City of Portland, Oregon
Bureau of Development Services
Land Use Services
FROM CONCEPT TO CONSTRUCTION

Carmen Rubio, Commissioner
David Kuhnhausen, Interim Director
Phone: (503) 823-7300
TTY: 711
www.portland.gov/bds

RECORDER
Please stamp the County Recorder's copy of the recording sheet and return with the attached decision to City of Portland, BDS 299/5000/BDS LUR

Multnomah County Official Records
J.D. Riddle, Deputy Clerk

2024-012640
03/05/2024 03:55:08 PM
LUA-LUA Pgs=7 Stn=77 ATLR
$35.00 $11.00 $60.00
$106.00

FINAL FINDINGS AND DECISION BY THE LANDMARKS COMMISSION RENDERED ON 1-22-2024.

The Historic Landmarks Commission has **approved** a proposal in your neighborhood. This document is only a summary of the decision. The reasons for the decision, including the written response to the approval criteria and to public comments received on this application, are included in the version located on the BDS website https://www.portland.gov/bds/zoning-land-use/news/notices. . Click on the relevant Neighborhood, and search the case number. If you disagree with the decision, you can appeal. Information on how to do so is included at the end of this decision.

CASE FILE NUMBER: LU 23-088549 HR DM
PC # 23-047200

Replacement of Mt Tabor Light Poles and Fixtures

BUREAU OF DEVELOPMENT SERVICES STAFF: Grace Jeffreys 503-865-6521 / Grace.Jeffreys@portlandoregon.gov

GENERAL INFORMATION

Applicant: Brett Horner, Portland Parks & Recreation
1210 SW 5th Ave Suite 800, Portland, OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

Owner: City of Portland
1900 SW 4th Ave Ste 7007, Portland, OR 97201-5380

Site Address: 6325 SE DIVISION ST

Legal Description: TL 100 190.32 ACRES, SECTION 05 1S 2E
Tax Account No.: R992050130
State ID No.: 1S2E05 00100
Quarter Section: 3136,3137,3236,3237

Neighborhood: Mt. Tabor, contact at contact.MTNA@gmail.com
Business District: NONE
District Coalition: Southeast Uplift, contact at operations@seuplift.org

Plan District: NONE
Other Designations: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District
Zoning: **OSc,s:** Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
Case Type: **HR DM:** Historic Resource Review, Demolition Review
Procedure: **Type III HR and DM,** with a public hearing before the Landmarks Commission. The decision of the Landmarks Commission can be appealed to City Council.

Proposal:
Type III Historic Resource Review and Demolition Review for the replacement of 88 light poles and fixtures which are part of part an existing historic lighting system which is considered a contributing aspect of the Mt Tabor Historic District. Of the 88 existing poles to be replaced:
- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal light fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Reviews Required:
- Demolition Review is required because the proposal to remove historic light poles and fixtures is for non-exempt demolition of contributing features within a Historic District, per Section 33.445.200.E.
- Historic Resource Review is required because the proposal to add new light poles and fixtures is for non-exempt development within a historic overlay zone, per Section 33.846.

Relevant Approval Criteria:
In order to be approved, this proposal must comply with the approval criteria of Title 33. The relevant approval criteria are:
- Demolition Review: One of the four criteria listed under 33.846.080.C.
- Historic Resource Review: 33.846.060.G. Other Approval Criteria.

CONCLUSIONS

The purpose of the Historic Resource Review process is to ensure that additions, new construction, and exterior alterations to historic resources do not compromise their ability to convey historic significance.

This project will replace 88 light poles and fixtures adjacent to the park's circulation system. Approximately 60 of the poles may date from the park district's historic period of significance, and none of the fixtures do. Options to retain, rehabilitate, and reuse the existing light poles were explored. However, there was not an acceptable way for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity.

The materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. Efforts have been made to preserve the spatial pattern of the illumination system. Replacement of the poles and the fixtures will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park. By replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

This proposal meets the applicable Historic Resource Review criteria and Demolition Review criteria and therefore warrants approval.

LANDMARKS COMMISSION DECISION

It is the decision of the Landmarks Commission to approve Historic Design Review for Historic Resource Review and Demolition Review for the replacement of 88 light poles and light fixtures in Mt Tabor Park. Of the 88 existing poles to be replaced:

- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal light fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Approvals per Exhibits C.1-C-36, signed, stamped, and dated January 25, 2024, subject to the following conditions:

A. As part of the building permit application submittal, the following development-related conditions (B – C) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE- Case File LU 23-088549 HR DM. All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."

B. At the time of building permit submittal, a signed Certificate of Compliance form (*Certificate of Compliance for Design and Historic Resource Review Approvals | Portland.gov*) must be submitted to ensure the permit plans comply with the Design/Historic Resource Review decision and approved exhibits.

C. No field changes allowed.

==========

By: _____
Historic Landmarks Commission Chair Andrew Smith

Application Filed: September 28, 2023.
Decision Filed: January 23, 2024.
Decision Rendered: January 22, 2024
Decision Mailed: January 29, 2024

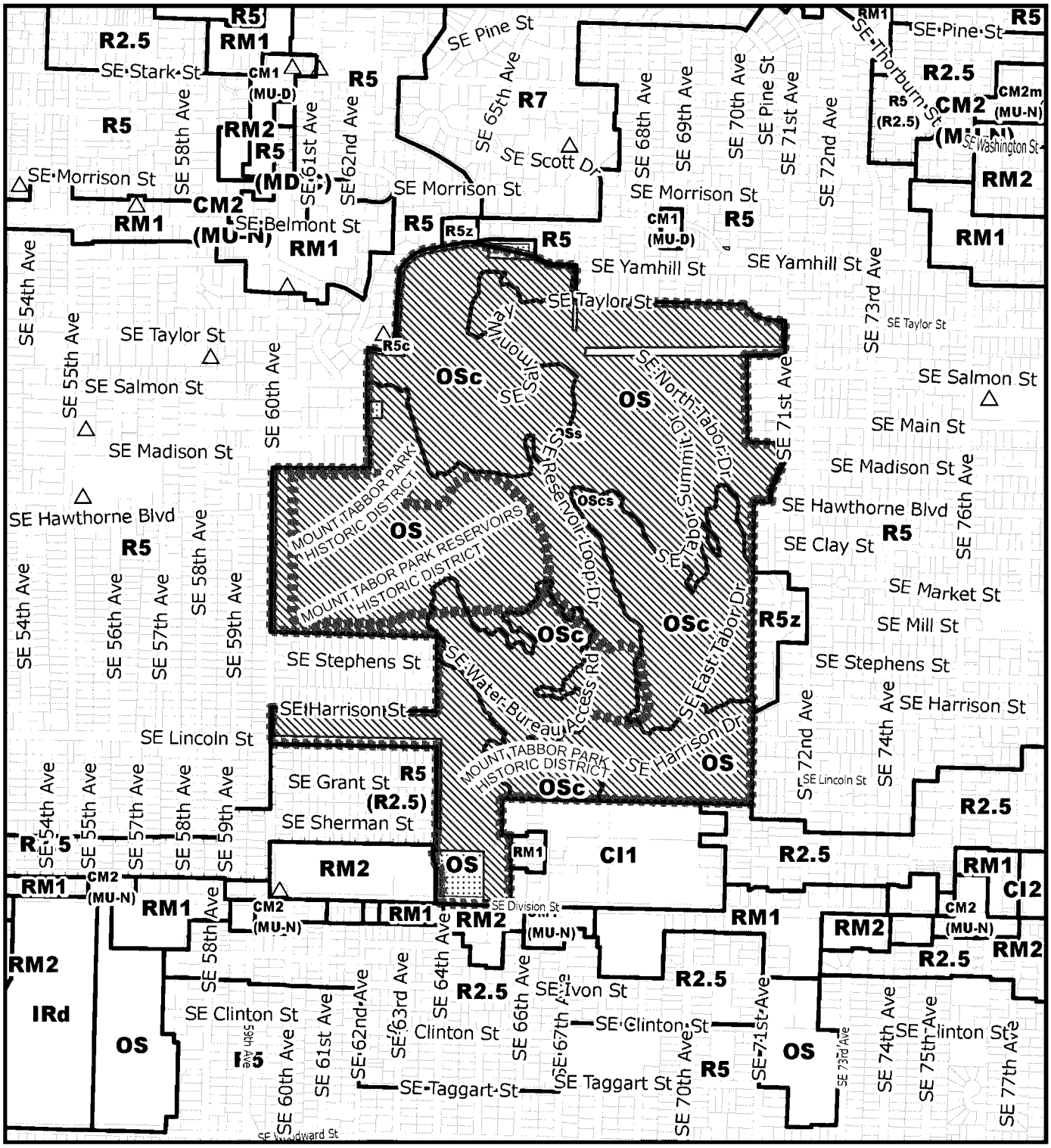
Last date to Appeal: February 12, 2024 by 4:30 pm
Effective Date (if no appeal): February 13, 2024 Decision may be recorded on this date

Kimberly Tallant, Principal Planner

City of Portland
Bureau of Development Services
1900 SW Fourth Ave, #5000
Portland, OR 97201

Date: February 13, 2024

_____
Representative



For Zoning Code in Effect Post October 1, 2022

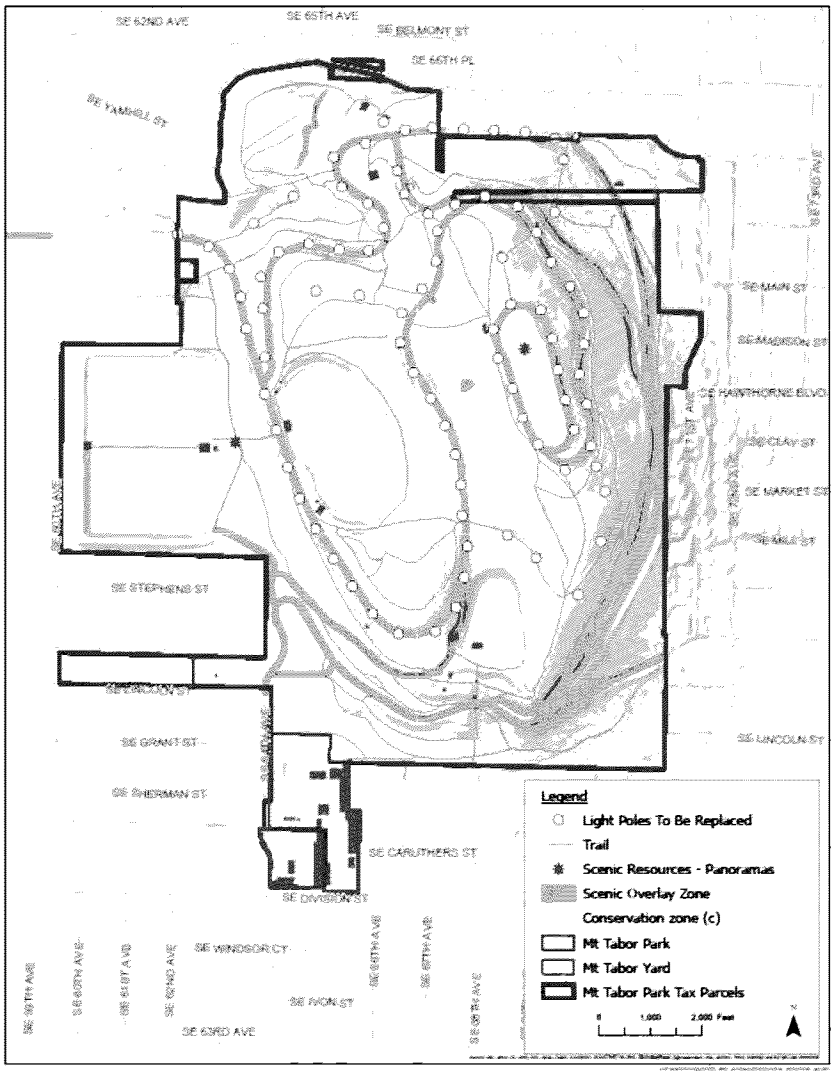
ZONING

THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

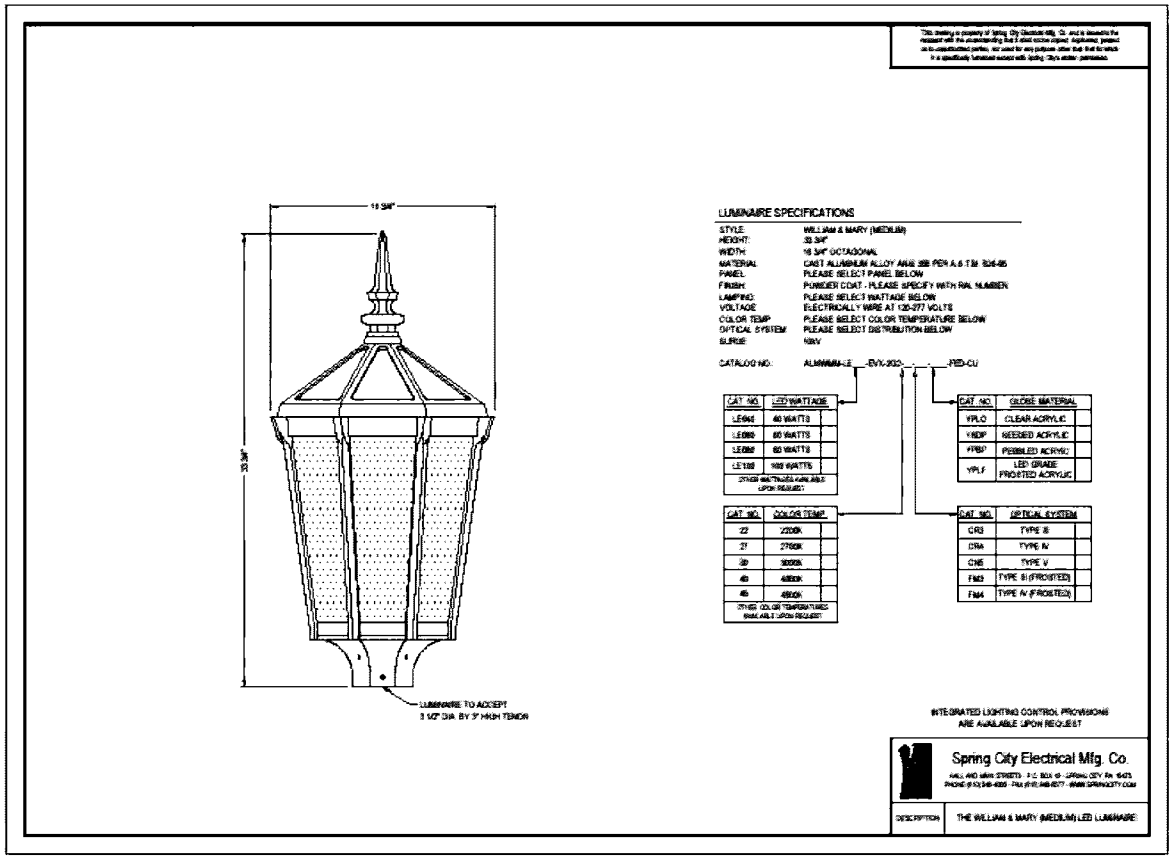
Light pole locations with Conservation and Scenic Overlays



Date — "Approved"
City of Portland
Bureau of Development Services
Planner
1.26.2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.4

Light poles and fixture schematics

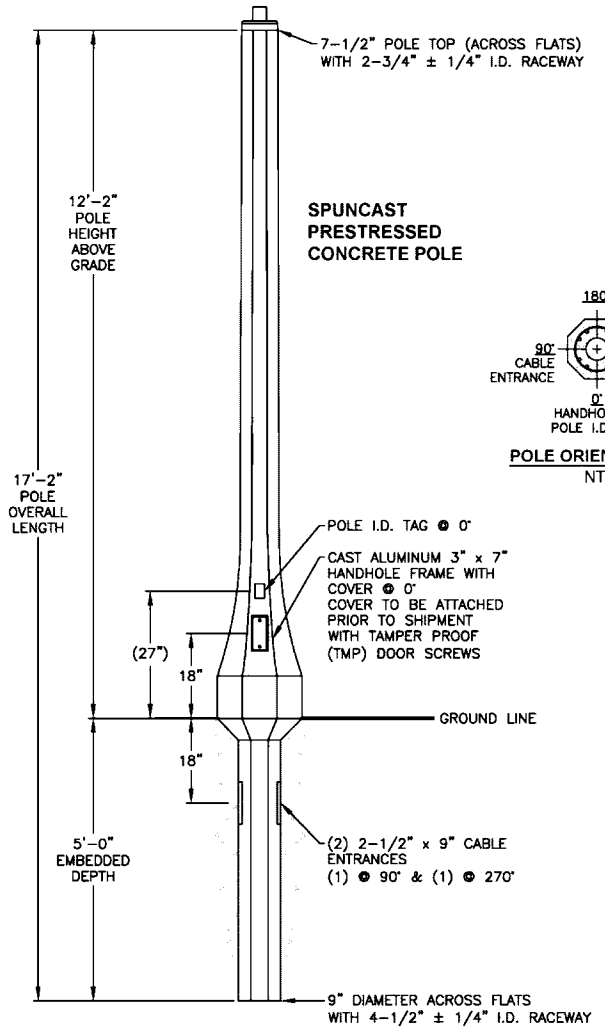


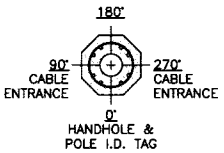
LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 3/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I 356. PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV
CATALOG NO:	
• TYPE III:	ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
• TYPE V:	ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU

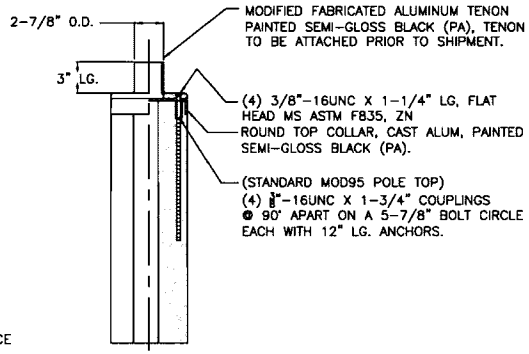
Date — *Approved*
City of Portland
Bureau of Development Services
Planner
1.26.2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.5

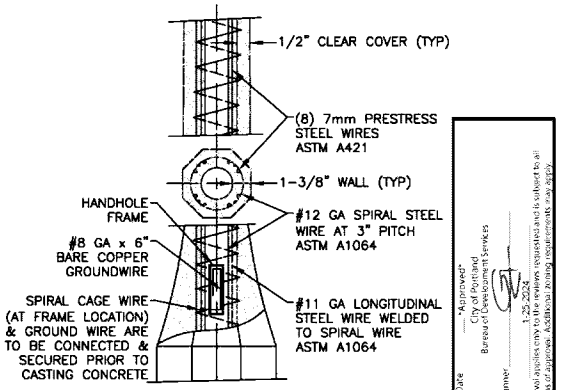




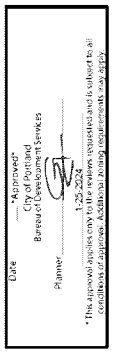
POLE ORIENTATIONS
NTS



POLE TOP DETAIL
NTS



POLE SECTION
NTS



REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

APPROVED BY DATE

Ameron POLE PRODUCTS
www.ameronpoles.com

PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	1" = 2'

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

City of Portland, Oregon
Bureau of Development Services
Land Use Services
FROM CONCEPT TO CONSTRUCTION

Carmen Rubio, Commissioner
David Kuhnhausen, Interim Director
Phone: (503) 823-7300
TTY: 711
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FINAL FINDINGS AND DECISION BY THE LANDMARKS COMMISSION RENDERED ON 1-22-2024.

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CASE FILE NUMBER: LU 23-088549 HR DM
PC # 23-047200

Replacement of Mt Tabor Light Poles and Fixtures

BUREAU OF DEVELOPMENT SERVICES STAFF: Grace Jeffreys 503-865-6521 / Grace.Jeffreys@portlandoregon.gov

GENERAL INFORMATION

Applicant: Brett Horner, Portland Parks & Recreation
1210 SW 5th Ave Suite 800, Portland, OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

Owner: City of Portland
1900 SW 4th Ave Ste 7007, Portland, OR 97201-5380

Site Address: 6325 SE DIVISION ST

Legal Description: TL 100 190.32 ACRES, SECTION 05 1S 2E
Tax Account No.: R992050130
State ID No.: 1S2E05 00100
Quarter Section: 3136,3137,3236,3237

Neighborhood: Mt. Tabor, contact at contact.MTNA@gmail.com
Business District: NONE
District Coalition: Southeast Uplift, contact at operations@seuplift.org

Plan District: NONE
Other Designations: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District
Zoning: **OSc,s:** Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
Case Type: **HR DM:** Historic Resource Review, Demolition Review

Procedure: **Type III HR and DM,** with a public hearing before the Landmarks Commission. The decision of the Landmarks Commission can be appealed to City Council.

Proposal:
Type III Historic Resource Review and Demolition Review for the replacement of 88 light poles and fixtures which are part of part an existing historic lighting system which is considered a contributing aspect of the Mt Tabor Historic District. Of the 88 existing poles to be replaced:

- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal light fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Reviews Required:

- Demolition Review is required because the proposal to remove historic light poles and fixtures is for non-exempt demolition of contributing features within a Historic District, per Section 33.445.200.E.
- Historic Resource Review is required because the proposal to add new light poles and fixtures is for non-exempt development within a historic overlay zone, per Section 33.846.

Relevant Approval Criteria:
In order to be approved, this proposal must comply with the approval criteria of Title 33. The relevant approval criteria are:

- Demolition Review: One of the four criteria listed under 33.846.080.C.
- Historic Resource Review: 33.846.060.G. Other Approval Criteria.

ANALYSIS

Site and Vicinity: The project site, Mt. Tabor Park, is roughly bound by SE Division Street on the south, SE 64th Avenue and SE 60th Avenue on the east, SE Yamhill on the north, and SE 71st Avenue on the west.

Mt. Tabor Park is a 196-acre public park located in a residential area of southeast Portland. The park encompasses most of a volcanic butte, with four peaks. The tallest summit rises to an elevation of 643 feet, making it a prime landmark visible from points all around the city. Because of its elevation, the site became a distribution site for Portland's gravity-fed, mountain-source drinking water in 1894 with the construction of two open reservoirs, Reservoir 1, and the since-demolished Reservoir 2. In 1903, Mt. Tabor was identified as a potential city park by John Charles Olmsted, adopted son of Frederick Law Olmsted, and who, along with his brother Frederick Law Olmsted Jr., operated the landscape firm Olmsted Brothers landscape firm which carried forth the legacy of their father. In 1909, voter-approved bonds were used to purchase the properties that made up the park. Emanuel Tillman Mische, who had previously worked for Olmsted Brothers, was hired the prior year as Portland's Park superintendent and designed the park. Two additional open reservoirs, Reservoirs 5 and 6, were constructed in 1911 on the western slope of the park.

Mt. Tabor Park is individually listed in the National Register and is classified as a Historic District. The "historic lighting system" is identified as one of the contributing aspects of the site. In the Nomination for the Historic District, the lighting system is described in detail:

> *Adding distinctive charm and illumination is the period lighting system comprised of eighty-eight single concrete standard lampposts that follow the drives and some of the main interior pathways throughout the park. These lampposts give off a soft, friendly light, reminiscent of gaslights, especially in the interior forested areas where they serve*

as a reminder of the original design of accessibility. The lighting encourages pedestrian exploration of the hills and dells throughout the park even in the short days of the colder months. Originally topped with a single, white, glass globe, polygonal lantern-style shades have replaced the globes. In 1911, Superintendent Mische requested of the Park Board, lampposts with glass globes to be serviced by an alternating current feed. He also requested underground conduits. The lampposts are serviced via underground conduits. The lighting system dates from 1924 and 1925.

Zoning: The Open Space (OS) zone is intended to preserve public and private open, natural, and improved park and recreation areas identified in the Comprehensive Plan. These areas serve many functions including: providing opportunities for outdoor recreation; providing contrasts to the built environment; preserving scenic qualities; protecting sensitive or fragile environmental areas; preserving the capacity and water quality of the stormwater drainage system; and providing pedestrian and bicycle transportation connections.

The Environmental Conservation Zone "c" overlay conserves important resources and functional values in areas where the resources and functional values can be protected while following environmentally sensitive urban development.

The historic resource overlay zone protects historic resources that have been identified as significant to the history of the city and region. The regulations implement Portland's Comprehensive Plan policies that address historic preservation. These policies recognize the role historic resources have in promoting education and enjoyment for those living in and visiting the region. The regulations foster awareness, memory, and pride among the region's current and future residents in their city and its diverse architecture, culture, and history. Historic preservation recognizes social and cultural history, retains significant architecture, promotes economic and environmental health, and stewards' important resources for the use, education, and enjoyment of future generations.

The Scenic Resource Zone "s" overlay is intended to protect Portland's significant scenic resources as identified in the *Scenic Resources Protection Plan* (1991) and the *Central City Scenic Resources Protection Plan* (2017); enhance the appearance of Portland to make it a better place to live and work; create attractive entrance ways to Portland and its districts; improve Portland's economic vitality by enhancing the City's attractiveness to its citizens and to visitors; and implement the scenic resource policies and objectives of Portland's Comprehensive Plan. The purposes of the Scenic Recourse zone are achieved by establishing height limits within view corridors to protect significant views and by establishing additional landscaping and screening standards to preserve and enhance identified scenic resources.

Land Use History: City records indicate that prior land use reviews include the following:
- LU 61-001380 (ref. file: CU 029-61) – Conditional Use approval for a small storage building;
- LU 64-002651 CU (ref. file: CU 067-64) - Conditional Uwe approval to construct a plant potting building on the SW corner of Mt. Tabor Park on park warehouse land;
- LU 65-002285 CU (ref. file: CU 056-65) – Conditional Use Approval with the condition that planting.
- be provided to screen the facilities from adjacent park and residential areas;
- LU 67-003406 (ref. file: CU 93-67) – Conditional Use approval for a maintenance building and office;
- LU 74-000650 (ref. file: CU 007-74) – Conditional Use approval for a greenhouse;
- LU 74-002392 (ref. file: CU 059-74) – Conditional Use approval for a picnic shelter;
- LU 77-002064 (ref. file: CU 49-77) – Conditional Use approval for a water pumping station;
- LU 89-003906 CU (ref. file: CU 26-89) – Conditional Use approval for parking lot expansion;
- LU 89-021552 (ref. file: MP 107-89) – Approval of a 3-lot minor partition;
- LU 90-024202 – Approval to locate and maintain a motor vehicle service building;

- LU 99-017214 EN (ref. file: LUR 99-00809) – Environmental Review approval of trail constructions and improvements in the Environmental Concern zone;
- LU 06-178213 HDZ – Historic Design Review approval for an 8' wide accessible path on the north side of Reservoir #6;
- LU 07-139442 HDZ – Historic Design Review approval for interim security and deferred maintenance improvements;
- LU 14-218444 HR EN – Historic Resource Review and Environmental Review approval of disconnection of reservoirs #1, #5, and #6 from the public drinking water system;
- LU 16-148005 HR – Historic Resource Review approval for rehabilitation of the Mt. Tabor Summit Restroom building;
- LU 17-158467 HRM – Historic Resource Review approval for exterior alterations to the Mount Tabor Yards;
- LU 17-206893 HR – Historic Resource Review approval for the replacement of existing and addition of new railings along the existing stairway of the Mount Tabor steps and the Summit Comfort Station;
- LU 17-245440 HR – Conditional Use approval for uses and improvements for the 13.3-acre project area including the Yard, Upper Nursery and Long Block areas of the park in the Mount Tabor Park Historic District;
- LU 18-103566 HR – Historic Resource Review approval for replacement of existing non-historic light poles with new, historically-appropriate pole lighting; and
- LU 21-053526 HR – Historic Resource Review approval for installation of an Interpretive Program to satisfy the requirement per Condition of Approval 'C' of LU 14-218444 HR EN.

Agency Review: A "Notice of proposal in Your Neighborhood" was mailed **January 2, 2024**. The following seven Bureaus, Divisions and/or Sections responded with no objections, and three of these included written comments, found in Exhibits E.1-E.3:

- Bureau of Transportation Engineering (Exhibit E.1)
- Bureau of Parks-Forestry Division (Exhibit E.2)
- Life Safety Section of BDS (Exhibit E.3)
- Bureau of Environmental Services
- Water Bureau
- Fire Bureau
- Site Development Section of BDS

Neighborhood Review: A Notice of Proposal in Your Neighborhood was mailed on **January 2, 2024**. Three written responses have been received from either the Neighborhood Association or notified property owners in response to the proposal.

1. Jesse Powell, 1-2-2024, wrote in opposition of removing historic lighting posts.
2. David Kaplan, 1-4-2024, wrote in support of the replacement design because it closely resembles the original posts and lanterns.
3. Linda Raveaux, 1-10-24, wrote in support of low light that is aimed downward to maintain the award winning "quiet" aspect of the park. Also supported maintaining existing historic appearance of the posts and fixtures.

Staff Response: Staff appreciates these neighbors for taking the time to share their thoughtful comments. Commission (Exhibit G.3) and Staff agree that repair is preferable to replacement However, the applicant's submittals show that options to retain, rehabilitate, and reuse the existing light poles were explored, and an acceptable way was not found for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity. Commission and Staff also support a replacement design that closely resembles the original posts and lanterns, with respect for Dark Skys.

At the 1-22-24 hearing the following people testified:

1. Aaron Andretti asked a question about the proposed light levels. The applicant responded that the overall light levels will be lower than current levels, while still providing visibility and safety.

Procedural History:

1. A voluntary Briefing on Lighting in Historic Parks was held in 3-13-2023, which included this work (Exhibit G.3). From the Summary Memo:

   Commissioners suggested that repair is preferable to replacement. Commissioners noted a desire to better understand the structural issues and expressed a desire to see the engineer's report when it is released, adding that this information should be in the public record. Commissioners noted that the issue seems to primarily be the anchoring system rather than the concrete poles and noted that this should be further explored so that repair could be further explored as an option. Commissioners expressed a desire for coherency within each park with regard to each park's lighting scheme.

2. This Land Use Review was submitted on 9-28-23. The applicant requested the application to be deemed complete on 12-7-23. A hearing was scheduled for 1-22-24, which was 45 days of after the complete date.

ZONING CODE APPROVAL CRITERIA

Historic Resource Review Process
Chapters 33.445, Historic Resource Overlay Zone, and 33.846, Historic Resource Reviews

33.445.010 Purpose [of Historic Resource Overlay Zone]
The historic resource overlay zone protects historic resources that have been identified as significant to the history of the city and region. The regulations implement Portland's Comprehensive Plan policies that address historic preservation. These policies recognize the role historic resources have in promoting education and enjoyment for those living in and visiting the region. The regulations foster awareness, memory, and pride among the region's current and future residents in their city and its diverse architecture, culture, and history. Historic preservation recognizes social and cultural history, retains significant architecture, promotes economic and environmental health, and stewards' important resources for the use, education, and enjoyment of future generations.

33.846.010 Purpose [of Historic Resource Review]
This chapter provides procedures and establishes the approval criteria for all historic reviews. The approval criteria protect the region's historic resources and preserve significant parts of the region's heritage. The reviews recognize and protect the region's historic and architectural resources, ensuring that changes to a designated historic resource preserve historic and architectural values and provide incentives for historic preservation.

33.846.080 Demolition Review

33.445.200.E Demolition of resources in a Historic District.
Demolition of contributing resources within a Historic District requires demolition review to ensure their historic value is considered and that there is an opportunity for the owner and community to consider alternatives to demolition.

33.846.080 A. Purpose of Demolition Review
Demolition review protects landmarks and contributing resources in districts. Demolition review recognizes that historic resources are irreplaceable assets significant to the region's architectural, cultural, and historical identity and their preservation promotes economic and

community vitality, resilience, and memory. In the event that demolition of a historic resource is approved, demolition review also addresses the potential for mitigation of the loss.

Findings: The applicant has applied for Demolition Review to demolish contributing resources within the boundary of an existing Historic District.

Mt. Tabor Park is individually listed in the National Register and is classified as a Historic District. Within that District, the park land is counted as a contributing feature, and the historic lighting system is a component of the park land, as noted in the Nomination:

> *Mount Tabor Park contains one contributing site, seven contributing buildings, five contributing structures, and one contributing object…*
> *The park land was counted as one contributing site; infrastructure such as driveways, paths, maintenance yard, and the lighting system, as well as those areas with loose physical definition such as play and picnic grounds, and the nursery, are included as part of the site.*

The light poles and light fixtures, which are part of that historic lighting system, are therefore subject to demolition review.

33.846.080.C. Demolition Review Approval criteria
Proposals to demolish a historic resource will be approved if the review body finds that one of the following approval criteria is met:

1. **Demolition of the resource has been evaluated against and, on balance, demolition has been found to be equally or more supportive of the relevant goals and policies of the Comprehensive Plan,** and any relevant area plans, than preservation, rehabilitation, or reuse of the resource. The evaluation must consider:
   a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
   b. The economic consequences for the owner and the community;
   c. The merits of demolition;
   d. The merits of development that could replace the demolished resource, either as specifically proposed for the site or as allowed under the existing zoning;
   e. The merits of preserving the resource, taking into consideration the purposes described in Subsection A; and
   f. Any proposed mitigation for the demolition.

2. **The proposal is to demolish a contributing resource in a Conservation District or National Register District,** and demolition of the resource will be mitigated to enhance, preserve, or restore the archaeological, architectural, cultural, or historic significance or integrity of the district. The mitigation must be responsive to the significance and integrity of the resource proposed for demolition. The evaluation must consider:
   a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
   b. The economic consequences for the owner and the community;
   c. Relevant goals and policies of the Comprehensive Plan.

3. **The proposal is to demolish a contributing resource in a single-dwelling zone in a National Register District**, and demolition of the resource will facilitate the creation of more deeply affordable dwelling units than could practicably result from preservation, rehabilitation, or reuse of the resource. In this case, deeply affordable means permanently

affordable to those earning no more than 60 percent of the area median family income. The evaluation must consider:

a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
b. The economic consequences for the owner and the community;
c. Relevant goals and policies of the Comprehensive Plan.

4. The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.

Findings:
One of the four approval criteria under 33.846.080.C must be shown to be met to demolish these contributing features.

The primary uses on this site are Parks and Open Areas, and the light poles and fixtures that are the subject of this demolition review are of secondary importance to these primary uses. Therefore, they are considered "accessory structures" under PZC 33.190 Definitions:

> ***33.910 Definitions; Accessory Structure.*** *A structure of secondary importance or function on a site. In general, the primary use of the site is not carried on in an accessory structure. Accessory structures may be attached or detached from the primary structure. Examples of accessory structures include garages, decks, fences, trellises, flag poles, stairways, heat pumps, awnings, and other structures.*

Because the light poles and fixtures are accessory structures, the proposal to remove and replace light poles within Mt. Tabor Park may be reviewed under the approval criterion of C.4.

> ***4. The proposal is to demolish an accessory structure****, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.*

As the findings below will describe, the demolition and replacement of the existing light poles and fixtures will not significantly diminish the architectural, cultural, or historic significance or integrity of the district.

<u>The light fixtures are not original fixtures.</u> All of the current fixtures to be removed and replaced are not original. The Nomination notes that while the lighting system dates from 1924 and 1925, the original single, white, glass globes were later replaced with polygonal lantern-style shades seen today.

Parks notes in their narrative that the current fixtures are consistent in design to existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other city parks (Irvington, Lair Hill Parks, Laurelhurst, Washington, etc.). Archival records indicate the now iconic lantern-style fixtures were first installed at Mt. Tabor Park in the 1950s.

The proposed replacement fixtures will match the existing fixtures in both materials and design (see Exhibit A-10, pages 15APP-G).

Some light poles may be original, however, documentation for individual poles varies. Some of the light poles were replaced at least once before with installation dates ranging from the 1950s through the 1980s (See Exhibit A.10, page 15). Currently, there are only 81 poles are installed at Mt. Tabor Park along the circulation system, and at most, 61 of the poles currently illuminating the park's circulation system are original installations.

The light poles are showing their age and the foundations do not meet current building code. Conditions include cracking and flaking in the concrete surface, as well as efflorescence (white discoloration from moisture loss), pitting, and even external evidence of corrosion of internal metal components, or 'spalling' (see photographs included in Exhibit A.10 – APP H).

The earlier poles were installed using an anchoring system that does not meet current building code (Exhibit A.6, pages 2-3). The primary issue with the wire anchor connector is that the steel tie wire connection was not designed to meet lateral loads. Additionally, some tie wires have deteriorated over time because of water/moisture influence. According to consulting engineers, even with a retrofit to replace the wire anchor, the following light pole elements would not meet code requirements (Exhibit A.6, pages 4-10):

- Footing depth
- Reinforcing steel; and
- lack of vertical steel with transverse ties.

These code deficiencies led the consultant to recommend replacement of the entire light poles and their footings, as documented in the Emergency declaration issued by the Commissioner-in-charge on December 28, 2022 (Exhibit A.10 – APP K).

The project team and engineering consultants explored options to retain, rehabilitate, and reuse the existing light poles in Mt. Tabor Park. However, this is not practicable as there is not an acceptable way for them to be anchored in a manner that would meet current building code for anchoring, while also retaining enough of the pole's historic and design integrity. Therefore, all the poles must be removed and replaced.

The light system will be restored to 88 light poles to match the number of poles identified in the historic nomination. All of the new replacement poles will match the existing ones in design and material (see Exhibit C.5-7 drawings, and Exhibit A.10 – APP G photos).

Finally, the quality of the overall illumination that the historic light system provides to the circulation system is valued as an important feature within the park site, rather than the individual light poles and fixtures.

In terms of the historical listing, the primary cultural or historic significance of Mt. Tabor Park is the Park's association with the Olmsted Brothers through the 1903 Olmsted Plan, which identified Mt. Tabor as a desirable site for a public park, and its design, which embodies the principles of landscape architecture espoused by the Olmsteds.

As such, the historic lighting system is a feature within the contributing resource of the park landscape as a whole and provides historic and functional value by illuminating the park's circulation system. In the nomination, some care was taken to determine when the various drives and formal pathways were constructed for the historical nomination, however, no such attempt was made regarding the lighting system. Further, no attempt was made to distinguish individual poles or their location, date

individual poles to the period of significance, or assign historical value to individual poles in the nomination.

Updating the light poles within the existing landscape will do nothing to erode the cultural importance of Mt. Tabor Park as a significant park within the Portland Park System, nor will it impact the integrity of the landscape itself. In fact, by replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

This criterion is met.

Staff note: While the light poles clearly met criterion C.4. for accessory structures, the applicant's submittal, Exhibit A.7, provide findings demonstrating how the proposal also meets criteria C.1. and C.2.

33.846 Historic Resource Review

33.846.060 E. Historic Resource Review Approval Criteria
Requests for Historic Resource Review will be approved if the review body finds the applicant has shown that all of the approval criteria have been met.

Findings: The site is within in a Historic District, and the proposal is for non-exempt treatments. Therefore, the proposal requires Historic Resource Review approval. The approval criteria are those listed in *33.846.060 G. – Other Historic Approval Criteria.*

Staff has considered all of the approval criteria and addressed only those applicable to this proposal.

33.846.060 G. Other Historic Approval Criteria

1. Historic character. The historic character of the landmark or contributing resource will be retained and preserved. Removal of historic materials or alteration of features and spaces that contribute to the historic significance of the landmark or contributing resource will be avoided.

Findings:
The historic listing identifies multiple parcels totaling 196-acres for the Mt. Tabor Park historical district, including both the park and maintenance yard. The district contains multiple contributing resources in addition to the park's landscape. The lighting system is just one component of the overall park site.

The replacement of the existing light poles and fixtures will have little to no impact on the existing natural areas and decorative landscaping, as the areas around the poles are typically kept clear of vegetation. Minor refinements to pole locations to avoid impacts to landscaping and tree could occur if needed to preserve the character of the landscaping and ensure trees are protected (See Exhibit C.31-36). The vast majority of the landscape, the historic vehicle entrances, and meandering drives, and all of the contributing buildings and structures will remain untouched by the light pole replacement project.

The lighting system itself will remain, even if components are replaced. Many of the original system components were replaced prior to the historical nomination, including all the light fixtures and 27 of the poles currently in use. The alternative to removing current poles would be to rehabilitate the existing poles despite their age and condition.

Bureau staff has verified with the consulting engineers at KPFF that the work necessary to mount existing poles to current code (installing rebar or other structural supports within the pole) is not considered practicable or cost-effective. For reuse, poles and footings would need to be removed and poles structurally altered to increase their structural capacity and then anchored to a new footing to meet current code standards. External alterations to enhance structural capacity would have a detrimental effect on the look and character of the pole, while internal alterations to replace or add reinforcing steel would significantly impact the structural integrity of the concrete. Internal alterations to 99-year-old concrete that was not originally built to meet current building code standards would significantly compromise the integrity of the poles (Exhibit A.6, pages 1-9)

By preserving the spatial pattern of poles (adjacent to the circulation system and distributed across the landscape), and installing poles of similar materials and design, the illuminated pathways will retain their historical character. The compelling nature of the park's landscape as a place of urban refuge offering a variety of forested, pastoral, and scenic experiences will be preserved through this project. Therefore, the contributing resource, the park's landscape will not be negatively affected by this project.

This criterion is met.

2. Record of its time. The landmark or contributing resource will remain a physical record of its time, place, and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings will be avoided.

Findings:
The illuminated circulation system provided vehicular access at the dawning of the automobile age to one of the city's most prominent natural features and ensured even nighttime visits would be safe and enjoyable. Pole and fixture replacement will result in a restoration of the illumination system at the time of the historic nomination, thus preserving the warmly illuminated meandering drives that provide access throughout the park, even in the darkest of forested areas.

This criterion is met.

3. Historic changes. Most resources change over time. Those changes that have acquired historic significance will be preserved.

Findings:
The project proposes to provide light pole replacements consistent in number to the historical listing. Locations will match that documented in 1988 and 1989 to the extent possible. Although not part of the period of significance, the current lantern-style fixtures, and the metal strapping at the top of certain light poles have acquired significance and are considered representative of Mt. Tabor Park in particular. The proposed new light poles will be topped with lantern-style fixtures along with metal strapping of similar in design and style, as shown in the Exhibit A.10 - APP G, to maintain the iconic significance these features have acquired over time.

This criterion is met.

4. Historic features. Generally, deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in

materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence.

Findings:
The lighting system that illuminates the circulation system is identified as contributing to the park's historic landscape. The replacement of 88 poles is needed to maintain structural safety of the lighting system due to severe deterioration, as certified by the city's consulting engineers. Installing modern fixtures at the same time poles are replaced will ensure the illumination system meets current electrical code, will reduce the need for future spot replacements, and will generate significant saving by reducing energy consumption. The new poles will match the historic ones in material, texture, color, and design (as shown in the comparison photographs in Exhibit A.10 - APP Exhibit G).

Written and graphic evidence regarding the existing system is provided in Exhibit A.10 - APP Exhibit F, which documents at least 27 pole replacements over time and the installation of the now iconic lantern-style fixtures. While the first elements of the lighting system were installed in 1924 and 1925, development of the park's physical elements occurred over time and it is likely some individual poles were added later, for example when the bridle path was established in 1929 and Mt. Tabor Drive was constructed (circa 1934). The earliest record of the number and location of light poles dates from the 1950s (outside the period of significance). Over time, individual poles have been replaced as needed – however the overall system of illuminated drives and paths providing circulation through the landscape has been maintained. Documentation of the lighting system is also located in the historic listing (Exhibit A.10 - APP J, pages 7-8, 44, 78, 86, 88). The existing light poles and fixtures are compared in photographs in Exhibit A.10 - APP G and details of the proposed replacements are shown in the specification sheets in Exhibit C.5-7.

This criterion is met.

5. Historic materials. Historic materials will be protected. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials will not be used.

Findings:
Poles will be ground-mounted, and the installation will not affect historic materials. Under normal circumstances, a direct buried concrete pole can be set directly into an augered hole that minimizes the amount of ground disturbance or impacts to surrounding soils or any historic concrete. Depending on the strength of the soil, backfilling can be accomplished with aggregate, concrete, or the original soil. This technique does not require the use of sandblasting or chemicals and meets modern building code requirements for structural safety.

This criterion is met.

6. Archaeological resources. Significant archaeological resources affected by a proposal will be protected and preserved to the extent practical. When such resources are disturbed, mitigation measures will be undertaken.

Findings:
There are no known archaeological resources on site. Development, including significant ground disturbance and excavation on the site has been documented since 1894. Given the project will install replacement light poles in previously developed locations using modern techniques that limit ground disturbance, it is very unlikely any materials of archaeological interest will be encountered. Regardless, should any

archaeological discoveries occur, work will be stopped in the affected area and the Bureau will notify the State Historic Preservation Office (SHPO). Prior to submitting this application, the Parks Bureau contacted the SHPO but has not heard back from them regarding any state requirements, concerns, or suggestions about this project.

This criterion is met.

7. Differentiate new from old. New additions, exterior alterations, or related new construction will not destroy historic materials that characterize a landmark or contributing resource. New work may be differentiated from the old if the differentiation does not diminish the character, features, materials, form, or integrity of the landmark or contributing resource and, if in a Historic District, the district as a whole.
8. Architectural compatibility. New additions, exterior alterations, or new construction will be compatible with the massing, size, scale, and architectural features of the landmark or contributing resource and, if in a district, the district as a whole. When retrofitting to improve accessibility for persons with disabilities or accommodate seismic improvements, design solutions will not compromise the architectural integrity of the landmark or contributing resource.

Findings for 7 and 8:
The integrity of the park's landscape (the contributing resource) will not be affected by the replacement poles, as they will maintain the existing spatial pattern of the lighting system adjacent to the circulation system. As previously noted, poles will match those in existence today and at the time of the historical listing. Any new conduit needed will be concealed.

Many of the current components of the light system are almost a hundred years old. By replacing the poles now, the structural integrity of the lighting system is assured for a long time to come. No other changes to the landscape or to any of the contributing architectural structures or buildings are proposed.

These criteria are met.

9. Preserve the form and integrity of historic resources. New additions, exterior alterations, or new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the landmark or contributing resource and, if in a district, the district as a whole would be unimpaired.

Findings:
The lighted circulation system is an integral component of the landscape in the Mt. Tabor Park Historic District, as the illumination provided alongside the historic drives and formal pathways enhances access to the park's various experiences. However, individual pole replacement has occurred repeatedly over time without affecting the integrity of the overall system of lighting or circulation. Therefore, it is reasonable to conclude that if an individual pole needs to be removed in the future, as long as it was replaced in the same vicinity and with similar materials and design, neither the system of illumination or circulation would be affected, and the character of the landscape would remain unimpaired.

This criterion is met.

10. Hierarchy of compatibility. New additions, exterior alterations, or new construction will be designed to be compatible primarily with the landmark or contributing resource and, if located within a district, secondarily with contributing resources within 200 feet and, finally,

with the rest of the district. Where practical, compatibility in districts will be pursued on all three levels.

Findings:
The lighting system will maintain its function and role of illuminating the park's circulation system. Replacement poles will maintain the look and design of the current poles within the illumination system. There is a compelling relationship between the lighting system and the circulation system. Areas in the vicinity of the existing lighting system that are part of the circulation system will not be affected by the replacement, as the overall lighting system will remain intact and individual replacement poles are of compatible materials and design to existing ones. Most importantly, the illuminated nature of the circulation system will be maintained.

No changes are proposed to the location or pattern of the circulation system within the park. The replacement of individual poles will not affect the contributing architectural resources. No changes are proposed to alter other aspects of the landscape, such as the terrain or vegetation.

The overall spatial pattern of the light poles illuminating the circulation pattern will be retained. Only minor refinements to pole locations are anticipated. Two poles near Reservoir 5 may conflict with water lines, as shown in the disturbance area site plans (Exhibit C.31-36), however, no changes are proposed that would affect the contributing resources within the Mt. Tabor Park Reservoir Historic District.

Based on the above, the planned pole replacements will be compatible with the circulation system, the landscape as a whole, other contributing resources, and both of the historic districts at the site.

This criterion is met.

DEVELOPMENT STANDARDS AND ADDITIONAL PROCESS

Unless specifically required in the approval criteria listed above, this proposal does not have to meet the development standards in order to be approved during this review process. The plans submitted for a building or zoning permit must demonstrate that all development standards of Title 33 can be met or have received an Adjustment or Modification via a land use review prior to the approval of a building or zoning permit.

Of the 88 existing light poles to be replaced, 4 are located in the SE Taylor Street right of way (ROW), Poles in the ROW will be addressed through the Portland Bureau of Transportation (PBOT) permit process for existing utility structures (encroachment permit review).

CONCLUSIONS

The purpose of the Historic Resource Review process is to ensure that additions, new construction, and exterior alterations to historic resources do not compromise their ability to convey historic significance.

This project will replace 88 light poles and fixtures adjacent to the park's circulation system. Approximately 60 of the poles may date from the park district's historic period of significance, and none of the fixtures do. Options to retain, rehabilitate, and reuse the existing light poles were explored. However, there was not an acceptable way for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity.

The materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. Efforts have been made to preserve the spatial pattern of the illumination system. Replacement of the poles and the fixtures will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park. By replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

This proposal meets the applicable Historic Resource Review criteria and Demolition Review criteria and therefore warrants approval.

LANDMARKS COMMISSION DECISION

It is the decision of the Landmarks Commission to approve Historic Design Review for Historic Resource Review and Demolition Review for the replacement of 88 light poles and light fixtures in Mt Tabor Park. Of the 88 existing poles to be replaced:

- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal light fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Approvals per Exhibits C.1-C-36, signed, stamped, and dated January 25, 2024, subject to the following conditions:

A. As part of the building permit application submittal, the following development-related conditions (B – C) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE- Case File LU 23-088549 HR DM. All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."

B. At the time of building permit submittal, a signed Certificate of Compliance form (*Certificate of Compliance for Design and Historic Resource Review Approvals | Portland.gov*) must be submitted to ensure the permit plans comply with the Design/Historic Resource Review decision and approved exhibits.

C. No field changes allowed.

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By: _____
Historic Landmarks Commission Chair Andrew Smith

Application Filed: September 28, 2023. Decision Rendered: January 22, 2024
Decision Filed: January 23, 2024. Decision Mailed: January 29, 2024

This land use decision is **not a permit** for development. Permits may be required prior to any work.

PROCEDURAL INFORMATION

The application for this land use review was submitted on September 28, 2023, and was determined to be complete on December 7, 2023.

Zoning Code Section 33.700.080 states that land use review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. Therefore, this application was reviewed against the Zoning Code in effect on September 28, 2023.

ORS 227.178 states the City must issue a final decision on land use review applications within 120 days of the application being deemed complete. The 120-day review period may be extended at the request of the applicant. In this case, the applicant waived the 120-day review period, as stated with Exhibit A.5. Unless further extended by the applicant, **the 120 days will expire on: December 6, 2024.**

Some of the information contained in this report was provided by the applicant. As required by Zoning Code Section 33.800.060, the burden of proof is on the applicant to show that the approval criteria are met. This report is the final decision of the Landmarks Commission with input from other City and public agencies.

If you are interested in viewing the file, please contact the planner listed on the front of this notice. The planner can provide information over the phone or via email. Only digital copies of the material in the file are available for viewing.

Conditions of Approval. This approval may be subject to specific conditions, listed above. Compliance with the applicable conditions of approval must be documented in all related permit applications. Plans and drawings submitted during the permitting process must illustrate how applicable conditions of approval are met. Any project elements that are specifically required by conditions of approval must be shown on the plans and labeled as such.

These conditions of approval run with the land, unless modified by future land use reviews. As used in the conditions, the term "applicant" includes the applicant for this land use review, any person undertaking development pursuant to this land use review, the proprietor of the use or development approved by this land use review, and the current owner and future owners of the property subject to this land use review.

Appeal of this decision. This decision is final unless appealed to City Council, who will hold a public hearing. Appeals must be filed by 4:30 pm on February 12, 2024. If this decision is appealed, a hearing will be scheduled, and you will be notified of the date and time of the hearing. The decision of City Council is the final local decision; any further appeal is to the Oregon Land Use Board of Appeals (LUBA).

Upon submission of their application, the applicant for this land use review chose to waive the 120-day time frame in which the City must render a decision. This additional time allows for any appeal of this proposal to be held as an evidentiary hearing, one in which new evidence can be submitted to City Council.

Who can appeal: You may appeal the decision only if you submit written comments which were received before the close of the record at the hearing or if you testified at the hearing, or if you are the property owner or applicant. Appeals must be filed within 14 days of the decision**.** The appeal application form can be accessed at https://www.portland.gov/sites/default/files/2020/lu_type3_appeal_form_073119.pdf.

The completed appeal application form must be emailed to LandUseIntake@portlandoregon.gov and to the planner listed on the first page of this decision. If you do not have access to email, please telephone the planner listed on the front page of this notice about submitting the appeal application. **An appeal fee of $5,000.00 will be charged.** The appeal fee will be refunded if the appellant prevails. There is no fee for Office of Community and Civic Life recognized organizations for the appeal of Type III decisions on property within the organization's boundaries. The vote to appeal must be in accordance with the organization's bylaws. Please contact the planner listed on the front page of this decision for assistance in filing the appeal and information on fee waivers. Please see the appeal form for additional information.

Recording the final decision.
If this land use review is approved the final decision will be recorded with the County Recorder. *Unless appealed,* the final decision will be recorded **on or after February 12, 2024,** by the Bureau of Development Services.

Expiration of this approval. Generally, land use approvals (except Comprehensive Plan and Zoning Map Amendments) expire three years from the date of the final decision unless one of the actions below has occurred (see Zoning Code Section 33.730.130 for specific expiration rules):
- A City permit has been issued for the approved development,
- The approved activity has begun (for situations not requiring a permit), or
- In situations involving only the creation of lots, the final plat has been submitted.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

Applying for permits. A building permit, occupancy permit, or development permit must be obtained before carrying out this project. See https://www.portland.gov/bds/permit-review-process/apply-or-pay-permits. At the time they apply for a permit, permittees must demonstrate compliance with:
- All conditions imposed here.
- All applicable development standards, unless specifically exempted as part of this land use review.
- All requirements of the building code.
- All provisions of the Municipal Code of the City of Portland, and all other applicable ordinances, provisions, and regulations of the City.

Grace Jeffreys
1-25-2024

The Bureau of Development Services is committed to providing equal access to information and hearings. Please notify us no less than five business days prior to the event if you need special accommodations. Call 503-823-7300 (TTY 503-823-6868).

EXHIBITS (not attached unless indicated)

A. Applicant's Submittals
   1. Narrative, 9-28-2023
   2. Appendix, 9-28-2023.
   3. Plans, 9-28-2023

4. Pre -App Summary, 9-28-2023
5. 120-day waiver, 10-12-2023
6. Incomplete Response, 12-7-2023
7. Revised narrative, 12-7-2023
8. New Site Plans, 12-7-2023
9. New Construction Plans, 12-7-2023
10. Revised Appendix, 12-7-2023
11. Revised Plans, 12-7-2023
12. Response to F2
13. Response to F1

B. Zoning Map (attached)
C. Plan & Drawings
1. Contents
2. Vicinity Plan
3. Historic District plan
4. Site Plan **(attached)**
5. Light Fitting drawings **(attached)**
6. Light pole drawings
7. Light pole drawings **(attached)**
8. Light pole details
9. - 20. Illumination studies
21. - 24. Permitted Landscape Plans
25. - 30. Tree plans
31. - 36. Disturbance Area Plans

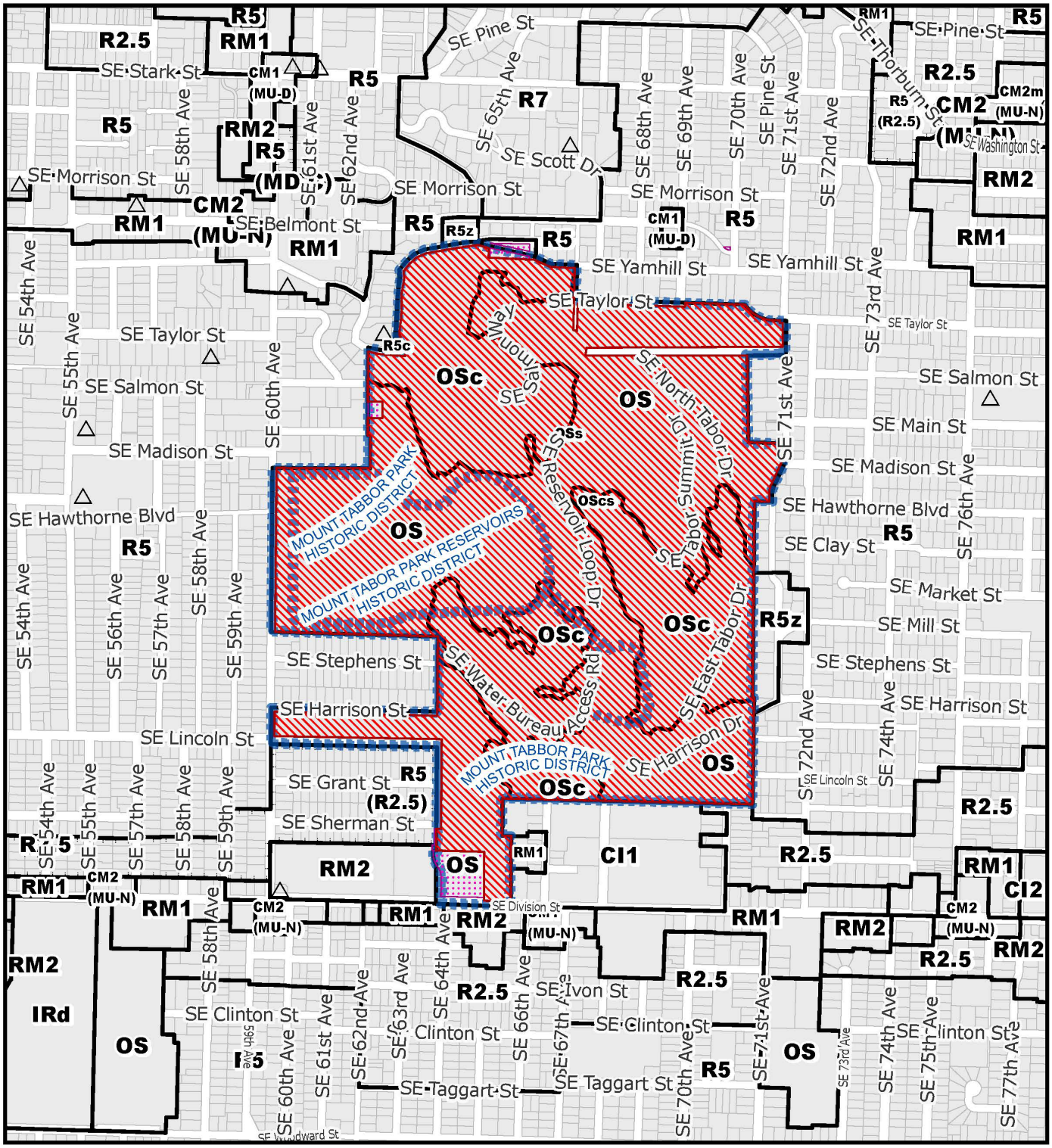
D. Notification information:
1. Request for response
2. Posting letter sent to applicant.
3. Notice to be posted.
4. Applicant's statement certifying posting.
5. Mailed notice.
6. Mailing list

E. Agency Responses:
1. Bureau of Transportation Engineering and Development Review
2. Bureau of Parks, Forestry Division
3. Life Safety Review Section of BDS

F. Letters
1. Jesse Powell, 1-2-2024, wrote in opposition of removing historic lighting posts.
2. David Kaplan, 1-4-2024, wrote in support of the replacement design because it closely resembles the original posts and lanterns.
3. Linda Raveaux, 1-10-24, wrote in support of low light that is aimed downward to maintain the award winning "quiet" aspect of the park. Also supported maintaining existing historic appearance of the posts and fixtures.

G. Other
1. Original LUR Application
2. Incomplete letter 10-19-23
   a. RFR response - Bureau of Environmental Services
   b. RFR response - Bureau of Transportation Engineering and Development
3. Summary from Briefing on Lighting in Historic Parks 3-13-23

H. Hearing
1. Staff Report
2. Staff Memo
3. Matrix
4. Staff Presentation
5. Applicant Presentation
6. Testifiers sign in sheet



For Zoning Code in Effect Post October 1, 2022

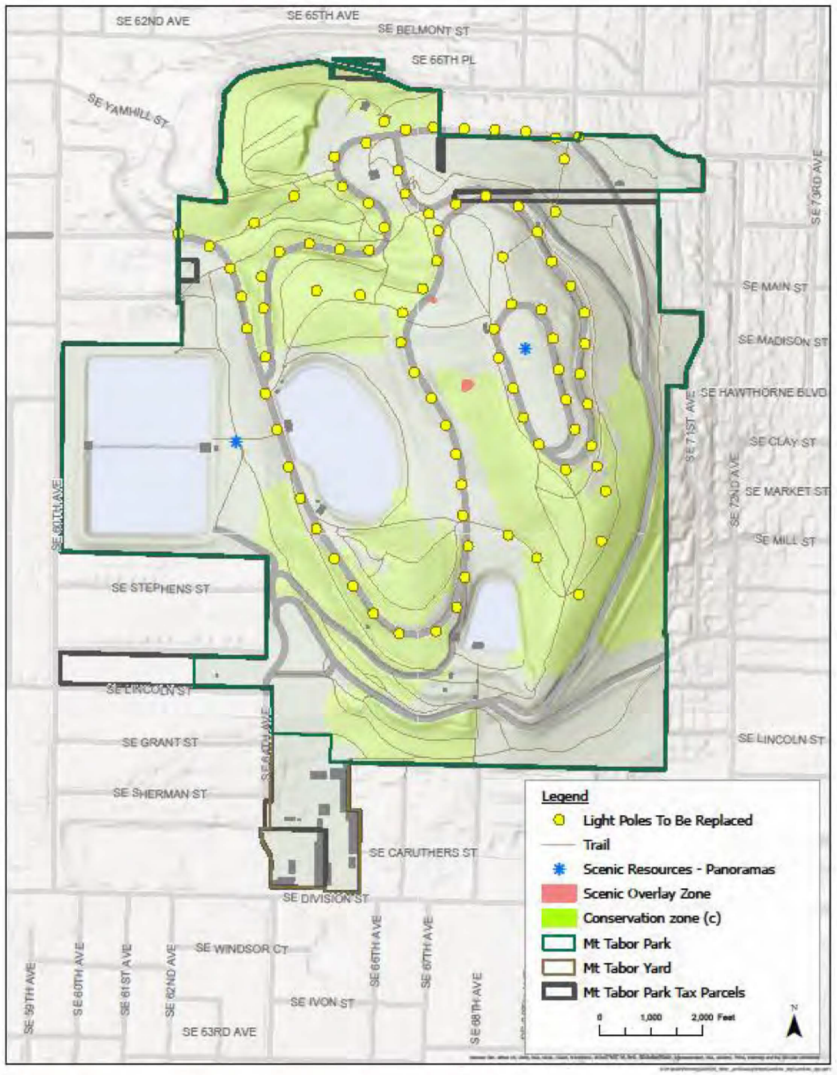
ZONING

THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

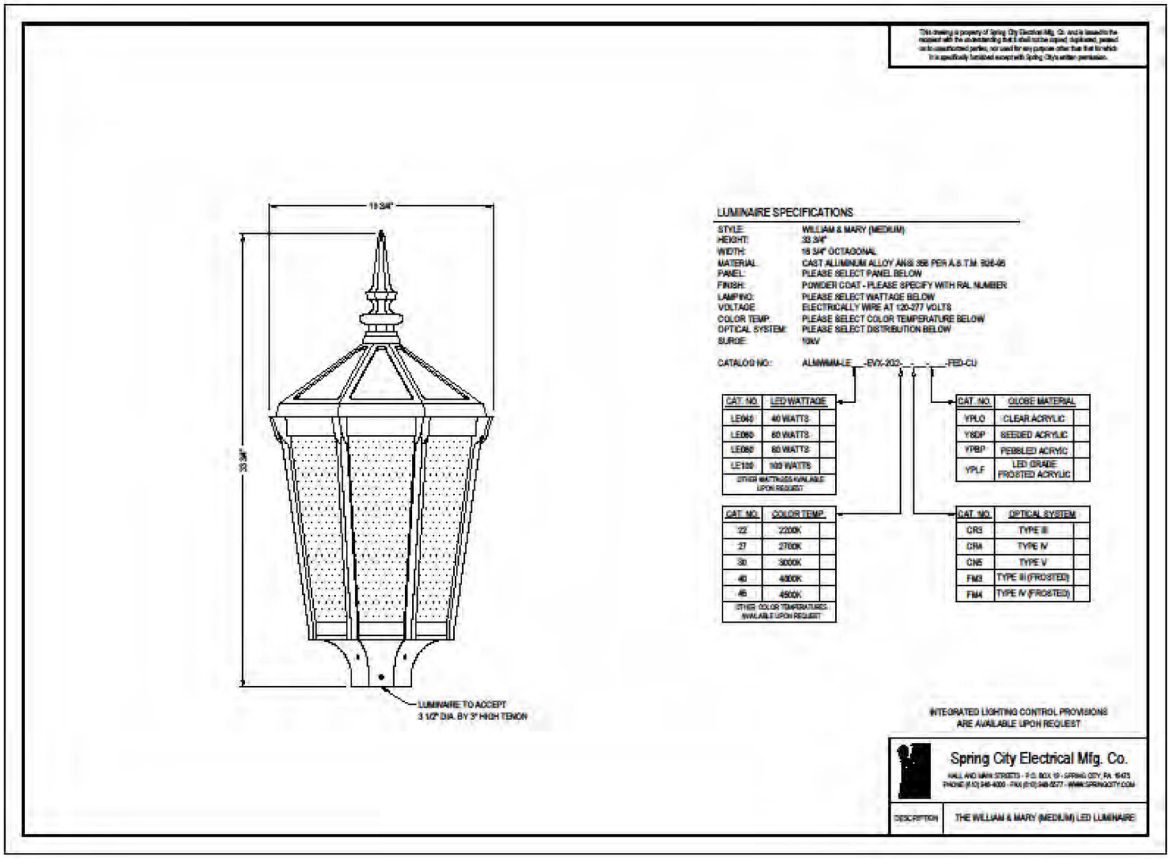
Light pole locations with Conservation and Scenic Overlays



Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.4

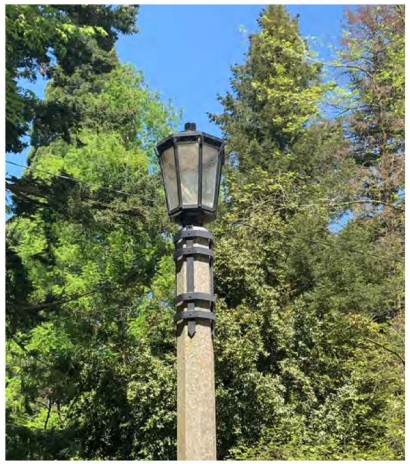
Light poles and fixture schematics



LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV

CATALOG NO.:
- TYPE III: ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
- TYPE V: ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU



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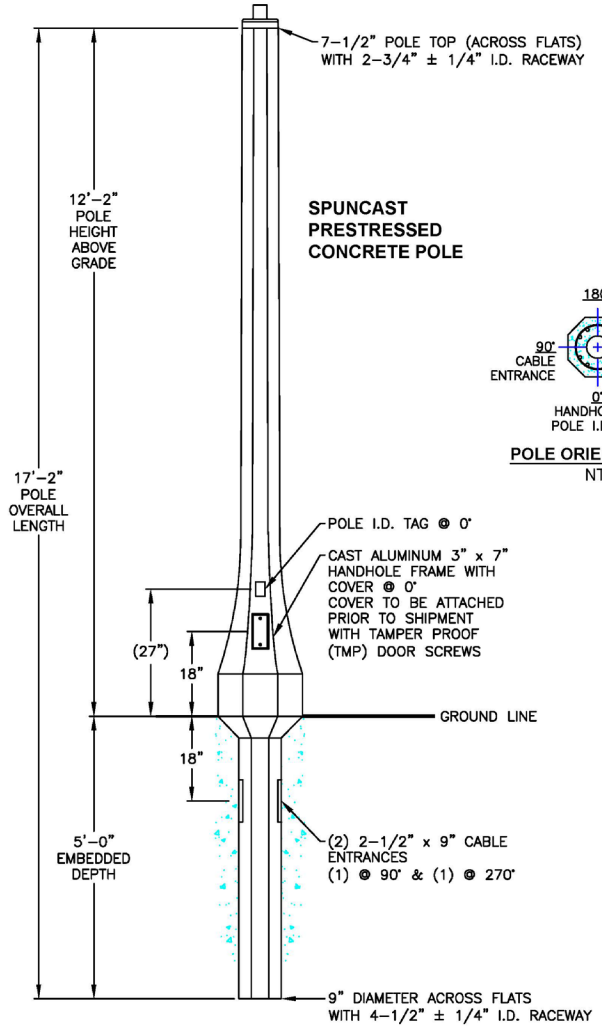
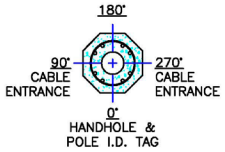
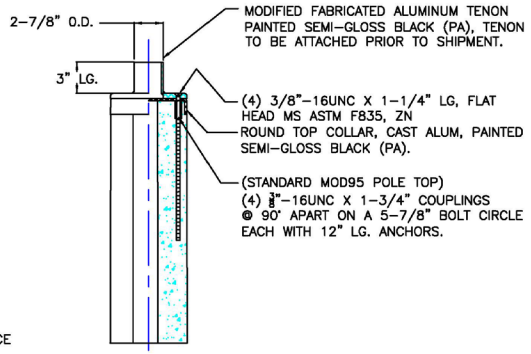
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	

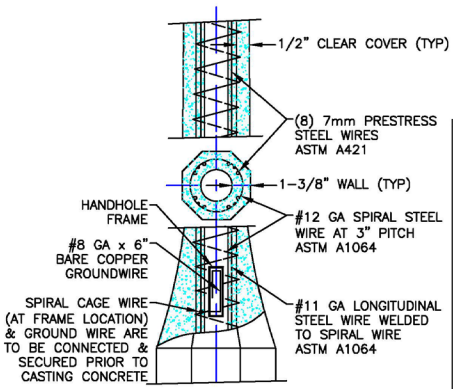




POLE ORIENTATIONS
NTS



POLE TOP DETAIL
NTS



POLE SECTION
NTS

Approved
City of Portland
Bureau of Development Services
Planner _____ Date 1-25-2024
*This approval applies only to the plans reviewed and is subject to all conditions of approval. Additional zoning requirements may apply.

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

APPROVED BY **DATE**

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN:	DATE:	APPR:	DATE:
BEU	4/6/23		

DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	1" = 2'

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

	A	B	C	D	E	F
1	ENDORSEMENT	INFO1	INFO2	NAME	ADDRESS/IO ADDRESS	CITYSTATEZIP/ADDRESSEE
2	RETURN SERVICE REQUESTED	OWNER	1S2E05 100	PORTLAND CITY OF	1900 SW 4TH AVE #7007	PORTLAND OR 97201-5380
3	RETURN SERVICE REQUESTED	APPLICANT/OWNERS AGENT	PORTLAND PARKS & RECREATION	HORNER BRETT	1210 SW 5TH AVE #800	PORTLAND OR 97204
4	RETURN SERVICE REQUESTED		LAND USE CONTACT C/O SEUL	MT TABOR NEIGHBORHOOD ASSOCIATION	3534 SE MAIN ST	PORTLAND OR 97214
5	RETURN SERVICE REQUESTED		PORTLAND SCHOOL DISTRICT	LAND USE NOTICE CONTACT	501 N DIXON	PORTLAND OR 97227
6	RETURN SERVICE REQUESTED		SOUTH TABOR NEIGHBORHOOD ASSOC	CARR JOHN	2918 SE 67TH AVE	PORTLAND OR 97206
7	RETURN SERVICE REQUESTED		LAND USE CONTACT	SE UPLIFT NEIGHBORHOOD PROGRAM	3534 SE MAIN ST	PORTLAND OR 97214
8	RETURN SERVICE REQUESTED		BELMONT AREA BUSINESS ASSOCIATION	COOK NICHOLAS	PO BOX 14472	PORTLAND OR 97293
9	RETURN SERVICE REQUESTED		HAWTHORNE BLVD BUSINESS ASSOCIATION	LEVESQUE WILLIAM	PO BOX 15271	PORTLAND OR 97293
10	RETURN SERVICE REQUESTED			KARLA MOORE-LOVE (CITY HALL)	1221 SW 4TH AVE #130	PORTLAND OR 97204
11	RETURN SERVICE REQUESTED		RISK & LAND DEPARTMENT	NW NATURAL	250 SW TAYLOR ST	PORTLAND OR 97204-3038
12	RETURN SERVICE REQUESTED		LAND USE CONTACT	PACIFIC POWER & LIGHT	7544 NE 33RD DR	PORTLAND OR 97211
13	RETURN SERVICE REQUESTED		PORTLAND METRO REGIONAL SOLUTIONS	C/O DLCD REGIONAL REPRESENTATIVE	1600 SW FOURTH AVE #109	PORTLAND OR 97201
14	RETURN SERVICE REQUESTED		LAND USE CONTACT	PORT OF PORTLAND PLANNING	PO BOX 3529	PORTLAND OR 97208
15	RETURN SERVICE REQUESTED		LAND USE CONTACT	TRANSIT DEVELOPMENT	1800 SW FIRST AVE #300	PORTLAND OR 97201
16	RETURN SERVICE REQUESTED		LAND USE CONTACT	STATE HISTORIC PRESERVATION OFFICE	725 SUMMER NE #C	SALEM OR 97301
17	RETURN SERVICE REQUESTED			JUDY PETERS	6916 NE 40TH ST	VANCOUVER WA 98661
18				PORTLAND PARK TRAIL	TATE WHITE	B106/R1302
19				LAND USE CONTACT	PROSPER PORTLAND	129/PROSPER

PORTLAND PARKS & RECREATION℠
Healthy Parks, Healthy Portland

Light Pole Safety Project: Mt. Tabor Park

Type III Historic Resources Review for Accessory Utility Upgrades

Table of Contents

General Information

Project:	PP&R Light Pole Safety Project
Applicant:	Portland Parks and Recreation (PP&R) 1120 SW Fifth Ave, Suite 858 Portland, OR 97201 Contact: Brett Horner, Parks and Trails Planning Manager 971-409-3518 | Brett.Horner@portlandoregon.gov
Property Owner:	City of Portland 1900 SW Fourth Ave, Suite 7007 Portland, OR 97201
Land Use Planner:	PP&R, 1120 SW Fifth Ave, Suite 858 Contact: Carine Arendes, AICP 503-679-0826 | Carine.Arendes@portlandoregon.gov
Engineer:	PP&R, 1120 SW Fifth Ave, Suite 858 Contact: George Tkebuchava, P.E. 503-250-0355 | George.Tkebuchava@portlandoregon.go
Site:	Mt. Tabor Park (6325 SE Division Street) Pre-application conference June 27, 2023 (23-047200 PC)
Improvement Value:	88 new concrete light poles with acrylic/metal fixtures and decorative metal strapping (value $8000 each, total $704,000)

SECTION 1 –PROPOSAL AND PROJECT NEED

Section 1.1 Proposal

This application narrative is provided to request land use approval to replace light poles at Mt. Tabor Park. The replacement work at Mt. Tabor Park is part of the City of Portland's Light Pole Safety project to replace light poles in 12 city parks. The current phase of the Light Pole Safety project was approved by City Council through the adoption of Ordinance No. 191222 on April 5, 2023. The replacement project is part of a larger effort to reduce the Parks and Recreation Bureau's environmental footprint and address a growing capital maintenance backlog.

Usually, the removal or installation of light poles does not require a building, site, or zoning permit. Mt. Tabor Park was nominated as a historic resource in 2004 and listed as a historic district. Historic resource review is required in this case because the lighting system is a noted attribute along with the circulation system and other elements within the park's landscape. The park's landscape (or 'park land' as it is referred to in the nomination) is a contributing feature in the listing of Mt. Tabor Park in the National Register of Historic Places. Therefore, a historic resources review is required.

Mt. Tabor Park was designed in the early 1900s by Emanuel Mische, a landscape architect who started his career with the well-known Olmsted Brothers landscape consulting firm. In addition to its notable designer, the park's landscaping elements, along with historic architecture and statuary contribute to the park's value as a historic resource. As discussed further in Section 3.3, the historic nomination does not list individual poles as important structures, rather it is the overall illumination provided to the circulation system as it meanders through the landscape of the park that is valued as an important feature within the park site.

Individual light poles to be replaced are located within the park and along SE Taylor St. 84 light poles are located within Mt. Tabor Park and four additional poles are located in the SE Taylor St. right-of-way (ROW). Poles in the ROW will be addressed through the Portland Bureau of Transportation (PBOT) permit process for existing utility structures (encroachment permit review).

Documentation for individual poles varies, some were replaced at least once before with installation dates ranging from the 1950 through the 1980s. About 60 of the poles are thought to have been installed during the 1920s and 1930s. Currently 81 poles are installed at Mt. Tabor Park along the circulation system. The light system will be restored to 88 light poles to match the number of poles identified in the historic nomination. All of the new replacement poles will match the existing ones in design and material (see Exhibit C).

Current fixtures to be replaced are not original - though they are consistent in design to existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other city parks (Irvington, Lair Hill Parks, Laurelhurst, Washington, etc.). Archival records indicate the now iconic lantern-style fixtures were first installed at Mt. Tabor Park in the 1950s. The replacement fixtures will match the existing fixtures in both materials and design (see APP Exhibit).

Existing poles are showing their age and the impacts of Portland's wet environment and the freeze-thaw cycle. Conditions include cracking and flaking in the concrete surface, as well as efflorescence (white discoloration from moisture loss), pitting, and even external evidence of corrosion of internal metal components, or 'spalling' (see photographs included in the APP Exhibit). Additionally, poles were installed using an anchoring system that does not meet current building code. The project team and engineering consultants explored options to retain, rehabilitate, and reuse the existing light poles in Mt. Tabor Park. However, this is not practicable as there is not an acceptable way for them to be anchored in a manner that would meet current building code for anchoring, while also retaining enough of the pole's historic and design integrity. Therefore, all of the poles are being removed and replaced.

Park landscape features identified in the listing are the circulation system – which consists of multiple scenic drives along with formal entrances, historic staircases, and the formal trail system; the lighting system for the circulation system; scenic viewpoints; spaces of refuge created by screening vegetation; two tennis courts and three play areas (69th Avenue playground and group picnic area, Harrison playground, and main playground). At the time of nomination, Mt. Tabor Park also contained seven contributing buildings and five additional contributing structures, along with 10 non-contributing buildings and six non-contributing structures.

The historic reservoirs and associated elements were detailed in a separate resource designation and constitute a separate historic district within the park. None of the Reservoir Historic District resources will be affected by this project (the boundaries of the two separate districts are shown in the APP Exhibit). Additional information on the Park Historic District is in Section 3.3 of this application and copy of the nomination (NRIS Reference No. 04001065) is included in the APP Exhibit.

Mt. Tabor Park is located in inner East Portland, generally bounded by SE Yamhill St.to the north, SE 71st Ave. to the east, SE Division St. to the south, and SE 60th Ave. to the west (see vicinity map in Exhibit C). Used first in 1894 as a site for the city's public water reservoir, records indicate Mt. Tabor was established as a public park and nursery for Portland's city parks in either 1908 or 1909. Built on a volcanic butte, the site's topography is highly variable, with shallow inclines to the west, steeper slopes in the

east, a forested ravine in the northwest corner and multiple peaks, the tallest of which is the namesake volcanic cider cone rising to more than 640’ in height.

The interior of the park is a mixture of grassy and forested areas that provide users with options for a wide variety of activities, including two scenic views identified in the city’s Scenic Resources Protection Plan. The southern portion of the site, south of SE Lincoln/Harrison St. contains the historic nursery and maintenance yard (approved for updates via 2017 land use approval), a small play area, and a dog-off leash area.

The replacement light poles will be installed along the historic drives and portions of the park’s soft surface trail system. The location and age of poles planned for replacement is shown in a modified version of the 1987 lighting plan in Exhibit C. Replacement poles will be installed in the same location as the current poles to maintain the spatial pattern in existence at the time of the historic listing wherever possible. A one-for-one replacement will also minimize tree impacts and ensure large shade trees are retained onsite.

Poles will consist of a concrete post and a metal framed lantern-style light fixture consistent with existing poles. Pole design details and fixture design details are provided in Exhibit C. As shown in the comparison of a current pole in Mt. Tabor Park and a replacement pole (already installed in Laurelhurst Park), the replacement poles match the character of the existing poles from materials used, design of pole and fixture, as well as height and form (APP Exhibit).

The replacement light poles include the following features:

- Tapered gray concrete octagonal poles with flared base similar in shape and style to the posts in existing light poles.
- Pole material is concrete consistent with period poles. Unlike the period poles, however, the replacement ones are precast for a durable and structurally stable life cycle. They have an exposed aggregate finish and anti-graffiti coating.
- Poles will be embedded 5’ underground. Once buried in place, the overall 17’2’ pole will have above ground height of 12’ 2” – similar in height to existing park poles.
- Poles will be placed directly into an augered hole, a technique referred to as direct burial, to minimize installation damage and loss. Direct burial provides a clean and uncluttered appearance eliminating anchor footings, or the need to cover unsightly base plates, studs, or nuts. This technique saves time, money and is more visually appealing.

- Decorative metal strapping will be affixed to the top of the pole below the fixture, consistent with existing fixtures in this and other historic parks in the city.

- Fixtures affixed to the tops of the poles are framed metal lantern-style to match existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other Portland Parks, historic (Irvington, Lair Hill) and otherwise (Laurelhurst, Washington, etc.).

- Fixtures (or luminaires) are made of cast aluminum with acrylic panels. The new fixtures are shielded to archive "dark skies" compliance. The new fixtures will also direct more focused illumination onto the circulation system.

- The existing 150W HPS lamp delivers 9000 luminaire lumens, while the new 60W light emitting diode (LED) lamp is more efficient and will deliver 6000 luminaire lumens (a reduction of 33%).

Section 1.2 Project Need

Over 1,000 light poles in city parks were inspected as part of a system-wide review of the structural safety of light poles in city parks. Through this effort, PP&R identified more than 240 light poles in 12 City Parks that may pose a life and safety hazard to the public due to structural issues. Initially the Bureau was removing hazard light poles while planning to replace light poles as funding became available. The Bureau has since developed a funding plan to replace all poles with structural issues. Poles will be replaced as new poles are delivered and are available to install. The Mt. Tabor Park replacement poles are currently scheduled for installation in April and May 2024.

The Bureau engaged the services of the engineering firm of KPFF to provide expert analysis on certain light poles used in City of Portland parks. The engineers were tasked with identifying structural issues and recommending solutions that prioritize public safety. Due to an inadequate anchoring system that relied on a tie wire technique and the condition of the concrete at the base of the poles, it is not practicable to reuse the poles. Concrete poles are required to have reinforcing steel capable of withstanding specific seismic and tensile loads to meet current code standards and it was the project team's determination that the existing poles could not meet these standards. Adding structural reinforcement while also keeping the concrete poles intact was determined to be not practicable.

Based on the age and condition of the poles and fixtures, and other information and recommendations from the engineers and City Attorneys on the project team, the Bureau determined full replacement was warranted. This determination is in line with City Policy FIN 2.19, which requires that, "*Bureaus shall employ a conservative approach*

to public and employee safety, erring on the side of caution." It is crucial the public feels safe when using our parks and natural areas. When public safety is at stake, the Bureau acts out of an abundance of caution to preserve the health and safety of Portlanders and others who use our facilities. PP&R has a long history of prioritizing life and safety in decision-making as evidenced by the recent difficult decision to close Columbia Pool, a community-cherished asset.

The decision to replace the period light poles in Mt. Tabor Park and those in 11 other city parks was carefully considered. A thorough review of more than 1,000 light poles throughout the park system was conducted, input from park friend groups and recommendations from legal and engineering experts was considered before making a final decision. Although replacement was not an easy decision, there are a number of benefits that will result from the decision to replace these light poles.

This project is an investment in adequate illumination of the park's circulation system for the long term. Benefits to replacement of the light poles includes improving public safety and energy benefits. Replacement of outdated and inefficient lighting systems is expected to result in reducing operating costs in the future. The light safety replacement project is estimated to reduce utility costs by $79,000 every year.

Replacement fixtures will provide more focused and direct lighting toward walkways, reducing the amount of light exposure in natural areas and on adjoining properties and enhancing safe use of our facilities. This project also advances the City's Renewable Energy Goal by improving the energy efficiency of our infrastructure to avoid the future consumption of over 362,313 kWh of electricity per year and over 10,092 therms of natural gas (as noted in Ordinance No. 191222 in the APP Exhibit).

Using new poles and fixtures will extend the life of the lighting in the park, far beyond the expected lifespan of the existing poles and fixtures. Investing in these improvements now helps ensures safe, efficient, and welcoming parks in the future, consist with the Bureau's mission to provide equitable access to welcoming places, programs, and services that improve community health and our environment.

Section 2.1 Existing Site

Mt. Tabor is located in a residential area of southeast Portland, approximately 3 miles east of the Willamette River, directly east of the central city core. The city purchased land on Mt. Tabor in 1888 to be part of the new system bringing water to town from the Bull Run. In 1894, the Water Bureau constructed Reservoir 1. Reservoirs 5 and 6 were completed in 1911. (Reservoirs 3 and 4 are located within Washington Park.)

The area was identified for park purposes in the 1903 Olmstead Portland Parks System Plan due to its importance as the most significant landscape feature in the area, the notable scenic view available from various points of the mountain's slopes, the existing mix of both cleared areas and lush tree groves, as well as its use by the public for "Sunday and holiday outings" at the time and the growing population projected in the vicinity of the site. From its volcanic peaks and "picturesque ravines," the Olmsteds were convinced that Mt. Tabor would provide a variety of "attractive features in a public pleasure ground." Portland leaders agreed and designated Mt. Tabor a public park. The site was expanded when additional land was purchased in 1909 to establish park uses on the site according to the historic nomination. Additional land purchases for park purposes also occurred in 1929, according to the park's 2000 Master Plan.

Access to the park is taken from SE Salmon St., SE 69th Ave., SE Harrison St., and SE Lincoln St. The adjacent maintenance yard can be accessed from SE 64th Ave. and SE Division St. While the park and the maintenance yard are located on the same tax lot, the Bureau classifies the park and maintenance yard as two separate assets based on their function. The portion of the site used as a public park totals 176.04 acres and is located on R332679, R149581, R149582, and R332503. Within R332503, the park site includes the Mt. Tabor Community Garden – but not the area immediately to the west of the community garden within the "long block" or the maintenance yard. The maintenance yard consists of approximately 6.83 acres and is located on the southern portion of R332503 and the entirety of R239658. Historical remnants of unvacated right-of-way still exists in the NE corner of the park, including where the tennis courts are located, and are not usually included in the Bureau's calculation of the park's size.

The site generally slopes from east to west and north to south. The park's elevation to the west (approximately 300') and south (ranging from 215' to 235') is generally consistent with the surrounding urban fabric. The eastern portion of the site contains slopes ranging in elevation from 400-250', with the steepest slopes in the northern portion, which also contains the namesake volcanic cone. The 69th Ave historic staircase in the northeast corner of the site contains a staggering 18 flights to span an elevation gain of 180 feet before intersecting with Harvey Scott Circle at the center of the park near the summit of Mt. Tabor.

Within the interior of the park, a series of flat terraced areas host a variety of amenities. Paved drives, soft surface paths, and staircases provide connections between active areas and more contemplative passive uses. Amenities include view areas, play areas, restrooms, picnic areas (some with shelters in addition to tables), a variety of sports courts (tennis, basketball, volleyball), a horseshoe pit, hard surface plaza areas, and a dog off-leash area. In active areas, lawns and soft surfaces are surrounded by towering Douglas Firs while ravines and steep slopes are vegetated with native understory plants

and contain a mix of conifers and deciduous trees. Landscaping adjacent to some developed areas also includes non-native ornamental plantings.

Exposed volcanic rock is apparent in a small section of the northwest corner of the park due to historical excavation on the site. The USDA Natural Resources Conservation Service identifies two dominant soils, Multnomah Silt Loam and Urban Land Latourell Complex, in disturbed areas. These soil types are well-drained, moderately permeable, and prone to erosion, particularly on steeper slopes.

The forest and woodlands on Mount Tabor are organized into natural communities based on slope and aspect. The native tree canopy is well-developed in most of the natural areas; however, the shrub layer is dominated by non-native, invasive species and some areas lack native understory. Plantings of horticultural shrubs and trees occur throughout the park alongside trails and roadways, and in meadows. The Bureau of Environmental Services identified the park as an “anchor site” in its 2006 Terrestrial Ecology Enhancement Strategy and the park’s vegetation is managed in accordance with the Portland Watershed Management Plan, PP&R’s Natural Areas Restoration Plan, and Urban Forestry regulations in Title 11 of the city’s code.

Section 2.2 Vicinity

The park is situated on a volcanic butte, Mt. Tabor, contained within the Boring Lava Fields that underlie East Portland. At the landscape scale, Mount Tabor is part of the East Buttes. These buttes are composed of complex sediments, share a common geological history, and are part of the same uplifted area.

The surrounding development was established during the city’s streetcar era in rectangular blocks and is primarily residential in nature. The park boundaries contain the steepest slopes associated with Mt. Tabor, however much of the immediate area around the park is also noticeably sloped. The adjacent rectangular street grid gives way to curvilinear streets in steeper areas.

Nearby development is finely grained, residential homes on small lots are oriented to the street. Larger lots to the west or south also contain courtyard style multifamily development, commercial enterprises, or campus use. Western Seminary is located west of the park, and Warner Pacific College is located to the southeast.

Although planned for vehicular access, the highly connected street pattern facilitates access to the park on foot or by bike. Belmont St. to the north, Division St to the south, and SE 60 Ave to the east, are intensely developed collectors supporting bus service and provide easy transit access to the park. Although located within 1.5 miles of Interstates 84 and 205, vehicular access to the park is via local streets.

Section 3.1 Zoning

Zoning

- Base: Open Space base zone
- Overlay(s): Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
- Pattern Area: Inner
- Pedestrian District: N/A
- Transit: Some of the site is considered "close to transit"
- Corridors: Division Street is considered a Civic or Neighborhood Corridor
- Historic Designation: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District

Mt. Tabor Park is entirely zoned Open Space (OS). Portions of the park are also within two Environmental Overlays, the Conservation (c) and Scenic (s) overlay zones, as shown in Exhibit C. Per the City zoning code, the OS zone is intended to preserve and enhance public and private open, natural, and improved park and recreation areas. The environmental overlays conserve identified resources while also providing for development. Due to its listing as a Historic District in the National Register of Historic Places, Mt. Tabor Park is also within the Historic Resource overlay zone, which ensures development impacts on historic resources – although allowed – are limited.

Section 3.2 Land Use History and Previous Approvals

Mt. Tabor Park was originally zoned Singe Family Zone I in 1924 despite already established as a city park, according to the BPS study *The Historical Context of Racist Planning: A History of How Planning Segregated Portland* (see APP Exhibit). According to the historic nomination, seven buildings and five structures were established within the park prior to 1937. One of these, the historic Administrative Building, was modified to add attached garages between 1938 and 1941, followed by a second-story addition in 1958.

Additional buildings and structures were added to the site in the 1950s and 1960s. City land use records for the site show Conditional Use (CU) approvals issued as early as 1961 for a storage building on-site. Additional CU approvals followed in the 1960s and 1970s for maintenance and nursery ('plant potting') buildings, along with a new parking lot, pumping station, and park shelter. The main parking lot dates from 1970.

The City's first state-acknowledged Comprehensive Plan, effective in 1981, identified the site as Open Space (see APP Exhibit). In the 1980s and 1990s a parking lot expansion,

the establishment of a motor vehicle service building, and trail improvements were approved. After a historic reservoir was decommissioned in the portion of the site managed by the Water Bureau, a flat portion of the park was partitioned from the parent parcel and sold for residential development.

The master plan for the park was updated in 2000. The primary focus of the plan is to preserve and enhance the natural qualities of Mt. Tabor. The plan envisioned updates to the circulation system, recreational uses, and facilities in manner that maintained the balance between developed areas and the environmental qualities of the natural areas in park. In 2009, a master plan to improve and update the Mt. Tabor Central Maintenance Yard & Nursery was completed.

The Historic Designation occurred in 2004. Since then, projects to provide deferred maintenance, an ADA-accessible pathway, reservoir disconnection, rehabilitation of the summit restroom, replacement and addition of railings along existing stairways, and replacement of non-historic light poles in the reservoir areas have been approved via historic resource or design review.

Most recently, updates including the addition of new structures, art and fencing; relocation of existing structures; removal of non-contributing structures; a new horticultural area; and the preservation of north elevation of one of the historic buildings were approved. These improvements occurred primarily, but not exclusively, in the vicinity of the Maintenance Yard. The Conditional Use review included a review of the site's nonconforming elements and approval of the existing parking lot and perimeter landscaping through the adjustments process.

No prior conditions of approval appear to conflict with the proposed site improvements and all conditions of approval are currently in compliance. Outstanding conditions for LU 17-245440 will be completed prior to final approval after construction is completed. A list of land use decisions for the site is included in the APP Exhibit.

Section 3.3 Historic Designation

The park was nominated for the National Register of Historic Places and listed in 2004. In addition to the 'park land', seven buildings, five structures and a statute of Henry Scott (one-time editor of the Oregonian) are listed as contributing to the site's value as a historic resource. An additional ten buildings, five structures, and multiple greenhouses that do not contribute to the site's value as a historic resource were also inventoried in the nomination.

The period of significance for the park's historical listing is a 50-year period spanning from 1889 to 1939. The park's development was influenced by the City Beautiful

movement's emphasis on establishing parks in urban areas according to the listing. The recognized architectural vernacular is both Late Victorian and Late 19th and 20th Century Revival. The park is also recognized for its utilization of the Depression era Works Progress Administration (WPA) program. In particular, the park is associated with the 1903 Olmsted Brothers report to the Portland Parks Board, the first year of significance noted in the listing, and was designed by Olmsted protégé Emmanuel Mische.

Mische was hired as Portland's Park Superintendent in 1908, the other year noted as significant in the listing. He submitted a plan of development for Mt. Tabor to the Parks Board in 1911 that identified scenic viewpoints and a circulation system of paved drives and pathways to traverse the heavily vegetated site (see 1911 site plan in the historic listing). Most of the improvements that occurred during the period of significance were actually implemented by another former Olmsted employee, Parks Superintendent Charles P. Keyser. The resulting park is a mix of formal and natural elements where no one feature is preeminent and a variety of activities and experiences can occur, and – according to the listing – "illustrates the design principles advanced by the Olmsted firm."

The listing details a long period of land acquisition and subsequent development within the park, noting that:

> "The active acquisition of the land that makes up the park and the park design occurred with local funding during the Progressive Era and included the influence of the City Beautiful movement at the turn of the nineteenth to the twentieth century. Work on Mount Tabor Park's amenities continued through the next decades with the ebb and flow of local funding. With the Great Depression came federal aid through the New Deal programs of the 1930s."

As Portland Parks Superintendent, Mische had significant interest in providing a wide variety of plants and trees for the whole park system, including native plants. Archival records indicate that the on-site Nursey was established in 1908 or 1909 and it is a significant contributing feature to the site's value as a historical resource. The earliest contributing historic building, the Horticultural Services Building, was located adjacent to the Nursery and was established sometime between the completion of Mische's 1911 plan for the park and 1918. The adjoining maintenance yard contains multiple contributing buildings with varying dates of construction according to the listing.

The contributing historic buildings within the park utilize revivalist designs. These consist of two Tudor-style restrooms dating from the mid-1920s and the Caretaker's House, a 1920s Colonial. A notable contributing structure in the park is the Crater Amphitheater. The completion date is not known, but records demonstrate construction was underway

by 1934 (as documented in historic photographs in the listing). The historical listing describes both contributing and non-contributing architectural elements in both park and the maintenance yard in detail.

The listing identifies the 'park land' as a contributing resource and details physical elements within the landscape of the park. According to the listing, the park's design does not focus on or feature any one element, rather it provides for a variety of pastoral and scenic experiences. The listing identifies the circulation and lighting systems, the formal entrances, and three playground areas as notable elements withing the landscape of the park. Other site attributes within the park's landscape include the west and east tennis courts with records of constructing dating from 1923 and 1928.

While construction of the first scenic drives was funded in 1912 and 1913, later construction to finish the planned drives was funded by the WPA (as documented in historic photos of WPA funded work dated 1934 in the nomination). The circulation system is a key element to the experience of the landscape at Mt. Tabor Park. The meandering drives enhance the sense of moving between separate spaces and various experiences within the park. Having lights alongside the circulation system increased the comfort and safety of those using the circulation system at a time when private vehicles and illuminated roadways were a relatively new phenomenon.

The circulation's lighting system consisted of 88 poles at the time of nomination. No attempt is made in the nomination to date individual poles or ascertain the number of poles dating from the period of significant compared to more recent installations. Similar poles at historic parks such as Laurelhurst and Irvington were not considered contributing resources, in part due to the lack of information to confirm installation dates and because fixtures for such poles were not original to the period of significance. In the Mt. Tabor Park nomination, lighting for individual buildings is not considered a contributing resource since those objects are separate from the park's circulation system and are of varying age.

According to the historic listing, archival records show a request to install an electric lighting system in 1911 alongside the planned drives, although the listing notes installation didn't occur until 1924 and 1925. The lighting system was an important enhancement to the growing circulation system as it improved access to the park's various pleasant experiences, especially the forested areas. In addition to the historic paved drives, a bridle path system dating from 1929 is also included in the park's circulation system in Superintendent Mische's design and was provided with electric illumination at an unknown point in time. It is also likely that as the system of paved drives expanded during the 1930s - additional lighting followed.

A review of as-built plans from different eras indicates park staff replaced and relocated individual poles as needed to support park needs in and around the circulation system (see APP Exhibit). A 1958 Lighting Plan shows the illumination for the circulation system consisted of 85 poles. Later plans from the 1980s show a total 87 poles, 24 of which were replacement poles. A 1999 plan shows the installation of new pole near a restroom, which is likely the 88th pole noted in the historical nomination.

Based on archival records and field examinations, park staff have concluded that at most, 61 of the poles currently illuminating the park's circulation system are original installations. As noted above, records indicate 24 poles were replaced in the 1980s. Installation dates for 3 poles is uncertain and may have occurred in tandem with the change to the fixtures associated with the 1958 mapping of the light system.

Based on a review of the historical listing and the identified contributing resources (which does not specifically identify the lighting system), the nomination's description of the strong association between the circulation system and its lighting system, and the archival records relating to the installation and replacement of individual light poles over time, park staff conclude the historic value lies with the system of illuminated pathways and historic drives as a whole – not individual light poles – and the resulting social and cultural value experienced by community members who used the circulation system to observe and interact with the park's natural and scenic landscapes at time when private vehicles were providing increased access to natural areas in park systems throughout the nation.

Section 4 Title 11

Title 11 of the city code regulates tree preservation and removal. A tree permit for the removal of light poles citywide was obtained March 3, 2023 and modified on March 28, 2023 (Permit # 23-007867-000-00-UF). A separate review will be completed for the installation of the replacement poles within Mt. Tabor Park.

Since the review authority has determined that a development permit is required on this site, the criteria in Chapter 11.50 apply to this application in accordance with 11.10.020. Applicable code standards are provided below in italics, followed by the response.

11.20.060 Heritage Trees

F. Heritage Tree removal. Heritage Trees may be removed only with the consent of the UFC, except as provided in Subsection I., below. The UFC shall hold a

public hearing on a request to remove a Heritage Tree. Consent to remove the tree shall be supported by at least six members of the UFC.

Response. No Heritage Trees will be affected by this project. There are two heritage trees in the park, located near Reservoir 6; neither of which are close to the proposed area of work. The northern tree is a giant sequoia located on the east side of Reservoir 6, is not directly adjacent to the circulation system, and is more than 250' from the SE Reservoir Loop Drive (where the closest light pole to be replaced is located). The southern tree is a bigleaf linden located on the SE corner of the same reservoir and while located near pathways that provide access to and from various points within the historic reservoir district, it is more than 350' feet to a light pole that will be replaced in this project.

Chapter 11.50 Trees in Development Situations

11.50.020 When a Tree Plan is Required.

A tree plan is required in conjunction with all development permits, unless there are no Private Trees 12 inches or more in diameter, no City Trees 6 inches or more in diameter, and/or no Street Trees 3 inches or more in diameter, and the site or activity is exempt from Section 11.50.050 On-Site Tree Density Standards; and Section 11.50.060 Street Tree Planting Standards. If multiple development permits are required for a development proposal, including demolitions and subsequent construction, the same Tree Plan shall be included with each permit. For tree removal when no development permit is required, following completion of the development permit, or when tree preservation does not apply per Subsection 11.50.040 A.1., see Chapter 11.40.

Response. A tree plan is provided in Exhibit C that shows the location of trees 6" and greater in diameter in the developed areas of the park. A scaled plan showing the areas of temporary disturbance is also provided in Exhibit C.

11.50.030 Development Impact Area Option For Large Sites and Streets.

Where development is proposed on a site larger than one acre or where work is occurring in the street and is not associated with an adjacent development site, the applicant may choose to establish a development impact area. For sites using the development impact area option, tree preservation requirements shall be based on the trees within the development impact area and tree density will be based on meeting Option A as applied only to the area within the development impact area. Trees may be planted to meet tree density requirement elsewhere on the site.

Response. The maximum area of disturbance as shown on the tree plan in Exhibit C constitutes the development impact area. The development impact area totals 2200 square feet.

11.50.040 Tree Preservation Standards.

C. Tree Preservation Requirement. Any trees preserved shall be protected in accordance with the specifications in Section 11.60.030. The regulations for Private Trees in Subsection 11.50.040 C.1. sunset after December 31, 2024. After December 31, 2024 the regulations in effect will be those in effect on January 1, 2015.

1. Private Trees...

2. City and Street Trees.

a. General Tree Preservation

(1) Retention. The City Forester will identify potential impacts and opportunities to preserve and protect existing trees, as well as any measures required to protect trees on site, on adjacent sites, or in the street. Any work on any Street Tree or City Tree must be approved by the City Forester.

(2) Mitigation. Any required mitigation specified below shall occur on the site, in the street planter strip, elsewhere on City property or in the street, or as a payment into the Tree Planting and Preservation Fund. The City Forester may reduce or waive the following mitigation requirements.

(a) Approved Street Tree removal in conjunction with improvements to partially or fully unimproved streets. Each tree at least 12 inches in diameter that is allowed to be removed shall be replaced with at least one tree. Trees planted to meet Street Tree Planting Standards will be credited toward meeting this requirement.

(b) Any other Street Tree or City Tree allowed to be removed that is 6 or more inches in diameter shall be replaced with at least one tree in addition to trees required to meet required tree density or Street Tree planting standards.

(3) Removal. Any trees approved to be removed by the City Forester may be removed. Any trees removed shall be removed in accordance with the specifications in Section 11.60.050.

Response. No trees are requested for removal in this request.

11.50.050 On-Site Tree Density Standards.

A. Where these Regulations Apply. This Section applies to sites within the City of Portland and the County Urban Pocket Areas. Unless exempted in Subsection 11.50.050 B., the following are subject to the On-Site Tree Density Standards:

1. New Development;

2. Exterior alterations to existing development with a project valuation that is more than the threshold stated in Subsection 33.258.070 D.2.a.

Response. Project value exceed the threshold in Subsection 33.258.070 D.2.a.

C. New development shall meet City specifications and standards in Chapter 11.60 and the on-site tree density requirements in Subsection D., below. Exterior alterations shall meet City specifications and standards in Chapter 11.60 and the on-site tree density requirements in Subsection D., below, but are only required to spend 10 percent of project value on the requirements in Subsection D. and the nonconforming upgrades required by Chapter 33.258, Nonconforming Situations.

D. On-Site Tree Density Requirements.

1. Required Tree Area. The required tree area is based on the size of the site and the type and size of proposed and existing development as shown in Table 50-2. Applicants may choose Option A or Option B for calculating required tree area except only Option A may be used to apply standards to a "Development Impact Area".

Table 50-2
Determining Required Tree Area

Development Type	Option A	Option B
Other	25 percent of site or development impact area	Site area minus building coverage of existing and proposed development

Response. The park is 176 acres, therefore the required tree area (or 25% of the site) is 44 acres or 1,916,640 square feet (sf). Tree canopy covers approximately 62% of the site as shown in Exhibit C. Therefore, the minimum tree area is met.

The Bureau has inventoried 1,131 trees in the developed portions of the park, as shown in Exhibit C. 74 trees have diameters more than 1.5" and less than 6" inches. 1,041 have diameters of 6" or greater. As shown in the tree inventory, 921 of the inventoried trees have large mature canopies, 59 have medium mature canopies, and 142 have small canopies at maturity. Additional trees in various stages of growth are located within the natural areas of the park.

11.60.030 Tree Protection Specifications.

C. Protection methods. The Tree Plan shall show that trees retained are adequately protected during construction using one of the methods described below:

1. Prescriptive Path.

a. A root protection zone is established as follows:

(1) For trees on the development site - a minimum of 1 foot radius (measured horizontally away from the face of the tree trunk) for each inch of tree diameter (see Subsection 11.80.020 C., Measurements):

b. Protection fencing

(1) Protection fencing consisting of a minimum 6-foot high metal chain link construction fence, secured with 8-foot metal posts shall be established at the edge of the root protection zone and permissible encroachment area on the development site. Existing structures and/or existing secured fencing at least 3.5 feet tall can serve as the required protective fencing.

c. Signage designating the protection zone and penalties for violations shall be secured in a prominent location on each protection fence;

d. Installation of landscaping required by Title 33 is allowed within the root protection zone and is not an encroachment. Any in-ground irrigation systems are considered encroachments.

e. The following is prohibited within the root protection zone of each tree or outside the limits of the development impact area: ground disturbance or construction activity including vehicle or equipment access (but excluding access on existing streets or driveways), storage of equipment or materials including soil, temporary or permanent stockpiling, proposed buildings, impervious surfaces, underground utilities, excavation or fill, trenching or other work activities; and

f. The fence shall be installed before any ground disturbing activities including clearing and grading, or construction starts; and shall remain in place until final inspection.

Response. Trees onsite will be protected in accordance with the above standards, unless the Bureau's contractor determines it is not practicable, in which case an arborist will be retained to provide site-specific recommendations and prepare a protection plan approved by the City Forester in accordance with 11.60.030 C. 2.

Section 5 Title 33

Using the terms defined in Chapter 33.920 (shown in italics), the proposed light pole replacement project is characterized as follows:

- the project will replace *utility structures* in the *Basic Utility Use Category* that provide an *accessory use* to the *primary use (*the public park).
- this action will constitute an *alteration to exterior development.*
- soils will need to be disturbed to install the poles in the ground, which will result in a *temporary disturbance area.*

The proposed use is identified in Chapter 33.100 Open Space Zone and is subject to the following overlay zones:

- 33.430 Environmental Zone.
- 33.480 Scenic Resource Zone.
- 33.445 Historic Resource Overlay Zone.

The replacement poles serve an accessory function to the primary park use and are subject to additional development standards related to off-site impacts as well as those that apply through the historic resources review.

Section 5.1 The Base Zone: *Open Space Zone*

The Open Space criteria are in Chapter 33.100 and allowed uses are identified in Table 100-1 *Open Space Zone Primary Uses*.

Table 100-1 Open Space Zone Primary Uses	
Use Categories	**OS Zone**
Institutional Categories	
Basic Utilities	L/CU [5]
Y = Yes, Allowed L = Allowed, But Special Limitations CU = Conditional Use Review Required N = No, Prohibited	
Notes: • The use categories are described in Chapter 33.920. • Regulations that correspond to the bracketed numbers [ ] are stated in 33.100.100.B. • Specific uses and developments may also be subject to regulations in the 200s series of chapters.	

As shown in the excerpt from Table 100-1, basic utility uses are allowed, either as a Limited Use or a Conditional use as determined by note [5] in 33.100.100 B (addressed below). The use is not identified in the 200s series of standards. Applicable code standards are provided in italics below, followed by the response.

Use Regulations 33.100.100 Primary Uses

> *B. Limited uses. Uses allowed that are subject to limitations are listed in Table 100-1 with an "L". These uses are allowed if they comply with the limitations listed below and the development standards and other regulations of this Title…*
>
> *5. Basic Utilities. This regulation applies to all parts of Table 100-1 that have note [5].*
>
> *a. Basic Utilities that serve a development site are accessory uses to the primary use being served.*

Response. Lighting systems are utilities that serve a development site and are accessory to the primary park use. The subject lighting system is classified in this section as a Basic Utility pursuant to 5.a. (hereafter referred to as a *Basic Utility, type 5.a.)* and meets the

standards for a Limited Use. As such the use is subject to the standards for accessory uses in this Chapter.

33.100.110 Accessory Uses

Uses that are accessory to a primary use are allowed if they comply with specific regulations for the accessory uses and all applicable development standards.

Response. The proposed use is subject to the development standards in 33.100.120 shown below.

33.100.120 Nuisance-Related Impacts

A. Off-site impacts. All nonresidential primary and accessory uses must comply with the standards of Chapter 33.262, Off-Site Impacts.

Response. The proposed use is a nonresidential accessory use and is therefore subject to the development standards in 33.262. The additional development standards in the 200s series are addressed in Section 4.2.

33.100.200 Development Standards

A. Allowed or limited uses. Allowed or limited uses are subject to the development standards stated below.

1. Building setbacks. Except as specified in paragraph A.3., buildings must be set back from all property lines a minimum of 1 foot for each foot of building height.

2. Outdoor activity facility setbacks. Except as specified in paragraph A.3. below, outdoor activity facilities, such as swimming pools, basketball courts, tennis courts, or baseball diamonds must be set back 50 feet from abutting R-zoned properties. Playground facilities must be set back 25 feet from abutting R-zoned properties if not illuminated, and 50 feet if illuminated. Where the outdoor activity facility abuts R-zoned properties in School uses, the required setback is reduced to zero.

3. Recreational fields for organized sports. Recreational fields used for organized sports are subject to Chapter 33.279, Recreational Fields for Organized Sports

Response. None of the above criteria apply to accessory utilities, in this case, the lighting system.

The lighting system meets the standards for allowed Limited Uses and meets all the development standards that apply to a *Basic Utility, type 5.a.* in the Base Zone.

Section 5.2 *Additional Use and Development Regulations*

No additional use regulations are identified in the 200s series for utilities accessory to primary park uses. Additional development standards are identified and addressed below.

Chapter 33.258 Nonconforming Situations

33.258.030 Types of Nonconforming Situations

A specific site may be nonconforming because it contains either a nonconforming use, an allowed residential use that exceeds the allowed density, a nonconforming development, or a combination of these. Nonconforming uses, nonconforming residential densities, and nonconforming development are defined in Chapter 33.910, Definitions.

Response. *Chapter 33.910, Definitions* provides the following term and definition:

Nonconforming Development. An element of a development, such as a setback, height, or parking area, that was created in conformance with development regulations but which subsequently, due to a change in the zone or zoning regulations, is no longer in conformance with the current applicable development standards.

Response. Both the primary use on site, the park, and the accessory utility use proposed for modification in this application, are currently allowed uses that conform with current zoning regulations. However, the development of the primary use, the park and the accessory utility use occurred prior to the adoption of the first zoning regulation and development regulations for accessory utility uses have since been adopted.

The primary use onsite – the park – does not conform to all the current regulations that apply to the development of new parks today. In particular, the review authority determined in LU 17-245440 that the park's perimeter and parking lot landscaping do not meet current standards. Three adjustments to those standards were approved in that decision therefore, no additional nonconforming upgrades to the site's landscaping are required. However, since that time, standards related to bicycle parking in Chapter 266 have been updated.

33.258.070 Nonconforming Development

A. *Purpose. This section is primarily aimed at upgrading nonconforming development elements that affect the appearance and impacts of a site. It*

is not intended to require extensive changes that would be extremely impractical such as moving or lowering buildings.

B. *Continued operation. Nonconforming developments may continue unless specifically limited by Subsection D. below or other regulations in this Title.*

C. *Changes. Changes may be made to the site that are in conformance with the development standards of the base zone, overlay zone, plan district or other development standards that apply to the site. Changes that bring the site closer to conformance are allowed. Proposed changes that are not in conformance or do not move closer to conformance, are subject to the adjustment process unless prohibited.*

Response. The change proposed in this application, light pole replacement, will conform to the requirements of this code.

D. *Development that must be brought into conformance. The regulations of this subsection are divided into two types of situations, depending upon whether the use is also nonconforming or not. These regulations apply except where superseded by more specific regulations in the code.*

1. *Nonconforming development with a new nonconforming use or new non-conforming residential density…*

2. *Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below.*

   When alterations are made that are over the threshold of Subparagraph D.2.a., the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits.

   a. *Thresholds triggering compliance. The standards of Subparagraph D.2.b., below, must be met when the value of the proposed alterations on the site, as determined by BDS, is more than $347,000. The following alterations and improvements do not count toward the threshold:*

(1) Replace a manufactured dwelling in a manufactured dwelling park;

(2) Alterations required by approved fire/life safety agreements;

(3) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;

(4) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;

(5) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; and

(6) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

(7) Energy efficiency or renewable energy improvements that meet the Public Purpose Administrator incentive criteria whether or not the project applies for and receives the incentive;

(8) Landscaping required by 33.475.220;

(9) Removal or remediation of hazardous substances conducted under ORS 465.200-545 & 900; and

(10) The installation of electric bike and electric vehicle chargers and accessory equipment.

Response. Nonconforming development exists on the site and the value of the proposed improvements is approximately $704,000, which exceeds the threshold to trigger compliance with the standards of this section. However, these improvements are intended to meet life safety standards and so may be exempt pursuant to Subsection 33.258.070 D. 2.a(2) above.

b. Standards which must be met. Development not complying with the development standards listed below must be brought into conformance or receive an adjustment.

(1) Landscaping and trees required for the following areas:

- *Exterior display, storage, and work activity areas;*
- *Setbacks for surface parking and exterior development areas;*
- *Interior parking lot landscaping;*
- *Existing building setbacks;*
- *Minimum landscaped areas (where land is not used for structures,*
- *parking, or exterior improvements); and*
- *On-site tree density standards of Subsection 11.50.050.C.*

Response. The parking lot landscaping was approved via the adjustment procedure in LU 17-245440 which approved the updates to the Tabor Yard. The implementation of the approved improvements to the Tabor Yard are currently in construction. Conditions related to the landscaping will be completed by the Bureau's contractor for the Yard project prior to final approval in accordance with that decision. (See permitted landscaping for LU 17-245440 in Exhibit C.)

(2) Pedestrian circulation systems, as set out in the pedestrian standards that apply to the site;

Response. Pedestrian circulation system standards are identified in the base zone. The OS zone does not contain pedestrian circulation standards; therefore, this criterion does not apply.

(3) Bicycle parking by upgrading existing racks and providing additional spaces in order to comply with 33.266.200, Bicycle Parking as follows:

- *Major remodeling projects must meet the standards for all bicycle parking;*
- *Sites with accessory surface parking must meet the standards for all bicycle parking;*
- *In all other situations, the amounts and standards for short-term bicycle parking must be met.*

Response. Mt. Tabor Park does have accessory surface parking; therefore, the bicycle parking standards apply.

The minimum number of bicycle parking spaces is calculated based on current and future bicycle use, as shown in Map 266-1 and pursuant to Table 266-1. Based on these requirements, Standard A applies to Mt. Tabor Park. Based on the site's primary use as a park, and in accordance with Table 266-6, no long-term bicycle parking is required. Short-term parking for public parks is determined through a conditional use review.

The most recent conditional review for the park occurred via LU 17-245440 did not determine a need to add more short-term bicycle parking. Currently, bike racks are located near the main parking lot and the western SE 64th/SE Lincoln St. entrance. Section 33.266 addresses bicycle parking. Sites that could considered for additional bicycle parking include the paved parking area by the playground in the middle of the park, as well as additional flat paved areas near other amenities such as the tennis courts, the south play area, and the summit.

(4) Screening; and

Response. The existing nonconforming perimeter screening landscaping was approved via the adjustment procedure in LU 17-245440.

(5) Required paving of surface parking and exterior storage and display areas.

Response. The existing surface parking areas are paved.

c. Area of required improvements.

(1) Generally. Except as provided in D.2.c(2), below, required improvements must be made for the entire site.

(2) Exception for sites with ground leases. Required improvements may be limited to a smaller area if there is a ground lease for the portion of the site where the alterations are proposed.

Response. No portion of the site is leased and therefore this subsection does not apply.

d. Timing and cost of required improvements. The applicant may choose one of the following options for making the required improvements:

(1) Option 1.

Under Option 1, required improvements must be made as part of the alteration that triggers the required improvements. However, the cost of required improvements is limited to 10 percent of the value of the proposed alterations. It is the responsibility of the applicant to document the value of the required improvements. When all required improvements are not being made, the applicant may choose which of the improvements listed in Subparagraph D.2.b to make. If improvements to nonconforming development are also required by regulations in a plan district or overlay zone, those improvements must be made before those listed in Subparagraph D.2.b.

Response. Required improvements will be completed as part of the light pole replacement work. The combined value of the proposed improvements is $704,000. Therefore, the maximum cost of the required upgrades cannot exceed $70,400.

33.262 Off-Site Impacts

33.262.010 Purpose

The regulations of this chapter are designed to protect all uses in the R, C, CI, IR, and OS zones from certain objectionable off-site impacts associated with nonresidential uses. These impacts include noise, vibration, odors, and glare…

33.262.020 Applying These Regulations

Nonresidential uses in all zones which cause off-site impacts on uses in the R, C, CI, IR, and OS zones are required to meet the standards of this chapter. Exempted equipment and facilities are stated in 33.262.030 below.

Response. Accessory utilities are for nonresidential use, and this project is in the OS zone, therefore the standards of this section apply.

33.262.050 Noise

The City noise standards are stated in Title 18, Noise Control. In addition, the Department of Environmental Quality has regulations which apply to firms adjacent to or near noise sensitive uses such as dwellings, religious institutions, schools, and hospitals.

Response. Replacing light poles within the existing lighting system will not result in any permanent noise generation. Temporary construction impacts will comply with the

standards in 18.10.060 for Construction Activities and Equipment, and the Oregon Administrative rules for DEQ in Chapter 340 Division 35.

33.262.060 Vibration

33.262.070 Odor

Response. Replacing light poles within the existing lighting system will not generate any vibrations or odors.

33.262.080 Glare

A. *Glare standard. Glare is illumination caused by all types of lighting and from high temperature processes such as welding or metallurgical refining. Glare may not directly, or indirectly from reflection, cause illumination on other properties in excess of a measurement of 0.5 foot candles of light.*

B. *Strobe lights. Strobe lights visible from another property are not allowed.*

Response. Most of the light poles in the historic illumination system are located within the park at significant distance from nearby residences and will not result in any light spill on residential properties as shown in the photometric study in Exhibit C. No strobe lights are proposed.

There are light poles located within the SE Taylor ROW outside of the park and the historic district boundary shown in the historic listing. These poles are not subject to Title 33 due to their location outside of the historic district and within the ROW. However, additional information is provided about these poles below since they are located closer to residential property lines than others in the lighting system.

The homes on SE Taylor are orientated to the north and take access via the SE Yamhill frontage. The homes are located east of the heavily vegetated area encircling the northern parking lot within the park and there is significant vegetation within the SE Taylor right-of-way providing significant buffering and screening between the roadway and the residences. PBOT will review the proposed lighting on SE Taylor through the encroachment permit review process.

PBOT typically mounts pedestrian scale lighting at 14 feet compared to overhead “cobra-head” lighting that is mounted at 30-40 feet. At 12.5 feet in height, the proposed replacement light poles located in the SE Taylor St ROW are consistent with pedestrian scale lighting. SE 69th which intersects with SE Taylor contains typical overhead lighting which casts significantly more illumination compared to the pedestrian scale lighting provided on SE Taylor.

The illuminance value for street lighting is guided by street functional classification and minimum lighting levels rise on streets that provide higher levels of service. The brightest lighting is expected on Major Traffic or Transit streets, while Local Service roadways have the lowest lighting levels. SE Taylor is classified as a local street in the Transportation System Plan and provides City Bikeway services. Therefore, according to PBOT's 2019 Recommended Light Levels and Guidelines for Roadway Lighting, the recommended minimum level of lighting is 0.2 candle lights along the corridor and 0.3 candle lights at the intersection of SE Taylor and SE 69th Ave.

Photometrics for SE Taylor show the poles will meet the minimum levels of lighting required in this location (see Exhibit C). The proposed new replacement lights will greatly reduce the amount of illumination cast on adjacent properties over the current ones due to improved light fixtures that focus light more effectively, thereby reducing the overall area illuminated by each light fixture.

The proposed replacement of light poles in Mt. Tabor Park for the light pole safety project will meet the additional development standards that apply to accessory utilities.

Section 5.3 *Environmental Overlay*

The criteria for environmental review are addressed in Chapter 33.430. Applicable code standards are identified in italics below, followed by the response.

33.430.080 Items Exempt From These Regulations
The following items, unless prohibited by Section 33.430.090, below, are exempt from the regulations of this chapter. Other City regulations such as Title 10, Erosion Control, and Title 11, Trees, must still be met.

D. Existing development, operations, and improvements, including the following activities:

1. Maintenance, repair, and replacement of existing structures, exterior improvements, roads, public trails, public rest points, public viewing areas, public interpretative facilities, and utilities….

8. Pruning trees in accordance with Title 11 permit requirements;

Response. The request is to replace existing utility structures and is exempt from the regulations in Chapter 33.430. Estimated average temporary ground disturbance is 2.5' around each light pole and maximum temporary ground disturbance is 5' x 5' per light poles, for a maximum 2200 sq ft of temporary ground disturbance. For the majority of the poles, bare ground is present in the immediate vicinity, and although poles may be located under tree canopy, no trees are proposed to be removed to install replacement

poles. Any pruning required to site equipment will occur in a limited fashion consistent with Title 11 requirements.

The proposed project to replace light poles in Mt. Tabor Park is a limited activity to maintain an existing accessory utility system and will comply with Titles 10 and 11. Any required permits will be obtained prior to any ground disturbance.

Section 5.4 *Scenic Overlay*

The standards for development within the scenic overlay are addressed in Chapter 33.480.

There are two small areas of scenic overlay located in the interior of the park that allow for tree removal under certain conditions to preserve views. There are no view corridors or scenic corridors that regulate building height on the site. As shown in Exhibit C, there are two panoramic viewpoints identified in the 1999 Scenic Resource Protection Plan. The western viewpoint is located above Reservoir 6 and the other is located at the summit.

The following standards apply to viewpoints:

33.480.050 Tree Removal Review

> *A. Tree removal without development…*
>
> *B. Tree removal in development situations. When tree removal is proposed as part of development, the standards of Subparagraph 33.480.040.B.2.h apply in addition to the tree preservation standards of Title 11, Trees.*
>
> *C. Trees that do not qualify for removal under Subparagraph 33.480.040.B.2.h may be removed if approved through tree review as provided in Chapter 33.853, Tree Review. However, where the tree removal would require environmental review, only environmental review is required.*

Response. None of the light pole replacements are proposed in the vicinity of either viewpoint. Furthermore, any pruning required to install the new poles will occur in accordance with Title 11, the associated Tree Permit protection plan, and to proper arboricultural practices, thereby avoiding impacts to the health or structural integrity of any trees.

The proposed project meets the standards in Chapter 33.480 for the Scenic Overlay.

Section 5.5 *Historic Resource Overlay Zone*

Chapter 33.445 contains the standards for the Historic Resource Overlay Zone. The applicable standards are identified in 33.445.030.

33.445.030 Where These Regulations Apply

A. Sections 33.445.010 through .060 and .400 through .500 apply to all historic resources.

B. Sections 33.445.100 through .340 apply as shown in Table 445-1.

Table 445-1
Where These Regulations Apply

	In Historic District	In Conservation District	In National Register District	Not in a district
Not a Landmark or Significant Resource	33.445.200	33.445.210	33.445.220	N/A

Response. Mt. Tabor Park was listed on the National Register of Historic Places as a Historic District prior to 2017 and is designated a Historic District by the city (and, consequently, is not a Landmark or Significant Resource). As shown in excerpt of Table 445-1 above, this request is subject to Section 33.445.200.

33.445.200 Historic District

A. Designation of a Historic District

1. National Register listing. Districts listed by the federal Keeper of the National Register of Historic Places or before January 27, 2017 are automatically identified as Historic Districts on the Official Zoning Maps. For Historic Districts that were listed by the federal Keeper of the National Register of Historic Places on or before January 27, 2017 but have not been independently designated by the City as the result of a legislative or quasi-judicial procedure, any expansion of the boundary by the federal Keeper of the National Register of Historic Places is also automatically identified on the Official Zoning Maps. See Section 33.855.075, Automatic Map Amendments for Historic Resources.

Response. The listing of Mt. Tabor Park on the National Register of Historic Places occurred in 2004. The Mt. Tabor Park Historic District was therefore identified on the official zoning maps (in APP Exhibit).

B. Removal of a Historic District designation.

Response. This criterion does not apply, as no change to the designation is proposed.

C. Relocation of a contributing resource in a Historic District.

Response. This criterion does not apply, as no relocation is proposed.

D. Development in a Historic District. Certain development within a Historic District requires historic resource review to ensure the resource's historic value is considered prior to or during the development process.

1. When historic resource review is required. Unless exempted by Paragraph D.2, the following proposals in a Historic District are subject to historic resource review…

2. Exempt from historic resource review.

a. Alterations that do not require a building, site, zoning, or sign permit from the City, and will not alter the exterior features of a resource having such features specifically listed in the Historic District documentation or National Register nomination as attributes that contribute to the resource's historic significance;

Response. The replacement of light poles does not require a building, site, zoning, or sign permit. However, the lighting for the circulation system was specifically identified in the documentation for the historic listing as an important feature of the park's landscape, which is a contributing resource. Therefore, review staff have determined that historic resource review is required. The standards for historic resource review are in Chapter 33.846 and are addressed in the next section.

E. Demolition of resources in a Historic District. Conservation Landmarks in a Historic District that are not identified as contributing to the historic significance of the Historic District are subject to the regulations of Section 33.445.110.E. National Register Landmarks in a Historic District that are not identified as contributing to the historic significance of the Historic District are subject to the regulations of Section 33.445.120.E. Significant Resources in a Historic District that are not identified as contributing to the historic

significance of the Historic District are subject to the regulations of Section 33.445.330.

Demolition of contributing resources within a Historic District requires demolition review to ensure their historic value is considered and that there is an opportunity for the owner and community to consider alternatives to demolition.

1. When demolition review is required. Unless exempted by Paragraph E.2., demolition of a contributing resource in a Historic District is subject to demolition review. For the purposes of this Chapter, demolition is defined as:

a. Total demolition;

b. An alteration that requires a demolition permit except for a demolition permit to relocate a structure;

c. An alteration that results in the removal of 50 percent or more of any streetfacing wall of a structure;

d. An alteration that results in:

(1) The removal of 50 percent or more of the total exterior wall area of a structure; and

(2) The removal of 50 percent or more of the total roof area of a structure; or

e. For structures that are not buildings, an alteration that results in the removal of 50 percent or more of the structure;

2. Exempt from demolition review. The following are exempt from demolition review:

a. Demolition of noncontributing resources;

Response. The park landscape is a contributing resource, and the lighting system is a component of the landscape. While the lighting system itself is proposed to be retained, because more than 50 percent of the light poles that constitute the lighting system will be replaced in the light safety project, BDS has determined that the replacement is subject to demolition review.

b. Demolition of contributing resources in Historic Districts when demolition is required because:

(1) The Bureau of Development Services requires demolition due to an immediate danger to the health, safety, or welfare of the occupants, the owner, or that of the general public, as stated in Section 29.40.030 of Title 29, Property Maintenance Regulations; or

(2) The Hearings Officer requires demolition, as provided for in Section 29.60.080 of Title 29, Property Maintenance Regulations;

Response. Park staff has proposed to replace light poles in 12 city parks to ensure public safety. However, neither BDS nor a Hearings Officer has required replacement, or demolition, in accordance with the requirements in Title 29.

c. Demolition of covered detached accessory structures in C and R zones that are identified as a contributing resource and are 800 square feet or less in total floor area; and

Response. Since this project will occur in the OS zone, the above criterion does not apply.

d. Alterations to a contributing resource that meet the definition of demolition in Paragraph E.1.b.-e. when the following are met:

(1) The alterations are approved through historic resource review; and

(2) The historic resource review decision is final, and all appeals have been resolved.

Response. This request fulfills the requirement to obtain a historic resource review. Pole removal may occur once the decision for this request is final (including the resolution of any appeals).

Section 5.6 *Historic Resource Review*

The standards for Historic Resource Reviews are located in Chapter 33.846. Review procedures for proposals within Historic Districts are located in Table 846-3.

Table 846-3 Review procedures for proposals within Historic Districts			
Proposal	**Zone**	**Threshold**	**Procedure**
Any other non-exempt proposal	All	Project value > $547,400	Type III
		Project value ≤ $547,400	Type II

Response. This request is not specifically listed and so falls into the final category, "*Any other non-exempt proposal*." Since the estimated project value is estimated at $704,00 it must be reviewed through the Type III procedure.

33.846.060 Historic Resource Review

E. Approval criteria for outside the Central City plan district. …

1. Historic Districts. When historic resource review is required for any resource in a Historic District, including Historic Landmarks and Conservation Landmarks, the approval criteria are:

a. Historic Districts with district-specific guidelines….

b. Historic Districts without district-specific guidelines. Where there are no guidelines that are specific to the Historic District, the approval criteria are:

(1) The criteria in Subsection G;

(2) If the resource is a Conservation Landmark, the criteria in Subsection H; and

(3) If the proposal includes relocating a landmark or contributing resource, the criteria of Subsection I;

Response. There are no district specific guidelines for the Mt Tabor Park Historical District, therefore the project is subject to the criteria in Subsection G.

The resource is not a Conservation Landmark; therefore, Subsection H does not apply. The proposal does not include relocating any resources; therefore, Subsection I does not apply.

G. Other historic approval criteria. When required by Paragraphs E. or F., the following approval criteria must be met:

1. Historic character. The historic character of the landmark or contributing resource will be retained and preserved. Removal of historic materials or alteration of features and spaces that contribute to the historic significance of the landmark or contributing resource will be avoided;

Response. The historic listing identifies multiple parcels totaling 196-acres for the Mt. Tabor Park historical district, including both the park and maintenance yard. As mentioned previously, the district contains multiple contributing resources in addition to the park's landscape. The lighting system is a small component of the overall park site.

The replacement project will have little to no impact on the existing natural areas and decorative landscaping, as the areas around the poles are typically kept clear of vegetation. Minor refinements to pole locations to avoid impacts to landscaping and tree could occur if needed to preserve the character of the landscaping and ensure trees are protected. The vast majority of the landscape, the historic vehicle entrances and meandering drives, and all of the contributing buildings and structures will remain untouched by the light pole replacement project.

The lighting system itself will remain, even if components are replaced. Many of the original system components were replaced prior to the historical nomination, including all the light fixtures and 27 of the poles currently in use. The alternative to removing current poles would be to rehabilitate the existing poles despite their age and condition.

Bureau staff has verified with the consulting engineers at KPFF that the work necessary to mount poles to current code (installing rebar or other structural supports within the pole) is not considered practicable or cost-effective. For reuse, poles and footings would need to be removed and poles structurally altered to increase their structural capacity and then anchored to a new footing to meet current code standards. External alterations to enhance structural capacity would have a detrimental effect on the look and character of the pole, while internal alterations to replace or add reinforcing steel would significantly impact the structural integrity of the concrete. Internal alterations to 99-year-old concrete that was not originally built to meet current building code standards would significantly compromise the integrity of the poles.

By preserving the spatial pattern of poles (adjacent to the circulation system and distributed across the landscape), and installing poles of similar materials and design, the illuminated pathways will retain their historical character. The compelling nature of the park's landscape as a place of urban refuge offering a variety of forested, pastoral,

and scenic experiences will be preserved through this project. Therefore, the contributing resource, the park's landscape will not be negatively affected by this project.

2. Record of its time. The landmark or contributing resource will remain a physical record of its time, place, and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings will be avoided;

Response. The illuminated circulation system provided vehicular access at the dawning of the automobile age to one of the city's most prominent natural features and ensured even nighttime visits would be safe and enjoyable. Pole replacement will result in a restoration of the illumination system at the time of the historic nomination, thus preserving the warmly illuminated meandering drives that provide access throughout the park, even in the darkest of forested areas.

3. Historic changes. Most resources change over time. Those changes that have acquired historic significance will be preserved;

Response. The project proposes to provide light pole replacements consistent in number to the historical listing. Locations will match that documented in 1988 and 1989 to the extent possible. Although not part of the period of significance, the current lantern-style fixtures and the metal strapping at the top of certain light poles, have acquired significance and are considered representative of Mt. Tabor Park in particular. The proposed new light poles will be topped with lantern-style fixtures along with metal strapping of similar in design and style, as shown in the APP Exhibit, to maintain the iconic significance these features have acquired over time.

4. Historic features. Generally, deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence;

Response. The lighting system that illuminates the circulation system is identified as contributing to the park's historic landscape. The replacement of 88 poles is needed to maintain structural safety of the lighting system due to severe deterioration, as certified by the city's consulting engineers. Installing modern fixtures at the same time poles are replaced will ensure the illumination system meets current electrical code, will reduce the need for future spot replacements, and will generate significant saving by reducing

energy consumption. The new poles will match the historic ones in material, texture, color, and design (as shown in the comparison photographs in the APP Exhibit).

Written and graphic evidence regarding the existing system is provided in the APP Exhibit, which documents at least 27 pole replacements over time and the installation of the now iconic lantern-style fixtures. While the first elements of the lighting system were installed in 1924 and 1925, development of the park's physical elements occurred over time and it is likely some individual poles were added later, for example when the bridle path was established in 1929 and Mt. Tabor Drive was constructed (circa 1934). The earliest record of the number and location of light poles dates from the 1950s (outside the period of significance). Over time, individual poles have been replaced as needed – however the overall system of illuminated drives and paths providing circulation through the landscape has been maintained. Documentation of the lighting system is also located in the historic listing. The existing light poles and fixtures are compared in photographs in the APP Exhibit and details of the proposed replacements are shown in the specification sheets in Exhibit C.

5. Historic materials. Historic materials will be protected. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials will not be used;

Response. Poles will be ground-mounted, and the installation will not affect historic materials. Under normal circumstances, a direct buried concrete pole can be set directly into an augered hole that minimizes the amount of ground disturbance or impacts to surrounding soils or any historic concrete. Depending on the strength of the soil, backfilling can be accomplished with aggregate, concrete, or the original soil. This technique does not require the use of sandblasting or chemicals and meets modern building code requirements for structural safety.

6. Archaeological resources. Significant archaeological resources affected by a proposal will be protected and preserved to the extent practical. When such resources are disturbed, mitigation measures will be undertaken;

Response. There are no known archaeological resources on site. Development, including significant ground disturbance and excavation on the site has been documented since 1894. Given the project will install replacement light poles in previously developed locations using modern techniques that limit ground disturbance, it is very unlikely any materials of archaeological interest will be encountered. Regardless, should any archaeological discoveries occur, work will be stopped in the affected area and the Bureau will notify the State Historic Preservation Office (SHPO). Prior to submitting this application, the Bureau contacted the SHPO but has not heard back from them regarding any state requirements, concerns, or suggestions about this project.

7. Differentiate new from old. New additions, exterior alterations, or new construction will not destroy historic materials that characterize a landmark or contributing resource. New work may be differentiated from the old if the differentiation does not diminish the character, features, materials, form, or integrity of the landmark or contributing resource and, if in a Historic District, the district as a whole;

8. Architectural compatibility. New additions, exterior alterations, or new construction will be compatible with the massing, size, scale, and architectural features of the landmark or contributing resource and, if in a district, the district as a whole. When retrofitting to improve accessibility for persons with disabilities or accommodate seismic improvements, design solutions will not compromise the architectural integrity of the landmark or contributing resource;

Response. The integrity of the park's landscape (the contributing resource) will not be affected by the replacement poles, as they will maintain the existing spatial pattern of the lighting system adjacent to the circulation system. As previously noted, poles will match those in existence today and at the time of the historical listing. Any new conduit needed will be concealed.

Many of the current components of the light system are almost a hundred years old. By replacing the poles now, the structural integrity of the lighting system is assured for a hundred more years. No other changes to the landscape or to any of the contributing architectural structures or buildings are proposed.

9. Preserve the form and integrity of historic resources. New additions, exterior alterations, or new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the landmark or contributing resource and, if in a district, the district as a whole would be unimpaired; and

Response. The lighted circulation system is an integral component of the landscape in the Mt. Tabor Park Historic District, as the illumination provided alongside the historic drives and formal pathways enhances access to the park's various experiences. However, individual pole replacement has occurred repeatedly over time without affecting the integrity of the overall system of lighting or circulation. Therefore, it is reasonable to conclude that if an individual pole needs to be removed in the future, as long as it was replaced in the same vicinity and with similar materials and design, neither the system of illumination or circulation would be affected, and the character of the landscape would remain unimpaired.

10. Hierarchy of compatibility. New additions, exterior alterations, or new construction will be designed to be compatible primarily with the landmark or contributing resource and, if located within a district, secondarily with contributing resources located within 200 feet and, finally, with the rest of the district. Where practical, compatibility in districts will be pursued on all three levels.

Response. The lighting system will maintain its function and role of illuminating the park's circulation system. Replacement poles will maintain the look and design of the current poles within the illumination system. There is a compelling relationship between the lighting system and the circulation system. Areas in the vicinity of the existing lighting system that are part of the circulation system will not be affected by the replacement, as the overall lighting system will remain intact and individual replacement poles are of compatible materials and design to existing ones. Most importantly, the illuminated nature of the circulation system will be maintained.

No changes are proposed to the location or pattern of the circulation system within the park. The replacement of individual poles will not affect the contributing architectural resources. No changes are proposed to alter other aspects of the landscape, such as the terrain or vegetation.

The overall spatial pattern of the light poles illuminating the circulation pattern will be retained. Only minor refinements to pole locations are anticipated. Two poles near Reservoir 5 may conflict with water lines, as shown in the disturbance area site plans (Sheet 4), however, no changes are proposed that would affect the contributing resources within the Mt. Tabor Park Reservoir Historic District.

Based on the above, the planned pole replacements will be compatible with the circulation system, the landscape as a whole, other contributing resources, and both of the historic districts at the site.

33.846.080 Demolition Review

A. Purpose. Demolition review protects landmarks and contributing resources in districts. Demolition review recognizes that historic resources are irreplaceable assets significant to the region's architectural, cultural, and historical identity and their preservation promotes economic and community vitality, resilience, and memory. In the event that demolition of a historic resource is approved, demolition review also addresses the potential for mitigation of the loss.

Response. The lighting system for the Park's circulation system was identified as an attribute within the Park's landscape, which is a contributing resource to the Park

Historic District. The lighting system is composed of light poles installed alongside the circulation system that was designed in 1911 and constructed between 1912 and 1934. Light poles within the system have been replaced over time and feature fixtures installed outside the period of significance identified in the historic listing.

As noted previously in this application, the value of the lighting system is the illumination provided to the historic circulation system which is a core component of the 1911 park design. The circulation system is composed of paved drives, soft surface formal trails, and staircases that convey park users from one experience to another within the park. Individual portions of the circulation system have been replaced, rebuilt and refurbished over time, just as the individual poles that constitute the illumination system have been replaced over time.

B. Review procedure. Demolition reviews are processed as follows:

1. Proposals to demolish an accessory structure are processed through a Type II procedure;

2. Proposals to demolish a Conservation Landmark, National Register Landmark, contributing resource in a Conservation District, or contributing resource in a National Register District are processed through a Type III procedure;

3. All other proposals to demolish a historic resource are processed through a Type IV procedure.

Response. This request is being processed through the Type III procedure consistent with B.2. above.

C. Approval criteria. Proposals to demolish a historic resource will be approved if the review body finds that one of the following approval criteria is met:

1. Demolition of the resource has been evaluated against and, on balance, demolition has been found to be equally or more supportive of relevant goals and policies of the Comprehensive Plan, and any relevant area plans, than preservation, rehabilitation, or reuse of the resource. The evaluation must consider:

a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;

b. The economic consequences for the owner and the community;

c. The merits of demolition;

d. The merits of development that could replace the demolished resource, either as specifically proposed for the site or as allowed under the existing zoning;

e. The merits of preserving the resource, taking into consideration the purposes described in Subsection A; and

f. Any proposed mitigation for the demolition.

2. The proposal is to demolish a contributing resource in a Conservation District or National Register District and demolition of the resource will be mitigated to enhance, preserve, or restore the archaeological, architectural, cultural, or historic significance or integrity of the district. The mitigation must be responsive to the significance and integrity of the resource proposed for demolition. The evaluation must consider:

a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;

b. The economic consequences for the owner and the community;

c. Relevant goals and policies of the Comprehensive Plan.

3. The proposal is to demolish a contributing resource in a single-dwelling zone in a National Register District, and demolition of the resource will facilitate the creation of more deeply affordable dwelling units…

4. The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.

Response. The lighting system is a Basic Utility and as such is classified as an accessory use in the OS base zone. Therefore, the proposal to remove and replace light poles within Mt. Tabor Park may be reviewed subject to the requirements in C. 4 above. As noted previously in this application, replacement of the proposed light poles will not have any effect on the architectural contributing structures or buildings in either the Mt. Tabor Park Historic District or the Mt. Tabor Park Reservoir Historic District.

In terms of the historical listing, the primary cultural or historic significance of Mt. Tabor Park as articulated in the historic listing, is the Park's association with the Olmsted

Brothers through the 1903 Olmsted Plan which identified Mt. Tabor as a desirable site for a public park, and its design which embodies the principles of landscape architecture espoused by the Olmsteds.

As such, the lighting is a feature within the contributing resource of the park landscape as a whole and provides historic and functional value by illuminating the park's circulation system. Some care was taken to determine when the various drives and formal pathways were constructed for the historical nomination, however, no such attempt was made regarding the lighting system. Further, no attempt was made to distinguish individual poles or their location, date individual poles to the period of significance, or assign historical value to individual poles in the nomination.

Updating the light poles within the existing landscape will do nothing to erode the cultural importance of Mt. Tabor Park as a significant park within the Portland Park System, nor will it impact the integrity of the landscape itself. In fact, by replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

While the light poles clearly met the criteria for accessory structures, given input received at the Historic Landmarks Commission briefing on March 13, 2023, it seems prudent to consider the additional demolition criteria that applies to contributing resources in Historic Districts under C.1. and National Register Districts in C.2. as well.

Relevant goals and policies of the 2035 Comprehensive Plan relate to encouraging development that promotes human health and safety, historical resource preservation and development that is energy and resource efficient. Goals and polices to implement these admirable intentions are located in Chapter 4 Design and Development and include the following:

- *Goal 4.B: Historic and cultural resources*

  Historic and cultural resources are identified, protected, and rehabilitated as integral parts of an urban environment that continues to evolve.

Response. The historic resource is Mt. Tabor Park. The park is integral to the Mt. Tabor Neighborhood and an important part of the Portland Park System. Ensuring the park is a place of safety is a key component of its value as an "urban refuge." It is critical that park visitors feel safe and welcome in Mt. Tabor Park. As the city's park system's components age, maintaining park safety through replacement of outdated components will be become a more common aspect of the evolving urban environment.

This request proposes to maintain the historical integrity of the lighting system and its role of illuminating the circulation system in park while also ensuring all the light pole structures are of the most modern construction and installed to current health and safety codes. The historic value and character of the system of illuminated pathways and historic drives within the park is derived from systems as a whole (rather than individual light poles), and the resulting social and cultural value experienced by community member's when partaking in the park's natural and scenic landscapes.

By replacing the light poles within the park's landscape with light poles that maintain the historic design and materials of the existing light poles, the light safety project will ensure that the overall park site remains available and open to public in a manner that honors the historic and cultural value the Park provides to the community.

- *Policy 4.1 Pattern areas. Encourage building and site designs that respect the unique built natural, historic, and cultural characteristics of Portland's five pattern areas described in Chapter 3: Urban Form.*

Response. The site design of Mt. Tabor Park is one that respects the natural topography of the site and the inner neighborhood pattern area. The site's curvilinear drives and mix of trails and staircases respects the site's sloped nature. The site's design also provides for a variety of edge treatments to integrate the park into the residential fabric of development that surrounds it. Utilizing long approaches and screening vegetation creates buffers between park users and residential users. The updated light fixtures proposed in this project will improve the lighting system for the park's circulation system by reducing the amount of illumination reaching nearby residential uses and improve the park's integration into the neighborhood. The proposed update will only enhance the value Mt. Tabor Park brings to the highly connected, densely populated inner neighborhood it is located within.

- *Policy 4.46 Historic and cultural resource protection. Within statutory requirements for owner consent, identify, protect, and encourage the use and rehabilitation of historic buildings, places, and districts that contribute to the distinctive character and history of Portland's evolving urban environment.*

Response. The Bureau supports sensible neighborhood nominations of historic parks to protect the historic and cultural relevancy of our revered park assets. Previous improvements at Mt. Tabor Park have included restoration of historic buildings, including the Gate House (Head House) and the Summit Restrooms. Interpretive elements onsite identify historic resources in the vicinity of the Cinder Cone, the Crater Amphitheater, and the Historic Reservoir District. Historic significant architectural

resources within the park have been protected and preserved including the Crater Amphitheater, the Summit and Volcano restrooms, and the Caretaker's House.

- *Policy 4.50 Demolition. Protect historic resources from demolition. When demolition is necessary or appropriate, provide opportunities for public comment and encourage pursuit of alternatives to demolition or other actions that mitigate for the loss.*

Response. The illuminated circulation system will be maintained through this project, even though individual light poles will be removed. Prior to submitting this application, Bureau staff attended the following public meetings to discuss the light safety project:

- Historic Landmarks Commission, March 13, 2023.
- Portland City Council, April 5, 2023.
- Light Pole Safety Project neighborhood meetings, May 11 &12, 2023.
- Light Pole Safety Project community-wide meeting, May 17, 2023.

Community input at meetings focused on safety, with strong preferences for maintaining lights until replacement poles and lights are funded. There was no opposition expressed regarding the appearance of the proposed poles, fixtures, and strapping, all of which have been used in other City parks (Laurelhurst and Duniway for example). Given the conditions of the existing poles, there was strong interest in replacing poles – however there was also community interest in salvaging old poles and fixtures where possible.

Bureau staff agreed to offer poles for salvage to mitigate for the loss of original Mt. Tabor Park light poles. Bureau staff contacted a variety of organizations and offered to donate the poles for this purpose. The following organizations have been offered original light poles, including fixtures from a variety of parks:

- Oregon Historical Society.
- Oregon Architectural Heritage Center.
- Habitat for Humanity ReStore.

The above organizations have accepted donations of fixtures (2, 4, and 35 fixtures respectively) for preservation, and in some case rehabilitation and resale. Despite offers, no organizations have chosen to preserve any of the concrete light poles due to pole size (12' and taller), weight (about 1200 pounds), and condition. It is expected that future removals will be managed by the city's contractor and materials will be recycled when practicable.

- *Policy 4.51 City-owned historic resources. Maintain City-owned historic resources with necessary upkeep and repair.*

Response. The Bureau maintains a wide range of assets within the Park System using funds from the General Funds as authorized by City Council and the 2020 Parks Local Option Levy as authorized by the city's voters. The Bureau operates and maintains 154 neighborhood parks, 11 indoor and outdoor pools, 14 community and art centers, six golf courses, 160 miles of regional trails, and a motor raceway. The revised budget for maintenance in FY 22-23 was $21.8 million and the Bureau expects to spend between $22.5 and $23.9 million on maintenance in this fiscal year (FY 23-24).

Resources are allocated in accordance with the Healthy Parks, Healthy Portland framework and adopted Level of Service plans. Within the parks system, resources are prioritized based on number of factors, including how many park users are served by an asset and equity considerations to address historic underinvestment within the park system. Parks with historic resources are not prioritized over other park assets under the current policy framework, however they are not assigned a lower priority either.

All developed parks, community center, and natural areas with public access receive basic daily maintenance. And although the Bureau prioritizes maintenance for health and safety, the system as a whole has a backlog of $560 million in deferred maintenance expenses. Additional resources to fund maintenance and operation expenses for the city's aging park system are currently under consideration through the Bureau's Sustainable Futures program.

The citywide light safety project will help reduce future maintenance expenses through a combination of reducing future operating expenses, leveraging external funding, and securing materials and labor at current costs, while also ensuring public safety. Investing in new light poles now for Mt. Tabor's historic light system will ensure that the illuminated circulation system remains in good repair well into the future.

- *Policy 4.60 Rehabilitation and adaptive reuse. Encourage rehabilitation and adaptive reuse of buildings, especially those of historic or cultural significance, to conserve natural resources, reduce waste, and demonstrate stewardship of the built environment.*

Response. The park's existing contributing buildings and structures will not be affected by the proposed replacement of the light poles. Replacement of the proposed light poles will ensure that contributing architectural resources are not impacted should aging or structural deficient poles fail.

- *Policy 4.62 Seismic and energy retrofits. Promote seismic and energy-efficiency retrofits of historic buildings and other existing structures to reduce carbon emissions, save money, and improve public safety.*

Response. Replacement light poles will meet current code standards and seismic requirements. The replacement light fixtures to be installed through the light pole safety project feature improvements in energy efficiency and will result in monetary saving over time. Most importantly, the replacement poles will improve public safety.

- *Policy 4.63 Life cycle efficiency. Encourage use of technologies, techniques, and materials in building design, construction, and removal that result in the least environmental impact over the life cycle of the structure.*

Response. The current manufacturing process for precast light poles proposed in this project will ensure a lengthy life cycle. The concrete is precast and prestressed to improve longevity. In addition, high tensile steel is incorporated into the pole during manufacturing which reduces freeze-thaw impacts and yields a stronger pole able to bear higher loads (APP Exhibit).

The existing concrete poles are experiencing a variety of impacts due to their age. Replacement of the reinforcing components inside the pole would compromise the pole's integrity, likely damage the external concrete casing, and destroying the desired appearance of the 1924 poles. While it is hypothetically possible to break down the concrete and melt down the existing rebar to reuse materials, doing so would be inefficient in terms of resource and energy use, as well as extend the amount time needed to complete this project. Thus, the project team concluded that replacement poles will result in the less environmental impact than attempts to rehabilitate the existing poles.

- *Policy 4.64 Deconstruction. Encourage salvage and reuse of building elements when demolition is necessary or appropriate.*

Response. Although the poles removed as part of the citywide light safety project so far have not been salvaged due to the lack of interest by area reuse experts, they have been recycled. It is expected that light poles removed during the Mt. Tabor Park portion of the project will also be recycled by the contractor as part of their overall construction debris handling.

Based on the above responses, the proposed project does comply with relevant 2035 Comprehensive Plan policies.

The criteria for Historic Districts under *C.1.a*. and National Register Districts in *C.2.a.* relates to the value of the historic resource, considering the resource's age, condition, significance, rarity, value to the community, and association with historically marginalized populations or communities. The historic resource in this case is the lighting system that provides illumination to the park's circulation system of historic drives, formal pathways, and period staircases. Park staff was unable to locate any evidence that the Mt. Tabor lighting system holds significance for any historically marginalized communities in Portland.

The lighting of Mt. Tabor's circulation system in the 1920s (and likely the 1930s in association with WPA circa drive construction) was not unique, nor was it the earliest achievement in the Portland Park system. The city's first known illuminated circulation system that welcomed automobile users to travel within forested areas and experience previously inaccessible scenic views was the Terwilliger Boulevard Parkway. The lighting system for the parkway may have been installed as early as 1913.

Laurelhurst Park, another historic park in the city's park system, also has an illuminated circulation system. According to that park's historical nomination, its lighting system was installed in 1915 – although the nomination also recognized that the age of individual poles varied and therefore, the system itself wasn't a contributing resource. The lighting system at Mt. Tabor Park is neither the oldest example of such a resource nor is it rare. The proposed replacement, however, will maintain the system's integrity and ability to function far into the future.

As for the design of the light poles themselves, the octagonal design is almost the standard for Portland parks developed within the inner neighborhood pattern area and examples of such poles can be found throughout the inner eastside. The fixtures that currently exist do have value for the community and the proposed replacement fixtures preserve the lantern-style design. Approximately 40 lighting fixtures of this style have already been donated. As noted previously though, the existing poles, especially those that date from the period of significance are not in good condition, lack the structural integrity necessary for restoration, and any rehabilitation or reuse would be far more resource intensive from an environmental standpoint than replacement.

The criteria for Historic Districts under C.1.b. and National Register Districts in C.2.b. focuses in on the economic consequences of demolition compared to preservation, rehabilitation, or reuse of the resource for the owner of the resource and the community as a whole. The lighting system is being preserved in this case, at issue is whether certain elements within the system should be or could be preserved, reused or rehabilitated.

Many elements of the lighting system, such as electronic wiring and fixtures, and some of the poles, have already been replaced in order to maintain the lighting system in proper functioning order. The main structural components of the lighting system, the poles and fixtures, are not unique within the Portland parks system. Through the Bureau's citywide Light Safety project, light fixtures of various ages have been successfully donated for reuse or preservation.

When it comes to individual light poles from the period of significance, there is a preponderance of evidence that rehabilitation to current code standards is not possible. Preservation would entail costs to remove poles from their current location where they pose a potential safety hazard to another location. Specialty equipment and trained staff is needed to transport objects of this size. In addition, materials and labor would be required to install a light pole or poles in another location and secure the pole(s) in a manner that mitigates the structural risk. These costs are all currently unfunded. Reuse by other parties does not appear feasible or cost effective as local experts have declined to take ownership of any the poles removed through the light safety project to date.

The Bureau's funding plan to replace the light poles in twelve city parks, which leveraged grant funding from Metro, was authorized by City Council earlier this year. The Bureau currently faces significant capital maintenance expenses that lack funding. While the community supported the preservation of existing services through the passage of the 2020 Parks Operation Levy and capital maintenance through the passage of the 2017 Capital Bond, expending scarce public dollars to preserve structurally deficient components does not meet current policy priorities nor would such expenditures be consistent with City and Bureau goals to provide an equitable level of service in our community.

Based on the above analysis, which considers feasibility as well as expenses, park staff have concluded that demolition and replacement of the light poles fixtures is a more cost-effective solution than reuse, rehabilitation, or preservation for both the Bureau and the community. However, it should be noted that cost is *not* the primary reason for proceeding with replacement was chosen; public safety, the impracticality of retrofitting the existing poles, and renewing the park's lighting system to last another century were more significant drivers in the decision to replace light poles in Mt. Tabor Park.

The subsequent criteria diverge at this point. Historic Districts require an examination of benefits for alternative scenarios, while in Conservation Districts the remaining criterion is focused on policies in the Comprehensive Plan. These policies were addressed above. Regarding the final Historic District criteria, since no redevelopment is proposed in this case, the alternative scenarios to be considered are demolition and preservation - taking into consideration the purposes described in Subsection A.

The benefits associated with demolition, or more specifically in this case, the benefits associated with the replacement of structural components in the historic light system and subsequent recycling and reuse of the light poles and fixtures, include the following:

- The integrity and character of the historic lighting system as a whole is maintained and available for use now and many years into the future.
- Park users will be able to continue to comfortably navigate the park in the evenings and access even the most densely forested portions of the circulation system regardless of the natural lighting conditions.
- Park users can have confidence in the city's park system as a safe place in which to recreate, exercise, and enjoy scenic vistas, with all members of their family, friends, and fellow community members.
- Future cost savings from increased energy efficient operation of the lighting system.
- Improved lighting conditions due to improvements in the lighting technology, including increased directional focus for light emitting diode (LED) lamps and improved shielding in fixtures that will result in dark skies compliance and less impact to off-site properties.
- Use of durable, proven, aesthetically pleasing and historic-honoring light pole and fixture products, with decades of performance in other City parks, including historic Terwilliger Boulevard, Duniway Park, Laurelhurst Park, and other Portland parks.

The merits of preservation that must be considered in Subsection A are *economic and community vitality, resilience, and memory*. Preservation of light poles in their current condition would require relocation away from the actual lighting system to a location where their structural deficiencies would not cause a risk to park users and likely would defeat the purposes of preservation related to promoting community vitality and memory. Preservation is currently unfunded and additional funding would need to be identified, which would have a negative impact on economic vitality. Preservation is unlikely to increase community resiliency to potential natural or other hazards.

Based on the above considerations, the Bureau concludes that replacing the light poles and fixtures of the historic lighting system while maintaining the spatial distribution noted in the historic nomination is the most feasible, cost-effective, and reasonable method for preserving the historic illuminated circulation system within Mt. Tabor Park.

The proposed replacement of light poles in Mt. Tabor Park's historic lighting system will comply with the standards in the Historic Resource Overlay Zone and for Historic Resource Review.

Conclusion

The Light Pole Safety project will replace 88 light poles adjacent to the park's circulation system, approximately 60 of which may date from the park district's historic period of significance. Economic and climate resiliency benefits will be realized by updating the aging lighting system, consistent with city policies. Replacement will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park.

Poles will be replaced in their existing location and replacement work will avoid existing trees. No trees are proposed for removal in the Light Pole Safety project. Any pruning or root cutting required to install the new poles will occur in accordance with Title 11 and the Tree Permit protection plan, consistent with proper arboricultural practices, and will not adversely impact the health or structural integrity of the tree.

The Bureau proposes to take significant efforts to preserve the spatial pattern of the illumination system. Materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. The reasoning provided in this narrative, along with the supporting evidence provided in the attached exhibits demonstrates project compliance with the applicable requirements of Title 33. Therefore, Bureau of Development Services staff should recommend, and the Historic Landmarks Commission should approve, the light pole safety project replacement of light poles within Mt. Tabor Park.

APP Exhibit List

Exhibit A – Portland City Council Ordinance #19122

Exhibit B – Official Zoning Maps # 3136, 3137, 3236, 3237

Exhibit C – Mt. Tabor Historic Districts

Exhibit D – Historic Zoning Maps

Exhibit E – Past Land Use reviews

Exhibit F – Historic records for illumination system (1958 Lighting Plan, 1984 Lighting + Electric As-Built Plan, 1987 Lighting Plan + Details, 1999 Restroom Electrical Plan) and Replacement Summary (notations on 1987 Lighting Plan)

Exhibit G – Comparison between existing and proposed

Exhibit H – Staff photographs showing existing pole conditions

Exhibit J – Tabor Park Historic District National Register listing

(*note no capital I Exhibit to avoid confusion with lowercase l)

191222

Emergency Ordinance

*Amend contract with McKinstry Essention, LLC for energy savings performance contracting services not to exceed $18,500,000 (amend Contract 30007025)

Passed

The City of Portland ordains:

Section 1. The Council finds:

1. In partnership with the Office of Management and Finance (OMF) Procurement and the Bureau of Planning and Sustainability, Portland Parks & Recreation (PP&R) is committed to reducing our environmental footprint while improving the resiliency of our infrastructure. Our lighting, cooling, heating, and plumbing systems consume over $6 million per year in gas, electricity, and water and many of these systems are well beyond expected service life and contribute to our $600 million and growing capital maintenance backlog.

2. On April 5, 2017, City Council authorized a competitive solicitation per City Code 5.34.880 for an Energy Savings Performance Contract (ESPC) (Ordinance No. 188310). To complete the work most efficiently, PP&R determined that it would implement multiple design-build stages from one initial technical energy audit. On September 4, 2019, City Council accepted the Guaranteed Maximum Price for Stage 1 (GMP1) implementation of the ESPC. On November 20, 2019, the City entered into contract agreement with McKinstry Essention, LLC (Contract No. 30007025).

3. On December 28, 2022, the Commissioner-in-Charge signed an emergency declaration for lighting removal and replacement work to take place under this contract since many of the impacted parks and pathway lighting impacted by a structural deficiency were already within scope of the ESPC work.

Introduced by

Mayor Ted Wheeler

Bureau

Management and Finance; Revenue and Financial Services

Contact

Biko Taylor
Chief Procurement Officer
biko.taylor@portlandoregon.gov
503-823-1095

Kelly Davis-McKernan
Construction, Supervisor II
Kelly.Davis-McKernan@portlandoregon.gov
503-823-1248

Requested Agenda Type

Regular

Date and Time Information

Requested Council Date
April 5, 2023
Time Requested
15 minutes

4. Both this Stage 2 amendment (GMP2) and GMP1 derive from the same feasibility, analysis, technical energy audit, technical specifications and know-how for the performance guarantee provided by McKinstry Essention, LLC. Performance has been satisfactory for Stage 1, including: 40% DMWESB firm utilization; direct annual cost savings of over $79,000 per year; a 15% reduction of utility consumption at the Stage 1 sites; improved lighting coverage on pathways at seven parks; and DarkSky-compliant fixtures for improved conditions for wildlife.

5. In a continuation of that work, PP&R intends to award a GMP2 contract amendment that will include improvements to pathway lighting at an additional 12 parks; add more efficient heating and cooling to replace an obsolete heating-only system at Peninsula Park Community Center; and modernize the heating, ventilation, and air-conditioning system at Charles Jordan Community Center and East Portland Community Center so that they are better able to function in poor outdoor air quality environments. These investments support the Climate Emergency Declaration and Workplan and avoid 327 Metric Tonnes of CO2 per year – the equivalent of 1,222,000 miles not driven in an internal combustion engine car.

6. The current contract amount is $1,071,124.24 incorporating change-orders 1 and 2, and the GMP 2 amendment's cost is anticipated to be $14,500,000, including the emergency approved change orders 3 and 4 for pole and base removals. An additional amount of $2,928,875.76 is being requested as a contingency in case other issues arise during construction and change orders are required, for a new contract not to exceed value of $18,500,000.

7. Sufficient funds are expected to be available in the Parks Capital Improvement Program Fund, No. P00924.

NOW, THEREFORE, the Council directs:

A. The Chief Procurement Officer is authorized to execute amendment(s) that are approved as to form by the City Attorney's office and/or change orders to Contract 30007025 if the contract not-to-exceed amount is $18,500,000 or less.

B. The Mayor and City Auditor, or their designee(s), are hereby authorized to draw and deliver checks when demand is presented and approved by the property authority.

Section 2. The Council declares an emergency exists due to the need for climate action and to replace removed pathway lighting for public safety; therefore, this Ordinance shall be in full force and effect from and after its passage by the Council.

Official Record (Efiles)

Ordinance and testimony
(https://efiles.portlandoregon.gov/record/16069363)

An ordinance when passed by the Council shall be signed by the Auditor. It shall be carefully filed and preserved in the custody of the Auditor (City Charter Chapter 2 Article 1 Section 2-122)

Passed by Council
April 5, 2023

Auditor of the City of Portland
Simone Rede

Impact Statement

Purpose of Proposed Legislation and Background Information

Authorize the Chief Procurement Officer to execute amendment(s) that are approved as to form by the City Attorney's office and/or change orders to Contract 30007025 if the contract not-to-exceed amount is $18,500,000 or less.

This is the second stage of a Guaranteed Maximum Price Energy Savings Performance Contract (ESPC) which was originally competitively bid in 2017. ESPCs follow City Code 5.34.880 where an expert firm performs technical analysis and feasibility of efficiency work and then performs and guarantees the utility savings of selected and funded designs. Stage 1 covered nine locations and this second stage covers an additional fifteen.

This Stage 2 amendment will improve pathway lighting at an additional 12 parks; add more efficient heating and cooling to replace an obsolete heating-only system at Peninsula Park Community Center; and modernize the heating, ventilation, and air-conditioning system at Charles Jordan Community Center and East Portland Community Center to ones that are better able to function in poor outdoor air quality and in pandemic operating environments.

Financial and Budgetary Impacts

Based on the proposed Guaranteed Maximum Price and also including contingency, Parks anticipates the contract cost to be up to $18,500,000.00. The additional amount in the amendment authorization ordinance includes the original award plus additional contract contingency should the scope change between now and the end of 2024.

The current contract amount is $1,071,124.24 incorporating change-orders 1 and 2, and the GMP 2 amendment's cost is anticipated to be $14,500,000,

including the emergency approved change orders 3 and 4 for pole and base removals. An additional amount of $2,928,875.76 is being requested as a contingency in case other issues arise during construction and change orders are required, for a new contract not to exceed value of $18,500,000.

Funds are expected available from the following sources:

- Capital Set Aside: $2,083,852
- System Development Charges: $900,000
- Metro Bond Local Share: $2,000,000
- PP&R Major Maintenance: $8,916,148
- Department of Energy Block Grant: $600,000
- Total anticipated funds available: $14,500,000.00
- Previous contract amount: $1,071,124.24
- Additional authorization for contingency: $2,928,875.76
- Sum of authorization: $18,500,000.00

No positions will be created, eliminated or re-classified as a result of this legislation. This project will reduce (or avoid the increase of) ongoing operating costs at the sites where these investments will be made.

Community Impacts and Community Involvement

The investment supports the Climate Emergency Declaration and Workplan and avoid 327 Metric Tonnes of CO2 per year – the equivalent of 1,222,000 miles not driven in an internal combustion engine car. In addition to progress on our major maintenance backlog, informal community feedback from the lighting conversion completed in the earlier pilot was positive and responds to extensive community involvement which shows extensive interest and concern about safety in-general and park lighting in-particular. The improved lighting is not only more energy efficient but also provides better coverage, appears brighter, and is more reliable. Based on preliminary consultation with the PP&R Community Engagement Team, implementation of the work will take an *inform* approach, where interested and impacted parties will be kept up to date on construction impacts through the project website, signage, and other appropriate site-specific strategies.

100% Renewable Goal

This projects advances the City's Renewable Energy Goal by improving the energy efficiency of our infrastructure to avoid the future consumption of over 362,313 kWh of electricity per year and over 10,092 therms of natural gas.

Budget Office Financial Impact Analysis

Based on the proposed Guaranteed Maximum Price and included contingency, the anticipated amended contract cost is expected to be up to $18.5 million. That amount includes the original award plus additional contact contingency should the scope change. Funding for this project is expected to be available from the following sources: Capital Set Aside: $2,083,852; System Development Charges: $900,000; Metro Bond Local Share: $2,000,000; PP&R Major Maintenance: $8,416,148; Department of Energy Block Grant: $600,000. Ongoing operating costs at the sites of these investments will be reduced or stay the same.

Breakdown of the total amount: The current unamended contract is $1,050,624.24. Including all change-orders and GMP2, the amendment's cost is anticipated to be $14.5 million. The contingency is $2,949,375.76. The amendment's cost and the contingency total are for the new contact that is not to exceed $18.5 million.

Agenda Items

264 Regular Agenda in April 5, 2023 Council Agenda (https://www.portland.gov/council/agenda/2023/4/5)

Passed

Commissioner Dan Ryan Yea

Commissioner Rene Gonzalez Yea

Commissioner Mingus Mapps Yea

Commissioner Carmen Rubio Yea

Mayor Ted Wheeler Yea

3136

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
NE 1/4 SEC. 06 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH
0 100 200 300
SCALE IN FEET

NOTE:
Zoning designations are subject to change; verify zoning prior to development or sales.

Legend

- R10 — **Current Zoning**
- (R10) — **Comprehensive Plan designation where there are other corresponding zones**
- ☆☆☆☆☆ — **Major Public Trails**
- **State ID Map Boundary**
- **Plan District Boundary**
- **Historic, Conservation, or National Register District Boundary or [1] N.R.M.P. Boundary**
- **Historic, Conservation, or National Register Landmark**
- **City Boundary**
- **Urban Service Area Boundary**
- **Unincorporated County with zoning applied**
- **Unincorporated County with Comprehensive Plan designation only**

Environmental Overlay Zones (see environmental zone note)

- **Protection overlay zone (p)**
- **Conservation overlay zone (c)**
- **Pleasant Valley natural resource (v)**

Environmental Overlay Zone Note: Protection (p); Conservation (c); Pleasant Valley Natural Resource (v), are represented on this map in color. These overlay zones are not labeled. All other overlay zones are represented with boundary lines and labels.

[1] N.R.M.P. - Natural Resource Management Plan

3036 3135 3137 3236

LU 23-088549 HR DM, Exhibit A.2

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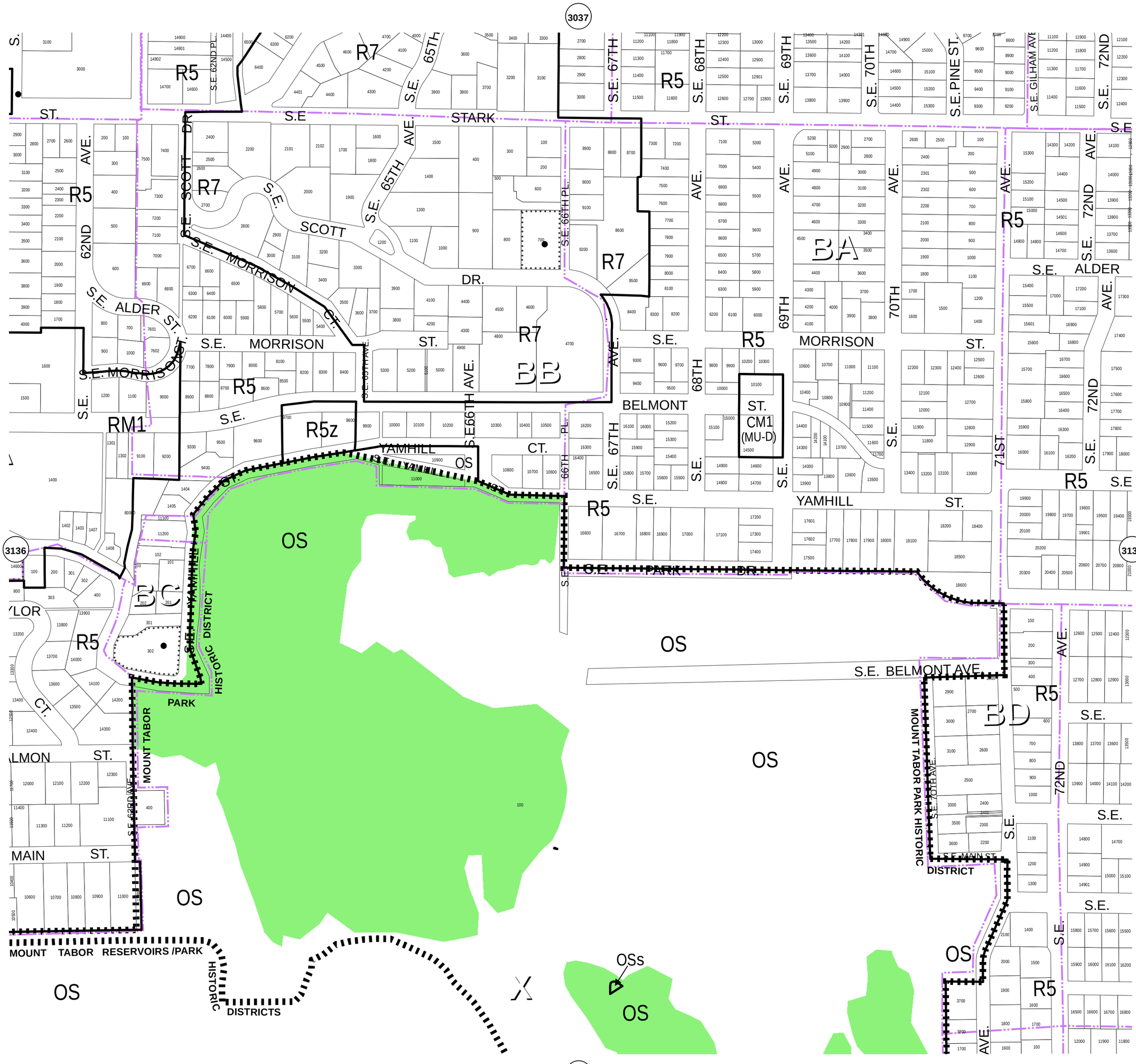

3137

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
NW 1/4 SEC. 05 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH
0 100 200 300
SCALE IN FEET

NOTE:
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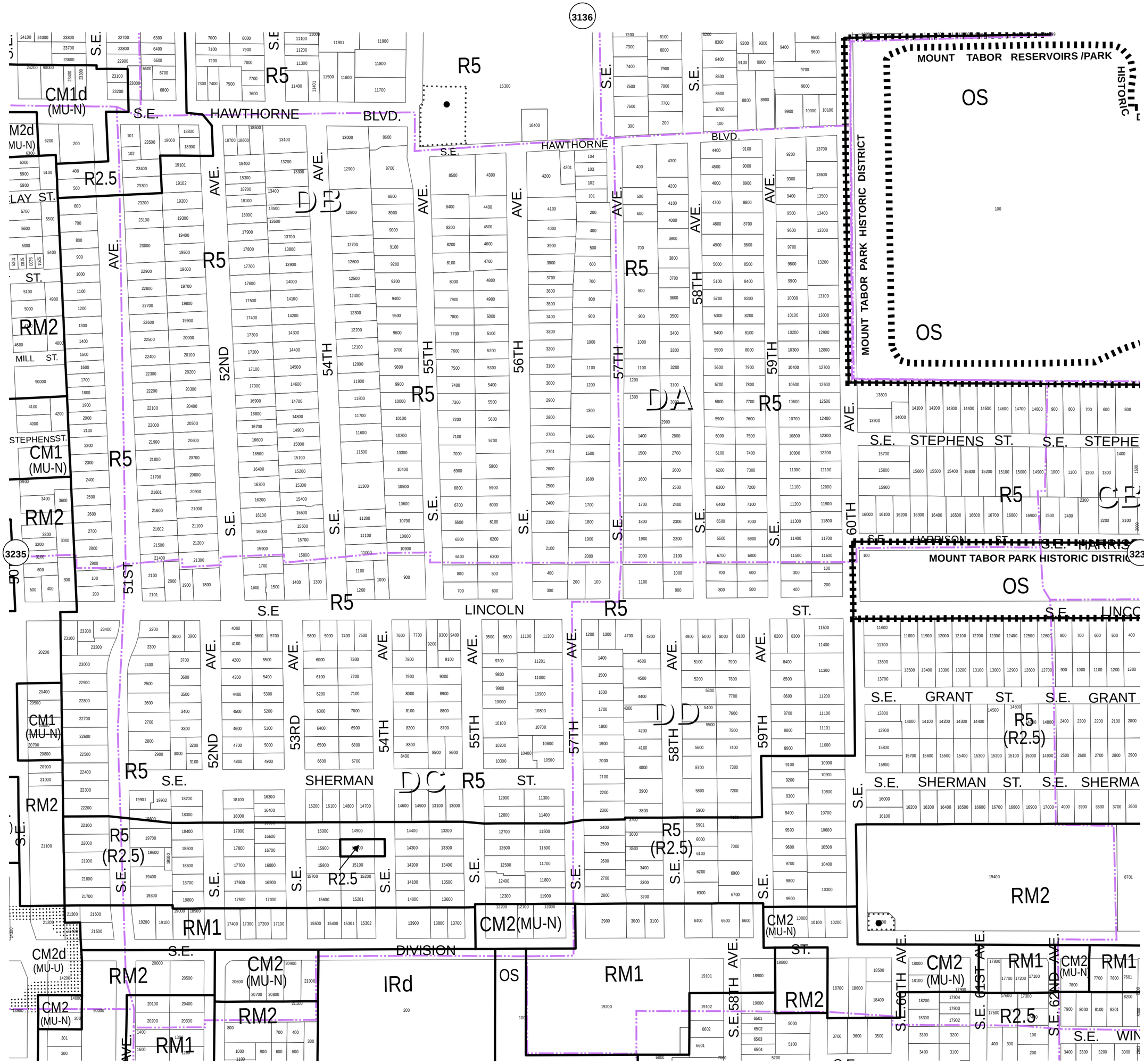

3236

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
SE 1/4 SEC. 06 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH
0 100 200 300
SCALE IN FEET

NOTE:
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Legend

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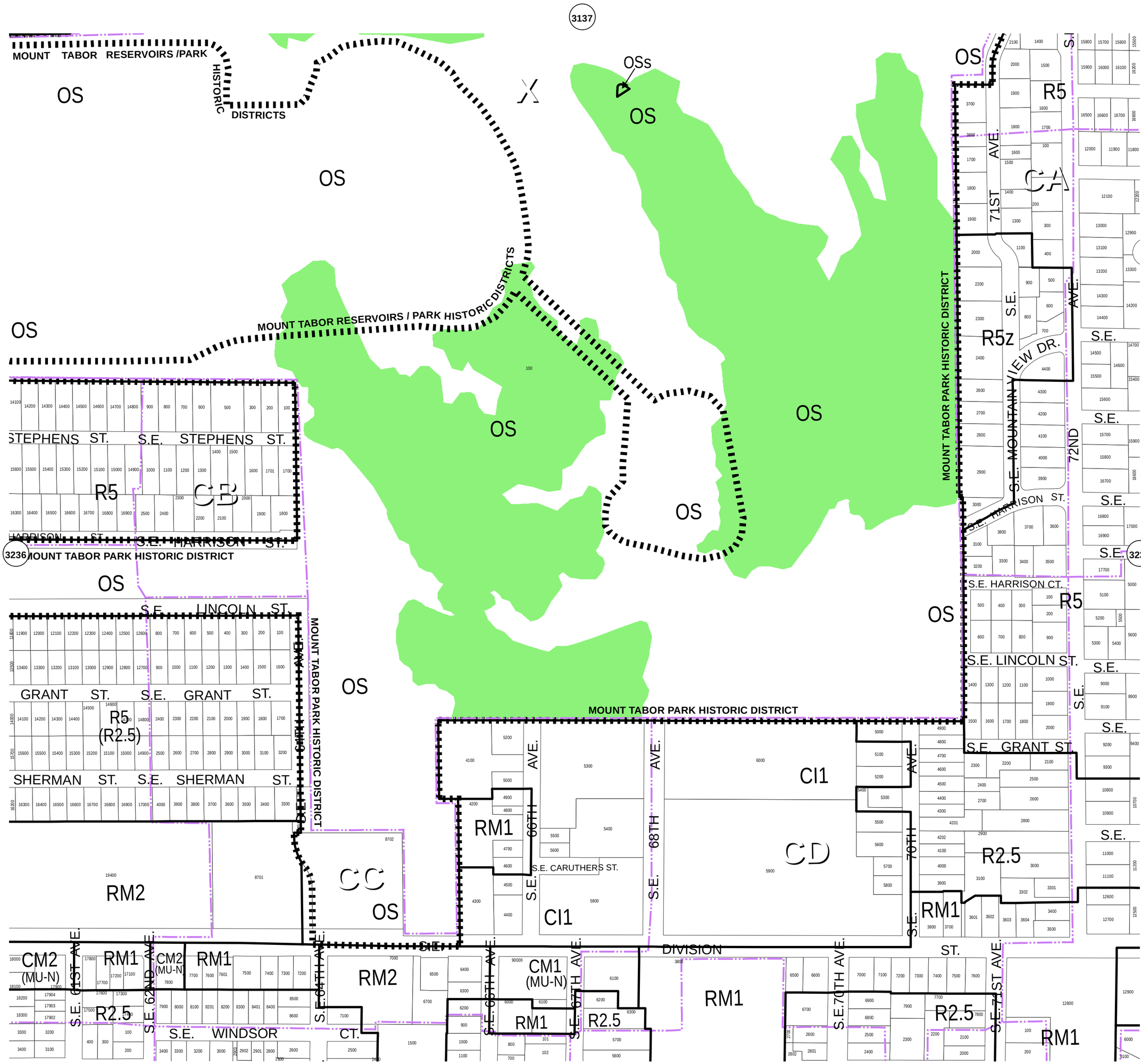

3237

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
SW 1/4 SEC. 05 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH

0 100 200 300
SCALE IN FEET

NOTE:
Zoning designations are subject to change; verify zoning prior to development or sales.

Legend

- R10 — **Current Zoning**
- (R10) — **Comprehensive Plan designation where there are other corresponding zones**
- **Major Public Trails**
- **State ID Map Boundary**
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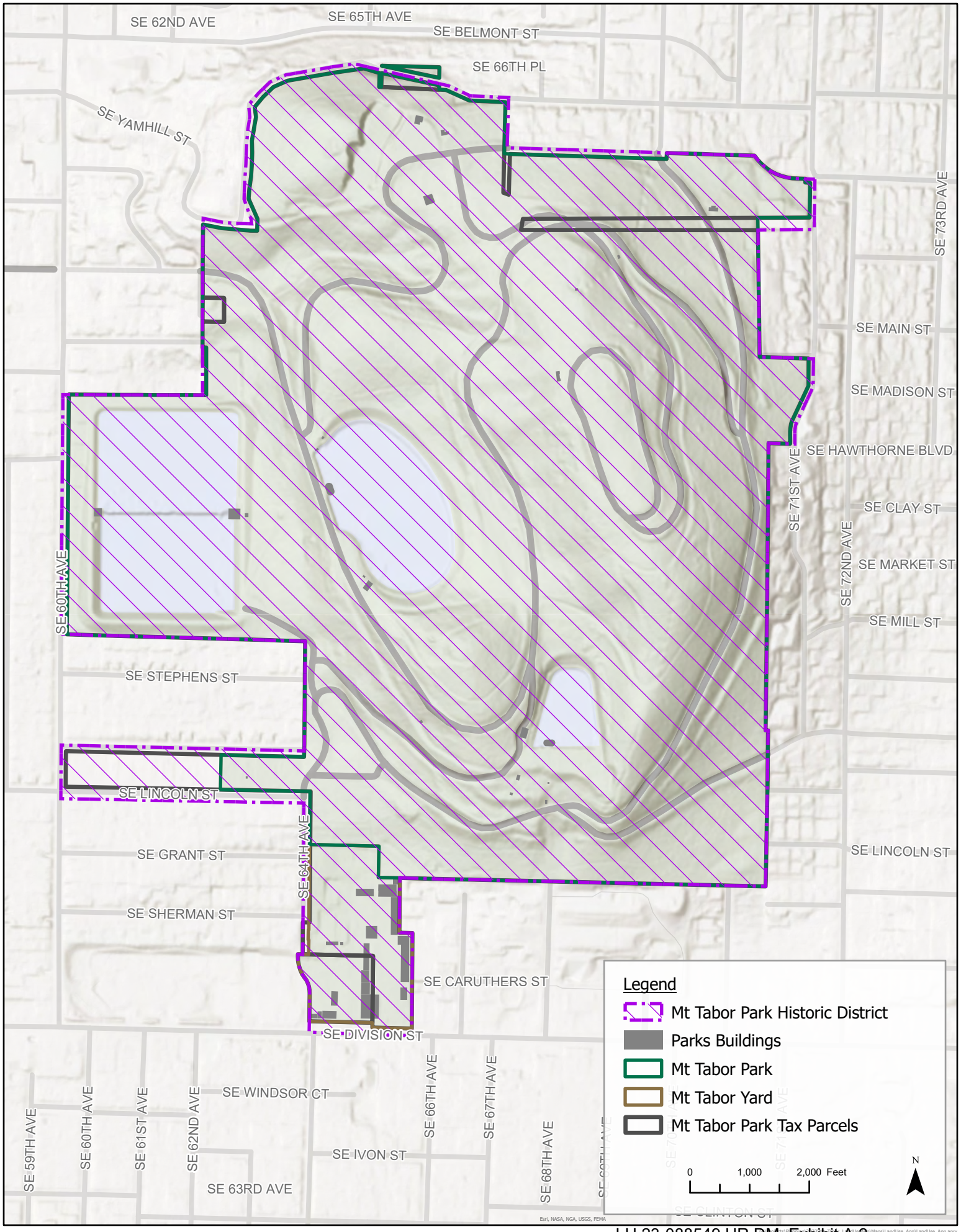
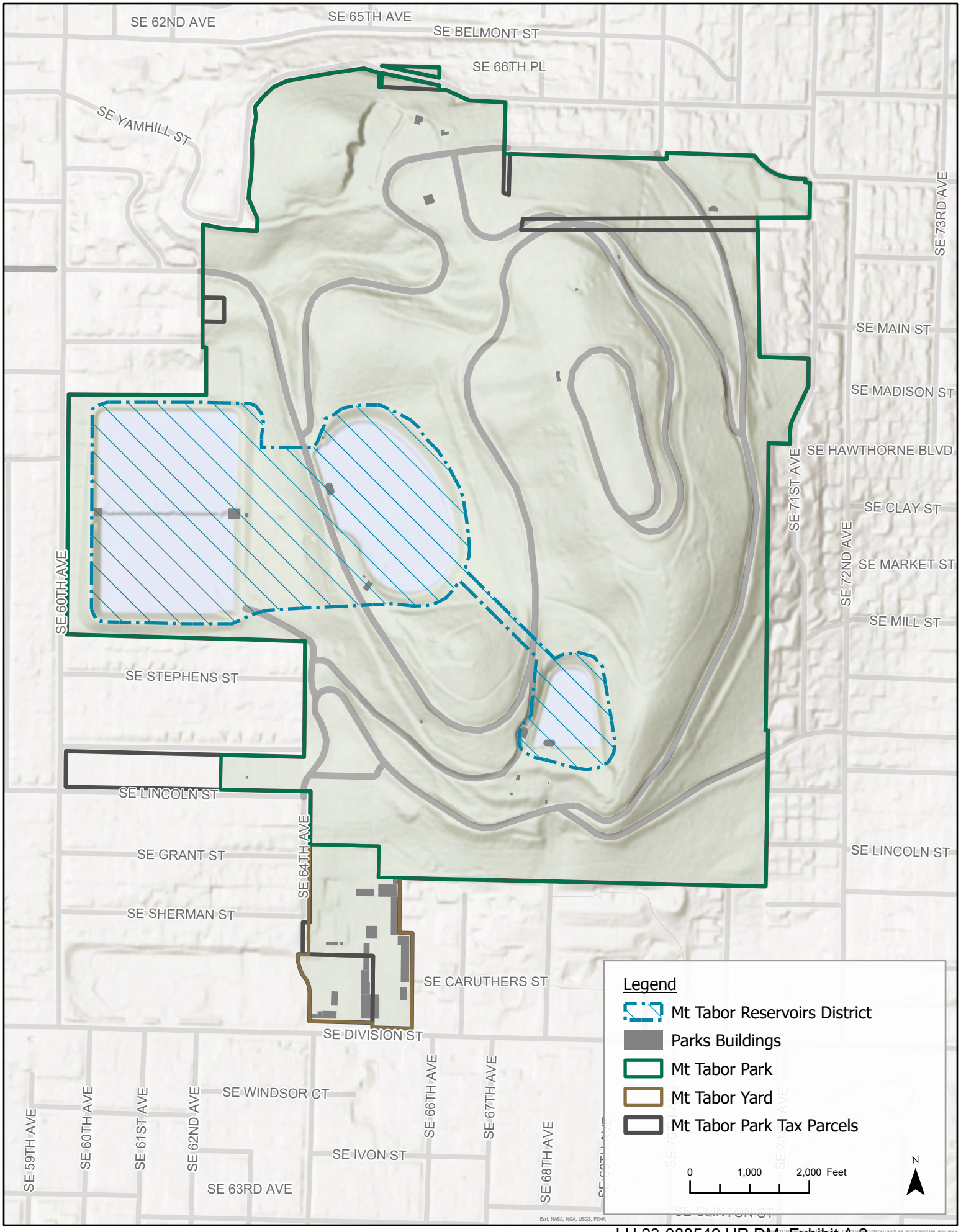


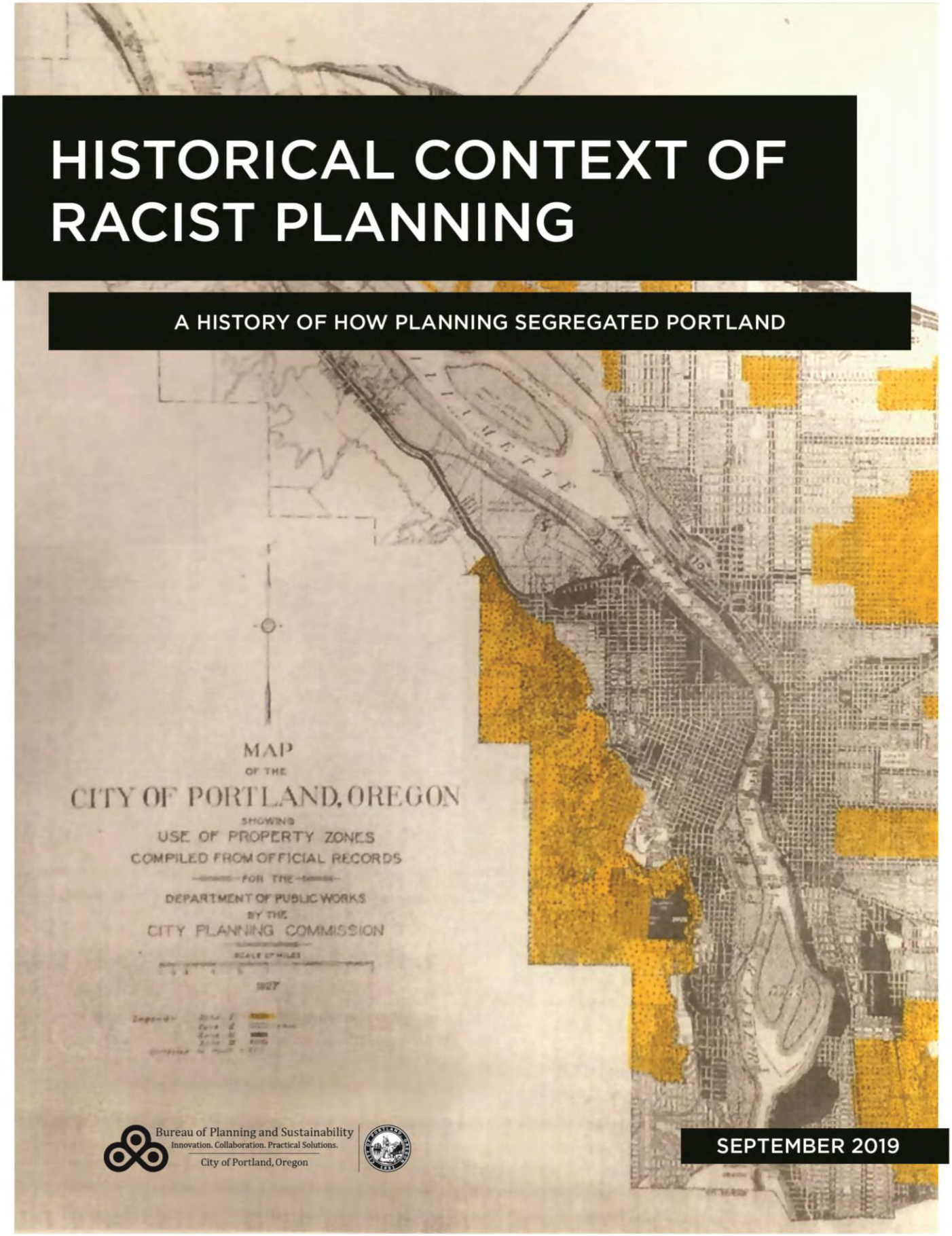
LU 23-088549 HR DM, Exhibit A.2



LU 23-088549 HR DM, Exhibit A.2

HISTORICAL CONTEXT OF RACIST PLANNING

A HISTORY OF HOW PLANNING SEGREGATED PORTLAND



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.
City of Portland, Oregon

SEPTEMBER 2019

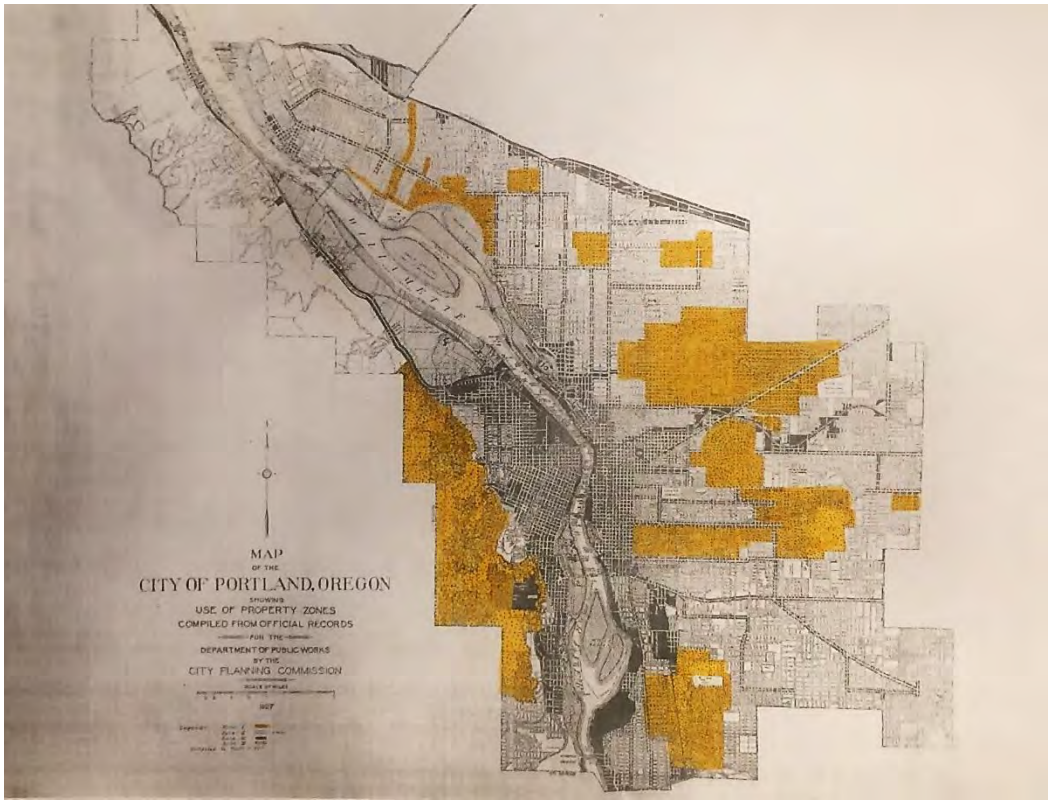


Figure 1. City of Portland map of Zone I single-family residential areas, 1927

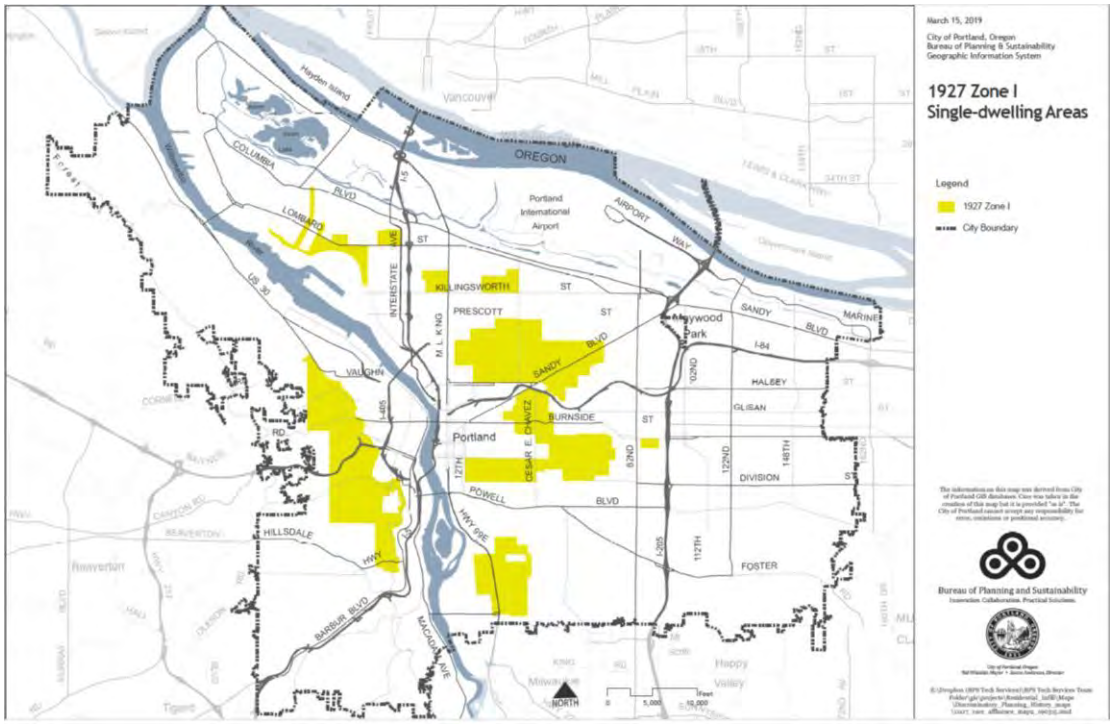


Figure 2. Current City of Portland map boundaries with 1927 Zone I single-family residential areas, 2019

Proposed Comprehensive Plan

Submitted to the Portland City Planning Commission

N

0 2000 4000 6000 Feet

0 500 1000 1500 Meters

COLUMBIA RIVER

WASHINGTON OREGON

Legend

City Land Use Designations

Open Space
Cemeteries, golf courses, natural areas, habitat areas, greenways, water bodies, transportation parkways and recreation areas. Open-space designated areas are zoned to either reflect their low-intensity character or in accordance with adjacent areas.

Farm and Forest
Permits agricultural uses as well as development of houses on lots not-less than two acres in size. The most intense zone allowed under this designation is **FF**.

Low Density Single-Family
Identifies areas subject to significant development constraints and limits residential sites to a minimum lot size of 10,000 sq. ft. Maximum zoning classification permitted is **R10**.

Medium Density Single-Family
Identifies areas subject to minor development constraints which would be limited to a minimum residential lot size of 7,000 sq. ft. Maximum zoning permitted is **R7**.

High Density Single-Family
Continues Portland's most common pattern of single-family development. One house is allowed on a 5,000 sq. ft. lot. Maximum zoning permitted is **R5**.

Attached Residential
Permits a mixture of housing types of a single-family character, including rowhouses. Infill redevelopment would be allowed on a minimum of two lots averaging to 2,500 sq. ft. each. Side yards would not be required except adjacent to existing detached single-family homes and on corner lots. Maximum zoning permitted is **R2.5**.

Low Density Apartments
Permits single-family homes, duplexes, rowhouses and garden apartments. One housing unit would be permitted for every 2,000 sq. ft. of lot area. Maximum zoning permitted is **A2**.

Medium Density Apartments
Permits single-family houses, duplexes, rowhouses and apartments. This is a variable density designation, allowing a range of 30-60 units per acre based upon a series of amenity packages.* Maximum zoning permitted is **A1.5**.

High Density Apartments
Permits high density apartments. Densities would range from 80 to 250 units per acre. Up to 20% of the building could be used for retail or office space, as a conditional use. Maximum zoning permitted is **AH**.

Downtown Apartment
Permits mid-rise to high-rise apartments. Up to 20% of the building could be used for neighborhood-oriented commercial. Density would be controlled by a separate overlay and would be based on an allowed ratio of gross building area to site area. Maximum zoning permitted is **AX**.

Neighborhood Commercial
Provides for neighborhood-oriented commercial uses. Highly auto-oriented uses would not be allowed, site size would be limited, and motor vehicle parking, maneuvering and loading areas could not be located in required yards. Maximum zoning permitted is **C4**.

Local Commercial
Permits all types of retail and service uses that may benefit from proximity to transit services and meet district and neighborhood needs. There is no minimum parking requirements, and auto-oriented commercial uses are not allowed. Maximum zoning permitted is **C3**.

General Commercial
Allows a full range of commercial uses, and some light industrial activities as a conditional use. Maximum zoning permitted is **C2**.

Downtown Commercial
Permits high-rise commercial and apartment buildings in the downtown. Building bulk and height would be controlled by an overlay zone to focus development along transit routes and to protect views, open space and historic areas. Maximum zoning permitted is **C1**.

Mixed Use
Allows a combination of apartment, commercial and light industrial activities. Single-family houses, duplexes, attached housing, and low and medium density apartments are permitted as are general commercial activities, labor intensive industrial, light manufacturing, warehousing and distribution. Maximum zoning permitted is **MU**.

Downtown Manufacturing
Permits certain industrial uses which require close proximity to the downtown. High density housing would be allowed as well as small commercial establishments oriented to meet the needs of the industrial and residential population. Maximum zoning permitted is **ME**.

General Manufacturing
Permits warehousing, distribution and all but the heaviest of manufacturing activities. Commercial uses would be allowed only as a conditional use. Housing would not be allowed. Maximum zoning permitted is **M2**.

Heavy Manufacturing
Permits a full range of manufacturing activities, sea and rail terminals and associated warehousing. Commercial uses would be allowed only as a conditional use. Housing would not be allowed. Maximum zoning permitted is **M1**.

County Land Use Designations

County Open Space
Includes parks, golf courses and other identified open spaces.

County Farm and Forest
Includes agricultural areas and commercial forests.

County Single-Family Residential
Includes all densities of single-family housing.

County Apartments
Includes all densities of apartment development.

County Commercial
Includes all forms and intensities of commercial development.

County Manufacturing
Includes all designations for manufacturing and industrial activity.

FROM THE PLANNING COMMISSION

Dear Portland Citizens:

The Portland Planning Commission is responsible for recommending a Comprehensive Plan for the City Council. This Proposed Comprehensive Plan suggests the adoption process for meeting this responsibility. For the first six months of this year, a Discussion Draft of the Plan was distributed to over 13,000 interested individuals and organizations. Over 100 meetings were held for citizen review and discussion of the Draft. Comments were received on the Draft in the form of memos, both pro and con, received during the public review period. Although some elements have stayed the same, there have been changes to address parts of the Plan.

The Planning Commission will begin public hearings on the **Proposed Comprehensive Plan** in September which will lead to a formal recommendation to the City Council by the first of 1980. After the City Council receives our recommendation, they will hold additional public hearings and adopt Portland's Comprehensive Plan.

To those thousands of individuals who have worked with the Staff and the Commission thus far to help make this Plan a solid, workable guideline for the growth and development of our future, thank you! To those of you interested in the future of our city who are reviewing the proposals for the first time, I invite your participation and comments as we move toward the final stages of adopting a Plan. Your comments and participation now will continue to help us in our deliberations. No plan can meet the aspirations, hopes and aspirations of everyone. Our Plan will require compromise from all of us. It is a serious and difficult task, and the Planning Commission will need your guidance and help.

Sincerely,

Joan H. Smith

Joan H. Smith, President
Portland City Planning Commission

INTRODUCTION

The Comprehensive Plan establishes goals and policies to guide future public and private actions, and to make investment decisions. The Plan will help to shape the City with:

- A set of Land Use and Public Facilities Goals and Policies to guide the development and redevelopment of the city;
- A Comprehensive Plan Map to guide zoning patterns in the city;
- A guide for the major public investments required to implement the Plan;
- A process for review and amendment of the Plan; and
- Recommendations for revising the Zoning Code to carry out the Policies and implement the Comprehensive Plan Map.

Goals and Policies establish **what** the City should do, while the Comprehensive Plan Map and Zoning Code provide the guidance and the tools for **where** and **how** to accomplish these Goals and Policies.

Land Use Goals and Policies provide a written framework for future program and funding decisions by the Planning Commission and City Council.

Public Facilities Goals and Policies guide how we spend money each year to maintain and construct the facilities that are necessary to support the Comprehensive Plan. These policies were developed in cooperation with the Department of Public Works, the Bureaus of Water, Parks, Fire and Police, and Portland School District #1.

The **Comprehensive Plan Map** determines the type, location and density of land development and redevelopment permitted in the future. Although development in the city may not exactly match the map in five, ten or even twenty years, the map does show where the different kinds of activities are likely to occur. It identifies potential development opportunities for meeting the city's housing and employment needs. The Comprehensive Plan Map designates land uses and densities at the maximum zoning classification allowable for each parcel of land.

The **Zoning Code** is the major "tool" for implementing the Plan. It contains regulations that are intended, at the same time, Zoning must be changed to be consistent with the Comprehensive Plan. This does not mean that **all** land will be immediately rezoned. Where "downzoning" (rezoning to a less intensive use) is necessary to be consistent with the Comprehensive Plan Map, the law requires that this must be done when the Plan is adopted. However, "upzoning" (rezoning to a more intensive use) does not take place until a specific application for an appropriate zone is submitted. Upzoning is recommended to occur on a case-by-case basis, using established zoning procedures, including notification and public hearings. The demand for upzoning will depend on such factors as stability or change in the area, evaluation of public utilities or services, and adequacy of transportation systems. By not automatically changing the zoning to the maximum level permitted by the Comprehensive Plan Map, existing uses should not be prematurely "forced out" of an area.

With all of these elements working together (the Land Use and Public Facilities Goals and Policies; the Comprehensive Plan Map and the Zoning Code), Portland can move into the future, changing needs while preserving the qualities that make Portland a desirable place to live, work and play.

Additional information on each of the Goals and Policies Sections, the Plan Map and the Proposed Zoning Code Revisions is available in individual copies of documents. Copies may be obtained at the BUREAU OF PLANNING, 424 S.W. MAIN, PORTLAND, OREGON 97204 (Telephone 248-4282).

LOOKING AHEAD
A VISION OF PORTLAND'S FUTURE

Portland is more than a geographic area—it is a way of life. Many characteristics combine to provide the unique livability of the city: the physical setting of the hills, trees and rivers accented by snow-capped peaks on the horizon; a dynamic urban setting enhanced by the intense, yet human, character of the Downtown; an active seaport a hundred miles from the ocean; thriving businesses and industries providing substantial employment; and a variety of neighborhoods, each unique in character, allowing for a broad range of lifestyles.

The passage of time inevitably brings changes. Portland today differs from the city of twenty or a hundred years ago; it differs from the city of tomorrow. Future seems to be arriving at an ever-increasing pace, and in ways that could damage the character and livability of the urban area. Portland is an urban area—a fact that cannot change. The task facing us is to retain the most important characteristics of our city in the face of changes we cannot control and to manage changes as well as possible. Those forces we can control. We must accept some challenges or we run the risk of losing all the things that make Portland "one of America's most livable cities."

The questions that make Portland so livable continue to draw more households to the city. Energy resources, particularly petroleum products, are becoming both more expensive and more scarce. Land and housing costs continue to increase, as do the costs for providing needed public facilities and services. Planning for the future must respond to these factors while preserving the city's economic health and livability.

Portland has developed historically into a land use pattern that is, and can continue to be, basically sound. The early cities of East Portland, St. Johns, Albina, Sellwood and Linnton form a series of commercial, industrial and residential centers within Portland. The trolley lines that joined these cities to downtown Portland and to each other created communities as Multnomah, Lents, Woodstock, Kenton and Sunnyside, became integrated into the urban fabric. Today Downtown Portland has developed as the major activity center of the metropolitan region, providing a financial, retail, industrial, cultural and residential core that is compact, vital and energetic, and must remain so. Well established, close-in industrial and distribution areas provide diverse employment opportunities close to a broad range of housing options.

The **Proposed Comprehensive Plan** calls for maintaining this basic development pattern while providing direction for responding to future trends. The proposed land use pattern limits the more intense residential densities to areas which reinforce the workability of public transit. The commercial centers along transit corridors are designed for new land uses which are not highly dependent on the automobile. A "new" type of single-family housing development is permitted—attached residential, or rowhousing. This housing type allows some increase in density, reduced land and construction costs per unit, and yet retains the qualities of the traditional single-family neighborhoods that now exist.

Provisions are included which allow more efficient use of larger homes and vacant land, encourage apartment developments to be more compatible with other residential uses, promote energy conservation, strengthen existing neighborhood areas, preserve and enhance environmental quality in the city, and stabilize existing neighborhoods from uncontrolled development speculation and deterioration. While to some people, any change appears to reduce livability, the Plan is designed to keep this change reasonable. In these ways, more affordable housing opportunities and more employment opportunities can be made available, to encourage and provide for the needs of a diverse population. More effective use of public facilities is possible, more people can be close to existing employment and shopping services, costly urban sprawl can be reduced, and public transit can be more accessible to more people.

In the year 2000, the Downtown skyline will be different, with new development reaching upward, as well as unique, older areas being preserved. Both of these characteristics must work together to keep the city center alive. Residential areas will retain their individual character, but with some increase in density to reduce urban sprawl, increase energy efficiency and provide more affordable housing options. Neighborhoods will generally remain single-family oriented with some exceptions; both detached and attached, strengthening neighborhood stability. Opportunities for rental units will cluster around corridors and centers which have good access to public transit to and from employment centers and shopping. Commercial and industrial activities will remain active and dynamic, as existing firms continue to grow and new firms choose Portland as their home.

Portland's history and character have provided a sound foundation for the continued development of the City. The city must build on that foundation as we meet the challenges of the future, and respond in a manner which retains that unique "Portland" character.

PLANNING COMMISSION PUBLIC HEARINGS:

Sept. 11 Grant High School Auditorium
Sept. 18 Lincoln High School Auditorium
Sept. 20 Wilson High School Auditorium
Sept. 27 Roosevelt High School Auditorium
Oct. 9 Marshall High School Auditorium
Oct. 11 Cleveland High School Auditorium
Oct. 11 Portland Planning Bureau, Rm. 200

ALL HEARINGS BEGIN AT 7:00 PM.

LAND USE AND PUBLIC FACILITIES GOALS AND POLICIES

SECTION I: METROPOLITAN COORDINATION

GOAL:

1 The Comprehensive Plan shall be coordinated with Federal and State law and subject regional goals, objectives and plans adopted by the Columbia Region Association of Governments and its successor, the Metropolitan Service District (MSD), to promote a regional planning framework.

SECTION II: URBAN DEVELOPMENT

GOAL:

2 Maintain Portland's role as the major regional employment, population and cultural center through public policies that encourage expanded opportunity for housing and jobs, while retaining the character of established residential neighborhoods and business centers.

POLICIES:

2.1 POPULATION GROWTH
Allow for population growth within the existing city boundary by providing sufficient housing units that will accommodate the projected increase in city households by the year 2000.

2.2 URBAN DIVERSITY
Promote a range of living environments and employment opportunities for Portland residents in order to attract and retain a stable and diversified population.

2.3 ANNEXATION
Phase the annexation program of the City within the urban service boundary to allow for smooth transition in service provision, more logical city boundaries and to coordinate capital improvements programming.

2.4 URBAN LANDS
The City shall encourage as regional policy that urban and urbanizable areas in the Portland metropolitan area shall be in an incorporated city.

2.5 OPEN SPACE
Provide opportunities for recreation and visual relief by preserving Portland's parks, golf courses, trails, parkways and cemeteries. Establish a system of open space and linkages of activities and places, using the natural features of the city, rivers, creeks, lakes, and sloughs.

2.6 **WILLAMETTE RIVER GREENWAY PLAN**
Implement the **Willamette River Greenway Plan** which preserves a strong working river and supporting recreational, natural and historical areas; and reinforce development along the Willamette south of the Broadway Bridge.

2.7 FOREST LANDS
Protect forest lands in areas with commercial forested lands.

2.8 RESIDENTIAL NEIGHBORHOODS
Improve livability within existing residential neighborhoods while allowing for increased density. Provide for neighborhood-oriented commercial activities within residential areas under certain conditions.

2.9 DOWNTOWN PORTLAND
Reinforce the downtown's position as the principal commercial, service, cultural and high-density employment center of the city and the region. Maintain the downtown as the city's principal retail center.

2.10 HISTORIC/CULTURAL CENTERS
Expand the role of major historic or cultural centers which are well served by transit. Strengthen these centers with retail, office, service and lodging activities as appropriate. Locate medium and high density apartment zoning adjacent to these centers.

2.11 TRANSIT CORRIDORS
Provide a mixture of activities along major transit routes to decrease dependence on the automobile. Encourage development of commercial uses and medium density apartments and allow labor-intensive industrial activities. Encourage attached residential and garden apartment development near major transit routes especially where vacant land affords an opportunity for in-fill development.

2.12 AUTO-ORIENTED COMMERCIAL
Allow auto-oriented commercial activities to locate along major traffic streets throughout the urban area, but not to the **Arterial Streets Classification Policy**. Also allow the location of small, labor-intensive manufacturing firms and small industrial firms which do not adversely impact adjacent residential areas.

2.13 INDUSTRIAL SANCTUARIES
Provide industrial sanctuaries. Encourage the growth of industrial activities in the city by preserving industrial land primarily for manufacturing purposes.

2.14 LIVING CLOSER TO WORK
Encourage higher density family residential densities near major industrial employment centers.

2.15 INFILL DEVELOPMENT
Discourage the development of new strip commercial areas and focus future activity in such areas to create a more clustered pattern of commercial development.

2.16 TRANSIT STATIONS
Where new regional transit facilities and stations are to be sited, increase opportunities for commercial activities, the development of medium and high density apartments, and increased single-family density.

2.17 UTILIZATION OF VACANT LAND AND HOUSING STOCK
Provide for fuller utilization of larger single-family homes and existing vacant land.

2.18 MIXED USE
Provide a mechanism that will allow for the continuation and enhancement of areas of mixed use character where such areas act as buffers and where opportunities exist for creation of nodes or centers of mixed commercial, residential and apartment development.

SECTION III: NEIGHBORHOODS

GOAL:

3 Preserve and reinforce the stability and diversity of the city's neighborhoods while providing for increased density in order to attract and retain long-term residents and businesses and ensure the city's residential quality and economic vitality.

POLICIES:

3.1 PHYSICAL CONDITIONS
Identify and develop programs to prevent the deterioration of existing structures and public facilities.

3.2 SOCIAL CONDITIONS
Provide and coordinate programs to promote neighborhood interest, concern and security and to minimize the social impacts of land use decisions.

3.3 NEIGHBORHOOD DIVERSITY
Promote neighborhood diversity and security by encouraging a balance in age, income, race and ethnic background within the city's neighborhoods.

3.4 HISTORIC PRESERVATION
Preserve and retain historic structures and areas throughout the city.

3.5 NEIGHBORHOOD INVOLVEMENT
Provide for the active involvement of neighborhood residents and businesses in decisions affecting their neighborhood through the promotion of neighborhood and business associations and their activities.

SECTION IV: HOUSING

GOAL:

4 Provide for a diversity in the type, density and location of housing within the city consistent with the adopted **City Housing Policy**, to provide adequate supply of safe, sanitary housing at price and rent levels appropriate to the varied financial capabilities of city residents.

POLICIES:

4.1 METROPOLITAN SERVICE DISTRICT AREAWIDE HOUSING OPPORTUNITY PLAN
Cooperate with the Metropolitan Service District and the Housing Authority of Portland in carrying out the MSD Areawide Housing Opportunity Plan.

The following policies were adopted by the Portland City Council, Ordinance #142737, on March 29, 1978 as the Housing Policy for the City of Portland.

4.2 FAIR HOUSING
Encourage and support equal access to housing throughout the city for all people regardless of race, sex, marital status, ancestry, national origin or physical or mental handicap, and encourage the responsible State and Federal agencies to enforce Federal and State civil rights and fair housing laws.

4.3 NEW HOUSING PRODUCTION
Assist the private sector in maintaining an adequate supply of single- and multi-family housing units. This shall be accomplished by revising primarily the homebuilding industry and private sector functions, supported by the elimination of unnecessary government regulations.

4.4 HOUSING CHOICE AND NEIGHBORHOOD STABILITY
Support public and private actions which increase housing choices for Portlanders, with emphasis on housing and public investments which: 1) improve the balance in the city's population by attracting and keeping in the city households with children; 2) maintain neighborhood schools; 3) increase the number of housing alternatives for both renter and owner; 4) improve the physical and environmental conditions of all neighborhoods.

4.5 LOWER INCOME ASSISTED HOUSING
Support and assist in planning for subsidized housing opportunities, which are primarily for households which cannot compete in the market for housing, utilizing all available Federal and State aids, in addition, it is City policy that public housing be divided between elderly and non-elderly families proportionate to their representation in the city's total need for low income housing. Public housing projects for families should be small, an optimum size of 30 units, located on scattered sites, and should achieve as broad an income mix as possible among tenants.

4.6 EXISTING HOUSING MAINTENANCE
Encourage and assist the continuing maintenance of existing residential properties, both single- and multi-family. This maintenance will be accomplished through a voluntary housing maintenance code program to include marketing, inspection and financial assistance, aimed primarily at safety, sanitation, structural integrity and energy conservation.

4.7 EXISTING HOUSING: MAJOR REHABILITATION
Provide assistance for rehabilitation of housing beyond Housing Maintenance Code requirements: 1) if the assistance is supportive of ongoing community development activity; 2) on a voluntary basis; and 3) if the Existing Housing: Maintenance and New Housing Policies are being fulfilled.

SECTION V: ECONOMIC DEVELOPMENT

GOALS:

A review draft of the proposed City Economic Development Policy has been prepared and a process established for public review, discussion and public hearings. The following goals are included in the proposed Policy.

5A PUBLIC/PRIVATE DEVELOPMENT PARTNERSHIP
Foster a public/private development partnership responsive to the economic needs of Portland businesses and residents.

5B JOBS AND INCOMES
Support the development of the Portland economy to meet the employment needs and increase the disposable income of city residents.

5C BUSINESS AND INDUSTRY
Retain existing in-city firms, keep Portland competitive for new business and industry.

5D NEIGHBORHOOD ECONOMIC DEVELOPMENT
Develop and maintain self-supportive business and industrial opportunities; promote retail, service, employment and investment responsive to neighborhood economic development needs.

5E EQUALIZATION OF ECONOMIC OPPORTUNITY
Equalize the opportunities for employment and career advancement, business development, and employment for those segments of the population facing the greatest institutional barriers to economic success.

5F OTHER PUBLIC OBJECTIVES
Foster local economic development and other publicly sponsored or funded activities are mutually supportive.

POLICIES—INDUSTRIAL:

5.1 Promote new jobs for city residents by targeting economic development resources and encouraging increased employment density within business/industrial centers.

5.2 Retain in-city business and industry by improving essential resources such transportation access, increased land supply and flood control facilities.

5.3 Encourage the location of designated industrial districts for manufacturing and related support functions.

5.4 Provide industrial sites in the city through redevelopment of existing industrial districts and annexation of new land, to provide jobs for city residents and the retention of existing in-city industry.

5.5 Improve investment of goods and workers in the designated industrial districts.

POLICIES—COMMERCIAL:

5.6 Encourage commercial development that enhances the economic viability of the city and reinforces transportation policies.

5.7 Maintain the central business district as the principal commercial center in the region consistent with the adopted Downtown Plan.

5.8 Support the vitality of commercial centers throughout the city as areas for trade and service.

5.9 Maintain transit-related commercial centers along designated major transit corridors.

5.10 Retain existing neighborhood commercial activities within walking distance of residential areas and encourage clustered siting of new neighborhood commercial development.

SECTION VI: TRANSPORTATION

GOAL:

6 Promote an efficient and balanced urban transportation system, consistent with the **Arterial Streets Classification Policy**, to encourage energy conservation, reduce air pollution, increase the value of vehicular traffic on residential neighborhoods and improve access to major employment and commercial centers.

POLICIES:

6.1 INTERGOVERNMENTAL COOPERATION
Encourage efficient management of the transportation resources located in the city and metropolitan area through cooperation and long range planning with Federal, State and local agencies.

6.2 REGIONAL AND CITY TRAFFIC PATTERNS
Create and maintain regional and city traffic patterns that protect the livability of Portland's established residential neighborhoods while improving access and mobility within commercial and industrial areas.

6.3 AIR QUALITY MAINTENANCE CLASSIFICATION POLICY
Support public and private actions which increase housing choices for Portlanders, with emphasis on housing and public improvements which: 1) improve the balance in the city's population by attracting and keeping in the city households with children; 2) maintain neighborhood schools; 3) increase the number of housing alternatives for both renter and owner; 4) improve the physical and environmental conditions of all neighborhoods.

6.4 Promote use of ride sharing and public transit throughout the metropolitan area.

POLICIES—WATER QUALITY:

6.5 Continue cooperation with Federal, State and regional agencies involved with the management and quality of Portland's water resources.

6.6 Operate, plan and regulate wastewater systems as designated in MSD's **Waste Treatment Management Component**.

6.7 Maintain coordination of land use planning and capital improvements to insure the most efficient use of the City's sanitary and stormwater run-off facilities.

POLICIES—LAND RESOURCES:

6.8 Protect Portland parks, cemeteries and golf courses from future development that threatens Open Space shown on the Comprehensive Plan Map.

6.9 Restrict development within Portland's natural drainageways through development and application of a drainageway overlay zone.

6.10 Protect and preserve the natural and economic qualities of lands along the Willamette River through implementation of the City's **Willamette River Greenway Plan**.

6.11 Participate actively in the National Flood Insurance Program through implementation of a full range of floodplain management measures.

6.12 Limit the density of development in areas of natural hazards.

POLICIES—NOISE:

6.13 Reduce and prevent excessive noise and vibration in attached residential dwellings through construction requirements.

6.14 Reduce and prevent excessive noise levels from one use which may impact another use through on-going noise monitoring and enforcement procedures.

SECTION VII: ENERGY

A review draft of the proposed City Energy Policy has been prepared and a process established for public review, discussion and public hearings. The following goal and policies are included in the proposed Policy.

GOAL:

7 To increase the energy efficiency of existing structures and the transportation systems of the city through policies and programs which encourage conservation and promote increased use of renewable resources, while maintaining the attractiveness of the city as a place to live and do business.

POLICIES:

7.1 THE CITY'S ROLE IN ENERGY CONSERVATION
The role of the City is to insure the accomplishment of the Goal. All of the energy policies are to be policies of the City and depend on City action. The City shall implement conservation actions directly through City government and encourage conservation actions by the private sector. This shall be accomplished by public education, incentives and disincentives. Where the City's efforts shall include promoting conservation; informing all sectors of available programs and conservation techniques; providing financial incentives; advocating the support of the City efforts at the state, regional, and federal levels; and regulating conservation actions where appropriate. The City shall evaluate indicators of energy consumption to assure the effectiveness of conservation efforts of the private sector activity.

7.2 RETROFIT OF EXISTING BUILDINGS AND EQUIPMENT
All buildings in the city shall be made as energy efficient as is economically possible as determined by costs of conservation measures and City government energy. The retrofit of existing buildings for the purpose of energy conservation shall be accomplished by adequate energy efficiency, with mandatory requirements imposed five years after the adoption of the policy. Retrofit programs will be required that minimize the cost-effective, energy consumption, and have the most equitable impact possible on all sectors of the community.

7.3 LAND USE
The City shall develop land use policies which take advantage of density and location to reduce the need to travel, increase access to transit, and permit building configurations which increase the efficiency of space heating and cooling.

7.4 RENEWABLE RESOURCES AND SUPPLEMENTAL ENERGY SYSTEM
The long-range impact of alternative energy sources, solar and business use shall be reduced by encouraging the application of renewable and alternative energy sources.

7.5 TRANSPORTATION
The consumption of nonrenewable fuels for transportation shall be reduced through actions which increase the efficiency of the transportation system operating within the city. These actions will encourage individuals to choose the method of travel which is the most fuel-efficient for the purpose of the trip; promote the energy-efficient movement of goods; and provide for policies for the use of fuel efficient vehicles.

7.6 CITY GOVERNMENT
City bureaus shall reduce energy consumption by investing in energy conservation opportunities and changing operational procedures to the most energy- and cost-effective extent possible.

SECTION VIII: ENVIRONMENT

GOAL:

8 Maintain and improve the quality of Portland's air, water and open space resources and protect neighborhoods and business centers from detrimental noise pollution.

POLICIES—AIR QUALITY:

8.1 Continue to cooperate with public agencies concerned with the improvement of air quality, and implement State and regional plans and programs to attain overall Federal air quality standards. Cooperate and work with MSD and the State Department of Environmental Quality in efforts to reach attainment of Federal ambient air quality standards for ozone by 1987 and carbon monoxide by 1985.

8.2 The revised **Downtown Parking and Circulation Plan** will guide future City policies on attaining air quality standards in the central business district and allow for expanded employment and housing opportunities downtown, and allow for expanded employment and housing opportunities downtown.

8.3 Develop strategies that will allow for economic growth and air quality improvements in air quality problem areas identified outside of Downtown.

8.4 Promote use of ride sharing and public transit throughout the metropolitan area.

POLICIES—WATER QUALITY:

8.5 Continue cooperation with Federal, State and regional agencies involved with the management and quality of Portland's water resources.

8.6 Operate, plan and regulate wastewater systems as designated in MSD's **Waste Treatment Management Component**.

8.7 Maintain coordination of land use planning and capital improvements to insure the most efficient use of the City's sanitary and stormwater run-off facilities.

POLICIES—LAND RESOURCES:

8.8 Protect Portland parks, cemeteries and golf courses from future development that threatens Open Space shown on the Comprehensive Plan Map.

8.9 Restrict development within Portland's natural drainageways through development and application of a drainageway overlay zone.

8.10 Protect and preserve the natural and economic qualities of lands along the Willamette River through implementation of the City's **Willamette River Greenway Plan**.

8.11 Participate actively in the National Flood Insurance Program through implementation of a full range of floodplain management measures.

8.12 Limit the density of development in areas of natural hazards.

POLICIES—NOISE:

8.13 Reduce and prevent excessive noise and vibration in attached residential dwellings through construction requirements.

8.14 Reduce and prevent excessive noise levels from one use which may impact another use through on-going noise monitoring and enforcement procedures.

SOLID WASTE

GOAL:

11D Provide for adequate solid waste disposal.

POLICIES:

11.2B DISPOSAL
Reduce reliance on landfilling for disposal of solid waste through support of the Metropolitan Service District's **Solid Waste Management Plan**.

11.2G ENERGY RECOVERY
Support the development and utilization of solid waste energy recovery systems.

11.3B COLLECTION
Continue to support the collection of solid waste by private operators.

WATER SERVICE

GOAL:

11E Insure that reliable and adequate water supply and delivery systems are available to provide sufficient quantities of high quality water at adequate pressures to meet the domestic, commercial, industrial and fire needs of the community, on an equitable, efficient and self-sustaining basis.

POLICIES:

11.31 SOURCE
Maintain and safeguard the Bull Run Watershed as the primary water supply source for the community, with water quality preservation taking precedence over all other uses.

11.32 QUALITY
Maintain the quality of the water supply at its current level, which exceeds all State and Federal water quality standards and satisfies the needs of both domestic and industrial customers.

11.33 ALTERNATIVE SOURCES
Ensure a reliable supply of water to the community through the development and maintenance of an adequate source (groundwater) for use during emergencies or periods of extremely high demand.

11.34 MAINTENANCE
Maintain storage and distribution facilities in order to protect water quality, insure a reliable water supply, assure adequate flow for all user needs, and minimize water loss.

11.35 STORAGE
Maintain City storage capacity of at least three times the average daily use of city users. Additional storage capacity contracted by outside city water districts shall also be maintained.

11.36 FIRE PROTECTION
Install and maintain public fire hydrants with adequate flow to serve the fire protection needs of all city residents and businesses.

11.37 DESIGN AND COMMUNITY IMPACT
Design water facilities to be compatible with the area in which they are located.

11.38 OUTSIDE USER CONTRACTS
Service outside areas pursuant to contract only where such service is to improve long-term water supply planning.

11.39 OUTSIDE USER BENEFIT
Require water users outside the City that benefit from a new improvement to finance that portion of the improvement constructed for their benefit.

11.40 FUTURE USER STORAGE
Require water purveyors, with whom the City has a contract, to provide storage of at least three times the average daily use of their customers and to compensate the City for the additional cost of maintaining such storage within the City system.

11.41 EQUITABILITY
Establish water rates based on the cost of providing water service in an equitable manner.

11.42 WATER PRESSURE
Provide water at standard pressure (40 to 110 lbs. per sq. inch) to all users whenever possible.

11.43 ENERGY CONSERVATION
Pursue water conservation, efficiencies in operation, and maintenance of facilities to reduce and conserve energy.

PARKS AND RECREATION

GOAL:

11F Maximize the quality, safety and usability of parklands and facilities through the application of appropriate levels of development, and preservation of parks and open space, and equitable allocation of active and passive recreation opportunities for the citizens of Portland.

POLICIES:

11.44 MASTER DEVELOPMENT PLANS
Maintain master development plans for city parks that address user group needs, development priorities, development costs, and economic costs, program opportunities, financing strategies and citizen involvement.

11.45 MAINTENANCE
Provide adequate preventive maintenance to all city park and recreational facilities in a manner which minimizes unpreventative maintenance and maximizes the useful life of scheduled service delivery.

11.46 CAPITAL PROGRAMMING
The Bureau of Planning and the Park Bureau shall develop a long range parks plan for the city which will provide standards for location of park and recreation facilities, and identify areas of facility deficiencies in neighborhood, district and city-wide recreational parks and programs.

SECTION XI: PUBLIC FACILITIES POLICIES

GENERAL GOAL:

11A Provide a timely, orderly and efficient arrangement of public facilities and services that support existing and planned land use patterns and densities.

GENERAL POLICIES:

11.1 SERVICE RESPONSIBILITY
Within its boundaries, the City of Portland will provide public facilities and services at levels appropriate for all land use types and will participate in coordinating efforts of other agencies which provide related services.

11.2 ORDERLY LAND DEVELOPMENT
Urban development should occur only where urban public facilities and services exist or can be reasonably made available.

11.3 ORDERLY SERVICE EXTENSION
The provision and expansion of one urban public facility or service should not stimulate development that significantly precedes the City's ability to provide all other necessary urban public facilities and services at uniform service levels.

11.4 CAPITAL EFFICIENCY
Maximum use of existing public facilities and services should be supported through encouraging new development to occur at the maximum densities allowed by the Comprehensive Plan and through the development of vacant land within presently developed areas.

11.5 COST EQUITABILITY
To the greatest extent possible, the costs of improvement, extension and construction of public facilities should be borne by those benefiting from the improvement, extension and construction.

11.6 FACILITIES SYSTEM PLAN
Develop and maintain a coordinated Facilities System Plan that provides a framework for the preservation of urban public facilities and services within Portland's Urban Service Boundary. This plan will be consistent with the designated land uses and density of the applicable Comprehensive Plan.

11.7 CAPITAL IMPROVEMENT PROGRAM
The Capital Improvement Program will be the annual planning process for major improvements to existing public facilities and the construction of new facilities. Planning will be in accordance with the framework provided by the Facilities System Plan.

PUBLIC RIGHTS-OF-WAY

GOAL:

11B Preserve the quality of Portland's land transportation system; protect the City's capital investment in public rights-of-way through continuing high quality maintenance and improvement; and carry out street improvements in accordance with identified needs, balancing limited resources among the needs of neighborhoods, commerce and industry.

POLICIES:

11.8 MAINTENANCE
First priority for the expenditure of General Fund revenues on public rights-of-way will be for the protection and prevent deterioration of the existing street system.

11.9 TRANSIT CORRIDORS
High priority will be given to improvements which promote more effective public transportation on those streets functioning as transit corridors.

11.10 STREET IMPROVEMENTS
Improvements in public rights-of-way will be consistent with the rights-of-way classifications in the **Arterial Streets Classification Policy**.

11.11 LOCAL SERVICE IMPROVEMENTS
Construct local service streets in accordance with existing and planned neighborhood land use patterns and accepted engineering standards.

11.12 TRANSIT IMPROVEMENTS
Construct transit streets so that transit vehicle movement is not impaired or made unsafe by the street width, turning radius or other physical constraints.

11.13 BICYCLE IMPROVEMENTS
Include physical construction standards necessary to assure access and safe passage for bicyclists in design and construction of all new or reconstructed public streets within the City, consistent with the policies set forth in the **Arterial Streets Classification Policy**.

11.14 BICYCLE PARKING
Provide for safe short-term, and safe, sheltered long-term bicycle parking throughout the Downtown and in other appropriate areas.

11.15 PEDESTRIAN IMPROVEMENTS
Provide for safe pedestrian movement along all new or reconstructed streets, and encourage provision of additional pedestrian pathways where needed for safety, convenient access to schools, parks and other community facilities.

11.16 STAGED CONSTRUCTION
In currently developed areas, allow the formation of Local Improvement Districts (LID) to construct one or more phases of a staged street improvement.

11.17 NEW CONSTRUCTION
Construct new streets of high quality structural materials in order to minimize future maintenance costs.

11.18 STREET VACATION
When considering requests for street vacations, give consideration to the opportunities for bicycle ways, pedestrian ways, parkland or other public use.

SANITARY AND STORMWATER FACILITIES

GOAL:

11C Insure an efficient, adequate and self-supporting wastewater collection treatment and disposal system which will meet the needs of the public and comply with Federal, State and local clean water requirements.

POLICIES:

11.19 MAINTENANCE
Maintain and improve the existing sanitary and storm sewer system through preventive maintenance and on-going appraisal.

11.20 IMPROVEMENT
Improve the existing sewer system in those areas adversely affected by overloaded sewer systems.

11.21 COMBINED SEWER OVERFLOWS
Control and reduce combined sewer overflows.

11.22 SUB-SURFACE DISPOSAL
Discourage the development of on-site sub-surface waste disposal systems on lots smaller than two acres in size.

ZONING CODE REVISIONS

INTRODUCTION

Zoning establishes limits on land development. It controls the type of use, intensity of activity and certain aspects of the design of new buildings. The revised Zoning Code provides for five major groupings of activities: Residential, Commercial, Industrial, Open Space, Mixed Use, and Manufacturing. This summary provides a guide to the specific requirements of the zones within these groupings. Each of the zones and designations mapped on the reverse side of this page. With the exception of Open Space, each designation corresponds with a zone. Open Space will also be discussed in this section.

OPEN SPACE DESIGNATION

This is the only land use designation that does not correspond with a zoning classification. Open Space designations are applied to public parks, cemeteries, golf courses, the Park Bureau playground improvements program, and parkways. Areas designated Open Space will be maintained in conformity with this designation, but may continue indefinitely. Any land to be replaced by new Open Space designations will require a Plan amendment would be necessary before an Open Space designated area could be rezoned to a more intensive use.

SINGLE-FAMILY RESIDENTIAL

Significant changes are proposed for the city's single-family residential designations. A new zoning classification has been developed for Attached Residences, A2.5. This zone provides for increased density close dential construction (R2.5). This zone provides for increased density close to major transit service while encouraging owner occupancy. A number of other single-family zones have been added to provide greater flexibility. Also special provisions have been added to provide increased development potential of existing larger residential structures, to encourage the development of vacant and infill land; and, in some cases, higher density development at least one on-site parking space.

FF Farm and Forest:

Allows agriculture, commercial forest and single-family homes on two-acre minimum size. Existing substandard lots, as small as one acre, may be developed, but no new substandard lots are created.

R20 Limited Single-Family Residential:

This zone is applied in areas where existing public facilities are not now adequate to provide for more intense development. It allows one house on a 20,000 sq. ft. or larger lot. Construction is allowed on existing substandard lots as small as 14,000 sq. ft., but no new substandard lots can be created. Owner-occupied houses having over 2,000 sq. ft. of floor area may add a small rental apartment unit within the existing structure. Common-wall construction would be allowed if certain conditions are met.

R10 Low Density Single-Family Residential:

Allows one house on a 10,000 sq. ft. or larger lot. Construction is allowed on existing substandard lots as small as 7,000 sq. ft., but no new substandard lots can be created. Owner-occupied houses having over 2,000 sq. ft. of floor area can be converted to contain two units. Owner-occupied houses having over 2,000 sq. ft. of floor area may add a small rental apartment unit within the existing structure. Common-wall construction and cluster housing would be allowed if certain conditions are met.

R7 Medium Density Single-Family Residential:

Allows one house on a 7,000 sq. ft. or larger lot. Construction is allowed on existing substandard lots as small as 5,000 sq. ft., but no new substandard lots can be created. Owner-occupied houses having over 2,000 sq. ft. of floor area may add a small rental apartment unit within the existing structure. Common-wall construction and cluster housing would be allowed if certain conditions are met. Existing small rental apartment buildings are designated as "attached housing" under the provisions of the R2.5 zone (see below).

R2.5 Attached Single-Family Residential (Townhouse/Rowhouse):

Allows construction of attached residential housing units on small parcels. Lots may be as small as 1,500 sq. ft. Complementary uses, such as day care, may be allowed through the Conditional Use process. Common-wall construction and cluster housing would be allowed if certain conditions are met. Existing detached single-family houses in this zone may be converted to duplexes as a conditional use.

SPECIAL PROVISIONS IN SINGLE-FAMILY RESIDENTIAL ZONES:

Allow Larger Homes to Add a Rental Unit if the following requirements are met:
A. The house must have at least 2,000 sq. ft. of floor area, excluding garage space.
B. The new apartment must be created only through internal conversion of the house. Garage space may not be converted.
C. No additions of floor space may have been added to the housing unit in the preceding five years.
D. The new rental unit may not occupy more than 25% of the house's floor area.
E. Only one unit may be in the house and be visible from the front yard.
F. The house must have been owner-occupied for at least 12 months preceding the addition of the rental unit.

Allow Common-Wall Construction if the following requirements are met:
A. No house may have more than one common wall.
B. Each house must be placed on a lot that meets all other requirements of the zone, i.e., width, depth and total area.
C. Each house must have one side yard at least 15 feet wide.

Allow Cluster Housing on sites of four or more acres, subject to the subdivision review process, if the following requirements are met:
A. Each housing unit must be a detached single-family residence; on its own lot and clustered with other units on the site.
B. No residence may be placed within 15 feet of another building.
C. Each unit must have access to a dedicated public street and meet the front yard requirement of the underlying zone.
D. Individual lots may be smaller than the minimum required in the underlying zone, but lot coverage may not exceed 50%.
E. No garage density is permitted than under a standard subdivision.
F. A 15 ft. landscaped buffer, planted with trees, must be established and maintained, adjacent to all external project boundaries, exclusive of dedicated rights of way.

Home Occupations

Currently, home occupations are limited to secondary sources of household income temporarily conducted in the home. This would be changed to allow primary permanent income-creating activities to be located in the home. Provisions are retained which assure these activities do not detract from the residential character of the area. The area of the home that may be used for the home occupation is increased from 200 sq. ft. to 750 sq. ft. One employee who is not a member of the household may engage in the home occupation.

Planned Unit Development

Planned Unit Developments (PUD) are a method of land development which requires a unified site plan for the entire development, including streets, utilities, structures and open space. It permits a mix of housing types, and densities (subject to the site's zoning). PUD's allow many of the specific zoning requirements in the code to be modified or waived, thereby allowing a balanced review of each project. Portland has permitted PUD's in all residential zones since 1959.

APARTMENT ZONES

The apartment zones have been modified from the existing code to address frequent criticisms that the current high density apartment zone (AO) has produced little housing because of its conditional use allowance of 100% office usage, and that the existing medium density apartment zone (A1) produces buildings surrounded by asphalt, with few amenities provided for tenants. The AO zone has been eliminated and replaced with a new high density designation which requires that 60% of the structure be devoted to housing use. The medium density apartment zone has been revised to restrict the location and size of parking areas, particularly on the front yards, and has been converted to a variable density zone which allows an increase in density when amenities are provided. In the low density apartment zone, the number of units allowed per acre is increased 25%. All new apartment projects must meet various control standards.

A2 Low Density Apartments:

Allows single-family houses, rowhouses, duplexes and garden apartments. One unit is permitted for every 2,000 sq. ft. of site area. New apartments are not permitted to use required yards for auto-

Past Land Use Reviews

File Name	Year	Category
LU 21 - 053526 HR	2021	LU
LU 18-103566 HR	2018	LU
LU 17-245440 CU AD	2017	LU
LU 17-206893 HR	2017	LU
LU 17-163203 CU	2017	LU
LU 17-158467 HRM	2017	LU
LU 16-148005 HR	2016	LU
LU 14-218444 HR EN	2014	LU
LU 13-236792 EN HR	2013	LU
LU 07-139442	2007	LU
LU 06-178213	2006	LU
LUR 99-00809	1999	LUR
MP1 107-89	1989	MP
HL 74-89	1989	HL
HL 75-89	1989	HL
CU 49-77	1977	CU
CU 059-74	1974	CU
CU 007-74	1974	CU
CU 93-67	1967	CU
CU 056-65	1965	CU
CU 067-64	1964	CU
CU 029-61	1961	CU

S. E. BELMONT ST.

S. E. YAMHILL ST.

S. E. SALMON ST.

S. E. MAIN ST.

S. E. 71 ST. AVE.

S. E. 72 ND AVE.

S. E. 60TH AVE.

5 POSTS NOT LAMPED

NORTH

S. E. STEPHENS ST.

S. E. DIVISION ST.

S. E. 68TH AVE.

PARK LIGHTING

INSTALLED 1924
89 POST & LAMP

DEPARTMENT OF PUBLIC UTILITIES
BUREAU OF LIGHT & POWER
PORTLAND, OREGON

NATE A. BOODY COMMISSIONER
CARL H. LUNDELL UTILITIES ENGINEER

ELECTRICAL DETAILS
OF
MT. TABOR PARK

SCALE 1"=200' DATE 4-9-58 DRAWN SHEET

APPROVED BY

REGISTERED PROFESSIONAL ENGINEER 505 STATE OF OREGON DEC. 8, 1961 C. H. LUNDELL

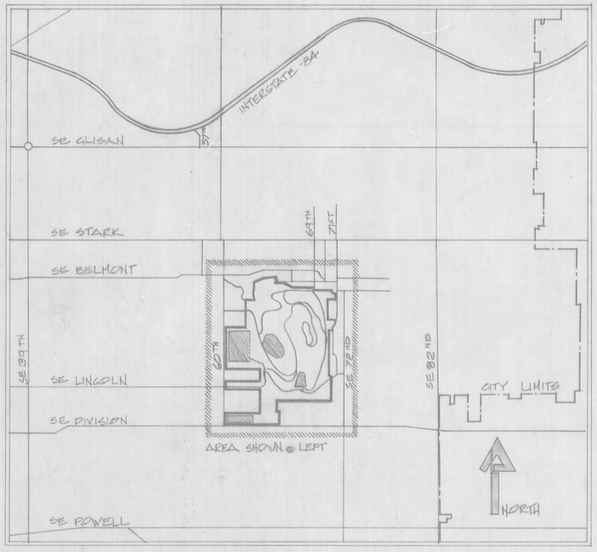
PGE POLE # 183
METER # 807206 E
MAINTAINENCE BLDG. &
METER # 684659 E
RESTROOM BLDG.

PGE POLE # 156
METER # K 37028P
TRANSFORMER HOUSE
METER # 321617 E
RESTROOM BLDG.

SE BELMONT
SE YAMHILL COURT
SE YAMHILL
SE TAYLOR CT
SE TAYLOR
SE SALMON
SE MAIN
SE MADISON
SE HAWTHORNE
SE STEPHENS
SE HARRISON
SE LINCOLN
SE GRANT
SE SHERMAN
SE DIVISION
SE HILL
SE CLAY
SE 60TH
SE 65TH
SE 66TH
SE 67TH
SE 68TH
SE 69TH
SE 70TH
SE 71ST
SE 72ND
SHEET 9
SHEET 10
SHEET 11

PARK MAINTENANCE BLDG.
PARK BUREAU POLE
#165
WP STAGE OUTLETS
THEATRE
WP OUTLET
handholes
3" sleeve
J-BOX
2" sleeve
PARK SHELTER
1-1/4" sleeve
TENNIS COURTS
TRANSFORMER HOUSES (SEE NOTE #3)
PUMP HOUSE (SEE DETAIL)
EAST TABOR DRIVE
NORTH TABOR DRIVE
SOUTH TABOR DRIVE
HARLEY SCOTT CIRCLE
ROAD TO RES #7
PGE METER # 117065D
REST ROOM BLDG.
PGE METER # 188801 G
POLICE BUSINESS
LEASED PROPERTY
PGE POLE # - 72
METER # -
PGE POLE # - 375
METER # - 517470 E
TENNIS COURTS (SEE NOTE # 2)
WATER BUREAU POWER LINE
handhole
1-1/4" sleeve
SOAP BOX DERBY TRACK
W.B. CONTROL CENTER
RESERVOIR #5
RESERVOIR #6
PUMP STATION
RESERVOIR #1
RESERVOIR #2
WATER BUREAU BLDG.
MT. TABOR MAINTAINENCE YARD (SEE NOTE #4)
SHOPS
NURSERY AREA
MT. VIEW DRIVE
HARRISON DRIVE
LINCOLN DRIVE
PGE METER # 715091S18
WATER BUREAU
SCALE 0 100' 200' 400' 800' 1200'
NORTH

MT. TABOR VICINITY MAP

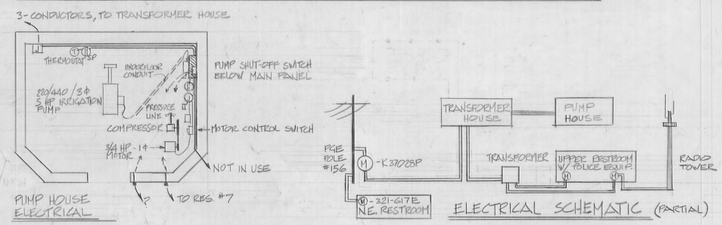


LEGEND / NOTES

SCALE OF DRAWING: @ 1" = 200'	@ 1" = 40'	DESCRIPTION
	E_P	ELECTRICAL WIRING - UNDERGROUND
E	E_P	ELECTRICAL WIRING - OVERHEAD
T	T	TELEPHONE WIRE - OVERHEAD
PLT	E	PARK LIGHTING - UNDERGROUND WIRING, DIST. POST-TO-POST
		UNDERGROUND WIRING FOR WATER BUREAU
E	E	PARK LAMP POST, CONCRETE, NUMBERS STENCILED IN BLACK AT BASE
	WP	WEATHERPROOF OUTLET
	P.P.	POWER POLE
	M	ELECTRIC METER
		POWER POLE WITH CITY STREET LIGHT

NOTES

1. SEE SECTION DRAWINGS FOR MORE DETAIL
2. SEE "TENNIS COURT LIGHTING FOR MT. TABOR PARK", SHEET E-3 BY PACIFIC ELEC. CORP., 5/15/73, DRAWN BY JOSE', FILE DETAIL-5
3. SEE "ELECTRICAL DETAILS OF MT. TABOR VAULT" (INCOMPLETE)
4. SEE "UTILITIES - PARK WAREHOUSE AREA" JAN. '65 & REVISIONS THRU MARCH 1983 TRACED BY ADC



MT. TABOR PARK

NORTH

NO.	DATE	REVISIONS	BY
1	7-28-88	PARK LIGHTING CONVERSION COMPLETED	P.M.

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION
CHARLES R. JORDAN, COMMISSIONER OF PUBLIC AFFAIRS

MT. TABOR PARK

STREET LIGHTING / ELECTRICAL

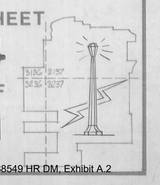
DRAWN BY: R.G. SWICK

1/4 SEC: 3136, 3137, 3236, 3237

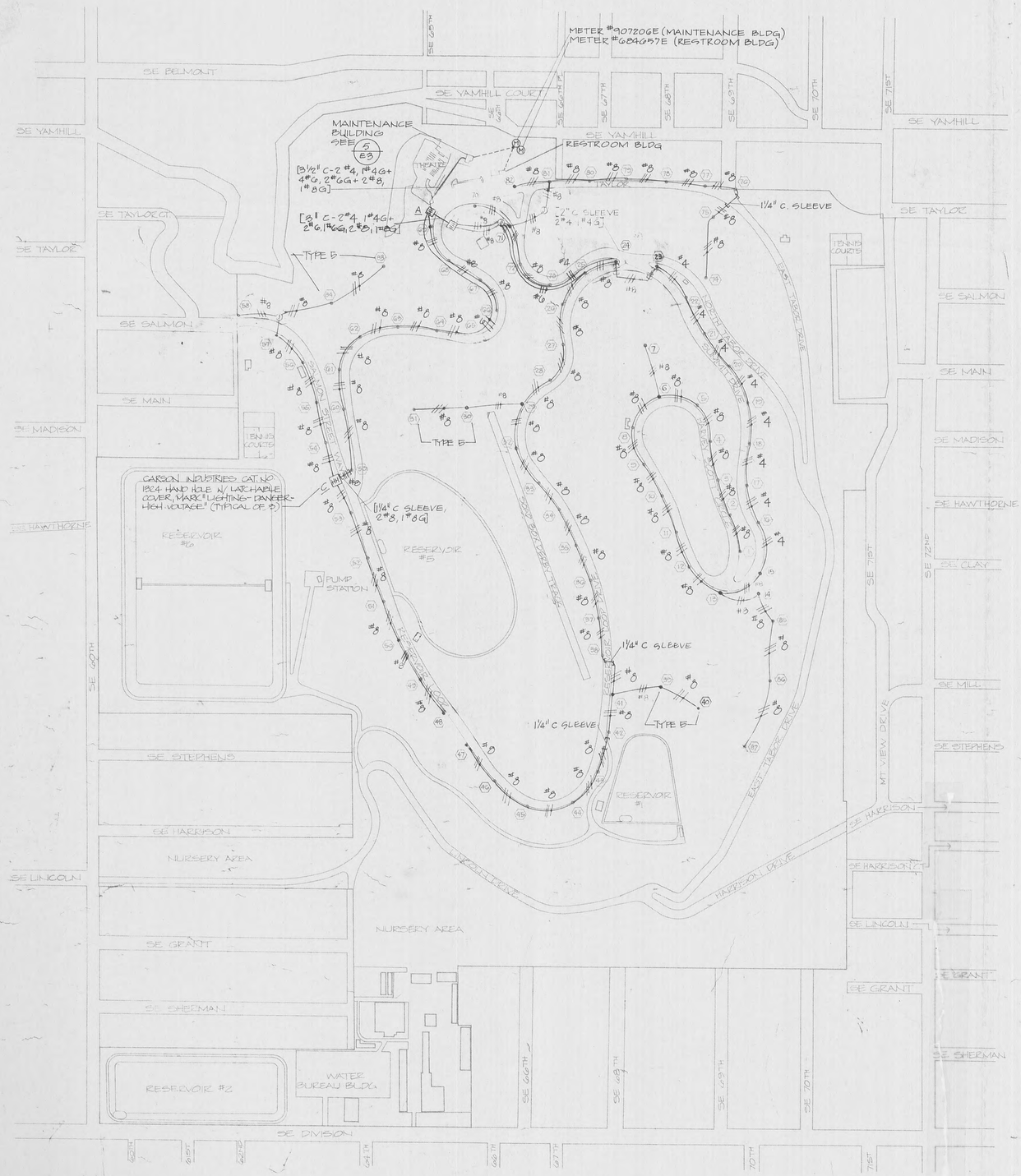
DATE: JAN. 10, 1983

SCALE: 1" = 200'

SHEET 4 OF 11

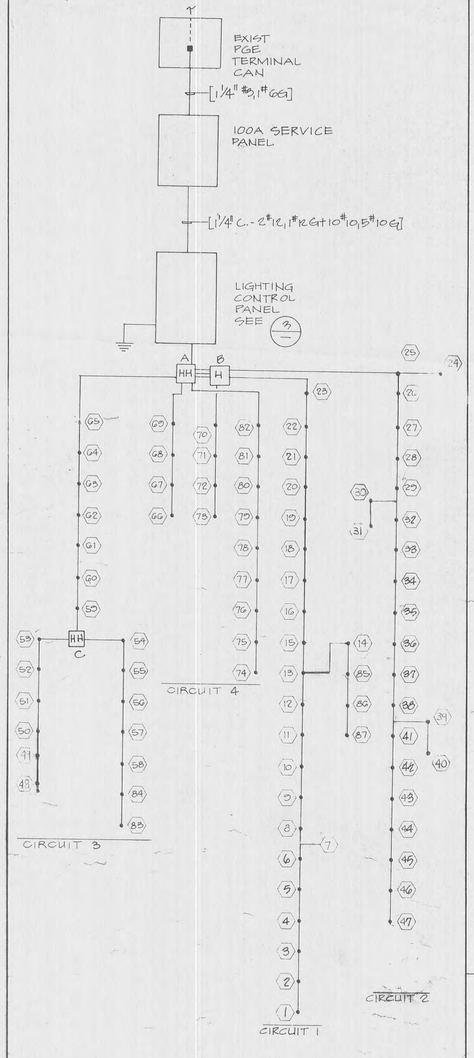


BRUNING 46-22



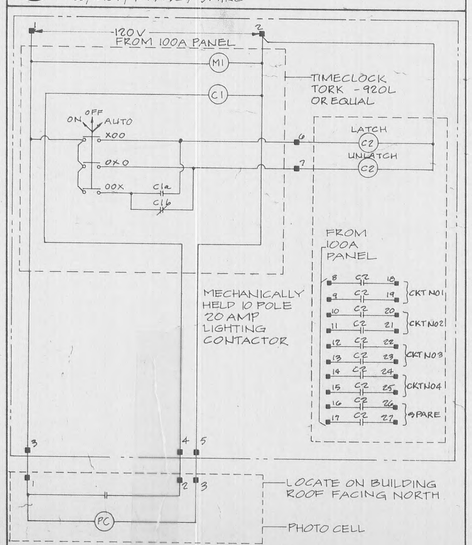
1 E2 ELECTRICAL ROADWAY LIGHTING PLAN

1" = 200'-0"



2 E2 ONE-LINE DIAGRAM

120/240V, 1 PHASE, 3 WIRE



3 E2 LIGHTING CONTROL DIAGRAM

NTS

PROJECT NOTES

I. INSTALL NEW SERVICE PANEL AND ALL NEW CIRCUITS, INCLUDING HAND HOLES AT BASE OF EACH POLE AS SHOWN IN ELEVATION 1 SHEET E-3 AND PLAN 2 SHEET E-3. ALL UNDERGROUND WIRING IS TO BE DIRECT-BURIAL CABLE SIZED AS SHOWN ON ROADWAY LIGHTING PLAN 1 SHEET E-2. PROVIDE CONDUIT SLEEVES UNDER ALL PAVED AREAS.

II. 2300V CIRCUITS MAY BE DE-ENERGIZED AT THE EXISTING TRANSFORMER HOUSE. EXISTING LIGHTS ARE ON TWO SERIES LOOPS DESIGNATED "TOP LOOP" AND "BOTTOM LOOP" AS SHOWN ON ROADWAY LIGHTING PLAN 1 ON SHEET E-1. LIGHT FIXTURES ARE TO BE MODIFIED AND TRANSFERRED TO NEW 240V CIRCUITS IN SEGMENTS AS DESCRIBED BELOW IN ORDER TO MAINTAIN AS MUCH LIGHTING IN SERVICE AS POSSIBLE DURING THE WORK.

III. INSTALL TEMPORARY 2300V SPLICE FROM POLE 65 TO POLE 66 USING LEAD-SHEATHED SERIES STREET LIGHTING CABLE SUITABLE FOR DIRECT BURIAL TO MATCH EXISTING, THUS ISOLATING POLES IDENTIFIED ON ONE-LINE DIAGRAM DETAIL 2 SHEET E-2 AS TO BE CONNECTED TO CIRCUIT 3. REMAINING "BOTTOM LOOP" FIXTURES ARE TO BE RE-ENERGIZED ON THE EXISTING CIRCUIT. PROVIDE REGULATION TO PERMIT PROPER OPERATION OF THE REDUCED QUANTITY OF FIXTURES ON THE EXISTING CIRCUIT.

IV. EXISTING WIRING REMOVAL
- A. REMOVE EXISTING WIRING FROM THE POLES IDENTIFIED AS CIRCUIT 3 AND CUT OFF BELOW GRADE
- B. REPLACE POLES 30, 31, 51, 52, 54, 56, AND 64 WITH NEW POLES FURNISHED BY THE BUREAU OF PARKS.
- C. STENCIL POLE IDENTIFICATION NUMBER ON EACH POLE AT +2'-0" ABOVE GRADE ON SIDE FACING ROADWAY OR WALKWAY USING WEATHER RESISTANT BLACK PAINT.
- D. INSTALL CONDUIT SWEEP ON BASE OF POLE AND CONNECT TO HAND HOLE - SEE DETAIL 1, SHEET E-3.
- E. MODIFY EXISTING HEADS, REPLACING EXISTING SOCKET AND LAMP WITH HIGH-PRESSURE SODIUM CONVERSION KIT INCLUDING BALLAST, SOCKET AND REFRACTOR AS SHOWN IN DETAIL 3, SHEET E-3 AND DETAIL 4, SHEET E-3.
- F. SPLICE NO. 12 AWG TAP CONDUCTORS IN HAND HOLE AS SHOWN IN DETAIL 2 SHEET E-3 AND CONNECT LUMINAIRE.

V. REPEAT STEPS 4A THROUGH 4F WITH CIRCUIT 4, THUS COMPLETING CONVERSION OF "BOTTOM LOOP". POLES TO BE REPLACED ARE 67, 74, 78, AND 79. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

VI. INSTALL TEMPORARY SPLICES AS DESCRIBED IN STEP 3 BETWEEN POLE 38 AND 41, ISOLATING POLES 41 THROUGH 49 AND BETWEEN POLE 15 AND 16, ISOLATING POLES 1 THROUGH 15.

VII. REPEAT STEPS 4A THROUGH 4F WITH POLES 41 THROUGH 49 AND POLES 1 THROUGH 15. POLES TO BE REPLACED ARE 9, 12, 42, 43, 44, 46, AND 49. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

VIII. REPEAT STEPS 4A THROUGH 4F WITH THE REMAINING POLES, THUS COMPLETING THE CONVERSION OF THE "TOP LOOP". POLES TO BE REPLACED ARE 27, 28, 37, 38, 39, AND 40. INSTALL REPLACEMENT FITTERS AND LANTERNS TO BE FURNISHED BY THE BUREAU OF PARKS ON POLES 85, 86 AND 87. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

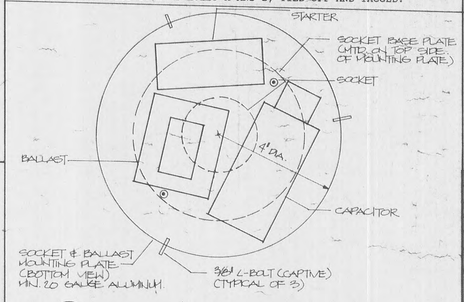
IX. EXISTING 2300V SERVICE LOOP WIRING BELOW GRADE IS TO BE ABANDONED IN PLACE.

ALTERNATIVES

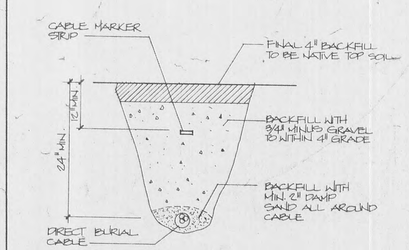
DEDUCTIVE ALTERNATE NO. 1.: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT CONVERT OR RECONNECT FIXTURES ON POLES 85, 86 AND 87. HAND HOLES ARE TO BE INSTALLED AT THE BASE OF THESE POLES AS REQUIRED UNDER BASIC WORK.

DEDUCTIVE ALTERNATE NO. 2: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK REQUIRED FOR CIRCUIT 4 BEYOND HAND HOLE A, INSTALL THE SPLICE DESCRIBED UNDER STEP 3 OF THE PROJECT NOTES AS A PERMANENT CONNECTION AND DO NOT PERFORM STEP 5 OF THE PROJECT NOTES. WIRING FOR CIRCUIT 4 IS TO BE PULLED TO HAND HOLE A, TIED OFF AND TAGGED.

DEDUCTIVE ALTERNATE NO. 3: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK DESCRIBED FOR CIRCUITS 3 AND 4 BEYOND HAND HOLES A AND B. DO NOT PERFORM WORK DESCRIBED UNDER STEPS 3, 4 AND 5 OF THE PROJECT NOTES. WIRING FOR CIRCUITS 3 AND 4 IS TO BE PULLED TO HAND HOLES A AND B, TIED OFF AND TAGGED.



4 E3 SOCKET SUPPORT BRACKET



5 E1 BACKFILL REQUIREMENTS

NTS

Channel:

#1 wire goes across picnic area to avoid tree roots

#2 J-box mounted to pickup wires running 4 ways

#3 Wire comes to J-box for new pump service and wire to pole 81 back feeds #2

#4 J-box has 3 #6, 1 #8 for future pump panel

#5 Wire crosses road and goes along bank and then crosses road again

#6 Power run to pole # 7 is now fed off of circuit # 1. 39 and 40 are on circuit # 2

#7 Pole # 14 is fed off # 13

#8 Pole 30 & 31 fed off of circuit #2. 48 & 49 now are on circuit # 3

#9 Wire crosses at pole 57 and goes to J box then splits and goes to 58 & 64

NO.	REVISION OR ISSUE	DATE	BY
1	ISSUED FOR PRICING	4.17.87	
0	ISSUED FOR REVIEW	4.10.87	

IDC CH2M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG - COMMISSIONER

MT. TABOR PARK

PARK LIGHTING CONVERSION

TITLE

LIGHTING PLAN, ONE-LINE DIGRAM, LIGHTING CONTROL DIAGRAM, PROJECT NOTES

DESIGNED	APPROVED	SCALE
G. Ladd Wright		AS SHOWN
DRAWN		DATE
M. Lewis		4-17-87
CHECKED		PROJECT NO.
		1142

DRAWING NO.

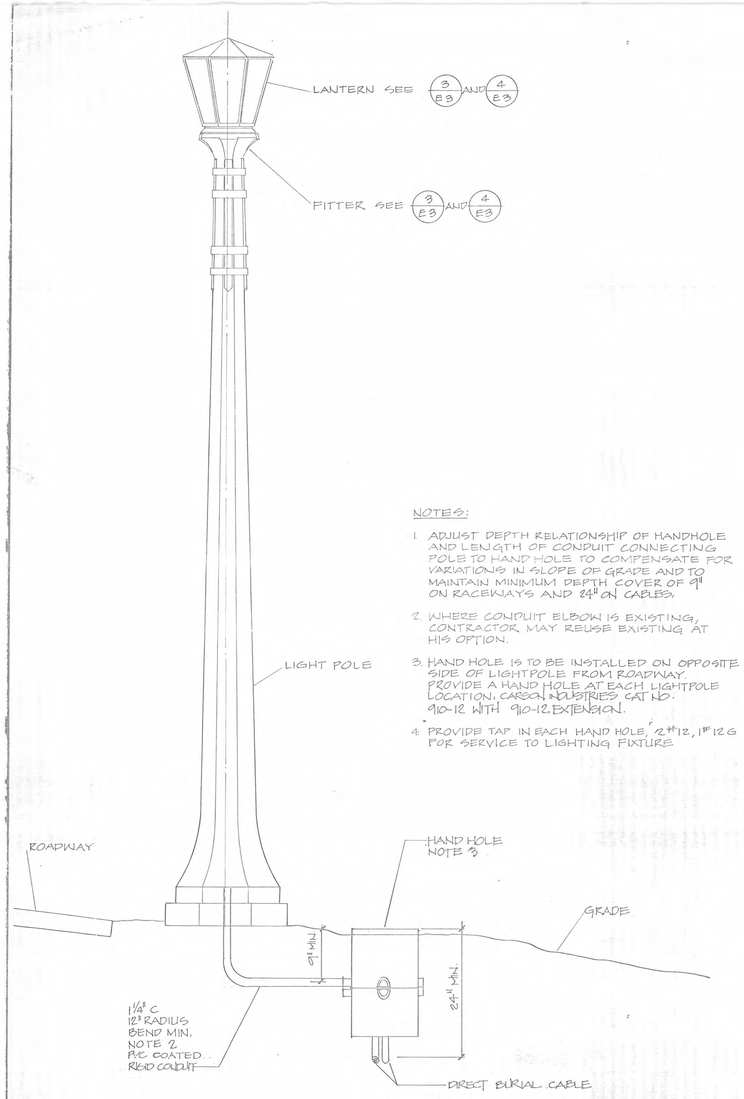
E-2

PRELIMINARY

OVERLAY IDENTIFICATION | COMPOSITE | E2 | SITE
PROJ NO | OVERLAY | E2 | SITE
CONTRACT | SCREEN | | SITE

WESTERN IMAGE SYSTEMS 104834

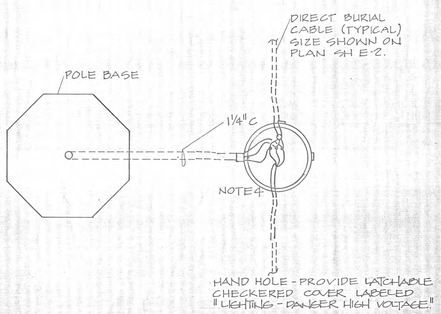
LU 23-088549 HR DM, Exhibit A.2



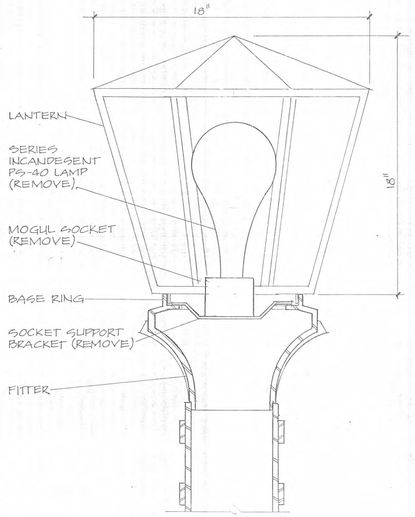
NOTES:

1. ADJUST DEPTH RELATIONSHIP OF HANDHOLE AND LENGTH OF CONDUIT CONNECTING POLE TO HAND HOLE TO COMPENSATE FOR VARIATIONS IN SLOPE OF GRADE AND TO MAINTAIN MINIMUM DEPTH COVER OF 9" ON RACEWAYS AND 24" ON CABLES.
2. WHERE CONDUIT ELBOW IS EXISTING, CONTRACTOR MAY REUSE EXISTING AT HIS OPTION.
3. HAND HOLE IS TO BE INSTALLED ON OPPOSITE SIDE OF LIGHTPOLE FROM ROADWAY. PROVIDE A HAND HOLE AT EACH LIGHTPOLE LOCATION, CARSON INDUSTRIES CAT NO: 910-12 WITH 910-12 EXTENSION.
4. PROVIDE TAP IN EACH HAND HOLE, 2#12, 1#12G FOR SERVICE TO LIGHTING FIXTURE

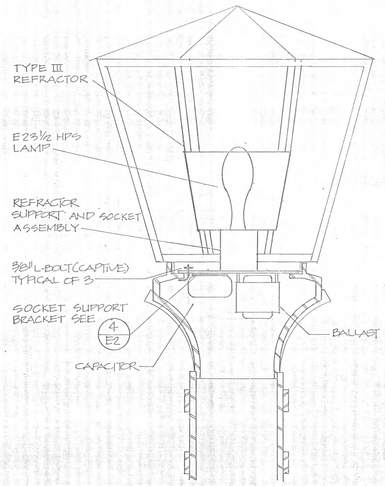
1/E2 TYPICAL ELEVATION AT POLE
1"=1'-0"



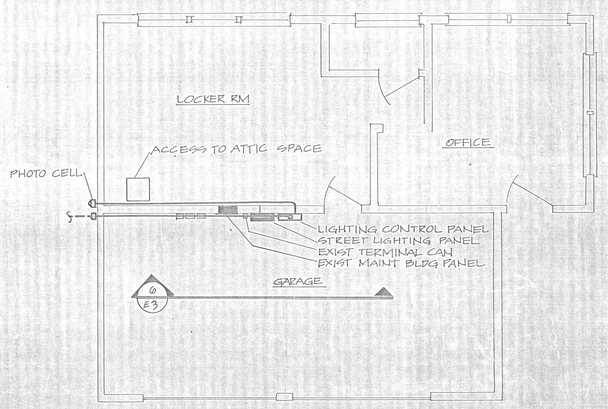
2/E2 TYPICAL PLAN AT POLE
1"=1'-0"



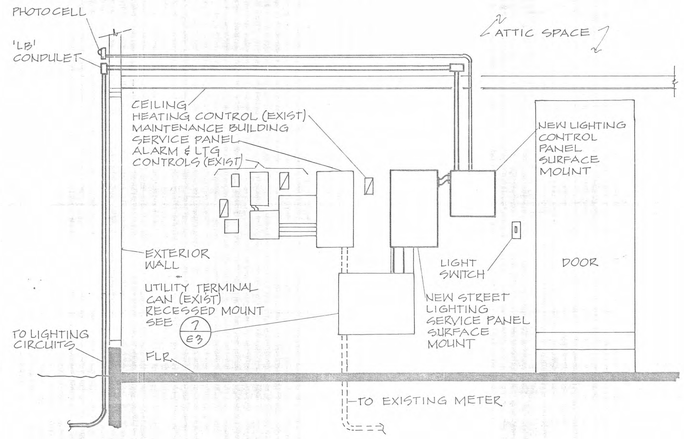
3/E2 SECTION THRU EXISTING LANTERN
1/4" SCALE



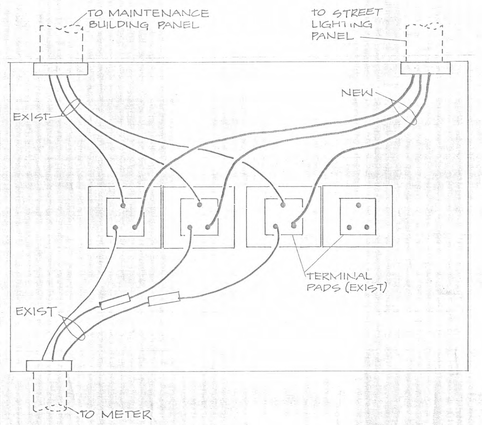
4/E2 SECTION THRU MODIFIED LANTERN
1/4 SCALE



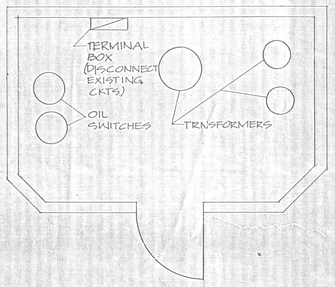
5/E2 MAINTENANCE BLDG PLAN
1/4"=1'-0"



6/E3 ELEVATION - SERVICE PANEL
1½" = 1'-0"



7/E3 CONNECTION @ EXIST. TERMINAL CAN
N.T.S.



8/E1 TRANSFORMER HOUSE PLAN
3/8"=1'-0"

NO.	REVISION OR ISSUE	DATE	BY
1	POSTED FOR PRICING	4-17-87	
0	ISSUE FOR REVIEW	2-4-87	

IDC / C.H.M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG COMMISSIONER

MT. TABOR PARK

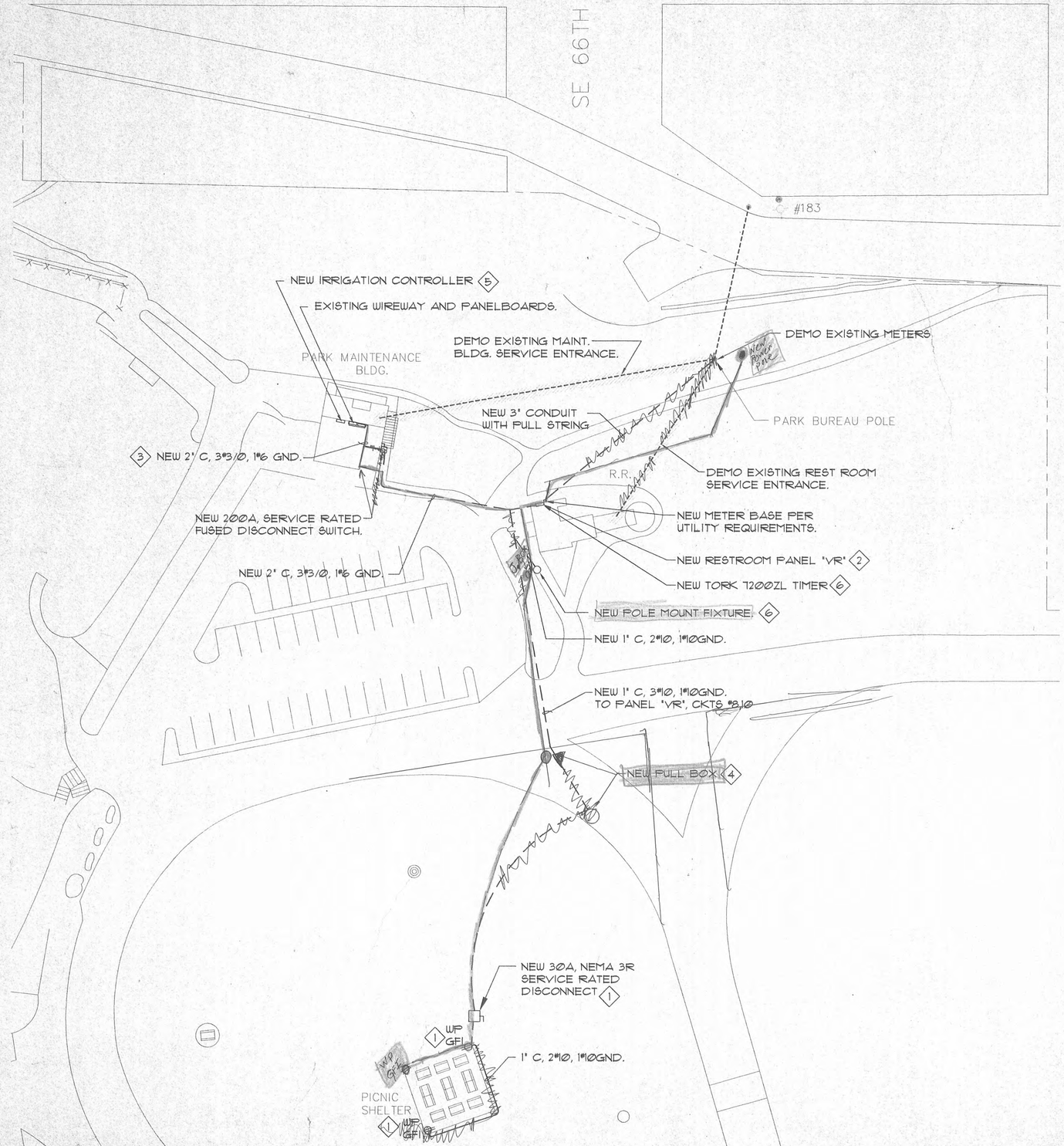
PARK LIGHTING CONVERSION

TITLE: DETAILS AND PLANS

DESIGN:	APPROVED:	SCALE: AS SHOWN
DRAWN:		DATE: 4-17-87
CHECKED:		PROJECT NO. 1112

DRAWING NO. E-3

7-28-88
AS-BUILT



1 — ELECTRICAL SITE PLAN - RESTROOM & MAINT. BLDG.

SCALE: 1"=30'

GENERAL NOTE

CONTRACTOR SHALL INSTALL NEW UNDERGROUND CONDUITS ALONG SIDEWALK PATHS AND EXCAVATIONS FOR OTHER PORTIONS OF THIS PROJECT. COORDINATE EXACT ROUTING WITH OWNER'S REPRESENTATIVE AND OTHER TRADES.

SHEET NOTES

(1) PROVIDE AND INSTALL WP, GFI RECEPTACLE AT +24" ABOVE FINISHED GRADE. SAW CUT SHELTER SLAB AS REQUIRED. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION.

(2) PROVIDE COMPLETE COMPLIMENT OF CIRCUIT BREAKERS FOR REST ROOM FINISH PROJECT. COORDINATE WITH OTHER CONTRACT.

(3) ROUTE CONDUIT CONCEALED IN ATTIC SPACE. COORDINATE WITH OWNER OR HIS REPRESENTATIVE.

(4) PROVIDE AND INSTALL NEW PULL BOXES AS REQUIRED. COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE.

(5) PROVIDE AND INSTALL NEW 120V, 1P, 20A CIRCUIT BREAKER IN EXISTING MAINTENANCE BUILDING PANEL BOARD AND NEW 3/4"C, 2#12, 1#12G AS REQUIRED TO POWER NEW IRRIGATION CONTROLLER. IRRIGATION CONTROLLER SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR WITH FINAL POWER CONNECTION BY ELECTRICAL CONTRACTOR.

(6) NEW SITE LIGHTING FIXTURE, POLE AND BASE SHALL BE PROVIDED BY PORTLAND PARKS AND RECREATION AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL OTHER ITEMS AS REQUIRED, INCLUDING, BUT NOT LIMITED TO A NEW 120V, ENERGY SAVING BALLAST, CONDUIT, WIRING AND HAND HOLE. HOMERUN SHALL BE VIA A TORK 7200EL TIMER, PROVIDED AND INSTALLED BY THIS ELECTRICAL CONTRACTOR. REFER TO SHEET E1 OF THE VOLCANO RESTROOM DRAWING PACKAGE FOR EXACT LOCATION.

PORTLAND PARKS & Recreation

REGISTERED PROFESSIONAL ENGINEER 18,563 OREGON JULY 10, 1986 TANNER A. NAJAFI
EXPIRES 12-31-00

WALKER·MACY
111 Southwest Oak Street, Suite 200, Portland, OR (503) 225-2222

Portland Parks and Recreation
JAMES FRANCESCONI, Commissioner
CHARLES JORDAN, Director

ELECTRICAL SITE PLAN - RESTROOM & MAINT. BLDG.
MT. TABOR PARK
Portland, Oregon

Project Manager: GEORGE LOZOVOY
Construction Manager: GARY WOODRUFF 823-5593
DRAWN BY: DMP CHECKED BY: TAN
DATE: 05/21/99 SCALE: AS NOTED

REVISIONS

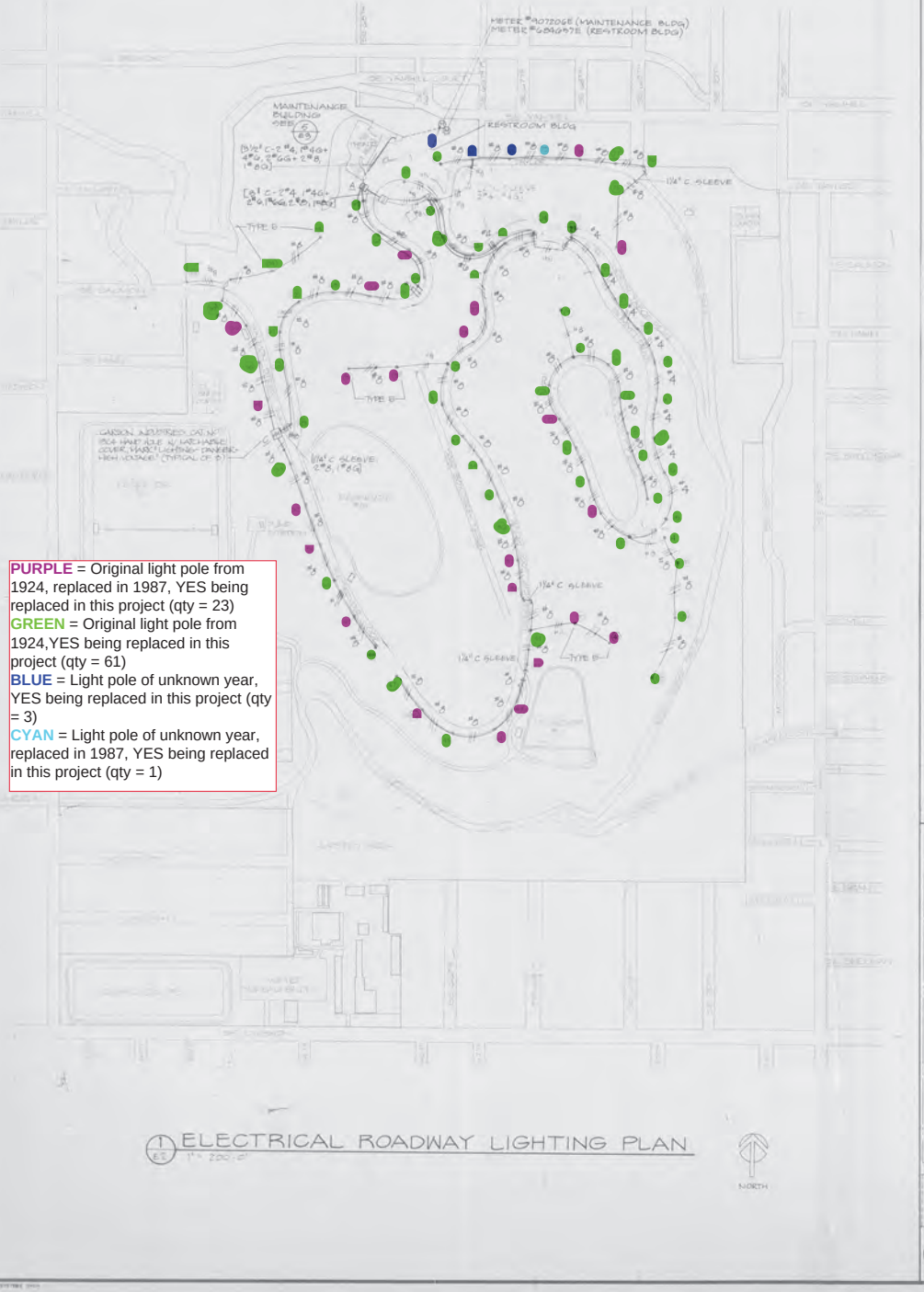
DATE	DESCRIPTION	BY

Let's Go Portland Parks

R&W ENGINEERING, INC "Engineering Integrated Solutions"
9400 SW Barbur Blvd Suite 250 Beaverton, Oregon 97005
Phone: (503) 292-8000 FAX: (503) 292-1422 E-mail: rweng@rweng.com

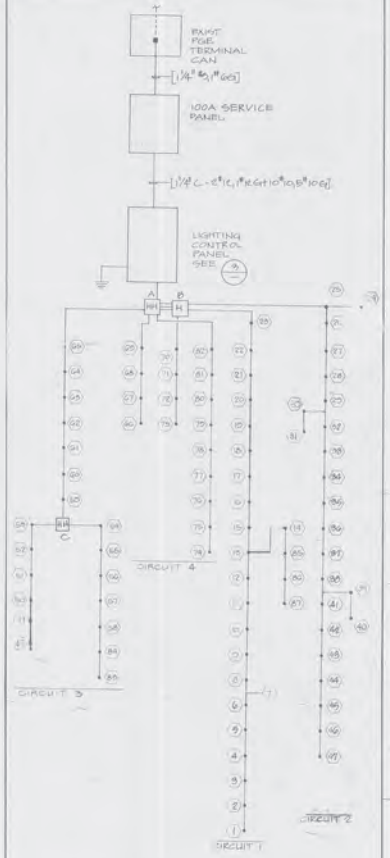
0 5 10 20
SCALE: 1"=10'
NORTH

E2

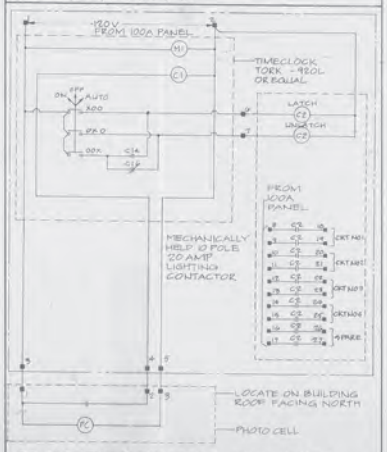


1 ELECTRICAL ROADWAY LIGHTING PLAN

NORTH



2 ONE-LINE DIAGRAM
120/240V, 1 PHASE, 3 WIRE



3 LIGHTING CONTROL DIAGRAM

PROJECT NOTES

I. INSTALL NEW SERVICE PANEL AND ALL NEW CIRCUITS, INCLUDING HAND HOLES AT BASE OF EACH POLE AS SHOWN IN ELEVATION 1 SHEET E-3 AND PLAN 2 SHEET E-3. ALL UNDERGROUND WIRING IS TO BE DIRECT-BURIAL CABLE SIZED AS SHOWN ON ROADWAY LIGHTING PLAN 1 SHEET E-2. PROVIDE CONDUIT SLEEVES UNDER ALL PAVED AREAS.

II. 2300V CIRCUITS MAY BE DE-ENERGIZED AT THE EXISTING TRANSFORMER HOUSE. EXISTING LIGHTS ARE ON TWO SERIES LOOPS DESIGNATED "TOP LOOP" AND "BOTTOM LOOP" AS SHOWN ON ROADWAY LIGHTING PLAN 1 SHEET E-2. LOOSE FIXTURES ARE TO BE MODIFIED AND TRANSFERRED TO NEW 240V CIRCUITS IN SEGMENTS AS DESCRIBED BELOW IN ORDER TO MAINTAIN AS MUCH LIGHTING IN SERVICE AS POSSIBLE DURING THE WORK.

III. INSTALL TEMPORARY 2300V SPLICE FROM POLE 85 TO POLE 86 USING LEAD-SHEATHED SERIES STREET LIGHTING CABLE SUITABLE FOR DIRECT BURIAL TO MATCH EXISTING. THUS ISOLATING POLES IDENTIFIED ON ONE-LINE DIAGRAM DETAIL 2 SHEET E-2 AS TO BE CONNECTED TO CIRCUIT 3. REMAINING "BOTTOM LOOP" FIXTURES ARE TO BE RE-ENERGIZED ON THE EXISTING CIRCUIT. PROVIDE REGULATION TO PERMIT PROPER OPERATION OF THE REDUCED QUANTITY OF FIXTURES ON THE EXISTING CIRCUIT.

IV. EXISTING WIRING REMOVAL
A. REMOVE EXISTING WIRING FROM THE POLES IDENTIFIED AS CIRCUIT 3 AND CUT OFF BELOW GRADE
B. REPLACE POLES 10, 35, 52, 61, 82, 85, AND 86 WITH NEW POLES FURNISHED BY THE BUREAU OF PARKS.
C.) STENCIL POLE IDENTIFICATION NUMBER ON EACH POLE AT +2'-0" ABOVE GRADE ON SIDE FACING ROADWAY OR WALKWAY USING WEATHER RESISTANT BLACK PAINT.
D. INSTALL CONDUIT SWEEP ON BASE OF POLE AND CONNECT TO HAND HOLE - SEE DETAIL 1, SHEET E-3.
E. MODIFY EXISTING HEADS, REPLACING EXISTING SOCKET AND LAMP WITH HIGH-PRESSURE SODIUM CONVERSION KIT INCLUDING BALLAST, SOCKET AND REFRACTOR AS SHOWN IN DETAIL 3, SHEET E-3 AND DETAIL 4, SHEET E-3.
F. SPLICE NO. 12 AWG TAP CONDUCTORS IN HAND HOLE AS SHOWN IN DETAIL 2 SHEET E-3 AND CONNECT LUMINAIRE.

V. REPEAT STEPS 4A THROUGH 4F WITH CIRCUIT 4, THUS COMPLETING CONVERSION OF "BOTTOM LOOP". POLES TO BE REPLACED ARE 67, (4, 78, AND 79.

VI. INSTALL TEMPORARY SPLICES AS DESCRIBED IN STEP 3 BETWEEN POLE 38 AND 41, ISOLATING POLES 41 THROUGH 49 AND BETWEEN POLE 15 AND 16, ISOLATING POLES 1 THROUGH 15.

VII. REPEAT STEPS 4A THROUGH 4F WITH POLES 41 THROUGH 49 AND POLES 1 THROUGH 15. POLES TO BE REPLACED ARE 7, 12, 42, 43, 48, 49, AND 49.

VIII. REPEAT STEPS 4A THROUGH 4F WITH THE REMAINING POLES, THUS COMPLETING THE CONVERSION OF THE "TOP LOOP". POLES TO BE REPLACED ARE 27, 28, 37, 38, 39, AND 40. INSTALL REPLACEMENT FIXTURES AND LANTERNS TO BE FURNISHED BY THE BUREAU OF PARKS ON POLES 85, 86 AND 87. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

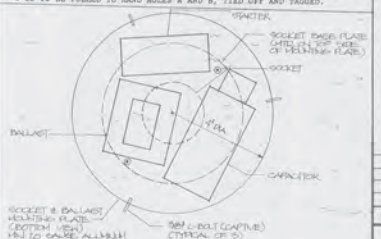
IX. EXISTING 2300V SERVICE LOOP WIRING BELOW GRADE IS TO BE ABANDONED IN PLACE.

ALTERNATIVES

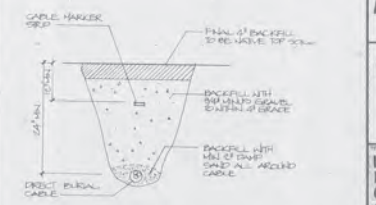
DEDUCTIVE ALTERNATE NO. 1: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT CONVERT OR RECONNECT FIXTURES ON POLES 85, 86 AND 87. HAND HOLES ARE TO BE INSTALLED AT THE BASE OF THESE POLES AS REQUIRED UNDER BASIC WORK.

DEDUCTIVE ALTERNATE NO. 2: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK REQUIRED FOR CIRCUIT 4 BEYOND HAND HOLE A. INSTALL THE SPLICE DESCRIBED UNDER STEP 3 OF THE PROJECT NOTES AS A PERMANENT CONNECTION AND DO NOT PERFORM STEP 5 OF THE PROJECT NOTES. WIRING FOR CIRCUIT 4 IS TO BE PULLED TO HAND HOLE A, TIED OFF AND TAGGED.

DEDUCTIVE ALTERNATE NO. 3: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK DESCRIBED FOR CIRCUITS 3 AND 4 BEYOND HAND HOLES A AND B. DO NOT PERFORM WORK DESCRIBED UNDER STEPS 3, 4 AND 5 OF THE PROJECT NOTES. WIRING FOR CIRCUITS 3 AND 4 IS TO BE PULLED TO HAND HOLES A AND B, TIED OFF AND TAGGED.



4 SOCKET SUPPORT BRACKET



5 BACKFILL REQUIREMENTS

3	ISSUED FOR PRICING	4/1/87
2	ISSUED FOR REVIEW	4-6-87
NO.	REVISION OR ISSUE	DATE BY

IDC CH2M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG - COMMISSIONER

MT. TABOR PARK

PARK LIGHTING CONVERSION

TITLE
LIGHTING PLAN, ONE-LINE DIGRAM, LIGHTING CONTROL DIAGRAM, PROJECT NOTES

DESIGNED	APPROVED	DATE AS NOTED
DRAWN		4-17-87
CHECKED		SCALE
		1:1

DRAWING NO.
E-2

PRELIMINARY

Comparison

Existing

Proposed

Comparison

Existing

Proposed

Staff photographs of light poles at Mt. Tabor Park

Light poles in the landscape

Adjacent to paved drives

Adjacent to soft surface trail

Note areas around poles are clear of vegetation and, while poles installed on flat grade, they are often near slopes which may be prone to erosion and/or soil instability. The overall site is steeply sloped, and soil erosion is common in many areas of the park. Replacement poles will utilize direct burial techniques that will increase structural stability regardless of nearby slopes.

Light poles in the landscape

In high traffic areas, signage reminds the public that it is prohibited to attach anything to light poles and provides the code reference for the prohibition.

Existing Pole Conditions

White deposits, or efflorescence, is caused by chemical changes within the concrete due to moisture impacts.

Cracking in concrete often occurs due to thermal stresses and weathering. May also be caused by corrosion of steel reinforcement.

Flaking, or delamination, is a common type of concrete distress. Surficial delamination occurs when air or water is trapped between surface and may also be a sign of internal corrosion.

Despite install on flat grade, all three of these poles show clear signs of soil erosion at the base that could lead to structural instability.

Existing Pole Conditions

Cracking can lead to materials loss, as has occurred on here. Loss may affect just the pole, as shown on the left, or both the pole and the base, as shown center and on the right. Replacement poles will be direct buried, thus eliminating the need for a separate base element.

(Left) Pole installed straddling mixed surface mediums (soil and concrete). This unfortunate installation is not as sound as installation on a single surface. This is an example where pole locations may be slightly refined for greater stability and safety.

Existing Pole Conditions

Erosion around base is present, as is cracking.

Pitting, as shown in the center and right photo, is a sign of material instability and is caused when water freezes within concrete pores. As the concrete becomes weaker, more of the craters will appear. Smaller pits will often converge into larger ones, as shown here.

Existing Pole Conditions

Pole with cracking and pitting. Vertical nature of pitting may indicate spalling.

Pole with cracking, pitting and efflorescence.

Existing Pole Conditions

Spalling occurs when the concrete starts to break away from the reinforcing steel bars, reducing the stability of the structure.

Spalling is sometimes referred to as ‘concrete cancer’ since the problem is not initially obvious and can result in structural failure.

NPS Form 10-900a
(8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section _____ Page ___

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 04001065 Date Listed: 9/22/2004

Mount Tabor Park — Multnomah — OR
Property Name — County — State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper — Date of Action: 9/24/04

Amended Items in Nomination:

Location:

The street location should read: *Roughly bounded by S.E. Division Street, S.E. 60th Avenue, S.E. Yamhill Street, and S.E. Mountain View Drive.*

Classification:

The Category of Property is: *District.*
The Number of Contributing Resources previously listed in the National Register should read: *12*
[Reservoir #1, Reservoir #5, Reservoir #6, Gatehouse #1, Gatehouse #5, Inlet Gatehouse #6, Outlet Gatehouse #6, Weir Building #1, Weir Building #5, Covered Storage Tank Building, Covered Storage Tank, and Reservoir #1 Fountain.]

Significance:

Entertainment/Recreation is added as an area of significance.

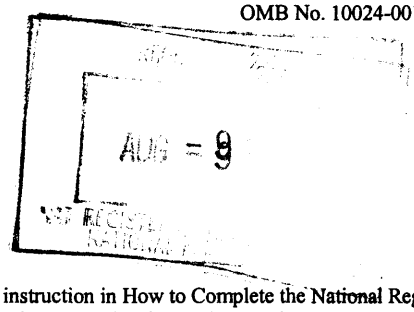
These clarifications were confirmed with the OR SHPO office.

DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

1063

NPS Form 10-900
(Oct.1990)

OMB No. 10024-0018



United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instruction in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classifications, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Mount Tabor Park

other names/site number

2. Location

street & number 6325 S.E. Division Street not for publication

city or town Portland vicinity

state Oregon code OR county Multnomah code 051 zip code 97215

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ____ does not meet the National Register criteria. I recommend that this property be considered significant ____ nationally ____ statewide X locally.

James Hamnick 30 July 2004

Signature of certifying official/Title - Deputy SHPO Date

Oregon State Historic Preservation Office

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper Date of Action

✓ entered in the National Register
___ See continuation sheet.
for Edson Beall 9/22/04

____ determined eligible for the National Register
___ See continuation sheet.

____determined not eligible for the National Register

____removed from the National Register

____ other (explain):

5. Classification

Ownership of Property
(check as many as apply)

___ private
_X_ public - local
___ public - state
___ public - Federal

Category of Property
(check only one box)

____ building(s)
_____district
__X__ site
____ structure
____ object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
7	10	buildings
1		sites
5	6	structures
1		objects
14	16	Total

Name of related multiple property listing
(enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

1 (Mount Tabor Reservoirs Historic District)

6. Function or Use

Historic Functions
(enter categories from instructions)

Recreation and Culture: outdoor recreation
Landscape: park
Agriculture/Subsistence: horticultural facility
Industry/Processing/Extraction: waterworks

Current Functions
(Enter categories from instructions)

Recreation and Culture: outdoor recreation
Landscape: park
Agriculture/Subsistence: horticultural facility
Industry/Processing/Extraction: waterworks

7. Description

Architectural Classification
(Enter categories from instructions)

Late Victorian
Late 19th and 20th Century Revivals

Materials
(Enter categories from instructions)

foundation: CONCRETE
walls: STUCCO; WOOD: plywood, weatherboard; CERAMIC TILE; CONCRETE
roof: CONCRETE; WOOD: shingle; ASPHALT
Other: EARTH; BRICK; STONE: granite, basalt; METAL: bronze, aluminum, iron, steel

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

See continuation sheets.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing).

__X__ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

_____ B Property is associated with the lives of persons significant in our past.

__X__ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

_____ D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply)

Property is:

_____ A owned by a religious institution or used for religious purposes

_____ B removed from its original location

_____ C a birthplace or grave

_____ D a cemetery

_____ E a reconstructed building, object, or structure

_____ F a commemorative property

_____ G less than 50 years of age or achieved significance Within the past 50 years

Areas of Significance
(Enter categories from instructions)

Landscape Architecture
Community Planning and Development

Period of Significance

1888-1939

Significant Dates

1903
1908

Significant Person
(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Mische, Emanuel Tillman
Keyser, Charles P.

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets)

9. Major Bibliographical References

Bibliography (Cite books, articles, and other sources used in preparing the form on one or more continuation sheets) See continuation sheets

Previous documentation on file (NPS):
- ___ preliminary determination of individual listing (36CFR67) has been requested
- ___ previously listed in the National Register
- ___ previously determined eligible by the National Register
- ___ designated a National Historic Landmark
- ___ recorded by Historic American Buildings Survey
- ___ recorded by Historic American Engineering Record

Primary location of additional data:
- ___ State Historic Preservation Office
- ___ Other State agency
- ___ Federal agency
- ___ Local government
- ___ University
- ___ Other

Name of repository: _____

10. Geographical Data

Acreage of Property 196 acres

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
1	10	532115	5040065
2	10	532076	5039181
3	10	531517	5038988
4	10	531181	5039637

X See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Cascade Anderson Geller

organization Mount Tabor Neighborhood Association date November 2003

street & number 1934 S.E. 56th Avenue telephone 503-232-0473

city or town Portland state Oregon zip code 97215

Additional Documentation

Submit the following items with the completed form:

Continuation sheets
Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.
Photographs: Representative black and white photographs of the property.
Additional items (check with the SHPO or FPO for any additional items)

Property Owner

name City of Portland

street & number 1221 S.W. 4th Avenue telephone 503-823-4000

city or town Portland state OR zip code 97024

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

DESCRIPTION

Mount Tabor Park is a 196-acre city park located in a residential area of southeast Portland, about three miles east of the Willamette River. The park encompasses most of a volcanic butte, with four peaks. The tallest summit rises to an elevation of 643 feet, making it a prime landmark visible from points all around the city. The terrain of the park varies from a limited number of level areas, especially around the reservoirs, to gentle hillsides and steeper slopes. The towering Douglas fir forest is punctuated with big deciduous trees and some glades. Large areas of the forest floor are kept mowed while steeper areas tend to have a predominance of native understory plants. Ornamental non-native shrubs and trees are found throughout the park, especially at buildings, entrances or other features. Non-native invasive species are also present.

Portland Parks and Recreation Bureau has authority over all but approximately 146 acres of Mount Tabor Park. The remaining 50 acres is under the jurisdiction of the Water Bureau. Mount Tabor Park is the site of three open reservoirs and a small concrete water tank. Mount Tabor Park, like Washington Park on the west side of the Willamette River, became a distribution site for Portland's gravity fed, mountain source drinking water in 1894 with the construction of the first reservoirs, two at Mount Tabor and two at Washington Park. Two additional Mount Tabor reservoirs, on the western slope, were constructed in 1911 soon after the time Mount Tabor Park became officially designated. All of these open reservoirs represent some of the finest examples of intact, still-in-use City Beautiful public works remaining in the nation. Because of their high integrity and historic significance to the city's water supply and development of Portland, and because they are outstanding examples of intact historic architecture and engineering, the reservoirs were listed in the National Register of Historic Places in 2004 as the Mount Tabor Reservoirs Historic District and the Washington Park Reservoirs Historic District. A majority of the reservoirs' features have been kept intact and contribute greatly to the integrity of Mt. Tabor Park. The surface of the water held in the reservoir basins represents approximately twenty acres, about one tenth of the entire park acreage. The deep, open water provides a chiaroscuro effect to the landscape and is an integral part of the experience of Mount Tabor Park. The lighted walkways around the perimeter of each parapet wall and wrought iron fence, the cleared, grassy areas associated with the reservoir basins and the outstanding views provide important park amenities.

Mount Tabor Park is a scenic reservation. The height of the various peaks allow for grand vistas in all directions from viewpoints attainable by auto, foot or bicycle. Two views on Mount Tabor have been rated by the City of Portland's Scenic Resource Inventory as among the top seven in the city and have been incorporated into the Scenic Resources Protection Plan.

The design principle of subordination is a key element of Mount Tabor Park. The historic drive and pathway system respects the topography, allowing accessibility without overwhelming the picturesque and pastoral landscape. The more than three miles of drives are popular destinations for local and out-of-town visitors to take in the views of the park, reservoirs, city skyline and surrounding mountains. Autos can still encircle the butte on the historic drives, arriving at one entrance and leaving at another. Since vehicular access has been restricted to certain areas in the park's interior since the 1970s, some of the paved drives provide popular routes for bicycles, skateboards, roller blades and baby carriages. Walking, jogging and bicycling are the primary activities noted in

the park. Many visitors arrive from the surrounding neighborhoods on foot or bicycle. These drives are conducive to the park being a popular site for various types of races including foot, bicycle and adult soap box derby tournaments. The wide, well-graded unpaved paths were in the original design and, like the drives, were added over a period of years when funds became available. The path system travels over the entire park. In recent years, more unofficial paths have been made by mountain bikes and hikers.

Adding distinctive charm and illumination is the period lighting system comprised of eighty-eight single concrete standard lampposts that follow the drives and some of the main interior pathways throughout the park. These lampposts give off a soft, friendly light, reminiscent of gaslights, especially in the interior forested areas where they serve as a reminder of the original design of accessibility. The lighting encourages pedestrian exploration of the hills and dells throughout the park even in the short days of the colder months. Originally topped with a single, white, glass globe, polygonal lantern-style shades have replaced the globes. In 1911, Superintendent Mische requested of the Park Board, lampposts with glass globes to be serviced by an alternating current feed. He also requested underground conduits. The lampposts are serviced via underground conduits. The lighting system dates from 1924 and 1925.

A variety of amenities have been added to the park over the years. These include picnic areas, playgrounds, an amphitheater, tennis courts, a soapbox derby track, and comfort stations (only one in service.) Most of these amenities can be accounted for during the period of significance and are described in the descriptions of the quadrants of the park. The varied topography and forest cover of the park has allowed the amenities to be tucked in here and there so that they do not dominate the general feel of the park as a forest retreat. As was the Olmsted counsel, the park's styles allow respite from urban life and a connection to the rural roots and historic and natural resources of the area.

As much as Mount Tabor Park is a forest refuge in an urban environment, it is also a pivotal "work-horse" park, not only for the Water Bureau, but also for Portland's Parks and Recreation Bureau. Superintendent Emanuel T. Mische was, above all, a horticulturist, and he established a nursery to supply trees and other plants to city properties, including tens of thousands of street trees, at the south end of the site soon after the property was acquired in 1909. The nursery and greenhouse complexes still provide stock for all the city's properties, including all of the parks.

Though Mount Tabor Park's grandeur is striking, closer observation reveals modern projects and alterations, fortunately few and small, which have not adhered to the graciousness of the historic understated features. No attempt has been made to utilize period light fixtures attached to buildings and around the reservoirs. Recent Park Bureau signs are at odds with the historic feel. The maintenance yard's hodge-podge of buildings displays the largest array of unaesthetic alterations, however, this area is separated from the recreation area and so does not pose a problem of aesthetics for the park at large.

The entire park is being nominated. The general outline of the park is a rough rectangle with irregular protrusions such as Mount Tabor Nursery and maintenance yard due south, the finger of nursery on the west boundary, and two narrow irregularities to the north and the east owned by the Oregon Department of

Transportation. It is roughly bounded by S.E. Division Street to the south, S.E. 60th Avenue to the west, S.E. Yamhill Street to the north, and S.E. Mountain View Drive to the east. The attached boundary map illustrates the current property lines.

Resource Count

Mount Tabor Park contains one contributing site, seven contributing buildings, five contributing structures, and one contributing object. In addition, Mount Tabor Park contains ten non-contributing buildings and six non-contributing structures. A sketch map and key delineate these features. The park land was counted as one contributing site; infrastructure such as driveways, paths, maintenance yard, and the lighting system, as well as those areas with loose physical definition such as play and picnic grounds, and the nursery, are included as part of the site. Substantial or distinctive buildings, structures, and objects were counted as contributing or non-contributing as follows:

Summary of Contributing Features

Site:

Mount Tabor Park site, including the circulation system: Drives (original names): Reservoir Loop Drive (Cascade Drive & Interlink Drive), East Tabor Drive (Woodland Drive), North Tabor Drive (East Overlook Drive), Tabor Summit Drive (Overlook Concourse), Lincoln Street Entrance (Linden Entrance), Salmon Street Entrance, and 69th Avenue Entrance; the historic lighting system; the Mount Tabor Nursery and maintenance yard, parking lot, and three play areas: 69th Avenue playground and group picnic area, Harrison playground and main playground.

Buildings:

Office-Horticultural Services Building
Administrative Building & Additions
Mechanical Offices Building (Community Gardens Building)
Caretaker House-Mount Tabor House
Volcano Comfort Station
Summit Comfort Station
Northeast Entrance Comfort Station

Structures:

Crater Amphitheater
West Tennis Court
East Tennis Court
69th Avenue Stairs
Southside Stairs

Object:
Harvey W. Scott Statue & Terrace

Summary of Non-Contributing Features

Buildings:
Garages/Shops-West Side Row
Garages/Shops-Eastside Row
Lathe House
Equipment Building
Pole Barn building
Duplex Screen House
50" Meter House
44" Meter House
56" Meter House
Maintenance Building and Park Office

Structures
Summit Radio Tower
Additional Greenhouses
Picnic Shelter
Greenhouse Complex
Basketball Court
Soap Box Derby Track

Regions and Features of Mount Tabor Park

Mount Tabor Park has four public vehicular entrances located roughly in the four corners of the rectangular property at S.E. Salmon Street (Salmon Street Entrance), S.E. 69th Avenue (69th Avenue Entrance), S.E. Harrison Street (Harrison Street Entrance) and S.E. Lincoln Street (Lincoln Street Entrance). Numerous pedestrian or bicycle entrances exist from footpaths on all sides of the park. Neighborhood streets dead end at park boundaries, especially at the north, west and south sides. The east side is steep and rugged and adjoined by a newer housing development with private properties abutting the parkland along Mountain View Drive. The southeast corner of the park property adjoins a small private college, Warner Pacific College. The far southwest corner now abuts the private apartment and nursing care facility, Courtyard Plaza, a five-acre parcel formerly occupied by one Mount Tabor Park's first two reservoirs. The reservoir gatehouse, now privately owned and listed in the National Register, remains at the corner of S.E. 60th Avenue and Division Street.

Many maps exist for Mount Tabor Park and over the years, vicinities, drives and features have been delegated various names. This has contributed to some difficulty in creating clear descriptive statements and guidelines for the photographers and other volunteers involved with the preparation of this nomination. The predominant

park boundary has a roughly rectangular shape. For the sake of clarity, this nomination has the park divided into quadrants based off the four park entrances described above. The site, buildings, structures, and objects in each quadrant are described as follows:

Lincoln Street Entrance

The earliest development of the land now designated as Mount Tabor Park happened in this area of the park. The city acquired land in this quadrant to build the first two reservoirs, then known as Mount Tabor High and Low Service Reservoirs respectively, in 1888.

In between Reservoir 1 and 5 is one of the four peaks, which Mische called the Hilltop Grove. At the summit of this small peak is a grove of large big-leaf maples and Douglas firs. On the south slope of the Hilltop Grove, just above the Reservoir Loop Drive, is a small grove of digger and ponderosa pines. The north slope of the hill is popular on the rare snowy day as it is used for sledding and other snow play. A 1954 map shows a ski tow at this location. A well-graded path encircles this rise as Mische had planned. Another path leads up and over the summit from north to south.

Where Harrison Drive meets Lincoln Drive at the south base of the dam face of Reservoir 1, the Southside Stairs climbs north from the roadway up to the reservoir basin. Lincoln drive continues west winding down the southwest slope of Mount Tabor past the Water Bureau entrance to the park south of Reservoir 6. At this junction, laurels and a cornelian cherry grow to the north and a weigela and several large lilacs to the west. flanked to the southeast with a row of mature fuchsia-colored double flowering cherries that create a dramatic display in mid-spring. The west side is a mixture of tall well-established shrubs and trees, some deciduous such as lilacs and hawthorns and others evergreen conifers and laurels. Continuing south, the drive intersects the nursery sites at the S.E. Lincoln Street Entrance and the north service entrance into the maintenance yard.

It was approximately here that Emanuel Mische designed his formal entrance scheme: the Maple Entrance arriving from the south from S.E. Division Street and the Linden Entrance from S.E. 60th Avenue coming from the west into a circle. A photograph circa 1920 depicts S.E. Lincoln Street lined with trees, as it is today on the north, nursery side. A traffic circle of sorts, does exist approximately where Mische's circle was to be but it is much more informal and less aesthetic. It is a widened area that serves as an intersection for a service road leading south into the maintenance yard, a small gravel service road going east into Mount Tabor Nursery, the Lincoln Street Entrance drive running straight west to S.E. 60th Avenue, and the drive into the park climbing north and then east. Today a touch of Mische's more formal scheme remains with some interesting, primarily non-native plantings. A large fragrant viburnum, Thunberg's barberry, a large strawberry madrone and other ornamental shrubs grow on the east side of the intersection and plantings of red osier dogwood, oriental maple, cotoneaster, and other shrubs are planted across the drive on the northwest corner of this intersection. S.E. Lincoln Street, as it runs west, has private homes constructed in the 1980s and 1990s on the south side of the street. The north is bounded by the nursery property fully planted with a variety of trees. This north side of the Lincoln Street Entrance is flanked by ornamental pear trees that replaced the double flowering cherries in the 1990s.

The Mount Tabor Nursery includes a large tree and shrub planting area and a maintenance yard historically associated with the nursery, which is currently used to store and maintain park vehicles and equipment. The nursery and maintenance grounds together comprise 14 acres. While not indicated specifically on Mische's 1911 plan for Mount Tabor Park, park archival records state that the Mount Tabor Nursery dates from 1908-1909, and both the nursery and maintenance yard are located within the historic boundaries of the park. Located on the sunny, well-drained lower southwestern slope of the butte, the nursery also covers a long finger of land extending east and west between S.E. Lincoln Street and S.E. Harrison Street due south of what Mische had called the Linden Entrance (Lincoln Street Entrance). On the north side, the nursery is flanked with climbing roses on trellises and on the south, along the Lincoln Street Entrance drive, a row of ornamental pear trees. At the east end of this finger of nursery, two other nursery plots exist. These rise up further on the slope of the butte, in a wide, south-facing sloped area. These plots are also planted with tree and shrub species and are divided by an east-west service road that ends at a concrete patio area used for storage of soil amenities below Harrison Drive. The nursery has supplied street trees and other plants for the City of Portland continuously since the earliest years of Mount Tabor Park, propagating native species as well as those from around the world. Presently, the over 70 species of trees growing in the nursery provide visual interest, especially seasonally, and encourage various species of birds.

Inside the maintenance compound are a variety of buildings dating from various periods and serving a variety of functions to park maintenance for the Park Bureau. Park vehicles and machines, such as mowers and other tools are stored and maintained at this site. Offices and greenhouses are also located here. From the back of the compound, a maintenance vehicle exit ties into the Lincoln Street Entrance drive and the tree and shrub nursery areas. The main entrance to the maintenance yard is marked by a lawn with a row of large Atlantic blue cedars, shrubs and a bed of seasonal flowering annuals. Upon entering the maintenance grounds, the asphalt roadway is flanked by two rows of buildings. To the east is the Administration Building along with garages and shops. To the west is a long row of attached garages and shops. The Administration Building is the most formally designed building on the site. All other structures are of a functional nature and house offices, greenhouses, machine shops, paint shops, garages, and storage. Dates of construction range from pre-1918 through 1989. The back entrance of the yard leads out to the north, through the nursery stock onto S.E. Lincoln Street. A chain link fence encloses the entire maintenance grounds. The yard layout appears to be unplanned with buildings constructed when needed wherever space was available. Verbal interviews with park employees indicate that horses were kept at the compound for mowing and other work. Some of the buildings are reportedly converted stables. The grounds are primarily asphalt-covered with the exception of some landscaping around the Administration building and various trees near the Community Garden building. The eastern border of the yard is lined with a dense cedar hedge.

Contributing Features

Horticultural Services Building
This small office building appears to be the oldest remaining building, dated "pre-1918" on various Parks' sketches. It is located in roughly the center of the maintenance yard, facing south. The Horticultural Services Building is a small rectangular one-story building with a hip roof. The siding is horizontal shiplap. The corners

are finished with a narrow board. A gabled dormer defines the front entrance. Wood shingles and a lunette window fill the gable end. No porch overhang exists currently. Windows are multi-over-one, double-hung wood sash of varying sizes. The foundation is concrete. There is a large brick chimney rising from the rear of the building venting the underground gas boiler. The boiler that heats the greenhouses was originally coal-burning. It continues to function as the boiler for the greenhouses. The chimney towers over the other structures in the yard, and has been extended to nearly twice its original height according to historical photographs. There is a greenhouse attached to the building.

Administrative Building and Additions
The most visible building on entering the maintenance grounds, and one of the most aesthetic, is the Administrative Building. Built in 1938, the Art Deco-styled, single-story, flat-roofed concrete building has a long rectangular plan with attached garages. In 1958, a two-story addition was added to the east facade. Both the 1938 building and the 1958 addition include a basement. The 1938 building was originally a combination of offices and garages. The front entrance is on the west elevation. It is defined by a slightly projecting bay decorated with telescoping vertical lines above the entrance. A flat concrete porch roof covers the entrance. Above this porch roof is a three-light, steel-sash window. To the south of the entrance is an unusual projecting triangular steel sash window; apparently a dispatcher's window overseeing the vehicle entrance. To the north is a series of garage entrances. Between the garage bays, at the top of the building, are a series of six-light, steel-sash windows. A decorative cornice is done in the Art Deco style. The garage bay immediately north of the front entrance has been in-filled and a new aluminum slider window replaces the original overhead garage door. Four garage bays remain intact. Beyond the garage bays, the building facade becomes slightly recessed, but the Art Deco cornice continues to the end of the concrete portion of the structure. Extending north, the structure changes to wood frame with metal siding and the roof becomes a gable roof covered with standing-seam metal. A series of metal-covered, wood, side-opening garage doors open into areas now used for storage and shops. According to verbal interviews with long-time parks' employees, this area once served as stables for the city's horses. According to park records, these attached garages were constructed over a three-year period from 1938 - 1941. The 1958 two-story addition was designed to match the original building, including the Art Deco cornice. The windows are a different type of steel sash. Typical of 1950s industrial buildings they are eight-light steel-sash with a center hopper window.

Mechanical Offices - Community Gardens Building
Located north of the Administration Building, this building is labeled mechanical offices on Parks Department sketches. It now functions as the "Community Gardens" office. According to park records, it was built before1938. This is a one-story structure with a concrete foundation and a gable roof. It is sided with wood horizontal lap siding. The corners are finished with vertical boards and the roof is composition shingle. Many of the windows have been replaced by vinyl sliders. The remaining original windows are small four-light wood sash. A shed-roof addition was added to the east facade at an unknown date. Wide wood lap siding covers the extension.

Southside Stairs
On Mische's preliminary plan, a long flight of stairs was designed to climb from the south park boundary up to the Reservoir 1 terrace garden to tie into the pathway network of the park. Construction of 500 tread of stairs, location not given, were under construction in 1913. The lower flight of stairs between the Lincoln Street Entrance drive and the south boundary of the park no longer exists. There is a rough path there and there are metal pipes in the ground that could be remnants of earlier construction. There have been apparent excavations, perhaps on water pipes from Reservoir 1 directly above, following the line of the mapped stairs. The section of the Southside Stairs that is intact starts at the Lincoln Street Entrance drive and climbs up to Reservoir 1. The top of the stairs yields an impressive front-on view to the north of the 1894 Reservoir 1 and its associated gatehouse and weir building. To the south, the view is of southeast Portland, distant hills and the grounds of Warner Pacific College.

Noncontributing Features

Garages and Shops-West Side Row
Also built in 1938 and located across from the Administration Building is a row of attached shops and garages. They are covered with a gable composition shingle roof. The garage doors and siding are covered in standing-seam metal. Some original windows remain and are eight-light wood sash. Some windows have been replaced by aluminum or vinyl sliders. Uses for this structure have varied over time; currently the spaces are identified as "Turf Maintenance, Building Maintenance, Ballfield Maintenance, Irrigation." Although falling within the historic period, it is considered a noncontributing building due to numerous alterations.

Garages and Shops-East Side Row
Roughly forming an L-shape, this group of buildings is located at the eastern border of the maintenance grounds. Built between 1950 and 1961, they are comprised of a series of attached buildings, all with gable roofs and concrete foundations. All roofs are covered with standing-seam metal. Siding is either wood board and batten (1961) or wide horizontal lap siding (1950s). Gable ends are filled with horizontal lap boards. Windows are identical to those in the 1958 addition to the Administration Building: twelve-light metal sash with center hoppers. This grouping has had numerous functions: paint shop, electric shop, storage, etc. The construction dates of these buildings fall outside of the historic period so they are considered noncontributing.

Other Buildings and Structures
An Equipment Building is located at the far north end of the maintenance yard. Built in 1971, it is a 1-1/2 story "tilt-up" building with metal siding and roof. Gas pumps are located in front. The Pole Barn building dating from 1987 is located at the south end of the yard adjacent to S.E. Division Street. Near the Horticultural Services Building to the west is the Lathe House. Built in 1963, it is a shed-roof building with horizontal lap siding. Directly behind the Horticultural Services Building is a Greenhouse Complex. According to sketches from the Parks Bureau, these were constructed in 1981, 1988 and 1989. Additional greenhouses dating from 1973 are located at the northwest corner of the maintenance yard. All of these buildings and structures are noncontributing because they fall outside the period of significance.

Water Bureau Buildings and Structures
Below and to the south of Reservoir 1 are four small buildings associated with the Water Bureau and piping from the reservoirs. The Duplex Screen House is a three-sided building with a shed roof. The small concrete building is situated into the slope. A metal door bears the building name. Dating from 1967, it is void of ornamentation. Southwest and below the Duplex Screen House is the 50" Meter House, a small shed- roofed concrete utilitarian building. The only slight embellishment is the projecting concrete door and window lintels and sills. The construction date is 1967. At the foot of the concrete steps up to Reservoir 1 is the 44" Meter House. The south elevation of this building abuts Harrison Drive. The metal door faces east and is accessed by concrete steps. The shed-roofed concrete building is the largest of the meter houses with screened windows on all four sides. To the west of these buildings along a wooded path, is the 56" Meter House. This small shed roofed concrete utilitarian structure has a slight embellishment in the projecting concrete door and window lintels and sills. It matches the design and feel of the other 1967 building. All of these buildings and structures are considered noncontributing because they fall outside the period of significance.

Salmon Street Entrance

The main vehicular entrance to the park is the S.E. Salmon Street Entrance. Accessed from S.E. 60th Avenue, this entrance was another of Mische's formal entries into the park. Presently it is marked with a basalt retaining wall on the steep north side and a park sign on the south side. A basalt wall acts as the gatepost for the metal swinging gate that can close off the driveway. The historic Caretakers House - Mount Tabor House (presently a rental property), is situated on slope to the immediate south of the Salmon Street Entrance overlooking the west side tennis courts and Reservoir 6 further to the south. To the north of the entrance is the steep forested slope of Foothill Overlook rising up to the S.E. Yamhill Street service entrance.

Here the park entices visitors into the interior as the driveway curves and gently climbs through one of the groomed forest areas of the park. At the line of sight where the driveway curves is a lovely ravine, called Sweet Briar Vale by Mische. John C. Olmsted called this area out in his Report to the Park Board in 1903 saying,

> "West of the summit ridge, it may be impracticable to take any considerable areas except in the ravines, which apparently have little value for residential purposes, and yet are very picturesque and would make attractive features in a public pleasure ground."

An important and picturesque trail network converges at Sweet Briar Vale, part of the inviting enticement of this region. Three paths climb up the ravine at this point. The one on the north side ascends the volcano through a large grove of tall rhododendrons beneath the overstory of Douglas firs. In the late winter or early spring the ground is covered with sweet violets. Passing historic lampposts standing in the forest, this path climbs occasional railroad tie steps (Mische had designed concrete steps) and arrives at the newly refinished basketball court at the south end of the Crater Amphitheater. An unofficial trail continues up the cinder cone, known as Foothill Overlook on the original map. Here also, the path intersects with a graveled east-west service drive that accesses the trash dumpsters to the west and continues out of the park onto S.E. Yamhill Street. Just to the east,

this drive intersects with the main Reservoir Loop Drive at this pivotal access point with the main parking area, Maintenance Building-Park Office, Volcano Comfort Station, Picnic Shelter, and main playground.

The newest path follows the cleavage of Sweet Briar Vale where recent work was done to attempt to channel seasonal water down through a naturalized ditch of rock and earth to a small wetland area at the base of the ravine. On the higher ground near this area, old plantings of large heather family shrubs such as kalmia, rhododendron, and andromeda dominate. There is also the only sourwood tree, native to the southeast United States located here. This touch of formality continues as the path crosses the Salmon Street Entrance road with large mature azaleas and other shrubs marking the path that leads down the railroad tie steps to the west tennis courts passing to the south of the Caretakers House-Mount Tabor House, both constructs from the 1920s. This trail once led to the comfort station alongside the main entrance drive. All that remains now is a concrete foundation accessed with steps to a picnic table. The building was demolished when a tree fell on it in the 1990s.

One of the most popular trails in the park follows the south side of Sweet Briar Vale through native forest with an intact understory. This trail was on Mische's original plan and was apparently also included in the bridle path system established in 1929. Along the path grow a variety of tree species including numerous bitter cherries, a California buckeye and one of the largest alder trees in the park. It arrives at an eastern junction of several trails and the Reservoir Loop Drive.

Crossing the paved Reservoir Loop Drive, the path continues to the south, up railroad tie stairs, (stairs were originally designed here by Mische) passing by two immature ginkgo trees and a row of young, recently planted alders. Picnic Grove is at the top of the stairs. A modern drinking fountain and barbeque structure were recently removed from this area. Two picnic tables remain. To the south, this area overlooks the starting point for the Soap Box Derby Track. The groomed forest spot also provides a view of Reservoir 5 and the southwestern cityscape through the Douglas fir boughs. Picnic Grove, with its southwestern aspect is one of the nicest places in the park. It has hosted weddings and other gatherings in modern times.

The eastern path from Picnic Grove intersects with Reservoir Loop Drive below the Mountain Crest Summit. An unofficial trail climbs straight up the summit arriving to the north of the backside of the Summit Comfort Station. Two other trails descend down from Picnic Grove to Reservoir Loop Drive. One to the north follows the contour of the hill wrapping around from the north to the south. The other drops down directly from the summit. Both reconnect, arriving at the more formalized region with plantings of star magnolias, hawthorn, flowering crabapple and young sequoias just to the northwest of Reservoir 5.

This point intersects with the boundary of the Mount Tabor Park Reservoirs Historic District. Here another well-used pathway intersects at the northwest corner of Reservoir 5 and travels west on the grassy grade completely encircling the basin of the reservoir. This path parallels the lighted sidewalk around Reservoir 5 and defines part of the boundary of the Mount Tabor Reservoirs Historic District. The path comes to a junction with three other pathways and the paved Reservoir Loop Drive and the Soapbox Derby Track below the summit of Hilltop Grove. From this point, the Reservoir 1 basin and its northern glade is visible further to the southeast.

This area is part of the narrowed, linear boundary defined by the underground tunnel that connects the waters of Reservoir 1 and Reservoir 5 of the Mount Tabor Reservoirs Historic District. This junction is a popular meeting ground and the lawn shows signs of wear and tear primarily because it has become a dog play area. Its popularity is understandable since the views of Reservoir 5 and the western cityscape are outstanding. In recent years, a bench has been placed northeast of this junction to take advantage of the fine vistas. The areas close to Reservoir 5, like those around Reservoir 1, are graced with the water sounds generated from the small cascades that feed into the reservoirs.

A west bound path continues along the southern boundary of the reservoir historic district south of Reservoir 5 to arrive at the top of the dam. Here Mische requested that the dam be widened so that visitors could have access the area and the views. This design created one of the most popular gathering places in the park and in the city to watch sunsets, fireworks over the Willamette River and to simply enjoy a sweeping, inspirational view of Portland. The view is enhanced by the twelve acres of the deep water reflecting from Reservoir 6 below. This is one of the protected views noted in the City of Portland's Scenic Resource Protection Plan and is within the boundaries of the Mount Tabor Reservoirs Historic District.

The Soapbox Derby Track runs north and south due east of Reservoir 5. Though seemingly not currently used by soap box derby aficionados, the south end of the track is located in a particularly scenic airy site overlooking Reservoir 5 with sweeping vistas of the cityscape. This site attracts many park visitors, both human and canine.

From the gate at Reservoir 5, going northeast on the Reservoir Loop Drive is a lovely curvilinear perfectly graded drive into the heart of the park. The forest dominates and every other distraction falls away, illustrating a chief Olmsted design principle. Passing by the top of Sweet Briar Vale at the base of two summits the road curves up to Mische's Foothill Overlook and the area to the west that is now called the "volcano" area or "crater." It is denoted with a tablet embedded in a stand of basalt rock that was erected in 1952 by the Oregon Society of the Geological Country of Oregon giving a brief summary of the volcanic activity.

This location, with its private feeling, lends itself to a natural amphitheater and has become the site of some of the amenities that the Mountain Crest Summit area hosted in the past. On the east side of the small peak, excavations unearthed a cinder cone in 1913. The east face of the cinder cone now comprises the west wall of the amphitheater. Excavations of rock for various city and private enterprises, created a quarried area that was eventually utilized as an outdoor amphitheater, the Crater Amphitheater. This is a defining and attractive feature of Mount Tabor Park.

Due south of the Crater Amphitheater and still within the volcanic crater is a regulation-sized basketball court, recently resurfaced with an orange substance made from recycled tennis shoes.

A path, from the original park design, surrounds the cinder cone, called Foothill Overlook on original maps. It is well graded and travels through an upland forest terrain that is mowed occasionally. The mid spring brings a carpet of yellow wood violets along the western slope interlaced with the earlier sweet purple violets. True

dandelions are abundant here. This part of the park adjoins a donation land claim of a botanic physician trained at the Baltimore Botanic Institute, Perry Prettyman, who reputedly introduced dandelions to use as medicine.

Directly above and to the east of the Crater Amphitheater is the main parking lot for the park. This modest-sized parking lot, the largest in the park, was designed in 1971. At the north end of the parking area is the non-historic Maintenance Building and Park Office. To the east of the maintenance building is the Volcano Comfort Station, the only current serviceable restroom in the park. This pleasingly designed comfort station appears to date from 1928. Due south of the parking lot, across Reservoir Loop Drive, is the non-historic thirty-four square feet Picnic Shelter open on four sides. The Picnic Shelter appears to have been constructed in approximately 1974. The main playground with a few remaining older metal structures and an elaborate modern plastic structure is adjacent to the Volcano Comfort Station, parking area and Picnic Shelter. Benches overlooking the play area have been provided at the top of the slight rise accessible by a brick ramp. The bricks are stamped with the names of benefactors who purchased a brick for $50 to help pay for the remodel in 1999. The ramp area is landscaped with miniature azaleas and other common ornamental shrubs. A row of young native red alders are planted to the south behind the benches. Paths lead up to the Mountain Crest Summit to the south and in every direction at this point.

Contributing Features

Caretaker House - Mount Tabor House
The house is situated at the base of Mount Tabor at the Salmon Street Entrance with a southern view overlooking the west tennis court and Reservoir 6. The house is accessed from an unpaved driveway, S.E. 63rd Avenue, off of S.E. Salmon Street. Facing west on a slight rise, it is of an unassuming design and does not dominant the landscape. It is surrounded by a wide expanse of shady lawn under towering Douglas fir trees with perimeter plantings. Originally it served as housing for the park caretaker but it is now rented out to a private individual. The house is designed in the Colonial style and is listed in park documents and assessor records as dating from 1920. It is a one-and-a-half story, side-gabled, rectangular house with a concrete foundation. The house is sided with cedar shingles and the roof has composition shingles. The gable ends have no eaves, but the front and rear elevations have wide boxed eaves. An eyebrow dormer penetrates the roof directly over the front porch. The front central entrance porch is recessed under the main roof. Sidelights flank the wood front door. On either side of the front porch are two built-in wood benches. Windows are either eight-over-eight, double-hung wood sash or three-over-three, double-hung wood sash. To the south of the entrance porch is a bay window. Wood shutters with diamond cut-outs decorate every window. An exterior stucco-covered chimney is located at the south facade. The rear facade has an off-set recessed back porch. City records indicate that construction costs of the dwelling were $3,000 in 1920.

West Tennis Court
The construction dates of the two tennis courts in the park are given in park records as 1923 and 1928. It is unclear which one was constructed when, however, both dates fall within the period of significance. This tennis court is located just north of Reservoir 6; the tennis court on the east side of the park is located at the 69th Avenue playground. Fence and other repairs to the courts are recorded in 1926 and 1932.

Volcano Comfort Station
Built in 1928 in the English Tudor style, this comfort station is in excellent condition. Park records show the cost for construction to be $3,843.19. The plan for this building is roughly L-shaped with a combination cross-gable and conical roof uniting three separate functions into one structure; restrooms, storage, and seating. This one-story roughcast stucco-covered building is comprised of two restrooms side by side and a storage area, a covered shelter with bench, and a small turreted storage room at the east end. The building has a concrete slab foundation and wood frame walls and roof. The roofing is composition shingles. Alterations were made to this building in the 1990s. At this time both men's and women's entrances were shifted to the south facade. Originally, the men's entrance was located on the west facade and was sheltered by a small Tudor-style covered porch. The women's entrance was located on the east facade under the attached covered shelter. An original window was removed from the south facade when the men's new entrance was installed. Both original entrance locations were replaced with windows. The porch on the west facade was removed. The gable end on the south facade (the current men's entrance) is filled with a decorative half-timber design. Small arched openings provide ventilation in the smaller gable end east of the men's entrance. A storage room is located to the north of the restrooms on the rear facade. Two entrances are located on the rear facade and retain their original vertical board doors. The attached gabled shelter is supported by a single square post with curved brackets in the Tudor style. The bracketing, exposed beams and cross bracing add to the English flavor. A wood built-in bench rests under the shelter. Seating is located on both sides of the bench. An attached round storage room at the far eastern end is topped with a conical roof that appears more French than English. Atop the roof is an iron weathervane depicting animals at play. It has an original vertical board round arched door cut into a round arch opening. The door has large iron strap hinges. A single step leading into this storage room is comprised of three massive cut stones. The charming nostalgic design is unique in the Portland parks system. Like the other two remaining Mount Tabor comfort stations, this one is set on a slight downhill slope to keep it from dominating the landscape. The approaching path from the south is through a touch of formal landscaping with common shrubs including Oregon grape and azaleas.

Crater Amphitheater
Making the most of the quarry established after the cinder cone was discovered in 1913, construction of the concrete stage and basalt rock retaining walls were apparently underway in 1934 according to archive photographs. A geological plaque on a basalt rock base, installed in 1952, remarks on the volcanic nature of this area. The concrete and basalt rock stage is located at the north end of a grassy "pavilion," with a large cindered area at the base of the stage. In the cindered area, wooden and metal benches are stored in stacks and set up for stage events. The grass pavilion was recently replanted with grass and three low angular curved basalt risers were installed to provide informal seating and enhanced viewing of the stage area. The stage area is wired for electricity. The Crater Amphitheater is accessible via remodeled concrete stairs or a long concrete ramp reconstructed to American Disabilities Act standards. The ramp parallels the high volcanic rock retaining wall all along the east side of the amphitheater that descends gradually to wrap around the back side of the stage. The stage area is accessed to the northeast by a small trail through old cedar plantings that connects with the trail that encircles the cinder cone. Though reconstruction has occurred at the Crater Amphitheater, it was done in a thoughtful manner and most of the historical features, including the stage, rock retaining walls, benches and

railings are either original or in keeping with the original design of the area. Other amenities here include a modern drinking fountain.

Non-contributing Features

Maintenance Building and Park Office
Situated to the northwest of the comfort station, this building faces out onto the main parking lot. The rear elevation, that drops down from the south façade, is surrounded by fir trees and a footpath. The original construction may be dated to approximately 1965, although a photograph dating from 1953 does show a building close to the current location. This south-facing building is one story with an exposed basement level on the north side. It is covered with T-111 siding on all but the front facade, which is covered with wood lap siding. The gable roof faces south and has imitation half-timbering in the gable end. The front facade is dominated by two garage doors. The entrance is recessed on the east end. All windows are aluminum sliders. This building is considered non-contributing because it is outside the period of significance.

Picnic Shelter
Located midway up Mount Tabor along Salmon Way is a large thirty-four-square-foot picnic shelter. Plans for the structure were drawn by R. George in 1974. The shelter is situated in an open grassy area across from the Parks office building and parking lot. This is the only picnic shelter in the park. It is a square structure with a cross-gable roof supported by four log posts, wood beams and trusses. The roof structure is exposed. The flooring is concrete slab. This shelter serves as a gathering place for large group events with seating for eighty to one hundred visitors. This structure is considered non-contributing because it is outside the period of significance.

Soap Box Derby Track
The Mount Tabor Soap Box Derby Track is a long ribbon of pavement with six faded painted lines forming lanes. It appears as a roadway set in a bowl. The starting trench is on the north end and this trench is covered with a long narrow piece of heavy steel. Just south of the starting trench, on the east side of the track, are large piles of soil amendments used for park maintenance. These piles use the cement retaining wall along the north east edge of the track. The track follows the contours of a bowl-like depression. Historical information is sketchy regarding its origins, however, the first official track in the U.S.A. was constructed as a Works Progress Administration project in 1936 in an Akron, Ohio city park. Oral reports from derby aficianados indicate that the track at Mount Tabor Park was originally designed to official specifications and was very active in the 1940s through the 1960s. Most sources doubt that the track would have been built in the period of significance for this nomination since few communities had official tracks prior to the 1940s. According to City Archives records, the Mount Tabor Park Soap Box Derby Track was apparently refurbished in 1957. During that time, there was a discussion between City Council and the park superintendent regarding complaints of not completing the tract to specifications and of problems with silt deposition onto the apron of Reservoir 5 below it. In 1961, there was more City Council correspondence regarding a design for the track. The Soap Box Derby Track is considered a non-contributing structure because it is outside the period of significance.

Basketball Court
The basketball court is open air and is bounded on the west by the crater, and to the northeast by the steps servicing the amphitheater. The date of construction is unknown but it has a modern feel and is subsequently considered a non-contributing structure.

69th Avenue Entrance

The northeast area of the park maintains much of its historic feel. Located in an historic and stable neighborhood, the 69th Avenue Entrance invites pedestrians to climb the long concrete stairs up the steep slope of Mount Tabor Butte. Historic drives travel to the southeast and due west. To the southeast, East Tabor Drive climbs gently in a curvilinear fashion past the 69th Avenue playground and group picnic site, eventually encircling the butte. To the west, the drive enters the park paralleling private residences to the north and arrives at the main playground, main parking lot, Crater Amphitheater, Picnic Shelter and Volcano Comfort Station.

To the southeast of the Northeast Entrance is the 69th Avenue playground. This historic playground and picnic area was built to take advantage of this relatively level spot on the steep east side of the butte. It is accessed by the 69th Avenue Stairs dropping down from East Tabor Drive. To the west, the butte rises dramatically upward. A comfort station, the Northeast Entrance Comfort Station, designed in 1916 and constructed in the 1920s, is also located in this area. This site includes an old style swing set, small ball diamond, volleyball court, two horseshoe pits and a group picnic area and drinking fountain. The open-air picnic site, like the entire area, is set amidst the lofty Douglas fir trees. The long tables are situated in close proximity to the recreational amenities. This area with its old-style recreational past-times and near-by historic comfort station, gives the visitor a sense of traveling back in time. Though the construction of every feature at this location cannot be dated precisely, there is a cohesiveness and sense of period that is intact. Also, early records report a high degree of neighborhood interest in recreation services at this entrance.

Mische designed a junction where park drives Interlink, West and East Overlook, Cascade, and Woodland met at the northern base of the park's highest point, Mountain Crest Summit. From this point pathways encircled the highest point and connected with a trail system to points all over the park. At the approximate location of Miche's junction there is now a primary intersection of the main driveways in the park and a small parking lot. A west locked gate at Reservoir Loop Drive (Cascade Drive) and an east locked gate at Tabor Summit Drive (East Overlook Drive) have been closed to public vehicular traffic since the 1970s when "partying youth" were prevalent and many nuisance reports were recorded. These driveways make excellent thoroughfares for bicycles, runners and baby strollers. Northwest of this junction is the main playground. Through the east locked gate, Tabor Summit Drive (East Overlook Drive) climbs the eastern slope to arrive at the summit area. This driveway has been referred to by numerous names on various maps such as Harvey Scott Circle, Mount Tabor Summit Drive, Tabor Summit Circle or simply Summit Drive. At the south end of the summit area there is a divider that directs traffic to the east side of the summit, circling around to the west side, and back down the east slope of the butte on the same driveway. Because this driveway has been closed to vehicular traffic for several decades the summit maintains a protected and peaceful feeling. Pedestrians, bicyclists, skateboarders

and roller bladders frequent it as do those seeking solitude at the few picnic tables in the groomed forest area or at the overlook benches.

The Mountain Crest Summit is the highest point on the butte. The long flat summit area stretches approximately one-eighth of a mile north and south, sloping gently to the south. The summit is composed of mowed shady lawn with lofty Douglas firs and other deciduous trees. Views to the east and west from the summit have been incorporated into the Scenic Resources Protection Plan adopted by the city in 1991. Although Emanuel Mische preferred to leave the forest intact, he had planned for the views from the Mountain Crest Summit to be kept open. Since the tall trees in the key vista points have not been kept pruned, the views of east Portland, Mount Hood and the eastern foothills and mountain range have now become more or less obstructed from the highest points on the summit's east side. (Dropping down to the East Tabor Drive, however, affords several good views of Mount Hood, Larch Mountain and other peaks and the cityscape.) From the northeast vicinity of the summit, a glimpse of Mount St. Helens can be obtained on clear days. The northwest section of the summit provides a grand vista of downtown Portland and the west hills. With the sparkling waters and picturesque oval gatehouse of Reservoir 5 below, it is one of the finest views available in the city. This is a favorite site for sunset watching and a modern bench has been installed here. Where Mische had planned a modest, airy bandstand at the north end of the summit, two grand big-leaf maples grow. This site is utilized as a meeting ground for many people and impromptu nighttime concerts occur here in mild weather. Benches face east and north, and sunrises and moonrises can be witnessed there. Young beech trees have been set out to the north of the big maples. A brass geological marker reading City of Portland Benchmark number 1876 is embedded in the ground to the north of the large maples. To the west, is the historic 1920s Summit Comfort Station (probably constructed in 1926 according to city records). This comfort station replaced the original one that was remodeled in 1913 from the large J.H. Smith residence that presided over the summit area until it was demolished. To the northeast of the few stairs that access the comfort station, a 135-foot Summit Radio Tower was built. This tower is apparently used as a relaying system for the water system. The date of construction appears to be about 1968. The tower is unobtrusive due to the screening of the tall fir trees. At the south end of the summit is a large bronze statue of newsman Harvey W. Scott, by Gutzon Borglum of Mount Rushmore fame. Mounted in 1933 on a granite base, the statue sits atop a cut basalt rock terrace with steps and two benches.

Besides the asphalted Tabor Summit Drive, the summit area is accessed at the north and south by several pathways. As Mische envisioned, a long flight of concrete steps, the 69th Avenue Stairs, curves down the northeast slope of the butte to the 69th Avenue Entrance. These stairs, like the other long flight between Reservoir 5 and 6 on the west slope, get frequent use for athletic training by school groups and individuals. A short distance down the stairs, another wide trail forks to the north and drops down to the Reservoir Loop Drive above the main playground. At this junction, a small building built into the side of the north slope faces low round cement structures. This small round concrete covered water storage tank is a discontiguous feature of the Mount Tabor Reservoirs Historic District. From the Summit Comfort Station, another smaller paved path descends further to the northwest down to this same point. On the south end of the Mountain Crest Summit, Mische planned for another long flight of stairs to descend down to the Old Reservoir, Reservoir 1, site. A short flight of concrete steps descends directly south of the Harvey W. Scott statue across Tabor Summit Drive. From here several trails traverse the steep south side of the butte through some of the most natural forest in the

park. Native understory, plants including fairy lanterns, trilliums, Solomon's plumes, snowberry, thimbleberry and hazel shrubs grow beneath the predominating conifer forest. One trail takes the steep route down to the north end of the Reservoir 1 site. The main path follows gentler contours of the hillside and is wide and well graded. Where it turns due west at a forest junction lamppost, it offers scenic glimpses of the waters and buildings of Reservoir 1. From this junction of several trails, the main trail turns northeast past another forest lamppost and accesses the eastern side of the summit area continuing either around to the 69th Avenue Entrance Stairs or tying into North Tabor Drive. This area of the park and the steep slope east of there has the most natural feel due to the forest undergrowth being intact.

Beginning at East Tabor Drive (Mische's Woodland Drive) was constructed with great difficulty across the rocky, steep slope of the east side of the butte. The east side of the roadbed has an attractive stacked basalt rock retaining wall. East Tabor Drive climbs and encircles the butte and arrives either at the Harrison Street Entrance, not in the original plan, or the Lincoln Street Entrance as Mische had essentially planned. Mische's 1911 preliminary park plan called for extending the boundary of the park so that the Woodland Drive (now East Tabor Drive) could be built at a more reasonable level farther down the slope. The property and drive he envisioned are analogous to what is now private homes along S.E. Mountain View Drive. East Tabor Drive, however, does provide the wide and inspirational views that Mische wanted to secure for the public. Mount Hood, the Cascade Range and all of east Multnomah County are visible as are the peaks in Washington State across the Columbia River to the north.

Contributing Features

Summit Comfort Station
The Summit Comfort Station is a Tudor-style building located to the northwest of the summit of Mount Tabor Park. It was built either in 1920 or 1926. In keeping with the other comfort station designs, it is located at a slightly lower elevation so as not to compete with the landscape. Several concrete steps and a low retaining-wall terrace landscaped with low ornamental shrubs lead down to the building from the Summit Drive. The one-story red-brick building faces east and is comprised of two restrooms with a storage/concessions area in between. The foundation is concrete and the roof is composition shingle. The plan is comprised of a main rectangular form with a projecting wing at either end. The center volume and wings are side gabled. Original round-arched wood doors to storage/concession are on the front (east) facade and a large central window opening has been boarded up. The gable ends of each of the wings (front facade) are filled with original timber and stucco. The original window openings in the gable ends have been filled in with brick. Restroom entrances are on the north and south facades in the wings. Wood vented window openings flank the entrances. The restroom entrances are sheltered by a small shed roof supported by Tudor-style brackets. Doors are original round-arched vertical board. The women's entrance retains an original curved iron railing. The rear elevation drops steeply down into the forest. The concrete foundation is more exposed on this side. Small boarded up windows are irregularly placed on this facade. The gable ends of the wings contain the same timber and stucco decoration as the front facade. Plans in 1953 were for a slight remodel for the women's side to accommodate a water bureau radio station. Though no longer in use, the building is in good condition and according to park records, can be made available for special occasions.

Harvey W. Scott Statue and Terrace
At the southern end of the top of the butte, amidst the Douglas fir boughs, stands a full-body bronze statue of Harvey W. Scott, long-time editor of the daily newspaper, the *Oregonian.* Mounted on a granite pedestal approximately thirteen feet tall in total, it faces southeast, looking toward Mount Scott, another of the Boring Buttes that bears the influential man's name and where he once owned sizeable acreage. The statue's right hand points westward toward downtown Portland. An inscription on the base reads: Harvey W. Scott 1838 – 1910; Pioneer, Editor, Publisher, Molder of Opinion. It is among the last works by the sculptor Gutzon Borglum (1867 – 1941), who completed it around 1930 while he was working on the Mount Rushmore Memorial. The name of the artist is inscribed into the metal base on the east side. The statue and its pedestal stand in a small formalized terrace of a cut basalt rock patio with two concrete benches on the east and west sides of the statue. Cut basalt rock stairs and walkways approach the statue from the east and west. A cut basalt rock retaining wall faces south and follows the curve of the Summit Drive between the east and west stairs. The terrace landscape includes hardy shrubs for this south facing aspect. Oregon grape, rhododendrons, red osier dogwood and heather are among them. The statue was a gift from Scott's family and was dedicated at a ceremony at the site in 1933. The family established a maintenance fund, the "Scott Statue Memorial Fund," with $5,000 in an interest bearing account in the city of Portland's name, in the 1940s.

Northeast Entrance Comfort Station
Plans for this building date from 1916 and were drawn by the architectural firm C. H. Kable & Company according to City Archives documents. The actual construction date is 1926 and the building's construction cost was $5,049.60 according to inventory records for Mount Tabor Park. Situated in the northeast corner of the park, it services the 69th Avenue Playground area. The front facade of the comfort station faces north. A sidewalk winds around the building and continues up a short flight of stairs to the road. This one-story Tudor-style building is clay tile construction with a concrete slab foundation. The building is situated on sloped ground so that the elevation drops down from north to south and west to east. Thus the foundation is higher on the southeast side. The top of the foundation is capped with a wide curved concrete water table. The exterior is roughcast stucco. Rectangular in plan, the hipped roof is intersected by a large gable-roofed front porch. The roof is composition shingle. The interior plan is comprised of two restrooms side by side and storage areas at the rear. Access to the women's restroom is from the front porch as is access to an ADA restroom. Access to the men's restroom is from a side porch on the north facade. The front facade is dominated by a large front porch. The porch gable end is filled with wood lap siding. Exposed rafters are curved as is the bargeboard. Squared brackets decorate the gable end. Identical rafters also decorate the eaves of the main hip roof. The porch is supported by square posts and is enclosed by a low stucco wall with an arched opening and inset tile and brick decoration. The porch ceiling is beaded board. A small built-in bench is integrated into the wood railing along the south end of the porch. The wood railing is decorated with bell shaped cut-outs. Window openings are located high up on the each of the facades and are filled in with wood vents. Under the hip roof on the rear facade is a recessed area containing a built-in bench. Original vertical board doors provide access to small storage areas here. This restroom is no longer open to the public, but the building is in good condition.

East Tennis Court
The construction dates of the two tennis courts in the park are given in park records as 1923 and 1928. It is unclear which one was constructed when, however, both dates fall within the period of significance. This tennis court is located at the 69th Avenue playground; the tennis court on the west side of the park is located at the Salmon Street Entrance near Reservoir 6. Fence and other repairs to the courts are recorded in 1926 and 1932.

69th Avenue Stairs
Long flights of stairs are one of the hallmarks of Mount Tabor Park. This concrete flight winds its way with steep grace up the entire northeast slope of the butte arriving at the summit. It begins at the 69th Avenue Entrance west of the playground. It was completed in 1915. Just past the junction with Tabor Summit Drive, concrete restoration work was completed recently on a section of the stairs.

Non-contributing features

Summit Radio Tower
The summit radio tower is a metal structure, 135 feet tall, located on the northwest portion of the Mountain Crest Summit. It reportedly serves the Water Bureau with communications to their various sites. Some of the power components are apparently housed within the Summit Comfort Station that was refitted to accommodate them. The date of construction could not be firmly determined, but through Archives and oral reports, it appears to be about 1968. The Summit Radio Tower is a non-contributing structure because it is outside the period of significance.

Harrison Street Entrance

Mische's preliminary park plan of 1911 had the northern reaches of this region traversed by Woodland Drive and pathways. His plan called for extending the park land to include the steep lower reaches of the butte that are now developed for residences along S.E. Mountain View Drive. The Woodland Drive of Mische's plan was developed higher up the butte in the 1930s and is called East Tabor Drive today. Photographs depict construction on this drive in 1937 by a WPA crew (Project # 869C). This is one of the most scenic drives in the park. It is open to vehicle traffic six days a week and provides some of the grandest views to the east of Mount Hood, Larch Mountain, and the Washington State mountains north of the Columbia Gorge. Pedestrians have a sidewalk up the east side for most of the drive. Heading north, East Tabor Drive intersects North Tabor Drive that travels northwest below the Mountain Crest Summit arriving at a small parking lot bounded by a railroad tie terrace to the south. This terrace is landscaped with a variety of native and non-native plants but of particular interest are the flowering currants that attract hummingbirds. Here, also, is the primary junction of the locked gates to Tabor Summit Drive and the east portion of Reservoir Loop Drive. The main playground and Crater Amphitheater areas are to the northwest.

The Harrison Street Entrance was the last formal entrance developed in the park and not part of Mische's original scheme. The entrance appears to have been an extension of S.E. Mountain View Drive, the residential street paralleling the eastern boundary of the park. This entrance was apparently begun as W.P.A. Project #

869C, 1/11/37 – 5/4/37 and labeled: 72nd and Harrison St. Approach to Mt. Tabor Park – Removing 1500 cu. Yard." The estimated cost was $4,746 and actual cost was $5,162.56. The drive associated with this entrance is called Harrison Drive because it is an extension of S.E. Harrison Street. It ties into the Lincoln Drive arriving from the west and the East Tabor Drive that curves down the eastern slope of the park. The junction of these drives is below and to the south of Reservoir 1, just east of the Southside Stairs. Harrison Drive is a good example of the difference noted between the newer road construction and the original. Harrison Drive is potholed and not of the same quality of that of the older drives.

The Harrison Street Entrance is flanked by ornamental tree plantings, predominantly flowering plums, on the north slope and the Harrison Playground, distinguished by the variety of lovely non-native shade trees, on the south side slope. The history of the planting of the mature grove of predominating black walnut, black oaks, linden, and other deciduous trees is unknown. They are well suited for this south-facing aspect and well-drained environment. The Mount Tabor Nursery is just to the west of this area, and along the paths in that direction, several other non-native or uncommon tree species are growing and so the area may have received the extra attention of nursery workers. The predominance of large, non-native nut-bearing trees makes this a distinguished site in the park and a favorite hunting ground for the plentiful fox squirrels and various birds. The deciduous trees make the area pleasantly shaded in the summer but well lit after the trees drop their leaves in the winter. The Harrison playground is old-style with several metal structures. The play structures are positioned with great distances between them in the sloped grove. The well-spaced great shade trees lend an airy, playful feel to this pastoral area, even without the play structures. The recent widening of the path that accesses this area from the east and west adds an unaesthetic element. The exact date of the construction of the playground is unknown.

A pathway leaves the playground going west through the primarily Douglas fir, partially groomed forest. It soon divides into a lower path and an upper path. These paths bisect what used to be the lower section of the Southside Stairs, from the southern boundary of the park up to the planned terrace garden of Reservoir 1. This portion of the stairs has been replaced by a rough trail that climbs steeply up to cross Lincoln Drive accessing the remaining upper section of the Southside Stairs. The lower path, bordering Warner Pacific College grounds, passes by two large native madrone trees, uncommon in the park and the neighborhood. The upper path traverses the south face of the slope and crosses a main, but undeveloped path climbing up to the Reservoir 1 area. The upper path passes by a tiny spring, one of the few visible springs in the park, emerging from beneath a big-leaf maple on the north side of the path. The pathway continues into a mature non-native spruce forest. Both of these trails converge into the nursery area where there is a small grove of sizable non-native Coulter or big-cone pines and other notable non-native species such as strawberry madrone. The upper trail arrives into a flat cedar grove that is used as a soil amendment storage area for the nursery . A low cement retaining wall along the north side is crowned with well-established plantings of uva ursi and a prostrate juniper.

Summary

True to the prediction of John Charles Olmsted, Mount Tabor Park is one of the most important and largest parklands in the city of Portland, and a defining landscape feature of the city's east side. Mount Tabor Park's design retains its historic integrity and the principles of Olmstedian design.

Mische recognized the wisdom of letting the land speak for itself by primarily aiding accessibility with aesthetic drives and pathways. Though a city park in an urban neighborhood, Mount Tabor maintains elements of a forest preserve. The masterful network of drives and pathways fit the needs of the community. The interior of the park remains a sanctuary due to the limited access of vehicles, yet the drives and paths provide recreational opportunities and numerous places to enjoy the powerfully beautiful park landscape and outstanding views of the surrounding city and countryside. The oldest driveways are also testimony to timeless construction techniques. After extensive analysis of the roadways in the park, the City of Portland's Mount Tabor Master Plan of 2000 stated that the historic roads have held up very well for over 50 years unlike the newer constructs. The rock work from local basalt accents drives and other manmade features. Amenities are subordinate to the landscape. All of the comfort stations have maintained a high degree of integrity, though only one is open to the public at this time. As the park master plan points out, the open water reservoirs are, "integral historic and aesthetic elements directly tied to the public's identification with Mount Tabor Park." Ninety-five years after the city purchased the nearly 200 acres that make up the park today, little has been done that alters the experience of Mount Tabor Park.

A PARTIAL LIST OF
Plants Growing in Mount Tabor Park
(alphabetized by most familiar common name)

Alder, red *Alnus rubra* Betulaceae
Andromeda *Pieris sp* Ericaceae
Barberry *Berberis sp* Berberidaceae
Bittercress *Cardamine sp* Cruciferae
Blackberry *Rubus laciniatus, R. discolor* Rosaceae
Buddleia (Butterfly bush) *Buddleia sp* Buddlejacaceae
Buttercup *Ranunculus sp.* Ranunculaceae
Burdock *Arctium lappa* Asteraceae
Brooklime, American *Veronica americana* Scrophulariaceae
Bracken fern *Pteridium aqulinum* Polypodiaceae
Camellia *Camellia japonica* Theaceae
Cedar *Thuja occidentalis, Chamaecyparis lawsoniana, C. nootkatensis, Calocedrus decurrens* Cupressaceae
Centaury *Centaurium umbellatum* Gentianaceae
Cherry, wild *Prunus emarginata, P. subcordata, P. virginiana* Rosaceae
Chestnut, horse *Aesculus hippocastanum* Aesculaceae

Chickweed *Stellaria media* Caryophyllaceae
Chicory *Chicorium intybus* Asteraceae
Clematis *Clematis sp* Ranunculaceae
Clivers *Galium aperine, G. oregano* Rubiaceae
Clover, red *Trifolium pratense* Fabaceae
Clover, white *Trifolium repens* Fabaceae
Cotoneaster *Cotoneaster sp* Rosaceae
Cottonwood *Populus trichocarpa* Saliaceae
Cranesbill *Geranium sp* Geraniaceae
Currant, red-flowering *Ribes sanguineum* Grossulariaceae
Daisy, English *Bellis perennis* Asteraceae
Daisy, ox-eye *Chrysanthemum leucanthemum* Asteraceae
Dandelion *Taraxacum officinale* Asteraceae
Dandelion, false *Hypochoeris radicata* Asteraceae
Dock, yellow *Rumex crispus, R.. obtusifolius* Polygonaceae
Dogbane, spreading *Apocynum androsaemifolium* Apocynaceae
Dogwood, Pacific *Cornus nuttalli* Cornaceae (in demise)
Dogwood, creek (red osier) *Cornus stolonifera* Cornaceae
Fairy lanterns (Fairy bells) *Disporum hookeri, D. smithii* Lilaceae
Fir, Douglas *Pseudotsuga menziesii* Pinaceae
Groundsel, common *Senecio vulgaris* Asteraceae
Hawthorn *Crataegus monogyna* Rosaceae
Hawkbit *Leontodon sp* Asteraceae
Hazelnut *Corylus cornuta* Betulaceae
Hemlock, Poison *Conium maculatum* Apiaceae
Hemlock (tree) *Tsuga sp* Pinaceae
Hydrangea *Hydrangea sp.* Saxifragaceae
Holly *Ilex aquifolium* Ilexaceae
Horsetail *Equisetum hymenale, E. arvense* Equisetaceae
Ivy, English *Hedera helix* Araliaceae
Juniper *Juniperis sp* Cupressaceae
Kalmia *Kalmia sp* Ericaceae
Knotweed *Polygonum sp* Polygonaceae
Lambsquarters *Chenopodium album* Chenopodiaceae
Lettuce, wild *Lactuca sp* Asteraceae
Madrone, Pacific *Arbutus menziesii* Ericaceae
Madrone, Strawberry *Arbutus uneda* Ericaceae
Mallow *Malva neglecta* Malvaceae
Maple, big leaf *Acer macrophyllum* Aceraceae
Maple, vine *Acer circinatum* Aceraceae
Mock orange *Philadelphus sp* Saxifragaceae

Mountain ash *Sorbus sitchensis* Rosaceae
Nipplewort *Lapsana communis* Asteraceae
Oak *Quercus sp* Fagaceae
Oceanspray *Holodiscus discolor* Rosaceae
Oregon grape *Mahonia aquifolium, Mahonia nervosa* Berberidaceae
Osoberry / Indian plum *Osmaronia cerasiformis* Rosaceae
Pearly everlasting *Anaphalis margaritaceae* Asteraceae
Periwinkle *Vinca major, V. minor* Apocynaceae
Pineapple weed *Maticaria matricarioides* Asteraceae
Pine *Pinus sp* Pinaceae
Pittosporum *Pittosporum sp* Pittosporaceae
Plantain *Plantago major, P. lanceolata* Plantaginaceae
Poison oak *Rhus diversiloba* Anacardiaceae
Queen Anne's lace *Daucus carota* Apiaceae
Raspberry *Rubus strigosus* Rosaceae
Rhododendron *Rhododendron sp* Ericaceae
Rose, wild *Rosa gymnocarpa, R. nutkana* Rosaceae
Rush *Juncus sp* Juncaceae
Salsify/Oyster plant *Tragopogon sp* Asteraceae
Scots broom *Cytisus scoparius* Fabaceae
Sedge *Carex sp* Cyperaceae
Self-heal *Prunella vulgaris* Laminaceae
Sheep sorrel *Rumex acetosella* Polygonaceae
Shepherd's purse *Capsella bursa-pastoris* Cruciferae
Snowberry *Symphoricarpos mollis* Lonicerae
Solomon's seal, branched/false, star-flowered *Smilicina racemosa, S. stellata* Liliaceae
St Johnswort *Hypericum perforatum* Hypericaceae
Strawberry *Fragaria vesca* Rosaceae
Sword fern *Polystichum munitum* Polypodiaceae
Tansy ragwort Senecio jacobaea Asteraceae
Thimbleberry *Rubus parviflorus* Rosaceae
Thistle *Cirsium sp* Asteraceae
Trillium *Trillium sp* Liliaceae
Uva ursi *Arctostaphylos uva ursi* Ericaceae
Vetch *Vicia sp* Fabaceae
Viburnum *Viburnum sp* Caprifoliaceae
Violets *Viola sp* Violaceae
Weigela *Weigela (Dievilla) sp* Caprifoliaceae
Witch hazel *Hamamelis sp* Hamamelidaceae
Willow *Salix sp* Salicaceae
Yarrow *Achillea millefolium* Asteraceae

Youth-on-age/Piggyback plant *Tolmiea menziesii* Saxifragaceae
Yellow dock *Rumex crispus* Polygonaceae
Yew *Taxus sp* Taxaceae

STATEMENT OF SIGNIFICANCE

Mount Tabor Park is a 196-acre city park located in southeast Portland, Multnomah County, Oregon. It is eligible for the National Register of Historic Places under Criterion A because of its association with early park planning achievements in Portland. The birth of this park characterizes the style by which many of Portland's parks, and the nation's parks, were obtained and developed through active citizen involvement in cooperation with the city government. Mount Tabor Park's story also illustrates how park design shifted with national trends, from a formalized European mode to a more naturalistic style, with later accommodations for the recreation/playground movement. The chronicle of Mount Tabor Park falls into the larger context of periods of park creation and development in the history of the United States. The earlier portion of the park's history, in the waning nineteenth century and emerging twentieth century, coincides with the City Beautiful movement's influence regarding the importance of parks and landscape on society. The ideas of these times held sway through the several decades of the Progressive Era. Also important in the park's development were the New Deal work programs of the 1930s, established during the years of the Great Depression.

Mount Tabor Park is also eligible as an example of Landscape Architecture under Criterion C because of its association with John Charles Olmsted, who identified it as a prime park location in 1903. Mount Tabor Park's design clearly exhibits elements that are associated with design principles followed by the Olmsted landscaping firm. John Charles Olmsted was the stepson and nephew of the famous landscape planner Frederick Law Olmsted, Sr. Frederick Law Olmsted is credited as being one of the prime instigators of the City Beautiful movement. Commissioned to aid in the planning of Portland's Lewis and Clark Exposition of 1905, his firm was also retained to review the city of Portland's existing and potential parklands. After John C. Olmsted's 21-day visit to Portland in April 1903, he produced his report to the Portland Park Board in December of 1903. Thirty-seven park projects were identified in Olmsted's 1903 Report to the Park Board, Mount Tabor Park among them. Olmsted's document has continued to shape the city's park planning to this day. In 1907, the Olmsted firm completed another review of Portland's parks, building on the earlier 1903 recommendations.

Mount Tabor Park's original design was created by Emanuel Tillman Mische, an outstanding horticulturist who had trained and worked at the Olmsted firm for eight years before being referred by them for the position of Portland's park superintendent. Mische was hired by the City of Portland in 1908. Emanuel Mische had a continuing relationship with the Olmsted family beyond that of an employee. On John Olmsted's subsequent visits they collaborated on various aspects of Portland's park planning and implementation. Mische's 1911 park design for Mount Tabor Park stayed true to the recommendations as discussed by Olmsted's report to the Park Board of 1903. Mount Tabor Park has maintained the look and feel of a park designed using the principles touted by the Olmsted firm in part due to the continuity afforded by Mische's assistant, Charles P. Keyser. Hired in 1909, the year of Mount Tabor's official park status, Keyser was made the superintendent of Portland's parks in 1917 where he remained until 1949.

Criterion A: Mount Tabor Park Development Influenced by the Progressive Era, City Beautiful Movement, and the New Deal

Mount Tabor Park meets the guidelines for Criterion A as an example of the city of Portland's early park planning. This story is not unlike so many other parks across the country. Civic leaders in Portland sought outside council, specifically the Olmsted landscape firm, to plan not only the site for the 1905 Lewis and Clark Exposition, but to review lands suitable for parks. Mount Tabor Park was one among many identified by John Charles Olmsted's 1903 Report to the Park Board. The active acquisition of the land that makes up the park and the park design occurred with local funding during the Progressive Era and included the influence of the City Beautiful movement at the turn of the nineteenth to the twentieth century. Work on Mount Tabor Park's amenities continued through the next decades with the ebb and flow of local funding. With the Great Depression came federal aid through the New Deal programs of the 1930s. Money was channeled to all levels of government to produce public works projects that would employ millions of jobless people. Mount Tabor Park, like so many other recreation sites around the country, benefited by work crews who created well-crafted infrastructure and amenities. In the case of Mount Tabor Park, Works Progress Administration crews completed the drive system as it was originally designed in the 1911 plan prepared by Emanuel Tillman Mische. Other W.P.A. projects related to the construction of park maintenance buildings, drainage and clearing understory plants were undertaken at Mount Tabor Park.

Progressive Era and City Beautiful Movement Stimulate Park and Urban Planning

The sweeping social and political changes that occurred during the ending years of the 1800s and the early years of the 1900s mark what is called the Progressive Era. Reform movements grew and created policies and institutions still powerful today. Progressive individuals and groups believed that it was possible to improve human nature by bettering living and working conditions. Women, from local civic clubs to scientists like Ellen Swallow Richards from M.I.T., were instrumental in providing leadership for the municipal housekeeping movement that spawned environmental consciousness and general improvements throughout the nation.

The Progressive Era emerged as the United States faced the end of the frontier. Settlement stretched from coast to coast. The population of the country burgeoned, tripling in size from thirty million in the 1860s to ninety million by 1910. Cities rapidly expanded with immigration, and migration from farms to urban jobs. Land became much more valuable as it became scarcer. Progressives grappled with the side effects of an unmitigated free enterprise system. Urban life brought the classes in close contact with each other, though the upper class could retreat to their estates. A compelling sense of responsibility to contribute to the community in positive ways grew, extending from the traditional philanthropy of the upper class to include the growing middle class. Whereas the upper class did not need to rely on public land for their recreation, the growing middle class and the lower classes needed access to land for recreation. Labor unions were edging industry toward providing shorter work hours for laborers thus city dwellers tended to have more time for recreational interests. The subjugation of nature by automobiles and urban development contributed to a growing sense of nostalgia for the lost rural roots of America. Reform movements emerged as the public faced the Industrial Revolution head-on. Among the movements was the so-called City Beautiful movement.

The City Beautiful movement grew out of this time of reform to address not only architecture but city planning at a time when urban areas were expanding exponentially with little concern for aesthetics or other planning criteria. Advocates of the City Beautiful movement promulgated that beautification would not only provide a more pleasing environment, but that individuals and thus society as a whole, would exhibit greater moral and civic virtues.

The City Beautiful movement's precepts strove to encourage city governments to set aside bountiful land for present and future enjoyment and to build beauty into every development. The movement preached that the incentives for doing so included a better, more affluent society of engaged citizens. There was an agreement that pleasant neighborhoods that included gardens, squares, tree-lined boulevards and parkways or other park-like land, as well as properties overlooking grand vistas and waterscapes, increased real estate value and increased the tax base.

Land use planning had not emerged as a strong feature in the forge-ahead economic development of United States cities in the middle of the nineteenth century. Yet well-established and crowded eastern urban areas had prominent people influenced by the grand beauty of European designed cities, parks and gardens, who demanded and helped to fund, lovely public spaces. Places like New York City, Boston and Washington, D.C. became famous for their parks and landscapes, and the designers of these landscapes found themselves in high demand. There was a sense of competitiveness between cities as they vied for attracting business and residents. This competitive sprit was exemplified by the international events known as the World Expositions.

Designed to promote the latest achievements in industry and technology, as well as to showcase the products and virtues of a region, the expos were meant to inspire the possibilities of creating an aesthetic and healthful city environment. The first were conceived and executed in Europe – London 1851, Paris 1889, London again, and Vienna. Chicago's World's Columbian Exposition of 1893, though not the first expo for the country, was a pivotal event for the United States. Four hundred years after Columbus, the nation was eager to demonstrate its glamour and abilities in comparison with the acknowledged distinction of Europe's far more historic cities. Known as the "White City" due to the extensive use of white paint applied to cover the plaster architectural features, Chicago's expo was a testament to classical Greek and Roman architecture and relied extensively on the elaborate Beaux Arts style, popularized by French schools of architecture. Design guidelines were utilized to create harmonious architectural scale. The highly designed landscape featured the local waterway as an aesthetic component whereas urban rivers and lakes were primarily monopolized by industry and suffered grave environmental consequences. The World's Columbian Exposition put the City Beautiful movement soundly on the map and influenced cities of all sizes across the land to develop beautification programs of their own.

Chicago's Columbian Exposition advanced the field of professional landscape design just as the Progressive Era, in the zeal to outsmart political cronyism, had hatched the trend to hire an outside professional consultant. The City Beautiful married the two and the landscape design field took off. Cities and prominent citizens were anxious to hire experts, like the Olmsteds, to help with urban and estate landscapes. If the city wanted to host an expo, there was even a greater incentive for creating an image of desirability. Such was the case for Portland in

1903, when John C. Olmsted was commissioned to help the city prepare for the Lewis and Clark Exposition of 1905.

The City Beautiful movement pushed for park planning as part of a national trend toward political and social reform that had grown with the burgeoning of American business, and the swelling population. The influence of this movement went right to the top level of public policy makers. Concern for the conservation of public lands was advanced by President Theodore Roosevelt. While his interests included art (he was an early member of the elite National Arts Club) and general political and commercial accountability, he is credited with championing the conservation of land for public parks. During his time as president, approximately 230 million acres were placed in public protection. His terms in office, between 1901 and 1909, first completing the assassinated William McKinley's three years followed by his own successful four year term, were very instrumental in forming the National Parks and National Monument systems, the U.S. Forest Service, and game and bird refuges. A clear policy of conservation coming from Washington, D.C. helped to foster the state and local park systems we know today. The push to acquire the land for Mount Tabor Park closely corresponds to Teddy Roosevelt's term, and a majority of the land parcels purchased by the city of Portland for Mount Tabor Park and other parks occurred in 1909.

The women's suffrage movement, an important component of the Progressive Era, had a profound effect on park planning. Even without the right to vote, women worked at the local and state levels to promote a common agenda of moral obligations to women and children. Kindergarten and other school programs, awareness of child labor practices and the playground movement came out of these efforts. New Jersey passed the first comprehensive state legislation in 1907 establishing a playground commission. Whereas the City Beautiful movement had emphasized the need for aesthetically, naturalistically designed land separated by space or landscape from the urban environment, a growing number of urban families demanded open space for active recreation.

Post World War I: Recreation Movement Continues

The time between the two Roosevelt presidents, from 1909 to 1933, was pivotal for the nation's evaluation of outdoor recreation. Many parks were established by the first decade of the twentieth century. The population clamored for more park amenities, as well as more parks, but lack of funding, the restrictive atmosphere imposed by World War I and the world wide influenza pandemic, had hampered the development of services on parklands. Nationally, as labor unions and public opinion swayed the labor force toward shorter work hours, people had more leisure time. The predominating urban environments, as opposed to the rural lifestyle, increased the demand by the public for recreational land and facilities. In general, people had more time and more mobility, especially with the private automobile, which also contributed to a declining rate of physical activity.

In 1924 the Federal Government held the National Conference on Outdoor Recreation in Washington, D.C. at the request of President Calvin Coolidge. Three-hundred delegates from one-hundred-twenty-eight national organizations attended. The conference was designed to assist in the formulation of a national policy "to

coordinate the activities of federal, state, county, municipal and unofficial agencies in the field of outdoor recreation and to promote the development of the recreational resources of the country and stimulate their use." The conference was also to encourage the promotion of conservation and wise administration of the nation's natural resources. This conference was followed two years later with the passage of the Recreation and Public Purposes Act, through Congress, that authorized the Secretary of the Interior to exchange, sell (at low cost) or lease unreserved non-mineral public lands to states, counties and municipalities for the purpose of recreation.

This time of park acquisition was followed by a time of development during the next decade. While the country suffered economic collapse in 1929 and private development languished, public lands benefited. John Olmsted, in his 1903 Report to the Park Board, had noted that economic hard times could be used for good advantage both in the acquisition and development of parks. The stock-market crash of October 1929 was a major turning point for American life on nearly every front. Desperation was a driving force of individuals as well as all levels of government.

The New Deal: Development of Park Amenities

President Franklin Delano Roosevelt (FDR), who served from 1933 until 1945, during the trying times of the Great Depression and World War II, established the work relief programs of the New Deal. In the face of the desperate depression times of the 1930s, FDR's administration worked to shore-up the economy of the nation by providing jobs for unemployed Americans. By providing funding for public works projects through the Public Works Administration and direct employment through the Works Progress Administration and the Civilian Conservation Corps, the federal government was able to assist states and local governments proceed with developing public amenities. Many parks, including more than 800 state parks, were developed through the direct employment agencies of the New Deal.

The Works Progress Administration, later called the Work Projects Administration, employed 8.5 million people on 1.4 million public projects to improve America's infrastructure, arts, history and culture. The Civilian Conservation Corps, under the Emergency Conservation Work program, put men to work developing recreational facilities in forests and parks, preventing soil erosion, and planting trees. Parks around the country were upgraded and Portland's parks were no exception. Work crews from this era left their mark on Mount Tabor Park, executing Mische's earlier design intentions from the mid-1930s until 1939.

Out of this period emerged principles regarding parks and natural resources and federal laws, such as Public Law 770 1/2 of 1936 that provided for a comprehensive study of parks, parkways, and recreation programs in the United States. Another federal study entitled, "Municipal and County Parks in the United States 1935" included data on every state including 1,216 cities in seventy-seven counties that was to be compared to the 1925-1926 study on recreation facilities. In 1941, a federal document outlining guidelines for the nation's recreation entitled, "A Study of the Park and Recreation Problem in the United States," made strong recommendations that the majority of recreational needs should be the responsibility of state and local governments.

World War II interrupted the momentum for park planning that had been gained during the 1920s and 1930s. It was not until the mid- to late -1950s that federal efforts pushed forward with the Mission 66 program, spurring once again park planning and development on all government levels. The boom times of the post-war nation encouraged housing developments and a new suburban expansion. Once again, there was much pressure for park land developments as housing and business continued to edge out the rural landscape.

Early Park Development: The Process in Portland, Oregon

The story of the creation of Mount Tabor Park, which was the largest park in Portland until the 1940s, is an illustration of the way many public parks were conceived. Its establishment took the will and the cooperation of civic-minded and influential individuals including members of the mayor-appointed Park Board, politicians and ultimately voters to give the mandate on funding. Very important in this mix were the outside influences of experts in the field, members of the Olmsted firm, including their former horticulturist, Emanuel Tillman Mische, whose vision and expertise helped manifest the beginnings of John C. Olmsted's park plan for Portland. Mount Tabor Park and Portland's entire park system benefited from the continuity of management style carried on by Mische's assistant, Charles Paul Keyser who was park superintendent until 1949.

A clear policy on publicly owned parkland had not developed nationally but it was in process by the turn of the century. There was a sense of rivalry between cities as policy makers tried to determine how much land was appropriate for parks. Hiring the Olmsted firm and hosting a world's fair helped Portland gain a reputation as a city that invested in planning and parkland. Portland began to get inquiries from city governments around the nation, some wanting to "borrow" the Olmsted report. In May of 1907 a letter from H. A. Shatuck addressed to Portland's Park Commissioners said, "We are in the throes of park agitation here in Boulder."[1] Walter D. Moody, the managing director of the Chicago Plan Commission in 1912, requested the total present park area and the total proposed park area (if any) for a national report on park acreage of leading American cities. Philadelphia, Boulder and Chehalis, Washington made similar inquiries to Portland.[2] Park planning eventually progressed to city planning. In the year 1909, the same year that Mount Tabor Park was pieced together, land use planning emerged as a budding profession. That year the first national conference on city planning was held, Harvard University's first course on city planning was offered, and Wisconsin passed legislation authorizing cities to create planning commissions.

The City Beautiful movement propelled the nation toward park development fueled by expositions like Chicago's in 1893. But expos not only generated models of planning, they also fostered growth in the hosting city as they were extensively advertised and attended by millions of people. Portland's Lewis and Clark Exposition, open from June until October 1905, expanded the city's population and boundaries sizably. Even with design expertise from consultants like Olmsted and planner Edward Bennett, the burgeoning growth made it a challenge to carry the City Beautiful tenets from the fantasy world of the expo to the filthy, crowded streets and waterways of the real urban world. The "White City" and Portland's own exposition of 1905 were artificially produced, short-term fantasies, produced to create wealth for the promoters, as well as for the region and concerns that were featured. The designs and recommendations of the designing consultants seemed far-fetched to some government and business leaders. Land use decisions were complicated by the special interests

of developers and industrialists who held powerful sway over elected politicians. The amounts of park land, the amenities to develop, the numbers of street trees, while looking good in theory, did not always seem attainable or sustainable. Park acquisition and development were closely tied with fickle economic trends as well as voter attitude. Elections, such as the discouraging ones in Portland in 1912 and 1913, proved that citizens were not entirely sold on the City Beautiful's concepts or if they were, they did not want to put their money where their beliefs were.

Civic Visionaries Guide Park Development Process

The city of Portland's effort at deliberate park planning, like other cities, was the culmination of a process. It involved civic conversation and action between city and state government and principal families of influence or people who were closely allied to them, plus hired professionals such as John C. Olmsted, Emanuel T. Mische and later Edward H. Bennett who submitted the "Greater Portland Plan" in 1912. A precedent had been set for municipal ownership when the Water Committee developed the city-owned Bull Run system in 1894. A number of the same civic elite members served as early Park Commissioners and on the Exposition Committee and they were instrumental in helping to initiate and guide the process toward a public park system. A major win for proponents of parks was the amendment of Portland's City Charter by the state legislature in 1899 and the referendum in 1900 to authorize the Portland Park Association and Board of Park Commissioners.

Portland's far-sighted citizens were able to harness the money and vitality of the city and look beyond its borders for talent, true to the trend of their day. Portland Park Commissioner, the Reverend Thomas Lamb Eliot, of the First Unitarian Church, utilized his connection to the influential east coast park movement and he was integral to the foundation of the parks system that Portland enjoys today. Reverend T.L. Eliot paid a visit to the Olmsted offices and set the deal for John Charles Olmsted, also a member of the Unitarian Church, to visit both Portland and Seattle. The Reverend Eliot's relative was Charles Eliot (1859 -1897) whose father, Charles William Eliot, was the president of Harvard College. The junior Eliot was a member of the Olmsted, Olmsted and Elliot landscape architecture firm in Brookline, Massachusetts. Charles Eliot is credited with helping to craft Massachusetts state legislation for the protection of public lands. This eventually led to the legislation that created the Boston Metropolitan Parks System in a large part due to his 1890 piece entitled "Waverly Oaks," a landmark article defending a stand of virgin trees in Belmont, Massachusetts. Charles Eliot greatly influenced the younger John Charles Olmsted, his business partner. In his plan for Portland parks, Olmsted repeatedly reminds Portland of the value of its forestland: "Many of the older cities would now pay very high prices for land covered with the primeval forest which the early inhabitants destroyed and which might once have been obtained for a few dollars an acre," he wrote. Of Mount Tabor, Olmsted said, "It has been sufficiently cleared to open up all the important views from one point or another of it, yet there still survive considerable groves of the original growth of fir trees, including many tall ones, as well as other trees and shrubs."[3] Presently, Mount Tabor Park represents the only sizable, naturalistic forest left in the heart of east side Portland.

While Eliot did the east coast leg-work for orchestrating Olmsted's visit, another member of the Park Commission, Lester Leander Hawkins, bank and electric utility president, escorted Olmsted and his assistant around Portland, including Mount Tabor, in the spring of 1903. Hawkins dreamed of a trail and driveway

network along the summit and valleys of the west hills from Macleay Park to south Portland. His vision, strengthened by the Olmsted report, has carried through the century. It laid the groundwork for conservationists and preservationists to develop Portland's largest network of trail systems. Nearly half a century later, with the help of a new set of citizens, Hawkins' vision became manifest with an elaborate trail system throughout the west hills. The crowning glory of this system, Forest Park, made official in the 1940s, is a forest reserve of over five-thousand acres that allowed Portland to boast of having one of the largest urban parks in the world. The view of this long, green ridge of parkland running north of the cityscape of Portland's downtown, provides one of the prized sights visible from the west side vista points of Mount Tabor Park.

Funding and Acquisition: Emanuel Mische Takes the Helm

Early correspondence, coupled with officially produced park reports, helps tell the tale of Portland's difficulties in developing a clear and consistent policy on parks. The Olmsted report of 1903 and follow-up report in 1907 chronicle the indecision that existed in Portland. There was a clear hesitation to commit lands to parks by some interests and politicians. There was an unhesitating group of citizens, and some politicians, that were dedicated to the park effort. In between were the vast number of average voting and tax-paying citizens subject to the pendulum of influences, especially economic concerns. To some, parks posed what was seen as multiple problems including the tying up of potentially more profitable land bases, development and maintenance costs, policing and administration costs, as well as liability risks. Those who did not support parks generally saw these same challenges even with donated park land. To others, parks were absolutely necessary for the health and well-being of a community on all levels, including economic.

Portland's records show that, overall, the city needed strong encouragement from civic sources, in addition to public funding, to acquire and develop parks. A major aid to increasing park acreage in Portland came from the Water Bureau's land holdings, some of which, like Mount Tabor Park, served two roles. These jointly owned and managed properties presented challenges to funding and management. The Olmsted and Mische park reports consistently addressed complicated issues in order to help the politicians and the community sort out priorities and options for acquiring, funding and managing parks.

Though John C. Olmsted had given Portland a thorough evaluation of park priorities in his report of 1903, the city had taken little action on his recommendations. Prior to 1909, Portland's parks were limited in size (approximately 165 acres of parkland in 1900) and most were gifted properties on the west side of the Willamette River (approximately 128 acres west, 37 acres east.) Parks were not dictated by a city-led plan. The Park Commissions Report of 1901 rallied a call for action by the citizens and the city to move forward on park development that led to the visit of John Charles Olmsted in 1903. The City Beautiful movement inspired a civic organization, The Initiative One Hundred, that promoted an integrated park system. Together with Portland's Park Board there was motivation to implement Olmsted's plan for parks.

When in 1906, Mayor Harry Lane took the helm of the Portland Park Board, coupled with support from a December 8, 1906 *Oregonian* piece expounding on the benefits of carefully implementing park design in collaboration with a competent engineer, the tide truly did turn toward creating momentum for park

development. Mayor Lane asked the Olmsted firm for their advice on securing a park superintendent. John Olmsted recommended Emanuel Mische, but Mische had just started a new job as Madison, Wisconsin's park superintendent. The Park Board hired Arthur D. Monteith instead.

Under Monteith's leadership, the Portland Park Association planned a bond issue in 1907 for $1,000,000 to carry out the Olmsted plan of 1903. It narrowly passed in June of that year. A challenge to the validity of the bond held up the funds, but $5,000 was allocated to retain the Olmsted firm again, with the anticipation of the eventual availability of the bond funds. Olmsted's colleague and member of the firm, James Frederick Dawson preceded Olmsted's arrival by three weeks in November 1907. It was Dawson who did much of the foot and paperwork in the complicated process of land value assessment. Olmsted's two-and-a-half weeks were spent on private enterprise with some of Portland's most elite families. For the city of Portland, Olmsted focused on defining boundary descriptions for nine parks and parkways. The Olmsted report, delivered by Dawson, was well received by the Park Board in December of 1907 and provided a roadmap to moving ahead with park acquisitions, though elevated property values limited the buying power of the available funds to approximately one-half of the proposed parklands.

By the time the first installment of the $1,000,000 bond issue became available for use, Emanuel Mische had replaced Arthur Monteith as Portland's park superintendent. Mische brought to Portland a remarkable range of experience and skill. Born in Syracuse, New York in 1870, his training in horticulture included stints at Arnold Arboretum at Harvard as well as the Royal Botanic Gardens at Kew. He was hired by the Olmsted firm when John Charles and Frederick Law, Jr. began their official partnership in 1898, and stayed on for eight years, becoming a friend and a colleague of the Olmsted family. It was Mische who penned the tribute to John Charles Olmsted in the April 1920 journal, *Parks and Recreation.* He became editor of a department of this magazine the next year. Mische eventually left the Olmsted firm to become park superintendent of Madison, Wisconsin at the recommendation of John C. Olmsted. On a second Olmsted recommendation, Mische landed the Portland superintendent position in the spring of 1908. Emanuel Mische had worked for a limited salary in Madison and regretted the small salary offered by Portland. The perks of a more suitable climate, a rent-free abode in City Park (negotiated by Olmsted) and the hope for private design work encouraged Mische, acclaimed by the Olmsted's as one of the country's most esteemed horticulturists, to move with his family to Portland. The story of his interactions with Portland's Park Board, City Hall, and the voters illustrate the challenges that were presented to park development, even with a highly capable professional such as Mische. He came to Portland with prior knowledge, gained through the previous visits of John Olmsted, of the concern that the city had for expenditures related to park acquisition and development.

The purchasing and condemning process that resulted in Mount Tabor Park, as well as other east side parks and the west side Terwilliger Boulevard in 1909, stirred up plenty of heated dialog as developing neighborhoods jockeyed for parkland. While many thought that it should be a priority to develop parks, others, like Mayor Joseph Simon, elected in 1909, seemed to believe the opposite. He was against tying up private land for public parks since he felt that Portland was, by its nature, a natural park. This attitude, along with the limitation of accessible funding from the previous bond and the threat of a decreased payroll for the Park Department,

created difficulties for the new Superintendent Mische. Nonetheless, he went ahead with his design of six parks, including Mount Tabor Park, and a boulevard, as well as attending to his regular duties of supervision.

East and West Side Dynamics: Portland's Citizen Groups Encourage Park Development

As the west coast of the United States' population burgeoned, Portland's was no exception. Portland's west side, backed up to the west hills, hosted the old establishment of affluent families and their gifted park properties. The broad, relatively flat plain of the east side of the Willamette River, however, was the fastest growing section of the city. By 1915 sixty percent of Portland's population lived on the east side of the river. Old money land speculation deals were building subdivisions on the eastside, such as Ladd's Addition, Laurelhurst and Irvington. Between the developers' interests, the sheer numbers of residents and the citizen clubs, the east side was developing a strong voice for parks and other public services.

This civic movement manifested itself in the style of "push clubs" that were especially active east of the Willamette River. Letters, petitions, and visits to the Park Board from these groups were continuous. The year 1905, the same year of the Lewis and Clark Exposition, push club activity was escalated with petitions and sizable attendance at Park Board meetings. It was in this year that the first mayor, Harry Lane, was elected from east Portland. The mayor was the official chairman of the Park Board. In November 1905, Park Commissioner Lang tried to assure the east side push clubs that though the present park acreage was three- hundred-seventy-five, the Park Board was planning not only east side parks, but a parkway and boulevard system to connect them. He included in his list Sellwood, Rose City, North Albina, Columbia River and also Mount Tabor parks for a total of one-thousand acres. Lang added that the goal was for three-thousand acres of parks and boulevards and of that, five-sixths should be east of the Willamette River. He suggested that the pending $1,000,000 bond was but a drop in the $10,000,000 bucket of monies to be found for parks.

Despite these encouraging words and continued agitation, years passed without action by the city to create new parklands. Land prices and population following the 1905 Lewis and Clark Exposition rose exponentially. Just as some people were feeling an urgency to put aside national lands, there was a growing concern that the rural-like qualities of large areas of Portland were rapidly being subdivided and urbanized. Emanuel Mische built a case to the Park Board that it was absolutely essential to acquire certain tracts to be included in the park system, "...some are so essential, both as strong local characteristics, distinctively native and excellent landscape features that to exclude them would be to very seriously impair the quality and value of the system. Such an element in the proposed system is the dual knoll eminence known as Mt. Tabor," he said.

An *Oregonian* article ran in November 1908 headlining: "Want Park at Mt. Tabor: East siders think ground should be bought now. Committee to appear before park commission today, setting forth wishes of United Push Clubs" The committee wanted action, "...for it has seemed to many citizens that little or no progress is being made toward securing a park at Mount Tabor, or anywhere else."[4] The article alluded to the fact that the City was contemplating two new reservoirs in the park. The east side push clubs had had a design in hand for several years amounting to a minimum of 169 acres.

Agitation finally yielded results as this March 1909 *Oregonian* piece illustrated, "Parks to be Bought: Mount Tabor Property Recommended by Boards. Value is over $300,000. System of reservoirs to be built to be used with new pipeline that will be constructed – Price agreed on is reasonable."[5] It is not surprising that Mount Tabor landowner and owner of the *Oregonian,* Henry Pittock, would deem the price reasonable He and his wife had been paid one of the highest amounts by the city in the scramble to acquire Mount Tabor properties. Having the Water Board responsible for about one quarter of the costs of the land may have helped spur on acquiring additional acres.

The slow acquisition of land dedicated for parks was a source of disappointment for public park supporters and Olmsted, who returned to Portland a number of times between 1903 and 1911. Pressure from citizen groups and the Park Board, coupled with public relations, was pivotal in helping to spur action and get the $1,000,000 bond measure passed in 1907 that allowed land purchases to commence. Citizen groups were also strong advocators for development money. When finally Mount Tabor Park was beginning to officially materialize, the Mount Tabor Improvement Association passed a resolution claiming that the $15,000 made available for development of the, "new Williams Park at Mount Tabor... was totally inadequate to do justice to the improvements contemplated on this centrally located and natural park site..."[6] The resolution recommended $25,000.

Amidst the planning of the park, a controversy was emerging regarding the naming of the park. Mount Tabor was the traditional name of a large portion of the east Portland area, more than twice the size of the present Mount Tabor neighborhood. The Mount Tabor of Palestine (now Israel) is the namesake of the Mount Tabor in Portland, probably bestowed by an early settler in the 1850s. Many churches, businesses and developments referred to Mount Tabor in their names and by the early 1900s the name Mount Tabor was rooted in the city. In April of 1910, an ordinance provided that the, "public park on Mt. Tabor shall be designated as Willams Park in honor of the late George Henry Williams (1823 - 1910.)"[7] Williams had served in national and local politics for half a century including being a U.S. Senator from Oregon, U.S. Attorney General, and the mayor of Portland from 1902 – 1905. Influential citizen input kept the name Williams Park from ever gaining a toe-hold, and the name reverted back to Mount Tabor Park.

Mount Tabor Park: Acquisition and Development

Prior to the large-scale acquisitions of land to create Mount Tabor Park in 1909, the surrounding community had unofficially used the land as "park" and for hunting and gathering for decades. Deer and bear were hunted according to accounts of early settlers such as the Kelly and the Prettyman families who had large land claims at the base of the butte prior to 1850. A deed dated July 21, 1888 states that Buell and Helen Lamberson dedicated a tract of land to the city as designated "park." This land may have corresponded to the Water Committee and the early reservoirs completed in 1894. John C. Olmsted used the title of Mount Tabor Park in his "Report to the Park Board" of 1903 and he pointed out that the butte was already being used for recreation. This was one of the facts he promulgated to build a case for the city to acquire the land for a park.[8] By the time the city moved ahead with land acquisitions for the park several years later, property prices had soared. A sizable chunk of the money garnered through the bond measure was spent on Mount Tabor butte. The city spent approximately $426,000 on forty or more properties in the creation of Mount Tabor Park in 1909. From 1908 through 1910,

lots of varying sizes were purchased, with a flurry of activity throughout 1909. Property prices paid by the city ranged from $1 paid to the Commercial Trust Company, to $37,500 paid to land speculator Henry L. Pittock, owner of the daily newspaper, the *Oregonian.* Some people sold their deeds for $10, stipulating that the property was only to be used as a public park. A number of cases went to court in condemnation proceedings. The average price paid per deed, if the two extremely high deals are excluded, was approximately $6,500. Charles Paul Keyser, in his reflections on forty years in the service of Portland's parks, first as Mische's engineer and later as superintendent, said, "In 1909 most of the high ground was still in more or less neglected ownership following a real estate bust of the nineties."[9] By December 1909, the Park Board reported, "When the court proceedings are completed, all the top and side slopes of that high eminence rising out of the east side plain will be public property. The views in the four directions on the compass will ever more be under public control. Nothing short of skyscrapers on contiguous property will ever destroy these views."[10] In a personal report in 1961, Keyser said of Mische's involvement with attaining Mount Tabor Park, "In my estimation making Mt. Tabor a most outstanding feature of our park system was his greatest single achievement, even if he was disappointed in failing to acquire the property fronting on S.E. 60th Avenue between Reservoirs #6 and #2, and a more ample margin on the eastern slope."[11]

Shifting Trends: Active Recreation, Funding Woes, Park Board Abolished

In 1908, Mische began his new job in Portland just in time to face two important changes in park design, the automobile and playgrounds. The automobile was integral to Mische's design of Mount Tabor Park, but it was also the automobile and its potential to do harm to children playing in the streets that helped to prompt the playground movement. Begun in New York City, playgrounds addressed tenement dwelling families with limited access to safe outdoor spaces. In addition, changes in land use and labor laws left children and adults alike with more leisure time. Portland followed the national shift from parks for beauty and passive recreation to an emphasis on active recreation. It was the women of the United States who vociferously lobbied for playgrounds; in Portland, the Play Ground Committee of the People's Institute included the wives of some of the most influential men in the city. Their report to the Park Board in 1907, regarding the new Park Blocks playground, provides valuable insight into Portland's early playground development. A female supervisor, hired by the institute, was responsible for the three months that the facility was open. There were separate girls' and boys' blocks. The average attendance was 40 children of mixed ethnic backgrounds between the ages of 7 and 9 years. Much of the remaining report recites the myriad of park rules per a city ordinance. In May of 1907, the Park Board received a letter from President Theodore Roosevelt as the honorary president of the Playground Association of America, requesting the attendance of the Playground Committee at the first annual meeting of the association in Chicago. Dues ranged from $1 to $1000 and members received the magazine, "The Playground." In 1911, the same year that California women gained voting rights (Oregon was the following year), a representative from the Women's Congress addressed the Parks Board regarding creating an exhibit of playground "apparatus" at an exposition to be held at the Armory. Mische was given the authority to act on this recommendation. Mische reported to Mrs. Stella W. Durham in March of 1914, that Portland had twelve playgrounds and he told her, "We spent for playgrounds in 1913, approximately $25,000."[12]

The year 1913 saw big changes in Portland's city government as the Parks Board, along with most of the other boards, was abolished. The City Charter was adopted that allowed for a council form of government. This change in July 1913, meant that Superintendent Mische reported to the elected official, Commissioner of Public Works, instead of the appointed Park Board. The Bureau of Parks was created under the authority of the commissioner. It appears that this was an awkward time of transition. In the words of Charles P. Keyser, "He (Mische, ed.) failed to click with the new regime, struggled along bravely for a couple of years longer, and in 1915 stepped down..." Mische was replaced by J.C. Convill, appointed by Commissioner Brewster. Keyser went on to say, "He (Convill, ed.) had been a notable college athlete. His extensive background in sports and savvy of publicity made him especially useful to Brewster who was rather inclined to promoting recreational activities with such appropriations as he could wrangle, until the time would be right to plug for more bond or other capital expenditure." [13]

By this time, the Olmstedian-City Beautiful influence on park planning had begun to shift. Mische and others outside of the political arena hoped to see some of the beautification projects, such as parkways and boulevards outlined in Edward H. Bennett's 1912 "Greater Portland Plan" plan, come to fruition. Though commissioned with money from the "city beautiful fund" established by Mayor Joseph Simon in 1909 during the frenzy of park acquisitions, the Bennett plan's arrival was ill-timed. The new Bureau of Parks pulled away from parks and boulevards for beauty and inspiration and more toward active recreation whose cost and liability could be shared by the developing school system. The national conversation regarding the social benefits of parks had turned its attention more to the value of keeping youth, especially boys, out of trouble with supervised organized sports. The trend centered on recreation centers, and generally smaller parks, featuring sports fields rather than providing inspiration and relaxation within the confines of an aesthetically pleasing, larger park. The new city commissioner echoed this new trend. Visionary superintendents, skilled in horticulture and park design, were not deemed as necessary as maintenance and recreation supervisory personnel. Complicating the parks issues even more was the reluctance of tax-paying citizens to pass the parks' bond measure asking for $2 million that was brought to the voters and failed in 1912 and 1913.

After the first bond defeat in November of 1912, Mische recommended that a full-scale report be presented to the public as an educational tool and an encouragement to support Portland's parks. Five years of reports were published as the Annual Reports of the Park Board 1908-1912, issued in March 1913. It was an unabashed appeal for funding. The report contained many photographs of Portland's parks and graphs and mapping to illustrate Portland's park deficit in comparison to other cities such as Chicago, Kansas City, Detroit, Cincinnati, San Francisco, Spokane and others. Portland's park acreage, per person, ranked lower than all of those cities. The report emphasized how politically clean the process would be for acquiring parkland. The closing remarks were emphatically pointed along the lines of the precepts of the City Beautiful movement: "Final admonition is given that our rate of progress has not been commensurate with our material or population growth nor has it been adequate to keep us abreast of a financially or economically wise or proper social betterment requirement. The Board would urge that the citizens take such action on the park project as to prove our readiness and our foresight in rising to our opportunities and by demonstrating our public spirit, enterprise and civic courage assist in taking enviable rank among the most favored cities of the nation."

Mount Tabor Park was to receive a sizeable portion, $69,800, of the anticipated bond money to get it in "first class condition." In anticipation of the election, an extensive article appeared in the *Oregonian* in the late summer entitled, "Mt. Tabor Park Plans Elaborate. Sylvan paths designed. Slow progress." Complaints of the inaccessibility of the park, especially during the wettest months of the year, led Mische to remark, "With a few improvements such as construction of walks, drives, proper drainage and lighting, the park can be converted into a recreation center second to none in Portland." His preliminary drawn plans, not realized, included a large swimming pool, four separate gymnasiums for men, women, boys and girls, playfields, a wading pool for the smallest children and a pergola for climbing plants and other formal landscaping touches to be located at the site of the original modest playground at the only large flat expanse of the park at the south end near the nursery and Reservoir 2. Mische pushed for acquiring all of the flat land at the base of the butte near adjoining roads and close to the residential areas as it was easily accessible to the children and parents of the community. The site also fit with the principle of separation being within the area he had wanted to make more formal and a good distance away from the more forested region of the butte. The original playground is no longer at the southeast site, but one of the three present playgrounds is due east at the southeast corner of the park and two other playgrounds have been constructed over the years. Portland's records, including mapping, are generally sketchy on details regarding playgrounds.

The End of an Era: Mische Moves On

Mount Tabor never did get the recreation center that Mische designed. (A very similar plan, however, was drawn up when Reservoir 2 was taken off line about sixty years later and the Park Bureau had its own high hopes of finally realizing this long-term recreational goal for the park. Instead the level property was sold to a private developer.) And despite the comprehensive report, the $2 million was not approved in the June 1913 election.

The defeat of the 1913 bond measure took much of the wind out of the sails of Portland park development and sent a message of dissatisfaction from citizens to the newly formed government. Another byproduct of this bond measure defeat was the gradual loss of Mische. His employment was soon to switch from park superintendent to landscape architect for the parks and finally out of the parks system to follow in the Olmsted's path to private practice with his own landscape architecture firm. Mische did some consulting work with the Park Bureau after the end of his official employment. His influence did live on with Charles P. Keyser, who served as Mische's assistant from 1909 and went on to become Park Superintendent from 1917 until 1949. Keyser deserves much credit for steering the Portland parks down the course set by Olmsted and Mische. Mount Tabor's essential plan of naturalistic forest landscape with the curvilinear road and pathway network was completed and remains in a large part due to these three people's vision.

Although highly dedicated to the city and his work, and extremely qualified, Emanuel T. Mische resigned as superintendent of Portland's park system after only six years. Details of his resignation remain obscure, but it is clear from the records that tensions existed between him and city officials, especially by 1913 when the city abolished the appointed Park Board and established the Park Bureau with the new commission form of government. His outspoken ideas on land acquisition and management, street trees and other civic

improvements were similar to those of his mentors, the Olmsteds, and though the ideas were influential, they seemed to be at odds with some elected city officials. Like Frederick Law Olmsted, Sr., who established his own private enterprise after soured experiences with city politics, Mische became a consultant in 1914, and worked outside of the park bureau on not only landscape, but larger civic issues concerning conservation.

World War I and the influenza pandemic of 1918-1919 slowed progress on projects as well as record keeping. It wasn't until the early 1920s, under Charles P. Keyser's reign as park superintendent, that substantial progress on Mount Tabor's amenities seemed to take off again with the construction of tennis courts and other active recreational facilities, lighting and comfort stations. Ever continuing was the progression of the drive and path system. Under the supervision of Charles P. Keyser, the 1920s also saw the construction of four comfort stations, two situated near the main entrances, one at the crater and another at the summit, along with a caretaker's house and the erection of eighty-eight concrete single pole lampposts with white glass globes, seemingly the same as those promoted by Mische to the Park Board in 1911. Greenhouses were built in the nursery's maintenance yard. Efforts continued during the 1930s to complete the drives called for in Mische's original plan.

Criterion C: Mount Tabor Park and the Olmsted Influence

Mount Tabor Park meets the guidelines for Criterion C as a park landscape that retains many elements of Olmsted design principles. Identified as a prime park location on John Charles Olmsted's first visit to Portland in 1903, Olmsted continued to work with the city on land acquisitions, park boundaries and as an advisor to his ex-employee and colleague, Emanuel Tillman Mische, between the years of 1906 through 1911. Mische was hired as Portland's park superintendent, on Olmsted's recommendation, in 1908 and remained in that position until 1914. He then continued a relationship with the city as an independent landscape designer. Mount Tabor Park reflects its original design, crafted by Emanuel Mische in 1911, and illustrates the design principles advanced by the Olmsted firm.

Olmsted Landscape Firm: Park Development in the Nation

With the Progressive Era's emphasis on hiring outside professionals as consultants, the emerging field of landscape design captured the attention of prominent citizens and city governments who wanted to hire well-known landscape designers to help beautify their cities and make them as desirable as possible. Frederick Law Olmsted, Sr.'s participation in the design of New York City's Central Park in the mid-1800s and his, and his namesake son's, affiliation with the 1893 World's Columbian Exposition in Chicago, set his Boston landscape firm at the forefront of landscape design. The Olmsted's, and other known designers, found themselves in high demand by cities, other agencies and elite land owners all over the country entranced with the precepts of the City Beautiful movement. The Olmsted firm included his nephew and step-son, John Charles Olmsted, son, Frederick Law Olmsted, Jr., and Charles Eliot, all extremely influential individuals who touched hundreds of public parks, and public and private institutions and developments across the nation. An "Olmsted Park" became a hallmark of civil society in the United States. John Charles Olmsted was hired as a consultant to Portland and Seattle in 1903 and these cities, like so many other places, have him to thank for some of their

most beautiful parks. Because of the influence of the Olmsted firm, and the receptivity of the nation to the ideals they espoused, the profession of landscape architecture was conceived at Harvard University (Charles Eliot's father, Charles William Eliot, was president of the university) and this profession in turn sparked the beginnings of urban planning.

The senior Olmsted was a man of the land, trained by experience and the family's appreciation of beautiful, natural places. Frederick Law Olmsted brought to his work as a landscape architect (he helped coin the term) years of experience and world travel. He, like his colleagues and mentors Andrew Jackson Downing and Calvert Vaux, blended social consciousness with land management. Born of American soil, influenced by the magnitude of the American west's landscape, Olmsted helped foster the idea that landscape could play a healing role on a personal as well as a social level. Rebelling against the tight confines of the Old World's formal landscapes that reflected a sense of opulence, his designs spoke more to the democratic society where large beautiful landscapes were available to all citizens regardless of social standing or race. These concepts became imbedded in the City Beautiful movement's message to civic individuals, policy makers and bureaucrats.

Already having been a reporter, covering Civil War issues in the South, Olmsted was able to sway public opinion. His inspirational appeal, written while serving as chairman of the state's commission for Yosemite, called for legislation to keep Yosemite in the public domain. It was entitled, "Yosemite and the Mariposa Grove: A Preliminary Report, 1865." The suppression of this document for over a century, along with the political hassles he encountered with his work on Central Park, could possibly have been the reason why he and his sons chose to work as consultants outside of the bureaucracies and why their commentaries to the bureaus and policy makers warned of the dangers of politicizing irreplaceable landscape resources.

The Olmsteds have had such a profound effect on American landscape design that the adjective "Olmstedian" has been coined to describe open spaces exhibiting their touch. Subject to interpretation, there are some generally agreed upon components of features that the Olmsted firm strove for and that are illustrated by enduring examples of the landscapes that they designed. The National Association for Olmsted Parks has provided a concise overview using what they describe as the "Seven S's " of Olmstedian design principles: scenery, suitability, style, subordination, separation, sanitation, and service. The scenery, even in small or active spaces, provides passages of scenery and indefinite boundaries. Avoidance of specimen planting and hard edges and the utilization of shadow and light help to enhance the sense of space. The suitability of the design is dependent on respecting and making use of the naturally occurring elements of the topography of the space itself. The style of the design is specific to a desired effect. A soothing pastoral effect is achieved with an open expanse of greensward dotted with small bodies of water, groves of trees or scattered individual trees. The abundant sense of the picturesque style is achieved with mass plantings of trees, shrubs, and groundcovers especially on steep slopes where the play of light can impart a sense of mystery. Subordination of every element to the desired effect of the overall design is a hallmark of the Olmsted principles. A thorough separation of differently designed or incompatible areas insures an intact sense of space. Engineering the design to insure sanitation by planning adequate drainage and other considerations into the features so that the space can be easily managed to provide the user with health of body and mind. And lastly, the designed landscape should be of service with utility that meets fundamental social and psychological needs crafted into the design.

John Charles Olmsted: Portland Consults

In 1894, Portland had already taken the investment plunge into an efficient public water system that brought pure mountain water down to collect in four grand open reservoirs, two on the east side, on what was to become Mount Tabor Park, and two in one of the earliest gifted park lands, City Park (now Washington Park.) The reservoirs were designed with the harmony of utility and beauty as advocated by the City Beautiful movement. In its continuing quest to get an edge over other developing west coast cities, Portland was busy planning the 1905 Lewis and Clark Exposition. In this time of zeal, park planning and the City Beautiful movement ideals got a substantial push in Portland. As the east coast park and city designers had looked to Europe for inspiration, newly developing western cities depended on the eastern cities not only for inspiration, but expertise.

The Portland Park Association engaged the Olmsted firm to help with the design of the expo grounds and other parklands for the growing city. Though preferring the name association of Frederick Law Olmsted, Jr., it was John C. Olmsted who made the trip to Portland in 1903, the same year that Frederick Law Olmsted, Sr. died. Having lived and worked in the far western regions of the U.S., John Charles was a good, albeit second, choice for Portland and Seattle, who jointly enlisted him in the spring of 1903. Reverend T.L. Eliot made the connection for him in Seattle so that his travel expenses could be shared between the cities and it would be better worth Olmsted's time to have another account.

Portland Park Commissioner Lester Leander Hawkins escorted Olmsted and his assistant from his firm, Percy Jones, to many potential and existing park sites around the region. John Olmsted presented a thorough document to the Park Board commenting on the sites and giving specific recommendations. The team visited Mount Tabor on the afternoon of April 19, 1903.[14] They took photographs and in his report to the Park Board, Olmsted made these remarks regarding the butte known as Mount Tabor:

> "There seems to be every reason why a portion, at least, of Mount Tabor should be taken as a public park. It is the only important landscape feature for miles around, and the population in its vicinity is destined to be fairly dense. It is already a good deal resorted to by people for their Sunday and holiday outings, and it will be better known to and more visited by the citizens as time goes on. It has been sufficiently cleared to open up all the important views from one point or another of it, yet there still survive considerable groves of the original growth of fir trees, including many tall ones, as well as other trees and shrubs. There can be but little doubt that public sentiment will cordially support the city government in acquiring considerable land on this prominent and beautiful hill. John C. Olmsted, Report to the Park Board, 1903.

On his subsequent return to Portland, John Olmsted and his colleague Frederick Dawson, developed park acquisition plans and drew up boundaries for some of the parks that had been identified in the 1903 report. Olmsted continued his relationship with Mische over the years that Mische was park superintendent in Portland.

Emanuel Tillman Mische: Continuing the Legacy of Olmsted Design in Portland

Portland's park system benefited from John C. Olmsted's visits at the turn of the century and his "Report to the Park Board of 1903" provided valuable guidance to Portland, still relevant today. Crucial also to the integrity of Mount Tabor Park and other historic parks in the system, was the actual planning and planting of the parks by former Olmsted employee, Emanuel Tillman Mische, hired as Portland's parks superintendent in 1908. His credentials were strong, and five years after his resignation from the Portland position in 1914, the Olmsted firm attempted to entice him back. But Mische stayed on in Portland, working on private and public contracts and serving as a civic leader in city and park planning, and as a leader in the budding field of landscape architecture.

The hiring of Emanuel Mische as Portland's park superintendent was controversial, as was his leaving due to uncomfortable political developments. During his six years at the helm of Portland's parks, however, he left an enduring mark with his insightful correspondence to the City of Portland that continues to contribute valuable information and insight regarding long and short range planning of green space. Few individuals could have brought such a prestigious array of training to fill a position. His design and drafting skills obtained from the years at the Olmsted firm, coupled with his strong expertise in horticulture gained from some of the most esteemed horticultural institutions in the world made him one of the prime foundations of Portland's park system.

The Olmsted heritage continued with Charles P. Keyser who had trained under Mische and stayed on as Portland's park supervisor until 1949. Though not much has been recorded regarding Keyser's life, he credited Emanuel Mische with teaching him what he needed to know about parks and park planning. Much of the integrity exhibited in Portland's historic parks is testament to the continuity of management he gave with an eye for the distinctive style originally laid down by Olmsted and Mische.

Mount Tabor Park: Design and Implementation

After Emanuel Mische was hired as park superintendent and most of the land that was to make up the park had been acquired, his plan and map were unveiled to the public on May 21, 1911 in the Sunday *Oregonian*. True to his tenure with the Olmsted firm, his design relied on key Olmsted design principles. The most formal, elaborate and costly part of his plan addressed the principle of service. With the two large new reservoirs being built on the west side of the park, facing downtown and the majority of Portland's population, Mische wanted to couple water storage with aesthetics by incorporating a large well-lit, waterfall and spray jet scheme utilizing the fall of water between the upper and lower reservoirs. "To contrast this feature satisfactorily will give this park a most interesting possession and the city a uniqueness not met with in any other park in the country," he said. Not naively, he added, "but its cost will be so great and the needs of the parks now are so urgent that we would specifically urge against any attempt to provide for it in the near future." This design feature was never realized, even two years later when once again, the *Oregonian* presented another spread that touted the continuing design process of the park. Mische still sounded hopeful for the cascade scheme and T.W. Tanner, park keeper, helped support the cause by adding, "It is my judgment that power enough could and should be developed by the falling water between the upper and lower reservoirs sufficient to illuminate Mount Tabor and

its driveways and Mountain Crest. There is a fall of 85 feet, which is sufficient to develop electric illumination of the entire park, which in my judgment would produce a most magnificent effect." Seven decades later, a hydroelectric generating system was installed utilizing the fall of water between Reservoir 5 and 6. A small hydro-generating unit is housed in the inlet Gatehouse of Reservoir 6.

The highly defined nature of the concrete reservoir basins surrounded by wrought iron fences with their distinctive gatehouses, leant a formality to the west side of Mount Tabor Park. Mische attempted to address the idea of separation of the incongruous features of this design with the sylvan feel of the rest of the park. "It is contemplated to provide two approaches at the southwest corner formally as a contrast to the native treatment of the remainder of the park," he said. [15] In keeping with the principle of suitability, his emphasis was on making an already beautiful place, complete with native aesthetic vegetation, simply more accessible to the public. His drive and pathway system, one of the hallmarks of the park, is an excellent example of subordination of features that yield to the overall design, as well as meeting the criteria of suitability. The *Oregonian* quotes him as saying, "The drives are located with a view to requiring the least possible scarring of the surfaces consistent with agreeable alignment and grade, where the distant views are to be enjoyed from the best vantage points or where the local vegetation or surface configuration pointedly suggest a traverse route. In passing over the drives on the ascent to the crest the vegetation is to be developed for its local offerings, with vistas opened only at prominent points. It is both impractical and ruinous to expect to have continuous or even large and abundant sweeps of distant outlooks without unduly injuring the forest. Such views are reserved for the summit concourse...The drives encircle the park on all sides, the east and west and wind their way to the top, where is located Mountain Crest, at present occupied by the old dwelling built there many years ago," the article went on to say.[16]

Mount Tabor Park Design: Shaped by Modes of Accessibility

Two predominating features of Mount Tabor Park bear the mark of Emanuel Mische and the Olmsted influence. One is the peaceful grandeur of the forest and the other is the drive and footpath system. Though the park does have several miles of paved drives and even more in the trail system, they are laid out with a master landscaper's touch and with a sensitivity to the natural terrain. The curvilinear design is easy on the eye and inviting to traverse. Though the drives are unnatural, they fit into the scenery, providing alluring passages. In many places, especially along Woodland Drive on the steep east slope, cut basalt rock blocks, probably quarried on-site, reinforce the east side of the drive and add to the rustic beauty of the scenery. In most places there is a forest buffer between the footpaths and the auto drives, adding to the sense of separation. In the name of serviceability, the pathways allow a myriad of routes to be taken so that regular visitors can walk for twenty minutes or one hundred and twenty minutes and not traverse the same path. Mische, and later his assistant, Keyser, did an excellent job of making the park accessible to an urban population while yet maintaining the rural feel. The drives and paths pass through the landscapes of the park exhibiting pastoral or picturesque qualities in a suitable and subordinate way. The historic drives and original pathways were very well constructed and conform to the design principle of sanitation in their quality engineering. When the drive and path system was complete, Mount Tabor butte could be scaled in a private vehicle, by foot or bicycle for stupendous views of the surrounding countryside; the high, snowy peaks to the east and the north, the

surrounding developing neighborhoods and the downtown city skyline backed by the green line of hills three miles to the west. This is one of the features of Mount Tabor Park that keeps visitors returning time and time again.

Mount Tabor Park's design paid homage to a new era of the automobile. In 1912 there were 902,000 registered autos in the United States. By 1913 Portland had approximately 6,000 automobiles in use. Automobiles were considered a source of entertainment. In 1907 the Park Blocks children's festival featured automobile rides as a featured entertainment. City planning, spurred on by the City Beautiful movement, called for creating leisure drives. Mische had a grand plan for a parkway running north from Sellwood along the high banks of the Willamette River. This river parkway was to tie into a tree-lined boulevard that would head east, through the Ladd's Addition neighborhood toward Mount Tabor Park where it would continue north to the meadows of the Columbia River Slough. This boulevard had been the vision of Olmsted when he visited Mount Tabor in 1903. "It appears to be entirely feasible to run a parkway two-hundred feet or more wide out to Mount Tabor," John C. Olmsted remarked. [17] Though the grand boulevard and parkway system was never realized, much money and effort were expended on the drive system within Mount Tabor Park. Grading and paving were completed in sections over many years and were prime expenditures for the park. The geography of the butte, with a primary summit of 643 feet and three smaller rises, stretched from north and south for over a mile. From east and west it measured almost a mile. The winding lanes, each distinctively named, would encircle the butte carrying visitors to a variety of viewpoints over the three-and-a-half miles of paved drive with a five-percent grade.

Emanuel Mische designed the system of drives for a winding but pleasant auto tour. They were to be graded in such a way as to be enjoyable to drive on, macadamized and illuminated. The width would be wide enough for motorcars or wagons but narrow enough to do minor damage to hillsides and forests. The drives would pass by interesting features and views. Visitors could escape from the sights and sounds of the surrounding city but they could also admire it from a high distance. The route could carry visitors in one entrance and out another.

Mische kept at the driveway projects with any funds he could get. A good portion of the drive projects were constructed at times of economic downturns, following Olmsted's advice in his report of 1903: "...it is far more advantageous to employ common labor for park improvement during hard times either to prevent or to diminish the sufferings of the poor and to get the work done at minimum wages." [18] Mische, in his report to the Park Board in 1912 said, "During the winter of 1911 – 1912 the Council appropriated $10,000 to give employment to idle men. The funds were set aside for charity purposes but good use, though by reason of the very nature of the method of employment and the class secured it was thoroughly efficient, nevertheless over 8,000 feet of 32-feet wide drive were cleared and partly graded...The drive connects the hilltop with the East Salmon Street Entrance." [19] Other such appropriations followed and included Works Progress Administration contracts from 1935 – 1939 when work progressed on East Tabor Drive (Woodland Drive), to Mische's design specifications, at a cost of $5,163.

"A system of walks supplement the drives and lead to many charming features it is not desirable to approach by a drive," described Mische of his 1911 plan for Mount Tabor Park. The trail system that he envisioned remains as one of Mount Tabor's park's most cherished attributes. Throughout the park pathways traversed areas

between the drives. Curvilinear pathways paralleled the curvilinear drives. He even provided access to some of the steepest areas with long flights of concrete stairs, some with more than a hundred steps, such as those that ascended the Mountain Crest. There was a type of path for all visitors from adventurers out for real exertion with a steep climb to those wanting a pleasant walk. The reservoirs themselves would, and still do, provide lighted walkways encircling them for easy strolling. Mische asked that the walkways surrounding the reservoirs be wide enough for pleasurable walking.

Summit design: Subordination of Elements

At 643 feet, the summit of Mount Tabor provided a grand panorama of the Portland area and the surrounding countryside both far and near when Olmsted and Mische were working with Mount Tabor Park. On Olmsted's visit to Mount Tabor, he suggested, that at a minimum, the twenty or so acres of the summit should be taken to command the views. Debate carried on for years regarding the grand residence at the top of the butte, commonly referred to as the J.H. Smith Residence. Information on this homestead is sketchy and although there are apparently no photographs of it in city records, a sketch does exist from an early real estate brochure.[20] Mische's plan followed the suggestion made in Olmsted's 1903 report, calling for its removal and replacement with a combination shelter, refectory, comfort station and detached bandstand that in his words were, "...all ...to be generally low and rambling and conspicuously modest and subdued in style, materials and color. Other than this the plan intends no masonry construction, such as an overlook tower, large building or other object attractive in itself mayhap, but disturbing in its effect on the beholder as seen amid surroundings of native rural wildness."[21] These designs followed the Olmsted principle of subordination. The residence was apparently converted to a visitor station in 1913, "Upon the crest, the large old residence has been remodeled and fitted for public use by opening rest rooms, nursery, refectory and comfort features. . . an automatic electric control pumping plant for delivering water from the submerged hill top reservoir to the attic tank in the park house is now being installed," Mische reported to the Park Board in 1913.[22]

Two years later the Smith residence was still sitting at the top of the hill and the plans for its removal and replacement with other services still were being contemplated. In 1917, correspondence to the, "...caretaker living on top of the hill in the big house,"[23] thanking them for the opportunity to make baskets, was addressed to the city and forwarded on by Mayor H.R. Albee. Actual demolition of the Smith Residence did finally occur, though the exact date is unknown. A Tudor-style comfort station was built to the west of the summit in the 1920s. True to Mische's vision, Keyser made sure that the comfort station sits down below the summit, in a position of subordination, so that at present the summit and the views are the commanding presence.

Concerts, especially with the municipal band, were an important activity for the parks to host, though not particularly lucrative. Popular outdoor concerts were held in Mount Tabor and other parks during the summer months. In 1913 one concert per month was held during July and August. Possibly these concerts, with attendance of one-thousand or more people, were held at the Mountain Crest Summit where the first public comfort station and refectory were remodeled into the Smith residence. According to the 1915 park report, the long flight of stairs was completed giving "large numbers of visitors" access to the hilltop. By 1917, concert attendance at Mount Tabor Park had more than doubled. Concerts have continued in Mount Tabor Park near

the area that Mische recommended in the 1913 Report of the Bureau of Parks in what he referred to as "the concert grove on the ridge adjoining Belmont Street." Present concerts are held in the month of July in the crater amphitheater in this vicinity.

Plantings: A Balance of Native and Non-native Species

Mische was appreciative of the flora in his new Pacific Northwest home. He had also been trained at the hand of people with a deep appreciation of forest preserves. His desire was to keep the natural forest feel of the butte, even reforesting the more gradual western slope,"...where it is now open and the openness severely defined by old property lines. It is both impractical and ruinous to expect to have continuous or even large and abundant sweeps of distant outlooks without unduly injuring the forest. Such views are reserved for the summit concourse," he reported to the Park Board of his plan in 1911.

Emphasis was put on the over-story of tall Douglas-firs as well as the under-story of natural shrubs and wildflowers. Mowing was to be kept to a minimum. Primary maintenance of the landscape of the park was to keep the grandest vistas cleared of trees. In the first *Oregonian* article of 1911 announcing the big, new east side park, Mische was quoted with this description of his vision for the Mount Tabor Park: "Except at the two formal entrances, at the terrace garden and the cascades, only native material is to be used or suffered to remain. Moreover, the undergrowth is at no time to be entirely removed from throughout the park, as has been suggested by private individuals." He continued, "This tract offers an excellent opportunity of displaying the exceptional beauty of our native flora. It requires merely the elimination of some sorts, the addition of others or as a whole controlling nature to the extent of determining how her materials shall be massed and arranged."[24]

His attention to practicality and foresight was evident when he commented, "In addition, native vegetation is always adapted to this region, can be depended upon to be safe, enduring, easily repaired should damage occur, and above all can be maintained more cheaply than exotic or foreign vegetation."[35] A good deal of the continuing attraction of Mount Tabor Park, to both human and animal visitors, is due to the amount of native plants that have been retained in some sections of the park, but non-natives are a historic feature of the park. Over the years, perhaps due to the wide variety of trees and shrubs propagated at the on-site nursery, areas of the park have had non-natives integrated into the landscape. These vicinities are predominantly in sections of the park that have been disturbed for entrances, drives or other types of construction. Mische was sensitive to quickly replanting any areas on the side of drives that were disturbed during grading operations. Likewise, he preferred to move slowly in removing vegetation as the drives were being laid out. "It is better, by far, not to remove anything," he said. Many of the non-native trees and shrubs, including many kinds of pines and hawthorns, are mature and add to the historic significance of Mount Tabor Park.

Mount Tabor Nursery: Plant Propagation for the Entire City

In the mid-1800s, orchards predominated in the Mount Tabor vicinity. Apples, pears and other fruits were shipped out by steamer and supplied the California boom towns in a lucrative market. Mount Tabor's south side had a gentle slope with a perfect aspect for plant propagation, providing adequate sunlight and drainage. The

butte rising to the north behind the area, provided a weather buffering element. The elevation was modest, serving the purpose of frost pocket protection. These features appealed to Mische as a fine place to site the nursery that he had called for in his first park report of 1908, a nursery that would serve all the parks and other planting needs of the city.

Though Mische appreciated the native plants of his newly adopted western home, he nevertheless continued his interest in non-native species. Large orders with invoices of over $2,000 were made to east coast nurseries. Invoices to Mische from the United States Department of Agriculture dating from spring of 1909 list plants that were being sent: two *Syringa amurensis,* five *Clematis recta* and three *Clematis species.* Other records indicate his interest in buying shrubs from local growers and wild diggers, especially rhododendrons. Interestingly, a potato crop was recorded as having been grown in 1916 at the Mount Tabor nursery.[26] Propagation stock was also brought from the nurseries supplying the Vanderbilt's Biltmore Estate in the Appalachian Mountains near Asheville, North Carolina.

There are references to a "fruitectium" being establishing at Mount Tabor for the cultivation of plants from seeds or cuttings for nursery stock.[27] In 1913, Harvard's Arnold Arboretum, Mische's, *alma mater,* sent a gift of five hundred Chinese species to him, probably attributable to Ernest Henry Wilson's two collecting trips to China, most recently in 1910. Among the species sent were rhododendrons, hollies, barberries and rhododendrons. This propagation stock went first to the greenhouse at Columbia Park and then was set out in the nursery at Mount Tabor Park. Mische wanted to use the species to begin an arboretum, an Olmsted ideal for every region in the country. Portland's Hoyt Arboretum, in Washington Park, is a result of Mische's plan and Charles Keyser's management.

The nursery at Mount Tabor Park was an important resource for the planned beautification of the city of Portland. An entry from Park Board records of December 1912 recites, "There are trees now growing in the Mount Tabor Nursery to supply a quantity sufficient to extend planting by about 30-40 miles in the fall of 1913."[28] City residents were petitioning for street trees. Mische had a grand plan for the street trees of Portland, an area that the city had been slow to act on, and this may have been one of the thrusts to create a large nursery at Mount Tabor Park. In his Report to the Park Board of 1911, he opened with strong words, "The condition of the street trees are deplorable."[29] Street trees represented at least a stab at the grand boulevards and parkways he wanted to see established from the Olmsted plan. It was a daunting task to keep up with road building plantings and Portland had not developed a clear policy on who was responsible for street trees. Power lines created problems and although the Park Board was apparently responsible for street trees, they had no jurisdiction over them. Mische gave specific recommendations to the Park Board regarding the size of the median strip and even designed a different theme of trees from around the world for the various quadrants of the city. Responses to infestations of elm beetles and gypsy moths eventually helped to clarify the importance of municipally controlled street trees. Besides street trees, the nursery at Mount Tabor Park also provided trees for other parks. The *Oregonian* of August 1913 stated that there were 32,000 tree seedlings set out in the nursery at Mount Tabor for supplying all of the parks. Mische continued his advocacy for Portland to become a city of stately trees. He authored an article published in the August 22, 1917, *The Evening Telegram* about shade trees.

Giant sequoia conifer trees, like those that grow on the western slope of the Sierra Nevada range in California, were brought to Oregon by pioneers such as A. H. Johnson and W. S. Ladd. The Mount Tabor neighborhood has numerous large sequoia *Sequoiadendron giganteum* trees that probably date back to Mische's time. He ordered twenty "sequoia gigantea" in 20"x 20" boxes. Each sampling was reportedly five to six feet tall and cost $6 each. They were to be shipped by rail for 51¢ per 100 pounds from the California Nursery Company in Niles, California, in 1910.[30] It is probable that one of these trees is the giant sequoia, a City Heritage Tree, that towers over the east side of Reservoir 6 today.

Probable references to construction of structures in the nursery area appear in reports from various years, such as advertising for a storehouse and shelter to be built in 1915. Evidently greenhouses were in progress at the nursery site in the summer of 1918 when the city council granted a one-month extension to the builder of the greenhouses. Ten years later, Superintendent Keyser introduced plans for a violet house at the "Municipal Nursery."

The nursery area is comprised of planted grounds and a maintenance yard. Buildings are of mixed time periods with suggested dates of construction ranging from pre-1918 with the greenhouse complex that has had various additions, through the years to the 1987 pole barn. Oral reports of the parks bureau personnel recount the current utilization of refurbished old stable buildings where once the horses that pulled the mowers were kept. Records corroborate that there was a stable at Mount Tabor. Records show that a greenhouse was dismantled in between 1916 and 1917. Columbia Park was the site of the first greenhouses and Mische mentions it in his 1913 report in reference to propagation of the newly acquired stock from Arnold Arboretum. Complaints regarding odors emanating from the manure and compost piles in the smaller Columbia Park may have contributed to moving propagation endeavors to the south side of Mount Tabor.

Reservoirs: Balancing Naturalistic with Formal Design

Included in the boundaries of the Mount Tabor Park nomination is the Mount Tabor Park Reservoirs Historic District, which includes the two 1911 reservoirs, Reservoirs 5 and 6, and the one remaining 1894 reservoir, Reservoir 1.[31] Portland's reservoirs in Mount Tabor Park and those in Washington Park, also listed in the National Register, are some of the nations most intact, functioning examples of public works projects from the City Beautiful movement. The reservoirs are defining features of Mount Tabor Park. Besides the period architecture, they provide outstanding panoramas of the surrounding countryside as well as a link to the historical significance of the butte to the development of the city of Portland.

Emanuel T. Mische planned to incorporate the two new 1911 reservoirs into his design for Mount Tabor Park as a formal feature. Frederick Law Olmsted, Jr. had written an article for *American Park and Outdoor Art Association* entitled, "The Relation of Reservoirs to Parks" in 1899, while Mische was working in the Olmsted firm. Olmsted stated that, "In itself, regardless of its outline or setting, a body of water is beautiful and refreshing, and its value to the public is so well recognized that provision is very often made for giving the public access to the enclosure about a reservoir, whence its surface may be seen."[32] The main discussion focused on what he saw as the wasted potential between different municipal organizations in regards to

reservoir design. In essence he felt that a reservoir in a public park should be designed with cooperation between engineers and landscape designers in order to achieve aesthetics and good value for the taxpayers' investment. In the case of distribution reservoirs, such as the ones at Mount Tabor Park, artificially created with embankments, he suggested keeping to a formal design. The two 1894 reservoirs at Mount Tabor Park followed this precept.

The 1911 reservoirs, constructed when Mische was park superintendent, were also designed to follow a formal theme. Mische attempted to coordinate planning with the Water Board and some of his recommendations were apparently heeded. He paid special attention to the dam face of the Upper Reservoir (Reservoir 5) as this area would be highly visible, illuminated with an open western exposure and a very steep slope. His design called for highlighting the stored water with, as he described it, a "rushing cascade" and "a series of pools..." taking advantage of the drop between them. Gravity pressure could supply several spray jets, adding greatly to the ornamental feature. "To be creditably executed requires considerable massiveness and architectural ornamentation in detail. The lighting must be abundant and some extension work, such as widening the dam and adding balustrades and the like are essential," Mische explained when the *Oregonian* showcased the design in the spring of 1911. To implement this scheme, Mische wanted the Water Board to lay the piping necessary for the cascades when the construction of the reservoirs was undertaken. The cascades scheme was never constructed, probably in a large part due to the lack of funding. According to park reports, as Olmsted had noted in his article, an apparent lack of cooperation did exist between the Water Board and the park superintendent regarding the design of the reservoirs and other park areas.

Mische successfully influenced the design surrounding the reservoirs, such as widening the dam at Reservoir 5 to accommodate the drive across the top that bestows one of the grandest views in the city. Today this view, as well as others on Mount Tabor, are part of the Scenic Resources Protection Plan. The greensward surrounding Reservoir 5 has touches of formality achieved with tree and shrub plantings. He suggested widening the walkway around Reservoir 6, that at present, is one of the most popular exercise and strolling walks in southeast Portland. An unsigned report to the Park Board in 1910 stated, "I have to report that several conferences were had with officials of the Water Board to the end that in constructing the reservoirs at Mt. Tabor there would be a partial carrying out of what would be park plans." As usual, money was a primary concern as, "It has not been contemplated that water funds should be devoted to park construction, but rather that such changes should be made in the purely structural work at this time as would harmonize it with park development whenever the latter is undertaken." In attempting to achieve the design principles of service and sanitation, mention is made of, "a profile and sketch grading plan for the slope between the two new reservoirs." A formal and an informal design for Reservoir 6 were suggested and, "Both propose an ornamental parapet balustrade on the street side of the west walk; Both propose an entrance of some pretension and dignity, with an entrance way rising above the parapet in order to relieve the long, bold sky-line of the parapet."[33] A steep concrete staircase of more than 100 steps climbs up the dam face between Reservoir 6 and Reservoir 5 on the west side of the park instead of Mische's waterfall scheme. A bit of a formal garden is retained with mature shrubs, tree plantings and a lawn area on the top of the dam adjoining the Gatehouse and parapet of Reservoir 1. Concrete steps rise up the south side of the dam face giving access to this area.

Mische's planning attempted to strike a balance between naturalistic features in a majority of the park with formality at the entrances and in the approximately 20 acres that harbored the reservoirs. The elaborate waterfall, fountains and walkway system that Mische envisioned up the western side of the butte were not realized nor were either of his entrance schemes, in their entirety, advanced for the west side of Reservoir 6. However, his ideas have held influence over the years, if modified. The creation of electricity generated by the drop between Reservoir 5 and 6 did come to pass seven decades later when the Portland Water Bureau developed a generating system between Reservoirs 5 and 6, which apparently met engineering guidelines but did not contribute a feature of beauty to the park as Mische desired. Although not part of the cascading scheme down the dam face, Reservoir 2 and 6 eventually did get the spray jets (fountains) that would spout high into the sky from the middle of their basins, providing a grand amenity and some water purification. Allegedly, the aeration would help to counteract the rectangular shape of the reservoirs that could contribute to water stagnation in the corners.

Mische wanted to utilize the flat land at the southwest base of the butte near the lower 1894 reservoir, for a major recreation center and for, "picnicking and other pastimes amid sylvan and retired surroundings." Picnicking is integrated into Mount Tabor Park but the formal flat area did not get constructed. His Picnic Grove now Picnic Hill, is one of the great areas he designed and is still maintained as a small picnic area with beautiful interior views of Reservoir 5, and glimpses of exterior views.

Archeological Summary

Though there has been involvement of the Federal Energy Regulatory Commission at the Mount Tabor site since the mid-1980s due to the hydro-electric generating plant, there is no official state record of cultural resource surveys conducted at Mount Tabor. Further research has revealed a site yielding artifacts dating from the Late Archaic period, 2,000 years ago to historic contact in the late 1700s, on the flanks of the butte, outside of the present park boundaries. These findings included: a moccasin last, arrowheads and the "Mt. Tabor Bowl." [34] The bowl got its name from its bowl-like form. It was 21 centimeters long and 14 centimeters wide with distinct depressions on the upper and lower surfaces. The outer edge showed evidence of decoration. Speculation was that it had been used as a grinding bowl or metate.[35] Other unconfirmed reports suggest that there are obsidian flakes within the park boundaries. [36]

Conclusion

Mount Tabor Park is an exemplary representation of a city park developed within the context of the Progressive era and the City Beautiful movement and enhanced with New Deal amenities. The Mount Tabor experience, as called for by Olmsted and Mische, includes the majesty and beauty of mature forest and plantings that yield a sense of stability and mystery. These natural features prevail over subordinated modifications and amenities. The varied terrain and the views yielded, the crater area, and the subtle integration of the buildings and other structures all contribute to make Mount Tabor Park one of the historic treasures of Portland, Oregon.

Mount Tabor Park is an excellent example of a city park that combines the principal elements that developed during the various movements that shaped American parklands. The recreation movement is represented with tennis courts, jogging and bicycling paths, and horseshoe pits. The playground movement is identified by the three open-air playgrounds. The three remaining reservoirs, with their dignified features and beautiful deep, open water views, provide an outstanding historic resource, a living record of the City Beautiful movement at its finest with their marriage of beauty, utility and the democratic principle of the first municipal service, drinking water. Another element of service, the Mount Tabor Nursery, is important not only to the historic integrity of Mount Tabor Park, but to the entire Portland parks system and, in fact, all city properties, as the continual provider of trees and other plants since it was established early in the park's history.

As defined by the National Association for Olmsted Parks, Mount Tabor Park's design embodies the "Seven S's" of Olmsted design principles: scenery, suitability, style, subordination, separation, sanitation, and service. The park's picturesque scenery provides a sense of passages and indefinite boundaries. The sheer size, nearly 200 acres, as well as the natural softly rugged terrain leave the visitor with a sense of wonder. The temperate rainforest climate nurtures remarkable plant growth, and the towering trees and lush greenery of the understory and grass make at once a soothing and exciting impression. The steep wilder areas are still endowed with seasonal wildflower shows, a rare thing in the midst of the city. The suitable design respected these natural elements and encouraged a "hands-off" policy in much of the park, acknowledging the serviceability of native vegetation for long-term maintenance. Mische's designs, like the Olmsted's, speak to long-term service, and his main aim in Mount Tabor Park was to achieve accessibility. He did so with the path and drive system, so well crafted that they have demanded little maintenance over the years and achieve the goal of not only service but sanitation, as their drainage is well engineered. Mische's thorough respect for the process of constructing without mass destruction set the tone that was followed by Keyser in the years it took to complete the drive and path system. The drives and paths subordinate themselves to the landscape in their position and their grade. Subordination has been used in most of the amenity design, especially of the built features, with the exception of the reservoirs. Their design is one of more formality, and the land around them follows a loosely pastoral theme with the reservoirs and their grassy setting acting as the bodies of water and the greensward. The three reservoirs embody the blending of beauty and utility, and the deep, sparkling water and the romantic period architecture add drama and charm to the park experience. Active recreation is represented at Mount Tabor Park, and although playgrounds, horseshoe pits, tennis courts, basketball and volleyball courts, even a small ball diamond, exist, they do not dominate. These amenities are tucked in here and there, so although the park has experienced, as most open space has, construction of modern features, the landscape allows separation and subordination.

In 1911, Emanuel Mische, Park Superintendent, summed up Mount Tabor Park well when he said to the Park Board, "One of the most pleasing accents of the general landscape of the city is this property, rising with majestic eminence from the broad East Side plain."

Notes

[1]City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[2]Ibid.

[3]City of Portland, Annual Report of the Park Board, 1903.

[4]The Oregonian November 5, 1908, p. 14.

[5]The Oregonian March 30, 1909, p. 16.

[6]City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[7]Ibid.

[8]City of Portland, Annual Report of the Park Board, 1903.

[9]Keyser, Charles Paul. Correspondence to Emily Moltzner, Oregon Geological Society, August, 31, 1961.

[10]City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[11]Keyser, Charles Paul. Correspondence to Emily Moltzner, Oregon Geological Society, August, 31, 1961.

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[14] Guzowski, Kenneth James, "Portland's Olmsted Vision (1897-1915): A Study of the Public Landscapes Designed by Emanuel T. Mische in Portland, Oregon." Thesis, University of Oregon, June, 1990.

[15] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[16] The Oregonian May 21, 1911, p. 10.

[17] City of Portland, Annual Report of the Park Board, 1903.

[18] Ibid.

[19] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[20] J.H. Smith Residence, Summit of Mt. Tabor. The Hart Land Co., Brochure of Mount Tabor Views. (ca. 1890's, ed.)

[21] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[22] City of Portland, Annual Report of the Bureau of Parks, 1913.

[23] City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[24] The Oregonian May 21, 1911, p. 10.

[25] Ibid.

[26] City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[27] Ibid.

[28] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[29] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[30] City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[31] Anderson Geller, Cascade, "Mount Tabor Reservoirs Historic District, National Register of Historic Places." 2003.

[32] Olmsted, Frederick Law, Jr., "The Relation of Reservoirs to Parks." American Park and Outdoor Art Association, Paper 32. Boston: Rockwell and Churchill Press, 1899.

[33] City of Portland, Stanley Parr Archives and Record Center. Report for Board Meeting, Park Department, January 7, 1910.

[34] City of Portland. "East Buttes, Terraces and Wetlands Conservation Plan," Ordinance number 166572, 1993.

[35] Beals, Herb (ed.), "Screenings," The Oregon Archaeological Society. Vol. 22 No. 7; July, 1973.

[36] City of Portland. "East Buttes, Terraces and Wetlands Conservation Plan," Ordinance number 166572, 1993.

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UTM REFERENCES

5 10 531495 5040207
Zone Easting Northing

VERBAL BOUNDARY DESCRIPTION

The nominated property is bounded beginning at S.E. 60th Ave. on the west at S.E. Lincoln St. north to S.E. Harrison St. east to the approximate location of S.E. 64th Ave. north to S.E. Stephens St. west to S.E. 60th Ave. north to approximately S.E. Madison St. east to approximately S.E. 62th Ave. north to S.E. Yamhill St. east along the south boundary of S.E. Yamhill St. to approximately S.E. 65th Ave. south to S.E. Taylor St. east along the south boundary of S.E. Taylor St. to S.E. 71st Ave. south roughly along S.E. 71st Ave. to Mountain View Dr. south following the east property boundaries of the west side private residences to approximately S.E. Grant St. west along the south property boundary of Warner Pacific College to approximately S.E. 65th Ave south to S.E. Division St west to approximately S.E. 64th Ave. north along roughly S.E. 64th Ave. to S.E. Lincoln St. west along the north boundary of the street to S.E. 60th Ave.

The boundary has some irregularities as shown by the heavy black line on the accompanying map entitled, Mount Tabor Park Boundary Map.

BOUNDARY JUSTIFICATION

The boundary represents the present boundary of Mount Tabor Park. It is roughly the same boundary as the original park plan of 1911*presented to the Portland Park Board and corresponds to the original park properties purchased between the years of 1888 and 1922, with the exception of the southwest corner of the property bounded roughly by S.E. 64th Ave. at S.E. Division St. north to roughly S.E. Caruthers west to S.E. 60th Ave. south to S.E. Division St. east to roughly S.E. 64th Ave. that was occupied by Reservoir 2 and was sold to a private individual in the 1990's.

*(Excluding the proposed eastern boundary section. See the Original Plan by Mische 1911)

Mount Tabor Park · Boundary Map

N →

Black area:
Environmental
zone overlay

S.E. Lincoln St.

S.E. Salmon St.

S.E. Yamhill St.

S.E. Belmont St.

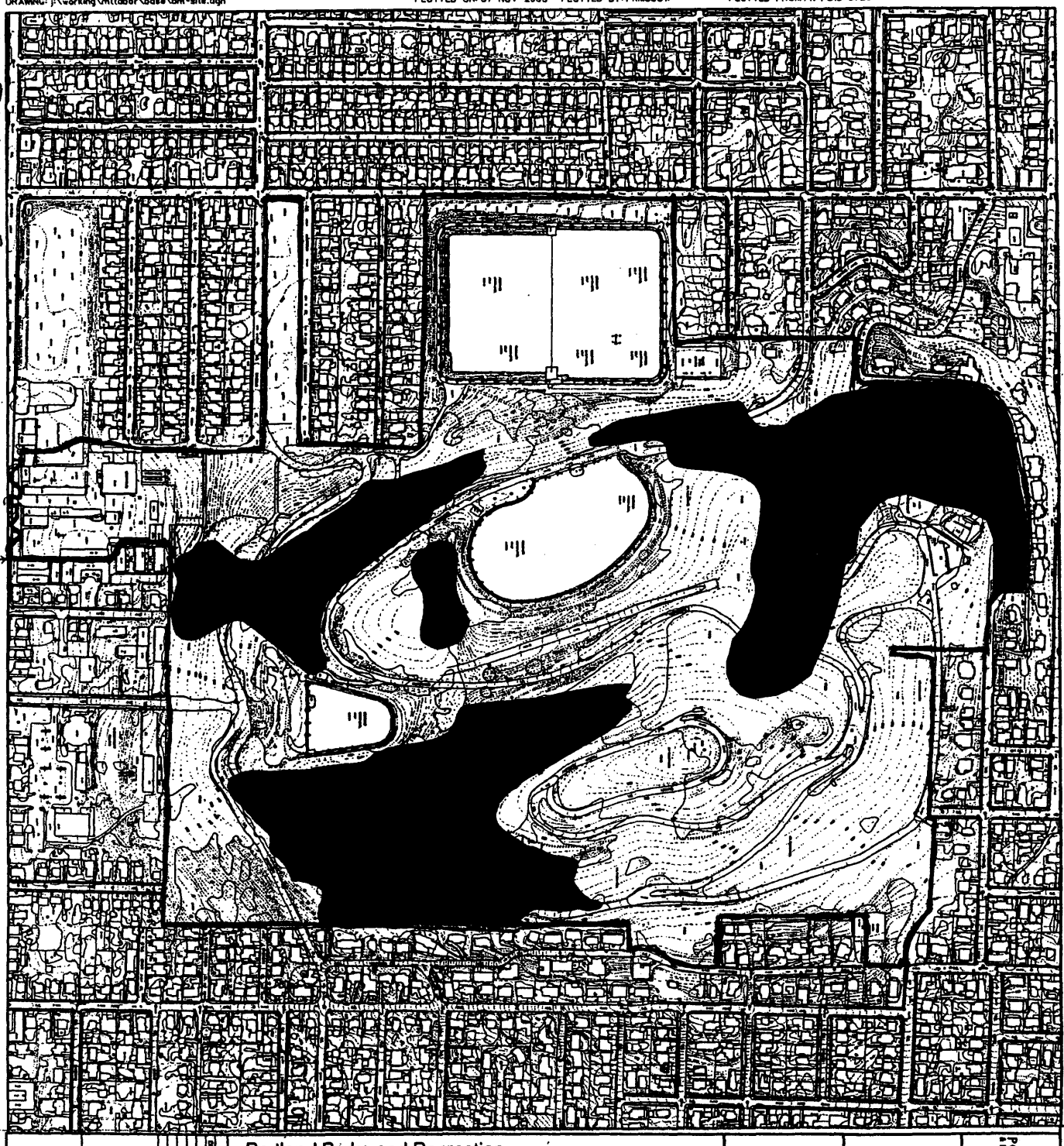
DRAWING: j:\working\mttabor\base\bm-site.dgn PLOTTED ON: 07 NOV 2003 PLOTTED BY: PKMCGOW PLOTTED FROM: PK-PB13-0720

S.E. Division St.

S.E. 60th Av.

S.E. 69th Ave

S.E. 71st Ave.



S1
of 1

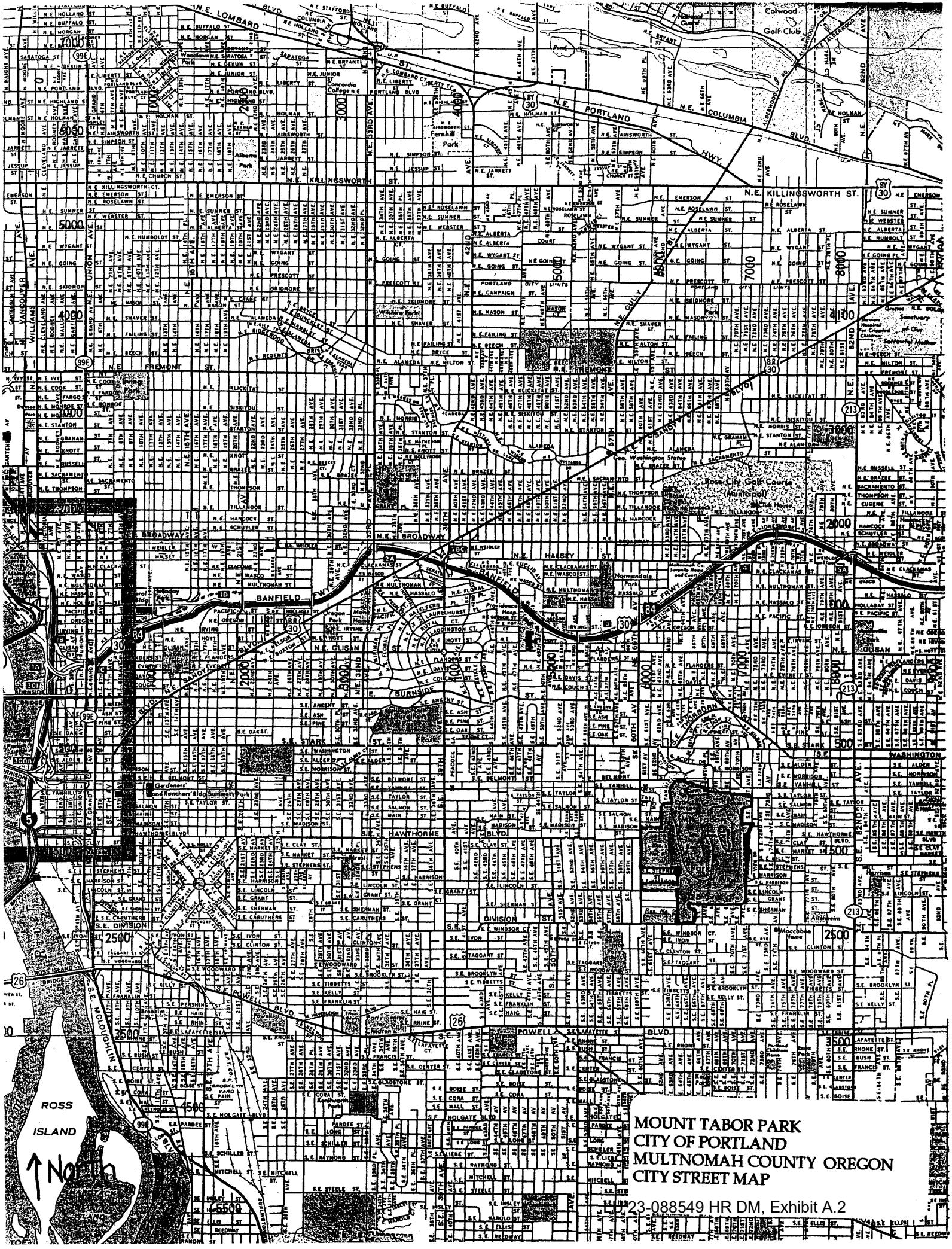
Portland Parks and Recreation
JIM FRANCESCONI, Commissioner ZARI SANTNER, Director

Existing Conditions
Mt. Tabor Park
Portland, Oregon PROJECT MANAGER:
DATE: 07 NOV 2003 SCALE: 1"=400' DRAWN BY: SECTION:

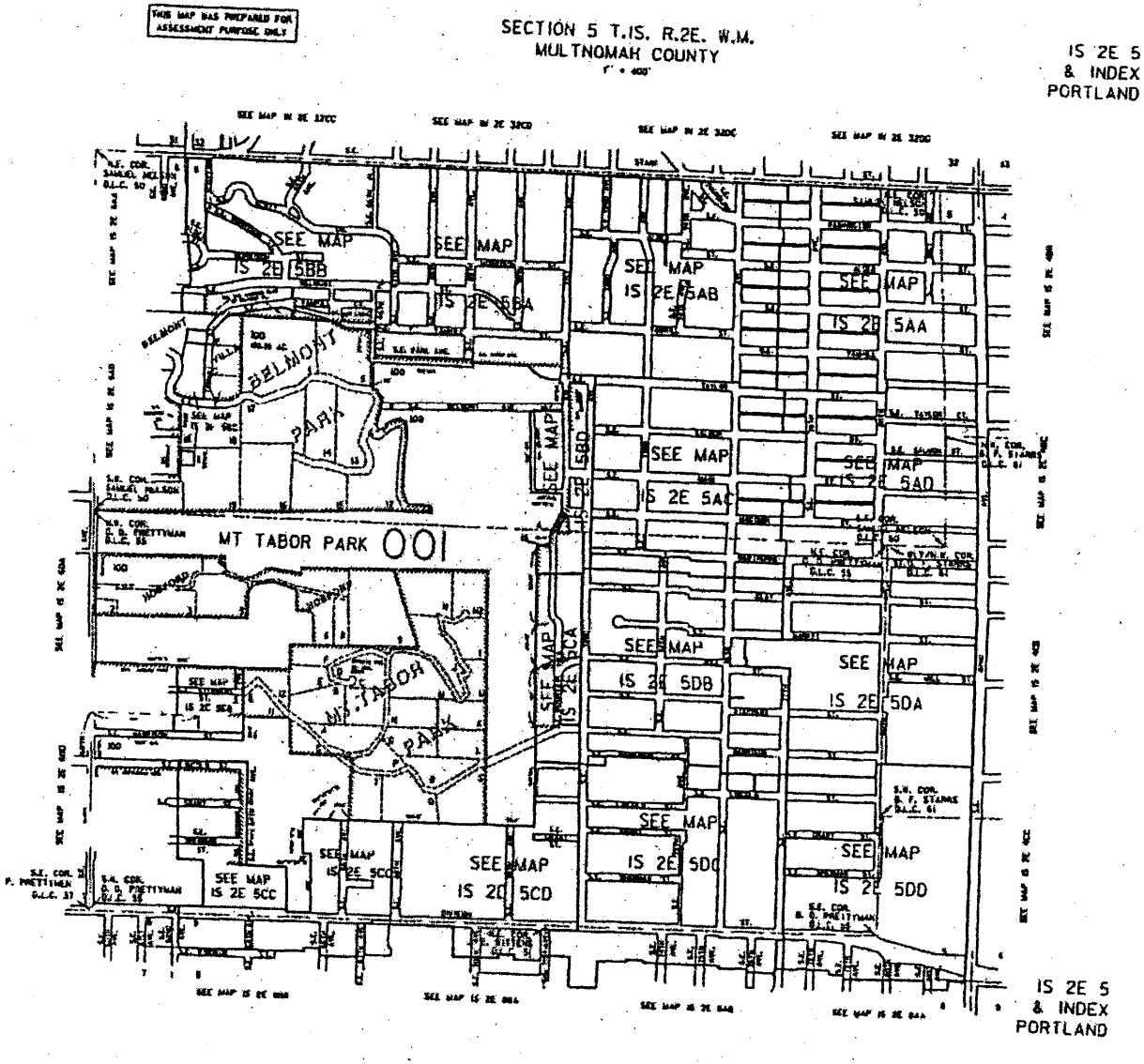
REVISIONS

PORTLAND PARKS & Recreation

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
BOUNDARY MAP 2003



23-088549 HR DM, Exhibit A.2



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MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON

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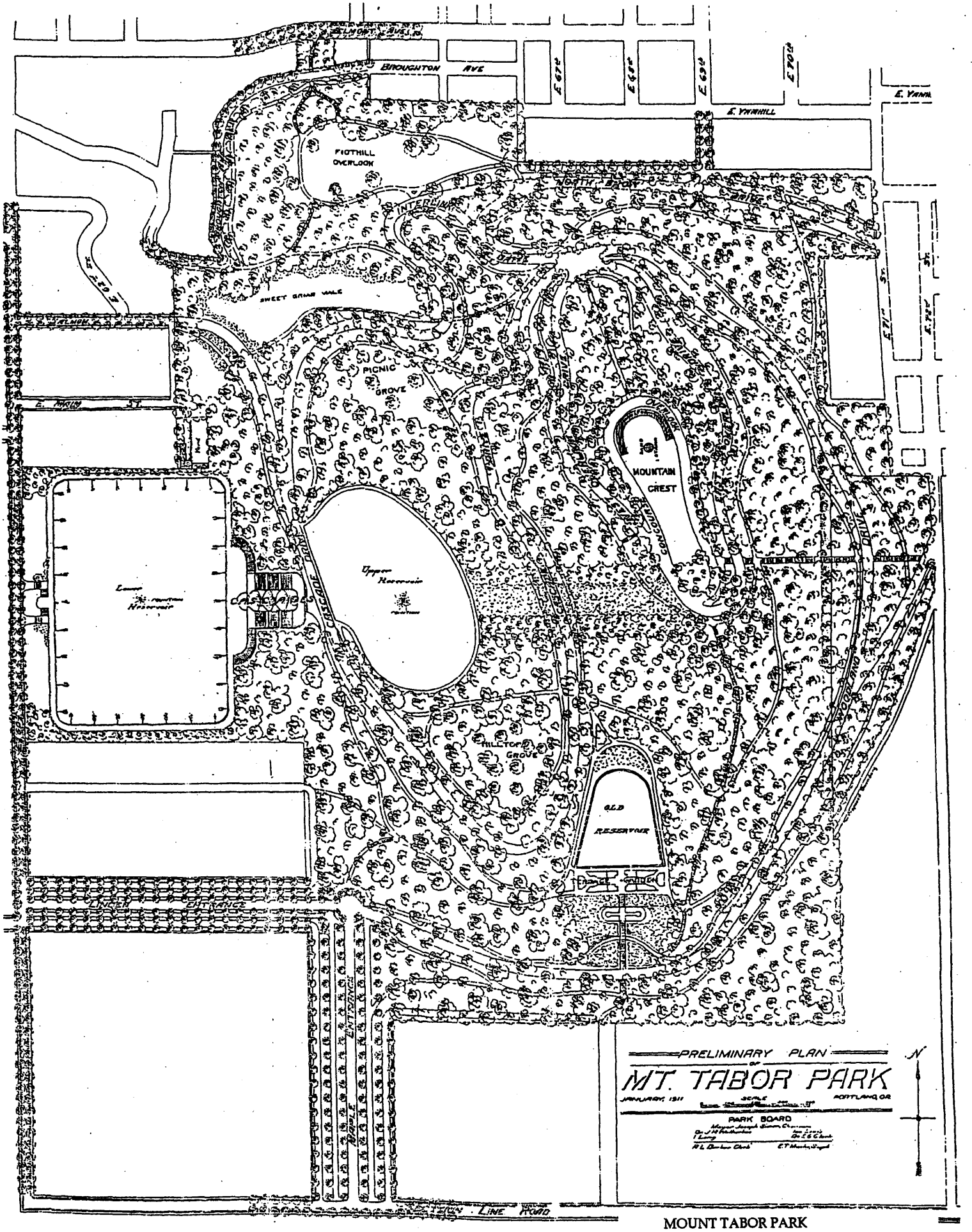


MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY, OREGON
ORIGINAL PLAN BY MISCHE 1911

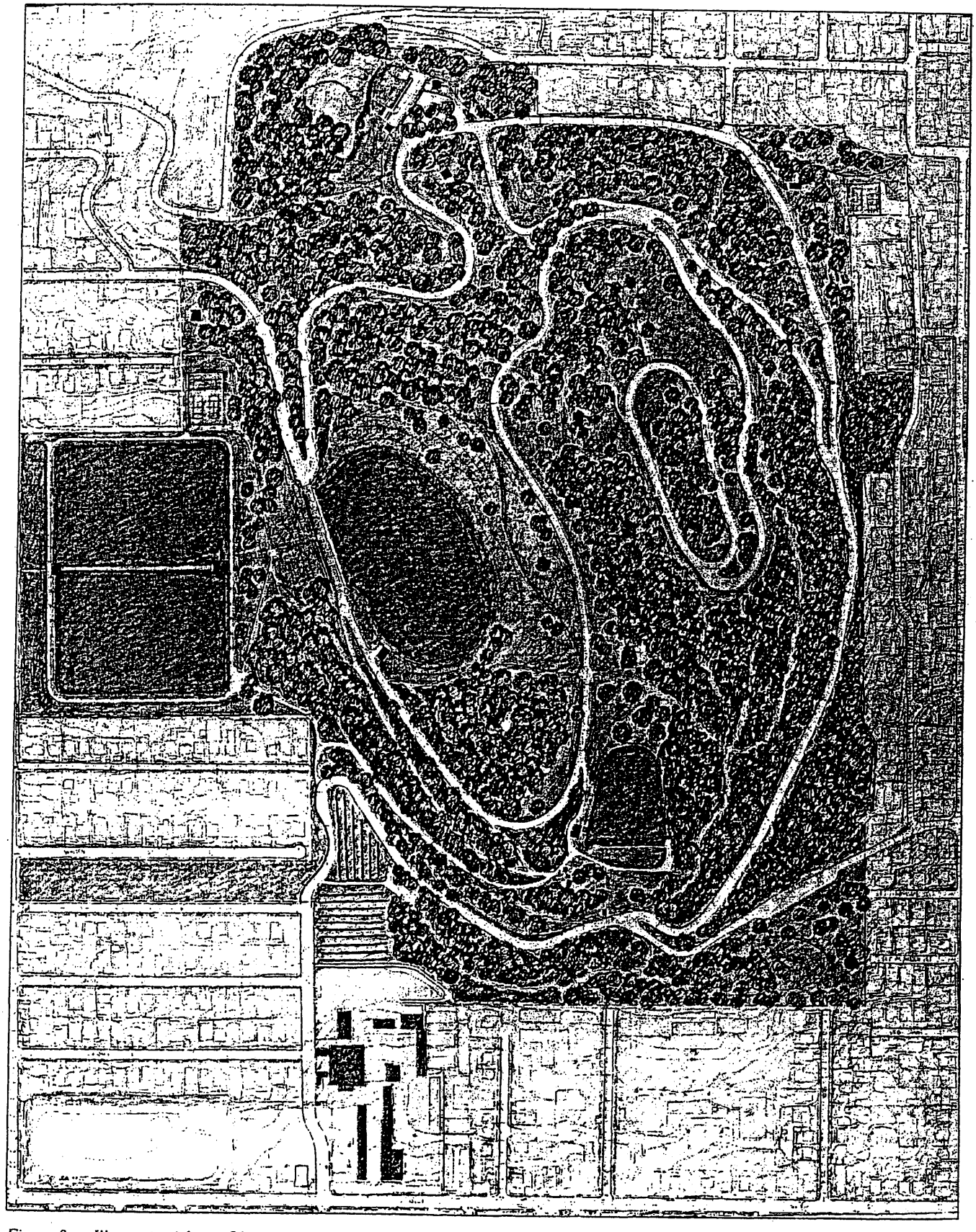
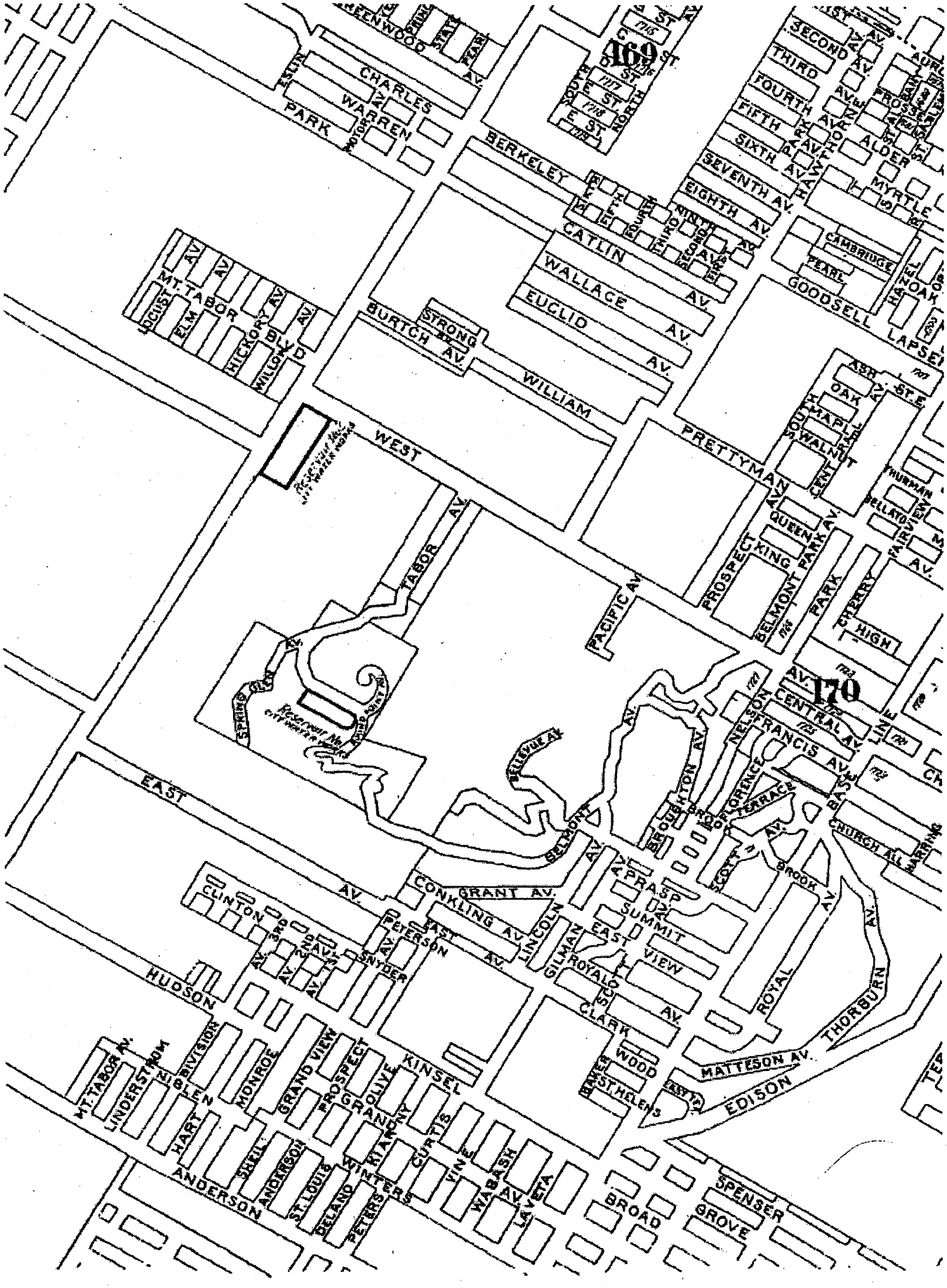
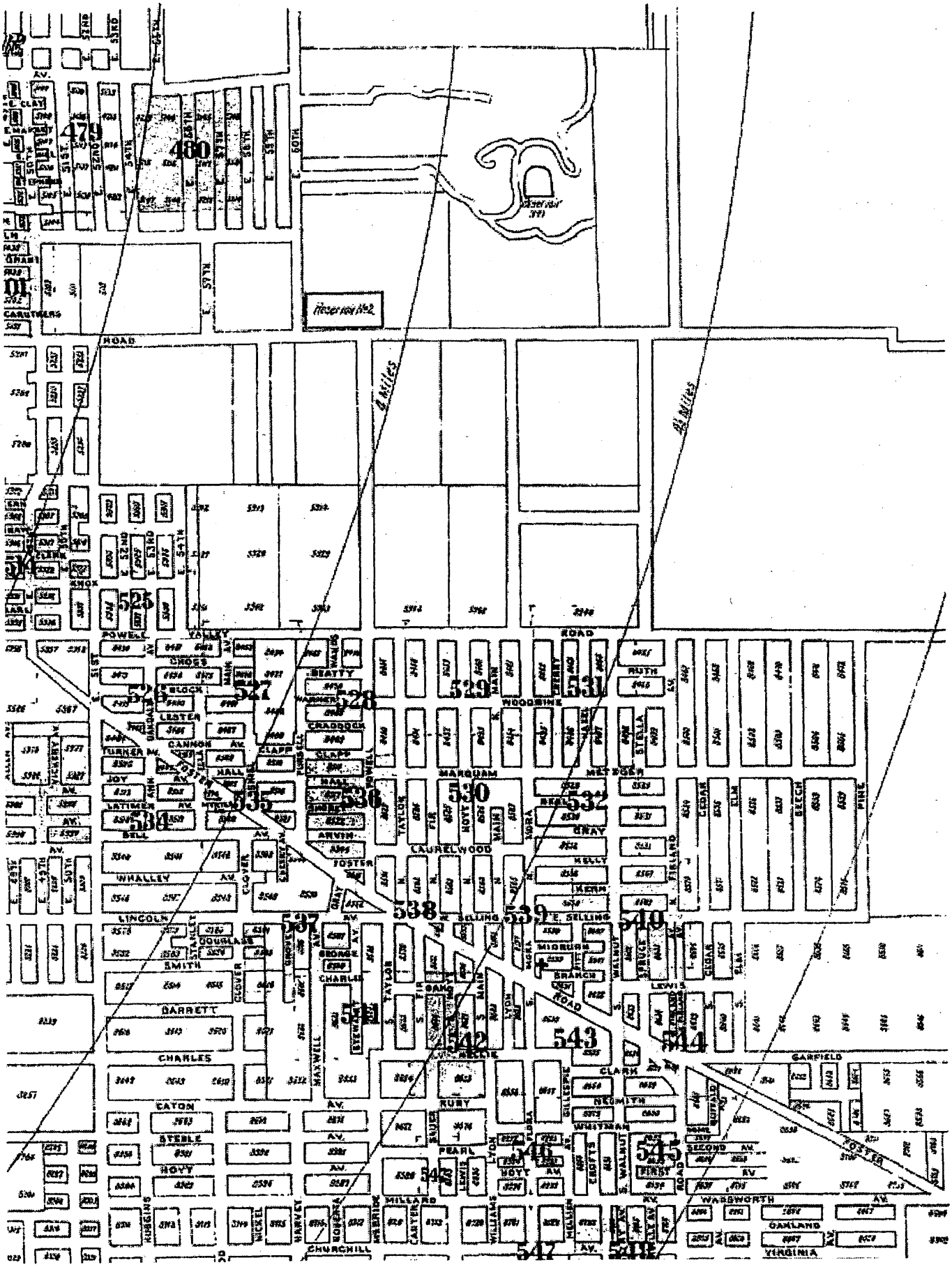


Figure 8 - Illustrative Master Plan

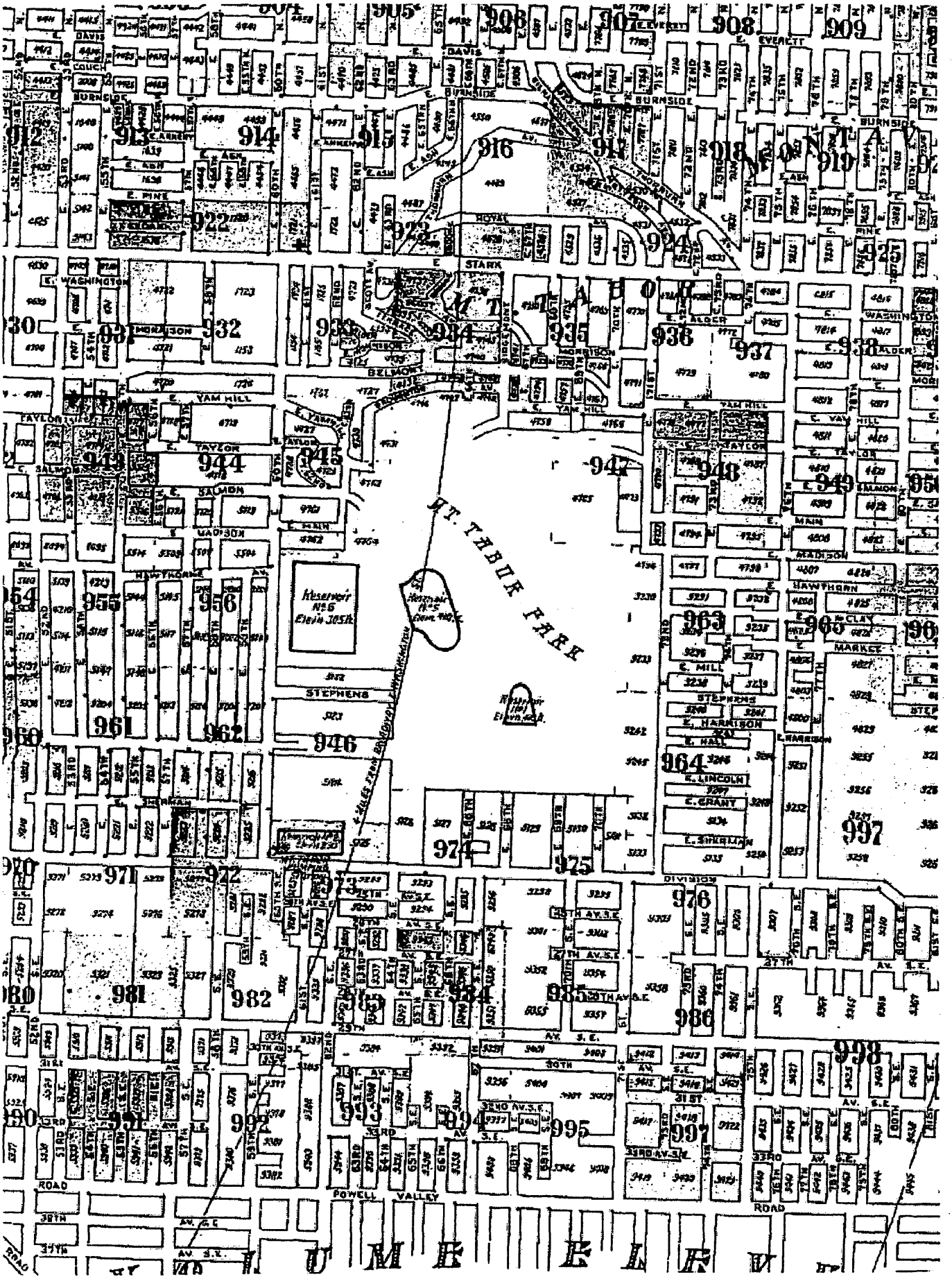
MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
MAP OF MASTER PLAN 2000



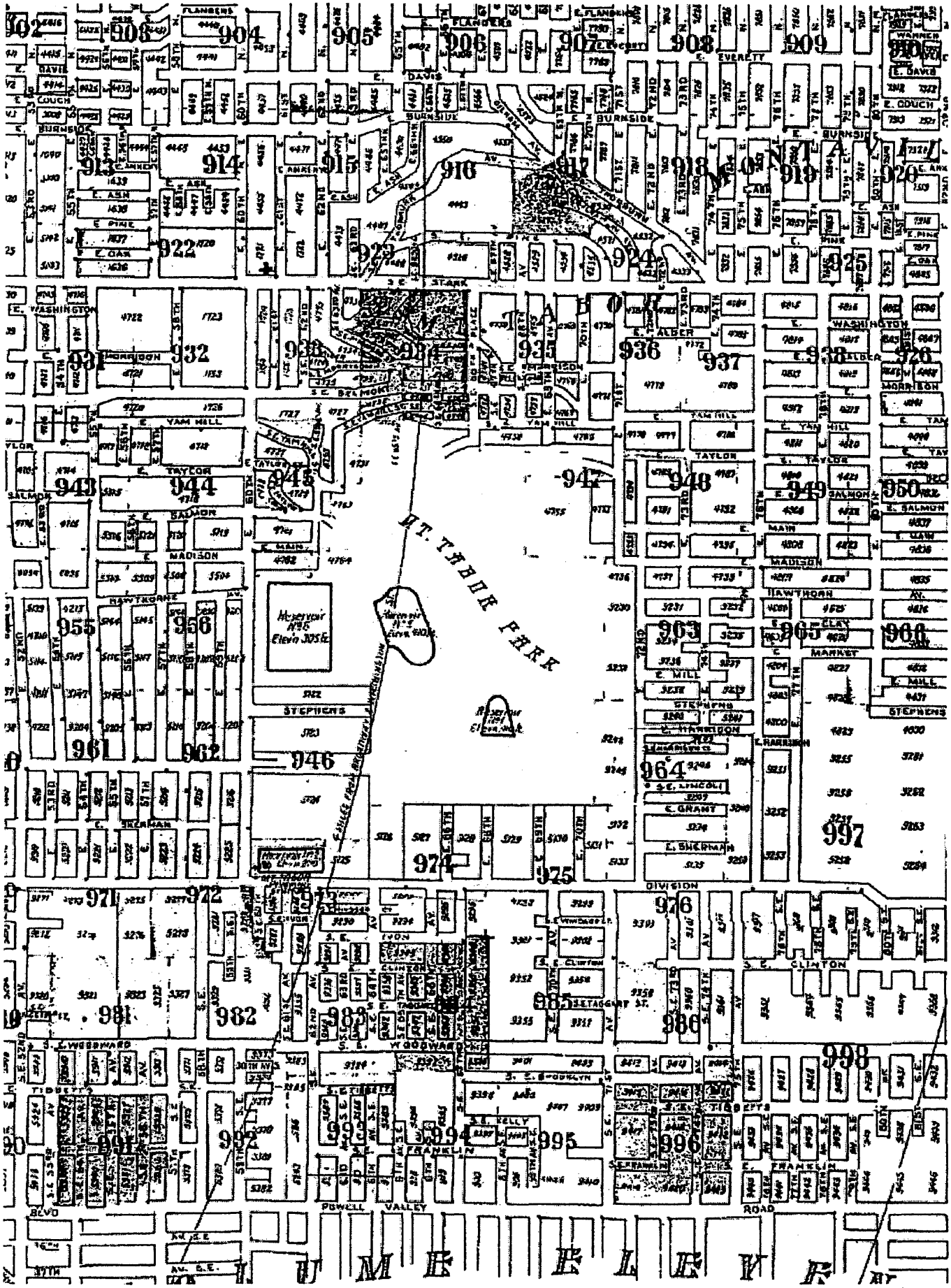
MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 1901



MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 1909



MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 1924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E. DIVISION
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E. WASHINGTON
E. ALDER
E. MORRISON
E. YAMHILL
E. TAYLOR
E. SALMON
E. MAIN
E. MADISON
E. HAWTHORNE
E. MARKET
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S.E. 5607TH AVE.
S.E. 5612TH AVE.
S.E. 5617TH AVE.
S.E. 5622ND AVE.
S.E. 5627TH AVE.
S.E. 5632ND AVE.
S.E. 5637TH AVE.
S.E. 5642ND AVE.
S.E. 5647TH AVE.
S.E. 5652ND AVE.
S.E. 5657TH AVE.
S.E. 5662ND AVE.
S.E. 5667TH AVE.
S.E. 5672ND AVE.
S.E. 5677TH AVE.
S.E. 5682ND AVE.
S.E. 5687TH AVE.
S.E. 5692ND AVE.
S.E. 5697TH AVE.
S.E. 5702ND AVE.
S.E

Photo List for Mount Tabor Park

The following information applies to all photographs:

Resource: Mount Tabor Park
Location: Multnomah County, Oregon
Photo date: November, 2003
Negative location: 1934 SE 56th Portland, Oregon 97215

View: Mount Tabor Butte looking east from Washington Park
Photographer: Cascade Anderson Geller
Photo Number: 1

View: Mount Tabor Butte looking east from S.E. Hawthorne Blvd.
Photographer: Cascade Anderson Geller
Photo Number: 2

View: S.E. Salmon Street Entrance looking east
Photographer: Jeff Lee
Photo Number: 3

View: Caretakers House looking southeast north and west elevations
Photographer: Kimberly Lakin
Photo Number: 4

View: Sweet Briar Vale path at S.E. Salmon St. looking east
Photographer: Jeff Lee
Photo Number: 5

View: S.E. Salmon St. drive with Sweet Briar Vale crossing looking northwest
Photographer: Jeff Lee
Photo Number: 6

View: Reservoir Loop Drive switchback north of Reservoir 5 looking north
Photographer: Jeff Lee
Photo Number: 7

View: Upper path around Reservoir 5 looking west
Photographer: Jeff Lee
Photo Number: 8

View: Looking southwest from Reservoir 5 viewpoint at Reservoir 6, hawthorn grove & sequoia tree
Photographer: Jeff Lee
Photo Number: 9

View: Top of Sweet Briar Vale path & steps to Picnic Hill
Photographer: Jeff Lee
Photo Number: 10

View: Picnic Grove Summit looking southwest toward Reservoir 5
Photographer: Jeff Lee
Photo Number: 11

View: Volcanic crater core & throat from amphitheater looking west
Photographer: Jeff Lee
Photo Number: 12

View: Crater Amphitheater & Stage looking north
Photographer: Jeff Lee
Photo Number: 13

View: Crater Amphitheater Stage rear entrance looking east (Maintenance Building & Office in background)
Photographer: Jeff Lee
Photo Number: 14

View: Crater Comfort Station looking north at south elevation
Photographer: Kimberly Lakin
Photo Number: 15

View: N.E. 69th Ave. Entrance stairs looking southwest
Photographer: Cascade Anderson Geller
Photo Number: 16

View: N.E. Entrance Comfort Station looking southwest east & north elevations
Photographer: Cascade Anderson Geller
Photo Number: 17

View: Summit Comfort Station looking west east elevation
Photographer: Kimberly Lakin
Photo Number: 18

View: Mountain Crest Summit north end big leaf maple grove looking northeast
Photographer: Cascade Anderson Geller
Photo Number: 19

View: Mountain Crest Summit south end east stairs to Harvey W. Scott statue
Photographer: Cascade Anderson Geller
Photo Number: 20

View: Harvey W. Scott statue looking west
Photographer: Cascade Anderson Geller
Photo Number: 21

View: East Tabor Drive viewpoint Mt. Hood, Boring Lava Buttes, east Portland looking east
Photographer: Cascade Anderson Geller
Photo Number: 22

View: East Tabor Drive basalt rock retaining wall looking northwest
Photographer: Cascade Anderson Geller
Photo Number: 23

View: S.E. Harrison St. Entrance Drive looking west
Photographer: Cascade Anderson Geller
Photo Number: 24

View: From north path above Reservoir 1 looking south
Photographer: Jeff Lee
Photo Number: 25

View: S.E. Harrison Drive switchback at Water Bureau Entrance looking southeast
Photographer: Jeff Lee
Photo Number: 26

View: Water Bureau Service Drive approach to Reservoir 6 southeast side looking northwest
Photographer: Jeff Lee
Photo Number: 27

View: Tennis Courts northeast side Reservoir 6 looking south
Photographer: Jeff Lee
Photo Number: 28

View: S.E. Lincoln St. Entrance at Nursery looking northeast
Photographer: Jeff lee
Photo Number: 29

View: Mount Tabor Yard from Nursery looking south
Photographer: Cascade Anderson Geller
Photo Number: 30

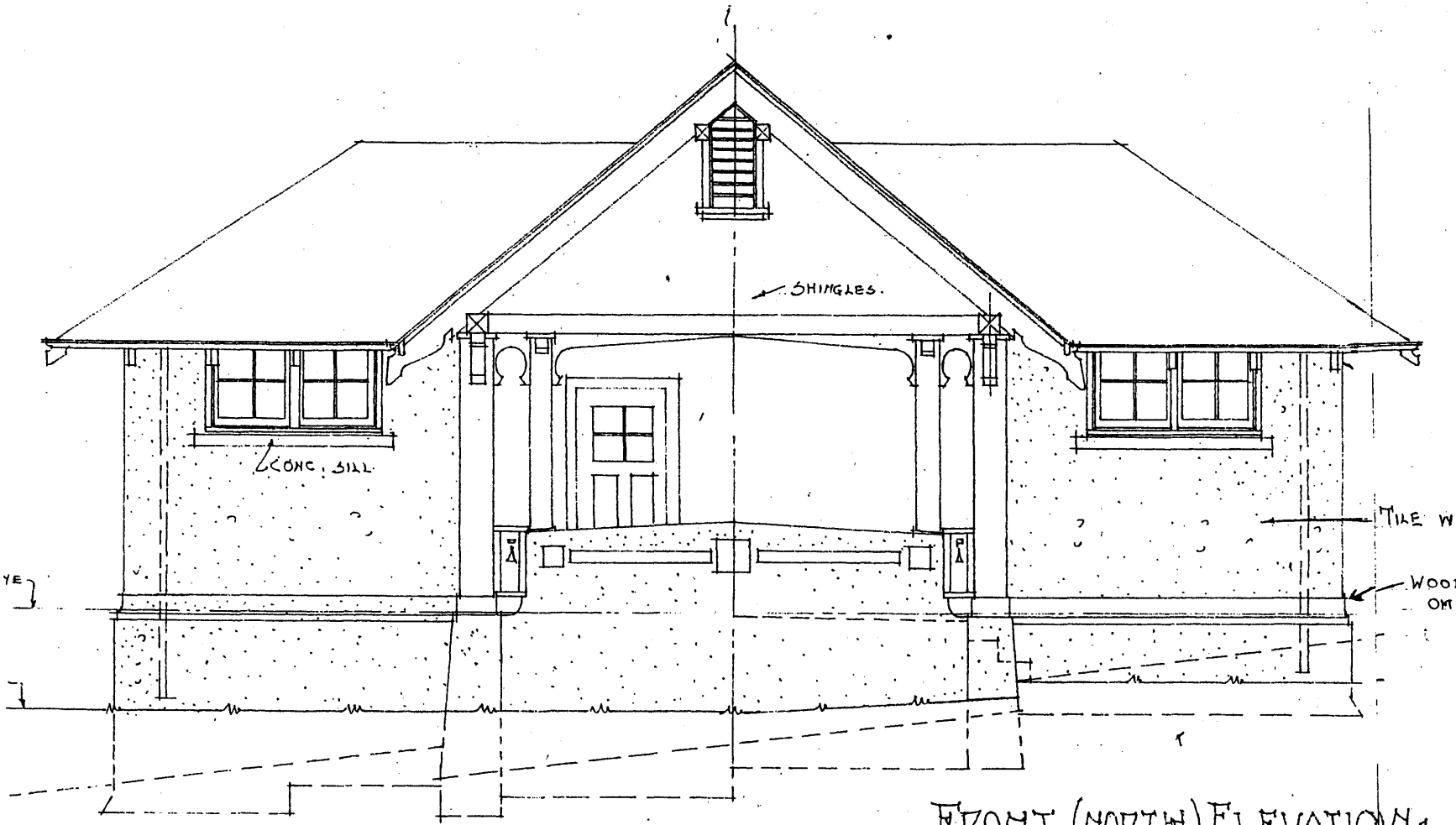
View: Mount Tabor Yard looking northeast
Photographer: Kimberly Lakin
Photo Number: 31

View: Office (Horticultural Services Building) looking northeast south & west elevations
Photographer: Kimberly Lakin
Photo Number: 32

View: Administrative Building &Additions looking east west elevation
Photographer: Kimberly Lakin
Photo Number: 33

View: Mechanical Offices (Community Gardens) looking northeast south and west elevations
Photographer: Kimberly Lakin
Photo Number: 34

View: Nursery finger looking northeast
Photographer: Cascade Anderson Geller
Photo Number: 35



FRONT (NORTH) ELEVATION

SCALE 1/4" = 1'-0"

OTHER ELEVATIONS ARE TO HAV CHANGES AS HERE SHOWN FOR FRONT ELEVATION-

DETAILS SHOWING ALTERNATE CONSTRUCTION

CITY OF PORTLAND - OREGON -
DEPARTMENT OF PUBLIC AFFAIRS
GEO. L. BAKER - COMMISSIONER -

JOB #. 13 SHEET # 4	COMFORT STATION FOR NORTH-EAST MT. TABOR -
DATE. 3-11-16.	BUREAU OF PARKS. J. O. CONVILL - SUPT. C. H. KOBLE - PARK ARCHITECT.

01/13/02 7200-05
Parks planning maps / drawings
Mt Tabor Park

MAP KEY
Mount Tabor Park

Contributing Features

Buildings:

1) Office-Horticultural Services Building
2) Administrative Building & Additions
3) Mechanical Offices Building (Community Gardens Building)
4) Caretaker House-Mount Tabor House
5) Volcano Comfort Station
6) Summit Comfort Station
7) Northeast Entrance Comfort Station

Structures:

8) Crater Amphitheater
9) West Tennis Court
10) East Tennis Court
11) 69th Avenue Stairs
12) Southside Stairs

Object:

13) Harvey W. Scott Statue & Terrace

Non-Contributing Features

Buildings:

14) Garages/Shops-West Side Row
15) Garages/Shops-Eastside Row
16) Lathe House
17) Equipment Building
18) Pole Barn building
19) Duplex Screen House
20) 50" Meter House
21) 44" Meter House
22) 56" Meter House
23) Maintenance Building and Park Office

Structures

24) Summit Radio Tower
25) Additional Greenhouses
26) Picnic Shelter
27) Greenhouse Complex
28) Basketball Court
29) Soap Box Derby Track

S1
of 1

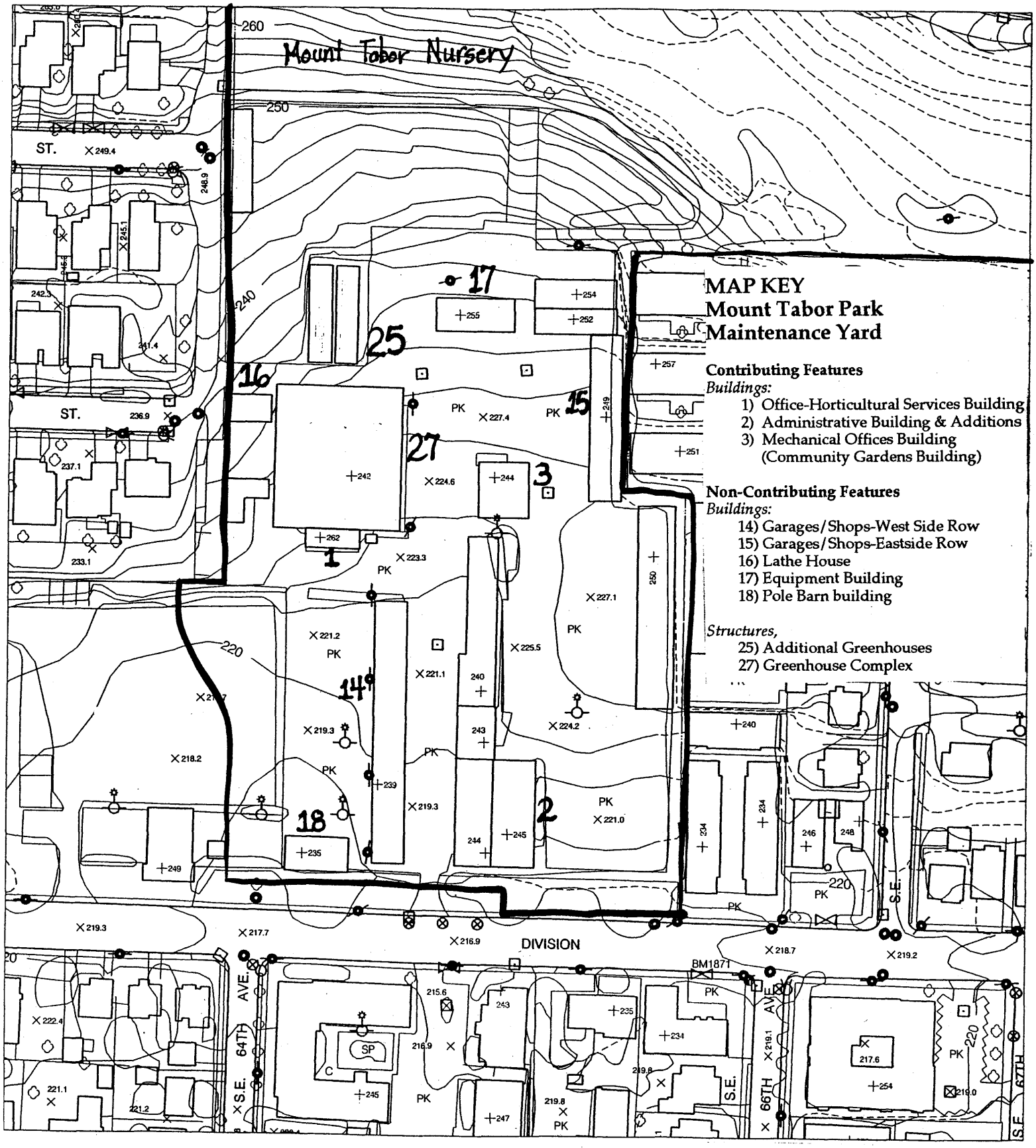
North

DATE	DESCRIPTION	REVISIONS

Portland Parks and Recreation
JIM FRANCESCONI, Commissioner ZARI SANTNER, Director

Existing Conditions
Mt. Tabor Park
Portland, Oregon PROJECT MANAGER:
DATE: 18 MAY 2004 SCALE: 1"=400' DRAWN BY: SECTION:

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
BOUNDARY & FEATURES MAP
2004



MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
MAINTENANCE YARD
INSET MAP
2004


LU 23-088549 HR DM, Exhibit A.2

88549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon 1

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

88549 HR DM, Exhibit A.2

3


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon

088549 HR DM, Exhibit A.2

5


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

6

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

7


LU 23-088549 HR DM, Exhibit A.2

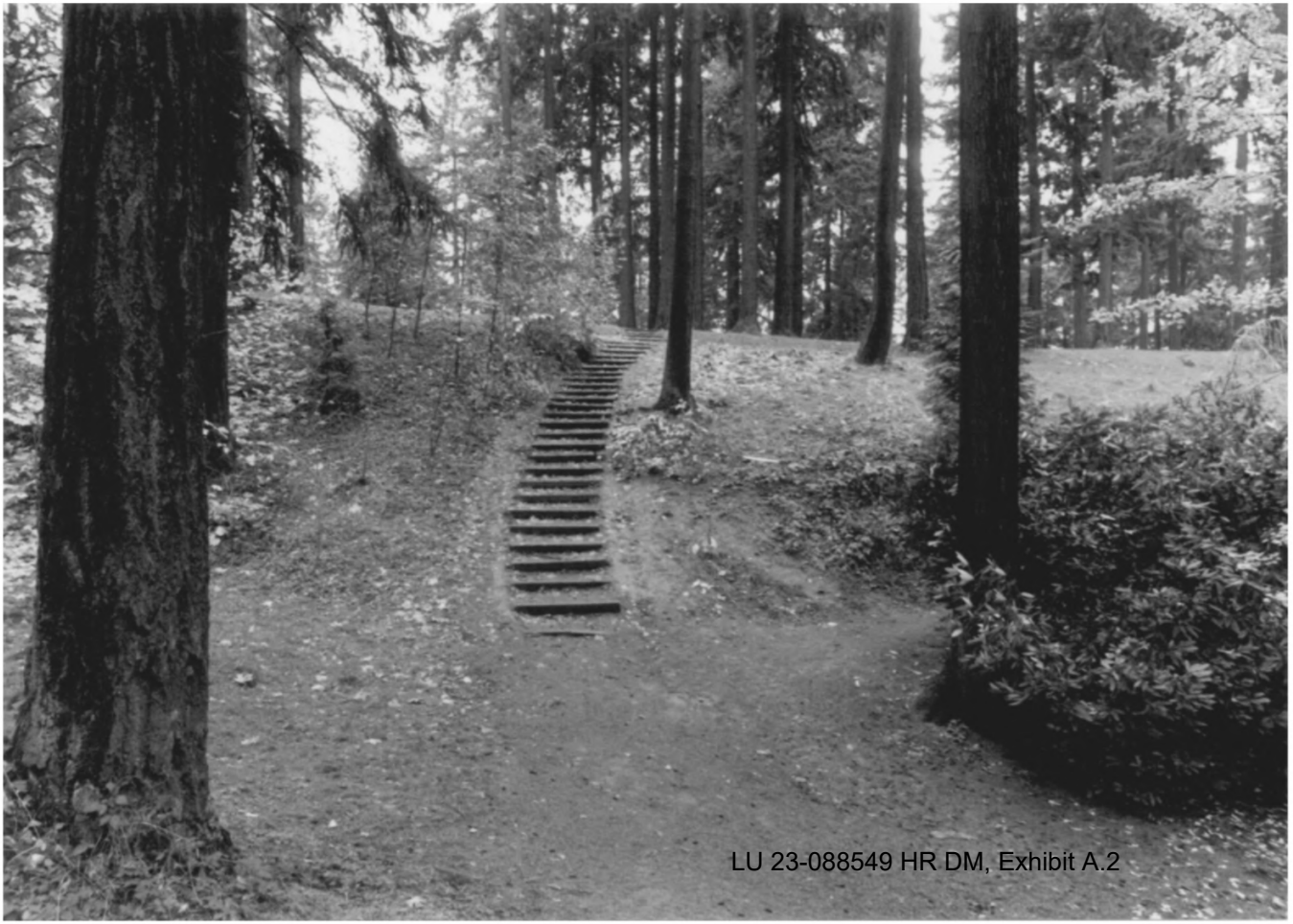
Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

88549 HR DM, Exhibit A.2

10


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

11

38549 HR DM, Exhibit A.2


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

9 HR DM, Exhibit A.2

12


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

HR DM, Exhibit A.2

Portland, Oregon

13


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

549 HR DM, Exhibit A.2

16


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

17

8549 HR DM, Exhibit A.2


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon
18


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon
19

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

23-088549 HR DM, Exhibit A.2

20

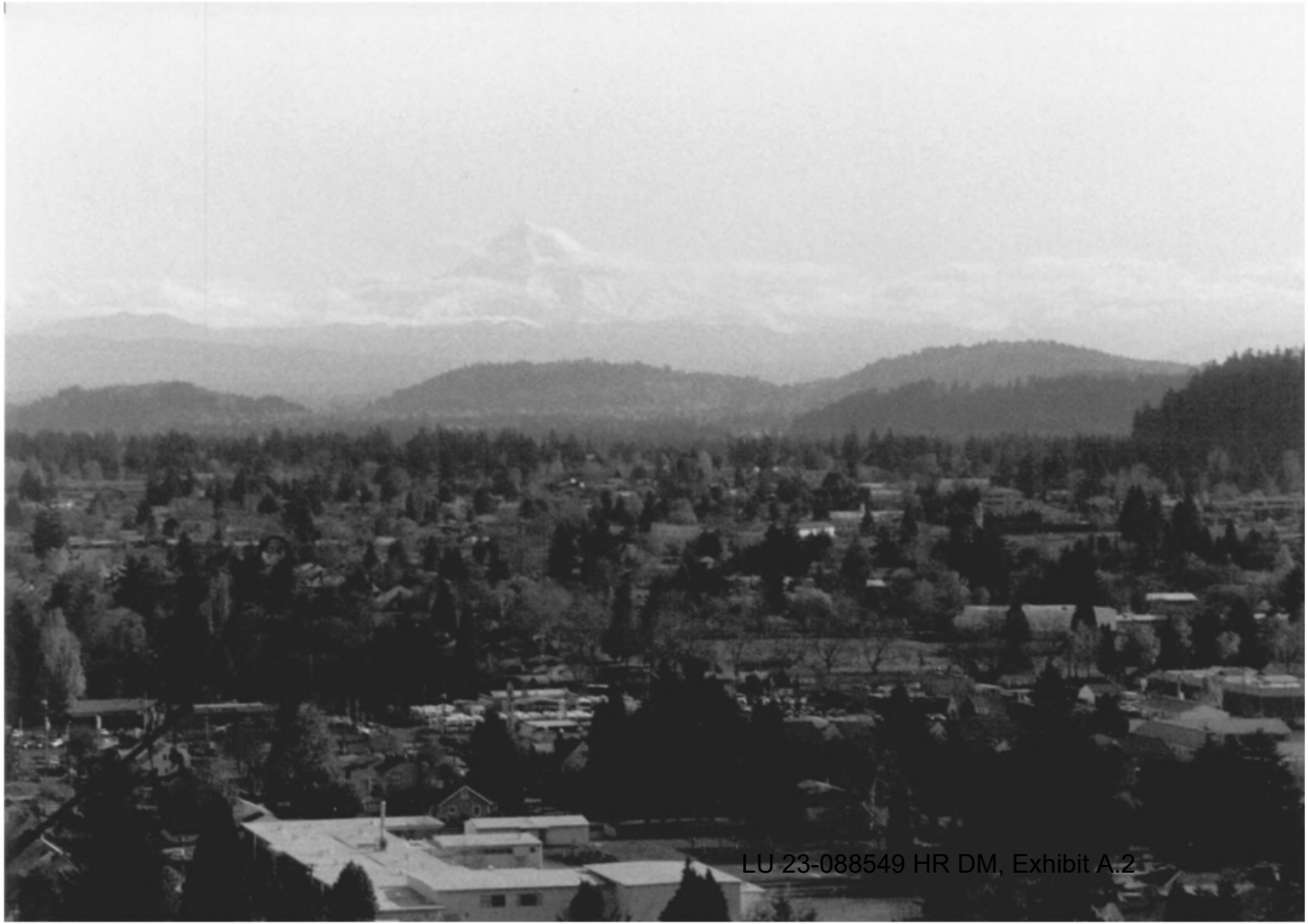
LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

J 23-088549 HR DM, Exhibit A.2

21


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

22


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

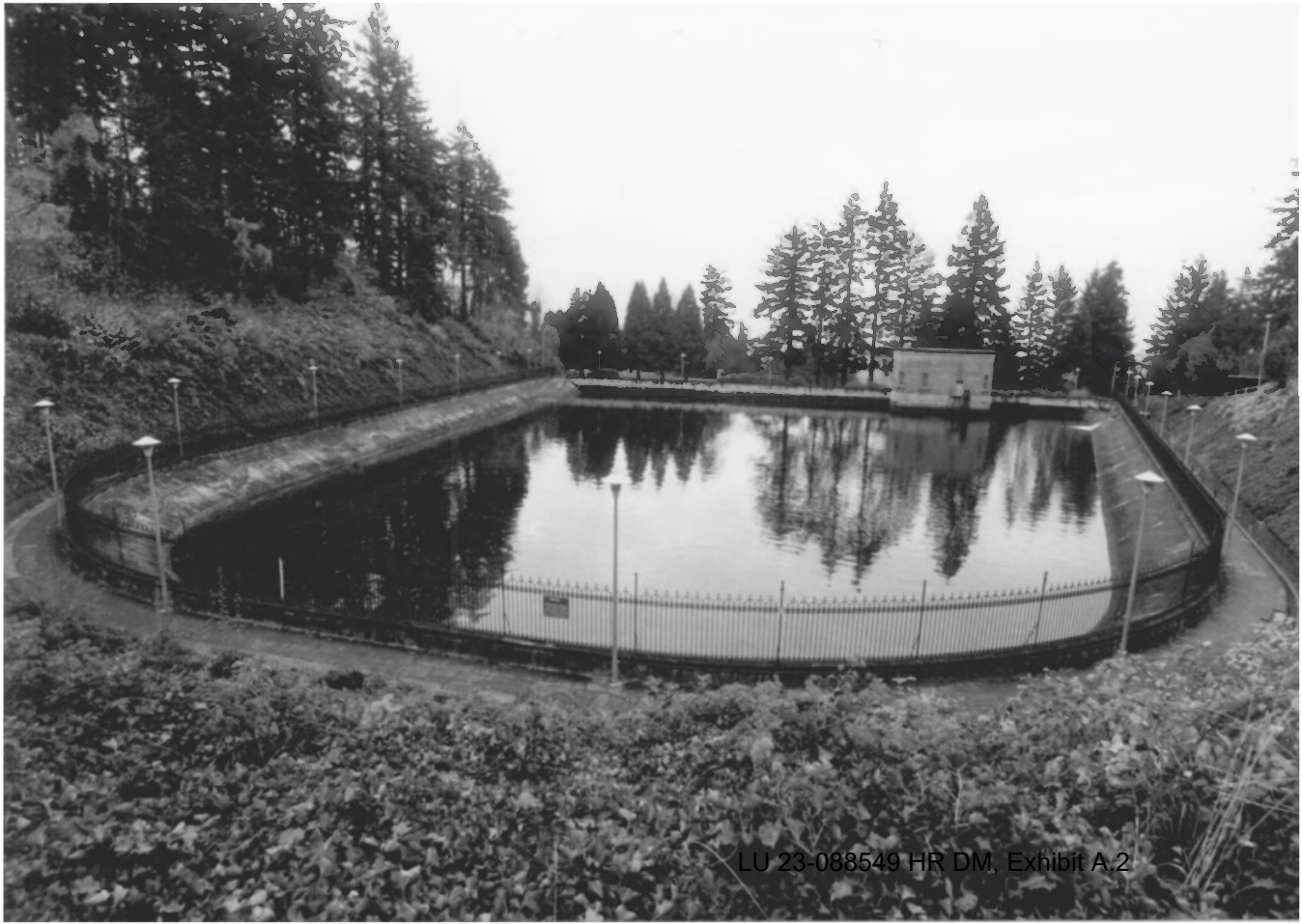
549 HR DM, Exhibit A.2

23

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

25

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

26


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

549 HRDM, Exhibit A.2

27


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Yar

Portland, Oregon

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon

-088549 HR DM, Exhibit A.2

31


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon
32

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park
Portland, Oregon

23-088549 HR DM, Exhibit A.2

33

LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

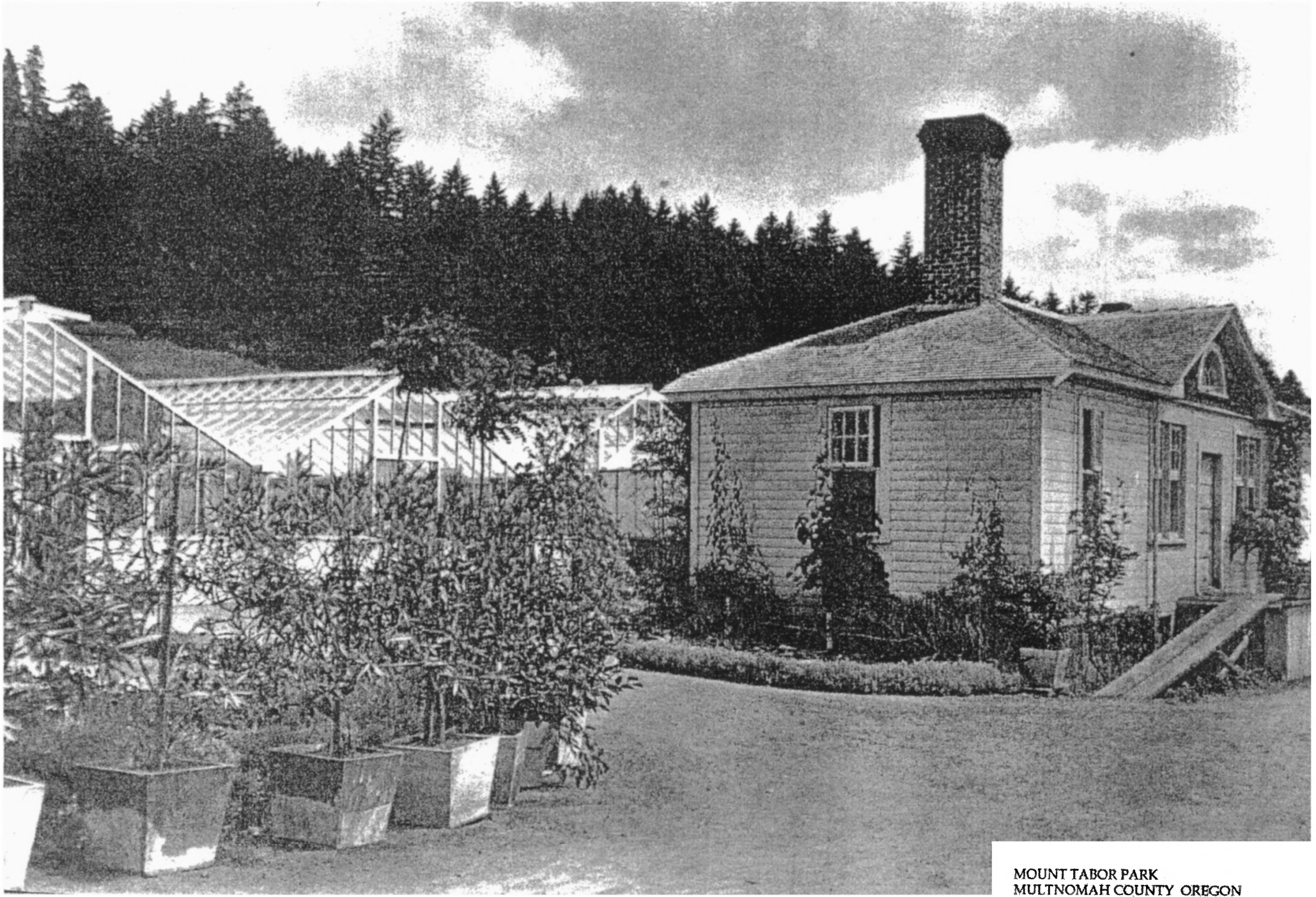
Portland, Oregon


LU 23-088549 HR DM, Exhibit A.2

Mount Tabor Park

Portland, Oregon

35



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN
OFFICE/HORTICULTURAL SERVICES BLI
C 1921

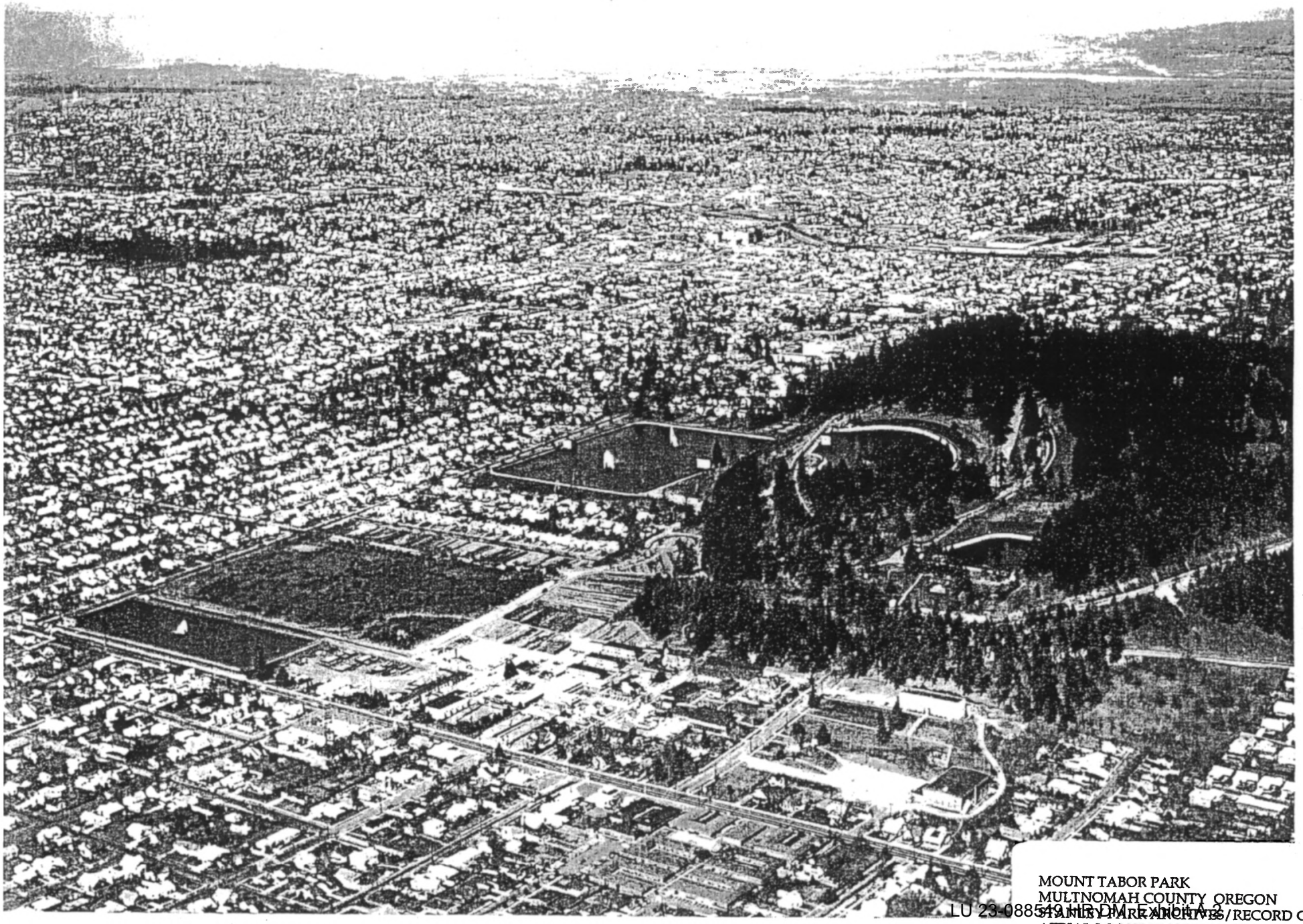
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES
AMPHITHEATER/STAGE CONSTRUC
1934

MOUNT TABOR PARK
MULTNOMAH COUNTY, OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
DRIVE CONSTRUCTION 1934

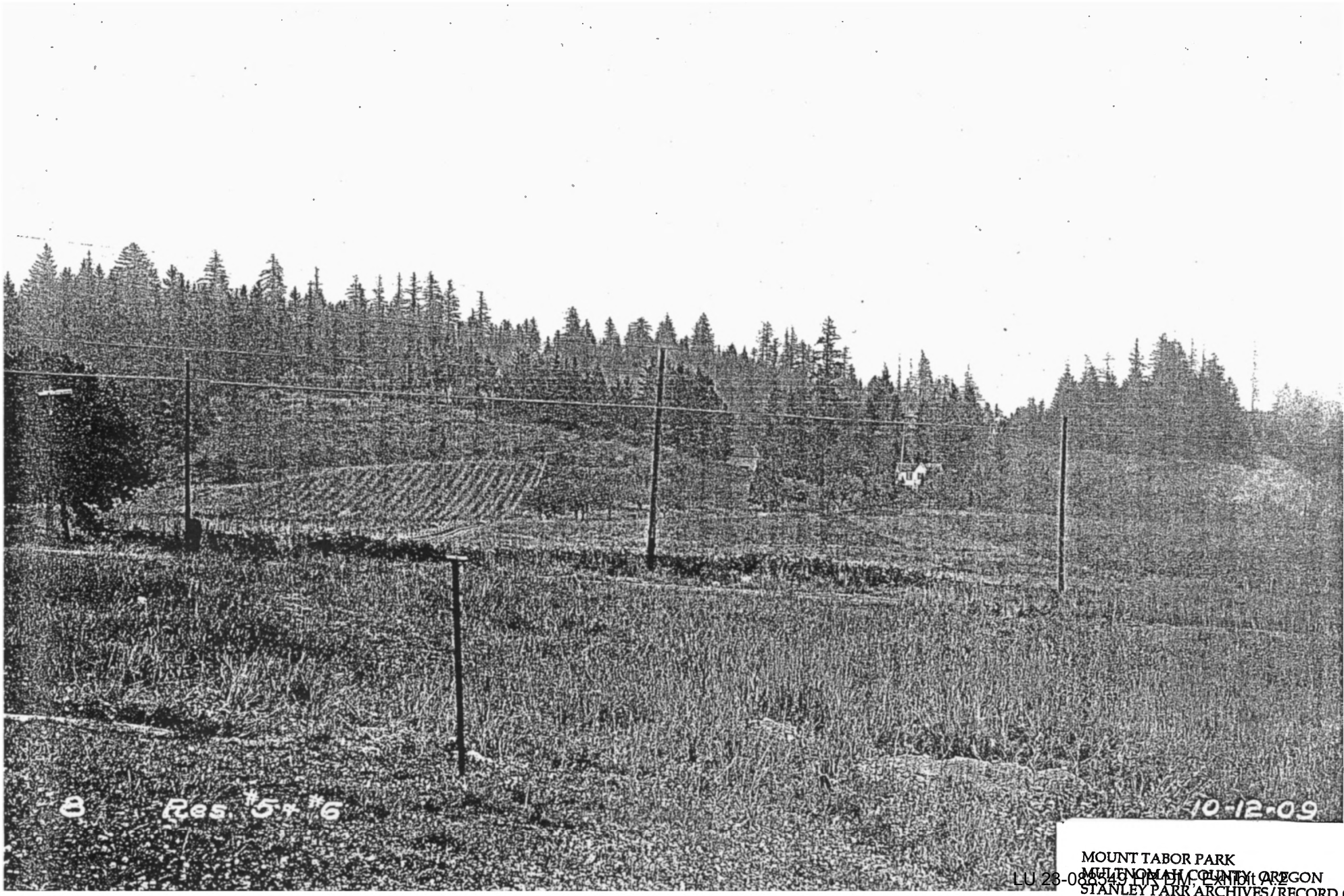
MOUNT TABOR PARK
[illegible], OREGON
STANLEY PARR ARCHIVES/RECORD CEN
WPA PROJECT 476 1935

LU 23-088549 HR DM, Exhibit A.2

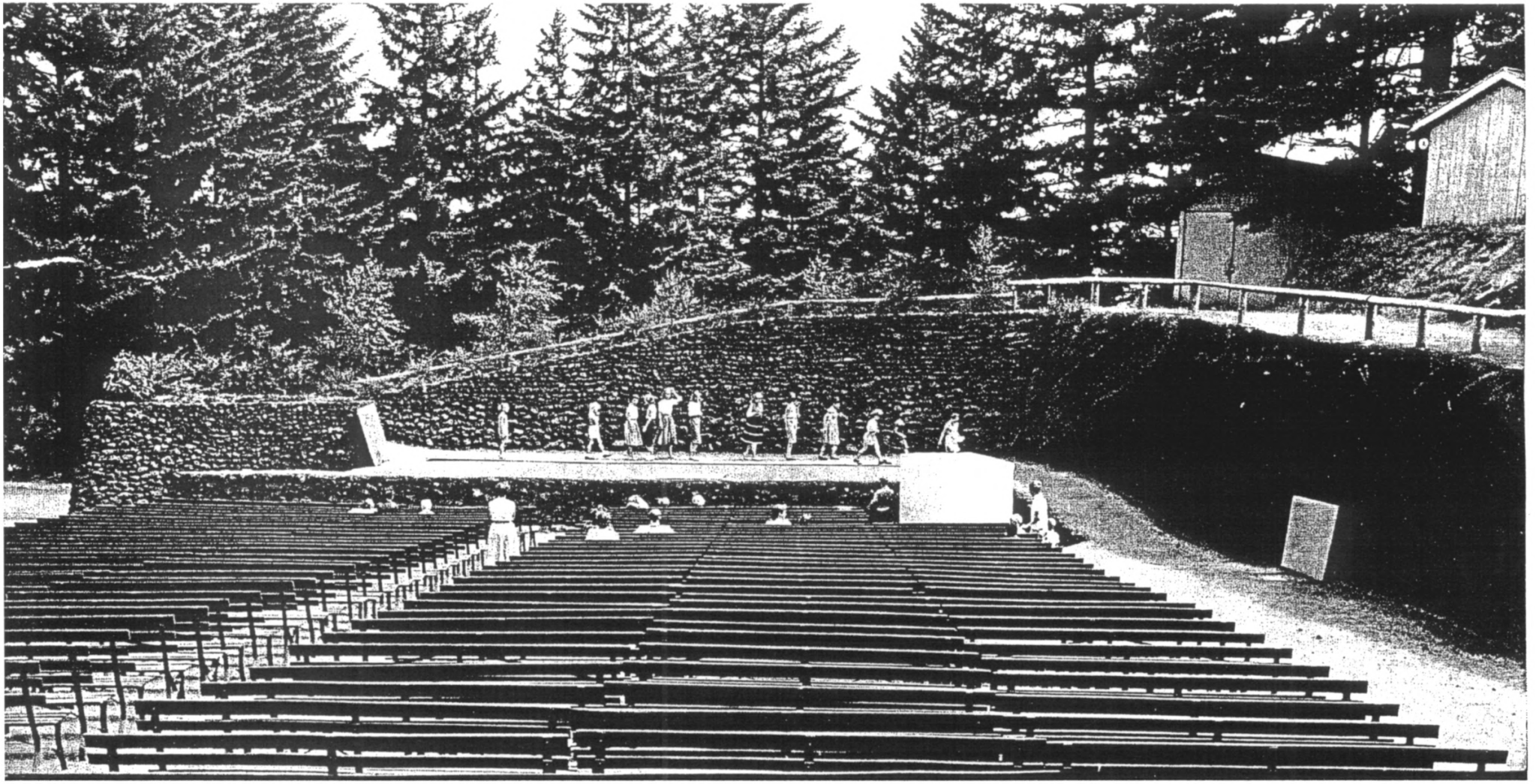
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
ADMINISTRATIVE BUILDING 1939



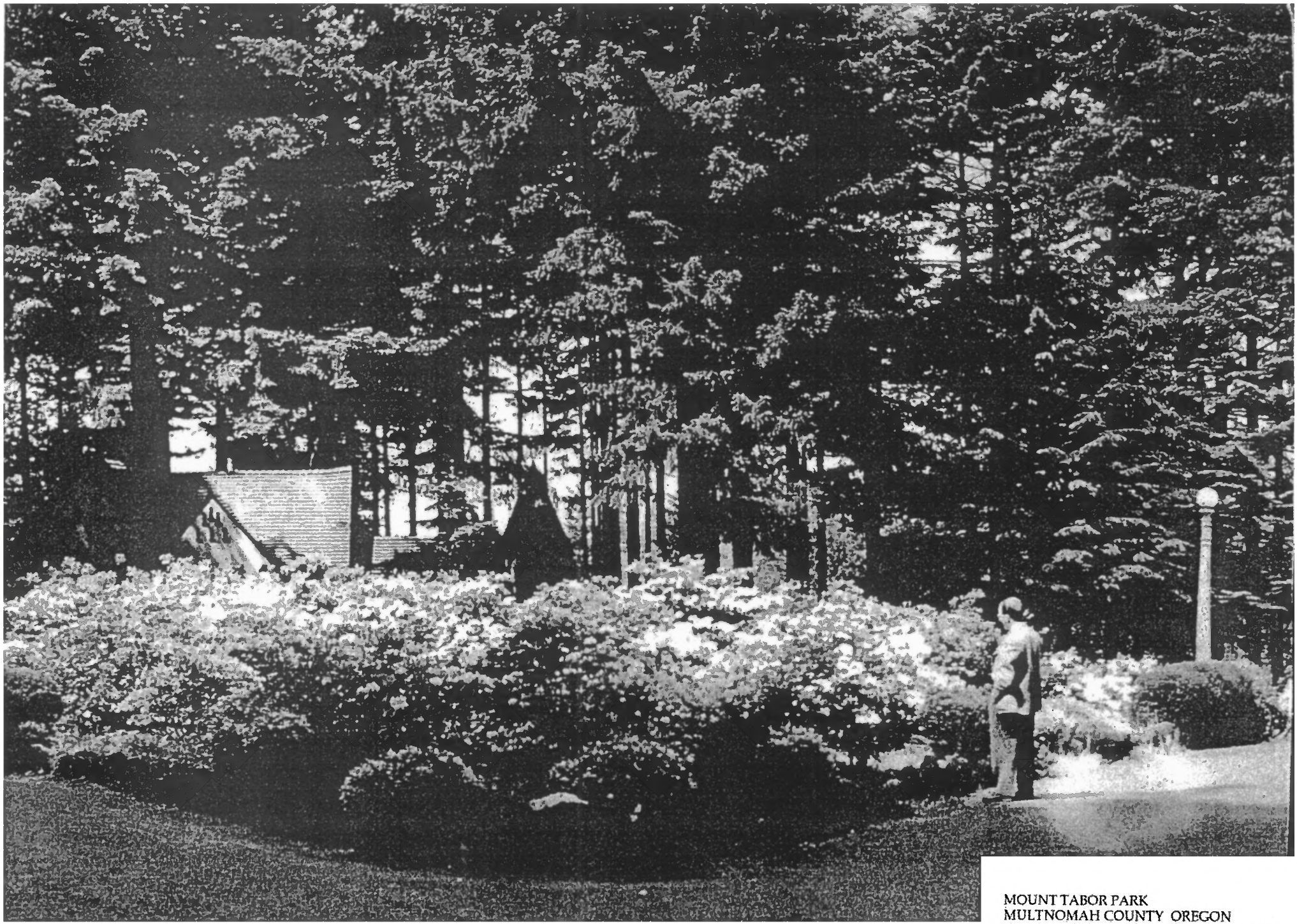
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
PARKS ARCHIVES/RECORD CEN
AERIAL LOOKING NORTHWEST 1968



MOUNT TABOR PARK
MULTNOMAH COUNTY, OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
1909



MOUNT TABOR PARK
MULTNOMAH COUNTY, OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
CRATER AMPHITHEATER AUGUST 16 1953



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN
SOUTHEAST QUADRANT, EXHIBIT A-2 PLANTINGS
c.1953

C Exhibit List (Plan Set)

Exhibit 1 – Vicinity Map

Exhibit 2 – Site Boundaries

Exhibit 3 – Light pole locations with Conservation and Scenic Overlays

Exhibit 4 – New Pole and Fixture Schematics

Exhibit 5 – Illumination Info (photometrics, distribution comparison, etc.)

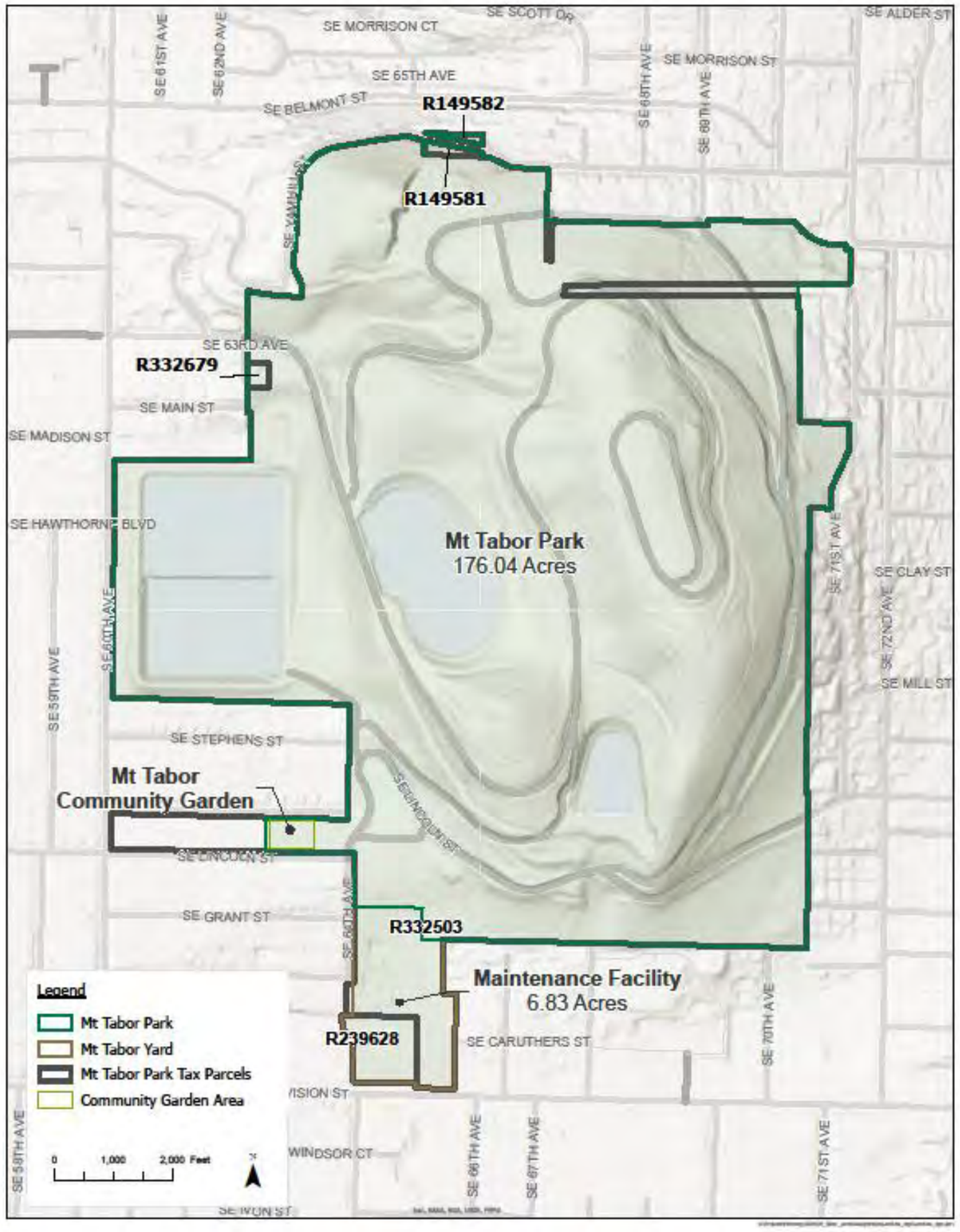
Exhibit 6 – Scaled Plan Set

Exhibit 7 – Permitted landscaping per LU 17-245440 Condition L.

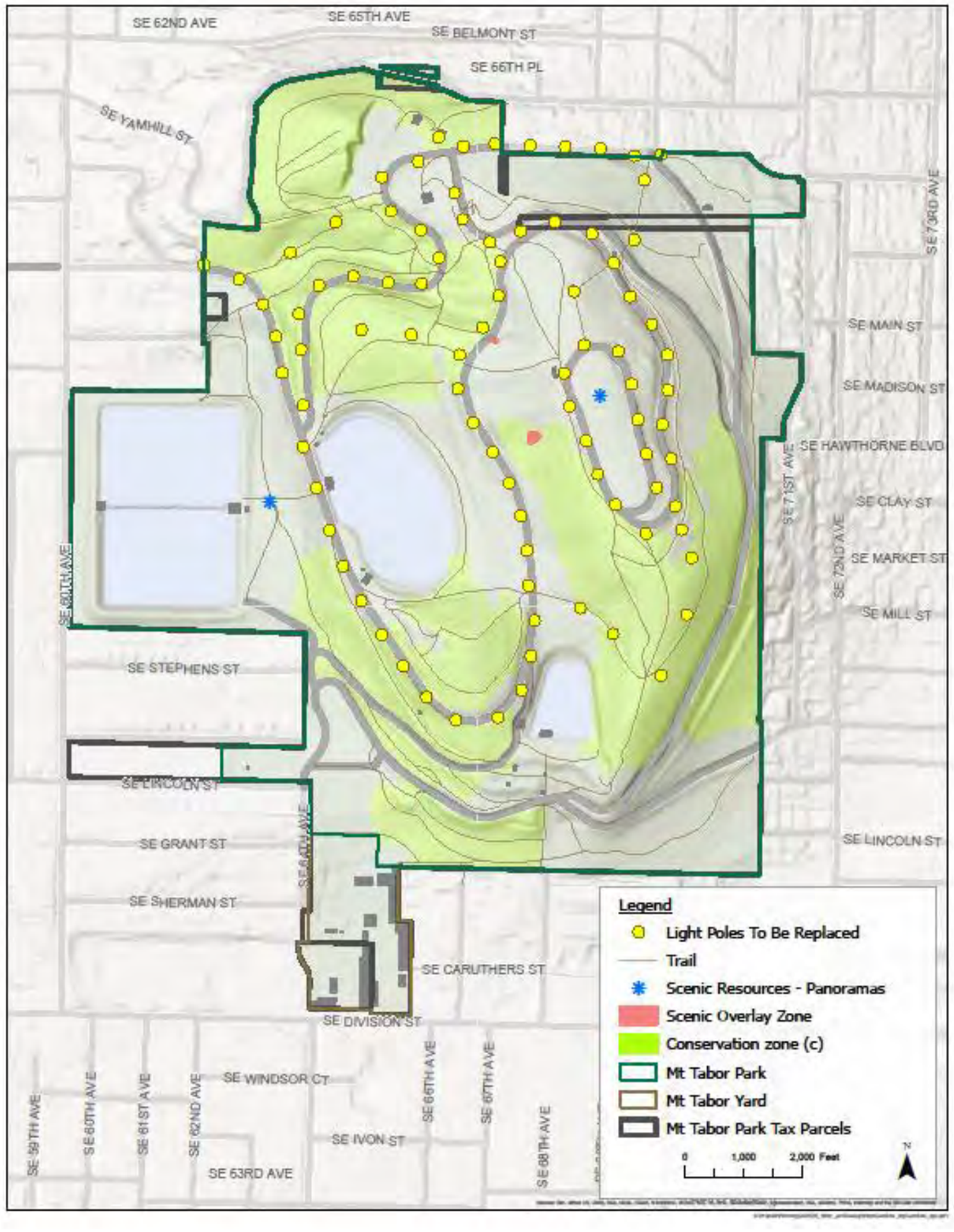
Exhibit 8 – Tree Plan (includes Inventory)

Vicinity Map

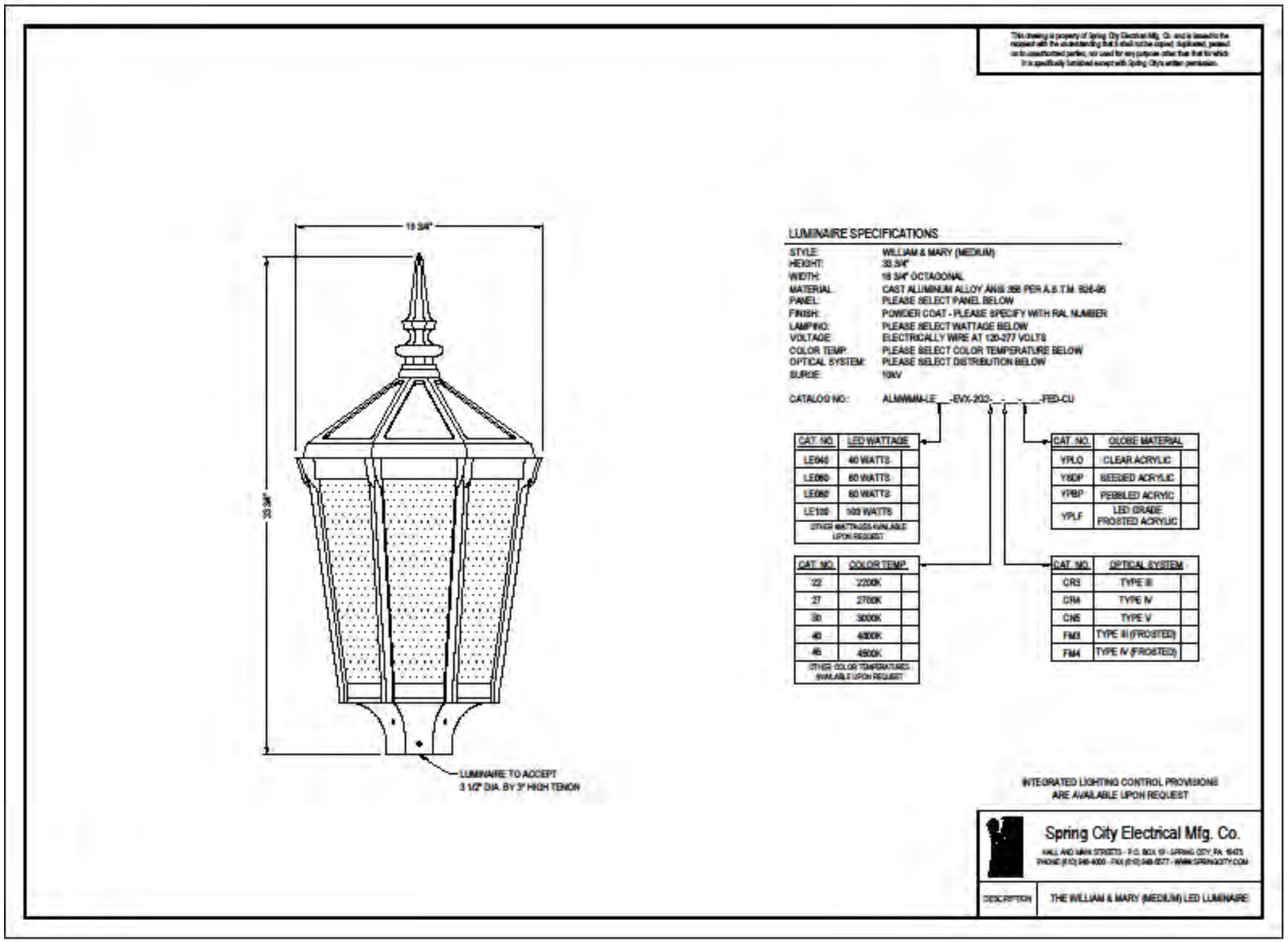
Site Boundaries



Light pole locations with Conservation and Scenic Overlays



Light poles and fixture schematics



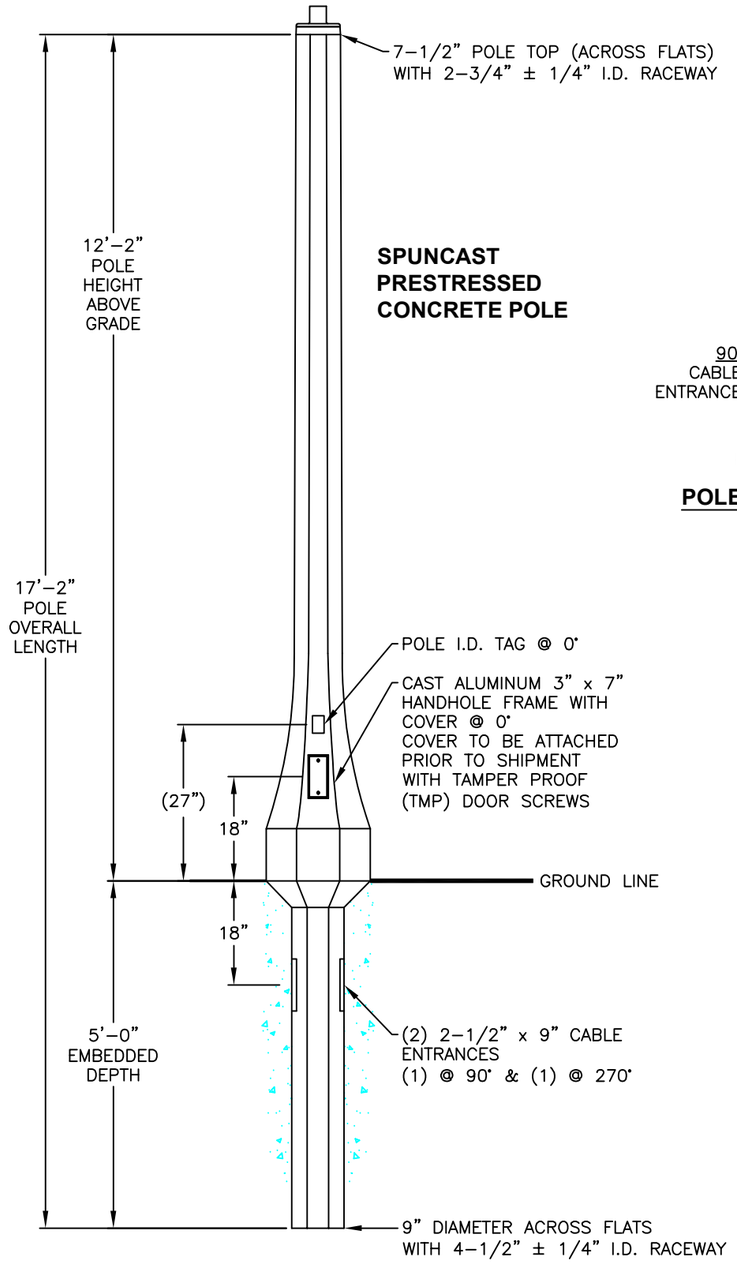
LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV

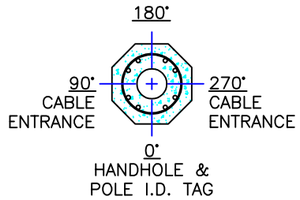
CATALOG NO.:

- TYPE III: ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
- TYPE V: ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU

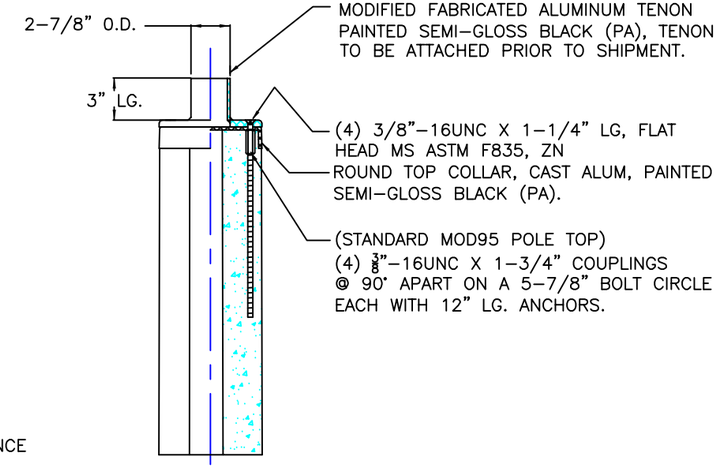
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	



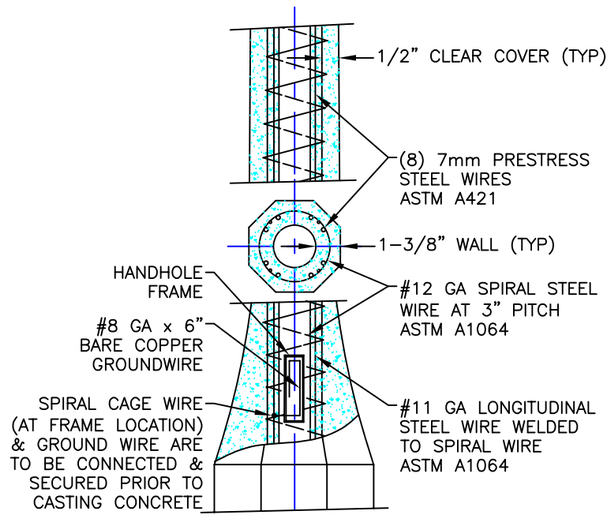
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

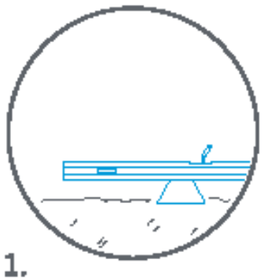
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

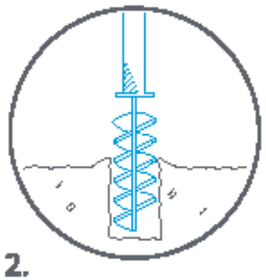
DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

Installation Steps for a Direct Embedded Ameron™ Concrete Pole

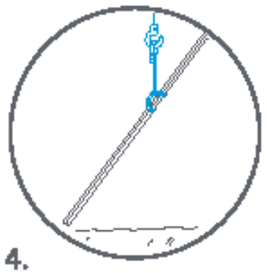


1.
Position pole for pre-wiring. Protect pole as described in handling and storage guide. Wire and install luminaire.

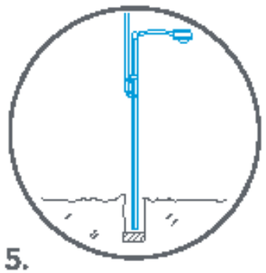


2.
Excavate hole to proper depth (plus 6-in. if special backfill is required).

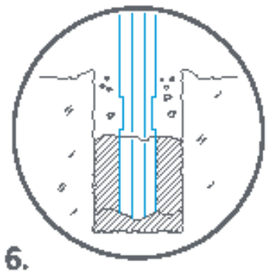
3.
Use proper backfill. See recommended backfill requirements below. Tamp a 6-in. base to ensure correct setting depth and drainage (if required).



4.
Use only synthetic straps. Single pick point is preferred method of handling. Use double clove hitch to avoid slippage.



5.
Set pole. Align/plumb. Maintain tension on the pole until compacted to bottom of cable entrance.



6.
Compact required backfill in two operations. Tamp 9-in. intervals to bottom of cable entrance. Install underground cable. Check alignment. Finish compaction to a height of 2-in. above grade sloping away from pole to allow proper drainage.

Recommended backfill requirements*

Good soil

Compact well-graded sand and gravel, hard clay, or well-graded fine and coarse sand (all drained so that water will not stand).

Use as is for backfill.

Medium soil

Compact fine sand, medium and clay, compact sandy loam, loose coarse sand and gravel (all drained so that water will not stand).

Requires select backfill—clean, washed sand or ¾-in. minus well-graded gravel.

Poor soil

Soft clay, clay loam, poorly compacted sand, or clays containing large amounts of silt. Water may stand during wet season.

Use compactible earth backfill—mix one part dry cement powder to 15 parts clean, washed sand.

*Based on location review by a qualified civil engineer.

Ameron Concrete Pole Handling Instructions

Ameron™ poles are made of pre-stressed concrete, a tough, elastic, durable material not limited by the properties of low strength, conventionally reinforced concrete. Like many other fabricated structures, Ameron poles are designed to withstand specific service loads and handling loads—with safety factors considered. Loads induced through handling are perhaps the ones most easily overlooked, even though only a few simple rules need be remembered. Attention to the following will minimize damage from handling and storage.

Storage

(See Figs. 1 through 3)

1. Store on dunnage placed 1/5 of the total length from each end. Location of temporary support points may vary from this rule for both storage and handling. Dunnage is ideally made from 4×4 fir, pine, or a similar wood, which is finished enough to have opposite sides flat and parallel (no logs or branches). The dunnage should be in one piece for the full width of the stack and be of sufficient thickness as to allow the placing of slings or the insertion of forklift fingers between the layers of poles. Weathered lumber is better than newly cut because the latter may stain the concrete when moisture is present.

2. Store on a level surface. If surface is not paved, be certain the ground is solid enough so that the dunnage does not sink into it.

3. When poles are stored in more than one layer, each piece of dunnage must be placed one above the other, so that the weight of the poles above is transmitted directly downward through the dunnage and does not induce bending stresses in the poles.

4. Distribution poles should be stacked no higher than nine layers and smaller poles no higher than 12 layers.

5. Each succeeding layer of poles should be placed with the tips in the opposite direction of the layer below.

6. Poles should be aligned so that the tips in each layer form a straight line normal to the center line of the poles.

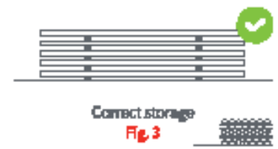
7. Place wedges on the dunnage next to the poles to prevent their rolling.

8. Do not step on the cantilevered tips of small poles in storage.

9. Handle poles with reasonable care so as to avoid dropping or otherwise striking them against each other or other hard, solid objects.

Incorrect storage
Fig. 1

Incorrect storage
Fig. 2



Correct storage
Fig. 3

Handling

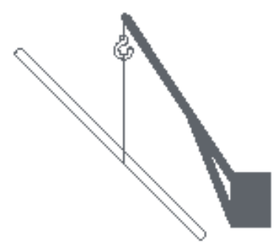
(See Fig. 4)

1. In lifting the pole from a single pick-up point, use either a choker sling or a loop sling with one complete extra turn around the pole just above the balance point.

2. When lifting the pole using two pick-up points from a single hook, a choker-type attachment should be used on the pole.

3. Poles with a polished or textured surface should be handled with a nylon or other non-metallic sling. For these poles, fingers of a forklift should be fitted with protective covers.

4. When using a forklift to handle poles, always use softeners on the fork tines. Also, always use wedges to prevent poles from rolling.



Handling by crane
Fig. 4

Total pole count: 88

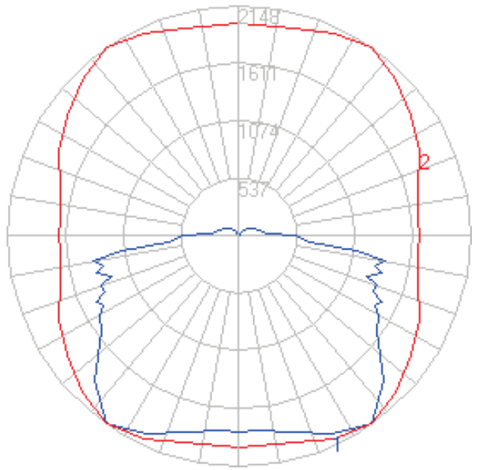
Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Specs

Existing lamp information used for calculation

Brand	Philips Lighting	Bulb Finish	Clear
Product Line	Ceramalux	Bulb Technology	High Pressure Sodium
Model Number	SON 150W E39 ED75 CL SL/12	Average Rated Life (hr)	24000
Energy Used	150 Watts	Length (in)	7.75
Base	Mogul (E39)	Diameter (in)	2.938
Bulb Shape	ED-23 1/2	Ballast Code	S55
Bulb Color	Warm White	Contains Mercury (Hg)	Yes
CRI	17	GE	44043 - LU150/55
Color Temperature (Kelvin)	2100	Osram Sylvania	67516 - LU150/55
Brightness (Lumens)	16000	Not For Sale In	WA

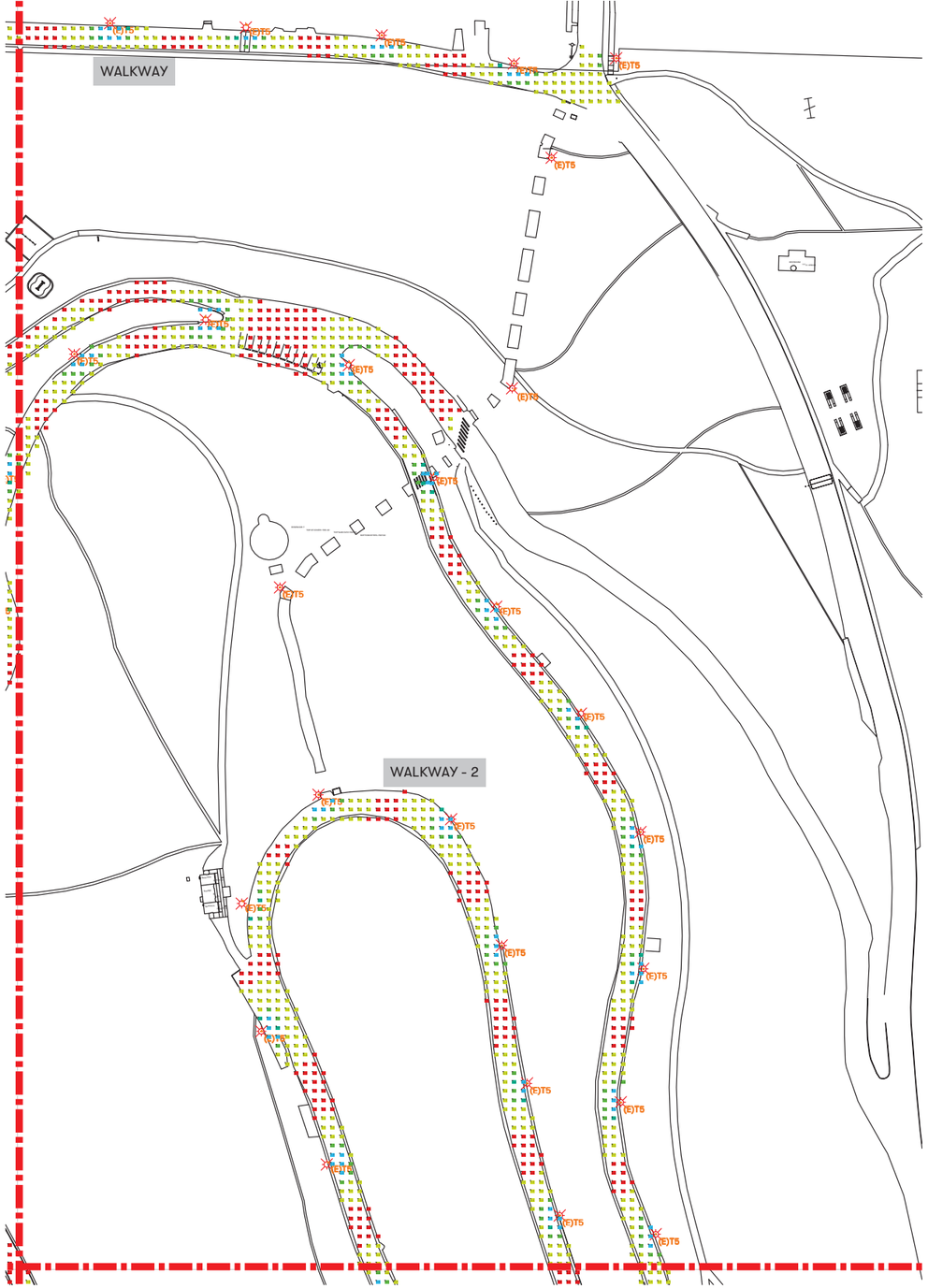


Lamp lumen distribution used for calculation - T5 type optic

Existing pole details:

(E) Decorative Post-top luminaire
Pole height: 12'-2"

MT TABOR - EXISTING CONDITION



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Approximate calculation

MT. TABOR - EXISTING POLE APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.31	5.2	0.0	N.A.
Walkway 2	Fc	0.28	5.3	0.0	N.A.

A Light Loss Factor (LLF) of 0.40 was used to account for light loss due to ballast factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

Note:

1. Lighting calculations were performed at 0'-0" AFF.
2. Ground reflectance was assumed to be 0.15.
3. This lighting plan represents illumination levels calculated from lab data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/ LEDs and other variable field conditions.
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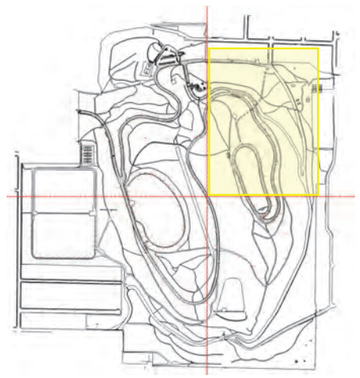
LIGHTING LEVEL (FC) LEGEND

	Range		Color
> =	0	To < = 0	
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



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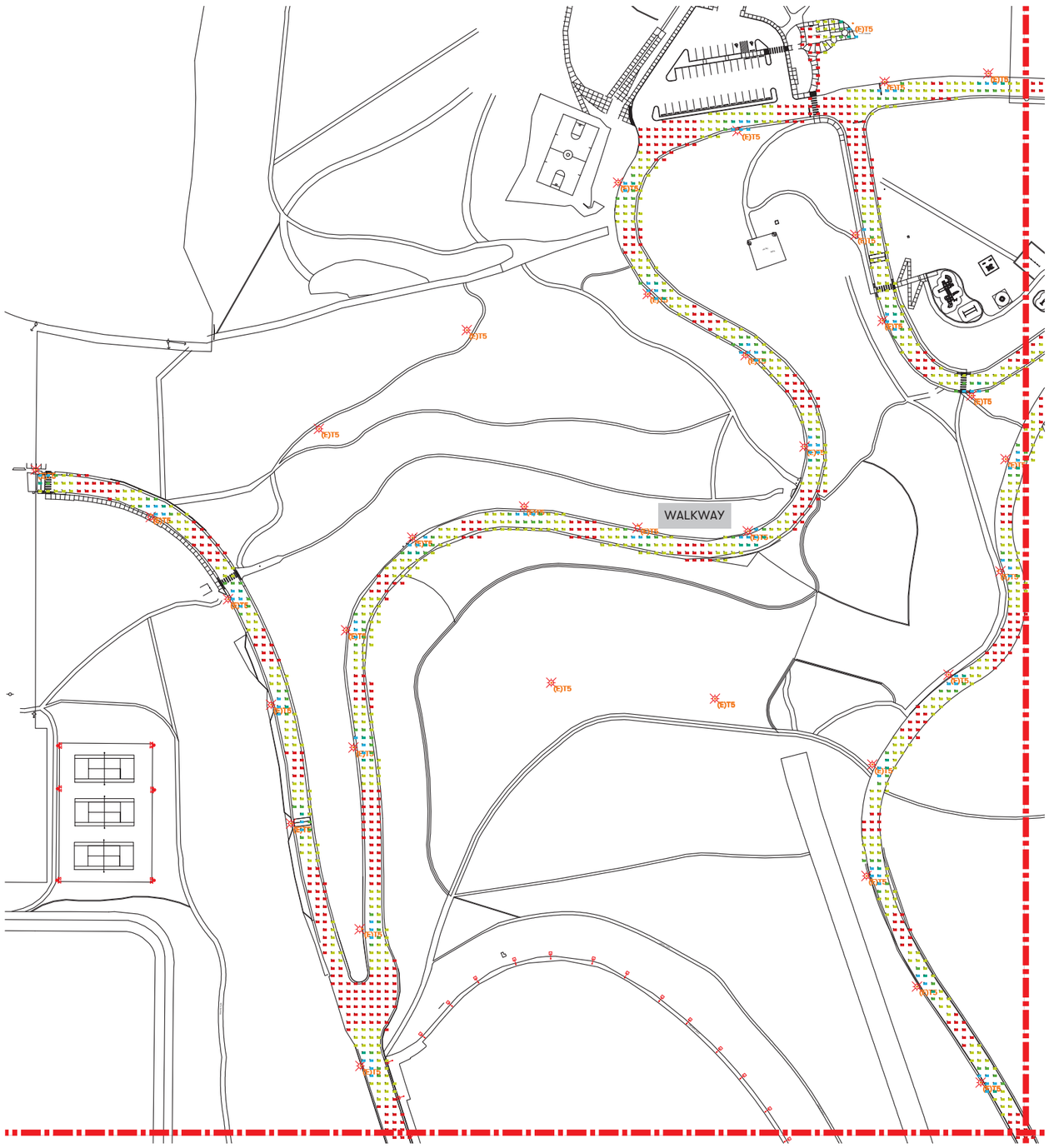
Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Approximate calculation

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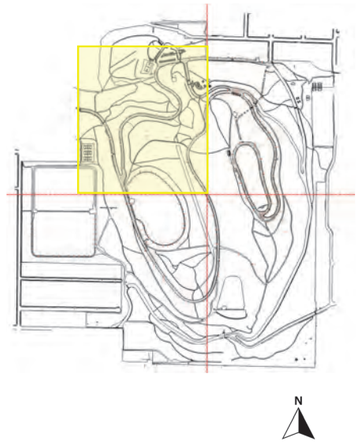
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	



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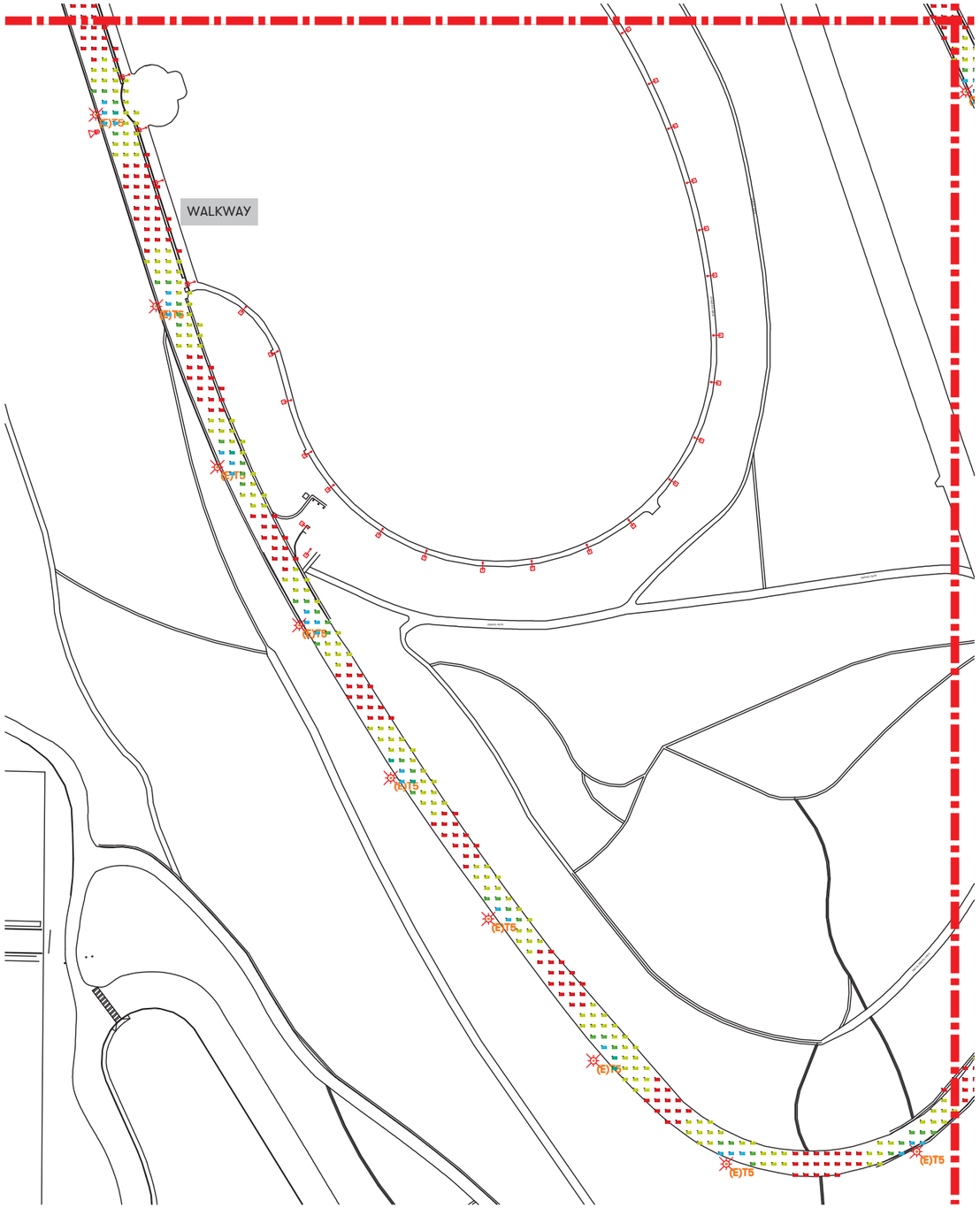
MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

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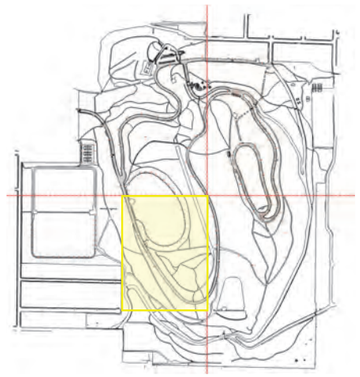
> =	0.8	To < = 1	
> =	1.1	To < = 100	



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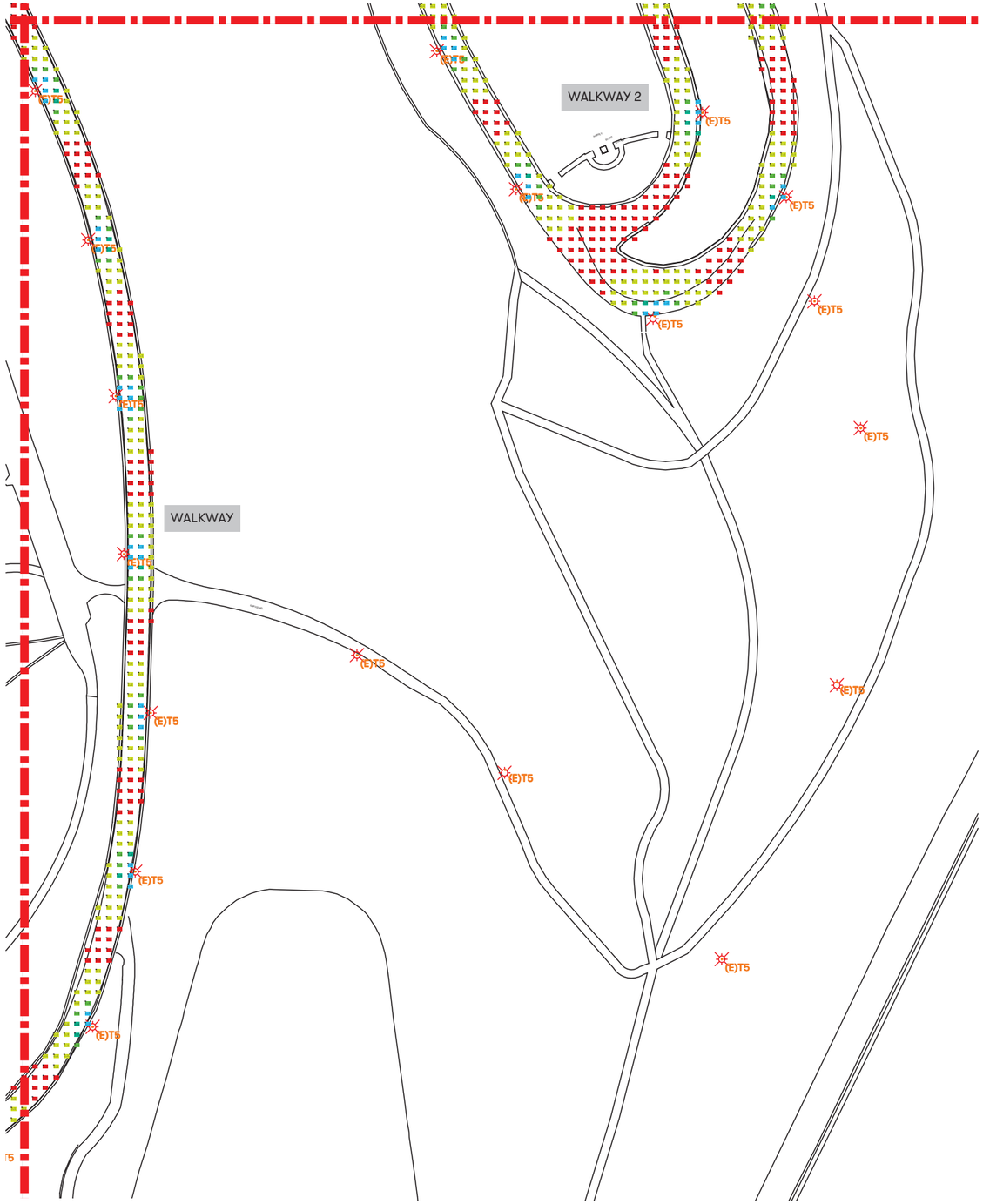
MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



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Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

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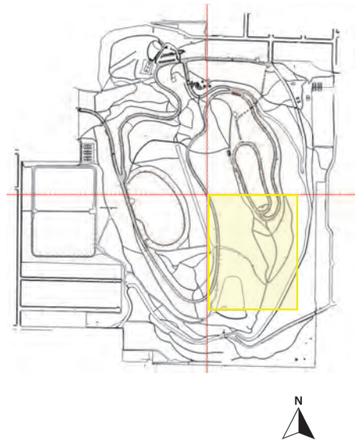
> =	0.8	To < =	1	
> =	1.1	To < =	100	



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MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC

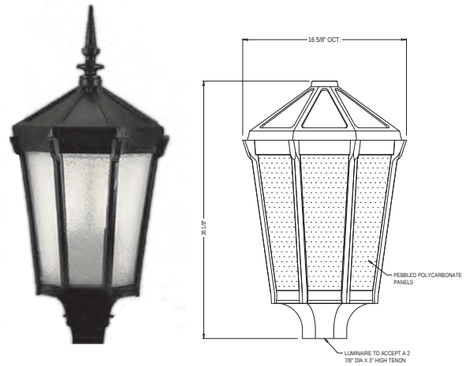
Total pole count: 88

Mt Tabor Park

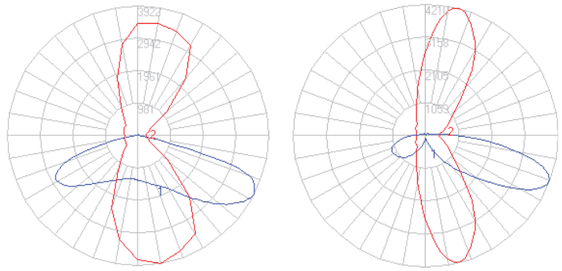
SE 60th Ave &, SE Salmon St, Portland, OR 97215

New LED product - Specs

Decorative Post-top:



Spring City - William and Mary Post-top fixture
ALMWMS-LE060-EVX-2G2-27-[OPTIC]-YPBP-CU



Optics used for calculation - T3, T5 type

Decorative Post-top luminaire
T3 Poles: 74, # T5 Poles: 14
Pole height: 12'-2"

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

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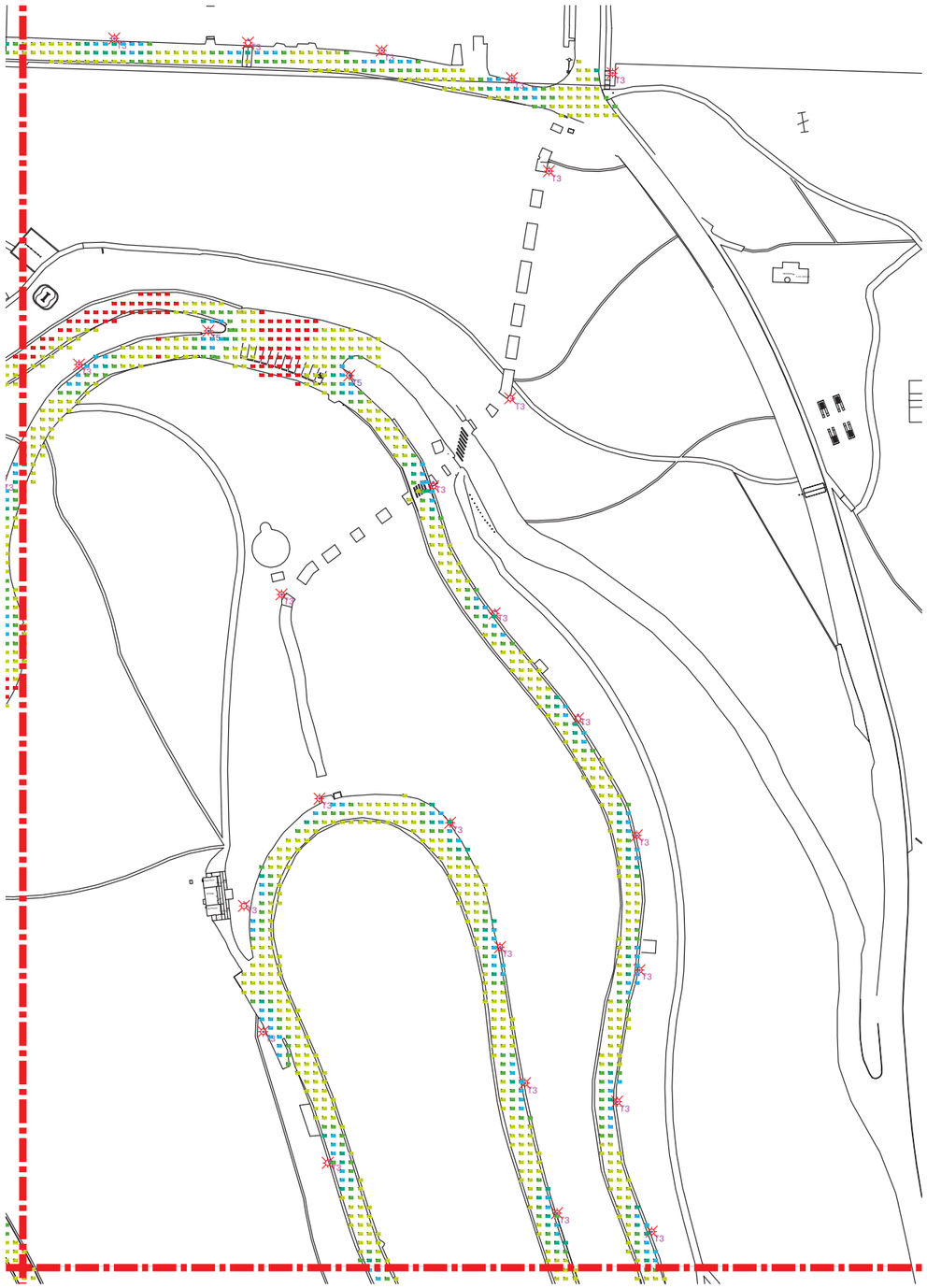

06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.45	2.6	0.0	N.A.
Walkway 2	Fc	0.41	2.5	0.0	N.A.

A Light Loss Factor (LLF) of 0.75 was used to account for light loss due to driver factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

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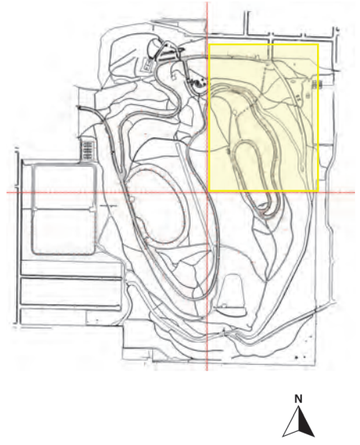
> = 0.1	To < = 0.3		
> = 0.4	To < = 0.7		
> = 0.8	To < = 1		
> = 1.1	To < = 100		



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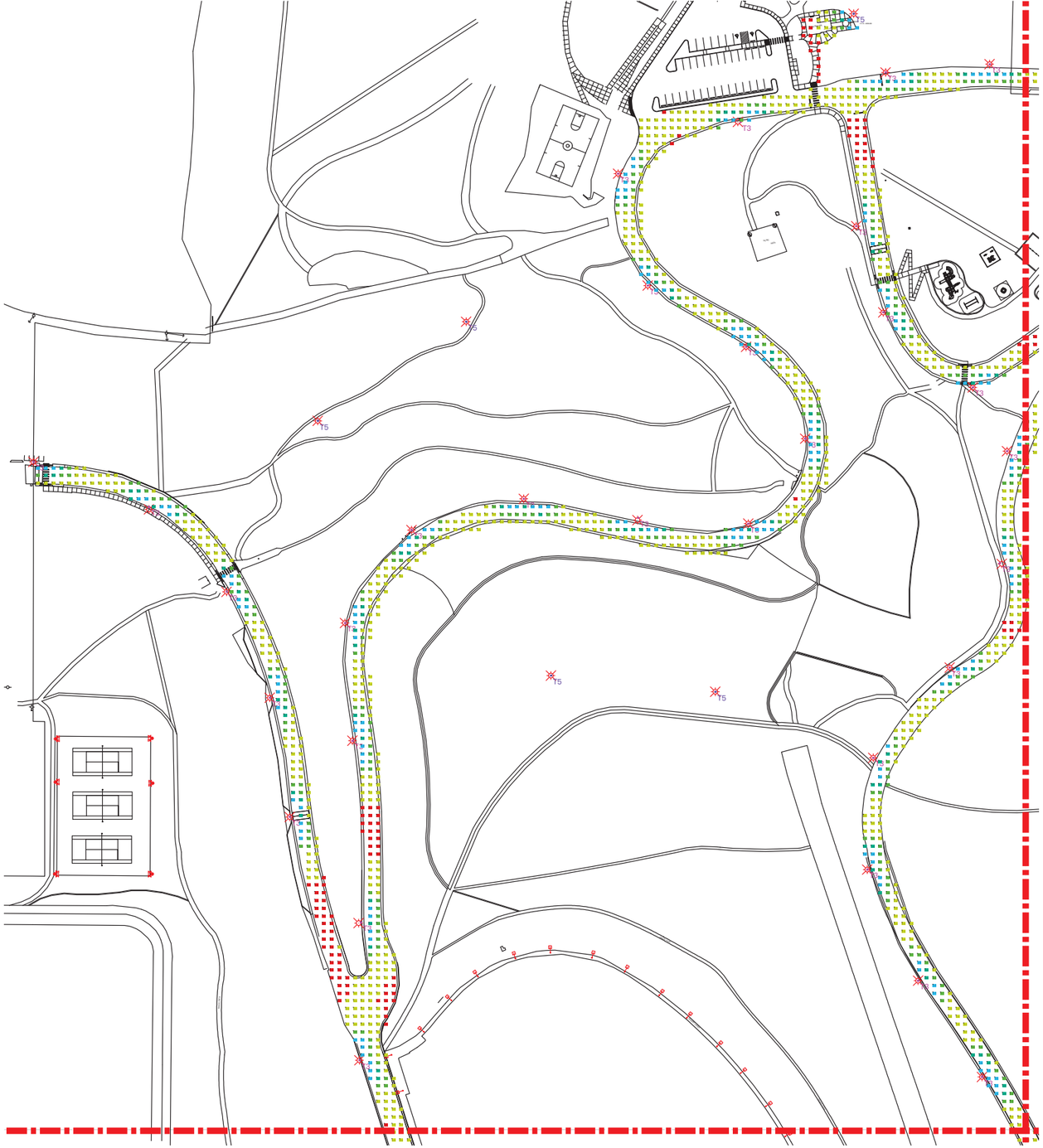
MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
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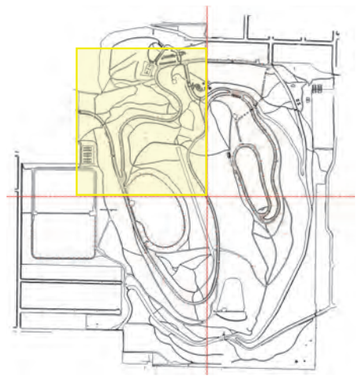

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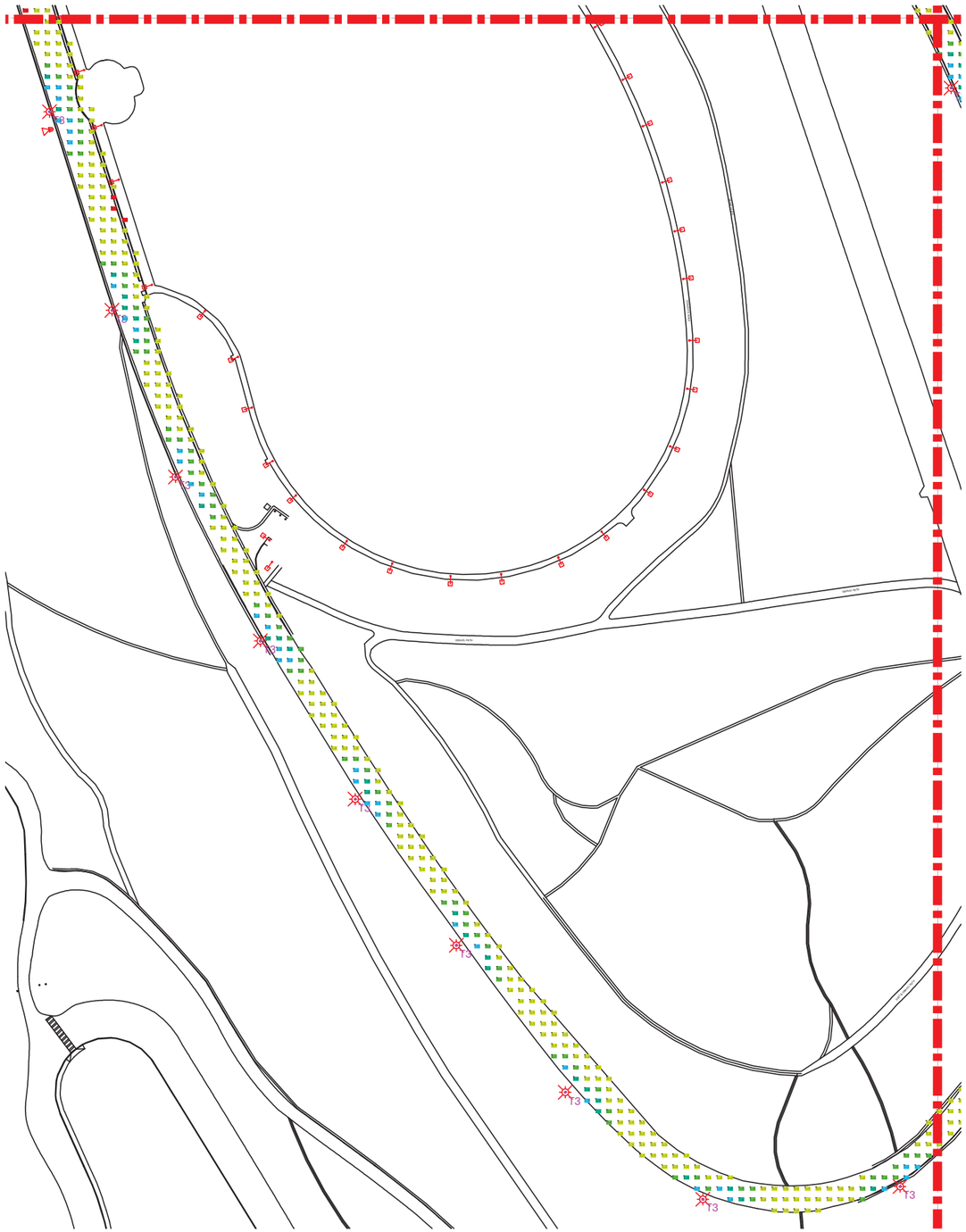
Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.45	2.6	0.0	N.A.
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> = 0.1	To < = 0.3		
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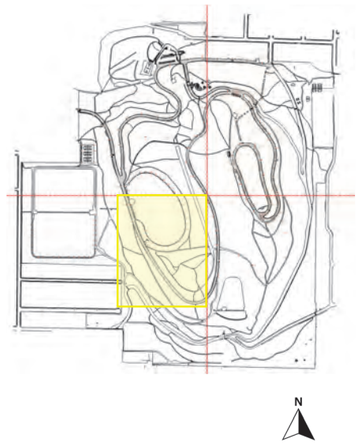

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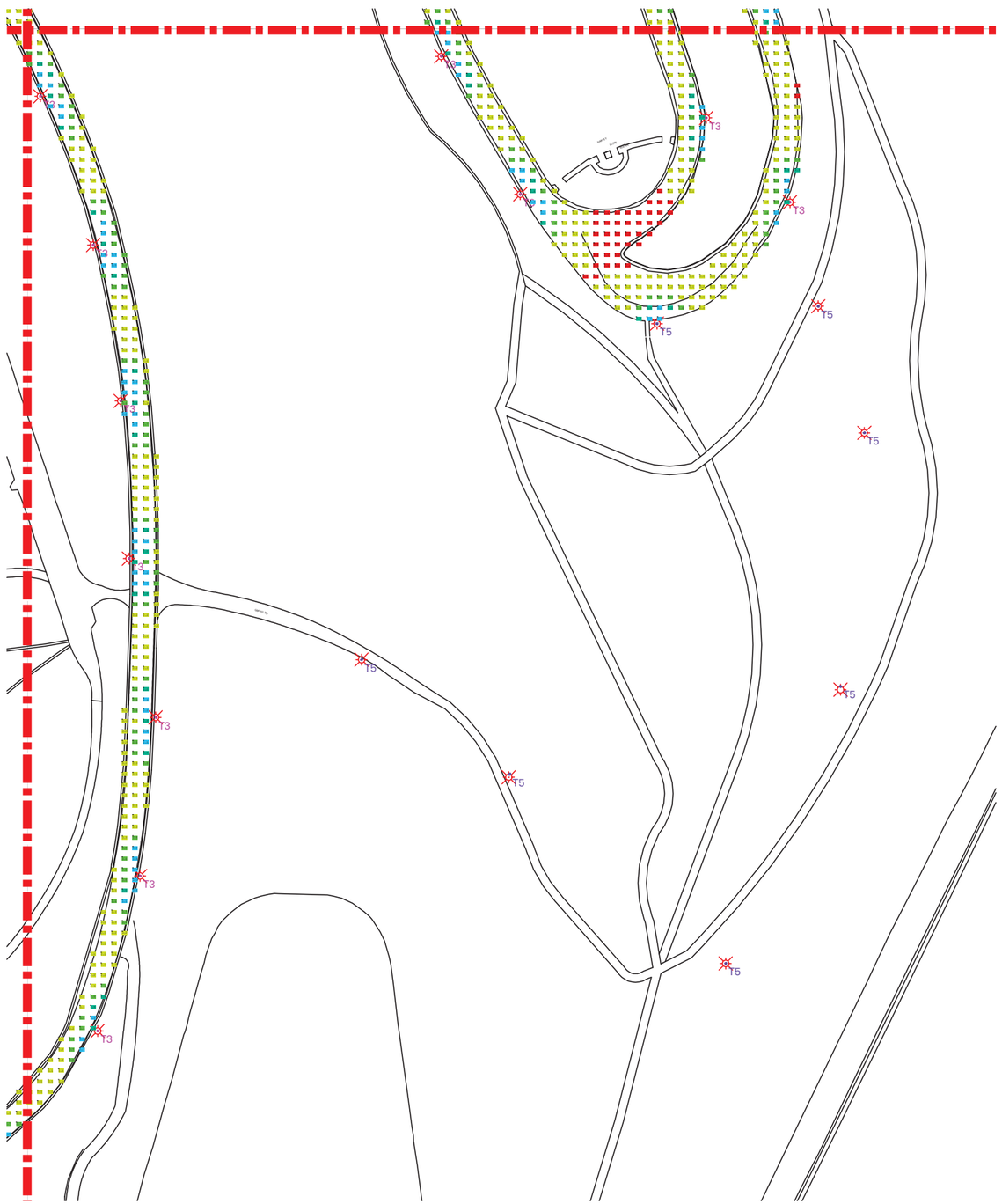
MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

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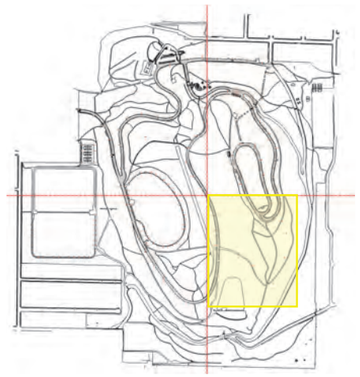
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



N

Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

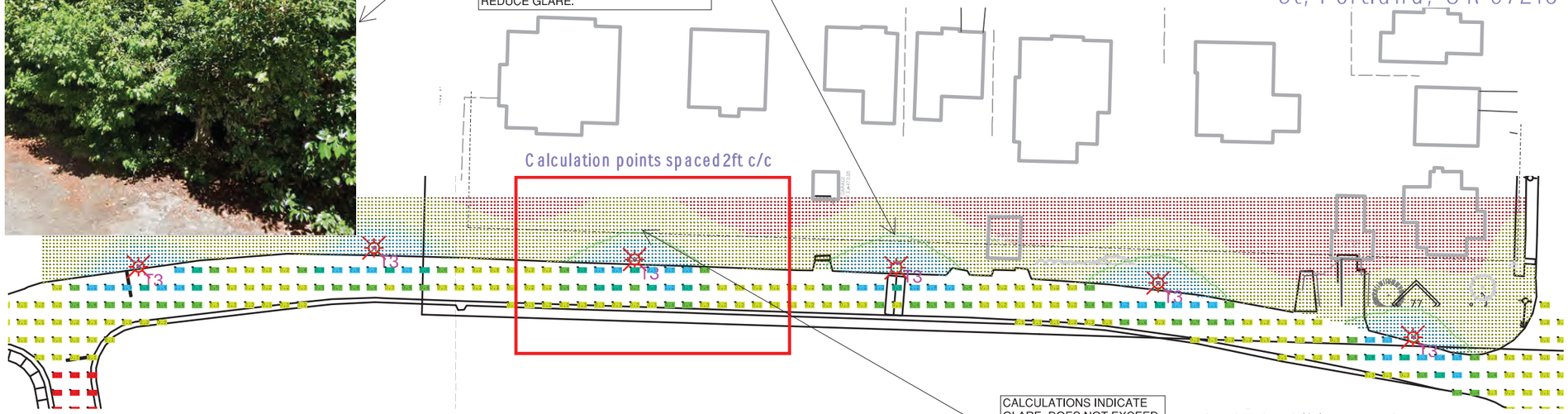
Portland Parks Photometrics | P2S INC

Mt Tabor Park
SE 60th Ave &, SE Salmon St, Portland, OR 97215

CALCULATIONS INDICATE GLARE ENCROACHES APPROXIMATELY 2'.

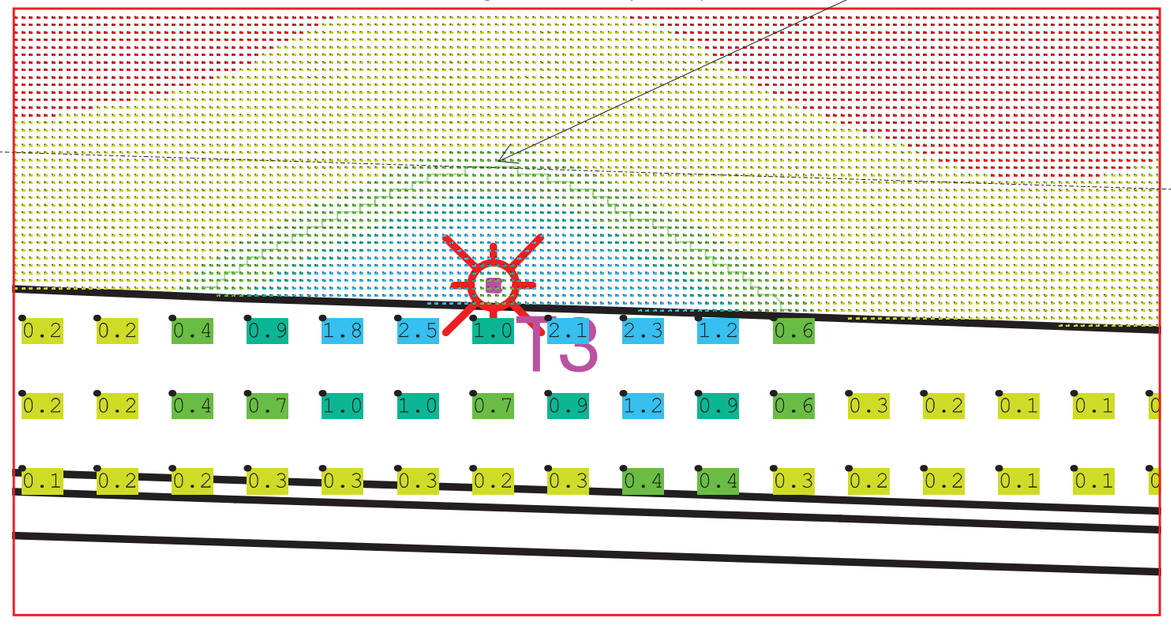
CALCULATIONS DO NOT ACCOUNT FOR OBSTRUCTIONS.

EXISTING VEGETATION LESSENS GLARE AND SHIELDING WILL FURTHER REDUCE GLARE.



CALCULATIONS INDICATE GLARE DOES NOT EXCEED 0.5 FC AT PROPERTY LINE.

Enlarged calculation points spaced 1ft c/c



Lighting level (fc) - Legend

	Range			Color
> =	0	To < =	0	
> =	0.1	To < =	0.3	
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	

Key plan

MT TABOR PARK - NEW LED FIXTURE (1-1 REPLACEMENT)

09/11/2023

Portland Parks Photometrics | P2S INC

Comparison of Existing and Proposed Distribution Diagrams

The new T3 type lights (to be located in the SE Taylor right-of-way) will greatly reduce the amount of light spill on adjacent properties compared to the existing T5 type lights. The distribution graphs show the total quantity of light emitted (lumens) by the fixture at various angles. Using the two views we can determine the location of maximum illumination; the blue line shows the maximum vertical lumens (section view) and the red line shows maximum horizontal lumens (plan view):

- For new Type 3 fixture, maximum illumination occurs when you are looking up at 20° angle and standing 75° to the side.
    - For a new fixture on a 12’ pole, this would put us about 38’ away from the pole. This would make a brighter light dimmer at a distance.
- The max illumination of 2148 for the old fixture is when you are looking up at a 55° angle and standing 55° to the side.
    - For an old fixture on a 12’ pole, this would put us about 15’ away from the pole. This closer distance would make a dimmer light seem brighter.

Despite the old fixture producing less lumens, by having the light shine closer it ends up being nearly twice as bright as new fixture. Being an omnidirectional fixture, this creates brighter spots all around the pole vs the new directional fixtures.

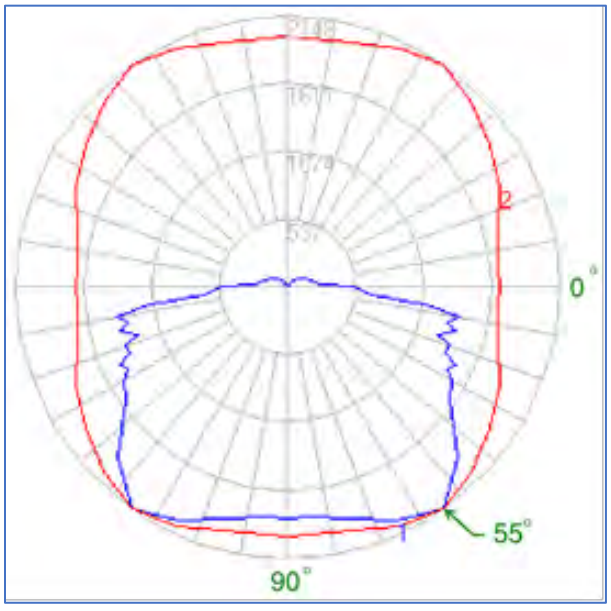


Figure 1. Light Spill from existing T5 fixture

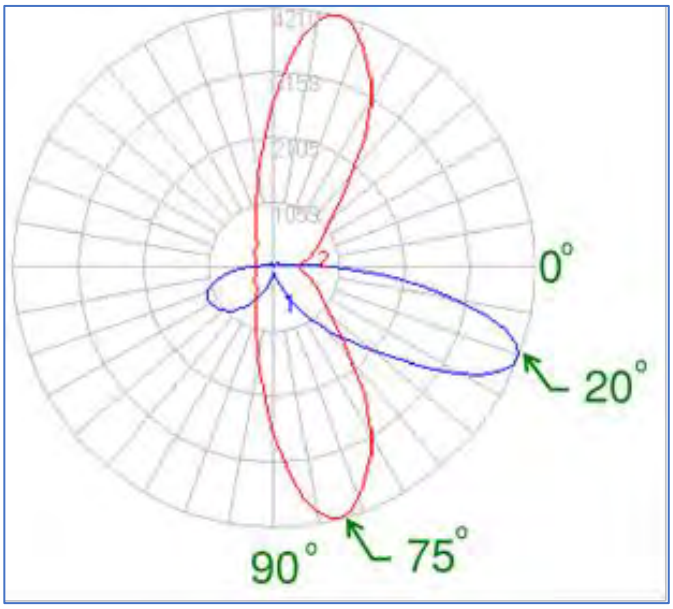


Figure 2. Light Spill from proposed new T3 fixture

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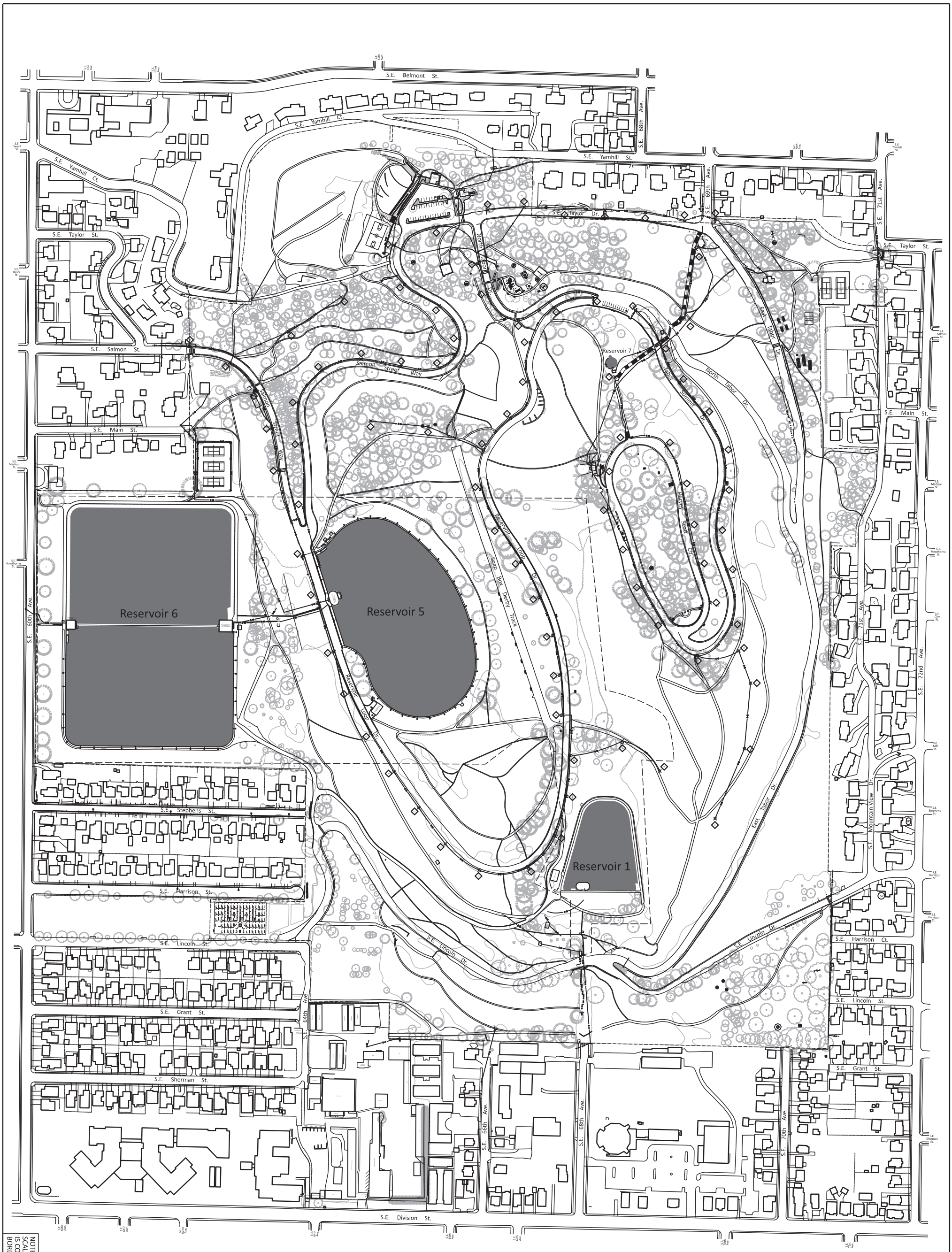

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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REVISIONS	DESCRIPTION	DATE	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Full Park Overview

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: N.T.S. DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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of 21

REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Hardscape Features

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=100' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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of 21

REVISIONS

BY	DESCRIPTION	DATE

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Hardscape Features

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=100' DRAWN BY:Mike Van Yserloo SECTION:

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Healthy Parks, Healthy Portland

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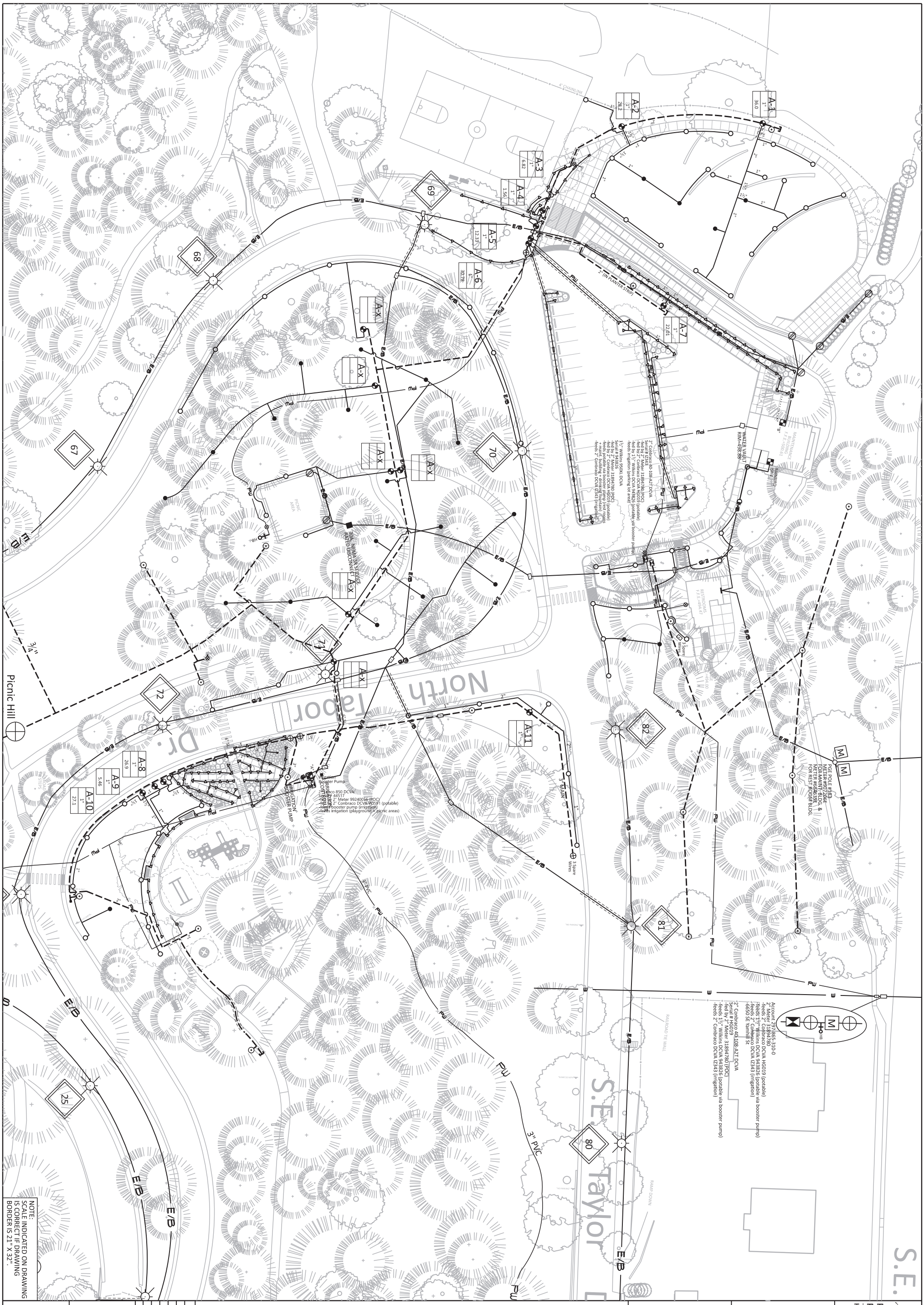

NOTE:
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Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - Amphitheater and Play Area

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=30' DRAWN BY:Mike Van Yserloo SECTION:

REVISIONS

DATE	DESCRIPTION	BY

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

S3 of 21

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Account 295-431-640-0
2" Meter 43281622
-feeds 2" Watts DCVA 16900 (potable)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)
-1226 SE 63rd Ave (dead end of SE Main St)
-Main at 63rd (billing address)

2" Watts 007 QT DCVA
Serial # 16900
-fed by 2" Meter 43281622 (POC)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)

1" Sub Meter 50081008
-fed by 2" Meter 43281622 (POC)
-fed by 2" Watts DCVA 16900 (potable)
-feeds potable (rental house)

D.F. Shut-off in Box

APPROXIMATE LOCATION OF UNDERGROUND ELECT. POWER LINE (PER CITY ELECT. PERMIT) WATER BUREAU AS-BUILT

WATER BUREAU VAULT

WATER BUREAU POWER LINE

Salmon Street Way

Salmon Street Way

Picnic Hill Shut Off

TOP OF 6" WATERLINE=416.23

TOP OF 6" WATERLINE=431.15

TOP OF 6" WATERLINE=431.63

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - NW

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

REVISIONS

BY	DESCRIPTION	DATE

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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of 21

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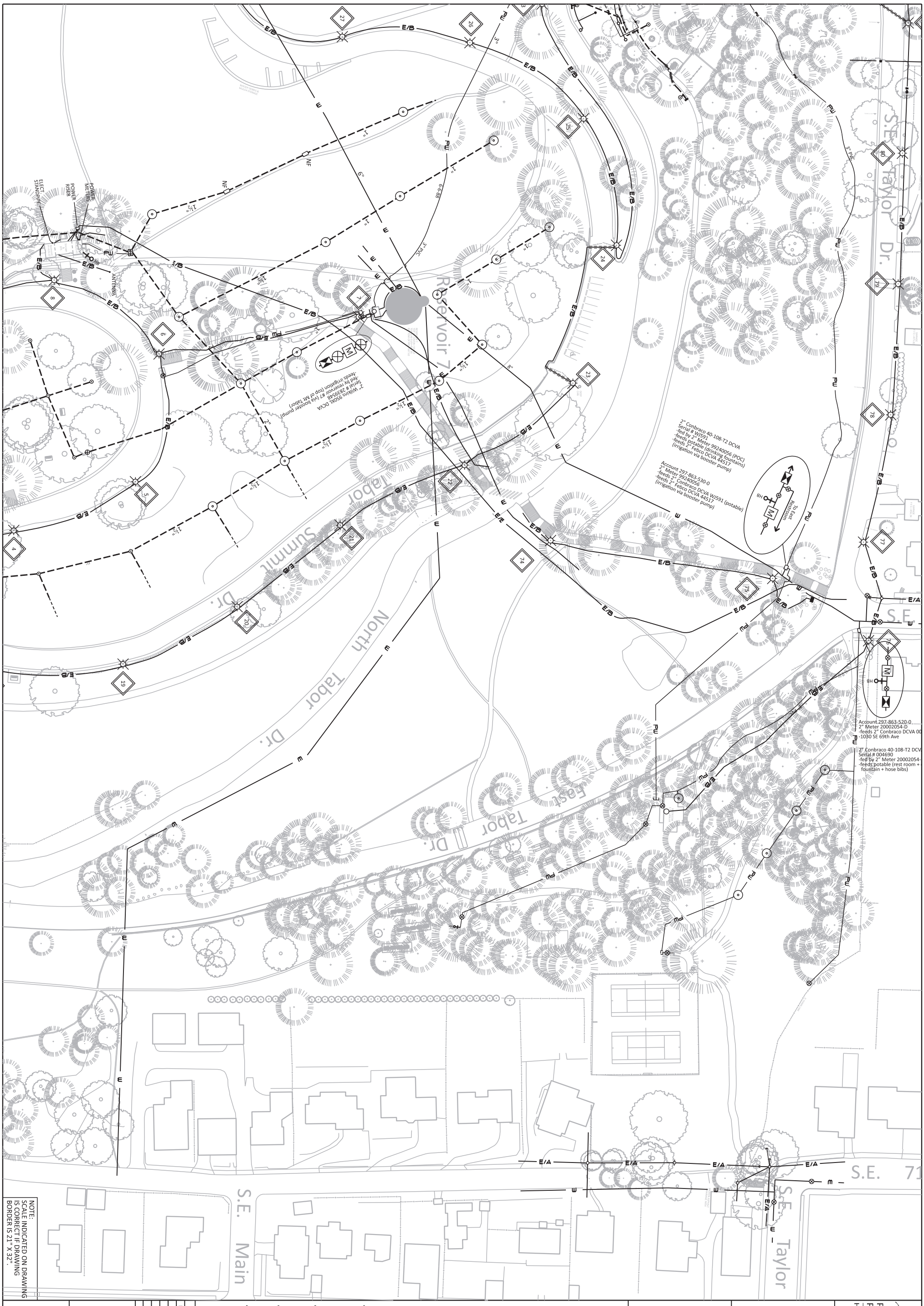

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REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - NE

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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POWER RISER
ELECT. STANDPIPE
PU
HB
ANTENNA
E/B
2"
1½"
Harvey Scott Cir.
APPROXIMATE LOCATION OF 2" WATERLINE AS SHOWN ON C.O.P. PARKS & REC. AS BUILTS
ZONE 1
ZONE 2
ZONE 3
ZONE 4
ZONE 5
ZONE 6
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

NOTE: SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - Summit

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=30' DRAWN BY:Mike Van Yserloo SECTION:

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Healthy Parks, Healthy Portland

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S.E. Sherman St.

S.E. Grant St.

S.E. Lincoln St.

S.E. Harrison St

S.E. Stephens St.

S.E. 64th Ave.

Account 297-866-930-0
2" Meter 20032531
-feeds 2" Wilkins DCVA 3314796
(long block irrigation + CG hose bibs)
-feeds 1" Sub Meter 0565537
(community garden)
-6210 SE Harrison St

2" Wilkins 950XL DCVA
Serial # 3314796
-fed by 2" Meter 20032531 (POC)
-feeds irrigation (long block)
-feeds 1" Sub Meter 0565537
(community garden)

2" Conbraco 40-100-02 DCVA
Serial # 178551
-fed by 2" Meter 94240140 (POC)
-fed by 2" Watts DCVA 3881S (potable + irrigation)
-feeds irrigation (QC line north of nursery)

1" Conbraco 40-100 DCVA
Serial # 217012
-fed by 2" Meter 94240140 (POC)
-fed by 2" Watts DCVA 3881S (potable)
-feeds irrigation (nursery area "D")

Account 297-866-860-0
2" Meter 94240140
-feeds 2" Watts DCVA 3881S (potable + irrigation)
-feeds DDLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM0559 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY facilites:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 1995S (greenhouse hose bibs east)
-SE 65th Ave & Harrison St (between reservoir #1 trail & SE Lincoln)

2" WILKINS-007 M1 QT DCVA
Serial # 3881S
-fed by 2" Meter 94240140 (POC)
-feeds DDLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM0559 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY facilites:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 1995S (greenhouse hose bibs east)

NOTE:
SCALE INDICATED ON DRAWING
IS CORRECT IF DRAWING
BORDER IS 21" X 32".

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - SW

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

REVISIONS

DATE	DESCRIPTION	BY

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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REVISIONS
DATE
DESCRIPTION
BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Irrigation Features - S

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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North Tabor Dr.

S.E. Taylor

S.E.

T.E. OUT(6" SE)=469.58'

IE OUT (8" NE)=457.63

AD RIM=478.80 IE OUT (6" S)=477.35 IE IN (6" N)=477.35

AD RIM=480.18 IE OUT(6" SW)=478.52

CB (OIL TRAP) RIM=482.03

4' CHAIN LINK

RIM=483.00' IE IN(SE)=480.70 IE IN(W)=480.70 IE OUT=480.60

CB (OIL TRAP) RIM=496.53 IE OUT(18" W)=494.73

RIM=476.45 IE=474.45

RIM=476.45 IE=474.45

CB (OIL TRAP) RIM=498.67

CB (OIL TRAP) RIM=498.91

WATER VAULT RIM=496.88

STANDPIPE (DRAIN) RIM=491.61

MAINTENANCE BUILDING F.F.E.=500.61

CB IE=494.68 RIM=498.18

VAULT RF & VALVE

CB RIM=493.33 IE OUT(8" N)=492.03

RESTROOMS F.F.E.=494.47

C.O. RIM=494.81

CB RIM=498.60 IE=495.10

CB RIM=496.80 IE=493.80

DRYWELL IE IN(N&W)=493.40

4" OVERFLOW

DAYLIGHT IE=494.00

IRRIGATION BOOSTER PUMP

IRRIGATION CONTROLLER

PICNIC AREA

PICNIC SHELTERS

RAMP DOWN

RAILROAD TIE WALL

3" PVC

30A, NEMA 3R SERVICE RATED DISCONNECT

1½" Wilkins 950XL DCVA Serial # 3818326 Fed by 2" Conbraco DCVA HG019 (potable) -feeds probable via booster pump (restrooms) -feeds 2" Conbraco DCVA I2343 (irrigation)

PGE POLE #133 METER #9072206E FOR MAINT. BLDG. & METER #8646396E FOR RESTROOM BLDG.

Account 7397865-310-0 2" Meter 31894780 -feeds 2" Conbraco DCVA HG019 (potable) -feeds 1½" Wilkins DCVA 943826 (potable via booster pump) -feeds 2" Conbraco DCVA I2343 (irrigation) 6650 SE Yamhill St

2" Conbraco 40-108-A2T DCVA Serial # HG019 -fed by 2" Meter 31894780 (POC) -feeds 1½" Wilkins DCVA 943826 (potable via booster pump) -feeds 2" Conbraco DCVA I2343 (irrigation)

NOTE: SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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REVISIONS

BY	DESCRIPTION	DATE

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - Amphitheater and Play Area

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=30' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION

Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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Account 295-431-640-0
2" Meter 43281622
-feeds 2" Watts DCVA 16900 (potable)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)
-1226 SE 63rd Ave (dead end of SE Main St)
-Main at 63rd (billing address)

2" Watts 007 [illegible] QT DCVA
Serial # 16900
-fed by 2" Meter 43281622 (POC)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)

1" Sub Meter 50081008
-fed by 2" Meter 43281622 (POC)
-fed by 2" Watts DCVA 16900 (potable)
-feeds potable (rental house)

D.F. Shut-off in Box

APPROXIMATE LOCATION OF UNDERGROUND ELECT. POWER LINE (PER CITY ELECT. PERMIT) AND WATER BUREAU AS-BUILTS

EXPOSED TOP OF STORM PIPE (LOCATE PAINT MARKS)

WATER VAULT

GRATE=307.23
IE 8" (E)=305.23

GRATE=302.61
IE 8" (NW)=305.51
IE 8" (SE)=305.51

WATER BUREAU POWER LINE

Salmon Street Way

Salmon Street

Tabor Dr.

Reservoir

TOP OF 6" WATERLINE=416.23

TOP OF 6" WATERLINE=431.15

TOP OF 6" WATERLINE=431.63

GRATE=510.96 (CLOGGED)

6" CSP

8"CSP

6"

3"

NOTE:
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REVISIONS

BY	DESCRIPTION	DATE

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - NW

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

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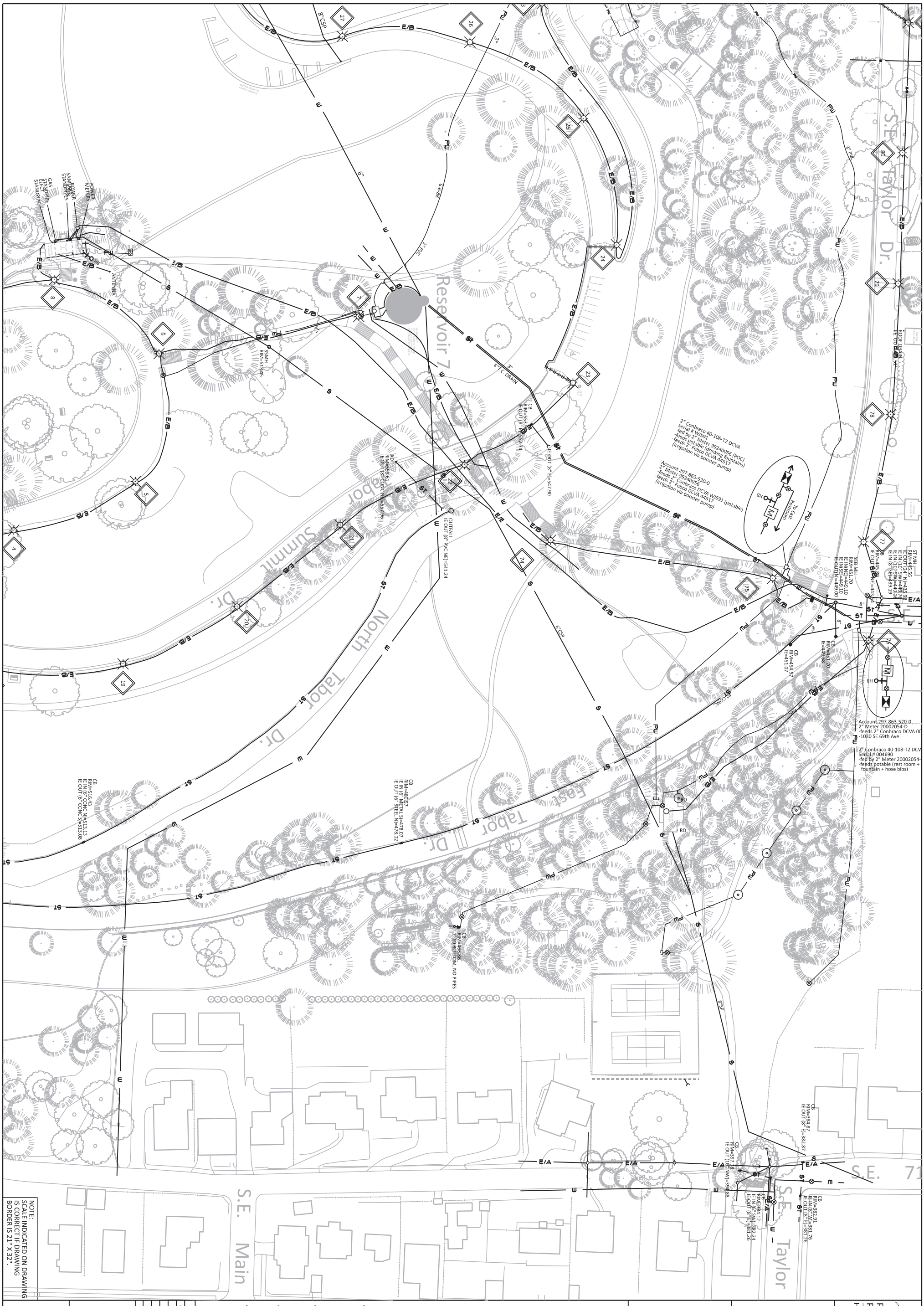

NOTE:
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BORDER IS 21" X 32".

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REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - NE

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

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S.E. 60th Ave.

TOP OF PIPE ELEV=282.33
TOP OF PIPE ELEV=277.78
30"
30"
BOTTOM OF GRATE=299.67
IE 30" CIP=277.96
IE 30" CIP=285.37
IE 30" CIP=286.06
TOP OF PIPE ELEV=289.92
IE=281.04
2" INSIDE 6"
42"
24"
CONC. THRUST BLOCK FOUNDATION
8" CIP
IE=284.48
GRATE=307.35
IE 8" (N&S)=303.46
6"
24"
TOP OF PIPE
TOP OF STEEL PLATFORM ELEV=300.20
TOP E&W PIPE ELEV=302.22
TOP N&S PIPE ELEV=301.20
GRATE=307.23
IE 8" (E)=305.23
GRATE=307.33 (CLOGGED)
GRATE=302.61
IE 8" (NW)=305.51
IE 8" (SE)=305.51
WATER BUREAU POWER LINE
WATER VAULT
GRATE=313.23
IE 10" (W)=411.53
IE 6" (E)=410.23
IE 6" (E)=410.63
GRATE=413.04
IE 6" (E)=411.24
TOP OF PIPE ELEV=410.12
BOTTOM OF GRATE=406.67
TOP OF 6" WATERLINE=416.23
TOP OF 6" WATERLINE=431.15
TOP OF 6" WATERLINE=431.63
CHLORINATION TUNNEL
Reservoir Loop Dr.
44"
95"
24"
"S" OUTFALL E)=290.39

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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of 21

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REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - W

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

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Soap Box Derby Track

Reservoir Loop Dr.

Harvey Scott Ct.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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of 21

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - E

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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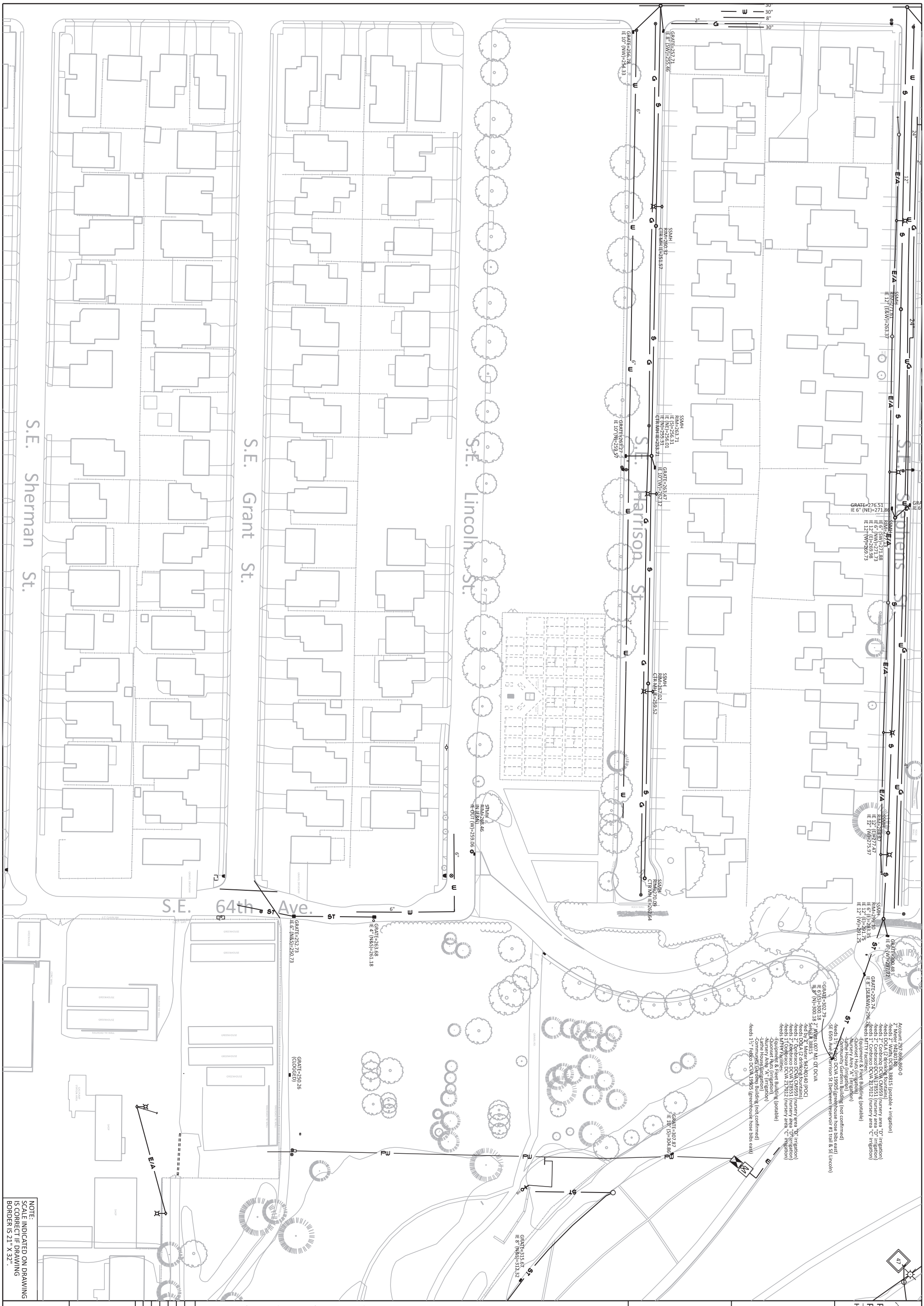
S.E. Sherman St.
S.E. Grant St.
S.E. Lincoln St.
S.E. Harrison St.
S.E. Stephens St.
S.E. 64th Ave.
GRATE=256.28
IE 10" (NW)=254.33
GRATE=257.71
IE 8" (SW)=255.46
SSMH
RIM=260.32
CTR MH IE=251.57
GRATE=263.27
IE 10" (N)=259.57
SSMH
RIM=263.71
IE (S)=256.31
IE (NE)=256.01
IE (N)=255.31
CTR MH IE=253.71
GRATE=263.47
IE 10" (W)=262.12
GRATE=276.51
IE 6" (NE)=271.86
SSMH
RIM=277.61
IE 6" (SW)=271.88
IE 6" (NW)=271.73
IE 12" (E)=269.98
IE 12" (W)=269.73
SSMH
RIM=277.61
IE 12" (E&W)=263.37
SSMH
RIM=267.02
CTR MH IE=259.52
SSMH
RIM=268.46
IE (E&W)
IE OUT (W)=259.06
SSMH
RIM=270.09
CTR MH IE=262.64
SSMH
RIM=288.87
IE 12" (NE)=277.47
IE 12" (W)=275.97
SSMH
RIM=290.16
IE 6" (E)=283.35
IE 12" (E)=281.75
IE 12" (W)=281.25
GRATE=252.73
IE 6" (N&S)=250.73
GRATE=261.68
IE 4" (N&S)=261.18
GRATE=250.26
(CLOSED)
GRATE=302.79
IE 6" (S)=300.18
IE 8" (N)=300.18
GRATE=307.87
IE 10" (S)=304.86
GRATE=315.67
IE 8" (N&S)=312.32
GRATE=290.48
IE 6" (W)=287.12
GRATE=290.74
IE 8" (SE&NW)=286.24
Account 297-8868-860-0
2" Meter 94240140
-feeds 2" Watts DCVA 38815 (potable + irrigation)
-feeds DDLA (2 drinking fountains)
-feeds 2" Cambro DCVA (restrooms)
-feeds 2" Cambro DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Cambro DCVA 217012 (nursery area "C" irrigation)
-feeds MTFY Facilities:
-Equipment & Fleet Building (potable)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Fedco DCVA 19905 (greenhouse hose bibs east)
Account 297-8868-860-0
2" Meter 94240140 (POC)
-fed by 2" Meter 94240140 (POC)
-feeds 2" Watts DCVA 38815
-feeds DDLA (2 drinking fountains)
-feeds 2" Cambro DCVA (restrooms)
-feeds 2" Cambro DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Cambro DCVA 217012 (nursery area "C" irrigation)
-feeds MTFY Facilities:
-Equipment & Fleet Building (potable)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Fedco DCVA 19905 (greenhouse hose bibs east)
-SE 65th Ave & Harrison St (between reservoir #1 trail & SE Lincoln)
-feeds 1" Dormont DCVA 1999S (irrigation)
-Duniway Park (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1" Dormont DCVA 1999S (greenhouse hose bibs east)
-SE 65th Ave & Harrison St (between reservoir #1 trail & SE Lincoln)
-Duniway Park (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Fedco DCVA 19905 (greenhouse hose bibs east)
-feeds MTFY Facilities:
-Equipment & Fleet Building (potable)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Fedco DCVA 19905 (greenhouse hose bibs east)
-feeds 2" Cambro DCVA (restrooms)
-feeds 2" Cambro DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Cambro DCVA 217012 (nursery area "C" irrigation)
-feeds DDLA (2 drinking fountains)
-fed by 2" Meter 94240140 (POC)
-feeds 2" Watts DCVA 38815
-feeds 2" Meter 9424 0140 (POC)
-feeds 2" Watts DCVA 38815
-feeds DDLA (2 drinking fountains)
-feeds 2" Cambro DCVA (restrooms)
-feeds 2" Cambro DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Cambro DCVA 217012 (nursery area "C" irrigation)
-feeds MTFY Facilities:
-Equipment & Fleet Building (potable)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Fedco DCVA 19905 (greenhouse hose bibs east)
GREENHOUSE
RAILROAD TIE WALL
ROCK WALL
SHOP
GRAVEL DRIVE
GRAVEL DRIVEWAY
CONCRETE WALL
ROCK WALL
RAILROAD TIE WALL
GRAVEL RD.
ROCK WALL
ROCK WALL
RAILROAD TIE WALL
RAILROAD TIE WALL
RAILROAD TIE

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S.E. Lincoln Dr.

S.E. Lincoln Dr.

East Ta

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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of 21

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - S

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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of 21

REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - Amphitheater and Play Area

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=30' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - NW

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

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Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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REVISIONS

DATE	DESCRIPTION	BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - NE

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

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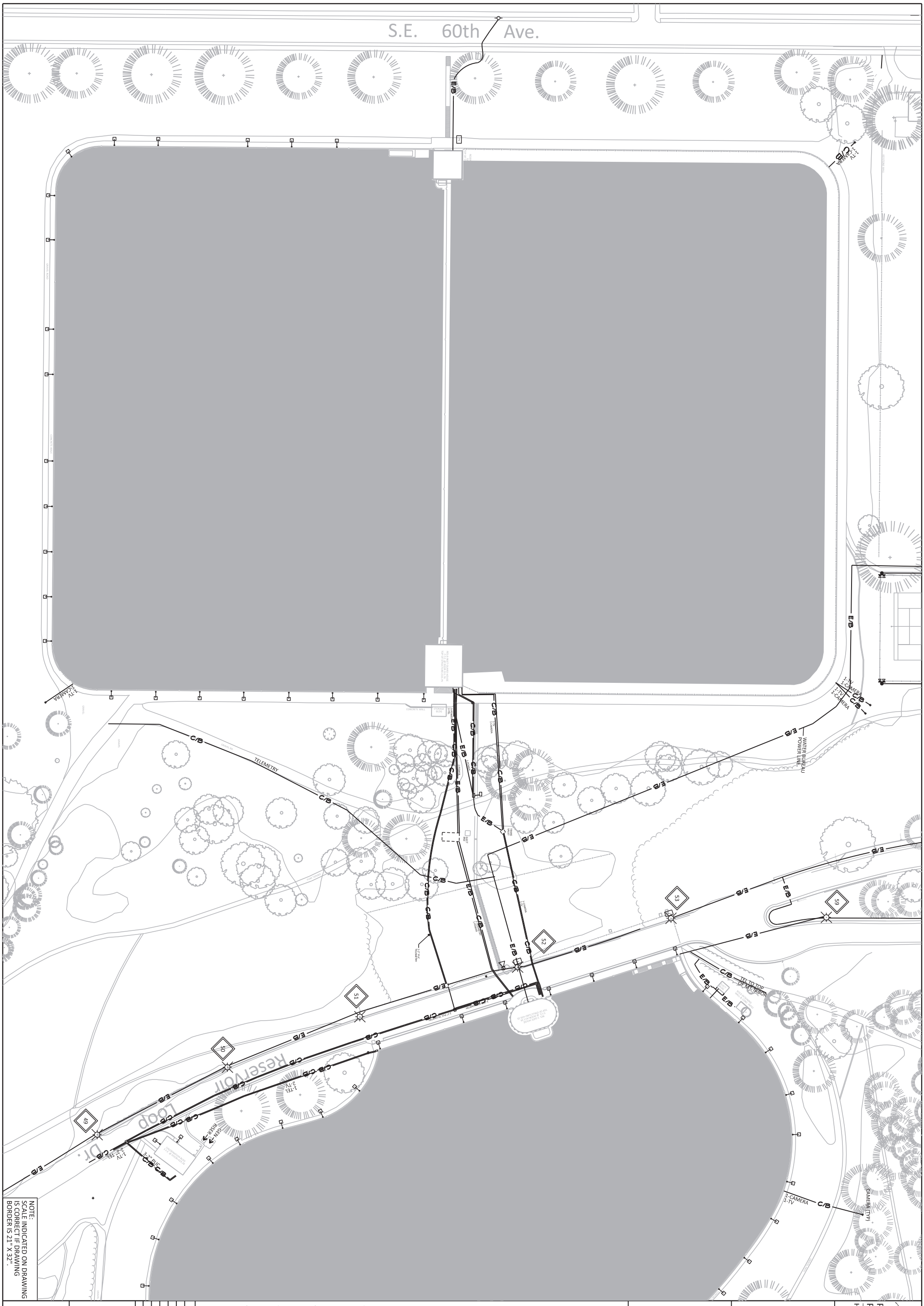

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

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N

REVISIONS
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Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - W

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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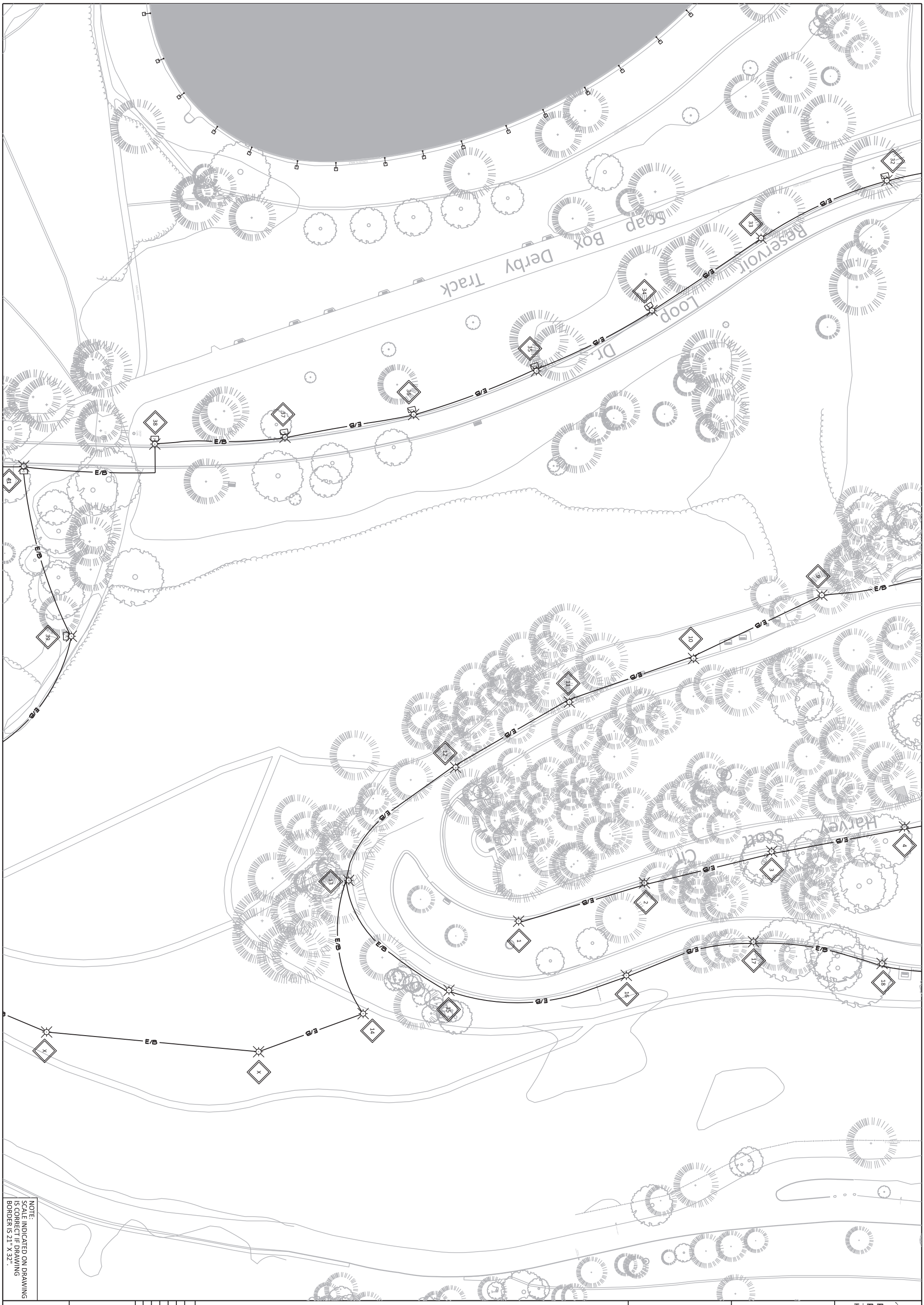

NOTE:
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REVISIONS

BY	DESCRIPTION	DATE

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - E

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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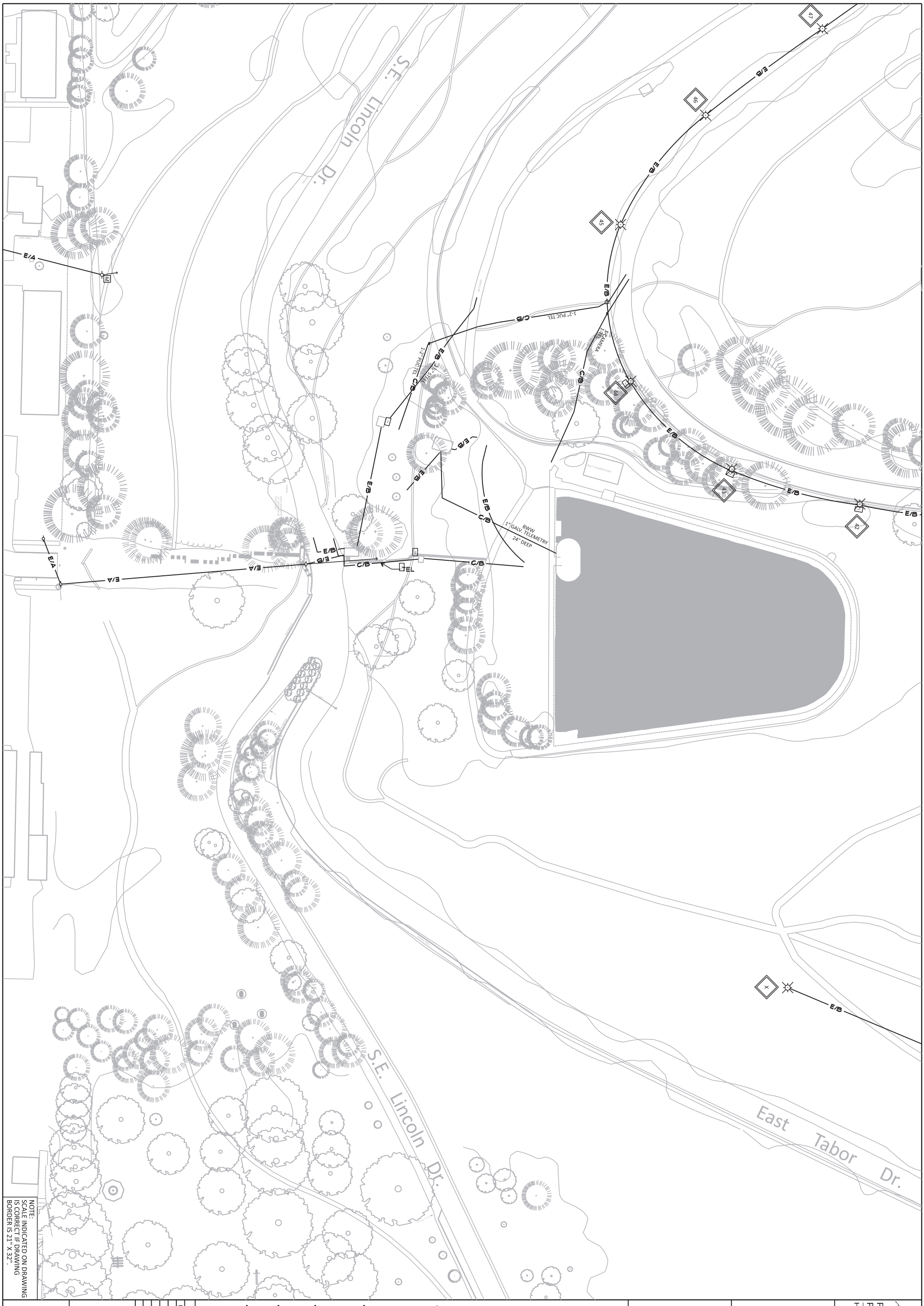

NOTE:
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IS CORRECT IF DRAWING
BORDER IS 21" X 32".

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REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Electrical Features - S

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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LEGEND

= 5' DIA. DISTURBANCE AREA

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

RIM=476.45
IE=474.45

RIM=476.45
IE=474.45

CB (OIL TRAP)
RIM=498.67

WATER VAULT
RIM=498.88

STANDPIPE (DRAIN)
RIM=497.85

MAINTENANCE BUILDING
F.F.E.=500.61

CB (OIL TRAP)
RIM=498.91

WATER VLT BF & VALVE

CB
RIM=499.33
IE OUT(8" NW)=492.05

CB
RIM=498.18
IE=494.68

RESTROOMS
F.F.E.=494.47

C.O.
RIM=494.81

PGE POLE #183
METER #907206E
FOR MAINT. BLDG. &
METER #6586.39E
FOR REST ROOM BLDG.

Account 297865-310-0
2" Meter 31894780
-feeds 2" Conbraco DCVA HG019 (potable)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)
-6650 SE Yamhill St

2" Conbraco 40-108-A2T DCVA
Serial # HG019
-fed by 2" Meter 31894780 (POC)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)

RIM=483.00
IE IN(SE)=480.70
IE IN(SW)=480.70
IE OUT=480.60

C.O.

C.O.

CB (OIL TRAP)
RIM=496.53
IE OUT(8" W)=494.73

1½" Wilkins 950XL DCVA
Serial # 943826
-fed by 2" Meter 31894780 (POC)
-fed by 2" Conbraco DCVA HG019 (potable)
-feeds potable via booster pump (rest rooms + maint. building + drinking fountain)
-feeds 2" Conbraco DCVA IZ343 (irrigation)

CB
RIM=498.60
IE=495.10

CB
RIM=496.80
IE=493.80

DAYLIGHT
IE=494.00

4" OVERFLOW

DRYWELL
IE IN(N&W)=493.40

MATCHLINE
SEE SHEET C3

MATCHLINE
SEE SHEET C2

CB (OIL TRAP)
RIM=482.03

30A, NEMA 3R SERVICE RATED DISCONNECT

PICNIC AREA

IRRIGATION CONTROLLER

IRRIGATION BOOSTER PUMP

3" PVC

I.E. OUT(6" SE)=469.58'

AD
RIM=480.18
IE OUT (6" SW)=478.52

AD
RIM=478.80
IE OUT (6" S)=477.35
IE IN (6" N)=477.35

IE OUT (8" NE)=457.63

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - Amphitheater and Play Area

Portland, Oregon

PROJECT MANAGER:

DRAWN BY: Mike Van Yserloo

DATE: 9/7/2023

SCALE: 1"=30'

SECTION:

REVISIONS		
DATE	DESCRIPTION	BY

C1
OF 6

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WATER MAIN IN ROADWAY. DISTURBANCE AREA TO BE LIMITED BETWEEN EDGE OF SIDEWALK AND BACK OF CURB.

Account 295-431-640-0
2" Meter 43281622
-feeds 2" Watts DCVA 16900 (potable)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)
-1226 SE 63rd Ave (dead end of SE Main St)
-Main at 63rd (billing address)

2" Watts 007 M1 QT DCVA
Serial # 16900
-fed by 2" Meter 43281622 (POC)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)

1" Sub Meter 50081008
-fed by 2" Meter 43281622 (POC)
-fed by 2" Watts DCVA 16900 (potable)
-feeds potable (rental house)

APPROXIMATE LOCATION OF UNDERGROUND ELECT. POWER LINE (PER CITY ELECT.) POWER WATER BUREAU AS-BUILT

EXPOSED TOP OF STORM PIPE (LOCATE PAINT MARKS)

WATER BUREAU POWER LINE

Salmon Street Way

MATCHLINE
SEE SHEET C4

MATCHLINE
SEE SHEET C5

MATCHLINE
SEE SHEET C1

MATCHLINE
SEE SHEET C3

8.4 FT CLEARANCE BETWEEN DISTURBANCE AREA AND WATER MAIN.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

C2
OF 6

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - NW
Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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MATCHLINE
SEE SHEET C2

MATCHLINE
SEE SHEET C1

MATCHLINE
SEE SHEET C5

WATER MAIN UNDER STAIRS. DISTURBANCE AREA TO BE LIMITED OUTSIDE OF STAIRS.

Reservoir 7

North Tabor Dr.

Summit Dr.

Foster Tabor Dr.

S.E. Taylor Dr.

S.E. Main

S.E. 71

2" Conbraco 40-108-T2 DCVA
Serial # WJ591
-fed by 2" Meter 99240056 (POC)
-feeds potable (drinking fountains)
-feeds 2" Febco DCVA 44517
(irrigation via booster pump)

Account 297-963-530-0
2" Meter 99240056
-feeds 2" Conbraco DCVA WJ591 (potable)
-feeds 2" Conbraco DCVA 44517
(irrigation via booster pump)

Account 297-863-520-0
2" Meter 20002054-D
-feeds 2" Conbraco DCVA 00
-1030 SE 69th Ave

2" Conbraco 40-108-T2 DCV
Serial # 004690
-fed by 2" Meter 20002054-
-feeds potable (rest room +
fountain + hose bibs)

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

C3
OF 6

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - NE

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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S.E. 60th Ave.

MATCHLINE SEE SHEET C2

LIGHT POLE LOCATION TO BE RELOCATED 5 FT MIN TO AVOID WATER LINE CONFLICT.

LIGHT POLE LOCATION TO BE RELOCATED 25 FT TO AVOID POTENTIAL WATER LINE CONFLICT.

TOP OF PIPE < 378.27 FT
BOT. OF POLE > 407.87 FT
MIN. CLEARANCE > 29.60 FT

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

C4
OF 6

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - W

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

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MATCHLINE SEE SHEET C3

Soap Box Derby Track

Reservoir Loop Dr.

Harvey Scott Ct

IE 24"=384.08
IE 24"=386.41
4" CONCRETE PIPE
I.E. OUT SW=621.22'
I.E. IN NE=621.20'
APX. TUNNEL LOCATION
12" ALUM. CMP
GRATE=449.43
IE 8" (E)=447.28
IE 10" (W)=446.68
GRATE=449.93
(CLOGGED)
GRATE=510.96
(CLOGGED)
IE 8" HDPE
OUTFALL
IE OUT (6" PVC S)=586.06
CB
RIM=520.49
IE OUT (6" CONC S)=519.04
CB
RIM=520.20
IE OUT (8" CONC S)=518.99
START OF CONCRETE DRAINAGE GUTTER SYSTEM (THIS SIDE)
CB
RIM=485.01
IE IN (6" CONC N)=482.31
IE OUT (6" CONC S)=482.26
CB
RIM=499.06
IE IN (8" CONC N)=495.66
IE OUT (8" CONC S)=495.61
CB
RIM=507.72
IE IN (8" CONC N)=504.22
IE OUT (8" CONC S)=504.07
CB
RIM=507.07
IE IN (8" CONC S)=501.37
IE OUT (8" CONC N)=501.17

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

C5
OF 6

REVISIONS
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Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - E

Portland, Oregon PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

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S.E. Lincoln Dr.

East Tabor Dr.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 21" X 32".

C6
OF 6

REVISIONS
DATE | DESCRIPTION | BY

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - S

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=50' DRAWN BY:Mike Van Yserloo SECTION:

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.3

LU 17-245440 CU AD
CONDITIONS OF APPROVAL

Condition A: As part of the building *permit* application submittal, the following development-related conditions (B through L) must be noted on each of the four required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-245440 CU AD." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page.

Condition B: At the Upper Nursery, a 15-foot-deep L3 high-screen landscape buffer will be installed outside of the decorative steel fence on the west side of the enclosed area; and a S-foot-deep L3 high- screen landscape buffer, minus the tree requirement, will be installed outside of the decorative steel fence along the north side of the enclosed area landscaping (Exhibit C.4). The landscaping will extend the length of the fenced area. One break in the landscaping up to 20 feet wide will be permitted to provide vehicle access into the Upper Nursery development area. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection for the building or other permits required for the Upper Nursery development.
Response: Condition is met on Plan Sheets L3.3 and L3.4

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16- 113354 CO and 16—113360 CO, must either be removed or brought into conformance with the requirements of the Stormwater Management Manual within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: The trees identified for tree protection in Exhibits C.34, C.35, and C.36 are required to be preserved to Title 11 specifications throughout all related building or other permits required to carry out the work approved herein.
Response: Condition is met on Plan Sheets L0.00 through L0.09

Condition E: A landscape buffer will be provided on the east side of the multi-use path that is at least eight feet wide and planted to the L3 high-screen standard between the path and the proposed decorative steel fence. This landscape buffer will extend from the southern property line up approximately 250 linear feet to the north, where the proposed landscaping widens to more than this 8-foot minimum. The required trees on the east side of the multi-use path will be planted such that they are staggered with the existing row of trees on the adjacent property to the west.
Response: Condition is met on Plan Sheets L3.0.

Condition F: Prior to building permit issuance for the multi-use path, Applicant will provide evidence of a recorded easement allowing PP&R access to a 5-foot-wide strip of land on the eastern edge of 6323 SE DİVi5ion Street, running from the Division Street right-of-way north some 290 linear feet. This easement will allow PP&R to remove the existing fence, build a new or relocated fence, and plant and maintain plantings in the area. Within this 5-foot-wide easement area, the existing fence must be removed; the eastern four feet must be planted as shown on landscape plan L3.00; and any new or relocated fence must be installed in the western one foot of the easement area.
Response: Easement is currently under negotiation with neighbor; design requirements are shown in drawings.

Condition G: If an additional drive aisle is allowed off of SE 64th Avenue for access to the Upper Nursery through the current Historic Resource Review 17-158467 HRM, any one of the existing dirt or gravel vehicle access points on SE 64 h Avenue or within the first 100 feet of the southern Park entrance will be closed, so that the total number of vehicle access points from SE Sherman Street north 700 feet, is limited to four. The drive aisle will be closed as part of the building permit approving development in the Upper Nursery area.
Response: Condition is met on demolition plans, Sheets C0.50.

Condition H:Maintain the landscaping buffer between the western tennis courts and the west property line to the L3 standard for trees and shrubs into perpetuity.
Response: The landscape buffer between the western tennis courts and the property line is within Mt Tabor Park and will be maintained by PP&R staff into the future. Pending response from City.

Condition I: Prior to issuance of a building permit for the new Maintenance Building, Applicant shall remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection.
Response: Reference Exhibit A - L3.21.

Condition J: In the event of future construction, maintenance, or other sewerage system activities on the Bureau of Environmental Services sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans L3.00 and L3.10.
Response: Future construction activities related to condtions of approval are not currently planned. PP&R management team will be informed of the condition.

Condition K: In the reduced buffer area between the new maintenance building and the west property line/SE 64t' Avenue right-of-way between the south end of SE Sherman Street and the north end of SE Grant Street, the LI standard for trees and groundcover will be met, and a minimum of 25 shrubs will be planted (Exhibits H.14j and H.14k).
Response: This condition is met on Sheets L3.2.

Condition L: Prior to building or other permit issuance for the multi-use path, Applicant must provide a 20- foot-wide public access easement for a multi-use path that is a minimum of 12-feet wide between SE Sherman and SE Division Street in general alignment with SE 64th Avenue.
Response: Easement work is underway and will be resolved by permit issuance.

LU 17-158467 HRM
CONDITIONS OF APPROVAL

City Of Portland
RECEIVED FOR
CODE COMPLIANCE
Please
Do not write in this area

Condition A: As part of the building permit application submittal, the following development-related conditions (B through I) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-158467HRM." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page, and referenced on A0.51 and A0.52.

Condition B: At the time of building permit submittal, a signed Certificate of Compliance form www.portlandoregon.gov/bds/article/623658 must be submitted to ensure the permit plans comply with the Design.
Response: A signed Certificate of Compliance form is included in the building permit submittal.

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16-113354 CO and 16-113360 CO, must either be removed, or brought into conformance with the requirements of the Stormwater Management Manual (SWMM) within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: All trees, structures and fences must be located at least 7 feet from the existing public sanitary sewer pipe. BES will allow shrubs and shallow-rooted vegetated to be planted over the pipe. In the event of future construction, maintenance, or other sewerage system activities on the BES sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans Exhibit C22 & C23.
Response: Condition is met on plan C302. Landscape area is understood to be part of standard PP&R maintenance activities.

Condition E: Prior to building or other permit issuance for the multi-use path, the applicant must provide a 24-foot-wide public access easement for a multi-use path that is a minimum of 12-ft wide between SE Sherman and SE Division Street in general alignment with SE 64th Ave.
Response: Easement work is underway and will be resolved by permit issuance.

Condition F: Prior to installation of the art pieces, an approved encroachment permit from PBOT must be obtained.
Response: PP&R is coordinating the permits with PBOT. Permits will be pursued after building permits are finalized. Noted on Sheets ART1.0 & ART1.1

Condition G: The public art in the three noted locations along the multi-modal pathway will be approved by the Regional Arts & Culture Council (RACC) and installed prior to issuance of the building's final certificate of occupancy, or sooner.
Response: PP&R has coordinated public art through RACC. Project work is to be accomplished prior to certificate of occupancy. Noted on Sheets ART1.0 & ART1.1

Condition H: Public art or significant landscaping will be installed at the south entrance of Mt. Tabor Parks, near the intersection of SE Lincoln Street and SE 65th Avenue as shown in Exhibit C-44, during the next phase of the Parks Master Plan implementation.
Response: The landscape buffer between the western tennis courts and the property line is within Mt Tabor Park and will be maintained by PP&R staff into the future.

Condition I: Railings at the bridge shall be similar to, but simpler than, the recently approved railings for the Mt. Tabor Park stairway. The railings shall be painted, rather than galvanized, in a color that harmonizes with the neighboring landscaping, and need not be black to match the fences.
Response: This condition is met on plan sheets A5.13.

Condition J: No field changes allowed.
Response: No field changes will be made.

KEY PLAN

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

opsis
503.525.9511
www.opsisarch.com
920 NORTHWEST SEVENTEENTH AVENUE
PORTLAND | OREGON | 97209

PERMIT SET
11.19.2019

REGISTERED ARCHITECT
PAUL G. KINLEY
PORTLAND, OREGON
4589
STATE OF OREGON

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director
6437 SE Division St, Portland, OR 97206

ZONING COMPLIANCE PAGE
MT. TABOR MAINTENANCE FACILITY
PROJECT MANAGER: ROBIN LAUGHLIN
DATE: 11.19.2019 SCALE: REFERENCE DETAILS DRAWN BY: Author SECTION:

REVISIONS

DATE	DESCRIPTION	BY
1	Revision 1	02.15.20

PARKS REPLACEMENT BOND 2014

G1.02

Job No.
4654-01

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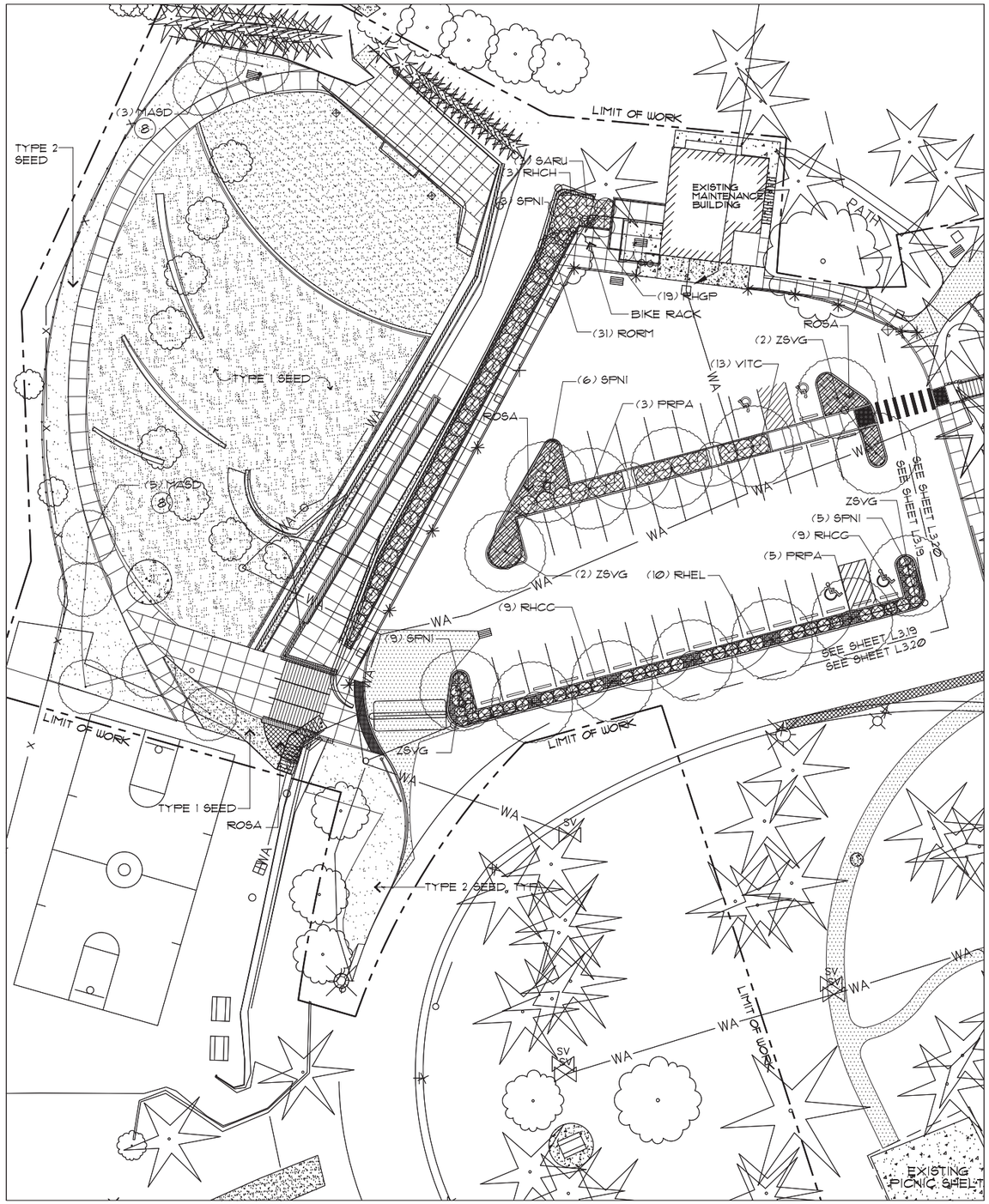
PLOTTED BY:
PLOTTED ON: 4/14/2020 12:52:13 PM
DRAWINGS\FILE$



PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	CONDITION/SIZE/SPACING
TREE:			
ACMA	ACER MACROPHYLLUM	BIGLEAF MAPLE	B&B/ 3" CAL./ AS SHOWN
ALRU	ALNUS RUBRA	RED ALDER	B&B/ 3" CAL./ AS SHOWN
MASD	MALUS 'SNOWDRIFT'	SNOWDRIFT CRABAPPLE	B&B/ 3" CAL./ AS SHOWN
PRPA	PRUNUS PADUS	EUROPEAN BIRD CHERRY	B&B/ 3" CAL./ AS SHOWN
QURU	QUERCUS RUBRA	RED OAK	B&B/ 3" CAL./ AS SHOWN
ZSVG	ZELKOVA SERATA 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	B&B/ 3" CAL./ AS SHOWN
SHRUB:			
DAOD	DAPHNE ODORA	WINTER DAPHNE	3 GAL. CONT/ AS SHOWN
HYPE	HYDRANGEA MACROPHYLLA 'PINK ELF'	PINK ELF HYDRANGEA	2 GAL. CONT/ AS SHOWN
POMU	POLYSTICHUM MUNITUM	SWORD FERN	1 GAL. CONT/ AS SHOWN
RHCH	RHODODENDRON 'CHRISTMAS CHEER'	CHRISTMAS CHEER RHOD.	12-18"/ AS SHOWN
RHCC	RHODODENDRON 'CREAM CREST'	CREAM CREST RHODODENDRON	12-18"/ AS SHOWN
RHDA	RHODODENDRON 'DORA AMATEIS'	DORA AMATEIS RHODODENDRON	12-18"/ AS SHOWN
RHEL	RHODODENDRON 'ELIZABETH'	ELIZABETH RHODODENDRON	12-18"/ AS SHOWN
RHGP	RHODODENDRON 'GUMPO PINK'	PINK GUMPO AZALEA	12-18"/ AS SHOWN
RHMA	RHODODENDRON 'MARS'	MARS RHODODENDRON	12-18"/ AS SHOWN
RHSW	RHODODENDRON 'SCARLET WONDER'	SCARLET WONDER RHOD.	12-18"/ AS SHOWN
RORM	ROSA 'RED MEIDILAND'	RED MEIDILAND ROSE	2 GAL. CONT/ 4' O.C.
SAHH	SARCOCOCCA HOOKERANA HUMILIS	CREEPING SARCOCOCCA	1 GAL. CONT./ AS SHOWN
SARU	SARCOCOCCA RUSCIFOLIA	FRAGRANT SARCOCOCCA	2 GAL. CONT./ AS SHOWN
SKJA	SKIMMIA JAPONICA	JAPANESE SKIMMIA	2 GAL. CONT/ AS SHOWN
SPNI	SPIRAEA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIRAEA	2 GAL. CONT./ AS SHOWN
VITC	VIBURNUM TINUS 'COMPACTA'	DWARF LAURUSTINUS	5 GAL. CONT./ AS SHOWN
GROUNDCOVERS:			
	ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1 GAL. CONT./ 18" O.C.
	FRAGARIA CHILOENSIS	WILD STRAWBERRY	1 GAL. CONT./ 12" O.C.
	GERANIUM MACRORRHIZUM 'BEVENS'	BEVENS GERANIUM	1 GAL. CONT./ 12" O.C.
	MAHONIA REPENS	CREEPING MAHONIA	1 GAL. CONT./ 18" O.C.
	NARCISSUS 'GOLDEN SPUR'	GOLDEN SPUR DAFFODIL	PROVIDE 200 BULBS FOR INSTALLATION WHERE SHOWN BY OWNER'S REPRESENTATIVE.
	ROSA 'ROBIN RED BREAST'	ROBIN RED BREAST ROSE	1 GAL. CONT. / 24" O.C./ TRI. SP.
	ROSA 'SNOW ON THE HEATHER'	SNOW ON THE HEATHER ROSE	1 GAL. CONT. / 36" O.C./ TRI. SP.
	TYPE 1 SEED, SEE SPECIFICATIONS.		
	TYPE 2 SEED, SEE SPECIFICATIONS.		

City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 09/24/21
Case File: LU 23-088549 HR DM
33.700.020, Conformance With LU 17-245440 CU AD, Conditional Use Review and Adjustment Review, Condition of Approval I. Prior to issuance of the new Maintenance Building building permit, remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than 6 months. All required landscaping must be installed prior to final inspection.

NOTES

1. SEE COVER SHEET FOR GENERAL NOTES.
2. GRADE SMOOTH ALL AREAS DISTURBED BY CONSTRUCTION NOT SCHEDULED FOR OTHER IMPROVEMENTS AND SEED WITH TYPE 1 SEED MIXTURE. SEE SPECIFICATIONS.
3. QUANTITIES INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. INSTALL NUMBER OF PLANTS AS DRAWN.
4. PROVIDE SMOOTH FLOWING TRANSITIONS BETWEEN PLANT MATERIALS. LOCATE PLANTS IN FIELD FOR ADJUSTMENT BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
5. ADD BARK MULCH TO EXISTING SHRUB AREAS DISTURBED BY CONSTRUCTION. PROVIDE A MINIMUM OF 2" THICK FOR DISTURBED SHRUB AREAS, TYPICAL.
6. OWNER'S REPRESENTATIVE TO LOCATE PLANTS IN RESTROOM AREA FOR INSTALLATION.
7. PROVIDE TEMPORARY WATERING TO ALL NEW PLANT MATERIAL LOCATED IN AREAS WHICH DO NOT RECEIVE AUTOMATIC IRRIGATION UNTIL FINAL ACCEPTANCE. SEE SPECIFICATIONS.
8. STAKE ALL TREE LOCATIONS IN FIELD FOR OWNER'S REPRESENTATIVE TO ADJUST PRIOR TO INSTALLATION.
9. WHERE ROSES ARE PLANTED INDIVIDUALLY, MINIMUM PLANTING PIT TO BE 24"X24"X24" DEEP.
10. SEE SHEET L7.1 FOR ADDITIVE ALTERNATE PLANT MATERIAL.

NOT IN CONTRACT, WORK BY OWNER

NOTE: IF SHEET SIZE NOT 22" x 35", SCALE IS INCORRECT.

NORTH

100% CONSTRUCTION DOCUMENTS

PORTLAND PARKS & Recreation

REGISTERED NO. 222 • MICHAEL W. ZILIS • OREGON LANDSCAPE ARCHITECT

WALKER·MACY
117 Strathcona Cub Grove, Suite 370, Portland, OR, (503) 224-3123

Portland Parks and Recreation
JAMES FRANCESCONI, Commissioner
CHARLES JORDAN, Director

AMPHITHEATER and MAIN PARKING
Planting Plan
MT. TABOR PARK
Portland, Oregon

Project Manager: GEORGE LOZOVOY
Construction Manager: GARY WOODRUFF 823-5933
DRAWN BY: ES, JB CHECKED BY: KL, MZ
SCALE: AS NOTED
DATE: 05/21/99

REVISIONS

DATE	DESCRIPTION	BY

Let's Build Portland Parks

L3.21
LR 2.00

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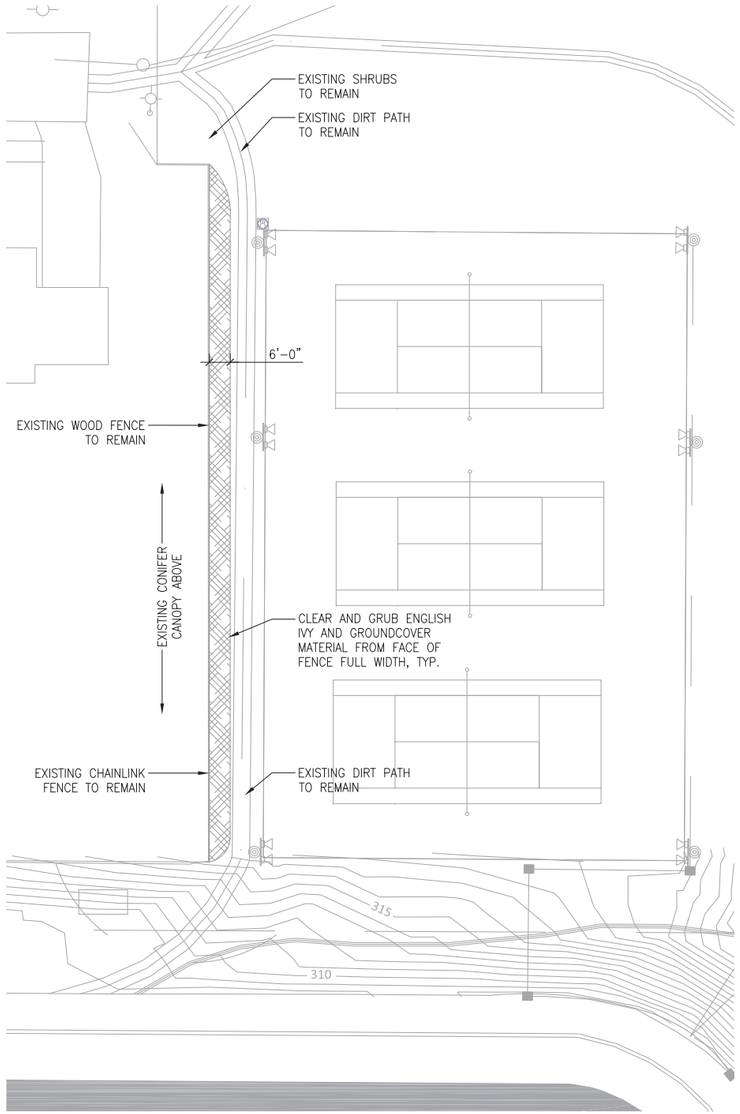
DRAWING: $FILE$

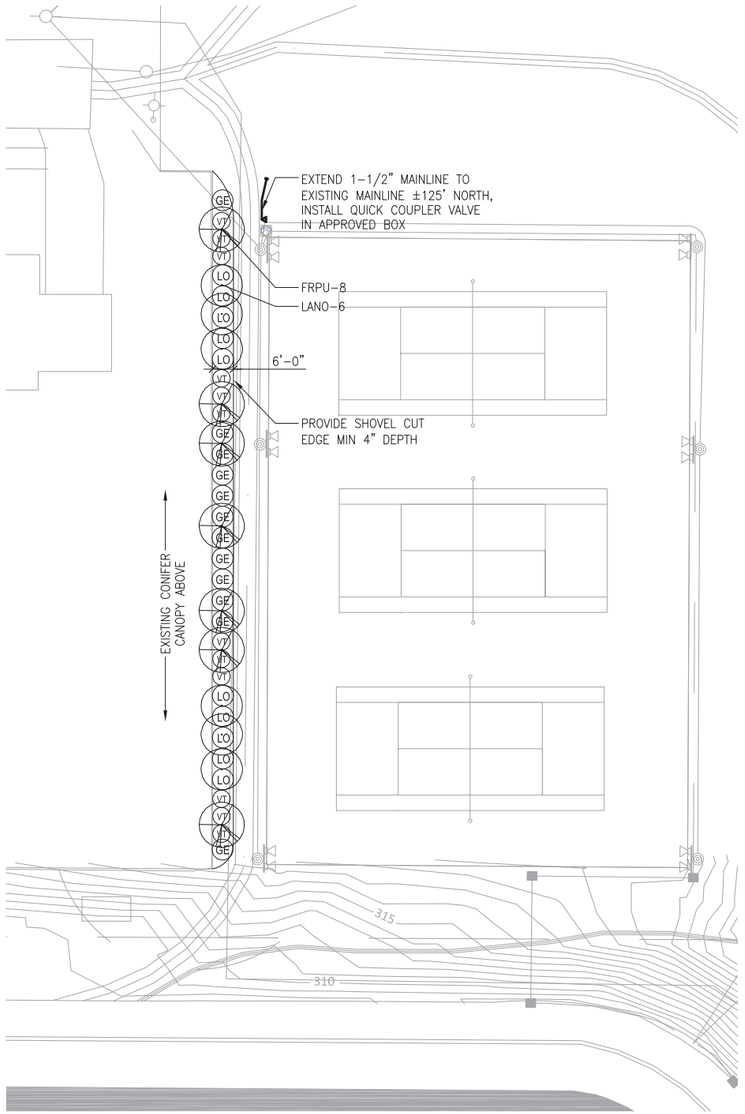
PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	SPACING	HEIGHT
	TREES				
FRPU	FRANGULA PURSHIANA	CASCARA BUCKTHORN	1-1/2" CAL.	AS SHOWN	SMALL TREE
LANO	LAURUS NOBILIS	SWEET BAY	1-1/2" CAL.	AS SHOWN	SMALL TREE
	SHRUBS				
GE	GARRYA ELLIPTICA	WAVYLEAF SILKTASSEL	2 GAL CONT.	AS SHOWN	6-8'
LO	LOROPETALUM CHINENSE v. RUBRUM	PINK-FLOWERING FRINGE-FLOWER	2 GAL. CONT.	AS SHOWN	6
VT	VIBURNUM TINUS	LAURUSTINUS VIBURNUM	2 GAL. CONT.	AS SHOWN	6-8'

City Of Portland
REVIEWED FOR
CODE COMPLIANCE
Date: 09/24/21
Project#: 19-143914-000-00-CO



1 DEMOLITION PLAN



2 PLANTING PLAN

PLANTING NOTES:

1. VERIFY LOCATION OF EXISTING FEATURES INDICATED TO REMAIN PRIOR TO SOIL PREPARATION. PROTECT ALL TREES AND SHRUBS INDICATED TO REMAIN. PLANTING LOCATIONS SHALL BE ADJUSTED TO BEST FIT EXISTING FEATURES TO REMAIN.
2. PLANTING AREAS TO BE SUFFICIENTLY CLEANED OF ROCK, DEBRIS, AND ENGLISH IVY FROM BASE OF FENCE TO EDGE OF WALK TO REMAIN.

GENERAL NOTES

1. NOT IN SCOPE OF WORK – TO BE COMPLETED BY OWNER
2. 33.258.070, CONFORMANCE WITH LU 17-245440 CU AD, CONDITIONAL USE REVIEW AND ADJUSTMENT REVIEW, CONDITION OF APPROVAL H: MAINTAIN THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE TO THE L3 STANDARD FOR TREES AND SHRUBS INTO PERPETUITY. TO COMPLY WITH THIS CONDITION OF APPROVAL, PLEASE PROVIDE A DETAILED LANDSCAPE PLAN TO DOCUMENT THE EXISTING CONDITIONS AND DEMONSTRATE THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE WILL BE MAINTAINED TO COMPLY WITH THE L3 STANDARD AS PART OF THIS PERMIT.

PLANTING REQUIREMENTS

	REQUIRED	PROVIDED
TOTAL FRONTAGE:	186-LF	186-LF
TOTAL TREES:	12.4	13
TOTAL SHRUBS:	31	34

0 5 10 20 40
SCALE: 1" = 20'-0"

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director

Mt Tabor Park Tennis Court Screening
Mt Tabor Park
Portland, Oregon

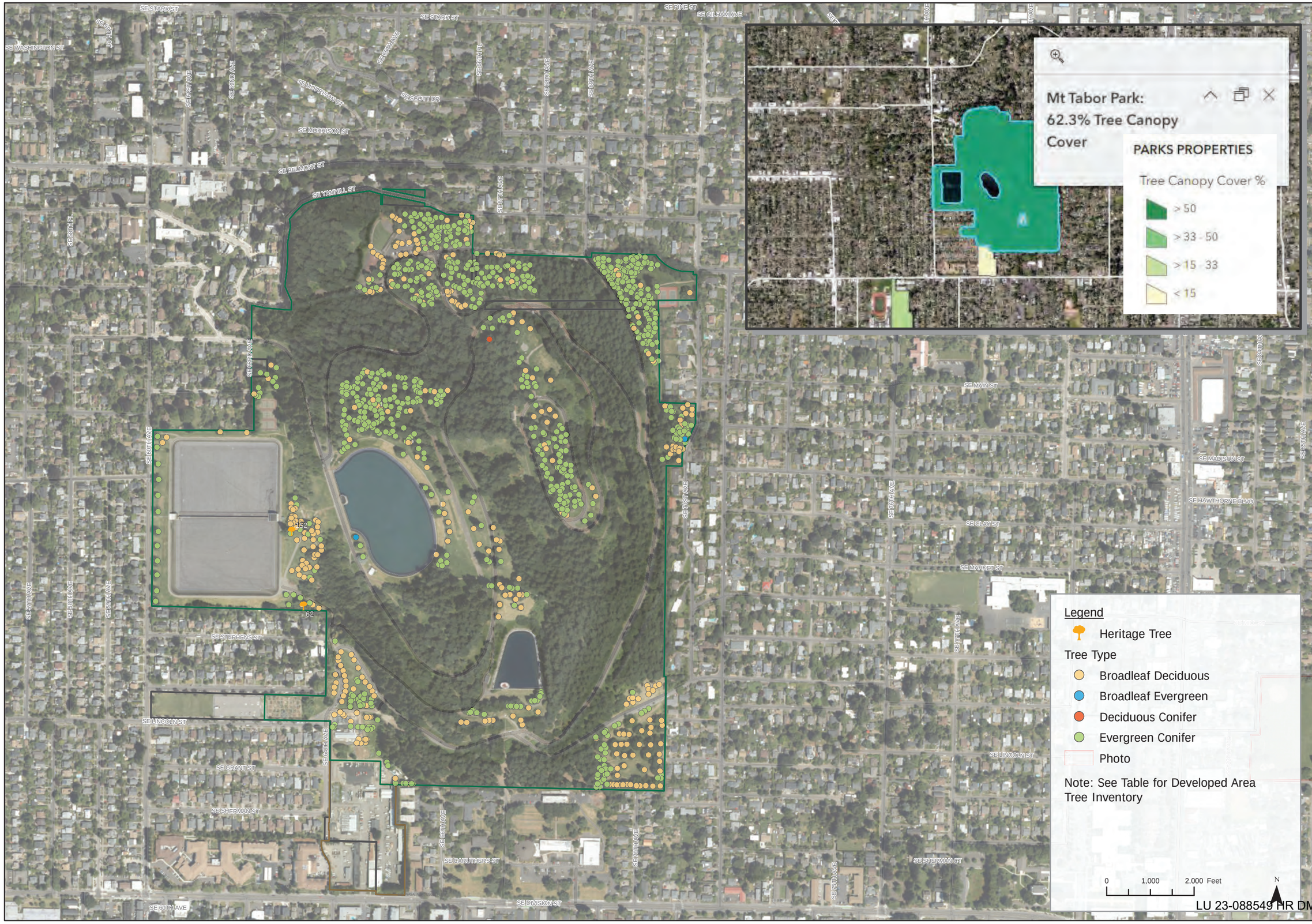
PROJECT MANAGER: RML
DRAWN BY:G DATKA
SECTION:
SCALE: as shown
DATE: July 29, 2020

REVISIONS

DATE	DESCRIPTION	BY

LR1.00

Mt Tabor Park Tree Canopy and Inventory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SE 138TH AVE
SE 139TH AVE
SE 140TH AVE
SE 141ST AVE
SE 142ND AVE
SE 143RD AVE
SE

Mt Tabor Park Tree Inventory

Table Page 1

TreeNo	Genus species	Common Name	DBH	Size
1	Liriodendron tulipifera	tuliptree	4.4	L
2	Cryptomeria japonica	Japanese cedar	10.4	M
3	Pinus strobus	eastern white pine	10.6	L
4	Picea smithiana	Himalayan spruce	6	L
5	Prunus serrulata	Japanese flowering cherry	2.9	S
6	Prunus serrulata	Japanese flowering cherry	30	S
7	Prunus serrulata	Japanese flowering cherry	26.5	S
8	Prunus serrulata	Japanese flowering cherry	6.7	S
9	Prunus serrulata	Japanese flowering cherry	4.3	S
10	Prunus serrulata	Japanese flowering cherry	28.6	S
11	Gymnocladus dioica	Kentucky coffeetree	3.2	L
12	Prunus serrulata	Japanese flowering cherry	14.4	S
13	Pterocarya spp.	wingnut	3.2	S
14	Pseudotsuga menziesii	Douglas-fir	13.9	L
15	Pseudotsuga menziesii	Douglas-fir	15.8	L
16	Pseudotsuga menziesii	Douglas-fir	13.3	L
17	Acer heldreichii	Balkan maple	11.6	M
18	Thuja plicata	western redcedar	13.6	L
19	Chamaecyparis obtusa	Hinoki falsecypress	6	L
20	Carpinus betulus	European hornbeam	12	M
21	Thuja plicata	western redcedar	8	L
22	Abies grandis x concolor	Leuteneggeri hybrid fir	23.8	S
23	Sequoia sempervirens	coast redwood	24.6	L
24	Thuja plicata	western redcedar	23.2	L
25	Acer campestre	hedge maple	5	M
26	Tilia tomentosa	silver linden	40.5	L
27	Acer macrophyllum	bigleaf maple	1.5	L
28	Acer macrophyllum	bigleaf maple	1.7	L
29	Crataegus monogyna	English hawthorn, common	16	S
30	Cedrus deodara	deodar cedar	39.2	L
31	Crataegus monogyna	English hawthorn, common	22.7	S
32	Cedrus deodara	deodar cedar	33	L
33	Crataegus monogyna	English hawthorn, common	11.7	S
34	Cedrus deodara	deodar cedar	35.7	L
35	Crataegus monogyna	English hawthorn, common	18.3	S
36	Sequoiadendron giganteum	giant sequoia	26	L
37	Cedrus deodara	deodar cedar	41.1	L
38	Acer macrophyllum	bigleaf maple	36.7	L
39	Crataegus monogyna	English hawthorn, common	14.3	S
40	Salix spp.	willow	19	M
41	Pseudotsuga menziesii	Douglas-fir	36	L
42	Crataegus monogyna	English hawthorn, common	25.7	S
43	Crataegus monogyna	English hawthorn, common	19.8	S
44	Malus spp.	ornamental crabapple	12.4	S
45	Crataegus monogyna	English hawthorn, common	15.5	S
46	Liquidambar styraciflua	sweetgum	13	M
47	Prunus serrulata	Japanese flowering cherry	23.2	S
48	Quercus palustris	pin oak	3.3	L
49	Prunus serrulata	Japanese flowering cherry	28.2	S
50	Prunus serrulata	Japanese flowering cherry	22.7	S
51	Prunus serrulata	Japanese flowering cherry	28.6	S
52	Gymnocladus dioica	Kentucky coffeetree	7.6	L
53	Prunus serrulata	Japanese flowering cherry	14.7	S
54	Alnus rubra	red alder	12.9	M
55	Pseudotsuga menziesii	Douglas-fir	1.2	L
56	Styrax japonicus	Japanese snowbell	4	S
57	Sequoiadendron giganteum	giant sequoia	29	L
58	Pinus ponderosa	ponderosa pine	14.1	L
59	Chamaecyparis obtusa	Hinoki falsecypress	6	L
60	Picea smithiana	Himalayan spruce	7.5	L
61	Acer davidii	snakebark maple	5.8	S
62	Acer davidii	snakebark maple	8.3	S
63	Thuja plicata	western redcedar	10	L
64	Sequoia sempervirens	coast redwood	29.3	L
65	Calocedrus decurrens	incense cedar	35	L
66	Quercus palustris	pin oak	3.1	L
67	Prunus serrulata	Japanese flowering cherry	2.8	S
68	Prunus serrulata	Japanese flowering cherry	34	S
69	Picea smithiana	Himalayan spruce	6	L
70	Prunus serrulata	Japanese flowering cherry	22.5	S
71	Pinus ponderosa	ponderosa pine	15.8	L
72	Sequoia sempervirens	coast redwood	24.3	L
73	Pseudotsuga menziesii	Douglas-fir	11.2	L
74	Pinus ponderosa	ponderosa pine	12.3	L
75	Chamaecyparis obtusa	Hinoki falsecypress	6	L
76	Chamaecyparis obtusa	Hinoki falsecypress	6	L
77	Crataegus monogyna	English hawthorn, common	0.5	S
78	Acer davidii	snakebark maple	7.8	S
79	Carpinus betulus	European hornbeam	12.5	M
80	Thuja plicata	western redcedar	8	L
81	Calocedrus decurrens	incense cedar	25	L
82	Calocedrus decurrens	incense cedar	25	L
83	Acer platanoides	Norway maple	3.8	M
84	Acer macrophyllum	bigleaf maple	1.7	L
85	Tilia tomentosa	silver linden	63.9	L
86	Crataegus monogyna	English hawthorn, common	20.4	S
87	Sequoiadendron giganteum	giant sequoia	1	L
88	Cedrus deodara	deodar cedar	23	L
89	Cedrus deodara	deodar cedar	31	L
90	Cedrus deodara	deodar cedar	31.9	L
91	Crataegus monogyna	English hawthorn, common	17.5	S
92	Crataegus monogyna	English hawthorn, common	13	S
93	Pseudotsuga menziesii	Douglas-fir	5.4	L
94	Malus spp.	ornamental crabapple	12.5	S
95	Prunus avium	bird cherry	7	M
96	Crataegus monogyna	English hawthorn, common	15	S
97	Pseudotsuga menziesii	Douglas-fir	28.8	L
98	Malus spp.	ornamental crabapple	10.1	S
99	Pseudotsuga menziesii	Douglas-fir	41.2	L
100	Pseudotsuga menziesii	Douglas-fir	23.5	L
101	Prunus serrulata	Japanese flowering cherry	32.4	S
102	Crataegus monogyna	English hawthorn, common	21.2	S
103	Prunus serrulata	Japanese flowering cherry	2.1	S
104	Prunus serrulata	Japanese flowering cherry	28.7	S
105	Prunus serrulata	Japanese flowering cherry	26	S
106	Gymnocladus dioica	Kentucky coffeetree	8.3	L
107	Prunus serrulata	Japanese flowering cherry	25.2	S
108	Pinus ponderosa	ponderosa pine	17.3	L
109	Prunus serrulata	Japanese flowering cherry	34.5	S
110	Pinus ponderosa	ponderosa pine	17.6	L
111	Pterocarya spp.	wingnut	2.1	S
112	Pseudotsuga menziesii	Douglas-fir	1	L
113	Pterocarya spp.	wingnut	3.5	S
114	Pseudotsuga menziesii	Douglas-fir	1.2	L
115	Sequoiadendron giganteum	giant sequoia	32.3	L
116	Sequoiadendron giganteum	giant sequoia	30.8	L
117	Pseudotsuga menziesii	Douglas-fir	15.3	L
118	Chamaecyparis obtusa	Hinoki falsecypress	4.2	L
119	Thuja plicata	western redcedar	10.8	L
120	Chamaecyparis obtusa	Hinoki falsecypress	5	L
121	Picea pungens	Colorado blue spruce	5.3	L
122	Acer davidii	snakebark maple	9.2	S
123	Pinus ponderosa	ponderosa pine	25.1	L
124	Fagus sylvatica	European beech	14	L
125	Styphnolobium japonicum syn. Sophora japonica	Japanese pagoda tree, Chinese	3.6	M
126	Cladrastis kentukea	American yellowwood	12.9	M
127	Calocedrus decurrens	incense cedar	30	L
128	Malus spp.	ornamental crabapple	13.9	S
129	Sequoiadendron giganteum	giant sequoia	11.8	L
130	Malus fusca	Pacific crabapple	14	S
131	Picea pungens	Colorado blue spruce	31.4	L
132	Crataegus monogyna	English hawthorn, common	24.4	S
133	Crataegus monogyna	English hawthorn, common	12.5	S
134	Crataegus monogyna	English hawthorn, common	19.5	S
135	Pyrus calleryana	flowering pear	6.1	M
136	Acer macrophyllum	bigleaf maple	15.5	L
137	Populus nigra	black poplar, Lombardy poplar	13.6	L
138	Ostrya virginiana	American hophornbeam	2.7	M
139	Crataegus monogyna	English hawthorn, common	13	S
140	Pseudotsuga menziesii	Douglas-fir	48.8	L
141	Thuja plicata	western redcedar	4.9	L
142	Acer saccharum	sugar maple	4.9	L
143	Sequoiadendron giganteum	giant sequoia	99	L
144	Cedrus deodara	deodar cedar	37.8	L
145	Cedrus deodara	deodar cedar	40.7	L
146	Sequoiadendron giganteum	giant sequoia	22.4	L
147	Sequoiadendron giganteum	giant sequoia	31.6	L
148	Cedrus deodara	deodar cedar	21.6	L
149	Cedrus deodara	deodar cedar	31	L
150	Crataegus monogyna	English hawthorn, common	11	S
151	Cedrus deodara	deodar cedar	26.2	L
152	Malus spp.	ornamental crabapple	15.8	S
153	Crataegus monogyna	English hawthorn, common	10.8	S
154	Crataegus monogyna	English hawthorn, common	11	S
155	Crataegus monogyna	English hawthorn, common	18.5	S
156	Populus nigra	black poplar, Lombardy poplar	17.7	L
157	Crataegus monogyna	English hawthorn, common	11.8	S
158	Pseudotsuga menziesii	Douglas-fir	44.5	L
159	Ostrya virginiana	American hophornbeam	2.5	M
160	Pseudotsuga menziesii	Douglas-fir	40.6	L
161	Pseudotsuga menziesii	Douglas-fir	56.8	L
162	Acer macrophyllum	bigleaf maple	28.8	L
163	Pseudotsuga menziesii	Douglas-fir	37.3	L
164	Crataegus monogyna	English hawthorn, common	13.6	S
165	Crataegus monogyna	English hawthorn, common	13.1	S
166	Crataegus monogyna	English hawthorn, common	19.9	S
167	Crataegus monogyna	English hawthorn, common	20.2	S
168	Crataegus monogyna	English hawthorn, common	10.3	S
169	Pseudotsuga menziesii	Douglas-fir	34	L
170	Crataegus monogyna	English hawthorn, common	18.2	S
171	Crataegus monogyna	English hawthorn, common	18.2	S
172	Crataegus monogyna	English hawthorn, common	13.2	S
173	Crataegus monogyna	English hawthorn, common	20.4	S
174	Crataegus monogyna	English hawthorn, common	13.1	S
175	Pyrus communis	European pear (including	8.1	M
176	Pseudotsuga menziesii	Douglas-fir	41.3	L
177	Pseudotsuga menziesii	Douglas-fir	37.6	L
178	Pseudotsuga menziesii	Douglas-fir	34.9	L
179	Pseudotsuga menziesii	Douglas-fir	46.1	L
180	Prunus sargentii	Sargent's cherry	9.6	S
181	Pseudotsuga menziesii	Douglas-fir	44.2	L
182	Prunus sargentii	Sargent's cherry	2.5	S
183	Prunus sargentii	Sargent's cherry	6	S
184	Pseudotsuga menziesii	Douglas-fir	49.2	L
187	Pseudotsuga menziesii	Douglas-fir	33.7	L
188	Zelkova serrata	Japanese zelkova	10	M
189	Pseudotsuga menziesii	Douglas-fir	36.7	L
190	Pseudotsuga menziesii	Douglas-fir	27.9	L
191	Pseudotsuga menziesii	Douglas-fir	41.1	L
192	Fagus sylvatica	European beech	25	L
193	Pseudotsuga menziesii	Douglas-fir	47.2	L
194	Pseudotsuga menziesii	Douglas-fir	35.9	L
195	Pseudotsuga menziesii	Douglas-fir	36.1	L
196	Prunus cerasifera	flowering plum	4.9	S
197	Pseudotsuga menziesii	Douglas-fir	31.7	L
198	Pseudotsuga menziesii	Douglas-fir	31	L
199	Pseudotsuga menziesii	Douglas-fir	42.9	L
200	Cornus nuttallii	Pacific dogwood	4.8	M
201	Pseudotsuga menziesii	Douglas-fir	50.2	L
202	Pseudotsuga menziesii	Douglas-fir	48.3	L
203	Thuja plicata	western redcedar	1.3	L
204	Pseudotsuga menziesii	Douglas-fir	45.3	L
205	Pseudotsuga menziesii	Douglas-fir	44.1	L
206	Prunus sargentii	Sargent's cherry	3.4	S
207	Zelkova serrata	Japanese zelkova	13.7	M
208	Zelkova serrata	Japanese zelkova	10.1	M
209	Zelkova serrata	Japanese zelkova	12.5	M
210	Pseudotsuga menziesii	Douglas-fir	24.7	L
211	Pseudotsuga menziesii	Douglas-fir	34.4	L
212	Pseudotsuga menziesii	Douglas-fir	47.4	L
213	Pseudotsuga menziesii	Douglas-fir	30.8	L
214	Zelkova serrata	Japanese zelkova	10.5	M
215	Pseudotsuga menziesii	Douglas-fir	21.8	L
216	Quercus rubra	northern red oak	30.2	L
217	Pseudotsuga menziesii	Douglas-fir	45.9	L
218	Acer platanoides	Norway maple	14.3	M
219	Pseudotsuga menziesii	Douglas-fir	33.9	L
220	Pseudotsuga menziesii	Douglas-fir	69.4	L
221	Pseudotsuga menziesii	Douglas-fir	23	L
222	Pseudotsuga menziesii	Douglas-fir	38.4	L
223	Pseudotsuga menziesii	Douglas-fir	36.8	L
224	Platanus x acerifolia	London plane tree	11.2	L
225	Pseudotsuga menziesii	Douglas-fir	32.7	L
226	Pseudotsuga menziesii	Douglas-fir	37.4	L
227	Thuja plicata	western redcedar	3	L
228	Pseudotsuga menziesii	Douglas-fir	37.1	L
229	Fagus sylvatica	European beech	11	L
230	Pseudotsuga menziesii	Douglas-fir	49.2	L
231	Prunus sargentii	Sargent's cherry	5.7	S
232	Fagus sylvatica	European beech	20.5	L
233	Pseudotsuga menziesii	Douglas-fir	48.7	L
234	Pseudotsuga menziesii	Douglas-fir	33	L
235	Pseudotsuga menziesii	Douglas-fir	35	L
236	Pseudotsuga menziesii	Douglas-fir	30.5	L
237	Pseudotsuga menziesii	Douglas-fir	31.6	L
238	Pseudotsuga menziesii	Douglas-fir	43.8	L
239	Pseudotsuga menziesii	Douglas-fir	33.9	L
240	Pseudotsuga menziesii	Douglas-fir	40.7	L
241	Pseudotsuga menziesii	Douglas-fir	28.6	L
242	Pseudotsuga menziesii	Douglas-fir	47	L
243	Pseudotsuga menziesii	Douglas-fir	20.9	L
244	Pseudotsuga menziesii	Douglas-fir	41.3	L
245	Pseudotsuga menziesii	Douglas-fir	39.9	L
246	Pseudotsuga menziesii	Douglas-fir	19.5	L
247	Pseudotsuga menziesii	Douglas-fir	51.5	L
248	Pseudotsuga menziesii	Douglas-fir	30	L
249	Acer macrophyllum	bigleaf maple	9	L
250	Acer palmatum	Japanese maple	8.1	S

Mt Tabor Park Tree Inventory

Table Page 2

TreeNo	Genus species	Common Name	DBH	Size
251	Platanus x acerifolia	London plane tree	19.5	L
252	Pseudotsuga menziesii	Douglas-fir	25.7	L
253	Tsuga heterophylla	western hemlock	4.3	L
254	Pseudotsuga menziesii	Douglas-fir	39	L
255	Malus spp.	ornamental crabapple	8.2	S
256	Pseudotsuga menziesii	Douglas-fir	31.6	L
257	Quercus rubra	northern red oak	15.4	L
258	Pseudotsuga menziesii	Douglas-fir	38.8	L
259	Pseudotsuga menziesii	Douglas-fir	35.4	L
260	Pseudotsuga menziesii	Douglas-fir	32.2	L
261	Pseudotsuga menziesii	Douglas-fir	27.7	L
262	Pseudotsuga menziesii	Douglas-fir	53	L
263	Pseudotsuga menziesii	Douglas-fir	44.7	L
264	Pseudotsuga menziesii	Douglas-fir	44.2	L
265	Pseudotsuga menziesii	Douglas-fir	30	L
266	Pseudotsuga menziesii	Douglas-fir	35.9	L
267	Pseudotsuga menziesii	Douglas-fir	40.8	L
268	Pseudotsuga menziesii	Douglas-fir	30.2	L
269	Pseudotsuga menziesii	Douglas-fir	36.2	L
270	Pseudotsuga menziesii	Douglas-fir	36.3	L
271	Pseudotsuga menziesii	Douglas-fir	1.7	L
272	Pseudotsuga menziesii	Douglas-fir	47.5	L
273	Pseudotsuga menziesii	Douglas-fir	47.3	L
274	Pseudotsuga menziesii	Douglas-fir	34.6	L
275	Pseudotsuga menziesii	Douglas-fir	26.9	L
276	Malus spp.	ornamental crabapple	5.2	S
277	Pseudotsuga menziesii	Douglas-fir	26	L
278	Pseudotsuga menziesii	Douglas-fir	41.9	L
279	Betula papyrifera	paper birch	5.7	M
280	Malus fusca	Pacific crabapple	6.9	S
281	Pseudotsuga menziesii	Douglas-fir	37.6	L
282	Tsuga heterophylla	western hemlock	34.2	L
283	Alnus rubra	red alder	12	M
284	Pseudotsuga menziesii	Douglas-fir	29.7	L
285	Pseudotsuga menziesii	Douglas-fir	35.8	L
286	Pseudotsuga menziesii	Douglas-fir	27.6	L
287	Pseudotsuga menziesii	Douglas-fir	42.9	L
288	Fagus grandifolia	American beech	41.9	L
289	Pseudotsuga menziesii	Douglas-fir	23.7	L
290	Pseudotsuga menziesii	Douglas-fir	36.7	L
291	Pseudotsuga menziesii	Douglas-fir	32.6	L
292	Pseudotsuga menziesii	Douglas-fir	45.9	L
293	Pseudotsuga menziesii	Douglas-fir	46.9	L
294	Pseudotsuga menziesii	Douglas-fir	50.4	L
295	Pseudotsuga menziesii	Douglas-fir	25.8	L
296	Pseudotsuga menziesii	Douglas-fir	34.3	L
297	Pseudotsuga menziesii	Douglas-fir	38.1	L
298	Pseudotsuga menziesii	Douglas-fir	37.3	L
299	Pseudotsuga menziesii	Douglas-fir	34.2	L
300	Pseudotsuga menziesii	Douglas-fir	36.4	L
301	Pseudotsuga menziesii	Douglas-fir	31.7	L
302	Pseudotsuga menziesii	Douglas-fir	54.4	L
303	Pseudotsuga menziesii	Douglas-fir	40.1	L
304	Pseudotsuga menziesii	Douglas-fir	34.5	L
305	Tsuga heterophylla	western hemlock	29.4	L
306	Pseudotsuga menziesii	Douglas-fir	26.5	L
307	Pseudotsuga menziesii	Douglas-fir	23	L
308	Pseudotsuga menziesii	Douglas-fir	29.8	L
309	Malus spp.	ornamental crabapple	5.6	S
310	Malus spp.	ornamental crabapple	4.4	S
311	Pseudotsuga menziesii	Douglas-fir	28.9	L
312	Pseudotsuga menziesii	Douglas-fir	34	L
313	Pseudotsuga menziesii	Douglas-fir	32	L
314	Pseudotsuga menziesii	Douglas-fir	41.2	L
315	Alnus rubra	red alder	11.6	M
316	Pseudotsuga menziesii	Douglas-fir	27.7	L
317	Pseudotsuga menziesii	Douglas-fir	27.9	L
318	Pseudotsuga menziesii	Douglas-fir	42.1	L
319	Pseudotsuga menziesii	Douglas-fir	33.4	L
320	Pseudotsuga menziesii	Douglas-fir	34.1	L
321	Calocedrus decurrens	incense cedar	8.8	L
322	Tsuga heterophylla	western hemlock	27.7	L
323	Thuja plicata	western redcedar	12.9	L
324	Sorbus aucuparia	European mountain ash	16.3	S
325	Pseudotsuga menziesii	Douglas-fir	39.7	L
326	Pseudotsuga menziesii	Douglas-fir	39.7	L
327	Pseudotsuga menziesii	Douglas-fir	39.1	L
328	Sorbus aucuparia	European mountain ash	9.8	S
329	Pseudotsuga menziesii	Douglas-fir	50	L
330	Acer macrophyllum	bigleaf maple	48	L
331	Pseudotsuga menziesii	Douglas-fir	39.3	L
332	Pseudotsuga menziesii	Douglas-fir	28.2	L
333	Pseudotsuga menziesii	Douglas-fir	39.8	L
334	Acer macrophyllum	bigleaf maple	56.5	L
335	Pseudotsuga menziesii	Douglas-fir	38.8	L
336	Pseudotsuga menziesii	Douglas-fir	27.5	L
337	Pseudotsuga menziesii	Douglas-fir	50.4	L
338	Pseudotsuga menziesii	Douglas-fir	2.1	L
339	Pseudotsuga menziesii	Douglas-fir	30.7	L
340	Pseudotsuga menziesii	Douglas-fir	35.5	L
341	Crataegus monogyna	English hawthorn, common	7.1	S
342	Pseudotsuga menziesii	Douglas-fir	39.5	L
343	Pseudotsuga menziesii	Douglas-fir	50.6	L
344	Pseudotsuga menziesii	Douglas-fir	24.5	L
345	Pseudotsuga menziesii	Douglas-fir	40.5	L
346	Pseudotsuga menziesii	Douglas-fir	40.4	L
347	Pseudotsuga menziesii	Douglas-fir	37.4	L
348	Pseudotsuga menziesii	Douglas-fir	31.4	L
349	Pseudotsuga menziesii	Douglas-fir	48	L
350	Picea pungens	Colorado blue spruce	7.7	L
351	Pseudotsuga menziesii	Douglas-fir	45	L
352	Malus spp.	ornamental crabapple	9.6	S
353	Pseudotsuga menziesii	Douglas-fir	39	L
354	Betula pendula	European white birch	17.7	M
355	Pseudotsuga menziesii	Douglas-fir	45.9	L
356	Betula pendula	European white birch	15.7	M
357	Pseudotsuga menziesii	Douglas-fir	37.3	L
358	Pseudotsuga menziesii	Douglas-fir	33.8	L
359	Pseudotsuga menziesii	Douglas-fir	10.1	L
360	Pseudotsuga menziesii	Douglas-fir	28.4	L
361	Pseudotsuga menziesii	Douglas-fir	45.2	L
362	Pseudotsuga menziesii	Douglas-fir	36.1	L
363	Pseudotsuga menziesii	Douglas-fir	30.5	L
364	Pseudotsuga menziesii	Douglas-fir	41.9	L
365	Magnolia spp.	magnolia	13.1	S
366	Picea abies	Norway spruce	15.7	L
367	Picea abies	Norway spruce	17.9	L
368	Pseudotsuga menziesii	Douglas-fir	56.4	L
369	Pseudotsuga menziesii	Douglas-fir	50.5	L
370	Malus spp.	ornamental crabapple	6.6	S
371	Acer macrophyllum	bigleaf maple	39.8	L
372	Acer macrophyllum	bigleaf maple	37.1	L
373	Pseudotsuga menziesii	Douglas-fir	32.9	L
374	Pseudotsuga menziesii	Douglas-fir	30.9	L
375	Magnolia spp.	magnolia	7.3	S
376	Pseudotsuga menziesii	Douglas-fir	49.4	L
377	Pseudotsuga menziesii	Douglas-fir	56.8	L
378	Pseudotsuga menziesii	Douglas-fir	49	L
379	Pseudotsuga menziesii	Douglas-fir	51.4	L
380	Pseudotsuga menziesii	Douglas-fir	40.9	L
381	Pseudotsuga menziesii	Douglas-fir	32.5	L
382	Pseudotsuga menziesii	Douglas-fir	52.3	L
383	Pseudotsuga menziesii	Douglas-fir	44.1	L
384	Pseudotsuga menziesii	Douglas-fir	37.1	L
385	Pseudotsuga menziesii	Douglas-fir	39	L
386	Pseudotsuga menziesii	Douglas-fir	63	L
387	Betula pendula	European white birch	8.5	M
388	Malus spp.	ornamental crabapple	7.1	S
389	Pseudotsuga menziesii	Douglas-fir	41	L
390	Pseudotsuga menziesii	Douglas-fir	43.5	L
391	Pseudotsuga menziesii	Douglas-fir	41.3	L
392	Quercus rubra	northern red oak	22.1	L
393	Malus spp.	ornamental crabapple	9.5	S
394	Fagus sylvatica	European beech	22.6	L
395	Juglans regia	English walnut	9.4	L
396	Fagus sylvatica	European beech	17.6	L
397	Fagus sylvatica	European beech	13.4	L
398	Pseudotsuga menziesii	Douglas-fir	40	L
399	Pseudotsuga menziesii	Douglas-fir	29.1	L
400	Betula pendula	European white birch	15.1	M
401	Betula pendula	European white birch	23.7	M
402	Pseudotsuga menziesii	Douglas-fir	55.1	L
403	Pseudotsuga menziesii	Douglas-fir	23.4	L
404	Acer circinatum	vine maple	9.2	S
405	Pseudotsuga menziesii	Douglas-fir	30.2	L
406	Pseudotsuga menziesii	Douglas-fir	23.2	L
407	Prunus avium	bird cherry	11.6	M
408	Pseudotsuga menziesii	Douglas-fir	35.4	L
409	Prunus serrula	paperbark cherry, birchbark	17	S
410	Prunus serrula	paperbark cherry, birchbark	22.3	S
411	Prunus serrula	paperbark cherry, birchbark	19.3	S
412	Pseudotsuga menziesii	Douglas-fir	40.6	L
413	Pseudotsuga menziesii	Douglas-fir	38.4	L
414	Pseudotsuga menziesii	Douglas-fir	33.3	L
415	Pseudotsuga menziesii	Douglas-fir	35.7	L
416	Pseudotsuga menziesii	Douglas-fir	51.4	L
417	Malus spp.	ornamental crabapple	9	S
418	Pseudotsuga menziesii	Douglas-fir	35.4	L
419	Prunus serrulata	Japanese flowering cherry	9.8	S
420	Picea abies	Norway spruce	19	L
421	Picea abies	Norway spruce	14.5	L
422	Betula pendula	European white birch	20.8	M
423	Pseudotsuga menziesii	Douglas-fir	45	L
424	Pseudotsuga menziesii	Douglas-fir	35.4	L
425	Pseudotsuga menziesii	Douglas-fir	38.8	L
426	Pseudotsuga menziesii	Douglas-fir	43.1	L
427	Pseudotsuga menziesii	Douglas-fir	26.5	L
428	Pseudotsuga menziesii	Douglas-fir	45.9	L
429	Pseudotsuga menziesii	Douglas-fir	42.6	L
430	Pseudotsuga menziesii	Douglas-fir	25.8	L
431	Pseudotsuga menziesii	Douglas-fir	41.1	L
432	Acer macrophyllum	bigleaf maple	11.3	L
433	Pseudotsuga menziesii	Douglas-fir	37.3	L
434	Pseudotsuga menziesii	Douglas-fir	24.6	L
435	Pseudotsuga menziesii	Douglas-fir	34.3	L
436	Acer macrophyllum	bigleaf maple	5.3	L
437	Pseudotsuga menziesii	Douglas-fir	20.1	L
438	Acer macrophyllum	bigleaf maple	52.4	L
439	Acer macrophyllum	bigleaf maple	41	L
440	Pseudotsuga menziesii	Douglas-fir	28.9	L
441	Pseudotsuga menziesii	Douglas-fir	57.8	L
442	Pseudotsuga menziesii	Douglas-fir	51	L
443	Pseudotsuga menziesii	Douglas-fir	33.3	L
444	Pseudotsuga menziesii	Douglas-fir	46.3	L
445	Pseudotsuga menziesii	Douglas-fir	27.3	L
446	Quercus garryana	Oregon white oak	2.4	L
447	Pseudotsuga menziesii	Douglas-fir	25.9	L
448	Pseudotsuga menziesii	Douglas-fir	35.4	L
449	Pseudotsuga menziesii	Douglas-fir	43.3	L
450	Pseudotsuga menziesii	Douglas-fir	41.7	L
451	Pseudotsuga menziesii	Douglas-fir	60.3	L
452	Pseudotsuga menziesii	Douglas-fir	7.4	L
453	Pseudotsuga menziesii	Douglas-fir	31.6	L
454	Pseudotsuga menziesii	Douglas-fir	40.6	L
455	Crataegus monogyna	English hawthorn, common	17.5	S
456	Pseudotsuga menziesii	Douglas-fir	39.9	L
457	Pseudotsuga menziesii	Douglas-fir	34.2	L
458	Pseudotsuga menziesii	Douglas-fir	54	L
459	Pseudotsuga menziesii	Douglas-fir	21.7	L
460	Pseudotsuga menziesii	Douglas-fir	54.8	L
461	Pseudotsuga menziesii	Douglas-fir	50.3	L
462	Picea pungens	Colorado blue spruce	10	L
463	Pseudotsuga menziesii	Douglas-fir	44.9	L
464	Pseudotsuga menziesii	Douglas-fir	29.2	L
465	Pseudotsuga menziesii	Douglas-fir	39.9	L
466	Pseudotsuga menziesii	Douglas-fir	27.4	L
467	Pseudotsuga menziesii	Douglas-fir	40	L
468	Pseudotsuga menziesii	Douglas-fir	55.1	L
469	Prunus avium	bird cherry	15.7	M
470	Pseudotsuga menziesii	Douglas-fir	29.6	L
471	Pseudotsuga menziesii	Douglas-fir	44.2	L
472	Pseudotsuga menziesii	Douglas-fir	30.8	L
473	Pseudotsuga menziesii	Douglas-fir	59.5	L
474	Pseudotsuga menziesii	Douglas-fir	49.2	L
475	Pseudotsuga menziesii	Douglas-fir	35.3	L
476	Acer macrophyllum	bigleaf maple	27.8	L
477	Pseudotsuga menziesii	Douglas-fir	45.7	L
478	Pseudotsuga menziesii	Douglas-fir	55.1	L
479	Pseudotsuga menziesii	Douglas-fir	30.9	L
480	Pseudotsuga menziesii	Douglas-fir	41.9	L
481	Pseudotsuga menziesii	Douglas-fir	39	L
482	Pseudotsuga menziesii	Douglas-fir	37.4	L
483	Pseudotsuga menziesii	Douglas-fir	53.2	L
484	Pseudotsuga menziesii	Douglas-fir	35.7	L
485	Pseudotsuga menziesii	Douglas-fir	38.6	L
486	Pseudotsuga menziesii	Douglas-fir	27.4	L
487	Pseudotsuga menziesii	Douglas-fir	28.6	L
488	Pseudotsuga menziesii	Douglas-fir	51.3	L
489	Pseudotsuga menziesii	Douglas-fir	32	L
490	Pseudotsuga menziesii	Douglas-fir	22	L
491	Pseudotsuga menziesii	Douglas-fir	58	L
492	Pseudotsuga menziesii	Douglas-fir	33	L
493	Pseudotsuga menziesii	Douglas-fir	26.8	L
494	Acer macrophyllum	bigleaf maple	56.3	L
495	Pseudotsuga menziesii	Douglas-fir	26.2	L
496	Pseudotsuga menziesii	Douglas-fir	19	L
497	Pseudotsuga menziesii	Douglas-fir	46.4	L
498	Acer macrophyllum	bigleaf maple	34.8	L
499	Pseudotsuga menziesii	Douglas-fir	34.7	L
500	Pseudotsuga menziesii	Douglas-fir	49.8	L
501	Pseudotsuga menziesii	Douglas-fir	52.6	L
502	Pseudotsuga menziesii	Douglas-fir	36.7	L
503	Pseudotsuga menziesii	Douglas-fir	30.8	L
504	Pseudotsuga menziesii	Douglas-fir	27.1	L
505	Acer macrophyllum	bigleaf maple	66.7	L
506	Pseudotsuga menziesii	Douglas-fir	55.1	L

Mt Tabor Park Tree Inventory

Table Page 3

TreeNo	Genus species	Common Name	DBH	Size
507	Pseudotsuga menziesii	Douglas-fir	30.5	L
508	Pseudotsuga menziesii	Douglas-fir	31.4	L
509	Pseudotsuga menziesii	Douglas-fir	58	L
510	Pseudotsuga menziesii	Douglas-fir	20.2	L
511	Pseudotsuga menziesii	Douglas-fir	30	L
512	Pseudotsuga menziesii	Douglas-fir	49.8	L
513	Pseudotsuga menziesii	Douglas-fir	31.6	L
514	Pseudotsuga menziesii	Douglas-fir	22.1	L
515	Pseudotsuga menziesii	Douglas-fir	27.2	L
516	Pseudotsuga menziesii	Douglas-fir	22.2	L
517	Pseudotsuga menziesii	Douglas-fir	33.7	L
518	Pseudotsuga menziesii	Douglas-fir	30.1	L
519	Pseudotsuga menziesii	Douglas-fir	33.2	L
520	Pseudotsuga menziesii	Douglas-fir	27.4	L
521	Pseudotsuga menziesii	Douglas-fir	35	L
522	Pseudotsuga menziesii	Douglas-fir	17.3	L
523	Pseudotsuga menziesii	Douglas-fir	40.3	L
524	Pseudotsuga menziesii	Douglas-fir	42.2	L
525	Pseudotsuga menziesii	Douglas-fir	37.2	L
526	Pseudotsuga menziesii	Douglas-fir	34.8	L
527	Pseudotsuga menziesii	Douglas-fir	23.4	L
528	Pseudotsuga menziesii	Douglas-fir	33.3	L
529	Pseudotsuga menziesii	Douglas-fir	35.1	L
530	Pseudotsuga menziesii	Douglas-fir	22.6	L
531	Pseudotsuga menziesii	Douglas-fir	35.5	L
532	Pseudotsuga menziesii	Douglas-fir	33.1	L
533	Pseudotsuga menziesii	Douglas-fir	43.6	L
534	Pseudotsuga menziesii	Douglas-fir	20.2	L
535	Pseudotsuga menziesii	Douglas-fir	22.2	L
536	Pseudotsuga menziesii	Douglas-fir	40.8	L
537	Pseudotsuga menziesii	Douglas-fir	29.1	L
538	Pseudotsuga menziesii	Douglas-fir	27.8	L
539	Pseudotsuga menziesii	Douglas-fir	28.5	L
540	Pseudotsuga menziesii	Douglas-fir	25.7	L
541	Pseudotsuga menziesii	Douglas-fir	26.7	L
542	Pseudotsuga menziesii	Douglas-fir	36	L
543	Pseudotsuga menziesii	Douglas-fir	18.8	L
544	Pseudotsuga menziesii	Douglas-fir	43.6	L
545	Pseudotsuga menziesii	Douglas-fir	28.3	L
546	Pseudotsuga menziesii	Douglas-fir	27.4	L
547	Pseudotsuga menziesii	Douglas-fir	23.8	L
548	Pseudotsuga menziesii	Douglas-fir	33.5	L
549	Pseudotsuga menziesii	Douglas-fir	19.6	L
550	Pseudotsuga menziesii	Douglas-fir	37.2	L
551	Pseudotsuga menziesii	Douglas-fir	34.7	L
552	Pseudotsuga menziesii	Douglas-fir	43.8	L
553	Pseudotsuga menziesii	Douglas-fir	26.7	L
554	Pseudotsuga menziesii	Douglas-fir	34.7	L
555	Pseudotsuga menziesii	Douglas-fir	25.3	L
556	Pseudotsuga menziesii	Douglas-fir	17.7	L
557	Pseudotsuga menziesii	Douglas-fir	25.8	L
558	Pseudotsuga menziesii	Douglas-fir	40.4	L
559	Pseudotsuga menziesii	Douglas-fir	21.7	L
560	Pseudotsuga menziesii	Douglas-fir	42.7	L
561	Pseudotsuga menziesii	Douglas-fir	37.1	L
562	Pseudotsuga menziesii	Douglas-fir	31.8	L
563	Pseudotsuga menziesii	Douglas-fir	27.2	L
564	Pseudotsuga menziesii	Douglas-fir	29.9	L
565	Pseudotsuga menziesii	Douglas-fir	24.6	L
566	Pseudotsuga menziesii	Douglas-fir	23.4	L
567	Pseudotsuga menziesii	Douglas-fir	36.8	L
568	Pseudotsuga menziesii	Douglas-fir	20.5	L
569	Pseudotsuga menziesii	Douglas-fir	41	L
570	Pseudotsuga menziesii	Douglas-fir	32.1	L
571	Pseudotsuga menziesii	Douglas-fir	37.6	L
572	Pseudotsuga menziesii	Douglas-fir	25.1	L
573	Pseudotsuga menziesii	Douglas-fir	31.4	L
574	Pseudotsuga menziesii	Douglas-fir	20.2	L
575	Crataegus monogyna	English hawthorn, common	14.3	S
576	Pseudotsuga menziesii	Douglas-fir	28.5	L
577	Acer macrophyllum	bigleaf maple	5.8	L
578	Pseudotsuga menziesii	Douglas-fir	18.1	L
579	Pseudotsuga menziesii	Douglas-fir	40	L
580	Pseudotsuga menziesii	Douglas-fir	24.3	L
581	Pseudotsuga menziesii	Douglas-fir	32.7	L
582	Pseudotsuga menziesii	Douglas-fir	38.4	L
583	Pseudotsuga menziesii	Douglas-fir	36.4	L
584	Pseudotsuga menziesii	Douglas-fir	35.5	L
585	Pseudotsuga menziesii	Douglas-fir	29.2	L
586	Pseudotsuga menziesii	Douglas-fir	32.1	L
587	Pseudotsuga menziesii	Douglas-fir	38.4	L
588	Pseudotsuga menziesii	Douglas-fir	39.2	L
589	Pseudotsuga menziesii	Douglas-fir	34.1	L
590	Pseudotsuga menziesii	Douglas-fir	24.6	L
591	Pseudotsuga menziesii	Douglas-fir	27.4	L
592	Pseudotsuga menziesii	Douglas-fir	27.3	L
593	Pseudotsuga menziesii	Douglas-fir	29.2	L
594	Pseudotsuga menziesii	Douglas-fir	39	L
595	Pseudotsuga menziesii	Douglas-fir	36.6	L
596	Pseudotsuga menziesii	Douglas-fir	22.4	L
597	Pseudotsuga menziesii	Douglas-fir	43.8	L
598	Pseudotsuga menziesii	Douglas-fir	30	L
599	Pseudotsuga menziesii	Douglas-fir	22.7	L
600	Pseudotsuga menziesii	Douglas-fir	35.8	L
601	Pseudotsuga menziesii	Douglas-fir	35.1	L
602	Pseudotsuga menziesii	Douglas-fir	34	L
603	Pseudotsuga menziesii	Douglas-fir	16.3	L
604	Pseudotsuga menziesii	Douglas-fir	18.5	L
605	Pseudotsuga menziesii	Douglas-fir	23	L
606	Pseudotsuga menziesii	Douglas-fir	38.8	L
607	Pseudotsuga menziesii	Douglas-fir	30.4	L
608	Pseudotsuga menziesii	Douglas-fir	37.3	L
609	Pseudotsuga menziesii	Douglas-fir	3.9	L
610	Pseudotsuga menziesii	Douglas-fir	40.6	L
611	Pseudotsuga menziesii	Douglas-fir	33.2	L
612	Pseudotsuga menziesii	Douglas-fir	28	L
613	Acer circinatum	vine maple	5.2	S
614	Pseudotsuga menziesii	Douglas-fir	37.8	L
615	Pseudotsuga menziesii	Douglas-fir	31	L
616	Pseudotsuga menziesii	Douglas-fir	37.8	L
617	Pseudotsuga menziesii	Douglas-fir	28.7	L
618	Pseudotsuga menziesii	Douglas-fir	34.2	L
619	Pseudotsuga menziesii	Douglas-fir	27.6	L
620	Pseudotsuga menziesii	Douglas-fir	34.5	L
621	Pseudotsuga menziesii	Douglas-fir	29.2	L
622	Pseudotsuga menziesii	Douglas-fir	35.1	L
623	Acer circinatum	vine maple	5.3	S
624	Pseudotsuga menziesii	Douglas-fir	36.9	L
625	Pseudotsuga menziesii	Douglas-fir	40	L
626	Pseudotsuga menziesii	Douglas-fir	34.6	L
627	Pseudotsuga menziesii	Douglas-fir	43.3	L
628	Pseudotsuga menziesii	Douglas-fir	31.6	L
629	Pseudotsuga menziesii	Douglas-fir	48.4	L
630	Pseudotsuga menziesii	Douglas-fir	32.2	L
631	Pseudotsuga menziesii	Douglas-fir	24.2	L
632	Pseudotsuga menziesii	Douglas-fir	2.7	L
633	Pseudotsuga menziesii	Douglas-fir	24.3	L
634	Fraxinus latifolia	Oregon ash	9.4	M
635	Pseudotsuga menziesii	Douglas-fir	34.9	L
636	Pseudotsuga menziesii	Douglas-fir	39.6	L
637	Pseudotsuga menziesii	Douglas-fir	40.2	L
638	Pseudotsuga menziesii	Douglas-fir	39.8	L
639	Pseudotsuga menziesii	Douglas-fir	31.9	L
640	Pseudotsuga menziesii	Douglas-fir	39.2	L
641	Pseudotsuga menziesii	Douglas-fir	40.2	L
642	Pseudotsuga menziesii	Douglas-fir	50.9	L
643	Acer macrophyllum	bigleaf maple	46.7	L
644	Prunus cerasifera	flowering plum	11.1	S
645	Pseudotsuga menziesii	Douglas-fir	43.6	L
646	Acer macrophyllum	bigleaf maple	36.9	L
647	Acer macrophyllum	bigleaf maple	22.8	L
648	Acer macrophyllum	bigleaf maple	18	L
649	Ulmus x	elm hybrid	10	L
650	Liquidambar styraciflua	sweetgum	7.5	M
651	Pseudotsuga menziesii	Douglas-fir	47.8	L
652	Prunus serrulata	Japanese flowering cherry	23	S
653	Pseudotsuga menziesii	Douglas-fir	45.2	L
654	Prunus serrulata	Japanese flowering cherry	25	S
655	Pseudotsuga menziesii	Douglas-fir	32	L
656	Pseudotsuga menziesii	Douglas-fir	32	L
657	Pseudotsuga menziesii	Douglas-fir	62.1	L
658	Pyrus communis	European pear (including	17.9	M
659	Prunus serrulata	Japanese flowering cherry	8	S
660	Pseudotsuga menziesii	Douglas-fir	48.2	L
661	Sequoiadendron giganteum	giant sequoia	24.5	L
662	Thuja plicata	western redcedar	33.1	L
663	Pseudotsuga menziesii	Douglas-fir	27.9	L
664	Prunus serrulata	Japanese flowering cherry	17.7	S
665	Prunus serrulata	Japanese flowering cherry	27.4	S
666	Amelanchier spp.	serviceberry	2.5	S
667	Pseudotsuga menziesii	Douglas-fir	51.9	L
668	Amelanchier spp.	serviceberry	1.6	S
669	Pseudotsuga menziesii	Douglas-fir	37.1	L
670	Pseudotsuga menziesii	Douglas-fir	48.4	L
671	Pseudotsuga menziesii	Douglas-fir	36.7	L
672	Pseudotsuga menziesii	Douglas-fir	38.1	L
673	Pseudotsuga menziesii	Douglas-fir	30.1	L
674	Pseudotsuga menziesii	Douglas-fir	26.7	L
675	Pseudotsuga menziesii	Douglas-fir	1.1	L
676	Arbutus menziesii	Pacific madrone	1	M
677	Pseudotsuga menziesii	Douglas-fir	52.9	L
678	Pseudotsuga menziesii	Douglas-fir	44.3	L
679	Pseudotsuga menziesii	Douglas-fir	31.7	L
680	Pseudotsuga menziesii	Douglas-fir	33.1	L
681	Pseudotsuga menziesii	Douglas-fir	47.1	L
682	Pseudotsuga menziesii	Douglas-fir	23.5	L
683	Pseudotsuga menziesii	Douglas-fir	29.2	L
684	Pinus sylvestris	Scots pine	15.5	L
685	Cupressus nootkatensis syn. Xanthocyparis nootkatensis	Alaska yellow-cedar	17.5	M
686	Pseudotsuga menziesii	Douglas-fir	53.8	L
687	Acer macrophyllum	bigleaf maple	35	L
688	Pseudotsuga menziesii	Douglas-fir	28.8	L
689	Crataegus monogyna	English hawthorn, common	22.6	S
690	Pseudotsuga menziesii	Douglas-fir	54.3	L
691	Pseudotsuga menziesii	Douglas-fir	41.7	L
692	Pseudotsuga menziesii	Douglas-fir	58.9	L
693	Pseudotsuga menziesii	Douglas-fir	62.1	L
694	Prunus serrulata	Japanese flowering cherry	8.9	S
696	Pseudotsuga menziesii	Douglas-fir	42.9	L
697	Robinia pseudoacacia	black locust	7.5	M
698	Robinia pseudoacacia	black locust	7.5	M
699	Pseudotsuga menziesii	Douglas-fir	52.8	L
700	Thuja plicata	western redcedar	33.7	L
701	Pseudotsuga menziesii	Douglas-fir	37.5	L
702	Pseudotsuga menziesii	Douglas-fir	35.7	L
703	Pseudotsuga menziesii	Douglas-fir	37.2	L
704	Pseudotsuga menziesii	Douglas-fir	45.8	L
705	Cornus spp.	dogwood	1.5	S
706	Acer macrophyllum	bigleaf maple	7.9	L
707	Pseudotsuga menziesii	Douglas-fir	41.4	L
708	Pseudotsuga menziesii	Douglas-fir	31.6	L
709	Pseudotsuga menziesii	Douglas-fir	25.8	L
710	Pseudotsuga menziesii	Douglas-fir	44.4	L
711	Pseudotsuga menziesii	Douglas-fir	38.9	L
712	Pseudotsuga menziesii	Douglas-fir	29.4	L
713	Pseudotsuga menziesii	Douglas-fir	29.4	L
714	Acer circinatum	vine maple	6.2	S
715	Pseudotsuga menziesii	Douglas-fir	33.7	L
716	Pseudotsuga menziesii	Douglas-fir	29.9	L
717	Pseudotsuga menziesii	Douglas-fir	47.3	L
718	Platanus x acerifolia	London plane tree	9.6	L
719	Platanus x acerifolia	London plane tree	14.1	L
720	Pseudotsuga menziesii	Douglas-fir	48.7	L
721	Acer macrophyllum	bigleaf maple	22.7	L
722	Acer macrophyllum	bigleaf maple	28	L
723	Pseudotsuga menziesii	Douglas-fir	59.3	L
724	Pseudotsuga menziesii	Douglas-fir	48.9	L
725	Quercus coccinea	scarlet oak	9.8	L
726	Acer macrophyllum	bigleaf maple	21.7	L
727	Liquidambar styraciflua	sweetgum	7	M
728	Pseudotsuga menziesii	Douglas-fir	40.5	L
729	Pseudotsuga menziesii	Douglas-fir	45	L
730	Prunus serrulata	Japanese flowering cherry	21.3	S
731	Pseudotsuga menziesii	Douglas-fir	54	L
732	Pseudotsuga menziesii	Douglas-fir	50.1	L
733	Pseudotsuga menziesii	Douglas-fir	25.5	L
734	Magnolia spp.	magnolia	20	S
735	Robinia pseudoacacia	black locust	7.5	M
736	Pseudotsuga menziesii	Douglas-fir	41.8	L
737	Pseudotsuga menziesii	Douglas-fir	52	L
738	Pseudotsuga menziesii	Douglas-fir	48.2	L
739	Pseudotsuga menziesii	Douglas-fir	39.6	L
740	Pseudotsuga menziesii	Douglas-fir	32.9	L
741	Pseudotsuga menziesii	Douglas-fir	31.7	L
742	Pseudotsuga menziesii	Douglas-fir	40.4	L
743	Acer macrophyllum	bigleaf maple	6.1	L
744	Pseudotsuga menziesii	Douglas-fir	34.4	L
745	Sorbus aucuparia	European mountain ash	5.3	S
746	Pseudotsuga menziesii	Douglas-fir	50.7	L
747	Pseudotsuga menziesii	Douglas-fir	31.1	L
748	Pseudotsuga menziesii	Douglas-fir	46.4	L
749	Pseudotsuga menziesii	Douglas-fir	34.6	L
750	Acer circinatum	vine maple	6.3	S
751	Pseudotsuga menziesii	Douglas-fir	31.4	L
752	Pseudotsuga menziesii	Douglas-fir	48.4	L
753	Acer circinatum	vine maple	6.2	S
754	Pseudotsuga menziesii	Douglas-fir	22.5	L
755	Pseudotsuga menziesii	Douglas-fir	43.7	L
756	Fraxinus latifolia	Oregon ash	7.9	M
757	Pseudotsuga menziesii	Douglas-fir	45.1	L
758	Pseudotsuga menziesii	Douglas-fir	33.7	L
759	Pseudotsuga menziesii	Douglas-fir	35.6	L

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Table Page 4

TreeNo	Genus species	Common Name	DBH	Size
760	Pseudotsuga menziesii	Douglas-fir	56.4	L
761	Pseudotsuga menziesii	Douglas-fir	48.6	L
762	Pseudotsuga menziesii	Douglas-fir	40.2	L
763	Sequoiadendron giganteum	giant sequoia	3.7	L
764	Acer macrophyllum	bigleaf maple	39.1	L
765	Acer macrophyllum	bigleaf maple	32	L
766	Prunus cerasifera	flowering plum	19.7	S
767	Acer macrophyllum	bigleaf maple	29	L
768	Sequoia sempervirens	coast redwood	31	L
769	Pseudotsuga menziesii	Douglas-fir	50.7	L
770	Pseudotsuga menziesii	Douglas-fir	44.6	L
771	Liquidambar styraciflua	sweetgum	6.7	M
772	Pseudotsuga menziesii	Douglas-fir	42.2	L
773	Prunus serrulata	Japanese flowering cherry	18	S
774	Pseudotsuga menziesii	Douglas-fir	36.9	L
775	Prunus serrulata	Japanese flowering cherry	20.5	S
776	Pseudotsuga menziesii	Douglas-fir	36.6	L
777	Pseudotsuga menziesii	Douglas-fir	46.5	L
778	Robinia pseudoacacia	black locust	7.5	M
779	Robinia pseudoacacia	black locust	7.5	M
780	Pseudotsuga menziesii	Douglas-fir	2.1	L
781	Prunus serrulata	Japanese flowering cherry	14.8	S
782	Pseudotsuga menziesii	Douglas-fir	51	L
783	Amelanchier spp.	serviceberry	1.6	S
784	Cornus spp.	dogwood	1.3	S
785	Pseudotsuga menziesii	Douglas-fir	38.4	L
786	Pseudotsuga menziesii	Douglas-fir	45.2	L
787	Pseudotsuga menziesii	Douglas-fir	34.9	L
788	Pseudotsuga menziesii	Douglas-fir	35.1	L
789	Pseudotsuga menziesii	Douglas-fir	35.3	L
790	Pseudotsuga menziesii	Douglas-fir	35.3	L
791	Pseudotsuga menziesii	Douglas-fir	19.5	L
792	Pseudotsuga menziesii	Douglas-fir	37.1	L
793	Pseudotsuga menziesii	Douglas-fir	37.1	L
794	Abies grandis	grand fir	12.4	L
795	Pseudotsuga menziesii	Douglas-fir	68.6	L
796	Pseudotsuga menziesii	Douglas-fir	48.1	L
797	Pseudotsuga menziesii	Douglas-fir	33.4	L
798	Pseudotsuga menziesii	Douglas-fir	34.3	L
799	Pseudotsuga menziesii	Douglas-fir	46.4	L
800	Pseudotsuga menziesii	Douglas-fir	17.1	L
801	Pseudotsuga menziesii	Douglas-fir	14.1	L
802	Pseudotsuga menziesii	Douglas-fir	27.8	L
803	Pseudotsuga menziesii	Douglas-fir	38	L
804	Pseudotsuga menziesii	Douglas-fir	33.2	L
805	Sequoia sempervirens	coast redwood	41.1	L
806	Acer macrophyllum	bigleaf maple	6.5	L
807	Pseudotsuga menziesii	Douglas-fir	34	L
808	Pseudotsuga menziesii	Douglas-fir	11	L
809	Pseudotsuga menziesii	Douglas-fir	38.8	L
810	Pseudotsuga menziesii	Douglas-fir	33.9	L
811	Acer macrophyllum	bigleaf maple	34.8	L
812	Sequoiadendron giganteum	giant sequoia	11.2	L
813	Pseudotsuga menziesii	Douglas-fir	36.7	L
814	Pseudotsuga menziesii	Douglas-fir	45.2	L
815	Pseudotsuga menziesii	Douglas-fir	15.5	L
816	Pseudotsuga menziesii	Douglas-fir	40.5	L
817	Pseudotsuga menziesii	Douglas-fir	8.1	L
818	Pseudotsuga menziesii	Douglas-fir	24.6	L
819	Acer rubrum	red maple	4.1	M
820	Pseudotsuga menziesii	Douglas-fir	46.7	L
821	Pseudotsuga menziesii	Douglas-fir	36.3	L
822	Pseudotsuga menziesii	Douglas-fir	3.7	L
823	Sequoiadendron giganteum	giant sequoia	35	L
824	Sequoiadendron giganteum	giant sequoia	28.8	L
825	Pseudotsuga menziesii	Douglas-fir	26.6	L
826	Pseudotsuga menziesii	Douglas-fir	37.3	L
827	Pseudotsuga menziesii	Douglas-fir	40	L
828	Pseudotsuga menziesii	Douglas-fir	9.5	L
829	Pseudotsuga menziesii	Douglas-fir	30.1	L
830	Pseudotsuga menziesii	Douglas-fir	23.5	L
831	Pseudotsuga menziesii	Douglas-fir	30.9	L
832	Pseudotsuga menziesii	Douglas-fir	41	L
833	Pseudotsuga menziesii	Douglas-fir	43.5	L
834	Aesculus hippocastanum	common horsechestnut	35.4	L
835	Fraxinus latifolia	Oregon ash	20.5	M
836	Acer macrophyllum	bigleaf maple	32.5	L
837	Pseudotsuga menziesii	Douglas-fir	31.1	L
838	Pseudotsuga menziesii	Douglas-fir	37.2	L
839	Pseudotsuga menziesii	Douglas-fir	24.3	L
840	Pseudotsuga menziesii	Douglas-fir	31.9	L
841	Pseudotsuga menziesii	Douglas-fir	34.3	L
842	Pseudotsuga menziesii	Douglas-fir	24.4	L
843	Pseudotsuga menziesii	Douglas-fir	44	L
844	Abies grandis	grand fir	12.4	L
845	Pseudotsuga menziesii	Douglas-fir	39.4	L
846	Pseudotsuga menziesii	Douglas-fir	29.4	L
847	Pseudotsuga menziesii	Douglas-fir	37.3	L
848	Acer macrophyllum	bigleaf maple	11.4	L
849	Pseudotsuga menziesii	Douglas-fir	24.9	L
850	Pseudotsuga menziesii	Douglas-fir	43.5	L
851	Pseudotsuga menziesii	Douglas-fir	40	L
852	Pseudotsuga menziesii	Douglas-fir	39.2	L
853	Pseudotsuga menziesii	Douglas-fir	41.1	L
854	Quercus palustris	pin oak	19.9	L
855	Pseudotsuga menziesii	Douglas-fir	27.4	L
856	Pseudotsuga menziesii	Douglas-fir	27.6	L
857	Pseudotsuga menziesii	Douglas-fir	32.6	L
858	Pseudotsuga menziesii	Douglas-fir	39.2	L
859	Acer macrophyllum	bigleaf maple	26.6	L
860	Pseudotsuga menziesii	Douglas-fir	45.6	L
861	Pseudotsuga menziesii	Douglas-fir	36.9	L
862	Pinus nigra	Austrian black pine	15	L
863	Pseudotsuga menziesii	Douglas-fir	20	L
864	Pseudotsuga menziesii	Douglas-fir	47.9	L
865	Pseudotsuga menziesii	Douglas-fir	22.8	L
866	Acer macrophyllum	bigleaf maple	1.2	L
867	Pseudotsuga menziesii	Douglas-fir	69.5	L
868	Pseudotsuga menziesii	Douglas-fir	38.1	L
869	Pseudotsuga menziesii	Douglas-fir	47.8	L
870	Pseudotsuga menziesii	Douglas-fir	43.9	L
871	Pseudotsuga menziesii	Douglas-fir	41.5	L
872	Pseudotsuga menziesii	Douglas-fir	6.9	L
873	Crataegus monogyna	English hawthorn, common	12.4	S
874	Pseudotsuga menziesii	Douglas-fir	31.1	L
875	Pseudotsuga menziesii	Douglas-fir	32.8	L
876	Pseudotsuga menziesii	Douglas-fir	40.7	L
877	Pseudotsuga menziesii	Douglas-fir	33.5	L
878	Crataegus monogyna	English hawthorn, common	30	S
879	Pseudotsuga menziesii	Douglas-fir	32.8	L
880	Pseudotsuga menziesii	Douglas-fir	43.3	L
881	Pseudotsuga menziesii	Douglas-fir	43.5	L
882	Pseudotsuga menziesii	Douglas-fir	33.3	L
883	Pseudotsuga menziesii	Douglas-fir	30.3	L
884	Pseudotsuga menziesii	Douglas-fir	51.6	L
885	Liriodendron tulipifera	tuliptree	9.5	L
886	Pseudotsuga menziesii	Douglas-fir	51.5	L
887	Pseudotsuga menziesii	Douglas-fir	25.2	L
888	Aesculus hippocastanum	common horsechestnut	28	L
889	Tilia tomentosa	silver linden	39.6	L
890	Juglans nigra	black walnut	38.4	L
891	Pseudotsuga menziesii	Douglas-fir	33.5	L
892	Pseudotsuga menziesii	Douglas-fir	33	L
893	Pseudotsuga menziesii	Douglas-fir	52	L
894	Pseudotsuga menziesii	Douglas-fir	16.3	L
895	Pseudotsuga menziesii	Douglas-fir	31.3	L
896	Pseudotsuga menziesii	Douglas-fir	42.6	L
897	Pseudotsuga menziesii	Douglas-fir	48.9	L
898	Pinus ponderosa	ponderosa pine	4.6	L
899	Pinus ponderosa	ponderosa pine	3.8	L
900	Pinus ponderosa	ponderosa pine	2	L
901	Pseudotsuga menziesii	Douglas-fir	39.4	L
902	Pseudotsuga menziesii	Douglas-fir	37.4	L
903	Pseudotsuga menziesii	Douglas-fir	34.8	L
904	Pseudotsuga menziesii	Douglas-fir	35	L
905	Acer macrophyllum	bigleaf maple	31.8	L
906	Pseudotsuga menziesii	Douglas-fir	30.8	L
907	Juglans nigra	black walnut	41.1	L
908	Chamaecyparis obtusa	Hinoki falsecypress	18.2	L
909	Pseudotsuga menziesii	Douglas-fir	22.1	L
910	Pseudotsuga menziesii	Douglas-fir	42.9	L
911	Pseudotsuga menziesii	Douglas-fir	3.9	L
912	Pseudotsuga menziesii	Douglas-fir	32.2	L
913	Pseudotsuga menziesii	Douglas-fir	14.7	L
914	Pseudotsuga menziesii	Douglas-fir	34.6	L
915	Pseudotsuga menziesii	Douglas-fir	39.5	L
916	Pinus ponderosa	ponderosa pine	2.8	L
917	Pseudotsuga menziesii	Douglas-fir	26.8	L
918	Pseudotsuga menziesii	Douglas-fir	44.9	L
919	Pseudotsuga menziesii	Douglas-fir	37.3	L
920	Fraxinus latifolia	Oregon ash	26.4	M
921	Pseudotsuga menziesii	Douglas-fir	42	L
922	Pseudotsuga menziesii	Douglas-fir	22.3	L
923	Pseudotsuga menziesii	Douglas-fir	27.3	L
924	Acer macrophyllum	bigleaf maple	7.7	L
925	Pseudotsuga menziesii	Douglas-fir	43.8	L
926	Quercus rubra	northern red oak	56.4	L
927	Acer macrophyllum	bigleaf maple	24.5	L
928	Pseudotsuga menziesii	Douglas-fir	16.3	L
929	Pseudotsuga menziesii	Douglas-fir	37.5	L
930	Quercus garryana	Oregon white oak	38.9	L
931	Umbellularia californica	Oregon myrtle	29	L
932	Chamaecyparis obtusa	Hinoki falsecypress	21.7	L
933	Pseudotsuga menziesii	Douglas-fir	49.3	L
934	Pseudotsuga menziesii	Douglas-fir	33.7	L
935	Pseudotsuga menziesii	Douglas-fir	38.7	L
936	Pseudotsuga menziesii	Douglas-fir	45.1	L
937	Pseudotsuga menziesii	Douglas-fir	36.3	L
938	Pseudotsuga menziesii	Douglas-fir	5.1	L
939	Pseudotsuga menziesii	Douglas-fir	33.5	L
940	Acer macrophyllum	bigleaf maple	6	L
941	Fraxinus latifolia	Oregon ash	16.8	M
942	Pseudotsuga menziesii	Douglas-fir	34.5	L
943	Fraxinus latifolia	Oregon ash	16.8	M
944	Pseudotsuga menziesii	Douglas-fir	28	L
945	Quercus garryana	Oregon white oak	0.3	L
946	Pseudotsuga menziesii	Douglas-fir	26	L
947	Pseudotsuga menziesii	Douglas-fir	36.4	L
948	Pseudotsuga menziesii	Douglas-fir	37.3	L
949	Cedrus atlantica 'Glauca'	blue Atlas cedar	34.8	L
950	Pseudotsuga menziesii	Douglas-fir	34.2	L
951	Chamaecyparis lawsoniana	Port Orford cedar	35	L
952	Pseudotsuga menziesii	Douglas-fir	30.6	L
953	Pseudotsuga menziesii	Douglas-fir	30.4	L
954	Pseudotsuga menziesii	Douglas-fir	49.5	L
955	Pseudotsuga menziesii	Douglas-fir	30.4	L
956	Pseudotsuga menziesii	Douglas-fir	19.6	L
957	Pseudotsuga menziesii	Douglas-fir	27.8	L
958	Pseudotsuga menziesii	Douglas-fir	29.5	L
959	Pseudotsuga menziesii	Douglas-fir	41.4	L
960	Cornus nuttallii	Pacific dogwood	4.7	M
961	Pseudotsuga menziesii	Douglas-fir	26.5	L
962	Pinus ponderosa	ponderosa pine	3.9	L
963	Pseudotsuga menziesii	Douglas-fir	33.5	L
964	Pseudotsuga menziesii	Douglas-fir	41.4	L
965	Pseudotsuga menziesii	Douglas-fir	25.7	L
966	Pseudotsuga menziesii	Douglas-fir	34	L
967	Pseudotsuga menziesii	Douglas-fir	29.5	L
968	Pseudotsuga menziesii	Douglas-fir	17.4	L
969	Pseudotsuga menziesii	Douglas-fir	33.5	L
970	Pseudotsuga menziesii	Douglas-fir	38.5	L
971	Pseudotsuga menziesii	Douglas-fir	27.5	L
972	Pseudotsuga menziesii	Douglas-fir	29	L
973	Pseudotsuga menziesii	Douglas-fir	36	L
974	Pseudotsuga menziesii	Douglas-fir	33.9	L
975	Pseudotsuga menziesii	Douglas-fir	32.7	L
976	Pseudotsuga menziesii	Douglas-fir	40	L
977	Acer macrophyllum	bigleaf maple	11.3	L
978	Pseudotsuga menziesii	Douglas-fir	9.7	L
979	Pseudotsuga menziesii	Douglas-fir	32	L
980	Pseudotsuga menziesii	Douglas-fir	24.6	L
981	Pseudotsuga menziesii	Douglas-fir	29.3	L
982	Pseudotsuga menziesii	Douglas-fir	29.8	L
983	Pseudotsuga menziesii	Douglas-fir	26.4	L
984	Pseudotsuga menziesii	Douglas-fir	28	L
985	Pseudotsuga menziesii	Douglas-fir	37.7	L
986	Pseudotsuga menziesii	Douglas-fir	26.9	L
987	Sorbus aucuparia	European mountain ash	3.5	S
988	Pseudotsuga menziesii	Douglas-fir	27.5	L
989	Quercus rubra	northern red oak	43.6	L
990	Pseudotsuga menziesii	Douglas-fir	42.7	L
991	Pseudotsuga menziesii	Douglas-fir	31.3	L
992	Pseudotsuga menziesii	Douglas-fir	21	L
993	Fagus sylvatica	European beech	11.6	L
994	Cedrus deodara	deodar cedar	35	L
995	Ulmus americana	American elm	43.4	L
996	Pseudotsuga menziesii	Douglas-fir	31	L
997	Pseudotsuga menziesii	Douglas-fir	34.2	L
998	Pseudotsuga menziesii	Douglas-fir	27	L
999	Pseudotsuga menziesii	Douglas-fir	33.4	L
1000	Pseudotsuga menziesii	Douglas-fir	27.8	L
1001	Prunus avium	bird cherry	13.2	M
1002	Juglans nigra	black walnut	24	L
1003	Pseudotsuga menziesii	Douglas-fir	30.1	L
1004	Tsuga heterophylla	western hemlock	29.1	L
1005	Sorbus aucuparia	European mountain ash	29.8	S
1006	Cornus nuttallii	Pacific dogwood	5.9	M
1007	Fraxinus latifolia	Oregon ash	39.4	M
1008		common horsechestnut	38.5	L

Mt Tabor Park Tree Inventory

Table Page 5

TreeNo	Genus species	Common Name	DBH	Size
1009	Aesculus hippocastanum	common horsechestnut	25.5	L
1010	Celtis occidentalis	common hackberry	17	M
1011	Amelanchier spp.	serviceberry	2.1	S
1012	Prunus cerasifera	flowering plum	16.2	S
1013	Juglans nigra	black walnut	45.3	L
1014	Quercus garryana	Oregon white oak	0.3	L
1015	Quercus garryana	Oregon white oak	0.3	L
1016	Platanus x acerifolia	London plane tree	16.6	L
1017	Amelanchier spp.	serviceberry	1.3	S
1018	Pseudotsuga menziesii	Douglas-fir	25.8	L
1019	Juglans nigra	black walnut	45.7	L
1020	Aesculus hippocastanum	common horsechestnut	20.5	L
1021	Pseudotsuga menziesii	Douglas-fir	33.3	L
1022	Aesculus hippocastanum	common horsechestnut	21.8	L
1023	Pseudotsuga menziesii	Douglas-fir	30.8	L
1024	Pseudotsuga menziesii	Douglas-fir	25.4	L
1025	Pseudotsuga menziesii	Douglas-fir	38	L
1026	Pseudotsuga menziesii	Douglas-fir	25	L
1027	Aesculus hippocastanum	common horsechestnut	18.1	L
1028	Aesculus hippocastanum	common horsechestnut	21.6	L
1029	Pseudotsuga menziesii	Douglas-fir	33.9	L
1030	Acer macrophyllum	bigleaf maple	3.4	L
1031	Pseudotsuga menziesii	Douglas-fir	29.3	L
1032	Pseudotsuga menziesii	Douglas-fir	31.7	L
1033	Pseudotsuga menziesii	Douglas-fir	16	L
1034	Pseudotsuga menziesii	Douglas-fir	33.8	L
1035	Pseudotsuga menziesii	Douglas-fir	27.2	L
1036	Pseudotsuga menziesii	Douglas-fir	25.5	L
1037	Pseudotsuga menziesii	Douglas-fir	28.1	L
1038	Thuja plicata	western redcedar	5	L
1039	Crataegus monogyna	English hawthorn, common	17	S
1040	Liquidambar styraciflua	sweetgum	34.6	M
1041	Thuja plicata	western redcedar	12.5	L
1042	Thuja plicata	western redcedar	11.7	L
1043	Quercus garryana	Oregon white oak	0.3	L
1044	Quercus rubra	northern red oak	42.9	L
1045	Prunus serrulata	Japanese flowering cherry	9.3	S
1046	Platanus x acerifolia	London plane tree	18.9	L
1047	Pseudotsuga menziesii	Douglas-fir	33.5	L
1048	Pseudotsuga menziesii	Douglas-fir	34.6	L
1049	Juglans nigra	black walnut	41.5	L
1050	Aesculus hippocastanum	common horsechestnut	28.7	L
1051	Pseudotsuga menziesii	Douglas-fir	32.3	L
1052	Pseudotsuga menziesii	Douglas-fir	28.6	L
1053	Pseudotsuga menziesii	Douglas-fir	56.1	L
1054	Pseudotsuga menziesii	Douglas-fir	29	L
1055	Pseudotsuga menziesii	Douglas-fir	43.4	L
1056	Ilex aquifolium	English holly	11.4	M
1057	Pseudotsuga menziesii	Douglas-fir	37.8	L
1058	Acer macrophyllum	bigleaf maple	22.9	L
1059	Acer circinatum	vine maple	6.3	S
1060	Pseudotsuga menziesii	Douglas-fir	28.3	L
1061	Pseudotsuga menziesii	Douglas-fir	36.5	L
1062	Acer platanoides	Norway maple	21.7	M
1063	Fagus grandifolia	American beech	24.9	L
1064	Quercus rubra	northern red oak	28.5	L
1065	Prunus serrulata	Japanese flowering cherry	9.5	S
1066	Aesculus hippocastanum	common horsechestnut	28.3	L
1067	Pseudotsuga menziesii	Douglas-fir	39.4	L
1068	Pseudotsuga menziesii	Douglas-fir	31.2	L
1069	Pseudotsuga menziesii	Douglas-fir	29	L
1070	Pseudotsuga menziesii	Douglas-fir	24.7	L
1071	Aesculus hippocastanum	common horsechestnut	27.2	L
1072	Pseudotsuga menziesii	Douglas-fir	29.5	L
1073	Pseudotsuga menziesii	Douglas-fir	26.1	L
1074	Metasequoia glyptostroboides	dawn redwood	16.4	L
1075	Prunus cerasifera	flowering plum	10.5	S
1076	Pseudotsuga menziesii	Douglas-fir	32.9	L
1077	Pseudotsuga menziesii	Douglas-fir	21.2	L
1078	Pseudotsuga menziesii	Douglas-fir	43.5	L
1079	Pseudotsuga menziesii	Douglas-fir	39.1	L
1080	Prunus cerasifera	flowering plum	10.3	S
1081	Prunus cerasifera	flowering plum	1.5	S
1082	Crataegus monogyna	English hawthorn, common	20.3	S
1083	Pseudotsuga menziesii	Douglas-fir	45.3	L
1084	Crataegus monogyna	English hawthorn, common	19.8	S
1085	Amelanchier spp.	serviceberry	1.6	S
1086	Amelanchier spp.	serviceberry	2.2	S
1087	Pseudotsuga menziesii	Douglas-fir	15	L
1088	Thuja plicata	western redcedar	11.3	L
1089	Prunus serrulata	Japanese flowering cherry	10.4	S
1090	Prunus serrulata	Japanese flowering cherry	11.2	S
1091	Pseudotsuga menziesii	Douglas-fir	25.5	L
1092	Juglans nigra	black walnut	36.8	L
1093	Aesculus hippocastanum	common horsechestnut	22.7	L
1094	Pseudotsuga menziesii	Douglas-fir	32.8	L
1095	Pseudotsuga menziesii	Douglas-fir	20.5	L
1096	Pseudotsuga menziesii	Douglas-fir	24.8	L
1097	Pseudotsuga menziesii	Douglas-fir	33.5	L
1098	Pseudotsuga menziesii	Douglas-fir	27.8	L
1099	Pseudotsuga menziesii	Douglas-fir	26.7	L
1100	Pseudotsuga menziesii	Douglas-fir	36.9	L
1101	Pinus sylvestris	Scots pine	7.8	L
1102	Pseudotsuga menziesii	Douglas-fir	38.5	L
1103	Pseudotsuga menziesii	Douglas-fir	28.2	L
1104	Pseudotsuga menziesii	Douglas-fir	46.4	L
1105	Pseudotsuga menziesii	Douglas-fir	37.3	L
1106	Pseudotsuga menziesii	Douglas-fir	19.3	L
1107	Pseudotsuga menziesii	Douglas-fir	27.8	L
1108	Pseudotsuga menziesii	Douglas-fir	35	L
1109	Pseudotsuga menziesii	Douglas-fir	38.2	L
1110	Acer negundo	box elder	8.3	L
1111	Acer macrophyllum	bigleaf maple	22.3	L
1112	Pseudotsuga menziesii	Douglas-fir	24	L
1113	Acer macrophyllum	bigleaf maple	21.9	L
1114	Chamaecyparis lawsoniana	Port Orford cedar	25.7	L
1115	Acer macrophyllum	bigleaf maple	22.5	L
1116	Acer macrophyllum	bigleaf maple	28.1	L
1117	Acer macrophyllum	bigleaf maple	11.7	L
1118	Acer macrophyllum	bigleaf maple	12.6	L
1119	Acer macrophyllum	bigleaf maple	15.2	L
1120	Acer macrophyllum	bigleaf maple	36	L
1121	Acer macrophyllum	bigleaf maple	22.5	L
1122	Acer macrophyllum	bigleaf maple	13.4	L
1123	Acer macrophyllum	bigleaf maple	21.4	L

23-047200 PC
6325 SE Division – Mt Tabor Park
Sign-in Sheet
June 27, 2023

Matt Wickstrom, BDS, matt.wickstrom@portlandoregon.gov, 503-865-6513

Tanya Paglia, BDS Design and Historic Review Team, tanya.paglia@portlandoregon.gov, 503-865-6518

Timothy Novak, BDS Land Division Environmental Team, timothy.novak@portlandoregon.gov, 503-823-5395

Tammy Boren-King, PBOT Development Review, tammy.boren-king@portlandoregon.gov, 503-823-2948

Eileen Cunningham, PBOT Development Review, Eileen.cunningham@portlandoregon.gov, 503-823-2999

Emma Kohlsmith, BES, emma.kohlsmith@portlandoregon.gov, 503-823-8427

Erin Mick, Water Bureau, erin.mick@portlandoregon.gov

Brandon Namm, Urban Forestry, brandon.namm@portlandoregon.gov, 503-729-1703

Ericka Koss (did not attend), BDS Site Development, ericka.koss@portlandoregon.gov

Brett Horner, Portland Parks and Recreation, brett.horner@portlandoregon.gov

Jill Hutchinson, Portland Parks and Recreation, jill.hutchinson@portlandoregon.gov

Robin Laughlin, Portland Parks and Recreation, robin.laughlin@portlandoregon.gov

George Tkebuchava, Portland Parks and Recreation, George.tkebuchava@portlandoregon.gov

City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 | 503-823-7300 | www.portland.gov/bds

Early Assistance Application

File Number:
Appt Date/Time:

FOR INTAKE, STAFF USE ONLY

Date Rec_____ by_____

LU Reviews Expected_____

Related cases

☐ Y ☐ N Unincorporated MC

☐ Y ☐ N Potential Landslide Hazard Area (LD & PD only)

☐ Y ☐ N 100-year Flood Plain

☐ Y ☐ N DOGAMI (high)

Qtr Sec Map(s)_____ Zoning_____

Plan District_____

Historic and/or Design District_____

Neighborhood_____

District Coalition_____

Business Assoc_____

Neighborhood within 400/1000 ft_____

APPLICANT: Complete all sections below. Email this application and supporting documents described below to: LandUseIntake@portlandoregon.gov. Once the application is received, staff will contact you regarding payment and scheduling a date and time for your meeting.

Site Address 6325 SE Division St

Site Size/Area 176.04 acres

Property ID(s) R 332503 R_____ R_____ R_____

Short Project Description: do not leave blank or direct to "see attached". Attach additional sheets for a more detailed description, if needed.

Remove and replace 88 park light poles and fixtures due to faulty anchoring. Please also see the attached Powerpoint. The lighting fixtures are not the original fixtures. Some of the concrete poles are original (1920s) but others have been repalced in the 1950s and 1980s. The new poles and fixtures will be replaced in the same location as the existing ones. No storm water changes in the park.

Design & Historic Review (New development: give project valuation. Renovation: give exterior alteration value) $ 3,000,000

Select an Early Assistance Type and check boxes for desired meeting/written notes options:

Early Assistance Type	City Reviewers	On-line MS Teams meeting & written notes provided	No meeting, written notes provided
■ **Pre-application Conference** Only required for Type III and IV land use reviews	BDS Land Use Services, Transportation, Environmental Services, Water, Parks, others as needed	■	
❑ **Design Advice Request** Public Zoom meeting with Design Commission or Historic Landmarks Commission	BDS Land Use Services and Design Commission or Historic Landmarks Commission		
❑ **Zoning and Infrastructure Bureaus** (including initial bureau responses for street vacations)	BDS Land Use Services, Transportation, Environmental Services, Water, Parks	❑	❑
❑ **Zoning Only**	BDS Land Use Services	❑	❑
❑ **Pre-Permit Zoning Plan Check** ❑ 1-2 housing units ❑ all other development	BDS Land Use Services		❑
❑ **Public Works Inquiry for 1-2 housing units** Only for 1-2 unit projects that do not require a land use review, land division or property line adjustment	Transportation, Environmental Services, Water		❑

Applicant Information Include a separate sheet for additional names if needed.

PRIMARY CONTACT, check all that apply ❑ Applicant ■ Owner ❑ Other _____

Invite to MS Teams Meeting?: ■ Yes ❑ No

Name Brett Horner Company Portland Parks & Recreation

Mailing Address 1210 SW 5th Ave Suite 800

City Portland State OR Zip Code 97204

Day Phone 971-409-3518 email brett.horner@portlandoregon.gov

Check all that apply ❑ Applicant ❑ Owner ❑ Other _____

Invite to MS Teams Meeting?: ■ Yes ❑ No

Name _____ Company _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ email _____

Check all that apply ❑ Applicant ❑ Owner ❑ Other _____

Invite to MS Teams Meeting?: ❑ Yes ❑ No

Name _____ Company _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ email _____

Please submit the following materials to LandUseIntake@portlandoregon.gov:

❑ Written project description, including proposed stormwater disposal system and additional property IDs if not included above.

❑ List of questions to be discussed.

❑ Site plans drawn to a measurable scale, with scale and scale bar identified and building elevations drawn to a measurable scale (if appropriate), with scale and scale bar identified.

❑ If the site is in a design overlay and you're planning to meet design standards, completed scorecards are required. Scorecards are available at https://www.portland.gov/bds/land-use-review-fees-and-types/design-standards.

Note:

1. See the Land Use Services fee schedule for detailed fee information: www.portland.gov/bds/current-fee-schedules.
2. Public notice (email and internet posting) is provided for Pre-application conferences and Design Advice Requests.
3. Only material submitted with the original application will be addressed by City staff; we are unable to address any additional material that is submitted after the application is received.
4. For some proposals, such as those using the Community Design Standards, you will receive more detailed information if you provide full-sized plans.
5. Estimates for System Development Charges (SDCs) are not provided at Early Assistance Meetings. Refer to SDC information on the BDS website.
6. Plans examiners do not participate in Early Assistance meetings and they do not provide written comments. For life/safety and building code questions, consult with a plans examiner by scheduling a 15-minute appointment or a Life Safety Preliminary Meeting (www.portland.gov/bds/documents/life-safety-preliminary-meeting-request-packet).

Pre-Application Conference Response

Date: June 27, 2023
To: Matt Wickstrom, Conference Facilitator
503-865-6513, Matt.Wickstrom@portlandoregon.gov
From: Emma Kohlsmith, BES Systems Development
503-823-8427, Emma.Kohlsmith@portlandoregon.gov
Case File: EA 23-047200
Location: 6325 SE DIVISION ST
R#: R332503, R332503, R332503
Proposal: Remove and replace 88 park light poles and fixtures due to faulty anchoring. Please also see the attached Powerpoint. The lighting fixtures are not the original fixtures. Some of the concrete poles are original (1920s) but others have been repalced in the 1950s and 1980s. The new poles and fixtures will be replaced in the same location as the existing ones. No storm water changes in the park.

The Bureau of Environmental Services (BES) has reviewed the submitted materials to identify potential issues and requirements and provide the following comments. Some references to Portland City Code (PCC) are included below; the applicant may refer to the Auditor's Office Online Charter and Code.

A. Key Issues and Requirements

Following is a brief summary of issues and requirements that may impact your proposed project or are submittal requirements that will require time to prepare prior to submittal of the application.

1. None anticipated.

B. Sanitary Service

1. *Sanitary Infrastructure*: According to available GIS data, the following sewer infrastructure is located in the vicinity of the project site:
   a. There are BES-owned sanitary and combined sewers within the roadways surrounding Mt Tabor Park. However, it does not appear that the project scope will impact BES sanitary infrastructure or require new connections to the sewer.

C. Stormwater Management

1. *Stormwater Infrastructure*: According to available GIS data, the following stormwater infrastructure is located in the vicinity of the project site:
   a. There are no public storm-only sewers within the vicinity of the site.
   b. Currently, stormwater from the public right-of-way discharges to the combined sewer.
2. *General Stormwater Management Requirements*: Development and redevelopment sites that include any of the triggers listed in PCC 17.38.040 are subject to the policies and standards of PCC 17.38.035, Portland's Stormwater Management Manual (SWMM) and Source Control Manual (SCM). Projects must comply with the current adopted version of the SWMM as of the permit application date. A fundamental evaluation factor in the SWMM is the Stormwater Infiltration and Discharge Hierarchy (Section 1.3.3), which sets the framework that will be used to determine when a project's stormwater runoff must be

infiltrated onsite and when offsite discharge will be permitted, and the parameters that must be met for either scenario.

3. *Public Right-of-Way Stormwater Management:* Stormwater runoff from the public right-of-way must comply with all applicable standards of the SWMM and Sewer and Drainage Facilities Design Manual and be conveyed to a discharge point along a route of service approved by the BES Director or the Director's designee. Additional guidance on meeting the 2020 SWMM for projects in the public right-of-way is available at https://www.portland.gov/bes/stormwater/swmm-and-right-way-projects.

    a. Based on the scope of PBOT requirements, no public stormwater management facilities are required because public frontage improvements are not required. Note that if changes in the scope of the proposed development alter PBOT requirements for public improvements, then public stormwater management facilities that conform with the SWMM or payment of an Offsite Stormwater Management Fee may be required.

4. *Private Property Stormwater Management*: Stormwater runoff from this project must comply with all applicable standards of the SWMM and SCM and be conveyed to a discharge point along a route of service approved by the BES Director or the Director's designee.

    a. *SWMM Triggers:* Based on the described project scope, it does not appear that stormwater management requirements are triggered. Stormwater management requirements described in the SWMM are triggered for projects that develop or redevelop greater than 500 SF of impervious area. Pavement removal and replacement within an existing paved area will trigger stormwater management requirements only if soil (subgrade) is exposed or the pavement is replaced with a different material. The applicant may refer to Section 1.2.1 of the SWMM and coordinate with BES staff for information on what qualifies as development and redevelopment for this project.

D. General Public Works Permit Information

For questions related to the public improvements described throughout these notes, please contact Rod Krauter at (503) 823-7064 or rodney.krauter@portlandoregon.gov or the BES Development Engineering hotline at (503) 823-7761, option 3.

E. Submittal Requirements for Land Use

1. Full land use plan set, including preliminary utility plan showing all existing and proposed sanitary and storm facilities and connections. All BES assets and easements must also be shown and labeled on plans.

BDS – Land Use Planner Response

Pre-Application Conference

Date:	August 3, 2023
To:	Brett Horner | (971) 409-3518 | Brett.Horner@Portlandoregon.gov
From:	Tanya Paglia, City Planner | 503-865-6518, Tanya.Paglia@portlandoregon.gov Timothy Novak | 503-823-5395, Timothy.Novak@portlandoregon.gov
File No.:	23-047200
Location:	6325 SE DIVISION ST
Tax Account:	R332503, R332503, R332503
State ID Number:	1S2E05 00100, 1S2E05 00100, 1S2E05 00100, 1S2E05 00100, 1S2E05 00100
Zoning:	OS, c,s, None
Proposal:	A Pre-Application Conference to discuss replacing 88 faulty light poles in Mt. Tabor Park. The location of the replacement poles will be the same as the existing light poles. None of the replacement light fixtures are the original 1920s fixtures. The proposed replacement poles are already located in Laurelhurst Park, Washington Park and 5 other Portland parks.

Please contact me with questions regarding this memo, or if I can be of further assistance as you move forward with your proposal.

The information provided at the conference and included in this response is based on the information you provided prior to and at the conference and reflects regulations in effect at the time of the conference. This response provides information and guidance only. It is preliminary in nature and based on the information the applicant provided to BDS staff. It is neither a land use review nor a final decision regarding this project. References are to the Portland Zoning Code available online at www.portland.gov/code/33.

Zoning:

- **Base:** OScs, Open Space base zone (33.100 Multi-Dwelling Zone)
- **Overlay(s):** Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
- **Pattern Area:** Inner
- **Pedestrian District:** N/A
- **Transit:** Some of the site is considered “close to transit”
- **Corridors:** Division Street is considered a Civic or Neighborhood Corridor
- **Historic Designation:** Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District

A. KEY ISSUES AND REQUIREMENTS

The following issues and requirements have been summarized for the applicant to pay special attention to as they may impact the proposed project.

1. Historic Resource Review Process

a. Removal (demolition) of lights.

- **Process:**
  - Contributing: Removal of lights identified as contributing is subject to Demolition Review. Proposals to demolish an accessory structure are processed through a Type II procedure per 33.846.080.B.1.

    Note: removal of contributing lights may be deemed exempt from Demolition Review if the Bureau of Development Services requires demolition due to an immediate danger to the health, safety, or welfare of the occupants, the owner, or that of the general public, as stated in Section 29.40.030 of Title 29, Property Maintenance Regulations. Such a determination has not been made.
  - Non-contributing: Removal of non-contributing lights would not require review so long as they only require an electrical permit and thus meet exemption 33.445.200.D.2.a:

    > "Alterations that do not require a building, site, zoning, or sign permit from the City, and will not alter the exterior features of a resource having such features specifically listed in the Historic District documentation or National Register nomination as attributes that contribute to the resource's historic significance".
- **Approval Criteria:** Proposals to demolish a historic resource will be approved if the review body finds that one of the four criteria listed under *33.846.080.C* is met. Of the four, staff believes criteria number four ("C.4") is the simplest applicable option:
  - The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.

b. Installation of lights – Historic Resource Review Track.

- **Process:** For the installation of new lights, a Type III Historic Resource Review would be required if the project value is >$547,400 based on the thresholds of table 846-3 of Section 33.846.060. Additional information about Historic Resource Review can be found below in the sections below, including Historic Resource Review submittal requirements in Section D.
- **Approval Criteria:** The applicable approval criteria are the *33.846.060.G. Other Approval Criteria* and can be found at https://www.portland.gov/sites/default/files/code/33.846-historic-resource-reviews.pdf.

c. Installation of lights – Community Design Standards Track.

The proposal is not eligible to use the non-discretionary design standards track based on the thresholds in Section 33.445.510.

d. Guide to Historic Resource Review.

You are encouraged to review the Guide to the Historic Resource Review Process prepared by the Historic Landmarks Commission, which provides guidance and expectations of the Historic Resource Review process. The guide can be found on the Landmarks Commission webpage at portland.gov/bds/landmarks/about-hlc.

e. Certificate of Compliance.

Approval of a Historic Resource Review allows for the proposed work to be built. The expectation is that the building permit will reflect the project (including the details) that was approved. To ensure this, a Certificate of Compliance will be required at the

time of building permit as indicated in a condition of approval. The Certificate of Compliance form can be found at portland.gov/bds/documents/certificate-compliance-design-and-historic-resource-review-approvals

2. Other Land Use Review Information

a. Environmental Review. Please see follow-up addendum for detailed information.

b. Additional Land Use Reviews. Additional land use reviews can be requested in addition to the Historic Resource Review. The development standards of the Zoning Code are expected to be met. However, if a standard cannot be met, a *Modification* or *Adjustment* review can be requested. Please note, requests for Modifications or Adjustments must better meet the approval criteria **and** meet the purpose of the standard or demonstrate the preservation of the character of the resource is more important than meeting the purpose of the standard.

- A ***Modification*** review may be requested for site-related standards (such as setbacks, size of loading spaces) that are not met.
- *An* ***Adjustment*** review may be requested as part of the Historic Resource review fo*r* use-related development standards (such as floor area ratios, number of loading spaces, number of parking spaces) that are not met.

All additional land use reviews should be listed on the land use application, the respective fees paid, and a response provided that addresses the additional approval criteria listed in the relevant Portland Zoning Code Chapters.

c. Other Approval Criteria. May apply if Modifications (Section 33.846.070) or Adjustments (Section 33.805.040) to development standards are requested.

d. Fee(s). Current fee(s) for land use reviews can be found at Land Use Services Fee Schedule.

3. Historic Resource Review Issues to Address

This preliminary feedback is a response to the information in your Pre-Application Conference submittal and based on the approval criteria of the *33.846.060.G. Other Approval Criteria.*

a. "Macro" Issues

- Architectural compatibility – The guidelines call for design solutions that will not compromise the architectural integrity of the resource and notes that where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in materials. The proposed light poles are very similar to those proposed for removal; therefore, such a replacement may be found to meet general approval criteria with regard to compatibility. Explore the existing lighting vocabulary for the park and try to come up with a unified plan for all the lighting. (*33.846.060.G* 4, 8, 9, 10)
- Historic character – Mt. Tabor Park is individually listed in the National Register, with the "historic lighting system" identified as a contributing aspect of the site, and retaining the park's historic character will be a focus of the review. Because the guidelines note that removal of historic materials should be avoided and deteriorated historic features should be repaired rather than replaced, the application should include strong evidence that every effort was made to preserve and retrofit the existing light structures before a replacement path was selected. Information on how the project might impact any abutting paths, landscape and hardscape should also be included and efforts made to avoid significant impacts. (*33.846.060.G* 1, 4, 9)

b. "Mid" Issues

- Record of its time and changes over time – The park must remain a physical record of its original time, place, and use and changes that have acquired historic significance should be preserved. The lighting history of the park should be documented as part of this process including creating an inventory of the lights with information about their materiality and their history. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other structures should be avoided. (*33.846.060.G* 2, 3)
- Landscaping – Avoid impacts to trees, especially large shade trees which are increasingly critical to the health and comfort of residents as temperatures soar. (*33.846.060.G* 1, 10)
- Electric conduit – No electrical conduit should be visible. (*33.846.060.G* 1, 8)

c. "Micro" Issues

- Historic materials – Create a plan for the salvage of the historic materials so they don't end up in a landfill. (*33.846.060.G* 1, 4, 5)
- Materials – High quality, durable materials that match existing are expected. (PCDG 08) / (CCFDG C2, C4). (*33.846.060.G* 8, 10)

4. Applicable Development Standards

Please note, meeting the minimum Title 33 standards does **not** ensure that a project will meet the Historic Resource Review approval criteria and receive approval. It is recommended you design to meet/exceed the approval criteria, and not begin with just meeting the minimum Title 33 standards.

a. Development standards that will apply to the project. These include, but are not necessarily limited to, those from the following chapters in the Zoning Code (Title 33) and other City codes available online at portland.gov/code/33.

- 33.846 Historic Resource Review
- Mount Tabor Park Historic District
- 33.445 Historic Resource Protection Overlay Zone
- 33.430 Environmental Conservation Overlay Zone
- 33.480 Scenic Resource Overlay Zone
- 33.266 Parking and Loading
- 33.258 Nonconforming Upgrades - interior or exterior improvements to a site totaling more than $347,000 requires up to 10% of the project cost must be spent toward bringing the site into conformance with identified zoning code standards.
- 33.248 Landscaping and Screening
- 33.100 Open Space Zone OScs, Open Space base zone with Environmental, Scenic and Historic Resource Overlays
- Title 11 Tree Code – Exemptions for tree density and preservation of this Title only apply to private trees on properties zoned IH, on sites with more than 85% building coverage, and sites less than 5,000 SF in area.

b. Specific development standards to note for this project. This list is not intended to be comprehensive. Always reference Title 33 for all applicable development standards and the exact language of each standard.

- Nonconforming Development – 33.258.070. Whenever a property owner or tenant makes interior or exterior improvements to a site totaling more than $347,000 up to 10% of the project cost must be spent toward bringing the site into conformance with the Zoning Code and Tree Code. Mandatory improvements for fire, life safety, and accessibility do not count toward the thresholds. Installation of electric vehicle parking, seismic and some stormwater upgrades, as well as remediation of hazardous substances per state law also do not count

toward the thresholds. The following standards will be evaluated for compliance at the time of your permit review:

a. Landscaping and trees required for the following areas:
   - Exterior display, storage, and work activity areas;
   - Setbacks for surface parking and exterior development areas;
   - Interior parking lot landscaping;
   - Existing building setbacks;
   - Minimum landscaped areas other than described above; and
   - Tree density standards of Chapter 11.50 for the site.

b. Pedestrian circulation systems, as set out in the pedestrian standards that apply to the site;

c. Bicycle parking by upgrading existing bicycle parking and providing additional spaces in order to comply with 33.266.220;

d. Screening of exterior mechanical equipment, and trash/recycling areas;

e. Paving of surface parking and exterior storage and display areas;

f. Title 11 Tree Density (for projects with exterior improvements).

5. Coordination with Other Agencies

Refer to individual responses from all participating bureaus, review groups and agencies for more detailed information.

a. Electric Utility Provider Coordination

- Plan for power early in the process. Consult with the Case Planner assigned to this Early Assistance appointment and coordinate with the utility providing electrical service to determine power needs on the site. If a new transformer were needed, lease note this document *Guidance to Siting Electrical Transformers* and this one *Path to Siting Electrical Transformers*.
- For properties served by PGE - portlandgeneral.com/construction/electric-service-requirements
- For properties served by Pacific Power - pacificpower.net/working-with-us/builders-contractors/electric-service-requirements.html
- Note that the service requirements included in these links may not cover all requirements associated with your project. Applicants should contact the PGE Service Coordinator at 503-736-5450 or the Pacific Power Business Center at 888-221-7070 to identify issues that are specific to your project and to coordinate electric service requirements.
- PGE requires minimum clearances from electric wires, conductors and cables. Please be aware of these clearances by calling PGE at 503-736-5450. More information on PGE minimum clearance can be found at portland.gov/bds/documents/why-you-should-respect-portland-general-electrics-power-line-clearances

b. Transportation (PBOT)

- Public Works Permit – If PBOT requires a 30% Public Works Permit approval before their response to a Historic Resource Review, it should be noted that such approvals can often

take longer than the Land Use Review process. Therefore, you are highly encouraged to initiate the Public Works Permit process before you submit the Historic Resource Review.

c. Environmental Services (BES)

- Stormwater Management. Stormwater management information, including infiltration tests, utility plans, stormwater facility designs, and site landscaping, must be submitted with the Historic Resource Review application. BES needs to review these elements early to ensure there are no issues that could affect the building size, location or site design.

d. Fire / Life Safety

- Preliminary Life Safety Meeting**.** A separate, preliminary life safety meeting is very beneficial to identify critical life safety and building code issues early in the process and allow the Historic Resource Review proposal to address those issues. This meeting is encouraged prior to submitting the Historic Resource Review. More information and the application can be found at portland.gov/bds/documents/life-safety-preliminary-meeting-request-packet.

e. Urban Forestry – Projects that require street tree preservation and planting should reach out to Urban Forestry early in the concept design phase to understand the requirements and process.

f. State Historic Preservation Office (SHPO) – Projects that impact a resource on the National Register of Historic Places should reach out to SHPO to understand their separate processes and requirements early in the concept design phase.

B. QUESTIONS RAISED AT THE MEETING

1. What other information is needed for the Type III Historic Review?

For the Historic Resource Review submittal, the following would be helpful:

- Detailed information on all the materials that are in the existing and the proposed light poles and fixtures.
- Information on structural integrity issues.
- Information as to why the existing poles and fixtures cannot be repaired. If it is an attachment issue, provide information on why they cannot be re-attached in a new manner. If it is a structural issue with the poles themselves, provide information.
- Provide information on consultations with restoration specialists that do this kind of work and provide information on their feedback as to why they would not be able to restore these poles.
- Provide more information about the safety concerns with the existing poles.
- An inventory of the lights and their history is important to the site history. With the submittal, please provide a detailed accounting/mapping of all the poles with their installation dates to understand which ones and how many are from the 20s and which ones and how many are from the 80s as well as any other information about the lighting history.

2. Who does the neighborhood noticing (mailing and posting of signs)?

- Notice of Proposal. As part of a Type III Historic Resource Review, BDS mails out a Notice of Proposal to all property owners within 400 feet, and all neighborhood associations and recognized organizations within 1,000 feet of your site.
- Physical Posting of Site. The applicant will be the one to post the site with signs.

- The case planner will send the applicant posting instructions and an 18x24 Sign Board Template in Adobe Illustrator, Adobe InDesign, and PDF formats for making the posting board, and they will provide the posting notice text in a PDF format which you will insert into the template
- The applicant will need to seek out a sign company, print shop or prepare the sign boards via in-house production.
- The overall board must be printed at its full 18-inch by 24-inch size.
- Your local sign manufacturer will have a variety of options available, but for environmental reasons we recommend corrugated plastic because it can be recycled. Corrugated plastic is sold under many trade names. It is an extruded twin wall plastic-sheet product produced from high-impact polypropylene resin with a similar make-up to corrugated cardboard and is ideally suited for outdoor signage. It can be direct printed or will accept pressure sensitive adhesive graphics.
- The sign must be printed in color.
- Signs may be attached to an existing building or structure, or mounted on posts, stakes, a fence, or other reasonable and sturdy structure that is fully accessible to the public.
- The top of the sign when mounted should be no higher than 60" inches above grade and free from any obstruction. The bottom of the sign must be at least 24” above the ground.
- The applicant is required to post notice on the site of the proposal 30 days before the hearing.
- The applicant must post one of these signs every 600 feet, or fraction thereof, on each street frontage of the property.
    - In the case of Mt Tabor, this amounts to a total of **30 signs**.
- These signs must be placed within 10 feet of the street frontage line, and must be visible to pedestrians and motorists, and must not be posted in the public right-of-way.
- The signs should not be removed before the meeting, but must be taken down within two weeks after the meeting.

3. Can we submit the Type III before we receive the Pre-App comments?

Yes.

C. PREVIOUS LAND USE REVIEWS

As part of your application, address relevant conditions of approval from previous land use reviews on the site and discuss the current status of compliance. Below are the relevant land use case reviews that the City of Portland has on record for the subject site:

- LU 61-001380 (ref. file: CU 029-61) – Conditional Use approval for a small storage building;
- LU 64-002651 CU (ref. file: CU 067-64)- Conditional Uwe approval to construct a plant potting building on the SW corner of Mt. Tabor Park on park warehouse land;
- LU 65-002285 CU (ref. file: CU 056-65) – Conditional Use Approval with the condition that planting be provided to screen the facilities from adjacent park and residential areas;
- LU 67-003406 (ref. file: CU 93-67) – Conditional Use approval for a maintenance building and office;
- LU 74-000650 (ref. file: CU 007-74) – Conditional Use approval for a greenhouse;

- LU 74-002392 (ref. file: CU 059-74) – Conditional Use approval for a picnic shelter;
- LU 77-002064 (ref. file: CU 49-77) – Conditional Use approval for a water pumping station;
- LU 89-003906 CU (ref. file: CU 26-89) – Conditional Use approval for parking lot expansion;
- LU 89-021552 (ref. file: MP 107-89) – Approval of a 3-lot minor partition;
- LU 90-024202 – Approval to locate and maintain a motor vehicle service building;
- LU 99-017214 EN (ref. file: LUR 99-00809) – Environmental Review approval of trail constructions and improvements in the Environmental Concern zone;
- LU 06-178213 HDZ – Historic Design Review approval for an 8' wide accessible path on the north side of Reservoir #6;
- LU 07-139442 HDZ – Historic Design Review approval for interim security and deferred maintenance improvements;
- LU 14-218444 HR EN – Historic Resource Review and Environmental Review approval of disconnection of reservoirs #1, #5, and #6 from the public drinking water system;
- LU 16-148005 HR – Historic Resource Review approval for rehabilitation of the Mt. Tabor Summit Restroom building;
- LU 17-158467 HRM – Historic Resource Review approval for exterior alterations to the Mount Tabor Yards;
- LU 17-206893 HR – Historic Resource Review approval for the replacement of existing and addition of new railings along the existing stairway of the Mount Tabor steps and the Summit Comfort Station;
- LU 17-245440 HR – Conditional Use approval for uses and improvements for the 13.3-acre project area including the Yard, Upper Nursery and Long Block areas of the Park, in the Mount Tabor Park Historic District;
- LU 18-103566 HR – Historic Resource Review approval for replacement of existing non-historic light poles with new, historically-appropriate pole lighting; and
- LU 21-053526 HR – Historic Resource Review approval for installation of an Interpretive Program to satisfy the requirement per Condition of Approval 'C' of LU 14-218444 HR EN.

D. SUBMITTAL REQUIREMENTS FOR LAND USE REVIEWS

This list identifies the materials you must submit for your Land Use application to be considered complete. For additional details, see Zoning Code Section 33.730.060.

GENERAL

- Digital submittal required.
- For final drawings (C Exhibits) and Appendix set (APP Exhibits):
  - Use 11"x17" format
  - Leave a 1.5"x5" blank space at the bottom right corner for Staff to add the case number, exhibit number and stamp.
- Conduct a thorough review before submitting your drawing packet.
- Review all color quality in submittal to ensure it accurately represent the colors intended.
- When returning for a 2nd hearing, revisions to the prior submittals should be illustrated and clearly marked in a side-by-side comparison.

PROJECT INFORMATION & NARRATIVE

- Land Use Review application form
- Project team and project cost

- Project description
- Zoning summary
- Response to guidelines/approval criteria (Word doc.)
- Modifications and Adjustments requests & approval criteria responses (Word doc.)
- Response to DAR (narrative)
- Technical Reports - Stormwater Loading Analysis, Queuing Study, etc.

DRAWINGS

"C" Exhibits should represent proposed development/alterations and be at an architectural or engineering scale:

- Title Page
- Table of Contents
- Site Plan
- Floor and Roof Plans - roof plan should show all rooftop elements, including mechanical
- Elevations - B/W and color, and without shade or shadows, include material key, street-facing elevations in their immediate context, including adjacent buildings
- Building Sections - Include some depicting relationships to adjacent buildings
- Enlarged Details - windows/doors, storefronts, canopies, balconies, signage and their attachments, etc., control joints, seismic joints, and other visible construction details
- Materials / Colors - clearly identify each building material by name
- Landscape Plans
- Lighting Plans
- Civil Plans
- Cut Sheets - only pertinent product info like type, finish, color, dimensions

SUPPORTING INFORMATION

Appendix ("APP" Exhibits) should include information that supports the drawings:

- Renderings - day and night in context, must be simple and not enhanced marketing-type images, avoid dramatic lighting effects
- Context - plan area, urban (3-block radius), site
- Sightlines - sightline drawings from relevant vantage points
- Material Photos & Examples
- Massing & Design Concept
- Miscellaneous Diagrams - FAR, ground floor windows, clear vs. spandrel panels, height, Modifications, Adjustments, etc.
- Responses to DAR (diagram)

NEIGHBORHOOD NOTIFICATION

When you apply for a Type III Land Use Review, all property owners within 400 feet, and all neighborhood associations and recognized organizations within 1,000 feet of your site will receive notification of your proposal.

- The site is located within the neighborhood association of Mt. Tabor, contact Stephanie Stewart at contact.MTNA@gmail.com.
- The site is located within 1,000 feet of South Tabor neighborhood association, contact John Carr at landuse@southtabor.org.
- The site is located within the district neighborhood coalition of Southeast Uplift, contact Matchu Williams at matchu@seuplift.org.
- Contact information for neighborhood associations, neighborhood district coalitions, and business associations is available at portlandoregon.gov/civic/search.

E. SUBMITTAL – LAND USE REVIEWS & PERMITS

PLEASE BE ADVISED - If a Land Use Review is required, permits for the work subject to the Land Use Review cannot be accepted until the Land Use Review approval is issued and recorded.

Land Use Reviews and other LUS applications:
When you are ready to submit a land use review application, please see the BDS Website at portland.gov/bds/land-use-review-fees-and-types/land-use-reviews-and-final-plat-applications for current submittal requirements. Currently, we are accepting electronic land use applications via email at LandUseIntake@portlandoregon.gov. A Land Use Services technician will contact you with instructions for providing payment for emailed applications.

Permits:
When you are ready to submit a permit, please see our website for updated information on how to apply for permits at portland.gov/bds/permit-review-process/apply-or-pay-permits.

PORTLAND BUREAU OF TRANSPORTATION

1900 SW Fourth Ave., Suite 5000 Portland, OR 97201 503-823-5185
Fax 503-823-7576 TTY 503-823-6868 www.portlandoregon.gov/transportation

Mingus Mapps Commissioner Tara Wasiak Interim Director

PBOT – Development Review

Pre-Application Conference Response

Date: June 27, 2023

To: Brett Horner, Portland Parks &Recreation, 971-409-3518, brett.horner@portlandoregon.gov

From: Eileen Cunningham, PBOT Development Review
503-823-2999, Eileen.Cunningham@portlandoregon.gov

Case File: EA 23-047200

Location: 6325 SE DIVISION ST

R#: R332503

Proposal: A Pre-Application Conference to discuss replacing 88 faulty light poles in Mt. Tabor Park. The location of the replacement poles will be the same as the existing light poles. None of the replacement light fixtures are the original 1920s fixtures. The proposed replacement poles are already located in Laurelhurst Park, Washington Park and 5 other Portland parks.

Portland Transportation/Development Review staff has reviewed the pre-application conference materials to identify potential issues and requirements.

1. There are no transportation related approval criteria for the subject review.
2. The proposal does not trigger either of the public improvement requirements of 17.88.020. No public improvements or dedication are required.
3. The light poles to be replaced are not PBOT assets, although, at least one light pole appears to be within the right-of-way. The poles will be replaced in their current location.
4. Any encroachments within the right-of-way will require an encroachment permit. The City's Encroachment Policy has provisions for recognizing pre-existing encroachments. (See page 4 at https://www.portland.gov/sites/default/files/2020-03/409066.pdf.) If the site contains existing encroachment within right-of-way, PBOT will require a current encroachment permit to document all the encroachments on the site. If so, the applicant will be required to apply for an encroachment permit, which will need to be approved prior to land use review approval. The encroachment permit application is available at https://www.portland.gov/transportation/development/encroachment-permits, including applicable fees. Please email the application and all supporting documentation to: encroachments@portlandoregon.gov. Please contact PBOT encroachment questions via email at encroachments@portlandoregon.gov (preferred). You may also call 503-823-7002 and select Option 3. For an overview of the encroachment permit process, please visit https://www.portland.gov/transportation/development/encroachment-permits.

5. If the proposed development will impact the use of an area within the public right-of-way, a separate street temporary closure permit will be required. Additionally, closures that do not allow safe passage and unobstructed flow of normal public use in a partially open area or lane, will also require a City approved Traffic Control Plan. For an application, general information, cost, and submittal information, please visit Temporary Street Use Permitting (TSUP) | Portland.gov or call 503-823-7365.

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Urban Forestry
1900 SW 4th Ave. Ste 5000, Portland, OR 97201
Tel: 503-823-TREE (8733) Fax: 503-823-4493
email: trees@portlandoregon.gov
web: portlandoregon.gov/trees

Urban Forestry
Early Assistance Response

Date: June 26, 2023
From: Brandon Namm
503-823-5844, Brandon.Namm@portlandoregon.gov
Case File: EA 23-047200
Location: 6325 SE DIVISION ST
Proposal: A Pre-Application Conference to discuss replacing 88 faulty light poles in Mt. Tabor Park. The location of the replacement poles will be the same as the existing light poles. None of the replacement light fixtures are the original 1920s fixtures. The proposed replacement poles are already located in Laurelhurst Park, Washington Park and 5 other Portland parks.

Portland Parks, Urban Forestry staff has reviewed the Early Assistance materials to identify potential issues and requirements in accordance with Title 11, Trees. This response identifies potential issues and/or impacts on existing street and heritage trees, and trees on city-owned or managed sites, if applicable. Trees on private property are subject to development standards from the Bureau of Development Services. See planner requirements for private property trees.

Please note that there may be other applicable tree requirements in Title 33 Planning & Zoning.

A. Response Summary

The development will be subject to Urban Forestry standards and requirements during the permit review process as detailed below.

A Preliminary Project Design Form must be submitted for Urban Forestry's review. The Preliminary Design Form can be found here: https://www.portlandoregon.gov/trees/article/513293

B. Tree Plan (11.50.060)

A tree plan must be submitted with each phase of review including land use reviews. A tree plan was not submitted with the EA application, but additional tree information is required. The plan must include the following information for street trees and trees on city owned property:

a. The size and location of street trees adjacent to the subject property, and trees onsite.
b. Trees proposed to be preserved including tree protection specifications in accordance with 11.60.030.
c. Tree(s) proposed for removal.
d. Tree planting plan (tree species and location(s)).

C. On Site Trees

City Managed Sites (11.50.040.C.2.a)

For development on City owned or managed sites, applicants are required to consult with the City Forester at the preliminary project design phase if City or Street Tree removal is likely to occur to complete the project. The purpose of this consultation is to identify potential impacts and opportunities to retain existing trees, as well as any measures required to protect trees on site, on adjacent sites, or in the street. In order to meet this requirement, you must go through a review with Urban Forestry. A Preliminary Project Design Form must be submitted early in the design process (prior to 30% plan completion). The Preliminary Design Form can be found here: https://www.portlandoregon.gov/trees/article/513293

The proposal is under review by Urban Forestry in case # 23-007867.

The light poles are located all around the park and will be replaced at their current locations. The documents in this Land Use Early Assistance focus on the light style, but the applicant should know that tree protection will be necessary when installing new poles.

1. *On-Site Tree Preservation* (11.50.040)
   Based on the proposed development it appears existing trees may be impacted. Development proposals must be configured to avoid city trees

   Trees must be preserved at all phases of construction. If the applicant believes the tree must be removed to facilitate development, the applicant must provide adequate technical analysis demonstrating why the tree cannot be preserved while developing the site to City standards.

2. *On-Site Tree Protection Specifications* (11.60.030)
   Tree protection is required in accordance with Title 11 Trees, Protection Methods (11.60.030). Tree protection shall follow either the Prescriptive or Performance path. Protection methods must be shown on the tree plan. If using the Performance path, the alternate tree protection plan must be prepared by an arborist who has visited the site.

   A Prescriptive path protection zone is established as follows; a minimum of 1 foot radius (measured horizontally away from the face of the tree trunk) for each inch of tree diameter. Protection fencing shall be a minimum 6-foot high metal chain link construction fence, secured with 8-foot metal posts established at the edge of the root protection zone and permissible encroachment area.

3. *On-Site Tree Density Standards* (11.50.050.D)
   The applicant has not provided a conceptual tree planting plan. The required tree area is based on the size and the type of proposed existing development as shown in Table 50-2. Trees must be planted at a minimum 1.5 caliper inches. Trees will be required to be planted through the Urban Forestry Permit.

D. Heritage Trees (11.20.060):

There are heritage trees located on the site that is on the City of Portland's Heritage Tree list (Trees 152, 62). This tree must be preserved unless removal is approved by the Urban Forestry Commission. The Urban Forestry Commission shall hold a public hearing on a request to remove a Heritage Tree. Consent to remove the tree shall be supported by at least six members of the UFC. Any work done in the root protection zone of the tree must receive prior approval from Urban Forestry.

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Urban Forestry
1900 SW 4th Ave. Ste 5000, Portland, OR 97201
Tel: 503-823-TREE (8733) Fax: 503-823-4493
email: trees@portlandoregon.gov
web: portlandoregon.gov/trees

URBAN FORESTRY TREE REQUIREMENTS
Early Assistance and Land Use Review

Portland Parks & Recreation Urban Forestry staff review Early Assistance and Land Use Review materials to identify potential issues and requirements in accordance with Title 11, Trees and Title 33, Zoning Code. The purpose of these reviews is to identify potential issues and/or impacts on existing street trees, heritage trees, and trees on City-owned or managed sites (if applicable), as well as to provide adequate areas for future street tree planting on existing and proposed public streets. Trees on private property are subject to development standards from the Bureau of Development Services. See planning requirements for private property trees or call the Zoning Hotline at 503-823-7526.

Tree Plan Submittal Requirements (11.50.070)

A tree plan must be submitted with each phase of review including land use reviews, building permit applications, and public works permits. The tree plan information may be combined with other relevant plan sheets. The tree plan submittal shall include the following information:

- existing improvements;
- proposed alterations;
- existing street trees ≥ 3” DBH including size and location;
- existing on-site trees ≥ 6” DBH within 15’ of the limits of disturbance;
- trees proposed for removal;
- tree planting proposal, including tree size, species and location; and
- trees to be retained and proposed tree protection measures meeting the specification in Chapter 11.60.

Any changes to an approved Tree Plan, including amending tree species must be approved by the City Forester. Please note that the City Forester may not approve revised tree planting plans based on the lack of species availability. To facilitate species availability, it is recommended that tree procurement occur approximately 6 months prior to installation.

Tree Mitigation (11.50.040.C.2)

Healthy street trees ≥ 6” DBH that are approved for removal shall be replanted with two trees in addition to trees required to be planted to meet Street Tree Planting Standards, below. When street improvements are to partially or fully unimproved streets, healthy street trees ≥12” DBH approved for removal shall be replanted with two trees, with trees planted to meet Street Tree Planting Standards credited towards meeting this requirement. Tree replacement for trees removed shall occur in the street planter strip, on site, or in the same watershed either by planting or by paying a fee in lieu of planting in accordance with table 60-1, below.

On City-owned or managed sites, healthy, non-nuisance trees ≥ 6” DBH that are approved for removal shall be replanted per the Administrative Rule for tree replacement standards, below:

Tree Replacement for Development on City Owned or Managed Sites

Size of tree to be removed (inches in diameter)	Number of trees to be planted
6 and up to 12	Up to 2
More than 12 and up to 20	Up to 3
More than 20 and up to 25	Up to 5
More than 25	Up to 6

Street Tree Planting Standards (11.50.050)

One street tree shall be planted or retained for each full increment of 25 linear feet per side of street frontage. Planting is exempt when existing above or below grade utilities prevent planting of street trees, or if the existing design of the street will not accommodate street tree planting because the planting strip is less than 3 feet wide, there is not a planting strip, or there is insufficient space to add tree wells. Trees planted to meet street tree planting standards are credited toward mitigation requirements when street improvements are to partially or fully unimproved streets. When the required number of trees cannot be planted, a fee in lieu of planting will be required, in accordance with Table 60-1, below.

Table 60-1 Broadleaf Tree Size Requirements

Development Type	Tree Size	
	On Site	Street
One and Two Family Residential	1.5”	1.5”
Multi Dwelling Residential	1.5”	2”
All others	1.5”	2.5”

Tree Planting Specifications

If there are fewer than 8 required trees, they may all be the same species. If there are between 8 and 24 required trees, no more than 40 percent can be of one species. If there are more than 24 required trees, no more than 24 percent can be of one species. Street tree species shall conform to the appropriate “City of Portland Approved Street Tree Planting List.” The City Forester may approve or require an alternate or unlisted species.

All required street trees shall be planted in-ground following Standard Drawing Number P-581 “Typical Street Tree installation,” except when in raised planters that are used to meet Bureau of Environmental Services storm water management requirements. Please include the Standard

Drawing Number P-581 as part of the Public Works permit application. Plant materials shall be installed to current nursery industry standards and proper arboricultural practices [American National Standards Institute, *ANSI A300 Part 6: Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices (Planting and Transplanting)* 2012, Tree Care Industry Association, Inc. Londonderry, NH]. Plant materials shall be properly supported to ensure survival.

All trees required or approved to be planted by Title 11 shall be planted or payment in lieu of planting made prior to the expiration of the permit or City's final acceptance of the project, as applicable. However, it is encouraged that planting occur during the wet months or as per City Forester recommendations. Street tree planting may be deferred between May 1 and September 30 upon filing a performance guarantee as provided in Section 11.10.060 or other assurance deemed acceptable by the City Forester or BDS Director as applicable.

Tree Protection Specifications (11.60.030)

Trees to be retained shall be protected in accordance with Title 11 Trees, Protection Specifications (11.60.030.C). Tree protection shall be shown on the tree plan and include the distance from the trunk of the tree to the fence. A standard root protection zone is established as follows; a minimum of 1 foot radius (measured horizontally away from the face of the tree trunk) for each inch of tree diameter. Protection fencing shall be a minimum 6-foot high metal chain link construction fence, secured with 8-foot metal posts established at the edge of the root protection zone and permissible encroachment area.

PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

Mingus Mapps, Commissioner
Gabriel Solmer, Administrator

1120 SW Fifth Avenue, Suite 405
Portland, Oregon 97204-1926
Information: 503-823-7404
portlandoregon.gov/water

Water Bureau

Early Assistance Appointment Response

Date: June 16, 2023

To:

From: Kari Ann Spoon, 503-865-6372, KariAnn.Spoon@portlandoregon.gov

Case File: EA 23-047200

Location: 6325 SE DIVISION ST

Property ID: R332503, R332503, R332503

Proposal: A Pre-Application Conference to discuss replacing 88 faulty light poles in Mt. Tabor Park. The location of the replacement poles will be the same as the existing light poles. None of the replacement light fixtures are the original 1920s fixtures. The proposed replacement poles are already located in Laurelhurst Park, Washington Park and 5 other Portland parks.

The Portland Water Bureau (PWB) has reviewed the early assistance materials to identify potential issues and requirements.

A. KEY ISSUES

Mt. Tabor light replacement-The only concern Water Available has is regarding if any exiting light poles are within 5ft of the outside “skin” of any existing water main. At time of permitting through BDS, demonstration of adequate separation distances from all water mains will need to be submitted on a site utility plan, showing all water mains and any poles within 5ft of the outside edge/skin of any water main. If any poles are within 5ft, it is recommended that the replacement poles be shifted to achieve 5ft minimum horizontal separation.

No other concerns exist for water bureau with this project.

Request for an Evidentiary Hearing and Waiver of Right to a Decision within 120 Days

State law requires the City to issue a final decision on your land use proposal within 120 days of receiving a complete application. In order to ensure that the decision on your land use review application is rendered within 120 days, any appeal of your proposal to City Council will be held based on evidence submitted as part of your first hearing to the Hear-ings Officer, Design Commission, or Historic Landmarks Commission.

If you prefer a hearing on appeal to City Council where anyone may bring in new facts and evidence (an "evidentiary hearing"), you must request a full 245-day extension of the 120-day review period by completing this form within 21 days of submitting your land use review application. You may choose to extend the 120-day review period for up to 245 days at any point in the land use review process. However, if the request is received more than 21 days after the application date, any appeal to City Council will be on-the-record and no new evidence can be submitted.

STAFF USE ONLY
Date Land Use Application received by BDS _____ **Case File No.** _____

Date this form is due to BDS for evidentiary hearing _____

APPLICANT: Complete all sections below that apply to the proposal. Please print legibly.
Email this application and supporting documents to: LandUseIntake@portlandoregon.gov

DATE: _____

TO: **Bureau of Development Services**
Attention: Case Planner
1900 SW Fourth Avenue, Suite 4500
Portland, OR 97201

REGARDING:
Type of Land Use Review Type III Historic Resource Review
Site Address/Street 6325 SE Division St. (Mt. Tabor Park)
Tax Account Number(s) 332503

I understand the following information:

1. I have the right, under State law, to a final decision on my application no more than 120 days after my application is determined to be complete by BDS staff.
2. I am not required to sign this form. If I do not sign this form, the City of Portland will process my application to meet the 120-day requirement.
3. By signing this form, I am making an irrevocable decision to extend the review period a full 245 days, and may not change my mind later except by withdrawing this application, filing a new application, and paying the associated fee.
4. By signing this form, I am waiving my right under State law to a final decision on my application with the 120-day review period. I am waiving my right to file any legal action to enforce the 120-day review period.

All applicants must print their name on this form.

Print Name Brett Horner, Parks and Trails Planning Manager **Day Phone** 971-409-3518

☑ I acknowledge this typed name as my signature

Print Name _____ **Day Phone** _____

☐ I acknowledge this typed name as my signature

120-day Review Period Information

State law requires that the City make a final decision on your application no more than 120 days after it is deemed complete. State law also allows an applicant to extend the 120-day review period for an additional 245 days. Generally, we have been able to meet the 120-day deadline. However, where the proposal is complex or there is an appeal to City Council, it is difficult to meet this deadline. This is due to the amount of time required to review cases, make findings, provide time for neighbors to comment, and hold public hearings.

The 1995 Oregon Legislature adopted new laws which change how this 120-day period is calculated, and these laws make it much more difficult for us to meet the timeline. As a result, City Council adopted a resolution allowing us to comply with the new laws. The way this affects you, the applicant, is that an appeal of your proposal to City Council will be held based only on the evidence already in the record.

Our Type III procedure provides for a hearing before a Land Use Hearing Officer or a commission (Design or Landmarks). It also provides for a hearing before City Council if there is an appeal. Our Zoning Code allows City Council to choose how it will hear appeals. City Council may hold a full evidentiary hearing, or the Council may hear the appeal "on the record." An evidentiary hearing is one where anyone may bring in new facts and evidence. For instance, a neighbor or applicant could bring a traffic study to the City Council hearing and request that Council consider it, even though it was not submitted to the original review body (Hearings Officer, Design Commission or Historic Landmarks Commission).

For an "on the record" appeal, the City Council relies only on the testimony and other evidence that was submitted to the original decision-maker—evidence that is "in the record." For an appeal based on the review body's decision and record, the appellant presents arguments to the Council about what is wrong with the review body's decision. The person that did not file the appeal is responsible for defending the decision. Neither side presents new evidence, and no new issues may be raised. Hearing appeals that are "on the record" saves considerable time, and makes it possible to meet the 120-day review period requirement.

The right to a final decision within 120 days is the applicant's right and guarantee under State law. The only way this can be changed is if the applicant requests that any appeal include an evidentiary hearing. If you prefer the process that allows for a full evidentiary hearing if there is an appeal, you must extend the 120-day review period by a full 245 days. We will still handle your application differently, but still in a timely manner.

There are several reasons why you may want to extend the 120-day review period. The most significant advantage is that it allows time for all parties—you, the neighbors, and the city agencies—to work together to develop solutions. It allows time for you to provide additional information in response to concerns, and to help everyone better understand the application. This can avert a costly appeal to City Council or even to the Land Use Board of Appeals (LUBA), but it does take time. In addition, it allows for modification to the proposal as it moves through the process. This gives you the opportunity to change your project to address concerns or improve the proposal. Extending the 120-day review period allows for flexibility in the nature, number, and types of hearings that can be held so your case is reviewed in the way best suited to your particular case. Finally, it allows for a full evidentiary hearing if there is an appeal to City Council. This would allow new information to be submitted, including new information to support your application.

Although we think the longer process can benefit everyone involved, you are fully entitled to the 120-day process. If you prefer that option, do not sign or return this form. We will then proceed in processing your application within the required 120-day review period. If you prefer to extend the 120-day review period by 245 days, you must sign and return this form to the Bureau of Development Services within 21 days of submitting your application.

Once you choose the timeline you want to follow, we will include that information in the notice to neighbors, and process your application accordingly. For that reason, once you choose a timeline, you may not change your request. If you choose the 120-day review period, you may not opt for an evidentiary appeal hearing unless you start the entire process over, including a new application fee. Conversely, once you choose to extend the review period by 245 days, you may not demand that a final decision be issued within 120 days.

For more information regarding 120-day review period, contact the planner assigned to your case, or the Zoning Hotline at 823-7526.

For more information, call the Planning and Zoning staff at 503-823-7526

Information is subject to change, for current Portland Zoning Code visit www.portland.gov/code/33

December 7, 2023

To: Arthur Graves, Planner
Land Use Services Division
Bureau of Development Services
1900 SW 4th Ave Suite 7007
Portland, OR 97201

Re: Land Use Review LU 23-088549 HR DM

This letter and attachments provide the Portland Parks and Recreation (PP&R) response to your questions (*shown in italics*) located in Section I. of your correspondence dated October 19, 2023. PP&R believes that this submittal, with attachments (revised submittal narrative and exhibits) addresses all the comments received. No additional materials are being submitted at this time.

1. *Please clarify the specific reason for the removal of the proposed historic light poles from the Mt Tabor Historic District.*

   The work proposed in Mt. Tabor Park is part of a city-wide light pole safety project. Decorative concrete poles installed utilizing an anchor wire connection within the Portland Parks system are affected. The reason for removal is to address the public safety hazard associated with the connection method that was used to install poles, and other code deficiencies.

   The primary hazard is wind or seismic lateral loads that exceed the capacity of the wire used to connect the poles to the footings. Even if the wire connection could be replaced, the poles cannot be reinstalled 'as-is' due to a lack of sufficient reinforcing metal within the poles and the footings to meet current code requirements. Additional details regarding these code deficiencies are provided in response to question 3.

   As stated on page 5 of the narrative, poles were installed using an anchoring system that does not meet current code standards. Further, it is not practicable to rehabilitate the poles to meet current code standards due to the age and condition of the poles (also page 5 of the narrative). Additional information regarding light pole installations and the problematic anchoring system is provided below.

Concrete light poles are currently installed in Portland parks using the direct bury method to assure structural stability. Metal light poles may be bolted to a buried concrete footing. There is no base added between the pole and the buried footing (or foundation) with these modern installation methods.

However, in the past, decorative concrete poles were installed with a grout base. As shown in Figure 1, reinforcing metal bars (or rebar) bent into hairpin-shaped loops (or rings) extrude from the bottom of the pole and the top of the concrete footings. The pole hairpins and the footing hairpins were attached to each other by steel wire ('tie wire') within the grout base.

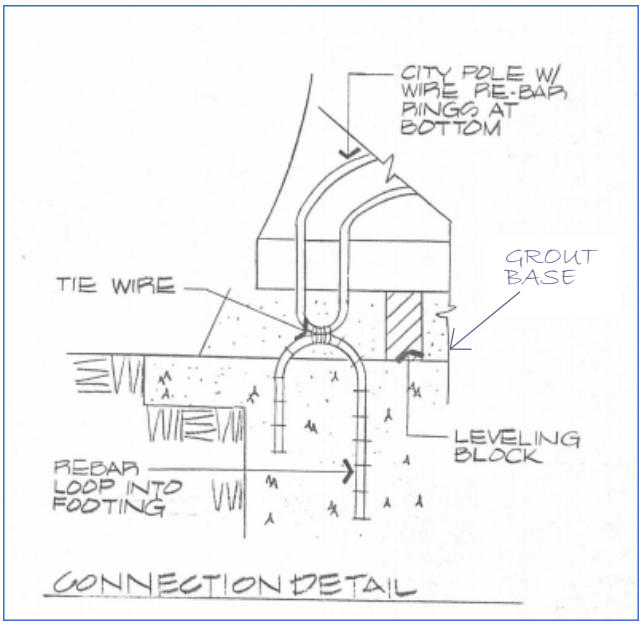


Figure 1.Typical Wired Anchoring Connection Detail

In November 2022, Asset Management staff visually inspected 1,020 light poles and found grout bases present on 252 decorative concrete light poles, indicating the presence of a tie wire anchor. Multiple decorative concrete poles with grout bases have since been removed, confirming that the poles with grout bases use the internal tie wire method. Figures 2 and 3 show a pole removal in progress at Mt. Tabor Park, which documents the presence of the substandard wire anchor within the grout base.

The 88 light poles proposed for replacement at Mt. Tabor Park all have grout bases and use this wire anchor method to connect the poles to buried concrete footings. Metal poles and other decorative concrete poles installed around the historic reservoirs do not use grout bases and are not proposed for replacement.

Figure 2 (Top). Pole at Mt. Tabor, removal in progress. Grout base to right of pole. Hair pin loops are visible protruding from the bottom of the pole. Remanent tie wire shown in bottom right of photo.

Figure 3 (Bottom). Base of pole shown in Figure 2 showing condition of the bottom of the pole and tie wire fragments from the internal wire anchor connection.

By removing the light poles with wire anchors that present a hazard to the public in Mt. Tabor Park (as well as 11 other parks in the city), the light pole safety project will resolve this public safety issue. The removal was approved by City Council through the authorizing ordinance provided as APP Exhibit A (see in particular Sections I. 3 through I. 6, page 1-2).

2. *Please clarify the submitted Exhibits with labels and page numbers. When referencing Exhibits cite the specific Exhibit and page number.*

   The exhibit sets have been revised to provide an exhibit label and page number on each page. The narrative has been revised to specify the exhibit relevant to each reference; all pages within the referenced exhibit are considered relevant unless specific pages are listed.

3. *Please clarify the statements on page 5 of the Application Narrative regarding the existing light poles not meeting building code requirements. Please provide documentation and support for this.*

   As noted on page 5 of the narrative, the existing connection between the pole and the foundation does not meet current code requirements. This assessment was provided by the project team's consulting engineers, KPFF. The third-party engineers performed the code analysis and prepared a report that recommended replacement due to the hazard presented by the poles. The hazard was discovered after a park visitor attached a hammock to a light pole, causing the pole anchoring system to fail and the light pole to fall over in June 2022.

   The primary issue with the wire anchor connection is that the steel tie wire connection was not designed to meet lateral loads. Additionally, some tie wires have deteriorated over time because of water/moisture influence. Even with a retrofit to replace the wire anchor, the following light pole elements would not meet code requirements according to the consulting engineers:
   - Footing depth of 3'-4';
   - Footings lack reinforcing steel; and
   - Poles lack reinforcing vertical steel with transverse ties.

   These code deficiencies led the consultant to recommend replacement of the entire light poles and their footings, as documented in the emergency declaration issued by the Commissioner-in-Charge on December 28, 2022 (added as APP Exhibit K).

   With this incompleteness response, PP&R is sharing photographs and a construction detail of the inadequate and code-deficient anchoring system discovered after the June 2022 hammock incident.

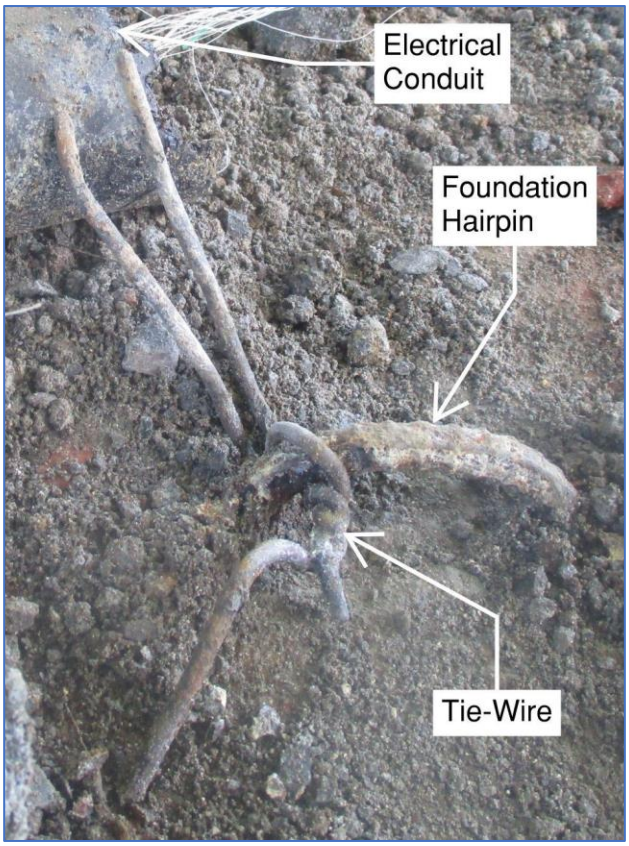


Figure 4 (Top). Close up of materials in the grout base showing foundation (footing) hairpin and severed tie wires.

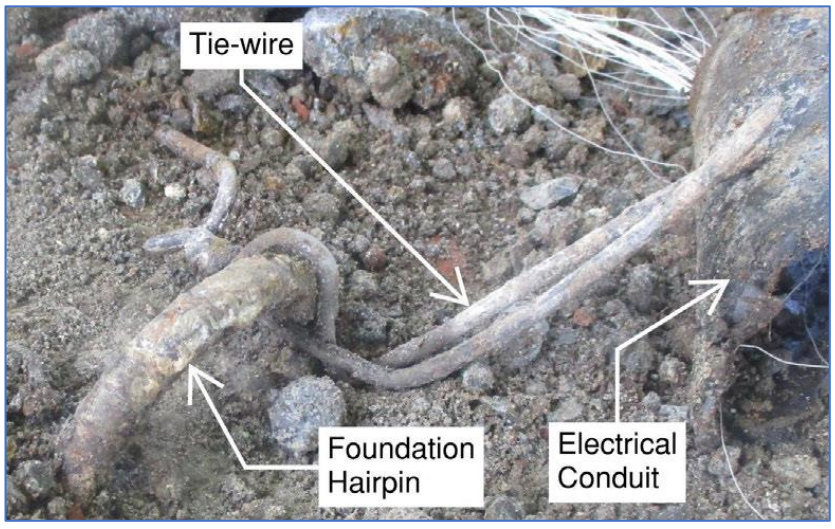


Figure 5 (Bottom). Same materials as above from different angle show hair pin and severed tie wire shown from a different angle.

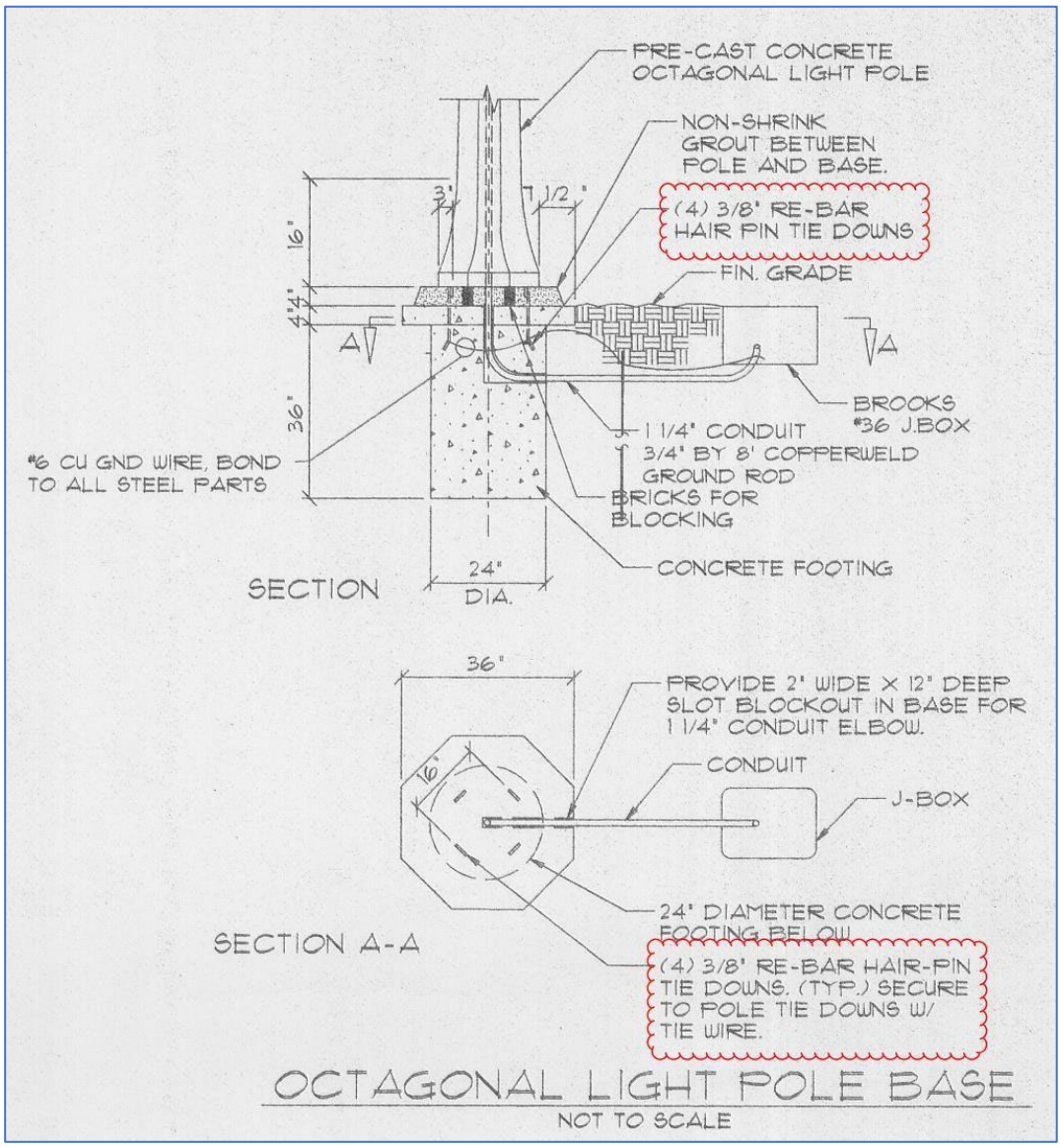


Figure 6 (Left). Construction detail "Existing Light Pole" (1996)

4. *Please provide information clarifying the structural integrity of the light poles to be removed. Provide both documentation and drawings.*

   The structural condition of light poles is discussed in the narrative on pages: 5, 7, 8, 37, 38, 48, 49, 50 and is substantiated by the emergency declaration (APP Exhibit K). Photographic documentation regarding the existing conditions that make the reuse of the poles through rehabilitation infeasible was provided in APP Exhibit H. Additional photographs and drawings in this letter supplement the original information.

   As noted in the response to question 3, even if the anchor was replaced, the poles cannot be reinstalled due to the lack of sufficient internal reinforcement to meet current code requirements. Adding structural supports to the pole would severely compromise the appearance of the original historic poles, defeating the entire purpose of saving them for their historic integrity.

   The availability of planned and as-built construction plans in the record varies. For newer construction, more documentation is available than for older projects. The as-builts provided in the original submittal are the best source of information on the historical poles specific to Mt. Tabor Park, however, some information gaps remain. The only records of the lighting system for the park's circulation system that contain construction details are those from 1987 (previously included in APP Exhibit F, page 4).

   The same decorative concrete light poles were used throughout the park system, so while there are no structural drawings specific to Mt. Tabor Park, there are plans available for other locations, such as Irving Park (provided in this letter as Figure 6). According to the project's consulting engineers, these plans document a lack of sufficient rebar in both footings *and* poles to provide enough structural reinforcement to meet current minimum code standards.

   As noted above and throughout the narrative, the technique used to connect historic poles to buried footings poses a potential life safety hazard and the rehabilitation of existing poles to add metal reinforcement to meet current code standards is not considered feasible due to the age and condition of the poles. The photograph in Figure 7 showing a pole removal in progress illustrates the structural instability of the grout bases.

Figure 7. Removed pole; broken wire tie circled; base of concrete pole is shown along with grout base in pieces.

The "deterioration" noted on page 38 of the narrative refers to external conditions observed by parks staff and the consulting engineers, as well as the internal deterioration affecting the tie wires making up the anchor connection visible during pole removals (Figure 4, 5, 7). Staff photographs documenting the external conditions were provided in APP Exhibit H).

5. *Please provide the engineers report(s) mentioned on page 7 of the Application Narrative.*

Ongoing litigation limits the amount of materials that can be made public relating to the condition of specific light poles. The engineer's report is subject to Attorney-Client privilege and the City has not made the report available to the public at this time due to legal proceedings.

6. *Please clarify which of the poles to be replaced will not be located in exactly the same locations as the existing light pole to be removed/replaced. Please provide documentation and drawings.*

   Changes to pole locations to avoid conflicts with waterlines previously shown in Exhibit C-6 are now shown on page 4 of exhibit C-9. There is the potential for pole locations to be revised slightly to limit impacts on existing trees and assure compliance with Title 11, since the project plans to retain all existing trees on site.

7. *Please provide complete drawings (plans, elevations, sections, etc.) of the historic light poles. ALL DRAWINGS MUST BE TO SCALE.*

   Historic plans from the Bureau's archive of as-built plans are stored as scanned versions of oversized scaled plans and were provided in APP Exhibit F. These plans of the illumination system show the location of the decorative concrete poles within the park in 1958, 1984, and 1987 on pages 1-3, 5-6. Scaled details are shown on pages 3 and 4 of APP Exhibit F. The location of the poles is also shown in the scaled plan set in C Exhibit 6, excluding pages 8 and 15.

8. *Please provide complete drawings (plans, elevations, sections, etc.) of the proposed replacement light poles. ALL DRAWINGS MUST BE TO SCALE.*

   The plans showing the mapped disturbance area for the proposed replacement light poles have been revised to show the scale when printed at 11" x 17" and are now Exhibit C-9.

   Elevations and sections of the poles and the fixtures available from the manufacturer are provided in Exhibit C-4 on pages 1-2 with spacing in the bottom right-hand corner as specified in the early assistance pre-application conference notes. A new page was added as Page 2-B which shows the pole to scale.

   Construction plans for the replacement poles have been added as Exhibit C-10, however since they are oversized, the plans will be submitted separately (rather than scale plans to print on 11" x 17" paper).

9. *Please clarify exactly which of the historic light poles are failing and need to be removed due to clearly visible structural deterioration.*

   All the poles in the Mt. Tabor circulation lighting system proposed for removal were installed using the wire anchor method identified as a public safety hazard. Since the anchor is internal it is not externally visible.

The structural deterioration that *is* visible on certain poles in the park substantiates the poor condition of the poles for the purpose of rehabilitating the existing poles to meet current code standards. Additionally, as noted on the last page of APP Exhibit H, spalling most often starts internally and is usually not visible until the deterioration process has progressed significantly – waiting until specific poles show visible signs of spalling before replacement could lead to an increased (and unacceptable) risk of structural failures.

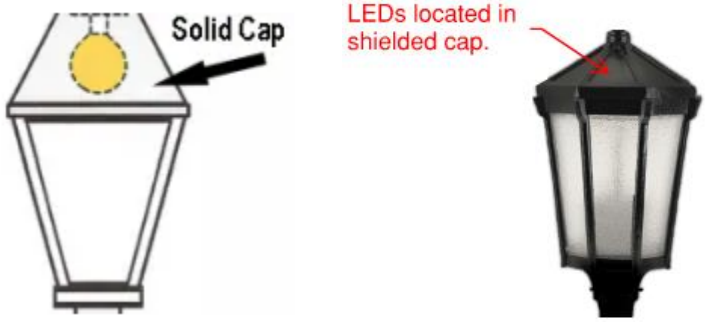
10. *Please clarify specifically what " 'dark skies' compliance" (mentioned on page 7 of the Application Narrative) refers to.*

Principles of "dark sky" or responsible outdoor lighting were identified by the Bureau of Planning and Sustainability (BPS) in their August 2020 report, *Dark Skies – Strategies for Reducing Light Pollution in Portland* (see excerpt from report in newly submitted APP-Exhibit Q). Consistent with these principles, the replacement lights at Mt. Tabor:

- Serve a specific purpose (lighting the circulation system within the park).
- Direct illumination where needed (fixtures are shielded at the top to reduce up light and therefore illumination is directed downward).
- Light levels are no brighter than necessary (wattage is limited to 60 watts)
- Lights in the system will be controlled (a control system is part of the replacement plan).
- Use warmer colors and limit blue-violet lights (luminaire produces a warm white light in the 24000 L wavelength).

11. *Within the 'dark skies' comment, please clarify how the proposed light poles are shielded.*

The shielded light fixture has a solid barrier (cap) at the top of the fixture in which the LEDs are located. The LEDs are installed in the cap, so LEDs are not visible below the barrier (no light is visible below the horizontal angle). This prevents any light from spilling skyward from the LEDs. Horizontal spill into the adjacent environment is also minimized as the LEDs are placed in a manner to direct more light toward the pathways.



12. *Please clarify the statement in the fourth bullet on page 7 of Application Narrative regarding lumens. Is this saying the proposed lights will be 33% less bright?*

    For context, the referenced statement is provided here:

    - The existing 150W HPS lamp delivers 9000 luminaire lumens, while the new 60W light emitting diode (LED) lamp is more efficient and will deliver 6000 luminaire lumens (a reduction of 33%).

    Light is measured in a variety of ways. The intensity at the light source is measured in lumens, while the amount of light present at a particular distance from a light source is measured in foot candles (fc). The proposed lights will emit 33% less amount of visible light as measured at the light source (6000 proposed vs 9000 existing lumens).

    How far the light reaches – or how bright it is at a particular distance – depends on several factors, including the amount of illumination produced at the source modified by factors such as lamp direction and concentration, fixture paneling, and absorption from barriers such as vegetation. Information on the amount of light reaching the pathways is provided on page 11 of Exhibit C-5.

13. *Please clarify the statement on page 7 of the Application Narrative starting, "Due to an inadequate anchoring system…it is not practicable to reuse the poles". Please provide information clarifying why existing historic light poles footings cannot be repaired and/or reinforced.*

    The footings are buried, not visible, and were not identified as a feature of the illuminated lighting system in the historic nomination. Regardless, the city's consultant assessed the possibility of retrofitting existing poles and footings using new metal anchors, as discussed further in response to question 26. Unfortunately, this method was not considered to be practicable by the consultants and, as noted in the original narrative, the third-party engineering consults could not recommend reuse based on safety considerations.

    In addition to deteriorating pole and footing conditions, consultants noted that footings lacked sufficient depth and both footings and poles lacked sufficient steel reinforcement, as discussed in the response to question 3 in this letter. All of which led consultants to recommend replacement to address life and safety requirements. The practicality of retrofitting poles for reuse by adding reinforcing steel to meet current code criteria was also discussed in the narrative (page 38, 44, 48-49, and 50-51).

14. *Please clarify what the industry standard is for light pole installation in parks.*

The standard practice for determining the method of installation for light poles is to follow the manufacturer's recommendations. The replacement poles will be direct buried in a manner consistent with the manufacturer's recommendations, as previously provided in Exhibit C-4 (page 3).

Regarding when light poles are replaced, the city has adopted policies for capital asset management. These standards identify the expected lifespan of capital assets. Lighting assets are expected to have at least a 33-year lifespan, as shown in administrative rule FIN 6.11.03 Lifecycle Examples for Capital Asset Administrative Procedures (Exhibit L). Based on the installation dates associated with PP&R light poles in Mt. Tabor Park, the proposed replacement is in line with adopted city policy.

There is no consistent industry standard used to determine when it is appropriate to provide illumination at parks or what level of illumination is best suited for various park settings. However, the Illumination Engineers Society (IES) provides technical recommendations that may be purchased from the American National Standards Institute, or ANSI, which is a private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system. These proprietary guidelines are not regulatory standards, nor do they replace guidance from subject matter experts.

ANSI information is not publicly available, however, experts in lighting may pay to access the information when developing location and context-specific solutions. In a recently published guide prepared for the City of Denver, industry professionals used the ANSI/IES standards as a starting point to make recommendations for Denver-specific policies. This guide is provided as Exhibit N in the revised APP Exhibit set. Information regarding Portland's efforts to update the lighting throughout our park system is summarized on pages 17-19. Proposed Lighting Illumination standards for pedestrian trails are provided on pages 36-39.

Unlike the proposed standards for Denver, which appear to apply to paved trails, the historic illumination system at Mt. Tabor Park lights soft surface trails, stairs, and paved drives. Therefore, the recommendations for Denver trails are not necessarily appropriate for the Mt. Tabor mixed-mode circulation system. Further, the existing historical illuminated circulation system provides cultural value and is proposed to be retained in this application, regardless of modern industry practices.

15. *Please clarify where the specific structural issue is with the historic light poles: the footing, base, poles, light, etc. Clarify if this a systemic issue will all historic light poles within the Mt Tabor Historic District.*

The risk posed by the wire anchor connection is a systemic issue affecting more than 250 decorative concrete light poles that are not direct buried in multiple city parks. See Light Pole Safety Project Frequently Asked Questions (added to the revised APP Exhibit Set, as Exhibit M, page 1). In addition to the wire anchor, footings and pole do not meet code requirements as detailed in response to question 3.

While there are more than 200 light poles at Mt. Tabor Park, the poles to be replaced are only those within the historic lighting system associated with the park's circulation system. All the poles in the park's historic lighting system provided to illuminate the park circulation system are decorative concrete poles installed using the deficient tie wire anchor method. The poles can be easily identified because they all have the same grout base and were originally installed in the 1920s or 1930s.

16. *On page 7 of the Application Narrative, in the last paragraph, "other information" is mentioned regarding "determining full replacement". Please provide this "other information".*

    Information to make the determination was provided by the consulting engineers and the City Attorney's office.

17. *The closure of the Columbia Pool is mentioned on page 8 of the Application Narrative. Please clarify why this pool was closed.*

    Columbia Indoor pool was closed due to life-safety hazards and diminishing structural integrity, including poor condition of the roof. The decision to close Columbia Pool, like the decision to replace light poles, epitomizes PP&R's commitment to prioritizing life and safety in decision-making.

18. *On page 14 of the Application Narrative, in the fourth paragraph, a comment is made about, "Similar poles at historic parks…" Please provide the supporting citation for this comment.*

    The National Register of Historic Places reference number for the Laurelhurst Park Historic District is No. 01000134 and is added as APP Exhibit P. See in particular page 5 of the exhibit (registration narrative page 2):

    > "*The circulation system was lit in 1915. The lamp standards and fixtures were replaced in the 1960s and again in 1996. Because it is not known if the new structures are placed in the same locations as the original structures and because the existing lamp structures are entirely modern, the lighting system is a noncontributing structure.*"

Irving Park is not considered a contributing resource to the historical character of the Irvington Historic District since it contains modern sports fields and structures. The park's lighting system which dates from a similar era is not mentioned in the listing for the District at all.

19. *On page 15 of the Application Narrative, in the second paragraph, a comment is made about 61 light poles. Please clarify in drawings where these light poles are located.*

    The notated plan from 1987 shows the location of each pole and labels each pole with Staff's estimated installation date. This was provided in APP Exhibit F and is located on page 6 of that exhibit.

20. *Please provide a schedule and corresponding plan for the light poles in the Mt Tabor Historic District to include: light pole age, installation date, construction type, degree of deterioration, reason for proposed removal and replacement. Number light poles 1-88 on the plan and in schedule.*

    See Exhibit C- 10, page 8 for the pole schedule.

    As noted in answer 19 above, the 1987 notated plan identifies the location of each pole proposed for replacement in this project and the estimated installation date. Each pole is numbered in the 1987 plan, consistent with the numbering used in earlier plans also provided in the same exhibit. In many cases, including for the Mt. Tabor Park illuminated circulation system, there is no primary source record to definitively date the original installation of the lighting system for the circulation system.

    The oldest record is the 1958 lighting plan which notes a 1924 installation. However, as noted in the application narrative, the historical nomination asserts the lighting system was installed in 1928-1929, while portions of the lighting system associated with the historic drives constructed in the 1930s were probably installed concurrently with roadway construction, and there does not appear to have been any attempt to date each pole in the system in the historic nomination (page 14-15).

    The reason for removal is the same for all the poles - the anchor attachment that was identified as a potential life safety hazard. Even if the anchor connection could be replaced, the poles cannot be reinstalled 'as-is' due to insufficient internal reinforcement to meet current code requirements as discussed in the response to question 3.

21. *Please clarify in drawings (plans, elevations, etc.) where Nonconforming Situations associated with LU 17-245440 and mentioned on page 23 of the Application Narrative will be installed.*

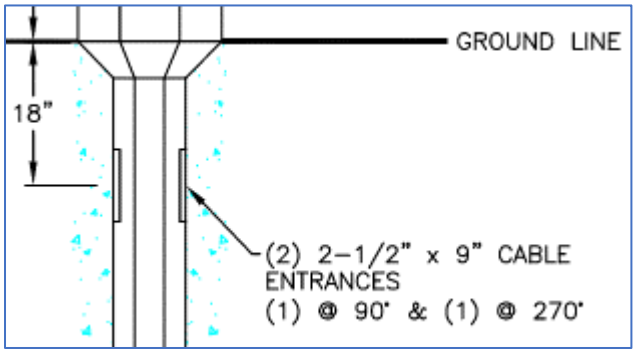
    The BDS-permitted plans that show where the nonconforming improvements will be made were provided as Exhibit C-7. This exhibit has been revised to add a site plan from the decision showing where adjustments approved existing conditions on page 4.

22. *Please clarify why irrigation drawings have been submitted.*

    The prepared plan set for the site was sequentially numbered inclusive of the irrigation plans. The irrigation plans were included so the reviewer could see all plans included in the plan set for the site and not have to inquire about what was missing. Based on the email instructions the scaled plan set for the site will be provided separate from the rest of Exhibit C.

23. *Please clarify how conduit will be concealed with the proposed replacement light poles.*

    The lighting system utilizes an underground conduit. Poles contain internal conduit, as shown in the 1987 plan details (APP Exhibit F, page 4) and in the pole schematics on page 2 of C Exhibit 4). Conduit will remain buried and will enter the poles 18" below the ground through cable entrances built into the embedded portion of the poles. The area of interest from Exhibit C-4 is reproduced here for reference:



24. *Please clarify where "Sheet 4" is located (this is mentioned on page 41 of the Application Narrative.*

    The previously submitted Exhibit C-6 contained the disturbance area plans, however, this plan is now a separate exhibit. Sheet 4 of the mapped disturbance area is now located on page 4 of Exhibit C-9.

25. *Please clarify why the bases/footings of the existing historic light poles cannot be repaired and/or reinforced.*

    Many of the grout bases are in poor external condition as documented in APP Exhibit H and photographs in this letter. Additional internal deterioration of the components located within the grout bases was documented by third-party engineering consultants, as shown in the photographs in this letter. Repair or replacement of the connection within the grout base while physically possible, would not meet current code standards (as discussed in the answer to question 3). Retrofitting to use a different method to connect poles to new footings would severely stress the poles (the 99-year-old concrete would crumble).

26. *Please clarify options investigated to repair the historic light poles. Please provide restoration experts/specialists consulted.*

    The third-party engineers considered both a replacement and retrofit option.
    - Replace existing wire anchors with new materials (replacement option)
    - Remove or sever existing hair pins and embed new anchors (retrofit option).

    The existing anchoring method does not meet code requirements as discussed in response to question 3. Therefore, even if materials could be replaced, this option is not a feasible solution since it would not meet the code or resolve the hazard. a Alternatively, poles could be retrofitted with a new anchor. Thiswould entail shearing off the protruding hairpin rebar and inserting a new anchor into the footing along with steel shims, which would then be epoxied to the footing – however due to the condition of the poles and the footings, the retrofit is not a practicable option. Regardless of anchor replacement or retrofit, the design and condition of the poles themselves are a cause for concern. Replacing the poles will mitigate the structural risk to public safety and ensure another 100 years or so of expected life span.

    Due to interest in preserving the poles, consulting engineers were also asked about reinforcing poles but such internal reinforcement to preserve the visual character of the historic poles was not considered practicable, as discussed in pages 7, 38, and 48 of the narrative.

    Park staff did contact the Oregon State Historic Preservation Office (SHPO), and consult with historic preservation organizations to offer the poles for preservation. As noted in the application narrative on page 45, none were willing to take the poles. While the most robust discussion occurred with the Oregon Historical Society, ultimately only light fixtures were conveyed.

PP&R recognizes the value of historic restoration expertise; however, this expertise does not supersede structural deficiencies or health and safety concerns. Any recommendations from a historic restoration expert would still need to align with the engineer's recommendations to abate the safety hazard. Since the consulting engineers determined that repair, retrofitting, or structural rehabilitation was not practicable and would not address the safety hazard, there was no need for a formal consultation of a historic resources specialist on this matter. Public safety was the most important criterion in deciding whether to keep or replace the light poles in the Bureau's decision-making process.

PORTLAND PARKS & RECREATION℠
Healthy Parks, Healthy Portland

Light Pole Safety Project: Mt. Tabor Park

Type III Historic Resources Review
for Accessory Utility Upgrades
(Revised)

Table of Contents

General Information

Project:	PP&R Light Pole Safety Project
Applicant:	Portland Parks and Recreation (PP&R) 1120 SW Fifth Ave, Suite 858 Portland, OR 97201 Contact: Brett Horner, Parks and Trails Planning Manager 971-409-3518 | Brett.Horner@portlandoregon.gov
Property Owner:	City of Portland 1900 SW Fourth Ave, Suite 7007 Portland, OR 97201
Land Use Planner:	PP&R, 1120 SW Fifth Ave, Suite 858 Contact: Carine Arendes, AICP 503-679-0826 | Carine.Arendes@portlandoregon.gov
Engineer:	PP&R, 1120 SW Fifth Ave, Suite 858 Contact: George Tkebuchava, P.E. 503-250-0355 | George.Tkebuchava@portlandoregon.go
Site:	Mt. Tabor Park (6325 SE Division Street) Pre-application conference June 27, 2023 (23-047200 PC)
Improvement Value:	88 new concrete light poles with acrylic/metal fixtures and decorative metal strapping (value $8000 each, total $704,000)

SECTION 1 –PROPOSAL AND PROJECT NEED

Section 1.1 Proposal

This application narrative is provided to request land use approval to replace light poles at Mt. Tabor Park. The replacement work at Mt. Tabor Park is part of the City of Portland's Light Pole Safety project to replace light poles in 12 city parks. The current phase of the Light Pole Safety project was approved by City Council through the adoption of Ordinance No. 191222 on April 5, 2023. The replacement project is part of a larger effort to reduce the Parks and Recreation Bureau's environmental footprint and address a growing capital maintenance backlog.

Usually, the removal or installation of light poles does not require a building, site, or zoning permit. Mt. Tabor Park was nominated as a historic resource in 2004 and listed as a historic district. Historic resource review is required in this case because the lighting system is a noted attribute along with the circulation system and other elements within the park's landscape. The park's landscape (or 'park land' as it is referred to in the nomination) is a contributing feature in the listing of Mt. Tabor Park in the National Register of Historic Places. Therefore, a historic resources review is required.

Mt. Tabor Park was designed in the early 1900s by Emanuel Mische, a landscape architect who started his career with the well-known Olmsted Brothers landscape consulting firm. In addition to its notable designer, the park's landscaping elements, along with historic architecture and statuary contribute to the park's value as a historic resource. As discussed further in Section 3.3, the historic nomination does not list individual poles as important structures, rather it is the overall illumination provided to the circulation system as it meanders through the landscape of the park that is valued as an important feature within the park site.

Individual light poles to be replaced are located within the park and along SE Taylor St. 84 light poles are located within Mt. Tabor Park and four additional poles are located in the SE Taylor St. right-of-way (ROW). Poles in the ROW will be addressed through the Portland Bureau of Transportation (PBOT) permit process for existing utility structures (encroachment permit review).

Documentation for individual poles varies, some were replaced at least once before with installation dates ranging from the 1950s through the 1980s. About 60 of the poles are thought to have been installed during the 1920s and 1930s. Currently, 81 poles are installed at Mt. Tabor Park along the circulation system. The light system will be restored to 88 light poles to match the number of poles identified in the historic nomination. All of the new replacement poles will match the existing ones in design and material (see Exhibit C- 4 pages 1-2, and Exhibit APP - G).

Current fixtures to be replaced are not original - though they are consistent in design to existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other city parks (Irvington, Lair Hill Parks, Laurelhurst, Washington, etc.). Archival records indicate the now iconic lantern-style fixtures were first installed at Mt. Tabor Park in the 1950s. The replacement fixtures will match the existing fixtures in both materials and design (see Exhibit APP-G).

Existing poles are showing their age and the impacts of Portland's wet environment and the freeze-thaw cycle. Conditions include cracking and flaking in the concrete surface, as well as efflorescence (white discoloration from moisture loss), pitting, and even external evidence of corrosion of internal metal components, or 'spalling' (see photographs included in Exhibit APP-H). Additionally, poles were installed using an anchoring system that does not meet current building code. The project team and engineering consultants explored options to retain, rehabilitate, and reuse the existing light poles in Mt. Tabor Park. However, this is not practicable as there is not an acceptable way for them to be anchored in a manner that would meet current building code for anchoring, while also retaining enough of the pole's historic and design integrity. Therefore, all the poles are being removed and replaced.

Park landscape features identified in the listing are the circulation system – which consists of multiple scenic drives along with formal entrances, historic staircases, and the formal trail system; the lighting system for the circulation system; scenic viewpoints; spaces of refuge created by screening vegetation; two tennis courts and three play areas (69th Avenue playground and group picnic area, Harrison playground, and main playground). At the time of nomination, Mt. Tabor Park also contained seven contributing buildings and five additional contributing structures, along with 10 non-contributing buildings and six non-contributing structures.

The historic reservoirs and associated elements were detailed in a separate resource designation and constitute a separate historic district within the park. None of the Reservoir Historic District resources will be affected by this project (the boundaries of the two separate districts are shown in the APP Exhibit Set as Exhibit C). Additional information on the Park Historic District is in Section 3.3 of this application and a copy of the nomination (NRIS Reference No. 04001065) is included in the APP Exhibit Set as Exhibit J.

Mt. Tabor Park is located in inner East Portland, generally bounded by SE Yamhill St. to the north, SE 71st Ave. to the east, SE Division St. to the south, and SE 60th Ave. to the west (see Vicinity Map, Exhibit C-1). Used first in 1894 as a site for the city's public water reservoir, records indicate Mt. Tabor was established as a public park and nursery for Portland's city parks in either 1908 or 1909. Built on a volcanic butte, the site's

topography is highly variable, with shallow inclines to the west, steeper slopes in the east, a forested ravine in the northwest corner, and multiple peaks, the tallest of which is the namesake volcanic cider cone rising to more than 640’ in height.

The interior of the park is a mixture of grassy and forested areas that provide users with options for a wide variety of activities, including two scenic views identified in the city’s Scenic Resources Protection Plan. The southern portion of the site, south of SE Lincoln/Harrison St. contains the historic nursery and maintenance yard (approved for updates via 2017 land use approval), a small play area, and a dog-off leash area.

The replacement light poles will be installed along the historic drives and portions of the park’s soft surface trail system. The location and age of poles planned for replacement is shown in a modified version of the 1987 lighting plan in the APP Exhibit F, page 6. Replacement poles will be installed in the same location as the current poles to maintain the spatial pattern in existence at the time of the historic listing wherever possible. A one-for-one replacement will also minimize tree impacts and ensure large shade trees are retained onsite.

Poles will consist of a concrete post and a metal framed lantern-style light fixture consistent with existing poles. Pole design details and fixture design details are provided in Exhibit C- 4 pages 1 -3 (page 4 provides pole installation and storage information). As shown in the comparison of a current pole in Mt. Tabor Park and a replacement pole (already installed in Laurelhurst Park), the replacement poles match the character of the existing poles from the materials used, design of pole and fixture, as well as height and form (Exhibit APP-G).

The replacement light poles include the following features:

- Tapered gray concrete octagonal pole with flared base similar in shape and style to the posts in existing light poles.

- Pole material is concrete consistent with period poles. Unlike the period poles, however, the replacement ones are precast for a durable and structurally stable life cycle. They have an exposed aggregate finish and anti-graffiti coating.

- Poles will be embedded 5’ underground. Once buried in place, the overall 17’2’ pole will have above ground height of 12’ 2” – similar in height to existing park poles.

- Poles will be placed directly into an augered hole, a technique referred to as direct burial, to minimize installation damage and loss. Direct burial provides a clean and uncluttered appearance eliminating anchor footings, or the need to

cover unsightly base plates, studs, or nuts. This technique saves time and money, and is more visually appealing.

- Decorative metal strapping will be affixed to the top of the pole below the fixture, consistent with existing fixtures in this and other historic parks in the city.

- Fixtures affixed to the tops of the poles are framed metal lantern-style to match existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other Portland Parks, historic (Irvington, Lair Hill) and otherwise (Laurelhurst, Washington, etc.).

- Fixtures (or luminaires) are made of cast aluminum with acrylic panels. The new fixtures are shielded to achieve “dark skies” compliance. The new fixtures will also direct more focused illumination onto the circulation system.

- The existing 150W HPS lamp delivers 9000 luminaire lumens, while the new 60W light emitting diode (LED) lamp is more efficient and will deliver 6000 luminaire lumens (a reduction of 33%).

Section 1.2 Project Need

Over 1,000 light poles in city parks were inspected as part of a system-wide review of the structural safety of light poles in city parks. Through this effort, PP&R identified more than 240 light poles in 12 City Parks that may pose a life and safety hazard to the public due to structural issues. Initially, the Bureau was removing hazard light poles while planning to replace light poles as funding became available. The Bureau has since developed a funding plan to replace all poles with structural issues. Poles will be replaced as new poles are delivered and are available to install. The Mt. Tabor Park replacement poles are currently scheduled for installation in April and May 2024.

The Bureau engaged the services of the engineering firm of KPFF to provide expert analysis on certain light poles used in the City of Portland parks. The engineers were tasked with identifying structural issues and recommending solutions that prioritize public safety. Due to an inadequate anchoring system that relied on a tie wire technique and the condition of the concrete at the base of the poles, it is not practicable to reuse the poles. Concrete poles are required to have reinforcing steel capable of withstanding specific seismic and tensile loads to meet current code standards and it was the project team’s determination that the existing poles could not meet these standards. Adding structural reinforcement while also keeping the concrete poles intact was determined to be not practicable.

Based on the age and condition of the poles and fixtures, and other information and recommendations from the engineers and City Attorneys on the project team, the Bureau determined full replacement was warranted. This determination is in line with City Policy FIN 2.19, which requires that, "*Bureaus shall employ a conservative approach to public and employee safety, erring on the side of caution.*" It is crucial the public feels safe when using our parks and natural areas. When public safety is at stake, the Bureau acts out of an abundance of caution to preserve the health and safety of Portlanders and others who use our facilities. PP&R has a long history of prioritizing life and safety in decision-making as evidenced by the recent difficult decision to close Columbia Pool, a community-cherished asset.

The decision to replace the period light poles in Mt. Tabor Park and those in 11 other city parks was carefully considered. A thorough review of more than 1,000 light poles throughout the park system was conducted, input from park friend groups and recommendations from legal and engineering experts were considered before making a final decision. Although replacement was not an easy decision, there are a number of benefits that will result from the decision to replace these light poles.

This project is an investment in adequate illumination of the park's circulation system for the long term. Benefits to the replacement of the light poles include improving public safety and energy benefits. Replacement of outdated and inefficient lighting systems is expected to result in reducing operating costs in the future. The light safety replacement project is estimated to reduce utility costs by $79,000 every year.

Replacement fixtures will provide more focused and direct lighting toward walkways, reducing the amount of light exposure in natural areas and on adjoining properties and enhancing safe use of our facilities. This project also advances the City's Renewable Energy Goal by improving the energy efficiency of our infrastructure to avoid the future consumption of over 362,313 kWh of electricity per year and over 10,092 therms of natural gas (as noted in Ordinance No. 191222 in the APP Exhibit A).

Using new poles and fixtures will extend the life of the lighting in the park, far beyond the expected lifespan of the existing poles and fixtures. Investing in these improvements now helps ensures safe, efficient, and welcoming parks in the future, consist with the Bureau's mission to provide equitable access to welcoming places, programs, and services that improve community health and our environment.

SECTION 2 – EXISTING SITE AND VICINITY

Section 2.1 Existing Site

Mt. Tabor is located in a residential area of southeast Portland, approximately 3 miles east of the Willamette River, directly east of the central city core. The city purchased land on Mt. Tabor in 1888 to be part of the new system bringing water to town from the Bull Run. In 1894, the Water Bureau constructed Reservoir 1. Reservoirs 5 and 6 were completed in 1911. (Reservoirs 3 and 4 are located within Washington Park.)

The area was identified for park purposes in the 1903 Olmstead Portland Parks System Plan due to its importance as the most significant landscape feature in the area, the notable scenic view available from various points of the mountain's slopes, the existing mix of both cleared areas and lush tree groves, as well as its use by the public for "Sunday and holiday outings" at the time and the growing population projected in the vicinity of the site. From its volcanic peaks and "picturesque ravines," the Olmsteds were convinced that Mt. Tabor would provide a variety of "attractive features in a public pleasure ground." Portland leaders agreed and designated Mt. Tabor a public park. The site was expanded when additional land was purchased in 1909 to establish park uses on the site according to the historic nomination. Additional land purchases for park purposes also occurred in 1929, according to the park's 2000 Master Plan.

Access to the park is taken from SE Salmon St., SE 69th Ave., SE Harrison St., and SE Lincoln St. The adjacent maintenance yard can be accessed from SE 64th Ave. and SE Division St. While the park and the maintenance yard are located on the same tax lot, the Bureau classifies the park and maintenance yard as two separate assets based on their function. The portion of the site used as a public park totals 176.04 acres and is located on R332679, R149581, R149582, and R332503. Within R332503, the park site includes the Mt. Tabor Community Garden – but not the area immediately to the west of the community garden within the "long block" or the maintenance yard. The maintenance yard consists of approximately 6.83 acres and is located on the southern portion of R332503 and the entirety of R239658. Historical remnants of unvacated right-of-way still exists in the NE corner of the park, including where the tennis courts are located, and are not usually included in the Bureau's calculation of the park's size.

The site generally slopes from east to west and north to south. The park's elevation to the west (approximately 300') and south (ranging from 215' to 235') is generally consistent with the surrounding urban fabric. The eastern portion of the site contains slopes ranging in elevation from 400-250', with the steepest slopes in the northern portion, which also contains the namesake volcanic cone. The 69th Ave historic staircase in the northeast corner of the site contains a staggering 18 flights to span an elevation

gain of 180 feet before intersecting with Harvey Scott Circle at the center of the park near the summit of Mt. Tabor.

Within the interior of the park, a series of flat terraced areas host a variety of amenities. Paved drives, soft surface paths, and staircases provide connections between active areas and more contemplative passive uses. Amenities include view areas, play areas, restrooms, picnic areas (some with shelters in addition to tables), a variety of sports courts (tennis, basketball, volleyball), a horseshoe pit, hard surface plaza areas, and a dog off-leash area. In active areas, lawns and soft surfaces are surrounded by towering Douglas Firs while ravines and steep slopes are vegetated with native understory plants and contain a mix of conifers and deciduous trees. Landscaping adjacent to some developed areas also includes non-native ornamental plantings.

Exposed volcanic rock is apparent in a small section of the northwest corner of the park due to historical excavation on the site. The USDA Natural Resources Conservation Service identifies two dominant soils, Multnomah Silt Loam and Urban Land Latourell Complex, in disturbed areas. These soil types are well-drained, moderately permeable, and prone to erosion, particularly on steeper slopes.

The forest and woodlands on Mount Tabor are organized into natural communities based on slope and aspect. The native tree canopy is well-developed in most of the natural areas; however, the shrub layer is dominated by non-native, invasive species and some areas lack native understory. Plantings of horticultural shrubs and trees occur throughout the park alongside trails and roadways, and in meadows. The Bureau of Environmental Services identified the park as an “anchor site” in its 2006 Terrestrial Ecology Enhancement Strategy and the park’s vegetation is managed in accordance with the Portland Watershed Management Plan, PP&R’s Natural Areas Restoration Plan, and Urban Forestry regulations in Title 11 of the city’s code.

Section 2.2 Vicinity

The park is situated on a volcanic butte, Mt. Tabor, contained within the Boring Lava Fields that underlie East Portland. At the landscape scale, Mount Tabor is part of the East Buttes. These buttes are composed of complex sediments, share a common geological history, and are part of the same uplifted area.

The surrounding development was established during the city’s streetcar era in rectangular blocks and is primarily residential in nature. The park boundaries contain the steepest slopes associated with Mt. Tabor, however much of the immediate area around the park is also noticeably sloped. The adjacent rectangular street grid gives way to curvilinear streets in steeper areas.

Nearby development is finely grained, residential homes on small lots are oriented to the street. Larger lots to the west or south also contain courtyard style multifamily development, commercial enterprises, or campus use. Western Seminary is located west of the park, and Warner Pacific College is located to the southeast.

Although planned for vehicular access, the highly connected street pattern facilitates access to the park on foot or by bike. Belmont St. to the north, Division St to the south, and SE 60 Ave to the east, are intensely developed collectors supporting bus service and provide easy transit access to the park. Although located within 1.5 miles of Interstates 84 and 205, vehicular access to the park is via local streets.

Section 3.1 Zoning

Zoning

- Base: Open Space base zone
- Overlay(s): Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
- Pattern Area: Inner
- Pedestrian District: N/A
- Transit: Some of the site is considered “close to transit”
- Corridors: Division Street is considered a Civic or Neighborhood Corridor
- Historic Designation: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District

Mt. Tabor Park is entirely zoned Open Space (OS). Portions of the park are also within two Environmental Overlays, the Conservation (c) and Scenic (s) overlay zones, as shown in Exhibit C-3. Per the City zoning code, the OS zone is intended to preserve and enhance public and private open, natural, and improved park and recreation areas. The environmental overlays conserve identified resources while also providing for development. Due to its listing as a Historic District in the National Register of Historic Places, Mt. Tabor Park is also within the Historic Resource overlay zone, which ensures development impacts on historic resources – although allowed – are limited.

Section 3.2 Land Use History and Previous Approvals

Mt. Tabor Park was originally zoned Singe Family Zone I in 1924 despite already established as a city park, according to the BPS study *The Historical Context of Racist Planning: A History of How Planning Segregated Portland* (see APP Exhibit D, pages 1-2).

According to the historic nomination, seven buildings and five structures were established within the park prior to 1937. One of these, the historic Administrative Building, was modified to add attached garages between 1938 and 1941, followed by a second-story addition in 1958.

Additional buildings and structures were added to the site in the 1950s and 1960s. City land use records for the site show Conditional Use (CU) approvals issued as early as 1961 for a storage building on-site. Additional CU approvals followed in the 1960s and 1970s for maintenance and nursery ('plant potting') buildings, along with a new parking lot, pumping station, and park shelter. The main parking lot dates from 1970.

The City's first state-acknowledged Comprehensive Plan, effective in 1981, identified the site as Open Space (see APP Exhibit D pages 3-4). In the 1980s and 1990s a parking lot expansion, the establishment of a motor vehicle service building, and trail improvements were approved. After a historic reservoir was decommissioned in the portion of the site managed by the Water Bureau, a flat portion of the park was partitioned from the parent parcel and sold for residential development.

The master plan for the park was updated in 2000. The primary focus of the plan is to preserve and enhance the natural qualities of Mt. Tabor. The plan envisioned updates to the circulation system, recreational uses, and facilities in manner that maintained the balance between developed areas and the environmental qualities of the natural areas in park. In 2009, a master plan to improve and update the Mt. Tabor Central Maintenance Yard & Nursery was completed.

The Historic Designation occurred in 2004. Since then, projects to provide deferred maintenance, an ADA-accessible pathway, reservoir disconnection, rehabilitation of the summit restroom, replacement and addition of railings along existing stairways, and replacement of non-historic light poles in the reservoir areas have been approved via historic resource or design review.

Most recently, updates including the addition of new structures, art and fencing; relocation of existing structures; removal of non-contributing structures; a new horticultural area; and the preservation of north elevation of one of the historic buildings were approved. These improvements occurred primarily, but not exclusively, in the vicinity of the Maintenance Yard. The Conditional Use review included a review of the site's nonconforming elements and approval of the existing parking lot and perimeter landscaping through the adjustments process.

No prior conditions of approval appear to conflict with the proposed site improvements and all conditions of approval are currently in compliance. Outstanding conditions for LU

17-245440 will be completed prior to final approval after construction is completed. A list of land use decisions for the site is included in the APP Exhibit E.

Section 3.3 Historic Designation

The park was nominated for the National Register of Historic Places and listed in 2004. In addition to the 'park land', seven buildings, five structures and a statute of Henry Scott (one-time editor of the Oregonian) are listed as contributing to the site's value as a historic resource. An additional ten buildings, five structures, and multiple greenhouses that do not contribute to the site's value as a historic resource were also inventoried in the nomination.

The period of significance for the park's historical listing is a 50-year period spanning from 1889 to 1939. The park's development was influenced by the City Beautiful movement's emphasis on establishing parks in urban areas according to the listing. The recognized architectural vernacular is both Late Victorian and Late 19th and 20th Century Revival. The park is also recognized for its utilization of the Depression era Works Progress Administration (WPA) program. In particular, the park is associated with the 1903 Olmsted Brothers report to the Portland Parks Board, the first year of significance noted in the listing, and was designed by Olmsted protégé Emmanuel Mische.

Mische was hired as Portland's Park Superintendent in 1908, the other year noted as significant in the listing. He submitted a plan of development for Mt. Tabor to the Parks Board in 1911 that identified scenic viewpoints and a circulation system of paved drives and pathways to traverse the heavily vegetated site (see 1911 site plan in the historic listing, Exhibit APP-J page 66). Most of the improvements that occurred during the period of significance were actually implemented by another former Olmsted employee, Parks Superintendent Charles P. Keyser. The resulting park is a mix of formal and natural elements where no one feature is preeminent and a variety of activities and experiences can occur, and – according to the listing – "illustrates the design principles advanced by the Olmsted firm."

The listing details a long period of land acquisition and subsequent development within the park, noting that:

> "The active acquisition of the land that makes up the park and the park design occurred with local funding during the Progressive Era and included the influence of the City Beautiful movement at the turn of the nineteenth to the twentieth century. Work on Mount Tabor Park's amenities continued through the next decades with the ebb and flow of local funding. With the Great Depression came federal aid through the New Deal programs of the 1930s."

As Portland Parks Superintendent, Mische had significant interest in providing a wide variety of plants and trees for the whole park system, including native plants. Archival records indicate that the on-site Nursey was established in 1908 or 1909 and it is a significant contributing feature to the site's value as a historical resource. The earliest contributing historic building, the Horticultural Services Building, was located adjacent to the Nursery and was established sometime between the completion of Mische's 1911 plan for the park and 1918. The adjoining maintenance yard contains multiple contributing buildings with varying dates of construction according to the listing.

The contributing historic buildings within the park utilize revivalist designs. These consist of two Tudor-style restrooms dating from the mid-1920s and the Caretaker's House, a 1920s Colonial. A notable contributing structure in the park is the Crater Amphitheater. The completion date is not known, but records demonstrate construction was underway by 1934 (as documented in historic photographs in the listing). The historical listing describes both contributing and non-contributing architectural elements in both park and the maintenance yard in detail.

The listing identifies the 'park land' as a contributing resource and details physical elements within the landscape of the park. According to the listing, the park's design does not focus on or feature any one element, rather it provides for a variety of pastoral and scenic experiences. The listing identifies the circulation and lighting systems, the formal entrances, and three playground areas as notable elements withing the landscape of the park. Other site attributes within the park's landscape include the west and east tennis courts with records of constructing dating from 1923 and 1928.

While construction of the first scenic drives was funded in 1912 and 1913, later construction to finish the planned drives was funded by the WPA (as documented in historic photos of WPA funded work dated 1934 in the nomination). The circulation system is a key element to the experience of the landscape at Mt. Tabor Park. The meandering drives enhance the sense of moving between separate spaces and various experiences within the park. Having lights alongside the circulation system increased the comfort and safety of those using the circulation system at a time when private vehicles and illuminated roadways were a relatively new phenomenon.

The circulation's lighting system consisted of 88 poles at the time of nomination. No attempt is made in the nomination to date individual poles or ascertain the number of poles dating from the period of significant compared to more recent installations. Similar poles at historic parks such as Laurelhurst and Irving were not considered contributing resources, in part due to the lack of information to confirm installation dates and because fixtures for such poles were not original to the period of significance. In the Mt. Tabor Park nomination, lighting for individual buildings is not considered a

contributing resource since those objects are separate from the park's circulation system and are of varying age.

According to the historic listing, archival records show a request to install an electric lighting system in 1911 alongside the planned drives, although the listing notes installation didn't occur until 1924 and 1925. The lighting system was an important enhancement to the growing circulation system as it improved access to the park's various pleasant experiences, especially the forested areas. In addition to the historic paved drives, a bridle path system dating from 1929 is also included in the park's circulation system in Superintendent Mische's design and was provided with electric illumination at an unknown point in time. It is also likely that as the system of paved drives expanded during the 1930s - additional lighting followed.

A review of as-built plans from different eras indicates park staff replaced and relocated individual poles as needed to support park needs in and around the circulation system (see APP Exhibit F). A 1958 Lighting Plan shows the illumination for the circulation system consisted of 85 poles. Later plans from the 1980s show a total 87 poles, 24 of which were replacement poles. A 1999 plan shows the installation of new pole near a restroom, which is likely the 88th pole noted in the historical nomination.

Based on archival records and field examinations, park staff have concluded that <u>at most</u>, 61 of the poles currently illuminating the park's circulation system are original installations. As noted above, records indicate 24 poles were replaced in the 1980s. Installation dates for 3 poles is uncertain and may have occurred in tandem with the change to the fixtures associated with the 1958 mapping of the light system.

Based on a review of the historical listing and the identified contributing resources (which does not specifically identify the lighting system), the nomination's description of the strong association between the circulation system and its lighting system, and the archival records relating to the installation and replacement of individual light poles over time, park staff conclude the <u>historic value lies with the system of illuminated pathways and historic drives as a whole</u> – not individual light poles – and the resulting social and cultural value experienced by community members who used the circulation system to observe and interact with the park's natural and scenic landscapes at time when private vehicles were providing increased access to natural areas in park systems throughout the nation.

Section 4 Title 11

Title 11 of the city code regulates tree preservation and removal. A tree permit for the removal of light poles citywide was obtained March 3, 2023, and modified on March 28, 2023 (Permit # 23-007867-000-00-UF). A separate review will be completed for the installation of the replacement poles within Mt. Tabor Park.

Since the review authority has determined that a development permit is required on this site, the criteria in Chapter 11.50 apply to this application in accordance with 11.10.020. Applicable code standards are provided below in italics, followed by the response.

11.20.060 Heritage Trees

> *F. Heritage Tree removal. Heritage Trees may be removed only with the consent of the UFC, except as provided in Subsection I., below. The UFC shall hold a public hearing on a request to remove a Heritage Tree. Consent to remove the tree shall be supported by at least six members of the UFC.*

Response. No Heritage Trees will be affected by this project. There are two heritage trees in the park, located near Reservoir 6; neither of which are close to the proposed area of work. The northern tree is a giant sequoia located on the east side of Reservoir 6, is not directly adjacent to the circulation system, and is more than 250’ from the SE Reservoir Loop Drive (where the closest light pole to be replaced is located). The southern tree is a bigleaf linden located on the SE corner of the same reservoir and while located near pathways that provide access to and from various points within the historic reservoir district, it is more than 350’ feet to a light pole that will be replaced in this project.

Chapter 11.50 Trees in Development Situations

11.50.020 When a Tree Plan is Required.

A tree plan is required in conjunction with all development permits, unless there are no Private Trees 12 inches or more in diameter, no City Trees 6 inches or more in diameter, and/or no Street Trees 3 inches or more in diameter, and the site or activity is exempt from Section 11.50.050 On-Site Tree Density Standards; and Section 11.50.060 Street Tree Planting Standards. If multiple development permits are required for a development proposal, including demolitions and subsequent construction, the same Tree Plan shall be included with each permit. For tree removal when no development permit is required, following completion of the development permit, or when tree preservation does not apply per Subsection 11.50.040 A.1., see Chapter 11.40.

Response. A tree plan is provided in Exhibit C-8 that shows the location of trees 6" and greater in diameter in the developed areas of the park. A scaled plan showing the areas of temporary disturbance is also provided in Exhibit C-6 pages 23-28.

11.50.030 Development Impact Area Option For Large Sites and Streets.

Where development is proposed on a site larger than one acre or where work is occurring in the street and is not associated with an adjacent development site, the applicant may choose to establish a development impact area. For sites using the development impact area option, tree preservation requirements shall be based on the trees within the development impact area and tree density will be based on meeting Option A as applied only to the area within the development impact area. Trees may be planted to meet tree density requirement elsewhere on the site.

Response. The maximum area of disturbance as shown on the tree plan in Exhibit C-6, pages 23-28 constitutes the development impact area. The development impact area totals 2200 square feet.

11.50.040 Tree Preservation Standards.

C. Tree Preservation Requirement. Any trees preserved shall be protected in accordance with the specifications in Section 11.60.030. The regulations for Private Trees in Subsection 11.50.040 C.1. sunset after December 31, 2024. After December 31, 2024 the regulations in effect will be those in effect on January 1, 2015.

1. Private Trees...

2. City and Street Trees.

a. General Tree Preservation

(1) Retention. The City Forester will identify potential impacts and opportunities to preserve and protect existing trees, as well as any measures required to protect trees on site, on adjacent sites, or in the street. Any work on any Street Tree or City Tree must be approved by the City Forester.

(2) Mitigation. Any required mitigation specified below shall occur on the site, in the street planter strip, elsewhere on City property or in the street, or as a payment into the Tree Planting and Preservation Fund. The City Forester may reduce or waive the following mitigation requirements.

(a) Approved Street Tree removal in conjunction with improvements to partially or fully unimproved streets. Each tree at least 12 inches in diameter that is allowed to be removed shall be replaced with at least one tree. Trees planted to meet Street Tree Planting Standards will be credited toward meeting this requirement.

(b) Any other Street Tree or City Tree allowed to be removed that is 6 or more inches in diameter shall be replaced with at least one tree in addition to trees required to meet required tree density or Street Tree planting standards.

(3) Removal. Any trees approved to be removed by the City Forester may be removed. Any trees removed shall be removed in accordance with the specifications in Section 11.60.050.

Response. No trees are requested for removal in this request.

11.50.050 On-Site Tree Density Standards.

A. Where these Regulations Apply. This Section applies to sites within the City of Portland and the County Urban Pocket Areas. Unless exempted in Subsection 11.50.050 B., the following are subject to the On-Site Tree Density Standards:

1. New Development;

2. Exterior alterations to existing development with a project valuation that is more than the threshold stated in Subsection 33.258.070 D.2.a.

Response. Project value exceed the threshold in Subsection 33.258.070 D.2.a.

C. New development shall meet City specifications and standards in Chapter 11.60 and the on-site tree density requirements in Subsection D., below. Exterior alterations shall meet City specifications and standards in Chapter 11.60 and the on-site tree density requirements in Subsection D., below, but are only required to spend 10 percent of project value on the requirements in Subsection D. and the nonconforming upgrades required by Chapter 33.258, Nonconforming Situations.

D. On-Site Tree Density Requirements.

1. Required Tree Area. The required tree area is based on the size of the site and the type and size of proposed and existing development as shown in Table 50-2. Applicants may choose Option A or Option B for calculating required tree

area except only Option A may be used to apply standards to a "Development Impact Area".

Table 50-2 Determining Required Tree Area		
Development Type	**Option A**	**Option B**
Other	25 percent of site or development impact area	Site area minus building coverage of existing and proposed development

Response. The park is 176 acres, therefore the required tree area (or 25% of the site) is 44 acres or 1,916,640 square feet (sf). Tree canopy covers approximately 62% of the site as shown in Exhibit C-8 page 1. Therefore, the minimum tree area is met.

The Bureau has inventoried 1,131 trees in the developed portions of the park, as shown in Exhibit C-8 pages 2- 6. 74 trees have diameters more than 1.5" and less than 6" inches; 1,041 have diameters of 6" or greater. As shown in the tree inventory, 921 of the inventoried trees have large mature canopies, 59 have medium mature canopies, and 142 have small canopies at maturity. Additional trees in various stages of growth are located within the natural areas of the park.

11.60.030 Tree Protection Specifications.

C. Protection methods. The Tree Plan shall show that trees retained are adequately protected during construction using one of the methods described below:

1. Prescriptive Path.

a. A root protection zone is established as follows:

(1) For trees on the development site - a minimum of 1 foot radius (measured horizontally away from the face of the tree trunk) for each inch of tree diameter (see Subsection 11.80.020 C., Measurements):

b. Protection fencing

(1) Protection fencing consisting of a minimum 6-foot high metal chain link construction fence, secured with 8-foot metal posts shall be

established at the edge of the root protection zone and permissible encroachment area on the development site. Existing structures and/or existing secured fencing at least 3.5 feet tall can serve as the required protective fencing.

c. Signage designating the protection zone and penalties for violations shall be secured in a prominent location on each protection fence;

d. Installation of landscaping required by Title 33 is allowed within the root protection zone and is not an encroachment. Any in-ground irrigation systems are considered encroachments.

e. The following is prohibited within the root protection zone of each tree or outside the limits of the development impact area: ground disturbance or construction activity including vehicle or equipment access (but excluding access on existing streets or driveways), storage of equipment or materials including soil, temporary or permanent stockpiling, proposed buildings, impervious surfaces, underground utilities, excavation or fill, trenching or other work activities; and

f. The fence shall be installed before any ground disturbing activities including clearing and grading, or construction starts; and shall remain in place until final inspection.

Response. Trees onsite will be protected in accordance with the above standards, unless the Bureau's contractor determines it is not practicable, in which case an arborist will be retained to provide site-specific recommendations and prepare a protection plan approved by the City Forester in accordance with 11.60.030 C. 2.

Section 5 Title 33

Using the terms defined in Chapter 33.920 (shown in italics), the proposed light pole replacement project is characterized as follows:

- the project will replace *utility structures* in the *Basic Utility Use Category* that provide an *accessory use* to the *primary use (*the public park).
- this action will constitute an *alteration to exterior development.*
- soils will need to be disturbed to install the poles in the ground, which will result in a *temporary disturbance area.*

The proposed use is identified in Chapter 33.100 Open Space Zone and is subject to the following overlay zones:

- 33.430 Environmental Zone.
- 33.480 Scenic Resource Zone.
- 33.445 Historic Resource Overlay Zone.

The replacement poles serve an accessory function to the primary park use and are subject to additional development standards related to off-site impacts as well as those that apply through the historic resources review.

Section 5.1 The Base Zone: *Open Space Zone*

The Open Space criteria are in Chapter 33.100 and allowed uses are identified in Table 100-1 *Open Space Zone Primary Uses*.

Table 100-1 Open Space Zone Primary Uses	
Use Categories	**OS Zone**
Institutional Categories	
Basic Utilities	L/CU [5]
Y = Yes, Allowed L = Allowed, But Special Limitations CU = Conditional Use Review Required N = No, Prohibited	
Notes: • The use categories are described in Chapter 33.920. • Regulations that correspond to the bracketed numbers [ ] are stated in 33.100.100.B. • Specific uses and developments may also be subject to regulations in the 200s series of chapters.	

As shown in the excerpt from Table 100-1, basic utility uses are allowed, either as a Limited Use or a Conditional use as determined by note [5] in 33.100.100 B (addressed below). The use is not identified in the 200s series of standards. Applicable code standards are provided in italics below, followed by the response.

Use Regulations 33.100.100 Primary Uses

B. Limited uses. Uses allowed that are subject to limitations are listed in Table 100-1 with an "L". These uses are allowed if they comply with the limitations listed below and the development standards and other regulations of this Title…

5. Basic Utilities. This regulation applies to all parts of Table 100-1 that have note [5].

a. Basic Utilities that serve a development site are accessory uses to the primary use being served.

Response. Lighting systems are utilities that serve a development site and are accessory to the primary park use. The subject lighting system is classified in this section as a Basic Utility pursuant to 5.a. (hereafter referred to as a *Basic Utility, type 5.a.)* and meets the standards for a Limited Use. As such the use is subject to the standards for accessory uses in this Chapter.

33.100.110 Accessory Uses

Uses that are accessory to a primary use are allowed if they comply with specific regulations for the accessory uses and all applicable development standards.

Response. The proposed use is subject to the development standards in 33.100.120 shown below.

33.100.120 Nuisance-Related Impacts

A. Off-site impacts. All nonresidential primary and accessory uses must comply with the standards of Chapter 33.262, Off-Site Impacts.

Response. The proposed use is a nonresidential accessory use and is therefore subject to the development standards in 33.262. The additional development standards in the 200s series are addressed in Section 4.2.

33.100.200 Development Standards

A. Allowed or limited uses. Allowed or limited uses are subject to the development standards stated below.

1. Building setbacks. Except as specified in paragraph A.3., buildings must be set back from all property lines a minimum of 1 foot for each foot of building height.

2. Outdoor activity facility setbacks. Except as specified in paragraph A.3. below, outdoor activity facilities, such as swimming pools, basketball

courts, tennis courts, or baseball diamonds must be set back 50 feet from abutting R-zoned properties. Playground facilities must be set back 25 feet from abutting R-zoned properties if not illuminated, and 50 feet if illuminated. Where the outdoor activity facility abuts R-zoned properties in School uses, the required setback is reduced to zero.

3. *Recreational fields for organized sports. Recreational fields used for organized sports are subject to Chapter 33.279, Recreational Fields for Organized Sports*

Response. None of the above criteria apply to accessory utilities, in this case, the lighting system.

The lighting system meets the standards for allowed Limited Uses and meets all the development standards that apply to a *Basic Utility, type 5.a.* in the Base Zone.

Section 5.2 *Additional Use and Development Regulations*

No additional use regulations are identified in the 200s series for utilities accessory to primary park uses. Additional development standards are identified and addressed below.

Chapter 33.258 Nonconforming Situations

33.258.030 Types of Nonconforming Situations

A specific site may be nonconforming because it contains either a nonconforming use, an allowed residential use that exceeds the allowed density, a nonconforming development, or a combination of these. Nonconforming uses, nonconforming residential densities, and nonconforming development are defined in Chapter 33.910, Definitions.

Response. *Chapter 33.910, Definitions* provides the following term and definition:

Nonconforming Development. An element of a development, such as a setback, height, or parking area, that was created in conformance with development regulations but which subsequently, due to a change in the zone or zoning regulations, is no longer in conformance with the current applicable development standards.

Response. Both the primary use on site, the park, and the accessory utility use proposed for modification in this application, are currently allowed uses that conform with current zoning regulations. However, the development of the primary use, the park and the accessory utility use occurred prior to the adoption of the first zoning regulation and development regulations for accessory utility uses have since been adopted.

The primary use onsite – the park – does not conform to all the current regulations that apply to the development of new parks today. In particular, the review authority determined in LU 17-245440 that the park's perimeter and parking lot landscaping do not meet current standards. Three adjustments to those standards were approved in that decision therefore, no additional nonconforming upgrades to the site's landscaping are required. However, since that time, standards related to bicycle parking in Chapter 266 have been updated.

33.258.070 Nonconforming Development

A. Purpose. This section is primarily aimed at upgrading nonconforming development elements that affect the appearance and impacts of a site. It is not intended to require extensive changes that would be extremely impractical such as moving or lowering buildings.

B. Continued operation. Nonconforming developments may continue unless specifically limited by Subsection D. below or other regulations in this Title.

C. Changes. Changes may be made to the site that are in conformance with the development standards of the base zone, overlay zone, plan district or other development standards that apply to the site. Changes that bring the site closer to conformance are allowed. Proposed changes that are not in conformance or do not move closer to conformance, are subject to the adjustment process unless prohibited.

Response. The change proposed in this application, light pole replacement, will conform to the requirements of this code.

D. Development that must be brought into conformance. The regulations of this subsection are divided into two types of situations, depending upon whether the use is also nonconforming or not. These regulations apply except where superseded by more specific regulations in the code.

1. Nonconforming development with a new nonconforming use or new non-conforming residential density…

2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below.

When alterations are made that are over the threshold of Subparagraph D.2.a., the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits.

a. Thresholds triggering compliance. The standards of Subparagraph D.2.b., below, must be met when the value of the proposed alterations on the site, as determined by BDS, is more than $347,000. The following alterations and improvements do not count toward the threshold:

(1) Replace a manufactured dwelling in a manufactured dwelling park;

(2) Alterations required by approved fire/life safety agreements;

(3) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;

(4) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;

(5) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; and

(6) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

(7) Energy efficiency or renewable energy improvements that meet the Public Purpose Administrator incentive criteria whether or not the project applies for and receives the incentive;

(8) Landscaping required by 33.475.220;

(9) Removal or remediation of hazardous substances conducted under ORS 465.200-545 & 900; and

(10) The installation of electric bike and electric vehicle chargers and accessory equipment.

Response. Nonconforming development exists on the site and the value of the proposed improvements is approximately $704,000, which exceeds the threshold to trigger compliance with the standards of this section. However, these improvements are intended to meet life safety standards and so may be exempt pursuant to Subsection 33.258.070 D. 2.a(2) above.

b. Standards which must be met. Development not complying with the development standards listed below must be brought into conformance or receive an adjustment.

(1) Landscaping and trees required for the following areas:

- *Exterior display, storage, and work activity areas;*
- *Setbacks for surface parking and exterior development areas;*
- *Interior parking lot landscaping;*
- *Existing building setbacks;*
- *Minimum landscaped areas (where land is not used for structures,*
- *parking, or exterior improvements); and*
- *On-site tree density standards of Subsection 11.50.050.C.*

Response. The parking lot landscaping was approved via the adjustment procedure in LU 17-245440 which approved the updates to the Tabor Yard. The implementation of the approved improvements to the Tabor Yard are currently in construction. Conditions related to the landscaping will be completed by the Bureau's contractor for the Yard project prior to final approval in accordance with that decision. (See permitted landscaping for LU 17-245440 in Exhibit C-7.)

(2) Pedestrian circulation systems, as set out in the pedestrian standards that apply to the site;

Response. Pedestrian circulation system standards are identified in the base zone. The OS zone does not contain pedestrian circulation standards; therefore, this criterion does not apply.

(3) Bicycle parking by upgrading existing racks and providing additional spaces in order to comply with 33.266.200, Bicycle Parking as follows:

- *Major remodeling projects must meet the standards for all bicycle parking;*
- *Sites with accessory surface parking must meet the standards for all bicycle parking;*
- *In all other situations, the amounts and standards for short-term bicycle parking must be met.*

Response. Mt. Tabor Park does have accessory surface parking; therefore, the bicycle parking standards apply.

The minimum number of bicycle parking spaces is calculated based on current and future bicycle use, as shown in Map 266-1 and pursuant to Table 266-1. Based on these requirements, Standard A applies to Mt. Tabor Park. Based on the site's primary use as a park, and in accordance with Table 266-6, no long-term bicycle parking is required. Short-term parking for public parks is determined through a conditional use review.

The most recent conditional review for the park occurred via LU 17-245440 did not determine a need to add more short-term bicycle parking. Currently, bike racks are located near the main parking lot and the western SE 64th/SE Lincoln St. entrance. Section 33.266 addresses bicycle parking. Sites that could considered for additional bicycle parking include the paved parking area by the playground in the middle of the park, as well as additional flat paved areas near other amenities such as the tennis courts, the south play area, and the summit.

(4) Screening; and

Response. The existing nonconforming perimeter screening landscaping was approved via the adjustment procedure in LU 17-245440.

(5) Required paving of surface parking and exterior storage and display areas.

Response. The existing surface parking areas are paved.

c. Area of required improvements.

(1) Generally. Except as provided in D.2.c(2), below, required improvements must be made for the entire site.

(2) Exception for sites with ground leases. Required improvements may be limited to a smaller area if there is a ground lease for the portion of the site where the alterations are proposed.

Response. No portion of the site is leased and therefore this subsection does not apply.

d. Timing and cost of required improvements. The applicant may choose one of the following options for making the required improvements:

(1) Option 1.

Under Option 1, required improvements must be made as part of the alteration that triggers the required improvements. However, the cost of required improvements is limited to 10 percent of the value of the proposed alterations. It is the responsibility of the applicant to document the value of the required improvements. When all required improvements are not being made, the applicant may choose which of the improvements listed in Subparagraph D.2.b to make. If improvements to nonconforming development are also required by regulations in a plan district or overlay zone, those improvements must be made before those listed in Subparagraph D.2.b.

Response. Required improvements will be completed as part of the light pole replacement work. The combined value of the proposed improvements is $704,000. Therefore, the maximum cost of the required upgrades cannot exceed $70,400.

33.262 Off-Site Impacts

33.262.010 Purpose

The regulations of this chapter are designed to protect all uses in the R, C, CI, IR, and OS zones from certain objectionable off-site impacts associated with nonresidential uses. These impacts include noise, vibration, odors, and glare…

33.262.020 Applying These Regulations

Nonresidential uses in all zones which cause off-site impacts on uses in the R, C, CI, IR, and OS zones are required to meet the standards of this chapter. Exempted equipment and facilities are stated in 33.262.030 below.

Response. Accessory utilities are for nonresidential use, and this project is in the OS zone, therefore the standards of this section apply.

33.262.050 Noise

The City noise standards are stated in Title 18, Noise Control. In addition, the Department of Environmental Quality has regulations which apply to firms adjacent to or near noise sensitive uses such as dwellings, religious institutions, schools, and hospitals.

Response. Replacing light poles within the existing lighting system will not result in any permanent noise generation. Temporary construction impacts will comply with the standards in 18.10.060 for Construction Activities and Equipment, and the Oregon Administrative rules for DEQ in Chapter 340 Division 35.

33.262.060 Vibration

33.262.070 Odor

Response. Replacing light poles within the existing lighting system will not generate any vibrations or odors.

33.262.080 Glare

A. *Glare standard. Glare is illumination caused by all types of lighting and from high temperature processes such as welding or metallurgical refining. Glare may not directly, or indirectly from reflection, cause illumination on other properties in excess of a measurement of 0.5 foot candles of light.*

B. *Strobe lights. Strobe lights visible from another property are not allowed.*

Response. Most of the light poles in the historic illumination system are located within the park at significant distance from nearby residences and will not result in any light spill on residential properties as shown in the photometric study in Exhibit C. No strobe lights are proposed.

There are light poles located within the SE Taylor ROW outside of the park and the historic district boundary shown in the historic listing. These poles are not subject to

Title 33 due to their location outside of the historic district and within the ROW. However, additional information is provided about these poles below since they are located closer to residential property lines than others in the lighting system.

The homes on SE Taylor are orientated to the north and take access via the SE Yamhill frontage. The homes are located east of the heavily vegetated area encircling the northern parking lot within the park and there is significant vegetation within the SE Taylor right-of-way providing significant buffering and screening between the roadway and the residences. PBOT will review the proposed lighting on SE Taylor through the encroachment permit review process.

PBOT typically mounts pedestrian scale lighting at 14 feet compared to overhead "cobra-head" lighting that is mounted at 30-40 feet. At 12.5 feet in height, the proposed replacement light poles located in the SE Taylor St ROW are consistent with pedestrian scale lighting. SE 69th which intersects with SE Taylor contains typical overhead lighting which casts significantly more illumination compared to the pedestrian scale lighting provided on SE Taylor.

The illuminance value for street lighting is guided by street functional classification and minimum lighting levels rise on streets that provide higher levels of service. The brightest lighting is expected on Major Traffic or Transit streets, while Local Service roadways have the lowest lighting levels. SE Taylor is classified as a local street in the Transportation System Plan and provides City Bikeway services. Therefore, according to PBOT's 2019 Recommended Light Levels and Guidelines for Roadway Lighting, the recommended minimum level of lighting is 0.2 candle lights along the corridor and 0.3 candle lights at the intersection of SE Taylor and SE 69th Ave.

Photometrics for SE Taylor show the poles will meet the minimum levels of lighting required in this location (see Exhibit C-5 pages 1-3, 6-8, 11-12). The proposed new replacement lights will greatly reduce the amount of illumination cast on adjacent properties over the current ones due to improved light fixtures that focus light more effectively, thereby reducing the overall area illuminated by each light fixture.

The proposed replacement of light poles in Mt. Tabor Park for the light pole safety project will meet the additional development standards that apply to accessory utilities.

Section 5.3 *Environmental Overlay*

The criteria for environmental review are addressed in Chapter 33.430. Applicable code standards are identified in italics below, followed by the response.

33.430.080 Items Exempt From These Regulations
The following items, unless prohibited by Section 33.430.090, below, are exempt from the regulations of this chapter. Other City regulations such as Title 10, Erosion Control, and Title 11, Trees, must still be met.

D. Existing development, operations, and improvements, including the following activities:

1. Maintenance, repair, and replacement of existing structures, exterior improvements, roads, public trails, public rest points, public viewing areas, public interpretative facilities, and utilities….

8. Pruning trees in accordance with Title 11 permit requirements;

Response. The request is to replace existing utility structures and is exempt from the regulations in Chapter 33.430. Estimated average temporary ground disturbance is 2.5' around each light pole and maximum temporary ground disturbance is 5' x 5' per light poles, for a maximum 2200 sq ft of temporary ground disturbance. For the majority of the poles, bare ground is present in the immediate vicinity, and although poles may be located under tree canopy, no trees are proposed to be removed to install replacement poles. Any pruning required to site equipment will occur in a limited fashion consistent with Title 11 requirements.

The proposed project to replace light poles in Mt. Tabor Park is a limited activity to maintain an existing accessory utility system and will comply with Titles 10 and 11. Any required permits will be obtained prior to any ground disturbance.

Section 5.4 *Scenic Overlay*

The standards for development within the scenic overlay are addressed in Chapter 33.480.

There are two small areas of scenic overlay located in the interior of the park that allow for tree removal under certain conditions to preserve views. There are no view corridors or scenic corridors that regulate building height on the site. As shown in Exhibit C-3, there are two panoramic viewpoints identified in the 1999 Scenic Resource Protection Plan. The western viewpoint is located above Reservoir 6 and the other is located at the summit.

The following standards apply to viewpoints:

33.480.050 Tree Removal Review

A. Tree removal without development…

B. Tree removal in development situations. When tree removal is proposed as part of development, the standards of Subparagraph 33.480.040.B.2.h apply in addition to the tree preservation standards of Title 11, Trees.

C. Trees that do not qualify for removal under Subparagraph 33.480.040.B.2.h may be removed if approved through tree review as provided in Chapter 33.853, Tree Review. However, where the tree removal would require environmental review, only environmental review is required.

Response. None of the light pole replacements are proposed in the vicinity of either viewpoint. Furthermore, any pruning required to install the new poles will occur in accordance with Title 11, the associated Tree Permit protection plan, and to proper arboricultural practices, thereby avoiding impacts to the health or structural integrity of any trees.

The proposed project meets the standards in Chapter 33.480 for the Scenic Overlay.

Section 5.5 *Historic Resource Overlay Zone*

Chapter 33.445 contains the standards for the Historic Resource Overlay Zone. The applicable standards are identified in 33.445.030.

33.445.030 Where These Regulations Apply

A. Sections 33.445.010 through .060 and .400 through .500 apply to all historic resources.

B. Sections 33.445.100 through .340 apply as shown in Table 445-1.

Table 445-1
Where These Regulations Apply

	In Historic District	In Conservation District	In National Register District	Not in a district
Not a Landmark or Significant Resource	33.445.200	33.445.210	33.445.220	N/A

Response. Mt. Tabor Park was listed on the National Register of Historic Places as a Historic District prior to 2017 and is designated a Historic District by the city (and, consequently, is not a Landmark or Significant Resource). As shown in the excerpt of Table 445-1 above, this request is subject to Section 33.445.200.

33.445.200 Historic District

A. Designation of a Historic District

1. National Register listing. Districts listed by the federal Keeper of the National Register of Historic Places or before January 27, 2017 are automatically identified as Historic Districts on the Official Zoning Maps. For Historic Districts that were listed by the federal Keeper of the National Register of Historic Places on or before January 27, 2017 but have not been independently designated by the City as the result of a legislative or quasi-judicial procedure, any expansion of the boundary by the federal Keeper of the National Register of Historic Places is also automatically identified on the Official Zoning Maps. See Section 33.855.075, Automatic Map Amendments for Historic Resources.

Response. The listing of Mt. Tabor Park on the National Register of Historic Places occurred in 2004. The Mt. Tabor Park Historic District was therefore identified on the official zoning maps (in APP Exhibit B).

B. Removal of a Historic District designation.

Response. This criterion does not apply, as no change to the designation is proposed.

C. Relocation of a contributing resource in a Historic District.

Response. This criterion does not apply, as no relocation is proposed.

D. Development in a Historic District. Certain development within a Historic District requires historic resource review to ensure the resource's historic value is considered prior to or during the development process.

1. When historic resource review is required. Unless exempted by Paragraph D.2, the following proposals in a Historic District are subject to historic resource review…

2. Exempt from historic resource review.

a. Alterations that do not require a building, site, zoning, or sign permit from the City, and will not alter the exterior features of a resource having such features specifically listed in the Historic District documentation or National Register nomination as attributes that contribute to the resource's historic significance;

Response. The replacement of light poles does not require a building, site, zoning, or sign permit. However, the lighting for the circulation system was specifically identified in the documentation for the historic listing as an important feature of the park's landscape, which is a contributing resource. Therefore, review staff have determined that historic resource review is required. The standards for historic resource review are in Chapter 33.846 and are addressed in the next section.

E. Demolition of resources in a Historic District. Conservation Landmarks in a Historic District that are not identified as contributing to the historic significance of the Historic District are subject to the regulations of Section 33.445.110.E. National Register Landmarks in a Historic District that are not identified as contributing to the historic significance of the Historic District are subject to the regulations of Section 33.445.120.E. Significant Resources in a Historic District that are not identified as contributing to the historic significance of the Historic District are subject to the regulations of Section 33.445.330.

Demolition of contributing resources within a Historic District requires demolition review to ensure their historic value is considered and that there is an opportunity for the owner and community to consider alternatives to demolition.

1. When demolition review is required. Unless exempted by Paragraph E.2., demolition of a contributing resource in a Historic District is subject to demolition review. For the purposes of this Chapter, demolition is defined as:

a. Total demolition;

b. An alteration that requires a demolition permit except for a demolition permit to relocate a structure;

c. An alteration that results in the removal of 50 percent or more of any streetfacing wall of a structure;

d. An alteration that results in:

(1) The removal of 50 percent or more of the total exterior wall area of a structure; and

(2) The removal of 50 percent or more of the total roof area of a structure; or

e. For structures that are not buildings, an alteration that results in the removal of 50 percent or more of the structure;

2. Exempt from demolition review. The following are exempt from demolition review:

a. Demolition of noncontributing resources;

Response. The park landscape is a contributing resource, and the lighting system is a component of the landscape. While the lighting system itself is proposed to be retained, because more than 50 percent of the light poles that constitute the lighting system will be replaced in the light safety project, BDS has determined that the replacement is subject to demolition review.

b. Demolition of contributing resources in Historic Districts when demolition is required because:

(1) The Bureau of Development Services requires demolition due to an immediate danger to the health, safety, or welfare of the occupants, the owner, or that of the general public, as stated in Section 29.40.030 of Title 29, Property Maintenance Regulations; or

(2) The Hearings Officer requires demolition, as provided for in Section 29.60.080 of Title 29, Property Maintenance Regulations;

Response. Park staff has proposed to replace light poles in 12 city parks to ensure public safety. However, neither BDS nor a Hearings Officer has required replacement, or demolition, in accordance with the requirements in Title 29.

c. Demolition of covered detached accessory structures in C and R zones that are identified as a contributing resource and are 800 square feet or less in total floor area; and

Response. Since this project will occur in the OS zone, the above criterion does not apply.

d. Alterations to a contributing resource that meet the definition of demolition in Paragraph E.1.b.-e. when the following are met:

(1) The alterations are approved through historic resource review; and

(2) The historic resource review decision is final, and all appeals have been resolved.

Response. This request fulfills the requirement to obtain a historic resource review. Pole removal may occur once the decision for this request is final (including the resolution of any appeals).

Section 5.6 *Historic Resource Review*

The standards for Historic Resource Reviews are located in Chapter 33.846. Review procedures for proposals within Historic Districts are located in Table 846-3.

Table 846-3
Review procedures for proposals within Historic Districts

Proposal	Zone	Threshold	Procedure
Any other non-exempt proposal	All	Project value > $547,400	Type III
		Project value ≤ $547,400	Type II

Response. This request is not specifically listed and so falls into the final category, "*Any other non-exempt proposal*." Since the estimated project value is estimated at $704,00 it must be reviewed through the Type III procedure.

33.846.060 Historic Resource Review

E. Approval criteria for outside the Central City plan district. …

1. Historic Districts. When historic resource review is required for any resource in a Historic District, including Historic Landmarks and Conservation Landmarks, the approval criteria are:

a. Historic Districts with district-specific guidelines….

b. Historic Districts without district-specific guidelines. Where there are no guidelines that are specific to the Historic District, the approval criteria are:

(1) The criteria in Subsection G;

(2) If the resource is a Conservation Landmark, the criteria in Subsection H; and

(3) If the proposal includes relocating a landmark or contributing resource, the criteria of Subsection I;

Response. There are no district specific guidelines for the Mt Tabor Park Historical District, therefore the project is subject to the criteria in Subsection G.

The resource is not a Conservation Landmark; therefore, Subsection H does not apply. The proposal does not include relocating any resources; therefore, Subsection I does not apply.

G. Other historic approval criteria. When required by Paragraphs E. or F., the following approval criteria must be met:

1. Historic character. The historic character of the landmark or contributing resource will be retained and preserved. Removal of historic materials or alteration of features and spaces that contribute to the historic significance of the landmark or contributing resource will be avoided;

Response. The historic listing identifies multiple parcels totaling 196-acres for the Mt. Tabor Park historical district, including both the park and maintenance yard. As mentioned previously, the district contains multiple contributing resources in addition to the park's landscape. The lighting system is a small component of the overall park site.

The replacement project will have little to no impact on the existing natural areas and decorative landscaping, as the areas around the poles are typically kept clear of vegetation. Minor refinements to pole locations to avoid impacts to landscaping and tree could occur if needed to preserve the character of the landscaping and ensure trees are protected. The vast majority of the landscape, the historic vehicle entrances and meandering drives, and all of the contributing buildings and structures will remain untouched by the light pole replacement project.

The lighting system itself will remain, even if components are replaced. Many of the original system components were replaced prior to the historical nomination, including all the light fixtures and 27 of the poles currently in use. The alternative to removing current poles would be to rehabilitate the existing poles despite their age and condition.

Bureau staff has verified with the consulting engineers at KPFF that the work necessary to mount poles to current code (installing rebar or other structural supports within the pole) is not considered practicable or cost-effective. For reuse, poles and footings would need to be removed and poles structurally altered to increase their structural capacity and then anchored to a new footing to meet current code standards. External alterations to enhance structural capacity would have a detrimental effect on the look and character of the pole, while internal alterations to replace or add reinforcing steel would significantly impact the structural integrity of the concrete. Internal alterations to 99-year-old concrete that was not originally built to meet current building code standards would significantly compromise the integrity of the poles.

By preserving the spatial pattern of poles (adjacent to the circulation system and distributed across the landscape), and installing poles of similar materials and design, the illuminated pathways will retain their historical character. The compelling nature of the park's landscape as a place of urban refuge offering a variety of forested, pastoral, and scenic experiences will be preserved through this project. Therefore, the contributing resource, the park's landscape will not be negatively affected by this project.

2. *Record of its time. The landmark or contributing resource will remain a physical record of its time, place, and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings will be avoided;*

Response. The illuminated circulation system provided vehicular access at the dawning of the automobile age to one of the city's most prominent natural features and ensured even nighttime visits would be safe and enjoyable. Pole replacement will result in a restoration of the illumination system at the time of the historic nomination, thus preserving the warmly illuminated meandering drives that provide access throughout the park, even in the darkest of forested areas.

3. *Historic changes. Most resources change over time. Those changes that have acquired historic significance will be preserved;*

Response. The project proposes to provide light pole replacements consistent in number to the historical listing. Locations will match that documented in 1988 and 1989 to the extent possible. Although not part of the period of significance, the current lantern-style fixtures and the metal strapping at the top of certain light poles, have acquired significance and are considered representative of Mt. Tabor Park in particular. The proposed new light poles will be topped with lantern-style fixtures along with metal strapping of similar in design and style, as shown in the APP Exhibit G, to maintain the iconic significance these features have acquired over time.

4. Historic features. Generally, deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence;

Response. The lighting system that illuminates the circulation system is identified as contributing to the park's historic landscape. The replacement of 88 poles is needed to maintain structural safety of the lighting system due to severe deterioration, as certified by the city's consulting engineers. Installing modern fixtures at the same time poles are replaced will ensure the illumination system meets current electrical code, will reduce the need for future spot replacements, and will generate significant saving by reducing energy consumption. The new poles will match the historic ones in material, texture, color, and design (as shown in the comparison photographs in the APP Exhibit G).

Written and graphic evidence regarding the existing system is provided in the APP Exhibit F, which documents at least 27 pole replacements over time and the installation of the now iconic lantern-style fixtures. While the first elements of the lighting system were installed in 1924 and 1925, development of the park's physical elements occurred over time and it is likely some individual poles were added later, for example when the bridle path was established in 1929 and Mt. Tabor Drive was constructed (circa 1934). The earliest record of the number and location of light poles dates from the 1950s (outside the period of significance). Over time, individual poles have been replaced as needed – however the overall system of illuminated drives and paths providing circulation through the landscape has been maintained. Documentation of the lighting system is also located in the historic listing (APP Exhibit J, pages 7-8, 44, 78, 86, 88). The existing light poles and fixtures are compared in photographs in the APP Exhibit G and details of the proposed replacements are shown in the specification sheets in Exhibit C-4 pages 1-3.

5. Historic materials. Historic materials will be protected. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials will not be used;

Response. Poles will be ground-mounted, and the installation will not affect historic materials. Under normal circumstances, a direct buried concrete pole can be set directly into an augered hole that minimizes the amount of ground disturbance or impacts to surrounding soils or any historic concrete. Depending on the strength of the soil, backfilling can be accomplished with aggregate, concrete, or the original soil. This

technique does not require the use of sandblasting or chemicals and meets modern building code requirements for structural safety.

6. Archaeological resources. Significant archaeological resources affected by a proposal will be protected and preserved to the extent practical. When such resources are disturbed, mitigation measures will be undertaken;

Response. There are no known archaeological resources on site. Development, including significant ground disturbance and excavation on the site has been documented since 1894. Given the project will install replacement light poles in previously developed locations using modern techniques that limit ground disturbance, it is very unlikely any materials of archaeological interest will be encountered. Regardless, should any archaeological discoveries occur, work will be stopped in the affected area and the Bureau will notify the State Historic Preservation Office (SHPO). Prior to submitting this application, the Bureau contacted the SHPO but has not heard back from them regarding any state requirements, concerns, or suggestions about this project.

7. Differentiate new from old. New additions, exterior alterations, or new construction will not destroy historic materials that characterize a landmark or contributing resource. New work may be differentiated from the old if the differentiation does not diminish the character, features, materials, form, or integrity of the landmark or contributing resource and, if in a Historic District, the district as a whole;

8. Architectural compatibility. New additions, exterior alterations, or new construction will be compatible with the massing, size, scale, and architectural features of the landmark or contributing resource and, if in a district, the district as a whole. When retrofitting to improve accessibility for persons with disabilities or accommodate seismic improvements, design solutions will not compromise the architectural integrity of the landmark or contributing resource;

Response. The integrity of the park's landscape (the contributing resource) will not be affected by the replacement poles, as they will maintain the existing spatial pattern of the lighting system adjacent to the circulation system. As previously noted, poles will match those in existence today and at the time of the historical listing. Any new conduit needed will be concealed.

Many of the current components of the light system are almost a hundred years old. By replacing the poles now, the structural integrity of the lighting system is assured for a hundred more years. No other changes to the landscape or to any of the contributing architectural structures or buildings are proposed.

9. Preserve the form and integrity of historic resources. New additions, exterior alterations, or new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the landmark or contributing resource and, if in a district, the district as a whole would be unimpaired; and

Response. The lighted circulation system is an integral component of the landscape in the Mt. Tabor Park Historic District, as the illumination provided alongside the historic drives and formal pathways enhances access to the park's various experiences. However, individual pole replacement has occurred repeatedly over time without affecting the integrity of the overall system of lighting or circulation. Therefore, it is reasonable to conclude that if an individual pole needs to be removed in the future, as long as it was replaced in the same vicinity and with similar materials and design, neither the system of illumination or circulation would be affected, and the character of the landscape would remain unimpaired.

10. Hierarchy of compatibility. New additions, exterior alterations, or new construction will be designed to be compatible primarily with the landmark or contributing resource and, if located within a district, secondarily with contributing resources located within 200 feet and, finally, with the rest of the district. Where practical, compatibility in districts will be pursued on all three levels.

Response. The lighting system will maintain its function and role of illuminating the park's circulation system. Replacement poles will maintain the look and design of the current poles within the illumination system. There is a compelling relationship between the lighting system and the circulation system. Areas in the vicinity of the existing lighting system that are part of the circulation system will not be affected by the replacement, as the overall lighting system will remain intact and individual replacement poles are of compatible materials and design to existing ones. Most importantly, the illuminated nature of the circulation system will be maintained.

No changes are proposed to the location or pattern of the circulation system within the park. The replacement of individual poles will not affect the contributing architectural resources. No changes are proposed to alter other aspects of the landscape, such as the terrain or vegetation.

The overall spatial pattern of the light poles illuminating the circulation pattern will be retained. Only minor refinements to pole locations are anticipated. Two poles near Reservoir 5 may conflict with water lines, as shown in the disturbance area site plans (Sheet 4), however, no changes are proposed that would affect the contributing resources within the Mt. Tabor Park Reservoir Historic District.

Based on the above, the planned pole replacements will be compatible with the circulation system, the landscape as a whole, other contributing resources, and both of the historic districts at the site.

33.846.080 Demolition Review

A. Purpose. Demolition review protects landmarks and contributing resources in districts. Demolition review recognizes that historic resources are irreplaceable assets significant to the region's architectural, cultural, and historical identity and their preservation promotes economic and community vitality, resilience, and memory. In the event that demolition of a historic resource is approved, demolition review also addresses the potential for mitigation of the loss.

Response. The lighting system for the Park's circulation system was identified as an attribute within the Park's landscape, which is a contributing resource to the Park Historic District. The lighting system is composed of light poles installed alongside the circulation system that was designed in 1911 and constructed between 1912 and 1934. Light poles within the system have been replaced over time and feature fixtures installed outside the period of significance identified in the historic listing.

As noted previously in this application, the value of the lighting system is the illumination provided to the historic circulation system which is a core component of the 1911 park design. The circulation system is composed of paved drives, soft surface formal trails, and staircases that convey park users from one experience to another within the park. Individual portions of the circulation system have been replaced, rebuilt and refurbished over time, just as the individual poles that constitute the illumination system have been replaced over time.

B. Review procedure. Demolition reviews are processed as follows:

1. Proposals to demolish an accessory structure are processed through a Type II procedure;

2. Proposals to demolish a Conservation Landmark, National Register Landmark, contributing resource in a Conservation District, or contributing resource in a National Register District are processed through a Type III procedure;

3. All other proposals to demolish a historic resource are processed through a Type IV procedure.

Response. This request is being processed through the Type III procedure consistent with B.2. above.

C. Approval criteria. Proposals to demolish a historic resource will be approved if the review body finds that one of the following approval criteria is met:

1. Demolition of the resource has been evaluated against and, on balance, demolition has been found to be equally or more supportive of relevant goals and policies of the Comprehensive Plan, and any relevant area plans, than preservation, rehabilitation, or reuse of the resource. The evaluation must consider:

a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;

b. The economic consequences for the owner and the community;

c. The merits of demolition;

d. The merits of development that could replace the demolished resource, either as specifically proposed for the site or as allowed under the existing zoning;

e. The merits of preserving the resource, taking into consideration the purposes described in Subsection A; and

f. Any proposed mitigation for the demolition.

2. The proposal is to demolish a contributing resource in a Conservation District or National Register District and demolition of the resource will be mitigated to enhance, preserve, or restore the archaeological, architectural, cultural, or historic significance or integrity of the district. The mitigation must be responsive to the significance and integrity of the resource proposed for demolition. The evaluation must consider:

a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;

b. The economic consequences for the owner and the community;

c. Relevant goals and policies of the Comprehensive Plan.

3. *The proposal is to demolish a contributing resource in a single-dwelling zone in a National Register District, and demolition of the resource will facilitate the creation of more deeply affordable dwelling units…*

4. *The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.*

Response. The lighting system is a Basic Utility and as such is classified as an accessory use in the OS base zone. Therefore, the proposal to remove and replace light poles within Mt. Tabor Park may be reviewed subject to the requirements in C. 4 above. As noted previously in this application, replacement of the proposed light poles will not have any effect on the architectural contributing structures or buildings in either the Mt. Tabor Park Historic District or the Mt. Tabor Park Reservoir Historic District.

In terms of the historical listing, the primary cultural or historic significance of Mt. Tabor Park as articulated in the historic listing, is the Park's association with the Olmsted Brothers through the 1903 Olmsted Plan which identified Mt. Tabor as a desirable site for a public park, and its design which embodies the principles of landscape architecture espoused by the Olmsteds.

As such, the lighting is a feature within the contributing resource of the park landscape as a whole and provides historic and functional value by illuminating the park's circulation system. Some care was taken to determine when the various drives and formal pathways were constructed for the historical nomination, however, no such attempt was made regarding the lighting system. Further, no attempt was made to distinguish individual poles or their location, date individual poles to the period of significance, or assign historical value to individual poles in the nomination.

Updating the light poles within the existing landscape will do nothing to erode the cultural importance of Mt. Tabor Park as a significant park within the Portland Park System, nor will it impact the integrity of the landscape itself. In fact, by replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

While the light poles clearly met the criteria for accessory structures, given input received at the Historic Landmarks Commission briefing on March 13, 2023, it seems prudent to consider the additional demolition criteria that applies to contributing resources in Historic Districts under C.1. and National Register Districts in C.2. as well.

Relevant goals and policies of the 2035 Comprehensive Plan relate to encouraging development that promotes human health and safety, historical resource preservation and development that is energy and resource efficient. Goals and polices to implement these admirable intentions are located in Chapter 4 Design and Development and include the following:

- *Goal 4.B: Historic and cultural resources*

  Historic and cultural resources are identified, protected, and rehabilitated as integral parts of an urban environment that continues to evolve.

Response. The historic resource is Mt. Tabor Park. The park is integral to the Mt. Tabor Neighborhood and an important part of the Portland Park System. Ensuring the park is a place of safety is a key component of its value as an "urban refuge." It is critical that park visitors feel safe and welcome in Mt. Tabor Park. As the city's park system's components age, maintaining park safety through replacement of outdated components will be become a more common aspect of the evolving urban environment.

This request proposes to maintain the historical integrity of the lighting system and its role of illuminating the circulation system in park while also ensuring all the light pole structures are of the most modern construction and installed to current health and safety codes. The historic value and character of the system of illuminated pathways and historic drives within the park is derived from systems as a whole (rather than individual light poles), and the resulting social and cultural value experienced by community member's when partaking in the park's natural and scenic landscapes.

By replacing the light poles within the park's landscape with light poles that maintain the historic design and materials of the existing light poles, the light safety project will ensure that the overall park site remains available and open to public in a manner that honors the historic and cultural value the Park provides to the community.

- *Policy 4.1 Pattern areas. Encourage building and site designs that respect the unique built natural, historic, and cultural characteristics of Portland's five pattern areas described in Chapter 3: Urban Form.*

Response. The site design of Mt. Tabor Park is one that respects the natural topography of the site and the inner neighborhood pattern area. The site's curvilinear drives and mix of trails and staircases respects the site's sloped nature. The site's design also provides for a variety of edge treatments to integrate the park into the residential fabric of development that surrounds it. Utilizing long approaches and screening vegetation creates buffers between park users and residential users. The updated light fixtures proposed in this project will improve the lighting system for the park's circulation

system by reducing the amount of illumination reaching nearby residential uses and improve the park's integration into the neighborhood. The proposed update will only enhance the value Mt. Tabor Park brings to the highly connected, densely populated inner neighborhood it is located within.

- *Policy 4.46 Historic and cultural resource protection. Within statutory requirements for owner consent, identify, protect, and encourage the use and rehabilitation of historic buildings, places, and districts that contribute to the distinctive character and history of Portland's evolving urban environment.*

Response. The Bureau supports sensible neighborhood nominations of historic parks to protect the historic and cultural relevancy of our revered park assets. Previous improvements at Mt. Tabor Park have included restoration of historic buildings, including the Gate House (Head House) and the Summit Restrooms. Interpretive elements onsite identify historic resources in the vicinity of the Cinder Cone, the Crater Amphitheater, and the Historic Reservoir District. Historic significant architectural resources within the park have been protected and preserved including the Crater Amphitheater, the Summit and Volcano restrooms, and the Caretaker's House.

- *Policy 4.50 Demolition. Protect historic resources from demolition. When demolition is necessary or appropriate, provide opportunities for public comment and encourage pursuit of alternatives to demolition or other actions that mitigate for the loss.*

Response. The illuminated circulation system will be maintained through this project, even though individual light poles will be removed. Prior to submitting this application, Bureau staff attended the following public meetings to discuss the light safety project:

- Historic Landmarks Commission, March 13, 2023.
- Portland City Council, April 5, 2023.
- Light Pole Safety Project neighborhood meetings, May 11 &12, 2023.
- Light Pole Safety Project community-wide meeting, May 17, 2023.

Community input at meetings focused on safety, with strong preferences for maintaining lights until replacement poles and lights are funded. There was no opposition expressed regarding the appearance of the proposed poles, fixtures, and strapping, all of which have been used in other City parks (Laurelhurst and Duniway for example). Given the conditions of the existing poles, there was strong interest in replacing poles – however there was also community interest in salvaging old poles and fixtures where possible.

Bureau staff agreed to offer poles for salvage to mitigate for the loss of original Mt. Tabor Park light poles. Bureau staff contacted a variety of organizations and offered to donate the poles for this purpose. The following organizations have been offered original light poles, including fixtures from a variety of parks:

- Oregon Historical Society.
- Oregon Architectural Heritage Center.
- Habitat for Humanity ReStore.

The above organizations have accepted donations of fixtures (2, 4, and 35 fixtures respectively) for preservation, and in some case rehabilitation and resale. Despite offers, no organizations have chosen to preserve any of the concrete light poles due to pole size (12' and taller), weight (about 1200 pounds), and condition. It is expected that future removals will be managed by the city's contractor and materials will be recycled when practicable.

- *Policy 4.51 City-owned historic resources. Maintain City-owned historic resources with necessary upkeep and repair.*

Response. The Bureau maintains a wide range of assets within the Park System using funds from the General Funds as authorized by City Council and the 2020 Parks Local Option Levy as authorized by the city's voters. The Bureau operates and maintains 154 neighborhood parks, 11 indoor and outdoor pools, 14 community and art centers, six golf courses, 160 miles of regional trails, and a motor raceway. The revised budget for maintenance in FY 22-23 was $21.8 million and the Bureau expects to spend between $22.5 and $23.9 million on maintenance in this fiscal year (FY 23-24).

Resources are allocated in accordance with the Healthy Parks, Healthy Portland framework and adopted Level of Service plans. Within the parks system, resources are prioritized based on number of factors, including how many park users are served by an asset and equity considerations to address historic underinvestment within the park system. Parks with historic resources are not prioritized over other park assets under the current policy framework, however they are not assigned a lower priority either.

All developed parks, community center, and natural areas with public access receive basic daily maintenance. And although the Bureau prioritizes maintenance for health and safety, the system as a whole has a backlog of $560 million in deferred maintenance expenses. Additional resources to fund maintenance and operation expenses for the city's aging park system are currently under consideration through the Bureau's Sustainable Futures program.

The citywide light safety project will help reduce future maintenance expenses through a combination of reducing future operating expenses, leveraging external funding, and securing materials and labor at current costs, while also ensuring public safety. Investing in new light poles now for Mt. Tabor's historic light system will ensure that the illuminated circulation system remains in good repair well into the future.

- *Policy 4.60 Rehabilitation and adaptive reuse. Encourage rehabilitation and adaptive reuse of buildings, especially those of historic or cultural significance, to conserve natural resources, reduce waste, and demonstrate stewardship of the built environment.*

Response. The park's existing contributing buildings and structures will not be affected by the proposed replacement of the light poles. Replacement of the proposed light poles will ensure that contributing architectural resources are not impacted should aging or structural deficient poles fail.

- *Policy 4.62 Seismic and energy retrofits. Promote seismic and energy-efficiency retrofits of historic buildings and other existing structures to reduce carbon emissions, save money, and improve public safety.*

Response. Replacement light poles will meet current code standards and seismic requirements. The replacement light fixtures to be installed through the light pole safety project feature improvements in energy efficiency and will result in monetary saving over time. Most importantly, the replacement poles will improve public safety.

- *Policy 4.63 Life cycle efficiency. Encourage use of technologies, techniques, and materials in building design, construction, and removal that result in the least environmental impact over the life cycle of the structure.*

Response. The current manufacturing process for precast light poles proposed in this project will ensure a lengthy life cycle. The concrete is precast and prestressed to improve longevity. In addition, high tensile steel is incorporated into the pole during manufacturing which reduces freeze-thaw impacts and yields a stronger pole able to bear higher loads (APP Exhibit K).

The existing concrete poles are experiencing a variety of impacts due to their age. Replacement of the reinforcing components inside the pole would compromise the pole's integrity, likely damage the external concrete casing, and destroying the desired appearance of the 1924 poles. While it is hypothetically possible to break down the concrete and melt down the existing rebar to reuse materials, doing so would be inefficient in terms of resource and energy use, as well as extend the amount time needed to complete this project. Thus, the project team concluded that replacement

poles will result in the less environmental impact than attempts to rehabilitate the existing poles.

- *Policy 4.64 Deconstruction. Encourage salvage and reuse of building elements when demolition is necessary or appropriate.*

Response. Although the poles removed as part of the citywide light safety project so far have not been salvaged due to the lack of interest by area reuse experts, they have been recycled. It is expected that light poles removed during the Mt. Tabor Park portion of the project will also be recycled by the contractor as part of their overall construction debris handling.

Based on the above responses, the proposed project does comply with relevant 2035 Comprehensive Plan policies.

The criteria for Historic Districts under *C.1.a*. and National Register Districts in *C.2.a.* relates to the value of the historic resource, considering the resource's age, condition, significance, rarity, value to the community, and association with historically marginalized populations or communities. The historic resource in this case is the lighting system that provides illumination to the park's circulation system of historic drives, formal pathways, and period staircases. Park staff was unable to locate any evidence that the Mt. Tabor lighting system holds significance for any historically marginalized communities in Portland.

The lighting of Mt. Tabor's circulation system in the 1920s (and likely the 1930s in association with WPA circa drive construction) was not unique, nor was it the earliest achievement in the Portland Park system. The city's first known illuminated circulation system that welcomed automobile users to travel within forested areas and experience previously inaccessible scenic views was the Terwilliger Boulevard Parkway. The lighting system for the parkway may have been installed as early as 1913.

Laurelhurst Park, another historic park in the city's park system, also has an illuminated circulation system. According to that park's historical nomination, its lighting system was installed in 1915 – although the nomination also recognized that the age of individual poles varied and therefore, the system itself wasn't a contributing resource. The lighting system at Mt. Tabor Park is neither the oldest example of such a resource nor is it rare. The proposed replacement, however, will maintain the system's integrity and ability to function far into the future.

As for the design of the light poles themselves, the octagonal design is almost the standard for Portland parks developed within the inner neighborhood pattern area and examples of such poles can be found throughout the inner eastside. The fixtures that

currently exist do have value for the community and the proposed replacement fixtures preserve the lantern-style design. Approximately 40 lighting fixtures of this style have already been donated. As noted previously though, the existing poles, especially those that date from the period of significance are not in good condition, lack the structural integrity necessary for restoration, and any rehabilitation or reuse would be far more resource intensive from an environmental standpoint than replacement.

The criteria for Historic Districts under C.1.b. and National Register Districts in C.2.b. focuses in on the economic consequences of demolition compared to preservation, rehabilitation, or reuse of the resource for the owner of the resource and the community as a whole. The lighting system is being preserved in this case, at issue is whether certain elements within the system should be or could be preserved, reused, or rehabilitated.

Many elements of the lighting system, such as electronic wiring and fixtures, and some of the poles, have already been replaced in order to maintain the lighting system in proper functioning order. The main structural components of the lighting system, the poles and fixtures, are not unique within the Portland parks system. Through the Bureau's citywide Light Safety project, light fixtures of various ages have been successfully donated for reuse or preservation.

When it comes to individual light poles from the period of significance, there is a preponderance of evidence that rehabilitation to current code standards is not possible. Preservation would entail costs to remove poles from their current location where they pose a potential safety hazard to another location. Specialty equipment and trained staff is needed to transport objects of this size. In addition, materials and labor would be required to install a light pole or poles in another location and secure the pole(s) in a manner that mitigates the structural risk. These costs are all currently unfunded. Reuse by other parties does not appear feasible or cost effective as local experts have declined to take ownership of any the poles removed through the light safety project to date.

The Bureau's funding plan to replace the light poles in twelve city parks, which leveraged grant funding from Metro, was authorized by City Council earlier this year. The Bureau currently faces significant capital maintenance expenses that lack funding. While the community supported the preservation of existing services through the passage of the 2020 Parks Operation Levy and capital maintenance through the passage of the 2017 Capital Bond, expending scarce public dollars to preserve structurally deficient components does not meet current policy priorities nor would such expenditures be consistent with City and Bureau goals to provide an equitable level of service in our community.

Based on the above analysis, which considers feasibility as well as expenses, park staff have concluded that demolition and replacement of the light poles fixtures is a more cost-effective solution than reuse, rehabilitation, or preservation for both the Bureau and the community. However, it should be noted that cost is *not* the primary reason for proceeding with replacement was chosen; public safety, the impracticality of retrofitting the existing poles, and renewing the park's lighting system to last another century were more significant drivers in the decision to replace light poles in Mt. Tabor Park.

The subsequent criteria diverge at this point. Historic Districts require an examination of benefits for alternative scenarios, while in Conservation Districts the remaining criterion is focused on policies in the Comprehensive Plan. These policies were addressed above. Regarding the final Historic District criteria, since no redevelopment is proposed in this case, the alternative scenarios to be considered are demolition and preservation - taking into consideration the purposes described in Subsection A.

The benefits associated with demolition, or more specifically in this case, the benefits associated with the replacement of structural components in the historic light system and subsequent recycling and reuse of the light poles and fixtures, include the following:

- The integrity and character of the historic lighting system as a whole is maintained and available for use now and many years into the future.
- Park users will be able to continue to comfortably navigate the park in the evenings and access even the most densely forested portions of the circulation system regardless of the natural lighting conditions.
- Park users can have confidence in the city's park system as a safe place in which to recreate, exercise, and enjoy scenic vistas, with all members of their family, friends, and fellow community members.
- Future cost savings from increased energy efficient operation of the lighting system.
- Improved lighting conditions due to improvements in the lighting technology, including increased directional focus for light emitting diode (LED) lamps and improved shielding in fixtures that will result in dark skies compliance and less impact to off-site properties.
- Use of durable, proven, aesthetically pleasing and historic-honoring light pole and fixture products, with decades of performance in other City parks, including historic Terwilliger Boulevard, Duniway Park, Laurelhurst Park, and other Portland parks.

The merits of preservation that must be considered in Subsection A are *economic and community vitality, resilience, and memory.* Preservation of light poles in their current condition would require relocation away from the actual lighting system to a location

where their structural deficiencies would not cause a risk to park users and likely would defeat the purposes of preservation related to promoting community vitality and memory. Preservation is currently unfunded and additional funding would need to be identified, which would have a negative impact on economic vitality. Preservation is unlikely to increase community resiliency to potential natural or other hazards.

Based on the above considerations, the Bureau concludes that replacing the light poles and fixtures of the historic lighting system while maintaining the spatial distribution noted in the historic nomination is the most feasible, cost-effective, and reasonable method for preserving the historic illuminated circulation system within Mt. Tabor Park.

The proposed replacement of light poles in Mt. Tabor Park's historic lighting system will comply with the standards in the Historic Resource Overlay Zone and for Historic Resource Review.

Conclusion

The Light Pole Safety project will replace 88 light poles adjacent to the park's circulation system, approximately 60 of which may date from the park district's historic period of significance. Economic and climate resiliency benefits will be realized by updating the aging lighting system, consistent with city policies. Replacement will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park.

Poles will be replaced in their existing location and replacement work will avoid existing trees. No trees are proposed for removal in the Light Pole Safety project. Any pruning or root cutting required to install the new poles will occur in accordance with Title 11 and the Tree Permit protection plan, consistent with proper arboricultural practices, and will not adversely impact the health or structural integrity of the tree.

The Bureau proposes to take significant efforts to preserve the spatial pattern of the illumination system. Materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. The reasoning provided in this narrative, along with the supporting evidence provided in the attached exhibits demonstrates project compliance with the applicable requirements of Title 33. Therefore, Bureau of Development Services staff should recommend, and the Historic Landmarks Commission should approve, the light pole safety project replacement of light poles within Mt. Tabor Park.

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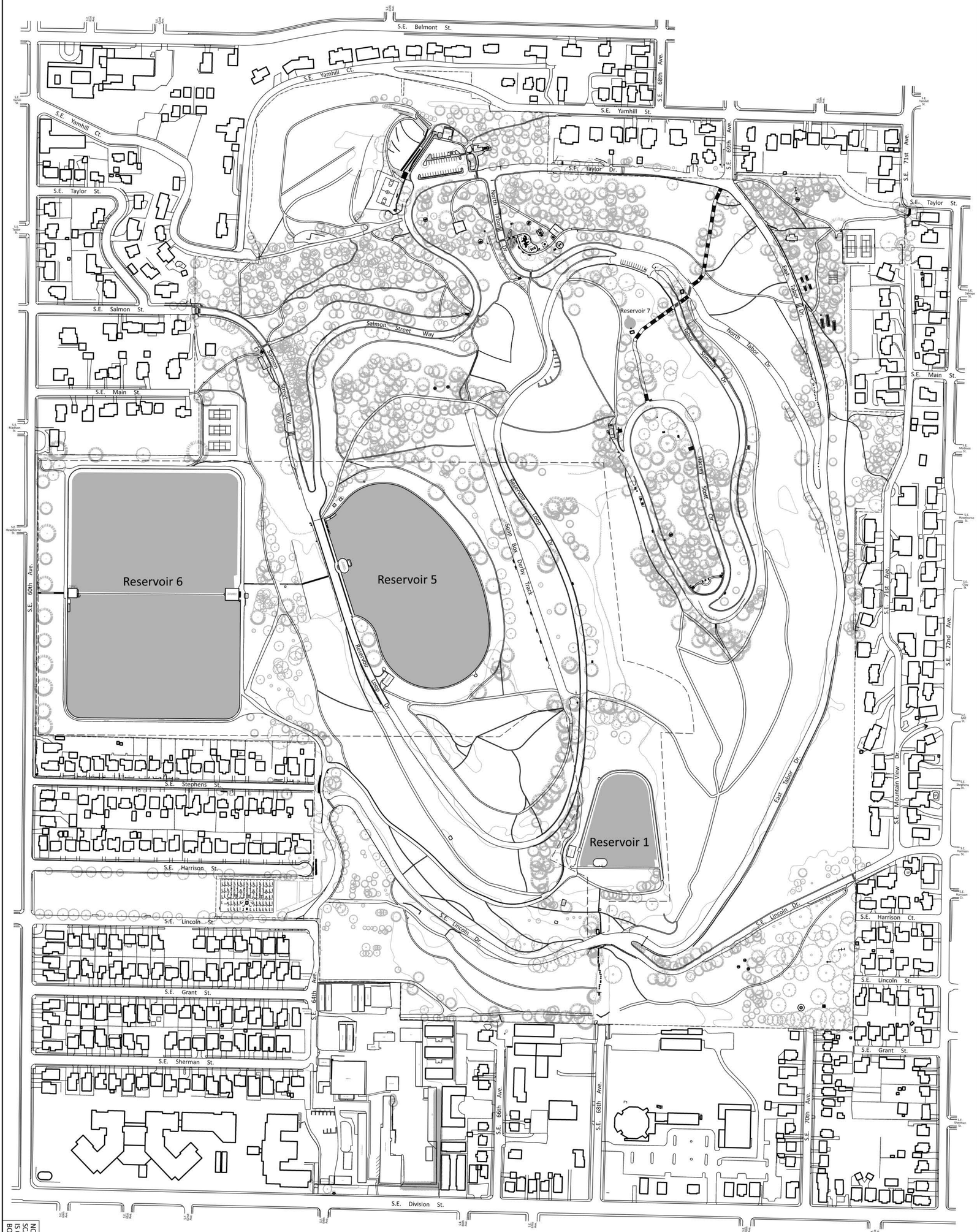

NOTE: SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park

Full Park Overview

Portland, Oregon

PROJECT MANAGER:

DATE: 2/3/2022 SCALE: N.T.S. DRAWN BY: Mike Van Yserloo SECTION:

REVISIONS

DATE	DESCRIPTION	BY

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LU 23-088549 HR DM, Exhibit A.8

Exhibit 10, page 1
Received 1/1/2024

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PLOTTED ON: 2/3/2022
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S.E. Yamhill St.
S.E. 68th Ave.
S.E. 69th Ave.
S.E. 70th Ave.
S.E. 71st Ave.
S.E. Taylor Dr.
S.E. Salmon St.
S.E. Main St.
S.E. Ct.
St.
North Tabor Dr.
East Tabor Dr.
Tabor Summit Dr.
North Tabor Dr.
Salmon Street Way
Salmon Street Way
Reservoir Loop Dr.
Soap Box Derby Track
Harvey Scott Ct.
Reservoir 7
Reservoir 6
Reservoir 5
S.E. 71st Ave.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Hardscape Features
Portland, Oregon

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SECTION:
SCALE: 1"=100'
DATE: 2/3/2022

REVISIONS

DATE	DESCRIPTION	BY

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of 21

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Reservoir Loop Dr.
S.E. Stephens St.
S.E. Harrison St.
S.E. Lincoln St.
S.E. Grant St.
S.E. Sherman St.
S.E. Division St.
S.E. 64th Ave.
S.E. 66th Ave.
S.E. 68th Ave.
S.E. 70th Ave.
East Tabor Dr.
S.E. Lincoln Dr.
Reservoir 1

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director
Portland, Oregon

Mt. Tabor Park

Hardscape Features

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=100'
DATE: 2/3/2022

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DATE	DESCRIPTION	BY

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of 21

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PLOTTED ON: 2/3/2022
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A-1 1" 36.0
A-2 1" 28.2
A-3 1" 6.82
A-4 1" 1.56
A-5 1" 12.33
A-6 1" 30.78
A-7 1" 22.01
A-8 1" 26.9
A-9 1" 5.46
A-10 1" 27.1
A-11 1"
A-x

WATER VAULT RIM=498.88'
RAINBIRD ESP-4
MAINTENANCE BUILDING F.F.E.=500.83
RESTROOMS F.F.E.=494.47
PICNIC AREA
RAMP DOWN
RAILROAD TIE WALL
PAVILION & STEPS
2" MAINLINE (3,000')
3" MAIN
3" PVC
PW
DF
HB
3 Spare Wires

2" Conbraco 40-108-A2T DCVA
Serial # IZ343
-fed by 2" Meter 31894780 (POC)
-fed by 2" Conbraco DCVA HG019 (potable)
-fed by 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds irrigation (parking lot area)

1½" Wilkins 950XL DCVA
Serial # 943826
-fed by 2" Meter 31894780 (POC)
-fed by 2" Conbraco DCVA HG019 (potable)
-feeds potable via booster pump (rest roopms + maint. building + drinking fountain)
-feeds 2" Conbraco DCVA IZ343 (irrigation)

Account 297865-310-0
2" Meter 31894780
-feeds 2" Conbraco DCVA HG019 (potable)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)
-6650 SE Yamhill St

2" Conbraco 40-108-A2T DCVA
Serial # HG019
-fed by 2" Meter 31894780 (POC)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)

2" Febco 850 DCVA
Serial # 99305K-PCO
-fed by 2" Meter 99305K (POC)
-feeds booster pump (irrigation)
-feeds irrigation (playground, lawn, trees)

S.E. Taylor
North Tabor Dr.
Picnic Hill
3/4"

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Irrigation Features - Amphitheater and Play Area
Portland, Oregon

PROJECT MANAGER:
DATE: 2/3/2022
SCALE: 1"=30'
DRAWN BY: Mike Van Yserloo
SECTION:

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DATE	DESCRIPTION	BY

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of 21

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PORTLAND
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Salmon Street Way

Salmon Street Way

Tabor Dr.

Reservoir

Picnic Hill
Shut Off

WATER VAULT

1"Sub Meter 50081008
-fed by 2" Meter 43281622 (POC)
-fed by 2" Meter DCVA 16900 (potable)
-feeds potable (drinking fountain)

D.F. Shut-off In Box

Account 295-431-6409
2" Meter 43281622
-fed by 2" Meter DCVA 16900 (potable)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)
-123 SW Salmon St (Office Address)
-Main at 63rd (billing address)

2" Mtr#L007 A61 QT DCVA
Serial # 16900
-fed by 2" Meter 43281622 (POC)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds potable (drinking fountain)

TOP OF 6" WATERLINE=431.63

TOP OF 6" WATERLINE=431.15

TOP OF 6" WATERLINE=416.23

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

Portland Parks and Recreation

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Mt. Tabor Park
Irrigation Features - NW

PROJECT MANAGER:
Portland, Oregon
DRAWN BY:Mike Van Ysenloo
SECTION:
DATE: 2/3/2022
SCALE: 1"=50'

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S.E. Taylor Dr.
S.E. Taylor
S.E. Main
East Tabor Dr.
Tabor Summit Dr.
North Tabor Dr.
Reservoir 7
To East Restroom
2" Cox Branco 40-108-T2 DCVA
Serial #: WP03-1
-fed by 2" Meter - 69740856 (POC)
-feeds potable (potable)
-feeds 2" Cox Branco DCVA #5 (turf)
(irrigation via booster pump)
Account: 297-865-530-0
2" Meter: 20002054
-feeds 2" Cox Branco DCVA WP01 (potable)
-feeds 2" Cox Branco DCVA 1425117
(irrigation via booster pump)
2" Cox Branco 40- 108-T2 DCV
Serial #: WP03-2
-fed by 2" Meter 20002054
-feeds potable (rest room +
irrigation + hose bibs)
2" Wilkins 950XL DCVA
Serial #: 2439508
-feeds irrigation (top of Mt Tabor)
(irrigation via booster pump)
3" PVC
6-6-88
NF
PW
W
E
M

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

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Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Irrigation Features - NE

Portland, Oregon

PROJECT MANAGER:
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SECTION:
SCALE: 1"=50'
DATE: 2/3/2022

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DATE	DESCRIPTION	BY

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Harvey Scott Cir.

APPROXIMATE LOCATION OF IRRIGATION MAIN LINES AS SHOWN ON C.O.P., PARKS & REC. AS-BUILTS

ZONE 1
ZONE 2
ZONE 3
ZONE 4
ZONE 5
ZONE 6

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

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Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Irrigation Features - Summit
Portland, Oregon

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SCALE: 1"=30'
DATE: 2/3/2022
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DATE	DESCRIPTION	BY

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S.E. Stephens St.

S.E. Harrison St.

S.E. Lincoln St.

S.E. Grant St.

S.E. Sherman St.

S.E. 64th Ave.

Account 297-866-860-0
2" Meter 94240140
-feeds 2" Watts DCVA 38815 (potable + irrigation)
-feeds DOLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM959 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY Facilities:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 19905 (greenhouse hose bibs east)
-SE 65th Ave & Harrison St (between reservoir #1 trail & SE Lincoln)

2" Watts 007 M1 QT DCVA
Serial # 38815
-fed by 2" Meter 94240140 (POC)
-feeds DOLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM959 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY Facilities:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 19905 (greenhouse hose bibs east)

Account 297-866-030-0
2" Meter 20032531
-feeds 2" Watts DCVA 131796
-feeds 2" Watts DCVA 131795 (not tested)
-feeds 1" Sub Meter 0565537
(community garden)
-6270 SE Harrison St

2" Watts 9500N DCVA
Serial # 131796
-fed by 2" Meter 20032531 (POC)
-feeds 2" Watts DCVA 131795 (not tested)
-feeds 1" Sub Meter 0565537
(community garden)

2" Conbraco 40-100 DCVA
Serial # CM959
-fed by 2" Meter 94240140 (POC)
-fed by 2" Watts DCVA 38815 (potable)
-feeds irrigation (nursery area "D")

2" Conbraco 40-100-02 DCVA
Serial # 178551
-fed by 2" Meter 94240140 (POC)
-fed by 2" Watts DCVA 38815 (potable + irrigation)
-feeds irrigation (DC line north of nursery)

1" Conbraco 40-100 DCVA
Serial # 217012
-fed by 2" Meter 94240140 (POC)
-fed by 2" Watts DCVA 38815 (potable)
-feeds irrigation (nursery area "C")

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Irrigation Features - SW
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SCALE: 1"=50'
DATE: 2/3/2022
SECTION:

REVISIONS

DATE	DESCRIPTION	BY

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of 21

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S.E. Lincoln Dr.

East Tank

56" TOP OF PIPE ELEV=396.48

TOP OF PIPE 382.16

TOP OF STANDPIPE 357.33

WMH

WMH

36"

44"

12"

33"

56"

12" CI WATER LINE LOCATE MARKS FROM 6/22/10

POTHOLE LOCATION 12" CI 5.25' DEEP

POTHOLE AREA FOR 36" CI, NO PIPE FOUND, 3.5' DEEP

36" CI WATER LINE LOCATE MARKS FROM 6/22/10

POC) S (potable) (C)

To Stand Pipe In Dola

TOP 4" PIPE ELEV. 249.75

50"

15"

20"

30"

44"

33"

CONDUIT #1

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Irrigation Features - S
Portland, Oregon

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SECTION:
SCALE: 1"=50'
DATE: 2/3/2022

REVISIONS

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S.E. Taylor

North Tabor Dr.

ST 6" CSP
C.O.
RIM=476.45
IE=474.45
6"
RIM=476.45
IE=474.45
STANDPIPE (DRAIN)
RIM=491.65
CB (OIL TRAP)
RIM=498.91
MAINTENANCE BUILDING F.F.E.=500.83
CB (OIL TRAP)
RIM=498.67
WATER VAULT
RIM=498.88'
VAULT BF & VALVE
CB
RIM=499.33
IE OUT(8" N)=492.03'
6" CSP
CB
RIM=498.18
IE=494.68
RESTROOMS F.F.E.=494.47
C.O.
RIM=494.81
RIM=483.00
IE IN(SE)=480.70
IE IN(SW)=480.70
IE OUT=480.60
4"
C.O.
CB (OIL TRAP)
RIM=496.53
IE OUT(8" W)=494.73
DF
1½" Wilkins 950XL DCVA
Serial # 943826
-fed by 2" Meter 31894780 (POC)
-feeds potable via booster pump (rest roopms + maint. building + drinking fountain)
-feeds 2" Conbraco DCVA IZ343 (irrigation)
CB
RIM=498.60
IE=495.10
CB
RIM=496.80
IE=493.80
6"
4" OVERFLOW
DRYWELL
IE IN(N&W)=493.40
DAYLIGHT
IE=494.00
FW
S
3
M
HB
Account 297865-310-0
2" Meter 31894780
-feeds 2" Conbraco DCVA HG019 (potable)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)
-6650 SE Yamhill St
2" Conbraco 40-108-A2T DCVA
Serial # HG019
-fed by 2" Meter 31894780 (POC)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA IZ343 (irrigation)
RAILROAD TIE WALL
RAMP DOWN
3" PVC
CB (OIL TRAP)
RIM=482.03
I.E. OUT(6" SE)=469.58'
PICNIC AREA
AD
RIM=480.18
IE OUT (6" SW)=478.52
AD
RIM=478.80
IE OUT (6" S)=477.35
IE IN (6" N)=477.35
IE OUT (8" NE)=457.63
RAILROAD STEPS

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - Amphitheater and Play Area
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SCALE: 1"=30'
DATE: 2/3/2022
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CB
RIM=482.03

I.E. OUT(6" SE)=469.58

AD
RIM=480.18
IE OUT (8" SW)=478.52

AD
RIM=478.80
IE OUT (6" S)=477.30
IE IN (6" N)=477.35

IE OUT (8" NE)=457.63
IE OUT (4" SE)=457.20

Tabor Dr.

Fw 3"

6-6-88

6"

8"CSP

W

C.O.

Fw

6" CSP
IE 8" HDPE=489.06

GRATE=510.96
(CLOGGED)

SANITARY STANDPIPE

GAS STANDPIPE

.89
SE)=350.25
NE)=351.05
" SW)=348.70

SED MH

ST

CB
RIM=372.90
IE OUT (8" W)=371.30

CB
RIM=358.20
IE=354.70

OUTFALL
IE=440.20

CB
RIM=444.60
IE IN=442.83
IE OUT=441.00

6"

AD
RIM=445.60
IE OUT (6" CONC NW)=444.20

OUTFALL
IE (6" CONC)=453.44

AD
RIM=461.51
IE OUT (6" CONC NW)=460.26

AD
RIM=462.77
IE OUT (8" CONC NW)=461.34

Salmon Street Way

Salmon Street

Reservoir

1" Sub Meter 50081008
-fed by 2" Meter 43281622 (POC)
-fed by 2" Meter DCVA 16900 (potable)
-feeds 2" Main (Portal House)

M

1"

BH

D.F. Shut-off In Box

EXPOSED TOP OF STORM PIPE (LOCATE PAINT MARKS)

Account 295-431-6459
2" Meter 43281622
-fed by 2" Meter DCVA 16900 (potable)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds portable (drinking fountain)
-2" Main at 63rd (billing address)

2" Wtill 007 M1 QT DCVA
Serial # 16900
-fed by 2" Meter 43281622 (POC)
-feeds 1" Sub Meter 50081008 (rental house)
-feeds portable (drinking fountain)

WATER VAULT

GRATE=307.23
IE 8" (E)=305.73

GRATE=302.61
IE 8" (NW)=305.51
IE 8" (SE)=305.51

TOP OF 6" WATERLINE=433.63

TOP OF 6" WATERLINE=431.15

TOP OF 6" WATERLINE=416.23

NOTE:
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PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - NW

Portland, Oregon

DATE: 2/3/2022

SCALE: 1"=50'

PROJECT MANAGER:

DRAWN BY:Mike Van Yserloo

SECTION:

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S.E. Taylor Dr.
S.E. Taylor
S.E. Main
East Tabor Dr.
North Tabor Dr.
Tabor Summit Dr.
Reservoir 7

ROOF DRAIN
I.E. OUT=471.51

ST MH
RIM=445.56
IE OUT (24" N)=435.92
IE IN (10" SW)=440.76
IE IN (10" SW)=440.06
IE IN (8" SE)=439.19

CB
RIM=445.89
IE OUT (10" NE)=443.54

SED MH
RIM=451.70
IE IN(NE)=449.10
IE IN(SE)=449.10
IE OUT(N)=449.00

CB
RIM=451.20
IE=449.68

CB
RIM=454.57
IE=451.07

To East Restroom

Account 297-865-530-0
2" Meter 20002054
Feed by 2" Meter 20002054
-feeds potable (west room + fountain + hose bibs)

2" Cerbraco 40-108-T2 DCVA
Serial No. WP03130
Feed by 2" Meter 20002054
-feeds potable (restroom)
-feeds irrigation via booster pump

Account 297-865-530-0
2" Meter 20002054
Feed by 2" Cerbraco DCVA WP03130
-feeds irrigation via booster pump

CB
RIM=384.87
IE OUT (8" E)=382.87

CB
RIM=382.91
IE IN (8" W)=381.76
IE OUT (8" E)=381.26

CB
RIM=384.12
IE IN (6" SW)=382.24
IE OUT (8" E)=381.26

CB
RIM=397.78
IE OUT (10" NW)=394.88

IE OUT (8" E)=547.90

CB
RIM=553.94
IE OUT (8" E)=552.74

OUTFALL
IE OUT (8" PVC NE)=541.24

AD
RIM=559.61
IE OUT (8" CONC NE)=557.96

SSMH
RIM=613.45

CB
RIM=466.86
1" TO BOTTOM, NO PIPES

CB
RIM=480.57
IE IN (6" METAL S)=478.07
IE OUT (6" STEEL N)=478.02

CB
RIM=516.43
IE IN (6" CONC N)=513.13
IE OUT (6" CONC S)=513.08

SANITARY STANDPIPES
GAS STANDPIPE

3" PVC
6" CSP
8" CSP
8" SP
6" DRAIN
1"

NOTE:
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PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - NE
Portland, Oregon
DATE: 2/3/2022

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=50'

REVISIONS

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Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director
Portland, Oregon

Mt. Tabor Park
Civil Features - W

PROJECT MANAGER:
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REVISIONS

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NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

Reservoir Loop
Soap Box Derby Track
Harvey Scott Ct.

GRATE=510.96
(CLOGGED)

4" CONCRETE PIPE
I.E. OUT SW - 621.22'
I.E. IN NE - 621.20'

CB
RIM=507.07
IE IN (8" CONC S)=501.22
IE OUT (8" CONC N)=501.17

CB
RIM=507.72
IE IN (8" CONC N)=504.22
IE OUT (8" CONC S)=504.07

CB
RIM=499.06
IE IN (8" CONC N)=495.66
IE OUT (8" CONC S)=495.61

CB
RIM=620.49
IE OUT (6" CONC S)=619.04

CB
RIM=620.09
IE OUT (4" CONC S)=618.99

START OF CONCRETE DRAINAGE GUTTER SYSTEM (THIS SIDE)

OUTFALL
IE OUT (6" PVC SE)=586.06

CB
RIM=485.01
IE IN (6" CONC N)=482.31
IE OUT (6" CONC S)=482.26

IE 24"=384.08
IE 24"=386.41

GRATE=449.43
IE 8" (E)=447.28
IE 10" (W)=446.68

GRATE=449.93
(CLOGGED)

APX. TUNNEL LOCATION

12" ALUM. CMP

2"DR.

NOTE:
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PORTLAND
PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - E

Portland, Oregon

PROJECT MANAGER:
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SECTION:
SCALE: 1"=50'
DATE: 2/3/2022

REVISIONS

DATE	DESCRIPTION	BY

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S.E. Stephens St.

S.E. Harrison St.

S.E. Lincoln St.

S.E. Grant St.

S.E. Sherman St.

S.E. 64th Ave.

SSMH
RIM=271.61
IE 12" (E&W)=263.37

SSMH
RIM=277.13
IE 6" (SW)=271.88
IE 6" (NW)=271.73
IE 12" (E)=269.98
IE 12" (W)=269.73

GRATE=275.57
IE 6" (N&E)=271.86

SSMH
RIM=288.87
IE 12" (E)=277.47
IE 12" (W)=275.97

GRATE=300.48
IE 6" (W)=297.72

SSMH
RIM=299.10
IE 6" (E)=293.35
IE 12" (E)=291.75
IE 12" (W)=291.25

GRATE=299.74
IE 8" (SE&NW)=296.26

Account 297-866-860-0
2" Meter 94240140
-feeds 2" Watts DCVA 38815 (potable + irrigation)
-feeds DOLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM959 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY Facilities:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 19905 (greenhouse hose bibs east)
-SE 65th Ave & Harrison St (between reservoir #1 trail & SE Lincoln)

GRATE=302.79
IE 6" (S)=300.18
IE 8" (N)=300.18

2" Watts 007 M1 QT DCVA
Serial # 38815
-fed by 2" Meter 94240140 (POC)
-feeds DOLA (2 drinking fountains)
-feeds 2" Conbraco DCVA CM959 (nursery area "D" irrigation)
-feeds 2" Conbraco DCVA 178551 (nursery area "D" irrigation)
-feeds 1" Conbraco DCVA 217012 (nursery area "C" irrigation)
-feeds MTTY Facilities:
-Equipment & Fleet Building (potable)
-Quonset Huts (irrigation)
-Nursery Area "A" (irrigation)
-Lathe House (irrigation)
-Community Gardens Building (not confirmed)
-feeds 1½" Febco DCVA 19905 (greenhouse hose bibs east)

GRATE=257.71
IE 8" (SW)=255.46

SSMH
RIM=260.32
CTR MH IE=251.57

SSMH
RIM=263.71
IE (S)=256.31
IE (NE)=256.01
IE (N)=255.31
CTR MH IE=253.71

GRATE=263.47
IE 10"(W)=262.12

SSMH
RIM=267.02
CTR MH IE=259.52

SSMH
RIM=270.09
CTR MH IE=262.64

GRATE=256.78
IE 10" (NW)=254.33

GRATE=263.27
IE 10"(N)=259.57

GRATE=307.87
IE 10" (S)=304.86

GRATE=315.67
IE 8" (N&S)=312.32

STMH
RIM=268.46
IN (E&N)
IE OUT (W)=259.06

GRATE=263.68
IE 4" (N&S)=261.18

GRATE=252.73
IE 6" (N&S)=250.73

GRATE=250.26
(CLOGGED)

NOTE:
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PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - SW
Portland, Oregon
DATE: 2/3/2022

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GRATE=444.13
(CLOGGED)

GRATE=443.52
(CLOGGED)

GRATE=420.59
IE 6" (W&E)=416.89

56"
TOP OF PIPE
ELEV=396.48

IE 8" INLET=401.54

IE=397.92

TOP OF PIPE
382.16

GRATE=328.97
IE 8" (N&S)=325.52

CB
RIM=358.16
IE IN (12" CONC NE)=353.56
IE OUT (12" CONC SW)=353.46

TOP OF STANDPIPE
357.33

WMH

GRATE=342.32
IE 8" (N&S)=338.87

12" CI WATER LINE
LOCATE MARKS FROM
6/22/10

POTHOLE LOCATION
12" CI 5.25' DEEP

POTHOLE AREA
FOR 36" CI, NO PIPE
FOUND, 3.5' DEEP

36" CI WATER LINE
LOCATE MARKS FROM
6/22/10

CB
RIM=341.31
IE OUT (10" CONC NE)=339.81

ST MH
RIM=341.27
IE IN (10" CONC W)=338.47
IE IN (12" CONC SW)=337.42
IE OUT (12" CONC NE)=337.37

CB
RIM=316.29
IE OUT (10" CONC NE)=315.03

ST MH
RIM=316.29
IE IN (10" CONC SW)=313.92
IE IN (12" CONC SW)=311.90
IE OUT (12" CONC NE)=311.78

TOP 4" PIPE
ELEV. 249.75

CONDUIT #1

S.E. Lincoln Dr.

East Tabor

PORTLAND
PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - S
Portland, Oregon

PROJECT MANAGER:
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S.E. Taylor

North Tabor Dr.

PGE POLE #183
METER #907206E
FOR MAINT. BLDG. &
METER #6584639E
FOR REST ROOM BLDG.

MAINTENANCE BUILDING F.F.E.=500.83

RESTROOMS F.F.E.=494.47

30A, NEMA 3R SERVICE RATED DISCONNECT

IRRIGATION CONTROLLER

IRRIGATION BOOSTER PUMP

RAILROAD TIE WALL

RAMP DOWN

PICNIC AREA

PARKING STEPS

67 68 69 70 71 72 80 81 82 25

E/B C/B M

NOTE:
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PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - Amphitheater and Play Area
Portland, Oregon

PROJECT MANAGER:
SCALE: 1"=30'
DRAWN BY:Mike Van Yserloo
DATE: 2/3/2022
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Salmon Street
Salmon Street Way
Tabor Dr.
Reservoir

APPROXIMATE LOCATION OF UNDERGROUND ELECT. POWER LINE (PER CITY OF PORTLAND WATER BUREAU AS-BUILTS)

WATER BUREAU POWER LINE

CAMERA (TYP)

IRRIGATION CONTROLLER

IRRIGATION BOOSTER PUMP

POWER METER

POWER RISER

ELECT. STANDPIPE

NOTE:
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PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - NW

Portland, Oregon

PROJECT MANAGER:
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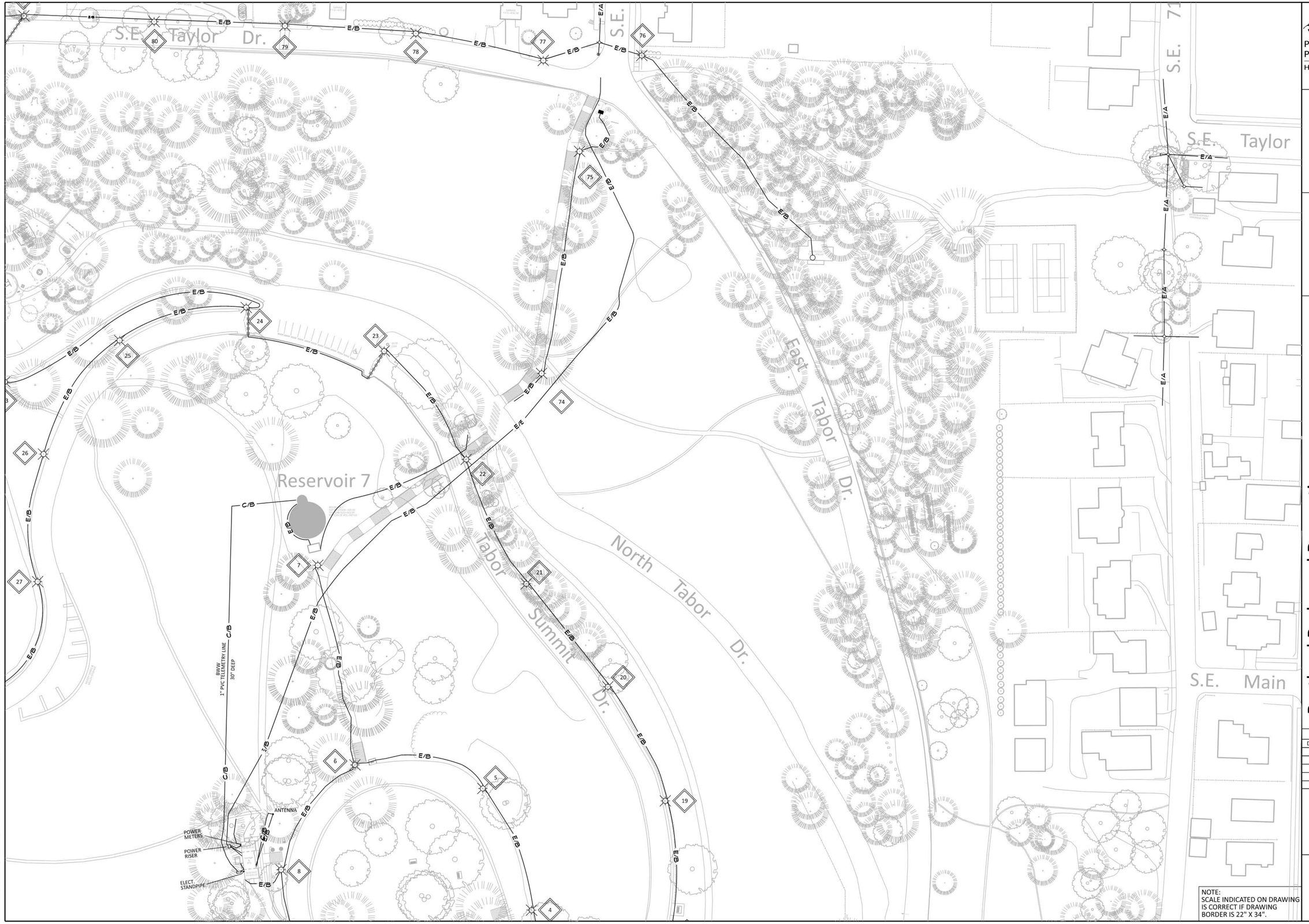

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PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - NE
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
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DATE: 2/3/2022

REVISIONS

DATE	DESCRIPTION	BY

NOTE:
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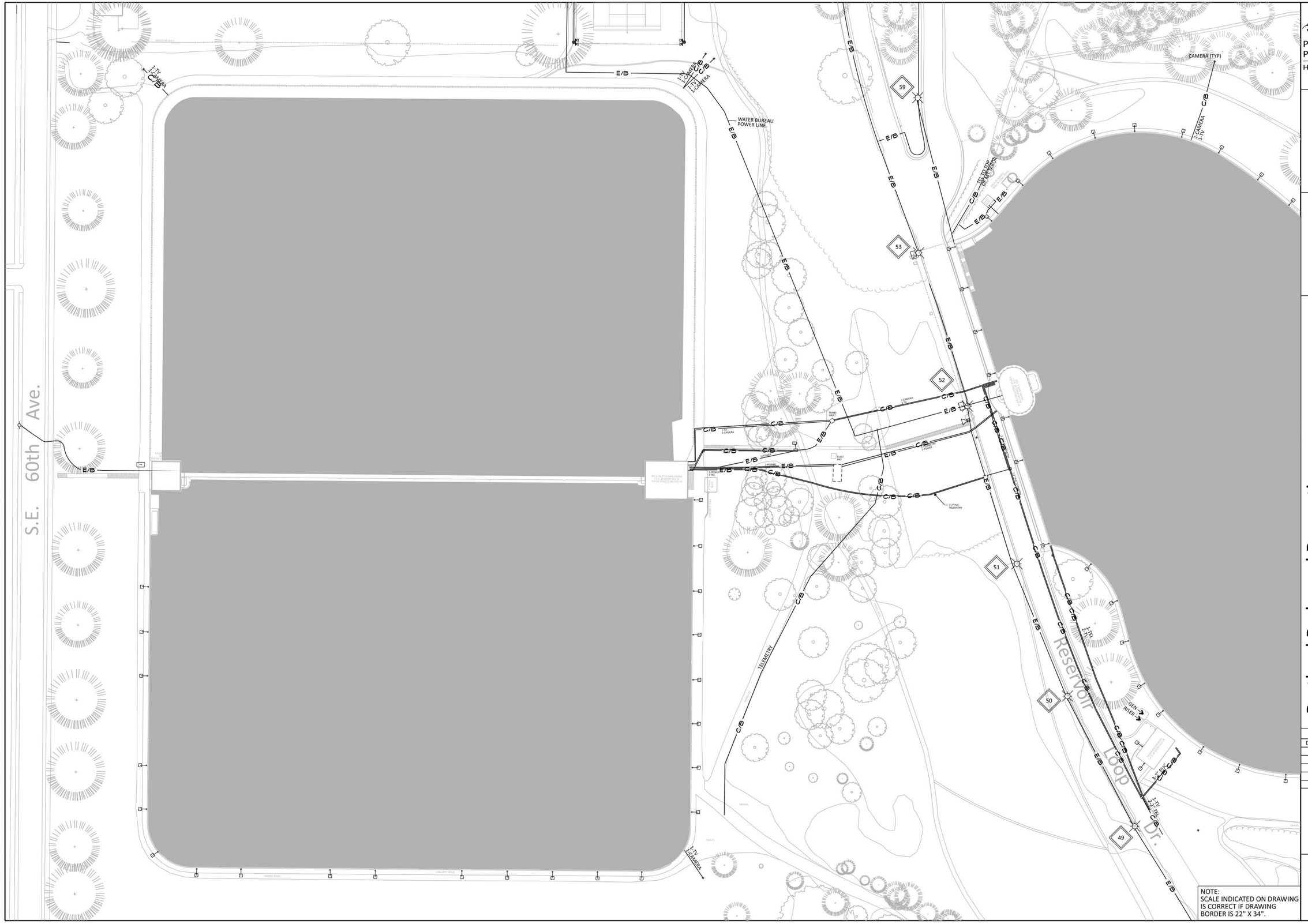

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - W

Portland, Oregon

PROJECT MANAGER:

DATE: 2/3/2022

SCALE: 1"=50'

DRAWN BY:Mike Van Yserloo

SECTION:

REVISIONS		
DATE	DESCRIPTION	BY

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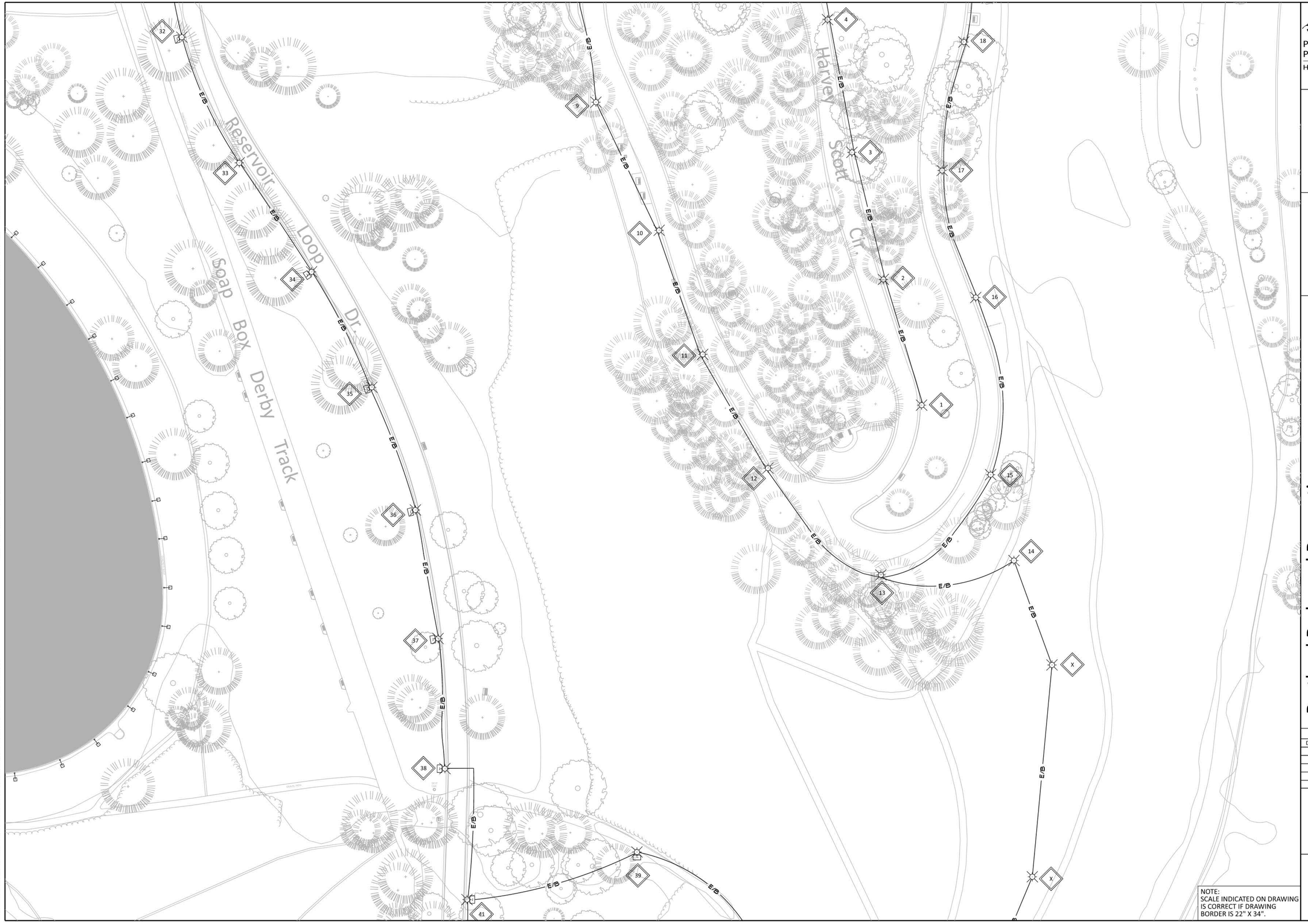

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PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - E
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=50'
DATE: 2/3/2022

REVISIONS

DATE	DESCRIPTION	BY

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

S20
of 21

PLOTTED BY: pkmichaelv PLOTTED FROM: WS23858

PLOTTED ON: 2/3/2022

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Mt_Tabor_Locate_Maps.dgn

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation

Carmen Rubio, Commissioner - Adena Long, Director

Mt. Tabor Park
Electrical Features - S

Portland, Oregon

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SECTION:
SCALE: 1"=50'
DATE: 2/3/2022

REVISIONS

DATE	DESCRIPTION	BY

N

S21
of 21

LIGHTING UPGRADE SCOPE LEGEND

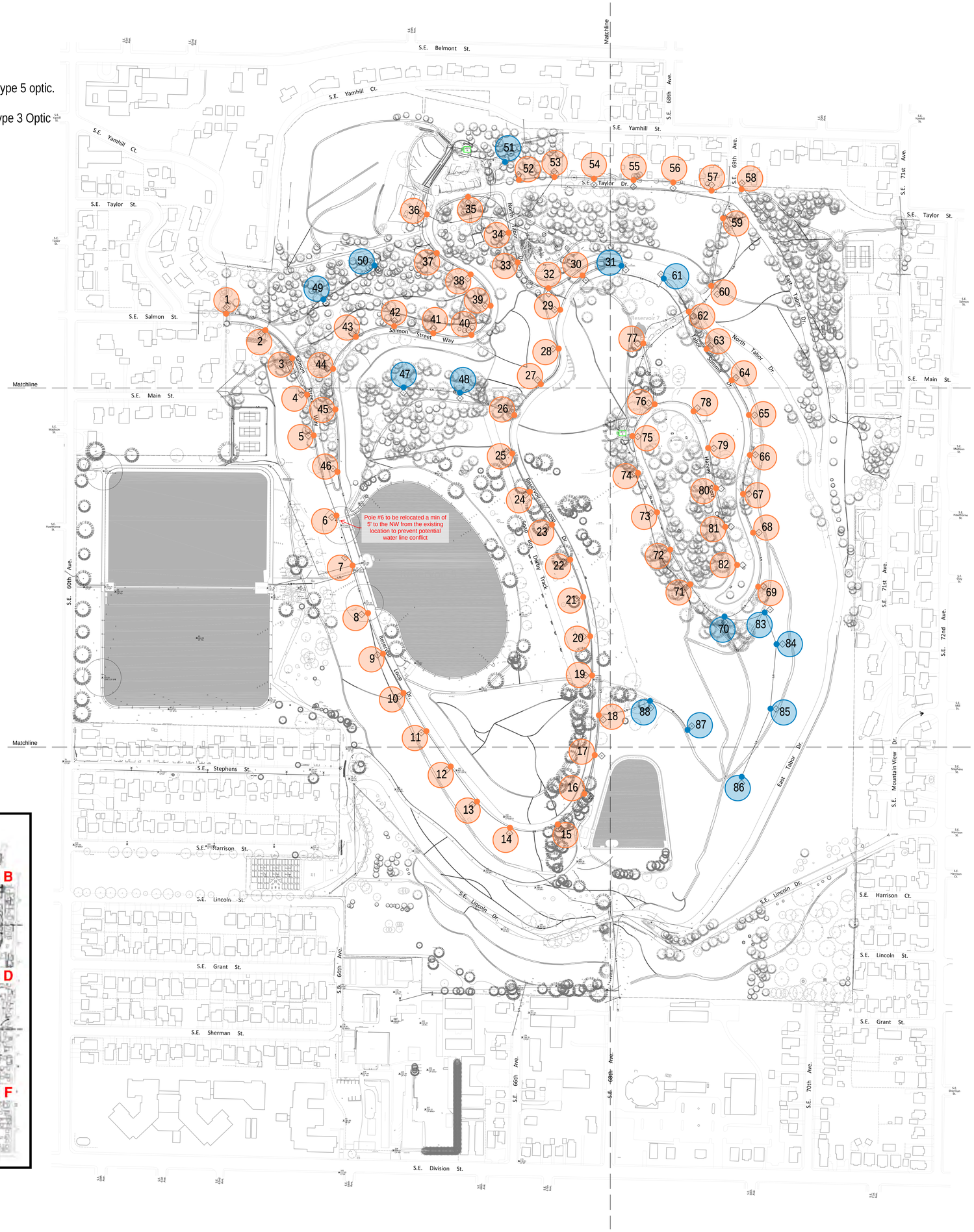
- (#) 14 Proposed Spring City William & Marry with Type 5 optic.
- (#) 74 Proposed Spring City William & Mary with Type 3 Optic

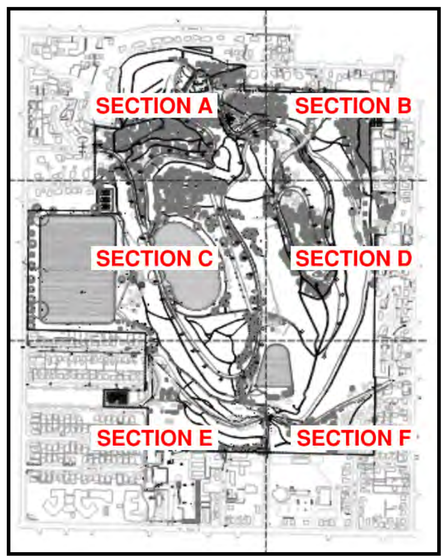
PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R — 1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.





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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 133.5417'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204362-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout

SHEET NUMBER:

L-7.1

LIGHTING UPGRADE SCOPE LEGEND

(#) 4 Proposed Spring City William & Marry with Type 5 optic.

(#) 23 Proposed Spring City William & Mary with Type 3 Optic

PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R

1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.

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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204362-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout - Section A

SHEET NUMBER:

L-7.2

LIGHTING UPGRADE SCOPE LEGEND

#	2	Proposed Spring City William & Marry with Type 5 optic.
#	10	Proposed Spring City William & Mary with Type 3 Optic

PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R

1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.

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PROJECT:

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SE 60th Ave & SE Salmon St,
Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204362-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout Section B

SHEET NUMBER:

L-7.3

LIGHTING UPGRADE SCOPE LEGEND

(#) 1 Proposed Spring City William & Marry with Type 5 optic.

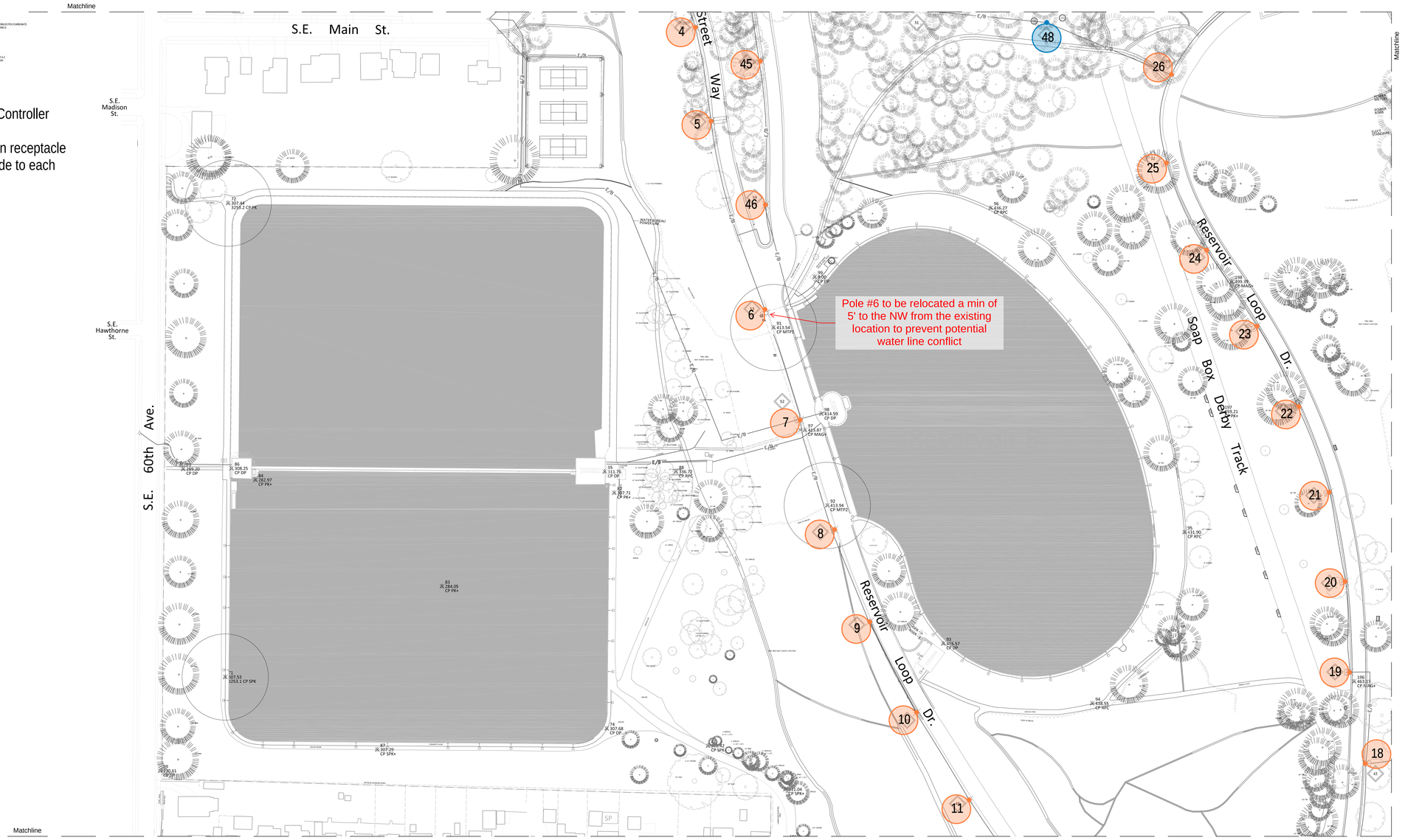
(#) 19 Proposed Spring City William & Mary with Type 3 Optic

PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R 1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.



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www.mckinstry.com

PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204382-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout Section C

SHEET NUMBER:

L-7.4

LIGHTING UPGRADE SCOPE LEGEND

#	6	Proposed Spring City William & Marry with Type 5 optic.
#	16	Proposed Spring City William & Mary with Type 3 Optic

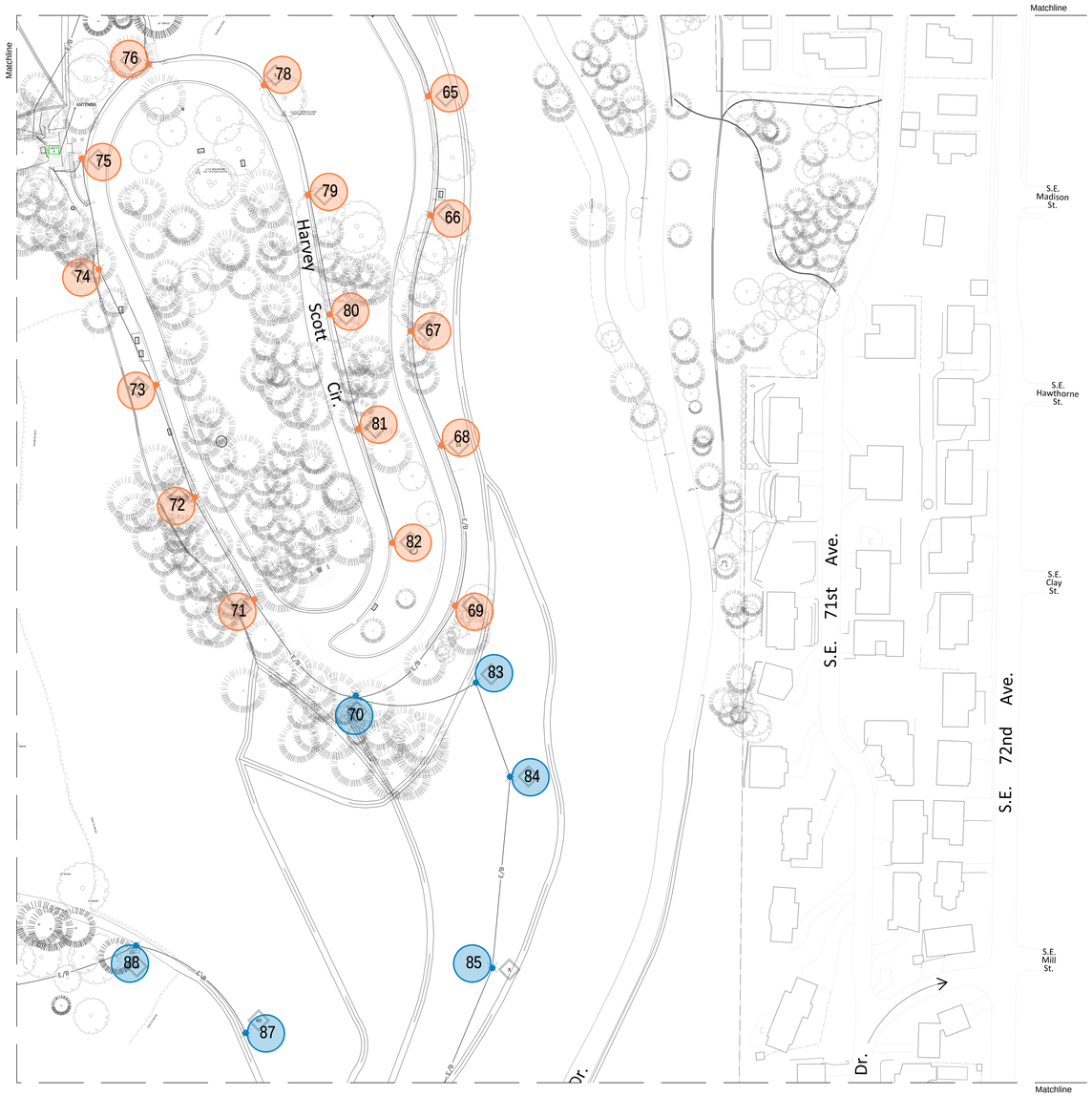
PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R

1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.



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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St,
Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204382-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout Section D

SHEET NUMBER:

L-7.5

LIGHTING UPGRADE SCOPE LEGEND

(#) 0 Proposed Spring City William & Marry with Type 5 optic.

(#) 6 Proposed Spring City William & Mary with Type 3 Optic

PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R 1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.

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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 20438Z-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout Section E

SHEET NUMBER:

L-7.6

LIGHTING UPGRADE SCOPE LEGEND

#	1	Proposed Spring City William & Marry with Type 5 optic.
#	0	Proposed Spring City William & Mary with Type 3 Optic

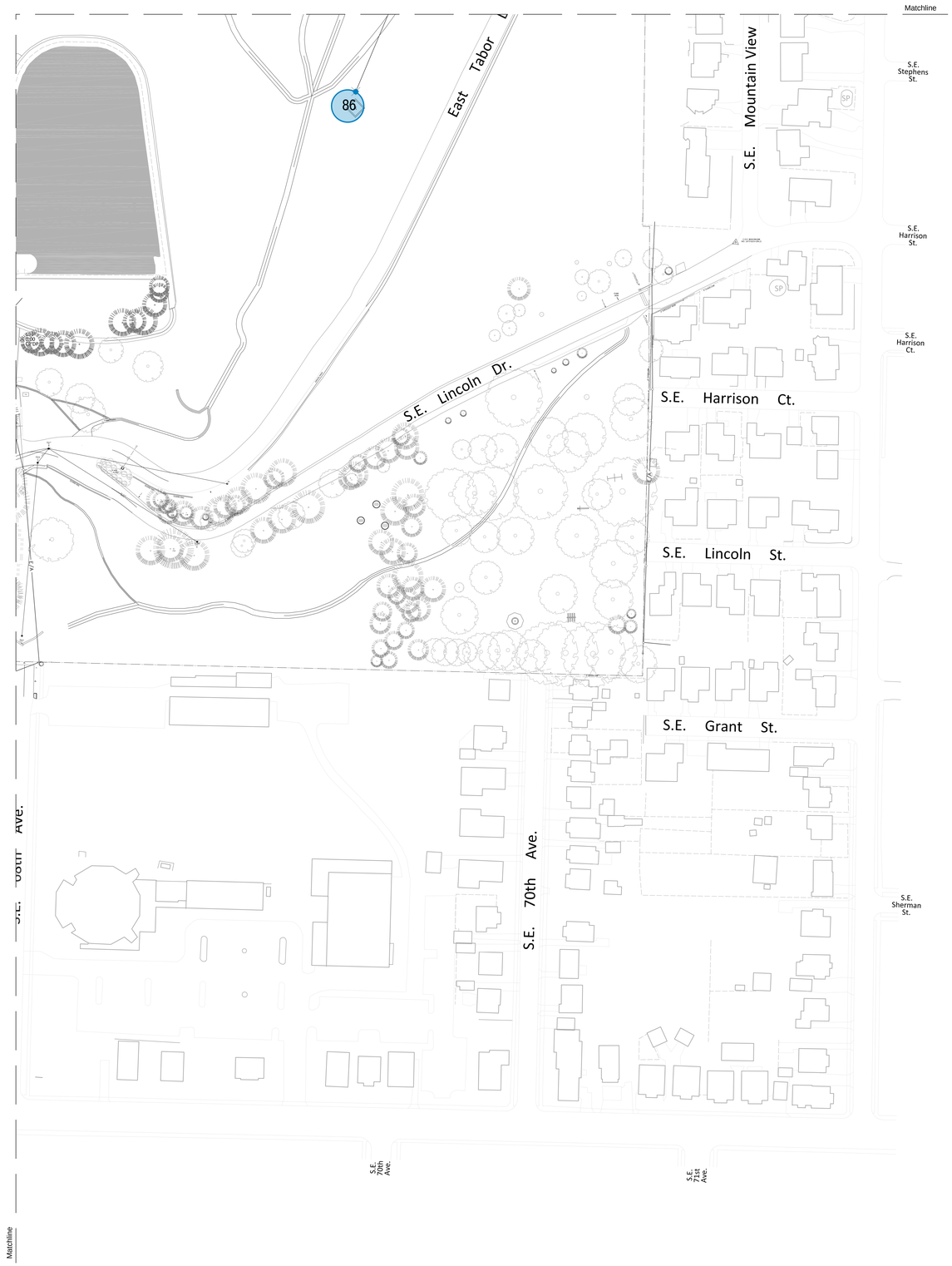
PROPOSED LUMINAIRE

LIGHTING CONTROLS

nECY R

1 nLight NECY Controller

Typical: Install 7-pin receptacle nLIGHT control node to each fixture.



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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

SCALE: 1" = 65'
SCALE IS CORRECT IF PAGE SIZE IS ARCH E (36"x48")

N

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204382-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Layout Section F

SHEET NUMBER:

L-7.7

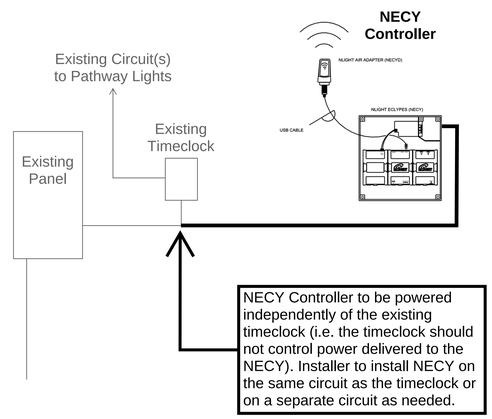
Pole #	Fixture	Lamp Distribution Type	Pole	Pole Footing Type	Pole Position
1	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
2	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
3	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
4	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
5	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
6	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
7	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
8	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
9	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
10	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
11	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
12	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
13	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
14	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
15	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
16	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
17	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
18	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
19	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
20	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
21	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
22	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
23	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
24	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
25	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
26	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
27	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
28	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
29	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
30	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
31	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
32	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
33	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
34	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
35	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
36	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
37	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
38	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
39	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
40	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
41	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
42	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
43	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
44	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
45	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
46	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
47	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
48	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
49	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
50	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E

Pole #	Fixture	Lamp Distribution Type	Pole	Pole Footing Type	Pole Position
51	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
52	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
53	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
54	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
55	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
56	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
57	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
58	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
59	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
60	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
61	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
62	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
63	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
64	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
65	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
66	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
67	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
68	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
69	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
70	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
71	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
72	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
73	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
74	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
75	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
76	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
77	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
78	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
79	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
80	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
81	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
82	Spring City	T3	12'2" Above Grade	Pole Footing (SK-1)	E
83	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
84	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
85	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
86	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
87	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E
88	Spring City	T5	12'2" Above Grade	Pole Footing (SK-1)	E

Fixture	Lamp Distribution Type	Qty by Type
Spring City SPEC-34261	T3	74
Spring City SPEC-34261	T5	14
	TOTAL FIXTURE COUNT	88

Pole Position Legend:
Existing = E
Relocate = R
New = N

Typical nLIGHT NECY Controller Layout



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PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

SE 60th Ave & SE Salmon St, Portland, OR 97215

CONSULTANTS:

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: Daniel Shaw
DRAWN: Daniel Shaw
CHECKED:
JOB NO: 204362-005 Pathway Light Pole Construction

SHEET TITLE:

0275-Mt. Tabor Park Proposed Pole Schedule

SHEET NUMBER:

L-7.8

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PROJECT PORTLAND PARKS & REC

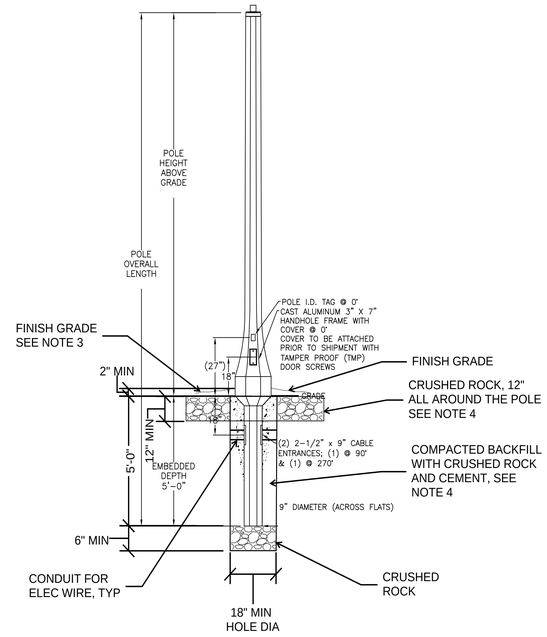
TITLE LIGHT POLE REPLACEMENT

BY MMR	SCALE NTS	JOB # 204362-006
DATE 10/04//23	REF.DWG	SHEET

ELECTRICAL POLE FOOTING SCHEDULE

Footing schedule

Park	Allowable Lateral Bearing Pressure (psf/ft)	FOOTING TYPE	Min Embed: (ft)	SKETCH NUMBER
Mt. Tabor	300	COMPACTED ROCK AND CEMENT BACK-FILL	5.0	SK-1



POLE FOOTING

SCALE: NTS

NOTE:
1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE ANY DIGGING.
2. COMPACT REQUIRED IN TWO OPERATION. TAMP 6" INTERVALS TO BOTTOM OF CABLE ENTRANC
3. FINISH COMPACTION TO A HEIGHT OF 2" ABOVE GRADE SLOPING AWAY FROM POLE TO ALLOW PROPER DRAINAGE.
4. CONTRACTOR TO PROVIDE CONCRETE MIX (CEMENTITIOUS MATERIAL) ALONG WITH CRUSHED ROCK (3/4 PLUS - MINUS) AT RATIO 1:4 OF CEMENT TO CRUSHED ROCK.

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206-762-3311

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PROJECT:
Portland Parks & Rec Light Pole Replaceme

ISSUES:

NO	DATE	DESCRIPTION
	08/07/23	ISSUED

DESIGNED: MMR
DRAWN: MMR
CHECKED: JWG
JOB NO: 204362

SHEET TITLE:
CONN DETAIL

SHEET NUMBER:
SK-1

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PORTLAND:
16790 NE MASON ST
SUITE 100
PORTLAND, OR 97230
503-331-0234

www.mckinstry.com

PROJECT:

City of Portland Parks & Recreation Bureau Pathway Light Pole Project

CONSULTANTS:

REGISTRATION:

ISSUES:

NO	DATE	DESCRIPTION
1	10/06/23	90% Completion Set
2	11/15/23	100% Completion Set

DESIGNED: MMR
DRAWN: MMR
CHECKED:
JOB NO: 204362-005 Pathway Light Pole Construction

SHEET TITLE:

Pole Footing Structural Details SK-1

SHEET NUMBER:

S-1

REVISED APP Exhibit List

Exhibit A – Portland City Council Ordinance #19122

Exhibit B – Official Zoning Maps # 3136, 3137, 3236, 3237

Exhibit C – Mt. Tabor Historic Districts

Exhibit D – Historic Zoning Maps

Exhibit E – Past Land Use reviews

Exhibit F – Historic records for illumination system (1958 Lighting Plan, 1984 Lighting + Electric As-Built Plan, 1987 Lighting Plan + Details, 1999 Restroom Electrical Plan) and Replacement Summary (notations on 1987 Lighting Plan)

Exhibit G – Comparison between existing and proposed

Exhibit H – Staff photographs showing existing pole conditions

Exhibit J – Mt. Tabor Park Historic District National Register listing

Exhibit K – December 28, 2022 Emergency Declaration (NEW)

Exhibit L – Administrative Rule FIN 6.11.03 USEFUL LIFE EXAMPLES, Capital Asset Administrative Procedures (NEW)

Exhibit M – Light Pole Safety Project Frequently Asked Question (NEW)

Exhibit N – Denver Parks & Recreation Trail Lighting Study (NEW)

Exhibit P – Laurelhurst Park Historic District National Register listing (NEW)

Exhibit Q – Excerpt from “Dark Skies - Strategies for Reducing Light Pollution in Portland” 2020 BPS Report (NEW)

(*note no capital I Exhibit to avoid confusion with lowercase l and no capital O Exhibit to avoid confusion with the numeral 0)

191222

Emergency Ordinance

*Amend contract with McKinstry Essention, LLC for energy savings performance contracting services not to exceed $18,500,000 (amend Contract 30007025)

Passed

The City of Portland ordains:

Section 1. The Council finds:

1. In partnership with the Office of Management and Finance (OMF) Procurement and the Bureau of Planning and Sustainability, Portland Parks & Recreation (PP&R) is committed to reducing our environmental footprint while improving the resiliency of our infrastructure. Our lighting, cooling, heating, and plumbing systems consume over $6 million per year in gas, electricity, and water and many of these systems are well beyond expected service life and contribute to our $600 million and growing capital maintenance backlog.

2. On April 5, 2017, City Council authorized a competitive solicitation per City Code 5.34.880 for an Energy Savings Performance Contract (ESPC) (Ordinance No. 188310). To complete the work most efficiently, PP&R determined that it would implement multiple design-build stages from one initial technical energy audit. On September 4, 2019, City Council accepted the Guaranteed Maximum Price for Stage 1 (GMP1) implementation of the ESPC. On November 20, 2019, the City entered into contract agreement with McKinstry Essention, LLC (Contract No. 30007025).

3. On December 28, 2022, the Commissioner-in-Charge signed an emergency declaration for lighting removal and replacement work to take place under this contract since many of the impacted parks and pathway lighting impacted by a structural deficiency were already within scope of the ESPC work.

Introduced by

Mayor Ted Wheeler

Bureau

Management and Finance; Revenue and Financial Services

Contact

Biko Taylor
Chief Procurement Officer
biko.taylor@portlandoregon.gov
503-823-1095

Kelly Davis-McKernan
Construction, Supervisor II
Kelly.Davis-McKernan@portlandoregon.gov
503-823-1248

Requested Agenda Type

Regular

Date and Time Information

Requested Council Date
April 5, 2023
Time Requested
15 minutes

4. Both this Stage 2 amendment (GMP2) and GMP1 derive from the same feasibility, analysis, technical energy audit, technical specifications and know-how for the performance guarantee provided by McKinstry Essention, LLC. Performance has been satisfactory for Stage 1, including: 40% DMWESB firm utilization; direct annual cost savings of over $79,000 per year; a 15% reduction of utility consumption at the Stage 1 sites; improved lighting coverage on pathways at seven parks; and DarkSky-compliant fixtures for improved conditions for wildlife.

5. In a continuation of that work, PP&R intends to award a GMP2 contract amendment that will include improvements to pathway lighting at an additional 12 parks; add more efficient heating and cooling to replace an obsolete heating-only system at Peninsula Park Community Center; and modernize the heating, ventilation, and air-conditioning system at Charles Jordan Community Center and East Portland Community Center so that they are better able to function in poor outdoor air quality environments. These investments support the Climate Emergency Declaration and Workplan and avoid 327 Metric Tonnes of CO2 per year – the equivalent of 1,222,000 miles not driven in an internal combustion engine car.

6. The current contract amount is $1,071,124.24 incorporating change-orders 1 and 2, and the GMP 2 amendment's cost is anticipated to be $14,500,000, including the emergency approved change orders 3 and 4 for pole and base removals. An additional amount of $2,928,875.76 is being requested as a contingency in case other issues arise during construction and change orders are required, for a new contract not to exceed value of $18,500,000.

7. Sufficient funds are expected to be available in the Parks Capital Improvement Program Fund, No. P00924.

NOW, THEREFORE, the Council directs:

A. The Chief Procurement Officer is authorized to execute amendment(s) that are approved as to form by the City Attorney's office and/or change orders to Contract 30007025 if the contract not-to-exceed amount is $18,500,000 or less.

B. The Mayor and City Auditor, or their designee(s), are hereby authorized to draw and deliver checks when demand is presented and approved by the property authority.

Section 2. The Council declares an emergency exists due to the need for climate action and to replace removed pathway lighting for public safety; therefore, this Ordinance shall be in full force and effect from and after its passage by the Council.

Official Record (Efiles)

Ordinance and testimony
(https://efiles.portlandoregon.gov/record/16069363)

An ordinance when passed by the Council shall be signed by the Auditor. It shall be carefully filed and preserved in the custody of the Auditor (City Charter Chapter 2 Article 1 Section 2-122)

Passed by Council
April 5, 2023

Auditor of the City of Portland
Simone Rede

Impact Statement

Purpose of Proposed Legislation and Background Information

Authorize the Chief Procurement Officer to execute amendment(s) that are approved as to form by the City Attorney's office and/or change orders to Contract 30007025 if the contract not-to-exceed amount is $18,500,000 or less.

This is the second stage of a Guaranteed Maximum Price Energy Savings Performance Contract (ESPC) which was originally competitively bid in 2017. ESPCs follow City Code 5.34.880 where an expert firm performs technical analysis and feasibility of efficiency work and then performs and guarantees the utility savings of selected and funded designs. Stage 1 covered nine locations and this second stage covers an additional fifteen.

This Stage 2 amendment will improve pathway lighting at an additional 12 parks; add more efficient heating and cooling to replace an obsolete heating-only system at Peninsula Park Community Center; and modernize the heating, ventilation, and air-conditioning system at Charles Jordan Community Center and East Portland Community Center to ones that are better able to function in poor outdoor air quality and in pandemic operating environments.

Financial and Budgetary Impacts

Based on the proposed Guaranteed Maximum Price and also including contingency, Parks anticipates the contract cost to be up to $18,500,000.00. The additional amount in the amendment authorization ordinance includes the original award plus additional contract contingency should the scope change between now and the end of 2024.

The current contract amount is $1,071,124.24 incorporating change-orders 1 and 2, and the GMP 2 amendment's cost is anticipated to be $14,500,000,

including the emergency approved change orders 3 and 4 for pole and base removals. An additional amount of $2,928,875.76 is being requested as a contingency in case other issues arise during construction and change orders are required, for a new contract not to exceed value of $18,500,000.

Funds are expected available from the following sources:

- Capital Set Aside: $2,083,852
- System Development Charges: $900,000
- Metro Bond Local Share: $2,000,000
- PP&R Major Maintenance: $8,916,148
- Department of Energy Block Grant: $600,000
- Total anticipated funds available: $14,500,000.00
- Previous contract amount: $1,071,124.24
- Additional authorization for contingency: $2,928,875.76
- Sum of authorization: $18,500,000.00

No positions will be created, eliminated or re-classified as a result of this legislation. This project will reduce (or avoid the increase of) ongoing operating costs at the sites where these investments will be made.

Community Impacts and Community Involvement

The investment supports the Climate Emergency Declaration and Workplan and avoid 327 Metric Tonnes of CO2 per year – the equivalent of 1,222,000 miles not driven in an internal combustion engine car. In addition to progress on our major maintenance backlog, informal community feedback from the lighting conversion completed in the earlier pilot was positive and responds to extensive community involvement which shows extensive interest and concern about safety in-general and park lighting in-particular. The improved lighting is not only more energy efficient but also provides better coverage, appears brighter, and is more reliable. Based on preliminary consultation with the PP&R Community Engagement Team, implementation of the work will take an *inform* approach, where interested and impacted parties will be kept up to date on construction impacts through the project website, signage, and other appropriate site-specific strategies.

100% Renewable Goal

This projects advances the City's Renewable Energy Goal by improving the energy efficiency of our infrastructure to avoid the future consumption of over 362,313 kWh of electricity per year and over 10,092 therms of natural gas.

Budget Office Financial Impact Analysis

Based on the proposed Guaranteed Maximum Price and included contingency, the anticipated amended contract cost is expected to be up to $18.5 million. That amount includes the original award plus additional contact contingency should the scope change. Funding for this project is expected to be available from the following sources: Capital Set Aside: $2,083,852; System Development Charges: $900,000; Metro Bond Local Share: $2,000,000; PP&R Major Maintenance: $8,416,148; Department of Energy Block Grant: $600,000. Ongoing operating costs at the sites of these investments will be reduced or stay the same.

Breakdown of the total amount: The current unamended contract is $1,050,624.24. Including all change-orders and GMP2, the amendment's cost is anticipated to be $14.5 million. The contingency is $2,949,375.76. The amendment's cost and the contingency total are for the new contact that is not to exceed $18.5 million.

Agenda Items

264 Regular Agenda in April 5, 2023 Council Agenda (https://www.portland.gov/council/agenda/2023/4/5)

Passed

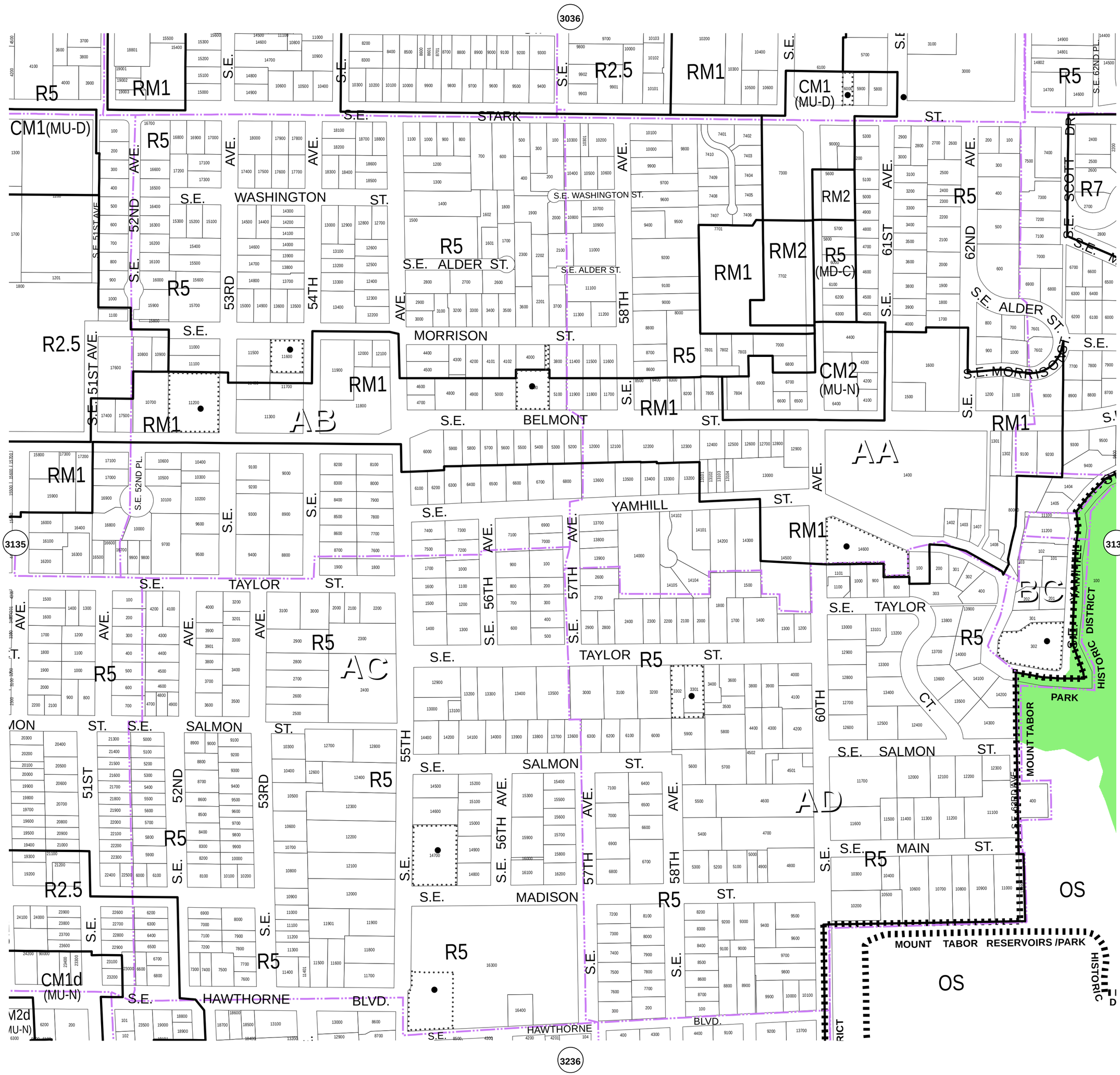
Commissioner Dan Ryan Yea

Commissioner Rene Gonzalez Yea

Commissioner Mingus Mapps Yea

Commissioner Carmen Rubio Yea

Mayor Ted Wheeler Yea



3136

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
NE 1/4 SEC. 06 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH

0 100 200 300
SCALE IN FEET

NOTE:
Zoning designations are subject to change; verify zoning prior to development or sales.

Legend

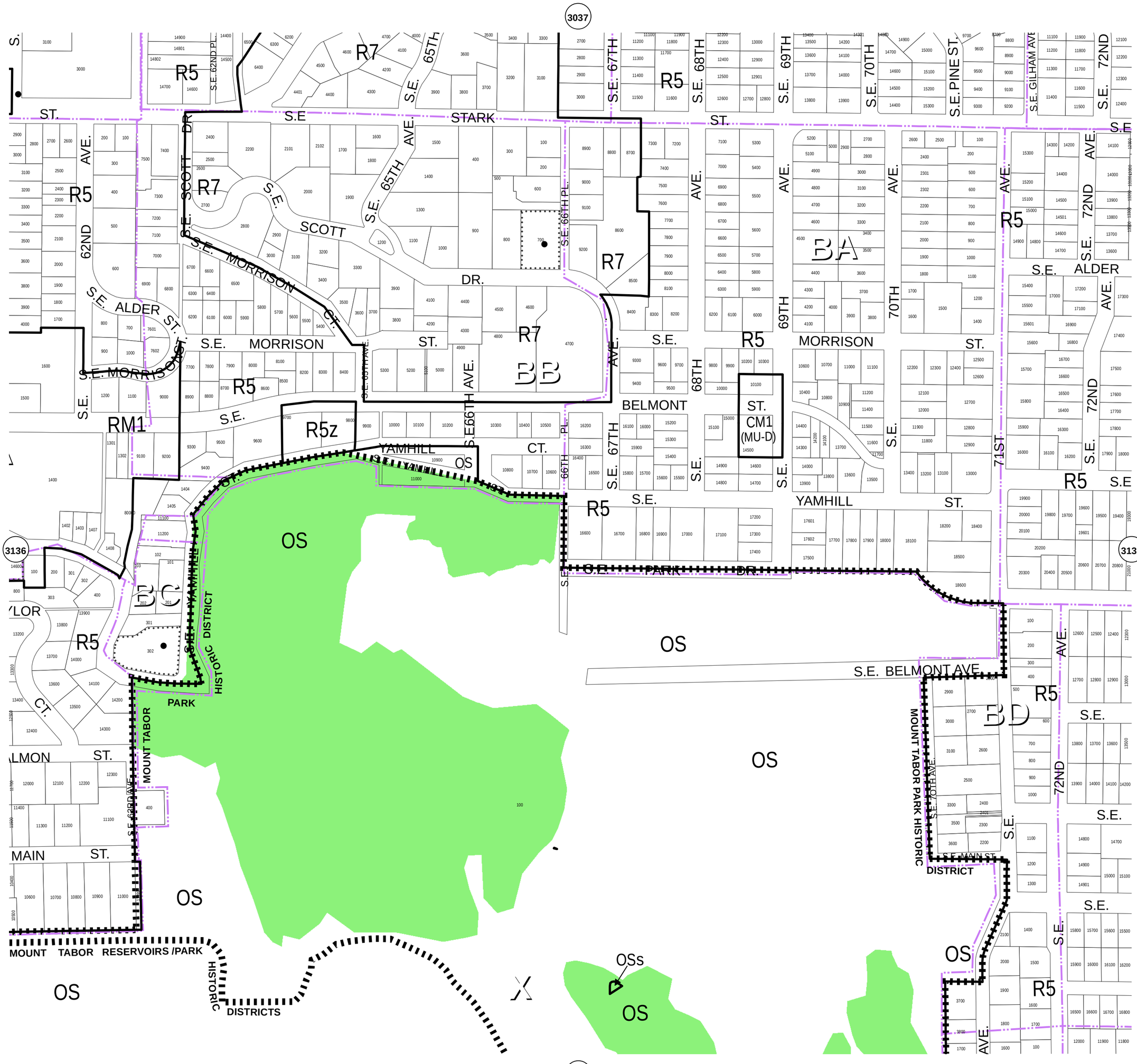
- R10 — **Current Zoning**
- (R10) — **Comprehensive Plan designation where there are other corresponding zones**
- ☆☆☆☆☆ — **Major Public Trails**
- **State ID Map Boundary**
- **Plan District Boundary**
- **Historic, Conservation, or National Register District Boundary or [1] N.R.M.P. Boundary**
- **Historic, Conservation, or National Register Landmark**
- **City Boundary**
- **Urban Service Area Boundary**
- **Unincorporated County with zoning applied**
- **Unincorporated County with Comprehensive Plan designation only**

Environmental Overlay Zones (see environmental zone note)

- **Protection overlay zone (p)**
- **Conservation overlay zone (c)**
- **Pleasant Valley natural resource (v)**

Environmental Overlay Zone Note: Protection (p); Conservation (c); Pleasant Valley Natural Resource (v), are represented on this map in color. These overlay zones are not labeled. All other overlay zones are represented with boundary lines and labels.

[1] N.R.M.P. - Natural Resource Management Plan



3137

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
NW 1/4 SEC. 05 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH

0 100 200 300
SCALE IN FEET

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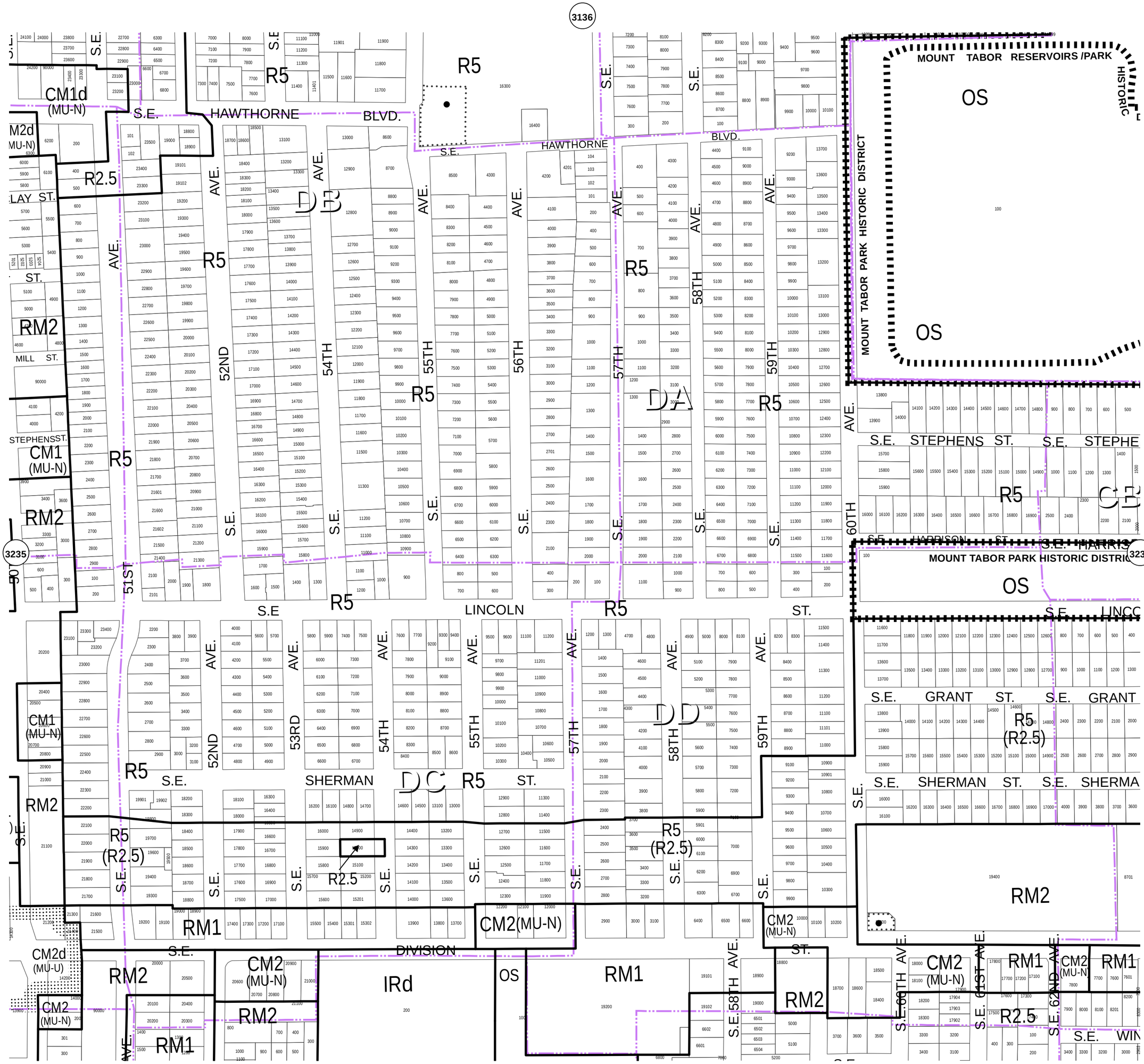

3236

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
SE 1/4 SEC. 06 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH
0 100 200 300
SCALE IN FEET

NOTE:
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Legend

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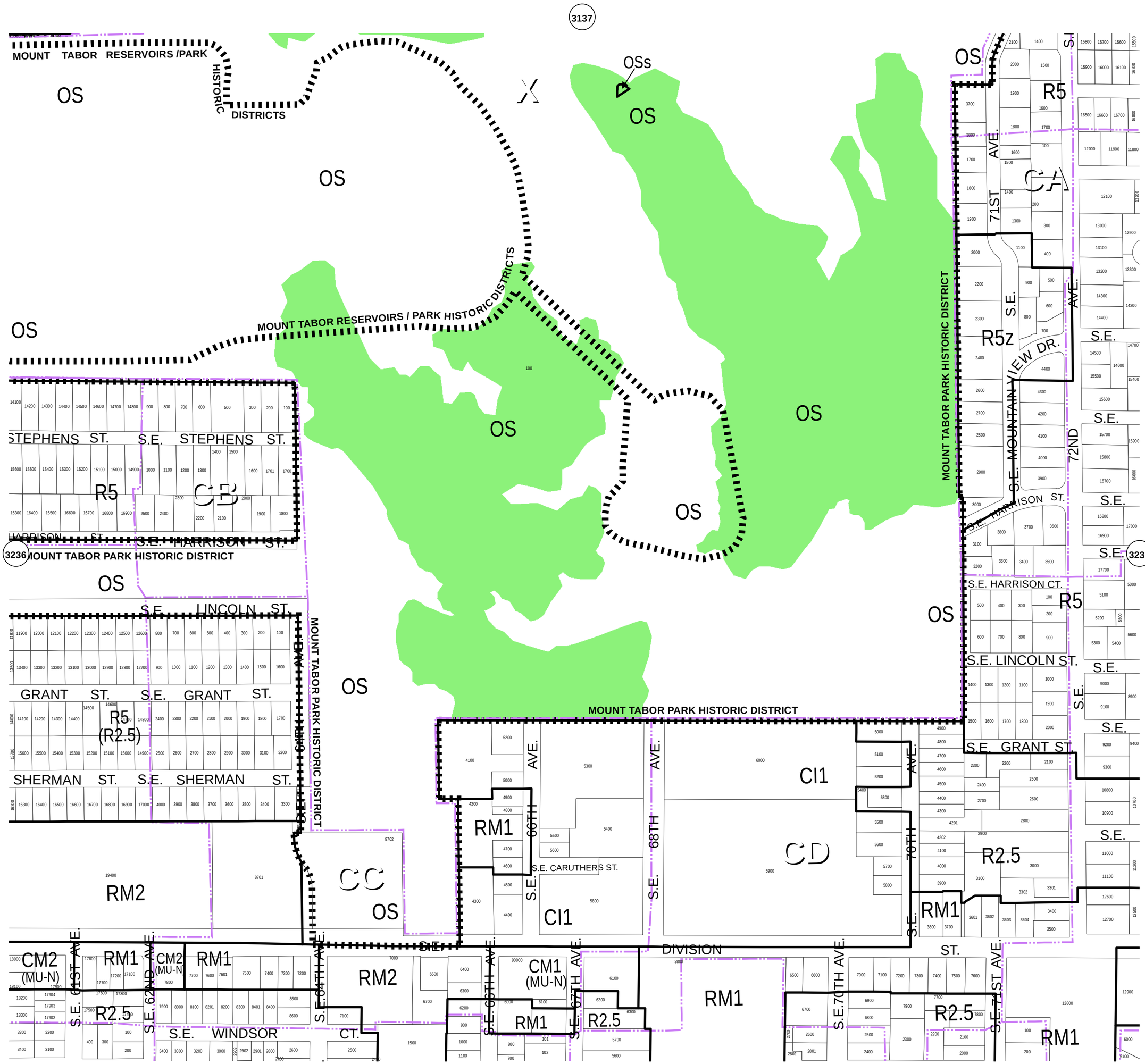

3237

ZONING REVISED:
10-01-2022

LEGAL DESCRIPTION:
SW 1/4 SEC. 05 - 1S - 2E

City of Portland, Bureau of Planning and Sustainability

NORTH

0 100 200 300
SCALE IN FEET

NOTE:
Zoning designations are subject to change; verify zoning prior to development or sales.

Legend

- R10 — **Current Zoning**
- (R10) — **Comprehensive Plan designation where there are other corresponding zones**
- ☆☆☆☆☆ — **Major Public Trails**
- **State ID Map Boundary**
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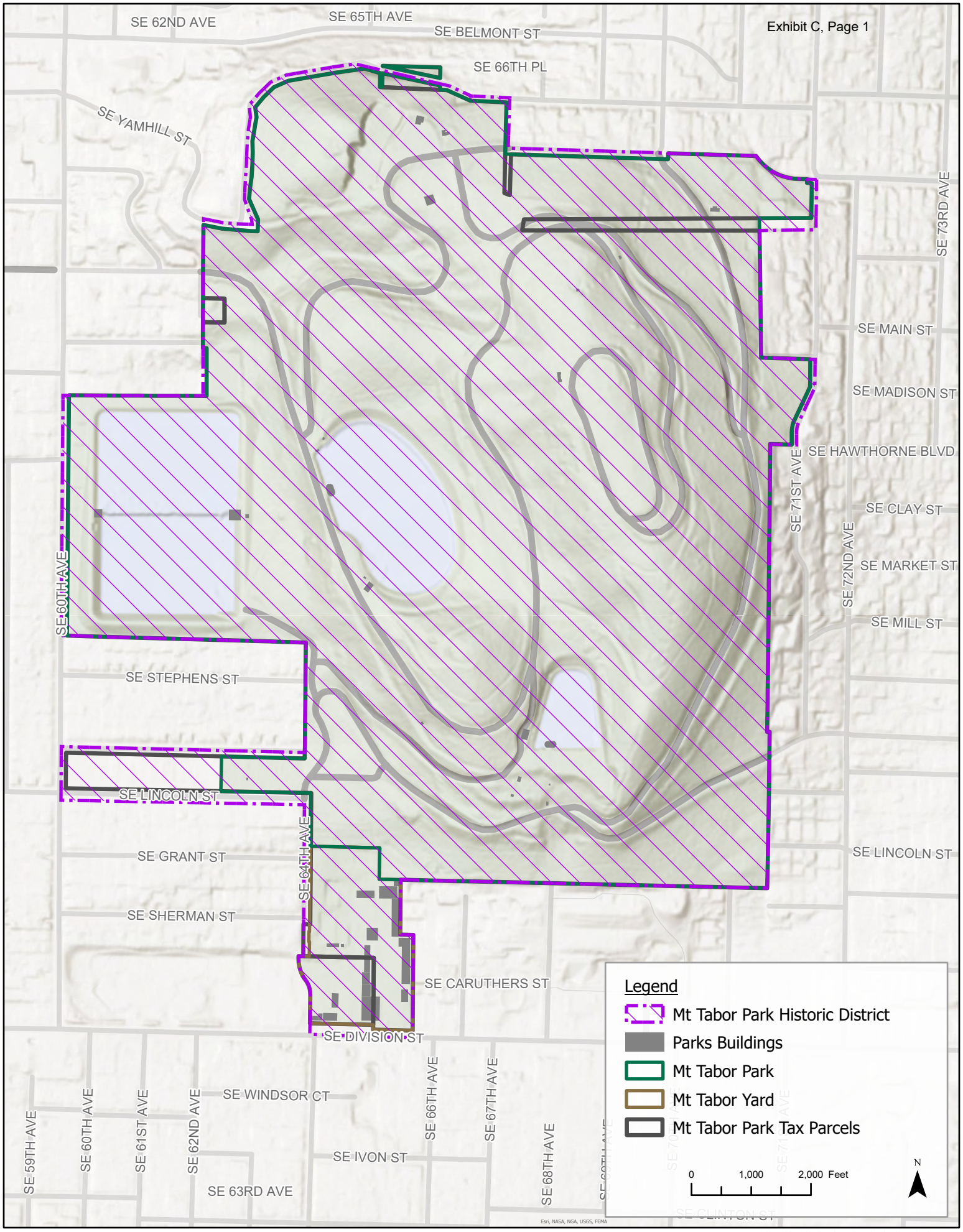
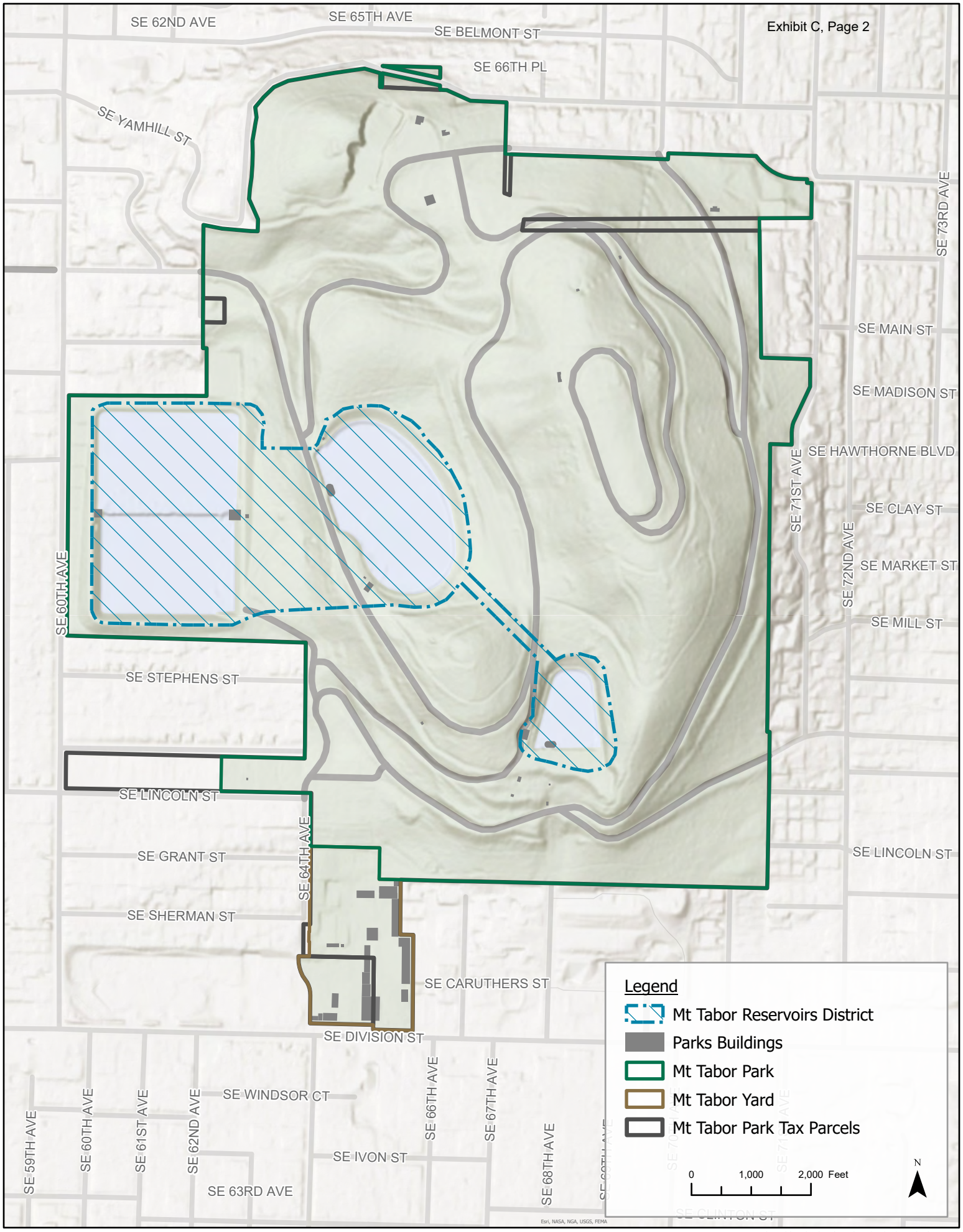


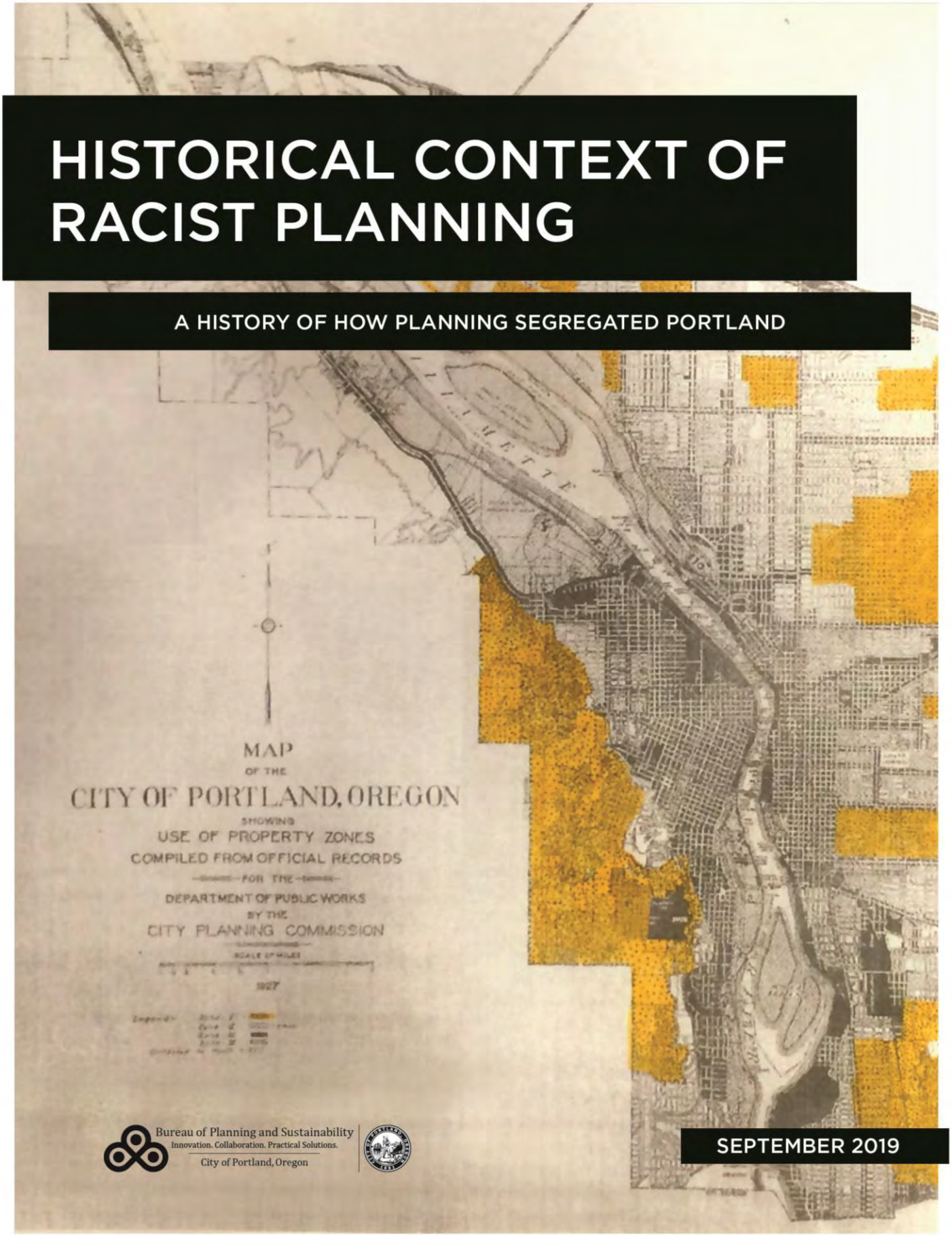
LU 23-088549 HR DM, Exhibit A.10



LU 23-088549 HR DM, Exhibit A.10

HISTORICAL CONTEXT OF RACIST PLANNING

A HISTORY OF HOW PLANNING SEGREGATED PORTLAND



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.
City of Portland, Oregon

SEPTEMBER 2019

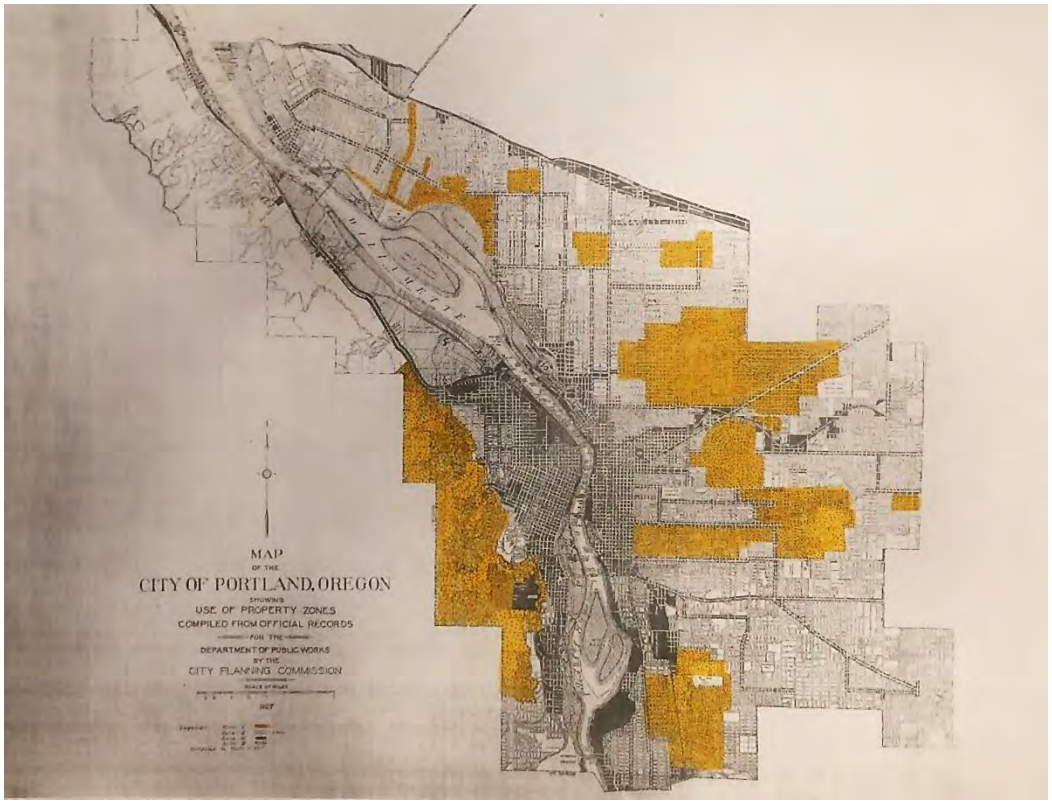


Figure 1. City of Portland map of Zone I single-family residential areas, 1927

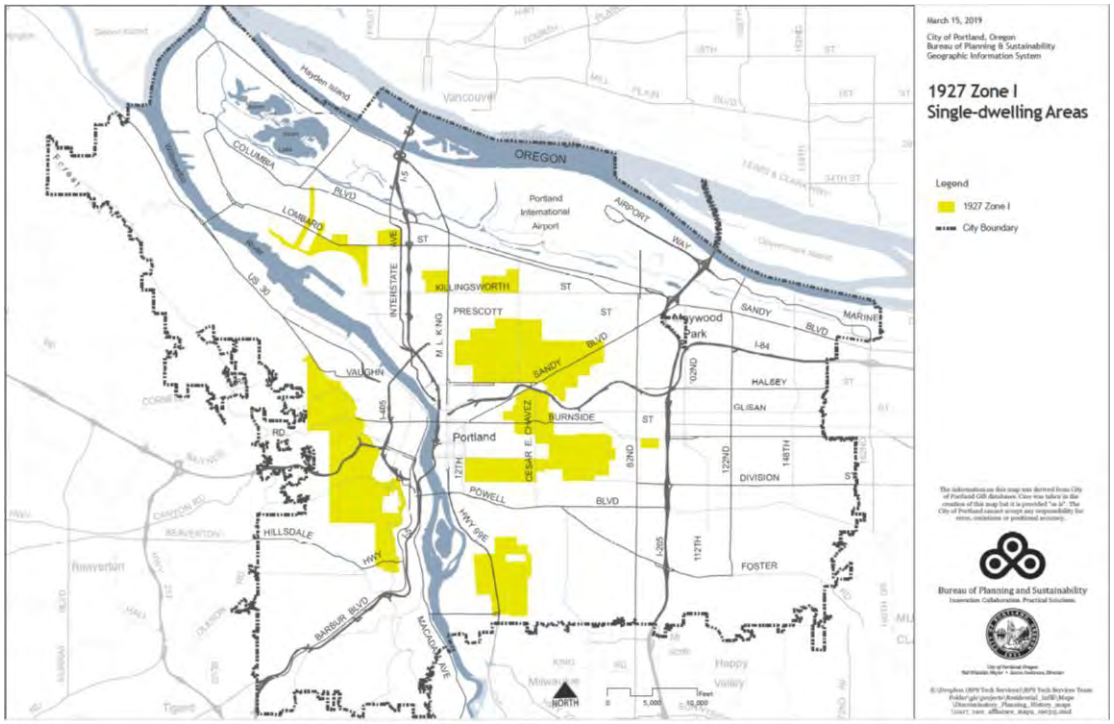


Figure 2. Current City of Portland map boundaries with 1927 Zone I single-family residential areas, 2019

Proposed Comprehensive Plan

Submitted to the Portland City Planning Commission

N

0 2000 4000 6000 Feet

0 500 1000 1500 Meters

COLUMBIA RIVER

WASHINGTON OREGON

Legend

City Land Use Designations

Open Space
Includes natural areas, cemeteries, golf courses, marinas, public and private parks, recreation facilities, boat launching areas, parkways and recreation areas. Open-space designated areas are zoned to either reflect their low-intensity character or in accordance with adjacent areas.

Farm and Forest
Permits agricultural uses as well as development of houses on lots not-less than two acres in size. The most intense zone allowed under this designation is **FF**.

Low Density Single-Family
Identifies areas subject to significant development constraints and limits residential sites to a minimum lot size of 10,000 sq. ft. Maximum zoning classification permitted is **R10**.

Medium Density Single-Family
Identifies areas subject to minor development constraints which would be limited to a minimum residential lot size of 7,000 sq. ft. Maximum zoning permitted is **R7**.

High Density Single-Family
Continues Portland's most common pattern of single-family development. One house is allowed on a 5,000 sq. ft. lot. Maximum zoning permitted is **R5**.

Attached Residential
Permits a mixture of housing types of a single-family character, including rowhouses. Infill redevelopment would be allowed on a minimum of two lots averaging to 2,500 sq. ft. each. Side yards would not be required except adjacent to existing detached single-family homes and on corner lots. Maximum zoning permitted is **R2.5**.

Low Density Apartments
Permits single-family homes, duplexes, rowhouses and garden apartments. One housing unit would be permitted for every 2,000 sq. ft. of lot area. Maximum zoning permitted is **A2**.

Medium Density Apartments
Permits single-family houses, duplexes, rowhouses and apartments. This is a variable density designation, allowing a range of 30-60 units per acre based upon a series of amenity packages.* Maximum zoning permitted is **A1.5**.

High Density Apartments
Permits high density apartments. Densities would range from 80 to 250 units per acre. Up to 20% of the building could be used for retail or office space, as a conditional use. Maximum zoning permitted is **AH**.

Downtown Apartment
Permits mid-rise to high-rise apartments. Up to 20% of the building could be used for neighborhood-oriented commercial. Density would be controlled by a separate overlay and would be based on an allowed ratio of gross building area to site area. Maximum zoning permitted is **AX**.

Neighborhood Commercial
Provides for neighborhood-oriented commercial uses. Highly auto-oriented uses would not be allowed, site size would be limited, and motor vehicle parking, maneuvering and loading areas could not be located in required yards. Maximum zoning permitted is **C4**.

Local Commercial
Permits all types of retail and service uses that may benefit from proximity to transit services and meet district and neighborhood needs. There is no minimum parking requirements, and auto-oriented commercial uses are not allowed. Maximum zoning permitted is **C3**.

General Commercial
Allows a full range of commercial uses, and some light industrial activities as a conditional use. Maximum zoning permitted is **C2**.

Downtown Commercial
Permits high-rise commercial and apartment buildings in the downtown. Building bulk and height would be controlled by an overlay zone to focus development along transit routes and to protect views, open space and historic areas. Maximum zoning permitted is **C1**.

Mixed Use
Allows a combination of apartment, commercial and light industrial activities. Single-family houses, duplexes, attached housing, and low and medium density apartments are permitted as are general commercial activities, labor intensive industrial, light manufacturing, warehousing and distribution. Maximum zoning permitted is **MU**.

Downtown Manufacturing
Permits certain industrial uses which require close proximity to the downtown. High density housing would be allowed as well as small commercial establishments oriented to meet the needs of the industrial and residential population. Maximum zoning permitted is **ME**.

General Manufacturing
Permits warehousing, distribution and all but the heaviest of manufacturing activities. Commercial uses would be allowed only as a conditional use. Housing would not be allowed. Maximum zoning permitted is **M2**.

Heavy Manufacturing
Permits a full range of manufacturing activities, sea and rail terminals and associated warehousing. Commercial uses would be allowed only as a conditional use. Housing would not be allowed. Maximum zoning permitted is **M1**.

County Land Use Designations

County Open Space
Includes parks, golf courses and other identified open spaces.

County Farm and Forest
Includes agricultural areas and commercial forests.

County Single-Family Residential
Includes all densities of single-family housing.

County Apartments
Includes all densities of apartment development.

County Commercial
Includes all forms and intensities of commercial development.

County Manufacturing
Includes all designations for manufacturing and industrial activity.

FROM THE PLANNING COMMISSION

Dear Portland Citizens:

The Portland Planning Commission is responsible for recommending a Comprehensive Plan for the City Council. This **Proposed Comprehensive Plan** is the response to that charge for meeting this responsibility. For the first six months of this year, a **Discussion Draft** of the Plan was distributed to over 13,000 interested individuals and organizations. Over 100 meetings were held for citizen review and discussion of the Draft. Many suggestions and ideas submitted in comments, both pro and con, received during the public review period. Although some elements have stayed the same, there have been many changes to update and improve the Plan.

The Planning Commission will begin public hearings on the **Proposed Comprehensive Plan** in September which will lead to a formal recommendation to the City Council by the first of 1980. After the City Council receives our recommendation they will hold additional public hearings and adopt Portland's Comprehensive Plan.

To those thousands of individuals who have worked with the Staff and the Commission thus far to help make this Plan a solid, workable guideline for the growth and development of our future, thank you! To those of you interested in the future of our city who are reviewing the proposals for the first time, I invite your participation and comments as we move toward the final stages of adopting a Plan. Your comments and participation now will continue to help us in our deliberations. No plan can meet the aspirations, hopes and aspirations of everyone. Our Plan will require compromise from all of us. It is a serious and difficult task, and the Planning Commission will need your guidance and help.

Sincerely,

Joan H. Smith

Joan H. Smith, President
Portland City Planning Commission

INTRODUCTION

The Comprehensive Plan establishes goals and policies to guide future public and private actions and investment decisions. The Plan will be used by all those in the City with:

- A set of Land Use and Public Facilities Goals and Policies to guide the development and redevelopment of the city;
- A Comprehensive Plan Map to guide zoning patterns in the city;
- A guide for the major public investments required to implement the Plan;
- A process for review and amendment of the Plan; and
- Recommendations for revising the Zoning Code to carry out the Policies and implement the Comprehensive Plan Map.

Goals and Policies establish **what** the City should do, while the Comprehensive Plan Map and Zoning Code provide the guidance and the tools for **where** and **how** to accomplish these Goals and Policies.

Land Use Goals and Policies provide a written framework for future program and funding decisions by the Portland Planning Commission and City Council.

Public Facilities Goals and Policies guide how we spend money each year to maintain and construct the facilities that are necessary to support the Comprehensive Plan. These policies were developed in cooperation with the Department of Public Works, the Bureaus of Water, Parks, Fire and Police, and Portland School District #1.

The **Comprehensive Plan Map** determines the type, location and density of land development and redevelopment permitted in the future. Although development in the city may not exactly match the map in five, ten or even twenty years, the map does show where different kinds of activities are likely to occur. It identifies potential development opportunities for meeting the city's housing and employment needs. The Comprehensive Plan Map designates land uses and densities at the maximum zoning classification allowable for each parcel of land.

The **Zoning Code** is the major "tool" for implementing the Plan. It establishes the specific regulations governing the development of land within the City. The Zoning Code must be revised to conform to the Plan. However, this cannot be done at the same time. Zoning must, by law, be consistent with the Comprehensive Plan, but does not mean that **all** land will be immediately rezoned. Where "downzoning" (rezoning to a less intensive use) is necessary to be consistent with the Comprehensive Plan Map, the law requires that this must be done when the Plan is adopted. However, "upzoning" (rezoning to a more intensive use) does not take place until a specific application for rezoning is submitted. Upzoning is recommended to occur on a case-by-case basis, using established zoning procedures, including notification and public hearings. The demand for upzoning will depend on such factors as stability or change in the area, evaluation of public utilities or services, and adequacy of transportation facilities. By not automatically changing the zoning to the maximum level permitted by the Comprehensive Plan Map, existing uses should not be prematurely "forced out" of an area.

With all of these elements working together (the Land Use and Public Facilities Goals and Policies; the Comprehensive Plan Map and the Zoning Code), Portland can move into the future, changing needs while preserving the qualities that make Portland a desirable place to live, work and play.

Additional information on each of the Goals and Policies Sections, the Plan Map and the Proposed Zoning Code Revisions is available in individual support documents. Copies may be obtained at the BUREAU OF PLANNING, 424 S.W. MAIN, PORTLAND, OREGON 97204 (Telephone 248-4250).

LOOKING AHEAD
A VISION OF PORTLAND'S FUTURE

Portland is more than a geographic area—it is a way of life. Many characteristics combine to provide the unique livability of the city: the physical setting of the hills, trees and rivers accented by snow-capped peaks on the horizon; a dynamic urban setting enhanced by the intense, yet human, character of the Downtown; an active seaport a hundred miles from the ocean; thriving businesses and industries providing substantial employment; and a variety of neighborhoods, each unique in character, allowing for a broad range of lifestyles.

The passage of time inevitably brings changes. Portland today differs from the city of twenty or a hundred years ago; it differs from the city of yesterday. The future seems to be arriving at an ever-increasing pace, and in ways that could future seems to be arriving at an ever-increasing pace, and in ways that could future seems to be arriving at an ever-increasing pace, and in ways that could future seems to be arriving at an ever-increasing pace, and in ways that could future seems to be arriving at an ever-increasing pace, and in ways that could future seems to be arriving at an ever-increasing pace, and in ways that could damage the character and livability of the urban area. Portland is an urban area—a fact that cannot change. The task facing us is to retain the most important characteristics of our city in the face of changes we cannot control and to manage changes as well as possible. These forces we can control. We must accept some changes as well as possible. These forces we can control. We must accept some changes or we can the net of losing all the things that make Portland "one of America's most livable cities."

The question that make Portland so livable continue to draw more households to the city. Energy resources, particularly petroleum products, are becoming both more expensive and more scarce. Land and housing costs continue to increase, as do the costs for providing needed public facilities and services. Planning for the future must respond to these factors while preserving the city's economic, social and livability.

Portland has developed historically into a land use pattern that is, and can continue to be, basically sound. The early cities of East Portland, St. Johns, Albina, Sellwood and Lents grew from a series of commercial, industrial and residential centers within Portland. The trolley lines that joined these cities to downtown Portland and to each other helped form communities as Multnomah, Lents, Woodstock, Kenton and Sunnyside, became integrated into the larger urban complex. Downtown Portland developed as the major activity center of the metropolitan region, providing a financial, retail, industrial, cultural and residential core that is still alive and energetic, and must remain so. Well established, close-in industrial and distribution areas provide diverse employment opportunities close to a broad range of housing options.

The **Proposed Comprehensive Plan** calls for maintaining this basic development pattern while providing direction for responding to future trends. The proposed land use pattern limits the more intense residential densities to areas which reinforce the workability of public transit. The commercial centers along transit corridors are designed for new land uses which are not highly dependent on the automobile. A "new" type of single-family housing development is permitted—attached residential, or rowhousing. This housing type allows some increase in density, reduced land and construction costs per unit, and yet retains the qualities of the traditional single-family neighborhoods that now exist.

Provisions are included which allow more efficient use of large homes and vacant land, encourage apartment developments to be more compatible with other residential uses, promote energy conservation, strengthen existing commercial areas, preserve and enhance environmental quality in the city, and stabilize existing neighborhoods from uncontrolled development speculation and deterioration. While to some people the Plan may change aspects of the city, change is designed to keep this change reasonable. In these ways, more affordable housing opportunities and more employment opportunities can be made available to encourage and provide for the needs of a diverse population. More effective use of public facilities is possible; more people can be close to existing employment and shopping services; costly urban sprawl can be reduced; and public transit can be more accessible to more people.

In the year 2000, the Downtown skyline will be different, with new development reaching upward, as well as unique, older areas being preserved. Both of these characteristics must work together to keep the city center alive. Residential areas will retain their individual character, but with some increase in density to reduce urban sprawl, increase energy efficiency and provide more affordable housing options. Neighborhoods will generally remain single-family oriented with some flexibility. Opportunities for rental units will cluster around corridors and centers which have good access to public transit to and from employment centers and shopping. Commercial and industrial activities will remain active and dynamic as existing firms continue to grow and new firms choose Portland as their home.

Portland's history and character have provided a sound foundation for the continued development of the city. The city must build on that foundation as we meet the challenges of the future, and respond in a manner which retains that unique "Portland" character.

PLANNING COMMISSION PUBLIC HEARINGS:

Sept. 11 Grant High School Auditorium
Sept. 18 Lincoln High School Auditorium
Sept. 20 Wilson High School Auditorium
Sept. 27 Roosevelt High School Auditorium
Oct. 4 Marshall High School Auditorium
Oct. 9 Cleveland High School Auditorium
Oct. 11 Portland Planning Bureau, Rm. 200

ALL HEARINGS BEGIN AT 7:00 PM.

LAND USE AND PUBLIC FACILITIES GOALS AND POLICIES

SECTION I: METROPOLITAN COORDINATION

GOAL:

1 The Comprehensive Plan shall be coordinated with Federal and State law and subject regional goals, objectives and plans adopted by the Columbia Region Association of Governments and its successor, the Metropolitan Service District (MSD), to promote a regional planning framework.

POLICIES:

1.1 URBAN GROWTH BOUNDARY
Support the concept of an urban growth boundary for the Portland metropolitan area.

1.2 URBAN PLANNING AREA BOUNDARY
Identify and adopt an urban planning area boundary outside the current city limits. The City will conclude agreements with adjoining counties establishing a process for monitoring activity within this boundary.

1.3 URBAN SERVICE BOUNDARY
Identify and adopt an urban service boundary within the urban planning area boundary.

1.4 INTERGOVERNMENTAL COORDINATION
Insure continuous participation in intergovernmental affairs with public agencies to promote coordinated metropolitan land use planning and maximize the efficient use of public funds.

1.5 FUTURE MSD PLANNING EFFORTS
Establish an update and review process that keeps Portland's Comprehensive Plan consistent with amendments that consider compliance with goals, objectives and plans adopted by MSD subsequent to acknowledgement of the Comprehensive Plan.

SECTION II: URBAN DEVELOPMENT

GOAL:

2 Maintain Portland's role as the major regional employment, population and cultural center through public and private investments that encourage expanded opportunity for housing and jobs, while retaining the character of established residential neighborhoods and business centers.

POLICIES:

2.1 POPULATION GROWTH
Allow for population growth within the existing city boundary by providing sufficient housing units that will accommodate the projected increase in city households by the year 2000.

2.2 URBAN DIVERSITY
Promote a range of living environments and employment opportunities for Portland residents in order to attract and retain a stable and diversified population.

2.3 ANNEXATION
Phase the annexation program of the City within the urban service boundary to allow for smooth transition in service provision, more logical city boundaries and capital improvements programming.

2.4 URBAN LANDS
The City shall encourage as reasonal policy that urban and urbanizable areas in the Portland metropolitan area shall be in an incorporated city.

2.5 OPEN SPACE
Provide opportunities for recreation and visual relief by preserving Portland's parks, golf courses, trails, parkways and cemeteries. Establish a system of open space lands and amenities that maximize the recreational use of the city's rivers, creeks, lakes, and sloughs.

2.6 **WILLAMETTE RIVER GREENWAY PLAN**
Implement the **Willamette River Greenway Plan** which preserves a strong working river economy, protects significant natural and historical areas, and reinforces development along the Willamette south of the Broadway Bridge.

2.7 FOREST LANDS
Protect forest lands in areas with commercial forested lands.

2.8 RESIDENTIAL NEIGHBORHOODS
Improve livability within existing residential neighborhoods while allowing for increased density. Provide for neighborhood-oriented commercial activities within residential areas under certain conditions.

2.9 DOWNTOWN PORTLAND
Reinforce the downtown's position as the principal commercial, service, cultural and high-density employment center of the city and the region. Maintain the downtown as the city's principal retail center.

2.10 HISTORIC/CULTURAL CENTERS
Expand the role of major historic or commercial centers which are well served by transit. Strengthen these centers with retail, office, service and tourist-oriented activities. Locate medium and high density apartment zoning adjacent to these centers.

2.11 TRANSIT CORRIDORS
Provide a mixture of activities along major transit routes to decrease dependence on the automobile. Encourage development of commercial uses and medium density apartments and allow labor-intensive industrial activities. Encourage attached residential and garden apartment development near transit routes especially where vacant land affords an opportunity for infill development.

2.12 AUTO-ORIENTED COMMERCIAL
Allow auto-oriented commercial activities to locate along major traffic streets designated for that purpose by the **Arterial Streets Classification Policy**. Also allow the location of small, labor-intensive manufacturing firms and small industrial firms which do not adversely impact adjacent residential areas.

2.13 INDUSTRIAL SANCTUARIES
Provide industrial sanctuaries. Encourage the growth of industrial activities in the city by preserving industrial land primarily for manufacturing purposes.

2.14 LIVING CLOSER TO WORK
Encourage higher density family residential densities near major industrial employment centers.

2.15 INFILL DEVELOPMENT
Discourage the development of new strip commercial areas and focus future activity in such areas to create a more clustered pattern of commercial development.

2.16 TRANSIT STATIONS
Where new regional transit facilities and stations are to be sited, increase opportunities for commercial activities, the development of medium and high density apartments, and increased single-family density.

2.17 UTILIZATION OF VACANT LAND AND HOUSING STOCK
Provide for fuller utilization of larger single-family homes and existing vacant land.

2.18 MIXED USE
Provide a mechanism that will allow for the continuation and enhancement of areas of mixed use character where such areas act as buffers and where opportunities exist for creation of nodes or centers of mixed commercial, residential and apartment development.

SECTION III: NEIGHBORHOODS

GOAL:

3 Preserve and reinforce the stability and diversity of the city's neighborhoods while providing for increased density in order to attract and retain long-term residents and businesses and ensure the city's residential quality and economic vitality.

POLICIES:

3.1 PHYSICAL CONDITIONS
Adopt programs and programs to prevent the deterioration of existing structures and facilities.

3.2 SOCIAL CONDITIONS
Provide and coordinate programs to promote neighborhood interest, concern and security and to minimize the social impacts of land use decisions.

3.3 NEIGHBORHOOD DIVERSITY
Promote neighborhood diversity and security by encouraging a balance in age, income, race and ethnic background within the city's neighborhoods.

3.4 HISTORIC PRESERVATION
Preserve and retain historic structures and areas throughout the city.

3.5 NEIGHBORHOOD INVOLVEMENT
Provide for the active involvement of neighborhood residents and business in decisions affecting their neighborhood through the promotion of neighborhood and business associations and their activities.

SECTION IV: HOUSING

GOAL:

4 Provide for a diversity in the type, density and location of housing within the city consistent with the adopted **City Housing Policy**, to provide adequate supply of safe, sanitary housing at price and rent levels appropriate to the varied financial capabilities of city residents.

POLICIES:

4.1 METROPOLITAN SERVICE DISTRICT AREAWIDE HOUSING OPPORTUNITY PLAN
Cooperate with the Metropolitan Service District and the Housing Authority of Portland in carrying out the MSD Areawide Housing Opportunity Plan.

The following policies were adopted by the Portland City Council, Ordinance #142737, on March 29, 1978 as the Housing Policy for the City of Portland.

4.2 FAIR HOUSING
Encourage and support equal access to housing throughout the city for all people regardless of race, sex, marital status, ancestry, national origin or physical or mental handicap, and encourage the responsible State and Federal agencies to enforce Federal and State civil rights and fair housing laws.

4.3 NEW HOUSING PRODUCTION
Assist the private sector in maintaining an adequate supply of single- and multi-family housing units. This shall be accomplished by revising primarily the homebuilding industry and private sector activities, supported by the elimination of unnecessary government regulations.

4.4 HOUSING CHOICE AND NEIGHBORHOOD STABILITY
Support public and private actions which increase housing choices for Portlanders, with emphasis on housing and public improvement programs which: 1) improve the balance in the city's population by attracting and keeping in the city families with children; 2) maintain neighborhood schools; 3) increase the number of housing alternatives for both renter and owner; 4) improve the physical and environmental conditions of all neighborhoods.

4.5 LOWER INCOME ASSISTED HOUSING
Support and assist in planning for subsidized housing opportunities, which are primarily for households which cannot compete in the market for housing, utilizing all available Federal and State aids, in addition, it is City policy that public housing be divided between elderly and non-elderly families proportionate to their representation in the city's total need for low income housing. Public housing projects for families should be small, an optimum size of 30 units, located on scattered sites, and should achieve as broad an income mix as possible among tenants.

4.6 EXISTING HOUSING: MAINTENANCE
Encourage and assist the continuing maintenance of existing residential properties, both single- and multi-family. This maintenance will be accomplished through a voluntary housing maintenance code program to include marketing, inspection and financial assistance, aimed primarily at safety, sanitation, structural integrity and energy conservation.

4.7 EXISTING HOUSING: MAJOR REHABILITATION
Provide assistance for rehabilitation of housing beyond Housing Maintenance Code requirements: 1) if the assistance is supportive of ongoing community development activity; 2) on a voluntary basis; and 3) if the Existing Housing: Maintenance and New Housing Policies are being fulfilled.

SECTION V: ECONOMIC DEVELOPMENT

GOALS:

A review draft of the proposed City Economic Development Policy has been prepared and a process established for public review, discussion and public hearings. The following goals are included in the proposed Policy.

GOAL:

5A PUBLIC/PRIVATE DEVELOPMENT PARTNERSHIP
Foster a public/private development partnership responsive to the economic needs of Portland businesses and residents.

5B JOBS AND INCOMES
Support the development of the Portland economy to meet the employment needs and increase the disposable income of city residents.

5C BUSINESS AND INDUSTRY
Retain existing in-city firms, keep Portland competitive for new business and industry.

5D NEIGHBORHOOD ECONOMIC DEVELOPMENT
Develop and maintain self-supporting business and industrial opportunities; promote retail, service, employment and investment responsive to neighborhood economic development needs.

5E EQUALIZATION OF ECONOMIC OPPORTUNITY
Equalize the opportunities for employment and career advancement, business development, and education for those segments of the population facing the greatest institutional barriers to economic success.

5F OTHER PUBLIC OBJECTIVES
Support economic development and other publicly sponsored or funded activities are mutually supportive.

POLICIES—INDUSTRIAL:

5.1 Promote jobs for city residents by targeting economic development resources and encouraging increased employment density within business and industrial centers.

5.2 Retain in-city business and industry by improving essential resources such transportation access, increased land supply and flood control facilities.

5.3 Encourage the location of designated industrial districts for manufacturing and related support functions.

5.4 Provide industrial sites in the city through redevelopment of existing industrial districts and annexation of new land, to provide jobs for city residents and the retention of existing in-city industry.

5.5 Improve investment of goods and workers in the designated industrial districts.

POLICIES—COMMERCIAL:

5.6 Encourage commercial development that enhances the economic viability of the city and reinforces neighborhood vitality.

5.7 Maintain the central business district as the principal commercial center in the region consistent with the adopted Downtown Plan.

5.8 Support the vitality of commercial centers throughout the city as areas for trade and service.

5.9 Maintain transit-related commercial centers along designated major transit corridors.

5.10 Retain existing neighborhood commercial activities within walking distance of residential areas and encourage clustered siting of new neighborhood commercial development.

SECTION VI: TRANSPORTATION

GOAL:

6 Promote an efficient and balanced urban transportation system, consistent with the **Arterial Streets Classification Policy**, to encourage energy conservation, reduce air pollution, increase the use of vehicular traffic on residential neighborhoods and improve access to major employment and commercial centers.

POLICIES:

6.1 INTERGOVERNMENTAL COOPERATION
Encourage efficient management of the transportation resources located in the city and metropolitan area through cooperation and long range planning with Federal, State and local agencies.

6.2 REGIONAL AND CITY TRAFFIC PATTERNS
Create and maintain regional and city traffic patterns that protect the livability of Portland's established residential neighborhoods while improving access and mobility within commercial and industrial areas.

6.3 **ARTERIAL STREETS CLASSIFICATION POLICY**
Establish a street classification policy for the **Arterial Streets Classification Policy** to encourage energy conservation, reduce air pollution, increase the use of vehicular traffic on residential neighborhoods and improve access to major employment and commercial centers.

6.4 PUBLIC TRANSPORTATION
Encourage a safe, efficient metropolitan public transportation system serving Portland as an alternative to the automobile by providing more direct cross-town service, improved access to employment centers in the city and the region, and higher density residential development in the city center.

6.5 TRANSIT-ORIENTED DENSITY
Reinforce the link between public transportation and land use by increasing urban densities along designated major transit streets and near commercial centers.

6.6 TRANSIT-DEPENDENT POPULATION
Encourage a public transit system that addresses the special needs of the transit-dependent population.

6.7 MARINE AND AVIATION FACILITIES
Coordinate the planning and development of marine related land use and aviation facilities with the Port of Portland as well as other affected agencies, groups and individuals.

6.8 RAIL RIGHTS-OF-WAY
Encourage the preservation of existing rail rights-of-way for use in freight and passenger movement.

6.9 ALTERNATIVE URBAN TRAVEL
Provide support for alternative forms of urban travel, such as bicycling and walking. Link residential neighborhoods to employment centers and commercial areas by providing bicycle paths and walk-ways.

SECTION VII: ENERGY

A review draft of the proposed City Energy Policy has been prepared and a process established for public review, discussion and public hearings. The following goal and policies are included in the proposed Policy.

GOAL:

7 To increase the energy efficiency of existing structures and the transportation systems of the city through policies and programs which encourage conservation of energy, promote renewable resources, reduce dependence on nonrenewable resources, while maintaining the attractiveness of the city as a place to live and do business.

POLICIES:

7.1 THE CITY'S ROLE IN ENERGY CONSERVATION
The role of the City is to ensure the achievement of the Goal. All of the energy policies are to be policies of the City and depend on City action. The City shall implement conservation actions directly by City government and encourage conservation actions by the private sector. This shall be accomplished through education, incentives and regulations. It shall be the City's efforts shall include promoting conservation; informing all sectors of available programs and conservation techniques; providing financial incentives; advocating the support of the City efforts at the state, regional, and federal levels; and regulating conservation actions where appropriate. The City shall evaluate indicators of energy consumption to assure the effectiveness of conservation efforts of all sectors of the public sector activity.

7.2 RETROFIT OF EXISTING BUILDINGS AND EQUIPMENT
All buildings in the city shall be made as energy efficient as is economically possible as determined by costs of conservation measures and city government energy. The retrofit of existing buildings for the purpose of energy conservation shall be accomplished by voluntary means initially. However, if mandatory requirements imposed five years after the adoption of the policy. Retrofit programs will be required to demonstrate the cost-effective, comprehensive, and have the most equitable impact possible on all sectors of the community.

7.3 LAND USE
The City shall develop land use policies which take advantage of density and location to reduce the need to travel, increase access to transit, and permit building configurations which increase the efficiency of space heating and cooling.

7.4 RENEWABLE RESOURCES AND SUPPLEMENTAL ENERGY SYSTEM
The long-range impact of increasing fossil fuel prices on land and business use shall be reduced by encouraging the application of renewable and alternative energy sources.

7.5 TRANSPORTATION
The consumption of nonrenewable fuels for transportation shall be reduced through actions which increase the efficiency of the transportation system operating within the city. These actions shall be coordinated to encourage the method of travel which is the most fuel-efficient for the purpose of the trip; promote the energy-efficient movement of goods; and provide alternatives for the use of fuel efficient vehicles.

7.6 CITY GOVERNMENT
City bureaus shall reduce energy consumption by investing in energy conservation opportunities and changing operational procedures to the most energy- and cost-effective extent possible.

SECTION VIII: ENVIRONMENT

GOAL:

8 Maintain and improve the quality of Portland's air, water and open space resources and protect neighborhoods and business centers from detrimental noise pollution.

POLICIES—AIR QUALITY:

8.1 Continue to cooperate with public agencies concerned with the improvement of air quality, and implement State and regional plans and programs to attain overall Federal air quality standards. Cooperate and work with MSD and the State Department of Environmental Quality in efforts to reach attainment of Federal ambient air quality standards for ozone by 1987 and carbon monoxide by 1985.

8.2 The revised **Downtown Parking and Circulation Plan** will guide future City policies on attaining air quality standards in the central business district and allow for expanded employment and housing opportunities downtown.

8.3 Develop strategies that will allow for economic growth and air quality improvements in air quality problem areas identified outside of Downtown.

8.4 Promote use of ride sharing and public transit throughout the metropolitan area.

POLICIES—WATER QUALITY:

8.5 Continue cooperation with Federal, State and regional agencies involved with the management and quality of Portland's water resources.

8.6 Operate, plan and regulate wastewater systems as designated in MSD's **Waste Treatment Management Component**.

8.7 Maintain coordination of land use planning and capital improvements to insure the most efficient use of the City's sanitary and stormwater run-off facilities.

POLICIES—LAND RESOURCES:

8.8 Protect Portland parks, cemeteries and golf courses from future development that threatens their Open Space function on the Comprehensive Plan Map.

8.9 Restrict development within Portland's natural drainageways through development and application of a drainageway overlay zone.

8.10 Protect and preserve the natural and economic qualities of lands along the Willamette River through implementation of the City's **Willamette River Greenway Plan**.

8.11 Retain qualification in the National Flood Insurance Program through implementation of a full range of floodplain management measures.

8.12 Limit the density of development in areas of natural hazards.

POLICIES—NOISE:

8.13 Reduce and prevent excessive noise and vibration in attached residential dwellings through construction requirements.

8.14 Reduce and prevent excessive noise levels from one use which may impact another use through on-going noise monitoring and enforcement procedures.

SOLID WASTE

GOAL:

11D Provide for adequate solid waste disposal.

POLICIES:

11.28 DISPOSAL
Reduce reliance on landfilling for disposal of solid waste through support of the Metropolitan Service District's **Solid Waste Management Plan**.

11.29 ENERGY RECOVERY
Support the development and utilization of solid waste energy recovery systems.

11.30 COLLECTION
Continue to support the collection of solid waste by private operators.

WATER SERVICE

GOAL:

11E Insure that reliable and adequate water supply and delivery systems are available to provide sufficient quantities of high quality water at adequate pressures to meet the fire-fighting and future needs of the community, on an equitable, efficient and self-sustaining basis.

POLICIES:

11.31 SOURCE
Maintain and safeguard the Bull Run Watershed as the primary water supply source for the community, with water quality preservation taking precedence over all other uses.

11.32 QUALITY
Maintain the quality of the water supply at its current level, which exceeds all State and Federal water quality standards and satisfies the needs of both domestic and industrial customers.

11.33 ALTERNATE SOURCES
Ensure a reliable supply of water to the community through the development and maintenance of an adequate source (groundwater) for use during emergencies or periods of extremely high demand.

11.34 MAINTENANCE
Maintain adequate and distribution facilities in order to protect water quality, insure a reliable water supply, assure adequate flow for all user needs, and minimize water loss.

11.35 STORAGE
Maintain City storage capacity of at least three times the average daily use of city users. Additional storage capacity contracted by outside city water districts will be provided.

11.36 FIRE PROTECTION
Install and maintain public fire hydrants with adequate flow to serve the fire protection needs of all city residents and businesses.

11.37 DESIGN AND COMMUNITY IMPACT
Design water facilities to be compatible with the area in which they are located.

11.38 OUTSIDE USER CONTRACTS
Service retail areas outside the city water service limits in order to improve long-term water supply planning.

11.39 OUTSIDE USER BENEFIT
Require water users outside the city that benefit from a new improvement to finance that portion of the improvement constructed for their benefit.

11.40 OUTSIDE USER STORAGE
Require water purveyors, with whom the City has a contract, to provide storage of at least three times the average daily use of their customers and to compensate the City for the additional cost of maintaining such storage within the City system.

11.41 EQUITABILITY
Establish water rates based on the cost of providing water service in an equitable manner.

11.42 WATER PRESSURE
Provide water at standard pressures (40 to 110 lbs. per sq. inch) to all users whenever possible.

11.43 ENERGY CONSERVATION
Pursue programs, improvements, efficiencies in operation, and maintenance of facilities to reduce and conserve energy.

PARKS AND RECREATION

GOAL:

11F Maximize the quality, safety and usability of parklands and facilities through capital improvements programs, recognizing urban needs, and preservation of parks and open space, and equitable allocation of active and passive recreation opportunities for the citizens of Portland.

POLICIES:

11.44 MASTER DEVELOPMENT PLANS
Maintain master development plans for city parks that address user group needs, development priorities, development standards and costs, program opportunities, financing strategies and citizen involvement.

11.45 MAINTENANCE
Provide adequate preventive maintenance to all city park and recreational facilities in a manner which minimizes reduced urban opportunities maintenance and the use of scheduled service delivery.

11.46 CAPITAL PROGRAMMING
The Bureau of Planning and the Park Bureau shall develop a long range parks plan for the city which will provide standards for location of park and recreation facilities, and identify areas of facility deficiencies in neighborhood, district and city-wide recreational parks and programs.

SECTION XI: PUBLIC FACILITIES POLICIES

GENERAL GOAL:

11A Provide a timely, orderly and efficient arrangement of public facilities and services that support existing and planned land use patterns and densities.

GENERAL POLICIES:

11.1 SERVICE RESPONSIBILITY
Within its boundaries, the City of Portland will provide public facilities and services at levels appropriate for all land use types and will participate in coordinating efforts of other agencies which provide related services.

11.2 ORDERLY LAND DEVELOPMENT
Urban development should occur only where urban public facilities and services exist or can be reasonably made available.

11.3 ORDERLY SERVICE EXTENSION
The improvement and expansion of urban public facility or service shall not stimulate development that significantly precedes the City's ability to provide all other necessary urban public facilities and services at uniform levels of service.

11.4 CAPITAL EFFICIENCY
Maximize use of existing public facilities and services should be supported through encouraging new development to occur at the maximum densities allowed by the Comprehensive Plan and through the development of vacant land within presently developed areas.

11.5 COST EQUITABILITY
To the greatest extent possible, the costs of improvement, extension and construction of public facilities should be borne by those benefiting from the improvement, extension, or construction.

11.6 FACILITIES SYSTEM PLAN
Develop and maintain a coordinated Facilities System Plan that provides a framework for the preservation of urban public facilities and services within Portland's Urban Service Boundary. This plan will be consistent with the adopted land use and density of the applicable Comprehensive Plan.

11.7 CAPITAL IMPROVEMENT PROGRAM
The Capital Improvement Program will be the annual planning process for the development of existing public facilities and the construction of new facilities. Planning will be in accordance with the framework provided by the Facilities System Plan.

PUBLIC RIGHTS-OF-WAY

GOAL:

11B Preserve the quality of Portland's land transportation system; protect the City's capital investment in public rights-of-way through continuing high quality improvements, and carry out streetscape and street improvements in accordance with identified needs, balancing limited resources among the needs of neighborhoods, commerce and industry.

POLICIES:

11.8 MAINTENANCE
First priority for the expenditure of General Fund revenues on public rights-of-way will be for maintenance and prevent deterioration of the existing street system.

11.9 TRANSIT CORRIDORS
High priority will be given to improvements which promote more effective public transportation and improve streets functioning as transit corridors.

11.10 STREET IMPROVEMENTS
Improvements in public rights-of-way will be consistent with the rights-of-way classifications in the **Arterial Streets Classification Policy**.

11.11 LOCAL SERVICE IMPROVEMENTS
Construct local service streets in accordance with existing and planned neighborhood land use patterns and accepted engineering standards.

11.12 TRANSIT IMPROVEMENTS
Construct transit streets so that transit vehicle movement is not impaired or made unsafe by the street width, turning radius or other physical constraints.

11.13 BICYCLE IMPROVEMENTS
Include physical construction standards necessary to assure access and safe passage for bicyclists in design and construction of all new or reconstructed streets; especially on those streets designated as bicycle pathways in the **Arterial Streets Classification Policy**.

11.14 BICYCLE PARKING
Provide for safe short-term, and safe, sheltered long-term bicycle parking throughout the Downtown and in other appropriate areas.

11.15 PEDESTRIAN IMPROVEMENTS
Provide for safe pedestrian movement along all new or reconstructed streets, and encourage provision of additional pedestrian pathways where needed, for safe, convenient access to schools, parks and other community facilities.

11.16 STAGED CONSTRUCTION
In currently developed areas, allow the formation of Local Improvement Districts (LID) to construct one or more phases of a staged street improvement.

11.17 NEW CONSTRUCTION
Construct new streets of high quality structural materials in order to minimize future maintenance costs.

11.18 STREET VACATION
When considering requests for street vacations, give consideration to the opportunities for bicycle ways, pedestrian ways, parkland or other public use.

SANITARY AND STORMWATER FACILITIES

GOAL:

11C Insure an efficient, adequate and self-supporting wastewater collection treatment and disposal system which will meet the needs of the public and comply with Federal, State and local clean water requirements.

POLICIES:

11.19 MAINTENANCE
Maintain and improve the existing sanitary and storm sewer system through preventive maintenance and on-going appraisal.

11.20 IMPROVEMENT
Improve the existing sewer system in those areas adversely affected by overloaded sewer systems.

11.21 COMBINED SEWER OVERFLOWS
Control and reduce combined sewer overflows.

11.22 SUB-SURFACE DISPOSAL
Discourage the development of on-site sub-surface waste disposal systems on lots smaller than two acres in size.

ZONING CODE REVISIONS

INTRODUCTION

Zoning establishes limits on land development. It controls the type of use, intensity of activity and certain aspects of the design of new buildings. The revised Zoning Code provides for five major groupings of activities: Residential, Commercial, Central Commercial, Mixed Use, and Manufacturing. This summary provides a guide to the specific requirements of the zones within these groupings. Each of the zones and designations mapped on the reverse side of this page. With the exception of Open Space, each designation corresponds with a zone. Open Space will also be discussed in this section.

OPEN SPACE DESIGNATION

This is the only land use designation that does not correspond with a zoning classification. Open Space designations are applied to public parks, cemeteries, golf courses, and other recreational areas. Park Bureau playground improvements and parkways. Areas designated Open Space will be maintained in conformity with this designation, may continue indefinitely. Any land which would be replaced by a major improvement, such as a new building, would be necessary before an Open Space designated area could be redeveloped to a more intensive use.

SINGLE-FAMILY RESIDENTIAL

**Significant changes are proposed for the city's single-family residential zones. A new zoning classification has been developed for Attached Residences. A new zoning classification has been developed for Attached Residences. A new zoning classification has been developed for Attached Residences

Past Land Use Reviews

File Name	Year	Category
LU 21 - 053526 HR	2021	LU
LU 18-103566 HR	2018	LU
LU 17-245440 CU AD	2017	LU
LU 17-206893 HR	2017	LU
LU 17-163203 CU	2017	LU
LU 17-158467 HRM	2017	LU
LU 16-148005 HR	2016	LU
LU 14-218444 HR EN	2014	LU
LU 13-236792 EN HR	2013	LU
LU 07-139442	2007	LU
LU 06-178213	2006	LU
LUR 99-00809	1999	LUR
MP1 107-89	1989	MP
HL 74-89	1989	HL
HL 75-89	1989	HL
CU 49-77	1977	CU
CU 059-74	1974	CU
CU 007-74	1974	CU
CU 93-67	1967	CU
CU 056-65	1965	CU
CU 067-64	1964	CU
CU 029-61	1961	CU

S. E. BELMONT ST.

S. E. YAMHILL ST.

S. E. SALMON ST.

S. E. MAIN ST.

S. E. 60TH AVE.

S. E. 71ST. AVE.

S. E. 72ND AVE.

S. E. STEPHENS ST.

5 POSTS NOT LAMPED

NORTH

PARK LIGHTING

INSTALLED 1924
89 POST & LAMP

S. E. DIVISION ST.

S. E. 68TH AVE.

DEPARTMENT OF PUBLIC UTILITIES
BUREAU OF LIGHT & POWER
PORTLAND, OREGON

NATE A. BOODY COMMISSIONER
CARL H. LUNDELL UTILITIES ENGINEER

ELECTRICAL DETAILS
OF
"MT. TABOR PARK"

SCALE 1"=200' DATE 4-9-[illegible] SHEET

APPROVED BY

REGISTERED PROFESSIONAL ENGINEER 595 OREGON DEC. 8, 1971 C. H. LUNDELL

PGE POLE # 183
METER # 807206 E
MAINTAINENCE BLDG. &
METER # 684659 E
RESTROOM BLDG.

PARK MAINTENANCE BLDG.

PARK BUREAU POLE

PGE POLE # 156
METER # K 37028P
TRANSFORMER HOUSE

METER # 321617 E
RESTROOM BLDG.

WP STAGE OUTLETS

THEATRE

WP OUTLET

handholes

3" sleeve

J-BOX

2" sleeve

1-1/4" sleeve

TENNIS COURTS

TRANSFORMER HOUSES (SEE NOTE #3)

PUMP HOUSE (SEE DETAIL)

LEASED PROPERTY
PGE POLE # - 72
METER # -

PGE POLE # - 375
METER # - 517470 E
TENNIS COURT LIGHTS

TENNIS COURTS (SEE NOTE # 2)

WATER BUREAU POWER LINE

handhole

1-1/4" sleeve

PGE METER # 120650
REST ROOM BLDG.

PGE METER # 188801 G
POLICE BUSINESS

RADIO TOWER

SOAP BOX DERBY TRACK

W.B. CONTROL CENTER

RESERVOIR #6

RESERVOIR #5

PUMP STATION

RESERVOIR #1

RESERVOIR #2

WATER BUREAU BLDG.

MT. TABOR MAINTENANCE YARD (SEE NOTE #4)

SHOPS

NURSERY AREA

NURSERY AREA

PGE METER # 715091518
WATER BUREAU

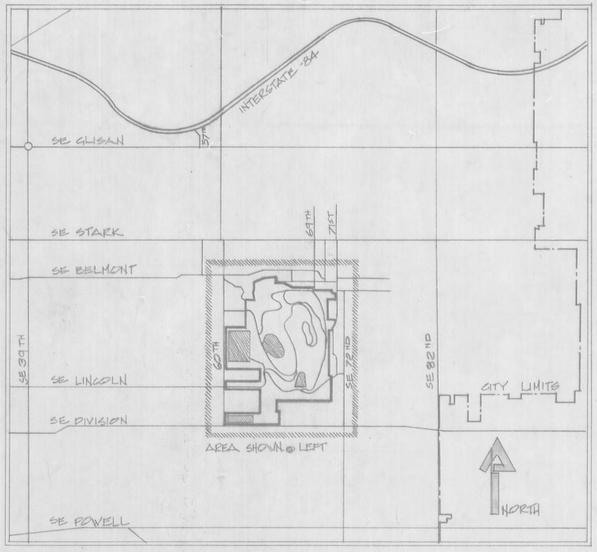
SE BELMONT
SE YAMHILL COURT
SE YAMHILL
SE TAYLOR CT
SE TAYLOR
SE SALMON
SE MAIN
SE MADISON
SE HAWTHORNE
SE STEPHENS
SE HARRISON
SE LINCOLN
SE GRANT
SE SHERMAN
SE DIVISION
SE CLAY
SE MILL

SE 65TH PL
SE 66TH PL
SE 67TH PL
SE 68TH PL
SE 69TH PL
SE 70TH
SE 71ST
SE 72ND
SE 60TH
SE 61ST
SE 62ND
SE 63RD
SE 64TH
SE 66TH
SE 67TH
SE 68TH
SE 69TH
SE 70TH
SE 71ST

EAST TABOR DRIVE
NORTH TABOR DRIVE
SOUTH TABOR DRIVE
HARVEY SCOTT CIRCLE
LOWER DRIVE
RESERVOIR DRIVE
MT. VIEW DRIVE
LINCOLN DRIVE
HARRISON DRIVE

SHEET 9
SHEET 10
SHEET 11

MT. TABOR VICINITY MAP

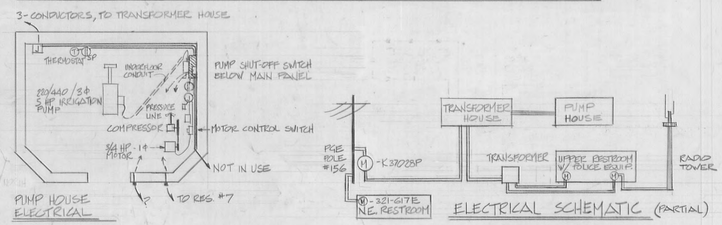


LEGEND / NOTES

SCALE OF DRAWING: @ 1" = 200'	@ 1" = 40'	DESCRIPTION
	E_P	ELECTRICAL WIRING - UNDERGROUND
E	E_P	ELECTRICAL WIRING - OVERHEAD
T	T	TELEPHONE WIRE - OVERHEAD
PL	E	PARK LIGHTING - UNDERGROUND WIRING, DIST. POST-TO-POST
W	W	UNDERGROUND WIRING FOR WATER BUREAU
E	E	PARK LAMP POST, CONCRETE, NUMBERS STENCILED IN BLACK AT BASE
	WP	WEATHERPROOF OUTLET
	P.P.	POWER POLE
	M	ELECTRIC METER
		POWER POLE WITH CITY STREET LIGHT

NOTES

1. SEE SECTION DRAWINGS FOR MORE DETAIL
2. SEE "TENNIS COURT LIGHTING FOR MT. TABOR PARK", SHEET E-3 BY PACIFIC ELEC. CORP., 5/15/73, DRAWN BY JOSE', FILE DETAIL-5
3. SEE "ELECTRICAL DETAILS OF MT. TABOR VAULT" (INCOMPLETE)
4. SEE "UTILITIES - PARK WAREHOUSE AREA" JAN. '65 & REVISIONS THRU MARCH 1983 TRACED BY ADC



MT. TABOR PARK

0 100' 200' 400' 800' 1200'

SCALE

NORTH

NO.	DATE	REVISIONS	BY
1	7-28-88	PARK LIGHTING CONVERSION COMPLETED	P.M.

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION
CHARLES R. JORDAN, COMMISSIONER OF PUBLIC AFFAIRS

MT. TABOR PARK

STREET LIGHTING / ELECTRICAL

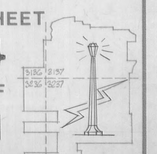
DRAWN BY: R.G. SWICK

1/4 SEC: 3136, 3137, 3236, 3237

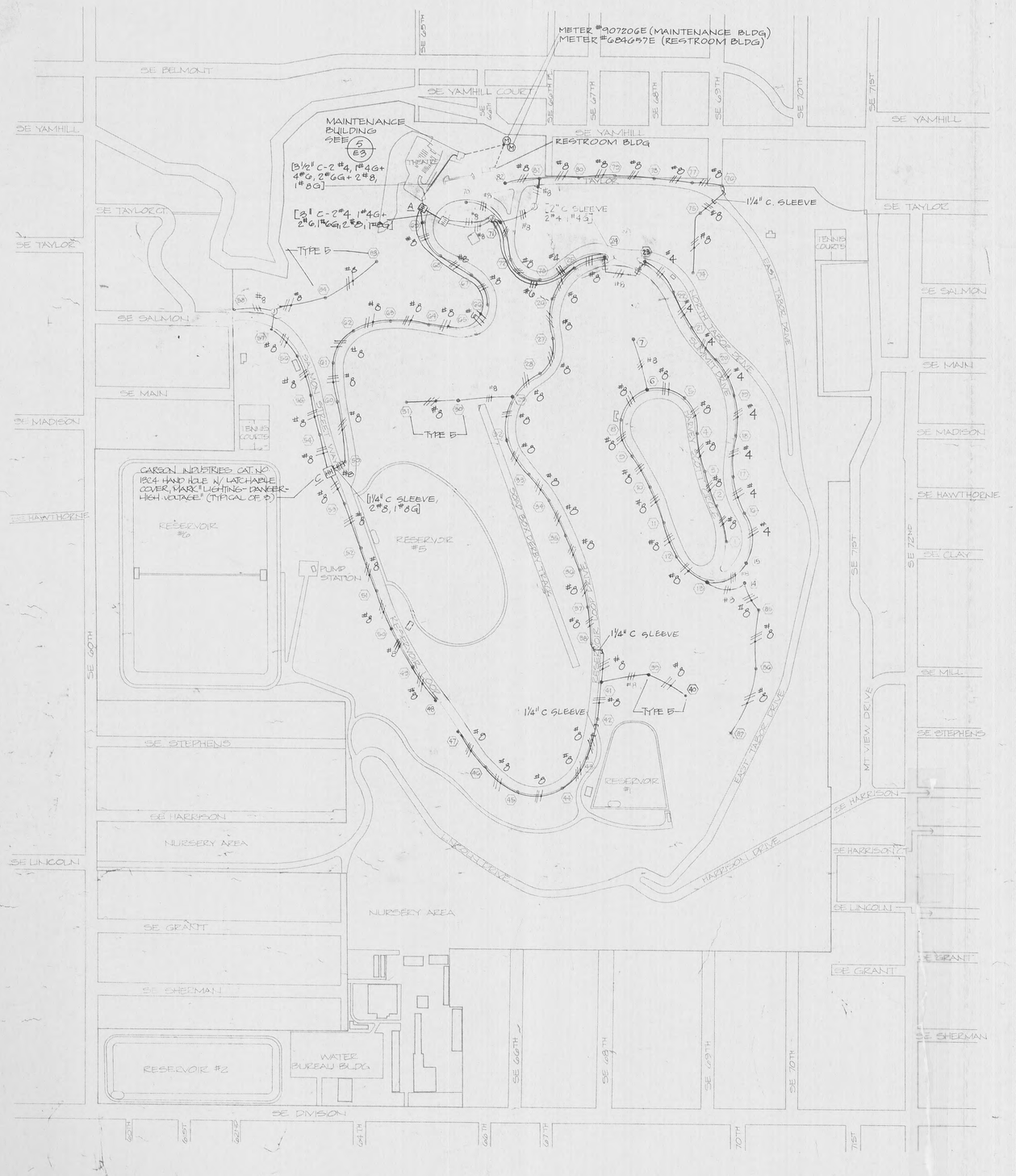
DATE: JAN. 10, 1983

SCALE: 1" = 200'

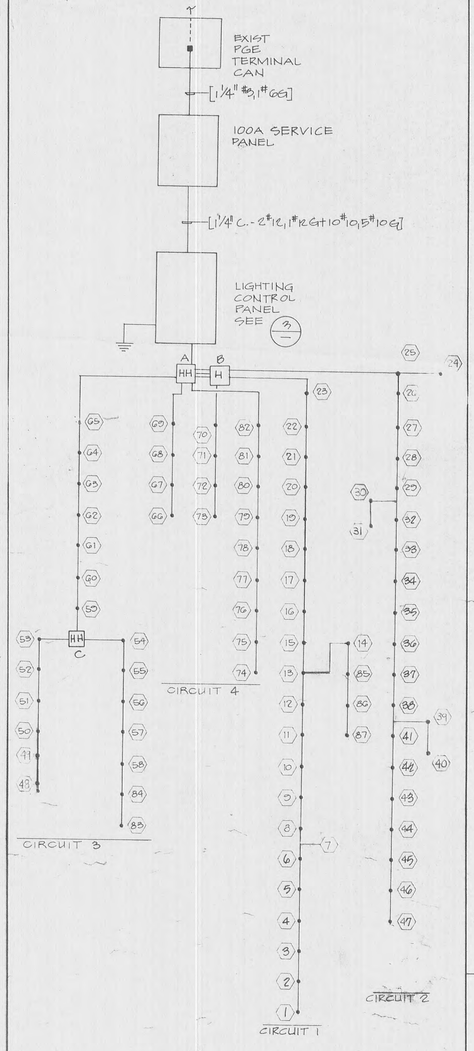
SHEET 4 OF 11



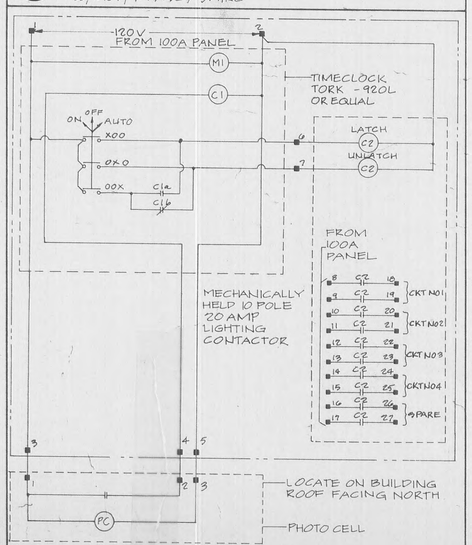
BRUNING 4622



1 E2 ELECTRICAL ROADWAY LIGHTING PLAN
1" = 200'-0"



2 E2 ONE-LINE DIAGRAM
120/240V, 1 PHASE, 3 WIRE



3 E2 LIGHTING CONTROL DIAGRAM
NTS

PROJECT NOTES

I. INSTALL NEW SERVICE PANEL AND ALL NEW CIRCUITS, INCLUDING HAND HOLES AT BASE OF EACH POLE AS SHOWN IN ELEVATION 1 SHEET E-3 AND PLAN 2 SHEET E-3. ALL UNDERGROUND WIRING IS TO BE DIRECT-BURIAL CABLE SIZED AS SHOWN ON ROADWAY LIGHTING PLAN 1 SHEET E-2. PROVIDE CONDUIT SLEEVES UNDER ALL PAVED AREAS.

II. 2300V CIRCUITS MAY BE DE-ENERGIZED AT THE EXISTING TRANSFORMER HOUSE. EXISTING LIGHTS ARE ON TWO SERIES LOOPS DESIGNATED "TOP LOOP" AND "BOTTOM LOOP" AS SHOWN ON ROADWAY LIGHTING PLAN 1 ON SHEET E-1. LIGHT FIXTURES ARE TO BE MODIFIED AND TRANSFERRED TO NEW 240V CIRCUITS IN SEGMENTS AS DESCRIBED BELOW IN ORDER TO MAINTAIN AS MUCH LIGHTING IN SERVICE AS POSSIBLE DURING THE WORK.

III. INSTALL TEMPORARY 2300V SPLICE FROM POLE 65 TO POLE 66 USING LEAD-SHEATHED SERIES STREET LIGHTING CABLE SUITABLE FOR DIRECT BURIAL TO MATCH EXISTING, THUS ISOLATING POLES IDENTIFIED ON ONE-LINE DIAGRAM DETAIL 2 SHEET E-2 AS TO BE CONNECTED TO CIRCUIT 3. REMAINING "BOTTOM LOOP" FIXTURES ARE TO BE RE-ENERGIZED ON THE EXISTING CIRCUIT. PROVIDE REGULATION TO PERMIT PROPER OPERATION OF THE REDUCED QUANTITY OF FIXTURES ON THE EXISTING CIRCUIT.

IV. EXISTING WIRING REMOVAL
- A. REMOVE EXISTING WIRING FROM THE POLES IDENTIFIED AS CIRCUIT 3 AND CUT OFF BELOW GRADE
- B. REPLACE POLES 30, 31, 51, 52, 54, 56, AND 64 WITH NEW POLES FURNISHED BY THE BUREAU OF PARKS.
- C. STENCIL POLE IDENTIFICATION NUMBER ON EACH POLE AT +2'-0" ABOVE GRADE ON SIDE FACING ROADWAY OR WALKWAY USING WEATHER RESISTANT BLACK PAINT.
- D. INSTALL CONDUIT SWEEP ON BASE OF POLE AND CONNECT TO HAND HOLE - SEE DETAIL 1, SHEET E-3.
- E. MODIFY EXISTING HEADS, REPLACING EXISTING SOCKET AND LAMP WITH HIGH-PRESSURE SODIUM CONVERSION KIT INCLUDING BALLAST, SOCKET AND REFRACTOR AS SHOWN IN DETAIL 3, SHEET E-3 AND DETAIL 4, SHEET E-3.
- F. SPLICE NO. 12 AWG TAP CONDUCTORS IN HAND HOLE AS SHOWN IN DETAIL 2 SHEET E-3 AND CONNECT LUMINAIRE.

V. REPEAT STEPS 4A THROUGH 4F WITH CIRCUIT 4, THUS COMPLETING CONVERSION OF "BOTTOM LOOP". POLES TO BE REPLACED ARE 67, 74, 78, AND 79. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

VI. INSTALL TEMPORARY SPLICES AS DESCRIBED IN STEP 3 BETWEEN POLE 38 AND 41, ISOLATING POLES 41 THROUGH 49 AND BETWEEN POLE 15 AND 16, ISOLATING POLES 1 THROUGH 15.

VII. REPEAT STEPS 4A THROUGH 4F WITH POLES 41 THROUGH 49 AND POLES 1 THROUGH 15. POLES TO BE REPLACED ARE 9, 12, 42, 43, 44, 46, AND 49. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

VIII. REPEAT STEPS 4A THROUGH 4F WITH THE REMAINING POLES, THUS COMPLETING THE CONVERSION OF THE "TOP LOOP". POLES TO BE REPLACED ARE 27, 28, 37, 38, 39, AND 40. INSTALL REPLACEMENT FITTERS AND LANTERNS TO BE FURNISHED BY THE BUREAU OF PARKS ON POLES 85, 86 AND 87. NEW POLES TO BE FURNISHED BY THE BUREAU OF PARKS.

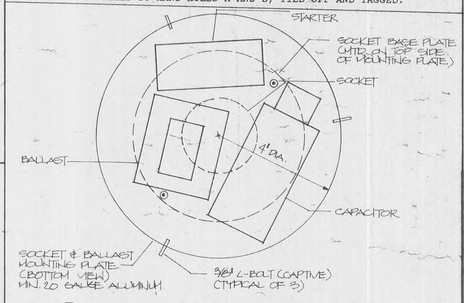
IX. EXISTING 2300V SERVICE LOOP WIRING BELOW GRADE IS TO BE ABANDONED IN PLACE.

ALTERNATIVES

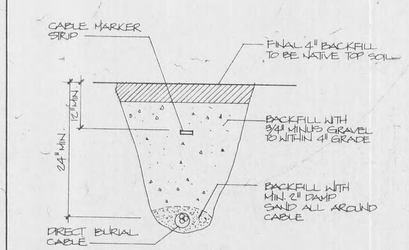
DEDUCTIVE ALTERNATE NO. 1.: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT CONVERT OR RECONNECT FIXTURES ON POLES 85, 86 AND 87. HAND HOLES ARE TO BE INSTALLED AT THE BASE OF THESE POLES AS REQUIRED UNDER BASIC WORK.

DEDUCTIVE ALTERNATE NO. 2: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK REQUIRED FOR CIRCUIT 4 BEYOND HAND HOLE A, INSTALL THE SPLICE DESCRIBED UNDER STEP 3 OF THE PROJECT NOTES AS A PERMANENT CONNECTION AND DO NOT PERFORM STEP 5 OF THE PROJECT NOTES. WIRING FOR CIRCUIT 4 IS TO BE PULLED TO HAND HOLE A, TIED OFF AND TAGGED.

DEDUCTIVE ALTERNATE NO. 3: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK DESCRIBED FOR CIRCUITS 3 AND 4 BEYOND HAND HOLES A AND B. DO NOT PERFORM WORK DESCRIBED UNDER STEPS 3, 4 AND 5 OF THE PROJECT NOTES. WIRING FOR CIRCUITS 3 AND 4 IS TO BE PULLED TO HAND HOLES A AND B, TIED OFF AND TAGGED.



4 E3 SOCKET SUPPORT BRACKET



5 E1 BACKFILL REQUIREMENTS
NTS

Channels:

#1 wire goes across picnic area to avoid tree roots

#2 J-box mounted to pickup wires running 4 ways

#3 wire comes to J-box for new pump service and wire to pole 81 back feeds #2

#4 J-box has 3 #6, 1 #8 for future pump panel

#5 wire crosses road and goes along bank and then crosses road again

#6 Power run to pole # 7 is now fed off of circuit # 1. 39 and 40 are on circuit # 2

#7 Pole # 14 is fed off # 13

#8 Pole 30 & 31 fed off of circuit #2. 48 & 49 now are on circuit # 3

#9 Wire crosses at pole 57 and goes to J box then splits and goes to 58 & 64

NO.	REVISION OR ISSUE	DATE	BY
1	ISSUED FOR PRICING	4.17.87	
0	ISSUED FOR REVIEW	4.10.87	

IDC CH2M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG- COMMISSIONER

MT. TABOR PARK

PARK LIGHTING CONVERSION

TITLE

LIGHTING PLAN, ONE-LINE DIGRAM, LIGHTING CONTROL DIAGRAM, PROJECT NOTES

DESIGNED	APPROVED	SCALE AS SHOWN
DRAWN		DATE 4-17-87
CHECKED		PROJECT NO. 1142

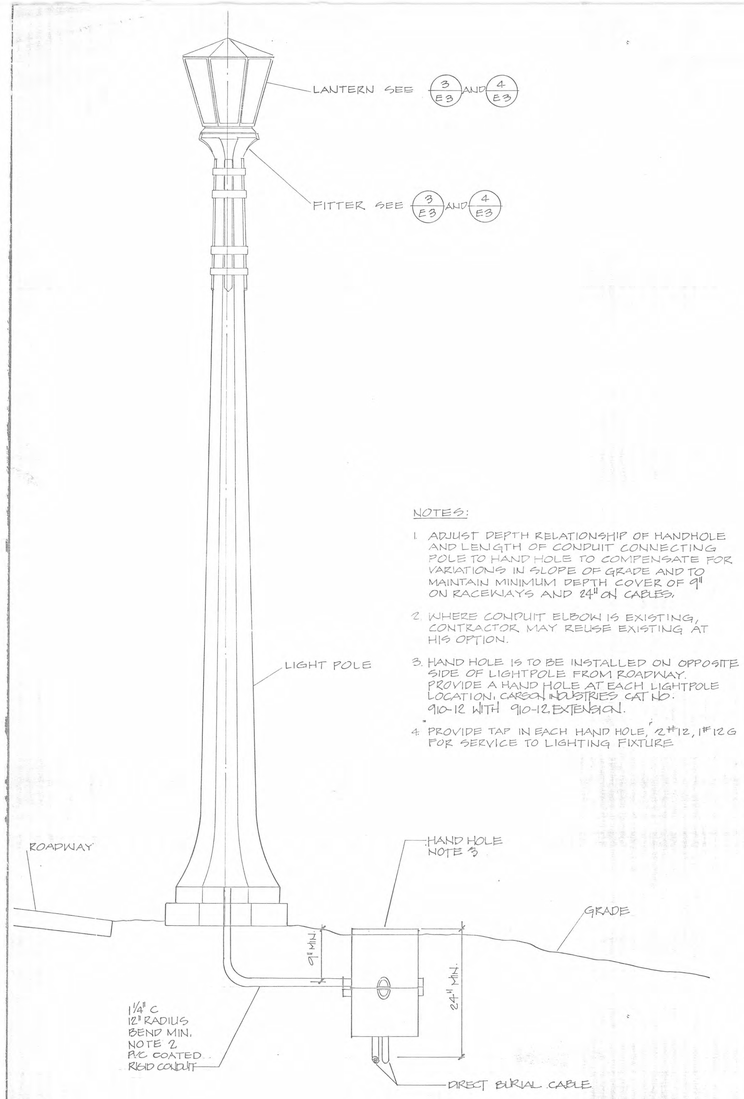
DRAWING NO.

E-2

PRELIMINARY

OVERLAY IDENTIFICATION: PROJ NO. 1142 | CONTRACT | COMPOSITE OVERLAY SCREEN | E2 E2 | SITE SITE SITE | HANDLER

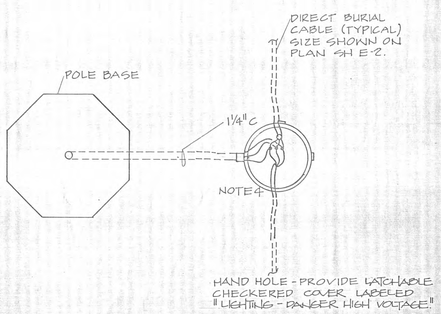
WESTERN IMAGE SYSTEMS 10434



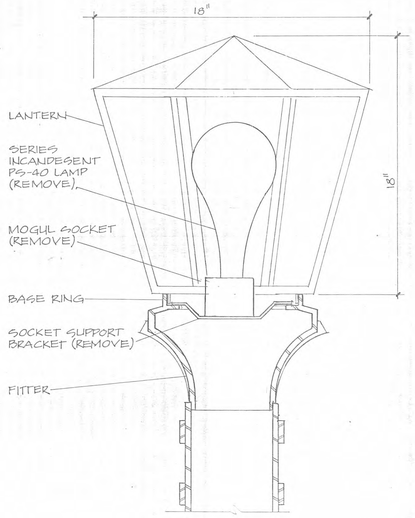
NOTES:

1. ADJUST DEPTH RELATIONSHIP OF HANDHOLE AND LENGTH OF CONDUIT CONNECTING POLE TO HAND HOLE TO COMPENSATE FOR VARIATIONS IN SLOPE OF GRADE AND TO MAINTAIN MINIMUM DEPTH COVER OF 9" ON RACEWAYS AND 24" ON CABLES.
2. WHERE CONDUIT ELBOW IS EXISTING, CONTRACTOR MAY REUSE EXISTING AT HIS OPTION.
3. HAND HOLE IS TO BE INSTALLED ON OPPOSITE SIDE OF LIGHTPOLE FROM ROADWAY. PROVIDE A HAND HOLE AT EACH LIGHTPOLE LOCATION, CARSON INDUSTRIES CAT NO: 910-12 WITH 910-12 EXTENSION.
4. PROVIDE TAP IN EACH HAND HOLE, 2#12, 1#12G FOR SERVICE TO LIGHTING FIXTURE

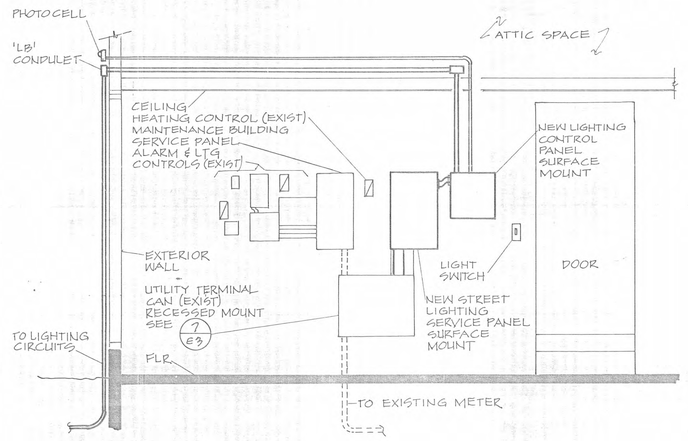
1/E2 TYPICAL ELEVATION AT POLE
1"=1'-0"



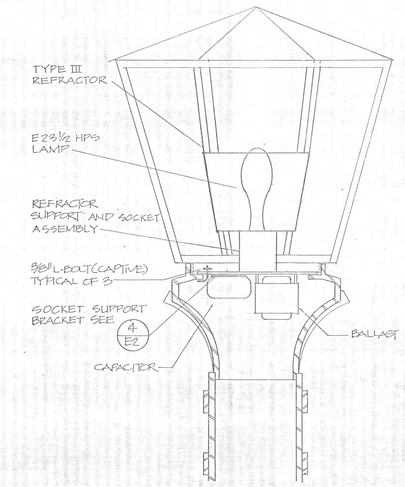
2/E2 TYPICAL PLAN AT POLE
1"=1'-0"



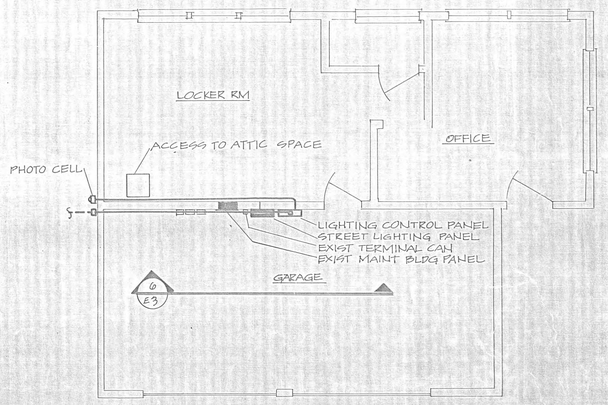
3/E2 SECTION THRU EXISTING LANTERN
1/4" SCALE



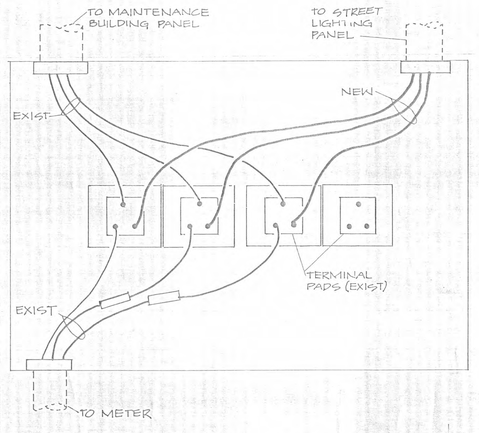
6/E3 ELEVATION - SERVICE PANEL
1½" = 1'-0"



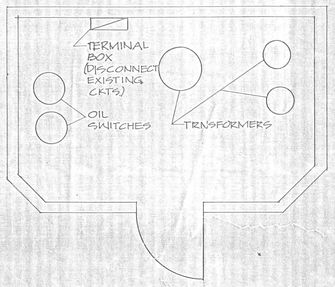
4/E2 SECTION THRU MODIFIED LANTERN
¼ SCALE



5/E2 MAINTENANCE BLDG PLAN
1/4"=1'-0"



7/E3 CONNECTION @ EXIST. TERMINAL CAN
N.T.S.



8/E1 TRANSFORMER HOUSE PLAN
3/8"=1'-0"

NO.	REVISION OR ISSUE	DATE	BY
1	ISSUED FOR PRICING	4-17-87	
0	ISSUE FOR REVIEW	4-14-87	

IDC CH2M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG COMMISSIONER

MT. TABOR PARK

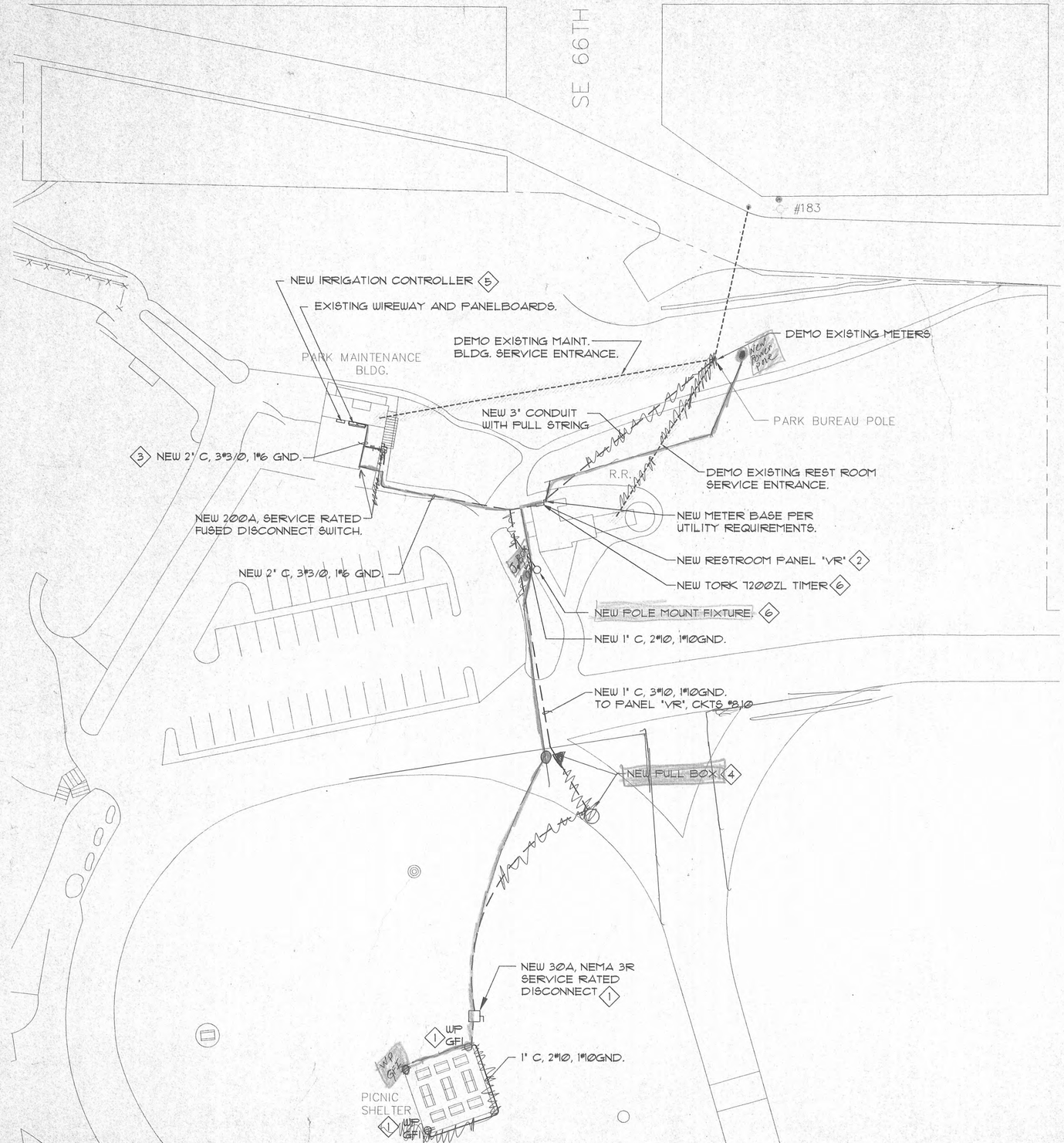
PARK LIGHTING CONVERSION

TITLE: DETAILS AND PLANS

DESIGN: [illegible]	APPROVED:	SCALE: AS SHOWN
DRAWN: [illegible]		DATE: 4-17-87
CHECKED:		PROJECT NO: 1112

DRAWING NO. E-3

7-28-88 AS-BUILT



1 — ELECTRICAL SITE PLAN - RESTROOM & MAINT. BLDG.

SCALE: 1"=30'

GENERAL NOTE

CONTRACTOR SHALL INSTALL NEW UNDERGROUND CONDUITS ALONG SIDEWALK PATHS AND EXCAVATIONS FOR OTHER PORTIONS OF THIS PROJECT. COORDINATE EXACT ROUTING WITH OWNER'S REPRESENTATIVE AND OTHER TRADES.

SHEET NOTES

(1) PROVIDE AND INSTALL WP, GFI RECEPTACLE AT +24" ABOVE FINISHED GRADE. SAW CUT SHELTER SLAB AS REQUIRED. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION.

(2) PROVIDE COMPLETE COMPLIMENT OF CIRCUIT BREAKERS FOR REST ROOM FINISH PROJECT. COORDINATE WITH OTHER CONTRACT.

(3) ROUTE CONDUIT CONCEALED IN ATTIC SPACE. COORDINATE WITH OWNER OR HIS REPRESENTATIVE.

(4) PROVIDE AND INSTALL NEW PULL BOXES AS REQUIRED. COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE.

(5) PROVIDE AND INSTALL NEW 120V, 1P, 20A CIRCUIT BREAKER IN EXISTING MAINTENANCE BUILDING PANEL BOARD AND NEW 3/4"C, 2#12, 1#12G AS REQUIRED TO POWER NEW IRRIGATION CONTROLLER. IRRIGATION CONTROLLER SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR WITH FINAL POWER CONNECTION BY ELECTRICAL CONTRACTOR.

(6) NEW SITE LIGHTING FIXTURE, POLE AND BASE SHALL BE PROVIDED BY PORTLAND PARKS AND RECREATION AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL OTHER ITEMS AS REQUIRED, INCLUDING, BUT NOT LIMITED TO A NEW 120V, ENERGY SAVING BALLAST, CONDUIT, WIRING AND HAND HOLE. HOMERUN SHALL BE VIA A TORK 7200EL TIMER, PROVIDED AND INSTALLED BY THIS ELECTRICAL CONTRACTOR. REFER TO SHEET E1 OF THE VOLCANO RESTROOM DRAWING PACKAGE FOR EXACT LOCATION.

PORTLAND PARKS & Recreation

REGISTERED PROFESSIONAL ENGINEER 18,563 OREGON JULY 10, 1998 TANNER A. NAJAFI
EXPIRES 12-31-00

WALKER·MACY
111 Southwest Oak Street, Suite 200, Portland, OR (503) 225-2222

Portland Parks and Recreation
JAMES FRANCESCONI, Commissioner
CHARLES JORDAN, Director

ELECTRICAL SITE PLAN - RESTROOM & MAINT. BLDG.
MT. TABOR PARK
Portland, Oregon

Project Manager: GEORGE LOZOVOY
Construction Manager: GARY WOODRUFF 823-5593
DATE: 05/21/99 SCALE: AS NOTED DRAWN BY: DMP CHECKED BY: TAN

REVISIONS

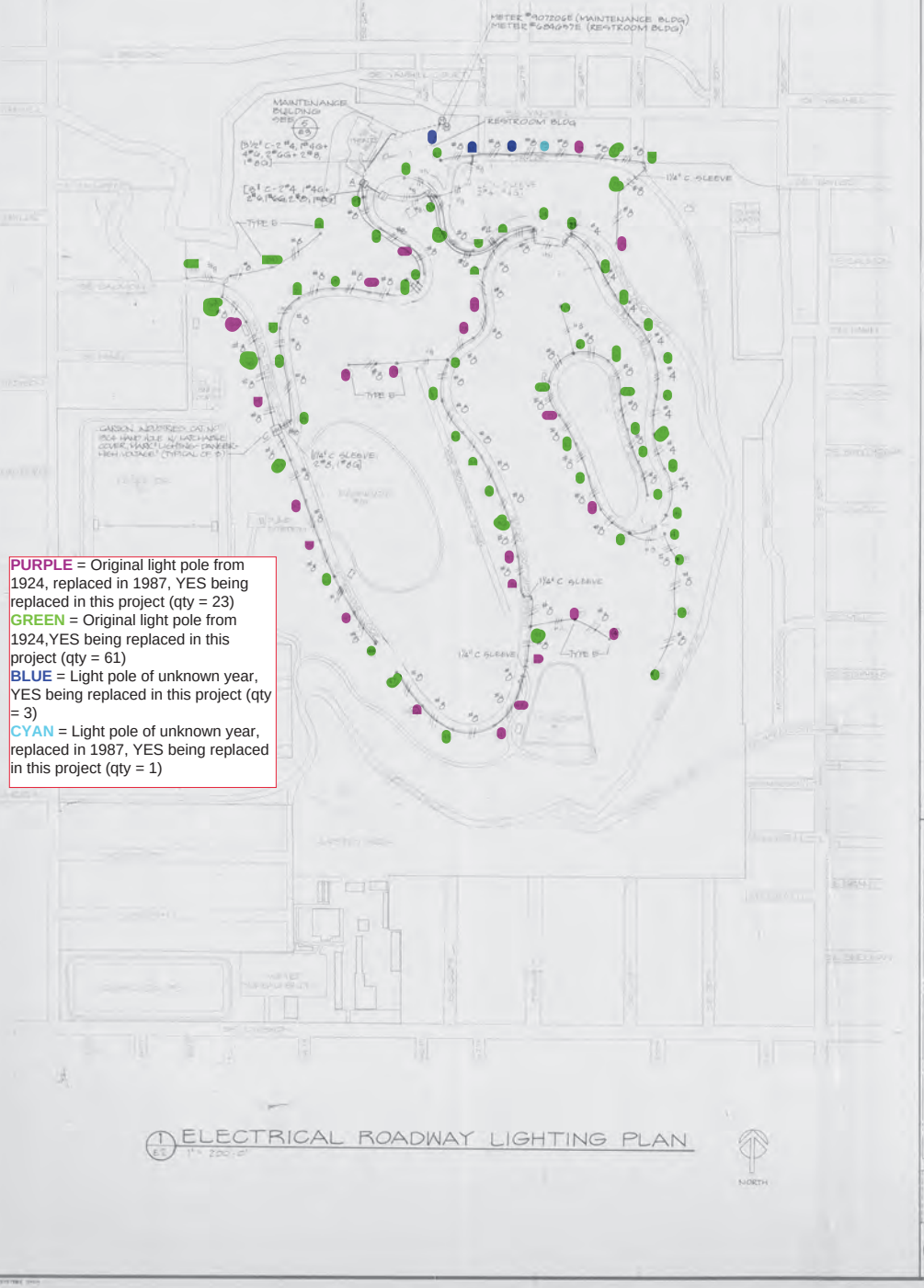
DATE	DESCRIPTION	BY

Let's Play Portland Parks

R&W ENGINEERING, INC "Engineering Integrated Solutions"
9400 SW Barbur Blvd Suite 250 Beaverton, Oregon 97005
Phone: (503) 292-8000 FAX: (503) 292-1422 E-mail: rweng@rweng.com

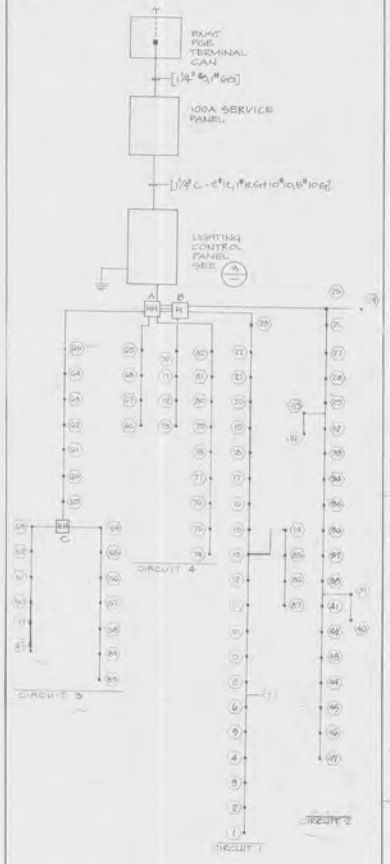
0 5 10 20
SCALE: 1"=10'
NORTH

E2

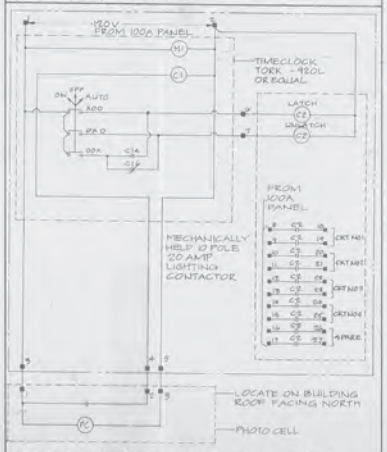


1 ELECTRICAL ROADWAY LIGHTING PLAN

NORTH



2 ONE-LINE DIAGRAM
120/240V, 1 PHASE, 3 WIRE



3 LIGHTING CONTROL DIAGRAM
NTS

PROJECT NOTES

1. INSTALL NEW SERVICE PANEL AND ALL NEW CIRCUITS, INCLUDING HAND HOLES AT BASE OF EACH POLE AS SHOWN IN ELEVATION 1 SHEET E-3 AND PLAN 2 SHEET E-3. ALL UNDERGROUND WIRING IS TO BE DIRECT-BURIAL CABLE SIZED AS SHOWN ON ROADWAY LIGHTING PLAN 1 SHEET E-2. PROVIDE CONDUIT SLEEVES UNDER ALL PAVED AREAS.

II. 2300V CIRCUITS MAY BE DE-ENERGIZED AT THE EXISTING TRANSFORMER HOUSE. EXISTING LIGHTS ARE ON TWO SERIES LOOPS DESIGNATED "TOP LOOP" AND "BOTTOM LOOP" AS SHOWN ON ROADWAY LIGHTING PLAN 1 ON SHEET E-1. LOOSE FIXTURES ARE TO BE MODIFIED AND TRANSFERRED TO NEW 240V CIRCUITS IN SEGMENTS AS DESCRIBED BELOW IN ORDER TO MAINTAIN AS MUCH LIGHTING IN SERVICE AS POSSIBLE DURING THE WORK.

III. INSTALL TEMPORARY 2300V SPLICE FROM POLE 85 TO POLE 86 USING LEAD-SHEATHED SERIES STREET LIGHTING CABLE SUITABLE FOR DIRECT BURIAL TO MATCH EXISTING. THUS ISOLATING POLES IDENTIFIED ON ONE-LINE DIAGRAM DETAIL 2 SHEET E-2 AS TO BE CONNECTED TO CIRCUIT 3. REMAINING "BOTTOM LOOP" FIXTURES ARE TO BE RE-ENERGIZED ON THE EXISTING CIRCUIT. PROVIDE REGULATION TO PERMIT PROPER OPERATION OF THE REDUCED QUANTITY OF FIXTURES ON THE EXISTING CIRCUIT.

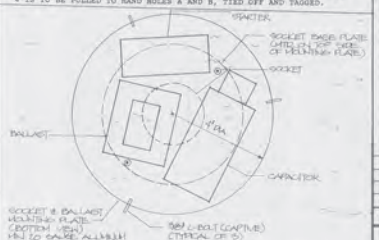
IV. EXISTING WIRING REMOVAL
A. REMOVE EXISTING WIRING FROM THE POLES IDENTIFIED AS CIRCUIT 3 AND CUT OFF BELOW GRADE
B. REPLACE POLES 10, 35, [illegible] AND 44 WITH NEW POLES FURNISHED BY THE BUREAU OF PARKS.
C.) STENCIL POLE IDENTIFICATION NUMBER ON EACH POLE AT +2'-0" ABOVE GRADE ON SIDE FACING ROADWAY OR WALKWAY USING WEATHER RESISTANT BLACK PAINT.
D. INSTALL CONDUIT SWEEP ON BASE OF POLE AND CONNECT TO HAND HOLE - SEE DETAIL 1, SHEET E-3.
E. MODIFY EXISTING HEADS, REPLACING EXISTING SOCKET AND LAMP WITH HIGH-PRESSURE SODIUM CONVERSION KIT INCLUDING BALLAST, SOCKET AND REFRACTOR AS SHOWN IN DETAIL 3, SHEET E-3 AND DETAIL 4, SHEET E-3.
F. SPLICE NO. 12 AWG TAP CONDUCTORS IN HAND HOLE AS SHOWN IN DETAIL 2 SHEET E-3 AND CONNECT LUMINAIRE.
V. REPEAT STEPS 4A THROUGH 4F WITH CIRCUIT 4, THUS COMPLETING CONVERSION OF "BOTTOM LOOP". POLES TO BE REPLACED ARE 4, 78, AND 79.
VI. INSTALL TEMPORARY SPLICES AS DESCRIBED IN STEP 3 BETWEEN POLE 38 AND 41, ISOLATING POLES 41 THROUGH 49 AND BETWEEN POLE 15 AND 16, ISOLATING POLES 1 THROUGH 15.
VII. REPEAT STEPS 4A THROUGH 4F WITH POLES 41 THROUGH 49 AND POLES 1 THROUGH 15. POLES TO BE REPLACED ARE 7, 12, 42, 43, 45, 46, AND 49.
VIII. REPEAT STEPS 4A THROUGH 4F WITH THE REMAINING POLES, THUS COMPLETING THE CONVERSION OF THE "TOP LOOP". POLES TO BE REPLACED ARE 27, 28, 33, 34, 39, AND 40. INSTALL REPLACEMENT FIXTURES AND LANTERNS TO BE FURNISHED BY THE BUREAU OF PARKS ON POLES 85, 86 AND 87. [illegible]
IX. EXISTING 2300V SERVICE LOOP WIRING BELOW GRADE IS TO BE ABANDONED IN PLACE.

ALTERNATIVES

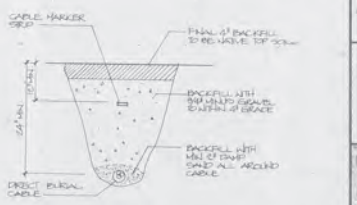
DEDUCTIVE ALTERNATE NO. 1: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT CONVERT OR RECONNECT FIXTURES ON POLES 85, 86 AND 87. HAND HOLES ARE TO BE INSTALLED AT THE BASE OF THESE POLES AS REQUIRED UNDER BASIC WORK.

DEDUCTIVE ALTERNATE NO. 2: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK REQUIRED FOR CIRCUIT 4 BEYOND HAND HOLE A. INSTALL THE SPLICE DESCRIBED UNDER STEP 3 OF THE PROJECT NOTES AS A PERMANENT CONNECTION AND DO NOT PERFORM STEP 5 OF THE PROJECT NOTES. WIRING FOR CIRCUIT 4 IS TO BE PULLED TO HAND HOLE A, TIED OFF AND TAGGED.

DEDUCTIVE ALTERNATE NO. 3: PERFORM ALL WORK REQUIRED UNDER BASIC BID EXCEPT DO NOT PERFORM WORK DESCRIBED FOR CIRCUITS 3 AND 4 BEYOND HAND HOLES A AND B. DO NOT PERFORM WORK DESCRIBED UNDER STEPS 3, 4 AND 5 OF THE PROJECT NOTES. WIRING FOR CIRCUITS 3 AND 4 IS TO BE PULLED TO HAND HOLES A AND B, TIED OFF AND TAGGED.



4 SOCKET SUPPORT BRACKET



5 BACKFILL REQUIREMENTS

3	ISSUED FOR PRICING	4/1/87
2	ISSUED FOR REVIEW	4-6-87
NO.	REVISION OR ISSUE	DATE BY

IDC CH2M HILL

PORTLAND OREGON

BUREAU OF PARKS AND RECREATION

MIKE LINDBERG - COMMISSIONER

MT. TABOR PARK

PARK LIGHTING CONVERSION

TITLE
LIGHTING PLAN, ONE-LINE DIGRAM, LIGHTING CONTROL DIAGRAM, PROJECT NOTES

DESIGNED	APPROVED	DATE AS NOTED
DRAWN		4-1-87
CHECKED		SCALE
		1162

DRAWING NO.
E-2

PRELIMINARY

Comparison

Existing

Proposed

Comparison

Existing

Proposed

Staff photographs of light poles at Mt. Tabor Park

Light poles in the landscape

Adjacent to paved drives

Adjacent to soft surface trail

Note areas around poles are clear of vegetation and, while poles installed on flat grade, they are often near slopes which may be prone to erosion and/or soil instability. The overall site is steeply sloped, and soil erosion is common in many areas of the park. Replacement poles will utilize direct burial techniques that will increase structural stability regardless of nearby slopes.

Light poles in the landscape

In high traffic areas, signage reminds the public that it is prohibited to attach anything to light poles and provides the code reference for the prohibition.

Existing Pole Conditions

White deposits, or efflorescence, is caused by chemical changes within the concrete due to moisture impacts.

Cracking in concrete often occurs due to thermal stresses and weathering. May also be caused by corrosion of steel reinforcement.

Flaking, or delamination, is a common type of concrete distress. Surficial delamination occurs when air or water is trapped between surface and may also be a sign of internal corrosion.

Despite install on flat grade, all three of these poles show clear signs of soil erosion at the base that could lead to structural instability.

Existing Pole Conditions

Cracking can lead to materials loss, as has occurred on here. Loss may affect just the pole, as shown on the left, or both the pole and the base, as shown center and on the right. Replacement poles will be direct buried, thus eliminating the need for a separate base element.

(Left) Pole installed straddling mixed surface mediums (soil and concrete). This unfortunate installation is not as sound as installation on a single surface. This is an example where pole locations may be slightly refined for greater stability and safety.

Existing Pole Conditions

Erosion around base is present, as is cracking.

Pitting, as shown in the center and right photo, is a sign of material instability and is caused when water freezes within concrete pores. As the concrete becomes weaker, more of the craters will appear. Smaller pits will often converge into larger ones, as shown here.

Existing Pole Conditions

Pole with cracking and pitting. Vertical nature of pitting may indicate spalling.

Pole with cracking, pitting and efflorescence.

Existing Pole Conditions

Spalling occurs when the concrete starts to break away from the reinforcing steel bars, reducing the stability of the structure.

Spalling is sometimes referred to as ‘concrete cancer’ since the problem is not initially obvious and can result in structural failure.

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SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 04001065 Date Listed: 9/22/2004

Mount Tabor Park — Multnomah — OR
Property Name — County — State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper — Date of Action: 9/24/04

Amended Items in Nomination:

Location:

The street location should read: *Roughly bounded by S.E. Division Street, S.E. 60th Avenue, S.E. Yamhill Street, and S.E. Mountain View Drive.*

Classification:

The Category of Property is: *District.*
The Number of Contributing Resources previously listed in the National Register should read: *12*
[Reservoir #1, Reservoir #5, Reservoir #6, Gatehouse #1, Gatehouse #5, Inlet Gatehouse #6, Outlet Gatehouse #6, Weir Building #1, Weir Building #5, Covered Storage Tank Building, Covered Storage Tank, and Reservoir #1 Fountain.]

Significance:

Entertainment/Recreation is added as an area of significance.

These clarifications were confirmed with the OR SHPO office.

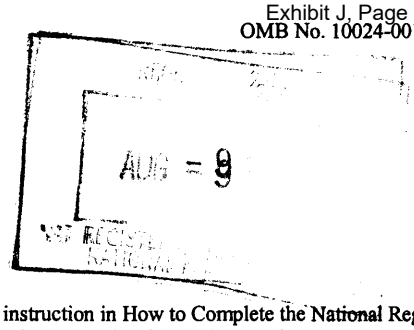
DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

OMB No. 10024-0018

NPS Form 10-900
(Oct.1990)

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form



This form is for use in nominating or requesting determinations for individual properties and districts. See instruction in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classifications, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Mount Tabor Park

other names/site number

2. Location

street & number 6325 S.E. Division Street not for publication

city or town Portland vicinity

state Oregon code OR county Multnomah code 051 zip code 97215

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ____ does not meet the National Register criteria. I recommend that this property be considered significant ____ nationally ____ statewide X locally.

James Hamrick 30 July 2004

Signature of certifying official/Title - Deputy SHPO Date

Oregon State Historic Preservation Office
State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper Date of Action

✓ entered in the National Register
___ See continuation sheet.
for Edson Beall 9/22/04

____ determined eligible for the National Register
___ See continuation sheet.

____determined not eligible for the National Register

____removed from the National Register

____ other (explain):

5. Classification

Ownership of Property
(check as many as apply)

___ private
_X_ public - local
___ public - state
___ public - Federal

Category of Property
(check only one box)

____ building(s)
_____district
__X__ site
____ structure
____ object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
7	10	buildings
1		sites
5	6	structures
1		objects
14	16	Total

Name of related multiple property listing
(enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

1 (Mount Tabor Reservoirs Historic District)

6. Function or Use

Historic Functions
(enter categories from instructions)

Recreation and Culture: outdoor recreation
Landscape: park
Agriculture/Subsistence: horticultural facility
Industry/Processing/Extraction: waterworks

Current Functions
(Enter categories from instructions)

Recreation and Culture: outdoor recreation
Landscape: park
Agriculture/Subsistence: horticultural facility
Industry/Processing/Extraction: waterworks

7. Description

Architectural Classification
(Enter categories from instructions)

Late Victorian
Late 19th and 20th Century Revivals

Materials
(Enter categories from instructions)

foundation: CONCRETE
walls: STUCCO; WOOD: plywood, weatherboard; CERAMIC TILE; CONCRETE
roof: CONCRETE; WOOD: shingle; ASPHALT
Other: EARTH; BRICK; STONE: granite, basalt; METAL: bronze, aluminum, iron, steel

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

See continuation sheets.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing).

__X__ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

_____ B Property is associated with the lives of persons significant in our past.

__X__ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

_____ D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply)

Property is:

_____ A owned by a religious institution or used for religious purposes

_____ B removed from its original location

_____ C a birthplace or grave

_____ D a cemetery

_____ E a reconstructed building, object, or structure

_____ F a commemorative property

_____ G less than 50 years of age or achieved significance Within the past 50 years

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets)

Areas of Significance
(Enter categories from instructions)

Landscape Architecture
Community Planning and Development

Period of Significance

1888-1939

Significant Dates

1903
1908

Significant Person
(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Mische, Emanuel Tillman
Keyser, Charles P.

9. Major Bibliographical References

Bibliography (Cite books, articles, and other sources used in preparing the form on one or more continuation sheets) See continuation sheets

Previous documentation on file (NPS):
- ___ preliminary determination of individual listing (36CFR67) has been requested
- ___ previously listed in the National Register
- ___ previously determined eligible by the National Register
- ___ designated a National Historic Landmark
- ___ recorded by Historic American Buildings Survey
- ___ recorded by Historic American Engineering Record

Primary location of additional data:
- ___ State Historic Preservation Office
- ___ Other State agency
- ___ Federal agency
- ___ Local government
- ___ University
- ___ Other

Name of repository: _____

10. Geographical Data

Acreage of Property 196 acres

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
1	10	532115	5040065
2	10	532076	5039181
3	10	531517	5038988
4	10	531181	5039637

X See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Cascade Anderson Geller

organization Mount Tabor Neighborhood Association date November 2003

street & number 1934 S.E. 56th Avenue telephone 503-232-0473

city or town Portland state Oregon zip code 97215

Additional Documentation

Submit the following items with the completed form:

Continuation sheets
Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.
Photographs: Representative black and white photographs of the property.
Additional items (check with the SHPO or FPO for any additional items)

Property Owner

name City of Portland

street & number 1221 S.W. 4th Avenue telephone 503-823-4000

city or town Portland state OR zip code 97024

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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Mount Tabor Park
Multnomah County, Oregon

DESCRIPTION

Mount Tabor Park is a 196-acre city park located in a residential area of southeast Portland, about three miles east of the Willamette River. The park encompasses most of a volcanic butte, with four peaks. The tallest summit rises to an elevation of 643 feet, making it a prime landmark visible from points all around the city. The terrain of the park varies from a limited number of level areas, especially around the reservoirs, to gentle hillsides and steeper slopes. The towering Douglas fir forest is punctuated with big deciduous trees and some glades. Large areas of the forest floor are kept mowed while steeper areas tend to have a predominance of native understory plants. Ornamental non-native shrubs and trees are found throughout the park, especially at buildings, entrances or other features. Non-native invasive species are also present.

Portland Parks and Recreation Bureau has authority over all but approximately 146 acres of Mount Tabor Park. The remaining 50 acres is under the jurisdiction of the Water Bureau. Mount Tabor Park is the site of three open reservoirs and a small concrete water tank. Mount Tabor Park, like Washington Park on the west side of the Willamette River, became a distribution site for Portland's gravity fed, mountain source drinking water in 1894 with the construction of the first reservoirs, two at Mount Tabor and two at Washington Park. Two additional Mount Tabor reservoirs, on the western slope, were constructed in 1911 soon after the time Mount Tabor Park became officially designated. All of these open reservoirs represent some of the finest examples of intact, still-in-use City Beautiful public works remaining in the nation. Because of their high integrity and historic significance to the city's water supply and development of Portland, and because they are outstanding examples of intact historic architecture and engineering, the reservoirs were listed in the National Register of Historic Places in 2004 as the Mount Tabor Reservoirs Historic District and the Washington Park Reservoirs Historic District. A majority of the reservoirs' features have been kept intact and contribute greatly to the integrity of Mt. Tabor Park. The surface of the water held in the reservoir basins represents approximately twenty acres, about one tenth of the entire park acreage. The deep, open water provides a chiaroscuro effect to the landscape and is an integral part of the experience of Mount Tabor Park. The lighted walkways around the perimeter of each parapet wall and wrought iron fence, the cleared, grassy areas associated with the reservoir basins and the outstanding views provide important park amenities.

Mount Tabor Park is a scenic reservation. The height of the various peaks allow for grand vistas in all directions from viewpoints attainable by auto, foot or bicycle. Two views on Mount Tabor have been rated by the City of Portland's Scenic Resource Inventory as among the top seven in the city and have been incorporated into the Scenic Resources Protection Plan.

The design principle of subordination is a key element of Mount Tabor Park. The historic drive and pathway system respects the topography, allowing accessibility without overwhelming the picturesque and pastoral landscape. The more than three miles of drives are popular destinations for local and out-of-town visitors to take in the views of the park, reservoirs, city skyline and surrounding mountains. Autos can still encircle the butte on the historic drives, arriving at one entrance and leaving at another. Since vehicular access has been restricted to certain areas in the park's interior since the 1970s, some of the paved drives provide popular routes for bicycles, skateboards, roller blades and baby carriages. Walking, jogging and bicycling are the primary activities noted in

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the park. Many visitors arrive from the surrounding neighborhoods on foot or bicycle. These drives are conducive to the park being a popular site for various types of races including foot, bicycle and adult soap box derby tournaments. The wide, well-graded unpaved paths were in the original design and, like the drives, were added over a period of years when funds became available. The path system travels over the entire park. In recent years, more unofficial paths have been made by mountain bikes and hikers.

Adding distinctive charm and illumination is the period lighting system comprised of eighty-eight single concrete standard lampposts that follow the drives and some of the main interior pathways throughout the park. These lampposts give off a soft, friendly light, reminiscent of gaslights, especially in the interior forested areas where they serve as a reminder of the original design of accessibility. The lighting encourages pedestrian exploration of the hills and dells throughout the park even in the short days of the colder months. Originally topped with a single, white, glass globe, polygonal lantern-style shades have replaced the globes. In 1911, Superintendent Mische requested of the Park Board, lampposts with glass globes to be serviced by an alternating current feed. He also requested underground conduits. The lampposts are serviced via underground conduits. The lighting system dates from 1924 and 1925.

A variety of amenities have been added to the park over the years. These include picnic areas, playgrounds, an amphitheater, tennis courts, a soapbox derby track, and comfort stations (only one in service.) Most of these amenities can be accounted for during the period of significance and are described in the descriptions of the quadrants of the park. The varied topography and forest cover of the park has allowed the amenities to be tucked in here and there so that they do not dominate the general feel of the park as a forest retreat. As was the Olmsted counsel, the park's styles allow respite from urban life and a connection to the rural roots and historic and natural resources of the area.

As much as Mount Tabor Park is a forest refuge in an urban environment, it is also a pivotal "work-horse" park, not only for the Water Bureau, but also for Portland's Parks and Recreation Bureau. Superintendent Emanuel T. Mische was, above all, a horticulturist, and he established a nursery to supply trees and other plants to city properties, including tens of thousands of street trees, at the south end of the site soon after the property was acquired in 1909. The nursery and greenhouse complexes still provide stock for all the city's properties, including all of the parks.

Though Mount Tabor Park's grandeur is striking, closer observation reveals modern projects and alterations, fortunately few and small, which have not adhered to the graciousness of the historic understated features. No attempt has been made to utilize period light fixtures attached to buildings and around the reservoirs. Recent Park Bureau signs are at odds with the historic feel. The maintenance yard's hodge-podge of buildings displays the largest array of unaesthetic alterations, however, this area is separated from the recreation area and so does not pose a problem of aesthetics for the park at large.

The entire park is being nominated. The general outline of the park is a rough rectangle with irregular protrusions such as Mount Tabor Nursery and maintenance yard due south, the finger of nursery on the west boundary, and two narrow irregularities to the north and the east owned by the Oregon Department of

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Transportation. It is roughly bounded by S.E. Division Street to the south, S.E. 60th Avenue to the west, S.E. Yamhill Street to the north, and S.E. Mountain View Drive to the east. The attached boundary map illustrates the current property lines.

Resource Count

Mount Tabor Park contains one contributing site, seven contributing buildings, five contributing structures, and one contributing object. In addition, Mount Tabor Park contains ten non-contributing buildings and six non-contributing structures. A sketch map and key delineate these features. The park land was counted as one contributing site; infrastructure such as driveways, paths, maintenance yard, and the lighting system, as well as those areas with loose physical definition such as play and picnic grounds, and the nursery, are included as part of the site. Substantial or distinctive buildings, structures, and objects were counted as contributing or non-contributing as follows:

Summary of Contributing Features

Site:

Mount Tabor Park site, including the circulation system: Drives (original names): Reservoir Loop Drive (Cascade Drive & Interlink Drive), East Tabor Drive (Woodland Drive), North Tabor Drive (East Overlook Drive), Tabor Summit Drive (Overlook Concourse), Lincoln Street Entrance (Linden Entrance), Salmon Street Entrance, and 69th Avenue Entrance; the historic lighting system; the Mount Tabor Nursery and maintenance yard, parking lot, and three play areas: 69th Avenue playground and group picnic area, Harrison playground and main playground.

Buildings:

Office-Horticultural Services Building
Administrative Building & Additions
Mechanical Offices Building (Community Gardens Building)
Caretaker House-Mount Tabor House
Volcano Comfort Station
Summit Comfort Station
Northeast Entrance Comfort Station

Structures:

Crater Amphitheater
West Tennis Court
East Tennis Court
69th Avenue Stairs
Southside Stairs

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Mount Tabor Park
Multnomah County, Oregon

Object:
Harvey W. Scott Statue & Terrace

Summary of Non-Contributing Features

Buildings:
Garages/Shops-West Side Row
Garages/Shops-Eastside Row
Lathe House
Equipment Building
Pole Barn building
Duplex Screen House
50" Meter House
44" Meter House
56" Meter House
Maintenance Building and Park Office

Structures
Summit Radio Tower
Additional Greenhouses
Picnic Shelter
Greenhouse Complex
Basketball Court
Soap Box Derby Track

Regions and Features of Mount Tabor Park

Mount Tabor Park has four public vehicular entrances located roughly in the four corners of the rectangular property at S.E. Salmon Street (Salmon Street Entrance), S.E. 69th Avenue (69th Avenue Entrance), S.E. Harrison Street (Harrison Street Entrance) and S.E. Lincoln Street (Lincoln Street Entrance). Numerous pedestrian or bicycle entrances exist from footpaths on all sides of the park. Neighborhood streets dead end at park boundaries, especially at the north, west and south sides. The east side is steep and rugged and adjoined by a newer housing development with private properties abutting the parkland along Mountain View Drive. The southeast corner of the park property adjoins a small private college, Warner Pacific College. The far southwest corner now abuts the private apartment and nursing care facility, Courtyard Plaza, a five-acre parcel formerly occupied by one Mount Tabor Park's first two reservoirs. The reservoir gatehouse, now privately owned and listed in the National Register, remains at the corner of S.E. 60th Avenue and Division Street.

Many maps exist for Mount Tabor Park and over the years, vicinities, drives and features have been delegated various names. This has contributed to some difficulty in creating clear descriptive statements and guidelines for the photographers and other volunteers involved with the preparation of this nomination. The predominant

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park boundary has a roughly rectangular shape. For the sake of clarity, this nomination has the park divided into quadrants based off the four park entrances described above. The site, buildings, structures, and objects in each quadrant are described as follows:

Lincoln Street Entrance

The earliest development of the land now designated as Mount Tabor Park happened in this area of the park. The city acquired land in this quadrant to build the first two reservoirs, then known as Mount Tabor High and Low Service Reservoirs respectively, in 1888.

In between Reservoir 1 and 5 is one of the four peaks, which Mische called the Hilltop Grove. At the summit of this small peak is a grove of large big-leaf maples and Douglas firs. On the south slope of the Hilltop Grove, just above the Reservoir Loop Drive, is a small grove of digger and ponderosa pines. The north slope of the hill is popular on the rare snowy day as it is used for sledding and other snow play. A 1954 map shows a ski tow at this location. A well-graded path encircles this rise as Mische had planned. Another path leads up and over the summit from north to south.

Where Harrison Drive meets Lincoln Drive at the south base of the dam face of Reservoir 1, the Southside Stairs climbs north from the roadway up to the reservoir basin. Lincoln drive continues west winding down the southwest slope of Mount Tabor past the Water Bureau entrance to the park south of Reservoir 6. At this junction, laurels and a cornelian cherry grow to the north and a weigela and several large lilacs to the west. flanked to the southeast with a row of mature fuchsia-colored double flowering cherries that create a dramatic display in mid-spring. The west side is a mixture of tall well-established shrubs and trees, some deciduous such as lilacs and hawthorns and others evergreen conifers and laurels. Continuing south, the drive intersects the nursery sites at the S.E. Lincoln Street Entrance and the north service entrance into the maintenance yard.

It was approximately here that Emanuel Mische designed his formal entrance scheme: the Maple Entrance arriving from the south from S.E. Division Street and the Linden Entrance from S.E. 60th Avenue coming from the west into a circle. A photograph circa 1920 depicts S.E. Lincoln Street lined with trees, as it is today on the north, nursery side. A traffic circle of sorts, does exist approximately where Mische's circle was to be but it is much more informal and less aesthetic. It is a widened area that serves as an intersection for a service road leading south into the maintenance yard, a small gravel service road going east into Mount Tabor Nursery, the Lincoln Street Entrance drive running straight west to S.E. 60th Avenue, and the drive into the park climbing north and then east. Today a touch of Mische's more formal scheme remains with some interesting, primarily non-native plantings. A large fragrant viburnum, Thunberg's barberry, a large strawberry madrone and other ornamental shrubs grow on the east side of the intersection and plantings of red osier dogwood, oriental maple, cotoneaster, and other shrubs are planted across the drive on the northwest corner of this intersection. S.E. Lincoln Street, as it runs west, has private homes constructed in the 1980s and 1990s on the south side of the street. The north is bounded by the nursery property fully planted with a variety of trees. This north side of the Lincoln Street Entrance is flanked by ornamental pear trees that replaced the double flowering cherries in the 1990s.

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The Mount Tabor Nursery includes a large tree and shrub planting area and a maintenance yard historically associated with the nursery, which is currently used to store and maintain park vehicles and equipment. The nursery and maintenance grounds together comprise 14 acres. While not indicated specifically on Mische's 1911 plan for Mount Tabor Park, park archival records state that the Mount Tabor Nursery dates from 1908-1909, and both the nursery and maintenance yard are located within the historic boundaries of the park. Located on the sunny, well-drained lower southwestern slope of the butte, the nursery also covers a long finger of land extending east and west between S.E. Lincoln Street and S.E. Harrison Street due south of what Mische had called the Linden Entrance (Lincoln Street Entrance). On the north side, the nursery is flanked with climbing roses on trellises and on the south, along the Lincoln Street Entrance drive, a row of ornamental pear trees. At the east end of this finger of nursery, two other nursery plots exist. These rise up further on the slope of the butte, in a wide, south-facing sloped area. These plots are also planted with tree and shrub species and are divided by an east-west service road that ends at a concrete patio area used for storage of soil amenities below Harrison Drive. The nursery has supplied street trees and other plants for the City of Portland continuously since the earliest years of Mount Tabor Park, propagating native species as well as those from around the world. Presently, the over 70 species of trees growing in the nursery provide visual interest, especially seasonally, and encourage various species of birds.

Inside the maintenance compound are a variety of buildings dating from various periods and serving a variety of functions to park maintenance for the Park Bureau. Park vehicles and machines, such as mowers and other tools are stored and maintained at this site. Offices and greenhouses are also located here. From the back of the compound, a maintenance vehicle exit ties into the Lincoln Street Entrance drive and the tree and shrub nursery areas. The main entrance to the maintenance yard is marked by a lawn with a row of large Atlantic blue cedars, shrubs and a bed of seasonal flowering annuals. Upon entering the maintenance grounds, the asphalt roadway is flanked by two rows of buildings. To the east is the Administration Building along with garages and shops. To the west is a long row of attached garages and shops. The Administration Building is the most formally designed building on the site. All other structures are of a functional nature and house offices, greenhouses, machine shops, paint shops, garages, and storage. Dates of construction range from pre-1918 through 1989. The back entrance of the yard leads out to the north, through the nursery stock onto S.E. Lincoln Street. A chain link fence encloses the entire maintenance grounds. The yard layout appears to be unplanned with buildings constructed when needed wherever space was available. Verbal interviews with park employees indicate that horses were kept at the compound for mowing and other work. Some of the buildings are reportedly converted stables. The grounds are primarily asphalt-covered with the exception of some landscaping around the Administration building and various trees near the Community Garden building. The eastern border of the yard is lined with a dense cedar hedge.

Contributing Features

Horticultural Services Building
This small office building appears to be the oldest remaining building, dated "pre-1918" on various Parks' sketches. It is located in roughly the center of the maintenance yard, facing south. The Horticultural Services Building is a small rectangular one-story building with a hip roof. The siding is horizontal shiplap. The corners

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are finished with a narrow board. A gabled dormer defines the front entrance. Wood shingles and a lunette window fill the gable end. No porch overhang exists currently. Windows are multi-over-one, double-hung wood sash of varying sizes. The foundation is concrete. There is a large brick chimney rising from the rear of the building venting the underground gas boiler. The boiler that heats the greenhouses was originally coal-burning. It continues to function as the boiler for the greenhouses. The chimney towers over the other structures in the yard, and has been extended to nearly twice its original height according to historical photographs. There is a greenhouse attached to the building.

Administrative Building and Additions
The most visible building on entering the maintenance grounds, and one of the most aesthetic, is the Administrative Building. Built in 1938, the Art Deco-styled, single-story, flat-roofed concrete building has a long rectangular plan with attached garages. In 1958, a two-story addition was added to the east facade. Both the 1938 building and the 1958 addition include a basement. The 1938 building was originally a combination of offices and garages. The front entrance is on the west elevation. It is defined by a slightly projecting bay decorated with telescoping vertical lines above the entrance. A flat concrete porch roof covers the entrance. Above this porch roof is a three-light, steel-sash window. To the south of the entrance is an unusual projecting triangular steel sash window; apparently a dispatcher's window overseeing the vehicle entrance. To the north is a series of garage entrances. Between the garage bays, at the top of the building, are a series of six-light, steel-sash windows. A decorative cornice is done in the Art Deco style. The garage bay immediately north of the front entrance has been in-filled and a new aluminum slider window replaces the original overhead garage door. Four garage bays remain intact. Beyond the garage bays, the building facade becomes slightly recessed, but the Art Deco cornice continues to the end of the concrete portion of the structure. Extending north, the structure changes to wood frame with metal siding and the roof becomes a gable roof covered with standing-seam metal. A series of metal-covered, wood, side-opening garage doors open into areas now used for storage and shops. According to verbal interviews with long-time parks' employees, this area once served as stables for the city's horses. According to park records, these attached garages were constructed over a three-year period from 1938 - 1941. The 1958 two-story addition was designed to match the original building, including the Art Deco cornice. The windows are a different type of steel sash. Typical of 1950s industrial buildings they are eight-light steel-sash with a center hopper window.

Mechanical Offices - Community Gardens Building
Located north of the Administration Building, this building is labeled mechanical offices on Parks Department sketches. It now functions as the "Community Gardens" office. According to park records, it was built before1938. This is a one-story structure with a concrete foundation and a gable roof. It is sided with wood horizontal lap siding. The corners are finished with vertical boards and the roof is composition shingle. Many of the windows have been replaced by vinyl sliders. The remaining original windows are small four-light wood sash. A shed-roof addition was added to the east facade at an unknown date. Wide wood lap siding covers the extension.

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Southside Stairs
On Mische's preliminary plan, a long flight of stairs was designed to climb from the south park boundary up to the Reservoir 1 terrace garden to tie into the pathway network of the park. Construction of 500 tread of stairs, location not given, were under construction in 1913. The lower flight of stairs between the Lincoln Street Entrance drive and the south boundary of the park no longer exists. There is a rough path there and there are metal pipes in the ground that could be remnants of earlier construction. There have been apparent excavations, perhaps on water pipes from Reservoir 1 directly above, following the line of the mapped stairs. The section of the Southside Stairs that is intact starts at the Lincoln Street Entrance drive and climbs up to Reservoir 1. The top of the stairs yields an impressive front-on view to the north of the 1894 Reservoir 1 and its associated gatehouse and weir building. To the south, the view is of southeast Portland, distant hills and the grounds of Warner Pacific College.

Noncontributing Features

Garages and Shops-West Side Row
Also built in 1938 and located across from the Administration Building is a row of attached shops and garages. They are covered with a gable composition shingle roof. The garage doors and siding are covered in standing-seam metal. Some original windows remain and are eight-light wood sash. Some windows have been replaced by aluminum or vinyl sliders. Uses for this structure have varied over time; currently the spaces are identified as "Turf Maintenance, Building Maintenance, Ballfield Maintenance, Irrigation." Although falling within the historic period, it is considered a noncontributing building due to numerous alterations.

Garages and Shops-East Side Row
Roughly forming an L-shape, this group of buildings is located at the eastern border of the maintenance grounds. Built between 1950 and 1961, they are comprised of a series of attached buildings, all with gable roofs and concrete foundations. All roofs are covered with standing-seam metal. Siding is either wood board and batten (1961) or wide horizontal lap siding (1950s). Gable ends are filled with horizontal lap boards. Windows are identical to those in the 1958 addition to the Administration Building: twelve-light metal sash with center hoppers. This grouping has had numerous functions: paint shop, electric shop, storage, etc. The construction dates of these buildings fall outside of the historic period so they are considered noncontributing.

Other Buildings and Structures
An Equipment Building is located at the far north end of the maintenance yard. Built in 1971, it is a 1-1/2 story "tilt-up" building with metal siding and roof. Gas pumps are located in front. The Pole Barn building dating from 1987 is located at the south end of the yard adjacent to S.E. Division Street. Near the Horticultural Services Building to the west is the Lathe House. Built in 1963, it is a shed-roof building with horizontal lap siding. Directly behind the Horticultural Services Building is a Greenhouse Complex. According to sketches from the Parks Bureau, these were constructed in 1981, 1988 and 1989. Additional greenhouses dating from 1973 are located at the northwest corner of the maintenance yard. All of these buildings and structures are noncontributing because they fall outside the period of significance.

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Water Bureau Buildings and Structures

Below and to the south of Reservoir 1 are four small buildings associated with the Water Bureau and piping from the reservoirs. The Duplex Screen House is a three-sided building with a shed roof. The small concrete building is situated into the slope. A metal door bears the building name. Dating from 1967, it is void of ornamentation. Southwest and below the Duplex Screen House is the 50" Meter House, a small shed- roofed concrete utilitarian building. The only slight embellishment is the projecting concrete door and window lintels and sills. The construction date is 1967. At the foot of the concrete steps up to Reservoir 1 is the 44" Meter House. The south elevation of this building abuts Harrison Drive. The metal door faces east and is accessed by concrete steps. The shed-roofed concrete building is the largest of the meter houses with screened windows on all four sides. To the west of these buildings along a wooded path, is the 56" Meter House. This small shed roofed concrete utilitarian structure has a slight embellishment in the projecting concrete door and window lintels and sills. It matches the design and feel of the other 1967 building. All of these buildings and structures are considered noncontributing because they fall outside the period of significance.

Salmon Street Entrance

The main vehicular entrance to the park is the S.E. Salmon Street Entrance. Accessed from S.E. 60th Avenue, this entrance was another of Mische's formal entries into the park. Presently it is marked with a basalt retaining wall on the steep north side and a park sign on the south side. A basalt wall acts as the gatepost for the metal swinging gate that can close off the driveway. The historic Caretakers House - Mount Tabor House (presently a rental property), is situated on slope to the immediate south of the Salmon Street Entrance overlooking the west side tennis courts and Reservoir 6 further to the south. To the north of the entrance is the steep forested slope of Foothill Overlook rising up to the S.E. Yamhill Street service entrance.

Here the park entices visitors into the interior as the driveway curves and gently climbs through one of the groomed forest areas of the park. At the line of sight where the driveway curves is a lovely ravine, called Sweet Briar Vale by Mische. John C. Olmsted called this area out in his Report to the Park Board in 1903 saying,

> "West of the summit ridge, it may be impracticable to take any considerable areas except in the ravines, which apparently have little value for residential purposes, and yet are very picturesque and would make attractive features in a public pleasure ground."

An important and picturesque trail network converges at Sweet Briar Vale, part of the inviting enticement of this region. Three paths climb up the ravine at this point. The one on the north side ascends the volcano through a large grove of tall rhododendrons beneath the overstory of Douglas firs. In the late winter or early spring the ground is covered with sweet violets. Passing historic lampposts standing in the forest, this path climbs occasional railroad tie steps (Mische had designed concrete steps) and arrives at the newly refinished basketball court at the south end of the Crater Amphitheater. An unofficial trail continues up the cinder cone, known as Foothill Overlook on the original map. Here also, the path intersects with a graveled east-west service drive that accesses the trash dumpsters to the west and continues out of the park onto S.E. Yamhill Street. Just to the east,

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this drive intersects with the main Reservoir Loop Drive at this pivotal access point with the main parking area, Maintenance Building-Park Office, Volcano Comfort Station, Picnic Shelter, and main playground.

The newest path follows the cleavage of Sweet Briar Vale where recent work was done to attempt to channel seasonal water down through a naturalized ditch of rock and earth to a small wetland area at the base of the ravine. On the higher ground near this area, old plantings of large heather family shrubs such as kalmia, rhododendron, and andromeda dominate. There is also the only sourwood tree, native to the southeast United States located here. This touch of formality continues as the path crosses the Salmon Street Entrance road with large mature azaleas and other shrubs marking the path that leads down the railroad tie steps to the west tennis courts passing to the south of the Caretakers House-Mount Tabor House, both constructs from the 1920s. This trail once led to the comfort station alongside the main entrance drive. All that remains now is a concrete foundation accessed with steps to a picnic table. The building was demolished when a tree fell on it in the 1990s.

One of the most popular trails in the park follows the south side of Sweet Briar Vale through native forest with an intact understory. This trail was on Mische's original plan and was apparently also included in the bridle path system established in 1929. Along the path grow a variety of tree species including numerous bitter cherries, a California buckeye and one of the largest alder trees in the park. It arrives at an eastern junction of several trails and the Reservoir Loop Drive.

Crossing the paved Reservoir Loop Drive, the path continues to the south, up railroad tie stairs, (stairs were originally designed here by Mische) passing by two immature ginkgo trees and a row of young, recently planted alders. Picnic Grove is at the top of the stairs. A modern drinking fountain and barbeque structure were recently removed from this area. Two picnic tables remain. To the south, this area overlooks the starting point for the Soap Box Derby Track. The groomed forest spot also provides a view of Reservoir 5 and the southwestern cityscape through the Douglas fir boughs. Picnic Grove, with its southwestern aspect is one of the nicest places in the park. It has hosted weddings and other gatherings in modern times.

The eastern path from Picnic Grove intersects with Reservoir Loop Drive below the Mountain Crest Summit. An unofficial trail climbs straight up the summit arriving to the north of the backside of the Summit Comfort Station. Two other trails descend down from Picnic Grove to Reservoir Loop Drive. One to the north follows the contour of the hill wrapping around from the north to the south. The other drops down directly from the summit. Both reconnect, arriving at the more formalized region with plantings of star magnolias, hawthorn, flowering crabapple and young sequoias just to the northwest of Reservoir 5.

This point intersects with the boundary of the Mount Tabor Park Reservoirs Historic District. Here another well-used pathway intersects at the northwest corner of Reservoir 5 and travels west on the grassy grade completely encircling the basin of the reservoir. This path parallels the lighted sidewalk around Reservoir 5 and defines part of the boundary of the Mount Tabor Reservoirs Historic District. The path comes to a junction with three other pathways and the paved Reservoir Loop Drive and the Soapbox Derby Track below the summit of Hilltop Grove. From this point, the Reservoir 1 basin and its northern glade is visible further to the southeast.

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This area is part of the narrowed, linear boundary defined by the underground tunnel that connects the waters of Reservoir 1 and Reservoir 5 of the Mount Tabor Reservoirs Historic District. This junction is a popular meeting ground and the lawn shows signs of wear and tear primarily because it has become a dog play area. Its popularity is understandable since the views of Reservoir 5 and the western cityscape are outstanding. In recent years, a bench has been placed northeast of this junction to take advantage of the fine vistas. The areas close to Reservoir 5, like those around Reservoir 1, are graced with the water sounds generated from the small cascades that feed into the reservoirs.

A west bound path continues along the southern boundary of the reservoir historic district south of Reservoir 5 to arrive at the top of the dam. Here Mische requested that the dam be widened so that visitors could have access the area and the views. This design created one of the most popular gathering places in the park and in the city to watch sunsets, fireworks over the Willamette River and to simply enjoy a sweeping, inspirational view of Portland. The view is enhanced by the twelve acres of the deep water reflecting from Reservoir 6 below. This is one of the protected views noted in the City of Portland's Scenic Resource Protection Plan and is within the boundaries of the Mount Tabor Reservoirs Historic District.

The Soapbox Derby Track runs north and south due east of Reservoir 5. Though seemingly not currently used by soap box derby aficionados, the south end of the track is located in a particularly scenic airy site overlooking Reservoir 5 with sweeping vistas of the cityscape. This site attracts many park visitors, both human and canine.

From the gate at Reservoir 5, going northeast on the Reservoir Loop Drive is a lovely curvilinear perfectly graded drive into the heart of the park. The forest dominates and every other distraction falls away, illustrating a chief Olmsted design principle. Passing by the top of Sweet Briar Vale at the base of two summits the road curves up to Mische's Foothill Overlook and the area to the west that is now called the "volcano" area or "crater." It is denoted with a tablet embedded in a stand of basalt rock that was erected in 1952 by the Oregon Society of the Geological Country of Oregon giving a brief summary of the volcanic activity.

This location, with its private feeling, lends itself to a natural amphitheater and has become the site of some of the amenities that the Mountain Crest Summit area hosted in the past. On the east side of the small peak, excavations unearthed a cinder cone in 1913. The east face of the cinder cone now comprises the west wall of the amphitheater. Excavations of rock for various city and private enterprises, created a quarried area that was eventually utilized as an outdoor amphitheater, the Crater Amphitheater. This is a defining and attractive feature of Mount Tabor Park.

Due south of the Crater Amphitheater and still within the volcanic crater is a regulation-sized basketball court, recently resurfaced with an orange substance made from recycled tennis shoes.

A path, from the original park design, surrounds the cinder cone, called Foothill Overlook on original maps. It is well graded and travels through an upland forest terrain that is mowed occasionally. The mid spring brings a carpet of yellow wood violets along the western slope interlaced with the earlier sweet purple violets. True

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dandelions are abundant here. This part of the park adjoins a donation land claim of a botanic physician trained at the Baltimore Botanic Institute, Perry Prettyman, who reputedly introduced dandelions to use as medicine.

Directly above and to the east of the Crater Amphitheater is the main parking lot for the park. This modest-sized parking lot, the largest in the park, was designed in 1971. At the north end of the parking area is the non-historic Maintenance Building and Park Office. To the east of the maintenance building is the Volcano Comfort Station, the only current serviceable restroom in the park. This pleasingly designed comfort station appears to date from 1928. Due south of the parking lot, across Reservoir Loop Drive, is the non-historic thirty-four square feet Picnic Shelter open on four sides. The Picnic Shelter appears to have been constructed in approximately 1974. The main playground with a few remaining older metal structures and an elaborate modern plastic structure is adjacent to the Volcano Comfort Station, parking area and Picnic Shelter. Benches overlooking the play area have been provided at the top of the slight rise accessible by a brick ramp. The bricks are stamped with the names of benefactors who purchased a brick for $50 to help pay for the remodel in 1999. The ramp area is landscaped with miniature azaleas and other common ornamental shrubs. A row of young native red alders are planted to the south behind the benches. Paths lead up to the Mountain Crest Summit to the south and in every direction at this point.

Contributing Features

Caretaker House - Mount Tabor House
The house is situated at the base of Mount Tabor at the Salmon Street Entrance with a southern view overlooking the west tennis court and Reservoir 6. The house is accessed from an unpaved driveway, S.E. 63rd Avenue, off of S.E. Salmon Street. Facing west on a slight rise, it is of an unassuming design and does not dominant the landscape. It is surrounded by a wide expanse of shady lawn under towering Douglas fir trees with perimeter plantings. Originally it served as housing for the park caretaker but it is now rented out to a private individual. The house is designed in the Colonial style and is listed in park documents and assessor records as dating from 1920. It is a one-and-a-half story, side-gabled, rectangular house with a concrete foundation. The house is sided with cedar shingles and the roof has composition shingles. The gable ends have no eaves, but the front and rear elevations have wide boxed eaves. An eyebrow dormer penetrates the roof directly over the front porch. The front central entrance porch is recessed under the main roof. Sidelights flank the wood front door. On either side of the front porch are two built-in wood benches. Windows are either eight-over-eight, double-hung wood sash or three-over-three, double-hung wood sash. To the south of the entrance porch is a bay window. Wood shutters with diamond cut-outs decorate every window. An exterior stucco-covered chimney is located at the south facade. The rear facade has an off-set recessed back porch. City records indicate that construction costs of the dwelling were $3,000 in 1920.

West Tennis Court
The construction dates of the two tennis courts in the park are given in park records as 1923 and 1928. It is unclear which one was constructed when, however, both dates fall within the period of significance. This tennis court is located just north of Reservoir 6; the tennis court on the east side of the park is located at the 69th Avenue playground. Fence and other repairs to the courts are recorded in 1926 and 1932.

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Volcano Comfort Station

Built in 1928 in the English Tudor style, this comfort station is in excellent condition. Park records show the cost for construction to be $3,843.19. The plan for this building is roughly L-shaped with a combination cross-gable and conical roof uniting three separate functions into one structure; restrooms, storage, and seating. This one-story roughcast stucco-covered building is comprised of two restrooms side by side and a storage area, a covered shelter with bench, and a small turreted storage room at the east end. The building has a concrete slab foundation and wood frame walls and roof. The roofing is composition shingles. Alterations were made to this building in the 1990s. At this time both men's and women's entrances were shifted to the south facade. Originally, the men's entrance was located on the west facade and was sheltered by a small Tudor-style covered porch. The women's entrance was located on the east facade under the attached covered shelter. An original window was removed from the south facade when the men's new entrance was installed. Both original entrance locations were replaced with windows. The porch on the west facade was removed. The gable end on the south facade (the current men's entrance) is filled with a decorative half-timber design. Small arched openings provide ventilation in the smaller gable end east of the men's entrance. A storage room is located to the north of the restrooms on the rear facade. Two entrances are located on the rear facade and retain their original vertical board doors. The attached gabled shelter is supported by a single square post with curved brackets in the Tudor style. The bracketing, exposed beams and cross bracing add to the English flavor. A wood built-in bench rests under the shelter. Seating is located on both sides of the bench. An attached round storage room at the far eastern end is topped with a conical roof that appears more French than English. Atop the roof is an iron weathervane depicting animals at play. It has an original vertical board round arched door cut into a round arch opening. The door has large iron strap hinges. A single step leading into this storage room is comprised of three massive cut stones. The charming nostalgic design is unique in the Portland parks system. Like the other two remaining Mount Tabor comfort stations, this one is set on a slight downhill slope to keep it from dominating the landscape. The approaching path from the south is through a touch of formal landscaping with common shrubs including Oregon grape and azaleas.

Crater Amphitheater

Making the most of the quarry established after the cinder cone was discovered in 1913, construction of the concrete stage and basalt rock retaining walls were apparently underway in 1934 according to archive photographs. A geological plaque on a basalt rock base, installed in 1952, remarks on the volcanic nature of this area. The concrete and basalt rock stage is located at the north end of a grassy "pavilion," with a large cindered area at the base of the stage. In the cindered area, wooden and metal benches are stored in stacks and set up for stage events. The grass pavilion was recently replanted with grass and three low angular curved basalt risers were installed to provide informal seating and enhanced viewing of the stage area. The stage area is wired for electricity. The Crater Amphitheater is accessible via remodeled concrete stairs or a long concrete ramp reconstructed to American Disabilities Act standards. The ramp parallels the high volcanic rock retaining wall all along the east side of the amphitheater that descends gradually to wrap around the back side of the stage. The stage area is accessed to the northeast by a small trail through old cedar plantings that connects with the trail that encircles the cinder cone. Though reconstruction has occurred at the Crater Amphitheater, it was done in a thoughtful manner and most of the historical features, including the stage, rock retaining walls, benches and

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railings are either original or in keeping with the original design of the area. Other amenities here include a modern drinking fountain.

Non-contributing Features

Maintenance Building and Park Office
Situated to the northwest of the comfort station, this building faces out onto the main parking lot. The rear elevation, that drops down from the south façade, is surrounded by fir trees and a footpath. The original construction may be dated to approximately 1965, although a photograph dating from 1953 does show a building close to the current location. This south-facing building is one story with an exposed basement level on the north side. It is covered with T-111 siding on all but the front facade, which is covered with wood lap siding. The gable roof faces south and has imitation half-timbering in the gable end. The front facade is dominated by two garage doors. The entrance is recessed on the east end. All windows are aluminum sliders. This building is considered non-contributing because it is outside the period of significance.

Picnic Shelter
Located midway up Mount Tabor along Salmon Way is a large thirty-four-square-foot picnic shelter. Plans for the structure were drawn by R. George in 1974. The shelter is situated in an open grassy area across from the Parks office building and parking lot. This is the only picnic shelter in the park. It is a square structure with a cross-gable roof supported by four log posts, wood beams and trusses. The roof structure is exposed. The flooring is concrete slab. This shelter serves as a gathering place for large group events with seating for eighty to one hundred visitors. This structure is considered non-contributing because it is outside the period of significance.

Soap Box Derby Track
The Mount Tabor Soap Box Derby Track is a long ribbon of pavement with six faded painted lines forming lanes. It appears as a roadway set in a bowl. The starting trench is on the north end and this trench is covered with a long narrow piece of heavy steel. Just south of the starting trench, on the east side of the track, are large piles of soil amendments used for park maintenance. These piles use the cement retaining wall along the north east edge of the track. The track follows the contours of a bowl-like depression. Historical information is sketchy regarding its origins, however, the first official track in the U.S.A. was constructed as a Works Progress Administration project in 1936 in an Akron, Ohio city park. Oral reports from derby aficianados indicate that the track at Mount Tabor Park was originally designed to official specifications and was very active in the 1940s through the 1960s. Most sources doubt that the track would have been built in the period of significance for this nomination since few communities had official tracks prior to the 1940s. According to City Archives records, the Mount Tabor Park Soap Box Derby Track was apparently refurbished in 1957. During that time, there was a discussion between City Council and the park superintendent regarding complaints of not completing the tract to specifications and of problems with silt deposition onto the apron of Reservoir 5 below it. In 1961, there was more City Council correspondence regarding a design for the track. The Soap Box Derby Track is considered a non-contributing structure because it is outside the period of significance.

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Basketball Court
The basketball court is open air and is bounded on the west by the crater, and to the northeast by the steps servicing the amphitheater. The date of construction is unknown but it has a modern feel and is subsequently considered a non-contributing structure.

69th Avenue Entrance

The northeast area of the park maintains much of its historic feel. Located in an historic and stable neighborhood, the 69th Avenue Entrance invites pedestrians to climb the long concrete stairs up the steep slope of Mount Tabor Butte. Historic drives travel to the southeast and due west. To the southeast, East Tabor Drive climbs gently in a curvilinear fashion past the 69th Avenue playground and group picnic site, eventually encircling the butte. To the west, the drive enters the park paralleling private residences to the north and arrives at the main playground, main parking lot, Crater Amphitheater, Picnic Shelter and Volcano Comfort Station.

To the southeast of the Northeast Entrance is the 69th Avenue playground. This historic playground and picnic area was built to take advantage of this relatively level spot on the steep east side of the butte. It is accessed by the 69th Avenue Stairs dropping down from East Tabor Drive. To the west, the butte rises dramatically upward. A comfort station, the Northeast Entrance Comfort Station, designed in 1916 and constructed in the 1920s, is also located in this area. This site includes an old style swing set, small ball diamond, volleyball court, two horseshoe pits and a group picnic area and drinking fountain. The open-air picnic site, like the entire area, is set amidst the lofty Douglas fir trees. The long tables are situated in close proximity to the recreational amenities. This area with its old-style recreational past-times and near-by historic comfort station, gives the visitor a sense of traveling back in time. Though the construction of every feature at this location cannot be dated precisely, there is a cohesiveness and sense of period that is intact. Also, early records report a high degree of neighborhood interest in recreation services at this entrance.

Mische designed a junction where park drives Interlink, West and East Overlook, Cascade, and Woodland met at the northern base of the park's highest point, Mountain Crest Summit. From this point pathways encircled the highest point and connected with a trail system to points all over the park. At the approximate location of Miche's junction there is now a primary intersection of the main driveways in the park and a small parking lot. A west locked gate at Reservoir Loop Drive (Cascade Drive) and an east locked gate at Tabor Summit Drive (East Overlook Drive) have been closed to public vehicular traffic since the 1970s when "partying youth" were prevalent and many nuisance reports were recorded. These driveways make excellent thoroughfares for bicycles, runners and baby strollers. Northwest of this junction is the main playground. Through the east locked gate, Tabor Summit Drive (East Overlook Drive) climbs the eastern slope to arrive at the summit area. This driveway has been referred to by numerous names on various maps such as Harvey Scott Circle, Mount Tabor Summit Drive, Tabor Summit Circle or simply Summit Drive. At the south end of the summit area there is a divider that directs traffic to the east side of the summit, circling around to the west side, and back down the east slope of the butte on the same driveway. Because this driveway has been closed to vehicular traffic for several decades the summit maintains a protected and peaceful feeling. Pedestrians, bicyclists, skateboarders

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and roller bladders frequent it as do those seeking solitude at the few picnic tables in the groomed forest area or at the overlook benches.

The Mountain Crest Summit is the highest point on the butte. The long flat summit area stretches approximately one-eighth of a mile north and south, sloping gently to the south. The summit is composed of mowed shady lawn with lofty Douglas firs and other deciduous trees. Views to the east and west from the summit have been incorporated into the Scenic Resources Protection Plan adopted by the city in 1991. Although Emanuel Mische preferred to leave the forest intact, he had planned for the views from the Mountain Crest Summit to be kept open. Since the tall trees in the key vista points have not been kept pruned, the views of east Portland, Mount Hood and the eastern foothills and mountain range have now become more or less obstructed from the highest points on the summit's east side. (Dropping down to the East Tabor Drive, however, affords several good views of Mount Hood, Larch Mountain and other peaks and the cityscape.) From the northeast vicinity of the summit, a glimpse of Mount St. Helens can be obtained on clear days. The northwest section of the summit provides a grand vista of downtown Portland and the west hills. With the sparkling waters and picturesque oval gatehouse of Reservoir 5 below, it is one of the finest views available in the city. This is a favorite site for sunset watching and a modern bench has been installed here. Where Mische had planned a modest, airy bandstand at the north end of the summit, two grand big-leaf maples grow. This site is utilized as a meeting ground for many people and impromptu nighttime concerts occur here in mild weather. Benches face east and north, and sunrises and moonrises can be witnessed there. Young beech trees have been set out to the north of the big maples. A brass geological marker reading City of Portland Benchmark number 1876 is embedded in the ground to the north of the large maples. To the west, is the historic 1920s Summit Comfort Station (probably constructed in 1926 according to city records). This comfort station replaced the original one that was remodeled in 1913 from the large J.H. Smith residence that presided over the summit area until it was demolished. To the northeast of the few stairs that access the comfort station, a 135-foot Summit Radio Tower was built. This tower is apparently used as a relaying system for the water system. The date of construction appears to be about 1968. The tower is unobtrusive due to the screening of the tall fir trees. At the south end of the summit is a large bronze statue of newsman Harvey W. Scott, by Gutzon Borglum of Mount Rushmore fame. Mounted in 1933 on a granite base, the statue sits atop a cut basalt rock terrace with steps and two benches.

Besides the asphalted Tabor Summit Drive, the summit area is accessed at the north and south by several pathways. As Mische envisioned, a long flight of concrete steps, the 69th Avenue Stairs, curves down the northeast slope of the butte to the 69th Avenue Entrance. These stairs, like the other long flight between Reservoir 5 and 6 on the west slope, get frequent use for athletic training by school groups and individuals. A short distance down the stairs, another wide trail forks to the north and drops down to the Reservoir Loop Drive above the main playground. At this junction, a small building built into the side of the north slope faces low round cement structures. This small round concrete covered water storage tank is a discontiguous feature of the Mount Tabor Reservoirs Historic District. From the Summit Comfort Station, another smaller paved path descends further to the northwest down to this same point. On the south end of the Mountain Crest Summit, Mische planned for another long flight of stairs to descend down to the Old Reservoir, Reservoir 1, site. A short flight of concrete steps descends directly south of the Harvey W. Scott statue across Tabor Summit Drive. From here several trails traverse the steep south side of the butte through some of the most natural forest in the

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park. Native understory, plants including fairy lanterns, trilliums, Solomon's plumes, snowberry, thimbleberry and hazel shrubs grow beneath the predominating conifer forest. One trail takes the steep route down to the north end of the Reservoir 1 site. The main path follows gentler contours of the hillside and is wide and well graded. Where it turns due west at a forest junction lamppost, it offers scenic glimpses of the waters and buildings of Reservoir 1. From this junction of several trails, the main trail turns northeast past another forest lamppost and accesses the eastern side of the summit area continuing either around to the 69th Avenue Entrance Stairs or tying into North Tabor Drive. This area of the park and the steep slope east of there has the most natural feel due to the forest undergrowth being intact.

Beginning at East Tabor Drive (Mische's Woodland Drive) was constructed with great difficulty across the rocky, steep slope of the east side of the butte. The east side of the roadbed has an attractive stacked basalt rock retaining wall. East Tabor Drive climbs and encircles the butte and arrives either at the Harrison Street Entrance, not in the original plan, or the Lincoln Street Entrance as Mische had essentially planned. Mische's 1911 preliminary park plan called for extending the boundary of the park so that the Woodland Drive (now East Tabor Drive) could be built at a more reasonable level farther down the slope. The property and drive he envisioned are analogous to what is now private homes along S.E. Mountain View Drive. East Tabor Drive, however, does provide the wide and inspirational views that Mische wanted to secure for the public. Mount Hood, the Cascade Range and all of east Multnomah County are visible as are the peaks in Washington State across the Columbia River to the north.

Contributing Features

Summit Comfort Station
The Summit Comfort Station is a Tudor-style building located to the northwest of the summit of Mount Tabor Park. It was built either in 1920 or 1926. In keeping with the other comfort station designs, it is located at a slightly lower elevation so as not to compete with the landscape. Several concrete steps and a low retaining-wall terrace landscaped with low ornamental shrubs lead down to the building from the Summit Drive. The one-story red-brick building faces east and is comprised of two restrooms with a storage/concessions area in between. The foundation is concrete and the roof is composition shingle. The plan is comprised of a main rectangular form with a projecting wing at either end. The center volume and wings are side gabled. Original round-arched wood doors to storage/concession are on the front (east) facade and a large central window opening has been boarded up. The gable ends of each of the wings (front facade) are filled with original timber and stucco. The original window openings in the gable ends have been filled in with brick. Restroom entrances are on the north and south facades in the wings. Wood vented window openings flank the entrances. The restroom entrances are sheltered by a small shed roof supported by Tudor-style brackets. Doors are original round-arched vertical board. The women's entrance retains an original curved iron railing. The rear elevation drops steeply down into the forest. The concrete foundation is more exposed on this side. Small boarded up windows are irregularly placed on this facade. The gable ends of the wings contain the same timber and stucco decoration as the front facade. Plans in 1953 were for a slight remodel for the women's side to accommodate a water bureau radio station. Though no longer in use, the building is in good condition and according to park records, can be made available for special occasions.

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Harvey W. Scott Statue and Terrace

At the southern end of the top of the butte, amidst the Douglas fir boughs, stands a full-body bronze statue of Harvey W. Scott, long-time editor of the daily newspaper, the *Oregonian.* Mounted on a granite pedestal approximately thirteen feet tall in total, it faces southeast, looking toward Mount Scott, another of the Boring Buttes that bears the influential man's name and where he once owned sizeable acreage. The statue's right hand points westward toward downtown Portland. An inscription on the base reads: Harvey W. Scott 1838 – 1910; Pioneer, Editor, Publisher, Molder of Opinion. It is among the last works by the sculptor Gutzon Borglum (1867 – 1941), who completed it around 1930 while he was working on the Mount Rushmore Memorial. The name of the artist is inscribed into the metal base on the east side. The statue and its pedestal stand in a small formalized terrace of a cut basalt rock patio with two concrete benches on the east and west sides of the statue. Cut basalt rock stairs and walkways approach the statue from the east and west. A cut basalt rock retaining wall faces south and follows the curve of the Summit Drive between the east and west stairs. The terrace landscape includes hardy shrubs for this south facing aspect. Oregon grape, rhododendrons, red osier dogwood and heather are among them. The statue was a gift from Scott's family and was dedicated at a ceremony at the site in 1933. The family established a maintenance fund, the "Scott Statue Memorial Fund," with $5,000 in an interest bearing account in the city of Portland's name, in the 1940s.

Northeast Entrance Comfort Station

Plans for this building date from 1916 and were drawn by the architectural firm C. H. Kable & Company according to City Archives documents. The actual construction date is 1926 and the building's construction cost was $5,049.60 according to inventory records for Mount Tabor Park. Situated in the northeast corner of the park, it services the 69th Avenue Playground area. The front facade of the comfort station faces north. A sidewalk winds around the building and continues up a short flight of stairs to the road. This one-story Tudor-style building is clay tile construction with a concrete slab foundation. The building is situated on sloped ground so that the elevation drops down from north to south and west to east. Thus the foundation is higher on the southeast side. The top of the foundation is capped with a wide curved concrete water table. The exterior is roughcast stucco. Rectangular in plan, the hipped roof is intersected by a large gable-roofed front porch. The roof is composition shingle. The interior plan is comprised of two restrooms side by side and storage areas at the rear. Access to the women's restroom is from the front porch as is access to an ADA restroom. Access to the men's restroom is from a side porch on the north facade. The front facade is dominated by a large front porch. The porch gable end is filled with wood lap siding. Exposed rafters are curved as is the bargeboard. Squared brackets decorate the gable end. Identical rafters also decorate the eaves of the main hip roof. The porch is supported by square posts and is enclosed by a low stucco wall with an arched opening and inset tile and brick decoration. The porch ceiling is beaded board. A small built-in bench is integrated into the wood railing along the south end of the porch. The wood railing is decorated with bell shaped cut-outs. Window openings are located high up on the each of the facades and are filled in with wood vents. Under the hip roof on the rear facade is a recessed area containing a built-in bench. Original vertical board doors provide access to small storage areas here. This restroom is no longer open to the public, but the building is in good condition.

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East Tennis Court
The construction dates of the two tennis courts in the park are given in park records as 1923 and 1928. It is unclear which one was constructed when, however, both dates fall within the period of significance. This tennis court is located at the 69th Avenue playground; the tennis court on the west side of the park is located at the Salmon Street Entrance near Reservoir 6. Fence and other repairs to the courts are recorded in 1926 and 1932.

69th Avenue Stairs
Long flights of stairs are one of the hallmarks of Mount Tabor Park. This concrete flight winds its way with steep grace up the entire northeast slope of the butte arriving at the summit. It begins at the 69th Avenue Entrance west of the playground. It was completed in 1915. Just past the junction with Tabor Summit Drive, concrete restoration work was completed recently on a section of the stairs.

Non-contributing features

Summit Radio Tower
The summit radio tower is a metal structure, 135 feet tall, located on the northwest portion of the Mountain Crest Summit. It reportedly serves the Water Bureau with communications to their various sites. Some of the power components are apparently housed within the Summit Comfort Station that was refitted to accommodate them. The date of construction could not be firmly determined, but through Archives and oral reports, it appears to be about 1968. The Summit Radio Tower is a non-contributing structure because it is outside the period of significance.

Harrison Street Entrance

Mische's preliminary park plan of 1911 had the northern reaches of this region traversed by Woodland Drive and pathways. His plan called for extending the park land to include the steep lower reaches of the butte that are now developed for residences along S.E. Mountain View Drive. The Woodland Drive of Mische's plan was developed higher up the butte in the 1930s and is called East Tabor Drive today. Photographs depict construction on this drive in 1937 by a WPA crew (Project # 869C). This is one of the most scenic drives in the park. It is open to vehicle traffic six days a week and provides some of the grandest views to the east of Mount Hood, Larch Mountain, and the Washington State mountains north of the Columbia Gorge. Pedestrians have a sidewalk up the east side for most of the drive. Heading north, East Tabor Drive intersects North Tabor Drive that travels northwest below the Mountain Crest Summit arriving at a small parking lot bounded by a railroad tie terrace to the south. This terrace is landscaped with a variety of native and non-native plants but of particular interest are the flowering currants that attract hummingbirds. Here, also, is the primary junction of the locked gates to Tabor Summit Drive and the east portion of Reservoir Loop Drive. The main playground and Crater Amphitheater areas are to the northwest.

The Harrison Street Entrance was the last formal entrance developed in the park and not part of Mische's original scheme. The entrance appears to have been an extension of S.E. Mountain View Drive, the residential street paralleling the eastern boundary of the park. This entrance was apparently begun as W.P.A. Project #

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869C, 1/11/37 – 5/4/37 and labeled: 72nd and Harrison St. Approach to Mt. Tabor Park – Removing 1500 cu. Yard." The estimated cost was $4,746 and actual cost was $5,162.56. The drive associated with this entrance is called Harrison Drive because it is an extension of S.E. Harrison Street. It ties into the Lincoln Drive arriving from the west and the East Tabor Drive that curves down the eastern slope of the park. The junction of these drives is below and to the south of Reservoir 1, just east of the Southside Stairs. Harrison Drive is a good example of the difference noted between the newer road construction and the original. Harrison Drive is potholed and not of the same quality of that of the older drives.

The Harrison Street Entrance is flanked by ornamental tree plantings, predominantly flowering plums, on the north slope and the Harrison Playground, distinguished by the variety of lovely non-native shade trees, on the south side slope. The history of the planting of the mature grove of predominating black walnut, black oaks, linden, and other deciduous trees is unknown. They are well suited for this south-facing aspect and well-drained environment. The Mount Tabor Nursery is just to the west of this area, and along the paths in that direction, several other non-native or uncommon tree species are growing and so the area may have received the extra attention of nursery workers. The predominance of large, non-native nut-bearing trees makes this a distinguished site in the park and a favorite hunting ground for the plentiful fox squirrels and various birds. The deciduous trees make the area pleasantly shaded in the summer but well lit after the trees drop their leaves in the winter. The Harrison playground is old-style with several metal structures. The play structures are positioned with great distances between them in the sloped grove. The well-spaced great shade trees lend an airy, playful feel to this pastoral area, even without the play structures. The recent widening of the path that accesses this area from the east and west adds an unaesthetic element. The exact date of the construction of the playground is unknown.

A pathway leaves the playground going west through the primarily Douglas fir, partially groomed forest. It soon divides into a lower path and an upper path. These paths bisect what used to be the lower section of the Southside Stairs, from the southern boundary of the park up to the planned terrace garden of Reservoir 1. This portion of the stairs has been replaced by a rough trail that climbs steeply up to cross Lincoln Drive accessing the remaining upper section of the Southside Stairs. The lower path, bordering Warner Pacific College grounds, passes by two large native madrone trees, uncommon in the park and the neighborhood. The upper path traverses the south face of the slope and crosses a main, but undeveloped path climbing up to the Reservoir 1 area. The upper path passes by a tiny spring, one of the few visible springs in the park, emerging from beneath a big-leaf maple on the north side of the path. The pathway continues into a mature non-native spruce forest. Both of these trails converge into the nursery area where there is a small grove of sizable non-native Coulter or big-cone pines and other notable non-native species such as strawberry madrone. The upper trail arrives into a flat cedar grove that is used as a soil amendment storage area for the nursery . A low cement retaining wall along the north side is crowned with well-established plantings of uva ursi and a prostrate juniper.

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Summary

True to the prediction of John Charles Olmsted, Mount Tabor Park is one of the most important and largest parklands in the city of Portland, and a defining landscape feature of the city's east side. Mount Tabor Park's design retains its historic integrity and the principles of Olmstedian design.

Mische recognized the wisdom of letting the land speak for itself by primarily aiding accessibility with aesthetic drives and pathways. Though a city park in an urban neighborhood, Mount Tabor maintains elements of a forest preserve. The masterful network of drives and pathways fit the needs of the community. The interior of the park remains a sanctuary due to the limited access of vehicles, yet the drives and paths provide recreational opportunities and numerous places to enjoy the powerfully beautiful park landscape and outstanding views of the surrounding city and countryside. The oldest driveways are also testimony to timeless construction techniques. After extensive analysis of the roadways in the park, the City of Portland's Mount Tabor Master Plan of 2000 stated that the historic roads have held up very well for over 50 years unlike the newer constructs. The rock work from local basalt accents drives and other manmade features. Amenities are subordinate to the landscape. All of the comfort stations have maintained a high degree of integrity, though only one is open to the public at this time. As the park master plan points out, the open water reservoirs are, "integral historic and aesthetic elements directly tied to the public's identification with Mount Tabor Park." Ninety-five years after the city purchased the nearly 200 acres that make up the park today, little has been done that alters the experience of Mount Tabor Park.

A PARTIAL LIST OF
Plants Growing in Mount Tabor Park
(alphabetized by most familiar common name)

Alder, red *Alnus rubra* Betulaceae
Andromeda *Pieris sp* Ericaceae
Barberry *Berberis sp* Berberidaceae
Bittercress *Cardamine sp* Cruciferae
Blackberry *Rubus laciniatus, R. discolor* Rosaceae
Buddleia (Butterfly bush) *Buddleia sp* Buddlejacaceae
Buttercup *Ranunculus sp.* Ranunculaceae
Burdock *Arctium lappa* Asteraceae
Brooklime, American *Veronica americana* Scrophulariaceae
Bracken fern *Pteridium aqulinum* Polypodiaceae
Camellia *Camellia japonica* Theaceae
Cedar *Thuja occidentalis, Chamaecyparis lawsoniana, C. nootkatensis, Calocedrus decurrens* Cupressaceae
Centaury *Centaurium umbellatum* Gentianaceae
Cherry, wild *Prunus emarginata, P. subcordata, P. virginiana* Rosaceae
Chestnut, horse *Aesculus hippocastanum* Aesculaceae

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Chickweed *Stellaria media* Caryophyllaceae
Chicory *Chicorium intybus* Asteraceae
Clematis *Clematis sp* Ranunculaceae
Clivers *Galium aperine, G. oregano* Rubiaceae
Clover, red *Trifolium pratense* Fabaceae
Clover, white *Trifolium repens* Fabaceae
Cotoneaster *Cotoneaster sp* Rosaceae
Cottonwood *Populus trichocarpa* Saliaceae
Cranesbill *Geranium sp* Geraniaceae
Currant, red-flowering *Ribes sanguineum* Grossulariaceae
Daisy, English *Bellis perennis* Asteraceae
Daisy, ox-eye *Chrysanthemum leucanthemum* Asteraceae
Dandelion *Taraxacum officinale* Asteraceae
Dandelion, false *Hypochoeris radicata* Asteraceae
Dock, yellow *Rumex crispus, R.. obtusifolius* Polygonaceae
Dogbane, spreading *Apocynum androsaemifolium* Apocynaceae
Dogwood, Pacific *Cornus nuttalli* Cornaceae (in demise)
Dogwood, creek (red osier) *Cornus stolonifera* Cornaceae
Fairy lanterns (Fairy bells) *Disporum hookeri, D. smithii* Lilaceae
Fir, Douglas *Pseudotsuga menziesii* Pinaceae
Groundsel, common *Senecio vulgaris* Asteraceae
Hawthorn *Crataegus monogyna* Rosaceae
Hawkbit *Leontodon sp* Asteraceae
Hazelnut *Corylus cornuta* Betulaceae
Hemlock, Poison *Conium maculatum* Apiaceae
Hemlock (tree) *Tsuga sp* Pinaceae
Hydrangea *Hydrangea sp.* Saxifragaceae
Holly *Ilex aquifolium* Ilexaceae
Horsetail *Equisetum hymenale, E. arvense* Equisetaceae
Ivy, English *Hedera helix* Araliaceae
Juniper *Juniperis sp* Cupressaceae
Kalmia *Kalmia sp* Ericaceae
Knotweed *Polygonum sp* Polygonaceae
Lambsquarters *Chenopodium album* Chenopodiaceae
Lettuce, wild *Lactuca sp* Asteraceae
Madrone, Pacific *Arbutus menziesii* Ericaceae
Madrone, Strawberry *Arbutus uneda* Ericaceae
Mallow *Malva neglecta* Malvaceae
Maple, big leaf *Acer macrophyllum* Aceraceae
Maple, vine *Acer circinatum* Aceraceae
Mock orange *Philadelphus sp* Saxifragaceae

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Mountain ash *Sorbus sitchensis* Rosaceae
Nipplewort *Lapsana communis* Asteraceae
Oak *Quercus sp* Fagaceae
Oceanspray *Holodiscus discolor* Rosaceae
Oregon grape *Mahonia aquifolium, Mahonia nervosa* Berberidaceae
Osoberry / Indian plum *Osmaronia cerasiformis* Rosaceae
Pearly everlasting *Anaphalis margaritaceae* Asteraceae
Periwinkle *Vinca major, V. minor* Apocynaceae
Pineapple weed *Maticaria matricarioides* Asteraceae
Pine *Pinus sp* Pinaceae
Pittosporum *Pittosporum sp* Pittosporaceae
Plantain *Plantago major, P. lanceolata* Plantaginaceae
Poison oak *Rhus diversiloba* Anacardiaceae
Queen Anne's lace *Daucus carota* Apiaceae
Raspberry *Rubus strigosus* Rosaceae
Rhododendron *Rhododendron sp* Ericaceae
Rose, wild *Rosa gymnocarpa, R. nutkana* Rosaceae
Rush *Juncus sp* Juncaceae
Salsify/Oyster plant *Tragopogon sp* Asteraceae
Scots broom *Cytisus scoparius* Fabaceae
Sedge *Carex sp* Cyperaceae
Self-heal *Prunella vulgaris* Laminaceae
Sheep sorrel *Rumex acetosella* Polygonaceae
Shepherd's purse *Capsella bursa-pastoris* Cruciferae
Snowberry *Symphoricarpos mollis* Lonicerae
Solomon's seal, branched/false, star-flowered *Smilicina racemosa, S. stellata* Liliaceae
St Johnswort *Hypericum perforatum* Hypericaceae
Strawberry *Fragaria vesca* Rosaceae
Sword fern *Polystichum munitum* Polypodiaceae
Tansy ragwort Senecio jacobaea Asteraceae
Thimbleberry *Rubus parviflorus* Rosaceae
Thistle *Cirsium sp* Asteraceae
Trillium *Trillium sp* Liliaceae
Uva ursi *Arctostaphylos uva ursi* Ericaceae
Vetch *Vicia sp* Fabaceae
Viburnum *Viburnum sp* Caprifoliaceae
Violets *Viola sp* Violaceae
Weigela *Weigela (Dievilla) sp* Caprifoliaceae
Witch hazel *Hamamelis sp* Hamamelidaceae
Willow *Salix sp* Salicaceae
Yarrow *Achillea millefolium* Asteraceae

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Youth-on-age/Piggyback plant *Tolmiea menziesii* Saxifragaceae
Yellow dock *Rumex crispus* Polygonaceae
Yew *Taxus sp* Taxaceae

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Mount Tabor Park
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STATEMENT OF SIGNIFICANCE

Mount Tabor Park is a 196-acre city park located in southeast Portland, Multnomah County, Oregon. It is eligible for the National Register of Historic Places under Criterion A because of its association with early park planning achievements in Portland. The birth of this park characterizes the style by which many of Portland's parks, and the nation's parks, were obtained and developed through active citizen involvement in cooperation with the city government. Mount Tabor Park's story also illustrates how park design shifted with national trends, from a formalized European mode to a more naturalistic style, with later accommodations for the recreation/playground movement. The chronicle of Mount Tabor Park falls into the larger context of periods of park creation and development in the history of the United States. The earlier portion of the park's history, in the waning nineteenth century and emerging twentieth century, coincides with the City Beautiful movement's influence regarding the importance of parks and landscape on society. The ideas of these times held sway through the several decades of the Progressive Era. Also important in the park's development were the New Deal work programs of the 1930s, established during the years of the Great Depression.

Mount Tabor Park is also eligible as an example of Landscape Architecture under Criterion C because of its association with John Charles Olmsted, who identified it as a prime park location in 1903. Mount Tabor Park's design clearly exhibits elements that are associated with design principles followed by the Olmsted landscaping firm. John Charles Olmsted was the stepson and nephew of the famous landscape planner Frederick Law Olmsted, Sr. Frederick Law Olmsted is credited as being one of the prime instigators of the City Beautiful movement. Commissioned to aid in the planning of Portland's Lewis and Clark Exposition of 1905, his firm was also retained to review the city of Portland's existing and potential parklands. After John C. Olmsted's 21-day visit to Portland in April 1903, he produced his report to the Portland Park Board in December of 1903. Thirty-seven park projects were identified in Olmsted's 1903 Report to the Park Board, Mount Tabor Park among them. Olmsted's document has continued to shape the city's park planning to this day. In 1907, the Olmsted firm completed another review of Portland's parks, building on the earlier 1903 recommendations.

Mount Tabor Park's original design was created by Emanuel Tillman Mische, an outstanding horticulturist who had trained and worked at the Olmsted firm for eight years before being referred by them for the position of Portland's park superintendent. Mische was hired by the City of Portland in 1908. Emanuel Mische had a continuing relationship with the Olmsted family beyond that of an employee. On John Olmsted's subsequent visits they collaborated on various aspects of Portland's park planning and implementation. Mische's 1911 park design for Mount Tabor Park stayed true to the recommendations as discussed by Olmsted's report to the Park Board of 1903. Mount Tabor Park has maintained the look and feel of a park designed using the principles touted by the Olmsted firm in part due to the continuity afforded by Mische's assistant, Charles P. Keyser. Hired in 1909, the year of Mount Tabor's official park status, Keyser was made the superintendent of Portland's parks in 1917 where he remained until 1949.

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Criterion A: Mount Tabor Park Development Influenced by the Progressive Era, City Beautiful Movement, and the New Deal

Mount Tabor Park meets the guidelines for Criterion A as an example of the city of Portland's early park planning. This story is not unlike so many other parks across the country. Civic leaders in Portland sought outside council, specifically the Olmsted landscape firm, to plan not only the site for the 1905 Lewis and Clark Exposition, but to review lands suitable for parks. Mount Tabor Park was one among many identified by John Charles Olmsted's 1903 Report to the Park Board. The active acquisition of the land that makes up the park and the park design occurred with local funding during the Progressive Era and included the influence of the City Beautiful movement at the turn of the nineteenth to the twentieth century. Work on Mount Tabor Park's amenities continued through the next decades with the ebb and flow of local funding. With the Great Depression came federal aid through the New Deal programs of the 1930s. Money was channeled to all levels of government to produce public works projects that would employ millions of jobless people. Mount Tabor Park, like so many other recreation sites around the country, benefited by work crews who created well-crafted infrastructure and amenities. In the case of Mount Tabor Park, Works Progress Administration crews completed the drive system as it was originally designed in the 1911 plan prepared by Emanuel Tillman Mische. Other W.P.A. projects related to the construction of park maintenance buildings, drainage and clearing understory plants were undertaken at Mount Tabor Park.

Progressive Era and City Beautiful Movement Stimulate Park and Urban Planning

The sweeping social and political changes that occurred during the ending years of the 1800s and the early years of the 1900s mark what is called the Progressive Era. Reform movements grew and created policies and institutions still powerful today. Progressive individuals and groups believed that it was possible to improve human nature by bettering living and working conditions. Women, from local civic clubs to scientists like Ellen Swallow Richards from M.I.T., were instrumental in providing leadership for the municipal housekeeping movement that spawned environmental consciousness and general improvements throughout the nation.

The Progressive Era emerged as the United States faced the end of the frontier. Settlement stretched from coast to coast. The population of the country burgeoned, tripling in size from thirty million in the 1860s to ninety million by 1910. Cities rapidly expanded with immigration, and migration from farms to urban jobs. Land became much more valuable as it became scarcer. Progressives grappled with the side effects of an unmitigated free enterprise system. Urban life brought the classes in close contact with each other, though the upper class could retreat to their estates. A compelling sense of responsibility to contribute to the community in positive ways grew, extending from the traditional philanthropy of the upper class to include the growing middle class. Whereas the upper class did not need to rely on public land for their recreation, the growing middle class and the lower classes needed access to land for recreation. Labor unions were edging industry toward providing shorter work hours for laborers thus city dwellers tended to have more time for recreational interests. The subjugation of nature by automobiles and urban development contributed to a growing sense of nostalgia for the lost rural roots of America. Reform movements emerged as the public faced the Industrial Revolution head-on. Among the movements was the so-called City Beautiful movement.

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The City Beautiful movement grew out of this time of reform to address not only architecture but city planning at a time when urban areas were expanding exponentially with little concern for aesthetics or other planning criteria. Advocates of the City Beautiful movement promulgated that beautification would not only provide a more pleasing environment, but that individuals and thus society as a whole, would exhibit greater moral and civic virtues.

The City Beautiful movement's precepts strove to encourage city governments to set aside bountiful land for present and future enjoyment and to build beauty into every development. The movement preached that the incentives for doing so included a better, more affluent society of engaged citizens. There was an agreement that pleasant neighborhoods that included gardens, squares, tree-lined boulevards and parkways or other park-like land, as well as properties overlooking grand vistas and waterscapes, increased real estate value and increased the tax base.

Land use planning had not emerged as a strong feature in the forge-ahead economic development of United States cities in the middle of the nineteenth century. Yet well-established and crowded eastern urban areas had prominent people influenced by the grand beauty of European designed cities, parks and gardens, who demanded and helped to fund, lovely public spaces. Places like New York City, Boston and Washington, D.C. became famous for their parks and landscapes, and the designers of these landscapes found themselves in high demand. There was a sense of competitiveness between cities as they vied for attracting business and residents. This competitive sprit was exemplified by the international events known as the World Expositions.

Designed to promote the latest achievements in industry and technology, as well as to showcase the products and virtues of a region, the expos were meant to inspire the possibilities of creating an aesthetic and healthful city environment. The first were conceived and executed in Europe – London 1851, Paris 1889, London again, and Vienna. Chicago's World's Columbian Exposition of 1893, though not the first expo for the country, was a pivotal event for the United States. Four hundred years after Columbus, the nation was eager to demonstrate its glamour and abilities in comparison with the acknowledged distinction of Europe's far more historic cities. Known as the "White City" due to the extensive use of white paint applied to cover the plaster architectural features, Chicago's expo was a testament to classical Greek and Roman architecture and relied extensively on the elaborate Beaux Arts style, popularized by French schools of architecture. Design guidelines were utilized to create harmonious architectural scale. The highly designed landscape featured the local waterway as an aesthetic component whereas urban rivers and lakes were primarily monopolized by industry and suffered grave environmental consequences. The World's Columbian Exposition put the City Beautiful movement soundly on the map and influenced cities of all sizes across the land to develop beautification programs of their own.

Chicago's Columbian Exposition advanced the field of professional landscape design just as the Progressive Era, in the zeal to outsmart political cronyism, had hatched the trend to hire an outside professional consultant. The City Beautiful married the two and the landscape design field took off. Cities and prominent citizens were anxious to hire experts, like the Olmsteds, to help with urban and estate landscapes. If the city wanted to host an expo, there was even a greater incentive for creating an image of desirability. Such was the case for Portland in

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1903, when John C. Olmsted was commissioned to help the city prepare for the Lewis and Clark Exposition of 1905.

The City Beautiful movement pushed for park planning as part of a national trend toward political and social reform that had grown with the burgeoning of American business, and the swelling population. The influence of this movement went right to the top level of public policy makers. Concern for the conservation of public lands was advanced by President Theodore Roosevelt. While his interests included art (he was an early member of the elite National Arts Club) and general political and commercial accountability, he is credited with championing the conservation of land for public parks. During his time as president, approximately 230 million acres were placed in public protection. His terms in office, between 1901 and 1909, first completing the assassinated William McKinley's three years followed by his own successful four year term, were very instrumental in forming the National Parks and National Monument systems, the U.S. Forest Service, and game and bird refuges. A clear policy of conservation coming from Washington, D.C. helped to foster the state and local park systems we know today. The push to acquire the land for Mount Tabor Park closely corresponds to Teddy Roosevelt's term, and a majority of the land parcels purchased by the city of Portland for Mount Tabor Park and other parks occurred in 1909.

The women's suffrage movement, an important component of the Progressive Era, had a profound effect on park planning. Even without the right to vote, women worked at the local and state levels to promote a common agenda of moral obligations to women and children. Kindergarten and other school programs, awareness of child labor practices and the playground movement came out of these efforts. New Jersey passed the first comprehensive state legislation in 1907 establishing a playground commission. Whereas the City Beautiful movement had emphasized the need for aesthetically, naturalistically designed land separated by space or landscape from the urban environment, a growing number of urban families demanded open space for active recreation.

Post World War I: Recreation Movement Continues

The time between the two Roosevelt presidents, from 1909 to 1933, was pivotal for the nation's evaluation of outdoor recreation. Many parks were established by the first decade of the twentieth century. The population clamored for more park amenities, as well as more parks, but lack of funding, the restrictive atmosphere imposed by World War I and the world wide influenza pandemic, had hampered the development of services on parklands. Nationally, as labor unions and public opinion swayed the labor force toward shorter work hours, people had more leisure time. The predominating urban environments, as opposed to the rural lifestyle, increased the demand by the public for recreational land and facilities. In general, people had more time and more mobility, especially with the private automobile, which also contributed to a declining rate of physical activity.

In 1924 the Federal Government held the National Conference on Outdoor Recreation in Washington, D.C. at the request of President Calvin Coolidge. Three-hundred delegates from one-hundred-twenty-eight national organizations attended. The conference was designed to assist in the formulation of a national policy "to

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coordinate the activities of federal, state, county, municipal and unofficial agencies in the field of outdoor recreation and to promote the development of the recreational resources of the country and stimulate their use." The conference was also to encourage the promotion of conservation and wise administration of the nation's natural resources. This conference was followed two years later with the passage of the Recreation and Public Purposes Act, through Congress, that authorized the Secretary of the Interior to exchange, sell (at low cost) or lease unreserved non-mineral public lands to states, counties and municipalities for the purpose of recreation.

This time of park acquisition was followed by a time of development during the next decade. While the country suffered economic collapse in 1929 and private development languished, public lands benefited. John Olmsted, in his 1903 Report to the Park Board, had noted that economic hard times could be used for good advantage both in the acquisition and development of parks. The stock-market crash of October 1929 was a major turning point for American life on nearly every front. Desperation was a driving force of individuals as well as all levels of government.

The New Deal: Development of Park Amenities

President Franklin Delano Roosevelt (FDR), who served from 1933 until 1945, during the trying times of the Great Depression and World War II, established the work relief programs of the New Deal. In the face of the desperate depression times of the 1930s, FDR's administration worked to shore-up the economy of the nation by providing jobs for unemployed Americans. By providing funding for public works projects through the Public Works Administration and direct employment through the Works Progress Administration and the Civilian Conservation Corps, the federal government was able to assist states and local governments proceed with developing public amenities. Many parks, including more than 800 state parks, were developed through the direct employment agencies of the New Deal.

The Works Progress Administration, later called the Work Projects Administration, employed 8.5 million people on 1.4 million public projects to improve America's infrastructure, arts, history and culture. The Civilian Conservation Corps, under the Emergency Conservation Work program, put men to work developing recreational facilities in forests and parks, preventing soil erosion, and planting trees. Parks around the country were upgraded and Portland's parks were no exception. Work crews from this era left their mark on Mount Tabor Park, executing Mische's earlier design intentions from the mid-1930s until 1939.

Out of this period emerged principles regarding parks and natural resources and federal laws, such as Public Law 770 1/2 of 1936 that provided for a comprehensive study of parks, parkways, and recreation programs in the United States. Another federal study entitled, "Municipal and County Parks in the United States 1935" included data on every state including 1,216 cities in seventy-seven counties that was to be compared to the 1925-1926 study on recreation facilities. In 1941, a federal document outlining guidelines for the nation's recreation entitled, "A Study of the Park and Recreation Problem in the United States," made strong recommendations that the majority of recreational needs should be the responsibility of state and local governments.

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World War II interrupted the momentum for park planning that had been gained during the 1920s and 1930s. It was not until the mid- to late -1950s that federal efforts pushed forward with the Mission 66 program, spurring once again park planning and development on all government levels. The boom times of the post-war nation encouraged housing developments and a new suburban expansion. Once again, there was much pressure for park land developments as housing and business continued to edge out the rural landscape.

Early Park Development: The Process in Portland, Oregon

The story of the creation of Mount Tabor Park, which was the largest park in Portland until the 1940s, is an illustration of the way many public parks were conceived. Its establishment took the will and the cooperation of civic-minded and influential individuals including members of the mayor-appointed Park Board, politicians and ultimately voters to give the mandate on funding. Very important in this mix were the outside influences of experts in the field, members of the Olmsted firm, including their former horticulturist, Emanuel Tillman Mische, whose vision and expertise helped manifest the beginnings of John C. Olmsted's park plan for Portland. Mount Tabor Park and Portland's entire park system benefited from the continuity of management style carried on by Mische's assistant, Charles Paul Keyser who was park superintendent until 1949.

A clear policy on publicly owned parkland had not developed nationally but it was in process by the turn of the century. There was a sense of rivalry between cities as policy makers tried to determine how much land was appropriate for parks. Hiring the Olmsted firm and hosting a world's fair helped Portland gain a reputation as a city that invested in planning and parkland. Portland began to get inquiries from city governments around the nation, some wanting to "borrow" the Olmsted report. In May of 1907 a letter from H. A. Shatuck addressed to Portland's Park Commissioners said, "We are in the throes of park agitation here in Boulder."[1] Walter D. Moody, the managing director of the Chicago Plan Commission in 1912, requested the total present park area and the total proposed park area (if any) for a national report on park acreage of leading American cities. Philadelphia, Boulder and Chehalis, Washington made similar inquiries to Portland.[2] Park planning eventually progressed to city planning. In the year 1909, the same year that Mount Tabor Park was pieced together, land use planning emerged as a budding profession. That year the first national conference on city planning was held, Harvard University's first course on city planning was offered, and Wisconsin passed legislation authorizing cities to create planning commissions.

The City Beautiful movement propelled the nation toward park development fueled by expositions like Chicago's in 1893. But expos not only generated models of planning, they also fostered growth in the hosting city as they were extensively advertised and attended by millions of people. Portland's Lewis and Clark Exposition, open from June until October 1905, expanded the city's population and boundaries sizably. Even with design expertise from consultants like Olmsted and planner Edward Bennett, the burgeoning growth made it a challenge to carry the City Beautiful tenets from the fantasy world of the expo to the filthy, crowded streets and waterways of the real urban world. The "White City" and Portland's own exposition of 1905 were artificially produced, short-term fantasies, produced to create wealth for the promoters, as well as for the region and concerns that were featured. The designs and recommendations of the designing consultants seemed far-fetched to some government and business leaders. Land use decisions were complicated by the special interests

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of developers and industrialists who held powerful sway over elected politicians. The amounts of park land, the amenities to develop, the numbers of street trees, while looking good in theory, did not always seem attainable or sustainable. Park acquisition and development were closely tied with fickle economic trends as well as voter attitude. Elections, such as the discouraging ones in Portland in 1912 and 1913, proved that citizens were not entirely sold on the City Beautiful's concepts or if they were, they did not want to put their money where their beliefs were.

Civic Visionaries Guide Park Development Process

The city of Portland's effort at deliberate park planning, like other cities, was the culmination of a process. It involved civic conversation and action between city and state government and principal families of influence or people who were closely allied to them, plus hired professionals such as John C. Olmsted, Emanuel T. Mische and later Edward H. Bennett who submitted the "Greater Portland Plan" in 1912. A precedent had been set for municipal ownership when the Water Committee developed the city-owned Bull Run system in 1894. A number of the same civic elite members served as early Park Commissioners and on the Exposition Committee and they were instrumental in helping to initiate and guide the process toward a public park system. A major win for proponents of parks was the amendment of Portland's City Charter by the state legislature in 1899 and the referendum in 1900 to authorize the Portland Park Association and Board of Park Commissioners.

Portland's far-sighted citizens were able to harness the money and vitality of the city and look beyond its borders for talent, true to the trend of their day. Portland Park Commissioner, the Reverend Thomas Lamb Eliot, of the First Unitarian Church, utilized his connection to the influential east coast park movement and he was integral to the foundation of the parks system that Portland enjoys today. Reverend T.L. Eliot paid a visit to the Olmsted offices and set the deal for John Charles Olmsted, also a member of the Unitarian Church, to visit both Portland and Seattle. The Reverend Eliot's relative was Charles Eliot (1859 -1897) whose father, Charles William Eliot, was the president of Harvard College. The junior Eliot was a member of the Olmsted, Olmsted and Elliot landscape architecture firm in Brookline, Massachusetts. Charles Eliot is credited with helping to craft Massachusetts state legislation for the protection of public lands. This eventually led to the legislation that created the Boston Metropolitan Parks System in a large part due to his 1890 piece entitled "Waverly Oaks," a landmark article defending a stand of virgin trees in Belmont, Massachusetts. Charles Eliot greatly influenced the younger John Charles Olmsted, his business partner. In his plan for Portland parks, Olmsted repeatedly reminds Portland of the value of its forestland: "Many of the older cities would now pay very high prices for land covered with the primeval forest which the early inhabitants destroyed and which might once have been obtained for a few dollars an acre," he wrote. Of Mount Tabor, Olmsted said, "It has been sufficiently cleared to open up all the important views from one point or another of it, yet there still survive considerable groves of the original growth of fir trees, including many tall ones, as well as other trees and shrubs."[3] Presently, Mount Tabor Park represents the only sizable, naturalistic forest left in the heart of east side Portland.

While Eliot did the east coast leg-work for orchestrating Olmsted's visit, another member of the Park Commission, Lester Leander Hawkins, bank and electric utility president, escorted Olmsted and his assistant around Portland, including Mount Tabor, in the spring of 1903. Hawkins dreamed of a trail and driveway

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network along the summit and valleys of the west hills from Macleay Park to south Portland. His vision, strengthened by the Olmsted report, has carried through the century. It laid the groundwork for conservationists and preservationists to develop Portland's largest network of trail systems. Nearly half a century later, with the help of a new set of citizens, Hawkins' vision became manifest with an elaborate trail system throughout the west hills. The crowning glory of this system, Forest Park, made official in the 1940s, is a forest reserve of over five-thousand acres that allowed Portland to boast of having one of the largest urban parks in the world. The view of this long, green ridge of parkland running north of the cityscape of Portland's downtown, provides one of the prized sights visible from the west side vista points of Mount Tabor Park.

Funding and Acquisition: Emanuel Mische Takes the Helm

Early correspondence, coupled with officially produced park reports, helps tell the tale of Portland's difficulties in developing a clear and consistent policy on parks. The Olmsted report of 1903 and follow-up report in 1907 chronicle the indecision that existed in Portland. There was a clear hesitation to commit lands to parks by some interests and politicians. There was an unhesitating group of citizens, and some politicians, that were dedicated to the park effort. In between were the vast number of average voting and tax-paying citizens subject to the pendulum of influences, especially economic concerns. To some, parks posed what was seen as multiple problems including the tying up of potentially more profitable land bases, development and maintenance costs, policing and administration costs, as well as liability risks. Those who did not support parks generally saw these same challenges even with donated park land. To others, parks were absolutely necessary for the health and well-being of a community on all levels, including economic.

Portland's records show that, overall, the city needed strong encouragement from civic sources, in addition to public funding, to acquire and develop parks. A major aid to increasing park acreage in Portland came from the Water Bureau's land holdings, some of which, like Mount Tabor Park, served two roles. These jointly owned and managed properties presented challenges to funding and management. The Olmsted and Mische park reports consistently addressed complicated issues in order to help the politicians and the community sort out priorities and options for acquiring, funding and managing parks.

Though John C. Olmsted had given Portland a thorough evaluation of park priorities in his report of 1903, the city had taken little action on his recommendations. Prior to 1909, Portland's parks were limited in size (approximately 165 acres of parkland in 1900) and most were gifted properties on the west side of the Willamette River (approximately 128 acres west, 37 acres east.) Parks were not dictated by a city-led plan. The Park Commissions Report of 1901 rallied a call for action by the citizens and the city to move forward on park development that led to the visit of John Charles Olmsted in 1903. The City Beautiful movement inspired a civic organization, The Initiative One Hundred, that promoted an integrated park system. Together with Portland's Park Board there was motivation to implement Olmsted's plan for parks.

When in 1906, Mayor Harry Lane took the helm of the Portland Park Board, coupled with support from a December 8, 1906 *Oregonian* piece expounding on the benefits of carefully implementing park design in collaboration with a competent engineer, the tide truly did turn toward creating momentum for park

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development. Mayor Lane asked the Olmsted firm for their advice on securing a park superintendent. John Olmsted recommended Emanuel Mische, but Mische had just started a new job as Madison, Wisconsin's park superintendent. The Park Board hired Arthur D. Monteith instead.

Under Monteith's leadership, the Portland Park Association planned a bond issue in 1907 for $1,000,000 to carry out the Olmsted plan of 1903. It narrowly passed in June of that year. A challenge to the validity of the bond held up the funds, but $5,000 was allocated to retain the Olmsted firm again, with the anticipation of the eventual availability of the bond funds. Olmsted's colleague and member of the firm, James Frederick Dawson preceded Olmsted's arrival by three weeks in November 1907. It was Dawson who did much of the foot and paperwork in the complicated process of land value assessment. Olmsted's two-and-a-half weeks were spent on private enterprise with some of Portland's most elite families. For the city of Portland, Olmsted focused on defining boundary descriptions for nine parks and parkways. The Olmsted report, delivered by Dawson, was well received by the Park Board in December of 1907 and provided a roadmap to moving ahead with park acquisitions, though elevated property values limited the buying power of the available funds to approximately one-half of the proposed parklands.

By the time the first installment of the $1,000,000 bond issue became available for use, Emanuel Mische had replaced Arthur Monteith as Portland's park superintendent. Mische brought to Portland a remarkable range of experience and skill. Born in Syracuse, New York in 1870, his training in horticulture included stints at Arnold Arboretum at Harvard as well as the Royal Botanic Gardens at Kew. He was hired by the Olmsted firm when John Charles and Frederick Law, Jr. began their official partnership in 1898, and stayed on for eight years, becoming a friend and a colleague of the Olmsted family. It was Mische who penned the tribute to John Charles Olmsted in the April 1920 journal, *Parks and Recreation.* He became editor of a department of this magazine the next year. Mische eventually left the Olmsted firm to become park superintendent of Madison, Wisconsin at the recommendation of John C. Olmsted. On a second Olmsted recommendation, Mische landed the Portland superintendent position in the spring of 1908. Emanuel Mische had worked for a limited salary in Madison and regretted the small salary offered by Portland. The perks of a more suitable climate, a rent-free abode in City Park (negotiated by Olmsted) and the hope for private design work encouraged Mische, acclaimed by the Olmsted's as one of the country's most esteemed horticulturists, to move with his family to Portland. The story of his interactions with Portland's Park Board, City Hall, and the voters illustrate the challenges that were presented to park development, even with a highly capable professional such as Mische. He came to Portland with prior knowledge, gained through the previous visits of John Olmsted, of the concern that the city had for expenditures related to park acquisition and development.

The purchasing and condemning process that resulted in Mount Tabor Park, as well as other east side parks and the west side Terwilliger Boulevard in 1909, stirred up plenty of heated dialog as developing neighborhoods jockeyed for parkland. While many thought that it should be a priority to develop parks, others, like Mayor Joseph Simon, elected in 1909, seemed to believe the opposite. He was against tying up private land for public parks since he felt that Portland was, by its nature, a natural park. This attitude, along with the limitation of accessible funding from the previous bond and the threat of a decreased payroll for the Park Department,

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created difficulties for the new Superintendent Mische. Nonetheless, he went ahead with his design of six parks, including Mount Tabor Park, and a boulevard, as well as attending to his regular duties of supervision.

East and West Side Dynamics: Portland's Citizen Groups Encourage Park Development

As the west coast of the United States' population burgeoned, Portland's was no exception. Portland's west side, backed up to the west hills, hosted the old establishment of affluent families and their gifted park properties. The broad, relatively flat plain of the east side of the Willamette River, however, was the fastest growing section of the city. By 1915 sixty percent of Portland's population lived on the east side of the river. Old money land speculation deals were building subdivisions on the eastside, such as Ladd's Addition, Laurelhurst and Irvington. Between the developers' interests, the sheer numbers of residents and the citizen clubs, the east side was developing a strong voice for parks and other public services.

This civic movement manifested itself in the style of "push clubs" that were especially active east of the Willamette River. Letters, petitions, and visits to the Park Board from these groups were continuous. The year 1905, the same year of the Lewis and Clark Exposition, push club activity was escalated with petitions and sizable attendance at Park Board meetings. It was in this year that the first mayor, Harry Lane, was elected from east Portland. The mayor was the official chairman of the Park Board. In November 1905, Park Commissioner Lang tried to assure the east side push clubs that though the present park acreage was three- hundred-seventy-five, the Park Board was planning not only east side parks, but a parkway and boulevard system to connect them. He included in his list Sellwood, Rose City, North Albina, Columbia River and also Mount Tabor parks for a total of one-thousand acres. Lang added that the goal was for three-thousand acres of parks and boulevards and of that, five-sixths should be east of the Willamette River. He suggested that the pending $1,000,000 bond was but a drop in the $10,000,000 bucket of monies to be found for parks.

Despite these encouraging words and continued agitation, years passed without action by the city to create new parklands. Land prices and population following the 1905 Lewis and Clark Exposition rose exponentially. Just as some people were feeling an urgency to put aside national lands, there was a growing concern that the rural-like qualities of large areas of Portland were rapidly being subdivided and urbanized. Emanuel Mische built a case to the Park Board that it was absolutely essential to acquire certain tracts to be included in the park system, "...some are so essential, both as strong local characteristics, distinctively native and excellent landscape features that to exclude them would be to very seriously impair the quality and value of the system. Such an element in the proposed system is the dual knoll eminence known as Mt. Tabor," he said.

An *Oregonian* article ran in November 1908 headlining: "Want Park at Mt. Tabor: East siders think ground should be bought now. Committee to appear before park commission today, setting forth wishes of United Push Clubs" The committee wanted action, "...for it has seemed to many citizens that little or no progress is being made toward securing a park at Mount Tabor, or anywhere else."[4] The article alluded to the fact that the City was contemplating two new reservoirs in the park. The east side push clubs had had a design in hand for several years amounting to a minimum of 169 acres.

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Agitation finally yielded results as this March 1909 *Oregonian* piece illustrated, "Parks to be Bought: Mount Tabor Property Recommended by Boards. Value is over $300,000. System of reservoirs to be built to be used with new pipeline that will be constructed – Price agreed on is reasonable."[5] It is not surprising that Mount Tabor landowner and owner of the *Oregonian,* Henry Pittock, would deem the price reasonable He and his wife had been paid one of the highest amounts by the city in the scramble to acquire Mount Tabor properties. Having the Water Board responsible for about one quarter of the costs of the land may have helped spur on acquiring additional acres.

The slow acquisition of land dedicated for parks was a source of disappointment for public park supporters and Olmsted, who returned to Portland a number of times between 1903 and 1911. Pressure from citizen groups and the Park Board, coupled with public relations, was pivotal in helping to spur action and get the $1,000,000 bond measure passed in 1907 that allowed land purchases to commence. Citizen groups were also strong advocators for development money. When finally Mount Tabor Park was beginning to officially materialize, the Mount Tabor Improvement Association passed a resolution claiming that the $15,000 made available for development of the, "new Williams Park at Mount Tabor... was totally inadequate to do justice to the improvements contemplated on this centrally located and natural park site..."[6] The resolution recommended $25,000.

Amidst the planning of the park, a controversy was emerging regarding the naming of the park. Mount Tabor was the traditional name of a large portion of the east Portland area, more than twice the size of the present Mount Tabor neighborhood. The Mount Tabor of Palestine (now Israel) is the namesake of the Mount Tabor in Portland, probably bestowed by an early settler in the 1850s. Many churches, businesses and developments referred to Mount Tabor in their names and by the early 1900s the name Mount Tabor was rooted in the city. In April of 1910, an ordinance provided that the, "public park on Mt. Tabor shall be designated as Willams Park in honor of the late George Henry Williams (1823 - 1910.)"[7] Williams had served in national and local politics for half a century including being a U.S. Senator from Oregon, U.S. Attorney General, and the mayor of Portland from 1902 – 1905. Influential citizen input kept the name Williams Park from ever gaining a toe-hold, and the name reverted back to Mount Tabor Park.

Mount Tabor Park: Acquisition and Development

Prior to the large-scale acquisitions of land to create Mount Tabor Park in 1909, the surrounding community had unofficially used the land as "park" and for hunting and gathering for decades. Deer and bear were hunted according to accounts of early settlers such as the Kelly and the Prettyman families who had large land claims at the base of the butte prior to 1850. A deed dated July 21, 1888 states that Buell and Helen Lamberson dedicated a tract of land to the city as designated "park." This land may have corresponded to the Water Committee and the early reservoirs completed in 1894. John C. Olmsted used the title of Mount Tabor Park in his "Report to the Park Board" of 1903 and he pointed out that the butte was already being used for recreation. This was one of the facts he promulgated to build a case for the city to acquire the land for a park.[8] By the time the city moved ahead with land acquisitions for the park several years later, property prices had soared. A sizable chunk of the money garnered through the bond measure was spent on Mount Tabor butte. The city spent approximately $426,000 on forty or more properties in the creation of Mount Tabor Park in 1909. From 1908 through 1910,

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lots of varying sizes were purchased, with a flurry of activity throughout 1909. Property prices paid by the city ranged from $1 paid to the Commercial Trust Company, to $37,500 paid to land speculator Henry L. Pittock, owner of the daily newspaper, the *Oregonian.* Some people sold their deeds for $10, stipulating that the property was only to be used as a public park. A number of cases went to court in condemnation proceedings. The average price paid per deed, if the two extremely high deals are excluded, was approximately $6,500. Charles Paul Keyser, in his reflections on forty years in the service of Portland's parks, first as Mische's engineer and later as superintendent, said, "In 1909 most of the high ground was still in more or less neglected ownership following a real estate bust of the nineties."[9] By December 1909, the Park Board reported, "When the court proceedings are completed, all the top and side slopes of that high eminence rising out of the east side plain will be public property. The views in the four directions on the compass will ever more be under public control. Nothing short of skyscrapers on contiguous property will ever destroy these views."[10] In a personal report in 1961, Keyser said of Mische's involvement with attaining Mount Tabor Park, "In my estimation making Mt. Tabor a most outstanding feature of our park system was his greatest single achievement, even if he was disappointed in failing to acquire the property fronting on S.E. 60th Avenue between Reservoirs #6 and #2, and a more ample margin on the eastern slope."[11]

Shifting Trends: Active Recreation, Funding Woes, Park Board Abolished

In 1908, Mische began his new job in Portland just in time to face two important changes in park design, the automobile and playgrounds. The automobile was integral to Mische's design of Mount Tabor Park, but it was also the automobile and its potential to do harm to children playing in the streets that helped to prompt the playground movement. Begun in New York City, playgrounds addressed tenement dwelling families with limited access to safe outdoor spaces. In addition, changes in land use and labor laws left children and adults alike with more leisure time. Portland followed the national shift from parks for beauty and passive recreation to an emphasis on active recreation. It was the women of the United States who vociferously lobbied for playgrounds; in Portland, the Play Ground Committee of the People's Institute included the wives of some of the most influential men in the city. Their report to the Park Board in 1907, regarding the new Park Blocks playground, provides valuable insight into Portland's early playground development. A female supervisor, hired by the institute, was responsible for the three months that the facility was open. There were separate girls' and boys' blocks. The average attendance was 40 children of mixed ethnic backgrounds between the ages of 7 and 9 years. Much of the remaining report recites the myriad of park rules per a city ordinance. In May of 1907, the Park Board received a letter from President Theodore Roosevelt as the honorary president of the Playground Association of America, requesting the attendance of the Playground Committee at the first annual meeting of the association in Chicago. Dues ranged from $1 to $1000 and members received the magazine, "The Playground." In 1911, the same year that California women gained voting rights (Oregon was the following year), a representative from the Women's Congress addressed the Parks Board regarding creating an exhibit of playground "apparatus" at an exposition to be held at the Armory. Mische was given the authority to act on this recommendation. Mische reported to Mrs. Stella W. Durham in March of 1914, that Portland had twelve playgrounds and he told her, "We spent for playgrounds in 1913, approximately $25,000."[12]

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The year 1913 saw big changes in Portland's city government as the Parks Board, along with most of the other boards, was abolished. The City Charter was adopted that allowed for a council form of government. This change in July 1913, meant that Superintendent Mische reported to the elected official, Commissioner of Public Works, instead of the appointed Park Board. The Bureau of Parks was created under the authority of the commissioner. It appears that this was an awkward time of transition. In the words of Charles P. Keyser, "He (Mische, ed.) failed to click with the new regime, struggled along bravely for a couple of years longer, and in 1915 stepped down..." Mische was replaced by J.C. Convill, appointed by Commissioner Brewster. Keyser went on to say, "He (Convill, ed.) had been a notable college athlete. His extensive background in sports and savvy of publicity made him especially useful to Brewster who was rather inclined to promoting recreational activities with such appropriations as he could wrangle, until the time would be right to plug for more bond or other capital expenditure." [13]

By this time, the Olmstedian-City Beautiful influence on park planning had begun to shift. Mische and others outside of the political arena hoped to see some of the beautification projects, such as parkways and boulevards outlined in Edward H. Bennett's 1912 "Greater Portland Plan" plan, come to fruition. Though commissioned with money from the "city beautiful fund" established by Mayor Joseph Simon in 1909 during the frenzy of park acquisitions, the Bennett plan's arrival was ill-timed. The new Bureau of Parks pulled away from parks and boulevards for beauty and inspiration and more toward active recreation whose cost and liability could be shared by the developing school system. The national conversation regarding the social benefits of parks had turned its attention more to the value of keeping youth, especially boys, out of trouble with supervised organized sports. The trend centered on recreation centers, and generally smaller parks, featuring sports fields rather than providing inspiration and relaxation within the confines of an aesthetically pleasing, larger park. The new city commissioner echoed this new trend. Visionary superintendents, skilled in horticulture and park design, were not deemed as necessary as maintenance and recreation supervisory personnel. Complicating the parks issues even more was the reluctance of tax-paying citizens to pass the parks' bond measure asking for $2 million that was brought to the voters and failed in 1912 and 1913.

After the first bond defeat in November of 1912, Mische recommended that a full-scale report be presented to the public as an educational tool and an encouragement to support Portland's parks. Five years of reports were published as the Annual Reports of the Park Board 1908-1912, issued in March 1913. It was an unabashed appeal for funding. The report contained many photographs of Portland's parks and graphs and mapping to illustrate Portland's park deficit in comparison to other cities such as Chicago, Kansas City, Detroit, Cincinnati, San Francisco, Spokane and others. Portland's park acreage, per person, ranked lower than all of those cities. The report emphasized how politically clean the process would be for acquiring parkland. The closing remarks were emphatically pointed along the lines of the precepts of the City Beautiful movement: "Final admonition is given that our rate of progress has not been commensurate with our material or population growth nor has it been adequate to keep us abreast of a financially or economically wise or proper social betterment requirement. The Board would urge that the citizens take such action on the park project as to prove our readiness and our foresight in rising to our opportunities and by demonstrating our public spirit, enterprise and civic courage assist in taking enviable rank among the most favored cities of the nation."

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Mount Tabor Park was to receive a sizeable portion, $69,800, of the anticipated bond money to get it in "first class condition." In anticipation of the election, an extensive article appeared in the *Oregonian* in the late summer entitled, "Mt. Tabor Park Plans Elaborate. Sylvan paths designed. Slow progress." Complaints of the inaccessibility of the park, especially during the wettest months of the year, led Mische to remark, "With a few improvements such as construction of walks, drives, proper drainage and lighting, the park can be converted into a recreation center second to none in Portland." His preliminary drawn plans, not realized, included a large swimming pool, four separate gymnasiums for men, women, boys and girls, playfields, a wading pool for the smallest children and a pergola for climbing plants and other formal landscaping touches to be located at the site of the original modest playground at the only large flat expanse of the park at the south end near the nursery and Reservoir 2. Mische pushed for acquiring all of the flat land at the base of the butte near adjoining roads and close to the residential areas as it was easily accessible to the children and parents of the community. The site also fit with the principle of separation being within the area he had wanted to make more formal and a good distance away from the more forested region of the butte. The original playground is no longer at the southeast site, but one of the three present playgrounds is due east at the southeast corner of the park and two other playgrounds have been constructed over the years. Portland's records, including mapping, are generally sketchy on details regarding playgrounds.

The End of an Era: Mische Moves On

Mount Tabor never did get the recreation center that Mische designed. (A very similar plan, however, was drawn up when Reservoir 2 was taken off line about sixty years later and the Park Bureau had its own high hopes of finally realizing this long-term recreational goal for the park. Instead the level property was sold to a private developer.) And despite the comprehensive report, the $2 million was not approved in the June 1913 election.

The defeat of the 1913 bond measure took much of the wind out of the sails of Portland park development and sent a message of dissatisfaction from citizens to the newly formed government. Another byproduct of this bond measure defeat was the gradual loss of Mische. His employment was soon to switch from park superintendent to landscape architect for the parks and finally out of the parks system to follow in the Olmsted's path to private practice with his own landscape architecture firm. Mische did some consulting work with the Park Bureau after the end of his official employment. His influence did live on with Charles P. Keyser, who served as Mische's assistant from 1909 and went on to become Park Superintendent from 1917 until 1949. Keyser deserves much credit for steering the Portland parks down the course set by Olmsted and Mische. Mount Tabor's essential plan of naturalistic forest landscape with the curvilinear road and pathway network was completed and remains in a large part due to these three people's vision.

Although highly dedicated to the city and his work, and extremely qualified, Emanuel T. Mische resigned as superintendent of Portland's park system after only six years. Details of his resignation remain obscure, but it is clear from the records that tensions existed between him and city officials, especially by 1913 when the city abolished the appointed Park Board and established the Park Bureau with the new commission form of government. His outspoken ideas on land acquisition and management, street trees and other civic

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improvements were similar to those of his mentors, the Olmsteds, and though the ideas were influential, they seemed to be at odds with some elected city officials. Like Frederick Law Olmsted, Sr., who established his own private enterprise after soured experiences with city politics, Mische became a consultant in 1914, and worked outside of the park bureau on not only landscape, but larger civic issues concerning conservation.

World War I and the influenza pandemic of 1918-1919 slowed progress on projects as well as record keeping. It wasn't until the early 1920s, under Charles P. Keyser's reign as park superintendent, that substantial progress on Mount Tabor's amenities seemed to take off again with the construction of tennis courts and other active recreational facilities, lighting and comfort stations. Ever continuing was the progression of the drive and path system. Under the supervision of Charles P. Keyser, the 1920s also saw the construction of four comfort stations, two situated near the main entrances, one at the crater and another at the summit, along with a caretaker's house and the erection of eighty-eight concrete single pole lampposts with white glass globes, seemingly the same as those promoted by Mische to the Park Board in 1911. Greenhouses were built in the nursery's maintenance yard. Efforts continued during the 1930s to complete the drives called for in Mische's original plan.

Criterion C: Mount Tabor Park and the Olmsted Influence

Mount Tabor Park meets the guidelines for Criterion C as a park landscape that retains many elements of Olmsted design principles. Identified as a prime park location on John Charles Olmsted's first visit to Portland in 1903, Olmsted continued to work with the city on land acquisitions, park boundaries and as an advisor to his ex-employee and colleague, Emanuel Tillman Mische, between the years of 1906 through 1911. Mische was hired as Portland's park superintendent, on Olmsted's recommendation, in 1908 and remained in that position until 1914. He then continued a relationship with the city as an independent landscape designer. Mount Tabor Park reflects its original design, crafted by Emanuel Mische in 1911, and illustrates the design principles advanced by the Olmsted firm.

Olmsted Landscape Firm: Park Development in the Nation

With the Progressive Era's emphasis on hiring outside professionals as consultants, the emerging field of landscape design captured the attention of prominent citizens and city governments who wanted to hire well-known landscape designers to help beautify their cities and make them as desirable as possible. Frederick Law Olmsted, Sr.'s participation in the design of New York City's Central Park in the mid-1800s and his, and his namesake son's, affiliation with the 1893 World's Columbian Exposition in Chicago, set his Boston landscape firm at the forefront of landscape design. The Olmsted's, and other known designers, found themselves in high demand by cities, other agencies and elite land owners all over the country entranced with the precepts of the City Beautiful movement. The Olmsted firm included his nephew and step-son, John Charles Olmsted, son, Frederick Law Olmsted, Jr., and Charles Eliot, all extremely influential individuals who touched hundreds of public parks, and public and private institutions and developments across the nation. An "Olmsted Park" became a hallmark of civil society in the United States. John Charles Olmsted was hired as a consultant to Portland and Seattle in 1903 and these cities, like so many other places, have him to thank for some of their

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most beautiful parks. Because of the influence of the Olmsted firm, and the receptivity of the nation to the ideals they espoused, the profession of landscape architecture was conceived at Harvard University (Charles Eliot's father, Charles William Eliot, was president of the university) and this profession in turn sparked the beginnings of urban planning.

The senior Olmsted was a man of the land, trained by experience and the family's appreciation of beautiful, natural places. Frederick Law Olmsted brought to his work as a landscape architect (he helped coin the term) years of experience and world travel. He, like his colleagues and mentors Andrew Jackson Downing and Calvert Vaux, blended social consciousness with land management. Born of American soil, influenced by the magnitude of the American west's landscape, Olmsted helped foster the idea that landscape could play a healing role on a personal as well as a social level. Rebelling against the tight confines of the Old World's formal landscapes that reflected a sense of opulence, his designs spoke more to the democratic society where large beautiful landscapes were available to all citizens regardless of social standing or race. These concepts became imbedded in the City Beautiful movement's message to civic individuals, policy makers and bureaucrats.

Already having been a reporter, covering Civil War issues in the South, Olmsted was able to sway public opinion. His inspirational appeal, written while serving as chairman of the state's commission for Yosemite, called for legislation to keep Yosemite in the public domain. It was entitled, "Yosemite and the Mariposa Grove: A Preliminary Report, 1865." The suppression of this document for over a century, along with the political hassles he encountered with his work on Central Park, could possibly have been the reason why he and his sons chose to work as consultants outside of the bureaucracies and why their commentaries to the bureaus and policy makers warned of the dangers of politicizing irreplaceable landscape resources.

The Olmsteds have had such a profound effect on American landscape design that the adjective "Olmstedian" has been coined to describe open spaces exhibiting their touch. Subject to interpretation, there are some generally agreed upon components of features that the Olmsted firm strove for and that are illustrated by enduring examples of the landscapes that they designed. The National Association for Olmsted Parks has provided a concise overview using what they describe as the "Seven S's " of Olmstedian design principles: scenery, suitability, style, subordination, separation, sanitation, and service. The scenery, even in small or active spaces, provides passages of scenery and indefinite boundaries. Avoidance of specimen planting and hard edges and the utilization of shadow and light help to enhance the sense of space. The suitability of the design is dependent on respecting and making use of the naturally occurring elements of the topography of the space itself. The style of the design is specific to a desired effect. A soothing pastoral effect is achieved with an open expanse of greensward dotted with small bodies of water, groves of trees or scattered individual trees. The abundant sense of the picturesque style is achieved with mass plantings of trees, shrubs, and groundcovers especially on steep slopes where the play of light can impart a sense of mystery. Subordination of every element to the desired effect of the overall design is a hallmark of the Olmsted principles. A thorough separation of differently designed or incompatible areas insures an intact sense of space. Engineering the design to insure sanitation by planning adequate drainage and other considerations into the features so that the space can be easily managed to provide the user with health of body and mind. And lastly, the designed landscape should be of service with utility that meets fundamental social and psychological needs crafted into the design.

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John Charles Olmsted: Portland Consults

In 1894, Portland had already taken the investment plunge into an efficient public water system that brought pure mountain water down to collect in four grand open reservoirs, two on the east side, on what was to become Mount Tabor Park, and two in one of the earliest gifted park lands, City Park (now Washington Park.) The reservoirs were designed with the harmony of utility and beauty as advocated by the City Beautiful movement. In its continuing quest to get an edge over other developing west coast cities, Portland was busy planning the 1905 Lewis and Clark Exposition. In this time of zeal, park planning and the City Beautiful movement ideals got a substantial push in Portland. As the east coast park and city designers had looked to Europe for inspiration, newly developing western cities depended on the eastern cities not only for inspiration, but expertise.

The Portland Park Association engaged the Olmsted firm to help with the design of the expo grounds and other parklands for the growing city. Though preferring the name association of Frederick Law Olmsted, Jr., it was John C. Olmsted who made the trip to Portland in 1903, the same year that Frederick Law Olmsted, Sr. died. Having lived and worked in the far western regions of the U.S., John Charles was a good, albeit second, choice for Portland and Seattle, who jointly enlisted him in the spring of 1903. Reverend T.L. Eliot made the connection for him in Seattle so that his travel expenses could be shared between the cities and it would be better worth Olmsted's time to have another account.

Portland Park Commissioner Lester Leander Hawkins escorted Olmsted and his assistant from his firm, Percy Jones, to many potential and existing park sites around the region. John Olmsted presented a thorough document to the Park Board commenting on the sites and giving specific recommendations. The team visited Mount Tabor on the afternoon of April 19, 1903.[14] They took photographs and in his report to the Park Board, Olmsted made these remarks regarding the butte known as Mount Tabor:

> "There seems to be every reason why a portion, at least, of Mount Tabor should be taken as a public park. It is the only important landscape feature for miles around, and the population in its vicinity is destined to be fairly dense. It is already a good deal resorted to by people for their Sunday and holiday outings, and it will be better known to and more visited by the citizens as time goes on. It has been sufficiently cleared to open up all the important views from one point or another of it, yet there still survive considerable groves of the original growth of fir trees, including many tall ones, as well as other trees and shrubs. There can be but little doubt that public sentiment will cordially support the city government in acquiring considerable land on this prominent and beautiful hill. John C. Olmsted, Report to the Park Board, 1903.

On his subsequent return to Portland, John Olmsted and his colleague Frederick Dawson, developed park acquisition plans and drew up boundaries for some of the parks that had been identified in the 1903 report. Olmsted continued his relationship with Mische over the years that Mische was park superintendent in Portland.

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Emanuel Tillman Mische: Continuing the Legacy of Olmsted Design in Portland

Portland's park system benefited from John C. Olmsted's visits at the turn of the century and his "Report to the Park Board of 1903" provided valuable guidance to Portland, still relevant today. Crucial also to the integrity of Mount Tabor Park and other historic parks in the system, was the actual planning and planting of the parks by former Olmsted employee, Emanuel Tillman Mische, hired as Portland's parks superintendent in 1908. His credentials were strong, and five years after his resignation from the Portland position in 1914, the Olmsted firm attempted to entice him back. But Mische stayed on in Portland, working on private and public contracts and serving as a civic leader in city and park planning, and as a leader in the budding field of landscape architecture.

The hiring of Emanuel Mische as Portland's park superintendent was controversial, as was his leaving due to uncomfortable political developments. During his six years at the helm of Portland's parks, however, he left an enduring mark with his insightful correspondence to the City of Portland that continues to contribute valuable information and insight regarding long and short range planning of green space. Few individuals could have brought such a prestigious array of training to fill a position. His design and drafting skills obtained from the years at the Olmsted firm, coupled with his strong expertise in horticulture gained from some of the most esteemed horticultural institutions in the world made him one of the prime foundations of Portland's park system.

The Olmsted heritage continued with Charles P. Keyser who had trained under Mische and stayed on as Portland's park supervisor until 1949. Though not much has been recorded regarding Keyser's life, he credited Emanuel Mische with teaching him what he needed to know about parks and park planning. Much of the integrity exhibited in Portland's historic parks is testament to the continuity of management he gave with an eye for the distinctive style originally laid down by Olmsted and Mische.

Mount Tabor Park: Design and Implementation

After Emanuel Mische was hired as park superintendent and most of the land that was to make up the park had been acquired, his plan and map were unveiled to the public on May 21, 1911 in the Sunday *Oregonian*. True to his tenure with the Olmsted firm, his design relied on key Olmsted design principles. The most formal, elaborate and costly part of his plan addressed the principle of service. With the two large new reservoirs being built on the west side of the park, facing downtown and the majority of Portland's population, Mische wanted to couple water storage with aesthetics by incorporating a large well-lit, waterfall and spray jet scheme utilizing the fall of water between the upper and lower reservoirs. "To contrast this feature satisfactorily will give this park a most interesting possession and the city a uniqueness not met with in any other park in the country," he said. Not naively, he added, "but its cost will be so great and the needs of the parks now are so urgent that we would specifically urge against any attempt to provide for it in the near future." This design feature was never realized, even two years later when once again, the *Oregonian* presented another spread that touted the continuing design process of the park. Mische still sounded hopeful for the cascade scheme and T.W. Tanner, park keeper, helped support the cause by adding, "It is my judgment that power enough could and should be developed by the falling water between the upper and lower reservoirs sufficient to illuminate Mount Tabor and

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its driveways and Mountain Crest. There is a fall of 85 feet, which is sufficient to develop electric illumination of the entire park, which in my judgment would produce a most magnificent effect." Seven decades later, a hydroelectric generating system was installed utilizing the fall of water between Reservoir 5 and 6. A small hydro-generating unit is housed in the inlet Gatehouse of Reservoir 6.

The highly defined nature of the concrete reservoir basins surrounded by wrought iron fences with their distinctive gatehouses, leant a formality to the west side of Mount Tabor Park. Mische attempted to address the idea of separation of the incongruous features of this design with the sylvan feel of the rest of the park. "It is contemplated to provide two approaches at the southwest corner formally as a contrast to the native treatment of the remainder of the park," he said. [15] In keeping with the principle of suitability, his emphasis was on making an already beautiful place, complete with native aesthetic vegetation, simply more accessible to the public. His drive and pathway system, one of the hallmarks of the park, is an excellent example of subordination of features that yield to the overall design, as well as meeting the criteria of suitability. The *Oregonian* quotes him as saying, "The drives are located with a view to requiring the least possible scarring of the surfaces consistent with agreeable alignment and grade, where the distant views are to be enjoyed from the best vantage points or where the local vegetation or surface configuration pointedly suggest a traverse route. In passing over the drives on the ascent to the crest the vegetation is to be developed for its local offerings, with vistas opened only at prominent points. It is both impractical and ruinous to expect to have continuous or even large and abundant sweeps of distant outlooks without unduly injuring the forest. Such views are reserved for the summit concourse...The drives encircle the park on all sides, the east and west and wind their way to the top, where is located Mountain Crest, at present occupied by the old dwelling built there many years ago," the article went on to say.[16]

Mount Tabor Park Design: Shaped by Modes of Accessibility

Two predominating features of Mount Tabor Park bear the mark of Emanuel Mische and the Olmsted influence. One is the peaceful grandeur of the forest and the other is the drive and footpath system. Though the park does have several miles of paved drives and even more in the trail system, they are laid out with a master landscaper's touch and with a sensitivity to the natural terrain. The curvilinear design is easy on the eye and inviting to traverse. Though the drives are unnatural, they fit into the scenery, providing alluring passages. In many places, especially along Woodland Drive on the steep east slope, cut basalt rock blocks, probably quarried on-site, reinforce the east side of the drive and add to the rustic beauty of the scenery. In most places there is a forest buffer between the footpaths and the auto drives, adding to the sense of separation. In the name of serviceability, the pathways allow a myriad of routes to be taken so that regular visitors can walk for twenty minutes or one hundred and twenty minutes and not traverse the same path. Mische, and later his assistant, Keyser, did an excellent job of making the park accessible to an urban population while yet maintaining the rural feel. The drives and paths pass through the landscapes of the park exhibiting pastoral or picturesque qualities in a suitable and subordinate way. The historic drives and original pathways were very well constructed and conform to the design principle of sanitation in their quality engineering. When the drive and path system was complete, Mount Tabor butte could be scaled in a private vehicle, by foot or bicycle for stupendous views of the surrounding countryside; the high, snowy peaks to the east and the north, the

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surrounding developing neighborhoods and the downtown city skyline backed by the green line of hills three miles to the west. This is one of the features of Mount Tabor Park that keeps visitors returning time and time again.

Mount Tabor Park's design paid homage to a new era of the automobile. In 1912 there were 902,000 registered autos in the United States. By 1913 Portland had approximately 6,000 automobiles in use. Automobiles were considered a source of entertainment. In 1907 the Park Blocks children's festival featured automobile rides as a featured entertainment. City planning, spurred on by the City Beautiful movement, called for creating leisure drives. Mische had a grand plan for a parkway running north from Sellwood along the high banks of the Willamette River. This river parkway was to tie into a tree-lined boulevard that would head east, through the Ladd's Addition neighborhood toward Mount Tabor Park where it would continue north to the meadows of the Columbia River Slough. This boulevard had been the vision of Olmsted when he visited Mount Tabor in 1903. "It appears to be entirely feasible to run a parkway two-hundred feet or more wide out to Mount Tabor," John C. Olmsted remarked. [17] Though the grand boulevard and parkway system was never realized, much money and effort were expended on the drive system within Mount Tabor Park. Grading and paving were completed in sections over many years and were prime expenditures for the park. The geography of the butte, with a primary summit of 643 feet and three smaller rises, stretched from north and south for over a mile. From east and west it measured almost a mile. The winding lanes, each distinctively named, would encircle the butte carrying visitors to a variety of viewpoints over the three-and-a-half miles of paved drive with a five-percent grade.

Emanuel Mische designed the system of drives for a winding but pleasant auto tour. They were to be graded in such a way as to be enjoyable to drive on, macadamized and illuminated. The width would be wide enough for motorcars or wagons but narrow enough to do minor damage to hillsides and forests. The drives would pass by interesting features and views. Visitors could escape from the sights and sounds of the surrounding city but they could also admire it from a high distance. The route could carry visitors in one entrance and out another.

Mische kept at the driveway projects with any funds he could get. A good portion of the drive projects were constructed at times of economic downturns, following Olmsted's advice in his report of 1903: "...it is far more advantageous to employ common labor for park improvement during hard times either to prevent or to diminish the sufferings of the poor and to get the work done at minimum wages." [18] Mische, in his report to the Park Board in 1912 said, "During the winter of 1911 – 1912 the Council appropriated $10,000 to give employment to idle men. The funds were set aside for charity purposes but good use, though by reason of the very nature of the method of employment and the class secured it was thoroughly efficient, nevertheless over 8,000 feet of 32-feet wide drive were cleared and partly graded...The drive connects the hilltop with the East Salmon Street Entrance." [19] Other such appropriations followed and included Works Progress Administration contracts from 1935 – 1939 when work progressed on East Tabor Drive (Woodland Drive), to Mische's design specifications, at a cost of $5,163.

"A system of walks supplement the drives and lead to many charming features it is not desirable to approach by a drive," described Mische of his 1911 plan for Mount Tabor Park. The trail system that he envisioned remains as one of Mount Tabor's park's most cherished attributes. Throughout the park pathways traversed areas

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between the drives. Curvilinear pathways paralleled the curvilinear drives. He even provided access to some of the steepest areas with long flights of concrete stairs, some with more than a hundred steps, such as those that ascended the Mountain Crest. There was a type of path for all visitors from adventurers out for real exertion with a steep climb to those wanting a pleasant walk. The reservoirs themselves would, and still do, provide lighted walkways encircling them for easy strolling. Mische asked that the walkways surrounding the reservoirs be wide enough for pleasurable walking.

Summit design: Subordination of Elements

At 643 feet, the summit of Mount Tabor provided a grand panorama of the Portland area and the surrounding countryside both far and near when Olmsted and Mische were working with Mount Tabor Park. On Olmsted's visit to Mount Tabor, he suggested, that at a minimum, the twenty or so acres of the summit should be taken to command the views. Debate carried on for years regarding the grand residence at the top of the butte, commonly referred to as the J.H. Smith Residence. Information on this homestead is sketchy and although there are apparently no photographs of it in city records, a sketch does exist from an early real estate brochure.[20] Mische's plan followed the suggestion made in Olmsted's 1903 report, calling for its removal and replacement with a combination shelter, refectory, comfort station and detached bandstand that in his words were, "...all ...to be generally low and rambling and conspicuously modest and subdued in style, materials and color. Other than this the plan intends no masonry construction, such as an overlook tower, large building or other object attractive in itself mayhap, but disturbing in its effect on the beholder as seen amid surroundings of native rural wildness."[21] These designs followed the Olmsted principle of subordination. The residence was apparently converted to a visitor station in 1913, "Upon the crest, the large old residence has been remodeled and fitted for public use by opening rest rooms, nursery, refectory and comfort features. . . an automatic electric control pumping plant for delivering water from the submerged hill top reservoir to the attic tank in the park house is now being installed," Mische reported to the Park Board in 1913.[22]

Two years later the Smith residence was still sitting at the top of the hill and the plans for its removal and replacement with other services still were being contemplated. In 1917, correspondence to the, "...caretaker living on top of the hill in the big house,"[23] thanking them for the opportunity to make baskets, was addressed to the city and forwarded on by Mayor H.R. Albee. Actual demolition of the Smith Residence did finally occur, though the exact date is unknown. A Tudor-style comfort station was built to the west of the summit in the 1920s. True to Mische's vision, Keyser made sure that the comfort station sits down below the summit, in a position of subordination, so that at present the summit and the views are the commanding presence.

Concerts, especially with the municipal band, were an important activity for the parks to host, though not particularly lucrative. Popular outdoor concerts were held in Mount Tabor and other parks during the summer months. In 1913 one concert per month was held during July and August. Possibly these concerts, with attendance of one-thousand or more people, were held at the Mountain Crest Summit where the first public comfort station and refectory were remodeled into the Smith residence. According to the 1915 park report, the long flight of stairs was completed giving "large numbers of visitors" access to the hilltop. By 1917, concert attendance at Mount Tabor Park had more than doubled. Concerts have continued in Mount Tabor Park near

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the area that Mische recommended in the 1913 Report of the Bureau of Parks in what he referred to as "the concert grove on the ridge adjoining Belmont Street." Present concerts are held in the month of July in the crater amphitheater in this vicinity.

Plantings: A Balance of Native and Non-native Species

Mische was appreciative of the flora in his new Pacific Northwest home. He had also been trained at the hand of people with a deep appreciation of forest preserves. His desire was to keep the natural forest feel of the butte, even reforesting the more gradual western slope,"...where it is now open and the openness severely defined by old property lines. It is both impractical and ruinous to expect to have continuous or even large and abundant sweeps of distant outlooks without unduly injuring the forest. Such views are reserved for the summit concourse," he reported to the Park Board of his plan in 1911.

Emphasis was put on the over-story of tall Douglas-firs as well as the under-story of natural shrubs and wildflowers. Mowing was to be kept to a minimum. Primary maintenance of the landscape of the park was to keep the grandest vistas cleared of trees. In the first *Oregonian* article of 1911 announcing the big, new east side park, Mische was quoted with this description of his vision for the Mount Tabor Park: "Except at the two formal entrances, at the terrace garden and the cascades, only native material is to be used or suffered to remain. Moreover, the undergrowth is at no time to be entirely removed from throughout the park, as has been suggested by private individuals." He continued, "This tract offers an excellent opportunity of displaying the exceptional beauty of our native flora. It requires merely the elimination of some sorts, the addition of others or as a whole controlling nature to the extent of determining how her materials shall be massed and arranged."[24]

His attention to practicality and foresight was evident when he commented, "In addition, native vegetation is always adapted to this region, can be depended upon to be safe, enduring, easily repaired should damage occur, and above all can be maintained more cheaply than exotic or foreign vegetation."[35] A good deal of the continuing attraction of Mount Tabor Park, to both human and animal visitors, is due to the amount of native plants that have been retained in some sections of the park, but non-natives are a historic feature of the park. Over the years, perhaps due to the wide variety of trees and shrubs propagated at the on-site nursery, areas of the park have had non-natives integrated into the landscape. These vicinities are predominantly in sections of the park that have been disturbed for entrances, drives or other types of construction. Mische was sensitive to quickly replanting any areas on the side of drives that were disturbed during grading operations. Likewise, he preferred to move slowly in removing vegetation as the drives were being laid out. "It is better, by far, not to remove anything," he said. Many of the non-native trees and shrubs, including many kinds of pines and hawthorns, are mature and add to the historic significance of Mount Tabor Park.

Mount Tabor Nursery: Plant Propagation for the Entire City

In the mid-1800s, orchards predominated in the Mount Tabor vicinity. Apples, pears and other fruits were shipped out by steamer and supplied the California boom towns in a lucrative market. Mount Tabor's south side had a gentle slope with a perfect aspect for plant propagation, providing adequate sunlight and drainage. The

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butte rising to the north behind the area, provided a weather buffering element. The elevation was modest, serving the purpose of frost pocket protection. These features appealed to Mische as a fine place to site the nursery that he had called for in his first park report of 1908, a nursery that would serve all the parks and other planting needs of the city.

Though Mische appreciated the native plants of his newly adopted western home, he nevertheless continued his interest in non-native species. Large orders with invoices of over $2,000 were made to east coast nurseries. Invoices to Mische from the United States Department of Agriculture dating from spring of 1909 list plants that were being sent: two *Syringa amurensis,* five *Clematis recta* and three *Clematis species.* Other records indicate his interest in buying shrubs from local growers and wild diggers, especially rhododendrons. Interestingly, a potato crop was recorded as having been grown in 1916 at the Mount Tabor nursery.[26] Propagation stock was also brought from the nurseries supplying the Vanderbilt's Biltmore Estate in the Appalachian Mountains near Asheville, North Carolina.

There are references to a "fruitectium" being establishing at Mount Tabor for the cultivation of plants from seeds or cuttings for nursery stock.[27] In 1913, Harvard's Arnold Arboretum, Mische's, *alma mater,* sent a gift of five hundred Chinese species to him, probably attributable to Ernest Henry Wilson's two collecting trips to China, most recently in 1910. Among the species sent were rhododendrons, hollies, barberries and rhododendrons. This propagation stock went first to the greenhouse at Columbia Park and then was set out in the nursery at Mount Tabor Park. Mische wanted to use the species to begin an arboretum, an Olmsted ideal for every region in the country. Portland's Hoyt Arboretum, in Washington Park, is a result of Mische's plan and Charles Keyser's management.

The nursery at Mount Tabor Park was an important resource for the planned beautification of the city of Portland. An entry from Park Board records of December 1912 recites, "There are trees now growing in the Mount Tabor Nursery to supply a quantity sufficient to extend planting by about 30-40 miles in the fall of 1913."[28] City residents were petitioning for street trees. Mische had a grand plan for the street trees of Portland, an area that the city had been slow to act on, and this may have been one of the thrusts to create a large nursery at Mount Tabor Park. In his Report to the Park Board of 1911, he opened with strong words, "The condition of the street trees are deplorable."[29] Street trees represented at least a stab at the grand boulevards and parkways he wanted to see established from the Olmsted plan. It was a daunting task to keep up with road building plantings and Portland had not developed a clear policy on who was responsible for street trees. Power lines created problems and although the Park Board was apparently responsible for street trees, they had no jurisdiction over them. Mische gave specific recommendations to the Park Board regarding the size of the median strip and even designed a different theme of trees from around the world for the various quadrants of the city. Responses to infestations of elm beetles and gypsy moths eventually helped to clarify the importance of municipally controlled street trees. Besides street trees, the nursery at Mount Tabor Park also provided trees for other parks. The *Oregonian* of August 1913 stated that there were 32,000 tree seedlings set out in the nursery at Mount Tabor for supplying all of the parks. Mische continued his advocacy for Portland to become a city of stately trees. He authored an article published in the August 22, 1917, *The Evening Telegram* about shade trees.

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Giant sequoia conifer trees, like those that grow on the western slope of the Sierra Nevada range in California, were brought to Oregon by pioneers such as A. H. Johnson and W. S. Ladd. The Mount Tabor neighborhood has numerous large sequoia *Sequoiadendron giganteum* trees that probably date back to Mische's time. He ordered twenty "sequoia gigantea" in 20"x 20" boxes. Each sampling was reportedly five to six feet tall and cost $6 each. They were to be shipped by rail for 51¢ per 100 pounds from the California Nursery Company in Niles, California, in 1910.[30] It is probable that one of these trees is the giant sequoia, a City Heritage Tree, that towers over the east side of Reservoir 6 today.

Probable references to construction of structures in the nursery area appear in reports from various years, such as advertising for a storehouse and shelter to be built in 1915. Evidently greenhouses were in progress at the nursery site in the summer of 1918 when the city council granted a one-month extension to the builder of the greenhouses. Ten years later, Superintendent Keyser introduced plans for a violet house at the "Municipal Nursery."

The nursery area is comprised of planted grounds and a maintenance yard. Buildings are of mixed time periods with suggested dates of construction ranging from pre-1918 with the greenhouse complex that has had various additions, through the years to the 1987 pole barn. Oral reports of the parks bureau personnel recount the current utilization of refurbished old stable buildings where once the horses that pulled the mowers were kept. Records corroborate that there was a stable at Mount Tabor. Records show that a greenhouse was dismantled in between 1916 and 1917. Columbia Park was the site of the first greenhouses and Mische mentions it in his 1913 report in reference to propagation of the newly acquired stock from Arnold Arboretum. Complaints regarding odors emanating from the manure and compost piles in the smaller Columbia Park may have contributed to moving propagation endeavors to the south side of Mount Tabor.

Reservoirs: Balancing Naturalistic with Formal Design

Included in the boundaries of the Mount Tabor Park nomination is the Mount Tabor Park Reservoirs Historic District, which includes the two 1911 reservoirs, Reservoirs 5 and 6, and the one remaining 1894 reservoir, Reservoir 1.[31] Portland's reservoirs in Mount Tabor Park and those in Washington Park, also listed in the National Register, are some of the nations most intact, functioning examples of public works projects from the City Beautiful movement. The reservoirs are defining features of Mount Tabor Park. Besides the period architecture, they provide outstanding panoramas of the surrounding countryside as well as a link to the historical significance of the butte to the development of the city of Portland.

Emanuel T. Mische planned to incorporate the two new 1911 reservoirs into his design for Mount Tabor Park as a formal feature. Frederick Law Olmsted, Jr. had written an article for *American Park and Outdoor Art Association* entitled, "The Relation of Reservoirs to Parks" in 1899, while Mische was working in the Olmsted firm. Olmsted stated that, "In itself, regardless of its outline or setting, a body of water is beautiful and refreshing, and its value to the public is so well recognized that provision is very often made for giving the public access to the enclosure about a reservoir, whence its surface may be seen."[32] The main discussion focused on what he saw as the wasted potential between different municipal organizations in regards to

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reservoir design. In essence he felt that a reservoir in a public park should be designed with cooperation between engineers and landscape designers in order to achieve aesthetics and good value for the taxpayers' investment. In the case of distribution reservoirs, such as the ones at Mount Tabor Park, artificially created with embankments, he suggested keeping to a formal design. The two 1894 reservoirs at Mount Tabor Park followed this precept.

The 1911 reservoirs, constructed when Mische was park superintendent, were also designed to follow a formal theme. Mische attempted to coordinate planning with the Water Board and some of his recommendations were apparently heeded. He paid special attention to the dam face of the Upper Reservoir (Reservoir 5) as this area would be highly visible, illuminated with an open western exposure and a very steep slope. His design called for highlighting the stored water with, as he described it, a "rushing cascade" and "a series of pools..." taking advantage of the drop between them. Gravity pressure could supply several spray jets, adding greatly to the ornamental feature. "To be creditably executed requires considerable massiveness and architectural ornamentation in detail. The lighting must be abundant and some extension work, such as widening the dam and adding balustrades and the like are essential," Mische explained when the *Oregonian* showcased the design in the spring of 1911. To implement this scheme, Mische wanted the Water Board to lay the piping necessary for the cascades when the construction of the reservoirs was undertaken. The cascades scheme was never constructed, probably in a large part due to the lack of funding. According to park reports, as Olmsted had noted in his article, an apparent lack of cooperation did exist between the Water Board and the park superintendent regarding the design of the reservoirs and other park areas.

Mische successfully influenced the design surrounding the reservoirs, such as widening the dam at Reservoir 5 to accommodate the drive across the top that bestows one of the grandest views in the city. Today this view, as well as others on Mount Tabor, are part of the Scenic Resources Protection Plan. The greensward surrounding Reservoir 5 has touches of formality achieved with tree and shrub plantings. He suggested widening the walkway around Reservoir 6, that at present, is one of the most popular exercise and strolling walks in southeast Portland. An unsigned report to the Park Board in 1910 stated, "I have to report that several conferences were had with officials of the Water Board to the end that in constructing the reservoirs at Mt. Tabor there would be a partial carrying out of what would be park plans." As usual, money was a primary concern as, "It has not been contemplated that water funds should be devoted to park construction, but rather that such changes should be made in the purely structural work at this time as would harmonize it with park development whenever the latter is undertaken." In attempting to achieve the design principles of service and sanitation, mention is made of, "a profile and sketch grading plan for the slope between the two new reservoirs." A formal and an informal design for Reservoir 6 were suggested and, "Both propose an ornamental parapet balustrade on the street side of the west walk; Both propose an entrance of some pretension and dignity, with an entrance way rising above the parapet in order to relieve the long, bold sky-line of the parapet."[33] A steep concrete staircase of more than 100 steps climbs up the dam face between Reservoir 6 and Reservoir 5 on the west side of the park instead of Mische's waterfall scheme. A bit of a formal garden is retained with mature shrubs, tree plantings and a lawn area on the top of the dam adjoining the Gatehouse and parapet of Reservoir 1. Concrete steps rise up the south side of the dam face giving access to this area.

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Mische's planning attempted to strike a balance between naturalistic features in a majority of the park with formality at the entrances and in the approximately 20 acres that harbored the reservoirs. The elaborate waterfall, fountains and walkway system that Mische envisioned up the western side of the butte were not realized nor were either of his entrance schemes, in their entirety, advanced for the west side of Reservoir 6. However, his ideas have held influence over the years, if modified. The creation of electricity generated by the drop between Reservoir 5 and 6 did come to pass seven decades later when the Portland Water Bureau developed a generating system between Reservoirs 5 and 6, which apparently met engineering guidelines but did not contribute a feature of beauty to the park as Mische desired. Although not part of the cascading scheme down the dam face, Reservoir 2 and 6 eventually did get the spray jets (fountains) that would spout high into the sky from the middle of their basins, providing a grand amenity and some water purification. Allegedly, the aeration would help to counteract the rectangular shape of the reservoirs that could contribute to water stagnation in the corners.

Mische wanted to utilize the flat land at the southwest base of the butte near the lower 1894 reservoir, for a major recreation center and for, "picnicking and other pastimes amid sylvan and retired surroundings." Picnicking is integrated into Mount Tabor Park but the formal flat area did not get constructed. His Picnic Grove now Picnic Hill, is one of the great areas he designed and is still maintained as a small picnic area with beautiful interior views of Reservoir 5, and glimpses of exterior views.

Archeological Summary

Though there has been involvement of the Federal Energy Regulatory Commission at the Mount Tabor site since the mid-1980s due to the hydro-electric generating plant, there is no official state record of cultural resource surveys conducted at Mount Tabor. Further research has revealed a site yielding artifacts dating from the Late Archaic period, 2,000 years ago to historic contact in the late 1700s, on the flanks of the butte, outside of the present park boundaries. These findings included: a moccasin last, arrowheads and the "Mt. Tabor Bowl." [34] The bowl got its name from its bowl-like form. It was 21 centimeters long and 14 centimeters wide with distinct depressions on the upper and lower surfaces. The outer edge showed evidence of decoration. Speculation was that it had been used as a grinding bowl or metate.[35] Other unconfirmed reports suggest that there are obsidian flakes within the park boundaries. [36]

Conclusion

Mount Tabor Park is an exemplary representation of a city park developed within the context of the Progressive era and the City Beautiful movement and enhanced with New Deal amenities. The Mount Tabor experience, as called for by Olmsted and Mische, includes the majesty and beauty of mature forest and plantings that yield a sense of stability and mystery. These natural features prevail over subordinated modifications and amenities. The varied terrain and the views yielded, the crater area, and the subtle integration of the buildings and other structures all contribute to make Mount Tabor Park one of the historic treasures of Portland, Oregon.

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Mount Tabor Park is an excellent example of a city park that combines the principal elements that developed during the various movements that shaped American parklands. The recreation movement is represented with tennis courts, jogging and bicycling paths, and horseshoe pits. The playground movement is identified by the three open-air playgrounds. The three remaining reservoirs, with their dignified features and beautiful deep, open water views, provide an outstanding historic resource, a living record of the City Beautiful movement at its finest with their marriage of beauty, utility and the democratic principle of the first municipal service, drinking water. Another element of service, the Mount Tabor Nursery, is important not only to the historic integrity of Mount Tabor Park, but to the entire Portland parks system and, in fact, all city properties, as the continual provider of trees and other plants since it was established early in the park's history.

As defined by the National Association for Olmsted Parks, Mount Tabor Park's design embodies the "Seven S's" of Olmsted design principles: scenery, suitability, style, subordination, separation, sanitation, and service. The park's picturesque scenery provides a sense of passages and indefinite boundaries. The sheer size, nearly 200 acres, as well as the natural softly rugged terrain leave the visitor with a sense of wonder. The temperate rainforest climate nurtures remarkable plant growth, and the towering trees and lush greenery of the understory and grass make at once a soothing and exciting impression. The steep wilder areas are still endowed with seasonal wildflower shows, a rare thing in the midst of the city. The suitable design respected these natural elements and encouraged a "hands-off" policy in much of the park, acknowledging the serviceability of native vegetation for long-term maintenance. Mische's designs, like the Olmsted's, speak to long-term service, and his main aim in Mount Tabor Park was to achieve accessibility. He did so with the path and drive system, so well crafted that they have demanded little maintenance over the years and achieve the goal of not only service but sanitation, as their drainage is well engineered. Mische's thorough respect for the process of constructing without mass destruction set the tone that was followed by Keyser in the years it took to complete the drive and path system. The drives and paths subordinate themselves to the landscape in their position and their grade. Subordination has been used in most of the amenity design, especially of the built features, with the exception of the reservoirs. Their design is one of more formality, and the land around them follows a loosely pastoral theme with the reservoirs and their grassy setting acting as the bodies of water and the greensward. The three reservoirs embody the blending of beauty and utility, and the deep, sparkling water and the romantic period architecture add drama and charm to the park experience. Active recreation is represented at Mount Tabor Park, and although playgrounds, horseshoe pits, tennis courts, basketball and volleyball courts, even a small ball diamond, exist, they do not dominate. These amenities are tucked in here and there, so although the park has experienced, as most open space has, construction of modern features, the landscape allows separation and subordination.

In 1911, Emanuel Mische, Park Superintendent, summed up Mount Tabor Park well when he said to the Park Board, "One of the most pleasing accents of the general landscape of the city is this property, rising with majestic eminence from the broad East Side plain."

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Notes

[1]City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[2]Ibid.

[3]City of Portland, Annual Report of the Park Board, 1903.

[4]The Oregonian November 5, 1908, p. 14.

[5]The Oregonian March 30, 1909, p. 16.

[6]City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

[7]Ibid.

[8]City of Portland, Annual Report of the Park Board, 1903.

[9]Keyser, Charles Paul. Correspondence to Emily Moltzner, Oregon Geological Society, August, 31, 1961.

[10]City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

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[15] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[16] The Oregonian May 21, 1911, p. 10.

[17] City of Portland, Annual Report of the Park Board, 1903.

[18] Ibid.

[19] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[20] J.H. Smith Residence, Summit of Mt. Tabor. The Hart Land Co., Brochure of Mount Tabor Views. (ca. 1890's, ed.)

[21] City of Portland, Annual Reports of the Park Board, 1908 – 1912. March, 1913.

[22] City of Portland, Annual Report of the Bureau of Parks, 1913.

[23] City of Portland, Stanley Parr Archives and Record Center. *Council Documents.*

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[25] Ibid.

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[31] Anderson Geller, Cascade, "Mount Tabor Reservoirs Historic District, National Register of Historic Places." 2003.

[32] Olmsted, Frederick Law, Jr., "The Relation of Reservoirs to Parks." American Park and Outdoor Art Association, Paper 32. Boston: Rockwell and Churchill Press, 1899.

[33] City of Portland, Stanley Parr Archives and Record Center. Report for Board Meeting, Park Department, January 7, 1910.

[34] City of Portland. "East Buttes, Terraces and Wetlands Conservation Plan," Ordinance number 166572, 1993.

[35] Beals, Herb (ed.), "Screenings," The Oregon Archaeological Society. Vol. 22 No. 7; July, 1973.

[36] City of Portland. "East Buttes, Terraces and Wetlands Conservation Plan," Ordinance number 166572, 1993.

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Multnomah County, Oregon

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Mount Tabor Park
Multnomah County, Oregon

UTM REFERENCES

5 10 531495 5040207
Zone Easting Northing

VERBAL BOUNDARY DESCRIPTION

The nominated property is bounded beginning at S.E. 60th Ave. on the west at S.E. Lincoln St. north to S.E. Harrison St. east to the approximate location of S.E. 64th Ave. north to S.E. Stephens St. west to S.E. 60th Ave. north to approximately S.E. Madison St. east to approximately S.E. 62th Ave. north to S.E. Yamhill St. east along the south boundary of S.E. Yamhill St. to approximately S.E. 65th Ave. south to S.E. Taylor St. east along the south boundary of S.E. Taylor St. to S.E. 71st Ave. south roughly along S.E. 71st Ave. to Mountain View Dr. south following the east property boundaries of the west side private residences to approximately S.E. Grant St. west along the south property boundary of Warner Pacific College to approximately S.E. 65th Ave south to S.E. Division St west to approximately S.E. 64th Ave. north along roughly S.E. 64th Ave. to S.E. Lincoln St. west along the north boundary of the street to S.E. 60th Ave.

The boundary has some irregularities as shown by the heavy black line on the accompanying map entitled, Mount Tabor Park Boundary Map.

BOUNDARY JUSTIFICATION

The boundary represents the present boundary of Mount Tabor Park. It is roughly the same boundary as the original park plan of 1911*presented to the Portland Park Board and corresponds to the original park properties purchased between the years of 1888 and 1922, with the exception of the southwest corner of the property bounded roughly by S.E. 64th Ave. at S.E. Division St. north to roughly S.E. Caruthers west to S.E. 60th Ave. south to S.E. Division St. east to roughly S.E. 64th Ave. that was occupied by Reservoir 2 and was sold to a private individual in the 1990's.

*(Excluding the proposed eastern boundary section. See the Original Plan by Mische 1911)

Mount Tabor Park · Boundary Map

Black area:
Environmental
zone overlay

N →

S.E. Lincoln St.
S.E. Salmon St.
S.E. Yamhill St.
S.E. Belmont St.

DRAWING: j:\working\mttabor\base\bm-site.dgn PLOTTED ON: 07 NOV 2003 PLOTTED BY: PKMCGOW PLOTTED FROM: PK-PB13-0720

S.E. Division St.

S.E. 60th Av.

S.E. 69th Ave

S.E. 71st Ave.

S1 of 1

Portland Parks and Recreation
JIM FRANCESCONI, Commissioner ZARI SANTNER, Director

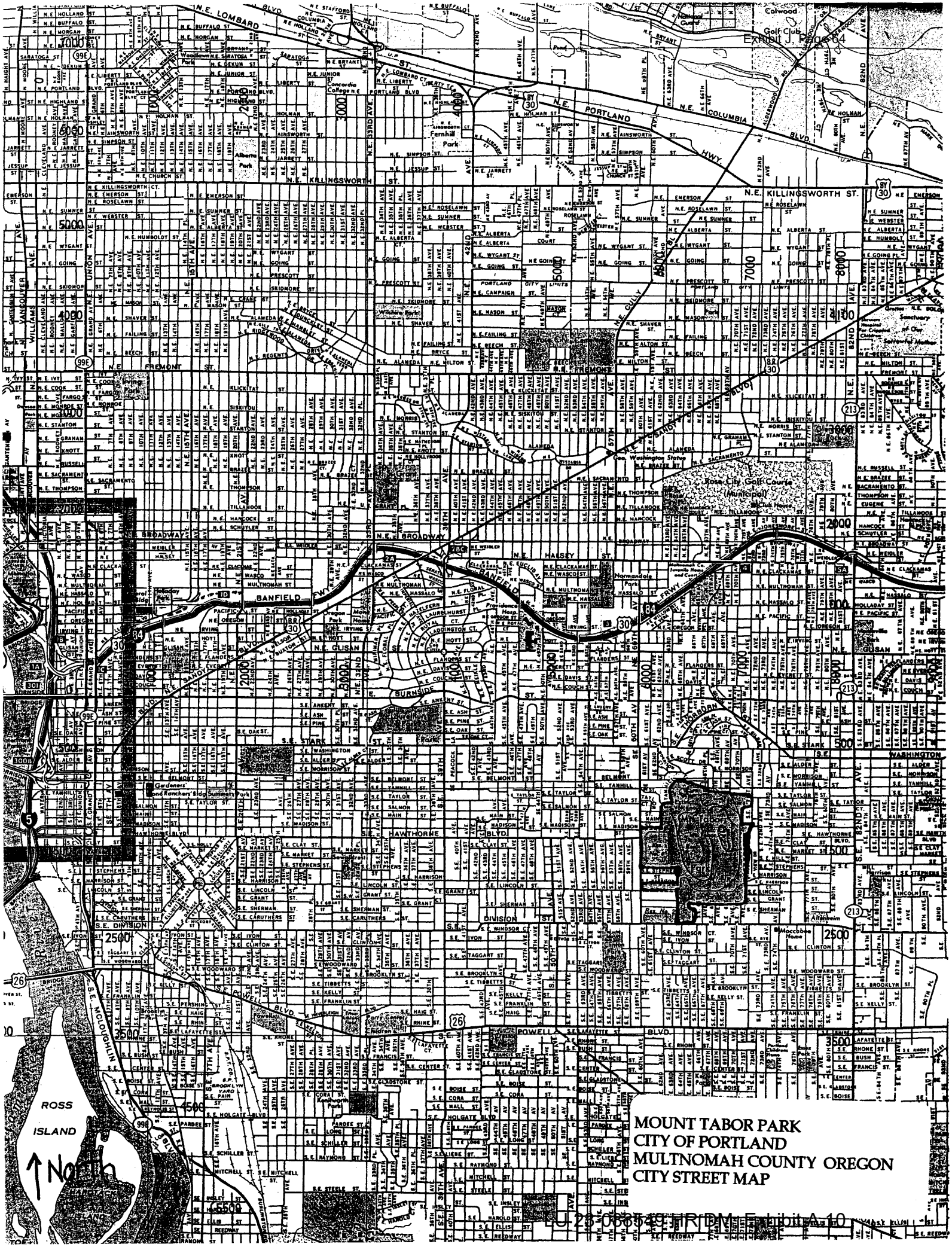
Existing Conditions
Mt. Tabor Park
Portland, Oregon

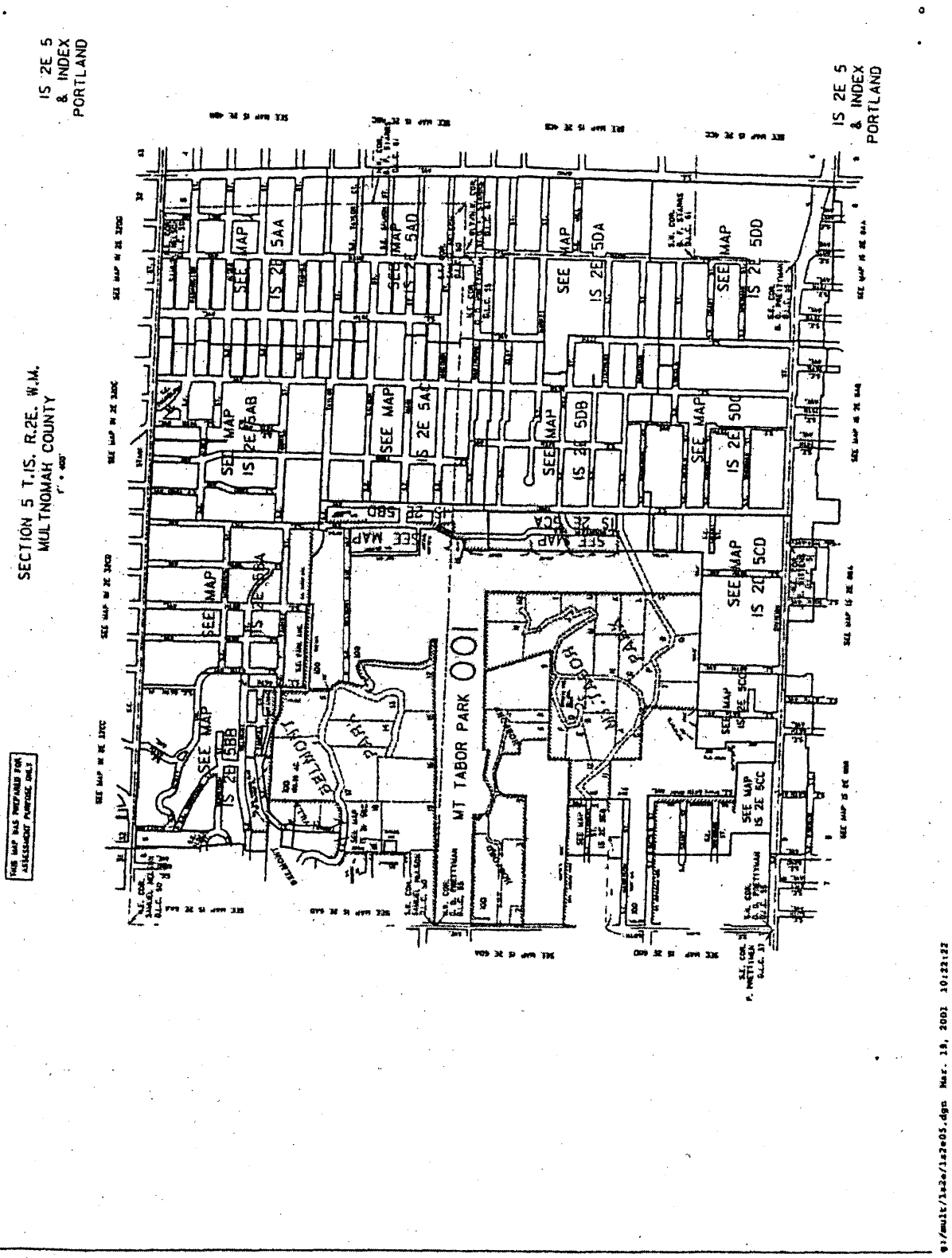
PROJECT MANAGER:
DATE: 18 NOV 2003 SCALE: 1"=400' DRAWN BY: SECTION:

REVISIONS

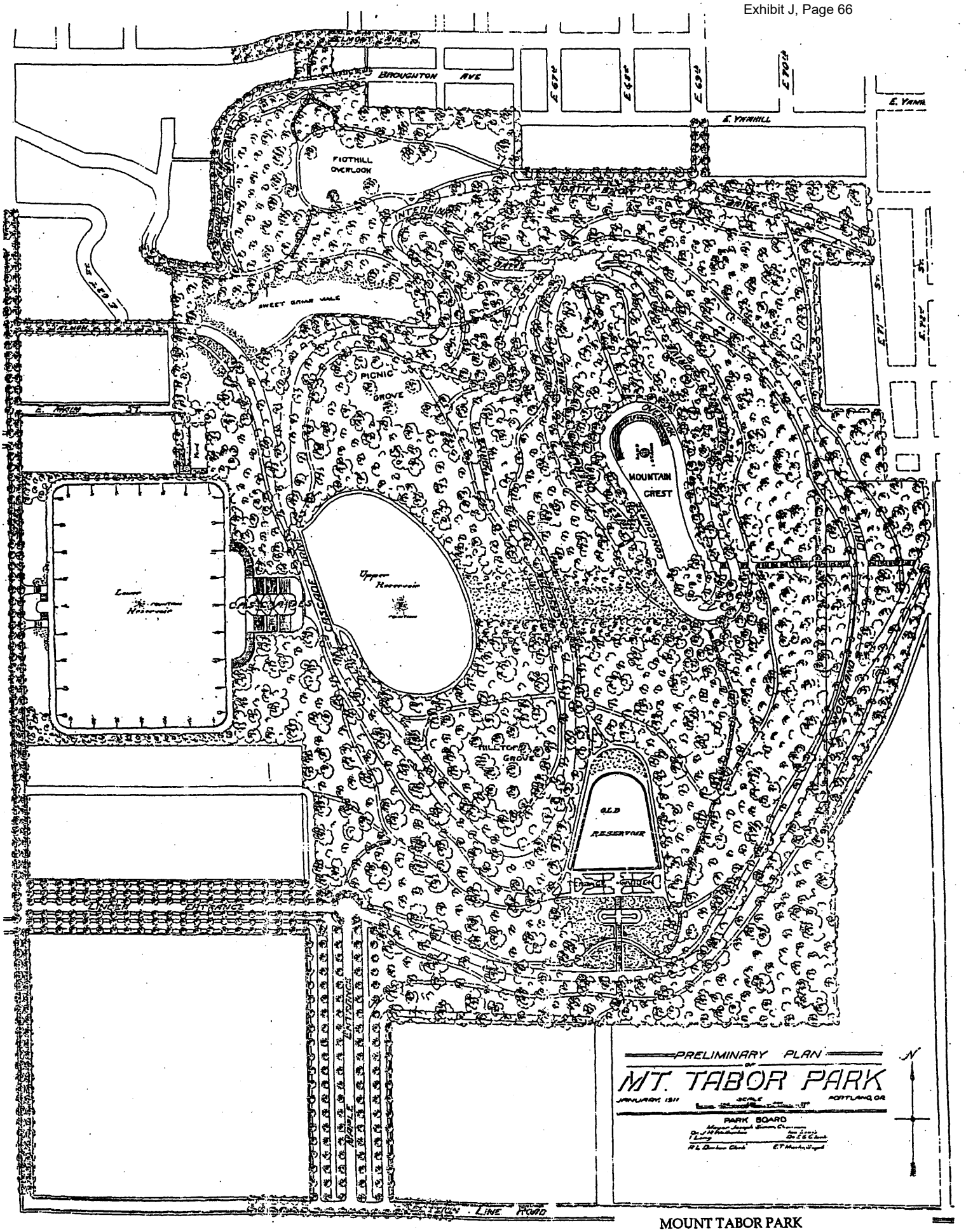
PORTLAND PARKS & Recreation

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
BOUNDARY MAP 2003


MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
CITY STREET MAP
North
ROSS ISLAND
Exhibit J, Page 64
LU 23-006540 HRDM, Exhibit A.10



MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON



MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY, OREGON
ORIGINAL PLAN BY MISCHE 1911

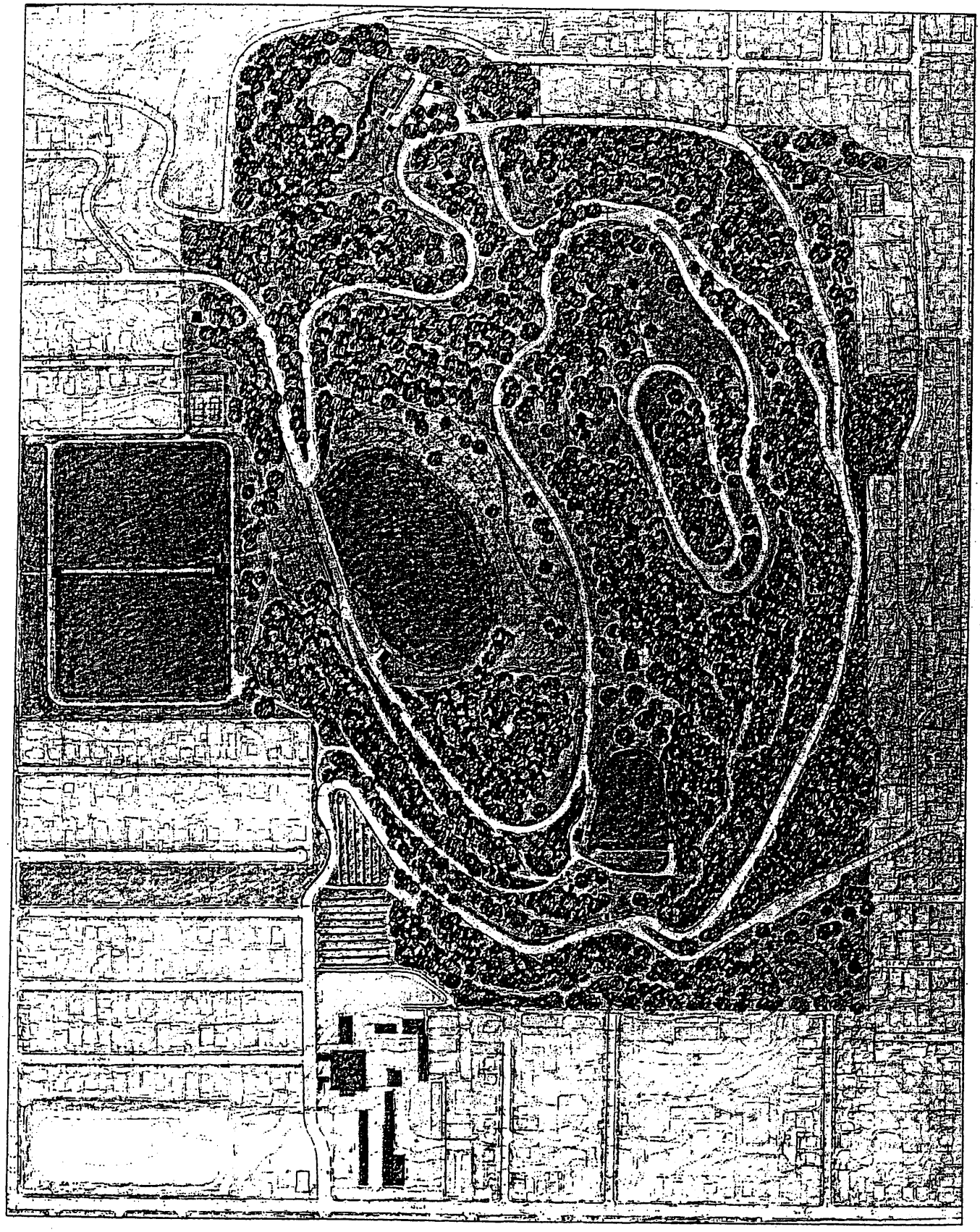
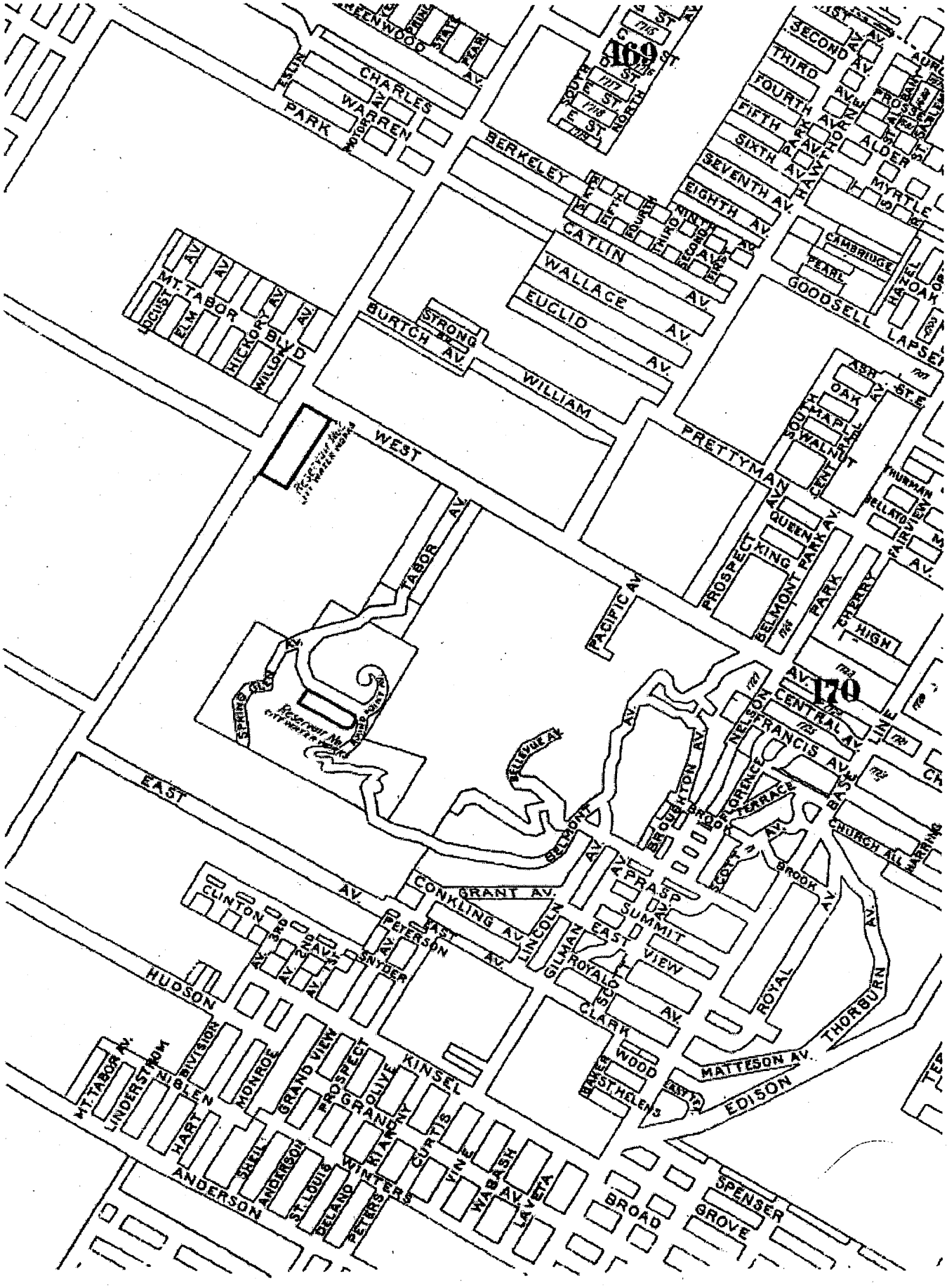
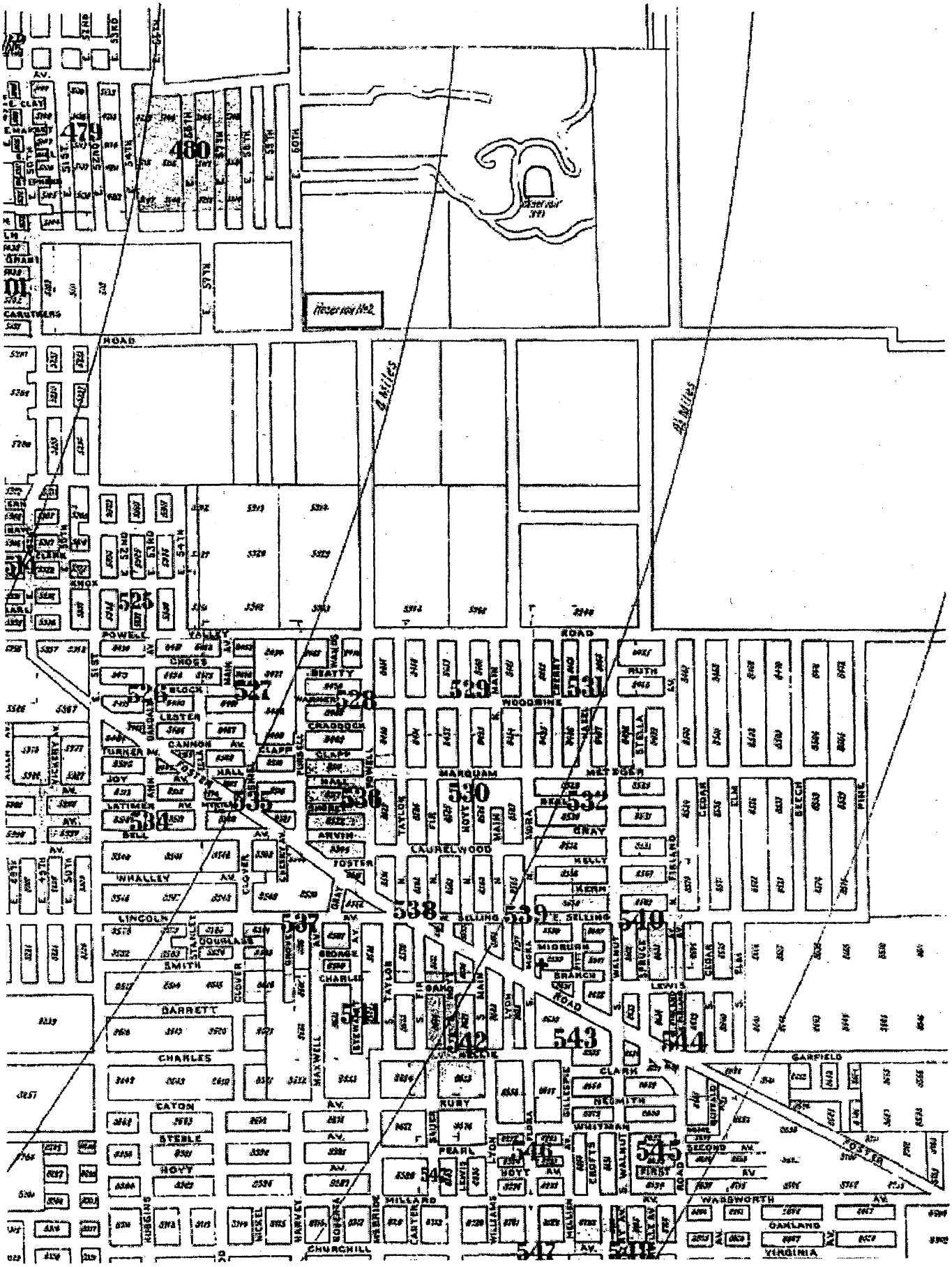


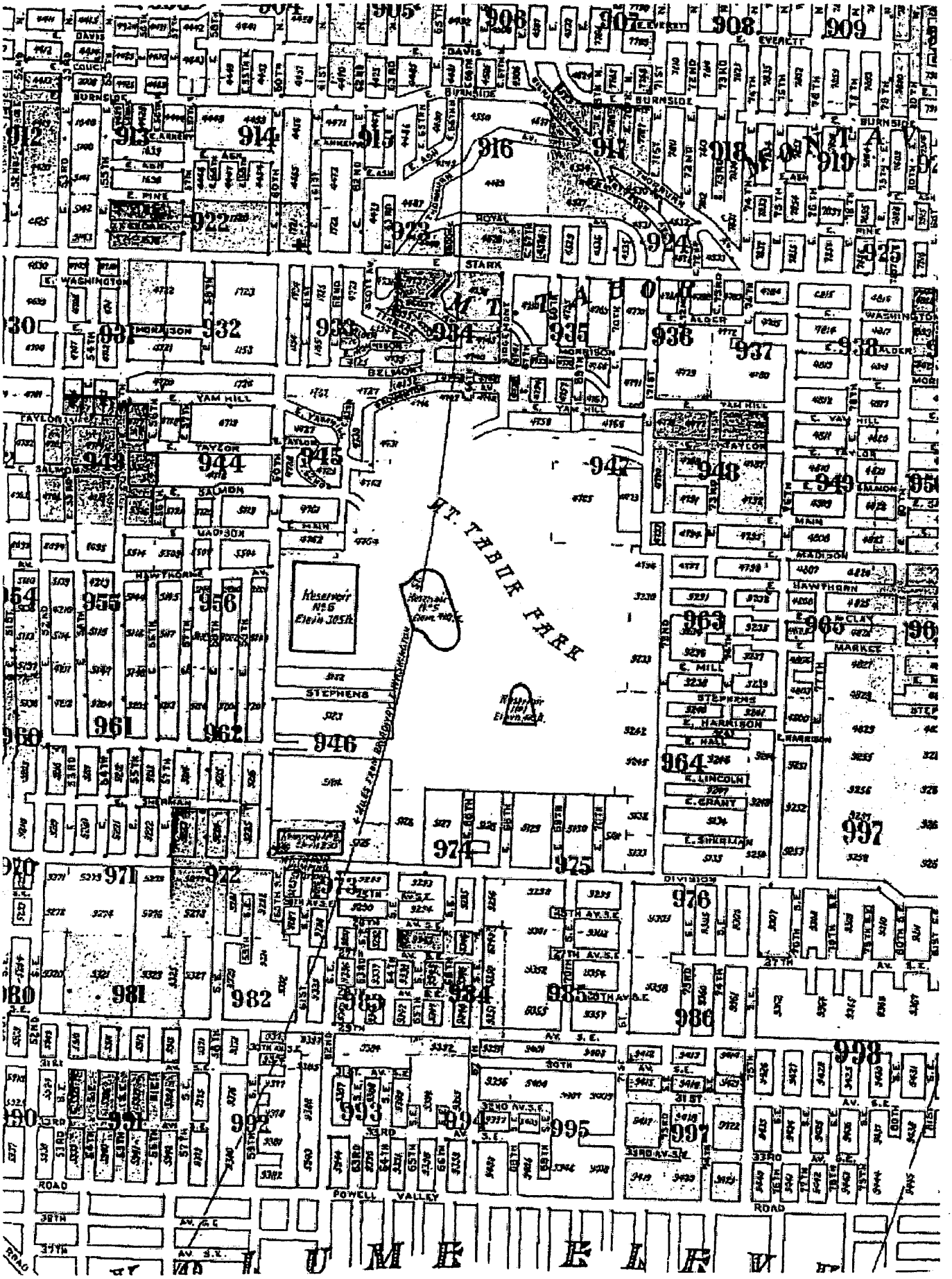
Figure 8 - Illustrative Master Plan

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
MAP OF MASTER PLAN 2000

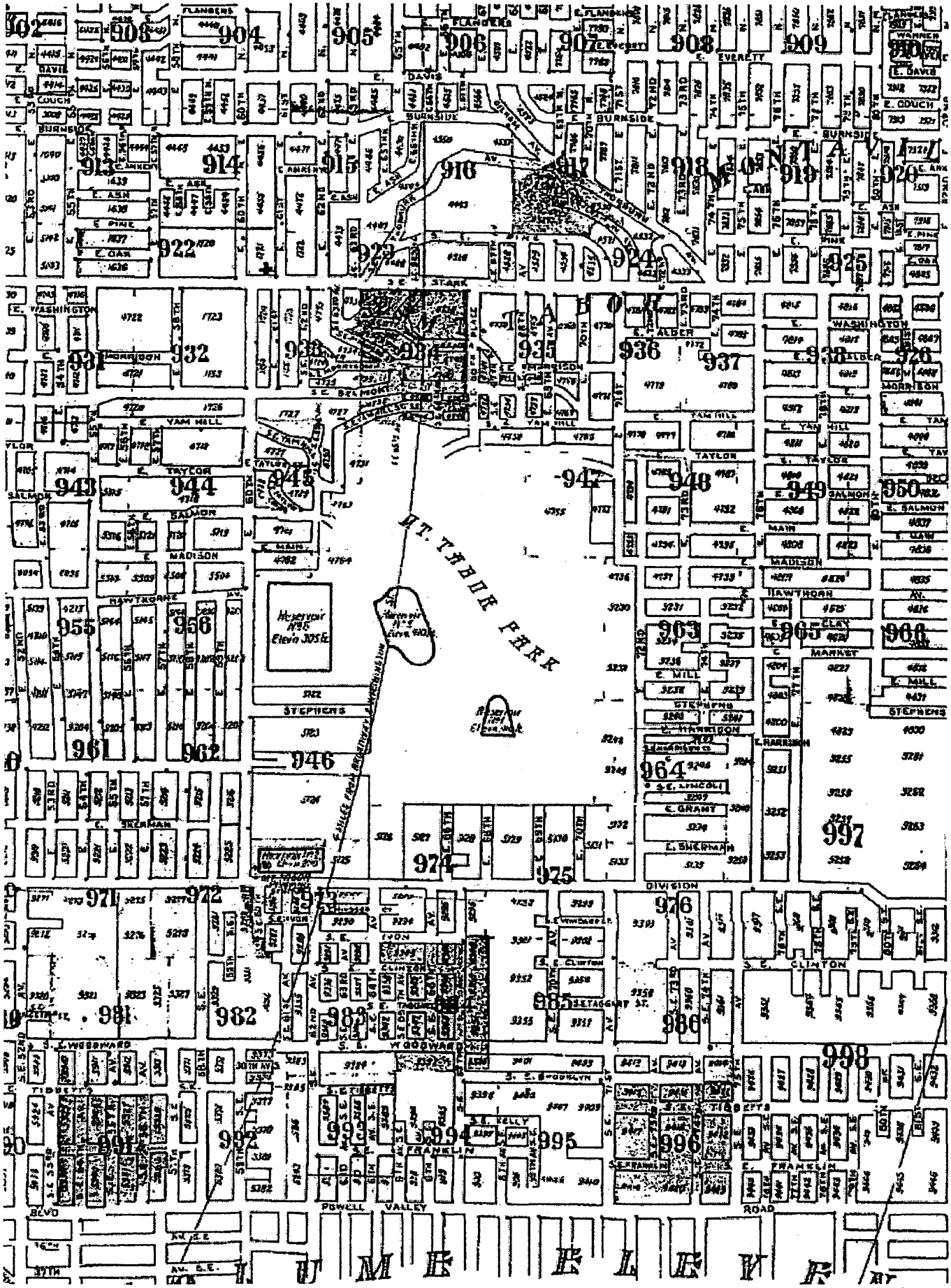


MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 1901





MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 9240


MT. TABOR PARK
Reservoir
Elevation 305 ft.
MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
SANBORN MAP 1950

NPS Form 10-900a
(8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Mount Tabor Park
Multnomah County, Oregon

Section _____ Page 1

Photo List for Mount Tabor Park

The following information applies to all photographs:

Resource: Mount Tabor Park
Location: Multnomah County, Oregon
Photo date: November, 2003
Negative location: 1934 SE 56th Portland, Oregon 97215

View: Mount Tabor Butte looking east from Washington Park
Photographer: Cascade Anderson Geller
Photo Number: 1

View: Mount Tabor Butte looking east from S.E. Hawthorne Blvd.
Photographer: Cascade Anderson Geller
Photo Number: 2

View: S.E. Salmon Street Entrance looking east
Photographer: Jeff Lee
Photo Number: 3

View: Caretakers House looking southeast north and west elevations
Photographer: Kimberly Lakin
Photo Number: 4

View: Sweet Briar Vale path at S.E. Salmon St. looking east
Photographer: Jeff Lee
Photo Number: 5

View: S.E. Salmon St. drive with Sweet Briar Vale crossing looking northwest
Photographer: Jeff Lee
Photo Number: 6

View: Reservoir Loop Drive switchback north of Reservoir 5 looking north
Photographer: Jeff Lee
Photo Number: 7

View: Upper path around Reservoir 5 looking west
Photographer: Jeff Lee
Photo Number: 8

View: Looking southwest from Reservoir 5 viewpoint at Reservoir 6, hawthorn grove & sequoia tree
Photographer: Jeff Lee
Photo Number: 9

View: Top of Sweet Briar Vale path & steps to Picnic Hill
Photographer: Jeff Lee
Photo Number: 10

View: Picnic Grove Summit looking southwest toward Reservoir 5
Photographer: Jeff Lee
Photo Number: 11

View: Volcanic crater core & throat from amphitheater looking west
Photographer: Jeff Lee
Photo Number: 12

View: Crater Amphitheater & Stage looking north
Photographer: Jeff Lee
Photo Number: 13

View: Crater Amphitheater Stage rear entrance looking east (Maintenance Building & Office in background)
Photographer: Jeff Lee
Photo Number: 14

View: Crater Comfort Station looking north at south elevation
Photographer: Kimberly Lakin
Photo Number: 15

View: N.E. 69th Ave. Entrance stairs looking southwest
Photographer: Cascade Anderson Geller
Photo Number: 16

View: N.E. Entrance Comfort Station looking southwest east & north elevations
Photographer: Cascade Anderson Geller
Photo Number: 17

View: Summit Comfort Station looking west east elevation
Photographer: Kimberly Lakin
Photo Number: 18

View: Mountain Crest Summit north end big leaf maple grove looking northeast
Photographer: Cascade Anderson Geller
Photo Number: 19

View: Mountain Crest Summit south end east stairs to Harvey W. Scott statue
Photographer: Cascade Anderson Geller
Photo Number: 20

View: Harvey W. Scott statue looking west
Photographer: Cascade Anderson Geller
Photo Number: 21

View: East Tabor Drive viewpoint Mt. Hood, Boring Lava Buttes, east Portland looking east
Photographer: Cascade Anderson Geller
Photo Number: 22

View: East Tabor Drive basalt rock retaining wall looking northwest
Photographer: Cascade Anderson Geller
Photo Number: 23

View: S.E. Harrison St. Entrance Drive looking west
Photographer: Cascade Anderson Geller
Photo Number: 24

View: From north path above Reservoir 1 looking south
Photographer: Jeff Lee
Photo Number: 25

View: S.E. Harrison Drive switchback at Water Bureau Entrance looking southeast
Photographer: Jeff Lee
Photo Number: 26

View: Water Bureau Service Drive approach to Reservoir 6 southeast side looking northwest
Photographer: Jeff Lee
Photo Number: 27

View: Tennis Courts northeast side Reservoir 6 looking south
Photographer: Jeff Lee
Photo Number: 28

View: S.E. Lincoln St. Entrance at Nursery looking northeast
Photographer: Jeff lee
Photo Number: 29

View: Mount Tabor Yard from Nursery looking south
Photographer: Cascade Anderson Geller
Photo Number: 30

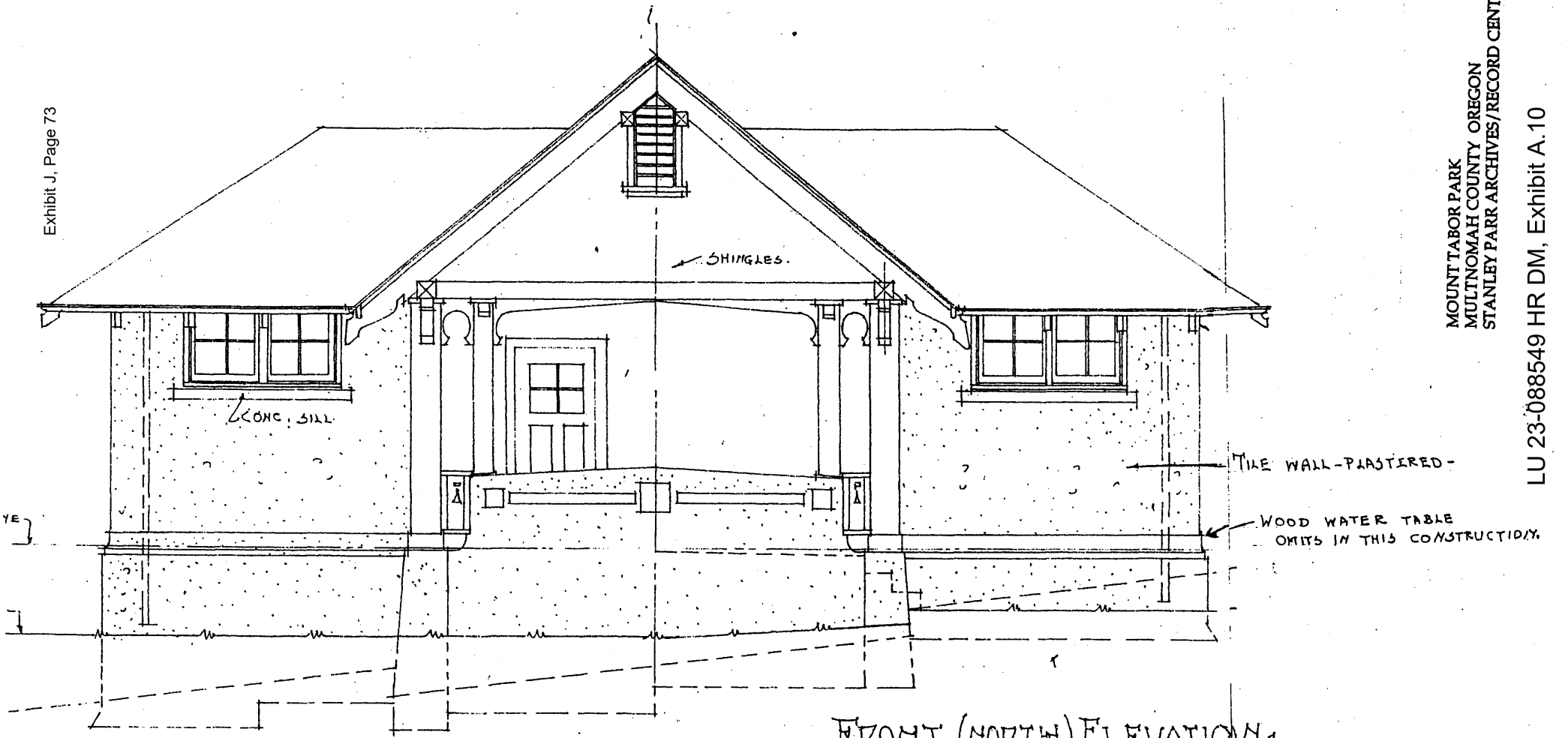
View: Mount Tabor Yard looking northeast
Photographer: Kimberly Lakin
Photo Number: 31

View: Office (Horticultural Services Building) looking northeast south & west elevations
Photographer: Kimberly Lakin
Photo Number: 32

View: Administrative Building &Additions looking east west elevation
Photographer: Kimberly Lakin
Photo Number: 33

View: Mechanical Offices (Community Gardens) looking northeast south and west elevations
Photographer: Kimberly Lakin
Photo Number: 34

View: Nursery finger looking northeast
Photographer: Cascade Anderson Geller
Photo Number: 35



FRONT (NORTH) ELEVATION

SCALE 1/4" = 1'-0"

OTHER ELEVATIONS ARE TO HAV CHANGES AS HERE SHOWN FOR FRONT ELEVATION-

DETAILS SHOWING ALTERNATE CONSTRUCTION

CITY OF PORTLAND - OREGON -
DEPARTMENT OF PUBLIC AFFAIRS
GEO. L. BAKER - COMMISSIONER -

JOB #. 13 SHEET # 4	COMFORT STATION FOR NORTH-EAST MT. TABOR -
DATE. 3-11-16.	BUREAU OF PARKS J. O. CONVILL - SUPT. C. H. KOBLE - PARK ARCHITECT.

01/13/02 7200-05
Parks planning maps / drawings
Mt Tabor Park

MAP KEY
Mount Tabor Park

Contributing Features

Buildings:

1) Office-Horticultural Services Building
2) Administrative Building & Additions
3) Mechanical Offices Building (Community Gardens Building)
4) Caretaker House-Mount Tabor House
5) Volcano Comfort Station
6) Summit Comfort Station
7) Northeast Entrance Comfort Station

Structures:

8) Crater Amphitheater
9) West Tennis Court
10) East Tennis Court
11) 69th Avenue Stairs
12) Southside Stairs

Object:

13) Harvey W. Scott Statue & Terrace

Non-Contributing Features

Buildings:

14) Garages/Shops-West Side Row
15) Garages/Shops-Eastside Row
16) Lathe House
17) Equipment Building
18) Pole Barn building
19) Duplex Screen House
20) 50" Meter House
21) 44" Meter House
22) 56" Meter House
23) Maintenance Building and Park Office

Structures

24) Summit Radio Tower
25) Additional Greenhouses
26) Picnic Shelter
27) Greenhouse Complex
28) Basketball Court
29) Soap Box Derby Track

S1
of 1

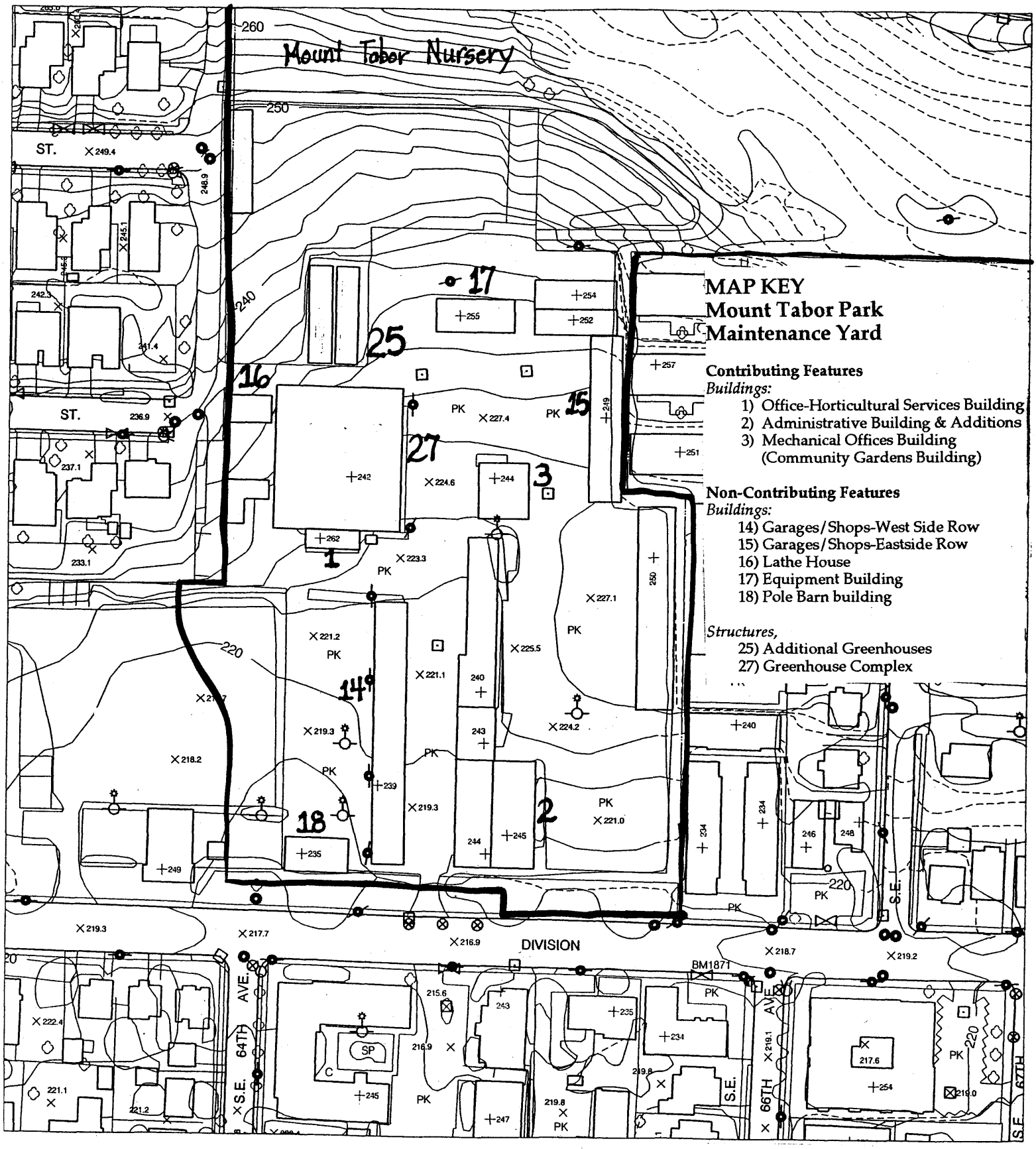
North

DATE	REVISIONS	BY

Portland Parks and Recreation
JIM FRANCESCONI, Commissioner ZARI SANTNER, Director

Existing Conditions
Mt. Tabor Park
Portland, Oregon PROJECT MANAGER:
DATE: 18 MAY 2004 SCALE: 1"=400' DRAWN BY: SECTION:

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
BOUNDARY & FEATURES MAP
2004

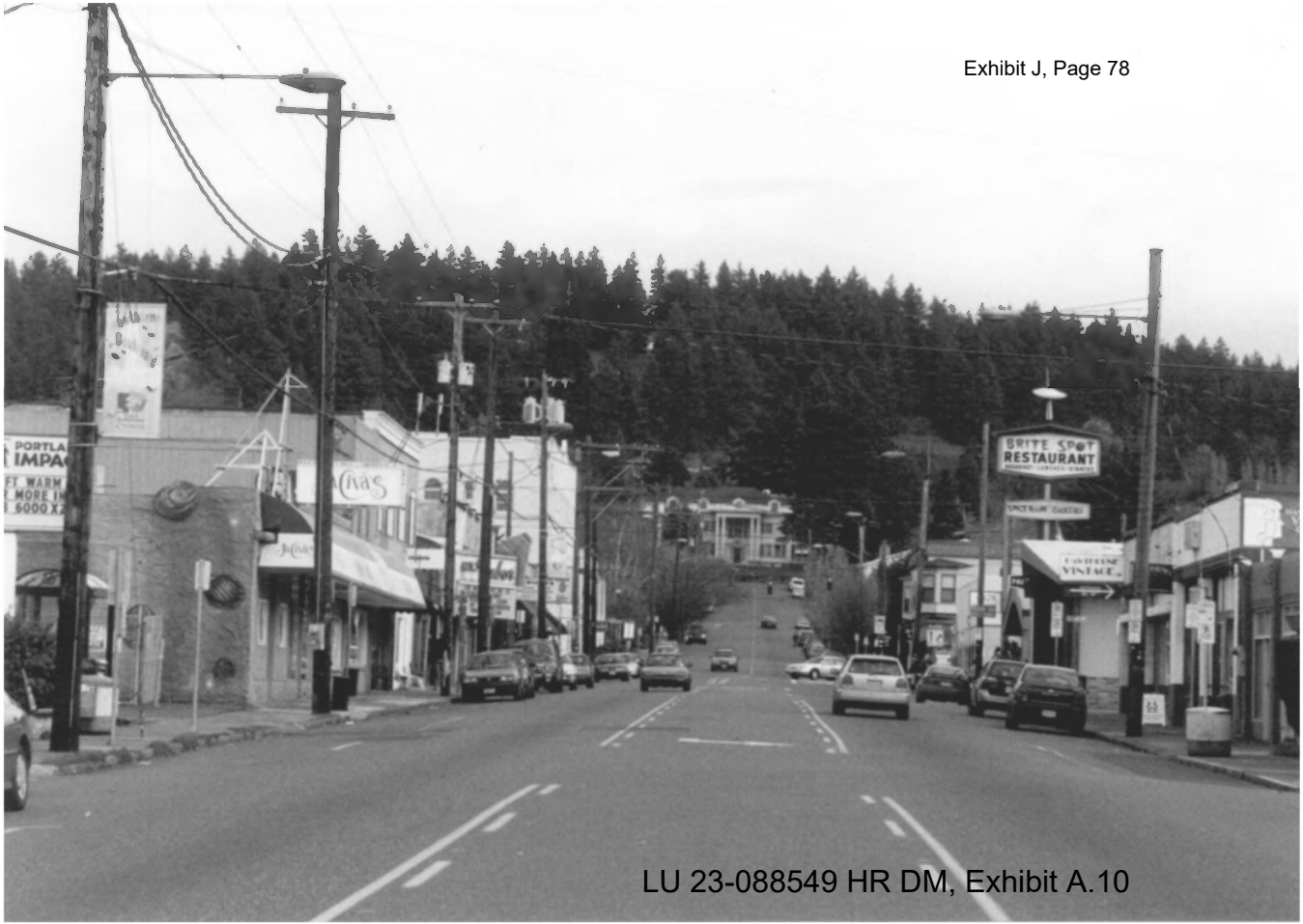


↑North

MOUNT TABOR PARK
CITY OF PORTLAND
MULTNOMAH COUNTY OREGON
MAINTENANCE YARD
INSET MAP
2004

Exhibit A.17

Mount Tabor Park
Portland, Oregon 1



LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Exhibit J, Page 79

Portland, oregon

549 HR DM, Exhibit A.10

2

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Exhibit J, Page 81

Portland, Oregon

9 HR DM, Exhibit A.10

3

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Portland, Oregon

HR DM, Exhibit A.10

4


Exhibit J, Page 84
LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park
Portland, Oregon

49 HR DM, Exhibit A.10

5

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Portland Oregon

6

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Portland, Oregon

88549 HR DM, Exhibit A.10

7

Mount Tabor Park

Exhibit J, Page 91

Portland, Oregon

R DM, Exhibit A.10

8

Mount Tabor Park

Portland, Oregon

38549 HR DM, Exhibit A.10

9

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Portland, Oregon

10

Mount Tabor Park

Portland, Oregon

HR DM, Exhibit A.10

11

LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Exhibit J, Page 99

Portland, Oregon

DM, Exhibit A.10

12

Mount Tabor Park

Portland, Oregon

13

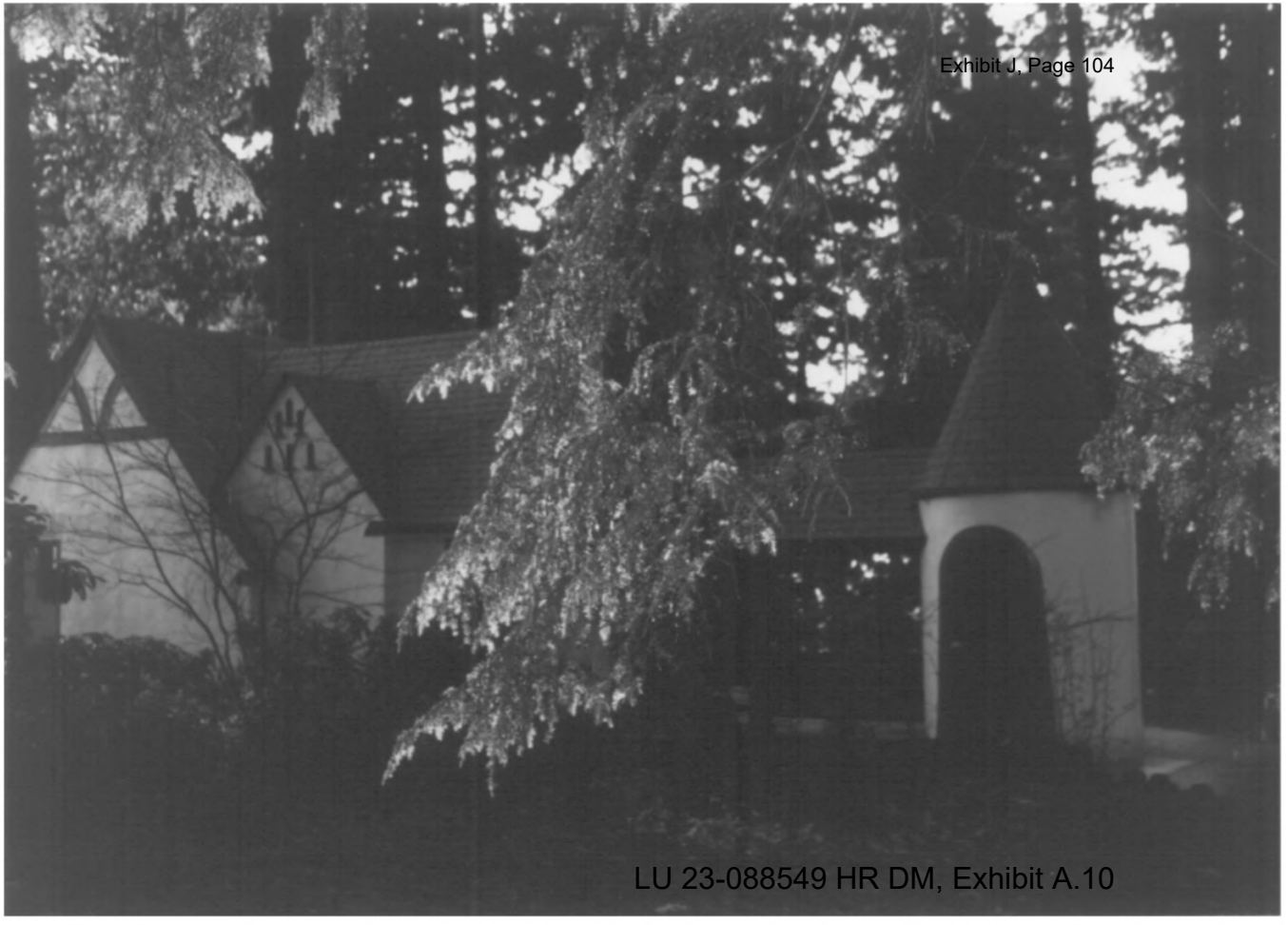
Mount Tabor Park

Exhibit J, Page 103

Portland, Oregon

HR DM, Exhibit A.10

14



LU 23-088549 HR DM, Exhibit A.10

Mount Tabor Park

Exhibit J, Page 105

Portland, Oregon

49 HR DM, Exhibit A.10

15


SPEED
15
MT TABOR PARK
PARKING AREA
VOLCANO
PICNIC AREAS
PLAYGROUND

Mount Tabor Park

Portland, Oregon

16

Mount Tabor Park

Portland, Oregon

17

Mount Tabor Park
Portland, Oregon
18

Mount Tabor Park

Portland, Oregon

49 HR DM, Exhibit A.10

19

Mount Tabor Park

Portland, Oregon

8549 HR DM, Exhibit A.10

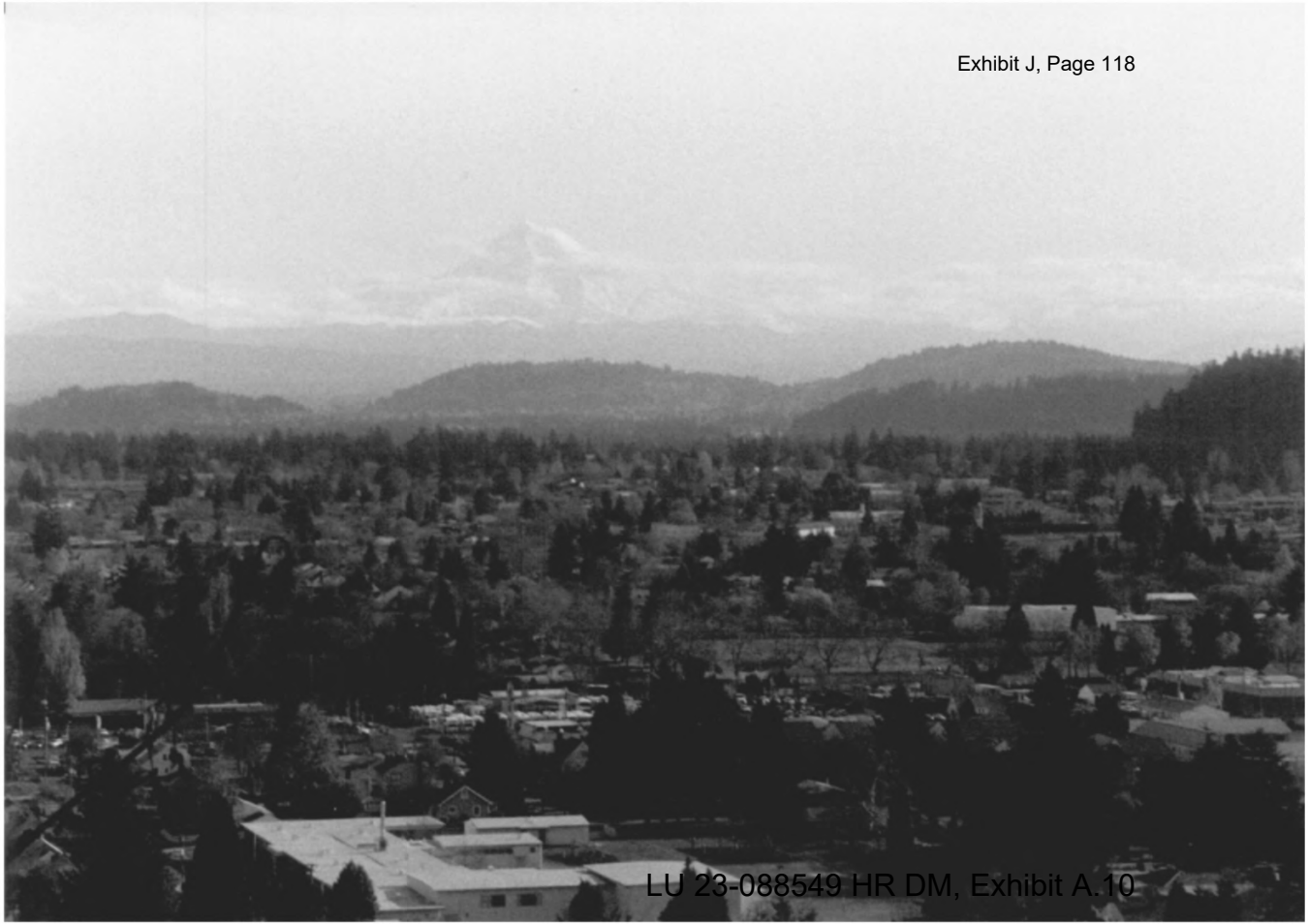
20

Mount Tabor Park

Portland, Oregon

88549 HR DM, Exhibit A.10

21



Mount Tabor Park

Portland, Oregon

8549 HR DM, Exhibit A.10

22

Mount Tabor Park

Portland, Oregon

23


MT. TABOR
PARK

Mount Tabor Park

Portland, Oregon

24

Mount Tabor Park

Exhibit J, Page 125

Portland, Oregon

25

-9 HR DM, Exhibit A.10


MT. TABOR
PARK

Mount Tabor Park

Portland, Oregon

26

Mount Tabor Park

Portland, Oregon

27

Mount Tabor Park

Portland, Oregon

549 HR DM, Exhibit A.10

28


MT TABOR
PARK
PORTLAND PARKS & RECREATION
HOURS: OPEN 5:00AM to 12:01AM

Mount Tabor Park

Exhibit J, Page 133

Portland, Oregon

9 HR DM, Exhibit A.10

29

Mount Tabor Park

Portland, Oregon

30

Mount Tabor Park

Exhibit J, Page 137

Portland, Oregon

49 HR DM, Exhibit A.10

31

Mount Tabor Park

Exhibit J, Page 139

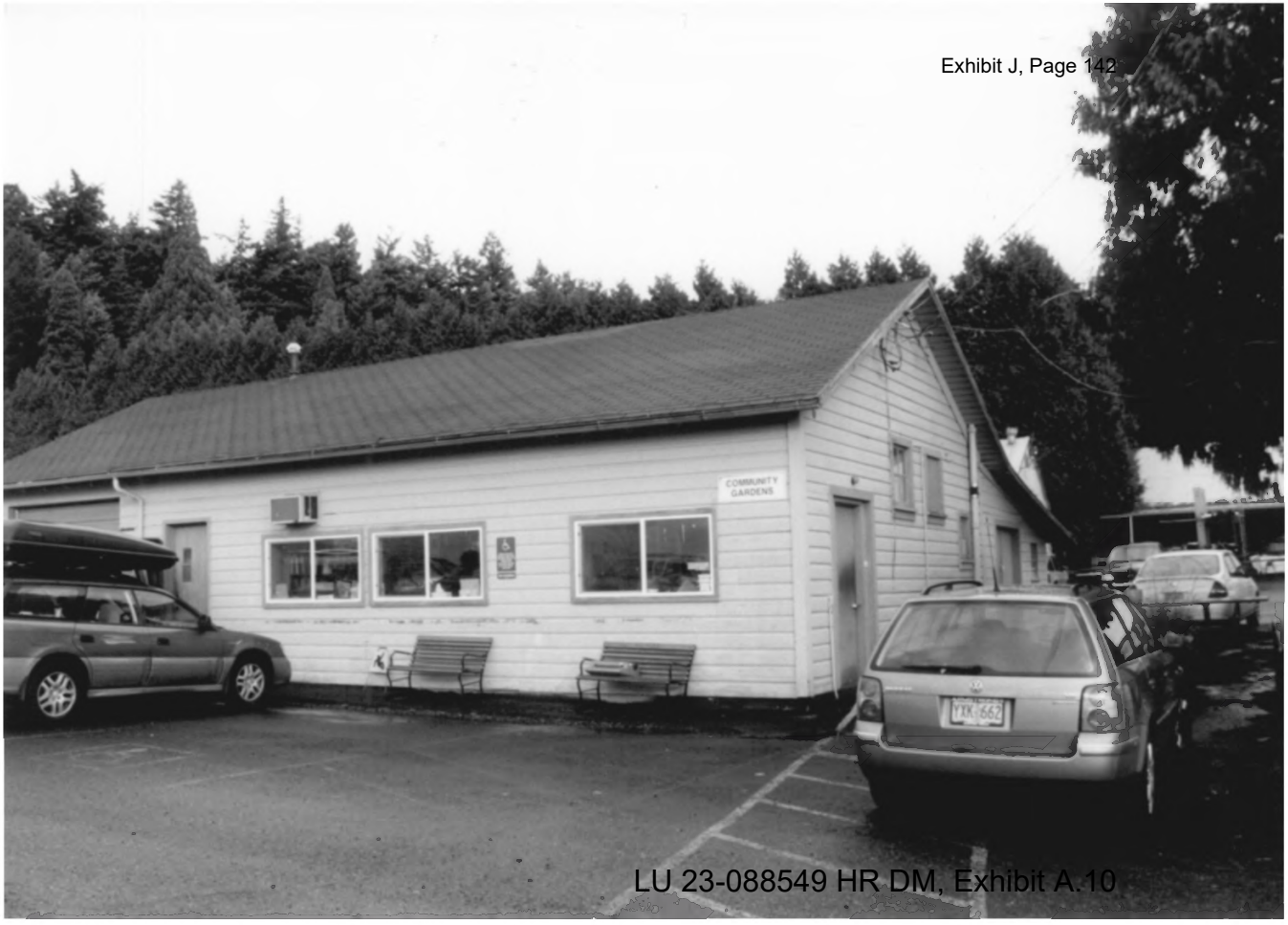
Portland, Oregon

49 HR DM, Exhibit A.10

32


MT. TABOR
MAIN OFFICE

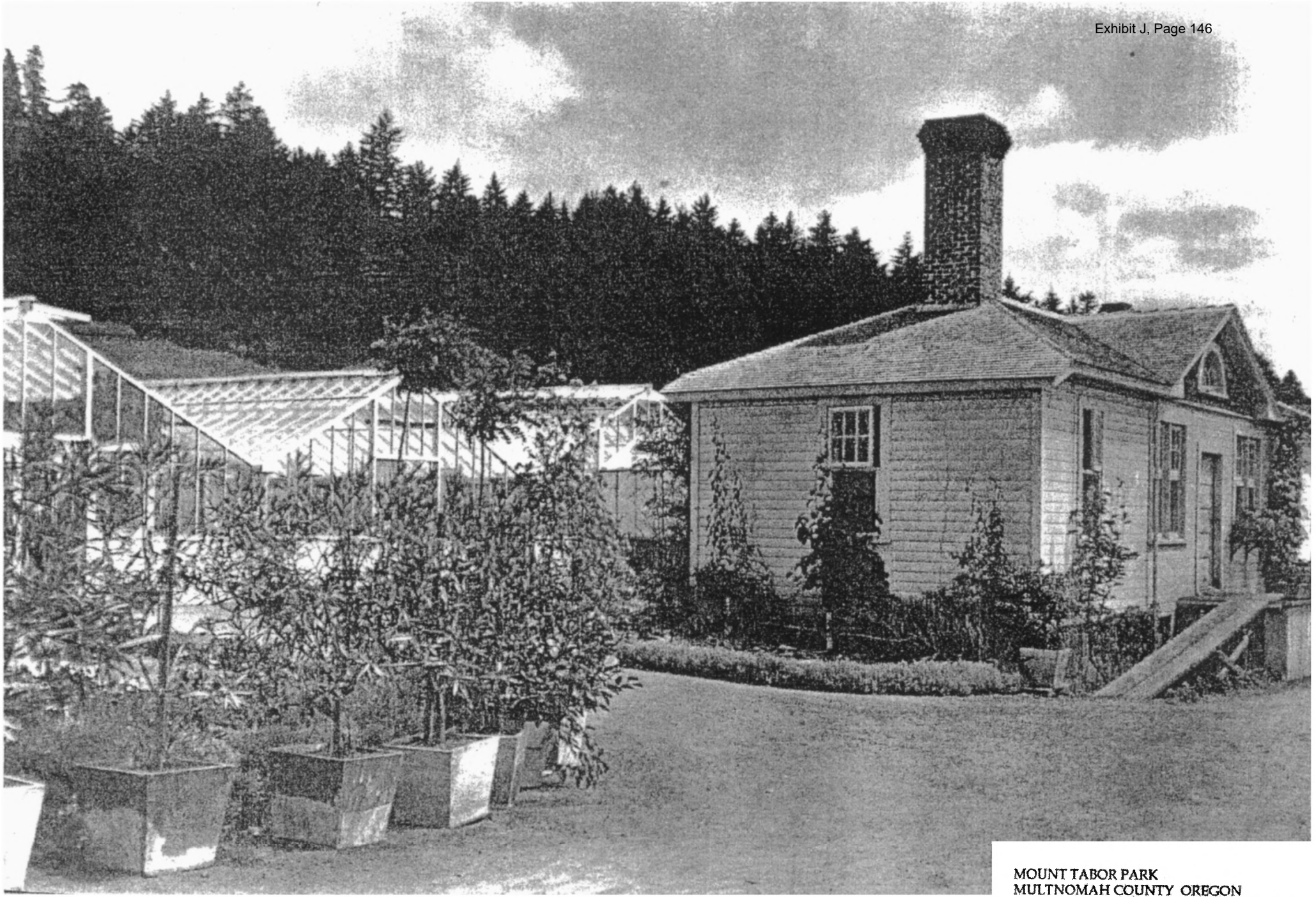
Mount Tabor Park
Portland, Oregon


COMMUNITY
GARDENS

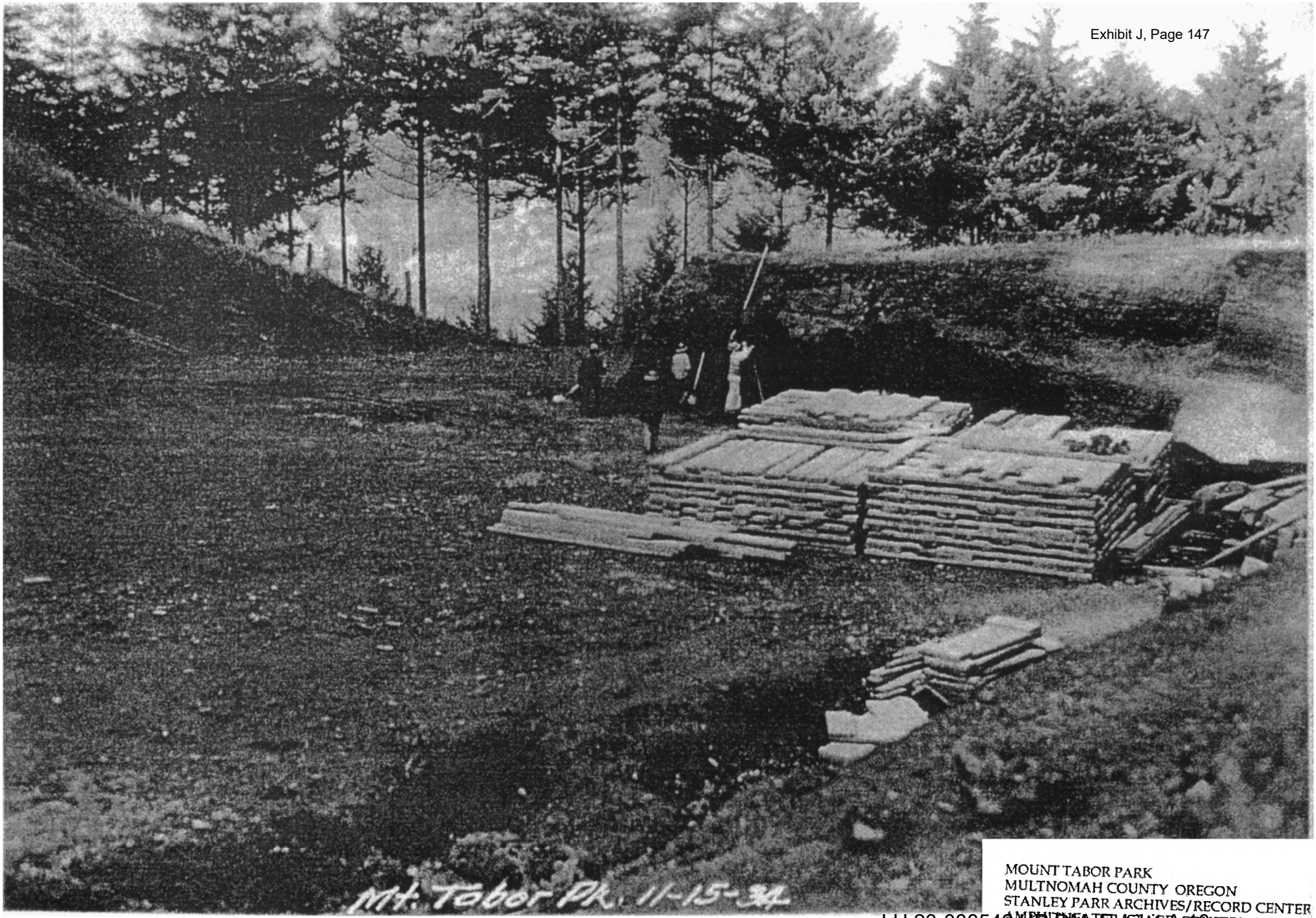
Mount Tabor Park
Portland, Oregon

34

Mount Tabor Park
Portland, Oregon



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN
OFFICE/HORTICULTURAL SERVICES BLI
C 1921



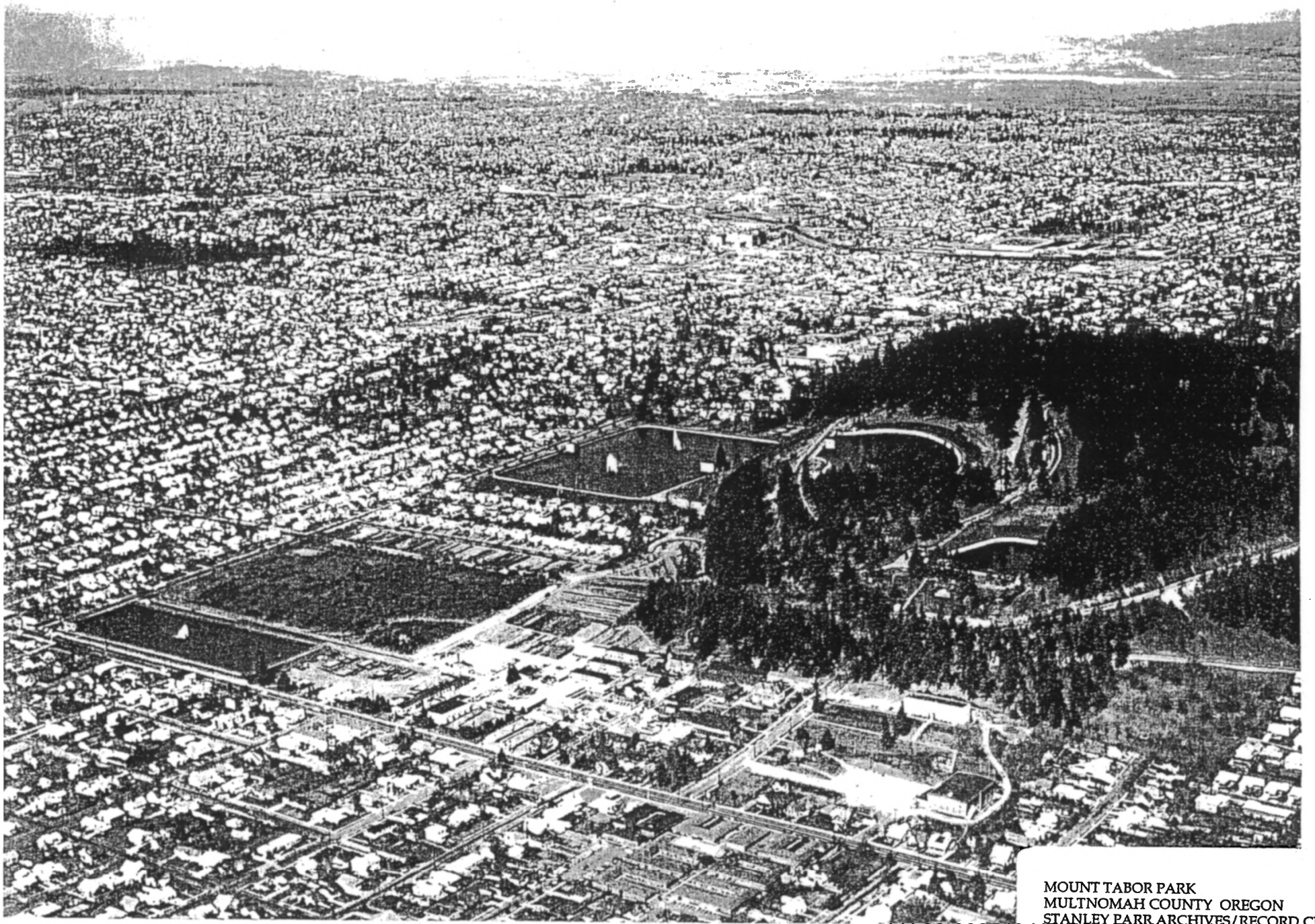
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
AMPHITHEATER, STAGE CONSTRUC
1934

MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANDARD TIME EXHIBIT A, 10
DRIVE CONSTRUCTION 1934

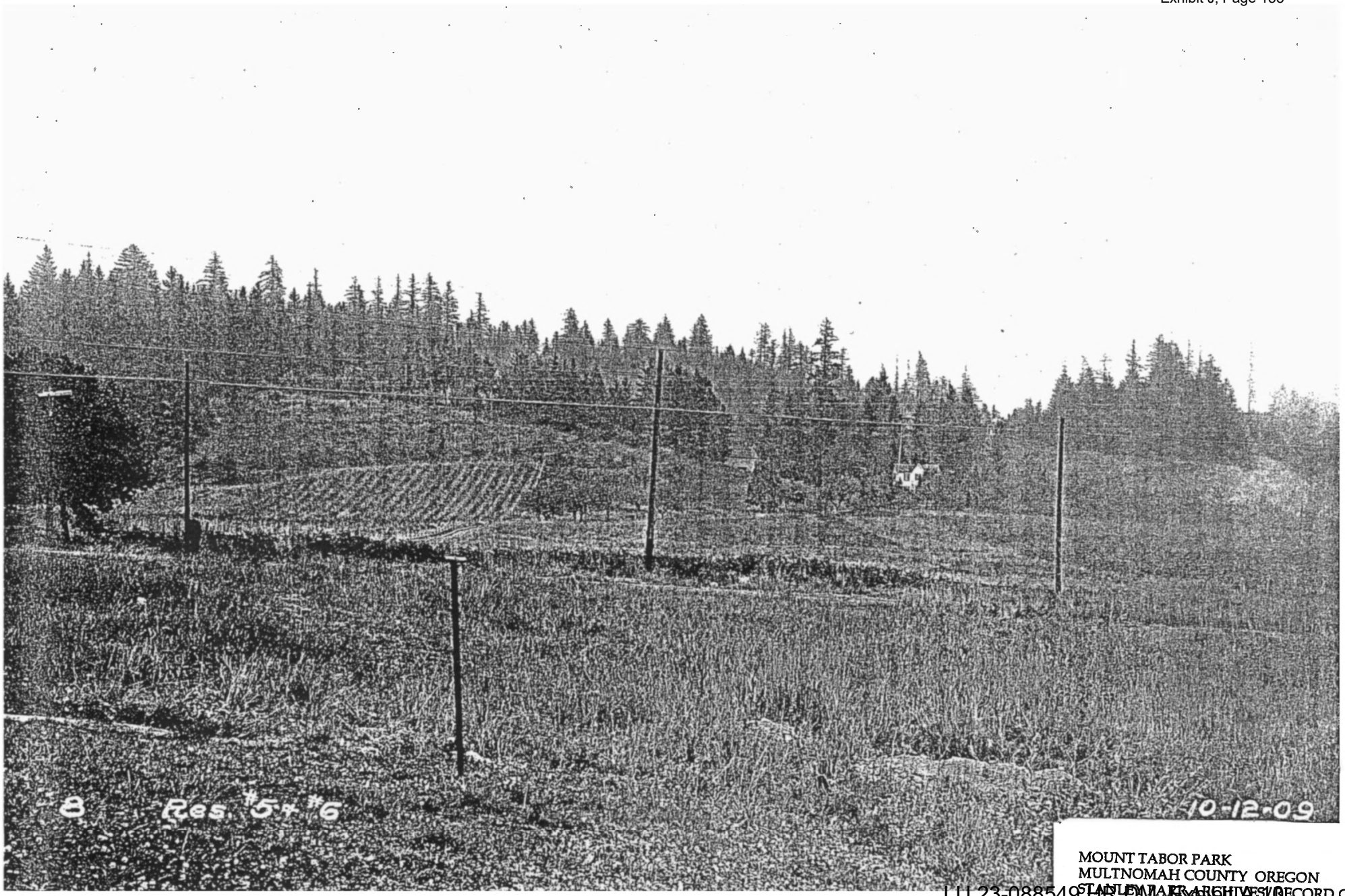
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
[illegible] RECORD CEN
WPA PROJECT 476 1935

MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN

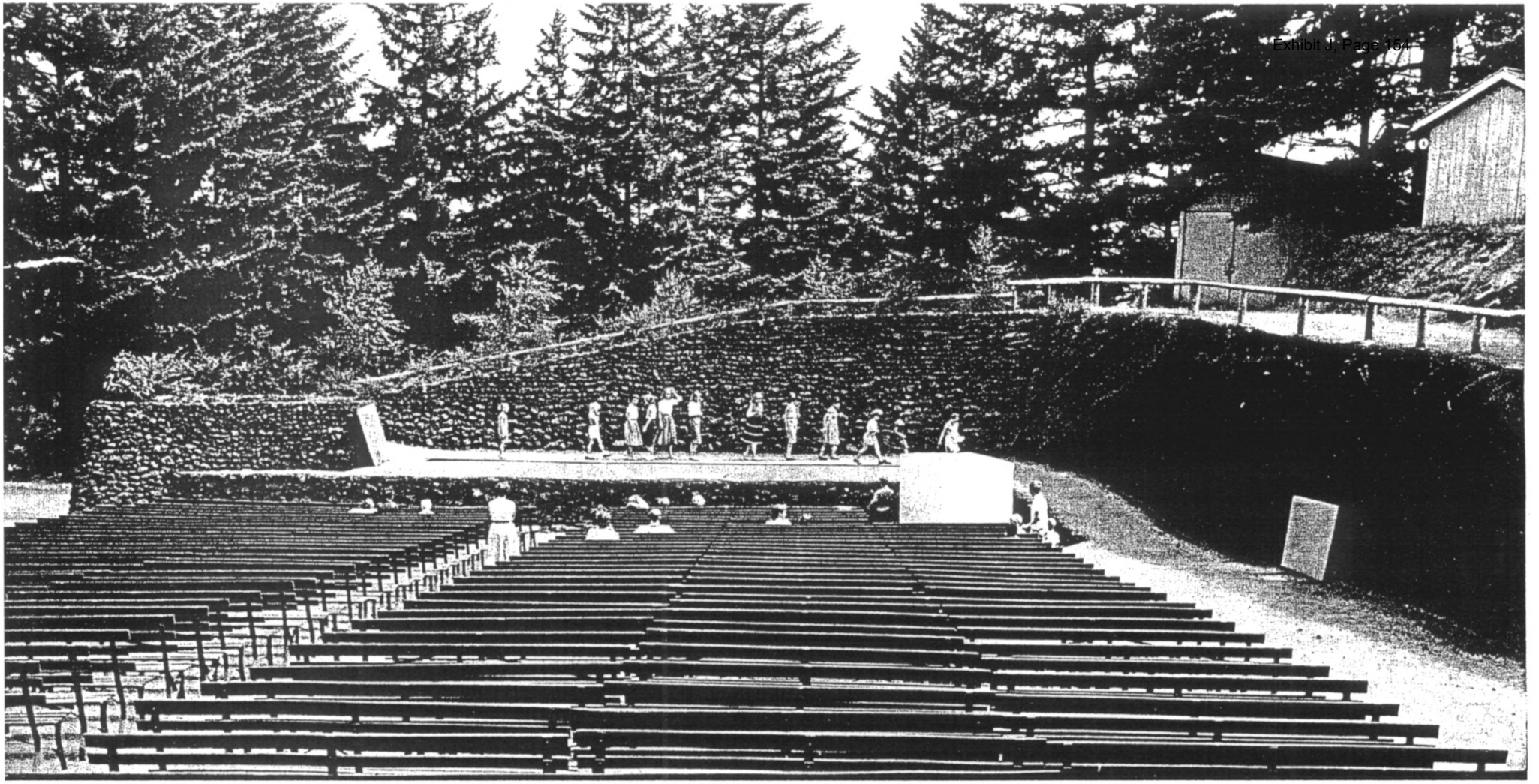
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
ADMINISTRATIVE BUILDING 1939



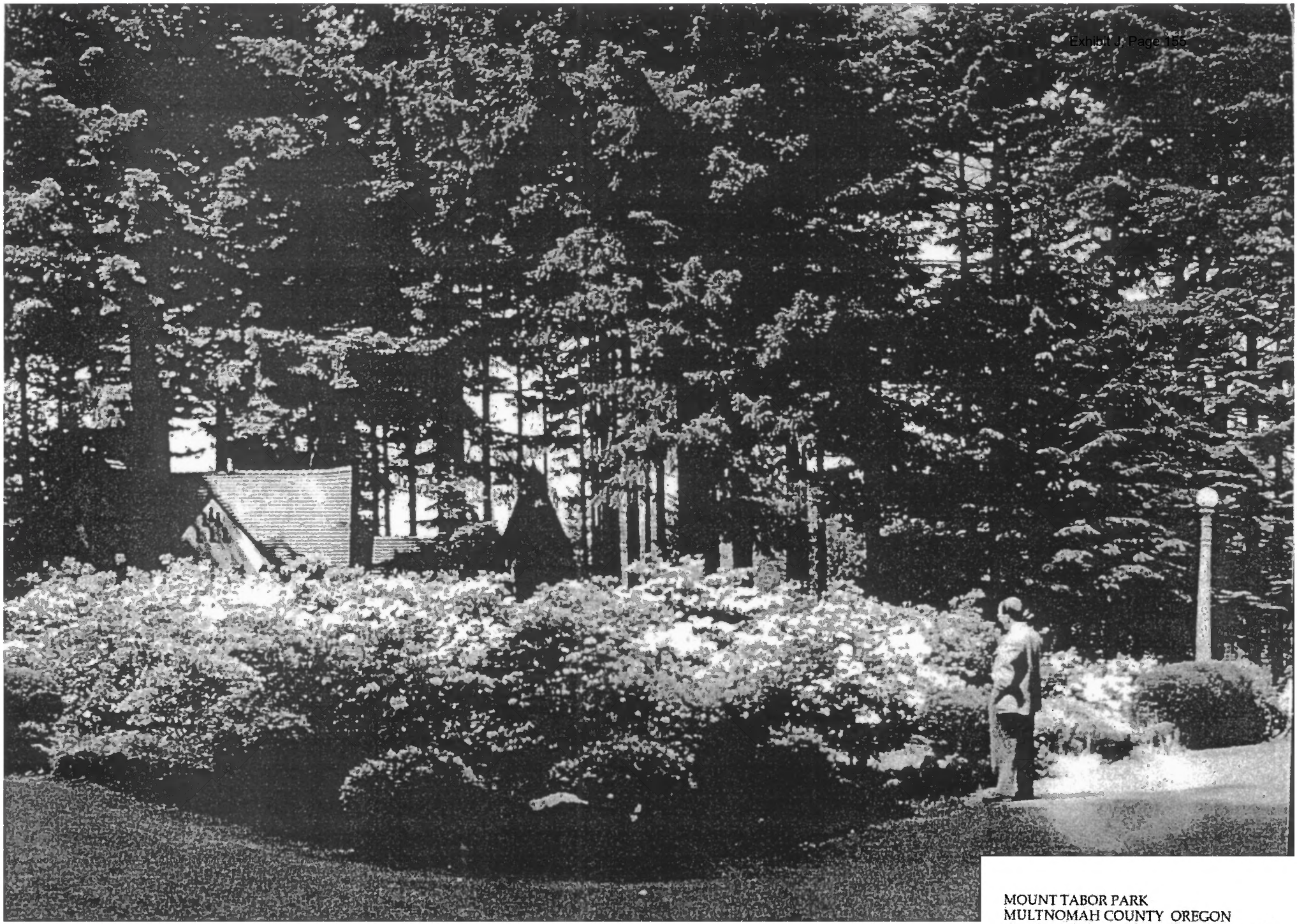
MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN
AERIAL LOOKING NORTHWEST 1968



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
1909



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CENTER
CRATER AMPHITHEATER AUGUST 16 1953



MOUNT TABOR PARK
MULTNOMAH COUNTY OREGON
STANLEY PARR ARCHIVES/RECORD CEN
CRATER COMFORT STATION PLANTINGS

PORTLAND PARKS & RECREATION℠
Healthy Parks, Healthy Portland

December 28, 2022

Carmen Rubio, Commissioner
City of Portland
Portland Bureau of Parks and Recreation

RE: EMERGENCY DECLARATION FOR LIGHT POLE REPLACEMENT AND RELATED WORK AT MULTIPLE PARK PROPERTIES

After an accident related to the light pole in which a park visitor tied a hammock to a light pole, PP&R initiated a structural engineering evaluation of the light poles in the subject park and on November 21, 2022 received a final report from KPFF Engineering - a third-party structural engineer- which concluded that:

"*…due to the inadequacy of the pole connection to the foundation to withstand code based lateral loads, we believe these poles represent a life safety hazard and should be removed as soon as possible*."

2022-11-18_Irving Park Light Pole Failure_10022200554_100 Structural Assessment (1).pdf

Furthermore, park lighting performs a vital safety function in parks and removal without replacement could create, at a minimum, the perception of new safety hazards.

McKinstry Essention, LLC, recently performed similar work at several parks and many of the impacted parks were already within scope of a planned amendment of that Energy Savings Performance Contract. Additionally, the project management, sub-contracting to certified firms, and Guaranteed Maximum Price approach of the contracting method on this complex, multi-site work is necessary due to PP&R's limited capacity.

The estimated total cost of work including previously expected scope is $23 million. This would cover less than 15% of all PP&R properties requiring lighting replacements in the next 5 – 10 years, with the remainder being less urgent and subject to full-and-open competition upon funding. The original contract to

Administration
1120 SW 5th Avenue, Suite 858
Portland, Oregon 97204
503-823-PLAY (7529) | Fax 503-823-6007

PORTLANDPARKS.ORG
Commissioner Carmen Rubio
Director Adena Long

McKinstry Essention, LLC was awarded after competition amongst qualified service providers.

This event meets the emergency criteria identified in PCC533.130 and ORS Chapter 297A-Public Contracting – General provisions as follows:

A. The immediate work need could not have been foreseen prior to receipt of the third-party engineering evaluation for the light poles on November 21, 2022.

B. If the subject light poles are left unaddressed, there is a life safety risk posed by these poles for the community and the staff and it is an unacceptable risk.

C. Immediate action is required, as removal and replacement of these light poles exceeds the capacity of in-house staff.

D. The work is within the contract scope of a previous competitively bid solicitation, and it is reasonable to award this work under that contract by amendment, given the immediate danger to the public.

Lauren McGuire Digitally signed by Lauren McGuire Date: 2022.12.28 10:39:34 -08'00'

From: Lauren McGuire,
Assets and Development
Division Manager

Approved:
Carmen Rubio, Commissioner

Approved:
Biko Taylor,
Chief Procurement Officer

Approved:
Adena Long, Director

USEFUL LIFE EXAMPLES
Capital Asset Administrative Procedures
FIN 6.11.03

The useful life indicated below is a general listing and not an exhaustive list of the capital assets used by the City. Alternative periods are acceptable if it properly corresponds with the length of period the asset is expected to be usable for the purposes it was acquired.

The Accounting Division can provide additional guidance to City bureaus upon request.

CAPITAL ASSET CLASSIFICATIONS

	Useful Life
Land	Not depreciable
Land Improvements	20-Year Life
Buildings & Building Improvements	50-Year Life
Equipment	5-Year Life
Infrastructure	50-Year Life
Land Rights	Permanent/Indefinite land use elements - Not Depreciable
	Depreciable Land Use Rights - Depreciated over the length of use period
Capital Lease, Equipment & Building	5-Year Life
Software Implementation Costs	5-Year Life

A more detailed asset listing can be found below:

First Digit	**Asset Class**
1	Land
2	Land Improvements
3	Buildings & Building Improvements
4	Equipment
5	Infrastructure
6	Land Rights
7	Capital Lease, Equipment & Building
8	Software Implementation Costs

Second Digit	**Useful Life**
A	03
B	05
C	07
D	08
E	10
F	15
G	20
H	25
I	30
J	33
K	40
L	50
M	67
N	75
O	77
P	100
Z	0

Description	**Useful Life** (years)	**Asset Coding**
Aeration Tank Modification	50	5L01
Aerator	15	4F01
Aerial Truck	15	4F02
Air Compressor	10	4E01
Air Cooling Systems	25	5H01
Air Rights	0	6Z06
Ambulance	8	4D01
Amplifier	10	4E02
Analytical Balance	15	4F03
Analyzer	15	4F04
Antenna	10	4E03
Anvil	15	4F05
Appliance	10	4E49
ARC Welder	15	4F06
Asbestos Removal	33	3J01
Asphalt Heater	20	4G01
Auditorium Construction	33	3J02
Auditorium Improvements	33	3J03
Backflow Prevention Valves	50	5L02
Backhoe	8	4D02
Base Station	15	4F07
Battery Charger	15	4F08
Bending Machine	15	4F09
Binding Machine	15	4F10
Bleacher	20	4G02
Blower	10	4E04
Boathouse	20	3G04
Boring Machine	15	4F11
Bridge (Park)	25	2H01
Building	50	3L01
Building Alteration	50	3L02
Bursting Machine	15	4F12
Bus	10	4E05
Calibrator	10	4E06
Camera	15	4F13
Capital Lease, Building	5	7B01
Capital Lease, Equipment	5	7B02
Card Access Control	15	4F14
Cardio scope	10	4E07

Description	**Useful Life** (years)	**Asset Coding**
Cart	15	4F47
Centrifuge	10	4E08
Chemical Truck	15	4F15
Chipper	10	4E09
Chlorination/Ammonia Treatment	50	5L03
Chromatograph	20	4G03
Clamshell Bucket	20	4G04
Club House	33	3J04
Colorimeter	15	4F16
Communication System	10	4E10
Communication Tower	20	5G01
Community Center	33	3J05
Community Policing Facility	50	3L03
Computer Hardware	5	4B01
Concrete	50	2L01
Construction Equipment	15	4F17
Copy Machine	5	4B02
Copy Rights	5	8B01
Crane	15	4F18
Crusher	15	4F19
Dams & Improvements	50	5L04
Data Collector	10	4E11
Data Logger	10	4E12
Defibrillator	10	4E13
Detective Device (Vehicle)	10	4E14
Developing Machining	15	4F20
Disinfection Equipment	20	5G02
Distillation Apparatus	15	4F21
Distribution Mains, Cast Iron,	67	5M01
Drafting Machining	15	4F22
Drainage	50	2L02
Drinking Fountains	75	5N01
Dump Truck	15	4F23
Easement	0	6Z01
Elevator	20	3G01
		4G05
Engraver	15	4F24
Excavator	10	4E15
Exercise Equipment	5	4B10

Description	**Useful Life** (years)	**Asset Coding**
Fencing	20	2G01
Fire Boat	20	4G06
Fire Engine (Pumper)	20	4G07
Fire Station	50	3L04
Fire Truck (Ladder)	20	4G08
Flooring	25	3H01
Folding Machine	15	4F25
Fountain	20	2G02
Full-Size Pickup	10	4E16
Furnace	20	4G09
Furnishings	15	4F26
Garage	33	3J06
Generating	50	5L05
Generating Foundation	100	5P01
Generator	10	4E48
Golf Course Development	50	2L03
Grader	10	4E17
Groundwater Collection Mains	67	5M02
Hoist	20	4G10
Hostage Phone	10	4E18
Humidgraph	10	4E19
HVAC	20	3G02
Hydrants	77	5O01
Improvements	33	5J01
Indoor Tennis Facility	25	3H02
Interphone System	10	4E20
Irrigation System	10	4E21
	20	2G03
Land	0	1Z01
Land Scaping	20	2G04
Lathe	15	4F27
Lift System	15	4F46
Lighting	33	2J01
Listening System	10	4E22
Loader	15	4F28
Mains	67	5M03
Maintenance Building	33	3J07
Meters	30	5I01
Microfilmer	15	4F29

Description	**Useful Life** (years)	**Asset Coding**
Microscope	20	4G11
Milling Machine	15	4F30
Mineral Rights	0	6Z03
Mini-Pickup	8	4D03
Mobile Data Computer/Terminal	5	4B03
Mobile Radio	10	4E23
Motor Home	15	4F31
Motorcycle	3	4A01
Mower	10	4E24
Mug Shot Computer	10	4E25
Multiplexor	10	4E26
Mural	20	4G12
Network Interconnect	5	4B04
Orchestra Pit, Lighting	10	3E01
Oscilloscope	15	4F32
Other, 100-Year Life	100	4P99
Other, 10-Year Life	10	4E99
Other, 15-Year Life	15	4F99
Other, 20-Year Life	20	4G99
Other, 25-Year Life	25	4H99
Other, 30-Year Life	30	4I99
Other, 33-Year Life	33	4J99
Other, 3-Year Life	3	4A99
Other, 40-Year Life	40	4K99
Other, 50-Year Life	50	4L99
Other, 5-Year Life	5	4B99
Other, 67-Year Life	67	4M99
Other, 75-Year Life	75	4N99
Other, 77-Year Life	77	4O99
Other, 7-Year Life	7	4C99
Other, 8-Year Life	8	4D99
Painting	20	4G13
Parking Lot	20	2G07
Patents	5	8B04
Patrol Boat	15	4F33
Paving	20	2G05
Photograph	20	4G14
Photographic Lens	15	4F34
Piano	20	4G15

Description	Useful Life (years)	Asset Coding
Picnic Facilities	25	2H02
Plant/Pump Station Machinery	20	5G06
Play Ground	33	2J02
Plow	20	4G16
Police Precinct	50	3L05
Pool	25	2H03
Power Shovel	15	4F35
Power Unit	10	4E27
Powerhouse Structure	100	5P02
Printing Press	15	4F36
Pruning System	10	4E28
Public Safety Vehicles	7	4C01
Pump	10	4E29
	40	5K01
Pump House-Gas	50	3L06
Pump House-Water	50	3L07
Pump Improvements	15	5F01
Pump Monitoring Equipment	10	5E01
Pump Station	50	5L06
Pump Tanks	33	5J02
Pumping	50	5L07
Pumping Station	50	3L08
Quality Sampling Stations	20	5G03
Raceway	33	2J03
Radar Unit	10	4E30
Radio System	10	4E31
Rare/Historic Treasures	50	4L01
Receiver	10	4E32
Refrigeration Equipment	15	4F37
Refuse Check Station	25	3H03
Rescue Tool	15	4F38
Reservoirs & Improvements	50	5L08
Respirator	15	4F39
Restrooms (Park)	25	3H04
Retaining Wall	20	2G06
Right-of-Way	0	6Z02
Roofing	50	3L09
Root Remover	10	4E33
Rototiller	10	4E34

Description	Useful Life (years)	Asset Coding
Router	15	4F40
ROW/Easement	0	1Z02
Safe	20	4G17
Sand Blasting Machine	10	4E35
Scooter	5	4B05
Sculpture	20	4G18
Security Alarm	20	3G03
Security System	20	5G04
Sedan	8	4D04
Server	5	4B06
Services	40	5K02
Sewer Hookup	50	5L09
Sewer Lines	100	5P03
Sewer System	20	4G19
	100	5P04
Shaking Machine	10	4E36
Shoring	10	4E37
Silver Recovery System	15	4F41
Sludge Disposal	50	5L10
Snow Plow	20	4G20
Software	5	4B07
Software Implementation Costs	5	8B03
Solid Separator	10	4E38
Sports Utility Vehicle (SUV)	8	4D07
Squad Car	3	4A02
Station Wagon	8	4D05
Steel Container	10	4E39
Sterilizer	10	4E40
Structures	50	5L11
Supply Mains, Cast Iron, >16"	67	5M04
Supply Mains, Steel, >16" Diam	67	5M05
Swim Pool Accessories	10	4E41
System Metering Equipment	10	5E02
Tamper	10	4E42
Tank	50	5L12
Tank Improvements	50	5L13
Tape Drive	10	4E43
Telemetry	20	5G05

Description	Useful Life (years)	Asset Coding
Thermal Imaging Camera	5	4B08
Timber Rights	0	6Z05
Tow Truck	15	4F42
Tractor	15	4F43
Trademarks	5	8B02
Trailer	15	4F44
Training Station	50	3L10
Transmitter	10	4E44
Transmitter Building	33	3J08
Treatment Plant	50	5L14
Treatment Plant Modification	50	5L15
Truck, Miscellaneous	15	4F48
Turbine	50	5L16
UPS	5	4B09
Utility Building	33	3J09
Utility Truck	10	4E45
Valves	50	5L17
Van	8	4D06
Vibrator	10	4E46
Water Rights	0	6Z04
Water Vacuum	10	4E47
Winch	15	4F45

History

Adopted by the Chief Administrative Officer, October 10, 2017

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Light Pole Safety Project Frequently Asked Questions

Project website: www.portland.gov/lightproject

Updated February 21, 2023

1. Why are some of the light poles in Portland parks being removed?
    - Portland Parks & Recreation (PP&R) recently evaluated a specific type of light pole in the park system. The process identified a flaw with the anchoring system of 243 poles located in 12 Portland parks. This flawed anchoring system may pose life and safety hazards to the public. PP&R will remove these 243 poles to help ensure the community's safety.
2. What is the difference between the light poles being removed and similar looking light poles that are not being removed?
    - The light poles being removed have an anchoring connection which was determined to potentially pose a life and safety hazard. There are light poles that look similar but are not being removed because they have a different type of anchoring connection and are buried in the ground.
3. Which parks will have some light poles removed?
    - Colonel Summers Park
    - Irving Park
    - Ladds Circle Park
    - Lair Hill Park
    - Montavilla Park
    - Mt. Scott Park
    - Mt. Tabor Park
    - Rose City Golf Course
    - Sellwood Park
    - Sellwood Riverfront Park
    - Woodstock Park
    - Wallace Park
4. When will light poles be replaced?
    - Currently, PP&R has secured funding to replace all light poles at Irving Park and Mt. Scott Park. At these two parks, the

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PORTLANDPARKS.ORG
Commissioner Dan Ryan
Director Adena Long

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effort to secure and install light poles is expected to take up to 16 months.
- For the other 10 affected parks, the length of time before light poles are replaced is dependent on securing additional project funding.

5. How is this light pole removal and replacement project being funded?
    - PP&R redirected $5 million in major maintenance funding to remove all light poles that have an anchoring system that may pose life and safety hazards and to start the replacement process. This full replacement of 243 light poles at 12 parks is currently estimated to cost $15 million.
6. Why isn't there enough funding to replace all light poles at this time?
    - Unfortunately, PP&R has a capital repair backlog approaching $600 million, which the bureau is attempting to address through its Sustainable Future Initiative. The Sustainable Future Initiative is an effort to align equitable service with funding levels for the long term. The light poles being removed represent a fraction of the maintenance backlog.
7. What will PP&R do to help mitigate the effects of the light pole removals at 12 City Parks?
    - To help ensure park rules are being met at night, PP&R will prioritize visits by Park Rangers in the affected parks. PP&R is also exploring opportunities to maximize the use of remaining lights to keep affected parks as bright as possible. In addition, Portland Commissioner of Culture & Livability, Dan Ryan has directed PP&R to close affected parks at 10:00 pm.
8. Can I attach anything to light poles in City parks?
    - No, do not attach anything to poles. City Code 10.12.100.

Denver Parks & Recreation

Trail Lighting Study

June 2023

Prepared for:

DENVER
PARKS & RECREATION

Prepared by:

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

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Section 1

Executive Summary

1 EXECUTIVE SUMMARY

Denver Parks & Recreation (DPR) requested a study of their current trail lighting system in order to identify their challenges and opportunities, explore the latest lighting and electrical technology available to Denver, and identify how to apply the most current lighting industry standards to DPR trails. This study explored the existing trail lighting, current best practices in outdoor lighting, luminaire products available to DPR, and how ongoing changes in operations and maintenance costs throughout Colorado would impact trail lighting decisions.

As part of this study process, we visited DPR trails in several areas to gather information on their current lighting conditions to compare against their likely usage patterns. Key concerns at this stage were:

- **Safety**: To provide adequate lighting in the locations where it is needed and to improve visibility for greater safety on mixed-use trails for both pedestrians and cyclists.
- **Responsible Lighting**: To ensure all trail lighting selected is appropriate for the area and considerate of the surrounding properties.
- **Equity**: To improve trail lighting in a more equitable way the prioritizes areas with greater needs using a data-driven approach.
- **Cost**: To identify the most cost-effective strategies for improvements needed in the DPR trail lighting system.
- **Maintenance**: To identify which lighting strategies and products would be most appropriate for DPR to develop a more durable and resilient lighting and electrical system.

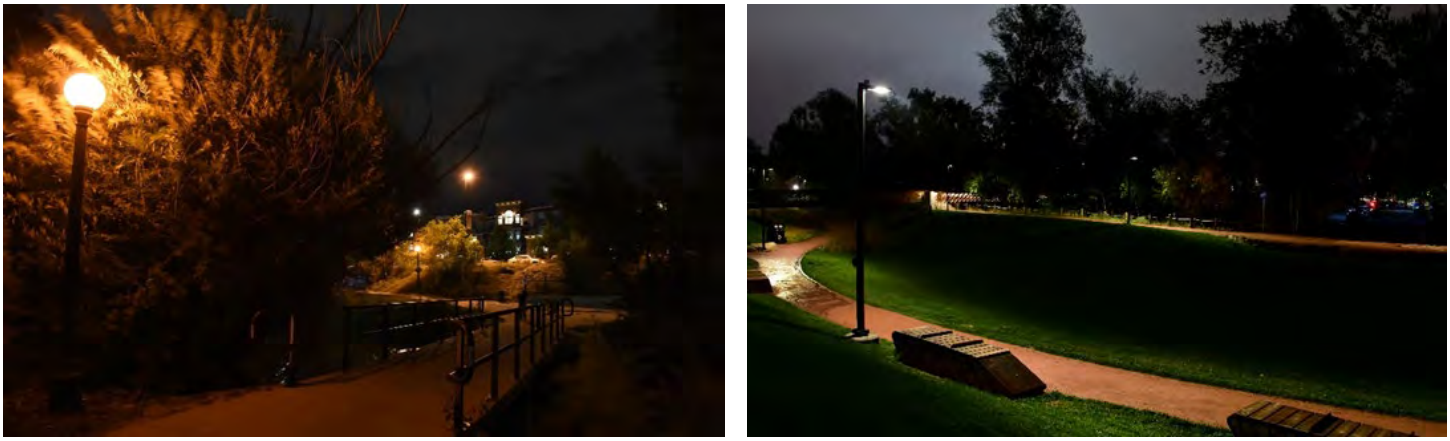


Figure 1-1 – The image on the left shows how the existing lighting along Cherry Creek Trail has no optical control, spilling light in all directions and creating light trespass into natural areas while poorly lighting the trail. The image on the right shows a local example of the type of trail lighting improvement being proposed in this study. The light provided is focused along the path's surface with minimal spill light beyond the trail. This improves visibility for users while minimizing energy consumption and the environmental impacts of outdoor lighting at night.

Trail Lighting Trends

The trends for trail lighting in other cities comparable to Denver were also explored. Portland, OR, and Montrose, CO were both interviewed to understand the trends they were experiencing and their current strategies in trail lighting. Both cities are experiencing maintenance staffing and funding challenges similar to Denver and are finding that even aging lighting infrastructure that is still functional is becoming difficult and expensive to maintain as components become obsolete. Both

cities were also structuring their trail improvements around addressing community equity issues such as transportation access, light trespass, and darker skies. Of note for DPR is that the City of Montrose, CO has successfully implemented solar-powered lighting for their trails. Portland's Parks & Recreation Department has experienced improved maintenance planning and response times by using a wireless lighting control system for their lights, which they are able to implement due to owning their own lighting.

Trail Lighting Design Process and Standards

The typical lighting design process for choosing where a trail should be lit and to what lighting levels is detailed in Sections 3 and 4 to provide a strong understanding of the industry and its processes to the non-lighting professional. The process of warranting is used to examine the conditions of a site and determine whether or not lighting is required and which lighting strategy is necessary or suitable if it is. Conditions used as warrants include:

- Pedestrian activity levels
- Trail types
- Lighting zones
- Land uses/zoning
- Proximity to natural areas
- Whether support is needed for commuters or recreation
- Existing equity concerns or if the area is historically underserved

This type of site analysis combined with national lighting standards allows lighting designers to arrive at a well-grounded proposal where light is only in the right places. This process allows criteria and expectations around lighting to be developed that are tailored for use by an organization such as DPR. The proposed lighting criteria in this study are based on the most recent Illuminating Engineering Society (IES) Recommended Practice for Lighting for People in Outdoor Environments (IES RP-43-22), which provides illumination criteria based on the activity types taking place and the lighting zones that relate to adjacent land uses. Referring to these national standards also helps minimize unnecessary energy consumption and reduce the environmental impact of outdoor lighting.

Trail lighting should be designed to appropriate light levels that consider the adjacent land use and trail usage. The lighting should remain focused on the trail surface instead of surrounding areas, limiting light trespass and light pollution, and dimmed during hours of low usage. Trail lighting should also use warmer colored light sources (lower correlated color temperature (CCT's such as 2200K or less) when near natural areas or sensitive habitats.

The discussions that took place during the course of this study have led DPR to develop an in-house GIS based scoring system to assist them in prioritizing trail lighting investments and applying appropriate lighting strategies. This tool generates a map of lighting recommendations in three categories:

- Continuous Lighting: Lighting along the trail is spaced at a distance that provides illumination that meets criteria for both average light level and uniformity, creating excellent visibility along the entire length of the trail.
- Non-continuous Lighting: Lighting is located at key decision points and provides wayfinding guidance along the trail so that the next light is visible. Non-continuous lighting does not meet uniformity criteria.

- Minimal Lighting: Lighting is provided only at key decision points and areas of safety concern. These minimal lighting locations include trail intersections, crosswalks, under-crossings, trail ingress/egress ramps and stairs, pedestrian bridges, and bridge underdeck.

This new tool and the scoring system being used are discussed in more detail in Section 4.3 and the Final Recommendations.

Trail Lighting Study

Table 1-1: Luminaire Options

Luminaire Name	Photo	Luminaire Specifications	Discussion
Lithonia Omero		**O&M: Denver Parks & Rec** Wattage: 75W Lumens: 5454 BUG Rating: B1-U2-G1 Distribution: Type II Mounting Ht: 12'-15'	**Use only in high usage urban parks:** This luminaire is currently installed at Confluence Park and Central 70 Cover Top Park. While the light quality is good, this luminaire has a high potential for light trespass with no shielding options and the lowest lumen output is too high for many DPR trail applications.
we-ef RFL530		**O&M: Denver Parks & Rec** Wattage: 14W Lumens: 1959 BUG Rating: B1-U0-G1 Distribution: Type II Mounting Ht: 12'-15'	**Recommended for Trail Lighting:** This luminaire has excellent optical design that maximizes spacing along the trail and minimizes light spill beyond the trail. A wider range of color temperatures (2200K – 3000K) is available for providing the appropriate CCT for the surrounding environment.
Kim Ouro		**O&M: Xcel Energy** Wattage: 28.2W Lumens: 2958 BUG Rating: B2-U0-G2 Distribution: Type III Med. Mounting Ht: 12'-15'	**Best Xcel-owned Luminaire:** This luminaire has a comfortable, low-glare optic, zero uplight, and is the best option currently offered by Xcel Energy. Light distribution and CCT options are limited, and dimming is not yet available from Xcel Energy.
King Luminaire K118 Acorn		**O&M: Xcel Energy** Wattage: 40.2W Lumens: 2176 BUG Rating: B1-U3-G2 Distribution: Type IV Med. Mounting Ht: 12'-15'	**Not Recommended:** This luminaire has too much uplight and spill light beyond the trails, which results in wasted energy and negative impacts to the surrounding environment. This luminaire is not recommended for use along DPR trails.

As part of this study, two sites were chosen by DPR for more detailed examination and the development of schematic lighting designs and their likely associated costs. Lighting designs were developed for each site to compare four luminaires. Two of the luminaires are options that are available from Xcel Energy (Kim Ouro and King Luminaire K118 Acorn), one is currently owned and maintained by DPR (Lithonia Omero), and one is a new recommendation for high quality trail lighting (by We-ef Lighting).

Each of these luminaries was studied and compared with lighting calculations to determine their effectiveness in meeting lighting criteria for continuous lighting along the path, while minimizing light trespass and light pollution.

Trail Lighting Ownership & Maintenance

Currently in Denver, Xcel Energy owns and maintains most of the trail lighting while DPR owns a small amount of their lights themselves. Changing this arrangement presents many challenges and opportunities for DPR. The flat-rate fees currently charged by Xcel Energy are based on a monthly rate that includes energy and maintenance costs. This fee is charged even when the light is not operational. With no proactive identification of outages from Xcel, non-operational lights can be unmaintained for weeks or months without being reported and yet the fees are still charged to the City when there is neither energy being consumed nor maintenance being performed. More information about Xcel Maintenance call response performance can be found in this City of Boulder Street Lighting Memorandum (Study Session Memorandum, 2022).

The Xcel Energy bill for trail lighting is currently paid by DOTI, rather than DPR, so this cost is not currently within DPR's operations budget. Yet this is still a taxpayer-funded cost, paid for by the City's energy office. If DPR is to consider owning and maintaining their own lights, budget will need to be allocated to them for capital improvement projects, energy costs, and either additional maintenance staff or a contractor in order to effectively own and operate this new lighting infrastructure. These questions are addressed in detail through Section 7.

Xcel Energy offers very limited options for trail lighting. There are no options for dimming, controlling light trespass, or warmer color temperature for sensitive areas. To fully implement the goals identified in this Trail Lighting Study, it is highly recommended that DPR take on the ownership and maintenance of their trail lighting system. DPR owning and maintaining their own lighting provides options for improving lighting, limiting light trespass, dimming, and warmer color temperature for sensitive areas.

Cost Analysis

The cost analysis included in this study in Section 7 uses the existing standard practice for each owner for lighting and electrical installation. This takes into account the differences between Xcel standards and DPR/CCD standards including wiring type (aluminum vs. copper) and electrical metering (non-metered vs. metered).

Considering these current standards, the cost analysis shows that Xcel owned and maintained lighting is less expensive than DPR owned and maintained lighting. This is primarily associated with Xcel Energy using aluminum wiring instead of copper wiring and not installing meters.

If DPR chooses to own and maintain their own trail lighting in the future, changing the current electrical standard to use aluminum wiring and a non-metered, energy-only "ESL" rate will reduce the

cost of electrical installation to be competitive to the cost of installing an Xcel-owned system. The use of aluminum wire would also help reduce the problem of theft of copper wire and the associated downtime of lights while they are repaired.

Solar Power for Trail Lighting

Solar power for trail lighting can offer multiple benefits to a city when used in the right locations. The long lengths of trails and their locations in green spaces that are often at greater distances from power sources can make lighting them cost prohibitive. By offsetting the costs and installation time of hardwired electrical systems, the solar power option can be both cost effective and reduce project timelines. However, solar-powered trail lighting is not suitable for all trails and the site suitability would need verification. This study includes equipment comparisons of solar-powered systems to conventional electrical systems in Section 5 and cost analysis as part of Section 7. The key conclusions of this study into solar trail lighting are as follows:

- Solar-powered systems eliminate all conduit, wiring, and need for a connection to a power source.
- When the light poles are spaced at 100-ft or greater, the capital costs of solar are less than those of a conventional hard-wired electrical system.
- Eliminating the conventional electrical system also reduces the costs and time associated with engineering services such as sub-surface utility engineering (SUE), electrical engineering, or applying for Xcel Builder's Call Line (BCL's).
- Solar is most suitable for locations with good hours of access to direct sunlight and without shading or shadowing from trees or near-by buildings.
- Site-by-site analysis is advised to assess the viability of solar for each trail location. Solar lighting manufacturers can provide this service.
- Solar power for underpass tunnels or bridge underdeck lighting is a more involved design process which requires remote solar panels and battery enclosures to feed power to the lighting. More project-specific study would be needed to assess viability of solar for this type of use.
- Solar battery life and eventual disposal should also be considered when evaluating the long-term effectiveness and impacts of solar power for trail lighting in Denver.

This Denver Trail Lighting Study sets up a knowledgebase for DPR to make more informed decisions on their outdoor lighting and electrical improvement options and priorities. The information in this study will support future trail lighting projects in being consistent, reliable, cost effective, and in best prioritizing the needs of Denver.

Section 2

Background & Purpose

2 BACKGROUND AND PURPOSE

Denver Parks & Recreation requested Clanton & Associates prepare a study to develop new strategies for lighting DPR's extensive trail network. The main goals of this study were to identify where lighting is warranted on the trails, what trail lighting strategies would best serve Denver, and to help develop a method for prioritizing the locations to implement these lighting improvements.

Key priorities of the study were to determine where to provide lighting, what light level is appropriate, how to reduce or prevent vandalism of luminaires, and what the lighting standard should be for safety and security. Other key concerns were how the trail lighting could impact Denver's ecosystem, how to light trails equitably, and when and where alternative lighting options such as solar may be appropriate.

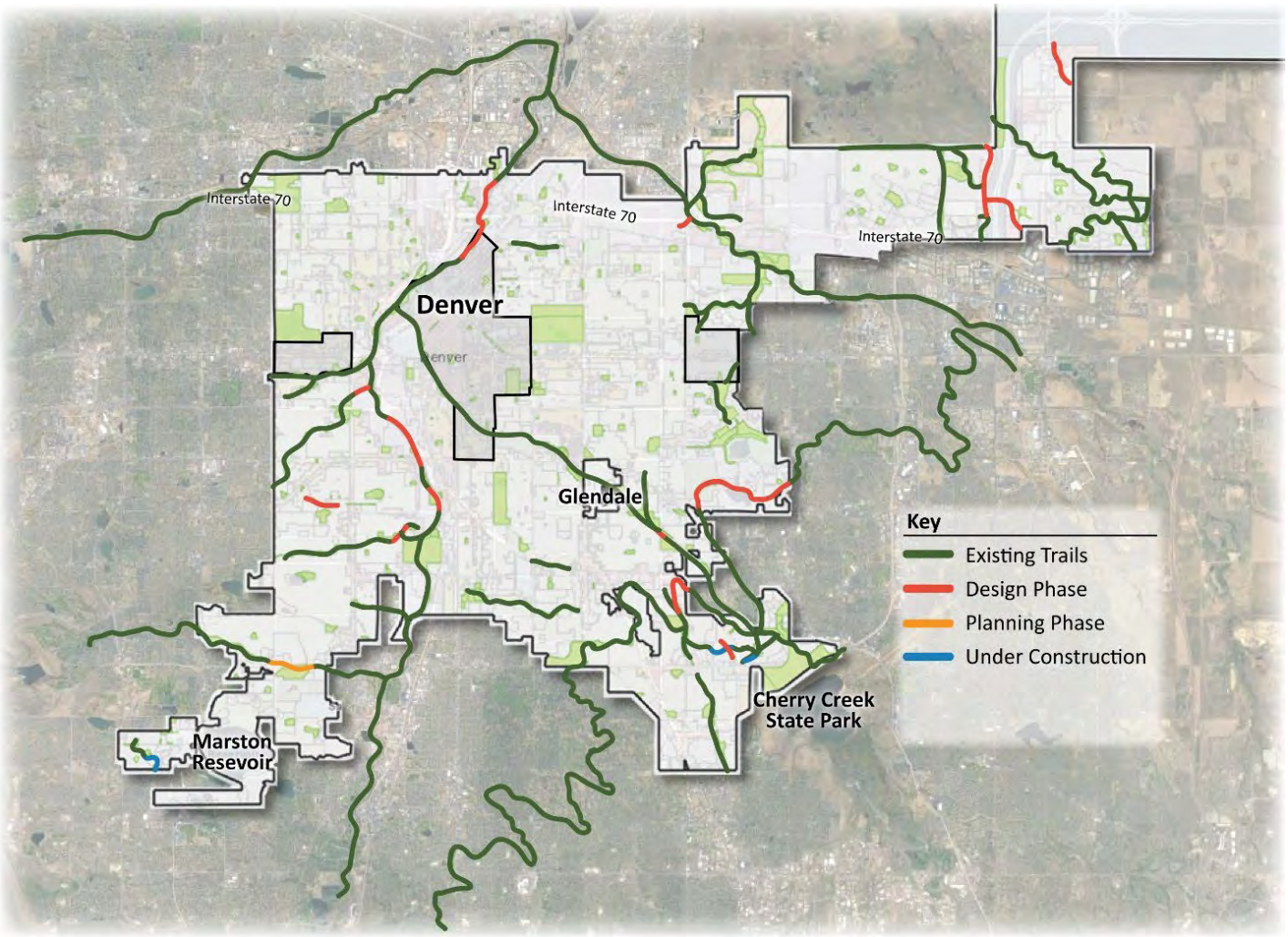


Figure 2-1 – Denver's Trail Network showing areas with active redesign or expansion underway

Denver Parks and Recreation is continually expanding and improving its trail system throughout the city. Figure 2-1 shows all existing trails as well as trail locations that are being designed, redesigned, or currently constructed. For additional information on planned trail development please see Denver's Parks and Recreation webpage through devergov.com (Parks & Recreation, 2023). Evaluating the

current trail lighting and exploring different lighting strategies is the next step to improve the trail system, increase its hours of use, and increase the overall attractiveness of the trail network.

Lighting Study Goals

The goals for improving the lighting throughout the Denver trails system are:

- Encourage use of the trail network for commuting
- Improve visual comfort and wayfinding for trail users
- Improve the perception of safety for trail users
- Minimize negative impacts of lighting on the environment and human health
- Minimize light pollution and light trespass from trail lighting
- Ensure trail lighting is improved throughout Denver in an equitable way
- Ensure luminaire choices are resistant to vandalism, flood waters and extreme weather
- Deter vandalism and other unwanted activities along the trail network
- Minimize luminaire variety and maintain ease of maintenance
- Maximize cost effectiveness of trail lighting

2.1 EXISITING CONDITIONS REPORT

An initial Existing Conditions Report was developed to provide a baseline understanding of the challenges and opportunities present in the existing trail lighting. Clanton & Associates visited six key trail locations in Denver during the daytime and nighttime hours. The sites chosen represent a mix of underpasses, trails, bridges, parks, and plazas. The project team made observations of the existing lighting equipment and the quality of the light being provided at each site. Photos were taken to document each site and photometric measurements were taken. These photometric measurements included:

- **Illuminance**: horizontal and vertical illuminance is the amount of light reaching a surface from a light source, measured in footcandles (FC).
- **Luminance**: the amount of light reflected from a surface or emitted from a light source that the eye perceives as brightness, measured in candela per square meter (cd/m^2).

The sites studied were:

SITE 1: Common's Park at Highland Bridge over the Platte River

SITE 2: Confluence Park

SITE 3: West Harvard Gulch Trail – west of South Platte Drive and south of Evans

SITE 4: High Line Canal Trail under I-25

SITE 5: Bible Park – trail connection under Yale Avenue

SITE 6: Cherry Creek Trail – between University Boulevard and South Steele Street

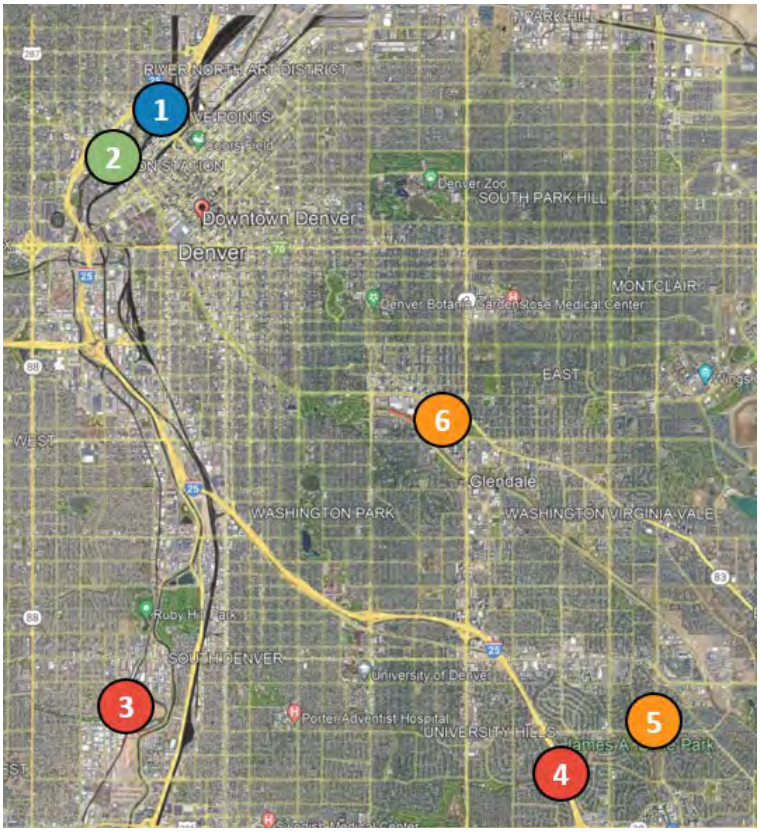


Figure 2-2 - Sites Studied

The lighting at each site was assessed and then compared with national criteria for outdoor light levels from ANSI/IES RP-43-22 Recommended Practice for Lighting Exterior Applications. Each site was then placed into one of the following four categories:

Exceeds Criteria: The existing trail lighting exceeded the levels recommended by national ANSI/IES criteria, resulting in lighting that caused glare, light trespass, visual discomfort, and wasted energy. These sites could be described as over-illuminated.

Meets Criteria: The existing trail lighting met ANSI/IES criteria and was adequate for all trail users. Visibility was good for performing tasks such as wayfinding, identifying obstructions in the trail, and identifying fellow trail users.

Below Criteria but Acceptable: The existing trail lighting levels were below national criteria, but still provided an acceptable visual experience for trail users. The existing lighting was comfortable and adequate for wayfinding.

Does Not Meet Criteria: The existing trail lighting was below national criteria and was not adequate for trail user's needs. The light levels could make it difficult to identify the edges of the trail, obstructions in the trail, or to see trail intersections. Lack of uniformity in the lighting could also be causing areas of intense darkness next to areas that are bright, adding further difficulty.

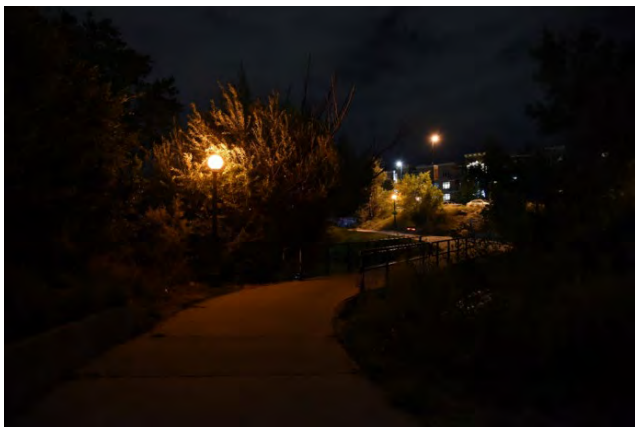
SITE 1: The Common's Park site in the downtown area did not meet ANSI/IES criteria.

SITE 2: The Confluence Park site in the downtown area met ANSI/IES criteria.

SITE 3: The West Harvard Gulch Trail site studied exceeded ANSI/IES criteria.

SITE 4: The High Line Canal Trail site studied exceeded ANSI/IES criteria.

SITE 5: The Bible Park site studied did not meet ANSI/IES criteria, but was still comfortable for trail users.



SITE 6: The Cherry Creek Trail site studied did not meet ANSI/IES criteria, but was still comfortable for trail users.

Figure 2-3 – Site photos taken by Clanton & Associates during site visits

Several initial observations could be made from these sites in relation to DPR's priorities for this study:

Lighting Quality: The existing lighting varied significantly throughout the sites studied by the project team. Light levels ranged from completely unlit areas to overlit areas. In some locations lighting was effective at enhancing safety by illuminating trail users, trail intersections, and objects of interest. In other areas, glare, light trespass, and uneven lighting were likely negatively impacting the visual adaptation and experience of trail users.

Maintenance Concerns: Several locations showed evidence of damage to lighting equipment. Some lights were not operating at the time of the visit or were being obscured by mature trees. Vandalism and conduit theft were both stated concerns for DPR.

Equity: Pedestrian and bike trails provide commuter routes to people who do not have or cannot use cars. Providing multimodal connections from residential spaces to employment centers and to other public spaces is an equity issue. Further analysis is needed to clarify which areas of the trail network should be prioritized according to Denver's Equity Index.

Ecology: Where illuminated trails are adjacent to habitat areas like parks or streams, additional consideration will be needed for the impacts of lighting on wildlife. Significant lengths of Denver's regional trails follow urban waterways closely, and many trails pass through parks and other natural areas with flora and fauna that are more sensitive to light trespass at night.

2.2 CURRENT TRAIL USAGE PATTERNS

To complement the information gathered about the trail system during the site visits, Clanton & Associates also studied the data publicly available online through DPR's ongoing trail counter program (Trail Use Data, 2023). These counters are mainly present along the regional trails and along some of the collector trails for now as this program is still expanding. The counters are able to detect users, distinguish pedestrians from cyclists, and report the time of day back to DPR for analysis. Three trails have had counters in place since 2020 and five more trails had one or more counters added in 2022.

Figure 2-4 below shows the locations of each counter currently placed along the trails. At the time of this study, trails with counters include:

- South Platte River Trail (installed Aug. 2020)
- Cherry Creek Trail (installed Aug. 2020)
- Bear Creek Trail (installed Aug. 2020)
- Sand Creek Trail (installed summer 2022)
- Lakewood Gulch Trail (installed summer 2022)
- Weir Gulch Trail (installed summer 2022)
- High Line Canal Trail (installed summer 2022)
- Sanderson Gulch Trail (installed autumn 2022)

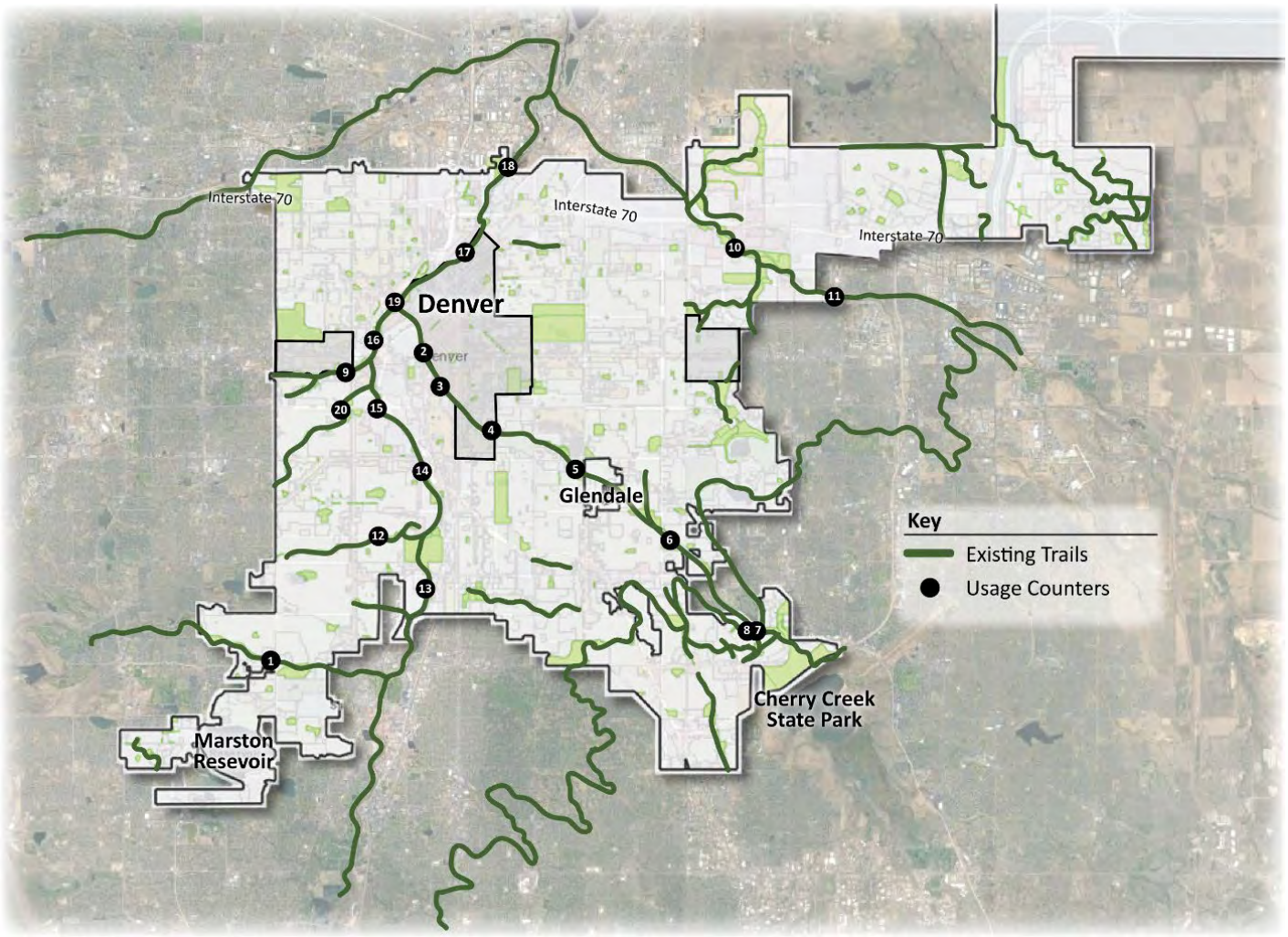


Figure 2-4 - Existing Trail Counter Locations

The intent of studying the available trail usage data were to identify any general day vs night and weekday vs weekend differences in the usage patterns. These patterns help show if the trail is being used more for commuting or recreation and how much impact a change in the lighting may have in that area.

The trail counter data examined for this section covers all publicly available data collected in 2022. Some of the trail counters were not present for all of these months or had incomplete data collection, but they have not been excluded as the goal was only to get a sense of average usage.

In 2022 over 5 million trail users were counted. This number includes around 2 million cyclists and 3 million pedestrians. The majority of trail users are on foot, but not by a huge margin.

The online interface was then used to show the average usage during the time ranges of 5 AM to 10 PM for “day” and 10 PM to 5 AM for nighttime hours. These ranges are not intended to reflect natural hours of daylight vs darkness throughout the year, but instead the typical hours of activity in an urban setting. Of the over 5 million trail users counted, over 4 million were counted during the “daytime” range. During the late nighttime range selected, 154K were counted. This number includes a total of 43K cyclists and 111K pedestrians.

While the amount of daytime traffic, or traffic that would align with commuter behavior and typical evening commercial activity is significantly higher, a rough count of 154K late night trail users is significant.

When we look at a narrower nighttime range of 1 AM through 4 AM the user counts drop significantly. This is the time of night with the least trail activity for every location throughout the entire year. The hours of 12 AM and 5 AM appear more variable in their usage rates. As most of the counters are located on regional or collector trails, this implies the typical local trail would have even less activity. This suggests these hours may be the best choices if a dimming system is considered for DPR's trails. If trail lights were to be dimmed to 50% during these hours it is unlikely there would be enough traffic to be negatively impacted. Over time this would save energy and reduce Denver's light pollution.

When looking at the difference between weekdays and weekends, the weekdays in 2022 show around 2 million pedestrians and 1 million cyclists. The weekends show 777K pedestrians and 773K cyclists. This shows a change from the overall counts and the weekday counts, with the weekends being far more evenly split between pedestrian and cyclist users. This likely reflects the expected shift between commuter-heavy traffic on the weekdays and more people taking part in recreational cycling on the weekends.

While it was not a priority of this trail lighting study, another important factor in trail usage patterns in Denver is seasonal. Winter months have more hours of darkness, and in Denver's climate are prone to sudden inclement weather and lingering ice and snow that can make trails hazardous to safely navigate at night. The online dataset shows the greatest seasonal reduction in trail usage during the months of November, December, January, and February. How much of this reduction could be influenced by improvements in trail lighting could merit further study.

There is a lot of potential for further analysis about lighting needs using the trail counter data. As DPR continues to expand the counter program, more detailed study of commuter preferences, seasonal trail use changes, and opportunities for dimming may be undertaken. More about DPR's next steps for trail lighting analysis is discussed in Section 4-3.

2.3 CASE STUDY CITIES

To provide better information and recommendations about current trail lighting strategies suitable for Denver, we reached out to some comparable cities to gather information about their experiences and current trail lighting policies. The cities ultimately interviewed included Portland, Oregon, and Montrose, Colorado. The topics that were discussed most during the interviews were the maintenance challenges and equity concerns of their trail lighting.

2.3.1 PORTLAND, OR

Portland is comparable in population size to Denver with a population of around 650,000. Their local climate is similar to Seattle, mild and rainy compared to Denver. The focus of their trail network has been filling in connectivity gaps for cyclists and pedestrians.

Portland Parks & Recreation is in the process of converting their existing lighting in developed parks to LEDs. In many cases this is a change from aged sodium lights. The new lights increase the City's energy efficiency and are consistent with the current best practices for dark skies, reducing light pollution and light trespass. Portland is committed to pursuing International Dark Sky Association (IDA) standards. The City's feels they benefitted greatly from the advice of their local Audubon

Society on the ecological issues with light pollution during this process. The new luminaires have a color temperature of 3000K and are IDA approved.

An additional benefit of the process of upgrading lights has been performing new lighting analyses. The new pedestrian lighting locations prioritize conflict areas, such as park entrances and intersections. The City has been able to improve the uniformity of their trail lighting and reduce uplight in their parks. Feedback from the public about the new lighting has been positive.

Challenges

The existing lights being replaced are very old and required frequent maintenance. The age of the lights was causing difficulty in sourcing replacement parts. Repairing lights is currently part of the workload of the Portland Parks and Recreation electric shop. Their electricians perform a quarterly, nighttime check of City parks. The trail lighting is owned by Parks and Recreation. The local utility does not play an ownership or maintenance role in Portland. Wire theft happens, but lights are not typically damaged.

The new pedestrian lights are controlled by timers or astronomical clocks and the lights operate at the same level from dusk to dawn. However, Portland Parks and Recreation feels the controls offer the flexibility to add dimming capability in the future.

The lights also provide feedback about their operational status. For example, the lights feature real-time fault detection, providing outage alerts that appear on a tablet app. As a result, new lights can communicate directly with their maintenance department rather than the City having to wait for a resident or passer-by to report an outage.

Figure 2-5 - Newly installed LED pedestrian trail lights in Portland, OR.

Equity Concerns

Portland Parks and Recreation has performed a system level analysis to determine where to add lighting in a way that prioritizes underserved areas as a determining factor. Specific locations for lighting improvements were then chosen based on available funding. Sites were given an equity score based on demographic factors such as the percent of the population represented by people of color, youth, and people living below the poverty line. This data was used together with community feedback about the needs in their neighborhoods.

Lessons Learned

Portland is using a multi-faceted trail lighting strategy which considers energy efficiency, equity, and dark skies to make decisions. Local partnerships, such as with the Audubon Society, have provided insight into lighting strategies. Lighting controls offer improved response times to maintenance concerns and capability for dimming to further reduce energy consumption. Given Denver also has concerns around maintenance response times and a population invested in improving their environmental impact, there seems to be opportunity for similar strategies to work well for DPR.

2.3.2 MONTROSE, CO

The City of Montrose is located in western Colorado with a population around 20,000 people. Its elevation and climate are very similar to Denver's.

The City has been installing solar-powered trail lighting for the last two years after studying their solar-powered lighting options for around a year. Their transition to solar-powered lighting was made in large part to reduce the time and resources the City was having to spend maintaining underground wiring on existing trail lights.

Figure 2-6 - Solar-powered pedestrian lights installed in Montrose, CO.

Solar Lighting

Daniel Payne, the Parks and Special Projects Superintendent, said that no equipment has failed in the two years since the solar-powered trail lights have been installed. There has been "hardly anything" to do for the City to maintain the lights.

The lights installed by Montrose have several vandal-resistant features, such as tempered glass to protect the solar panel, toughened glass to protect the lamp, and vandal resistant hardware to prevent access to the battery enclosure. The lights also have the capability of City-controlled dimming. They operate at 100% after dusk and before dawn but dim to 50% output during late night hours. They are programmable through a remote that Daniel Payne said was easy for the City to use. This also extends the battery charges of their new system.

Montrose found that installing solar-powered lights had about the same cost as installing wired lights. For them the cost benefits of solar have mainly come from greatly reduced maintenance needs after installation.

Lessons Learned

Montrose has successfully implemented solar-powered lighting to reduce the required maintenance time and effort spent on aging, wired lighting. The manufacturer of the new solar-powered lights has provided them with hands-on support, and there have been little to no maintenance issues since the lights were installed. As Montrose is another Colorado community with similar weather and infrastructure when compared to the other city contacted, their success suggests the probability for success with solar in Denver is high.

Section 3

Warrants & Design Criteria

3 WARRANTS AND DESIGN CRITERIA

The following section explains the warranting process typically used by lighting professionals for developing a quality lighting design. This mainly concerns how the different characteristics of the land around the trails can influence which lighting strategy is most appropriate. This section also covers how the trail usage counts used by DPR relate to those used by the Illuminating Engineering Society (IES) for determining appropriate trail lighting based on user needs. Also included is an explanation on how utilizing the Lighting zones from the Model Lighting Ordinance (MLO) can provide a more accessible structure for making decisions about what lighting level is appropriate in any given area.

3.1 TRAIL LIGHTING WARRANTS

Clanton & Associates is recommending three different trail lighting strategies be developed for use throughout the DPR trail system - Continuous Lighting, Non-Continuous Lighting, and Minimal Trail Lighting.

A lighting design uses the process of warranting to help guide where and how much lighting should be placed on a site. This process examines many factors of a site such as the land use, the activity level after dark, whether there is other existing lighting providing light to the site, proximity to more sensitive ecological areas, among others. These warrants allow for a more granular approach to choosing the appropriate lighting for anywhere in the DPR trail system.

Minimal Trail Lighting

Minimal trail lighting would be warranted throughout the system to meet safety needs. Areas that do not provide minimal lighting should be improved. The minimal option for trail lighting would focus only on ensuring conflict zones are adequately lit, where trail users could experience a collision with other users or have difficulty navigating in darkness, rather than lighting significant linear stretches of the trails. Minimal trail lighting is suitable for trails with lower activity levels at night and low density. This option requires the addition or relocation of the fewest luminaires.

Design Warrants for Minimal Trail Lighting

- Trails are mainly used during daylight hours or for recreation
- Trails having a low average usage rate after dark
- The adjacent land uses are not active at night
- Trail is greater than 1000’ from providing access to a light rail or bus transit station
- Conflict Zones
  - Trail intersections
  - Pedestrian and cyclist bridges
  - Beneath any undercrossing (under bridges or through tunnels)
  - Points of ingress/egress, ramps, and stairs
  - Street crossings
- Areas with heightened environmental concerns

The different conflict zones that occur within the trail system are explained in more detail in Section 3.3.2.

Non-Continuous Trail Lighting

In many parts of the Denver trails network, continuous lighting would not be strictly warranted to meet safety and wayfinding needs due to the user activity level at night. For areas of increased ecological

concern within the city, minimizing outdoor lighting may also be the higher priority over increasing trail usage. How many luminaire would need to be added or relocated may vary significantly between sites.

Design Warrants for Non-Continuous Lighting

- Trails with a majority daytime usage and some recreational evening usage
- Trails having a medium average usage rate after dark
- The adjacent land uses are less active in the evening hours
- Trails are around 500’ from providing direct access to light rail or bus transit stations
- Areas with heightened environmental concerns
- Trails with many intersections with other major trails or with streets

Continuous Trail Lighting

Continuous lighting should be provided in areas with higher nighttime usage to provide excellent visibility. When continuous trail lighting is warranted, lighting must meet the appropriate average illuminance and uniformity criteria for the application. The trail would be lit at a spacing of no more than 100’ between each luminaire. Spacing between 60’ – 100’ would be acceptable for continuous lighting. This option provides safe wayfinding for high usage trails, but it does require the addition or relocation of the most luminaires.

Design Warrants for Continuous Trail Lighting

- Trails with a higher usage rate after dark
- Trails having a high average usage rate after dark
- The adjacent zoning has higher activity in the evening hours
- Trails within 250’ of providing direct access to light rail or bus transit stations
- Trail areas where increasing commuter usage is a key goal
- Areas with heightened safety concerns

3.2 PEDESTRIAN ACTIVITY LEVELS

As part of determining what level of lighting is warranted in an outdoor space, the IES provides guidelines on pedestrian volumes. These refer to the total number of pedestrians walking in both directions on a typical block during nighttime hours. These pedestrian classification definitions are per IES RP-8-21 and can be low, medium, or high (IES, 2022). The usage rate guides what level of lighting is appropriate to provide on the path or trail surface. These rates are defined from 0 to 100 users.

As seen through the trail counter data discussed in Section 2.2, the usage rates for many of DPR’s trails exceed 100 trail users an hour at night regularly. The regional trails do this most consistently, but the pattern is not strictly determined by trail type. As part of developing a GIS tool (further discussed in Section ##), DPR has developed a range of pedestrian volumes appropriate to the trail system. That range has been matched to their equivalent IES usage categories.

Low Usage

The IES defines a low pedestrian usage rate as 10 or fewer pedestrians an hour during hours of darkness. This activity level is expected in suburban parks, low-density residential areas, or semi-rural areas.

For DPR's trail system a low usage rate would be from anywhere below 100 to around 150 trail users per day.

Medium Usage

The IES defines a medium amount of pedestrian traffic to be 10 to 100 pedestrians an hour during hours of darkness. This activity level is expected in downtown office areas, higher density residential, shopping areas, and some industrial areas.

For DPR's trail system a medium usage rate would be from approximately 150 to 450 trail users per day.

High Usage

The IES defines a high pedestrian usage rate as over 100 pedestrians an hour during hours of darkness. This activity level is expected in downtown retail areas, near theaters or concert halls, near stadiums, and around major transit stations.

For DPR's trail system a high usage rate would be from approximately 450 to over 700 trail users per day.

3.3 TRAIL TYPOLOGIES & POTENTIAL CONFLICT ZONES

DPR uses several trail typologies to differentiate between the sizes and usage patterns throughout the trail network and to facilitate public communication. These same typologies will be used as a guiding factor for determining the appropriate lighting strategy in each trail section.

Per the Trails - Rules and Etiquette section, the entire trail network has an expected maximum speed of 15 mph. This has extra importance for nighttime visibility as users entering a trail from a park or a larger trail from a smaller one are expected to yield to oncoming users, which can lead to potential conflicts (Trails - Rules and Etiquette, 2023). While many City parks close during nighttime hours, the trail network is available to users 24/7 barring a severe weather or flooding event.

3.3.1 TRAIL TYPOLOGIES

There are three main trail types in the DPR trail system – regional, collector, or local. More detailed information about these trail types and other additional information can be found in Denver Moves masterplan from 2019 or by accessing the DPR Trails & Bike Network map online (Denver Moves: Pedestrians and Trails, 2019).

Regional Trails

Regional trails have the highest activity level and are some of the longest continuous routes. They connect many residential areas to employment centers and recreational areas. The regional trails are the South Platte River Trail, Cherry Creek Trail, Sand Creek Regional Greenway, and High Line Canal Trail. These trails are more likely to warrant higher lighting levels due to their usage.

Collector Trails

These trails link local trails and neighborhoods into the regional trails, providing the connectivity that allows the trails network to be used for transportation needs like commuting instead of just for recreation. They are anywhere from .5 miles to 4 miles in length. These trails vary in their activity level after dark, with some serving commuters and some being used mostly for recreation. They may or may not warrant improved or expanded lighting based on their usage.

Local Trails

These trails primarily connect local parks and residential areas into collector trails or connect a residential area to other land uses. They are less likely to be active after dark except for recreational activity and less likely to warrant an increase in lighting.

3.3.2 POTENTIAL CONFLICT ZONES

In addition to trail types, the types of potential conflict zones for trail users help inform lighting designers about what light level is appropriate for safety and navigation. The following four conflict zone types are adapted from terminology used in IES RP-43-22 (IES RP-43-22, 2022) and Denver Moves 2019 (Denver Moves: Pedestrians and Trails, 2019).

Ingress/Egress Ramps or Stairways

Many ingress or egress points along the trail system involve steps, other grade changes or sharp turns. These present additional navigation challenges for trail users and require greater visibility to traverse safely after dark. Minimal lighting is required in these areas for safety.

Trail Bridges

Bridges that serve pedestrian and cyclist crossing needs but are fully separated from vehicular traffic have their own national lighting criteria (IES RP-43-22, 2022). The edges of the bridge must be clearly seen at all times as well as the ingress/egress zones. As these bridges are not shared with vehicular traffic, lighting provided by the spill light from street lighting is not an option.

Trail Undercrossings

Undercrossing is the term used in the Denver Moves 2019 Plan for any below grade crossing, such as under a roadway deck or through tunnels (Denver Moves: Pedestrians and Trails, 2019). Undercrossings require lighting during daytime and nighttime hours to maintain a safe visibility level for trail users. Transitional lighting when approaching an undercrossing is important, as the interior of a tunnel is brighter at night than its surroundings. This is especially important when the tunnel serves many cyclists, as they are moving faster than pedestrians and have less time to visually adjust.

Street Crossings

Off-street trails will sometimes need to cross roadways at grade rather than through a separate bridge or undercrossing. These crossings could be included in an intersection or take place through a mid-block crossing, especially in areas that are mainly residential with narrower streets. The lighting standards for this type of conflict zone are generally directed by the IES RP-8-21 standards for roadway lighting. The streetscape lighting standards for Denver are defined by Denver's Department of Transportation & Infrastructure (DOTI) in their Street Lighting Design Guidelines & Details (CCD, 2019).

3.4 ROLE OF LIGHTING ZONES

The Model Lighting Ordinance (MLO) was developed jointly by the IES and IDA as a municipal planning tool. The document was finalized in 2011.They are also officially defined within the ANSI/IES document *LP-11-20 Environmental Considerations for Outdoor Lighting*. Lighting zones were developed as part of the MLO as a planning strategy similar to other types of overlay zoning commonly used by cities (MLO, 2011).

The strengths of lighting zones for cities lie in how they are defined by the human activity levels expected in their areas and in how they work alongside the existing zoning. This overlay strategy helps municipal organizations to reduce both light pollution and wasted energy from unnecessary lighting, and also ensure their lighting is appropriate for the area. This can reduce complaints from residents about over/underlighting and improve their confidence in being active outdoors in the nighttime hours.

There is no absolute system for the placement of lighting zones in a city. Decisions will need to be made on the characteristics of an area and consensus reached on what the goals for the usage of that area are. The ultimate lighting zone designation should be based on the outdoor environment DPR wants to achieve for a site, not on the current existing conditions.

Lighting zones are most effective when they complement existing land use zoning. Each lighting zone designation is defined below with their typical associated land uses:

LZ-0

Lighting Zone 0, or No Ambient Light, is appropriate for areas where permanent outdoor lighting is not expected and not intended to be installed in the future. Nighttime human activity is sparse and people expect and are adapted to darkness. Flora and fauna could be seriously impacted by small amounts of additional lighting.

Typical application of this zone is for natural areas, protected wilderness, conservation areas, or rural countryside. This lighting zone is not appropriate for use within the City of Denver, but may apply in adjacent areas.

LZ-1

Lighting Zone 1, or Low Ambient Light, is appropriate for developed areas within a natural environment and areas of human activity that are inherently dark at night. The vision of people in these areas is adapted to the low light levels, and they do not expect to see electric lighting except where absolutely necessary.

This lighting zone would be appropriate for single-family and duplex communities, business parks, commercial or industrial areas with limited nighttime activities.

LZ-2

Lighting Zone 2, or Moderate Ambient Light, is appropriate for areas with some elevated level of human activity in the evenings and night. The vision of people in these areas is usually adapted to moderate light levels and they expect there to be some lighting present.

This lighting zone would be appropriate for multifamily residential, schools, churches, hospitals, hotels/motels, outdoor sales, evening recreational and playing fields.

LZ-3

Lighting Zone 3, or Moderately High Ambient Light, is appropriate for high levels of human activity in the evenings and night. Human vision will be well adapted to the presence of lighting and it will be expected throughout these areas.

This lighting zone would be appropriate for downtown business districts, retail, restaurants, bars, nighttime active industrial areas, high use recreational and playing fields, gas stations and car dealerships.

LZ-4

Lighting Zone 4, or Very High Ambient Light, should only be used for special cases for high intensity entertainment districts, and is never intended for use as a default lighting zone. Human vision will be well adapted to lighting in these areas.

This lighting zone would be appropriate for locations such as Times Square in New York City or the Las Vegas Strip. It does not apply to anywhere within the City of Denver.

B.U.G. Ratings

The B.U.G. Rating system (Backlight, Uplight, and Glare) was developed as part of the MLO to help communicate outdoor luminaire performance. Backlight refers to light falling behind the luminaire. Any backlight may be undesirable for a trail or some backlight may be a benefit depending on the land use contexts along the trail. Uplight refers to light shining above the horizontal plane. It is undesirable due to the potential for glare and the negative impacts on sky quality and the environment. The lowest U value possible is typically the goal. As the main purpose of trail lighting is to light the trail surfaces and users, any uplight is generally wasted energy. Glare refers to light coming from the luminaire at any angle above 60º. This can be very uncomfortable in the eyes of trail users or could lead to light spilling too far in front of the luminaire.

Table 3-1: Typical BUG Ratings for Lighting Zones

Lighting Zone	Associated Land Uses	Typical BUG Ratings		
		Backlight	Uplight	Glare
LZ-0	NA in Denver City Limits	**-**	**U0**	**-**
LZ-1	Natural parks, residential, lower intensity commercial	**B1**	**U1**	**G1**
LZ-2	Most commercial, some industrial, some urban residential	**B2**	**U2**	**G2**
LZ-3	Downtown, some commercial, special event	**B2**	**U2**	**G2**
LZ-4	Not Recommended in Denver	**B2**	**U2**	**G2**

The information shown in the above table has been modified from the original Model Lighting Ordinance to be most relevant to DPR's needs in selecting trail luminaires.

3.5 ROLE OF ADJACENT LAND USES

The land use along a trail route and other adjacent land uses are key factors in determining the appropriate lighting strategy for a trail as it directly correlates to the number of pedestrians and cyclists who will be using the trail during nighttime hours. Areas of increased trail usage at night often accompany more intense land uses and will warrant additional lighting, whereas areas that typically

do not have much traffic after dark and have low density zoning will most likely only warrant minimal lighting for safety. These patterns are used to guide which lighting zone is most appropriate for the location. For a better understanding of the intentions for future growth in Denver, please refer to the citywide Blueprint Denver documents and interactive map through denvergov.org (Blueprint Denver, 2019).

Figure 3-1 shows the land use zoning map for Denver with the currently existing, off-street trail network overlaid. This is a quick way to begin studying how much of the trail network may fall into which lighting zone. For trails that have different land uses to each side, it's recommended that the less intensive land use be selected to guide the choice of lighting zone. This better protects residential and open spaces from over lighting.

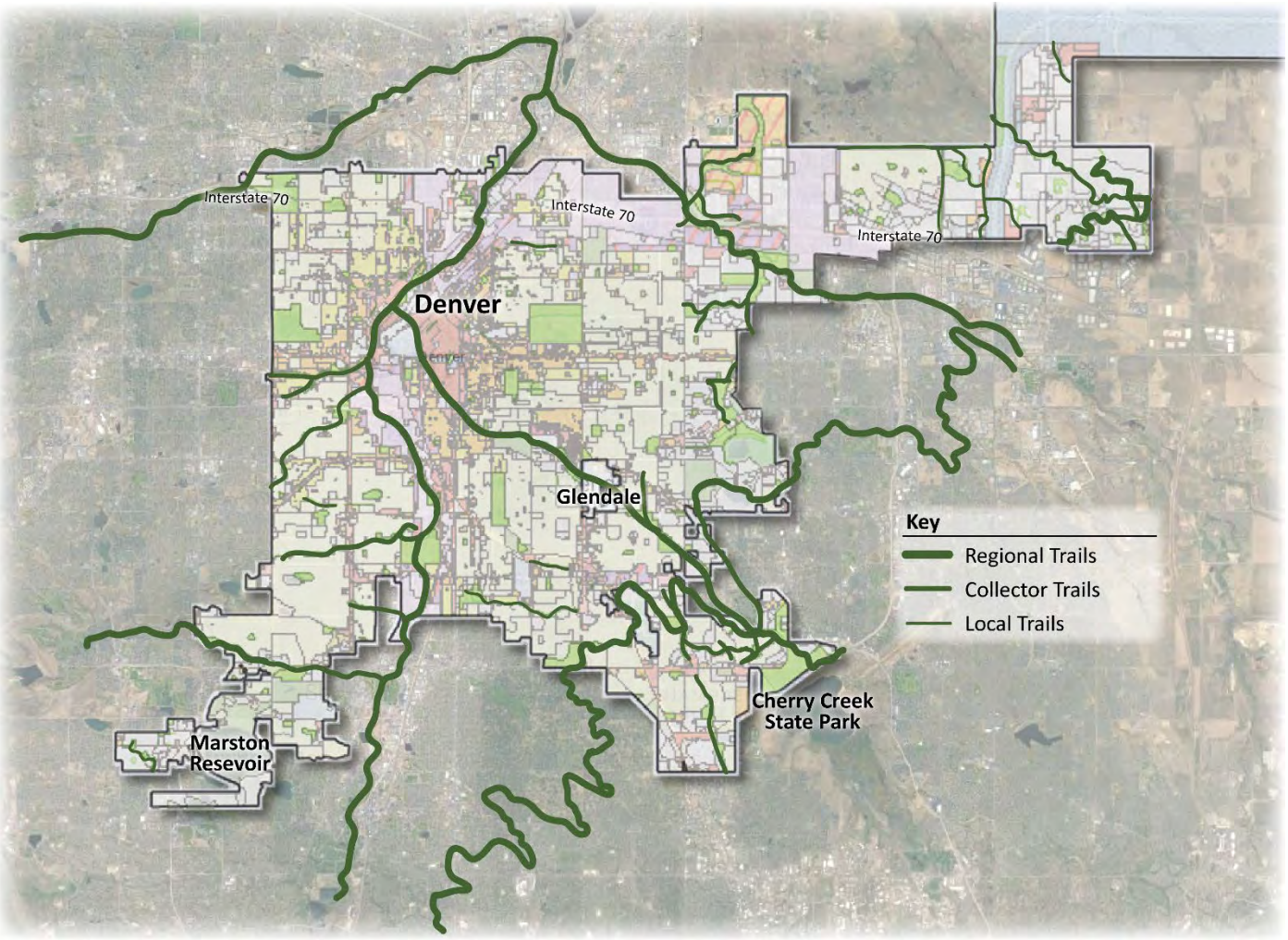


Figure 3-1 City of Denver Zoning Map with DPR Trails Overlaid

3.5.1 ZONING CONTEXTS IN DENVER

Denver's zoning is divided into land use contexts that contain sets of similar zones. These contexts have been further simplified below in order to better connect them to the relevant IDA-IES lighting zones throughout this document. For more detailed information on Denver's current zoning, please refer to Denver's Zone District Descriptions and Definitions (Zone Descriptions, 2023). To view the

current zoning map in greater detail, please visit https://www.denvergov.org/maps/map/zoning (Denver Zoning Map, 2023).

Single Family Residential

This land use context is comprised of the two zones Single Unit (SU) and Two Unit (TU). They are shown in Figure 3-1 in yellows. May local and collector trails are located within this land use. The nighttime activity level may be lower in these areas. Light trespass from trail lighting into residential windows is a greater concern.

This land use context is typically associated with Lighting Zone-1.

Multi-Family Residential

This land use context is comprised of five multi-family and mixed use zones. They are shown in Figure 3-1 in oranges. Regional and collector trails are often adjacent to these zones. The nighttime activity level is expected to vary significantly by neighborhood.

This land use context is typically associated with Lighting Zone-1 or Lighting Zone-2.

Retail/Commercial

This land use context is comprised of eleven commercial and mixed-use zones. They are shown in Figure 3-1 in reds. Significant portions of the regional trails are adjacent to this land use. The activity level of these areas during both daytime and nighttime hours can vary significantly.

This land use context is typically associated with Lighting Zone-2 or Lighting Zone-3.

Industrial

This land use context is comprised of four industrial and mixed-use zones. They are shown in Figure 3-1 in purples. Significant portions of the regional trails are adjacent to this land use. The activity level during nighttime hours may vary significantly in these areas.

This land use context is typically associated with Lighting Zone-2 or Lighting Zone-3.

Civic/School/Campus

This land use context is comprised of eight zones. They are shown in Figure 3-1 in blues. Trails within this type of zoning will have their own activity pattern according to the specific use and require the appropriate lighting strategy to be chosen on a case by case basis.

This land use may be associated with Lighting Zone-1, Lighting Zone-2, or Lighting Zone-3.

Open Space

Denver's open space context is comprised of four zones. They are shown in Figure 3-1 in greens. Additional lighting restrictions are often needed with this type of land use in order to avoid causing harm to flora and fauna.

This land use zone is typically associated with Lighting Zone-1 in urban areas.

3.5.2 TRAILS ADJACENT TO RESIDENTAL AREAS

Trails located in residential areas are typically used for either recreation or for commuting through connections made to larger trails. This activity tends to take place either during daytime hours,

morning and evening commute hours, or in evening hours prior to 11 pm. Many neighborhoods that are predominantly single-family residential expect a lowered activity level during most nighttime hours. Denser residential areas such as multi-family, townhome areas, or mixed residential areas are tolerant of more activity during the nighttime hours.

Areas that are predominantly residential will have people of all ages sleeping at night. This makes light pollution and light trespass from outdoor lighting more likely to be a nuisance and a public health concern. Quality sleep is key to lifelong positive health outcomes. Light trespassing into bedroom windows is just as much of a sleep disturbance as urban noise. For sensitive individuals, it can noticeably disrupt their circadian rhythms, which leads to poorer health outcomes.

Trails passing through residential areas or that are adjacent to a residence should ensure the trail lighting places a high priority on preventing light from spilling beyond the trail. For more detailed information on light trespass, refer to the publicly available IES/IDA Model Lighting Ordinance (IES, 2011).

3.5.3 TRAILS ADJACENT TO EMPLOYMENT CENTERS

Trails throughout Denver help connect employment centers to residential areas, either through direct connections or by linking the areas to regional transit options. Trails located near employment hubs support the last mile connections commuters need to allow them to forgo a typical private vehicle commute. For some, a trail near their place of employment allows active commuting. When available, active commuting options offer many benefits to public health by incorporating physical activity into a normal part of someone's day. Other benefits include fewer vehicles on the roads, leading to reduced emissions and improved air quality. To better support active commuting on trails throughout the year, trails that connect through major employment centers should take peak commuting hours in the mornings and evenings into account in their lighting strategy choices. Lighting may be needed both earlier and later in the day than on a trail that's main usage is recreational.

Other advantages of trails in employment centers are their usage during the workday. Employees nearby are able to take advantage of their recreational uses. It also provides an alternative method for moving between businesses and making deliveries without the need to get on a roadway. These options benefit any work environment, from the typical office to industrial areas.

3.5.4 TRAILS ADJACENT TO TRANSIT ORIENTED DEVELOPMENTS

Trails that pass through areas of transit oriented development (TOD) support active commuting and transit ridership for residents in those neighborhoods. TOD neighborhoods typically involve denser residential development and increased access to bus and light rail transit stations, which both support Denver's climate commitments. The ridership of transit systems is often dependent on the quality of last-mile connections between transit stations and destinations, whether that is a home, office, or commercial area. Trails are an important component of these connections.

Several of Denver's regional trails with the highest activity levels currently parallel major transit corridors and connect multiple TOD locations. The graphic shown in Figure 3-2 shows the existing trail system in Denver in green, major transit corridors in red, and the TOD neighborhoods recognized by Denver in black. This map was adapted from the TOD and Transit Corridor Map used in the TOD Strategic Plan from 2014 (TOD Strategic Plan, 2014).

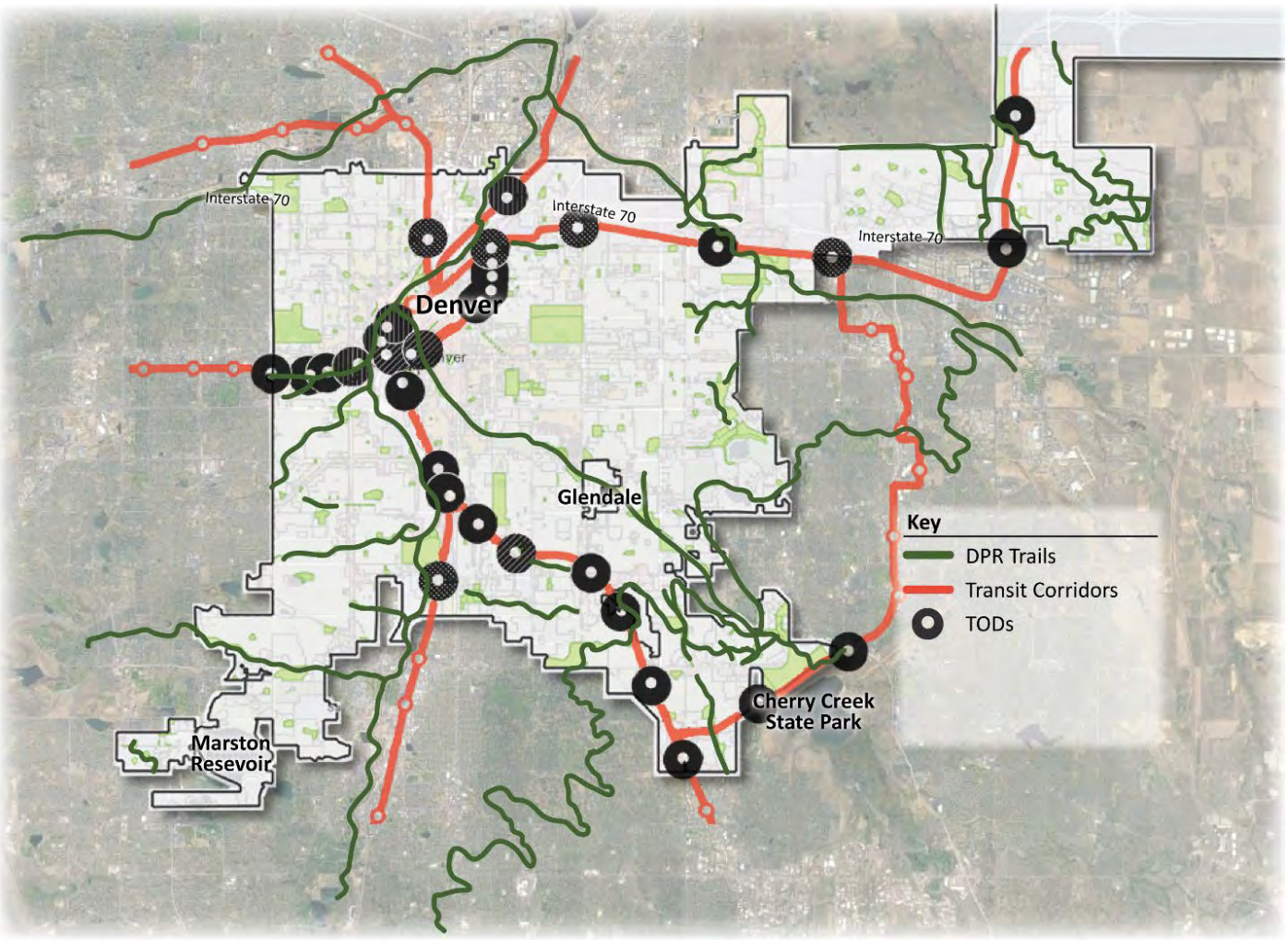


Figure 3-2 – DPR Trails and major transit corridors shown with location of TODs

The proximity of TODs is likely to lead to an increased trail usage rate in these areas even when the land uses surrounding the TOD would otherwise suggest a lower rate. The presence of TODs along a trail will also likely extend the nighttime hours where that trail sees higher activity beyond that seen on trails of comparable size due to more people using them for last mile connections and to access neighborhood destinations. Regional trails are associated with the most TODs, but local and collector trails may not see the drop off in evening usage compared to similar trails in other parts of the system.

Trails that are otherwise sufficiently lit through a minimal lighting strategy may require non-continuous lighting where they pass through a suburban TOD or continuous lighting may be needed in TODs in urban areas despite being mainly residential in use. Transitional lighting levels will need extra attention around TODs in order to preserve the visual comfort of trail users.

3.5.5 NEIGHBORHOOD EQUITY & TRAILS

Commuting by trail can be a personal choice for environmental footprint reduction or personal health reasons, but in disadvantaged areas where the median income is low and car ownership may be unstable or nonexistent in a household involuntarily, trail commuting may be more of a lifeline than a personal choice. It is therefore essential to ensure the trails into and out of these communities are

visually comfortable and easy to navigate for any user, as this can play a role in increasing access to employment.

Trail access for recreational needs in disadvantaged areas is also very important. Local public parks and trails are a crucial form of affordable recreation and improve a neighborhood's sense of community through their shared use. It is also well documented through studies of cortisol levels that exposure to nature reduces stress in the human body. A walk on a local trail offers numerous benefits to the physical and mental health of residents. Access to this amenity is especially important in areas that tend to have lower overall health outcomes.

The following map graphic shows Denver's neighborhoods graded by their scores on the Neighborhood Equity Index (NEI) currently used by DPR. These scores are developed by grading each neighborhood on qualities such as park proximity, household income, and life expectancy (Neighborhood Equity Index, 2020).

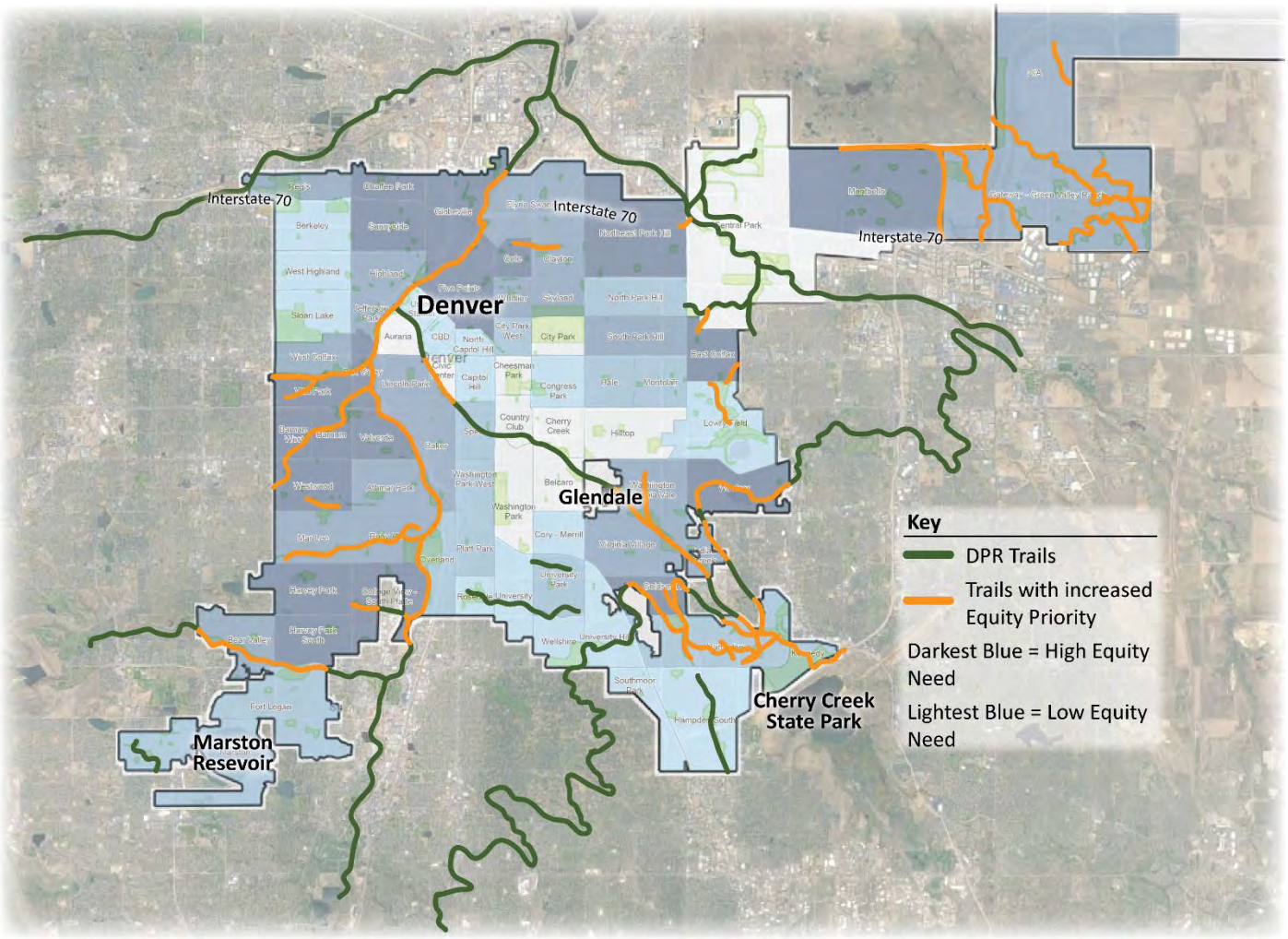


Figure 3-3 – Neighborhood Equity Map with overlaid trails and priority areas for lighting design.

The darkest blue is the highest numerical equity score, demonstrating the most need for positive interventions. The lightest areas have the lowest numerical score and need little additional support at this time. When the trail network is overlaid, it reveals that many existing trails are in or near neighborhoods that are struggling. Trail sections that were within higher need neighborhoods, with

scores of 3, 4, or 5 according to the 2020 Neighborhood Equity Index are shown with a greater priority for lighting improvements than those in neighborhoods with less need which score a 1 or 2. Other neighborhoods with the highest equity needs have little or no trail system access at this time for recreation or transportation.

Traditionally, areas with lower median incomes are more likely to have more people who are working on a shift schedule, at night, or during other atypical hours. Ensuring the trails are comfortable for commuter use 24/7 could have a greater positive impact in these areas than other neighborhoods.

This does not mean however that these areas require a higher light level than would be recommended for any other area where usage merits continuous or non-continuous trail lighting in Denver. The areas highlighted as places where trail lighting may be a greater equity priority are intended to show that these neighborhoods may benefit more if they are made a priority for study to see if they are meeting the standards for minimal lighting and for improvements if minimal lighting is not sufficient.

3.5.6 TRAILS ADJACENT TO OPEN SPACES

Artificial lighting at night can have serious impacts on the flora and fauna in a community, from tiny insects and flowers to large predators and trees. The species we share spaces with, like us, have evolved with the earth's natural solar and lunar cycles. Due to this, the IES recommendation for light levels in many natural areas is that it should not exceed 0.1 footcandles of illuminance (IES RP-43-22, 2022). This is equivalent to the light level cast by a full moon, enough light for most people to navigate safely in a dark environment but not enough to cause significant harm to most species.

Denver is an Urban Bird Treaty City and a participant in the Lights Out program that aims to reduce migratory bird strikes through reduced building lighting (Lights Out Denver, 2023). A light temperature of 3000K is also the current maximum temperature intended for outdoor lighting in the City, though some 4000K is still in use (CCD, 2019). While 4000K is sometimes compared to the temperature of moonlight, in LED sources they can contain disruptive amounts of light in the blue spectrum. For areas that are ecologically sensitive such as riparian buffers, natural waters, or nature preserves, color temperatures lower than 3000K may be preferable. 2700K is becoming much more widely available as a standard outdoor lighting option and the availability of 2200K luminaires is increasing. Both are less disruptive to the environment.

Light trespassing beyond the area intended to be lit, usually the trail's surface, so that it spills into adjacent waterways, into natural landscape areas that are important urban habitats, or onto trees can have significant negative effects on Denver's biodiversity and the ecological sustainability goals of the community. The appropriate amount of light properly aimed and shielded can greatly reduce the negative impacts of outdoor lighting. When the usage of a trail does not justify significant amounts of lighting, it is better for the environment that the most minimal lighting option be used and then dimmed further when it is not needed. Please refer to IES RP-43-22 *Lighting Exterior Applications* for more detailed information on these strategies and their impacts if necessary (IES RP-43-22, 2022).

Effects on Plants

Plants that are sensitive to photoperiodicity in their flowering, bud dormancy, or leaf senescence behaviors in response to day length may be adversely affected by any amount of illumination they receive from artificial lighting. Most plants need sunlight during the day and darkness at night to

maintain their health over their full lifespan. Plants have evolved a wide range of photoreceptors that perceive and respond to signals from light in their environment, especially in the ultraviolet, blue, red, and near-infrared regions of the electromagnetic spectrum. Some of the many processes sensitive to light are:

- Seed germination
- Stem elongation
- Leaf expansion
- Flower development
- Fruit development
- Bud dormancy (when leaves stop growing)
- Leaf senescence
- Leaf drop

Landscaping is a significant investment and urban trees are a crucial component in managing urban heat. For a city, fall color and spring flowering are a source of community pride. Lighting in a way that could reduce trees and other urban plants health, appearance, and lifespan needs to be avoided.

Effects on Wildlife

Just like the human eye has different spectral distributions of light that help regulate our biological processes and our health, so does most other wildlife on earth. While the sensitivities vary between species, in general the closer an artificial light source is to the daylight spectrum the more wildlife (and people) can be negatively affected by it.

Most small carnivorous mammals are fully nocturnal. Many species that have adapted well to sharing the urban environment with humans are crepuscular, active in the dawn and evening hours. However, any species that (like us) needs to sleep during hours of darkness are just as disturbed by light pollution as urban humans.

Lighting affects wildlife beyond sleeping behaviors. Artificial lighting at night has been shown to disrupt numerous natural patterns in wildlife, including:

- Foraging behavior and increased predation
- Internal biological clocks
  - Can affect mating success, group-mediated anti-predator vigilance, and other light-stimulated behaviors
- Dispersal movements and wildlife corridor use
- Breeding behavior in birds
  - Nest site selection, increased predation, timing of breeding
- Possible support for invasive species (mostly pertains to insects)
- Alteration of territorial behaviors
- Delays and changes in migratory behaviors
- Reductions in populations of nocturnal insects
  - Has a cascade effect on their predators and is detrimental to pollination

A healthy urban ecosystem depends on a variety of insects, birds, reptiles, amphibians, and mammals of all shapes and sizes to sustain itself. Lighting that trespasses from trails and into waterways, forested areas, or other natural spaces throws innumerable natural behaviors and patterns out of balance.

Section 4

Trail Lighting Design

4 TRAIL LIGHTING DESIGN

The following section details how the different design factors of land use, trail usage and typology, equity, efforts towards commuter support, and environmental preservation can guide what lighting strategy would be the best fit for any trail area in Denver when generating a lighting design. In addition to the lighting design process, how the latest national standards apply to different trail locations in Denver is explained.

Rather than recommending specific locations for the different lighting strategies at a granular level, this study has led to the ongoing development of a new GIS mapping tool that will be used by DPR to evaluate the best fit lighting strategy throughout the trail network. More about this process is covered in section 4.3.

4.1 TRAIL LIGHTING STANDARDS

This section contains charts adapted from the document ANSI/IES RP-43-22 Lighting Exterior Applications (IES, 2022). This document covers the illuminance levels that are acceptable in any given lighting zone. These charts have been reduced in their level of detail in order to be more relevant to DPR.

Illuminance is the primary lighting metric used for multimodal trails, crosswalks, and bike paths. Illuminance is the amount of light reaching a surface and is measured in units of footcandles (fc). An Average to Minimum ratio is used to evaluate the uniformity of the lighting to identify if there are areas that are too dark in relation to the average light level. The Light Control criteria shown reflect the acceptable BUG ratings for glare and uplight respective to the outdoor land use and the lighting zone in which it's taking place in. The values for LZ-0 and LZ-4 are not included in the charts as they are not recommended for use within Denver at this time.

These criteria are used alongside the pedestrian activity levels, lighting zones, adjacent land uses, and any other necessary criteria to provide the specific measurements adequate for lighting any trail typology in DPR's system.

The following table is adapted for DPR from Table A-3 on page 49 of IES RP-43-22. Most trails in DPR's network are serving both cyclists and pedestrians, making these illuminance values relevant to most trails. They would apply to trails that are lit continuously, non-continuously, or only lit minimally where there are potential conflict points.

Table 4-1: IES Standards - Mixed Cycling & Pedestrian Paths						
Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	1.5 @ 0.0	5:1	G2	U2	3200
	Upper limit (avg.)	3 @ 0.0	5:1	G2	U2	4000
LZ-2	Lower Limit (avg.)	0.8 @ 0.0	5:1	G2	U2	2700
	Upper limit (avg.)	1.5 @ 0.0	5:1	G2	U2	3200
LZ-1	Lower Limit (avg.)	0.4 @ 0.0	5:1	G1	U1	1800
	Upper limit (avg.)	0.8 @ 0.0	5:1	G1	U1	2700

The following table is adapted for DPR from Table A-3 on page 39 of IES RP-43-22. Trails that are adjacent to waterfront areas (such as a trail surface located under twenty feet (20') from the water's surface) or that fall within what are generally considered to be riparian areas may need greater consideration for their lighting. They can sometimes offer more wayfinding hazards to their users due to the potential for slips and falls, but they also require more attention be paid to ecological concerns. They would apply to trails that are lit continuously, non-continuously, or only lit minimally where there are potential conflict points.

Table 4-2: IES Standards - Walking Surfaces Adjacent to Waterfront						
Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	1 @ 0.0	8:1	G2	U2	3200
	Upper limit (avg.)	3 @ 0.0	8:1	G2	U2	4000
LZ-2	Lower Limit (avg.)	1 @ 0.0	8:1	G2	U2	2700
	Upper limit (avg.)	2 @ 0.0	8:1	G2	U2	3200
LZ-1	Lower Limit (avg.)	0.5 @ 0.0	8:1	G1	U1	1800
	Upper limit (avg.)	1 @ 0.0	8:1	G1	U1	2700

The following table is adapted for DPR from Table A-3 on page 40 of IES RP-43-22. Stairs and ramps throughout the trail system pose increased risk of trips, falls, or collisions for trail users. Their lighting is part of a minimal lighting expectation. Their upper and lower acceptable light levels are higher than a typical walking surface.

Table 4-3: IES Standards - Stairs & Ramps

Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	3 @ 0.0	5:1	G2	U2	3200
	Upper limit (avg.)	4 @ 0.0	5:1	G2	U2	4000
LZ-2	Lower Limit (avg.)	2 @ 0.0	5:1	G2	U2	2700
	Upper limit (avg.)	3 @ 0.0	5:1	G2	U2	3200
LZ-1	Lower Limit (avg.)	1 @ 0.0	5:1	G1	U1	1800
	Upper limit (avg.)	2 @ 0.0	5:1	G1	U1	2700

The following table is adapted for DPR from Table A-3 on page 45 of IES RP-43-22. Overpasses that are exclusively for cyclists and pedestrians do not have the same potential for traffic conflicts, but require transitional lighting when approaching stairs, ramps, or ingress/egress points. These standards would apply to overpasses that are lit continuously, non-continuously, or only lit minimally where there are potential conflict points.

Table 4-4: IES Standards - Pedestrian Overpass

Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	1.6 @ 0.0	5:1	G2	U2	3200
	Upper limit (avg.)	3.2 @ 0.0	5:1	G2	U2	4000
LZ-2	Lower Limit (avg.)	0.8 @ 0.0	10:1	G2	U2	2700
	Upper limit (avg.)	1.5 @ 0.0	10:1	G2	U2	3200
LZ-1	Lower Limit (avg.)	0.4 @ 0.0	10:1	G1	U1	1800
	Upper limit (avg.)	1 @ 0.0	10:1	G1	U1	2700

The following table is adapted for DPR from Table A-3 page 46 of IES RP-43-22. A pedestrian moving from a bright outdoor space into an underlit or even unlighted tunnel can create an uncomfortable if not dangerous transition while the eye adjusts. This is even more significant for cyclists, who are generally moving at faster speeds and thus have less time to adjust to changes in lighting. Their lighting during the day is part of a minimal lighting expectation. The light levels shown are higher as they only apply to daylight hours.

Table 4-5: IES Standards - Pedestrian Tunnels (daytime)

Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	8 @ 0.0	4:1	G2	-	3200
	Upper limit (avg.)	10 @ 0.0	4:1	G2	-	4000
LZ-2	Lower Limit (avg.)	8 @ 0.0	4:1	G2	-	2700
	Upper limit (avg.)	10 @ 0.0	4:1	G2	-	3200
LZ-1	Lower Limit (avg.)	8 @ 0.0	4:1	G1	-	1800
	Upper limit (avg.)	10 @ 0.0	4:1	G1	-	2700

The following table is adapted for DPR from Table A-3 on page 47 of IES RP-43-22. A pedestrian tunnel that is lit for daytime needs through the nighttime hours also poses a hazard to any user approaching it. Entering or approaching a brightly lit space from a nighttime environment can lead to discomfort or reduced visibility. The amount of transitional lighting that would be needed to compensate for the daytime light level in a tunnel used at night would be inappropriate for the environment surrounding the trail and lead to light pollution. Their lighting at night is part of a minimal lighting expectation. The light levels listed below are sufficient for nighttime safety and navigation.

Table 4-6: Pedestrian Tunnels (nighttime)						
Lighting Zones		Horizontal Illuminance		Light Control		Lumens
		FC @ FT	Illuminance Ratio Avg:Min	Maximum Glare Rating	Maximum Uplight Rating	Maximum Lumen Output
LZ-3	Lower Limit (avg.)	1 @ 0.0	4:1	G2	-	3200
	Upper limit (avg.)	3 @ 0.0	4:1	G2	-	4000
LZ-2	Lower Limit (avg.)	1 @ 0.0	4:1	G2	-	2700
	Upper limit (avg.)	2 @ 0.0	4:1	G2	-	3200
LZ-1	Lower Limit (avg.)	0.5 @ 0.0	4:1	G1	-	1800
	Upper limit (avg.)	1 @ 0.0	4:1	G1	-	2700

The glare and illuminance values in all of the above charts are based on national best practices and would apply to any trail, usage pattern, or luminaire option used by DPR. Lighting levels will generally be considered as meeting the criteria if the calculated values are within ten percent (10%) of the criteria, or do not exceed the criteria by more than one and a half times (1.5x).

4.2 TRAIL LIGHTING SELECTION PROCESS

This section explains how the warrants from Section 3.1 are used in combination with the IES criteria in the previous section to guide the lighting design process. Before the first luminaire is chosen, these are the questions a lighting designer is looking to answer about their project – how much lighting is warranted, in which locations, for which tasks, and what those light levels should be according to the national best practices that have been developed for those tasks.

For any lighting design the unique needs of the area to be lit and its surrounding context are as involved as the criteria itself, as discussed in Section 3. For Denver's trail system the impact of equity, safety, and the environmental effects of changes to trail lighting are the primary concerns.

Figure 4-1 shows the priority areas a lighting designer would consider based on the Denver Neighborhood Equity Index Map. At a high level, the conflict zones where trails intersect merit minimal lighting despite any other factors they may have around them. Trail sections that were within higher need neighborhoods, with scores of 3, 4, or 5 according to the 2020 Neighborhood Equity Index are shown with a greater priority for lighting improvements than those in neighborhoods with less need which score a 1 or 2 (NEI, 2020). While scores of 3 are not considered high need areas on their own, they would merit more scrutiny in the lighting design process for other factors that may influence their design needs, especially when adjacent to areas scoring 4 or 5.

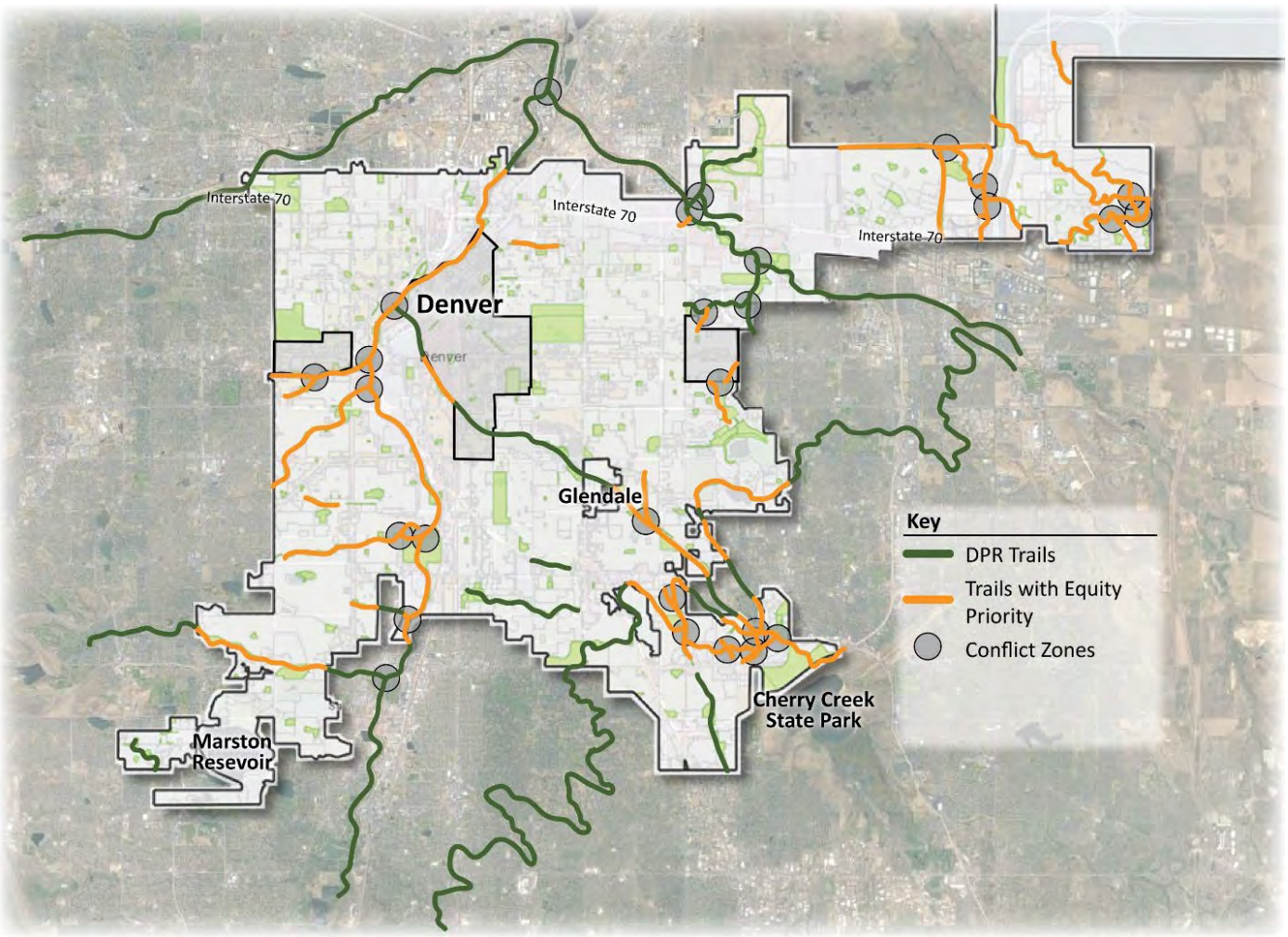


Figure 4-1 – Lighting Design Priority Map

The following subsections describe the different approaches needed in developing a lighting design for each of the trail typologies & potential conflict zones discussed in Section 3.3. Typical and more unique lighting design solutions are included with examples of successful and unsuccessful design strategies. Each of these would be connected to their placement in the DPR trail system as meriting the minimal, non-continuous, or continuous lighting appropriate for their type.

Trail Surfaces

Trails have unique lighting needs depending on their location in a city and their amount of user traffic after dark. Identifying the appropriate Lighting Zone for a site then guides the selection of lighting design criteria, strategy, and luminaire characteristics such as lumen output, color temperature, optical distribution type, and shielding.

The lighting criteria adapted from IES RP-43-22 into table 4-1 for Mixed Cycling & Pedestrian Paths and Table 4-2 for Walking Surfaces Adjacent to Waterfront are the two best sets of national lighting criteria to guide lighting levels on trail surfaces in Denver. The criteria in Table 4-1 would be the default criteria to consult. The criteria in Table 4-2 would be the more suitable option in most trail locations that are near rivers, creaks, ponds, or other natural bodies of water in Denver.

The priority in lighting trails is to get the minimum amount of light needed to illuminate the surface of the trail as uniformly as is practical while ensuring this light does not spill past the trail surface and into other areas. Trails are generally narrow and may have irregular bends and curves frequently. They are often near natural spaces or close to homes. This makes avoiding light trespass one of the highest priorities in designing lighting for trails. Controlling the glare from trail lighting is also crucial as it allows lower light levels to be used without compromising on visibility. Light temperatures of 2700K or 3000K would both be appropriate CCT's for most trails. A CCT of 2200K may be preferred in areas with heightened ecological sensitivity, such as the presence of endangered species habitat.

A quality trail lighting design would provide the minimal amount of light necessary for user comfort and confidence and confine that lighting only to the trail surface and the users upon it.

A low quality trail lighting design may be lit in a haphazard way so that users are not sure whether an area will be lit or not, or when the next light may appear along their path. It may be overlit so that upon leaving the trail area the user has difficulty seeing, or underlit so their vision is compromised upon entering the trail.

The IES criteria specific to the type of trail surface, the usage rate of the trail, and the land usage contexts around the trail typically lead to three strategies of trail lighting. These are minimal, non-continuous, and continuous.

A minimal level of trail lighting designates the locations along a trail that require lighting in order for a trail user to navigate it safely at night. Once these locations are identified, the surrounding context determines which IES criteria and lighting zone should be used to determine the appropriate light level and uniformity.

A non-continuous level of trail lighting designates which stretches of trail need more than minimal lighting to be comfortable at night, but don't have the activity level or surrounding land uses that would warrant continuous lighting. The goal of non-continuous lighting is that it be spaced so that any trail user is able to easily perceive the next light along the path from the light they are currently nearest. This improves the navigability of the trail and provides reassurance to the user. Once these locations are identified, the surrounding context determines which IES criteria and lighting zone should be used to determine the appropriate light level and uniformity.

A continuous level of trail lighting designates which lengths of the trail should have no perceivable gaps in the lighting. Uniform lighting is expected and activity levels are high enough at night that less lighting would feel uncomfortable for users and lead to more potential conflicts when different groups of users fail to see each other in a timely way. Once these locations are identified, the surrounding context determines which set of IES criteria and which lighting zone should be used to determine the appropriate light level and uniformity.

Each of these lighting strategies has the opportunity to incorporate pedestrian poles, bollards, step lights, railing lights, illuminated outdoor furniture, and other outdoor lighting options to achieve the sufficient amount of lighting for that particular trail. There is also the option to incorporate alternative power sources, part night lighting strategies, dimming, or smart city technologies into trail lighting. While the primary focus of trail lighting is to provide for safe navigation at night for any trail user, there is still plenty of room for creativity in the lighting design that could test new outdoor lighting strategies for a city or simply improve a neighborhoods unique character.

Ingress/Egress Locations

Points of ingress or egress along a trail have significant potential for conflicts between users. This could be due to trail users trying to navigate past one another or due to confusion about changes in the direction or grade of the trail itself. Lighting that provides excellent visibility is even more crucial for safety in these areas.

Any point of ingress or egress to a trail such as ramps or stairs will warrant minimal lighting to meet trail users needs for safety and wayfinding. The lighting criteria adapted from IES RP-43-22 into table 4-3 for Stairs & Ramps would apply to this type of potential conflict zone in the DPR trail system.

A quality lighting design for this type of trail condition would provide higher uniformity than for a regular length of trail without losing the necessary contrast. Pedestrian scale post mounted luminaires are spaced to provide the right uniformity for the specific area, but other smaller options such as bollards, step lights, and railing lights are incorporated where they would provide superior visibility to reduce the risk of tripping hazards or collisions. Transitional lighting may also be required, as this kind of use could be isolated or otherwise be located in an area of minimal lighting. Light temperatures of 2700K or 3000K would both be appropriate.

A lower quality lighting design would fail to adequately communicate upcoming turns, make changes in grade like a ramp or steps easily visible, or delineate connections with other trails where other users may be moving quickly in different directions. The lighting provided may be too isolated to keep the eye adapted to the right level of night vision. Smaller scale options for lighting may not manage their glare, reducing visual adaptation further, or they may not take the increased potential for damage or vandalism into account and therefore spend significant amounts of time inoperable.

Bridges

Bridges that are strictly for pedestrian and cyclist use have unique design needs and some frequent complications to design for. Standard pedestrian luminaires that are mounted on poles are often heavy and must withstand higher wind loading conditions on a bridge than on the ground. Spill light from these luminaires also must be prevented from falling on the waterway or greenspace that is usually below these crossings as this can quickly lead to negative environmental impacts.

Any pedestrian bridge will warrant minimal lighting to meet trail users needs for safety and wayfinding. The lighting criteria adapted from IES RP-43-22 into Table 4-4 for Pedestrian Overpass would apply to this type of potential conflict zone in the DPR trail system.

A quality lighting design for this type of trail condition would provide uniform lighting on the bridge surface and ensure the edges of the space are clearly delineated to any trail user. It would also use the characteristics of the bridge itself as part of the lighting strategy. For example, if there are overhead structures like old rail trusses the lighting could be incorporated overhead, reducing the need for pedestrian scale pole lighting while also featuring local character. Light temperatures of 2700K or 3000K would both be appropriate.

A lower quality lighting design would fail to provide enough uniformity or sufficient illumination to prevent tripping hazards due to elevation changes. These issues would also fail to provide enough visibility to navigate the edges of the bridge safely, especially for anyone elderly or those who otherwise has compromised night vision. Poorly shielded and aimed lighting on bridges also has more potential for negative environmental impacts and general light trespass.

Under-Crossings

DPR standards use the term undercrossing for both underdeck lighting and pedestrian tunnels. From a lighting design perspective, both of these uses are very different and have their own distinct needs. However, any trail undercrossing of either type will merit minimal lighting as they have higher potential for navigational conflicts between users.

The lighting criteria adapted from IES RP-43-22 into table 4-5 for Pedestrian Tunnels (daytime) and into Table 4-6 for Pedestrian Tunnels (nighttime) would apply to this type of potential conflict zone in the DPR trail system.

A quality lighting design for this area on a trail would provide transitional lighting levels leading up to the undercrossing so the vision of any user is able to adjust comfortably to the change in their environment whether it is day or night. If the undercrossing is a tunnel, the light level will transition from the thresholds in towards the center of the tunnel so that as the eyes adjusts to the enclosed environment almost no change in illumination is perceived by the user. Light temperatures of 2700K or 3000K would both be appropriate.

An insufficient lighting design would fail to take the time needed by the human eye to adjust to changes in lighting into account. This could lead to undercrossings that feel too dark upon entering them from a bright, daytime environment or that feel too bright upon entering them with dark-adapted vision. Poor designs may also have issues with light trespassing into adjacent areas due to over lighting or insufficient shielding of the light sources.

Crosswalks

While crosswalks are generally considered more a part of street lighting design, there are often occasions for a trail to need to cross a street at a midblock location in a residential area or to join into a typical crosswalk scenario at a busy intersection. For lighting design guidance on crosswalks, we would refer to the IES document RP-8-22 Lighting for Roadway and Parking Facilities instead of RP-43-22 (IES RP-8-22, 2022). When trail lighting standards take priority, trail crosswalks should be included in the category of minimal lighting. When the trail crossing is going to be incorporated as part of a street lighting design, the standards from the CCD Street Lighting Design Guide will take priority (CCD, 2019). A light temperature of 3000K is likely to be preferred for crosswalks.

A quality lighting design for this type of trail condition would provide adequate light on the crosswalk surface and trail surfaces adjacent to it so the trail user has good visibility. It would also ensure the trail user is illuminated vertically so their location is easy for anyone driving a vehicle to see. Where this is not possible due to site constraints, the trail user should be backlit so their silhouette is easily visible.

An insufficient lighting design would only light a pedestrian crossing from above by placing the luminaires directly over the crosswalk. This makes anyone in the crosswalk difficult for a driver to see, reducing safety. A luminaire with high glare or one which is poorly shielded would also reduce visibility.

4.3 DPR GIS SCORING SYSTEM

This insight into the lighting design process, the role of lighting zones, and the adjacent land use and activity patterns is currently being used by the City of Denver's GIS department to help develop a GIS scoring system for DPR to use for trail lighting decisions. This type of scoring and mapping strategy is used for many other applications in Denver, most notably for this study the Neighborhood Equity

Index (NEI) that was developed in 2020. That map used 8 scoring factors to determine the needs of each neighborhood (NEI, 2020).

The GIS lighting tool being developed will have eight scoring categories that will help DPR determine in a general sense which lighting strategy (minimal, non-continuous, or continuous) is appropriate for which locations. The following chart shows the eight categories being used to score the trails. Each category will be scored with a value of 1 through 5. This allows a maximum total score of 40 and minimum of 8.

Table 4-7: DPR GIS Analysis Factors

Scoring Factor	1	2	3	4	5	Data Source
Average Daily Trail Usage	Avg monthly users < 10,000	10,000-20,000	20,000-30,000	30,000-40,000	<40,000	Trail Counter Estimates
DPR Equity Index Score	1	2	3	4	5	Equity Index
Zoning	Single Family Res	Industrial	Retail	Multifamily/ Commercial	Mixed Use	Denver Blueprint
Density	1	2	3	4	5	Equity Index
Crime	<52	52-94	94-184	184-315	315+	Crime Rate per 1,000 pop by nbhd (DPD)
Distance from River/Wetlands	<50’	50’-100’	100’-150’	150’-250’	>250’	Near (US wetlands mapping)
Distance to Rail Transit Station	>2 mi	1-2mi	.5-1mi	.25-.5mi	<.25 mi	Near (RTD Rail Stations)
Park Available within 10 min.	1 to 2	3 to 4	5-6	7-8	9-10	2500’ buffer SD Park Land

In general, a score of 15 or below would mean the trail area merits only minimal lighting. A score between 16 and 20 would mean non-continuous lighting is likely the most appropriate choice. A score of 21 or higher would mean continuous lighting is likely needed. DPR can use this GIS tool as a starting point whenever a trail area is being examined for lighting improvements. Each of the eight categories used for the scoring system aligns with the design factors discussed in Section 3.2.

The scoring factor for average daily trail usage coordinates with the high-medium-low trail usage system used by the IES. Lower daily usage rates will receive a lower score while high usage will receive a higher score as higher activity trails are more likely to warrant continuous lighting.

The five DPR Equity Index score categories are incorporated into this analysis tool to assist in locating lighting improvements in a more equitable way. A score of 1 reflects low equity need and a score of 5 indicates high need in that area.

The land use contexts in Denver have each been given a scoring factor that reflects their intensity of use and likely pedestrian and cyclist activity level during nighttime hours. Single Family Residential and Industrial uses have low scores as they should not be very busy at night. Urban Mixed Use in areas such as downtown Denver has the highest score.

The scores for population density are intended to reflect the likely usage rate of the trail in those areas. For example, a low population density area will receive a lower score, which will lend itself to more minimal lighting. High population density areas will have a higher score and merit more lighting.

The scores for the impact of crime on trail lighting needs reflect the crime rate per 1,000 individuals in an area. This will help identify parts of the trail system where visibility into the surrounding area for trail users is a safety priority.

The scoring factor for a trail's proximity to waterways or wetlands addresses both how much light should be near these more delicate ecological areas and allows DPR to see where a CCT below 3000K should be considered. A score of 1 or 2 in this category should lead to lower CCT's being considered for trail and park lighting in order to avoid negative ecological effects, as well as greater priority for any dimming options.

The scoring factor for proximity to transit stations reflects the gradual increase in trail users the closer the are to a transit station. This is in line with trails often having the role in transportation systems as "last mile" connections. The further a trail is from a transit stop the lower the scoring factor becomes.

The category for a trail's proximity to park spaces is intended to factor in the effects park activities and travel to and from park resources has on the usage of surrounding trails. If a trail can reach many parks, it is likely to see more usage throughout the day and later into the evening and would receive a higher score.

This tool will allow DPR to provide a data-based starting point for proposed updates to any trail's lighting that is based on sound lighting design principles. Like the City's other GIS tools, it will be able to facilitate analysis, communication, and map development. While each trail lighting update will still require verification by DPR that the scoring system has correctly taken the site's context and future needs into account, this tool provides a much better in-house ease of use tool for Denver that is grounded in current best practices for outdoor lighting design.

Section 5

Luminaire & Equipment Specifications

5 LUMINAIRE & EQUIPMENT SPECIFICATIONS

This section covers standard electrical and solar powered lighting systems, the pros and cons of solar powered alternatives, and the luminaires and equipment available to Denver Parks and Recreation used in the photometric lighting studies in Section 6. This section also includes key factors for choosing outdoor trail lighting as more luminaire and solar panel options may be available to Denver in the future.

5.1 STANDARD POWERED LIGHTING

Luminaires are usually powered through connecting them to the electrical grid in their area upon installation. The typical approach to feeding power to grid-connected luminaires starts with the primary power. An existing transformer near the lighting locations may be used to provide this power, or a new transformer may be placed by the utility. 120V AC is typical. The utility will make the final connection between the transformer and a meter.

After the meter is set up, a circuit breaker panel feeds the various branch feeder circuits with electrical power. From this circuit breaker panel, conduit and wiring extends out to the lighting locations for a typical underground electrical installation. Wires connect the lights to the panel, which is connected through the meter back to the primary power source. Typical billing mechanisms include metered rates and utility-owned flat rates. This process and its costs are familiar to many. Many technologies have been developed to reduce energy consumption and its accompanying costs, such as part-night dimming.

LED light sources are typically installed now. Legacy light sources, such as high-pressure sodium or metal halide are still in use, but they are not often used for new installations. LED lights are already highly efficient and help to reduce energy consumption and the resultant bills.

Solar-powered luminaires can eliminate these energy bills entirely.

5.2 SOLAR POWERED LIGHTING

Solar-powered lighting has many advantages related to environmental impact, energy costs, installation costs, and operations and maintenance. Solar-powered lighting uses renewable energy harnessed from the sun, does not consume fossil fuels, and does not produce greenhouse gas emissions. It better supports Denver’s climate impact commitments than standard power options can.

Installing solar-powered lighting avoids the material and labor costs of wiring, conduit, splice boxes, a utility meter, and/or a circuit breaker panel. When a small number of luminaires need to be installed, or when existing power sources are not located near the planned lighting locations, solar-powered lighting is successful by having solar panels and batteries installed on each pole. As a result, power generation is located near the loads, time can be saved by avoiding utility mobilization to connect power to the loads, and maintenance of underground wiring can be avoided.

For general maintenance and ongoing operations, a benefit of solar-powered lighting is that it will continue to operate during utility power outages. There is limited conduit to maintain, if any. Many of the panel options are very durable and 5-year manufacturer warranties are now common. Some manufacturers also offer programmable controls that can be used with a remote or with a smartphone.

There are some challenges and disadvantages to incorporating solar-powered lighting into Denver's trail system. Adding these new products will increase the overall product inventory Denver needs to maintain. Another consideration is that although solar-powered systems can operate in power outages, they also cannot rely on utility electric grids for backup when their batteries are depleted. These batteries will eventually require replacement, though the savings on installation costs mean that solar-powered systems still compare favorably to wired systems when battery replacement costs are included. Several of these pros and cons of solar-powered lighting are listed below.

Pros of Solar

- Environmental
  - Uses renewable energy
  - Supports Denver's climate goals
- Cost
  - Avoids the material and labor costs from installing wiring and conduit
- Installation
  - Can be installed on a shorter time frame
  - Does not require utility mobilization
  - Works very well when a smaller number of lights need to be installed
  - Works very well in locations remote from existing power conduit
- Operations and maintenance
  - Many manufacturers' warranty these products and components for several years
  - Manufacturers offer dimming profiles and programmable solar light options
  - Should continue to operate during most power outages
  - May continue to operate during flooding when solar panels and batteries have been installed above the high water level

Cons of Solar

- Adding new products increases Denver's required equipment inventory
- Batteries will require replacement after a period of time. This varies between equipment options.
- Not suitable for locations where obstructions to direct sunlight exist, such as dense trees and tall buildings
- May not operate every night when there are days with limited sunshine.
  - Even a 99% reliable system will have around 3 days per year when it is not operational.
- Standalone solar systems that are not connected to the state's power grid lack the reliability the grid can provide

Where permanent obstructions like multi-story buildings and mature trees will shade the panel locations, solar-powered systems will have a reduced performance that wired systems would not. When temporary partial shading is present, such as when clouds are passing overhead, this kind of performance reduction is not expected. Solar panels are designed to continue to optimize their power output and are wired to avoid serious power reduction from partial shading. However, solar-powered lights may not operate every night of the year, especially in winter months when daylight hours are at a minimum. This is typically addressed by sizing the panels and batteries to provide sufficient power during the expected winter months in the region, ensuring their year-round operation. Failing to size

batteries and panels sufficiently, orienting the panels improperly, or overlooking environmental conditions such as extreme temperatures could lead to additional negative experiences. Other environmental conditions that could affect the panels could be dust, debris, or inclement weather. Dust can accumulate on solar panels, but typical rainfall cleans away some of this dust periodically. A study of the impact of dust accumulation on solar panel efficiency found that a site in Commerce City, CO had a one percent annual reduction in efficiency to dust accumulation without any maintenance intervention. (Hicks, 2021)

Solar-powered lighting relies on established technologies and can be a reliable, cost-effective lighting solution. It can also be used to increase the adoption of renewable energy in cities and work towards their climate goals. Solar-powered lighting can be used strategically where existing power sources are not nearby, where access to sunlight is easily available, or wherever electrical costs or trenching are important to avoid. However, considering the site-specific challenges of shadowing and adequate access to sunlight, installing solar-powered lighting universally in any city is impractical.

For the larger goal of reducing greenhouse gas emissions and improving a city's overall climate impact, an alternative strategy could be installing grid-connected lighting but also investing in generating more solar power to the grid itself in other locations. Over time, the amount of non-emitting power sources on the grid can be increased this way even when solar powered luminaires are not a practical option.

5.3 EQUIPMENT CRITERIA AND SPECIFICATIONS

All luminaires and equipment used for this lighting study for DPR are described in the following tables. Detailed information is included for four post-top pedestrian luminaire options and two solar power systems. The reasons for their inclusion and the criteria used to select the best options for DPR is also included. Each of these luminaires has their performance evaluated through the schematic designs analyzed in Section 6.

A city-owned wallpack option was also considered briefly for the Cherry Creek site studied in Section 6, but this option was discarded due to site characteristics and its data is not included here. The height of the wall required a mounting height lower than what is intended for the wallpack and didn't allow for the necessity of keeping the luminaire away from potential vandalism. This leads to very poor uniformity for a trail lighting application, with light far too bright directly beneath the wallpack and inappropriate levels of darkness in between. Increasing the amount of wall-packs to address the uniformity quickly led to over lighting.

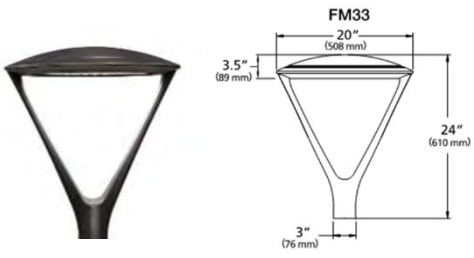


Figure 5-1 – Kim Ouro Luminaire

For luminaires that would remain owned by Xcel Energy, DPR currently has the option of the Kim Ouro luminaire produced by Current Lighting or the K118 Washington acorn produced by King Luminaire. Both are post-tops for pedestrian areas and are suitable for trail applications.

The Kim Ouro has a clean silhouette and is currently used throughout Denver by Xcel Energy. The advantage of this luminaire choice is its uplight score of zero, which supports

Denver's climate commitments and reduces light trespass into the areas around where it's implemented.

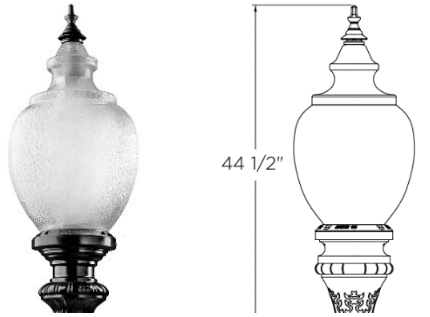


Figure 5-2 – K118 Washington Luminaire

The K118 Washington acorn offers a classic look and is currently used throughout Denver by Xcel Energy. However, it is a poor performer when it comes to uplight and light trespass. The acorn's lack of shielding makes it fundamentally undesirable for cities interested in dark skies. Its light output and visual comfort level may make it suitable for some types of high-activity pedestrian areas, but it is not recommended for general use as trail lighting.

Table 5-1: Luminaire Performance of Xcel-Owned Options

Luminaire Name	CCT's Available	Wattage	Maximum Lumen Output	BUG Rating	Light Distribution	Mounting Height
Kim Ouro	3000K	28.2W	2958	B2-U0-G2	Type III Med.	12'-15'
K118 Acorn	3000K	40.2W	2176	B1-U3-G2	Type IV Med.	12'-15'

For luminaires that would require being owned and maintained by the City the RFL530-SE produced by We-ef Lighting is recommended as the most suitable choice for any trail lighting applications. The Omero by Lithonia Lighting is currently in use for some DPS parks and trails but is more suitable for larger areas.

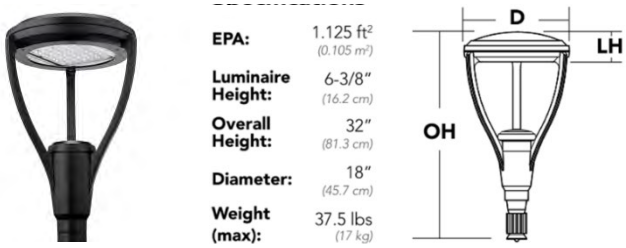


Figure 5-3 – Lithonia Omero Luminaire

The Lithonia Omero has a simple silhouette similar to the Ouro and would blend well with existing lighting throughout Denver. Despite its shape it has an uplight score of two. The lowest lumen output available is much higher than the other luminaires recommended in this study. It also produces more spill light into the area around it than the Ouro or We-ef options, and there are no shielding options offered by the manufacturer. This luminaire should only be considered in high activity areas that are not near residential or natural areas and it is not ideal for trails.

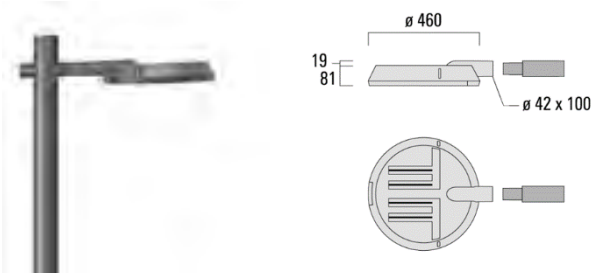


Figure 5-4 – we-ef RFL530-SE Luminaire

The RFL530-SE from we-ef has a more industrial visual character than the other three luminaire options and should blend seamlessly with most streetlighting. It also has an uplight score of zero, as well as low glare. It is available in very narrow lighting distributions that could be an advantage in many trail applications. Additionally, for any we-ef option, a CCT of 2200 can be provided by the company per request. Of these four luminaires, this

makes it a very competitive choice for areas where there is increased ecological sensitivity along the trail.

Table 5-2: Luminaire Performance of Denver-Owned Options						
Luminaire Name	**CCT's Available**	**Wattage**	**Maximum Lumen Output**	**BUG Rating**	**Light Distribution**	**Mounting Height**
Lithonia Omero	3000K	75W	5454	B1-U2-G1	Type II	12'-15'
we-ef RFL530	3000K 2700K	14W	1959	B1-U0-G1	Type II Medium	12'-15'
we-ef RFL530	3000K 2700K	27W	3062	B1-U0-G1	Type II Medium	12'-15'

The following Table 5-3 lists several performance specifications for seven solar power system options for pedestrian luminaires from seven manufacturers. This serves as a starting point for comparing the options currently on the market and available to DPR. The information shown would be included in a typical cutsheet and is important for understanding how the equipment may perform. Where any information was not included online or in cutsheets for the product there is instead a note to contact the manufacturer directly.

Manufacturers play an instrumental role in sizing a system that will have enough panel wattage and battery energy storage to ensure its year-round operation. The different battery chemistries such as lead acid and lithium ion have different characteristics such as their operating temperatures that are important to understand based on the intended equipment location and will be known by the manufacturer. Many solar panels are currently made with mono-crystalline or poly-crystalline silicon. Mono-crystalline silicon solar cells have higher efficiency than poly-crystalline solar cells, but they have a more expensive manufacturing process that adds to their overall cost. Copper Indium Gallium Diselenide (CIGS) is a thin-film solar cell material, which allows the solar panels to be wrapped around the pole in the Clearworld solar system.

Solar-powered systems for lighting are available in several common configurations. These are:

- Pole-mounted solar panel and battery enclosure:
  - A solar panel or panels are mounted to the luminaire's pole, as well as the battery enclosure
- Panels arranged around the pole:
  - Vertical solar panels are arranged around the pole
- All-in-one:
  - The solar panel and battery are integrated into the luminaire itself

Pole-mounted solar panels often have the largest panels to gather the largest amount of sunlight and thus provide the greatest amount of power to charge the battery. One drawback is that the panel

presents a large, flat surface to the wind which can increase the structural requirements for the pole. Panels arranged vertically around the pole can offer better aesthetics along trails as they are much less conspicuous. They can also present less surface area for wind loading. However, the vertical position of the panels is not optimally positioned to absorb the sun, resulting in some decrease in charging. All-in-one systems provide another compact design, but integrating the panel and the battery into the luminaire imposes size constraints that limit power and energy storage. There are also systems that use one solar collection system (i.e., panels, batteries, and electronics) to then power several luminaires. This has the potential to power adjacent lights which are shaded, such as by trees. This option requires additional conduit and wiring to connect multiple luminaires through a solar system, driving up its price.

Table 5-3: Performance of Solar Power Options

Solar Panel Manufacturer	System Configuration	Solar Panel Wattage	Solar Panel Material	Battery Energy Storage (Ah)	Battery Chemistry	Lumen Output	System Standard Warranty
Greenshine	Pole-mounted	110W	Silicon	80	Gel Lead Acid	2,600	5-year
ClearWorld	Pole-wrapped	260W	CIGS	60	Lithium Ion	6,480	10-year
Selux	Pole-mounted	110W	Silicon	118	AGM Lead Acid	2,210	5-year
Sol	Pole-mounted	Contact Mfr.	Silicon	Contact Mfr.	AGM Lead Acid	Up to 12,800	5-year
First Light	All-in-one	Contact Mfr.	Silicon	Contact Mfr.	LiFEPO4	1,250	Contact Mfr.
Signify	All-in-one	35W	Silcon	20	LiFEPO4	2,000	5-year
Ragni	Pole-wrapped	100W	Silicon	Contact Mfr.	LiFEPO4	1,000 – 5,600	Contact Mfr.

The characteristics in Table 5-3 should remain comparable if other solar-powered options are considered by DPR. The all-in-one systems would require the use of their luminaires. ClearWorld has shown significant flexibility adapting their system to various poles. How flexible the manufacturers can be as far as adapting their systems to different luminaires will vary. Additional options for luminaires and equipment that would work well for DPR's needs may become available now or in the future. The luminaires and the solar equipment specifications in this section comply with the expectations for outdoor lighting currently being used in the City and County of Denver.

General Specifications

Other general information about luminaires and their warranty expectations that was the most relevant to this trail lighting study are included below in Table 5-4. Please refer to the Street Lighting

Design Guidelines & Details document that Denver produced in 2019 for more detail on luminaire requirements if necessary (CCD, 2019).

Table 5-4: General Luminaire Specifications	
Item	**Description**
Correlated Color Temperature (CCT)	3000K Maximum in Denver 2700K Suitable in residential areas and parks 2200K Preferred near Open Space, Waterways, Natural Habitat areas
Color Rendering Index (CRI)	≥70
Impact Rating (IK)	IK07 acceptable, IK08 suitable for general areas at risk of vandalism, IK10 recommended for lights mounted on walls, underdeck, or other locations with easier access to the luminaire and higher risks of damage
IP Rating	IP66 or greater
Luminaire Warranty	10 years minimum on luminaire and components.
Luminaire Warranty Period	Earliest warranty period allowed shall start on the date of receipt by City.

In addition to the options DPR has for luminaires and solar-powered systems, there are several control system technologies and strategies suitable for trail lighting. These, like shielding and appropriate light temperatures, play a role in improving light pollution and trespass in cities like Denver. Control strategies for outdoor lighting include dimming systems, astronomical timeclocks, and motion detection.

Dimming reduces the light output of luminaires during the times when it is not needed, such as when trail usage is known to be very low. LED drivers compatible with multiple styles of lighting control systems such as 0-10V dimming, digital multiplex (DMX), or digital addressable lighting interface (DALI) provide flexibility for future changes. 0-10V dimming systems are currently the most common system in the United States. DMX and DALI systems are protocols for sending control signals out to compatible lights.

Timeclocks can be used to change when lights turn on and off throughout the year as sunrise and sunset times change seasonally. This is often done through the use of a photocell added to the luminaire and is common in outdoor lighting.

Motion detection can be used to light trails only when trail users are present. Motion sensors may include cameras, radar, or infrared sensors to detect the activity trail users and either turn on the lights or increase the light level. During research done jointly by Clanton & Associates and Pacific Northwest National Laboratory, motion sensing using infrared sensors was not found to be commercially viable for general outdoor use. Additional motion sensing methods and products may be available but have not been utilized by Clanton & Associates at this time.

Section 6

Lighting Study Sites

6 LIGHTING STUDY SITES

DPR provided two trail sites approximately half a mile in length for to be used to develop schematic lighting designs and analyze their performance against IES criteria and the trail's context. Both trail sites are regional trails near the downtown core of Denver and are generally roughly in parallel to waterways. The first site studied was a section of the South Platte River Regional Trail and the second was a section of the Cherry Creek Regional Trail. Both sites are among the busiest in the trail system, so continuous lighting is recommended for the safety of trail users.

The main factors being studied in this lighting analysis were how well these luminaires were able to meet the necessary criteria for safety and visibility, if the uniformity of the light would be pleasant for all trail users, and how the lighting would impact the environment of the nearby waterways.

6.1 SOUTH PLATTE REGIONAL TRAIL

This trail site parallels the South Platte River on the north side of Denver. This area currently has a mix of land uses and several bridges for traffic and rail crossings. Several tall buildings are under construction to the south and east of the trail. This area has been more industrial in the past but it is densifying and further diversifying in its land uses. Trail usage in this area is expected to increase over time.

Special considerations needed for this site are the impacts of lighting at night on the ecological health of the South Platte River. Even small amounts of light on the water's surface can affect the behavior of flora and fauna living in the river. This can contribute to lowered water quality as the aquatic ecosystem becomes unbalanced. Light spilling past the trail surface and into the riparian buffer is also important to avoid as it is detrimental to the habitat of local and migratory species.

Figure 6-1 – South Platte River Regional Trail Study Area

From this half mile area a 500' segment that had the most consistent dimensions and was indicative of the overall character of the site was selected for a more detailed photometric analysis. This portion of the site is seen in Figure 6-2 following.

Figure 6-2 – South Platte River Regional Trail Study Site

This portion of the study area was then diagramed and used as the basis of a lighting layout to generate calculations of the schematic lighting design's performance. These schematic designs would be the same for an electrical or solar-powered trail lighting system. These calculations show whether the lighting design has sufficient light to safely use the trail after dark, has acceptable uniformity for visual comfort and lighting quality, and if there is over lighting with the design. The calculations also show how much light is trespassing past the trail surface intended to be lit and where that spill light occurs.

The IES criteria used for this study is for the category Mixed Cycling and Pedestrian Paths from Table A-3 on page 49 of IES RP-43-22. The relevant details are included in this report in Table 4-1. This is the most likely set of lighting criteria to be used for any trail in the DPR system, so it was selected over the criteria for Walking Surfaces Adjacent to Waterfront found in Table 4-2, though that set of criteria could also be applied to this site.

As this trail is close to a river, we have applied the criteria for Lighting Zone 1. This is the lowest light level suitable for use within Denver. For denser areas of downtown, the criteria for Lighting Zone 2 may also be appropriate even when near waterways. The lowest criteria suitable for a site is always used as the starting point for a lighting design. Whenever criteria is being chosen at a boundary condition, such as where two different lighting zones will share a boundary or two land uses, it is preferred to select the stricter criteria in order to avoid any issues of light trespass. The lowest criteria suitable for a site is always used as the starting point for a lighting design. These decisions are made on a site-by-site basis by the lighting designer.

The minimum appropriate FC average for this use in LZ1 is 0.4 FC. The maximum appropriate FC average is 0.8 FC for LZ1. For LZ2 this maximum would be 1.5 FC and 0.8 FC would be the minimum. For both zones the appropriate range for uniformity is an average FC to minimum FC of 5:1. This range ensures both enough uniformity and enough contrast is being generated by the trail lighting for good visibility.

6.1.1 KIM OURO LUMINAIRE – XCEL-OWNED

This lighting design calculation examined the performance of the Kim Ouro luminaire in lighting a 500’ length of regional trail at 100’ spacing on center. While a closer spacing could increase uniformity, it is not necessary to meet the criteria and would increase the overall costs. The luminaires are set back from the trail surface 3’ per current typical installation guidelines. This section of trail is bordered on one side by riparian shoreline and the other by open space.

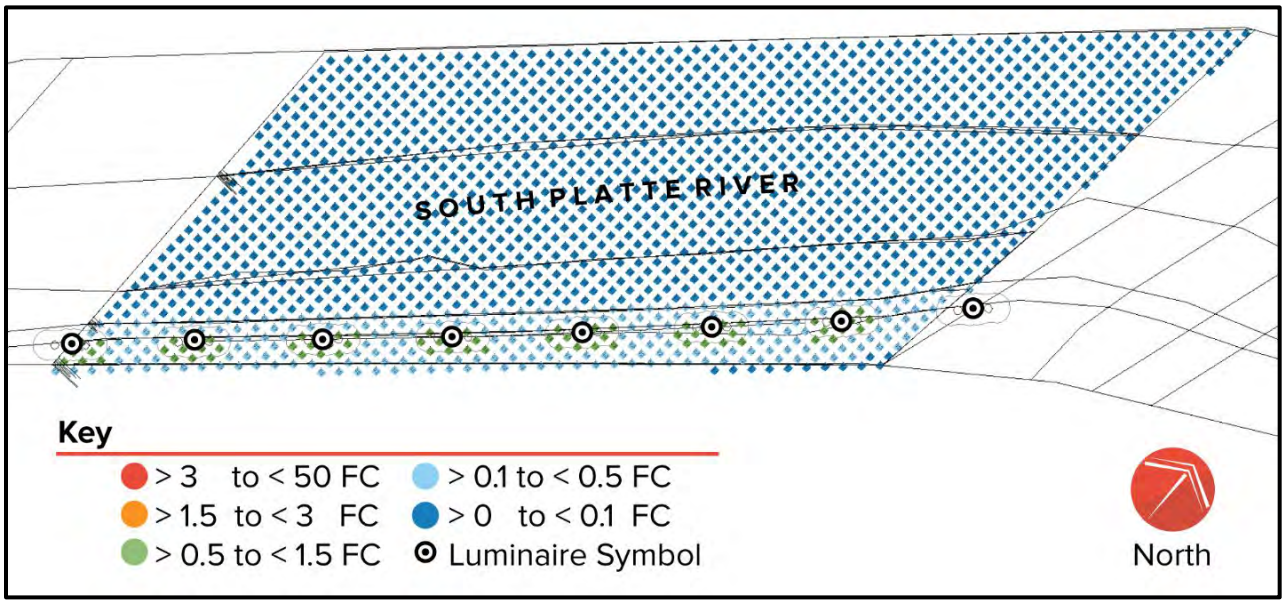
Luminaire

The Kim Ouro has a clean silhouette and is currently used throughout Denver by Xcel Energy. The advantage of this luminaire choice is its uplight score of zero, which supports Denver’s climate commitments and reduces light trespass into areas around where it’s implemented.

Performance details for this luminaire can be found in Table 5-1.

Luminaire Layout and Calculation Grid

The lighting calculation grid shows that the light from this design is relatively uniform along the trail surface and very little light is spilling forward into the riparian buffer. The light reaching the river’s surface is very negligible, only measurable along the shoreline. A significant amount of light is falling on the open space buffer where the luminaire is sited, but that may not be a major concern for this site.



Calculation Summary Tables

The following two tables show how this layout performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

Table 6-1: South Platte Trail - Kim Ouro Luminaire at 100' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surface	**Criteria**				
	Eavg (fc) **0.8**	**Emax (fc)** **---**	**Emin (fc)** **---**	**Eavg/Emin (fc)** **5:1**	**Emax/Emin (fc)** **---**
Trail Surface	0.45	0.9	0.2	2.25	4.5

This table shows the trail surface itself to be within the criteria being studied. A footcandle average of 0.45 FC is an acceptable amount of illuminance. An FC average of 0.4 is the minimum for this criteria. The uniformity is also in the correct range for the usage expected, so visibility and visual comfort should be good for users.

Table 6-2: South Platte Trail - Kim Ouro Luminaire at 100' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) **---**	**Emax (fc)** **0.1**	**Emin (fc)** **---**	**Eavg/Emin (fc)** **---**	**Emax/Emin (fc)** **---**
Riparian Buffer	0.08	0.3	0	N.A.	N.A.
Streetside Buffer	0.41	1.1	0.1	4.1	11
South Platte River Surface	0	0	0	N.A.	N.A.

This table shows what amount of light in this design that is measurable past the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. This design and luminaire do an excellent job keeping light off the river surface. The light level in the riparian buffer exceeds criteria, but not by a large number and the calculation grid shows that the areas closest to the river that would be the most sensitive to interference from light remain very dark. There is a more significant amount of backlight in the streetside buffer, but in this trail scenario there are no nearby residences to be disturbed so it is a lower priority when considering light trespass.

6.1.2 LITHONIA OMERO LUMINAIRE – CITY-OWNED

This lighting design calculation examined the performance of the Lithonia Omero luminaire in lighting a 500’ length of regional trail at 100’ spacing on center. The luminaires are set back from the trail surface 3’ per current typical installation guidelines. This section of trail is bordered on one side by riparian shoreline and the other by open space.

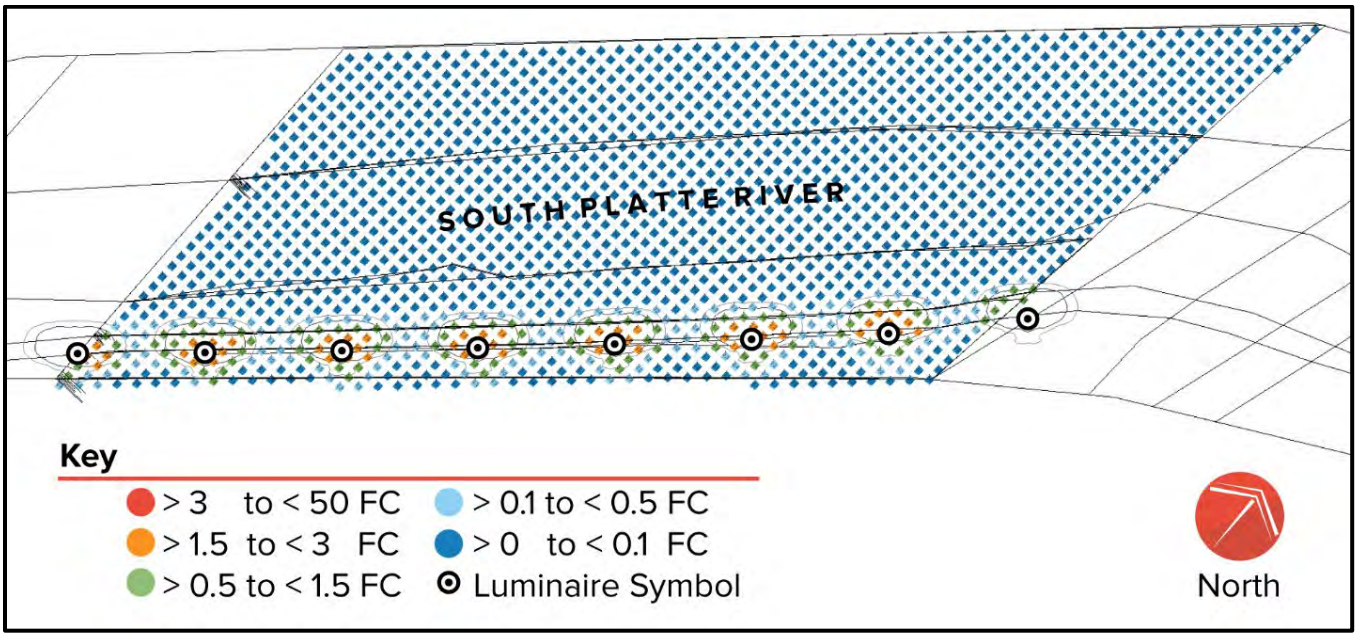
Luminaire

The Lithonia Omero has a simple silhouette similar to the Ouro and would blend well with existing lighting in Denver. Despite its shape it has an uplight score of two. It tends to produce more spill light into the area around it more than the Ouro or we-ef options, which is typically a disadvantage for trail lighting.

Performance details for this luminaire can be found in Table 5-2.

Luminaire Layout and Calculation Grid

The calculation grid shows the light being produced by this design is less even, with noticeable reductions in light levels between the luminaires and brighter levels directly underneath them. There is little light spilling into the riparian buffer. Any light reaching the river’s surface appears negligible. There is some light spilling backwards into the streetside buffer, but it is concentrated close by the luminaires.



Calculation Summary Tables

The following two tables show how this layout with the Omero performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

Table 6-3: South Platte Trail – Lithonia Omero Luminaire at 100' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surface	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail Surface	1.44	3.0	0.2	7.2	15

This table shows the trail surface itself exceeds the selected criteria. A footcandle average of 1.44 FC is too high for the LZ1 criteria. It is also very close to the upper limit for LZ2, which would be 1.5 FC. The uniformity exceeds the requirement for either zone, meaning there would be noticeable changes in the light level between luminaires for trail users.

Table 6-4: South Platte Trail – Lithonia Omero Luminaire at 100' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
Riparian Buffer	0.24	1.9	0	N.A.	N.A.
Streetside Buffer	0.43	2.0	0.1	4.1	11
South Platte River Surface	0	0	0	N.A.	N.A.

This table shows what amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. This design and luminaire do an excellent job keeping light off the river surface. However, the light level in the riparian buffer and streetside buffer both exceed this criteria by a significant amount. This suggests this luminaire may be a better fit for trails with more urbanized surroundings where this spill light could be useful for human activity rather than along a trail through more ecologically sensitive greenspaces.

6.1.3 LUMINAIRE WE-EF RFL530

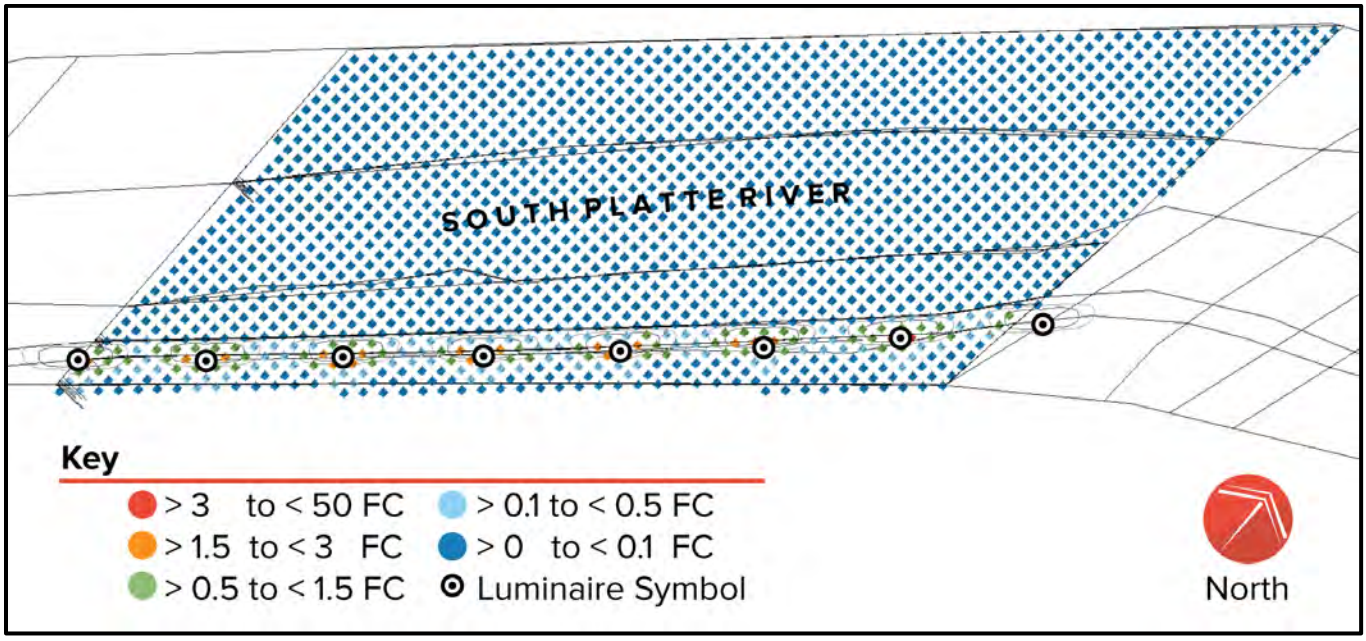
This lighting design calculation examined the performance of the we-ef RFL530 luminaire in lighting a 500’ length of regional trail at 100’ spacing on center. The luminaires are set back from the trail surface 3’ per current typical installation guidelines. This section of trail is bordered on one side by riparian shoreline and the other by open space.

Luminaire

The RFL530-SE from we-ef has a more industrial visual character than the other three luminaire options and should blend seamlessly with most streetlighting. It also has an uplight score of zero, as well as low glare. It is available in very narrow light distributions that could be an advantage in many trail applications. It’s also available in a low CCT of 2200K by request, an advantage in sensitive ecological areas. Performance details for this luminaire can be found in Table 5-2.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by this design with the we-ef is very well confined to the trail area. The river and shoreline are very dark. There are some brighter spots directly beneath the luminaires and some backwards spill light, but overall the lighting on the trail appears to be even and sufficient.



Calculation Summary Tables

The following two tables show how this design using the we-ef performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

Table 6-5: South Platte Trail – we-ef RFL530 Luminaire at 100' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surface	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail Surface	1.02	3.4	0.2	5.1	17

This table shows the trail surface itself to exceed the criteria being studied, but not by as large an amount as some of the other luminaires. A footcandle average of 1.02 FC is still too high for the LZ1 criteria. The uniformity here is 5.1, exactly at the upper limit of this set of criteria. Exceeding the uniformity criteria does not necessarily improve visibility as contrast and shadow are also needed. It is often necessary to adjust the luminaire spacing for the needs of the site once the design is past the schematic stage, making uniformity a slightly lesser concern than light levels at the schematic stage.

Table 6-6: South Platte Trail – we-ef RFL530 Luminaire at 100' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
Riparian Buffer	0.03	0.2	0	N.A.	N.A.
Streetside Buffer	0.31	2.7	0	N.A.	N.A.
South Platte River Surface	0	0	0	N.A.	N.A.

This table shows what amount of spill light there is with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. This design and luminaire do an excellent job keeping light off the river surface. The light level in the riparian buffer only slightly exceeds criteria and the calculation grid shows that the areas closest to the river that are the most sensitive to light remain very dark. There is a more significant amount of backlight in the streetside buffer, but in this trail scenario there are no nearby residences to be disturbed so it is a lower priority for light trespass.

6.2 CHERRY CREEK STUDY SITE

This trail site provided by DPR runs along both sides of Cherry Creek for a significant length of downtown. This area supports a mix of residential and retail land uses, a busy street, community park spaces, and nearby entertainment destinations. It is a lively and diverse area when it comes to land use patterns. The site is also distinctive due to the amount of historic bridges crossing over the trail. Trail usage and general pedestrian activity in this area is high.

Special considerations for this site are the impacts of lighting at night on the ecological health of the Cherry Creek, potential light trespass into nearby residential windows, and how to provide adequate light for both the upper and lower pedestrian paths on the Speer Boulevard side of Cherry Creek.

Even small amounts of light on the water's surface can affect the behavior of flora and fauna living in the river, and efforts to improve the health of the Cherry Creek waterway are ongoing. Light spilling into the water or the riparian buffers on either side of the creek needs to be avoided.

A key design consideration for this site was to reuse the existing concrete footings and spacing of approximately 60' on center that are currently in place. The luminaires there now are older and nearing the end of their service life but their placement has been an important part of the visual character of this trail area. This close of a spacing is not typically necessary to meet the expected uniformity criteria, but it is still within an acceptable range. This spacing is the same on either side of the creek along the top of the channel walls, but the usages of the upper deck pathways on either side are different. To address this issue, the lighting designs use a standard post top for the eastern shore of the trail and a dual-headed option on the western shore. This provides more light for anyone coming to and from the parks on the western side and reduces the potential light trespass into residences along the eastern side of the creek.

Figure 6-3 – Cherry Creek Regional Trail Study Area

From this half mile area a 500' segment that had the most consistent dimensions and was indicative of the overall character of the site was selected for a more detailed photometric analysis. This portion of the site is seen in Figure 6-4 below.

Figure 6-4 – Cherry Creek Regional Trail Study Site

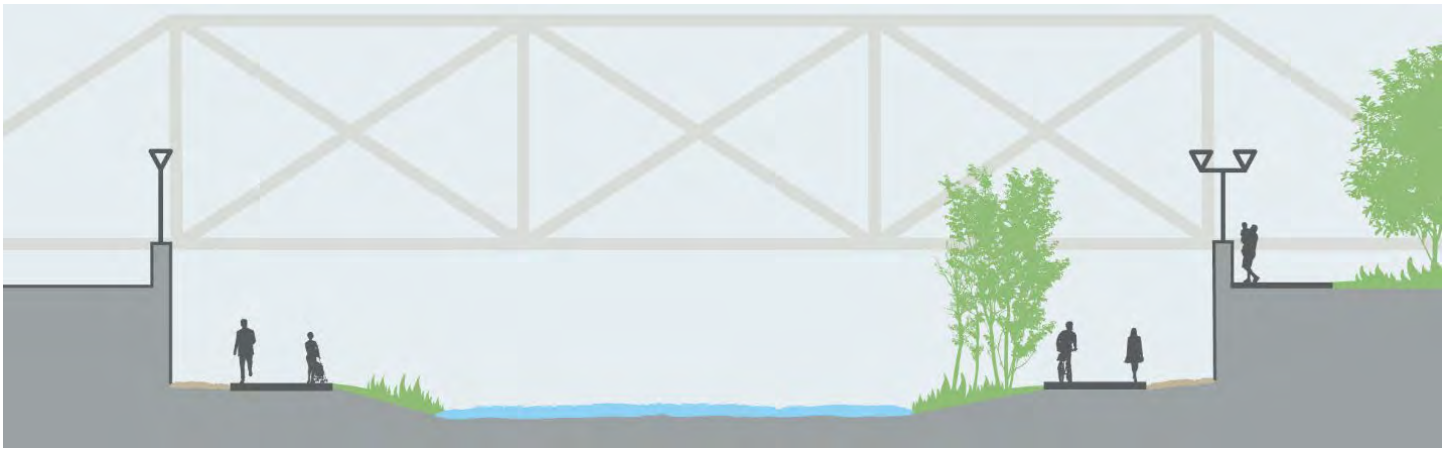
This portion of the study area was then diagramed and used as the basis of a lighting layout with which to generate calculations of the schematic lighting design's performance. These schematic designs would be the same for an electrical or solar-powered trail lighting system. These calculations show whether the lighting design has sufficient light to safely use the trail after dark, has acceptable uniformity for visual comfort and lighting quality, and if there is over lighting with the design. The calculations also show how much light is trespassing past the trail area intended to be lit and where that spill light occurs.

The IES criteria used for this study is for the category Mixed Cycling and Pedestrian Paths from Table A-3 on page 49 of IES RP-43-22. The relevant details are included in this report in Table 4-1. This is the most likely set of lighting criteria to be used for any trail in the DPR system, so it was selected over the criteria for Walking Surfaces Adjacent to Waterfront found in Table 4-2, though that set of criteria could also be applied to this site.

As this trail is very close to a creek, the criteria for Lighting Zone 1 has been applied. This is the lowest light level suitable for use within Denver. For denser areas of downtown, the criteria for Lighting Zone 2 may also be appropriate. The lowest criteria suitable for a site is always used as the starting point for a lighting design. Whenever criteria is being chosen at a boundary condition, such as where two different lighting zones will share a boundary or two land uses, it is preferred to select the stricter criteria in order to avoid any issues of light trespass. The lowest criteria suitable for a site is always used as the starting point for a lighting design. These decisions are made on a site-by-site basis by the lighting designer.

The minimum appropriate FC average for this use in LZ1 is 0.4 FC. The maximum appropriate FC average is 0.8 FC for LZ1. For LZ2 this maximum would be 1.5 FC and 0.8 FC would be the minimum. For both zones the appropriate range for uniformity is an average FC to minimum FC of 5:1. This range ensures both enough uniformity and enough contrast is being generated by the trail lighting for good visibility.

6.2.1 KIM OURO LUMINAIRE – XCEL-OWNED



This lighting design calculation examined the performance of the Kim Ouro luminaire in lighting a 500’ length of regional trail at 60’ spacing on center on average. This is to reuse the existing footings. The luminaires are set along the existing concrete railing structure that runs on both sides of the trail. Both trails are bordered by riparian shoreline that varies in width on one side.

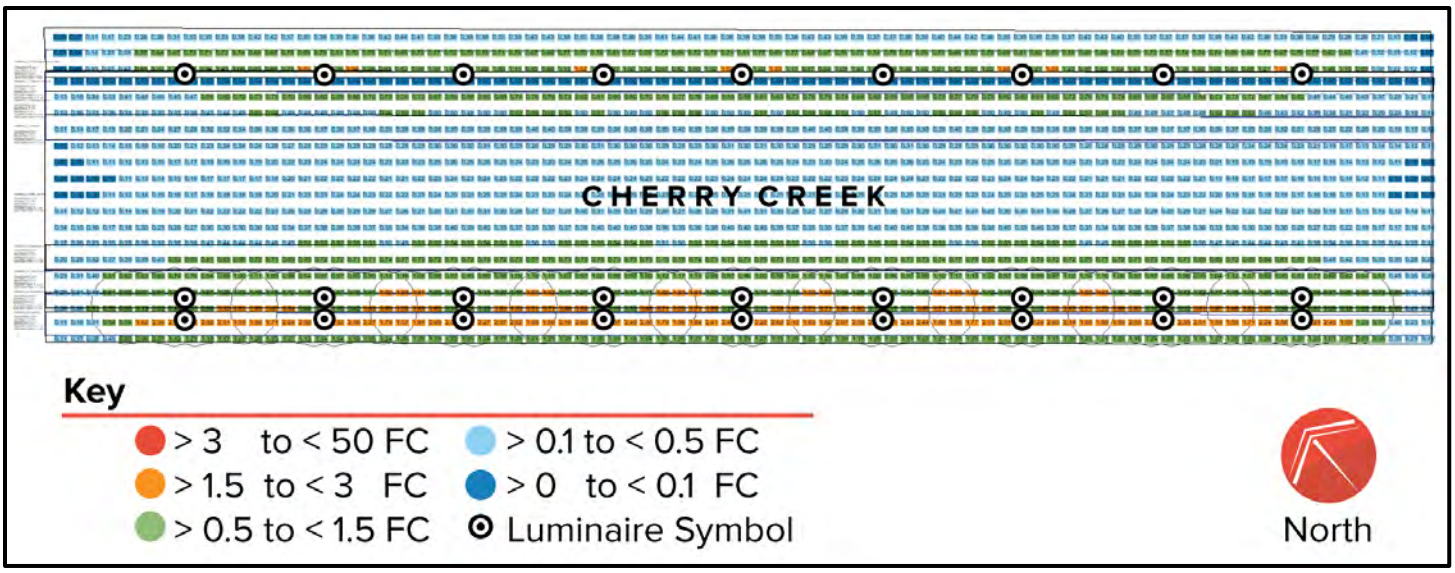
Luminaire

The Kim Ouro has a clean silhouette and is currently used throughout Denver by Xcel Energy. The advantage of this luminaire choice is its uplight score of zero, which supports Denver’s climate commitments and reduces light trespass into areas around where it’s implemented.

Performance details for this luminaire can be found in Table 5-1.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by the design is sufficient for both regional trails but is too intense for the upper deck by the park. There is also a significant amount of light spilling down into the creek and riparian buffers.



Calculation Summary Tables

The following two tables show how this design using the Kim Ouro performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

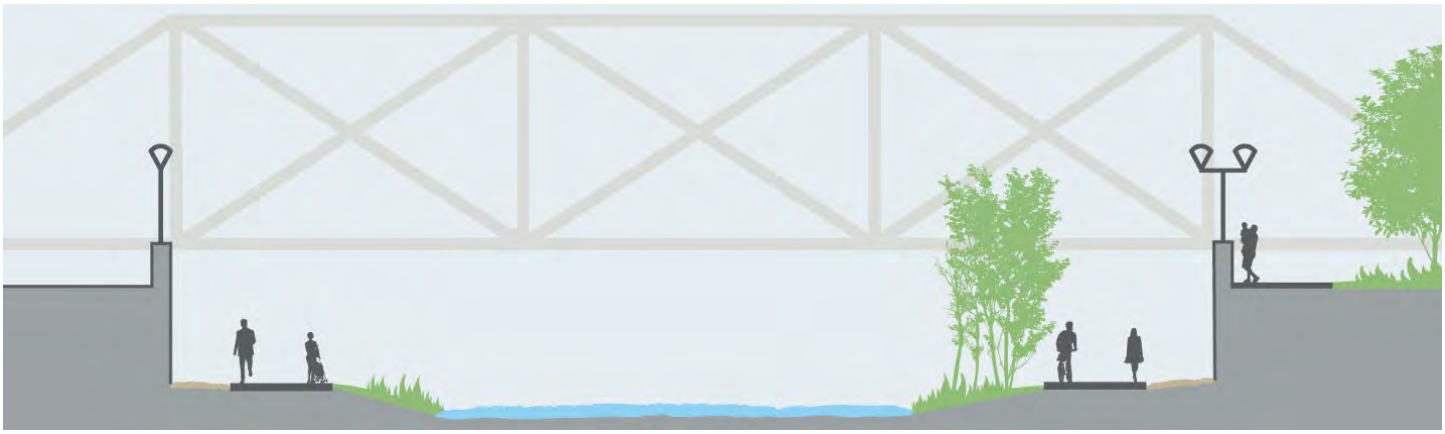
Table 6-7: Cherry Creek Trail – Kim Ouro Luminaire at 60' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surfaces	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail - East Bank	0.4	0.6	0.2	2.0	3.0
Trail - West Bank	1.13	1.7	0.6	1.9	2.8
West Upper Deck	1.68	2.5	1.11	1.5	2.3

This table shows the east trail surface is right at the lower limit for the criteria being studied but the west trail surface exceeds it for LZ1. The upper deck surface significantly exceeds the criteria. This may imply a higher pole height would be needed here. All three surfaces meet the uniformity criteria and would provide a good visual experience for the user in that regard.

Table 6-8: Cherry Creek Trail Lighting Study – Kim Ouro Luminaire at 60' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
East Riparian Buffer	.39	0.4	0.3	1.3	1.33
Cherry Creek Surface	.31	0.6	0.2	1.6	3
West Riparian Buffer	.71	0.8	.06	1.18	1.33

This table shows the amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. Both riparian buffers exceed this criteria. Another concerning number is 0.6 FC on the creek's surface. The luminaire locations along the high wall make it more complicated to control the spill light from many luminaires.

6.2.2 LITHONIA OMERO LUMINAIRE – CITY-OWNED



This lighting design calculation examined the performance of the Lithonia Omero luminaire in lighting a 500’ length of regional trail at 60’ spacing on center on average. This is to reuse the existing footings. The luminaires are set along the existing concrete railing structure that runs on both sides of the trail. Both trails are bordered by riparian shoreline that varies in width on one side.

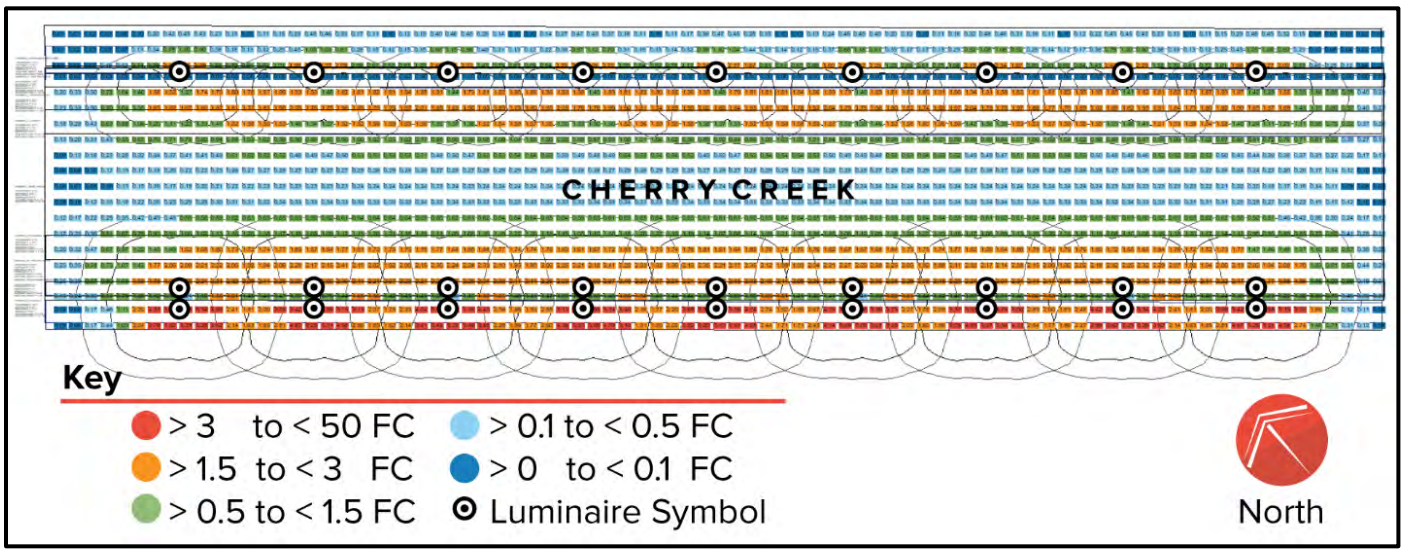
Luminaire

The Lithonia Omero has a simple silhouette similar to the Ouro and would blend well with existing lighting in Denver. Despite its shape it has an uplight score of two. It tends to produce more spill light into the area around it more than the Ouro or we-ef options, which is typically a disadvantage for trail lighting.

Performance details for this luminaire can be found in Table 5-2.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by the Lithonia Omero with this design is too intense for the needs of this space. The trails are consistently lit over the criteria and so are showing on the grid in orange. There is a significant amount of light spilling into the creek and an excessive amount falling on the riparian buffers.



Calculation Summary Tables

The following two tables show how the layout using the Lithonia Omero performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

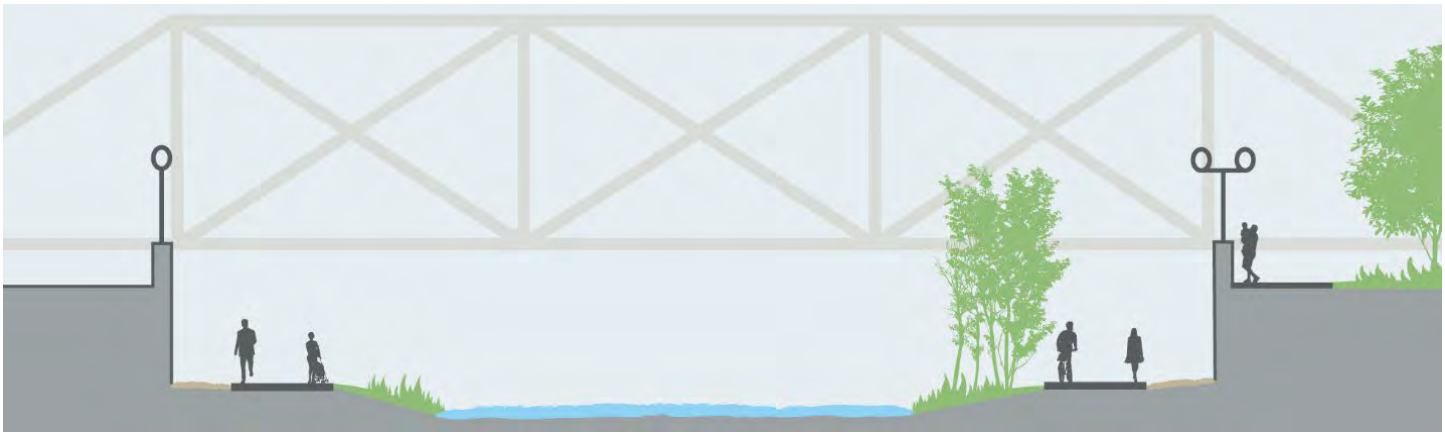
Table 6-9: Cherry Creek Trail – Omero Luminaire at 60' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surfaces	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail - East Bank	1.87	2.1	1.7	1.1	1.24
Trail - West Bank	2.19	2.4	1.7	1.29	1.41
West Upper Deck	3.6	5.7	1.6	2.25	3.56

This table shows the all the pavement surfaces exceed recommended criteria for LZ1. They also noticeably exceed the 1.5 FC average maximum for LZ2. This may imply a higher pole height would be needed here or a luminaire producing fewer lumens. All three surfaces meet the uniformity criteria and would provide a good visual experience for the user in that regard.

Table 6-10: Cherry Creek Trail – Omero Luminaire at 60' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
East Riparian Buffer	1.59	1.6	1.2	1.24	1.33
Cherry Creek Surface	0.47	1.2	0.1	4.7	12
West Riparian Buffer	1.73	1.8	1.5	1.15	1.2

This table shows the amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. Both riparian buffers exceed this criteria. Another concerning number is 1.2 FC reaching the creek's surface. The luminaire locations along the high wall make it more complicated to control the spill light from many luminaires.

6.2.3 K118 WASHINGTON ACORN LUMINAIRE – XCEL-OWNED



This lighting design calculation examined the performance of the K118 Washington Acorn luminaire in lighting a 500’ length of regional trail at 60’ spacing on center on average. This is to reuse the existing footings. The luminaires are set along the existing concrete railing structure that runs on both sides of the trail. Both trails are bordered by riparian shoreline that varies in width on one side.

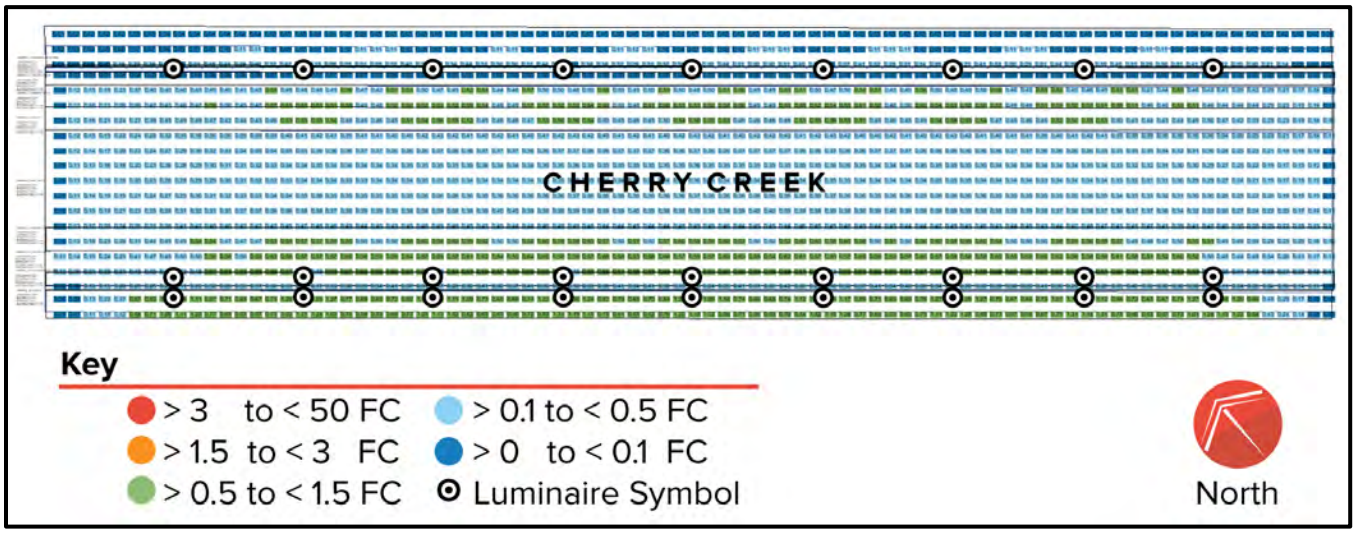
Luminaire

The K118 Washington acorn offers a classic look and is currently used throughout Denver by Xcel Energy. While it is a poor performer when it comes to uplight, its light output can sometimes be appropriate for pedestrian areas, and it is visually comfortable for pedestrians or other trail users.

Performance details for this luminaire can be found in Table 5-1.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by this design using the acorn is less intense and in some places is more uniform than that from the Omero. There is a significant amount of light spilling into the riparian buffers. The entire creek is also receiving a low amount of spill light.



Calculation Summary Tables

The following two tables show how the layout using the K118 Washington acorn performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

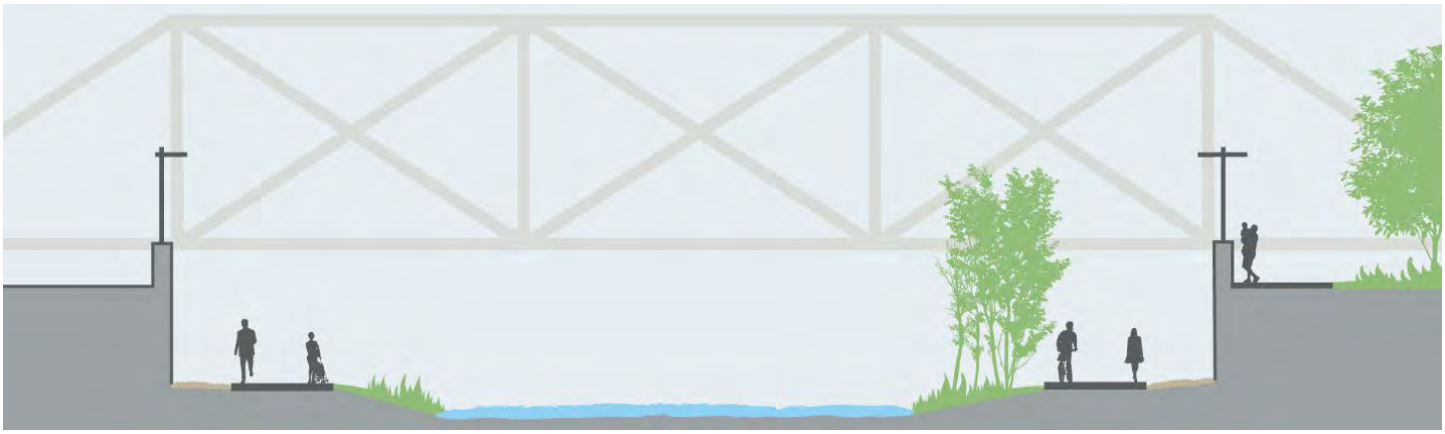
Table 6-11: Cherry Creek Trail – K118 Washington Luminaire at 60' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surfaces	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail - East Bank	0.54	0.6	0.5	1.08	1.2
Trail - West Bank	0.59	0.7	0.3	1.97	2.33
West Upper Deck	.91	1.38	0.52	1.75	2.65

This table shows the two creek trail surfaces to be within the criteria being studied. The upper deck exceeds the average illuminance criteria slightly at .91 FC. All three surfaces meet the uniformity criteria.

Table 6-12: Cherry Creek Trail – K118 Washington Luminaire at 60' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
East Riparian Buffer	0.51	0.6	0.4	1.28	1.5
Cherry Creek Surface	0.35	0.5	0.3	1.23	1.7
West Riparian Buffer	0.55	0.6	0.5	1.1	1.2

This table shows the amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. Both riparian buffers exceed this criteria. The average of .35 FC on the creek's surface exceeds this criteria, and the grid shows light is impacting the entire water's surface. Even at the lower levels seen with this luminaire, this is far from ideal. The luminaire locations along the high wall make it more complicated to control the spill light from many luminaires.

6.2.4 WE-EF RFL530 LUMINAIRE – CITY-OWNED



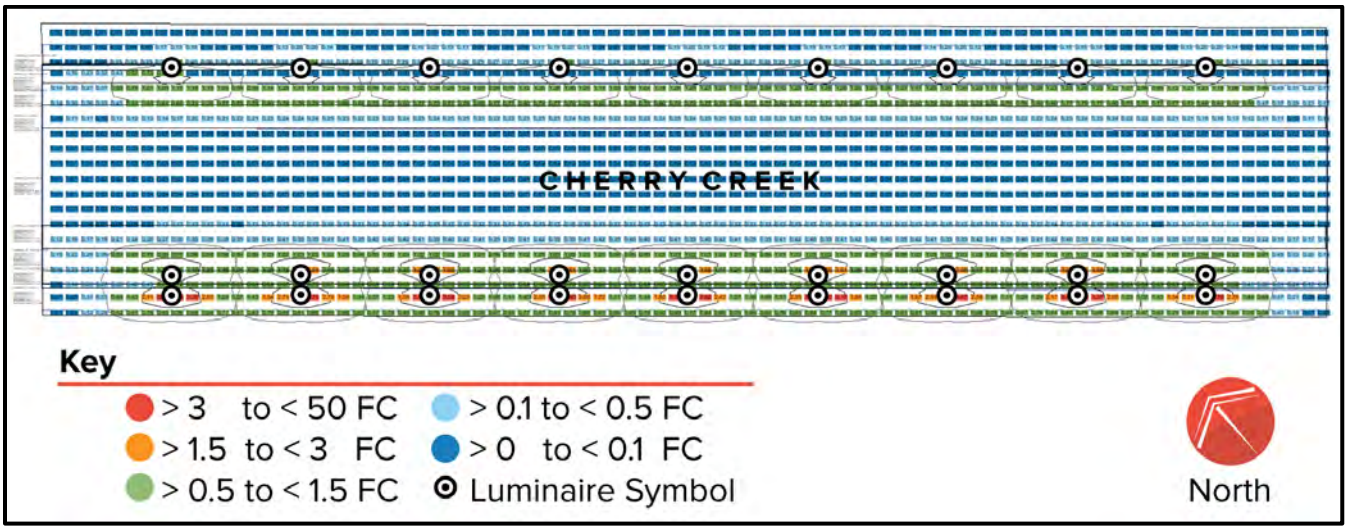
This lighting design calculation examined the performance of the we-ef RFL530 luminaire in lighting a 500’ length of regional trail at 60’ spacing on center on average. This is to reuse the existing footings. The luminaires are set along the existing concrete railing structure that runs on both sides of the trail. Both trails are bordered by riparian shoreline that varies in width on one side.

Luminaire

The RFL530-SE from we-ef has a more industrial visual character than the other three luminaire options and should blend seamlessly with most streetlighting. It also has an uplight score of zero, as well as low glare. It is available in very narrow light distributions that could be an advantage in many trail applications. It’s also available in a low CCT of 2200K by request, an advantage in sensitive ecological areas. Performance details for this luminaire can be found in Table 5-2.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by the design is well confined to the trail surfaces compared to the Ouro or Omero. There are some areas of increased intensity directly under the luminaires, but they are minimal. There is some spill light into the riparian buffers, but very little light is spilling out onto the creek’s surface.



Calculation Summary Tables

The following two tables shown how the layout using the we-ef luminaire performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

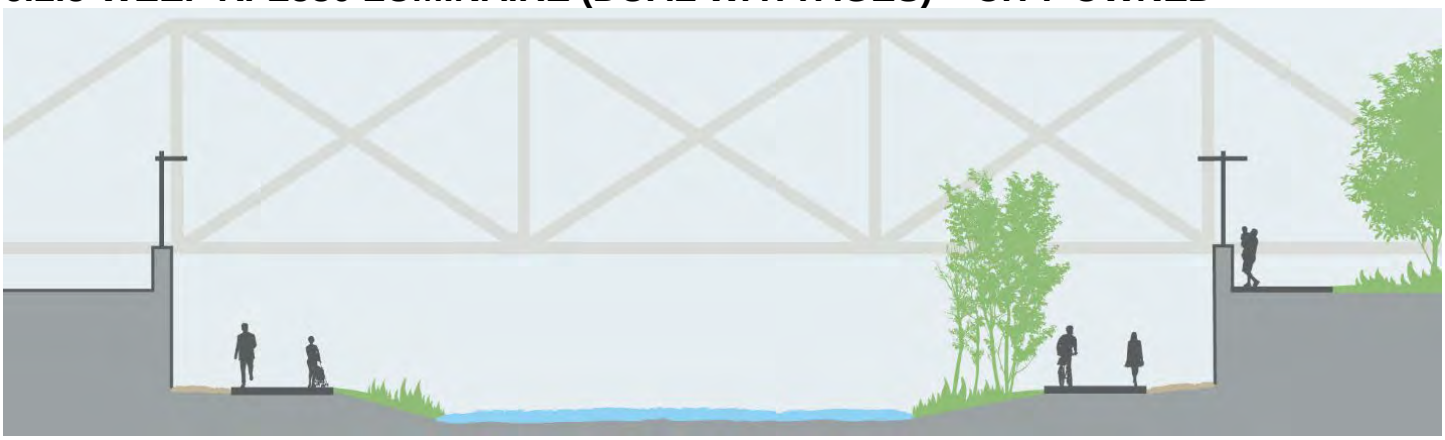
Table 6-13: Cherry Creek Trail – WE-EF Luminaire at 60' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surfaces	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail - East Bank	0.79	0.8	0.7	1.13	1.14
Trail - West Bank	1.34	1.6	1.0	1.34	1.6
West Upper Deck	1.53	3.94	0.76	2.0	5.18

This table shows the trail on the east bank meets criteria. The trail on the west bank exceeds it at 1.34 FC. The upper deck pavement exceeds it at 1.53 FC. This is close to the maximum average footcandle limit of 1.5 FC for LZ2. This may need to be addressed through mounting height. All three surfaces meet the uniformity criteria.

Table 6-14: Cherry Creek Regional Trail – WE-EF Luminaire at 60' Spacing					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
East Riparian Buffer	0.22	0.3	0.2	1.1	1.5
Cherry Creek Surface	0.07	0.2	0	N.A.	N.A.
West Riparian Buffer	0.4	0.4	0.3	1.33	1.33

This table shows the amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. Both riparian buffers exceed this criteria, but these numbers are significantly lower compared to the previous luminaire options. There is 0.2 FC reaching the creek surface, but this is also an improvement. The luminaire locations along the high wall makes it more complicated to control spill light with many luminaires. The we-ef luminaire is the best performer for Cherry Creek in this study.

6.2.5 WEEF RFL530 LUMINAIRE (DUAL WATTAGES) – CITY-OWNED



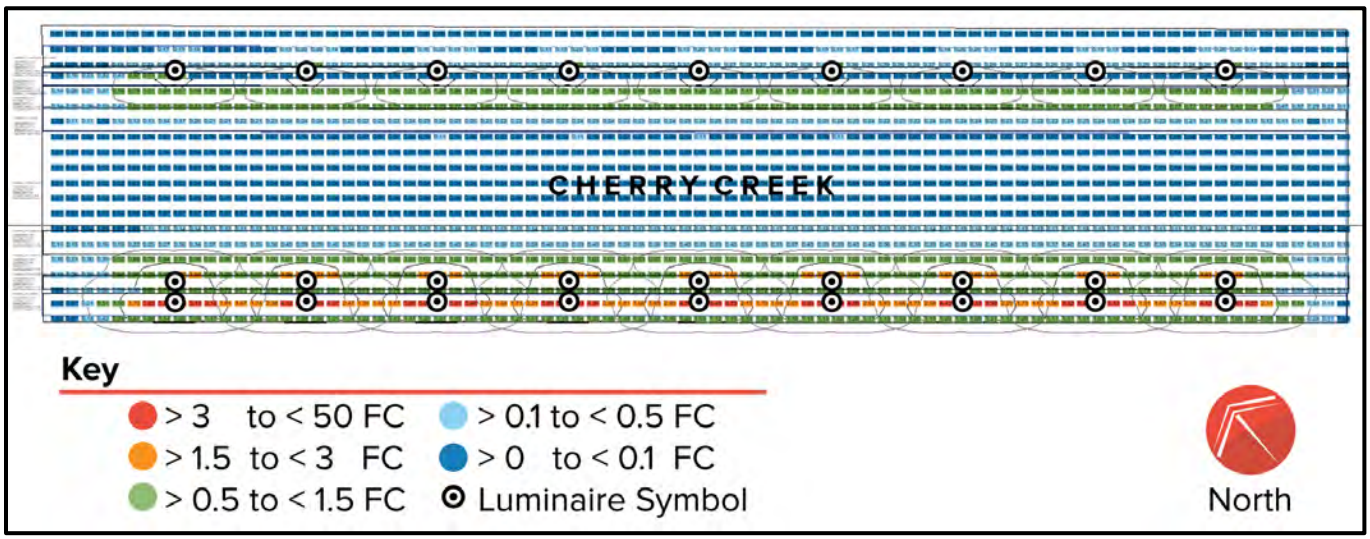
This lighting design calculation examined the performance of the we-ef RFL530 luminaire in lighting a 500’ length of regional trail at 60’ spacing on center on average. This is to reuse the existing footings. The luminaires are set along the existing concrete railing structure that runs on both sides of the trail. Both trails are bordered by riparian shoreline that varies in width on one side.

Luminaire

The RFL530-SE from we-ef has a more industrial visual character than the other three luminaire options and should blend seamlessly with most streetlighting. It also has an uplight score of zero, as well as low glare. It is available in very narrow light distributions that could be an advantage in many trail applications. It’s also available in a low CCT of 2200K by request, an advantage in sensitive ecological areas. Performance details for this luminaire can be found in Table 5-2.

Luminaire Layout and Calculation Grid

The calculation grid shows that the light being produced by the design is well confined to the trail surfaces compared to the Ouro or Omero. There are some areas of increased intensity directly under the luminaires, especially on the upper deck where a higher wattage luminaire was selected. There is some spill light into the riparian buffers but very little onto the creek’s surface.



Calculation Summary Tables

The following two tables show how this layout using we-ef luminaires performs against the selected trail lighting criteria from the IES. These calculations are produced based on the grid seen overlaid on the site, with each point in the grid representing a light level.

Table 6-15: Cherry Creek Trail – WE-EF Dual Wattages Luminaire at 60' Spacing					
Statistical Area	**Trail Lighting Calculations**				
Trail Pavement Surfaces	**Criteria**				
	Eavg (fc) 0.8	**Emax (fc) ---**	**Emin (fc) ---**	**Eavg/Emin (fc) 5:1**	**Emax/Emin (fc) ---**
Trail - East Bank	0.79	0.8	0.7	1.13	1.14
Trail - West Bank	1.43	1.8	1.1	1.3	1.64
West Upper Deck	2.29	5.97	1.0	2.29	5.97

This table shows the trail on the east bank meets criteria. The trail on the west bank exceeds it at 1.43 FC. This slight increase is due to using a higher wattage version of the luminaire oriented towards the upper deck to improve uniformity. The upper deck pavement exceeds it at 2.29 FC. All three surfaces meet the uniformity criteria.

Table 6-16: Cherry Creek Regional Trail Lighting Study – WEEF TII-TIII Luminaire					
Statistical Area	**Light Trespass Calculations**				
River & Riparian Buffers	**Criteria**				
	Eavg (fc) ---	**Emax (fc) 0.1**	**Emin (fc) ---**	**Eavg/Emin (fc) ---**	**Emax/Emin (fc) ---**
East Riparian Buffer	0.2	0.3	0.1	2	3
Cherry Creek Surface	0.06	0.2	0	N.A.	N.A.
West Riparian Buffer	0.36	0.4	0.1	3.6	4

This table shows the amount of spill light with this design that is measurable beyond the trail surfaces. Ideally these areas would not exceed 0.1 FC at night. Both riparian buffers exceed this criteria, but these numbers are lower compared to the previous options. There is 0.2 FC reaching the creek surface, but this is also an improvement. The luminaire locations along the high wall make it more complicated to control the spill light with many luminaires. The we-ef luminaire is the best performer for Cherry Creek in this study.

Section 7

Electrical Costs & Comparisons

7 ELECTRICAL COSTS & COMPARISONS

To complement the 500' lighting designs in the previous section, three schematic electrical designs were developed and studied for each half-mile site: a city-owned lighting design, an Xcel-owned lighting design, and a solar-powered lighting design.

The following cost summaries have been prepared using CDOT cost data from the 2022 cost data book as well as from other available data about the current costs of equipment and materials. They represent a reasonable estimate of the material and installation costs it would take to provide continuous lighting along a half-mile section of a trail in Denver. The lighting designs used to develop the cost estimates were either existing at the study site or typical for trail applications.

7.1 SOUTH PLATTE STUDY SITE

The schematic lighting design for the South Platte River Trail site includes the costs of pedestrian lighting along the trail and underdeck lighting added beneath existing traffic, rail, or pedestrian bridges. The typical electrical costs expected for these lighting designs are also included.

7.1.1 SHADE ANALYSIS

It is necessary to note that the part of the South Platte River Trail used for the study area is bordered by mature trees, which would cast shade on solar panels mounted at a 20-foot height. There are also existing and planned tall buildings in this area that would also cast deep shade onto solar panels mounted along the trail. The following image shows the results of a shading analysis of one building's impact on this part of the South Platte River Trail. The shaded areas in grey represent the shadows cast by one of the buildings on Arkins Court throughout a winter day, from 9 AM to 3 PM. They were calculated by using the height of the building, the longitude, and the angle of the sun for the date of December 21st. The labeled lines indicate the direction of the sun at the given time of day. For example, at 9:00 AM, the sun is shining from the SE and at 3:00 PM, the sun is shining from the SW. The shaded area shows how the shadow from the building will shift position and shade the trail throughout the day. Using a date such as December 21st is a typical approach because the sun angle on that date provides the least amount of direct sun in a year, so a solar system designed for these conditions should work well the rest of the year. The grey area shows that several hundred feet of the trail will be consistently shaded by the nearby building during the day. Additional buildings are expected to be constructed along Arkins Court next to the trail in the future, which will further increase this shading.

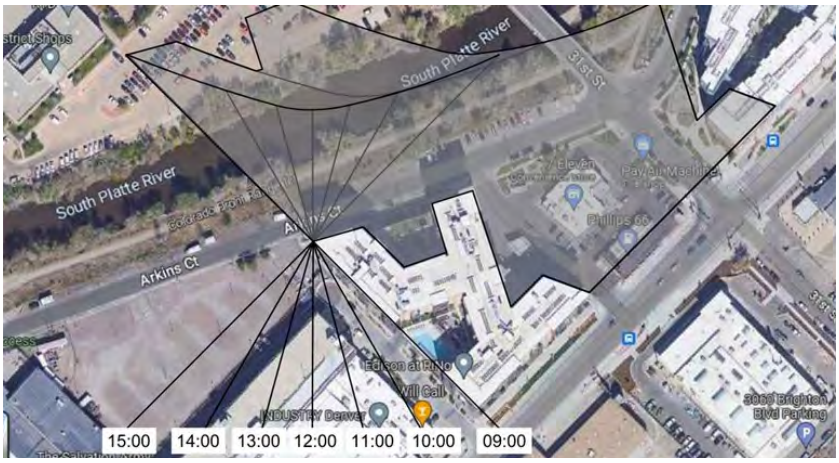


Figure 7-1 – Shading Analysis

This schematic design can therefore be considered as a generalizable example of solar-powered lighting designed with 100' spacing. However, the location is not optimal for solar-powered lighting. Other locations throughout the trail system would be more suitable for implementing solar.

7.1.2 COST ANALYSIS

The following three cost options for the studied site are intended to be representative of the typical prices for labor and materials at the time of this study. While the schematic designs were done using a representative portion of the study site, the cost analysis has been done for the full half-mile length. The full lighting and electrical designs that would be developed before any construction took place could provide more refined cost estimates than the schematic designs used for these estimates.

City-Owned Trail Lighting

In addition to luminaire costs, the cost estimate for the city-owned design in the chart below includes copper wiring, the installation of a new meter to feed the lights, and a force account pay item for final connection to the electrical service done by Xcel Energy. These necessities contributed to the city-owned design having the highest cost.

Table 7-1: South Platte Trail City-Owned Costs & Quantities - 100' Spacing

CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES		INSTALLED UNIT COST	SUBTOTAL COST
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	3230			$ 30	$ 96,900
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	330			$ 38	$ 12,540
613-01125	1-1/4 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	140			$ 32	$ 4,480
613-07002	TYPE TWO PULL BOX	EA	7			$ 2,000	$ 14,000
613-10000	WIRING	LS	1			$ 106,500	$ 106,500
613-13006	LUMINAIRE (LED) (6,000 LUMENS)	EA	26	POST-TOP		$ 2,000	$ 52,000
613-13006	LUMINAIRE (LED) (6,000 LUMENS)	EA	29	WALL		$ 2,000	$ 58,000
613-34150	LIGHT STANDARD METAL 15-FOOT)	EA	26			$ 4,500	$ 117,000
613-40000	CONCRETE FOUNDATION PAD	EA	1			$ 1,700	$ 1,700
613-40010	LIGHT STANDARD FOUNDATION	EA	26			$ 3,000	$ 78,000
613-50109	METER POWER PEDESTAL	EA	1			$ 10,000	$ 10,000
700-70082	F/A FURNISHED & INSTALL ELECTRICAL SERVICE	FA	1			$ 5,000	$ 5,000

LUMINAIRE COSTS	$ 350,750
OTHER COSTS (conduit, wiring, splice boxes, MPP, MPP foundation, electrical service)	$ 288,788
SUBTOTAL	$ 556,120
CONTINGENCY	$ 83,400
TOTAL	**$ 639,520**

Xcel-Owned Trail Lighting

In contrast to the city-owned design, the Xcel-owned option uses aluminum wires, which currently cost significantly less than copper wires. They also invite less wire theft, as they are heavier to maneuver and less popular for resale. The Xcel-owned design also avoids the need to install a meter and a foundation for that meter entirely. These differences led to the Xcel-owned design having a lower cost than the city-owned design, likely by an amount around $97,000.

Table 7-2: South Platte Trail Xcel-Owned Costs & Quantities - 100' Spacing

CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES	INSTALLED UNIT COST	SUBTOTAL COST
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	3230		$ 30	$ 96,900
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	330		$ 38	$ 12,540
613-01125	1-1/4 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	140		$ 32	$ 4,480
613-07002	TYPE TWO PULL BOX	EA	7		$ 2,000	$ 14,000
613-10000	WIRING	LS	1		$ 33,700	$ 33,700
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	26	POST-TOP	$ 2,000	$ 52,000
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	29	WALL	$ 2,000	$ 58,000
613-34150	LIGHT STANDARD METAL 15-FOOT)	EA	26		$ 4,500	$ 117,000
613-40000	CONCRETE FOUNDATION PAD	EA			$ 1,700	$ -
613-40010	LIGHT STANDARD FOUNDATION	EA	26		$ 3,000	$ 78,000
613-50109	METER POWER PEDESTAL	EA			$ 10,000	$ -
700-70082	F/A FURNISHED & INSTALL ELECTRICAL SERVICE	FA	1		$ 5,000	$ 5,000

LUMINAIRE COSTS	$ 350,750
OTHER COSTS (conduit, wiring, splice boxes, MPP, MPP foundation, electrical service)	$ 191,613
SUBTOTAL	$ 471,620
CONTINGENCY	$ 70,700
TOTAL	**$ 542,320**

Solar-Powered Trail Lighting

For the South Platte River regional trail, the solar-powered lighting option had the lowest total costs. The lighting related costs are similar to the city-owned and Xcel-owned options. The cost estimate still includes the same amount of luminaires, light standards, and lighting standard foundations. However, the costs of wiring, conduit, and a meter are avoided (except where underdeck lights require a small amount of wire and conduit to connect to solar panels). The reductions in these electrical costs are a significant savings, around $23,000 cheaper than the upfront costs of Xcel-owned lighting. The cost estimate is detailed in the table below.

Table 7-3: South Platte Trail Solar-Powered Costs & Quantities - 100' Spacing

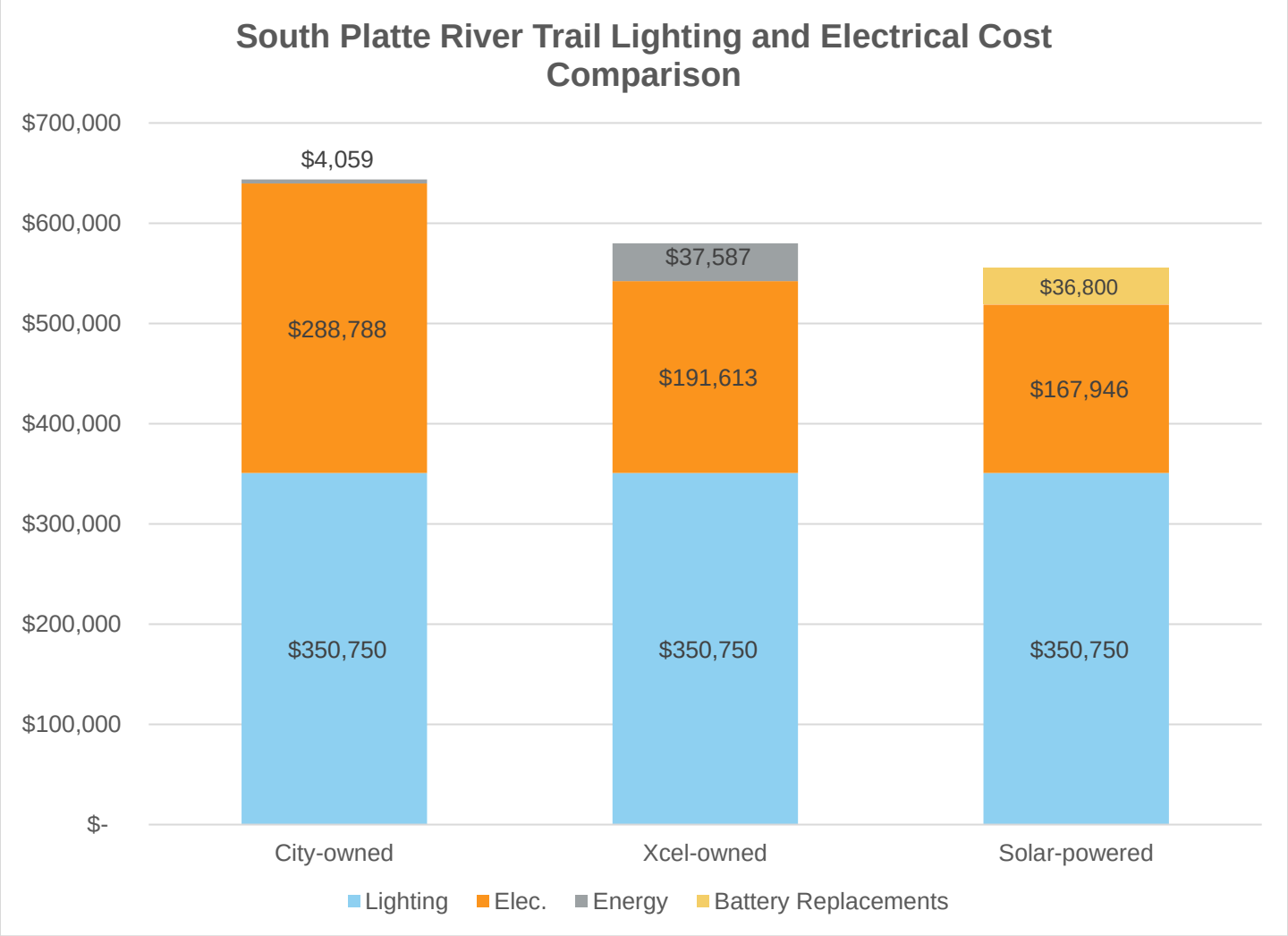
CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES	INSTALLED UNIT COST	SUBTOTAL COST
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	350		$ 30	$ 10,500
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	380		$ 38	$ 14,440
613-10000	WIRING	LS	1		$ 2,700	$ 2,700
613-13000	LUMINAIRE (LED)(SPECIAL)	EACH	26	1	$ 2,000	$ 52,000
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	29	WALL	$ 2,000	$ 58,000
613-34150	LIGHT STANDARD METAL 15-FOOT)	EA	26	3	$ 4,500	$ 117,000
613-40010	LIGHT STANDARD FOUNDATION	EACH	26		$ 3,000	$ 78,000
613-50375	SOLAR COLLECTION SYSTEM	EACH	32	2	$ 3,700	$ 118,400

NOTES:
1) INCLUDES THE LUMINAIRE, AND POWER SUPPLY CONNECTION SUPPLIED BY MANUFACTURER.
2) INCLUDES THE PV SOLAR PANELS AND BATTERIES PROVIDED BY MANUFACTURER.
3) INCLUDES THE POLE AND ARM ASSEMBLY SUPPLIED BY MANUFACTURER.

LUMINAIRE COSTS	$	350,750
OTHER COSTS (solar panel, conduit, wiring)	$	167,946
SUBTOTAL	$	451,040
CONTINGENCY	$	67,700
TOTAL	**$**	**518,740**

7.1.3 COST COMPARISONS

The following chart compares the cost estimates for the city-owned, Xcel-owned, and solar-powered schematic designs for the South Platte River Trail. The lighting costs were very similar for all three options due to requiring the same number of luminaires. The Xcel-owned and solar-powered options both had lower electrical costs than the city-owned option due to reducing or eliminating costs of wiring, conduit, and electrical meters.



The energy cost included in the chart uses the Xcel Energy metered street light rate for the city-owned option. It uses the energy-only, flat-rate for the Xcel-owned option. The energy costs are the estimated five-year costs of energy based on the number of pedestrian lights used in the schematic designs.

While solar-powered lighting won't require energy costs, it will necessitate the cost of battery replacements over time. The estimated costs of battery replacements after five years are included in the cost comparison chart. Manufacturers provide expected battery lifetimes and battery warranties which can inform expectations about how long the batteries will last and how often they'll require replacement. The battery operating temperature should also be suited to the climate at the project location. The manufacturers listed in Table 5-3 typically warranty their batteries for 5 or up to10 years. When selecting solar-powered lighting options, take note of these battery characteristics to

understand how often battery replacements will be needed to address diminishing performance. Shorter battery lifetimes may have lower costs but will lead to more frequent replacements and more effort spent replacing batteries. In general, battery costs have been trending downwards but it should be discussed with the manufacturer.

7.2 CHERRY CREEK STUDY SITE

The schematic lighting design for the Cherry Creek Regional Trail site includes the costs of pedestrian lighting along the trail and underdeck lighting added beneath existing traffic, rail, or pedestrian bridges. The typical electrical costs expected for these lighting designs are also included.

The Cherry Creek Trail study site has a number of existing characteristics that influenced the lighting design. Concrete walls surround the creek and the trail on both sides. Numerous bridges cross this section of the trail. The existing lighting along the tops of the walls is at a 60’ spacing. After initial photometric study, the lighting design chosen used new luminaires at the existing 60‘ spacing in addition to adding underdeck lights under bridges.

7.2.1 COST ANALYSIS

The following three cost options for the studied site are intended to be representative of the typical prices for labor and materials at the time of this study. While the schematic designs were done using a representative portion of the study site, the cost analysis has been done for the full half-mile length. The full lighting and electrical designs that would be developed before any construction took place could provide more refined cost estimates than the schematic designs used for these estimates.

City-Owned Trail Lighting

Similar to the city-owned schematic design for the South Platte River Trail, the cost estimate in the chart below includes copper wiring, installation of a new meter to feed the lights, and a force account pay item for final connection to the electrical services provided by Xcel Energy.

Table 7-4: Cherry Creek Trail City-Owned Costs & Quantities - 60' Spacing

CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES	INSTALLED UNIT COST	SUBTOTAL COST
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	4430		$ 30	$ 132,900
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	1040		$ 38	$ 39,520
613-07002	TYPE TWO PULL BOX	EA	3		$ 2,000	$ 6,000
613-10000	WIRING	LS	1		$ 94,300	$ 94,300
613-13006	LUMINAIRE (LED) (6,000 LUMENS)	EA	87	POST-TOP	$ 2,000	$ 174,000
613-13006	LUMINAIRE (LED) (6,000 LUMENS)	EA	52	WALL	$ 2,000	$ 104,000
613-34120	LIGHT STANDARD METAL (12-FOOT)	EA	41		$ 2,000	$ 82,000
613-34122	LIGHT STANDARD METAL (12-FOOT) (2-ARM)	EA	23		$ 2,000	$ 46,000
613-40000	CONCRETE FOUNDATION PAD	EA	2		$ 1,700	$ 3,400
613-40010	LIGHT STANDARD FOUNDATION	EA			$ 3,000	$ -
613-50109	METER POWER PEDESTAL	EA	2		$ 10,000	$ 20,000
700-70082	F/A FURNISHED & INSTALL ELECTRICAL SERVICE	FA	1		$ 5,000	$ 5,000

LUMINAIRE COSTS	$	466,900
OTHER COSTS (conduit, wiring, splice boxes, MPP, MPP foundation, electrical service)	$	346,288
SUBTOTAL	$	707,120
CONTINGENCY	$	106,100
TOTAL	**$**	**813,220**

Xcel-Owned Trail Lighting

The table below shows the Xcel-owned cost estimate for Cherry Creek Trail. The cost estimate uses aluminum wiring (a lower cost compared to copper wiring) and does not include a meter, a meter foundation, or the force account item for the connection to electrical service. These differences led to the Xcel-owned design having a lower cost than the city-owned design, likely by an amount around $78,000.

Table 7-5: Cherry Creek Trail Xcel-Owned Costs & Quantities - 60' Spacing

CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES	INSTALLED UNIT COST	SUBTOTAL COST
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	4430		$ 30	$ 132,900
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	1040		$ 38	$ 39,520
613-07002	TYPE TWO PULL BOX	EA	3		$ 2,000	$ 6,000
613-10000	WIRING	LS	1		$ 49,800	$ 49,800
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	87	POST-TOP	$ 2,000	$ 174,000
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	52	WALL	$ 2,000	$ 104,000
613-34120	LIGHT STANDARD METAL (12-FOOT)	EA	41		$ 2,000	$ 82,000
613-34122	LIGHT STANDARD METAL (12-FOOT) (2-ARM)	EA	23		$ 2,000	$ 46,000
613-40000	CONCRETE FOUNDATION PAD	EA			$ 1,700	$ -
613-40010	LIGHT STANDARD FOUNDATION	EA			$ 3,000	$ -
613-50109	METER POWER PEDESTAL	EA			$ 10,000	$ -
700-70082	F/A FURNISHED & INSTALL ELECTRICAL SERVICE	FA	1		$ 5,000	$ 5,000

LUMINAIRE COSTS	$	466,900
OTHER COSTS (conduit, wiring, splice boxes, MPP, MPP foundation, electrical service)	$	268,203
SUBTOTAL	$	639,220
CONTINGENCY	$	95,900
TOTAL	**$**	**735,120**

Solar-Powered Trail Lighting

The chart below shows the cost estimate for solar-powered lighting along Cherry Creek Trail. At the 60' spacing used in this design, solar-powered lights had the highest estimated cost. The conduit and wiring costs are still much lower than the costs in the City-owned and Xcel-owned designs. However, at this closer spacing, the costs of solar panels, batteries, and their associated electronics (included in the solar collection system pay item) outweigh the reduction in conduit and wiring costs significantly.

If cost savings are the main motivation for using solar-powered lighting on a trail, then solar-powered lighting will be better suited to designs with greater spacing between lights. We would not recommend its use when the spacing needs to be less than 100'.

Table 7-6: Cherry Creek Trail Solar-Powered Costs & Quantities - 60' Spacing

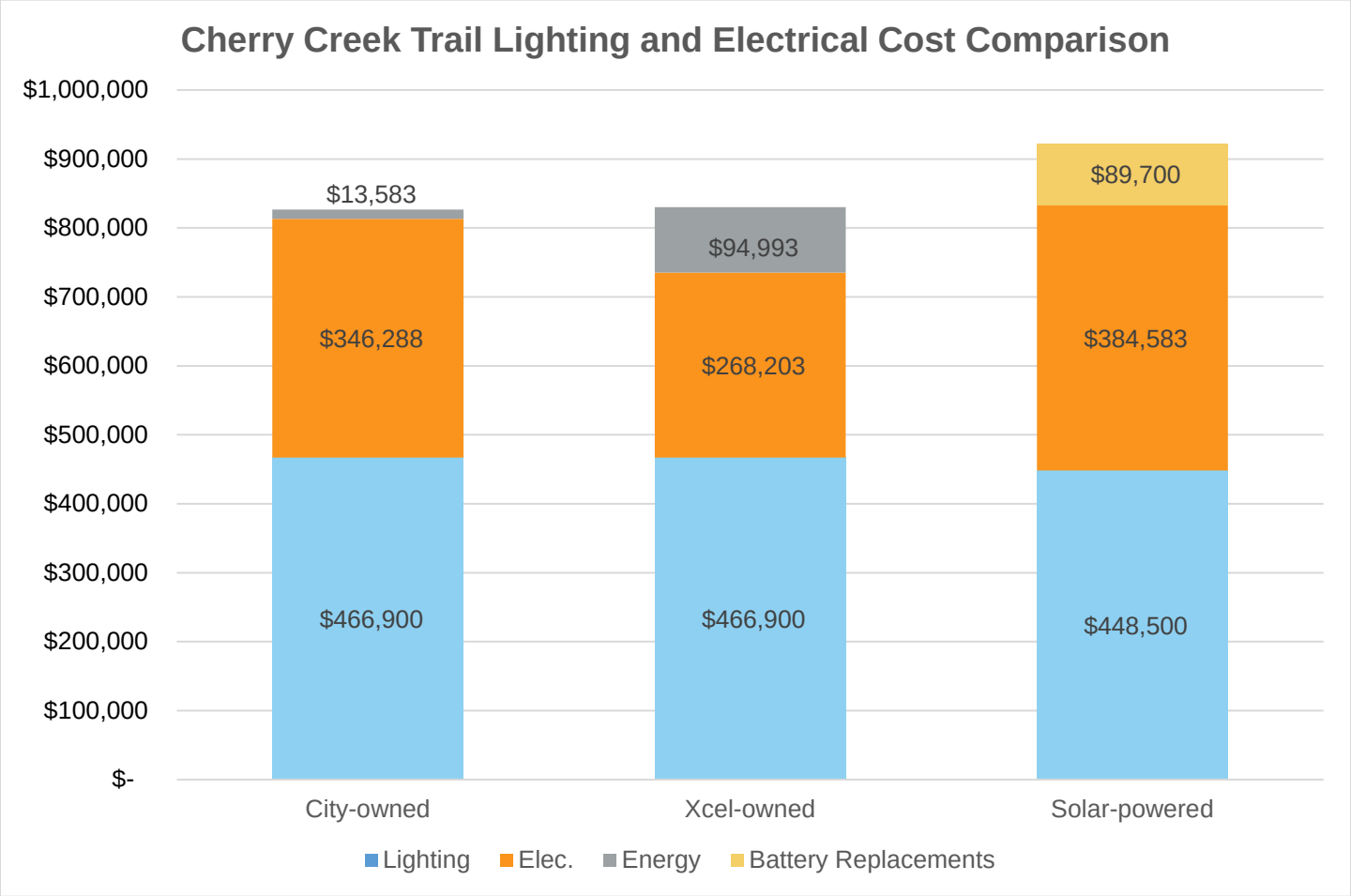
CDOT PAY ITEM	DESCRIPTION	UNITS	QTY	NOTES	INSTALLED UNIT COST	SUBTOTAL COST
613-13000	LUMINAIRE (LED)(SPECIAL)	EACH	87	1	$ 2,000	$ 174,000
613-34120	LIGHT STANDARD METAL (12-FOOT)	EA	41	3	$ 1,750	$ 71,750
613-34122	LIGHT STANDARD METAL (12-FOOT) (2-ARM)	EA	23	3	$ 1,750	$ 40,250
613-40010	LIGHT STANDARD FOUNDATION	EACH			$ 3,000	$ -
613-13006	LUMINAIRE (LED)(6,000 LUMENS)	EA	52	WALL	$ 2,000	$ 104,000
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	700		$ 30	$ 21,000
613-00125	1-1/4 INCH ELECTRICAL CONDUIT	LF	1040		$ 38	$ 39,520
613-10000	WIRING	LS	1		$ 6,300	$ 6,300
613-50375	SOLAR COLLECTION SYSTEM	EACH	78	2	$ 3,700	$ 288,600

NOTES:
1) INCLUDES THE LUMINAIRE, AND POWER SUPPLY CONNECTION SUPPLIED BY MANUFACTURER.
2) INCLUDES THE PV SOLAR PANELS AND BATTERIES PROVIDED BY THE MANUFACTURER.
3) INCLUDES THE POLE AND ARM ASSEMBLY SUPPLIED BY MANUFACTURER.

LUMINAIRE COSTS	$	448,500
OTHER COSTS (solar panel, conduit, wiring)	$	384,583
SUBTOTAL	$	745,420
CONTINGENCY	$	111,800
TOTAL	**$**	**857,220**

7.2.2 COST COMPARISONS

The cost comparison between the city-owned, Xcel-owned, and solar-powered designs for the Cherry Creek Trail study area is shown in the chart below.



The energy cost included in the chart uses the Xcel Energy metered street light rate for the city-owned option. It uses the energy-only, flat-rate for the Xcel-owned option. The energy costs are the estimated five-year costs of energy based on the number of pedestrian lights used in the schematic designs.

While solar-powered lighting won't require energy costs, it will necessitate the cost of battery replacements over time. Manufacturers provide expected battery lifetimes and battery warranties which can inform expectations about how long the batteries will last and how often they'll require replacement. The battery operating temperature should also be suited to the climate at the project location. The manufacturers listed in Table 5-3 typically warranty their batteries for 5 or up to10 years. When selecting solar-powered lighting options, take note of these battery characteristics to understand how often battery replacements will be needed to address diminishing performance. Shorter battery lifetimes may have lower costs but will lead to more frequent replacements and more effort spent replacing batteries. In general, the costs of these batteries have been trending downwards but it should be discussed with the manufacturer.

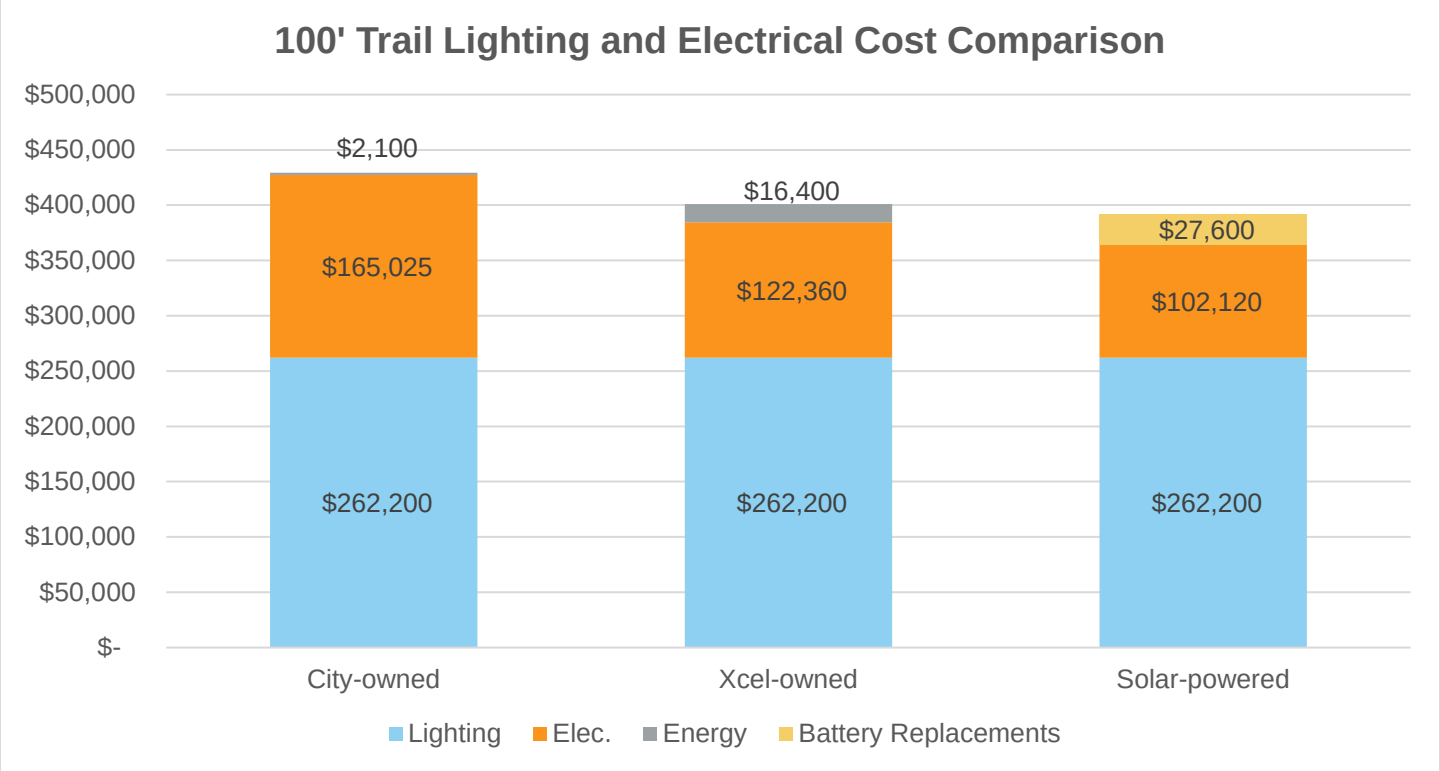
For the Cherry Creek Trail study area and its unique characteristics, the Xcel-owned option had the lowest cost. This was due to using aluminum wiring (in contrast to the copper wiring used in the city-owned design) and to avoiding the cost of installing an electrical meter. The solar-powered design had the highest cost for this site due to the close spacing of the lights and the high number of solar panels and batteries included in the cost estimate.

7.3 CONCLUSIONS

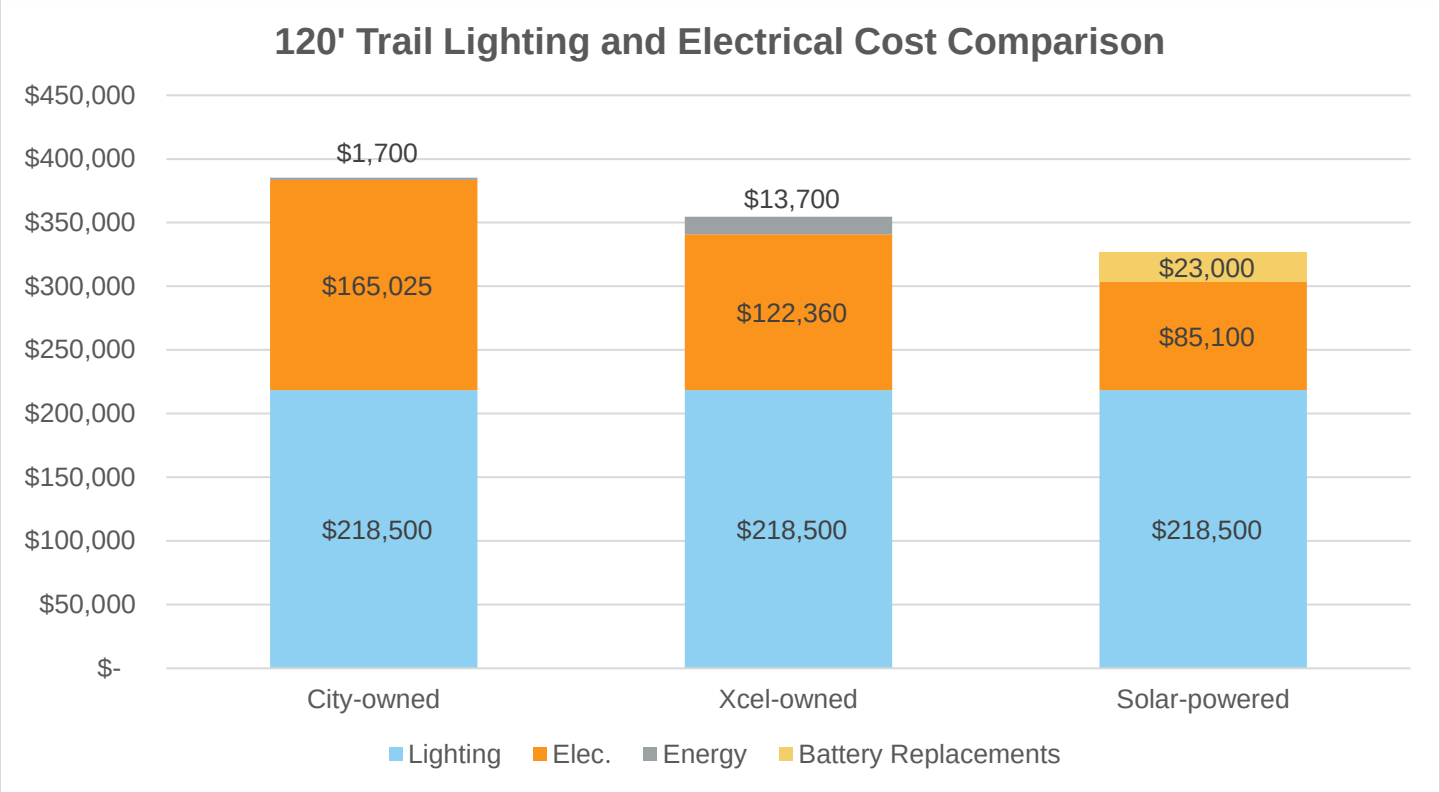
The solar-powered lighting designs in this comparison merit additional comment. Solar-powered lighting performs best in locations with full access to the sun, ideally with solar panels which can be positioned in the field to tilt towards the equator to optimize their performance. Obstructions between the solar panel and the sun reduce any solar system's performance.

In the northern hemisphere, this would include any buildings or dense trees located south of the site where the solar-powered lighting would be installed. Construction of multi-story buildings is expected south of the South Platte River Trail study area which will limit the applicability of solar-powered lighting for that site. In addition, mature trees surround portions of the trail, also reducing solar system performance. Bridges also cover significant portions of the South Platte River Trail and the Cherry Creek Trail in Downtown Denver. Lighting under bridges can be solar-powered. However, conduit and wiring would be needed to connect underdeck lights out to a solar collection system located next to a bridge. The costs of conduit and wiring to connect solar power to underdeck lighting will reduce the cost-competitiveness of solar compared to city-owned or Xcel-owned lighting.

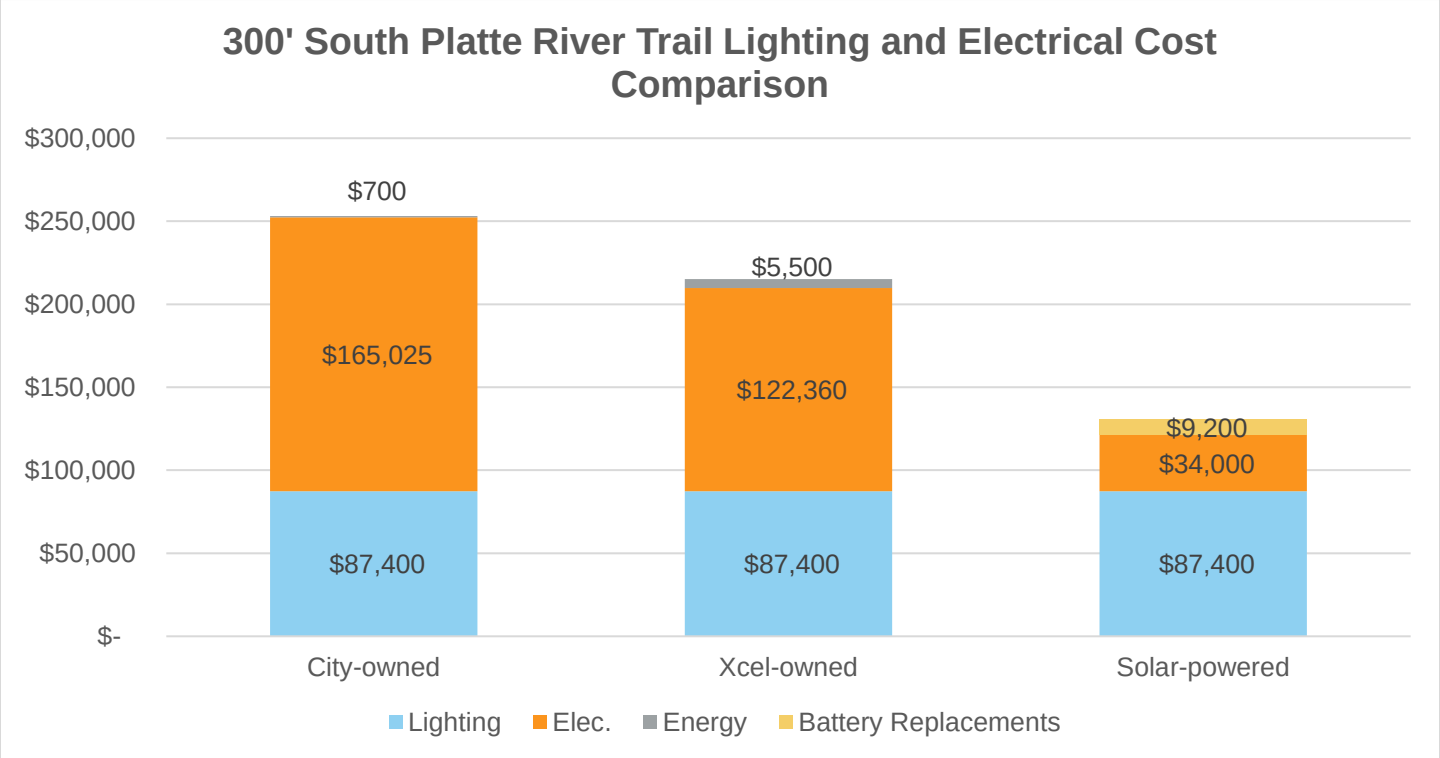
To demonstrate how this impacts the cost of these systems, the following graphs show the cost of schematic lighting design for a site of the same size as those studied, but ideal for solar powered trail lighting with no major obstructions for southern sunlight or requirement for underdeck lighting.



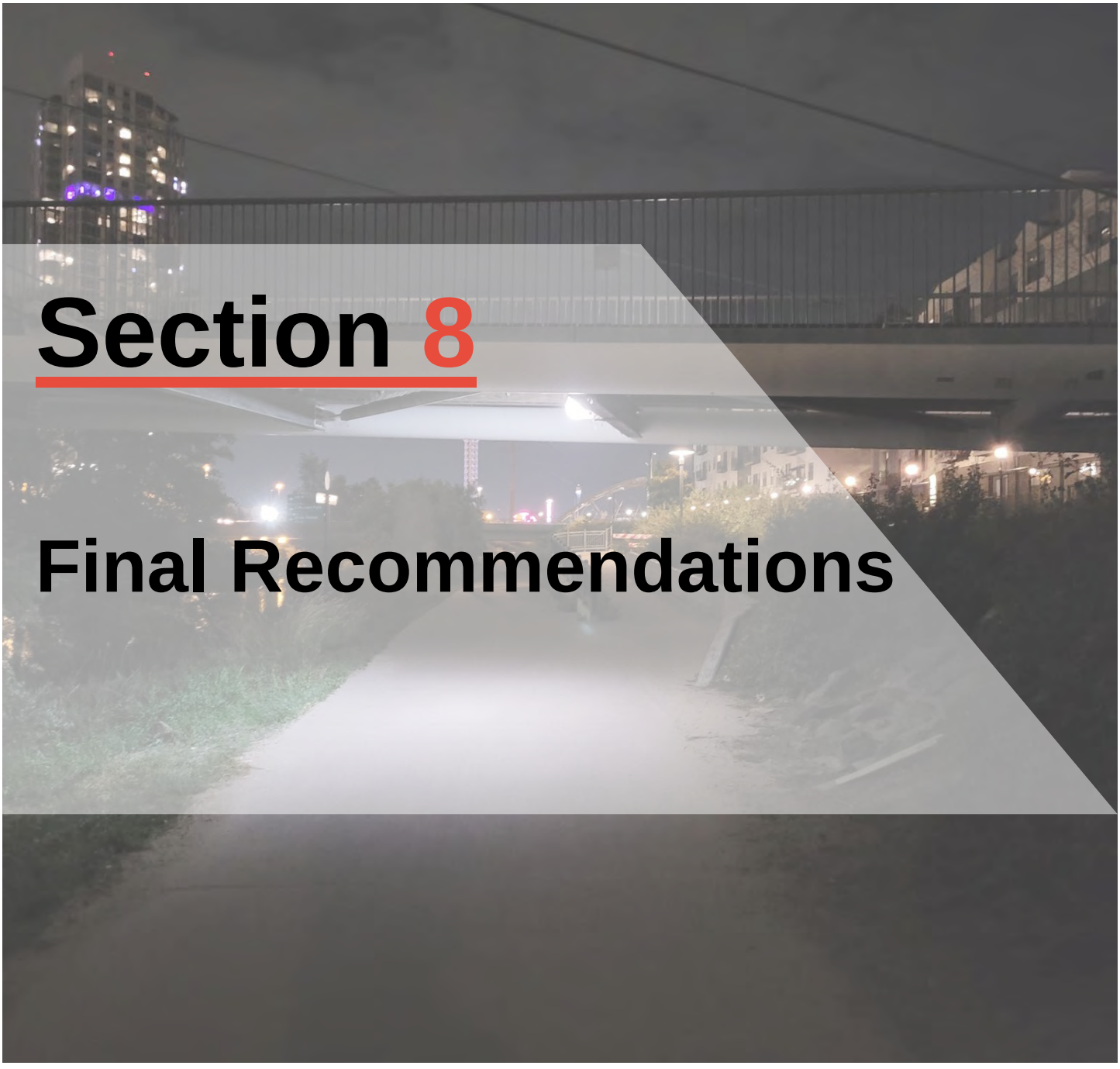
At 100’ spacing the costs of a solar system for DPR remain very similar to the Xcel-owned option.



At 120’ spacing the cost savings begin to increase. At the 300’ spacing that would be suitable for non-continuous lighting the savings of solar options become significant.



Overall, in this study the cost estimates for a solar-powered system were equal to or less than the cost estimates for City-owned lights or Xcel-owned lights. This shows that site selection is a crucial part of determining where solar-powered lighting can be best utilized. While solar-powered systems have ecological benefits, their economic benefits are not fully realized unless the site itself is the right fit for solar. Trails that receive direct sunlight, that are unobscured by tall trees and buildings, that merit non-continuous or minimal lighting, and have few bridges requiring underdeck lighting would be good candidates for solar-powered trail lighting. The cost analysis also shows that while city-owned options are consistently more expensive than Xcel-owned, this margin is narrow enough that the other advantages for Denver such as luminaire and maintenance choices may still make it a viable option.



Section 8

Final Recommendations

8 FINAL RECOMMENDATIONS

This Denver Trail Lighting Study has set up a knowledgebase for DPR to make more informed decisions on their outdoor lighting and electrical improvement options and priorities. The information contained in this study will support future DPR trail lighting projects in being consistent, reliable, cost effective, and support the development of a GIS mapping tool that will be used to determine which level of lighting and in what location is best for Denver.

Designing Trail Lighting

The typical lighting design process for choosing where a trail should be lit and to what lighting levels is detailed in Sections 3 and 4 to provide a strong understanding of the industry and its processes to the non-lighting professional. This included the warranting process and how to best utilize national lighting criteria. These sections relate to several of the original five key concerns that began this study, which were safety, responsible lighting practices, equity, costs, and maintenance.

Safety: To provide adequate lighting in the locations where it is needed and to improve visibility for greater safety on mixed-use trails for both pedestrians and cyclists.

- **Lighting Warrants & Criteria**: Sections 3 & 4 of this study provide a process for determining the lighting warrants and criteria that will provide adequate light levels to improve safety throughout the DPR trail system.

Responsible Lighting: This key item was to identify what information was needed by DPR to ensure all trail lighting selected is appropriate for the area and considerate of the surrounding properties.

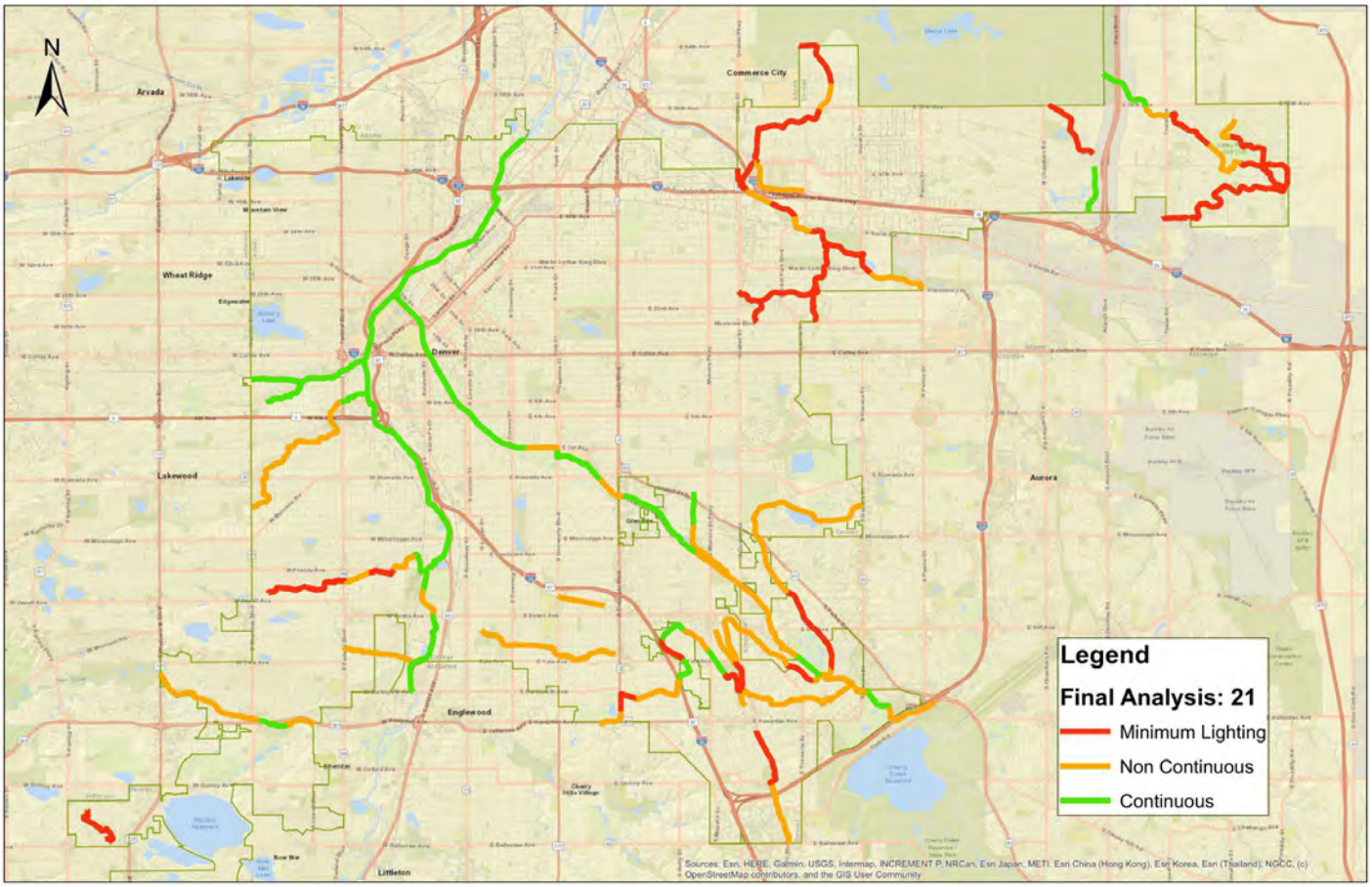
- **Responsible Lighting Approach**: The trail lighting system should provide just enough light for good visibility, with an appropriate color temperature (CCT) that considers adjacent land uses and only puts light where it is needed and when it is needed.
- **Responsible Lighting Strategies**: To successfully achieve these goals, quality lighting equipment must be selected that have:
    - Precision Optics: Luminaires with excellent optical control to focus the light on the trail, have low glare and minimize spill light beyond the trail.
    - Appropriate Light Levels: Luminaires with a range of lumen output that result in appropriate light levels that do not exceed lighting criteria.
    - Color Temperature: Luminaires with a range of correlated color temperatures (CCT) to minimize impacts of light on flora and fauna.
    - Dimming Controls: Lighting controls that provide adaptive dimming to reduce light levels at times with lower usage of the trails.
- **Solar Power**: Using solar power in locations with adequate solar access can be reliable, cost effective and can save significant costs where Non-Continuous or Minimal Lighting is warranted.
    - Solar-powered systems reduce the amount of energy consumed by Denver, reducing the City's environmental impact.

Equity: This key item was to improve trail lighting in a more equitable way the prioritizes areas with greater needs using a data-driven approach.

- **Equity Score**: In collaboration with DPR, Section 4.3 of this study establishes a mapping system that incorporates the existing Denver Neighborhood Equity Index scoring system, adjacent land use, population density, crime rates, distance from public and other factors to help guide the decisions to use Continuous, Non-Continuous or Minimal Lighting strategies for any segment of trail.
- **Priority Funding**: When possible, funding for trail lighting improvement projects should also consider these Denver Neighborhood Equity Index scores to determine which trails should receive priority funding.

The figure below is an example of the GIS mapping tool being developed by DPR as described in Section 4.3. Several lighting warrants are scored on through five to determine where lighting should be Continuous, Non-Continuous, or Minimal based on multiple factors including trail usage, population density, land use zoning, equity, crime rates, distance to public transit and parks, and distance from rivers and wetlands. Since this scoring system is a new system that will require fine-tuning, it should be used as a starting point for the lighting warrants conversation but not as the determining factor. Adjustments to this scoring system are likely to be needed as DPR evaluates how accurately it is working for individual projects.

Figure 8-1 – Initial output of trail lighting recommendations using DPR's new GIS mapping tool



This initial map shows the recommended areas of continuous lighting in green, non-continuous lighting in orange, and minimum lighting in red. At a glance, the areas suggested align well with the trail type and neighborhoods they are located in. The continued development of this tool is a very exciting improvement for DPR's trail lighting.

Trail Lighting Ownership & Maintenance

Currently in Denver, Xcel Energy owns and maintains most of the trail lighting while DPR owns a small amount of their lights themselves. Changing this arrangement presents many challenges and opportunities for DPR. This study has identified the most cost-effective strategies for improvements needed in the DPR trail lighting system and which products would be most appropriate for DPR to develop a more durable and resilient lighting and electrical system.

Costs:

- **DPR Electrical Standards**: The cost analysis in this study is based upon current lighting and electrical standards of Xcel Energy and DPR. While the DPR owned and maintained system shows a higher cost than Xcel Energy, this is mostly due to the higher cost of copper wiring vs. aluminum wiring, and the cost of installing electrical meters. By changing DPR electrical standards to use aluminum wiring and the non-metered, energy-only ESL rate, these costs can be reduced to be competitive with an Xcel-owned trail lighting system.
- **Systematic Changes**: Since the current Xcel-owned trail lighting costs are paid for by DOTI, not by DPR, the energy and maintenance costs are not currently within the DPR budgets. To successfully implement the changes recommended in this study, there must be a systematic change to shift the trail lighting funding from DOTI to DPR.

Maintenance:

- **Maintenance Reliability**: The current maintenance approach for Xcel-owned lighting is complaint based, resulting in slow response time, and higher costs and monthly payments, even for lights that are non-operational. DPR taking over the ownership of their own lights will reduce costs to the taxpayers while also improving the performance of the lighting system.
- **Staffing or Contracting Maintenance**: For DPR to successfully manage an increased inventory of trail lighting, there must be a commitment by CCD and DPR to plan for and provide funding for either hiring qualified maintenance staff or to manage a lighting maintenance contractor.

This study highly recommends that DPR should take steps to own and maintain more of their own lighting system. This will ultimately give DPR more control over the decisions that are made for their trail lighting including dimming systems, color temperatures, and more suitable luminaires for trail lighting such as the we-ef RFL530.

Luminaire Recommendations

Of the luminaire options studied, the use of the King Luminaire K118 Acorn is not recommended for trail lighting and it has been removed from Table 8-1. The we-ef RFL530 is by far the best trail-specific luminaire that was studied and would be DPR's best option should they pursue owning more of their lighting.

Table 8-1: Luminaire Recommendations			
Luminaire Name	**Photo**	**Luminaire Specifications**	**Discussion**
we-ef RFL530		**O&M: Denver Parks & Rec** Wattage: 14W Lumens: 1959 BUG Rating: B1-U0-G1 Distribution: Type II Mounting Ht: 12'-15'	**Recommended for Trail Lighting:** This luminaire has excellent optical design that maximizes spacing along the trail and minimizes light spill beyond the trail. A wider range of color temperatures (2200K – 3000K) is available for providing the appropriate CCT for the surrounding environment.
Lithonia Omero		**O&M: Denver Parks & Rec** Wattage: 75W Lumens: 5454 BUG Rating: B1-U2-G1 Distribution: Type II Mounting Ht: 12'-15'	**Use only in high usage urban parks:** This luminaire is currently installed at Confluence Park and Central 70 Cover Top Park. While the light quality is good, this luminaire has a high potential for light trespass with no shielding options and the high lumen output is too high for many DPR trail applications.
Kim Ouro		**O&M: Xcel Energy** Wattage: 28.2W Lumens: 2958 BUG Rating: B2-U0-G2 Distribution: Type III Med. Mounting Ht: 12'-15'	**Best Xcel Luminaire:** This luminaire has a comfortable, low-glare optic, zero uplight, and is the best option currently offered by Xcel Energy. Light distribution and CCT options are limited, and dimming is not yet available from Xcel Energy.

Solar Power for Trail Lighting

The solar power options described for the two study areas on the South Platte River trail and on the Cherry Creek trail were intended to provide a realistic scenario for evaluating both the lighting design and electrical options for cost comparison. While these are very useful schematic studies for their purpose, both of these sites presented some challenges that would not occur in many other trail segments and would not be ideal locations for solar-powered systems. However, there are locations throughout the DPR trail network where solar could be beneficial for lighting as well as reducing Denver's environmental impact.

Solar Power is not ideal for:

- Bridge underdeck lighting or wall mounted lighting applications, where the solar power must be remotely located and thus still requires conduit to be routed from the solar panels to the lights.
- Areas with significant shadowing from trees or buildings. Shadowing should be evaluated for every project for all seasons to determine the trail has adequate solar access. Planned future buildings or the adjacent zoning to the trail should also be included in any shadowing studies.

- Locations where pedestrian light poles must be spaced at less than 100-ft to meet lighting criteria or site character. This spacing makes solar no longer a cost-competitive option. This is based on the current costs of solar systems and conventional electrical installation in the Spring of 2023 when this study was performed and may change in the future.

Solar Power is feasible, reliable, and cost effective for:

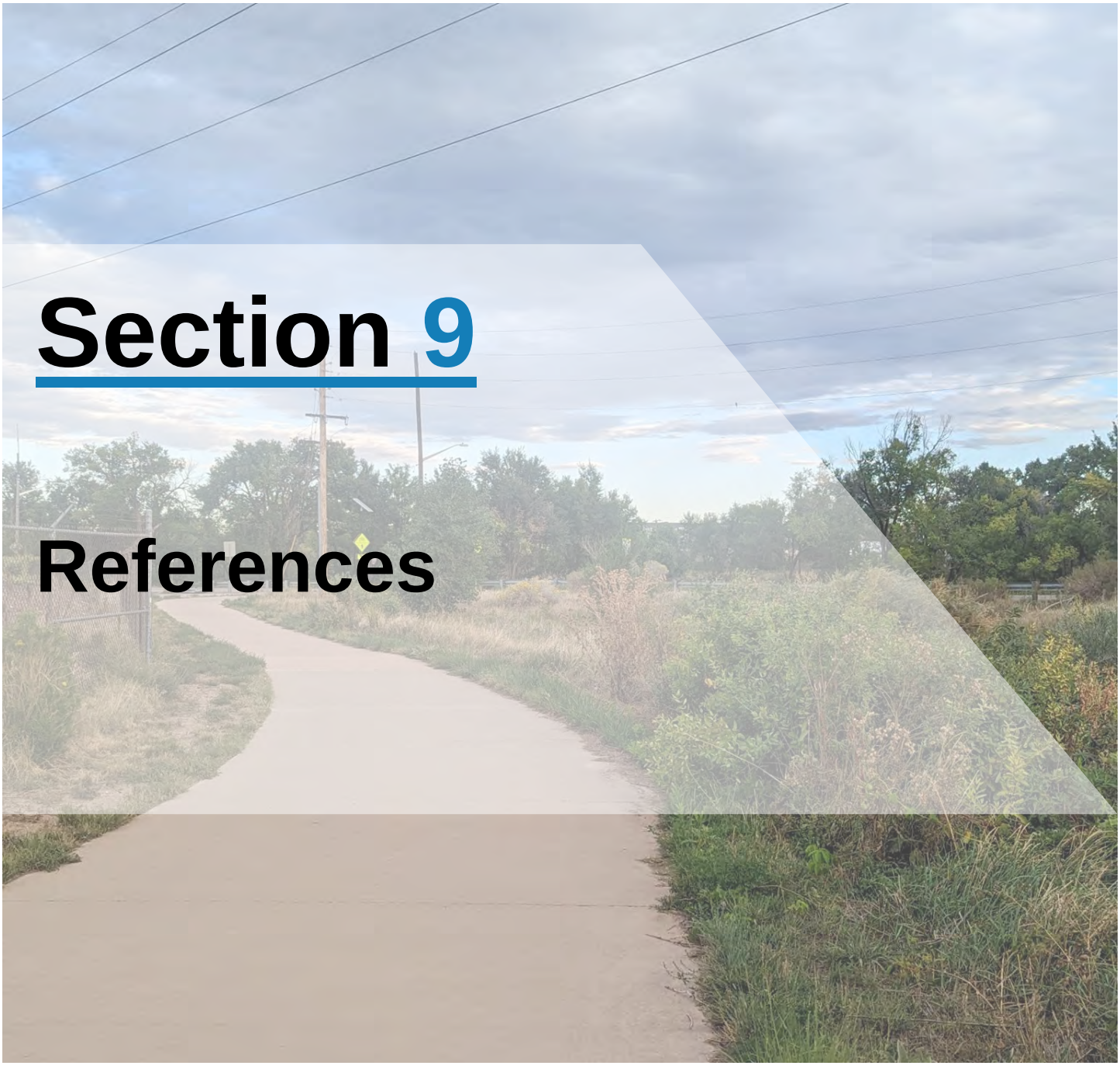
- Locations where there is no significant shadowing from trees or buildings.
- Pedestrian scale light poles that can be spaced at 100-ft or more to meet lighting warrants and criteria.
- Along trail segments where the lighting warrants have recommended either Non-Continuous or Minimal Lighting be used and where light poles may be spaced at 300-ft or more solar power can significantly reduce costs compared to a conventional electrical system.

Trail Lighting in Denver

There are many opportunities currently present for DPR to improve their trail lighting. By transitioning to a system where DPR owns and maintains the majority of their trail lighting, options for better trail luminaires like the we-ef RFL530 become available as well as technologies for control systems such as dimming. Solar-powered lighting systems also become a viable option for trail areas that receive the right amount of sunlight and could be very beneficial when minimal light levels are needed in more remote locations.

Even if most of the lighting remains Xcel owned and maintained, the new GIS mapping tool that is being developed can better ensure the right amount of light is being placed in the right locations throughout the trail system, thus improving the equity of the trail system and safety for all users.

As the mapping tool's performance is evaluated, there is also the opportunity to incorporate more of the data being collected through the growing trail counter program and to evaluate how the natural environment in Denver is being impacted by these lighting changes. Many of these improvement opportunities should be able to utilize this study as a reference to get started.



Section 9

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APPENDIX 1- FUNDAMENTALS OF LIGHTING DESIGN

Lighting plays a key role in how people perceive the spaces in which they live, work, and play. This is especially true of lighting for outdoor spaces at night. Lighting helps people understand the space they are in by providing visual cues and allows a heightened awareness of their surrounding environment through improved visibility. A good lighting design does this while taking into account the needs of different users of a space and the effects outdoor lighting can have on our environment.

A.1 LUMINANCE AND ILLUMINANCE

Creating good visibility with street and public lighting depends on two metrics: illuminance (measured in footcandles – fc) which is the amount of light falling on a surface, and luminance (measured in candela per square meter – cd/m^2) which is the amount of light reflecting off a surface toward an observer. Pedestrian areas, such as trails, crosswalks, and sidewalks are usually based on illuminance. The human eye identifies objects at night mostly by the contrast between an object and its background. Sufficient visibility in an off-street trail environment requires sufficient luminance on the trail's surface and vertical illuminance on pedestrians, cyclists, and any other trail users.

A.2 GLARE REDUCTION

Glare is caused by excessive or undesirable light entering the eye from a bright light source. Glare can result in discomfort, annoyance, and decreased visibility. The experience of direct glare can happen when a light source is in direct view. The presence of direct glare depends on the intensity of the light source and its contrast with the surrounding environment. While experiencing direct glare the eye has a harder time seeing contrast and details. A lighting system designed solely around the desired lighting level tends to aim more light at higher viewing angles, thus producing more potential for glare. Direct glare can be minimized with careful equipment selection as well as luminaire placement.

Figure 9-1: Example of high glare luminaires (left), example of low glare luminaire (right)

A.3 UNIFORMITY VS. CONTRAST

Lighting uniformity refers to the evenness of light. Our eyes are continually adapting to the brightest object in our field of view. Any object lighted to 1/10th the level of the immediate surroundings appears noticeably darker. Evenly lit pavement is generally the first indicator of good uniformity in lighting. However, good visibility also requires the clear contrast of an object against its background. An environment with perfectly uniform lighting provides low contrast, which can reduce the overall visibility. High contrast is necessary for good visibility. Uniformity criteria are typically structured in ratios of maximum to minimum light level or average to minimum luminance or illuminance. Contrast is the difference between two adjacent luminance values. To have enough contrast there needs to be a balance between uniform lighting perception and enough contrast to improve visual detection of objects that may be on a surface outdoors at night.

Differences in color also produce a visible contrast even when both objects have similar luminance values, which supports the benefits of using higher color rendering light sources. When the proper balance of uniformity and contrast is achieved, the lighting is more effective at lower overall light levels, reducing over lighting and light pollution (Clanton N, 2014).

Color Contrast: In the photos above, the black and white image shows us that the luminance of the flower and its background are very similar. Only when the colors are rendered does the color contrast of the yellow flower make it highly visible against its background. This demonstrates why outdoor lighting with good color rendering can improve the visibility of objects, even when using the same or lower light levels than what was there before. Further study on the effects of color contrast is needed to fully understand the level of improved visibility of broad-spectrum light sources when used at light levels below the current IES RP-8 recommendations (IES, 2022).

Figure 9-2: Color contrast

A.4 ADAPTATION

Adaptation refers to the human eye's ability to adjust its vision between changes in luminance. Our eye will automatically adjust itself to the brightest object in our field of view. Glare from headlights or fixed lighting can negatively affect someone's ability to adapt to a lower surface luminance. This happens to everyone, but especially impacts the elderly. Glare is also especially hard on anyone with cataracts, people with astigmatism, other low-vision issues, and certain neurodivergent groups. Another form of eye adaptation occurs when someone moves from a brightly lighted area to a non-lighted section of a roadway or trail. In these cases, the lighted area should slowly transition to darker light levels to allow for the necessary adaptation time. This makes the transition more comfortable for everyone but is essential to the safety of elderly people and certain other groups to be outdoors at night.

A.5 CORRELATED COLOR TEMPERATURE (CCT)

The correlated color temperature (CCT) rating system is a metric that describes how "warm" or "cool" a light source appears to be to the human eye. Light sources with a CCT rating below 3200K are usually considered "warm" and more closely match firelight while those with a CCT at or above 4000K are usually considered "cool" in appearance. Anything in between 3200K and 4000K is typically considered "neutral." See Figure 5-3 for examples of "warm" and "cool" color temperatures.

Figure 9-3: Correlated color temperature diagram

Temperature*	Description	Traditional Sources	LED Fixture Availability on Market
1800 K - 2200K	Very warm white, Candle flame, sunset/sunrise	High pressure Sodium	Limited LED fixtures available with few manufacturers/May need to be custom
2700 K	Warm white	Incandescent lamps	Typical standard LED fixtures available with select manufacturers
3000 K	Warm white	Halogen lamps, tungsten lamps, warm white compact fluorescents	Typical standard LED fixtures available with most manufacturers
4000 K	Neutral white, Moonlight	Fluorescent lamps, metal halide lamps	Typical standard LED fixtures available with most manufacturers
5000 K	Cool white, Horizon Daylight	Fluorescent lamps	Typical standard LED fixtures available with most manufacturers
5500 – 6500 K	Cool white, Vertical Daylight	Fluorescent lamps, electronic flash	Typical standard LED fixtures available with most manufacturers
6500 – 9500 K	Very cool white, Overcast Sky	LCD or CRT screen	Limited LED fixtures available with few manufacturers/May need to be custom
*These temperatures are merely characteristic; considerable variation may be present			

A.6 COLOR RENDERING AND NIGHTTIME VISIBILITY

The Color Rendering Index (CRI) is the standard metric used to evaluate how well a light source renders the true color of an object. CRI is measured on a scale of 0 to 100, with 100 representing how an object would look under a reference incandescent light source similar to natural daylight. The higher the number, the better the color rendering capacity of the light source. Traditional High-Pressure Sodium (“HPS”) streetlights have a very low CRI of approximately 30, making the detection of any color differences difficult. Today’s standard LED streetlights are not only significantly more energy efficient, they also have a much higher CRI by default, a value of approximately 70. This improvement increases color detection, visual acuity, and the overall effectiveness of outdoor lighting.

Advancements in LED lighting technologies also allow outdoor lighting to be tuned to a specific correlated color temperature (“CCT”) without noticeably reducing the CRI. This technology can be used to reduce the color temperature in environmentally sensitive areas without significantly reducing the CRI, preserving the effectiveness of the lighting system for human needs while reducing the harms of artificial lighting at night.

LEDs by default emit light across the entire visual spectrum, often considered white light. Many older types of light sources do not do this, instead emitting a much narrower spectrum of light. This means that LEDs appear brighter to the human eye even when the light level is intended to be the same. This often becomes an issue when traditional HPS lights are replaced with LEDs as residents often find the light to be obtrusive. When upgrading to LEDs in residential areas it is essential to take the differences in old and new technologies into account from the start and to have a dimming system to be able to respond to complaints from residents.

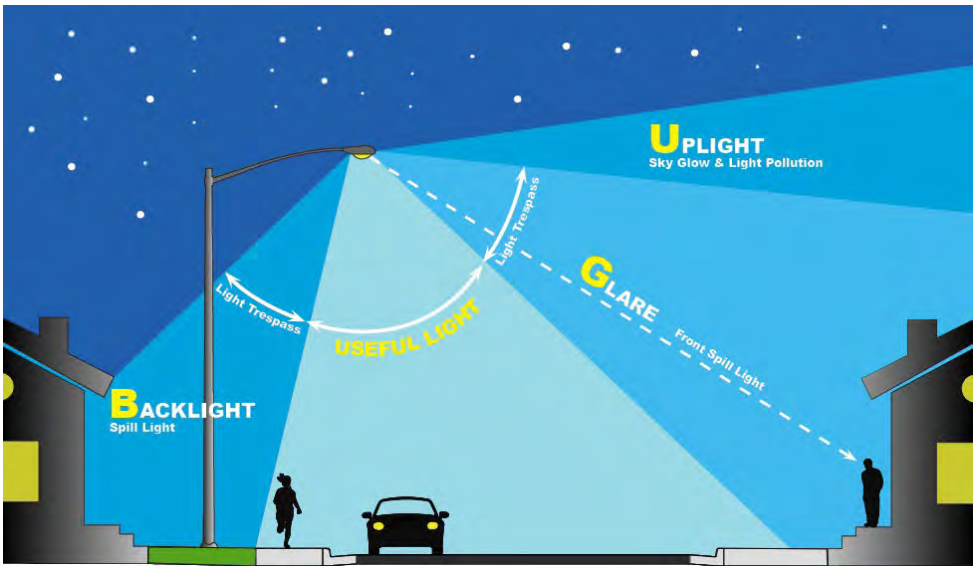
Figure 9-4:Color rendering

This car is illuminated by two different light sources. On the left side an LED light source with high color rendering clearly reveals the colors and details of the car. On the right side a low-pressure sodium light with low color rendering distorts the color of the car and the details of the vehicle are not clear to the viewer.

A.7 BUG RATINGS

The BUG rating system (Backlight-Uplight-Glare) for luminaires which is defined in IES TM-15-11 (IES, 2015) provides a numerical rating of the luminaire light distribution as it applies to light trespass, uplight, and glare. BUG ratings are defined by the zonal lumen output within the distribution angles of a luminaire. Essentially, a higher BUG rating means that more light is emitted at each angle.

Figure 9-5: BUG Ratings Applied to a Streetscape



Backlight (B) is the amount of light falling behind the luminaire. Too much backlight can result in unwanted light trespass onto adjacent surroundings or into windows. Or sometimes backlight can provide beneficial lighting for sidewalks located behind the amenity zone of a street or for pedestrian areas adjacent to a trail. The quantity of backlight and whether it could be useful needs to be a carefully considered part of any lighting design.

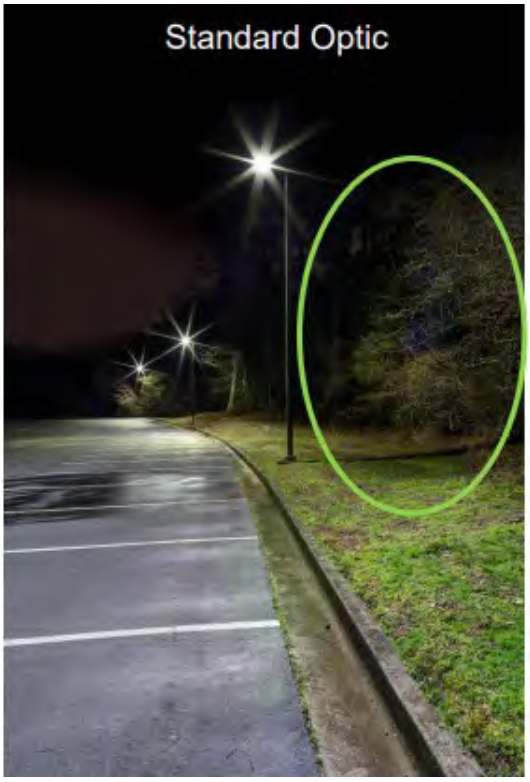
Uplight (U) is the amount of light produced in the upper 90 degrees of the luminaire. Low angle uplight (from between 80° to 100°) is the largest cause of sky glow which adversely affects astronomy, smog levels, and the view of the night sky. Higher angle uplight, at angles greater than 100 degrees, is almost always wasted light.

Glare (G) can be annoying or even disabling. While higher angles of frontward light allow the light to be cast further from the source, any angle above 63° can cause disability glare and its occurrence therefore should be minimized. Luminaires that have a glare rating greater than G3 have the greatest potential for creating disability glare, which can be dangerous. Luminaires with lower glare ratings (G2 or lower) are preferred.

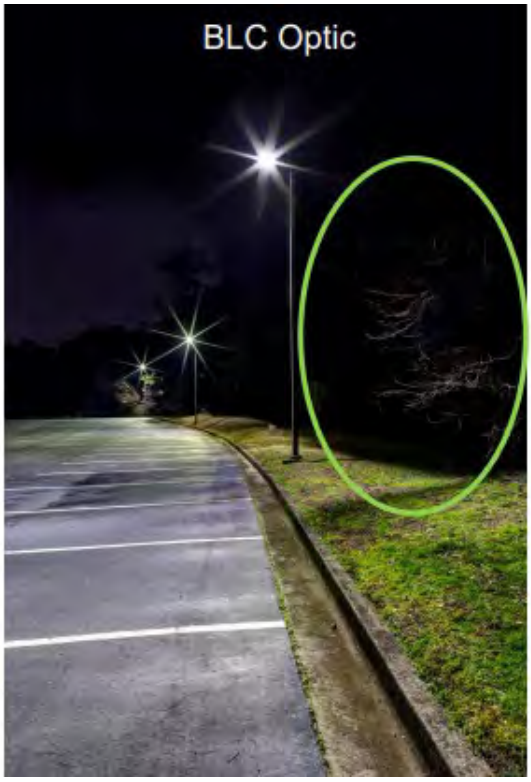
A.8 LIGHT TRESPASS

Light trespass is defined as stray light that crosses a property boundary. Uncontrolled, non-shielded light sources are usually the cause of light trespass. The most noticeable form of light trespass is usually caused by an excessively bright luminaire that is unshielded and thus distributes light outward into the adjacent properties. This quickly becomes a nuisance to the neighbors or the environment. However, even a well-controlled, fully shielded luminaire may cause light trespass if it is not located or oriented properly on a site. Topography can easily lead to this. In cases where the location of a light standard cannot be changed, additional shielding may be necessary to prevent light trespass.

Figure 9-6: Light trespass



A luminaire with inappropriate light distribution and poor shielding creates a significant amount of light trespass on a nearby open space.



A well shielded luminaire with appropriate light distribution provides adequate light for the street with minimal light spill beyond the parking lot.

A.9 LIGHT POLLUTION

Light pollution and sky glow are caused by light aimed directly up into the sky and by light reflected up from the ground or other surfaces. Any outdoor lighting will contribute to light pollution. However, it is the direct uplight component of outdoor lighting (rather than the reflected light) that does not contribute anything to useful street-level visibility that is the most objectionable form of light pollution. Unshielded luminaires are the biggest contributors to sky glow. Also, over-lighting even with fully shielded or U0 luminaires, reflects unnecessary light into the atmosphere and adds to the total sky glow. To minimize light pollution, any site must first minimize the overall amount of light. Exterior lighting should be used only where and when it is needed.

APPENDIX 2 - GLOSSARY

Backlight, Uplight, and Glare (BUG) Ratings: A Luminaire Classification System for Outdoor Luminaires per IES TM-15 that describes the amount of uplight, backlight and glare. The lower the rating (i.e. a 0) equates to the minimal amount of negative impact.

- B = backlight, or the light directed behind the luminaire.
- U = uplight, or the light directed above the horizontal plane from the luminaire.
- G = glare, or the amount of light emitted from the luminaire at the angles known to cause glare.

Color Rendering Index (CRI): This is a metric developed using a scale of 0 to 100 to describe the ability of the light source to render an object's natural colors.

Continuous Lighting: An outdoor lighting system made up of regularly spaced luminaires along a trail or street. IES criteria typically defines minimum and maximum illuminance or luminance values and the overall uniformity along the lighted area.

Correlated Color Temperature (CCT): Measured in Kelvin (K). This is the color appearance of the light emitted by a lamp. The CCT rating for a lamp is a measure of the "warmth" or "coolness" of its appearance. In general, fire has a CCT of around 1850K and daylight is around 6000K.

Glare: The visual sensation created by luminance (or brightness) that is significantly higher than the surrounding luminance level that the eyes are adapted to. This can cause annoyance and discomfort (discomfort glare), or even a loss in visual performance and visibility (disability glare).

Illuminance: Measured in Footcandles (Fc). This is the density of light falling onto a surface. Commonly measured in the horizontal and vertical planes.

Illuminating Engineering Society (IES): The IES strives to improve the lit environment by publishing recommended practices to guide lighting designers, architects, engineers, sales professionals, and researchers. The IES' The Lighting Handbook and Recommended Practices are the current recognized authoritative references on the science and application of lighting.

Legacy Light Source: All non-LED light sources including incandescent, halogen, high pressure sodium, low pressure sodium, induction, and fluorescent types.

Life Cycle Cost: An economic analysis of an investment that covers all the costs and benefits over the expected life cycle of the equipment or system. Unlike a simple payback analysis, it accounts for maintenance and energy costs even after the system is paid for with projected savings.

Lifetime: The life value assigned to a light source. This value is commonly a statistically determined estimated average or the median operational life. For LED sources, it is the average time before the light output has reduced to 70% of its initial light output.

Light Pollution: Typically, this is light emitted upwards, either directly from a luminaire or when reflected from a surface, increasing overall skyglow. While the direct light is the largest contributor to light pollution, over-lighting which results in light reflected from the ground also increases this negative environmental impact.

Light Trespass: Light spilling past property lines so it falls onto adjacent properties unintentionally. This can be a neighborhood nuisance and a contributor to light pollution.

Lumen: The measurement of visible light (luminous flux) emitted from a light source.

Luminaire: The complete electrical light unit including light source, housing, optics, and driver.

Luminance: Measured in Candela per meter squared (cd/m2). The light source or surface brightness as it is perceived by the human eye.

Luminous Efficacy: Measured in Lumens per Watt (lm/W). A measure of luminaire energy efficiency, or the ratio of luminous flux to power consumption.

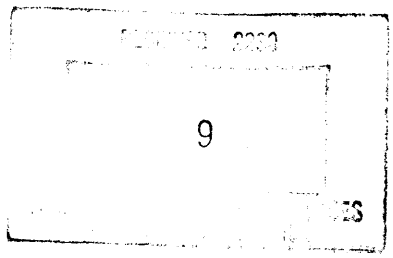
Non-Continuous Lighting: A non-continuous outdoor lighting system that typically lights only conflict areas such as trail intersections, crosswalks, ingress/egress ramps, and other navigational hazards.

Typology: The classification of different physical characteristics of a site or area in order to guide design choices.

Veiling Luminance: A metric used to evaluate disability glare from a driver or other user of outdoor lit spaces perspectives (L_v).

Warrant: In lighting design, warrants are the conditions of a site that determine whether or not lighting is required and which lighting strategy is necessary or suitable if so.

Watt (W): A measurement of energy transfer over a unit of time.



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United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Laurelhurst Park

other names/site number Ladd Park

2. Location

street & number 3554 SE Ankeny Street ☐ not for publication

city or town Portland ☐ vicinity

state Oregon code OR county Multnomah code 051 zip code 97204

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ____ does not meet the National Register Criteria. I recommend that this property be considered significant ___ nationally ___ statewide X locally. (___ See continuation sheet for additional comments.)

January 16, 2001

Signature of certifying official / Date
Deputy SHPO

Oregon State Historic Preservation Office
State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

Signature of commenting or other official Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is: Edson H. Beall 2/16/01

_V_ entered in the National Register
___ See continuation sheet.
____ determined eligible for the _____ _____
National Register
___ See continuation sheet.
____ determined not eligible for the _____ _____
National Register
____ removed from the National Register _____ _____

____ other (explain): _____

_____ _____ _____
Signature of Keeper Date
of Action

5. Classification

Ownership of Property (Check as many boxes as apply)
___ private
_X_ public-local
___ public-State
___ public-Federal

Category of Property (Check only one box)
___ building(s)
___ district
_X_ site
___ structure
___ object

Number of Resources within Property

Contributing	Noncontributing	
1	_____	buildings
1	_____	sites
2	4	structures
_____	1	objects
4	5	Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)

City Beautiful Multiple Property Submission

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat: RECREATION AND CULTURE Sub: outdoor recreation

Current Functions (Enter categories from instructions)

Cat: RECREATION AND CULTURE Sub: outdoor recreation

7. Description

Architectural Classification (Enter categories from instructions)

LATE 19TH AND 20TH CENTURY REVIVALS

Materials (Enter categories from instructions)

foundation
roof
walls
other

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

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Description[1]

Laurelhurst Park contains one contributing building, one contributing site, and two contributing structures. In addition, Laurelhurst Park contains four noncontributing structures and one noncontributing object. The contributing and noncontributing features are listed below with numbers corresponding to the map entitled "Sketch and Boundary Map and Feature Key" found after Section 10 of this document.

1. Ankeny Street Comfort Station: contributing building.
2. Laurelhurst Park land, defined by its legal boundaries and including Concert Grove, Children's Lawn, Plateau Meadow, Broad Meadow, Picnic Grove, and Rhododendron Hill: contributing site
3. Circulation system: contributing structure
4. Firwood Lake: contributing structure
5. Lighting system: noncontributing structure
6. Horseshoe pit court: noncontributing structure
7. Boomerang Island: noncontributing structure
8. Concrete terraces: noncontributing structures
9. Modern sculpture: noncontributing object

Laurelhurst Park marks the southwest corner of Laurelhurst, a 442-acre residential neighborhood located in both southeast and northeast Portland. The 26.81-acre park is bounded on the east by Southeast Thirty-ninth Avenue, the south by Southeast Oak Street, the west by Southeast Thirty-third Avenue, and the north by Southeast Ankeny Street. The northwest border of the park, between Southeast Ash and Ankeny Streets, is heavily wooded and abuts a large parcel of residential property. With the exception of Thirty-ninth Avenue, quiet residential streets surround Laurelhurst Park.

Laurelhurst Park has a roughly triangular footprint; its east end and south side meet at a square angle, while its north side slopes south as it travels westerly, following Ankeny Street's slightly curved alignment. The park's western boundary along Southeast Thirty-third Avenue, which angles to the northeast, forms the "point" of the rough triangle. Because there was little major grading of the site when the park was developed, the topography follows the contours of the surrounding area. Gently rolling hills and intermittent level land contrast with a shallow swale and steep slope at the park's northwest section. The park boundaries are defined by a dense mix of mature deciduous and coniferous trees and large shrubs, obscuring views of the park's interior from points outside the property line. There are thirteen entrances to the park from the surrounding streets: main entrances are located at the corner of Ankeny and Thirty-ninth Streets, at the corner of Thirty-ninth Avenue and Oak Street, along Oak Street, and along Ankeny Street. There is one secondary entrance at Thirty-ninth Street, four at Oak Street, two at Thirty-third Avenue, and two at Ankeny Street.

There are six major sections of land within the park. Emanuel T. Mische, the Olmsted Brothers' long-time horticultural expert who served as Portland's park superintendent and designer from 1908 until 1914, designed Laurelhurst Park to allow for different types of uses within each section. The sections each have their own distinct character and are

[1] This description is based on a site visit conducted by Christine Curran on November 10 and November 14, 1999. Sources for this section include a 1910 site plan prepared by Emanuel T. Mische; a 1981 site plan prepared by the Bureau of Parks and Recreation; a series of building plans dating from 1914 and 1915 prepared by architects Whitehouse and Foulihoux; and a Laurelhurst Park tree inventory and plant list obtained from Portland Parks and Recreation, 1999.

separated from each other by the original concrete footpath system that circulates throughout the park. The sections will not be considered individually as contributing or noncontributing sites. They comprise the site and are therefore considered collectively as a contributing site. However, within some sections, there may be noncontributing elements, for example: the noncontributing modern sculpture located within the contributing Children's Lawn. The park's main circulation system is a contributing structure because it is original and retains its historic integrity. The paths are twelve-feet wide in most areas and paved with asphalt throughout with the exception of a secondary path through Rhododendron Hill. The system includes a stairway that runs between Ankeny Street and the park's interior at the north park boundary. The park's circulation system follows Mische's 1910 plan very closely. Although some secondary paths shown on the plan were never built, all of the main paths actually constructed at Laurelhurst Park are represented on the 1910 plan. The system essentially makes an open loop around the perimeter of the park, starting at the northernmost entrance on Thirty-third Avenue and terminating at the southernmost entrance on Thirty-third Avenue. Offshoots from the loop comprise the bulk of the circulation system, following the curvilinear boundaries of the six different sections of the park. Where paths merged, Mische created triangles that served to prevent short-cutting across the lawn by park visitors. These triangles remain ideal sites to showcase plantings such as Cornelian cherry, mountain laurel, eastern flowering dogwood, and Japanese andromeda. The circulation system was lit in 1915. The lamp standards and fixtures were replaced in the 1960s and again in 1996. Because it is not known if the new structures are placed in the same locations as the original structures and because the existing lamp structures are entirely modern, the lighting system is a noncontributing structure. Picnic tables and benches are scattered throughout the park. Placement and materials of these features have changed over time but do not greatly affect the overall integrity of the park.

The following narrative describes the park's major elements beginning at the north boundary and moving clockwise.

Ankeny Street Comfort Station

In 1914, Portland architects Whitehouse and Foulihoux designed a men's comfort station for Laurelhurst Park. The building is located at the park's northern boundary at the intersection of Laurelhurst Place and Ankeny Street. The building faces Ankeny Street, marking one of the park's main entrances, and currently holds restrooms and the park's administrative office. Because the Ankeny Street Comfort Station retains its historic integrity and appearance, it is a contributing structure.

Clad in green-painted stucco with darker green trim, the one-story, wood-frame building has a cross-gabled plan consisting of prominent, projecting cross-gabled bays at the front (south) and rear (north) facades and hipped-roof wings to the east and west. The building was designed in a simple version of English Cottage, a popular period-revival style at the time. The eaves at the cross-gabled bays display simple vergeboards, while the hipped-roof wings have overhanging boxed eaves. Three steel bollards and a concrete pad and sidewalk mark the approach to the building, which is surrounded by planting beds and mature deciduous trees. The gabled bay at the front facade holds a wood double-leaf front door framed in a simple wood casing. Each leaf has a tongue-and-groove panel surmounted by a four-light window. The door is spanned by a five-light transom. On either side of the main door is a six-light, wood-sash window. The gable of the bay is pierced by a vertical louvered vent. East of the front bay, the hipped-roof wing holds a wood-sash, multi-light window. The west wing holds a double-leaf door with tongue-and-groove panels. West of the doors the front facade continues seamlessly as part of a secondary hipped addition that extends off the west facade. The west wing's roof steps down just past the double doors, indicating the addition. The addition holds a small wood-sash, multi-light window at the front facade and two modern, single-leaf, metal doors at the west facade. The projecting gabled bay at the south facade faces the interior of Laurelhurst Park. A central double-leaf door is flanked by single-leaf doors in a continuous casing. All the doors have tongue-and-groove panels topped with four-light

windows. Thick, tapered columns flank the doors. A broad, wood beam surmounts the columns, spanning the distance between them. A series of rafter tails extends from the building to the beam, creating a canopy over the doors. The gable of the bay is pierced by a vertical louvered vent. On either side of the bay, the east and west wings hold wood-sash, multi-light windows with simple casings. The west wing addition is slightly recessed at this facade and also holds a wood-sash, multi-light window. A raised concrete patio marks the approach to the south facade. Thick, concrete wing walls ring the patio, framing a wide set of three shallow steps leading from the patio into the park. The east facade of the building is comprised of the end of the east wing. There is a single, off-center, modern metal door at this facade.

Inside the Ankeny Street Comfort Station, the center section, articulated by the gabled bays, contains a recently remodeled Parks and Recreation field office and community meeting room. The hipped-roof wings hold men's and women's restrooms. Interior furnishings are spare, with walls of painted plywood and a floor of concrete.

Concert Grove

Directly east of the Ankeny Street Comfort Station is the subdivision of the park known as the Concert Grove. The Grove is a gently sloping tract of cultivated lawn that covers the northeast portion of the park. Mische intended to build a music gazebo in the center of the Grove, but money shortages cancelled the plan. Nevertheless, the Grove has historically been the location of musical and theatrical performances, attracting large crowds to the expansive area. Since Mische envisioned a space that would accommodate such crowds, he planned a spare planting program for the Concert Grove. Mische added Douglas fir, linden, and swamp chestnut oak to the mature Douglas firs that already peppered the site in 1913. Most of the trees are scattered at the Grove's perimeter. Modern picnic tables stand in angled groupings at the east and west ends of the Grove.[2]

Firwood Lake and the Children's Lawn

The south border of the Concert Grove marks the north edge of the section of the park containing Firwood Lake. This is a large section, covering more than one-third of the east side of the park. Firwood Lake is approximately three feet deep. It is surrounded by a gravel path that circumnavigates its concrete and rock banks. Plantings around the lake are a mix of deciduous and coniferous trees and mature shrubbery planted in clusters, including common hackberry, silktree, sweetgum, fragrant snowbell, bald cypress, and Chinese witch hazel. Bigleaf maple, sugarberry, and Northern red oak are among those plantings that remain from 1913-1914. Boomerang Island stands in the west section of the lake. Constructed in the 1950s, this small island was not part of Mische's original plan; however, a dramatic weeping willow and mature evergreen shrubs contribute appropriately to the lake's picturesque appearance. Shallow concrete terraces at the lake's northwest and east shores provide seating and access to the lake. There are rock stairs and railings at the north shore leading from the path to the lake and stylized railings around the terraces at the east end of the lake. These manmade features were not designed by Mische. They represent efforts during the 1920s and 1930s to improve accessibility to the shore and increase safety in the area immediately surrounding the water. The lake is a contributing structure because it was a principle design element in Mische's original plan. The concrete terraces surrounding the lake are noncontributing structures and Boomerang Island is a noncontributing structure because these elements were not part of the original design.

Northwest of the lake is a small, treeless tract of cultivated lawn known as the Children's Lawn. Surrounded by clusters of ornamental shrubbery and mature trees, this area was designed as an open play field. It remains today as it was

[2] Portland (OR) Park Board, *Annual Report*, 1912 (Portland: The Board, 1913); Laurelhurst Park tree inventory and plant list.

originally designed, with the exception of a modern metal sculpture placed in the middle of the lawn in the early 1980s. The sculpture is a noncontributing object because it is a modern addition.

Plateau Meadow

At the south shore of Firwood Lake, the land rises to the hilly, forested southeast corner of the park. Known as Plateau Meadow, this section of the park contains many of the original, old Douglas and grand firs that Mische considered the central design element of Laurelhurst Park. His decision to minimize grading at the park was a result of his respect for the trees and his desire to maintain the grandeur of their appearance. To the grove of firs, Misch added more Douglas and grand firs, swamp chestnut oak, and London planetree. Many of these original trees still stand, although some of the old firs have died of natural causes over the years and been replaced in-kind. Later additions, evergreens and exotics, have contributed to the stunning display of variety at Plateau Meadow. These include dawn redwood, a rare deciduous conifer, giant redwood, Port Orford cedar, Northern red oak, tulip tree, Japanese crabapple, Pacific dogwood, Southern magnolia, Whitcomb flowering cherry, and Katsura tree. Besides the lamp posts along the pathways, manmade features at Plateau Meadow are limited to sparsely scattered benches, single picnic tables, and the twelve-pit, lighted horseshoe court enclosed by a low chain-link fence at the south edge of the park. The horseshoe court is a noncontributing structure because it was not part of Mische's original plan.

Broad Meadow

A dense swath of large, original camellias marks the transition from Plateau Meadow to Broad Meadow, the park's large center section whose southern boundary parallels Oak Street. Broad Meadow represents Mische's vision to create distinct sections of the park for vigorous activities: "the flatter areas are to be open to games, picnicing, rambling and fiestas." Consequently, Mische planted very little at Broad Meadow, which consists of a wide expanse of cultivated lawn with a level, treeless center surrounded by gentle slopes with dense and varied tree clusters. In 1913, Mische found Douglas and grand fir, Western red cedar, and Western hemlock at the site. He added American beech, tulip tree, heavenly bamboo, and wintersweet, all of which are extant. Subsequent plantings include Pissard plum, Northern red oak, giant sequoia, weeping Japanese cherry, Colorado spruce, and Sassafras. Broad Meadow contains a few scattered picnic tables and benches around its perimeter. It is utilized as a playing field for casual ball games and other team sports, just as Mische had intended when he designed it in 1910.[3]

Picnic Grove

Picnic Grove has a savannah-like character, with open, level spaces scattered with single trees giving way to denser foliage and hilly land at its west end. Approximately half the size of its eastern neighbor, Broad Meadow, Picnic Grove is located between Oak Street to the south and Rhododendron Hill to the north. Picnic Grove is utilized, as originally intended by Mische, as a gathering place for large groups. The area displays long strings of picnic tables on concrete pads at its flat west end. Mische did a great deal of planting in this area to augment the Douglas fir, Western yew, and black walnut that he found there in 1913. European beech, sugar maple, Norway maple, bigleaf maple, coast redwood, giant sequoia, common persimmon, holly, sycamore, and umbrella pine comprise Mische's selections for Picnic Grove. According to the park's planting inventory, this original vegetation is extant.

[3] Portland Park Board, *Annual Report*, 1912; Linda Corbett, Laurelhurst Gardener, interview by Christine Curran, November 10, 1999.

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Rhododendron Hill

The southern boundary of the area known as Rhododendron Hill meets the northern boundaries of Picnic Grove and Broad Meadow. The steepest section of Rhododendron Hill abuts a large parcel of residential property, marking the park's northern boundary between Ash and Ankeny Streets. Running from the west end of the park to the Ankeny Street Comfort Station, Rhododendron Hill is the largest of the six sections in Laurelhurst Park. Rhododendron Hill is located on either side of the park's northernmost pathway, which begins at Thirty-third Avenue and travels to the Ankeny Street Comfort Station. The paved pathway runs through a steep hillside covered with dense foliage and some of the most diverse plantings in the park. There is a gravel path that runs parallel and below the paved one. This hill contains what Mische described as the "steeper areas" of the park which were to be "devoted to arboreous and shrubby vegetation as an appropriate use of the ground and to add an enriching element and one lessening the cost of maintenance." Mische planted the area profusely with rhododendrons, azaleas, Western hemlock, and Southern and saucer magnolia. The rhododendrons that lend the hill its name are concentrated in the center of the incline around a string of straight-run brick stairs that runs from the base of the hill to Ankeny Street. Although the original log stairs have been replaced with brick, the enormous rhododendrons surrounding them are the original plantings. Subsequent plantings on the densely wooded slope include deodar cedar, border forsythia, Tanyosho pine, paperbark maple, paper birch, paperbark cherry, empress tree, redbud, Devil's Walking Stick, harlequin glorybower, grand fir, goldenchain tree, incense cedar, and red flowering currant. At the base of the hill is a shallow, lawn-covered ravine. This ravine was to have been the site of a brook and pool system originating from Firwood Lake. Mische deliberately planned the brook system for that area, knowing the area was swampy. A lack of funds cancelled construction of the brook and now the ravine holds standing water through much of the winter and spring.

Conclusion

The integrity of Laurelhurst Park is excellent. Emanuel Mische's design intent, based on the Olmsted design tradition, is clearly recognizable eighty-nine years after the park's design was conceived. Within the original property boundary, the historic circulation system is still intact, defining the original relationships between the six distinct sections of the park. Today, each section offers the same type of visitor experience and provides the same function for which it was originally intended. Because landscapes are dynamic entities, not all the vegetation called for by Mische in 1913 remains intact. However, many of the natural features that Mische used as principle design elements in his plan for Laurelhurst Park are extant, including portions of the old fir grove and the lake. Mische selected a wide variety of plants for Laurelhurst Park at a time when such horticultural heterogeneity was not commonly seen in Portland. Later alterations to the historic planting plan, inevitable in a living landscape, were undertaken in the spirit of Mische's fascination for diversity. Many of the plants in Laurelhurst Park are rare, unique to Portland and to the Northwest. Contained within its nearly twenty-seven acres are over one-hundred different varieties of trees and shrubs. The park's only architectural feature, the Ankeny Street Comfort Station, retains its historic appearance and excellent condition. A minor, seamless addition to its west end does not diminish the building's integrity. All these factors contribute to excellent visual continuity and to the strong historical associations evoked by Laurelhurst Park.

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

X___ A Property is associated with events that have made a significant contribution to the broad pattern of our history.

___ B Property is associated with the lives of persons significant in our past.

__X__ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

___ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

___ A owned by a religious institution or used for religious purposes.

___ B removed from its original location.

___ C a birthplace or a grave.

___ D a cemetery.

___ E a reconstructed building, object, or structure.

___ F a commemorative property.

___ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

LANDSCAPE ARCHITECTURE

Period of Significance 1910-1915

Significant Dates 1910, 1912

Significant Person (Complete if Criterion B is marked above)

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Statement of Significance

Introduction

Laurelhurst Park in east Portland, Oregon is eligible for the National Register of Historic Places within the area of Landscape Architecture under Criterion A and C because it embodies the design principles of Frederick Law Olmsted, the nation's most influential landscape architect and urban planner. Frederick Law Olmsted's landscape design firm was the first of several such firms to flourish around the turn of the twentieth century as a result of the City Beautiful movement. The City Beautiful movement was one among many social crusades that gained popularity between 1890 and 1917 as a response to the oppressive conditions found in American cities in the wake of the Industrial Revolution. This period of heightened social awareness, known as the Progressive Era, was characterized by reform movements in all areas of American culture, from personal morality, politics, and working conditions to civil engineering, architecture, and recreation. The City Beautiful movement promoted the rational, comprehensively planned built environment as a means for achieving civic aesthetics and social reform. The City Beautiful movement was embraced and interpreted by professionals and laypersons alike; its ideology was practiced in the fields of architecture, landscape architecture, civil engineering, community planning, recreation, and fine art. One of the fundamental components of the City Beautiful movement was the notion of beautifying the urban landscape using deliberate planning practices; its hallmark became the planned park system that stood in sharp contrast to the random and haphazard development that had characterized the physical growth of American cities up to that time.[4]

In 1898, the secretary of Portland, Oregon's newly formed park association began correspondence with Olmsted Brothers, the firm that was founded by Frederick Law Olmsted. In 1903, John C. Olmsted, stepson and nephew of Frederick Law Olmsted and principal of the firm, submitted a plan for a park system in Portland. While the Olmsted firm was not retained to design the system, the Olmsted legacy was manifested in Emanuel T. Mische, the Olmsted Brothers' long-time horticultural expert who served as Portland's park superintendent and designer from 1908 until 1914. Under E. T. Mische, Laurelhurst Park flowered into one of the finest examples of Frederick Law Olmsted's revolutionary treatment of designed landscapes in Portland.[5]

In addition, Laurelhurst Park meets the registration requirements set forth by the City Beautiful Multiple Property Submission prepared by the City of Portland Bureau of Planning in 1999. The park qualifies for listing as a Neighborhood Park that retains integrity of location, design, setting, materials, and association. It is also eligible as a reflection of Olmsted design characteristics and as a part of the Olmsted Plan of 1903. Finally, Laurelhurst Park was acquired or functioning as a park between 1897 and 1949, the City Beautiful Multiple Property Submission's period of significance.

John C. Olmsted's 1903 Portland Park Plan

The initiation of correspondence between the secretary of Portland's newly formed park association and the nation's

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[4] The following narrative on the Olmsted Plan of 1903 and Emanual Mische relied heavily on sections from Kenneth J. Guzowski's master's thesis, "Portland's Olmsted Vision (1897-1915): A Study of the Public Landscapes Designed by Emanuel T. Mische in Portland, Oregon" (master's thesis, University of Oregon, 1990); Guzowski, 9-12, 21-24; Norman T. Newton, *Design on the Land: The Development of Landscape Architecture* (Cambridge, Mass: The Belknap Press of Harvard University Press, 1971), 413-426.

[5] Guzowski, 17.

premiere landscape architecture firm, Olmsted Brothers of Brookline, Massachusetts, marked the genesis of Portland's park system. Encouraged by Portland's strong economy, city leaders in the 1890s actively promoted Portland as the emerging cultural and economic center on the West Coast. With the reformist ideologies of the Progressives at the forefront of the country's collective consciousness, Portland's visionaries set about to cultivate a higher quality of life in the city by improving the built environment. Portland was not alone in its quest for physical order, deliberate planning, and refined aesthetics. The World's Columbian Exposition in Chicago had stimulated the public's interest in civic design in 1893. Several similar fairs followed in other cities and the McMillan Commission's plan of 1901 for the Mall in Washington, D.C. strengthened the current that propelled American cities into a period of unprecedented planning activity at the turn of the century. The Portland Park Association's interest in establishing a comprehensive park system reflected this nationwide trend toward a heightened civic aesthetic known as the City Beautiful movement.[6]

In Portland, the City Beautiful movement found expression initially in the construction of four municipal reservoirs in 1894: two at Mt. Tabor and two at City Park, now known as Washington Park. Surrounded by elaborate fencing, gatehouses, cultivated lawn, and flower beds, the reservoirs represented some of the finest planned landscapes in the city. The development around the reservoirs stood in stark contrast to the city's park land, which at that time consisted of the Park Blocks, a string of twenty blocks in the city's downtown; the Plaza Blocks, two blocks now known as Chapman and Lownsdale Squares, between Southwest Salmon and Madison Streets and Third and Fourth Avenues; Terwilliger Park, south of downtown; City Park, west of downtown; Holladay Park, between Northeast Eleventh and Thirteenth Avenues and Holladay and Multnomah Streets; Columbia Park, off North Willamette Boulevard in north Portland; and Ladd's Addition in southeast Portland. Encompassing less than 200 total acres, Portland's park land was largely unimproved. Encouraged by the investment at the reservoirs and a generous donation of 107 acres of land in northwest Portland by Scotsman Donald Macleay in 1897, civic leaders began to visualize the potential for a municipal park system. Empowered by the national call-to-arms to pursue the "City Beautiful," the city of Portland formed a park association to administer and improve existing parks and to develop a park system.[7]

Negotiations between the Portland Park Association and Olmsted Brothers continued over the following two-and-one-half years. By the spring of 1903, John C. Olmsted was on his way to the Pacific Northwest to discuss the design of the upcoming Lewis and Clark Exposition and proposed park systems in Portland and Seattle. At the time of Olmsted's visit, Portland park property consisted of just over 200 acres. Olmsted spent several days touring the city and visiting parks. Later that year, he prepared a report to the Park Board "outlining a system of parkways, boulevards and parks for the city of Portland." This preliminary plan became the foundation from which the city's modern park system would eventually develop.[8]

In his report, Olmsted identified locations for thirty-seven park projects encompassed within a proposed system of neighborhood parks, suburban parks, scenic reservations, city squares, parkways, and boulevards. Among the sites

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[6] City of Portland Bureau of Planning, "The City Beautiful Movement and Civic Planning in Oregon, 1897-1921, Multiple Property Submission," sec. E, pp. 1-13; Leland M. Roth, *A Concise History of American Architecture* (New York: Harper and Row, 1979), 214-218; Newton, 400-412.

[7] "The City Beautiful Movement," sec. E, p.12-13. Acquisition dates for the parks are as follows: Park Blocks, 1852-1870; Chapman and Lownsdale Squares, 1852; Terwilliger Park, 1854; City Park, 1871; Holladay Park, 1870; Columbia Park, 1891; Ladd's Addition, 1891; and Macleay Park, 1897. Portland Park Board, *Annual Report,* 1901. Although the city owned the above park properties by 1903, they may or may not have been developed by that time. Terwilliger Park should not be confused with Terwilliger Boulevard, a parkway identified by John C. Olmsted in 1903. Acquisition of land for Terwilliger Boulevard did not begin until 1908. Guzowski, 143-145.

[8] City of Portland, "The City Beautiful Movement;" Guzowski, 17.

Olmsted selected was a portion of an east Portland dairy farm owned by the estate of William S. Ladd. In 1903, the land surrounding the farm was already being subdivided for residential use. Olmsted undoubtedly foresaw the future development of the Ladd farm, as he targeted its swampy, forested southwest section as an ideal setting for a neighborhood park. Eventually known as Laurelhurst Park, the acreage would not be acquired by the city for some time. The extraordinary rise in land values after Portland's Lewis and Clark Exposition of 1905 prevented the Park Board from realizing Olmsted's plan for the Ladd farm or for any of the other thirty-six proposed park sites.[9]

In time, however, the rapid development Portland experienced after the Exposition worked to the advantage of the Olmsted plan. As the population grew, pressure mounted for neighborhood parks and playgrounds in and around expanding residential subdivisions. In 1907, the Portland Park Association planned a bond issue for $1,000,000 to carry out the Olmsted plan of 1903. The bond issue passed in June and the following month, the Park Board enlisted Olmsted Brothers to prepare a land acquisition analysis for the properties identified in the 1903 plan. Because of the city's rapid growth and concurrent skyrocketing land values, John Olmsted made substantial changes to his 1903 plan. He suggested that the city prioritize its acquisitions, identifying the most important landscapes to be developed. He advised to abandon hopes for connecting parkways on Portland's east side, as the land had become too expensive. Instead, he suggested placing priority on constructing local and neighborhood parks to keep up with the rapid residential growth taking place on the east side. In contrast to Olmsted's 1903 plan, his 1907 acquisition plan found the Park Board in a position to act upon his advice. Between 1908 and 1909, Emanuel Mische led the Park Board in prioritizing park lands and initiating negotiations to acquire them.[10]

Emanuel T. Mische and the Portland Park System

Thirty-eight-year-old Emanuel Tillman Mische was at the helm of the Portland Park Department when the first installment of the $1,000,000 bond issue became available for park land acquisition. Mische had replaced park superintendent Arthur D. Monteith in the spring of 1908 after leaving his position as park superintendent for Madison, Wisconsin. Mische had been recommended for the Portland position by John Olmsted at the time of Monteith's hiring in 1906 but Mische had just started his job in Madison. When the opportunity arose again in 1908, the timing was right. Mische brought to Portland a remarkable range of experience and skill. Born in Syracuse, New York, he attended the Missouri Botanic School before enrolling in the Bussey Institute, the horticulture school of the Arnold Arboretum in Jamaica Plain, Massachusetts, in 1894. Under the influence of such horticulture luminaries as Charles Sargent, Alfred Rehder, Jackson Dawson, and Ernest Henry Wilson, Mische cultivated his skills, focusing on the propagation of seeds, grafting, and cuttings of new plant species from Asia. In 1896, Mische received a scholarship to attend the Royal Botanic Gardens at Kew, England. In 1898, upon his return from Europe, Mische went to work for Olmsted Brothers in Brookline, Massachusetts. Under the tutelage of John Olmsted and Olmsted's half-brother Frederick Law, Jr., Mische learned to draw and design in the Olmsted tradition. Because of his extraordinary horticulture expertise, the Olmsteds encouraged his involvement with projects requiring planting plans. After eight years with Olmsted Brothers, Mische left Brookline for the Madison position.[11]

Emanuel Mische's responsibilities as Portland's park superintendent went above and beyond the routine duties of the position. Mische expanded his responsibilities for the administration of park maintenance and improvements to include

[9] Portland Park Board, Report of the Park Board, Portland, Oregon, 1903, with the Report of Messrs. Olmsted Bros., Landscape Architects, Outlining a System of Parkways, Boulevards and Parks for the City of Portland (Portland: The Board, 1903) as described in Guzowski, 54-58.

[10] Guzowski, 64-68; Portland Park Board, *Annual Report*, 1923.

[11] Ibid., 97-100.

the designing and planting of all the city's parks. While his predecessor simply made recommendations for park land acquisition, Mische took an active role in negotiations. Because of his intimate involvement with every aspect of park planning, the parks that were developed during his six-year tenure as park superintendent emerged with a distinct character wholly evocative of Frederick Law Olmsted's finest urban park designs. During his eight years with Olmsted Brothers, Mische had absorbed the philosophies that inspired the work of the Olmsted family: the social responsibility the Olmsteds felt to create restorative landscapes for all classes of people; the creation of designs that resembled the results of natural weathering or biological processes on the land; the use of design techniques that created either a pastoral scene characterized by gently rolling meadows, scattered shade trees, and still bodies of water, or a picturesque scene evoked by lush foliage, rugged terrain, and circuitous paths and streams; the use of circulation systems such as walks and drives so visitors could enjoy the landscape without destroying it; the belief that all buildings and statuary in a park remain secondary to the landscape design; and finally, the importance of the benefits to the human soul of total immersion in scenery. In addition, Mische was heavily influenced by the Olmsted technique of dividing neighborhood parks into sections for different types of uses. John Olmsted mentioned this design approach in 1903 when he suggested to the Portland Park Board, "To make them [neighborhood parks] as attractive and useful as possible it is often best to abandon the attempt to secure simple broad landscape effects and to design them with as many interesting features and useful subdivisions as practicable somewhat as a recreation building is subdivided." Mische utilized all of the design techniques mentioned above when designing new park acquisitions and improving existing parks while he was superintendent.[12]

The Park Board Takes Possession

By December 1909, Mische had facilitated the acquisition of Mt. Tabor, Kenilworth, Sellwood, and Peninsula parks, and Ladd Park, now known as Laurelhurst. First identified by John Olmsted as part of his 1903 park plan, Ladd Park was further developed on paper when John Olmsted returned to Portland in 1906 to secure private work with William M. Ladd. Ladd's father, William S. Ladd, had been a prominent civic leader in Portland. Founder of the city's first bank and twice mayor of Portland, the elder Ladd had owned and operated Hazel Fern Farm, a 486-acre dairy and livestock concern in east Portland. William S. Ladd died in 1893 and in 1906 the property still belonged to his estate. As Olmsted had suspected three years earlier when he targeted a portion of the farm as an ideal site for a neighborhood park, the property was under extreme development pressure. One year after the Lewis and Clark Exposition, with land values soaring, Ladd's son contacted Olmsted in anticipation of the residential development that was planned for the farm as soon as the estate was settled. According to landscape historian Kenneth J. Guzowski, Olmsted made several preliminary plans for the new subdivision only to learn that his firm would not be employed to finalize the design. Olmsted remarked in a letter to his business partner, Frederick Law, Jr.:

> Mr. Ladd's idea is that I should act in consultation with his engineer in determining a few main lines of curved roads only. I thought this rather absurd but did not say so of course. I mean that it did not seem to me possible to determine the main lines without studying all the roads. I dare say it was partly his canny way of saving the cost of a full plan. However I dare say I shall get a fair compensation out of it.[13]

Olmsted's essential plan for the subdivision featured curvilinear streets and emphasized a large neighborhood park at

[12] Charles E. Beveridge and Paul Rocheleau, *Frederick Law Olmsted: Designing the American Landscape* (New York: Rizzoli International Publications, Inc., 1995), 33, 38, 43, 50-51; Portland Park Board, *1903 Report* as quoted in Guzowski, 119.

[13] "Closely Knit Laurelhurst Clings to Roots," *Oregonian*, n.d., vertical file at Oregon Historical Society. Subsequent references to the Oregon Historical Society will be abbreviated "OHS;" Olmsted to Olmsted, Dec. 4, 1908, quoted in Guzowski, 63.

the south end of the development. The plans languished until the settlement of William S. Ladd's estate in 1908 triggered a flurry of property transactions. As soon as their father's estate was settled, William M. Ladd and his brothers formed the Ladd Estate Company to handle the family's land holdings. In 1909, the company deeded Hazel Fern Farm to William M. Ladd, who promptly sold it to the Laurelhurst Company that year for $2,000,000, the largest sale of vacant land in Portland up to that time. Using Olmsted's plans as a framework, the Laurelhurst Company began planning the subdivision in earnest. In keeping with Olmsted's vision, the Portland Park Association purchased the swampy southwest corner of the property from the Laurelhurst Company in October 1909 for $92,482.10.[14]

A Layout for Laurelhurst

While formulating designs for the parks he acquired in 1909, Mische was particularly challenged by the site at Ladd Park, proposing "a development of strong individuality for the park, one not possible in a similar way in any of the other park properties." At just over thirty acres, the Ladd Park property purchased by the Park Board was slightly larger than was suggested by Olmsted. Mische felt justified in improving on his old friend's recommendation, explaining to the Park Board in 1909, "to confine ourselves to the original recommendation would be to secure practically the swamp alone, whereas the extended taking includes many specimens of the grove of fine old firs and it furthermore allows for providing that district with more reasonable ample and satisfactory park attributes."[15]

Indeed, the grove of old firs at the southeast end of the park became the focal point of the park's design. Mische called the trees "the crowning glory of the park" and he described their role in his plan for Laurelhurst Park, as it was known by then, in the 1912 annual report to the Park Board:

> The proposed plan is conceived in the spirit of the trees being the principal local consideration, and the general design and its details are devised to accentuate them and encourage their continued longevity.[16]

Mische planned to emphasize the fir trees by integrating other existing evergreen vegetation at the site into the design and by planting new evergreens and other plants rich in foliage, such as "hollies, mountain laurel, rhododendrons, azaleas, and similar plants known as 'choice,' either for their elegance of foliage, beauty of flower, ornament of fruit, or similar reasons." Mische insisted that "practically all of the material used there is grown in local nurseries," and that his suppliers looked elsewhere only when there was a shortage in local stock or a financial advantage to obtaining a plant from a non-local source. According to Linda Corbett, Laurelhurst's gardener, Mische obtained much of his non-local material from the southeastern United States, which may account for the high mortality rate of many of the original shrubs over time. In addition to the native plants and trees existing at the site, Mische's planting palette at Laurelhurst included Japanese snowbell; sweet viburnum; sweetgum; fragrant snowbell; tupelo; camellia; mountain laurel; Japanese star anise; sakaki; bigleaf, silver, and Norway maple; seven species of magnolia; redwood; fuchsia; heavenly bamboo; sassafras; American (or London) planetree; Chinese photinia; European and American beech; tuliptree; wintersweet; holly; Western hemlock; daphne; hydrangea; five species of rhododendrons; five species of

[14] Guzowski, 63; OHS vertical file; Warranty Deed, Laurelhurst Park Historic File, 1909-1972, 27/10 at the Stanley Parr Archives and Records Center, Portland, Oregon. Subsequent references to the Stanley Parr Archives and Records Center will be abbreviated "Portland Archives."

[15] Portland Park Board, *Annual Report*, 1909.

[16] Portland Park Board, *Annual Report*, 1912; Ladd Park's name was changed to Laurelhurst Park by a resolution adopted by the Park Board in July 1912. The same resolution changed City Park's name to Washington Park and Williams Park's name to Mt. Tabor Park. Laurelhurst Park Historic File, 1909-1972, 27/10, Portland Archives.

boxwoods; ten species of zaleas; three species of linden; gardenia; and common hackberry.[17]

In addition to the grove of fir trees, Mische utilized an existing spring-fed pond at the east side of the site as a principle design element. Mische called for the enlargement and deepening of the pond to create Firwood Lake, which was designed to feed a brook system that emptied out of the lake from its north shore, meandering west to the far end of the park. Mische envisioned intermittent dams creating pools and miniature cascades at several locations along the stream. Picturesque bridges would carry paved walkways over the brook. The details in Mische's design went beyond aesthetics. His extensive knowledge of horticulture and natural systems led Mische to make allowances in his design of the lake to keep it clear of biological growth and prevent stagnation. He calculated the depth of the lake to prevent the growth of aquatic weeds and provided a back-up circulation system, suggesting the use of an artesian well or the city main if the Ladd spring failed to keep the water moving naturally.[18]

Mische's design subdivided the park into six major sections separated by paved walkways. "The flatter areas are to be open to games, picnicing, rambling and fiestas. The steeper areas are to be devoted to arboreous and shrubby vegetation as an appropriate use of the ground and to add an enriching element and one lessening the cost of maintenance." The bucolic names Mische gave to these subdivisions reveal their distinct characteristics: "Concert Grove," "Plateau Meadow," "Broad Meadow," "Picnic Grove," "Rhododendron Hill," and "Children's Lawn." The circuitous walkways that bordered them were "so arranged as to control a tendency toward short cuttings."[19]

Mische's description addressed the issue of buildings and structures in the park, invoking quintessential Olmsted design principles in his insistence that "all building structures coming into vision are to be secondary to the landscape, and with this design a departure therefrom can only be adopted as a sacrifice to park effect and value." Mische proposed to "provide such necessary structures as shelters and comforts, and such minor objects as seats, fountains, light standards, and the like, but never to introduce buildings of conspicuous size, or any dominating a considerable portion of the park."[20]

Mische felt the design of Laurelhurst Park, more than any in the park system, was dictated by the existing vegetation, topography, and natural features at the site. His understanding of the integral character of natural systems was evident in his warning to the Park Board that, with the exception of Macleay Park, "change is nowhere to be regarded with the probability of harm being so surely involved therein as in this one." Mische felt strongly that any major alteration of the topography, such as substantial re-grading or placing structures too close to the grove of fir trees, would cause irreparable harm to the site's most appealing features. From the beginning, Mische considered Laurelhurst Park "a distinctively interior park with views wholly within the tract, and its development recognizes and uses this so as to establish a highly ornate property, self contained and without outward dependence other than for water supply." At Laurelhurst Park, Mische's training at the hands of the Olmsted Brothers is fully recognizable, as he clearly subscribed to the Olmsted conviction that "all rational improvement of grounds is, necessarily, founded on a due attention to the character and situation of the place to be improved."[21]

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[17] Park Board, *Annual Report*, 1912, 68-70; original plantings plan linen, 1913, in the collection of the Portland Archives; Linda Corbett interview; letter from E. T. Mische to Paul Murphy, June 19, 1914, Correspondence-Laurelhurst 1914 File 2/8, Portland Archives.

[18] Park Board, *Annual Report*, 1912, 68-70.

[19] Ibid.; Original plan for Ladd Park, 1910, Portland Archives.

[20] Park Board, *Annual Report*, 1912, 69.

[21] Ibid., 70.

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National Park Service

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Laurelhurst Park
Name of Property

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Mische's Vision Materialized

Although Mische designed Laurelhurst Park in 1910, little more than debris clearing happened at the site that year because of funding shortages. At the end of 1911, the site was still unimproved but Mische stated in his annual report to the Park Board a desire to start grading walks and lawns at the park. Construction finally began in 1912 with the sub-grading of walkways, the grading and seeding of lawns, and the installation of log steps; however, financial constraints stalled plans for planting and quashed the construction of a gazebo for the Concert Grove and the installation of the brook and pool system. That year also brought a challenge to one of Mische's principle design elements. Feeling pressure from "local agitation" for a playground in the park, likely from prospective and existing owners in the developing Laurelhurst subdivision, the Park Board insisted that plans be studied for the substitution of the proposed Firwood Lake with a recreation area. The site would include a swimming pool, assembly building, lockers, gymnasium, and an outdoor playground. Mische claimed that because of the "radical changes this entails, if so much as possible of the tree growth is to be preserved, extremely careful and painstaking study on an extended scale is necessary and to date sufficient time to prepare it has not been available." Mische felt strongly that no further improvements be made to Laurelhurst Park until the playground issue was resolved. In addition, the public had failed that year to pass a $2,000,000 bond issue for park acquisition and improvement. For these reasons, construction did not resume at Laurelhurst Park for three more years.[22]

After the failure of the 1912 bond issue, Mische made a concerted effort to promote the bond for a 1913 election. Even though he had made substantial progress toward realizing Olmsted's 1903 plan, Mische lamented that Portland was still 100 to 600 percent behind other American cities in park development. He spent the year on the local lecture circuit, gathering research, and making presentations in an all-out appeal for his cause. The failure of the bond issue in June 1913 disheartened Mische profoundly. That same year, extensive city charter revisions abolished the Park Board in the process of installing a commission form of government. Although the park superintendent was still the administrative head of the newly established Park Bureau, sources suggest that the restructured government did not share Mische's broad interpretation of the position. He was transferred to the position of landscape architect for the city in August 1914 after continued friction with Commissioner William Brewster. One month later, Mische officially tendered his resignation as park superintendent. Almost immediately upon his resignation, Mische signed a one-year contract with the city to serve as a parks consultant under the new superintendent, James O. Convill, Mische's former assistant. In his capacity as consultant, Mische made recommendations and executed designs for new additions to the Olmsted Plan and prepared detailed improvement and planting plans for existing parks, including Laurelhurst.[23]

It was under Convill's administration and Mische's design and recommendations that activity resumed at Laurelhurst Park in 1915 with the paving of the walkways, the installation of a lighting system, and the erection of a "first-class" restroom facility. With the renewed attention to the park and the continuing development of the residential neighborhood surrounding it, Laurelhurst Park's popularity began to rise dramatically. By that time, the park and neighborhood were accessible by several street car lines: the East Ankeny and Montavilla lines along Glisan, the Rose City and Beaumont lines along Sandy, and the Mount Tabor and Sunnyside cars along Belmont Street. The annual report to the Park Board in 1915 noted that because of its central location, the patronage of the park was "enormous" and that one local band concert drew 32,000 people, "the largest crowd ever assembled in a Portland park for a single

[22] Park Board, *Annual Report*, 1910-1912. Construction took place on a contractual basis. Information was not available regarding the specific firms that undertook the work on Laurelhurst Park.

[23] Guzowski, 148-153.

band concert."[24]

Regular improvements continued at Laurelhurst Park through 1916, the most significant of which was the enlarging and deepening of the pond at the east end of the park to create Firwood Lake. By 1916 Portland's park system consisted of 1,410 acres, much of it acquired, designed, or improved by Emanual Mische. Mische had described Laurelhurst Park as "one of the most elegant of the park system properties;" it was later reported to have been his favorite. Mische used Laurelhurst to show off his horticultural expertise, taking full advantage of the site to experiment with a wide range of plant varieties that had not been used before in Portland. In 1919, the Pacific Coast Parks Association honored Mische by voting Laurelhurst the most beautiful park in the west.[25]

After Mische's contract with the city of Portland ended, he continued to exert his influence over park decisions through newspaper articles, city council meetings, and as president of the Portland City Club, a position he held from 1922 to 1923. In addition, he pursued private work all over the West Coast, aiding in the developing of Crater Lake Park and contributing to leading contemporary horticulture and landscape magazines. He stayed in Portland until the mid-1920s when he moved to Los Angeles to pursue park work for California State Parks.[26]

Laurelhurst's Olmsted Legacy

In August 1917, another of Mische's former assistants, Charles P. Keyser, became the Executive Head of the Park Bureau, a position he retained for thirty-two years. As a result of having worked closely with Emanual Mische for many years, park superintendent Keyser followed a nearly seamless philosophical approach to the maintenance and improvements of Portland's park system. Between 1921 and 1922, Keyser purchased an entire block across Oak Street from Laurelhurst Park to serve as a playground. This strategic acquisition took the pressure off further development at the main park and was a key factor in the retention of the park's design integrity over time. Keyser oversaw the development of the playground throughout the 1920s, installing tennis courts, handball courts, play equipment, a wading pool, a recreation building, and a kitchenette. A real estate inventory listing park and playground features installed between 1925 and 1932 notes the installation of horseshoe courts in 1926, a point confirmed in the 1927 Annual Report, which listed six courts. Although it is unclear whether the horseshoe courts were located at the playground or at the main park, the six courts were likely the first of twelve that currently stand at the south side of the main park. These horseshoe courts represent the only major recreation facility constructed in the park since it was designed in 1910. Charles Keyser continued to facilitate improvements to Laurelhurst Park through the 1920s and 1930s, including the installation of a rock shore, shallow concrete terraces, and railings at Firwood Lake. The 1955 construction of Boomerang Island in the lake was perhaps the most significant alteration to Mische's park design, although it echoes the picturesque character of the rest of the park. The 1950s also saw the original log stairway that led from the north end of the park to Ankeny Street replaced by one constructed of bricks in the identical location. An electric kitchen and restroom facility west of Broad Meadow, built in the 1960s, was removed in 1996. A metal sculpture was placed in the Children's Lawn in the early 1980s.[27]

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[24] Park Board, *Annual Report*, 1915.

[25] Park Board, Annual Report, 1916; letter from E. T. Mische to Paul Murphy; Linda Corbett, interview; Keith Eggener, Ladd Park National Register Nomination (unsubmitted), 1985, sec. 8, p. 5.

[26] Guzowski, 152-158.

[27] Warranty Deeds, 1921 and 1922, Laurelhurst Park Historic File, 1909-1972, 27/10, Portland Archives; Real Estate Inventory, Laurelhurst Park Historic File, 1909-1972, 27/10; Eggener, sec. 8, p.5.

The plantings that Mische so carefully selected for Laurelhurst Park in 1913 and 1914 matured with varying levels of success. The trees fared better over time than the shrubbery, although original examples of both planting types have survived to the present. The grove of old firs that caught Mische's trained eye in 1909 is currently a mix of original and second-growth trees; as the trees reached their natural life span and died, park officials replaced them in-kind. Although some of the plants along the perimeter of the park have been replaced over time, the "wholly interior views" that Mische intended in his design of Laurelhurst Park have been preserved.[28]

The lush surroundings at Laurelhurst Park were chosen year after year as the location for such long-standing Portland traditions as the Rose Festival flower shows and queen coronations. In the 1960s and 1970s, Laurelhurst Park suffered neglect as the surrounding neighborhood experienced a decline in property values and owner-occupied residences. However, the past twenty years have witnessed the re-emergence of the Laurelhurst neighborhood as the elegant subdivision it was designed to be almost ninety years ago. Property values there are among the highest in the city and the welfare of the park and the neighborhood are assured under the watchful eyes of a remarkably active neighborhood association.

Today, Laurelhurst Park remains a physical anchor and cherished amenity for the surrounding neighborhood and a landmark for the city of Portland. The park is eligible for the National Register under Criterion C as perhaps the best example in the Portland park system of the Olmsted design philosophy interpreted by Emanuel T. Mische. It is also eligible for listing under Criterion A for its association with Portland's early park planning, particularly for its inclusion in the Olmsted Plan of 1903. Laurelhurst Park is clearly evocative of the social issues that were at the forefront of the American consciousness at the turn of the twentieth century. The design for Portland's park system by John C. Olmsted reflected the activities of many American cities at that time, as they strove to build a quality of life equal to the economic stability the Industrial Revolution had provided. Through the vision and talents of park superintendent E. T. Mische, the design of Laurelhurst Park embodies the distinct physical characteristics associated with Frederick Law Olmsted and his close associates, who represented the professional pinnacle in landscape design at the height of the City Beautiful movement.

Registration Requirements

Parks nominated under the Multiple Property Submission, "The City Beautiful Movement and Civic Planning in Portland, Oregon 1897-1921" must meet the following registration requirements:

1. Intact example of rural or suburban park, or an urban or neighborhood park
2. Exhibits Olmstedian design characteristics
3. May have been included in the Olmsted Plan of 1903
4. Acquired or functioning as a park between 1897 and 1921 during the period of significance

Laurelhurst Park is an excellent example of park planning in Portland during the height of the City Beautiful movement for the following reasons:

Intact example of urban or neighborhood park. Exceptionally intact after almost ninety years, Laurelhurst Park marks the southwest corner of a distinctive, 442-acre residential subdivision in the city of Portland's inner ring. The park serves both the surrounding neighborhood and the wider metropolitan area. The park is particularly accessible to pedestrians because of its location in a residential neighborhood and its interior circulation system of wide paved

[28] Linda Corbett, interview; current plantings list for Laurelhurst Park obtained from Portland Parks and Recreation.

pathways. A playground adjacent to the park contains a recreation building, tennis courts, a wading pool, and playground equipment.

Exhibits Olmstedian design characteristics. As a former employee of Olmsted Brothers, Portland park superintendent Emanuel T. Mische was an accomplished practitioner of the highly distinctive design techniques that characterized Olmsted work. Mische designed Laurelhurst Park as a superior example of such techniques: pastoral scenes characterized by gently rolling meadows, scattered shade trees, and still bodies of water are represented in Laurelhurst Park's Broad Meadow, Picnic Grove, and Firwood Lake; picturesque scenes evoked by lush foliage, rugged terrain, and circuitous paths and streams are found at Rhododendron Hill; the use of circulation systems such as walks and drives so visitors could enjoy the landscape without destroying it is evident throughout the park in the curvilinear pathway network; finally, the Olmsted belief that all buildings and statuary in a park remain secondary to the landscape design is illustrated in the placement and scale of the single building at Laurelhurst Park, the Ankeny Street Comfort Station.

May have been included in the Olmsted Plan of 1903. The current location and approximate footprint of Laurelhurst Park is clearly visible in the Olmsted Plan of 1903.

Acquired or functioning as a park between 1897 and 1921 during the period of significance. Laurelhurst Park was acquired in 1909 at the height of the City Beautiful Movement. It was functioning as a park by 1916.

Cultural Affiliation _____

_____

_____

Architect/Builder Emanuel Tillman Mische

_____

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)
___ preliminary determination of individual listing (36 CFR 67) has been requested.
___ previously listed in the National Register
___ previously determined eligible by the National Register
___ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey #_____
___ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
___ State Historic Preservation Office
___ Other State agency
___ Federal agency
_X_ Local government
___ University
_X_ Other
Name of repository: Oregon Historical Society

10. Geographical Data

Acreage of Property 26.81 acres

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
A 1	10	529520	5040895	3 10	528930	5040610
2	10	529520	5040620	4 10	528980	5040765

___ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Christine A. Curran, architectural historian

organization SERA Architects, PC date November 1999

street & number 123 NW Second Avenue telephone (503) 445-7331

city or town Portland state OR zip code 97204

Bibliography

Selected Sources

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Warranty deed. January 27, 1921. Laurelhurst Park Historic File # 27/10, 1909-1972. Stanley Parr Archives and Records Center, Portland.

Warranty deed. January 14, 1922. Laurelhurst Park Historic File # 27/10, 1909-1972. Stanley Parr Archives and Records Center, Portland.

Archival Collections

Portland Parks and Recreation Archives and Drawing Collection. Stanley Parr Archives and Records Center, Portland.

Vertical Files. Oregon Historical Society, Portland.

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Name of Property

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UTM References

Verbal Boundary Description

The nominated property is bounded by Southeast Thirty-ninth Street on the east, Southeast Oak Street on the south, Southeast Thirty-third Street on the west, Southeast Ash Street on the northwest, and Southeast Ankeny Street on the north. The boundary is shown as a heavy black line on the accompanying map entitled, "Sketch and Boundary Map, Laurelhurst Park," drawn to a scale of 100 feet to one-half inch.

Boundary Justification

The boundary represents the original tract of property purchased by the Portland Park Board in 1909.

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps
A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name City of Portland c/o Park Bureau

street & number 1120 SW 5th Avenue telephone (503) 823-2223

city or town Portland state OR zip code 97204-1914

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.0. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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Index to Photographs

Property: Laurelhurst Park, Portland, Multnomah County, Oregon
Photographer: Christine A. Curran, SERA Architects, PC
Date: November 7, 1999
Negatives: SERA Architects, PC
123 NW 2nd Avenue
Portland, Oregon 97209

No. 1 Ankeny Street Comfort Station, north facade. View to southeast.

No. 2 Concert Grove. View to northeast.

No. 3 Plateau Meadow. View to southwest.

No. 4 Footpaths between Plateau and Broad Meadows. View to north.

No. 5 General view. View to west.

No. 6 Broad Meadow. View to northwest.

No. 7 Picnic Grove. View to northwest.

No. 8 Ankeny Street Stairs. View to north.

No. 9 Firwood Lake. View to east.

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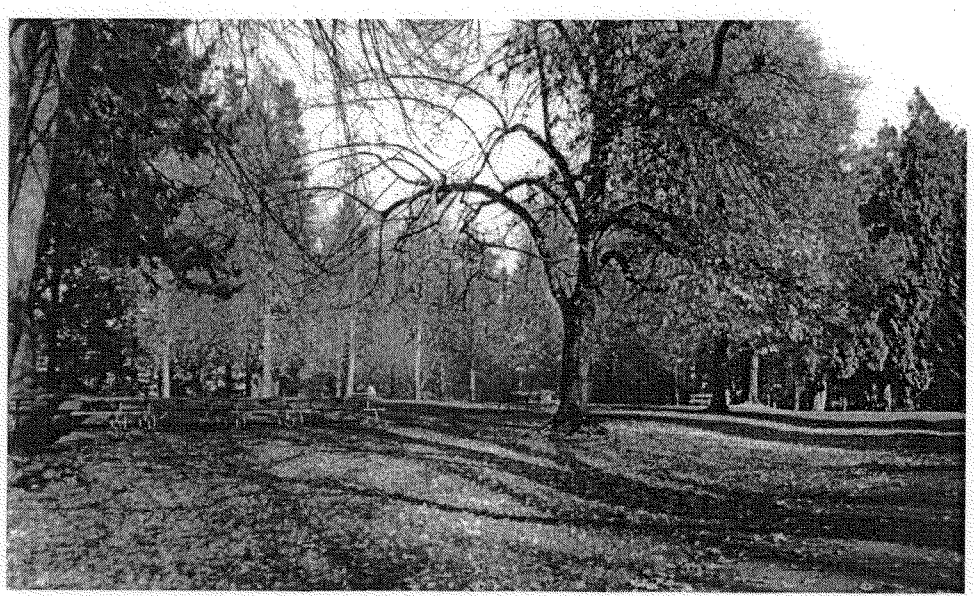
No. 1 Ankeny Street Comfort Station, north façade. View to southeast.



No. 2 Concert Grove. View to northeast.

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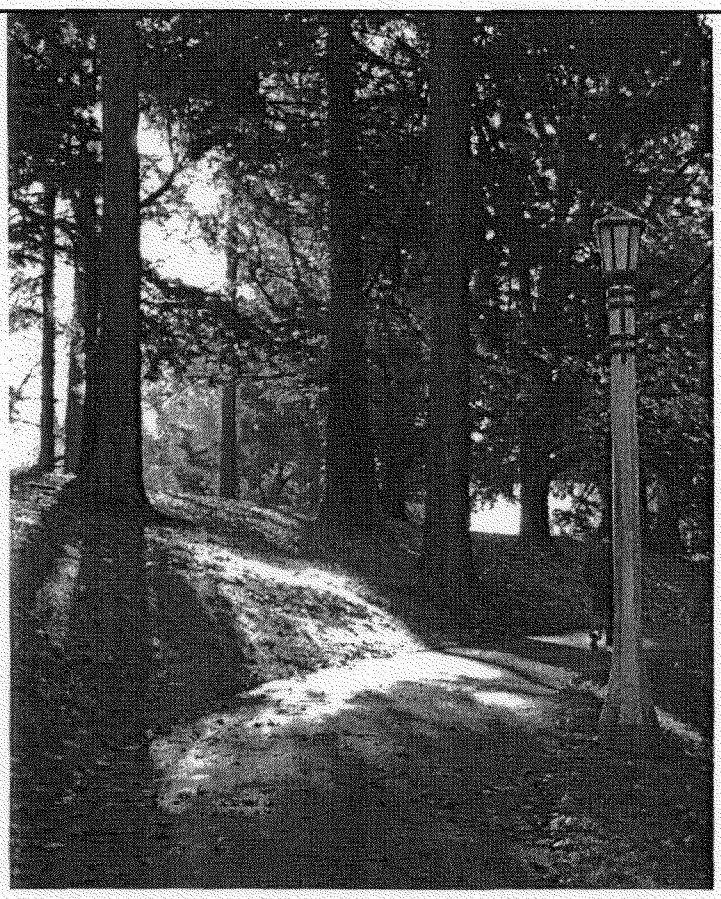
Name of Multiple Property Listing



No. 3 Plateau Meadow. View to southwest.

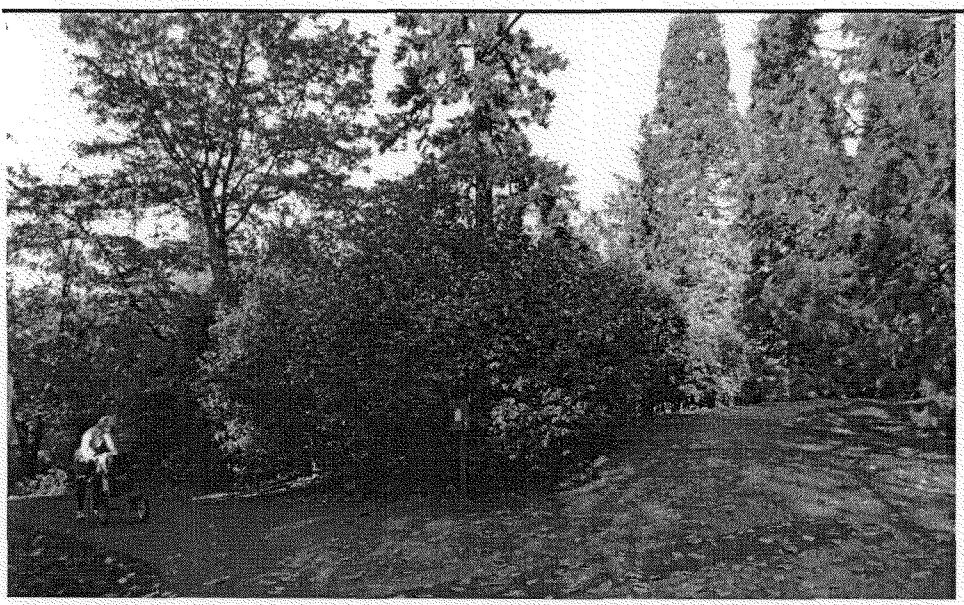
NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 11 **Page** 22

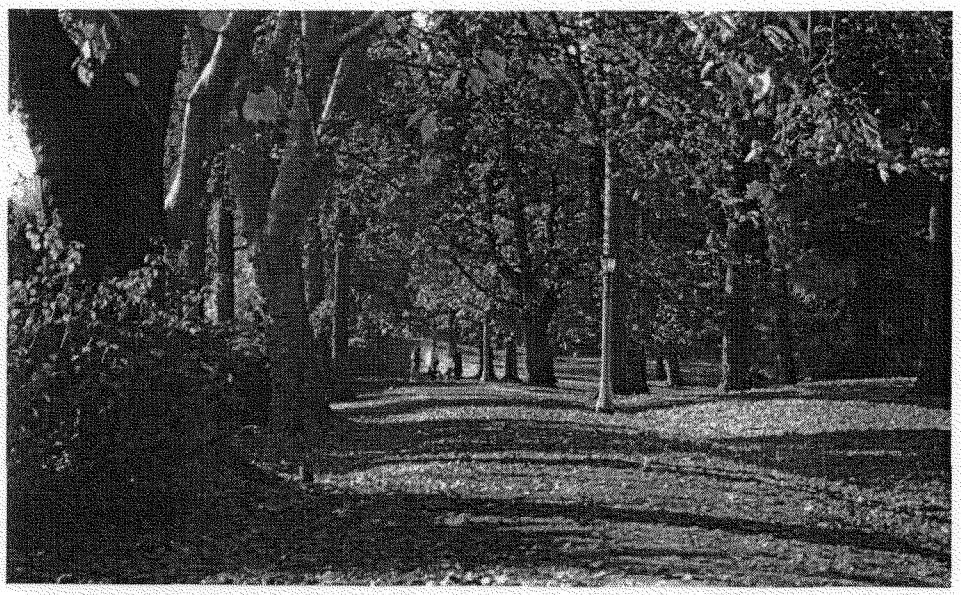
Laurelhurst Park
Name of Property

Multnomah, Oregon
County and State

City Beautiful MPS
Name of Multiple Property Listing



No. 4 Footpaths between Plateau and Broad Meadows. View to north.



No. 5 General View. View to west.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 11 **Page** 23

Laurelhurst Park
Name of Property

Multnomah, Oregon
County and State

City Beautiful MPS
Name of Multiple Property Listing

No. 6 Broad Meadow. View to northwest.

No. 7 Picnic Grove. View to northwest.

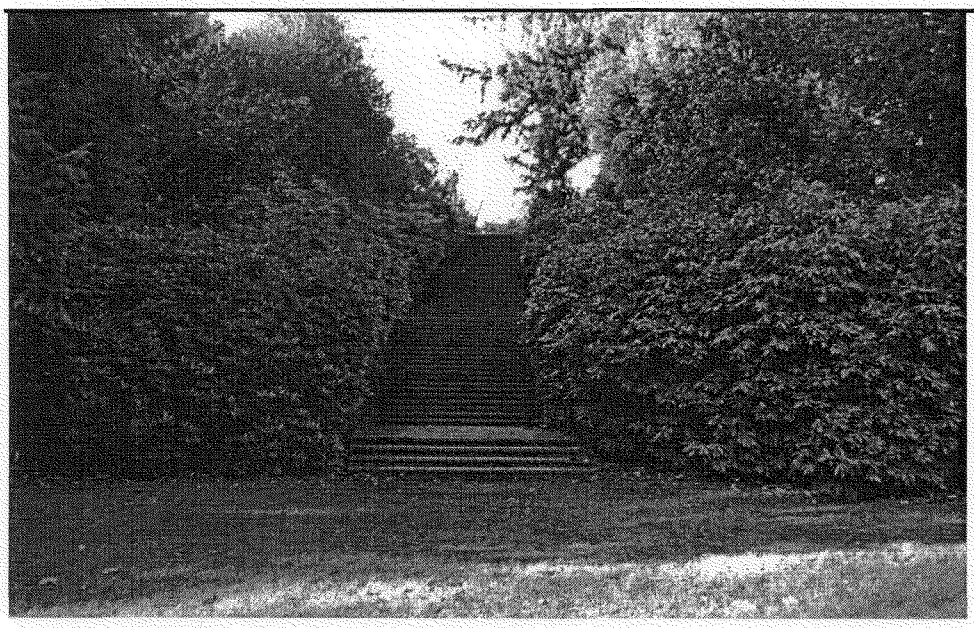
NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 11 **Page** 24

Laurelhurst Park
Name of Property

Multnomah, Oregon
County and State

City Beautiful MPS
Name of Multiple Property Listing



No. 8 Ankeny Street Stairs. View to north.

No. 9 Firwood Lake. View to east.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 11 **Page** 25

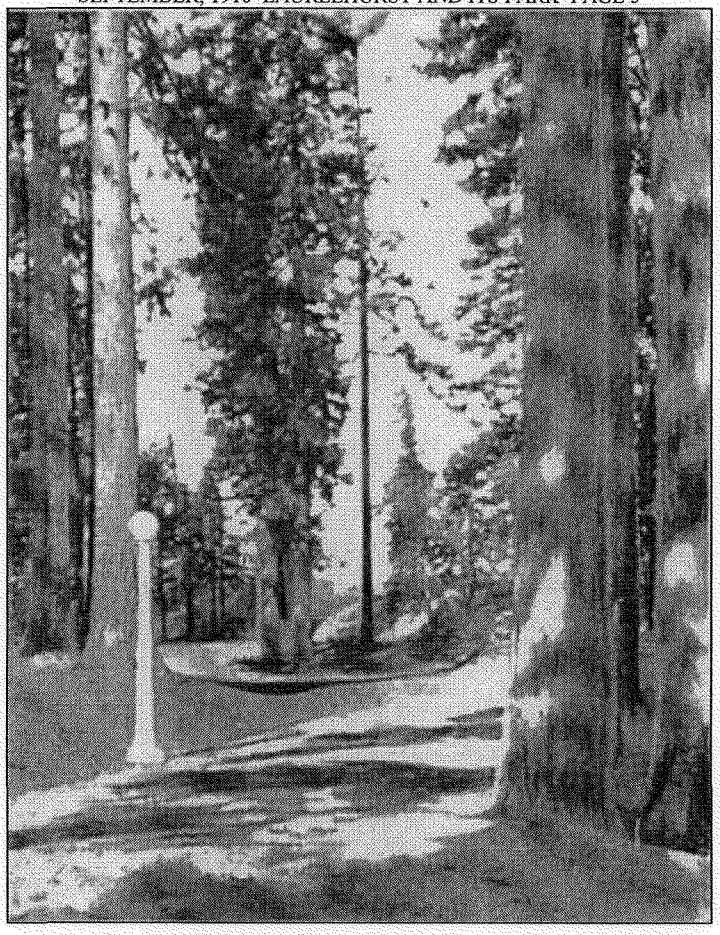
Laurelhurst Park
Name of Property

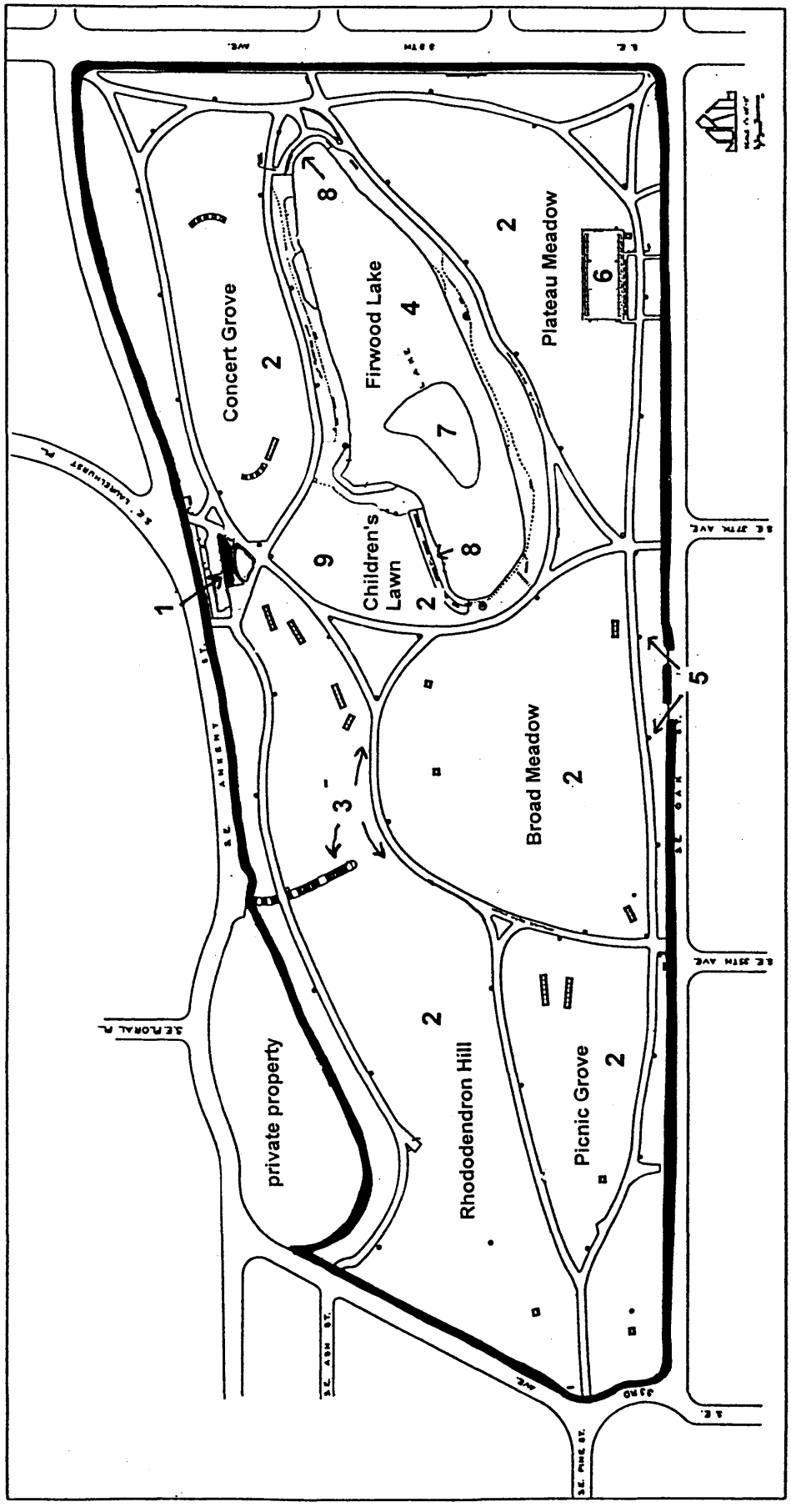
Multnomah, Oregon
County and State

City Beautiful MPS
Name of Multiple Property Listing

ADDITIONAL DOCUMENTATION: View in Laurelhurst Park, image from Paul C. Murphy, *Laurelhurst and its Park* (Portland, OR, 1916) 5.

SEPTEMBER, 1916 LAURELHURST AND ITS PARK PAGE 5





Sketch and Boundary Map
and Feature Key

Laurelhurst Park
Portland, Multnomah County
Oregon

Scale: ½" = approximately 100'

No. 1

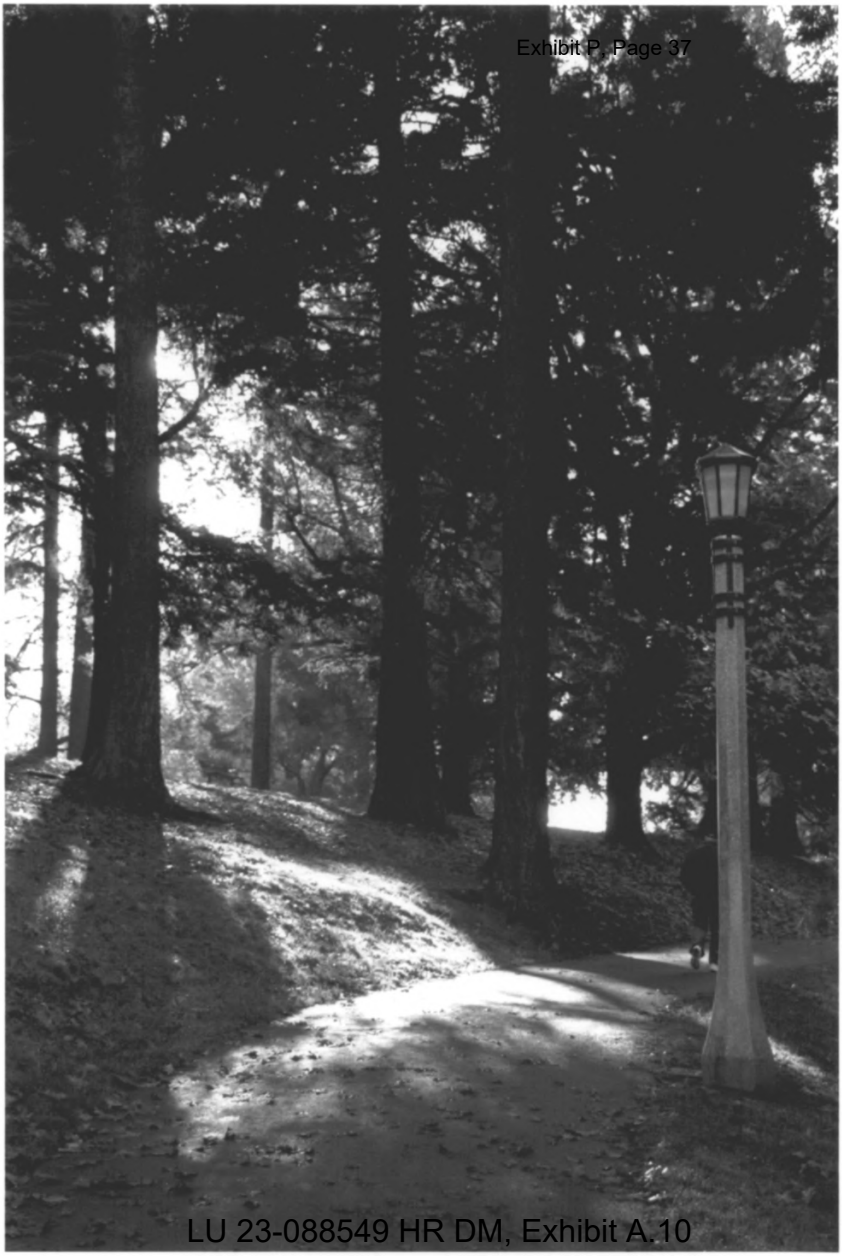
Laurelhurst Park

Multnomah Co., Oregon

No. 2

Laurelhurst Park

Multnomah Co., Oregon



No. 3

Laurelhurst Park

Multnomah Co., Oregon

No. 4

Laurelhurst Park

Multnomah County, Oregon

No. 5

Laurelhurst Park

Multnomah Co., Oregon

No. 6

Laurelhurst Park

Multnomah Co., Oregon


A

No. 7

Laurelhurst Park

Multnomah Co. Oregon

No. 8

Laurelhurst Park

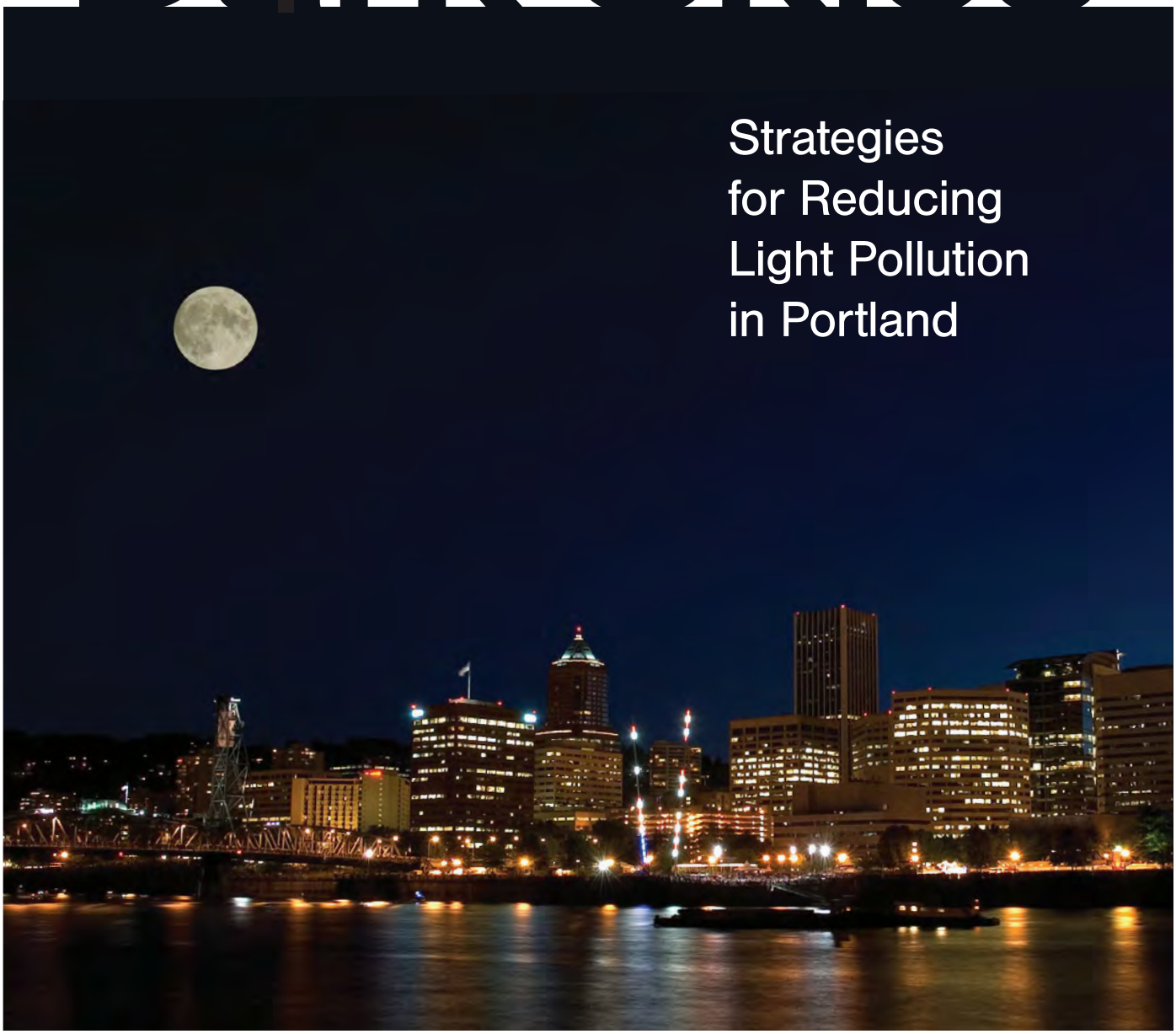
Multnomah Co., Oregon

No. 9

Laurelhurst Park

Multnomah Co, Oregon

Dark Skies



Strategies for Reducing Light Pollution in Portland

AUGUST 2020

Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.
City of Portland, Oregon

Astronomers at observatories can see the effects of sky glow from cities hundreds of miles away. Sky glow from the City of Portland is clearly visible from Goldendale Observatory in Goldendale, Washington, 117 miles to the east.

Best Practices: What the experts recommend

The **International Dark-Sky Association** (IDA) is a leading organization combating light pollution worldwide and their primary goals is "to preserve and protect the nighttime environment and our heritage of dark skies through socially and environmentally responsible outdoor lighting". IDA was founded in 1988 and works with the public, city planners, legislators, lighting manufacturers, parks, and protected areas to provide and implement smart lighting choices. The **Illuminating Engineering Society** (IES) is the recognized technical and educational authority on illumination with a mission to improve the lighted environment by bringing together those with lighting knowledge and translating that knowledge into actions that benefit the public. Established in 1906, the IES membership includes: engineers, architects, designers, educators, students, contractors, distributors, utility personnel, manufacturers, and scientists in 64 countries.

IDA and IES recognize that modern society requires outdoor lighting for a variety of needs, including safety and commerce. To minimize the harmful effects of light pollution, IDA and IES together support the following principles for responsible outdoor lighting:

REVISED C Exhibit List (Plan Set)

Exhibit 1 – Vicinity Map

Exhibit 2 – Site Boundaries

Exhibit 3 – Light pole locations with Conservation and Scenic Overlays

Exhibit 4 – New Pole and Fixture Schematics (NEW Page 2B)

Exhibit 5 – Illumination Info (photometrics, distribution comparison, etc.)

Exhibit 6 – Scaled Plan Set (SEPARATE UPLOAD)

Exhibit 7 – Permitted landscaping per LU 17-245440 Condition L. and (NEW) approved areas of adjustment (Exhibit C-1 of casefile LU 17-2454400 CU-AD)

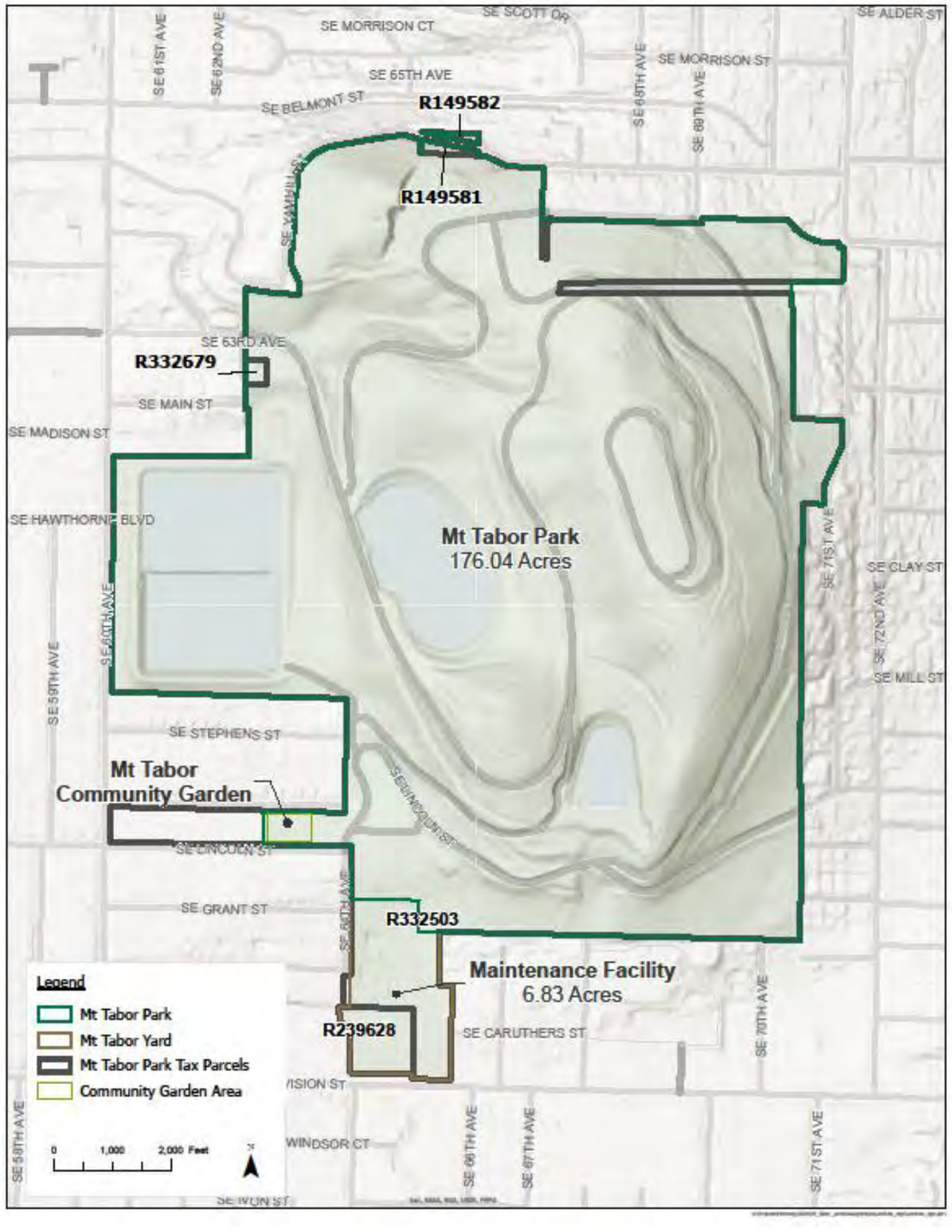
Exhibit 8 – Tree Plan (includes Inventory)

Exhibit 9 – Disturbance Area Plan for Replacement Poles (REVISED)

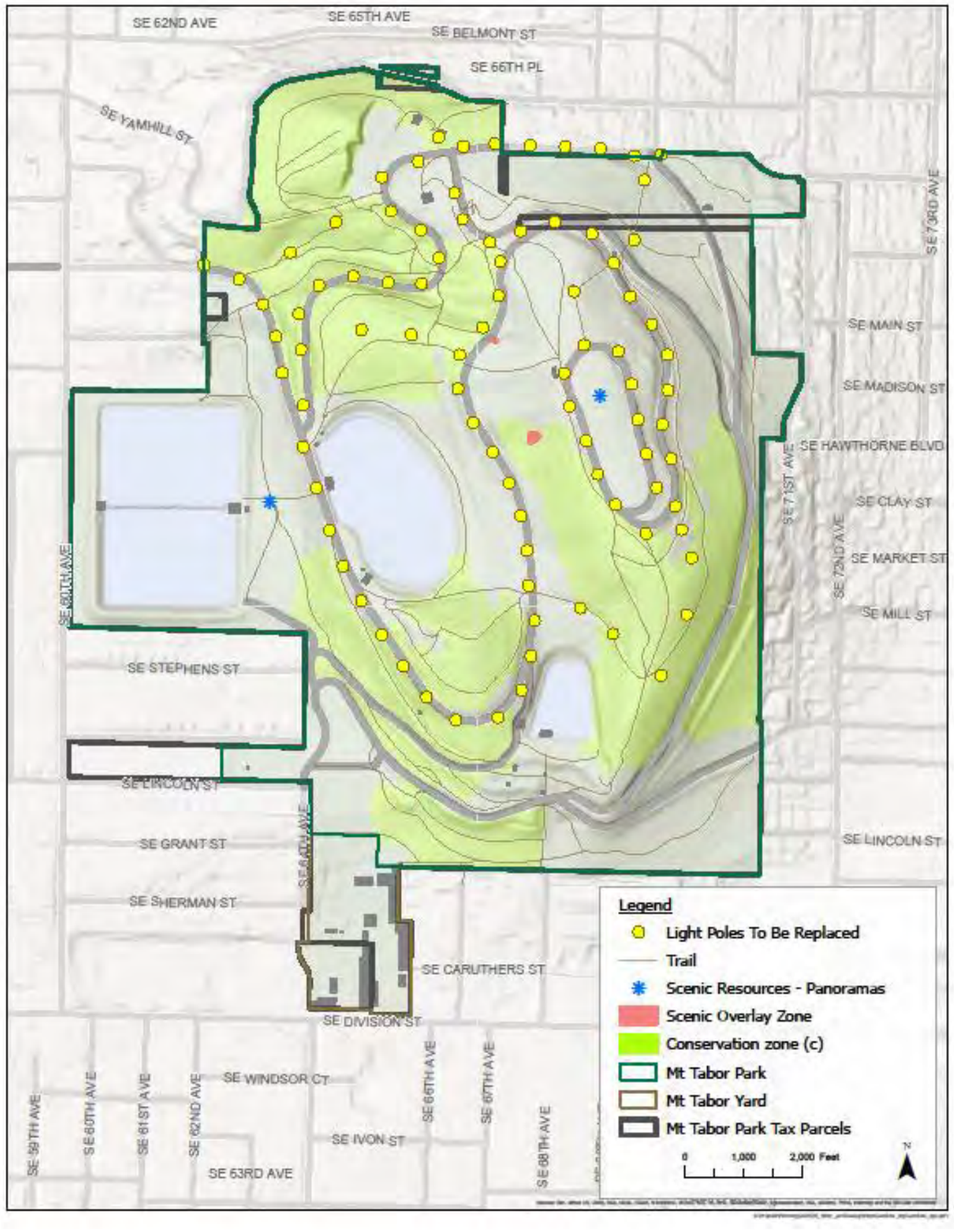
Exhibit 10 – Scaled Construction Plan Set (NEW, SEPARATE UPLOAD)

Vicinity Map

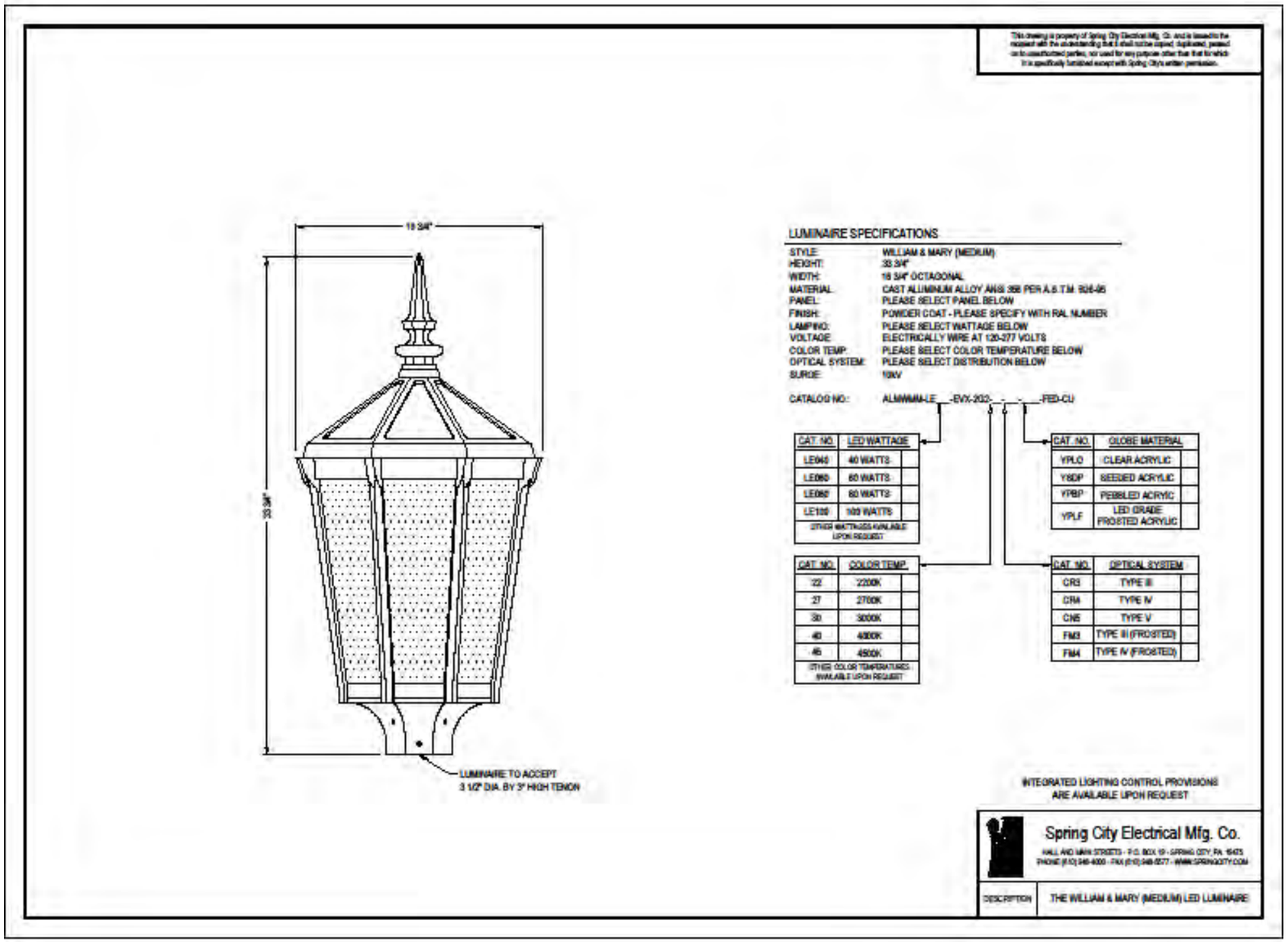
Site Boundaries



Light pole locations with Conservation and Scenic Overlays



Light poles and fixture schematics



LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV

CATALOG NO.:

- TYPE III: ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
- TYPE V: ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU

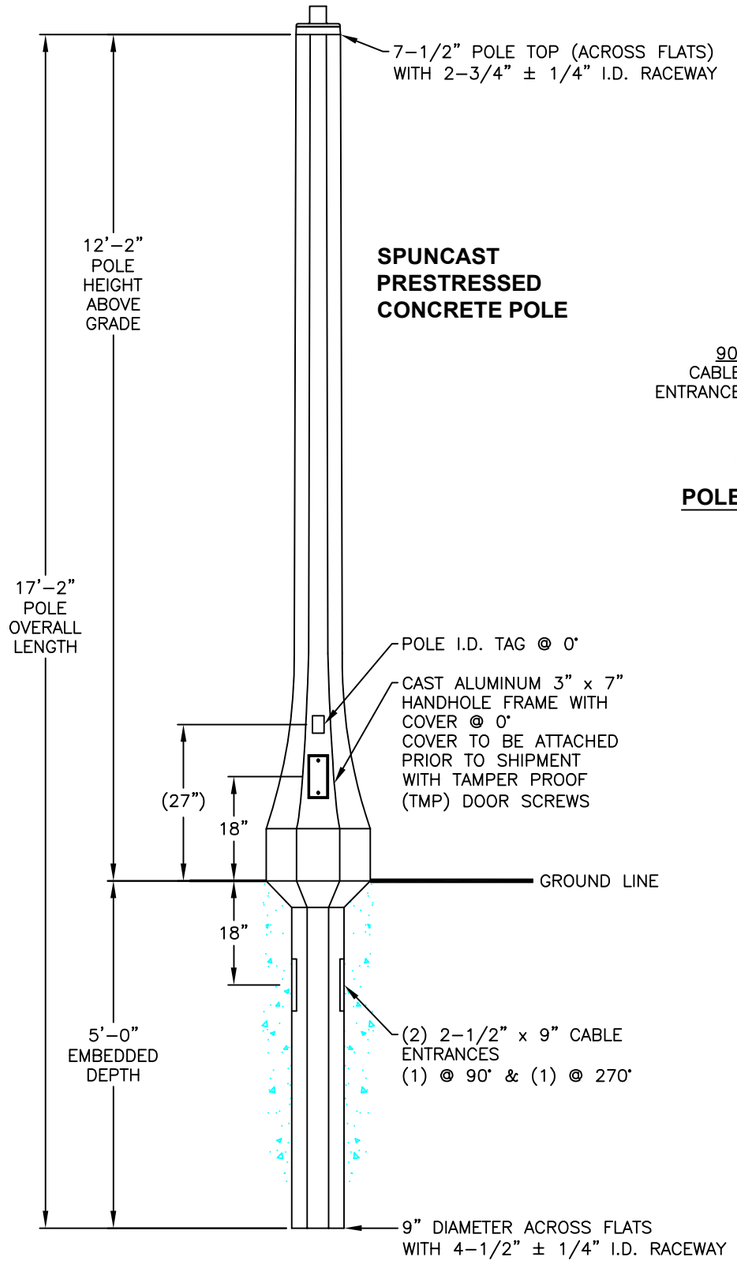
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	

VICTORIAN III EMBEDDED FLUTED POLE

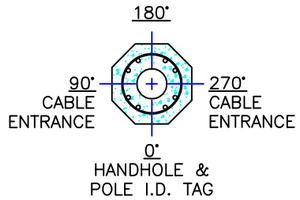
POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

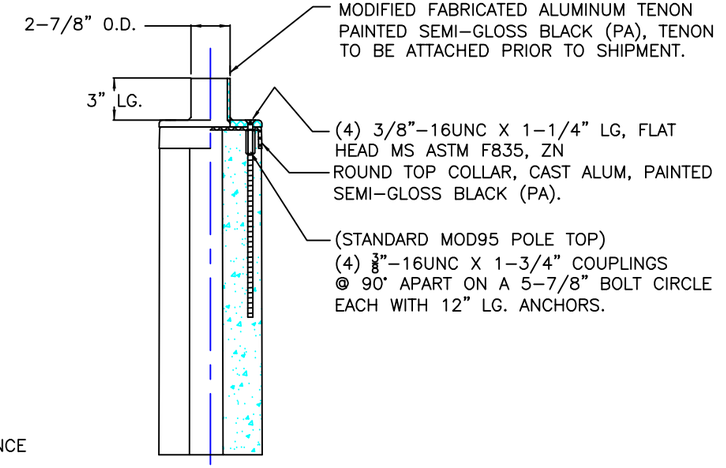
"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8



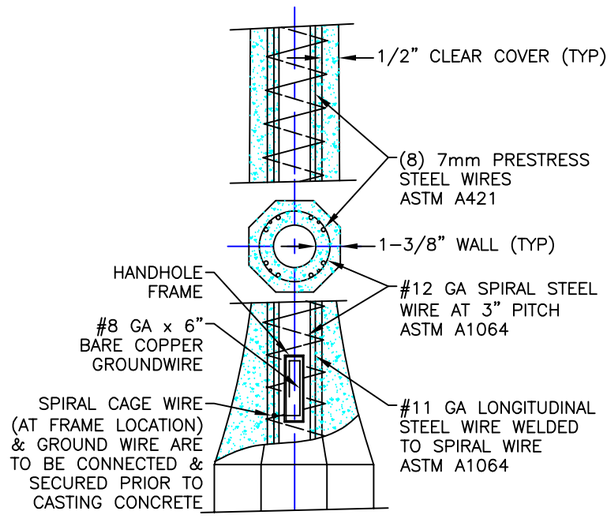
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

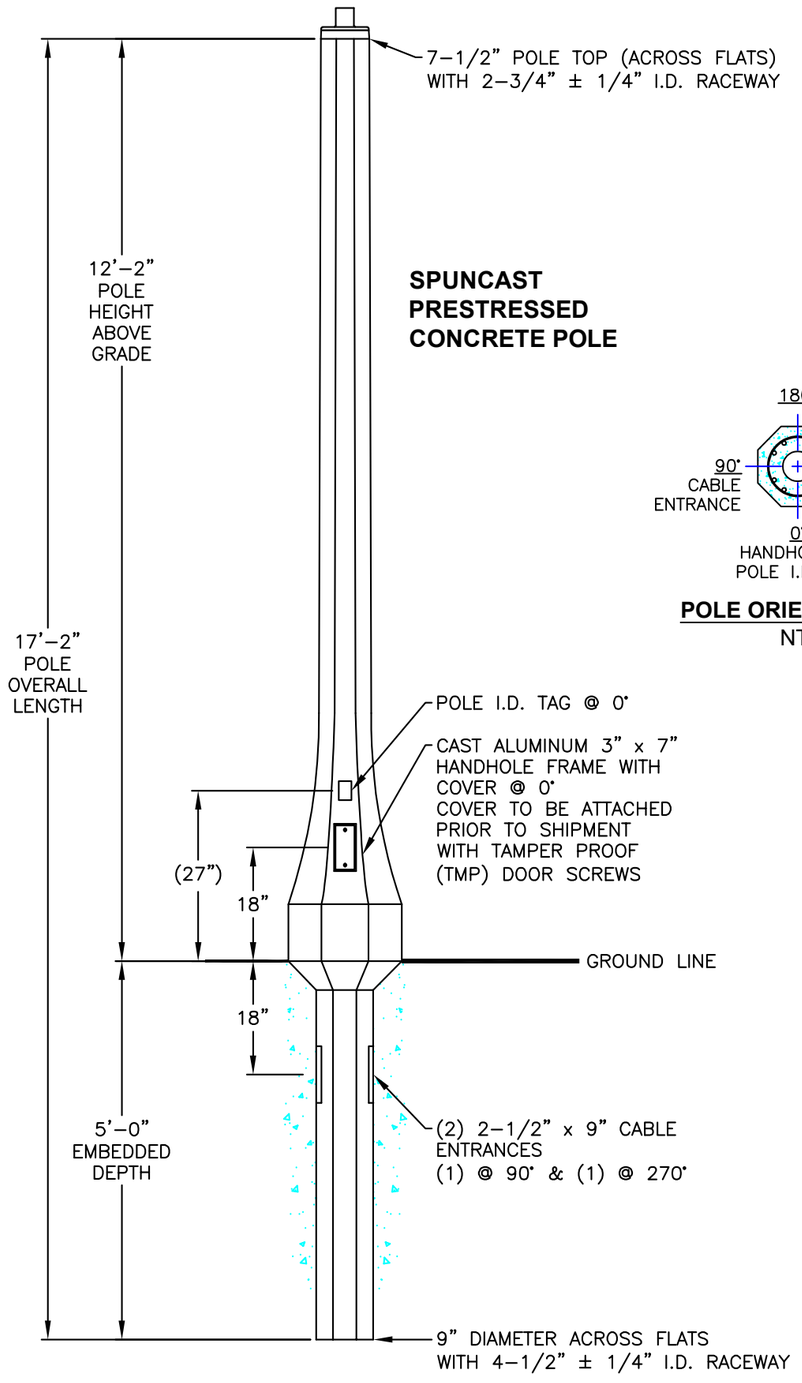
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

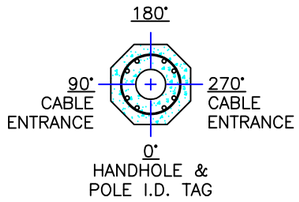
DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

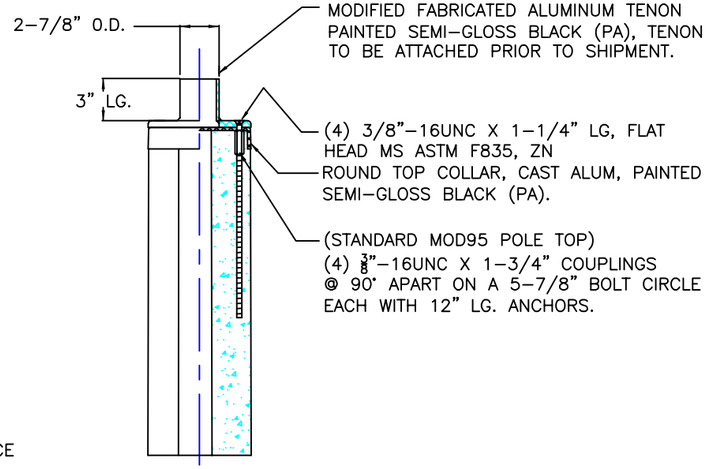
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	



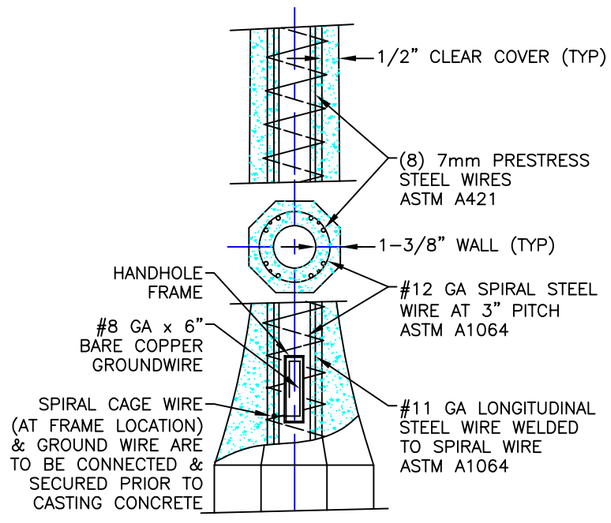
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS
NTS



POLE TOP DETAIL
NTS



POLE SECTION
NTS

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
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10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

APPROVED BY **DATE**

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

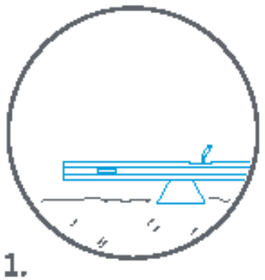
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN:	DATE:	APPR:	DATE:
BEU	4/6/23		

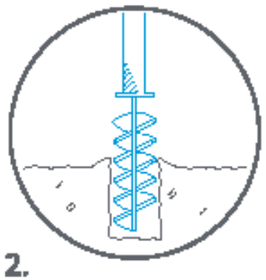
DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	1" = 2'

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

Installation Steps for a Direct Embedded Ameron™ Concrete Pole

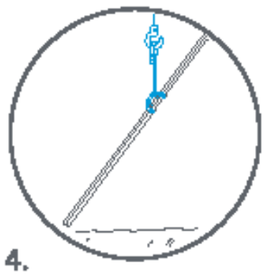


1.
Position pole for pre-wiring. Protect pole as described in handling and storage guide. Wire and install luminaire.

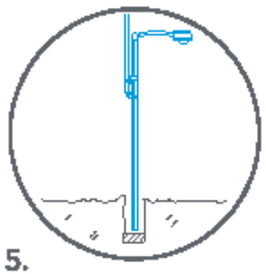


2.
Excavate hole to proper depth (plus 6-in. if special backfill is required).

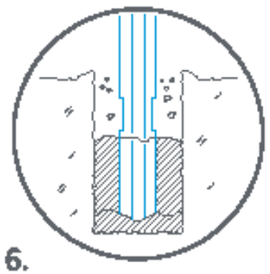
3.
Use proper backfill. See recommended backfill requirements below. Tamp a 6-in. base to ensure correct setting depth and drainage (if required).



4.
Use only synthetic straps. Single pick point is preferred method of handling. Use double clove hitch to avoid slippage.



5.
Set pole. Align/plumb. Maintain tension on the pole until compacted to bottom of cable entrance.



6.
Compact required backfill in two operations. Tamp 9-in. intervals to bottom of cable entrance. Install underground cable. Check alignment. Finish compaction to a height of 2-in. above grade sloping away from pole to allow proper drainage.

Recommended backfill requirements*

Good soil

Compact well-graded sand and gravel, hard clay, or well-graded fine and coarse sand (all drained so that water will not stand).

Use as is for backfill.

Medium soil

Compact fine sand, medium and clay, compact sandy loam, loose coarse sand and gravel (all drained so that water will not stand).

Requires select backfill—clean, washed sand or ¾-in. minus well-graded gravel.

Poor soil

Soft clay, clay loam, poorly compacted sand, or clays containing large amounts of silt. Water may stand during wet season.

Use compacted earth backfill—mix one part dry cement powder to 15 parts clean, washed sand.

*Based on location review by a qualified civil engineer.

Ameron Concrete Pole Handling Instructions

Ameron™ poles are made of pre-stressed concrete: a tough, elastic, durable material not limited by the properties of low strength, conventionally reinforced concrete. Like many other fabricated structures, Ameron poles are designed to withstand specific service loads and handling loads—with safety factors considered. Loads induced through handling are perhaps the ones most easily overlooked, even though only a few simple rules need be remembered. Attention to the following will minimize damage from handling and storage.

Storage

(See Figs. 1 through 3)

1. Store on dunnage placed ⅙ of the total length from each end. Location of temporary support points may vary from this rule for both storage and handling. Dunnage is ideally made from 4×4 fir, pine, or a similar wood, which is finished enough to have opposite sides flat and parallel (no logs or branches). The dunnage should be in one piece for the full width of the stack and be of sufficient thickness as to allow the placing of slings or the insertion of forklift fingers between the layers of poles. Weathered lumber is better than newly cut because the latter may stain the concrete when moisture is present.

2. Store on a level surface. If surface is not paved, be certain the ground is solid enough so that the dunnage does not sink into it.

3. When poles are stored in more than one layer, each piece of dunnage must be placed one above the other, so that the weight of the poles above is transmitted directly downward through the dunnage and does not induce bending stresses in the poles.

4. Distribution poles should be stacked no higher than nine layers and smaller poles no higher than 12 layers.

5. Each succeeding layer of poles should be placed with the tips in the opposite direction of the layer below.

6. Poles should be aligned so that the tips in each layer form a straight line normal to the center line of the poles.

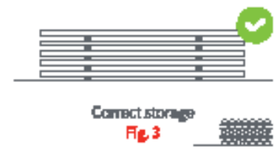
7. Place wedges on the dunnage next to the poles to prevent their rolling.

8. Do not step on the cantilevered tips of small poles in storage.

9. Handle poles with reasonable care so as to avoid dropping or otherwise striking them against each other or other hard, solid objects.

Incorrect storage
Fig. 1

Incorrect storage
Fig. 2



Correct storage
Fig. 3

Handling

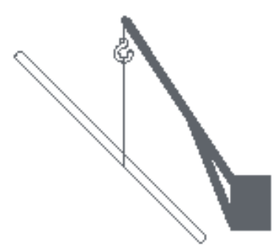
(See Fig. 4)

1. In lifting the pole from a single pick-up point, use either a choker sling or a loop sling with one complete extra turn around the pole just above the balance point.

2. When lifting the pole using two pick-up points from a single hook, a choker-type attachment should be used on the pole.

3. Poles with a polished or textured surface should be handled with a nylon or other non-metallic sling. For these poles, fingers of a forklift should be fitted with protective covers.

4. When using a forklift to handle poles, always use softeners on the fork tines. Also, always use wedges to prevent poles from rolling.



Handling by crane
Fig. 4

Total pole count: 88

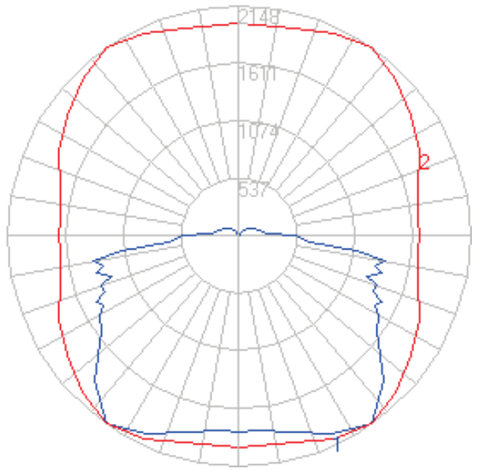
Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Specs

Existing lamp information used for calculation

Brand	Philips Lighting	**Bulb Finish**	Clear
Product Line	Ceramalux	**Bulb Technology**	High Pressure Sodium
Model Number	SON 150W E39 ED75 CL SL/12	**Average Rated Life (hr)**	24000
Energy Used	150 Watts	**Length (in)**	7.75
Base	Mogul (E39)	**Diameter (in)**	2.938
Bulb Shape	ED-23 1/2	**Ballast Code**	S55
Bulb Color	Warm White	**Contains Mercury (Hg)**	Yes
CRI	17	**GE**	44043 - LU150/55
Color Temperature (Kelvin)	2100	**Osram Sylvania**	67516 - LU150/55
Brightness (Lumens)	16000	**Not For Sale In**	WA

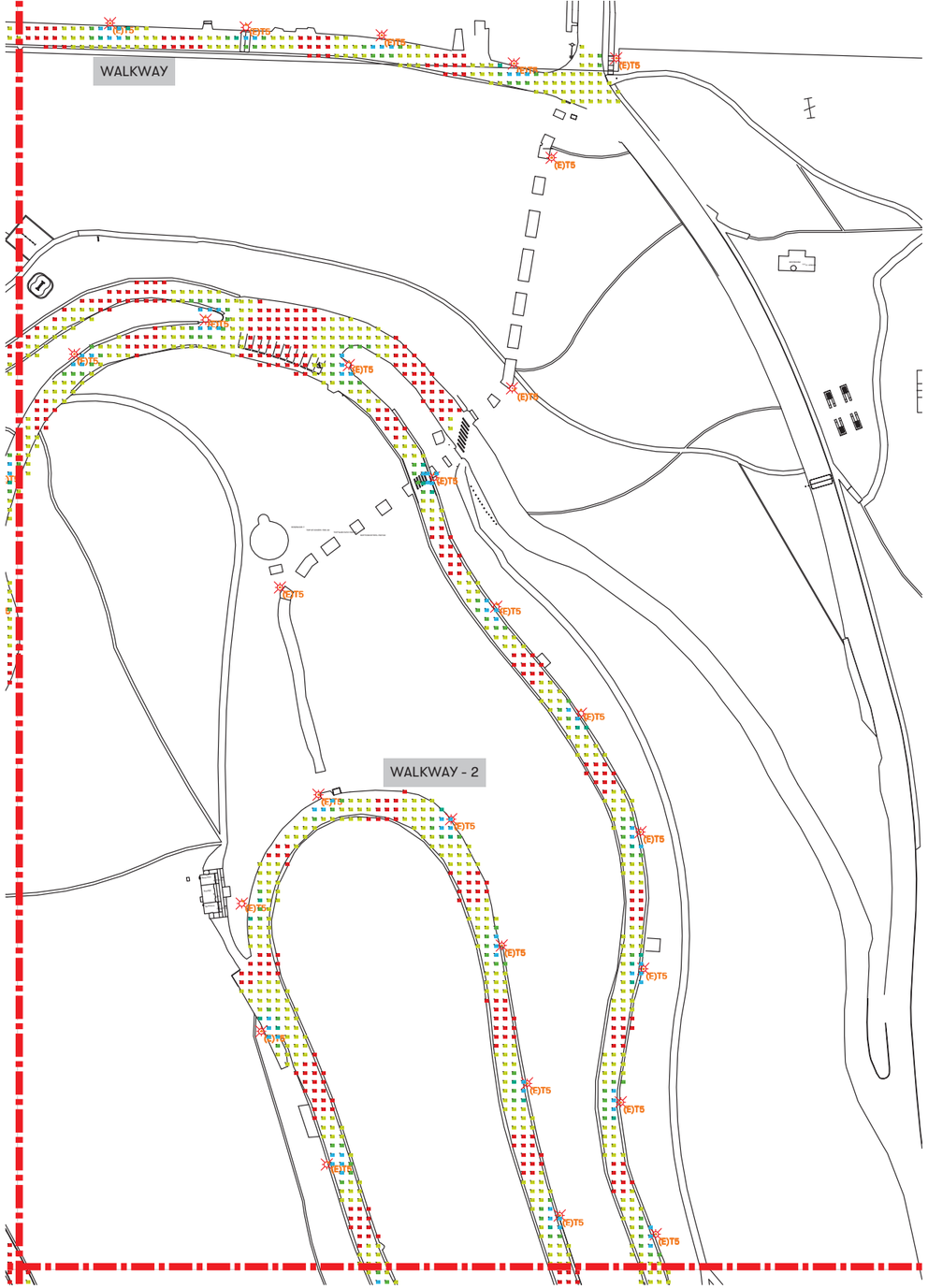


Lamp lumen distribution used for calculation - T5 type optic

Existing pole details:

(E) Decorative Post-top luminaire
Pole height: 12'-2"

MT TABOR - EXISTING CONDITION



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Approximate calculation

MT. TABOR - EXISTING POLE APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.31	5.2	0.0	N.A.
Walkway 2	Fc	0.28	5.3	0.0	N.A.

A Light Loss Factor (LLF) of 0.40 was used to account for light loss due to ballast factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

Note:

1. Lighting calculations were performed at 0'-0" AFF.
2. Ground reflectance was assumed to be 0.15.
3. This lighting plan represents illumination levels calculated from lab data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/ LEDs and other variable field conditions.
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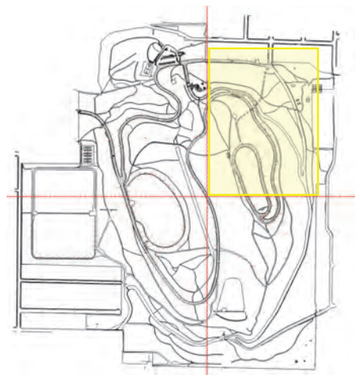
LIGHTING LEVEL (FC) LEGEND

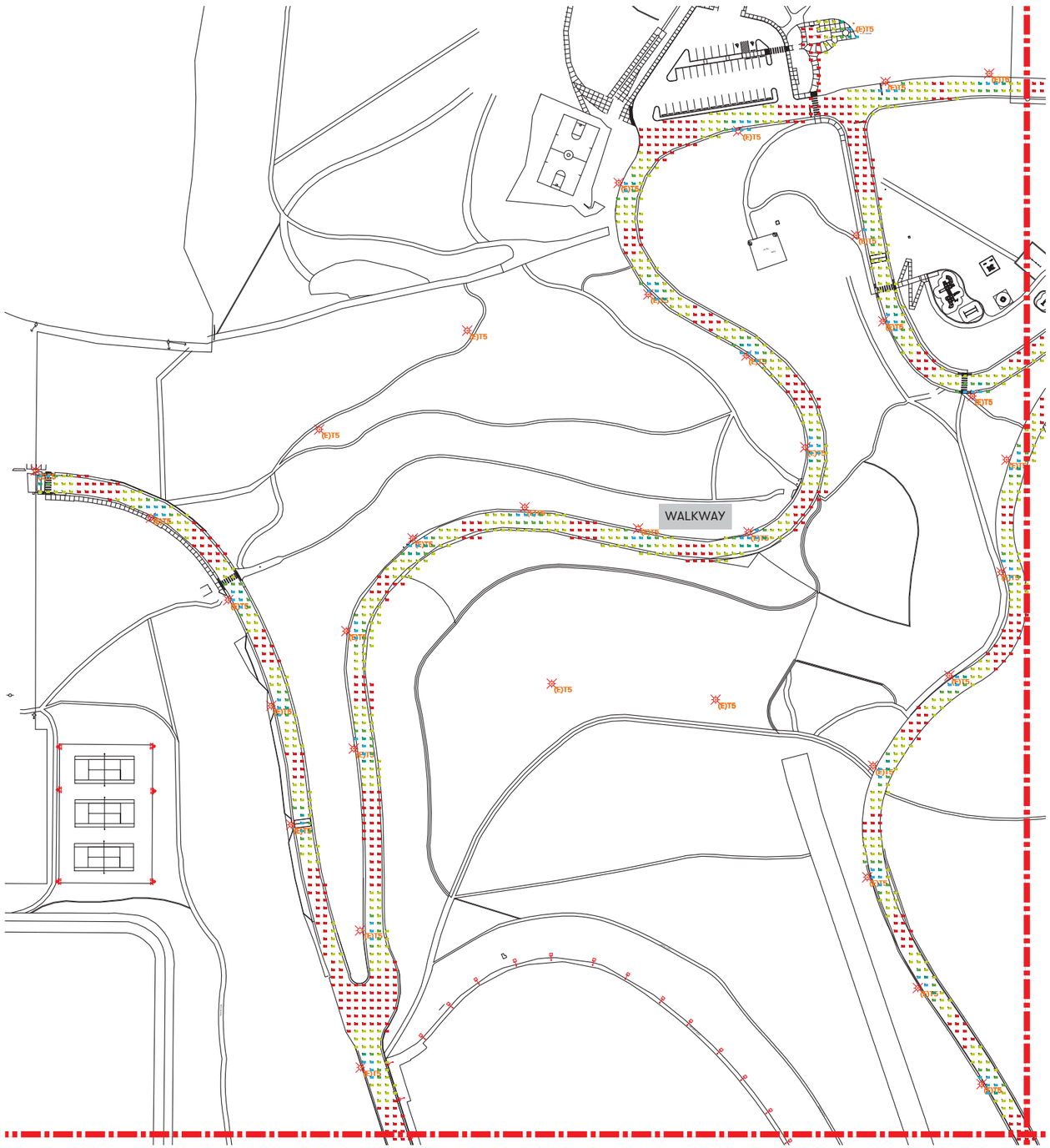
	Range		Color
> =	0	To < = 0	
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

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> =	0.4	To < = 0.7	
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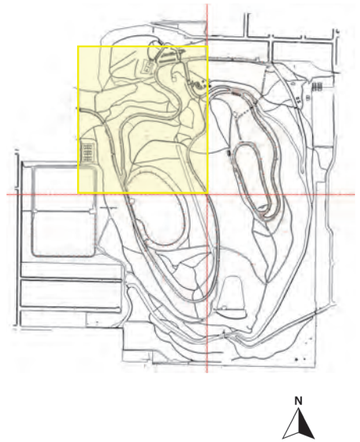

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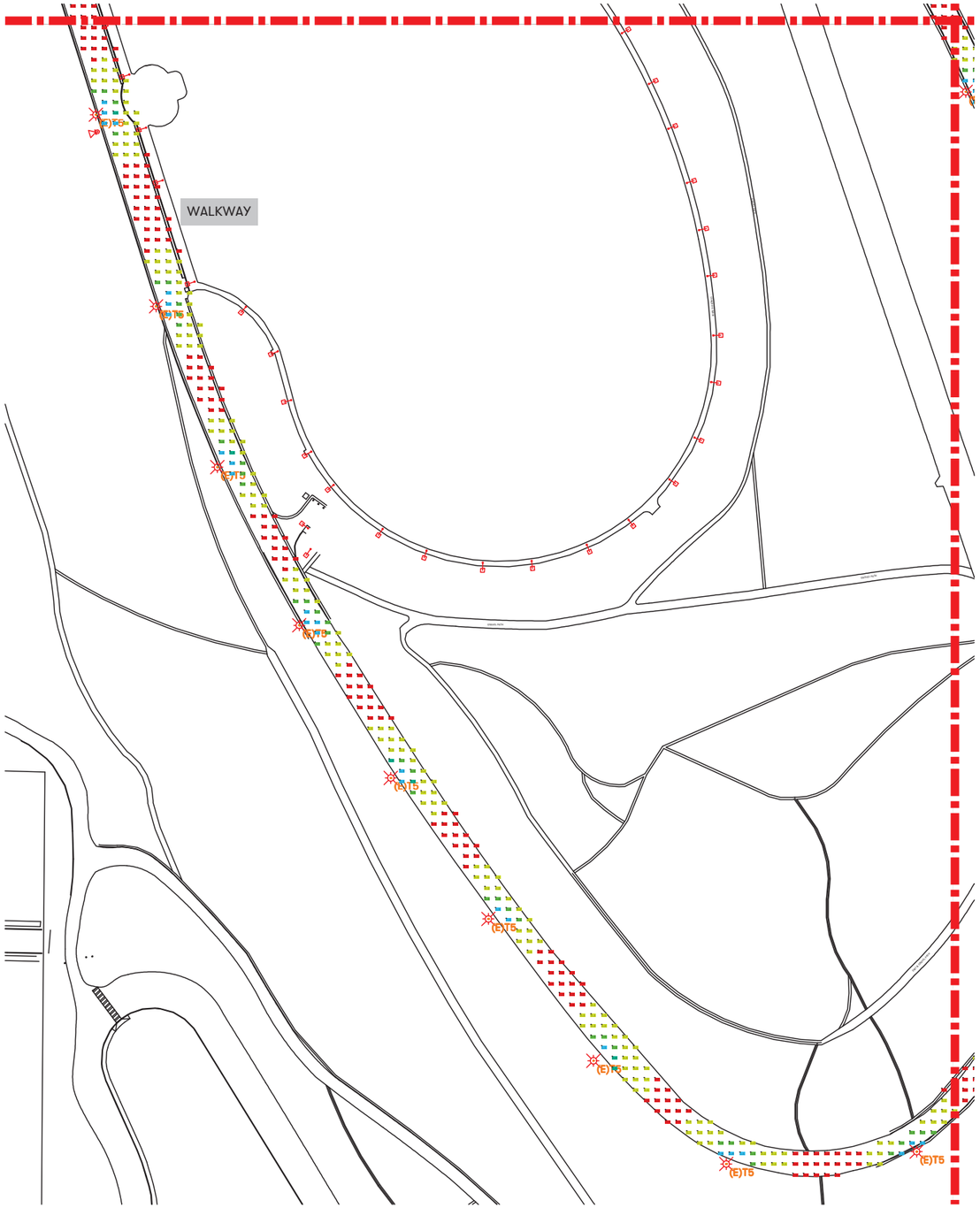
Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Approximate calculation

MT. TABOR - EXISTING POLE APPROX. CALC					
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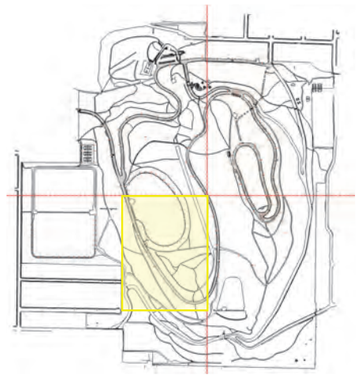
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



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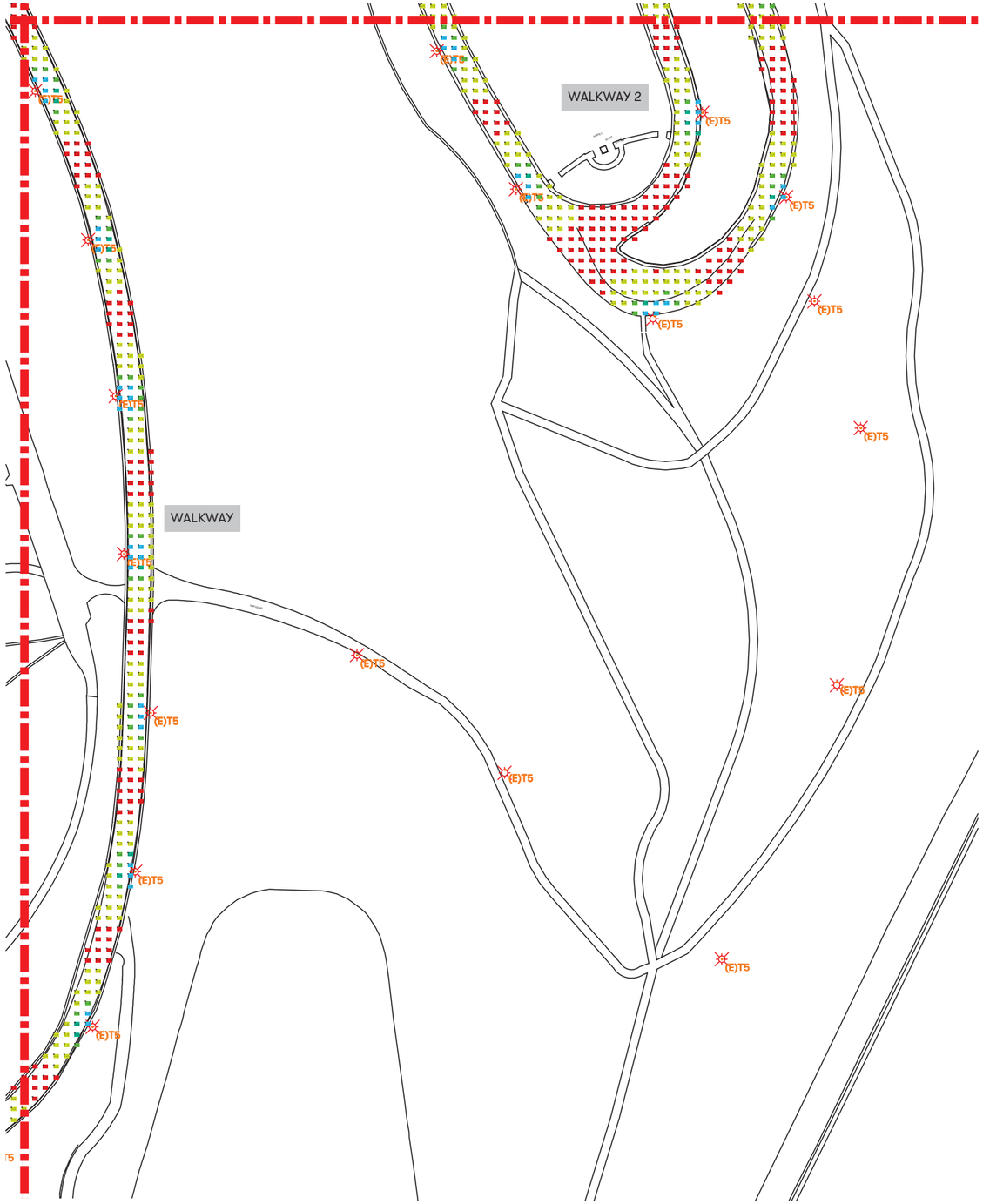
MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

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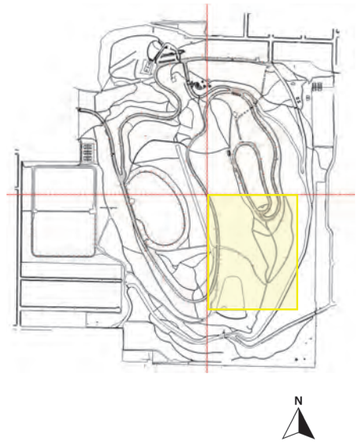
> = 0.4	To < = 0.7		
> = 0.8	To < = 1		
> = 1.1	To < = 100		



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MT TABOR - EXISTING CONDITION

Portland Parks Photometrics | P2S INC

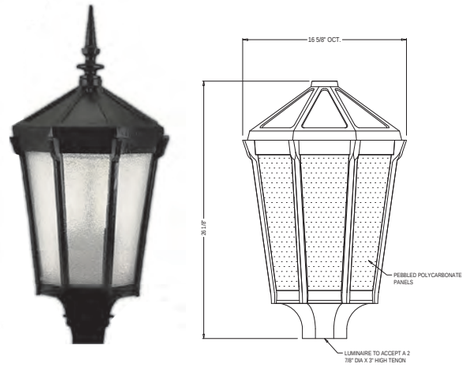
Total pole count: 88

Mt Tabor Park

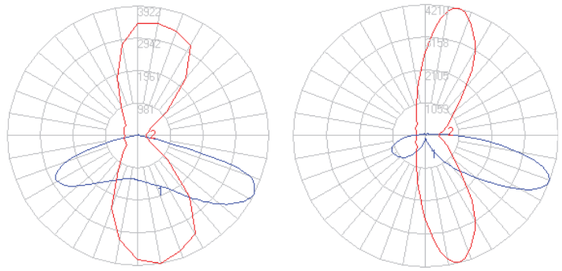
SE 60th Ave &, SE Salmon St, Portland, OR 97215

New LED product - Specs

Decorative Post-top:



Spring City - William and Mary Post-top fixture
ALMWMS-LE060-EVX-2G2-27-[OPTIC]-YPBP-CU



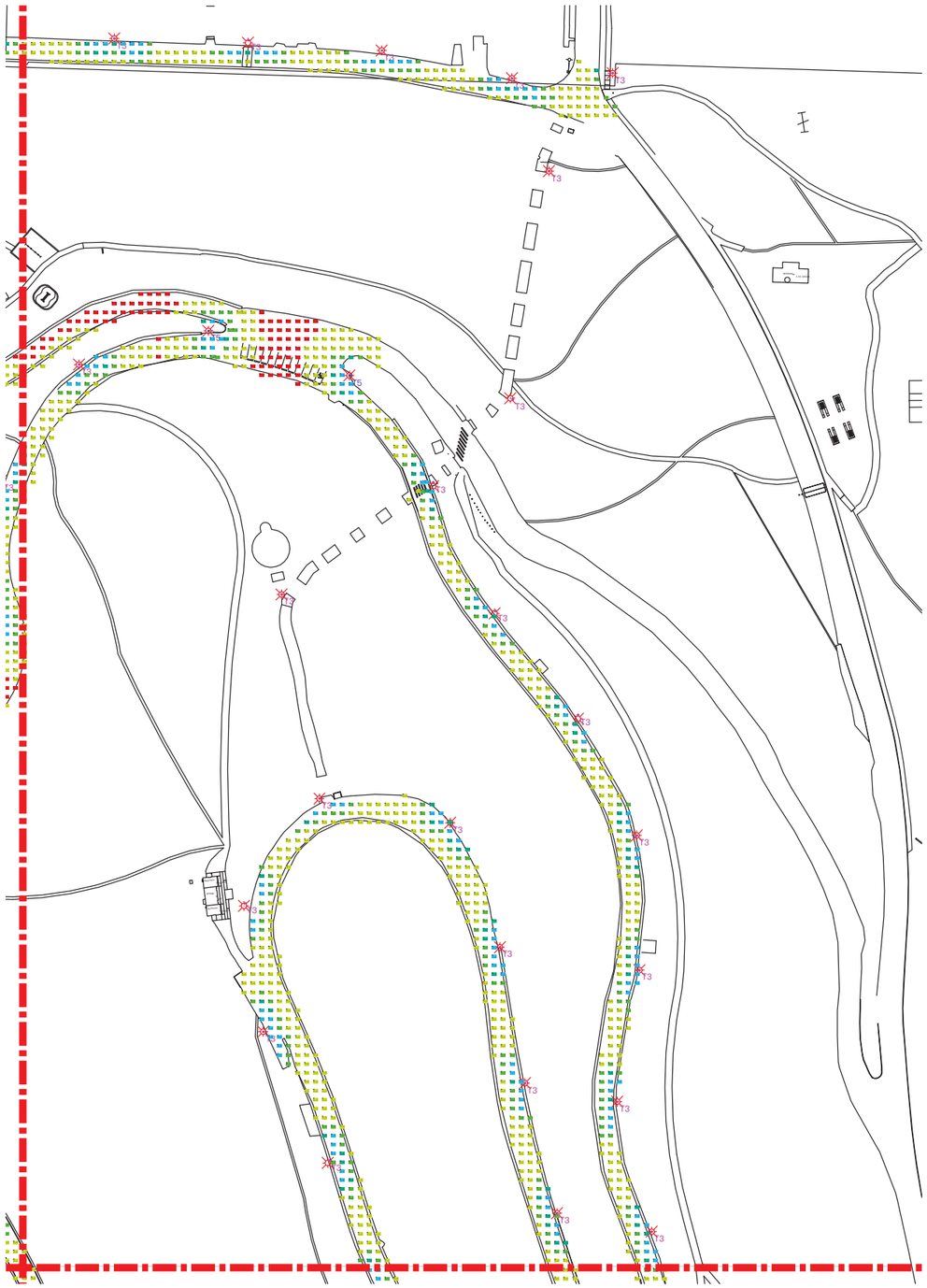
Optics used for calculation - T3, T5 type

Decorative Post-top luminaire
T3 Poles: 74, # T5 Poles: 14
Pole height: 12'-2"

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

06/21/2023

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.45	2.6	0.0	N.A.
Walkway 2	Fc	0.41	2.5	0.0	N.A.

A Light Loss Factor (LLF) of 0.75 was used to account for light loss due to driver factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

Note:

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	Range			Color
> =	0	To < =	0	
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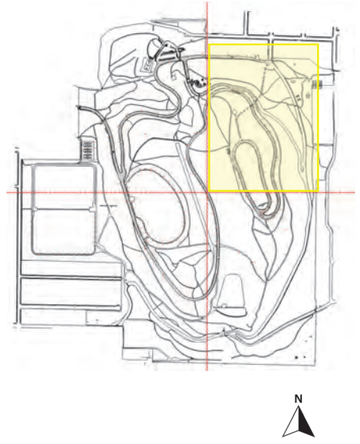
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	



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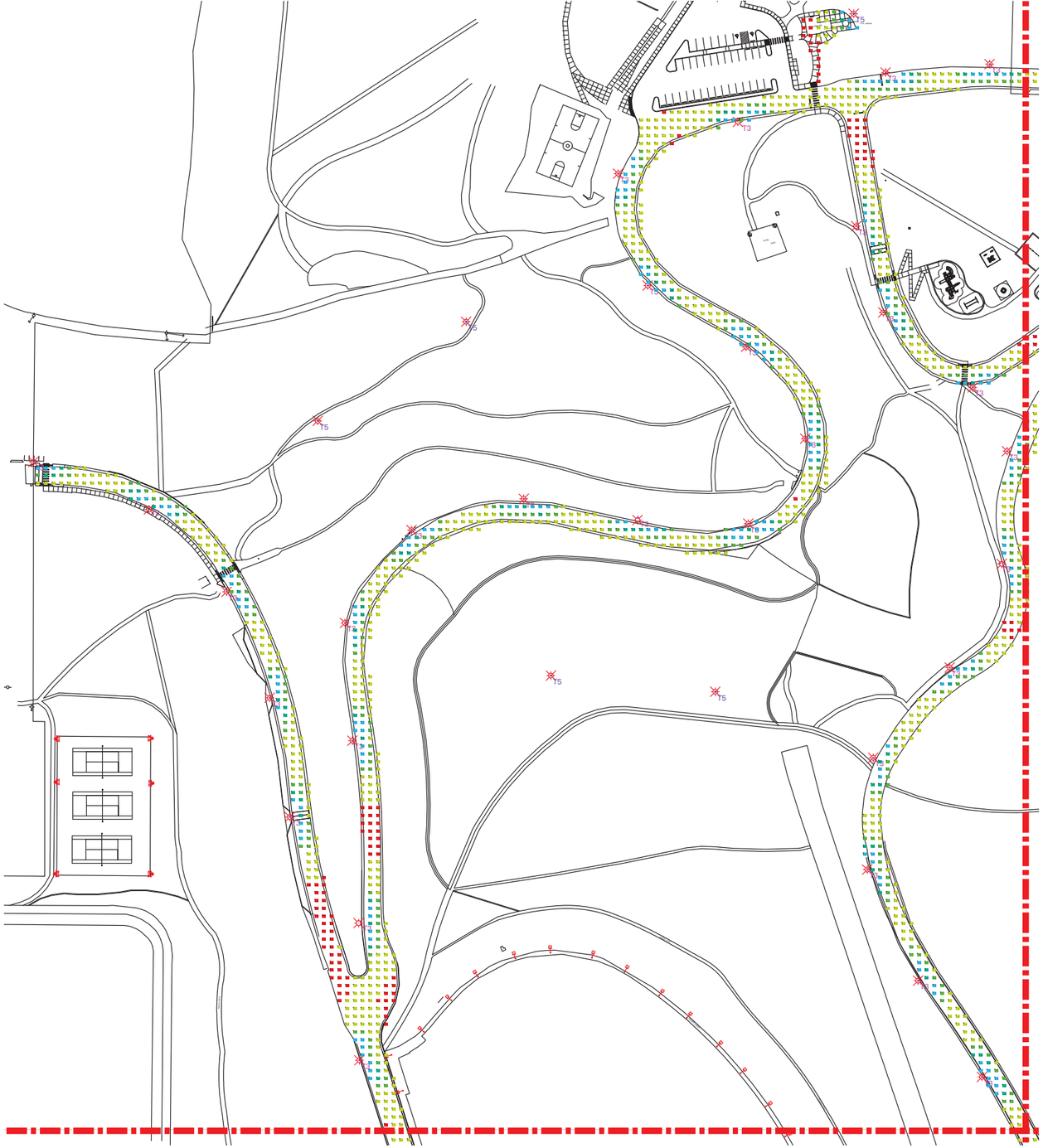
MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

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LIGHTING LEVEL (FC) LEGEND

	Range		Color
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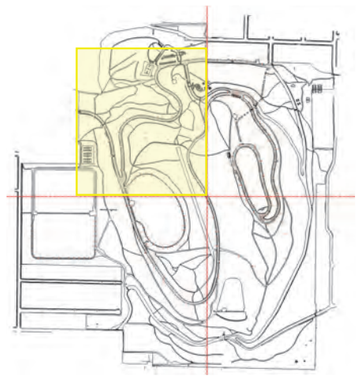
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



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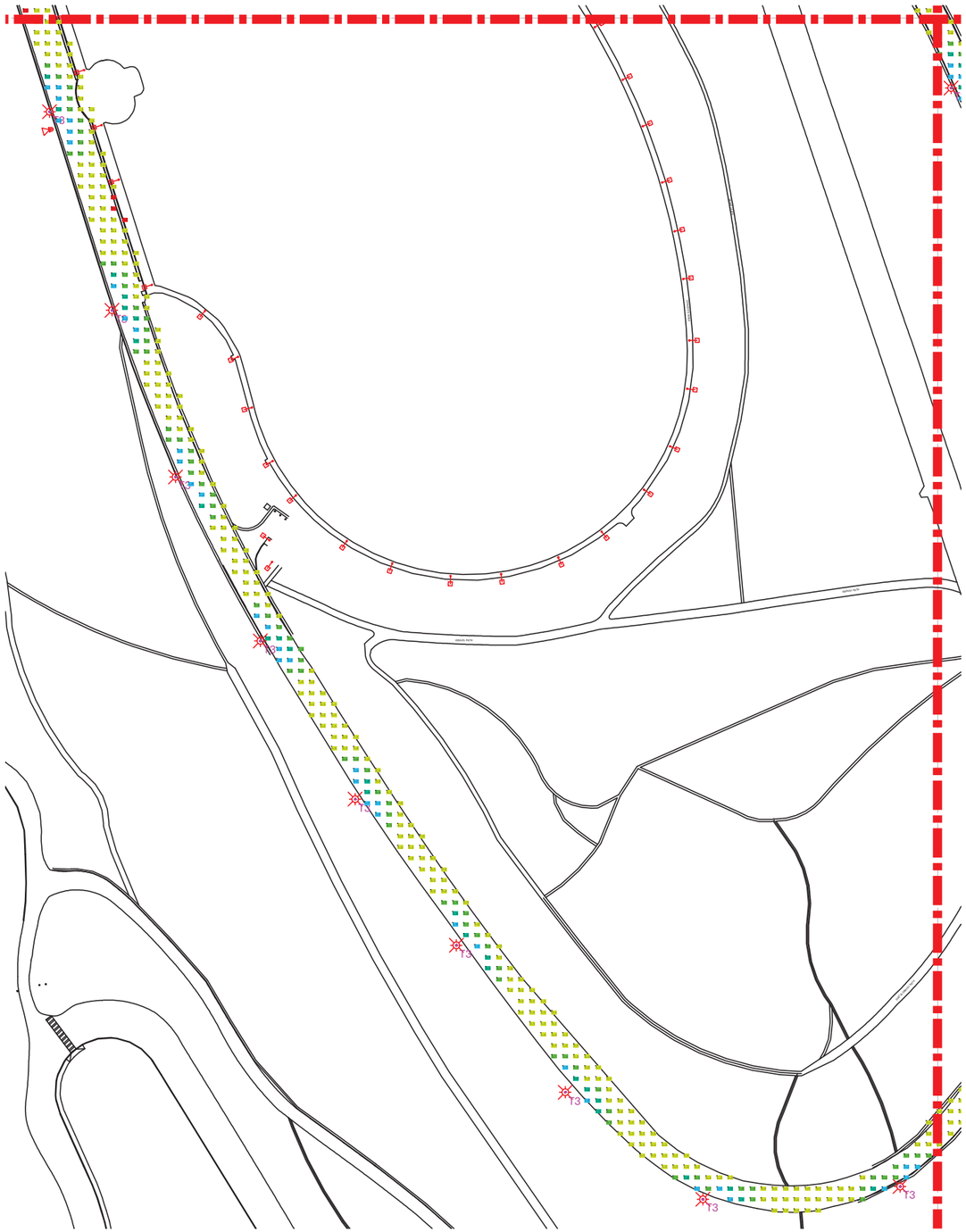
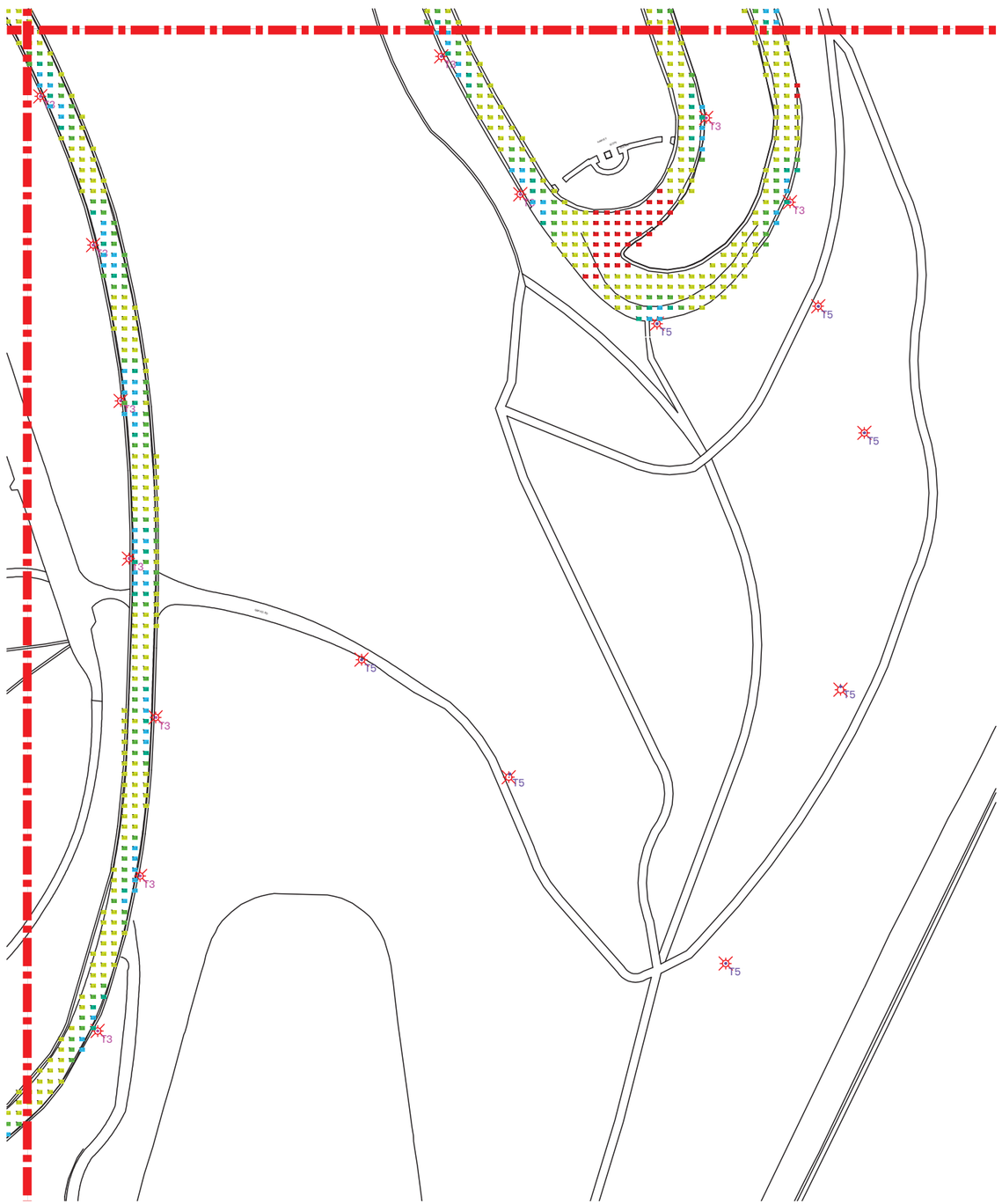
MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC


T3
T3
T3



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

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> = 0	To < = 0		
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> = 0.4	To < = 0.7		
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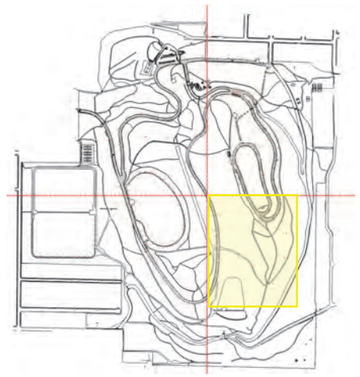
> = 1.1	To < = 100		



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Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC

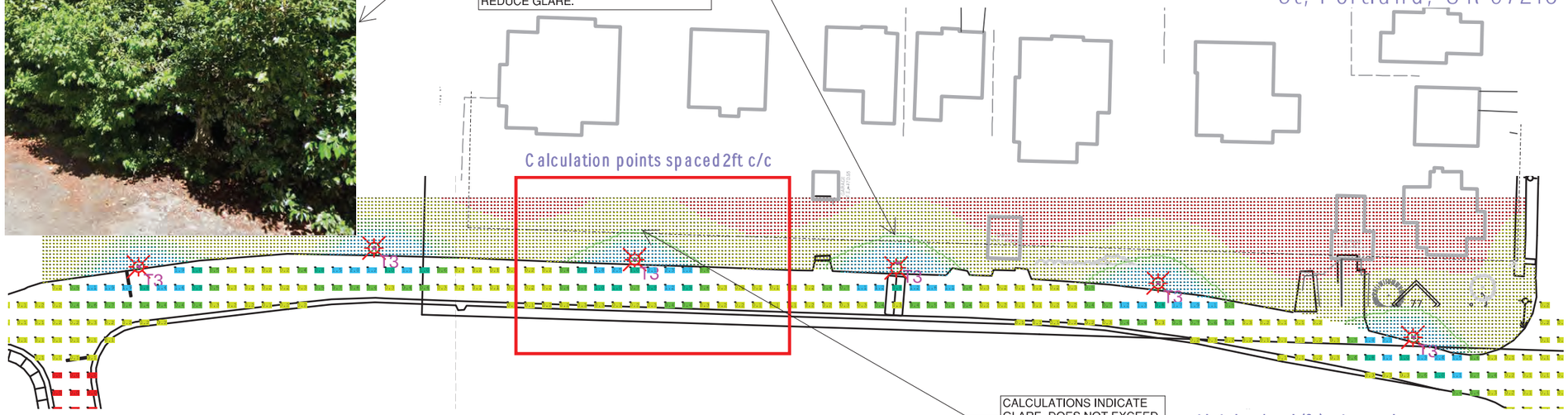
Mt Tabor Park
SE 60th Ave &, SE Salmon St, Portland, OR 97215

CALCULATIONS INDICATE GLARE ENCROACHES APPROXIMATELY 2'.

CALCULATIONS DO NOT ACCOUNT FOR OBSTRUCTIONS.

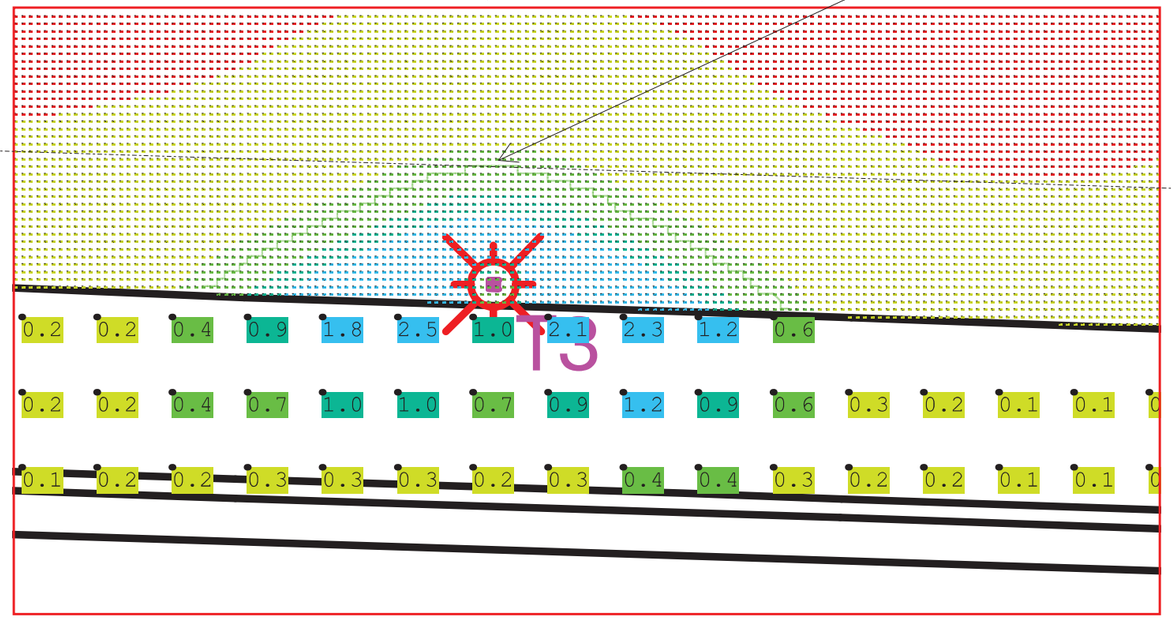
EXISTING VEGETATION LESSENS GLARE AND SHIELDING WILL FURTHER REDUCE GLARE.

Calculation points spaced 2ft c/c



CALCULATIONS INDICATE GLARE DOES NOT EXCEED 0.5 FC AT PROPERTY LINE.

Enlarged calculation points spaced 1ft c/c



Lighting level (fc) - Legend

	Range			Color
> =	0	To < =	0	
> =	0.1	To < =	0.3	
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	

Key plan

MT TABOR PARK - NEW LED FIXTURE (1-1 REPLACEMENT)

09/11/2023

Portland Parks Photometrics | P2S INC

Comparison of Existing and Proposed Distribution Diagrams

The new T3 type lights (to be located in the SE Taylor right-of-way) will greatly reduce the amount of light spill on adjacent properties compared to the existing T5 type lights. The distribution graphs show the total quantity of light emitted (lumens) by the fixture at various angles. Using the two views we can determine the location of maximum illumination; the blue line shows the maximum vertical lumens (section view) and the red line shows maximum horizontal lumens (plan view):

- For new Type 3 fixture, maximum illumination occurs when you are looking up at 20° angle and standing 75° to the side.
    - For a new fixture on a 12’ pole, this would put us about 38’ away from the pole. This would make a brighter light dimmer at a distance.
- The max illumination of 2148 for the old fixture is when you are looking up at a 55° angle and standing 55° to the side.
    - For an old fixture on a 12’ pole, this would put us about 15’ away from the pole. This closer distance would make a dimmer light seem brighter.

Despite the old fixture producing less lumens, by having the light shine closer it ends up being nearly twice as bright as new fixture. Being an omnidirectional fixture, this creates brighter spots all around the pole vs the new directional fixtures.

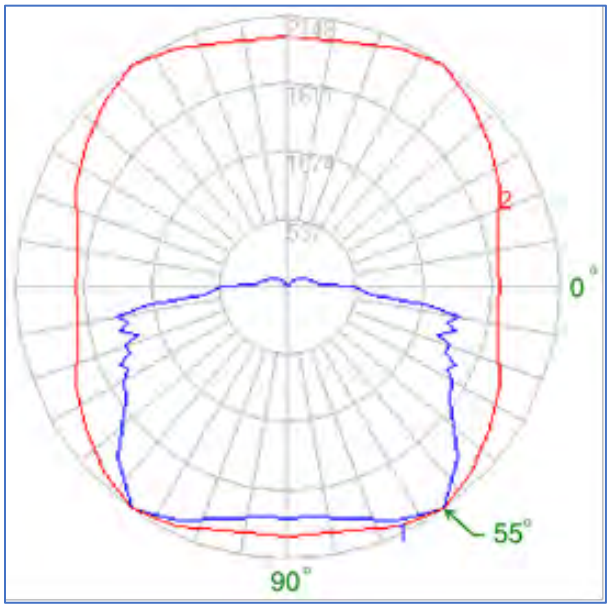


Figure 1. Light Spill from existing T5 fixture

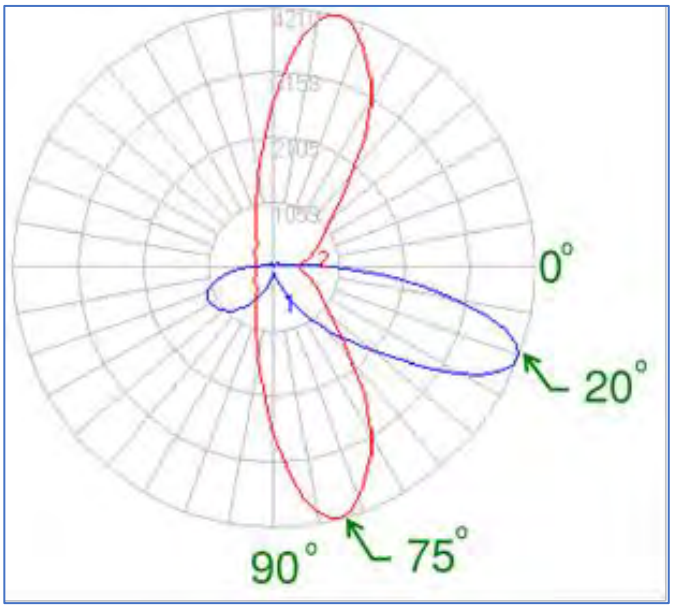


Figure 2. Light Spill from proposed new T3 fixture

LU 17-245440 CU AD
CONDITIONS OF APPROVAL

Condition A: As part of the building *permit* application submittal, the following development-related conditions (B through L) must be noted on each of the four required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-245440 CU AD." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page.

Condition B: At the Upper Nursery, a 15-foot-deep L3 high-screen landscape buffer will be installed outside of the decorative steel fence on the west side of the enclosed area; and a S-foot-deep L3 high- screen landscape buffer, minus the tree requirement, will be installed outside of the decorative steel fence along the north side of the enclosed area landscaping (Exhibit C.4). The landscaping will extend the length of the fenced area. One break in the landscaping up to 20 feet wide will be permitted to provide vehicle access into the Upper Nursery development area. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection for the building or other permits required for the Upper Nursery development.
Response: Condition is met on Plan Sheets L3.3 and L3.4

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16- 113354 CO and 16—113360 CO, must either be removed or brought into conformance with the requirements of the Stormwater Management Manual within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: The trees identified for tree protection in Exhibits C.34, C.35, and C.36 are required to be preserved to Title 11 specifications throughout all related building or other permits required to carry out the work approved herein.
Response: Condition is met on Plan Sheets L0.00 through L0.09

Condition E: A landscape buffer will be provided on the east side of the multi-use path that is at least eight feet wide and planted to the L3 high-screen standard between the path and the proposed decorative steel fence. This landscape buffer will extend from the southern property line up approximately 250 linear feet to the north, where the proposed landscaping widens to more than this 8-foot minimum. The required trees on the east side of the multi-use path will be planted such that they are staggered with the existing row of trees on the adjacent property to the west.
Response: Condition is met on Plan Sheets L3.0.

Condition F: Prior to building permit issuance for the multi-use path, Applicant will provide evidence of a recorded easement allowing PP&R access to a 5-foot-wide strip of land on the eastern edge of 6323 SE DİVi5ion Street, running from the Division Street right-of-way north some 290 linear feet. This easement will allow PP&R to remove the existing fence, build a new or relocated fence, and plant and maintain plantings in the area. Within this 5-foot-wide easement area, the existing fence must be removed; the eastern four feet must be planted as shown on landscape plan L3.00; and any new or relocated fence must be installed in the western one foot of the easement area.
Response: Easement is currently under negotiation with neighbor; design requirements are shown in drawings.

Condition G: If an additional drive aisle is allowed off of SE 64th Avenue for access to the Upper Nursery through the current Historic Resource Review 17-158467 HRM, any one of the existing dirt or gravel vehicle access points on SE 64 h Avenue or within the first 100 feet of the southern Park entrance will be closed, so that the total number of vehicle access points from SE Sherman Street north 700 feet, is limited to four. The drive aisle will be closed as part of the building permit approving development in the Upper Nursery area.
Response: Condition is met on demolition plans, Sheets C0.50.

Condition H:Maintain the landscaping buffer between the western tennis courts and the west property line to the L3 standard for trees and shrubs into perpetuity.
Response: The landscape buffer between the western tennis courts and the property line is within Mt Tabor Park and will be maintained by PP&R staff into the future. Pending response from City.

Condition I: Prior to issuance of a building permit for the new Maintenance Building, Applicant shall remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection.
Response: Reference Exhibit A - L3.21.

Condition J: In the event of future construction, maintenance, or other sewerage system activities on the Bureau of Environmental Services sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans L3.00 and L3.10.
Response: Future construction activities related to condtions of approval are not currently planned. PP&R management team will be informed of the condition.

Condition K: In the reduced buffer area between the new maintenance building and the west property line/SE 64t' Avenue right-of-way between the south end of SE Sherman Street and the north end of SE Grant Street, the LI standard for trees and groundcover will be met, and a minimum of 25 shrubs will be planted (Exhibits H.14j and H.14k).
Response: This condition is met on Sheets L3.2.

Condition L: Prior to building or other permit issuance for the multi-use path, Applicant must provide a 20- foot-wide public access easement for a multi-use path that is a minimum of 12-feet wide between SE Sherman and SE Division Street in general alignment with SE 64th Avenue.
Response: Easement work is underway and will be resolved by permit issuance.

LU 17-158467 HRM
CONDITIONS OF APPROVAL

City Of Portland
RECEIVED FOR
CODE COMPLIANCE
Project:
Date Received:
Initials:

Condition A: As part of the building permit application submittal, the following development-related conditions (B through I) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-158467HRM." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page, and referenced on A0.51 and A0.52.

Condition B: At the time of building permit submittal, a signed Certificate of Compliance form www.portlandoregon.gov/bds/article/623658 must be submitted to ensure the permit plans comply with the Design.
Response: A signed Certificate of Compliance form is included in the building permit submittal.

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16-113354 CO and 16-113360 CO, must either be removed, or brought into conformance with the requirements of the Stormwater Management Manual (SWMM) within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: All trees, structures and fences must be located at least 7 feet from the existing public sanitary sewer pipe. BES will allow shrubs and shallow-rooted vegetated to be planted over the pipe. In the event of future construction, maintenance, or other sewerage system activities on the BES sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans Exhibit C22 & C23.
Response: Condition is met on plan C302. Landscape area is understood to be part of standard PP&R maintenance activities.

Condition E: Prior to building or other permit issuance for the multi-use path, the applicant must provide a 24-foot-wide public access easement for a multi-use path that is a minimum of 12-ft wide between SE Sherman and SE Division Street in general alignment with SE 64th Ave.
Response: Easement work is underway and will be resolved by permit issuance.

Condition F: Prior to installation of the art pieces, an approved encroachment permit from PBOT must be obtained.
Response: PP&R is coordinating the permits with PBOT. Permits will be pursued after building permits are finalized. Noted on Sheets ART1.0 & ART1.1

Condition G: The public art in the three noted locations along the multi-modal pathway will be approved by the Regional Arts & Culture Council (RACC) and installed prior to issuance of the building's final certificate of occupancy, or sooner.
Response: PP&R has coordinated public art through RACC. Project work is to be accomplished prior to certificate of occupancy. Noted on Sheets ART1.0 & ART1.1

Condition H: Public art or significant landscaping will be installed at the south entrance of Mt. Tabor Parks, near the intersection of SE Lincoln Street and SE 65th Avenue as shown in Exhibit C-44, during the next phase of the Parks Master Plan implementation.
Response: The landscape buffer between the western tennis courts and the property line is within Mt Tabor Park and will be maintained by PP&R staff into the future.

Condition I: Railings at the bridge shall be similar to, but simpler than, the recently approved railings for the Mt. Tabor Park stairway. The railings shall be painted, rather than galvanized, in a color that harmonizes with the neighboring landscaping, and need not be black to match the fences.
Response: This condition is met on plan sheets A5.13.

Condition J: No field changes allowed.
Response: No field changes will be made.

KEY PLAN

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

opsis
503.525.9511
www.opsisarch.com
920 NORTHWEST SEVENTEENTH AVENUE
PORTLAND | OREGON | 97209

PERMIT SET
11.19.2019

REGISTERED ARCHITECT
PAUL G. KINLEY
PORTLAND, OREGON
4589
STATE OF OREGON

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director
6437 SE Division St, Portland, OR 97206

ZONING COMPLIANCE PAGE
MT. TABOR MAINTENANCE FACILITY
PROJECT MANAGER: ROBIN LAUGHLIN
DETAILS DRAWN BY: Author SECTION:
SCALE: REFERENCE DETAILS
DATE: 11.19.2019

REVISIONS

DATE	DESCRIPTION	BY
1	Revision 1	02.15.20

PARKS REPLACEMENT BOND 2014

G1.02

Job No.
4654-01

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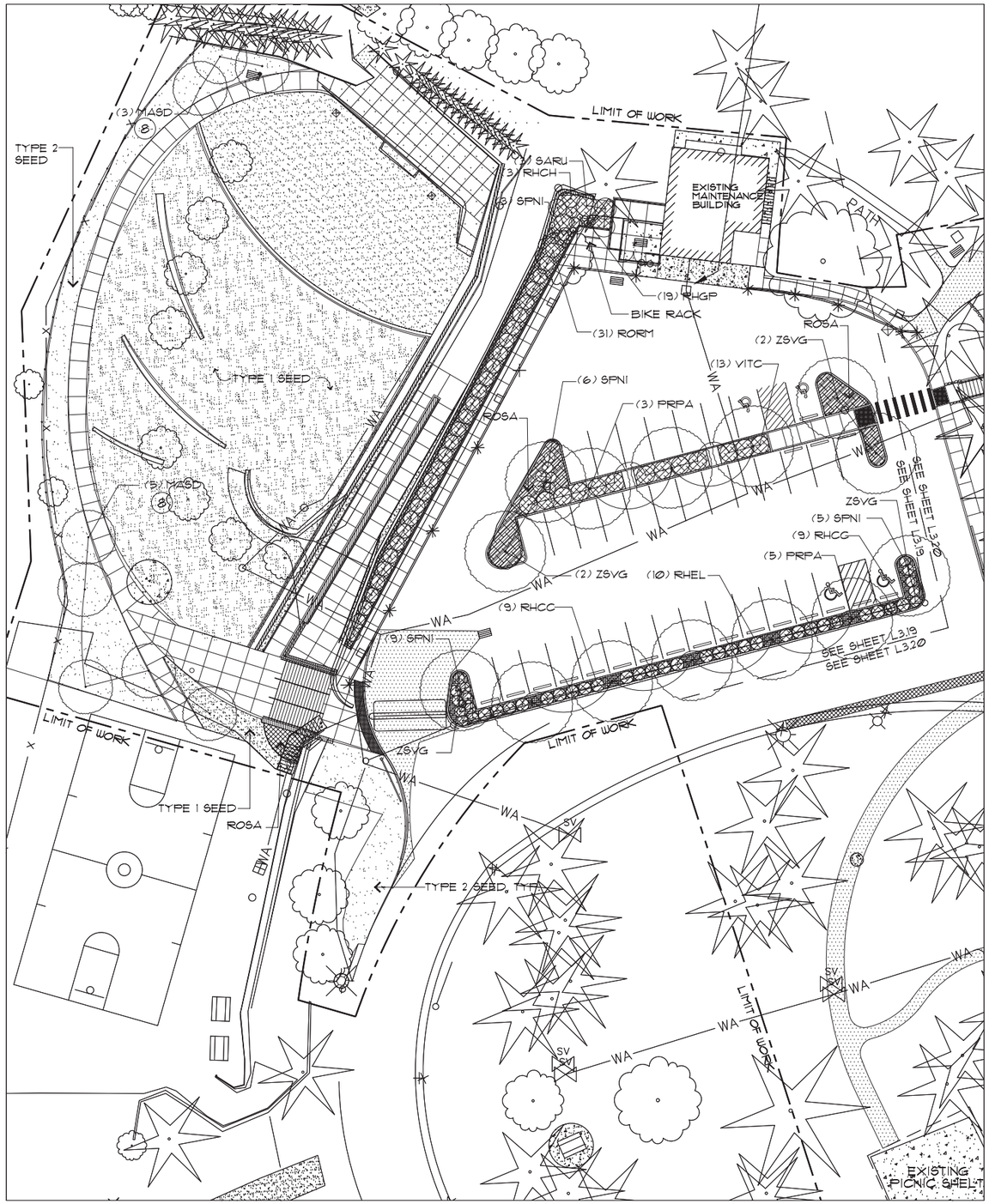
PLOTTED BY:
PLOTTED ON: 4/14/2020 12:52:13 PM
DRAWINGS\FILES



PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	CONDITION/SIZE/SPACING
TREE:			
ACMA	ACER MACROPHYLLUM	BIGLEAF MAPLE	B&B/ 3" CAL./ AS SHOWN
ALRU	ALNUS RUBRA	RED ALDER	B&B/ 3" CAL./ AS SHOWN
MASD	MALUS 'SNOWDRIFT'	SNOWDRIFT CRABAPPLE	B&B/ 3" CAL./ AS SHOWN
PRPA	PRUNUS PADUS	EUROPEAN BIRD CHERRY	B&B/ 3" CAL./ AS SHOWN
QURU	QUERCUS RUBRA	RED OAK	B&B/ 3" CAL./ AS SHOWN
ZSVG	ZELKOVA SERATA 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	B&B/ 3" CAL./ AS SHOWN
SHRUB:			
DAOD	DAPHNE ODORA	WINTER DAPHNE	3 GAL. CONT/ AS SHOWN
HYPE	HYDRANGEA MACROPHYLLA 'PINK ELF'	PINK ELF HYDRANGEA	2 GAL. CONT/ AS SHOWN
POMU	POLYSTICHUM MUNITUM	SWORD FERN	1 GAL. CONT/ AS SHOWN
RHCH	RHODODENDRON 'CHRISTMAS CHEER'	CHRISTMAS CHEER RHOD.	12-18"/ AS SHOWN
RHCC	RHODODENDRON 'CREAM CREST'	CREAM CREST RHODODENDRON	12-18"/ AS SHOWN
RHDA	RHODODENDRON 'DORA AMATEIS'	DORA AMATEIS RHODODENDRON	12-18"/ AS SHOWN
RHEL	RHODODENDRON 'ELIZABETH'	ELIZABETH RHODODENDRON	12-18"/ AS SHOWN
RHGP	RHODODENDRON 'GUMPO PINK'	PINK GUMPO AZALEA	12-18"/ AS SHOWN
RHMA	RHODODENDRON 'MARS'	MARS RHODODENDRON	12-18"/ AS SHOWN
RHSW	RHODODENDRON 'SCARLET WONDER'	SCARLET WONDER RHOD.	12-18"/ AS SHOWN
RORM	ROSA 'RED MEIDILAND'	RED MEIDILAND ROSE	2 GAL. CONT/ 4' O.C.
SAHH	SARCOCOCCA HOOKERANA HUMILIS	CREEPING SARCOCOCCA	1 GAL. CONT./ AS SHOWN
SARU	SARCOCOCCA RUSCIFOLIA	FRAGRANT SARCOCOCCA	2 GAL. CONT./ AS SHOWN
SKJA	SKIMMIA JAPONICA	JAPANESE SKIMMIA	2 GAL. CONT/ AS SHOWN
SPNI	SPIRAEA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIRAEA	2 GAL. CONT./ AS SHOWN
VITC	VIBURNUM TINUS 'COMPACTA'	DWARF LAURUSTINUS	5 GAL. CONT./ AS SHOWN
GROUNDCOVERS:			
	ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1 GAL. CONT./ 18" O.C.
	FRAGARIA CHILOENSIS	WILD STRAWBERRY	1 GAL. CONT./ 12" O.C.
	GERANIUM MACRORRHIZUM 'BEVENS'	BEVENS GERANIUM	1 GAL. CONT./ 12" O.C.
	MAHONIA REPENS	CREEPING MAHONIA	1 GAL. CONT./ 18" O.C.
	NARCISSUS 'GOLDEN SPUR'	GOLDEN SPUR DAFFODIL	PROVIDE 200 BULBS FOR INSTALLATION WHERE SHOWN BY OWNER'S REPRESENTATIVE.
	ROSA 'ROBIN RED BREAST'	ROBIN RED BREAST ROSE	1 GAL. CONT. / 24" O.C./ TRI. SP.
	ROSA 'SNOW ON THE HEATHER'	SNOW ON THE HEATHER ROSE	1 GAL. CONT. / 36" O.C./ TRI. SP.
	TYPE 1 SEED, SEE SPECIFICATIONS.		
	TYPE 2 SEED, SEE SPECIFICATIONS.		

City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 09/24/21
File#: 19-148124-000-00-CO

33.700.020, Conformance With LU 17-245440 CU AD, Conditional Use Review and Adjustment Review, Condition of Approval I. Prior to issuance of the new Maintenance Building building permit, remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than 6 months. All required landscaping must be installed prior to final inspection.

NOTES

1. SEE COVER SHEET FOR GENERAL NOTES.
2. GRADE SMOOTH ALL AREAS DISTURBED BY CONSTRUCTION NOT SCHEDULED FOR OTHER IMPROVEMENTS AND SEED WITH TYPE 1 SEED MIXTURE. SEE SPECIFICATIONS.
3. QUANTITIES INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. INSTALL NUMBER OF PLANTS AS DRAWN.
4. PROVIDE SMOOTH FLOWING TRANSITIONS BETWEEN PLANT MATERIALS. LOCATE PLANTS IN FIELD FOR ADJUSTMENT BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
5. ADD BARK MULCH TO EXISTING SHRUB AREAS DISTURBED BY CONSTRUCTION. PROVIDE A MINIMUM OF 2" THICK FOR DISTURBED SHRUB AREAS, TYPICAL.
6. OWNER'S REPRESENTATIVE TO LOCATE PLANTS IN RESTROOM AREA FOR INSTALLATION.
7. PROVIDE TEMPORARY WATERING TO ALL NEW PLANT MATERIAL LOCATED IN AREAS WHICH DO NOT RECEIVE AUTOMATIC IRRIGATION UNTIL FINAL ACCEPTANCE. SEE SPECIFICATIONS.
8. STAKE ALL TREE LOCATIONS IN FIELD FOR OWNER'S REPRESENTATIVE TO ADJUST PRIOR TO INSTALLATION.
9. WHERE ROSES ARE PLANTED INDIVIDUALLY, MINIMUM PLANTING PIT TO BE 24"X24"X24" DEEP.
10. SEE SHEET L7.1 FOR ADDITIVE ALTERNATE PLANT MATERIAL.

NOT IN CONTRACT, WORK BY OWNER

NOTE: IF SHEET SIZE NOT 22" x 35", SCALE IS INCORRECT.

NORTH

100% CONSTRUCTION DOCUMENTS

PORTLAND PARKS & Recreation

REGISTERED NO. 222 • MICHAEL W. ZILIS • OREGON LANDSCAPE ARCHITECT

WALKER·MACY
121 Southwest Oak Street, Suite 300, Portland, OR (503) 224-3123

Portland Parks and Recreation
JAMES FRANCESCONI, Commissioner
CHARLES JORDAN, Director

AMPHITHEATER and MAIN PARKING
Planting Plan
MT. TABOR PARK
Portland, Oregon

Project Manager: GEORGE LOZOVOY
Construction Manager: GARY WOODRUFF 823-5933
DRAWN BY: ES, JB CHECKED BY: KL, MZ
SCALE: AS NOTED
DATE: 05/21/99

REVISIONS

DATE	DESCRIPTION	BY

Let's Build Portland Parks

L3.21
LR 2.00

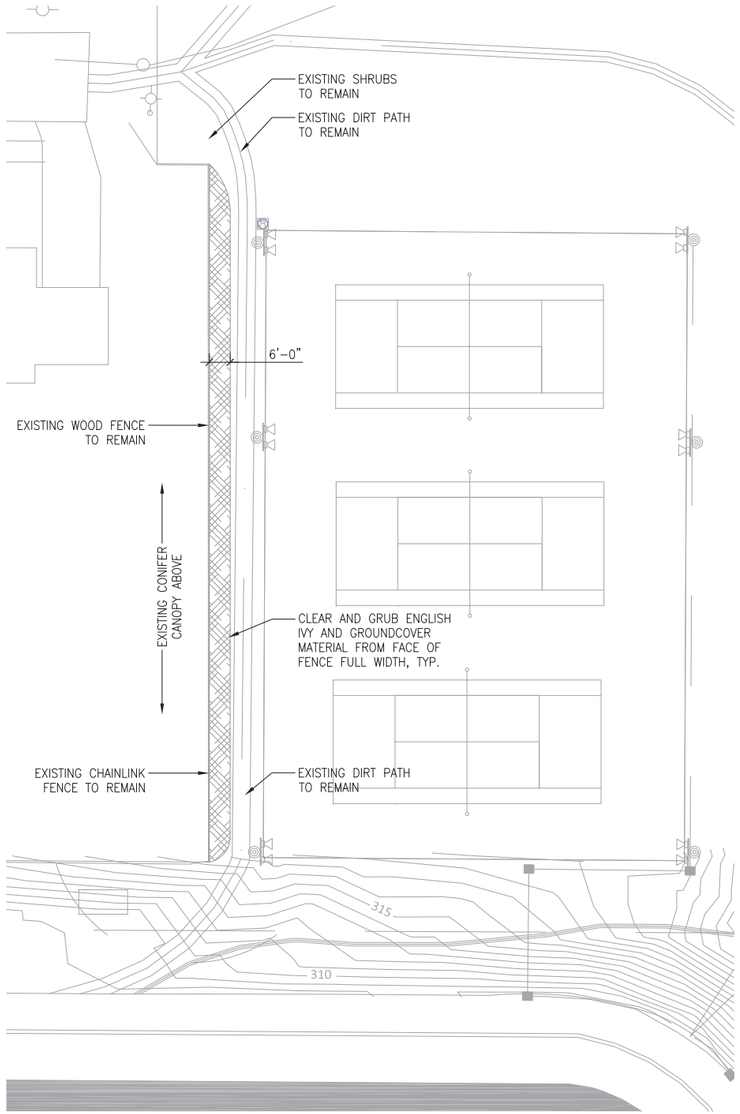
PLOTTED ON: $DATE$ PLOTTED BY: $USERNAME$ PLOTTED FROM: $COMPUTERNAME$

DRAWING: $FILE$

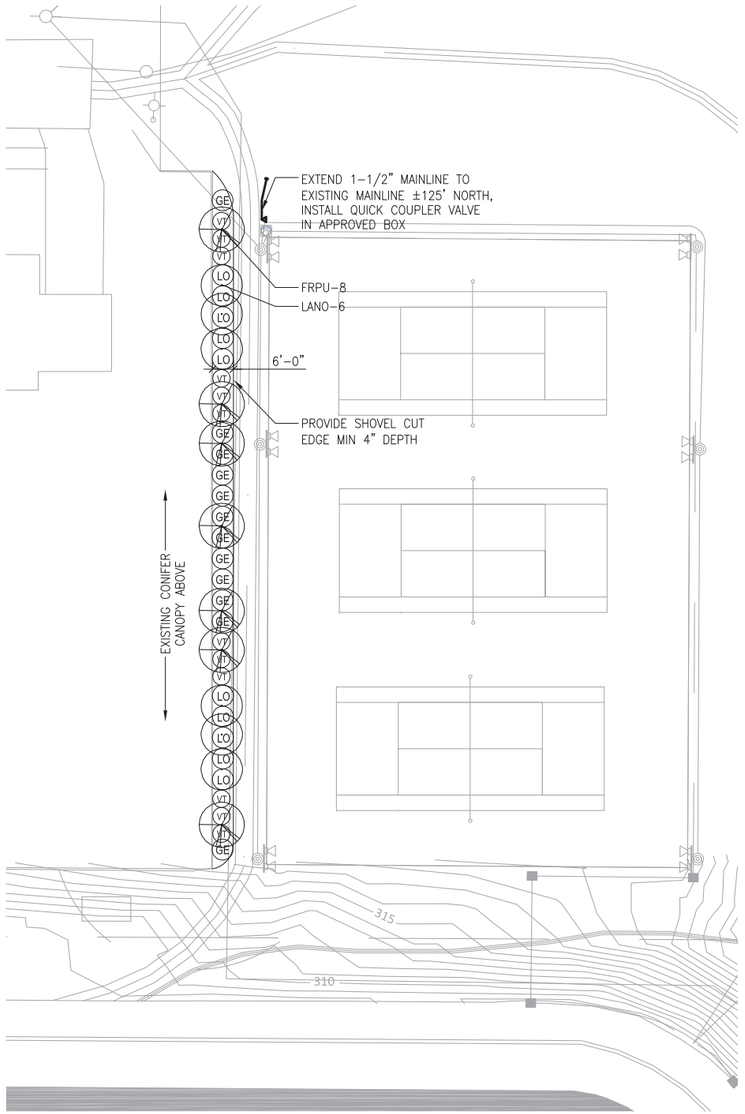
PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	SPACING	HEIGHT
	TREES				
FRPU	FRANGULA PURSHIANA	CASCARA BUCKTHORN	1-1/2" CAL.	AS SHOWN	SMALL TREE
LANO	LAURUS NOBILIS	SWEET BAY	1-1/2" CAL.	AS SHOWN	SMALL TREE
	SHRUBS				
GE	GARRYA ELLIPTICA	WAVYLEAF SILKTASSEL	2 GAL. CONT.	AS SHOWN	6-8'
LO	LOROPETALUM CHINENSE v. RUBRUM	PINK-FLOWERING FRINGE-FLOWER	2 GAL. CONT.	AS SHOWN	6
VT	VIBURNUM TINUS	LAURUSTINUS VIBURNUM	2 GAL. CONT.	AS SHOWN	6-8'

City Of Portland
REVIEWED FOR
CODE COMPLIANCE
Date: 09/24/21
Project#: 19-143914-000-00-CU



1 DEMOLITION PLAN



2 PLANTING PLAN

PLANTING NOTES:

1. VERIFY LOCATION OF EXISTING FEATURES INDICATED TO REMAIN PRIOR TO SOIL PREPARATION. PROTECT ALL TREES AND SHRUBS INDICATED TO REMAIN. PLANTING LOCATIONS SHALL BE ADJUSTED TO BEST FIT EXISTING FEATURES TO REMAIN.
2. PLANTING AREAS TO BE SUFFICIENTLY CLEANED OF ROCK, DEBRIS, AND ENGLISH IVY FROM BASE OF FENCE TO EDGE OF WALK TO REMAIN.

GENERAL NOTES

1. NOT IN SCOPE OF WORK – TO BE COMPLETED BY OWNER
2. 33.258.070, CONFORMANCE WITH LU 17-245440 CU AD, CONDITIONAL USE REVIEW AND ADJUSTMENT REVIEW, CONDITION OF APPROVAL H: MAINTAIN THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE TO THE L3 STANDARD FOR TREES AND SHRUBS INTO PERPETUITY. TO COMPLY WITH THIS CONDITION OF APPROVAL, PLEASE PROVIDE A DETAILED LANDSCAPE PLAN TO DOCUMENT THE EXISTING CONDITIONS AND DEMONSTRATE THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE WILL BE MAINTAINED TO COMPLY WITH THE L3 STANDARD AS PART OF THIS PERMIT.

PLANTING REQUIREMENTS

	REQUIRED	PROVIDED
TOTAL FRONTAGE:	186-LF	186-LF
TOTAL TREES:	12.4	13
TOTAL SHRUBS:	31	34

0 5 10 20 40
SCALE: 1" = 20'-0"

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director

Mt Tabor Park Tennis Court Screening
Mt Tabor Park
Portland, Oregon

PROJECT MANAGER: RML
DRAWN BY:G DATKA
SECTION:
SCALE: as shown
DATE: July 29, 2020

REVISIONS

DATE	DESCRIPTION	BY

LR1.00

Mt. Tabor Park Overall Site Plan

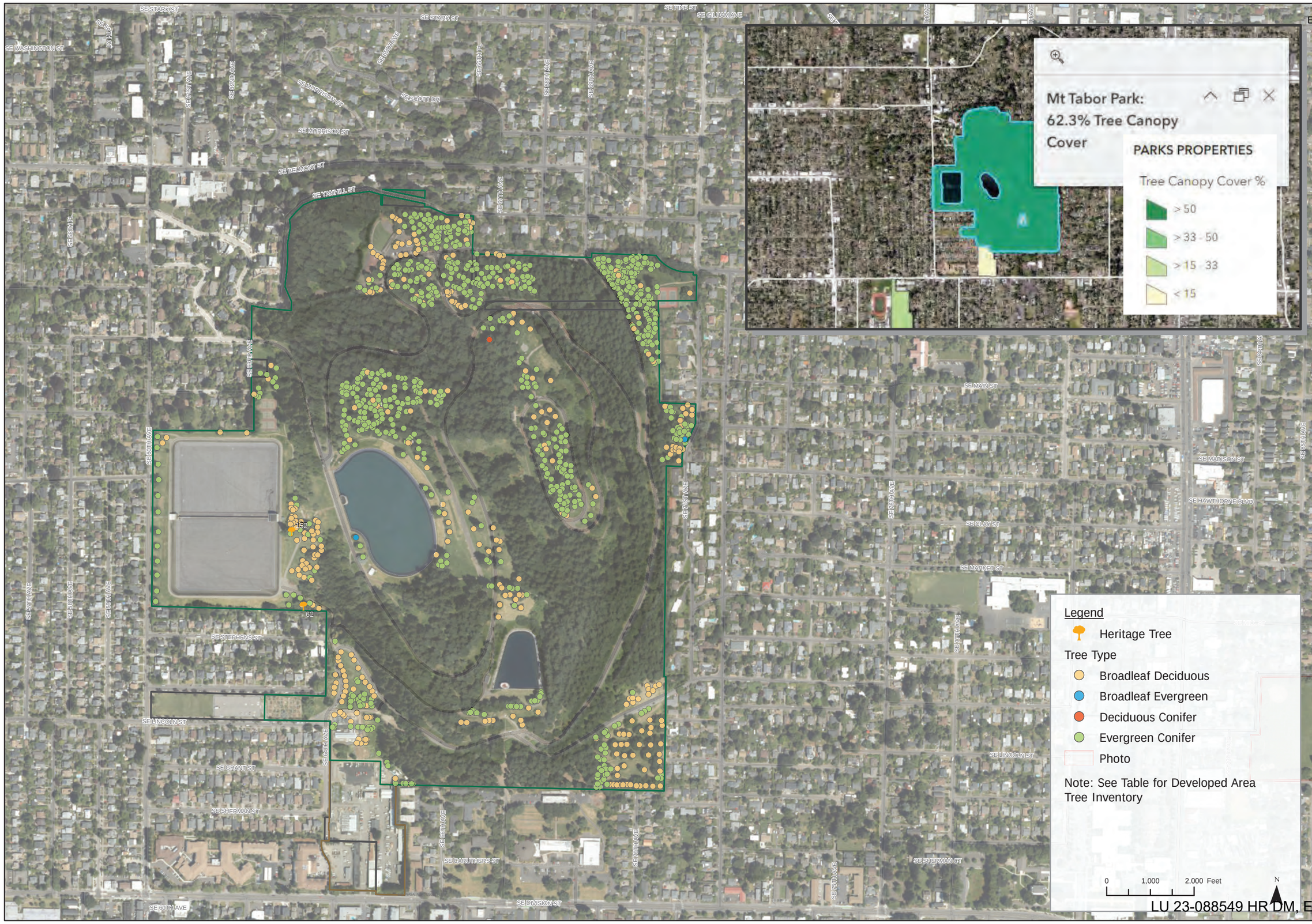
CASE NO. LU 14-138440 CU
EXHIBIT J.7

MT. TABOR PARK
MT TABOR MAINTENANCE BUILDING

The new development is focused in the Maintenance Yard, Upper Nursery and Long Block, but the Adjustments consider the entire site. The two Adjustments to perimeter and interior parking lot landscaping look at parking in the maintenance yard, at the caldera parking lot, and at the striped parking on Tabor Summit Dr. The Buffering Adjustment looks at the entire perimeter of the park.

PORTLAND PARKS & RECREATION | opsis architecture LLP

Mt Tabor Park Tree Canopy and Inventory



LU 23-088549 HR DM, Exhibit A.11

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Mt Tabor Park Tree Inventory

Table Page 1

TreeNo	Genus species	Common Name	DBH	Size
1	Liriodendron tulipifera	tuliptree	4.4	L
2	Cryptomeria japonica	Japanese cedar	10.4	M
3	Pinus strobus	eastern white pine	10.6	L
4	Picea smithiana	Himalayan spruce	6	L
5	Prunus serrulata	Japanese flowering cherry	2.9	S
6	Prunus serrulata	Japanese flowering cherry	30	S
7	Prunus serrulata	Japanese flowering cherry	26.5	S
8	Prunus serrulata	Japanese flowering cherry	6.7	S
9	Prunus serrulata	Japanese flowering cherry	4.3	S
10	Prunus serrulata	Japanese flowering cherry	28.6	S
11	Gymnocladus dioica	Kentucky coffeetree	3.2	L
12	Prunus serrulata	Japanese flowering cherry	14.4	S
13	Pterocarya spp.	wingnut	3.2	S
14	Pseudotsuga menziesii	Douglas-fir	13.9	L
15	Pseudotsuga menziesii	Douglas-fir	15.8	L
16	Pseudotsuga menziesii	Douglas-fir	13.3	L
17	Acer heldreichii	Balkan maple	11.6	M
18	Thuja plicata	western redcedar	13.6	L
19	Chamaecyparis obtusa	Hinoki falsecypress	6	L
20	Carpinus betulus	European hornbeam	12	M
21	Thuja plicata	western redcedar	8	L
22	Abies grandis x concolor	Leuteneggeri hybrid fir	23.8	S
23	Sequoia sempervirens	coast redwood	24.6	L
24	Thuja plicata	western redcedar	23.2	L
25	Acer campestre	hedge maple	5	M
26	Tilia tomentosa	silver linden	40.5	L
27	Acer macrophyllum	bigleaf maple	1.5	L
28	Acer macrophyllum	bigleaf maple	1.7	L
29	Crataegus monogyna	English hawthorn, common	16	S
30	Cedrus deodara	deodar cedar	39.2	L
31	Crataegus monogyna	English hawthorn, common	22.7	S
32	Cedrus deodara	deodar cedar	33	L
33	Crataegus monogyna	English hawthorn, common	11.7	S
34	Cedrus deodara	deodar cedar	35.7	L
35	Crataegus monogyna	English hawthorn, common	18.3	S
36	Sequoiadendron giganteum	giant sequoia	26	L
37	Cedrus deodara	deodar cedar	41.1	L
38	Acer macrophyllum	bigleaf maple	36.7	L
39	Crataegus monogyna	English hawthorn, common	14.3	S
40	Salix spp.	willow	19	M
41	Pseudotsuga menziesii	Douglas-fir	36	L
42	Crataegus monogyna	English hawthorn, common	25.7	S
43	Crataegus monogyna	English hawthorn, common	19.8	S
44	Malus spp.	ornamental crabapple	12.4	S
45	Crataegus monogyna	English hawthorn, common	15.5	S
46	Liquidambar styraciflua	sweetgum	13	M
47	Prunus serrulata	Japanese flowering cherry	23.2	S
48	Quercus palustris	pin oak	3.3	L
49	Prunus serrulata	Japanese flowering cherry	28.2	S
50	Prunus serrulata	Japanese flowering cherry	22.7	S
51	Prunus serrulata	Japanese flowering cherry	28.6	S
52	Gymnocladus dioica	Kentucky coffeetree	7.6	L
53	Prunus serrulata	Japanese flowering cherry	14.7	S
54	Alnus rubra	red alder	12.9	M
55	Pseudotsuga menziesii	Douglas-fir	1.2	L
56	Styrax japonicus	Japanese snowbell	4	S
57	Sequoiadendron giganteum	giant sequoia	29	L
58	Pinus ponderosa	ponderosa pine	14.1	L
59	Chamaecyparis obtusa	Hinoki falsecypress	6	L
60	Picea smithiana	Himalayan spruce	7.5	L
61	Acer davidii	snakebark maple	5.8	S
62	Acer davidii	snakebark maple	8.3	S
63	Thuja plicata	western redcedar	10	L
64	Sequoia sempervirens	coast redwood	29.3	L
65	Calocedrus decurrens	incense cedar	35	L
66	Quercus palustris	pin oak	3.1	L
67	Prunus serrulata	Japanese flowering cherry	2.8	S
68	Prunus serrulata	Japanese flowering cherry	34	S
69	Picea smithiana	Himalayan spruce	6	L
70	Prunus serrulata	Japanese flowering cherry	22.5	S
71	Pinus ponderosa	ponderosa pine	15.8	L
72	Sequoia sempervirens	coast redwood	24.3	L
73	Pseudotsuga menziesii	Douglas-fir	11.2	L
74	Pinus ponderosa	ponderosa pine	12.3	L
75	Chamaecyparis obtusa	Hinoki falsecypress	6	L
76	Chamaecyparis obtusa	Hinoki falsecypress	6	L
77	Crataegus monogyna	English hawthorn, common	0.5	S
78	Acer davidii	snakebark maple	7.8	S
79	Carpinus betulus	European hornbeam	12.5	M
80	Thuja plicata	western redcedar	8	L
81	Calocedrus decurrens	incense cedar	25	L
82	Calocedrus decurrens	incense cedar	25	L
83	Acer platanoides	Norway maple	3.8	M
84	Acer macrophyllum	bigleaf maple	1.7	L
85	Tilia tomentosa	silver linden	63.9	L
86	Crataegus monogyna	English hawthorn, common	20.4	S
87	Sequoiadendron giganteum	giant sequoia	1	L
88	Cedrus deodara	deodar cedar	23	L
89	Cedrus deodara	deodar cedar	31	L
90	Cedrus deodara	deodar cedar	31.9	L
91	Crataegus monogyna	English hawthorn, common	17.5	S
92	Crataegus monogyna	English hawthorn, common	13	S
93	Pseudotsuga menziesii	Douglas-fir	5.4	L
94	Malus spp.	ornamental crabapple	12.5	S
95	Prunus avium	bird cherry	7	M
96	Crataegus monogyna	English hawthorn, common	15	S
97	Pseudotsuga menziesii	Douglas-fir	28.8	L
98	Malus spp.	ornamental crabapple	10.1	S
99	Pseudotsuga menziesii	Douglas-fir	41.2	L
100	Pseudotsuga menziesii	Douglas-fir	23.5	L
101	Prunus serrulata	Japanese flowering cherry	32.4	S
102	Crataegus monogyna	English hawthorn, common	21.2	S
103	Prunus serrulata	Japanese flowering cherry	2.1	S
104	Prunus serrulata	Japanese flowering cherry	28.7	S
105	Prunus serrulata	Japanese flowering cherry	26	S
106	Gymnocladus dioica	Kentucky coffeetree	8.3	L
107	Prunus serrulata	Japanese flowering cherry	25.2	S
108	Pinus ponderosa	ponderosa pine	17.3	L
109	Prunus serrulata	Japanese flowering cherry	34.5	S
110	Pinus ponderosa	ponderosa pine	17.6	L
111	Pterocarya spp.	wingnut	2.1	S
112	Pseudotsuga menziesii	Douglas-fir	1	L
113	Pterocarya spp.	wingnut	3.5	S
114	Pseudotsuga menziesii	Douglas-fir	1.2	L
115	Sequoiadendron giganteum	giant sequoia	32.3	L
116	Sequoiadendron giganteum	giant sequoia	30.8	L
117	Pseudotsuga menziesii	Douglas-fir	15.3	L
118	Chamaecyparis obtusa	Hinoki falsecypress	4.2	L
119	Thuja plicata	western redcedar	10.8	L
120	Chamaecyparis obtusa	Hinoki falsecypress	5	L
121	Picea pungens	Colorado blue spruce	5.3	L
122	Acer davidii	snakebark maple	9.2	S
123	Pinus ponderosa	ponderosa pine	25.1	L
124	Fagus sylvatica	European beech	14	L
125	Styphnolobium japonicum syn. Sophora japonica	Japanese pagoda tree, Chinese	3.6	M
126	Cladrastis kentukea	American yellowwood	12.9	M
127	Calocedrus decurrens	incense cedar	30	L
128	Malus spp.	ornamental crabapple	13.9	S
129	Sequoiadendron giganteum	giant sequoia	11.8	L
130	Malus fusca	Pacific crabapple	14	S
131	Picea pungens	Colorado blue spruce	31.4	L
132	Crataegus monogyna	English hawthorn, common	24.4	S
133	Crataegus monogyna	English hawthorn, common	12.5	S
134	Crataegus monogyna	English hawthorn, common	19.5	S
135	Pyrus calleryana	flowering pear	6.1	M
136	Acer macrophyllum	bigleaf maple	15.5	L
137	Populus nigra	black poplar, Lombardy poplar	13.6	L
138	Ostrya virginiana	American hophornbeam	2.7	M
139	Crataegus monogyna	English hawthorn, common	13	S
140	Pseudotsuga menziesii	Douglas-fir	48.8	L
141	Thuja plicata	western redcedar	4.9	L
142	Acer saccharum	sugar maple	4.9	L
143	Sequoiadendron giganteum	giant sequoia	99	L
144	Cedrus deodara	deodar cedar	37.8	L
145	Cedrus deodara	deodar cedar	40.7	L
146	Sequoiadendron giganteum	giant sequoia	22.4	L
147	Sequoiadendron giganteum	giant sequoia	31.6	L
148	Cedrus deodara	deodar cedar	21.6	L
149	Cedrus deodara	deodar cedar	31	L
150	Crataegus monogyna	English hawthorn, common	11	S
151	Cedrus deodara	deodar cedar	26.2	L
152	Malus spp.	ornamental crabapple	15.8	S
153	Crataegus monogyna	English hawthorn, common	10.8	S
154	Crataegus monogyna	English hawthorn, common	11	S
155	Crataegus monogyna	English hawthorn, common	18.5	S
156	Populus nigra	black poplar, Lombardy poplar	17.7	L
157	Crataegus monogyna	English hawthorn, common	11.8	S
158	Pseudotsuga menziesii	Douglas-fir	44.5	L
159	Ostrya virginiana	American hophornbeam	2.5	M
160	Pseudotsuga menziesii	Douglas-fir	40.6	L
161	Pseudotsuga menziesii	Douglas-fir	56.8	L
162	Acer macrophyllum	bigleaf maple	28.8	L
163	Pseudotsuga menziesii	Douglas-fir	37.3	L
164	Crataegus monogyna	English hawthorn, common	13.6	S
165	Crataegus monogyna	English hawthorn, common	13.1	S
166	Crataegus monogyna	English hawthorn, common	19.9	S
167	Crataegus monogyna	English hawthorn, common	20.2	S
168	Crataegus monogyna	English hawthorn, common	10.3	S
169	Pseudotsuga menziesii	Douglas-fir	34	L
170	Crataegus monogyna	English hawthorn, common	18.2	S
171	Crataegus monogyna	English hawthorn, common	18.2	S
172	Crataegus monogyna	English hawthorn, common	13.2	S
173	Crataegus monogyna	English hawthorn, common	20.4	S
174	Crataegus monogyna	English hawthorn, common	13.1	S
175	Pyrus communis	European pear (including	8.1	M
176	Pseudotsuga menziesii	Douglas-fir	41.3	L
177	Pseudotsuga menziesii	Douglas-fir	37.6	L
178	Pseudotsuga menziesii	Douglas-fir	34.9	L
179	Pseudotsuga menziesii	Douglas-fir	46.1	L
180	Prunus sargentii	Sargent's cherry	9.6	S
181	Pseudotsuga menziesii	Douglas-fir	44.2	L
182	Prunus sargentii	Sargent's cherry	2.5	S
183	Prunus sargentii	Sargent's cherry	6	S
184	Pseudotsuga menziesii	Douglas-fir	49.2	L
187	Pseudotsuga menziesii	Douglas-fir	33.7	L
188	Zelkova serrata	Japanese zelkova	10	M
189	Pseudotsuga menziesii	Douglas-fir	36.7	L
190	Pseudotsuga menziesii	Douglas-fir	27.9	L
191	Pseudotsuga menziesii	Douglas-fir	41.1	L
192	Fagus sylvatica	European beech	25	L
193	Pseudotsuga menziesii	Douglas-fir	47.2	L
194	Pseudotsuga menziesii	Douglas-fir	35.9	L
195	Pseudotsuga menziesii	Douglas-fir	36.1	L
196	Prunus cerasifera	flowering plum	4.9	S
197	Pseudotsuga menziesii	Douglas-fir	31.7	L
198	Pseudotsuga menziesii	Douglas-fir	31	L
199	Pseudotsuga menziesii	Douglas-fir	42.9	L
200	Cornus nuttallii	Pacific dogwood	4.8	M
201	Pseudotsuga menziesii	Douglas-fir	50.2	L
202	Pseudotsuga menziesii	Douglas-fir	48.3	L
203	Thuja plicata	western redcedar	1.3	L
204	Pseudotsuga menziesii	Douglas-fir	45.3	L
205	Pseudotsuga menziesii	Douglas-fir	44.1	L
206	Prunus sargentii	Sargent's cherry	3.4	S
207	Zelkova serrata	Japanese zelkova	13.7	M
208	Zelkova serrata	Japanese zelkova	10.1	M
209	Zelkova serrata	Japanese zelkova	12.5	M
210	Pseudotsuga menziesii	Douglas-fir	24.7	L
211	Pseudotsuga menziesii	Douglas-fir	34.4	L
212	Pseudotsuga menziesii	Douglas-fir	47.4	L
213	Pseudotsuga menziesii	Douglas-fir	30.8	L
214	Zelkova serrata	Japanese zelkova	10.5	M
215	Pseudotsuga menziesii	Douglas-fir	21.8	L
216	Quercus rubra	northern red oak	30.2	L
217	Pseudotsuga menziesii	Douglas-fir	45.9	L
218	Acer platanoides	Norway maple	14.3	M
219	Pseudotsuga menziesii	Douglas-fir	33.9	L
220	Pseudotsuga menziesii	Douglas-fir	69.4	L
221	Pseudotsuga menziesii	Douglas-fir	23	L
222	Pseudotsuga menziesii	Douglas-fir	38.4	L
223	Pseudotsuga menziesii	Douglas-fir	36.8	L
224	Platanus x acerifolia	London plane tree	11.2	L
225	Pseudotsuga menziesii	Douglas-fir	32.7	L
226	Pseudotsuga menziesii	Douglas-fir	37.4	L
227	Thuja plicata	western redcedar	3	L
228	Pseudotsuga menziesii	Douglas-fir	37.1	L
229	Fagus sylvatica	European beech	11	L
230	Pseudotsuga menziesii	Douglas-fir	49.2	L
231	Prunus sargentii	Sargent's cherry	5.7	S
232	Fagus sylvatica	European beech	20.5	L
233	Pseudotsuga menziesii	Douglas-fir	48.7	L
234	Pseudotsuga menziesii	Douglas-fir	33	L
235	Pseudotsuga menziesii	Douglas-fir	35	L
236	Pseudotsuga menziesii	Douglas-fir	30.5	L
237	Pseudotsuga menziesii	Douglas-fir	31.6	L
238	Pseudotsuga menziesii	Douglas-fir	43.8	L
239	Pseudotsuga menziesii	Douglas-fir	33.9	L
240	Pseudotsuga menziesii	Douglas-fir	40.7	L
241	Pseudotsuga menziesii	Douglas-fir	28.6	L
242	Pseudotsuga menziesii	Douglas-fir	47	L
243	Pseudotsuga menziesii	Douglas-fir	20.9	L
244	Pseudotsuga menziesii	Douglas-fir	41.3	L
245	Pseudotsuga menziesii	Douglas-fir	39.9	L
246	Pseudotsuga menziesii	Douglas-fir	19.5	L
247	Pseudotsuga menziesii	Douglas-fir	51.5	L
248	Pseudotsuga menziesii	Douglas-fir	30	L
249	Acer macrophyllum	bigleaf maple	9	L
250	Acer palmatum	Japanese maple	8.1	S

Mt Tabor Park Tree Inventory

Table Page 2

TreeNo	Genus species	Common Name	DBH	Size
251	Platanus x acerifolia	London plane tree	19.5	L
252	Pseudotsuga menziesii	Douglas-fir	25.7	L
253	Tsuga heterophylla	western hemlock	4.3	L
254	Pseudotsuga menziesii	Douglas-fir	39	L
255	Malus spp.	ornamental crabapple	8.2	S
256	Pseudotsuga menziesii	Douglas-fir	31.6	L
257	Quercus rubra	northern red oak	15.4	L
258	Pseudotsuga menziesii	Douglas-fir	38.8	L
259	Pseudotsuga menziesii	Douglas-fir	35.4	L
260	Pseudotsuga menziesii	Douglas-fir	32.2	L
261	Pseudotsuga menziesii	Douglas-fir	27.7	L
262	Pseudotsuga menziesii	Douglas-fir	53	L
263	Pseudotsuga menziesii	Douglas-fir	44.7	L
264	Pseudotsuga menziesii	Douglas-fir	44.2	L
265	Pseudotsuga menziesii	Douglas-fir	30	L
266	Pseudotsuga menziesii	Douglas-fir	35.9	L
267	Pseudotsuga menziesii	Douglas-fir	40.8	L
268	Pseudotsuga menziesii	Douglas-fir	30.2	L
269	Pseudotsuga menziesii	Douglas-fir	36.2	L
270	Pseudotsuga menziesii	Douglas-fir	36.3	L
271	Pseudotsuga menziesii	Douglas-fir	1.7	L
272	Pseudotsuga menziesii	Douglas-fir	47.5	L
273	Pseudotsuga menziesii	Douglas-fir	47.3	L
274	Pseudotsuga menziesii	Douglas-fir	34.6	L
275	Pseudotsuga menziesii	Douglas-fir	26.9	L
276	Malus spp.	ornamental crabapple	5.2	S
277	Pseudotsuga menziesii	Douglas-fir	26	L
278	Pseudotsuga menziesii	Douglas-fir	41.9	L
279	Betula papyrifera	paper birch	5.7	M
280	Malus fusca	Pacific crabapple	6.9	S
281	Pseudotsuga menziesii	Douglas-fir	37.6	L
282	Tsuga heterophylla	western hemlock	34.2	L
283	Alnus rubra	red alder	12	M
284	Pseudotsuga menziesii	Douglas-fir	29.7	L
285	Pseudotsuga menziesii	Douglas-fir	35.8	L
286	Pseudotsuga menziesii	Douglas-fir	27.6	L
287	Pseudotsuga menziesii	Douglas-fir	42.9	L
288	Fagus grandifolia	American beech	41.9	L
289	Pseudotsuga menziesii	Douglas-fir	23.7	L
290	Pseudotsuga menziesii	Douglas-fir	36.7	L
291	Pseudotsuga menziesii	Douglas-fir	32.6	L
292	Pseudotsuga menziesii	Douglas-fir	45.9	L
293	Pseudotsuga menziesii	Douglas-fir	46.9	L
294	Pseudotsuga menziesii	Douglas-fir	50.4	L
295	Pseudotsuga menziesii	Douglas-fir	25.8	L
296	Pseudotsuga menziesii	Douglas-fir	34.3	L
297	Pseudotsuga menziesii	Douglas-fir	38.1	L
298	Pseudotsuga menziesii	Douglas-fir	37.3	L
299	Pseudotsuga menziesii	Douglas-fir	34.2	L
300	Pseudotsuga menziesii	Douglas-fir	36.4	L
301	Pseudotsuga menziesii	Douglas-fir	31.7	L
302	Pseudotsuga menziesii	Douglas-fir	54.4	L
303	Pseudotsuga menziesii	Douglas-fir	40.1	L
304	Pseudotsuga menziesii	Douglas-fir	34.5	L
305	Tsuga heterophylla	western hemlock	29.4	L
306	Pseudotsuga menziesii	Douglas-fir	26.5	L
307	Pseudotsuga menziesii	Douglas-fir	23	L
308	Pseudotsuga menziesii	Douglas-fir	29.8	L
309	Malus spp.	ornamental crabapple	5.6	S
310	Malus spp.	ornamental crabapple	4.4	S
311	Pseudotsuga menziesii	Douglas-fir	28.9	L
312	Pseudotsuga menziesii	Douglas-fir	34	L
313	Pseudotsuga menziesii	Douglas-fir	32	L
314	Pseudotsuga menziesii	Douglas-fir	41.2	L
315	Alnus rubra	red alder	11.6	M
316	Pseudotsuga menziesii	Douglas-fir	27.7	L
317	Pseudotsuga menziesii	Douglas-fir	27.9	L
318	Pseudotsuga menziesii	Douglas-fir	42.1	L
319	Pseudotsuga menziesii	Douglas-fir	33.4	L
320	Pseudotsuga menziesii	Douglas-fir	34.1	L
321	Calocedrus decurrens	incense cedar	8.8	L
322	Tsuga heterophylla	western hemlock	27.7	L
323	Thuja plicata	western redcedar	12.9	L
324	Sorbus aucuparia	European mountain ash	16.3	S
325	Pseudotsuga menziesii	Douglas-fir	39.7	L
326	Pseudotsuga menziesii	Douglas-fir	39.7	L
327	Pseudotsuga menziesii	Douglas-fir	39.1	L
328	Sorbus aucuparia	European mountain ash	9.8	S
329	Pseudotsuga menziesii	Douglas-fir	50	L
330	Acer macrophyllum	bigleaf maple	48	L
331	Pseudotsuga menziesii	Douglas-fir	39.3	L
332	Pseudotsuga menziesii	Douglas-fir	28.2	L
333	Pseudotsuga menziesii	Douglas-fir	39.8	L
334	Acer macrophyllum	bigleaf maple	56.5	L
335	Pseudotsuga menziesii	Douglas-fir	38.8	L
336	Pseudotsuga menziesii	Douglas-fir	27.5	L
337	Pseudotsuga menziesii	Douglas-fir	50.4	L
338	Pseudotsuga menziesii	Douglas-fir	2.1	L
339	Pseudotsuga menziesii	Douglas-fir	30.7	L
340	Pseudotsuga menziesii	Douglas-fir	35.5	L
341	Crataegus monogyna	English hawthorn, common	7.1	S
342	Pseudotsuga menziesii	Douglas-fir	39.5	L
343	Pseudotsuga menziesii	Douglas-fir	50.6	L
344	Pseudotsuga menziesii	Douglas-fir	24.5	L
345	Pseudotsuga menziesii	Douglas-fir	40.5	L
346	Pseudotsuga menziesii	Douglas-fir	40.4	L
347	Pseudotsuga menziesii	Douglas-fir	37.4	L
348	Pseudotsuga menziesii	Douglas-fir	31.4	L
349	Pseudotsuga menziesii	Douglas-fir	48	L
350	Picea pungens	Colorado blue spruce	7.7	L
351	Pseudotsuga menziesii	Douglas-fir	45	L
352	Malus spp.	ornamental crabapple	9.6	S
353	Pseudotsuga menziesii	Douglas-fir	39	L
354	Betula pendula	European white birch	17.7	M
355	Pseudotsuga menziesii	Douglas-fir	45.9	L
356	Betula pendula	European white birch	15.7	M
357	Pseudotsuga menziesii	Douglas-fir	37.3	L
358	Pseudotsuga menziesii	Douglas-fir	33.8	L
359	Pseudotsuga menziesii	Douglas-fir	10.1	L
360	Pseudotsuga menziesii	Douglas-fir	28.4	L
361	Pseudotsuga menziesii	Douglas-fir	45.2	L
362	Pseudotsuga menziesii	Douglas-fir	36.1	L
363	Pseudotsuga menziesii	Douglas-fir	30.5	L
364	Pseudotsuga menziesii	Douglas-fir	41.9	L
365	Magnolia spp.	magnolia	13.1	S
366	Picea abies	Norway spruce	15.7	L
367	Picea abies	Norway spruce	17.9	L
368	Pseudotsuga menziesii	Douglas-fir	56.4	L
369	Pseudotsuga menziesii	Douglas-fir	50.5	L
370	Malus spp.	ornamental crabapple	6.6	S
371	Acer macrophyllum	bigleaf maple	39.8	L
372	Acer macrophyllum	bigleaf maple	37.1	L
373	Pseudotsuga menziesii	Douglas-fir	32.9	L
374	Pseudotsuga menziesii	Douglas-fir	30.9	L
375	Magnolia spp.	magnolia	7.3	S
376	Pseudotsuga menziesii	Douglas-fir	49.4	L
377	Pseudotsuga menziesii	Douglas-fir	56.8	L
378	Pseudotsuga menziesii	Douglas-fir	49	L
379	Pseudotsuga menziesii	Douglas-fir	51.4	L
380	Pseudotsuga menziesii	Douglas-fir	40.9	L
381	Pseudotsuga menziesii	Douglas-fir	32.5	L
382	Pseudotsuga menziesii	Douglas-fir	52.3	L
383	Pseudotsuga menziesii	Douglas-fir	44.1	L
384	Pseudotsuga menziesii	Douglas-fir	37.1	L
385	Pseudotsuga menziesii	Douglas-fir	39	L
386	Pseudotsuga menziesii	Douglas-fir	63	L
387	Betula pendula	European white birch	8.5	M
388	Malus spp.	ornamental crabapple	7.1	S
389	Pseudotsuga menziesii	Douglas-fir	41	L
390	Pseudotsuga menziesii	Douglas-fir	43.5	L
391	Pseudotsuga menziesii	Douglas-fir	41.3	L
392	Quercus rubra	northern red oak	22.1	L
393	Malus spp.	ornamental crabapple	9.5	S
394	Fagus sylvatica	European beech	22.6	L
395	Juglans regia	English walnut	9.4	L
396	Fagus sylvatica	European beech	17.6	L
397	Fagus sylvatica	European beech	13.4	L
398	Pseudotsuga menziesii	Douglas-fir	40	L
399	Pseudotsuga menziesii	Douglas-fir	29.1	L
400	Betula pendula	European white birch	15.1	M
401	Betula pendula	European white birch	23.7	M
402	Pseudotsuga menziesii	Douglas-fir	55.1	L
403	Pseudotsuga menziesii	Douglas-fir	23.4	L
404	Acer circinatum	vine maple	9.2	S
405	Pseudotsuga menziesii	Douglas-fir	30.2	L
406	Pseudotsuga menziesii	Douglas-fir	23.2	L
407	Prunus avium	bird cherry	11.6	M
408	Pseudotsuga menziesii	Douglas-fir	35.4	L
409	Prunus serrula	paperbark cherry, birchbark	17	S
410	Prunus serrula	paperbark cherry, birchbark	22.3	S
411	Prunus serrula	paperbark cherry, birchbark	19.3	S
412	Pseudotsuga menziesii	Douglas-fir	40.6	L
413	Pseudotsuga menziesii	Douglas-fir	38.4	L
414	Pseudotsuga menziesii	Douglas-fir	33.3	L
415	Pseudotsuga menziesii	Douglas-fir	35.7	L
416	Pseudotsuga menziesii	Douglas-fir	51.4	L
417	Malus spp.	ornamental crabapple	9	S
418	Pseudotsuga menziesii	Douglas-fir	35.4	L
419	Prunus serrulata	Japanese flowering cherry	9.8	S
420	Picea abies	Norway spruce	19	L
421	Picea abies	Norway spruce	14.5	L
422	Betula pendula	European white birch	20.8	M
423	Pseudotsuga menziesii	Douglas-fir	45	L
424	Pseudotsuga menziesii	Douglas-fir	35.4	L
425	Pseudotsuga menziesii	Douglas-fir	38.8	L
426	Pseudotsuga menziesii	Douglas-fir	43.1	L
427	Pseudotsuga menziesii	Douglas-fir	26.5	L
428	Pseudotsuga menziesii	Douglas-fir	45.9	L
429	Pseudotsuga menziesii	Douglas-fir	42.6	L
430	Pseudotsuga menziesii	Douglas-fir	25.8	L
431	Pseudotsuga menziesii	Douglas-fir	41.1	L
432	Acer macrophyllum	bigleaf maple	11.3	L
433	Pseudotsuga menziesii	Douglas-fir	37.3	L
434	Pseudotsuga menziesii	Douglas-fir	24.6	L
435	Pseudotsuga menziesii	Douglas-fir	34.3	L
436	Acer macrophyllum	bigleaf maple	5.3	L
437	Pseudotsuga menziesii	Douglas-fir	20.1	L
438	Acer macrophyllum	bigleaf maple	52.4	L
439	Acer macrophyllum	bigleaf maple	41	L
440	Pseudotsuga menziesii	Douglas-fir	28.9	L
441	Pseudotsuga menziesii	Douglas-fir	57.8	L
442	Pseudotsuga menziesii	Douglas-fir	51	L
443	Pseudotsuga menziesii	Douglas-fir	33.3	L
444	Pseudotsuga menziesii	Douglas-fir	46.3	L
445	Pseudotsuga menziesii	Douglas-fir	27.3	L
446	Quercus garryana	Oregon white oak	2.4	L
447	Pseudotsuga menziesii	Douglas-fir	25.9	L
448	Pseudotsuga menziesii	Douglas-fir	35.4	L
449	Pseudotsuga menziesii	Douglas-fir	43.3	L
450	Pseudotsuga menziesii	Douglas-fir	41.7	L
451	Pseudotsuga menziesii	Douglas-fir	60.3	L
452	Pseudotsuga menziesii	Douglas-fir	7.4	L
453	Pseudotsuga menziesii	Douglas-fir	31.6	L
454	Pseudotsuga menziesii	Douglas-fir	40.6	L
455	Crataegus monogyna	English hawthorn, common	17.5	S
456	Pseudotsuga menziesii	Douglas-fir	39.9	L
457	Pseudotsuga menziesii	Douglas-fir	34.2	L
458	Pseudotsuga menziesii	Douglas-fir	54	L
459	Pseudotsuga menziesii	Douglas-fir	21.7	L
460	Pseudotsuga menziesii	Douglas-fir	54.8	L
461	Pseudotsuga menziesii	Douglas-fir	50.3	L
462	Picea pungens	Colorado blue spruce	10	L
463	Pseudotsuga menziesii	Douglas-fir	44.9	L
464	Pseudotsuga menziesii	Douglas-fir	29.2	L
465	Pseudotsuga menziesii	Douglas-fir	39.9	L
466	Pseudotsuga menziesii	Douglas-fir	27.4	L
467	Pseudotsuga menziesii	Douglas-fir	40	L
468	Pseudotsuga menziesii	Douglas-fir	55.1	L
469	Prunus avium	bird cherry	15.7	M
470	Pseudotsuga menziesii	Douglas-fir	29.6	L
471	Pseudotsuga menziesii	Douglas-fir	44.2	L
472	Pseudotsuga menziesii	Douglas-fir	30.8	L
473	Pseudotsuga menziesii	Douglas-fir	59.5	L
474	Pseudotsuga menziesii	Douglas-fir	49.2	L
475	Pseudotsuga menziesii	Douglas-fir	35.3	L
476	Acer macrophyllum	bigleaf maple	27.8	L
477	Pseudotsuga menziesii	Douglas-fir	45.7	L
478	Pseudotsuga menziesii	Douglas-fir	55.1	L
479	Pseudotsuga menziesii	Douglas-fir	30.9	L
480	Pseudotsuga menziesii	Douglas-fir	41.9	L
481	Pseudotsuga menziesii	Douglas-fir	39	L
482	Pseudotsuga menziesii	Douglas-fir	37.4	L
483	Pseudotsuga menziesii	Douglas-fir	53.2	L
484	Pseudotsuga menziesii	Douglas-fir	35.7	L
485	Pseudotsuga menziesii	Douglas-fir	38.6	L
486	Pseudotsuga menziesii	Douglas-fir	27.4	L
487	Pseudotsuga menziesii	Douglas-fir	28.6	L
488	Pseudotsuga menziesii	Douglas-fir	51.3	L
489	Pseudotsuga menziesii	Douglas-fir	32	L
490	Pseudotsuga menziesii	Douglas-fir	22	L
491	Pseudotsuga menziesii	Douglas-fir	58	L
492	Pseudotsuga menziesii	Douglas-fir	33	L
493	Pseudotsuga menziesii	Douglas-fir	26.8	L
494	Acer macrophyllum	bigleaf maple	56.3	L
495	Pseudotsuga menziesii	Douglas-fir	26.2	L
496	Pseudotsuga menziesii	Douglas-fir	19	L
497	Pseudotsuga menziesii	Douglas-fir	46.4	L
498	Acer macrophyllum	bigleaf maple	34.8	L
499	Pseudotsuga menziesii	Douglas-fir	34.7	L
500	Pseudotsuga menziesii	Douglas-fir	49.8	L
501	Pseudotsuga menziesii	Douglas-fir	52.6	L
502	Pseudotsuga menziesii	Douglas-fir	36.7	L
503	Pseudotsuga menziesii	Douglas-fir	30.8	L
504	Pseudotsuga menziesii	Douglas-fir	27.1	L
505	Acer macrophyllum	bigleaf maple	66.7	L
506	Pseudotsuga menziesii	Douglas-fir	55.1	L

Mt Tabor Park Tree Inventory

Table Page 3

TreeNo	Genus species	Common Name	DBH	Size
507	Pseudotsuga menziesii	Douglas-fir	30.5	L
508	Pseudotsuga menziesii	Douglas-fir	31.4	L
509	Pseudotsuga menziesii	Douglas-fir	58	L
510	Pseudotsuga menziesii	Douglas-fir	20.2	L
511	Pseudotsuga menziesii	Douglas-fir	30	L
512	Pseudotsuga menziesii	Douglas-fir	49.8	L
513	Pseudotsuga menziesii	Douglas-fir	31.6	L
514	Pseudotsuga menziesii	Douglas-fir	22.1	L
515	Pseudotsuga menziesii	Douglas-fir	27.2	L
516	Pseudotsuga menziesii	Douglas-fir	22.2	L
517	Pseudotsuga menziesii	Douglas-fir	33.7	L
518	Pseudotsuga menziesii	Douglas-fir	30.1	L
519	Pseudotsuga menziesii	Douglas-fir	33.2	L
520	Pseudotsuga menziesii	Douglas-fir	27.4	L
521	Pseudotsuga menziesii	Douglas-fir	35	L
522	Pseudotsuga menziesii	Douglas-fir	17.3	L
523	Pseudotsuga menziesii	Douglas-fir	40.3	L
524	Pseudotsuga menziesii	Douglas-fir	42.2	L
525	Pseudotsuga menziesii	Douglas-fir	37.2	L
526	Pseudotsuga menziesii	Douglas-fir	34.8	L
527	Pseudotsuga menziesii	Douglas-fir	23.4	L
528	Pseudotsuga menziesii	Douglas-fir	33.3	L
529	Pseudotsuga menziesii	Douglas-fir	35.1	L
530	Pseudotsuga menziesii	Douglas-fir	22.6	L
531	Pseudotsuga menziesii	Douglas-fir	35.5	L
532	Pseudotsuga menziesii	Douglas-fir	33.1	L
533	Pseudotsuga menziesii	Douglas-fir	43.6	L
534	Pseudotsuga menziesii	Douglas-fir	20.2	L
535	Pseudotsuga menziesii	Douglas-fir	22.2	L
536	Pseudotsuga menziesii	Douglas-fir	40.8	L
537	Pseudotsuga menziesii	Douglas-fir	29.1	L
538	Pseudotsuga menziesii	Douglas-fir	27.8	L
539	Pseudotsuga menziesii	Douglas-fir	28.5	L
540	Pseudotsuga menziesii	Douglas-fir	25.7	L
541	Pseudotsuga menziesii	Douglas-fir	26.7	L
542	Pseudotsuga menziesii	Douglas-fir	36	L
543	Pseudotsuga menziesii	Douglas-fir	18.8	L
544	Pseudotsuga menziesii	Douglas-fir	43.6	L
545	Pseudotsuga menziesii	Douglas-fir	28.3	L
546	Pseudotsuga menziesii	Douglas-fir	27.4	L
547	Pseudotsuga menziesii	Douglas-fir	23.8	L
548	Pseudotsuga menziesii	Douglas-fir	33.5	L
549	Pseudotsuga menziesii	Douglas-fir	19.6	L
550	Pseudotsuga menziesii	Douglas-fir	37.2	L
551	Pseudotsuga menziesii	Douglas-fir	34.7	L
552	Pseudotsuga menziesii	Douglas-fir	43.8	L
553	Pseudotsuga menziesii	Douglas-fir	26.7	L
554	Pseudotsuga menziesii	Douglas-fir	34.7	L
555	Pseudotsuga menziesii	Douglas-fir	25.3	L
556	Pseudotsuga menziesii	Douglas-fir	17.7	L
557	Pseudotsuga menziesii	Douglas-fir	25.8	L
558	Pseudotsuga menziesii	Douglas-fir	40.4	L
559	Pseudotsuga menziesii	Douglas-fir	21.7	L
560	Pseudotsuga menziesii	Douglas-fir	42.7	L
561	Pseudotsuga menziesii	Douglas-fir	37.1	L
562	Pseudotsuga menziesii	Douglas-fir	31.8	L
563	Pseudotsuga menziesii	Douglas-fir	27.2	L
564	Pseudotsuga menziesii	Douglas-fir	29.9	L
565	Pseudotsuga menziesii	Douglas-fir	24.6	L
566	Pseudotsuga menziesii	Douglas-fir	23.4	L
567	Pseudotsuga menziesii	Douglas-fir	36.8	L
568	Pseudotsuga menziesii	Douglas-fir	20.5	L
569	Pseudotsuga menziesii	Douglas-fir	41	L
570	Pseudotsuga menziesii	Douglas-fir	32.1	L
571	Pseudotsuga menziesii	Douglas-fir	37.6	L
572	Pseudotsuga menziesii	Douglas-fir	25.1	L
573	Pseudotsuga menziesii	Douglas-fir	31.4	L
574	Pseudotsuga menziesii	Douglas-fir	20.2	L
575	Crataegus monogyna	English hawthorn, common	14.3	S
576	Pseudotsuga menziesii	Douglas-fir	28.5	L
577	Acer macrophyllum	bigleaf maple	5.8	L
578	Pseudotsuga menziesii	Douglas-fir	18.1	L
579	Pseudotsuga menziesii	Douglas-fir	40	L
580	Pseudotsuga menziesii	Douglas-fir	24.3	L
581	Pseudotsuga menziesii	Douglas-fir	32.7	L
582	Pseudotsuga menziesii	Douglas-fir	38.4	L
583	Pseudotsuga menziesii	Douglas-fir	36.4	L
584	Pseudotsuga menziesii	Douglas-fir	35.5	L
585	Pseudotsuga menziesii	Douglas-fir	29.2	L
586	Pseudotsuga menziesii	Douglas-fir	32.1	L
587	Pseudotsuga menziesii	Douglas-fir	38.4	L
588	Pseudotsuga menziesii	Douglas-fir	39.2	L
589	Pseudotsuga menziesii	Douglas-fir	34.1	L
590	Pseudotsuga menziesii	Douglas-fir	24.6	L
591	Pseudotsuga menziesii	Douglas-fir	27.4	L
592	Pseudotsuga menziesii	Douglas-fir	27.3	L
593	Pseudotsuga menziesii	Douglas-fir	29.2	L
594	Pseudotsuga menziesii	Douglas-fir	39	L
595	Pseudotsuga menziesii	Douglas-fir	36.6	L
596	Pseudotsuga menziesii	Douglas-fir	22.4	L
597	Pseudotsuga menziesii	Douglas-fir	43.8	L
598	Pseudotsuga menziesii	Douglas-fir	30	L
599	Pseudotsuga menziesii	Douglas-fir	22.7	L
600	Pseudotsuga menziesii	Douglas-fir	35.8	L
601	Pseudotsuga menziesii	Douglas-fir	35.1	L
602	Pseudotsuga menziesii	Douglas-fir	34	L
603	Pseudotsuga menziesii	Douglas-fir	16.3	L
604	Pseudotsuga menziesii	Douglas-fir	18.5	L
605	Pseudotsuga menziesii	Douglas-fir	23	L
606	Pseudotsuga menziesii	Douglas-fir	38.8	L
607	Pseudotsuga menziesii	Douglas-fir	30.4	L
608	Pseudotsuga menziesii	Douglas-fir	37.3	L
609	Pseudotsuga menziesii	Douglas-fir	3.9	L
610	Pseudotsuga menziesii	Douglas-fir	40.6	L
611	Pseudotsuga menziesii	Douglas-fir	33.2	L
612	Pseudotsuga menziesii	Douglas-fir	28	L
613	Acer circinatum	vine maple	5.2	S
614	Pseudotsuga menziesii	Douglas-fir	37.8	L
615	Pseudotsuga menziesii	Douglas-fir	31	L
616	Pseudotsuga menziesii	Douglas-fir	37.8	L
617	Pseudotsuga menziesii	Douglas-fir	28.7	L
618	Pseudotsuga menziesii	Douglas-fir	34.2	L
619	Pseudotsuga menziesii	Douglas-fir	27.6	L
620	Pseudotsuga menziesii	Douglas-fir	34.5	L
621	Pseudotsuga menziesii	Douglas-fir	29.2	L
622	Pseudotsuga menziesii	Douglas-fir	35.1	L
623	Acer circinatum	vine maple	5.3	S
624	Pseudotsuga menziesii	Douglas-fir	36.9	L
625	Pseudotsuga menziesii	Douglas-fir	40	L
626	Pseudotsuga menziesii	Douglas-fir	34.6	L
627	Pseudotsuga menziesii	Douglas-fir	43.3	L
628	Pseudotsuga menziesii	Douglas-fir	31.6	L
629	Pseudotsuga menziesii	Douglas-fir	48.4	L
630	Pseudotsuga menziesii	Douglas-fir	32.2	L
631	Pseudotsuga menziesii	Douglas-fir	24.2	L
632	Pseudotsuga menziesii	Douglas-fir	2.7	L
633	Pseudotsuga menziesii	Douglas-fir	24.3	L
634	Fraxinus latifolia	Oregon ash	9.4	M
635	Pseudotsuga menziesii	Douglas-fir	34.9	L
636	Pseudotsuga menziesii	Douglas-fir	39.6	L
637	Pseudotsuga menziesii	Douglas-fir	40.2	L
638	Pseudotsuga menziesii	Douglas-fir	39.8	L
639	Pseudotsuga menziesii	Douglas-fir	31.9	L
640	Pseudotsuga menziesii	Douglas-fir	39.2	L
641	Pseudotsuga menziesii	Douglas-fir	40.2	L
642	Pseudotsuga menziesii	Douglas-fir	50.9	L
643	Acer macrophyllum	bigleaf maple	46.7	L
644	Prunus cerasifera	flowering plum	11.1	S
645	Pseudotsuga menziesii	Douglas-fir	43.6	L
646	Acer macrophyllum	bigleaf maple	36.9	L
647	Acer macrophyllum	bigleaf maple	22.8	L
648	Acer macrophyllum	bigleaf maple	18	L
649	Ulmus x	elm hybrid	10	L
650	Liquidambar styraciflua	sweetgum	7.5	M
651	Pseudotsuga menziesii	Douglas-fir	47.8	L
652	Prunus serrulata	Japanese flowering cherry	23	S
653	Pseudotsuga menziesii	Douglas-fir	45.2	L
654	Prunus serrulata	Japanese flowering cherry	25	S
655	Pseudotsuga menziesii	Douglas-fir	32	L
656	Pseudotsuga menziesii	Douglas-fir	32	L
657	Pseudotsuga menziesii	Douglas-fir	62.1	L
658	Pyrus communis	European pear (including	17.9	M
659	Prunus serrulata	Japanese flowering cherry	8	S
660	Pseudotsuga menziesii	Douglas-fir	48.2	L
661	Sequoiadendron giganteum	giant sequoia	24.5	L
662	Thuja plicata	western redcedar	33.1	L
663	Pseudotsuga menziesii	Douglas-fir	27.9	L
664	Prunus serrulata	Japanese flowering cherry	17.7	S
665	Prunus serrulata	Japanese flowering cherry	27.4	S
666	Amelanchier spp.	serviceberry	2.5	S
667	Pseudotsuga menziesii	Douglas-fir	51.9	L
668	Amelanchier spp.	serviceberry	1.6	S
669	Pseudotsuga menziesii	Douglas-fir	37.1	L
670	Pseudotsuga menziesii	Douglas-fir	48.4	L
671	Pseudotsuga menziesii	Douglas-fir	36.7	L
672	Pseudotsuga menziesii	Douglas-fir	38.1	L
673	Pseudotsuga menziesii	Douglas-fir	30.1	L
674	Pseudotsuga menziesii	Douglas-fir	26.7	L
675	Pseudotsuga menziesii	Douglas-fir	1.1	L
676	Arbutus menziesii	Pacific madrone	1	M
677	Pseudotsuga menziesii	Douglas-fir	52.9	L
678	Pseudotsuga menziesii	Douglas-fir	44.3	L
679	Pseudotsuga menziesii	Douglas-fir	31.7	L
680	Pseudotsuga menziesii	Douglas-fir	33.1	L
681	Pseudotsuga menziesii	Douglas-fir	47.1	L
682	Pseudotsuga menziesii	Douglas-fir	23.5	L
683	Pseudotsuga menziesii	Douglas-fir	29.2	L
684	Pinus sylvestris	Scots pine	15.5	L
685	Cupressus nootkatensis syn. Xanthocyparis nootkatensis	Alaska yellow-cedar	17.5	M
686	Pseudotsuga menziesii	Douglas-fir	53.8	L
687	Acer macrophyllum	bigleaf maple	35	L
688	Pseudotsuga menziesii	Douglas-fir	28.8	L
689	Crataegus monogyna	English hawthorn, common	22.6	S
690	Pseudotsuga menziesii	Douglas-fir	54.3	L
691	Pseudotsuga menziesii	Douglas-fir	41.7	L
692	Pseudotsuga menziesii	Douglas-fir	58.9	L
693	Pseudotsuga menziesii	Douglas-fir	62.1	L
694	Prunus serrulata	Japanese flowering cherry	8.9	S
696	Pseudotsuga menziesii	Douglas-fir	42.9	L
697	Robinia pseudoacacia	black locust	7.5	M
698	Robinia pseudoacacia	black locust	7.5	M
699	Pseudotsuga menziesii	Douglas-fir	52.8	L
700	Thuja plicata	western redcedar	33.7	L
701	Pseudotsuga menziesii	Douglas-fir	37.5	L
702	Pseudotsuga menziesii	Douglas-fir	35.7	L
703	Pseudotsuga menziesii	Douglas-fir	37.2	L
704	Pseudotsuga menziesii	Douglas-fir	45.8	L
705	Cornus spp.	dogwood	1.5	S
706	Acer macrophyllum	bigleaf maple	7.9	L
707	Pseudotsuga menziesii	Douglas-fir	41.4	L
708	Pseudotsuga menziesii	Douglas-fir	31.6	L
709	Pseudotsuga menziesii	Douglas-fir	25.8	L
710	Pseudotsuga menziesii	Douglas-fir	44.4	L
711	Pseudotsuga menziesii	Douglas-fir	38.9	L
712	Pseudotsuga menziesii	Douglas-fir	29.4	L
713	Pseudotsuga menziesii	Douglas-fir	29.4	L
714	Acer circinatum	vine maple	6.2	S
715	Pseudotsuga menziesii	Douglas-fir	33.7	L
716	Pseudotsuga menziesii	Douglas-fir	29.9	L
717	Pseudotsuga menziesii	Douglas-fir	47.3	L
718	Platanus x acerifolia	London plane tree	9.6	L
719	Platanus x acerifolia	London plane tree	14.1	L
720	Pseudotsuga menziesii	Douglas-fir	48.7	L
721	Acer macrophyllum	bigleaf maple	22.7	L
722	Acer macrophyllum	bigleaf maple	28	L
723	Pseudotsuga menziesii	Douglas-fir	59.3	L
724	Pseudotsuga menziesii	Douglas-fir	48.9	L
725	Quercus coccinea	scarlet oak	9.8	L
726	Acer macrophyllum	bigleaf maple	21.7	L
727	Liquidambar styraciflua	sweetgum	7	M
728	Pseudotsuga menziesii	Douglas-fir	40.5	L
729	Pseudotsuga menziesii	Douglas-fir	45	L
730	Prunus serrulata	Japanese flowering cherry	21.3	S
731	Pseudotsuga menziesii	Douglas-fir	54	L
732	Pseudotsuga menziesii	Douglas-fir	50.1	L
733	Pseudotsuga menziesii	Douglas-fir	25.5	L
734	Magnolia spp.	magnolia	20	S
735	Robinia pseudoacacia	black locust	7.5	M
736	Pseudotsuga menziesii	Douglas-fir	41.8	L
737	Pseudotsuga menziesii	Douglas-fir	52	L
738	Pseudotsuga menziesii	Douglas-fir	48.2	L
739	Pseudotsuga menziesii	Douglas-fir	39.6	L
740	Pseudotsuga menziesii	Douglas-fir	32.9	L
741	Pseudotsuga menziesii	Douglas-fir	31.7	L
742	Pseudotsuga menziesii	Douglas-fir	40.4	L
743	Acer macrophyllum	bigleaf maple	6.1	L
744	Pseudotsuga menziesii	Douglas-fir	34.4	L
745	Sorbus aucuparia	European mountain ash	5.3	S
746	Pseudotsuga menziesii	Douglas-fir	50.7	L
747	Pseudotsuga menziesii	Douglas-fir	31.1	L
748	Pseudotsuga menziesii	Douglas-fir	46.4	L
749	Pseudotsuga menziesii	Douglas-fir	34.6	L
750	Acer circinatum	vine maple	6.3	S
751	Pseudotsuga menziesii	Douglas-fir	31.4	L
752	Pseudotsuga menziesii	Douglas-fir	48.4	L
753	Acer circinatum	vine maple	6.2	S
754	Pseudotsuga menziesii	Douglas-fir	22.5	L
755	Pseudotsuga menziesii	Douglas-fir	43.7	L
756	Fraxinus latifolia	Oregon ash	7.9	M
757	Pseudotsuga menziesii	Douglas-fir	45.1	L
758	Pseudotsuga menziesii	Douglas-fir	33.7	L
759	Pseudotsuga menziesii	Douglas-fir	35.6	L

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Table Page 4

TreeNo	Genus species	Common Name	DBH	Size
760	Pseudotsuga menziesii	Douglas-fir	56.4	L
761	Pseudotsuga menziesii	Douglas-fir	48.6	L
762	Pseudotsuga menziesii	Douglas-fir	40.2	L
763	Sequoiadendron giganteum	giant sequoia	3.7	L
764	Acer macrophyllum	bigleaf maple	39.1	L
765	Acer macrophyllum	bigleaf maple	32	L
766	Prunus cerasifera	flowering plum	19.7	S
767	Acer macrophyllum	bigleaf maple	29	L
768	Sequoia sempervirens	coast redwood	31	L
769	Pseudotsuga menziesii	Douglas-fir	50.7	L
770	Pseudotsuga menziesii	Douglas-fir	44.6	L
771	Liquidambar styraciflua	sweetgum	6.7	M
772	Pseudotsuga menziesii	Douglas-fir	42.2	L
773	Prunus serrulata	Japanese flowering cherry	18	S
774	Pseudotsuga menziesii	Douglas-fir	36.9	L
775	Prunus serrulata	Japanese flowering cherry	20.5	S
776	Pseudotsuga menziesii	Douglas-fir	36.6	L
777	Pseudotsuga menziesii	Douglas-fir	46.5	L
778	Robinia pseudoacacia	black locust	7.5	M
779	Robinia pseudoacacia	black locust	7.5	M
780	Pseudotsuga menziesii	Douglas-fir	2.1	L
781	Prunus serrulata	Japanese flowering cherry	14.8	S
782	Pseudotsuga menziesii	Douglas-fir	51	L
783	Amelanchier spp.	serviceberry	1.6	S
784	Cornus spp.	dogwood	1.3	S
785	Pseudotsuga menziesii	Douglas-fir	38.4	L
786	Pseudotsuga menziesii	Douglas-fir	45.2	L
787	Pseudotsuga menziesii	Douglas-fir	34.9	L
788	Pseudotsuga menziesii	Douglas-fir	35.1	L
789	Pseudotsuga menziesii	Douglas-fir	35.3	L
790	Pseudotsuga menziesii	Douglas-fir	35.3	L
791	Pseudotsuga menziesii	Douglas-fir	19.5	L
792	Pseudotsuga menziesii	Douglas-fir	37.1	L
793	Pseudotsuga menziesii	Douglas-fir	37.1	L
794	Abies grandis	grand fir	12.4	L
795	Pseudotsuga menziesii	Douglas-fir	68.6	L
796	Pseudotsuga menziesii	Douglas-fir	48.1	L
797	Pseudotsuga menziesii	Douglas-fir	33.4	L
798	Pseudotsuga menziesii	Douglas-fir	34.3	L
799	Pseudotsuga menziesii	Douglas-fir	46.4	L
800	Pseudotsuga menziesii	Douglas-fir	17.1	L
801	Pseudotsuga menziesii	Douglas-fir	14.1	L
802	Pseudotsuga menziesii	Douglas-fir	27.8	L
803	Pseudotsuga menziesii	Douglas-fir	38	L
804	Pseudotsuga menziesii	Douglas-fir	33.2	L
805	Sequoia sempervirens	coast redwood	41.1	L
806	Acer macrophyllum	bigleaf maple	6.5	L
807	Pseudotsuga menziesii	Douglas-fir	34	L
808	Pseudotsuga menziesii	Douglas-fir	11	L
809	Pseudotsuga menziesii	Douglas-fir	38.8	L
810	Pseudotsuga menziesii	Douglas-fir	33.9	L
811	Acer macrophyllum	bigleaf maple	34.8	L
812	Sequoiadendron giganteum	giant sequoia	11.2	L
813	Pseudotsuga menziesii	Douglas-fir	36.7	L
814	Pseudotsuga menziesii	Douglas-fir	45.2	L
815	Pseudotsuga menziesii	Douglas-fir	15.5	L
816	Pseudotsuga menziesii	Douglas-fir	40.5	L
817	Pseudotsuga menziesii	Douglas-fir	8.1	L
818	Pseudotsuga menziesii	Douglas-fir	24.6	L
819	Acer rubrum	red maple	4.1	M
820	Pseudotsuga menziesii	Douglas-fir	46.7	L
821	Pseudotsuga menziesii	Douglas-fir	36.3	L
822	Pseudotsuga menziesii	Douglas-fir	3.7	L
823	Sequoiadendron giganteum	giant sequoia	35	L
824	Sequoiadendron giganteum	giant sequoia	28.8	L
825	Pseudotsuga menziesii	Douglas-fir	26.6	L
826	Pseudotsuga menziesii	Douglas-fir	37.3	L
827	Pseudotsuga menziesii	Douglas-fir	40	L
828	Pseudotsuga menziesii	Douglas-fir	9.5	L
829	Pseudotsuga menziesii	Douglas-fir	30.1	L
830	Pseudotsuga menziesii	Douglas-fir	23.5	L
831	Pseudotsuga menziesii	Douglas-fir	30.9	L
832	Pseudotsuga menziesii	Douglas-fir	41	L
833	Pseudotsuga menziesii	Douglas-fir	43.5	L
834	Aesculus hippocastanum	common horsechestnut	35.4	L
835	Fraxinus latifolia	Oregon ash	20.5	M
836	Acer macrophyllum	bigleaf maple	32.5	L
837	Pseudotsuga menziesii	Douglas-fir	31.1	L
838	Pseudotsuga menziesii	Douglas-fir	37.2	L
839	Pseudotsuga menziesii	Douglas-fir	24.3	L
840	Pseudotsuga menziesii	Douglas-fir	31.9	L
841	Pseudotsuga menziesii	Douglas-fir	34.3	L
842	Pseudotsuga menziesii	Douglas-fir	24.4	L
843	Pseudotsuga menziesii	Douglas-fir	44	L
844	Abies grandis	grand fir	12.4	L
845	Pseudotsuga menziesii	Douglas-fir	39.4	L
846	Pseudotsuga menziesii	Douglas-fir	29.4	L
847	Pseudotsuga menziesii	Douglas-fir	37.3	L
848	Acer macrophyllum	bigleaf maple	11.4	L
849	Pseudotsuga menziesii	Douglas-fir	24.9	L
850	Pseudotsuga menziesii	Douglas-fir	43.5	L
851	Pseudotsuga menziesii	Douglas-fir	40	L
852	Pseudotsuga menziesii	Douglas-fir	39.2	L
853	Pseudotsuga menziesii	Douglas-fir	41.1	L
854	Quercus palustris	pin oak	19.9	L
855	Pseudotsuga menziesii	Douglas-fir	27.4	L
856	Pseudotsuga menziesii	Douglas-fir	27.6	L
857	Pseudotsuga menziesii	Douglas-fir	32.6	L
858	Pseudotsuga menziesii	Douglas-fir	39.2	L
859	Acer macrophyllum	bigleaf maple	26.6	L
860	Pseudotsuga menziesii	Douglas-fir	45.6	L
861	Pseudotsuga menziesii	Douglas-fir	36.9	L
862	Pinus nigra	Austrian black pine	15	L
863	Pseudotsuga menziesii	Douglas-fir	20	L
864	Pseudotsuga menziesii	Douglas-fir	47.9	L
865	Pseudotsuga menziesii	Douglas-fir	22.8	L
866	Acer macrophyllum	bigleaf maple	1.2	L
867	Pseudotsuga menziesii	Douglas-fir	69.5	L
868	Pseudotsuga menziesii	Douglas-fir	38.1	L
869	Pseudotsuga menziesii	Douglas-fir	47.8	L
870	Pseudotsuga menziesii	Douglas-fir	43.9	L
871	Pseudotsuga menziesii	Douglas-fir	41.5	L
872	Pseudotsuga menziesii	Douglas-fir	6.9	L
873	Crataegus monogyna	English hawthorn, common	12.4	S
874	Pseudotsuga menziesii	Douglas-fir	31.1	L
875	Pseudotsuga menziesii	Douglas-fir	32.8	L
876	Pseudotsuga menziesii	Douglas-fir	40.7	L
877	Pseudotsuga menziesii	Douglas-fir	33.5	L
878	Crataegus monogyna	English hawthorn, common	30	S
879	Pseudotsuga menziesii	Douglas-fir	32.8	L
880	Pseudotsuga menziesii	Douglas-fir	43.3	L
881	Pseudotsuga menziesii	Douglas-fir	43.5	L
882	Pseudotsuga menziesii	Douglas-fir	33.3	L
883	Pseudotsuga menziesii	Douglas-fir	30.3	L
884	Pseudotsuga menziesii	Douglas-fir	51.6	L
885	Liriodendron tulipifera	tuliptree	9.5	L
886	Pseudotsuga menziesii	Douglas-fir	51.5	L
887	Pseudotsuga menziesii	Douglas-fir	25.2	L
888	Aesculus hippocastanum	common horsechestnut	28	L
889	Tilia tomentosa	silver linden	39.6	L
890	Juglans nigra	black walnut	38.4	L
891	Pseudotsuga menziesii	Douglas-fir	33.5	L
892	Pseudotsuga menziesii	Douglas-fir	33	L
893	Pseudotsuga menziesii	Douglas-fir	52	L
894	Pseudotsuga menziesii	Douglas-fir	16.3	L
895	Pseudotsuga menziesii	Douglas-fir	31.3	L
896	Pseudotsuga menziesii	Douglas-fir	42.6	L
897	Pseudotsuga menziesii	Douglas-fir	48.9	L
898	Pinus ponderosa	ponderosa pine	4.6	L
899	Pinus ponderosa	ponderosa pine	3.8	L
900	Pinus ponderosa	ponderosa pine	2	L
901	Pseudotsuga menziesii	Douglas-fir	39.4	L
902	Pseudotsuga menziesii	Douglas-fir	37.4	L
903	Pseudotsuga menziesii	Douglas-fir	34.8	L
904	Pseudotsuga menziesii	Douglas-fir	35	L
905	Acer macrophyllum	bigleaf maple	31.8	L
906	Pseudotsuga menziesii	Douglas-fir	30.8	L
907	Juglans nigra	black walnut	41.1	L
908	Chamaecyparis obtusa	Hinoki falsecypress	18.2	L
909	Pseudotsuga menziesii	Douglas-fir	22.1	L
910	Pseudotsuga menziesii	Douglas-fir	42.9	L
911	Pseudotsuga menziesii	Douglas-fir	3.9	L
912	Pseudotsuga menziesii	Douglas-fir	32.2	L
913	Pseudotsuga menziesii	Douglas-fir	14.7	L
914	Pseudotsuga menziesii	Douglas-fir	34.6	L
915	Pseudotsuga menziesii	Douglas-fir	39.5	L
916	Pinus ponderosa	ponderosa pine	2.8	L
917	Pseudotsuga menziesii	Douglas-fir	26.8	L
918	Pseudotsuga menziesii	Douglas-fir	44.9	L
919	Pseudotsuga menziesii	Douglas-fir	37.3	L
920	Fraxinus latifolia	Oregon ash	26.4	M
921	Pseudotsuga menziesii	Douglas-fir	42	L
922	Pseudotsuga menziesii	Douglas-fir	22.3	L
923	Pseudotsuga menziesii	Douglas-fir	27.3	L
924	Acer macrophyllum	bigleaf maple	7.7	L
925	Pseudotsuga menziesii	Douglas-fir	43.8	L
926	Quercus rubra	northern red oak	56.4	L
927	Acer macrophyllum	bigleaf maple	24.5	L
928	Pseudotsuga menziesii	Douglas-fir	16.3	L
929	Pseudotsuga menziesii	Douglas-fir	37.5	L
930	Quercus garryana	Oregon white oak	38.9	L
931	Umbellularia californica	Oregon myrtle	29	L
932	Chamaecyparis obtusa	Hinoki falsecypress	21.7	L
933	Pseudotsuga menziesii	Douglas-fir	49.3	L
934	Pseudotsuga menziesii	Douglas-fir	33.7	L
935	Pseudotsuga menziesii	Douglas-fir	38.7	L
936	Pseudotsuga menziesii	Douglas-fir	45.1	L
937	Pseudotsuga menziesii	Douglas-fir	36.3	L
938	Pseudotsuga menziesii	Douglas-fir	5.1	L
939	Pseudotsuga menziesii	Douglas-fir	33.5	L
940	Acer macrophyllum	bigleaf maple	6	L
941	Fraxinus latifolia	Oregon ash	16.8	M
942	Pseudotsuga menziesii	Douglas-fir	34.5	L
943	Fraxinus latifolia	Oregon ash	16.8	M
944	Pseudotsuga menziesii	Douglas-fir	28	L
945	Quercus garryana	Oregon white oak	0.3	L
946	Pseudotsuga menziesii	Douglas-fir	26	L
947	Pseudotsuga menziesii	Douglas-fir	36.4	L
948	Pseudotsuga menziesii	Douglas-fir	37.3	L
949	Cedrus atlantica 'Glauca'	blue Atlas cedar	34.8	L
950	Pseudotsuga menziesii	Douglas-fir	34.2	L
951	Chamaecyparis lawsoniana	Port Orford cedar	35	L
952	Pseudotsuga menziesii	Douglas-fir	30.6	L
953	Pseudotsuga menziesii	Douglas-fir	30.4	L
954	Pseudotsuga menziesii	Douglas-fir	49.5	L
955	Pseudotsuga menziesii	Douglas-fir	30.4	L
956	Pseudotsuga menziesii	Douglas-fir	19.6	L
957	Pseudotsuga menziesii	Douglas-fir	27.8	L
958	Pseudotsuga menziesii	Douglas-fir	29.5	L
959	Pseudotsuga menziesii	Douglas-fir	41.4	L
960	Cornus nuttallii	Pacific dogwood	4.7	M
961	Pseudotsuga menziesii	Douglas-fir	26.5	L
962	Pinus ponderosa	ponderosa pine	3.9	L
963	Pseudotsuga menziesii	Douglas-fir	33.5	L
964	Pseudotsuga menziesii	Douglas-fir	41.4	L
965	Pseudotsuga menziesii	Douglas-fir	25.7	L
966	Pseudotsuga menziesii	Douglas-fir	34	L
967	Pseudotsuga menziesii	Douglas-fir	29.5	L
968	Pseudotsuga menziesii	Douglas-fir	17.4	L
969	Pseudotsuga menziesii	Douglas-fir	33.5	L
970	Pseudotsuga menziesii	Douglas-fir	38.5	L
971	Pseudotsuga menziesii	Douglas-fir	27.5	L
972	Pseudotsuga menziesii	Douglas-fir	29	L
973	Pseudotsuga menziesii	Douglas-fir	36	L
974	Pseudotsuga menziesii	Douglas-fir	33.9	L
975	Pseudotsuga menziesii	Douglas-fir	32.7	L
976	Pseudotsuga menziesii	Douglas-fir	40	L
977	Acer macrophyllum	bigleaf maple	11.3	L
978	Pseudotsuga menziesii	Douglas-fir	9.7	L
979	Pseudotsuga menziesii	Douglas-fir	32	L
980	Pseudotsuga menziesii	Douglas-fir	24.6	L
981	Pseudotsuga menziesii	Douglas-fir	29.3	L
982	Pseudotsuga menziesii	Douglas-fir	29.8	L
983	Pseudotsuga menziesii	Douglas-fir	26.4	L
984	Pseudotsuga menziesii	Douglas-fir	28	L
985	Pseudotsuga menziesii	Douglas-fir	37.7	L
986	Pseudotsuga menziesii	Douglas-fir	26.9	L
987	Sorbus aucuparia	European mountain ash	3.5	S
988	Pseudotsuga menziesii	Douglas-fir	27.5	L
989	Quercus rubra	northern red oak	43.6	L
990	Pseudotsuga menziesii	Douglas-fir	42.7	L
991	Pseudotsuga menziesii	Douglas-fir	31.3	L
992	Pseudotsuga menziesii	Douglas-fir	21	L
993	Fagus sylvatica	European beech	11.6	L
994	Cedrus deodara	deodar cedar	35	L
995	Ulmus americana	American elm	43.4	L
996	Pseudotsuga menziesii	Douglas-fir	31	L
997	Pseudotsuga menziesii	Douglas-fir	34.2	L
998	Pseudotsuga menziesii	Douglas-fir	27	L
999	Pseudotsuga menziesii	Douglas-fir	33.4	L
1000	Pseudotsuga menziesii	Douglas-fir	27.8	L
1001	Prunus avium	bird cherry	13.2	M
1002	Juglans nigra	black walnut	24	L
1003	Pseudotsuga menziesii	Douglas-fir	30.1	L
1004	Tsuga heterophylla	western hemlock	29.1	L
1005	Sorbus aucuparia	European mountain ash	29.8	S
1006	Cornus nuttallii	Pacific dogwood	5.9	M
1007	Fraxinus latifolia	Oregon ash	39.4	M
1008		common horsechestnut	33.2	L

Mt Tabor Park Tree Inventory

Table Page 5

TreeNo	Genus species	Common Name	DBH	Size
1009	Aesculus hippocastanum	common horsechestnut	25.5	L
1010	Celtis occidentalis	common hackberry	17	M
1011	Amelanchier spp.	serviceberry	2.1	S
1012	Prunus cerasifera	flowering plum	16.2	S
1013	Juglans nigra	black walnut	45.3	L
1014	Quercus garryana	Oregon white oak	0.3	L
1015	Quercus garryana	Oregon white oak	0.3	L
1016	Platanus x acerifolia	London plane tree	16.6	L
1017	Amelanchier spp.	serviceberry	1.3	S
1018	Pseudotsuga menziesii	Douglas-fir	25.8	L
1019	Juglans nigra	black walnut	45.7	L
1020	Aesculus hippocastanum	common horsechestnut	20.5	L
1021	Pseudotsuga menziesii	Douglas-fir	33.3	L
1022	Aesculus hippocastanum	common horsechestnut	21.8	L
1023	Pseudotsuga menziesii	Douglas-fir	30.8	L
1024	Pseudotsuga menziesii	Douglas-fir	25.4	L
1025	Pseudotsuga menziesii	Douglas-fir	38	L
1026	Pseudotsuga menziesii	Douglas-fir	25	L
1027	Aesculus hippocastanum	common horsechestnut	18.1	L
1028	Aesculus hippocastanum	common horsechestnut	21.6	L
1029	Pseudotsuga menziesii	Douglas-fir	33.9	L
1030	Acer macrophyllum	bigleaf maple	3.4	L
1031	Pseudotsuga menziesii	Douglas-fir	29.3	L
1032	Pseudotsuga menziesii	Douglas-fir	31.7	L
1033	Pseudotsuga menziesii	Douglas-fir	16	L
1034	Pseudotsuga menziesii	Douglas-fir	33.8	L
1035	Pseudotsuga menziesii	Douglas-fir	27.2	L
1036	Pseudotsuga menziesii	Douglas-fir	25.5	L
1037	Pseudotsuga menziesii	Douglas-fir	28.1	L
1038	Thuja plicata	western redcedar	5	L
1039	Crataegus monogyna	English hawthorn, common	17	S
1040	Liquidambar styraciflua	sweetgum	34.6	M
1041	Thuja plicata	western redcedar	12.5	L
1042	Thuja plicata	western redcedar	11.7	L
1043	Quercus garryana	Oregon white oak	0.3	L
1044	Quercus rubra	northern red oak	42.9	L
1045	Prunus serrulata	Japanese flowering cherry	9.3	S
1046	Platanus x acerifolia	London plane tree	18.9	L
1047	Pseudotsuga menziesii	Douglas-fir	33.5	L
1048	Pseudotsuga menziesii	Douglas-fir	34.6	L
1049	Juglans nigra	black walnut	41.5	L
1050	Aesculus hippocastanum	common horsechestnut	28.7	L
1051	Pseudotsuga menziesii	Douglas-fir	32.3	L
1052	Pseudotsuga menziesii	Douglas-fir	28.6	L
1053	Pseudotsuga menziesii	Douglas-fir	56.1	L
1054	Pseudotsuga menziesii	Douglas-fir	29	L
1055	Pseudotsuga menziesii	Douglas-fir	43.4	L
1056	Ilex aquifolium	English holly	11.4	M
1057	Pseudotsuga menziesii	Douglas-fir	37.8	L
1058	Acer macrophyllum	bigleaf maple	22.9	L
1059	Acer circinatum	vine maple	6.3	S
1060	Pseudotsuga menziesii	Douglas-fir	28.3	L
1061	Pseudotsuga menziesii	Douglas-fir	36.5	L
1062	Acer platanoides	Norway maple	21.7	M
1063	Fagus grandifolia	American beech	24.9	L
1064	Quercus rubra	northern red oak	28.5	L
1065	Prunus serrulata	Japanese flowering cherry	9.5	S
1066	Aesculus hippocastanum	common horsechestnut	28.3	L
1067	Pseudotsuga menziesii	Douglas-fir	39.4	L
1068	Pseudotsuga menziesii	Douglas-fir	31.2	L
1069	Pseudotsuga menziesii	Douglas-fir	29	L
1070	Pseudotsuga menziesii	Douglas-fir	24.7	L
1071	Aesculus hippocastanum	common horsechestnut	27.2	L
1072	Pseudotsuga menziesii	Douglas-fir	29.5	L
1073	Pseudotsuga menziesii	Douglas-fir	26.1	L
1074	Metasequoia glyptostroboides	dawn redwood	16.4	L
1075	Prunus cerasifera	flowering plum	10.5	S
1076	Pseudotsuga menziesii	Douglas-fir	32.9	L
1077	Pseudotsuga menziesii	Douglas-fir	21.2	L
1078	Pseudotsuga menziesii	Douglas-fir	43.5	L
1079	Pseudotsuga menziesii	Douglas-fir	39.1	L
1080	Prunus cerasifera	flowering plum	10.3	S
1081	Prunus cerasifera	flowering plum	1.5	S
1082	Crataegus monogyna	English hawthorn, common	20.3	S
1083	Pseudotsuga menziesii	Douglas-fir	45.3	L
1084	Crataegus monogyna	English hawthorn, common	19.8	S
1085	Amelanchier spp.	serviceberry	1.6	S
1086	Amelanchier spp.	serviceberry	2.2	S
1087	Pseudotsuga menziesii	Douglas-fir	15	L
1088	Thuja plicata	western redcedar	11.3	L
1089	Prunus serrulata	Japanese flowering cherry	10.4	S
1090	Prunus serrulata	Japanese flowering cherry	11.2	S
1091	Pseudotsuga menziesii	Douglas-fir	25.5	L
1092	Juglans nigra	black walnut	36.8	L
1093	Aesculus hippocastanum	common horsechestnut	22.7	L
1094	Pseudotsuga menziesii	Douglas-fir	32.8	L
1095	Pseudotsuga menziesii	Douglas-fir	20.5	L
1096	Pseudotsuga menziesii	Douglas-fir	24.8	L
1097	Pseudotsuga menziesii	Douglas-fir	33.5	L
1098	Pseudotsuga menziesii	Douglas-fir	27.8	L
1099	Pseudotsuga menziesii	Douglas-fir	26.7	L
1100	Pseudotsuga menziesii	Douglas-fir	36.9	L
1101	Pinus sylvestris	Scots pine	7.8	L
1102	Pseudotsuga menziesii	Douglas-fir	38.5	L
1103	Pseudotsuga menziesii	Douglas-fir	28.2	L
1104	Pseudotsuga menziesii	Douglas-fir	46.4	L
1105	Pseudotsuga menziesii	Douglas-fir	37.3	L
1106	Pseudotsuga menziesii	Douglas-fir	19.3	L
1107	Pseudotsuga menziesii	Douglas-fir	27.8	L
1108	Pseudotsuga menziesii	Douglas-fir	35	L
1109	Pseudotsuga menziesii	Douglas-fir	38.2	L
1110	Acer negundo	box elder	8.3	L
1111	Acer macrophyllum	bigleaf maple	22.3	L
1112	Pseudotsuga menziesii	Douglas-fir	24	L
1113	Acer macrophyllum	bigleaf maple	21.9	L
1114	Chamaecyparis lawsoniana	Port Orford cedar	25.7	L
1115	Acer macrophyllum	bigleaf maple	22.5	L
1116	Acer macrophyllum	bigleaf maple	28.1	L
1117	Acer macrophyllum	bigleaf maple	11.7	L
1118	Acer macrophyllum	bigleaf maple	12.6	L
1119	Acer macrophyllum	bigleaf maple	15.2	L
1120	Acer macrophyllum	bigleaf maple	36	L
1121	Acer macrophyllum	bigleaf maple	22.5	L
1122	Acer macrophyllum	bigleaf maple	13.4	L
1123	Acer macrophyllum	bigleaf maple	21.4	L

Exhibit 9, Page 1

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

S.E.

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.11

LEGEND

= 5' DIA. DISTURBANCE AREA

ST 6" CSP

C.O.

RIM=476.45
IE=474.45

RIM=476.45
IE=474.45

STAIRWELL (DRAIN)
RIM=497.89

MAINTENANCE BUILDING
F.F.E.=500.61

CB (OIL TRAP)
RIM=498.67

WATER VAULT
RIM=498.88

CB (OIL TRAP)
RIM=498.71

WATER VALVE
BF & VALVE

CB
RIM=493.33
IE OUT(8" NW)=492.78

6" CSP

PGE POLE #193
METER #907206E
FOR MAINT. BLDG. &
METER #6586399
FOR REST ROOM BLDG.

Account 297865-310-0
2" Meter 31894780
-feeds 2" Conbraco DCVA HG019 (potable)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA I2343 (irrigation)
-6650 SE Yamhill St

2" Conbraco 40-108-A2T DCVA
Serial # HG019
-fed by 2" Meter 31894780 (POC)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA I2343 (irrigation)

RESTROOMS
F.F.E.=494.47

C.O.
RIM=494.81

CB
RIM=498.18
IE=494.68

RIM=483.00
IE IN(SE)=480.70
IE IN(SW)=480.70
IE OUT=480.60

CB (OIL TRAP)
RIM=496.53
IE OUT(8" W)=494.73

1½" Wilkins 950XL DCVA
Serial # 943826
-fed by 2" Meter 31894780 (POC)
-fed by 2" Conbraco DCVA HG019 (potable)
-feeds potable via booster pump (rest rooms + maint. building + drinking fountain)
-feeds 2" Conbraco DCVA I2343 (irrigation)

CB
RIM=498.60
IE=495.10

CB
RIM=496.80
IE=493.80

DAYLIGHT
IE=494.00

4" OVERFLOW

DRYWELL
IE IN(N&W)=493.40

MATCHLINE
SEE SHEET C3

81
82
80
70
69
68
67
71
72
25

3" PVC

S.E. Taylor

North Tabor Dr.

CB (OIL TRAP)
RIM=482.03

30A, NEMA 3R SERVICE RATED DISCONNECT

PICNIC AREA

IRRIGATION CONTROLLER

IRRIGATION BOOSTER PUMP

I.E. OUT(6" SE)=469.58'

AD
RIM=480.18
IE OUT (6" SW)=478.52

AD
RIM=478.80
IE OUT (6" S)=477.35
IE IN (6" N)=477.35

IE OUT (8" NE)=457.63

MATCHLINE
SEE SHEET C2

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - Amphitheater and Play Area
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
DATE: 9/7/2023
SCALE: 1"=60'
SECTION:

REVISIONS

DATE	DESCRIPTION	BY

C1
OF 6

Exhibit 9, Page 2

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

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LU 23-088549 HR DM, Exhibit A.11

WATER MAIN IN ROADWAY. DISTURBANCE AREA TO BE LIMITED BETWEEN EDGE OF SIDEWALK AND BACK OF CURB.

15.8 FT CLEARANCE BETWEEN DISTURBANCE AREA AND WATER MAIN.

MATCHLINE SEE SHEET C1

MATCHLINE SEE SHEET C3

MATCHLINE SEE SHEET C4

MATCHLINE SEE SHEET C5

Salmon Street

Salmon Street Way

Taylor Dr.

Reservoir

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director
Portland, Oregon

Mt. Tabor Park
Civil Features - NW

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SECTION:
SCALE: 1"=100'
DATE: 9/7/2023

REVISIONS

DATE	DESCRIPTION	BY

C2
OF 6

Exhibit 9, Page 3
PLOTTED FROM: WS30621
PLOTTED BY: pkmichaelv
PLOTTED ON: 9/7/2023

WATER MAIN UNDER STAIRS. DISTURBANCE AREA TO BE LIMITED OUTSIDE OF STAIRS.

MATCHLINE
SEE SHEET C1

MATCHLINE
SEE SHEET C2

MATCHLINE
SEE SHEET C5

S.E. Taylor Dr.

S.E. Taylor

S.E. Main

East Tabor Dr.

North Tabor Dr.

Tabor Summit Dr.

Reservoir 7

ST MH
RIM=445.56
IE OUT (24" N)=435.94
IE IN (10" SW)=440.76
IE IN (10" SW)=440.08
IE IN (8" SE)=439.19

SED MH
RIM=451.70
IE IN(NE)=449.10
IE IN(SE)=449.10
IE OUT(N)=449.00

CB
RIM=449.28
IE OUT (8" NE)=443.68

CB
RIM=451.20
IE=449.68

CB
RIM=454.57
IE=451.07

2" Gorbracco 40-108-T2 DCVA
Serial No. WP03-99740056 (POC)
Feed by 2" Meter 99740056 (Domestic)
Feed by 2" Meter 20002054 (Irrigation)
Feeds portable (pest room + restroom + hose bibb)

Account 197-863-530-0
2" Meter 20002054-D
2" Gorbracco DCVA WP01 (available)
Feeds 2" Gorbracco DCVA 99740056
(irrigation via booster pump)

To East Restroom

IE OUT (8" E)=547.90

CB
RIM=553.39
IE OUT (8" E)=552.74

OUTFALL
IE OUT (8" PVC NE)=541.24

AD
RIM=559.61
IE OUT (8" CONC N)=557.06

SSMH
RIM=613.45

CB
RIM=480.57
IE IN (6" METAL S)=478.07
IE OUT (6" STEEL N)=478.02

CB
RIM=516.43
IE IN (6" CONC N)=513.13
IE OUT (6" CONC S)=513.08

CB
RIM=466.86
1' TO BOTTOM, NO PIPES

CB
RIM=384.87
IE OUT (8" E)=382.87

CB
RIM=382.91
IE IN (8" W)=381.76
IE OUT (8" E)=381.26

CB
RIM=384.12
IE IN (6" SW)=382.24
IE OUT (8" E)=381.26

CB
RIM=397.18
IE OUT (10" NW)=394.88

ROOF DRAIN
I.E. OUT (8" SE)=439.52

ANTENNA

POWER METER

BOWL SANITARY STANDPIPE

GAS STANDPIPE

ELECT STANDPIPE

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.11

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - NE
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=100'
DATE: 9/7/2023

REVISIONS

DATE	DESCRIPTION	BY

C3
OF 6

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

Exhibit 9, Page 4

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

MATCHLINE

SEE SHEET C2

SEE SHEET C5

POTENTIAL WATER LINE CONFLICT.
LIGHT POLE TO BE RELOCATED
5 FT MIN TO THE NW.

TOP OF PIPE < 378.27 FT
BOT. OF POLE > 407.87 FT
MIN. CLEARANCE > 29.60 FT

POTENTIAL WATER LINE CONFLICT.
LIGHT POLE TO BE RELOCATED
15 FT TO THE SOUTHEAST.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

PORTLAND PARKS &RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.11

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - W
Portland, Oregon

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo SECTION:
DATE: 9/7/2023 SCALE: 1"=100'

REVISIONS

DATE	DESCRIPTION	BY

C4
OF 6

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

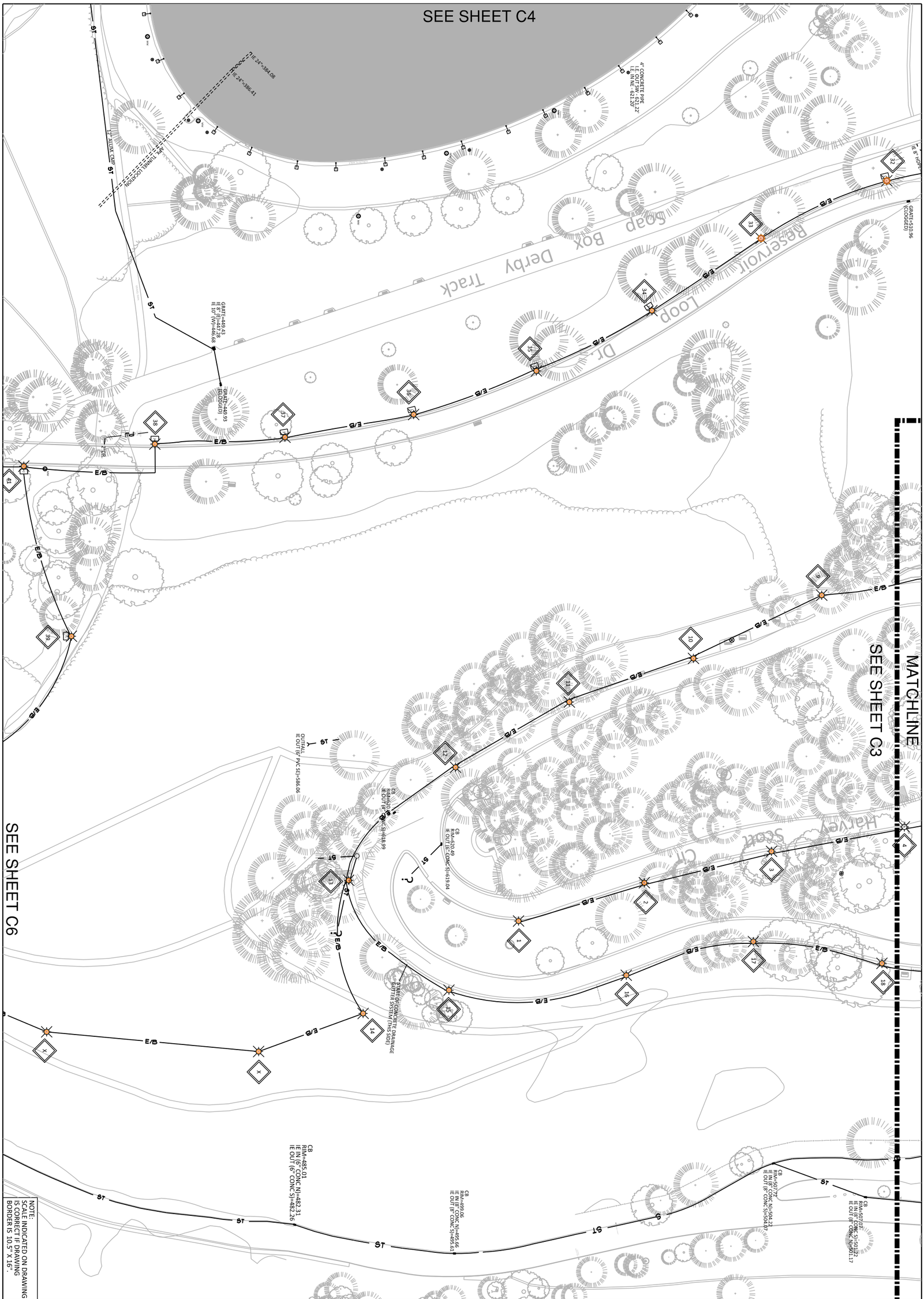
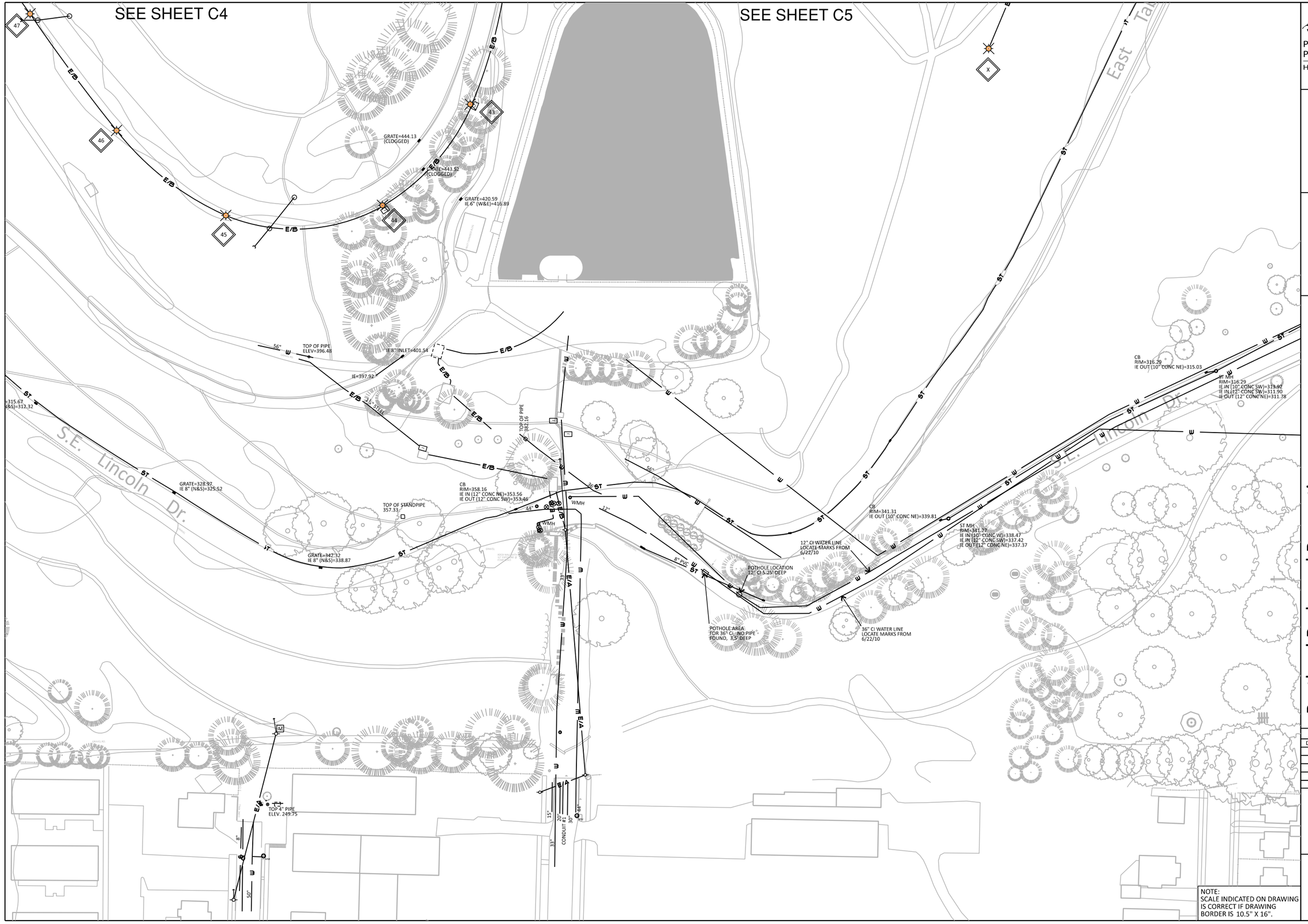

SEE SHEET C4
SEE SHEET C6
SEE SHEET C3
MATCHLINE
Soap Box Derby Track
Reservoir Loop Dr.
Harvey Scott Ct
4" CONCRETE PIPE
IE IN (E) =421.22
IE OUT (W) =421.09
12" X LINK CAP
24" TUNNEL OPENING
IE 24"=384.08
IE 24"=386.41
GRATE=449.33
IE 10" (W)=446.68
GRATE=449.99
(CLOGGED)
GRATE=510.96
(CLOGGED)
IE 8" HDPE
CB
RIM=507.72
IE IN (8" CONC S)=504.27
IE OUT (8" CONC S)=504.27
CB
RIM=507.07
IE IN (8" CONC S)=503.27
IE OUT (8" CONC N)=503.17
CB
RIM=482.50
IE IN (6" CONC N)=482.31
IE OUT (6" CONC S)=482.26
CB
RIM=496.96
IE IN (8" CONC N)=495.66
IE OUT (8" CONC S)=495.61
CB
RIM=507.20
IE IN (8" CONC S)=503.04
CB
RIM=507.09
IE IN (8" CONC S)=503.04
CB
RIM=507.09
IE IN (8" CONC S)=503.04
CB
RIM=507.09

Exhibit 9, Page 6

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn



PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

LU 23-088549 HR DM, Exhibit A.11

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - S
Portland, Oregon
DATE: 9/7/2023

PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=100'

REVISIONS		
DATE	DESCRIPTION	BY

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

C6
OF 6

From: Arendes, Carine
To: David Kaplan
Cc: Horner, Brett; Jeffreys, Grace
Subject: FW: Case file LU 23-088549 HR DM/Cost Estimate Question
Date: Wednesday, January 10, 2024 9:07:27 AM

Hello David,

We appreciate your high standards for our parks! We worked hard to find suitable replacement poles and fixtures, as keeping the design and style of the lighting in our historic parks is really important to us.

Unfortunately all of PP&R's recent projects have faced escalating construction costs. In this case, light poles and their concrete foundations must first be removed before new poles can be installed. Both installation and removal require the use of special equipment to handle the weight of the poles (approximately 1200 pounds each). For the entire city-wide project, which will replace 278 light poles, the total budget is $11,500,000.

This results in about $41,400 per pole. In additional to materials, budgets also cover labor and "soft costs" like permitting fees. Based off of current project documentation, the design-build amount ($32,500) per pole consists of:

- $8,200 to remove an existing pole and their base (252 existing poles)
- $25,100 for the new poles (278 new poles)

This project is an investment in our parks and reflects PP&R's commitment to safety. PP&R is balancing budgetary constraints with appropriate lighting design at each park. Although additional lighting will be added to Montavilla and Mt Scott Parks, new poles are only being installed where doing so will improve safety in our parks. The new fixtures are 66% more energy efficient and provide total energy savings of 61% even with additional poles being installed. Over time, the improved energy efficiency provided by the new lighting is expected to result will result in both energy and cost savings.

Thanks again for giving us your feedback on the project.

Carine Arendes, AICP *(she/her/hers)* *Why do I list my pronouns?*
City Parks Planner | Asset and Development Division
503-679-0826 (mobile)
Monday – Friday, 9:00 am – 5:30 pm
Carine.Arendes@portlandoregon.gov
portland.gov/parks
I use a large font for accessibility. Learn how to make your Outlook emails accessible for people with disabilities.

From: Jeffreys, Grace <Grace.Jeffreys@portlandoregon.gov>
Sent: Thursday, January 4, 2024 3:14 PM
To: Horner, Brett <Brett.Horner@portlandoregon.gov>
Subject: FW: Case file LU 23-088549 HR DM

FYI**:** RE: Case file LU 23-088549 HR DM

Hello David,

I will share your comments of support for the designs with the applicants and the Landmarks Commission.

You will need to reach out to applicant directly with questions about the cost of the work:
Brett Horner, Parks and Trails Planning Manager, Brett.Horner@portlandoregon.gov, 971-409-3518

Grace Jeffreys (she/her)
City Planner II – Urban Design
Land Use Services Division, Design and Historic Resource Review Team

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From: David Kaplan <kaplan.pdx@gmail.com>
Sent: Thursday, January 4, 2024 11:35 AM
To: Jeffreys, Grace <Grace.Jeffreys@portlandoregon.gov>
Subject: Case file LU 23-088549 HR DM

Mt. Tabor lights PC # 23-047200

Commissioners,

I was very skeptical when I first heard that all of the historic park lamp posts were declared a hazard after an ill-advised attempted nap in a hammock. I feared that the Parks Bureau would replace the lighting with cheaper modern fixtures.

I raised the concerns with Friends of Mt. Tabor Park and several civic agencies (including Landmarks

and SHPO), citing the language of the Historic District listing with the National Park Service.

I am happy to see that the Parks Bureau has chosen a replacement design that closely resembles the original posts and lanterns. Today, I visited Colonel Summers Park to see the new fixtures. They are beautiful.

My only question is how these installations can be so expensive. My calculations based on the project budget for parks citywide show a unit cost of about $74,000. I am not an engineer or architect, but that seems to be a pretty big figure. A high level breakdown of these cost elements would be of interest.

Again, I am very pleased at the proposed replacement lighting in the park, and urge approval by the commission.

David Kaplan
7110 SE Main St.
Portland, Oregon 97215

From: Arendes, Carine
To: Powell, Jesse (he/him)
Cc: Jeffreys, Grace
Subject: FW: Mt. Tabor Light Pole Proposal
Date: Friday, January 12, 2024 3:48:46 PM
Attachments: ComparisionPhotos.pdf

Hi Jesse,

Thanks for your interest and support for Mt. Tabor Park – it's a great park! As you noticed, one of the park's defining features is the lighted system of roads, stairs, and pathways. Many of the light poles in the current system are outdated and are beyond their expected lifespan; some may be a hundred years old!

Safety concerns about how the light poles were installed means we do have to replace them. Our website has more information about the light pole safety project that will result in new light poles in 11 parks city-wide. However, the replacements for our historic parks have been very carefully chosen to match the old ones in style, design, and materials. Even the decorative metal strapping at the top of the poles is included (see attached comparison photos).

The light safety project will replace the gaps that currently exist in the Mt. Tabor Park system and will ensure that every light pole in the system provides safe, well-lit access to the park for the next 100 years.

Thanks again for your interest in our project.

Carine Arendes, AICP *(she/her/hers) Why do I list my pronouns?*
City Parks Planner | Asset and Development Division
503-679-0826 (mobile)
Monday – Friday, 9:00 am – 5:30 pm
Carine.Arendes@portlandoregon.gov
portland.gov/parks
I use a large font for accessibility. Learn how to make your Outlook emails accessible for people with disabilities.

From: Jeffreys, Grace <Grace.Jeffreys@portlandoregon.gov>
Sent: Wednesday, January 3, 2024 8:08 AM
To: Horner, Brett <Brett.Horner@portlandoregon.gov>
Subject: FW: Mt. Tabor Light Pole Proposal

Good morning, Brett.
Please find below an email encouraging preservation of the historic light posts at Mt Tabor.

Grace Jeffreys (she/her)
City Planner II – Urban Design
Land Use Services Division, Design and Historic Resource Review Team

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From: Jeffreys, Grace
Sent: Wednesday, January 3, 2024 8:07 AM
To: Powell, Jesse (he/him) <Jesse.Powell@providence.org>
Subject: RE: Mt. Tabor Light Pole Proposal

Hi Jesse,
Thank you for your comments regarding preserving the historic light posts at Mt Tabor. I will share with the applicant and the Landmarks Commission.
Grace

Grace Jeffreys (she/her)
City Planner II – Urban Design
Land Use Services Division, Design and Historic Resource Review Team

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From: Powell, Jesse (he/him) <Jesse.Powell@providence.org>
Sent: Tuesday, January 2, 2024 10:17 PM
To: Jeffreys, Grace <Grace.Jeffreys@portlandoregon.gov>
Subject: Mt. Tabor Light Pole Proposal

Hello,

I recently became aware of the proposal to remove the historic lighting from Mt Tabor Park. I am a long-time resident of the Mt Tabor neighborhood and visit the park almost every day for exercise and recreation. I am VEHEMENTLY opposed to the removal of the historic light posts. They provide a wonderful charm and character to the park. I was so sad when the post on the upper forest trail was replaced. Removing all of them would be almost as tragic as removing a mature Douglas Fir tree from the park. That money should be devoted to GOOD causes for the city, not the destruction of historic architecture. Please please don't do this.

Jesse Powell

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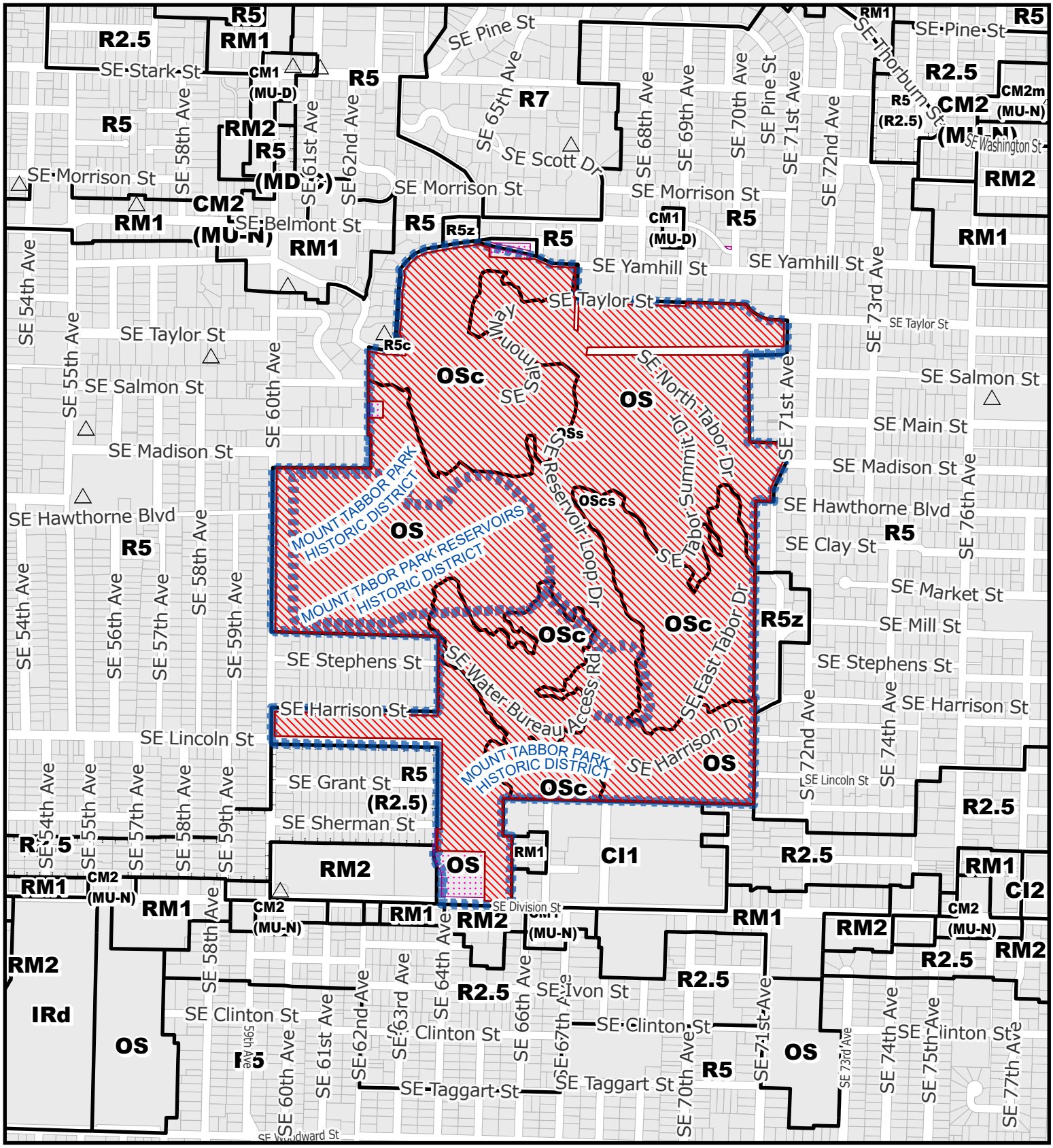
anyone the message or any information contained in the message. If you have received this message in error, please immediately advise the sender by reply email and delete this message.



For Zoning Code in Effect Post October 1, 2022

ZONING

THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

REVISED C Exhibit List (Plan Set)

Exhibit 1 – Vicinity Map

Exhibit 2 – Site Boundaries

Exhibit 3 – Light pole locations with Conservation and Scenic Overlays

Exhibit 4 – New Pole and Fixture Schematics (NEW Page 2B)

Exhibit 5 – Illumination Info (photometrics, distribution comparison, etc.)

Exhibit 6 – Scaled Plan Set (SEPARATE UPLOAD)

Exhibit 7 – Permitted landscaping per LU 17-245440 Condition L. and (NEW) approved areas of adjustment (Exhibit C-1 of casefile LU 17-2454400 CU-AD)

Exhibit 8 – Tree Plan (includes Inventory)

Exhibit 9 – Disturbance Area Plan for Replacement Poles (REVISED)

Exhibit 10 – Scaled Construction Plan Set (NEW, SEPARATE UPLOAD)

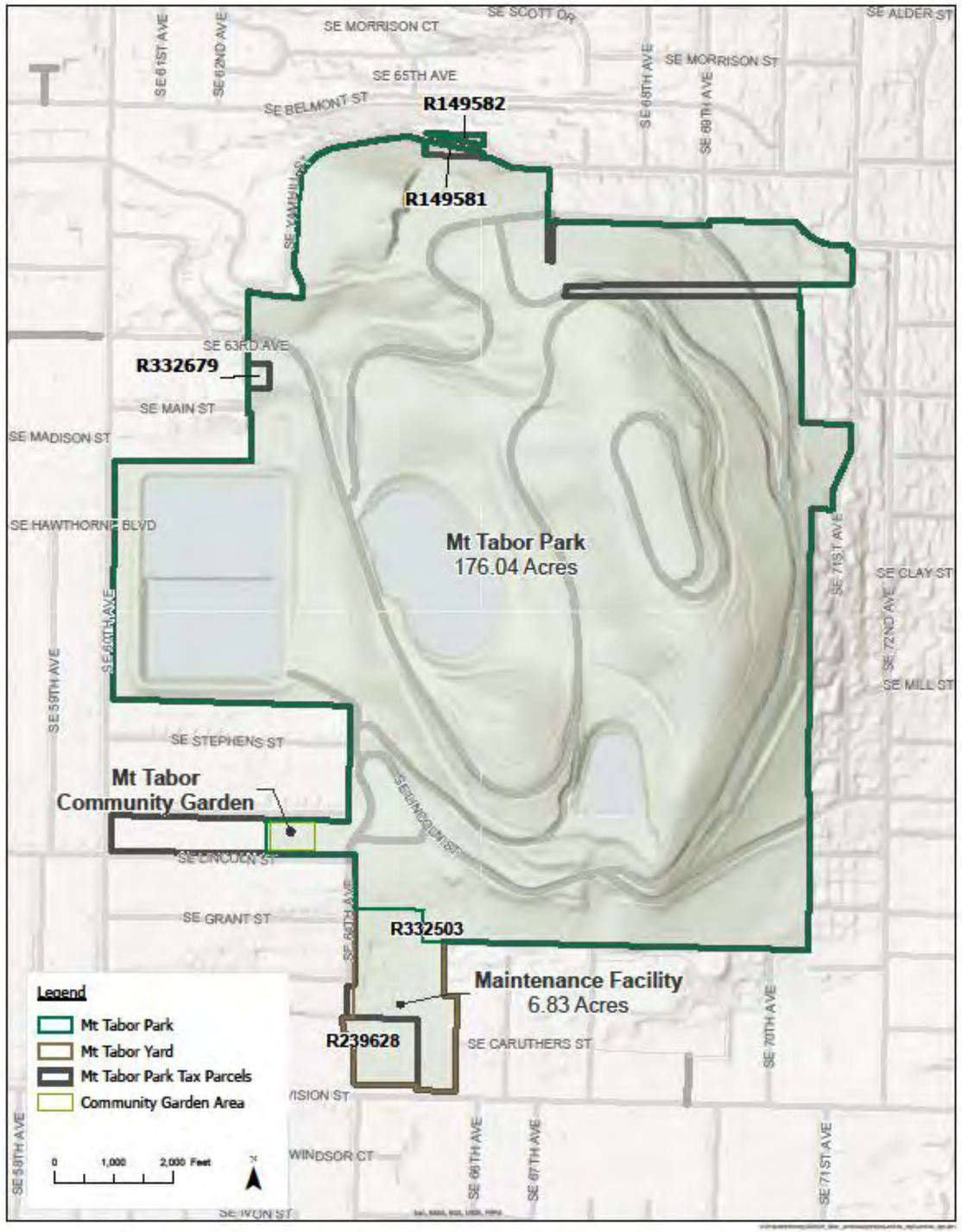
Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Vicinity Map

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner_____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.2

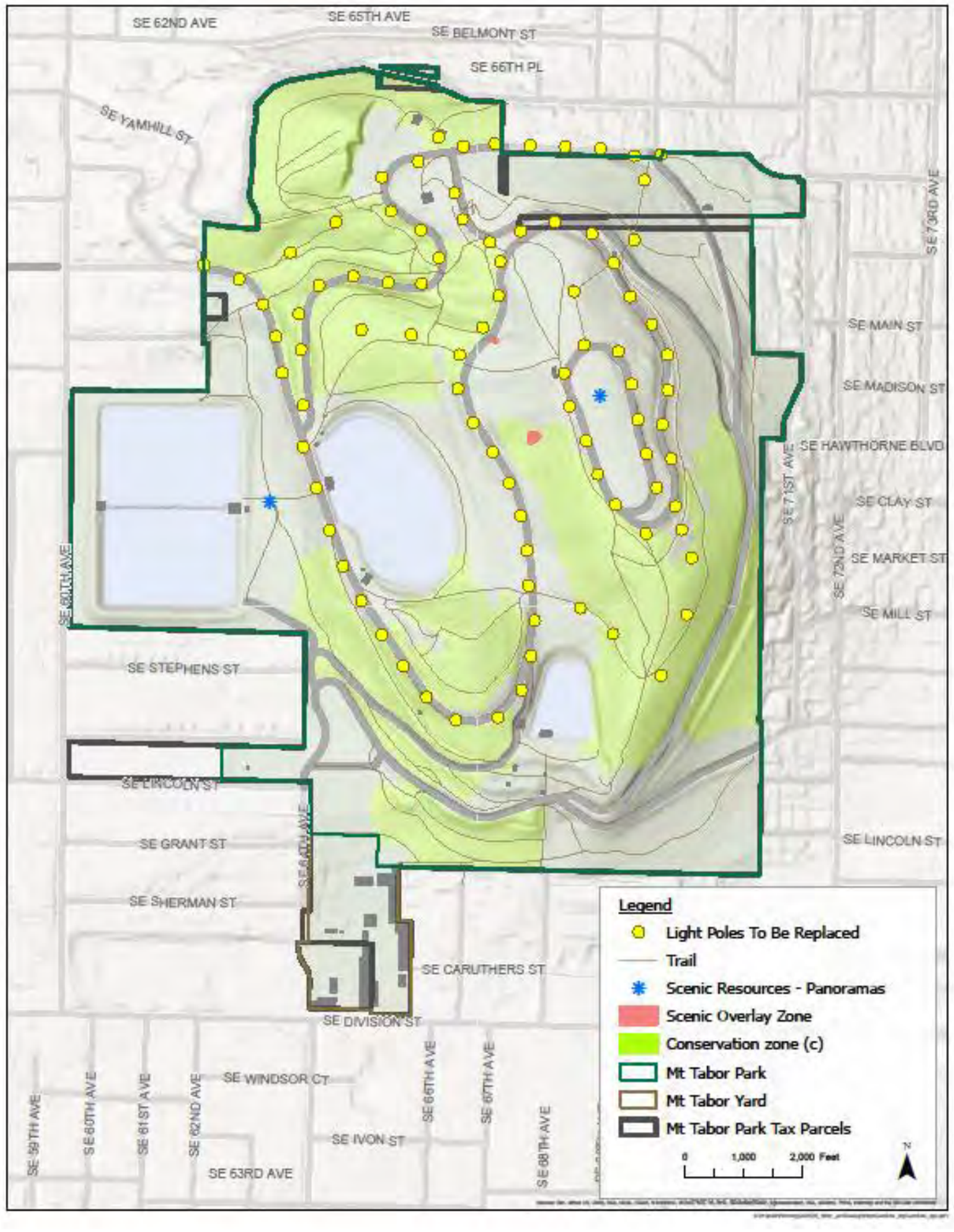
Site Boundaries



Date 1-25-2024 *Approved*
City of Portland
Bureau of Development Services
Planner
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.3

Light pole locations with Conservation and Scenic Overlays



Date 1-25-2024 *Approved*
City of Portland
Bureau of Development Services
Planner
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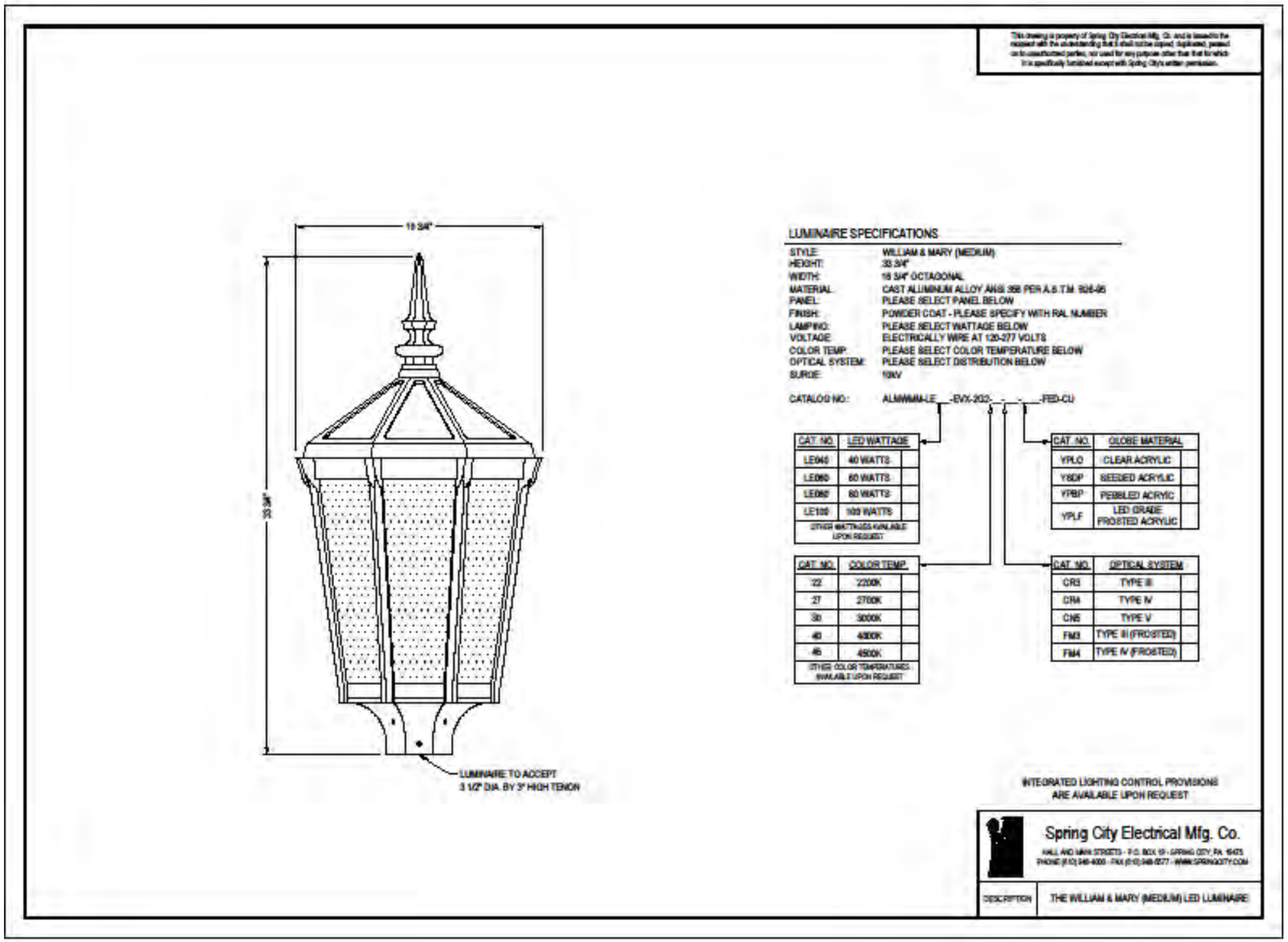
Light poles and fixture schematics



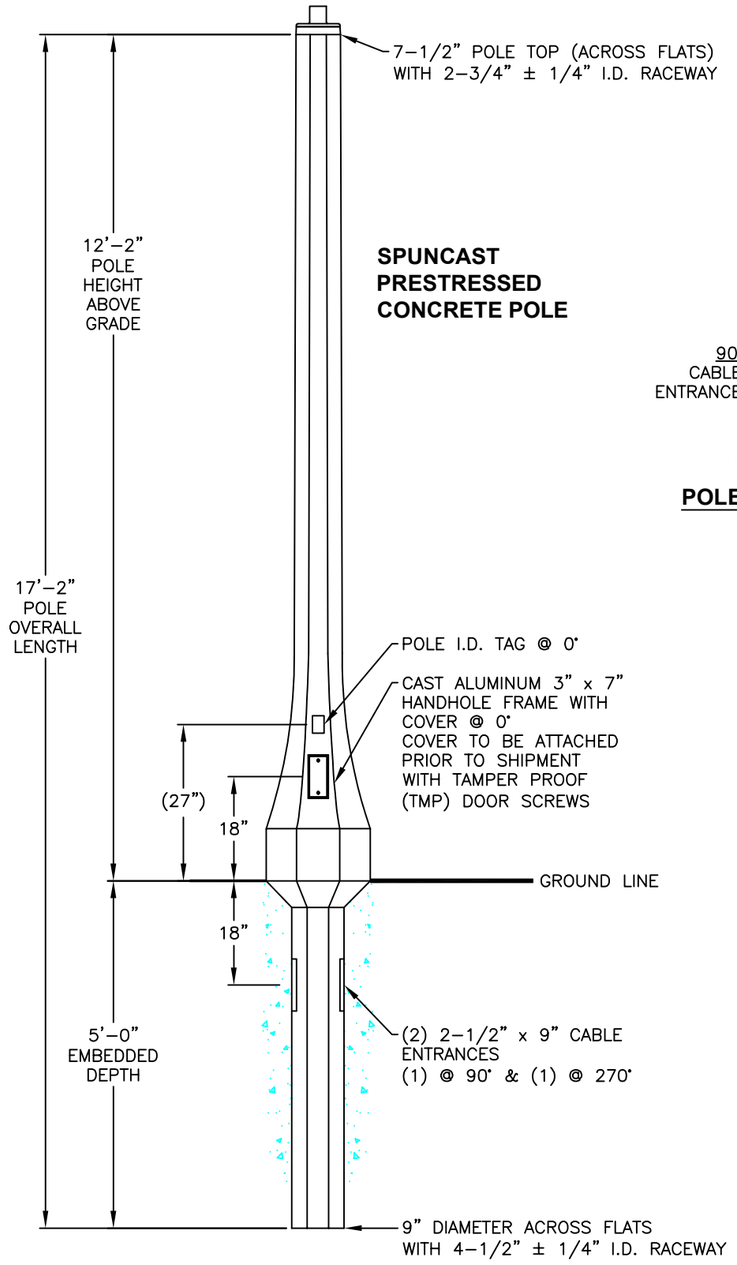
LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV

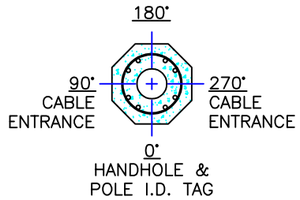
CATALOG NO.:
- TYPE III: ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
- TYPE V: ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner_____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

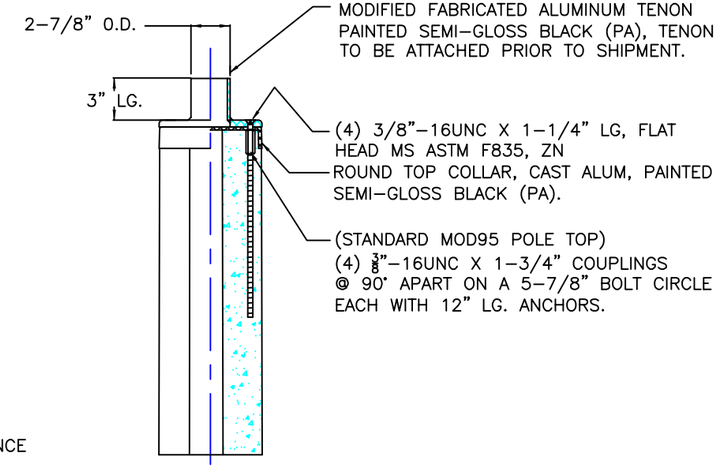
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	



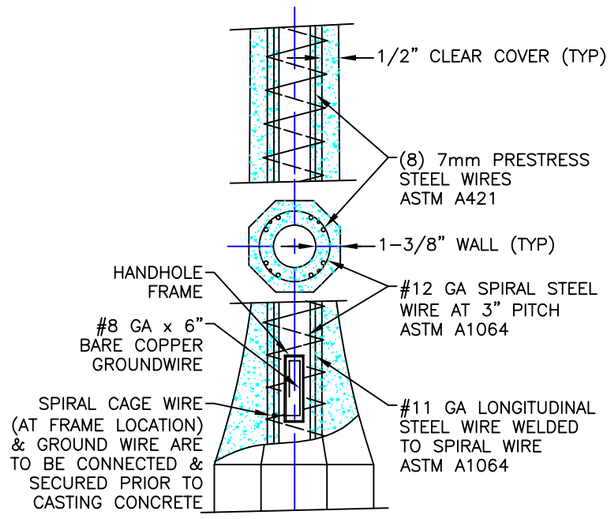
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Date — "Approved" City of Portland Bureau of Development Services
Planner — 1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

REV	DATE	DESCRIPTION	BY	APPR
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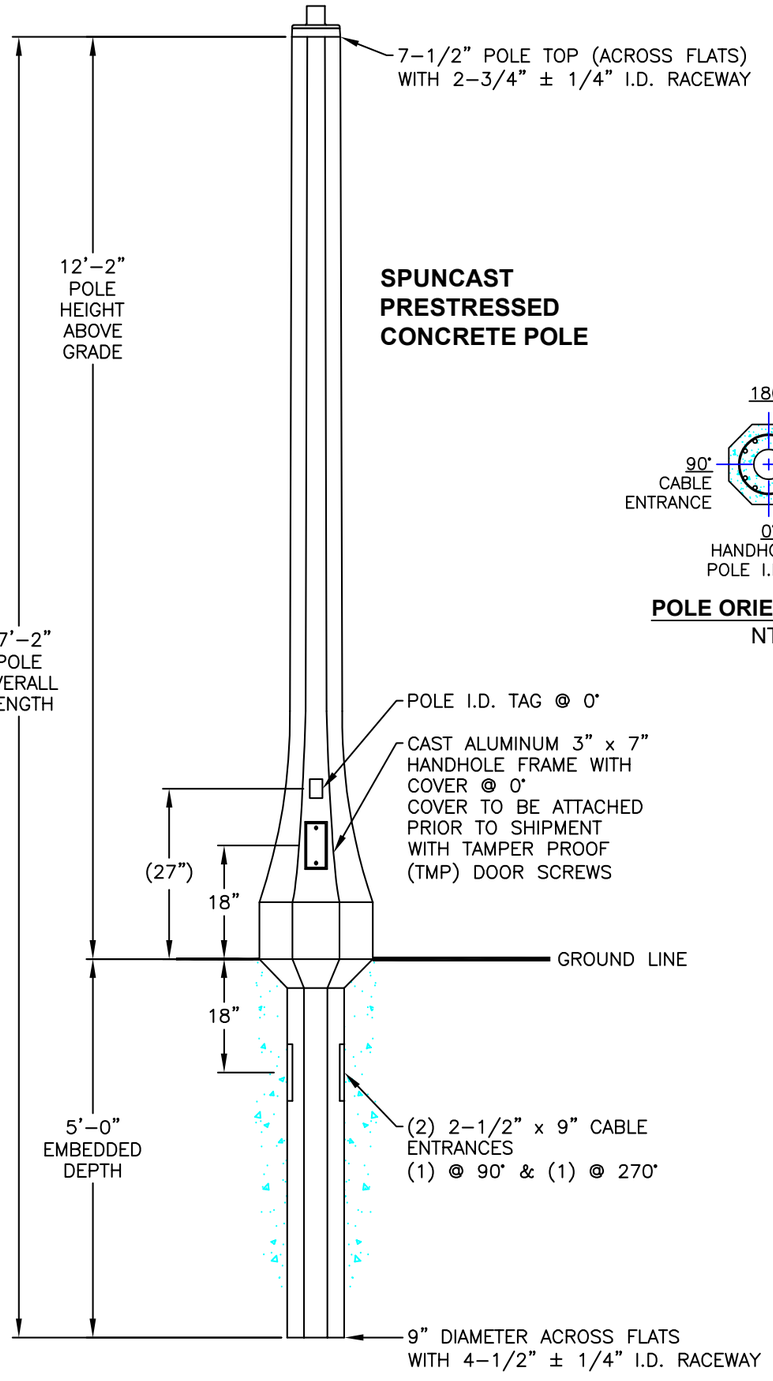
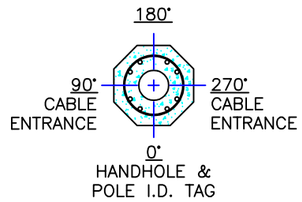
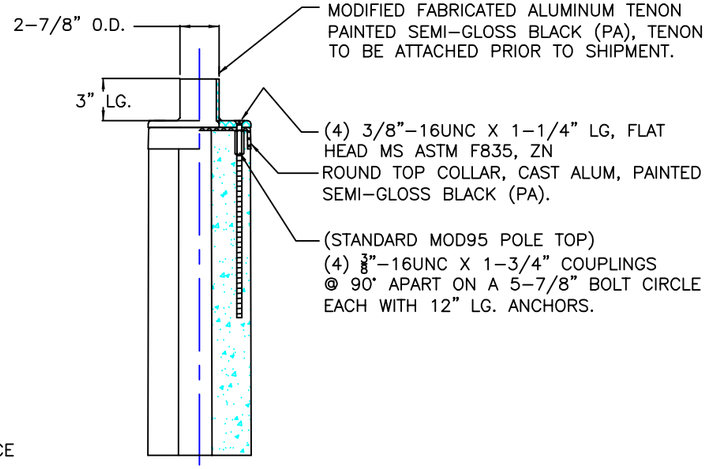


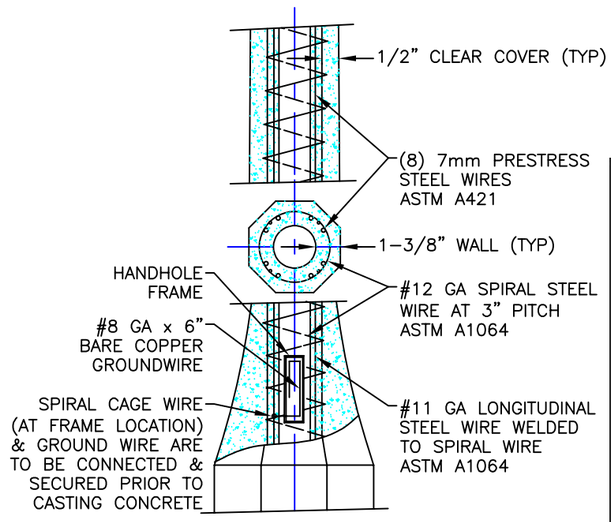
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS
NTS



POLE TOP DETAIL
NTS



POLE SECTION
NTS

Approved
City of Portland
Bureau of Development Services
Planner
Date 1-25-2024
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VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

APPROVED BY **DATE**

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

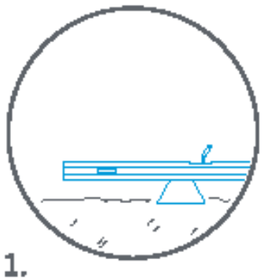
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN:	DATE:	APPR:	DATE:
BEU	4/6/23		

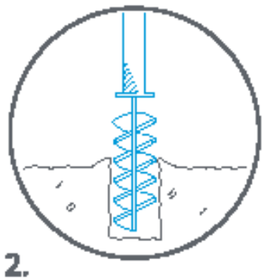
DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	1" = 2'

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

Installation Steps for a Direct Embedded Ameron™ Concrete Pole

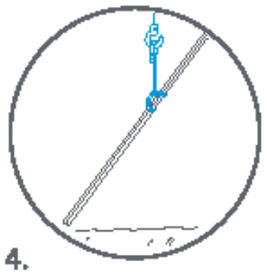


1.
Position pole for pre-wiring. Protect pole as described in handling and storage guide. Wire and install luminaire.

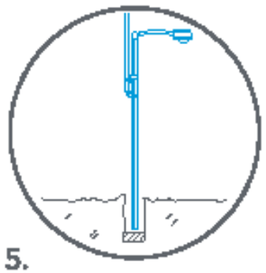


2.
Excavate hole to proper depth (plus 6-in. if special backfill is required).

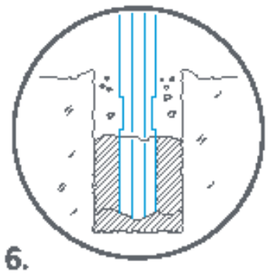
3.
Use proper backfill. See recommended backfill requirements below. Tamp a 6-in. base to ensure correct setting depth and drainage (if required).



4.
Use only synthetic straps. Single pick point is preferred method of handling. Use double clove hitch to avoid slippage.



5.
Set pole. Align/plumb. Maintain tension on the pole until compacted to bottom of cable entrance.



6.
Compact required backfill in two operations. Tamp 9-in. intervals to bottom of cable entrance. Install underground cable. Check alignment. Finish compaction to a height of 2-in. above grade sloping away from pole to allow proper drainage.

Recommended backfill requirements*

Good soil

Compact well-graded sand and gravel, hard clay, or well-graded fine and coarse sand (all drained so that water will not stand).

Use as is for backfill.

Medium soil

Compact fine sand, medium and clay, compact sandy loam, loose coarse sand and gravel (all drained so that water will not stand).

Requires select backfill—clean, washed sand or ¾-in. minus well-graded gravel.

Poor soil

Soft clay, clay loam, poorly compacted sand, or clays containing large amounts of silt. Water may stand during wet season.

Use compacted earth backfill—mix one part dry cement powder to 25 parts clean, washed sand.

*Based on location review by a qualified civil engineer.

Ameron Concrete Pole Handling Instructions

Ameron™ poles are made of pre-stressed concrete, a tough, elastic, durable material not limited by the properties of low strength, conventionally reinforced concrete. Like many other fabricated structures, Ameron poles are designed to withstand specific service loads and handling loads—with safety factors considered. Loads induced through handling are perhaps the ones most easily overlooked, even though only a few simple rules need be remembered. Attention to the following will minimize damage from handling and storage.

Storage

(See Figs. 1 through 3)

1. Store on dunnage placed 1/5 of the total length from each end. Location of temporary support points may vary from this rule for both storage and handling. Dunnage is ideally made from 4×4 fir, pine, or a similar wood, which is finished enough to have opposite sides flat and parallel (no logs or branches). The dunnage should be in one piece for the full width of the stack and be of sufficient thickness as to allow the placing of slings or the insertion of forklift fingers between the layers of poles. Weathered lumber is better than newly cut because the latter may stain the concrete when moisture is present.

Incorrect storage
Fig. 1

2. Store on a level surface. If surface is not paved, be certain the ground is solid enough so that the dunnage does not sink into it.

3. When poles are stored in more than one layer, each piece of dunnage must be placed one above the other, so that the weight of the poles above is transmitted directly downward through the dunnage and does not induce bending stresses in the poles.

4. Distribution poles should be stacked no higher than nine layers and smaller poles no higher than 12 layers.

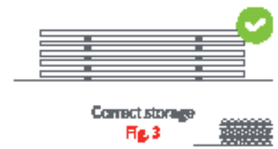
5. Each succeeding layer of poles should be placed with the tips in the opposite direction of the layer below.

6. Poles should be aligned so that the tips in each layer form a straight line normal to the center line of the poles.

Incorrect storage
Fig. 2

7. Place wedges on the dunnage next to the poles to prevent their rolling.

8. Do not step on the cantilevered tips of small poles in storage.



Correct storage
Fig. 3

9. Handle poles with reasonable care so as to avoid dropping or otherwise striking them against each other or other hard, solid objects.

Handling

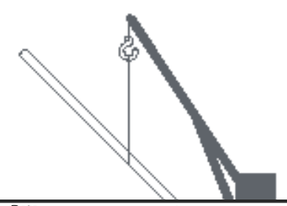
(See Fig. 4)

1. In lifting the pole from a single pick-up point, use either a choker sling or a loop sling with one complete extra turn around the pole just above the balance point.

2. When lifting the pole using two pick-up points from a single hook, a choker-type attachment should be used on the pole.

3. Poles with a polished or textured surface should be handled with a nylon or other non-metall
For these poles, fingers of a forklift should be fitted with protective covers.

4. When using a forklift to handle poles, always use softeners on the fork tines. Also, always use
to prevent poles from rolling.



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Total pole count: 88

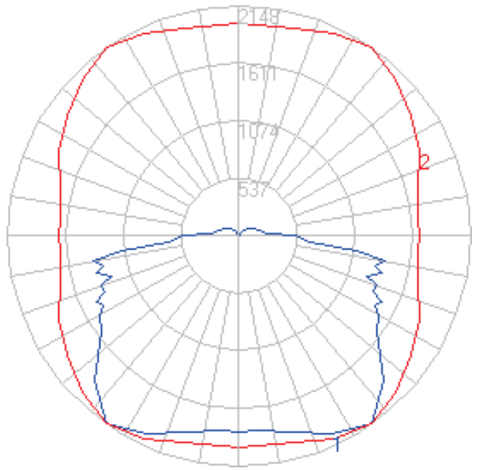
Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Specs

Existing lamp information used for calculation

Brand	Philips Lighting	**Bulb Finish**	Clear
Product Line	Ceramalux	**Bulb Technology**	High Pressure Sodium
Model Number	SON 150W E39 ED75 CL SL/12	**Average Rated Life (hr)**	24000
Energy Used	150 Watts	**Length (in)**	7.75
Base	Mogul (E39)	**Diameter (in)**	2.938
Bulb Shape	ED-23 1/2	**Ballast Code**	S55
Bulb Color	Warm White	**Contains Mercury (Hg)**	Yes
CRI	17	**GE**	44043 - LU150/55
Color Temperature (Kelvin)	2100	**Osram Sylvania**	67516 - LU150/55
Brightness (Lumens)	16000	**Not For Sale In**	WA



Lamp lumen distribution used for calculation - T5 type optic

Existing pole details:

(E) Decorative Post-top luminaire
Pole height: 12'-2"

MT TABOR - EXISTING CONDITION

06/21/2023

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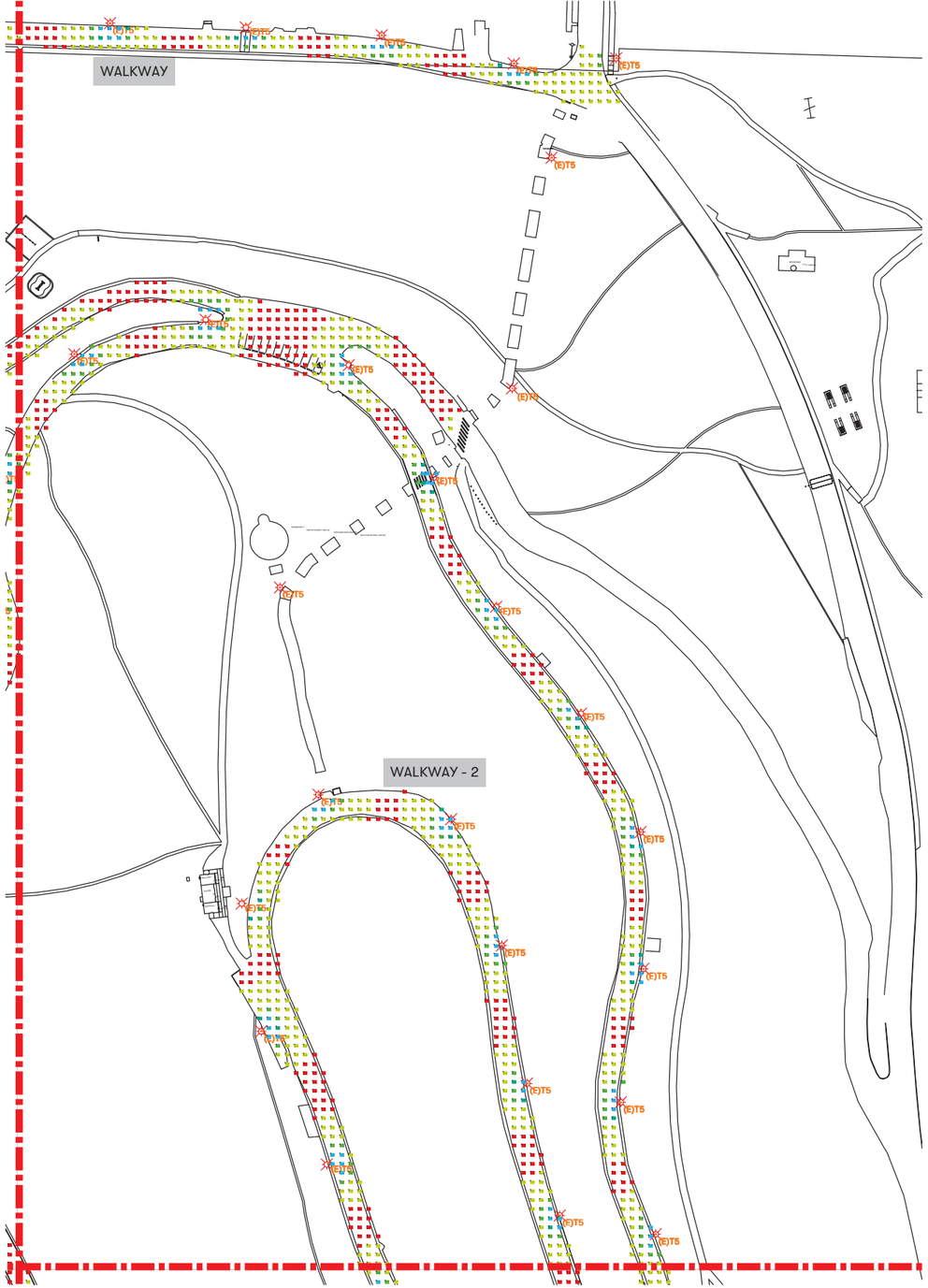
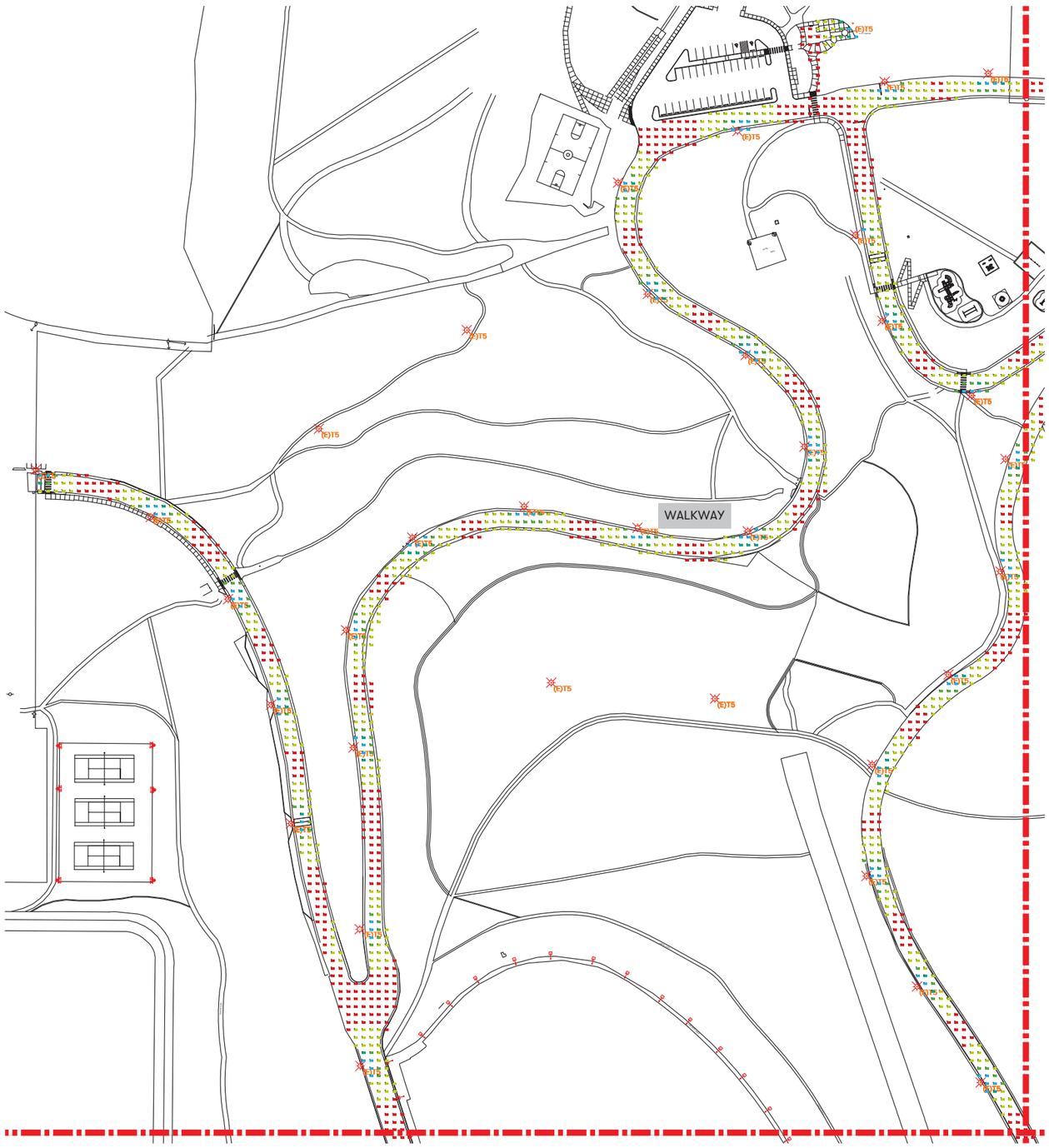

WALKWAY
WALKWAY - 2
(E)T5
(E)T5
(E)T5



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

Existing product - Approximate calculation

MT. TABOR - EXISTING POLE APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.31	5.2	0.0	N.A.
Walkway 2	Fc	0.28	5.3	0.0	N.A.

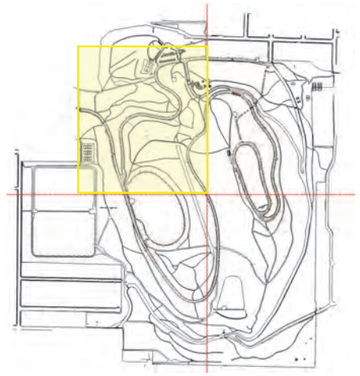
A Light Loss Factor (LLF) of 0.40 was used to account for light loss due to ballast factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

Note:

1. Lighting calculations were performed at 0'-0" AFF.
2. Ground reflectance was assumed to be 0.15.
3. This lighting plan represents illumination levels calculated from lab data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/ LEDs and other variable field conditions.
4. Calculations do not include obstructions such as landscaping, buildings. curbs and/or any other architectural elements unless noted. This drawings is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering products.

LIGHTING LEVEL (FC) LEGEND

	Range			Color
> =	0	To < =	0	
> =	0.1	To < =	0.3	
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	



N

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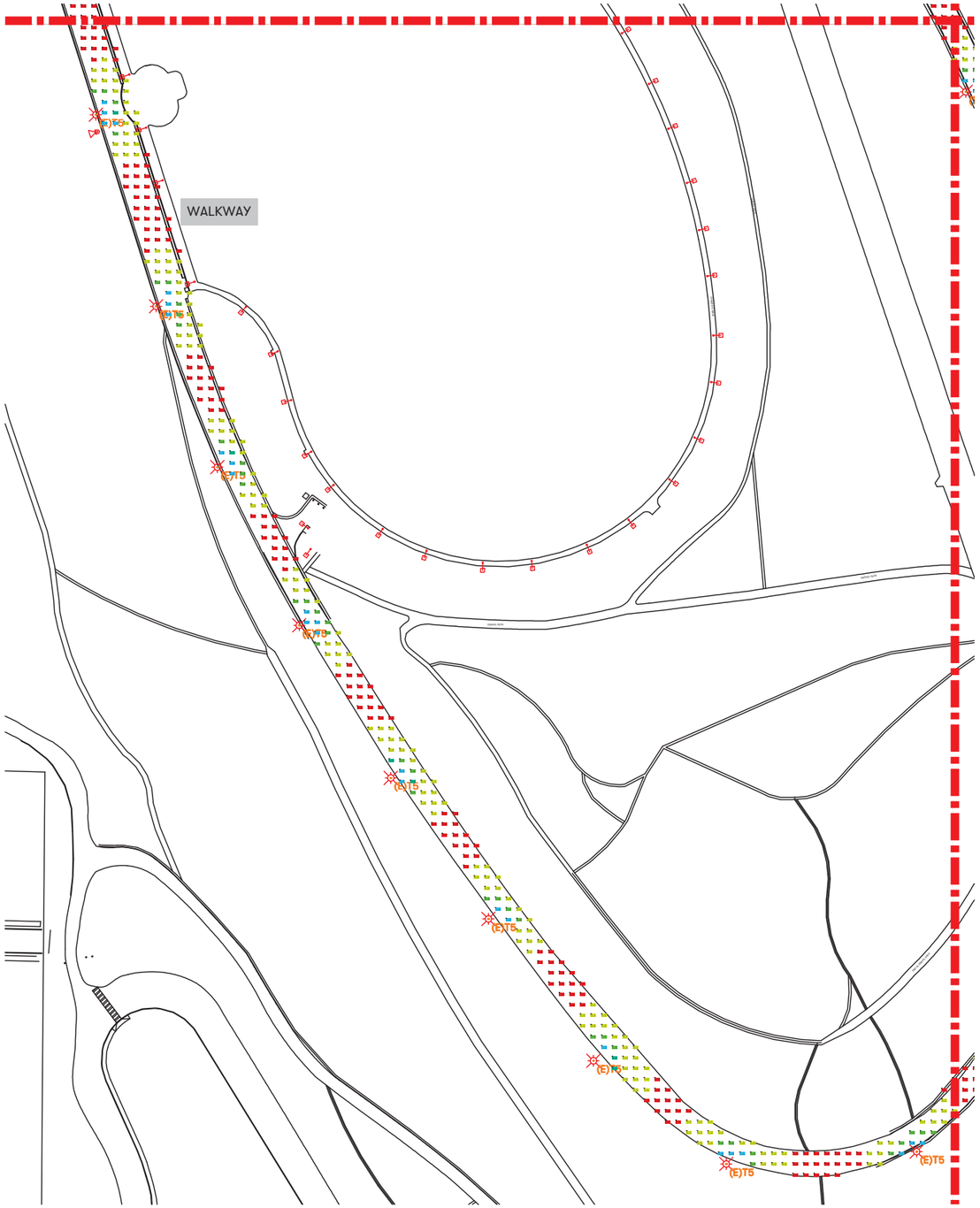
LU 23-088549 HR DM, Exhibit C.11



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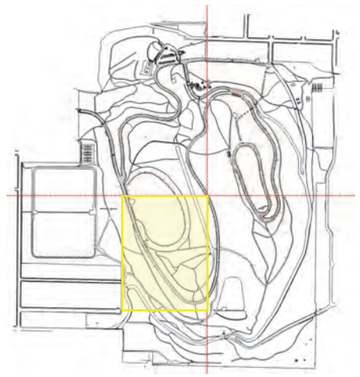
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



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MT TABOR - EXISTING CONDITIO

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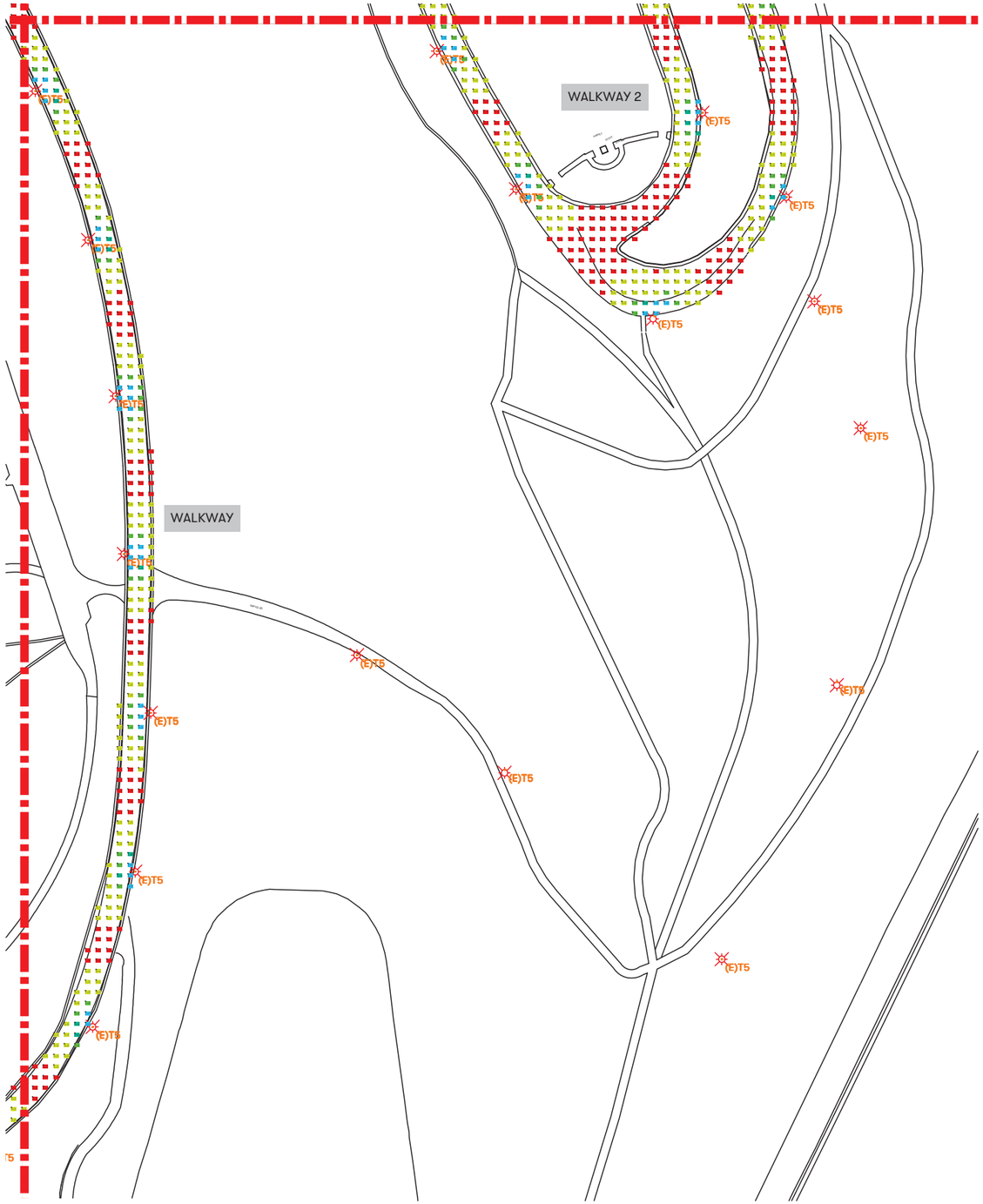
LU 23-088549 HR DM, Exhibit C.12



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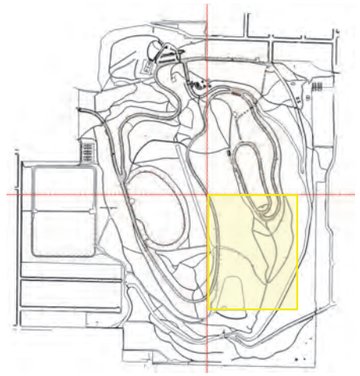
> = 0.8	To < = 1		
> = 1.1	To < = 100		



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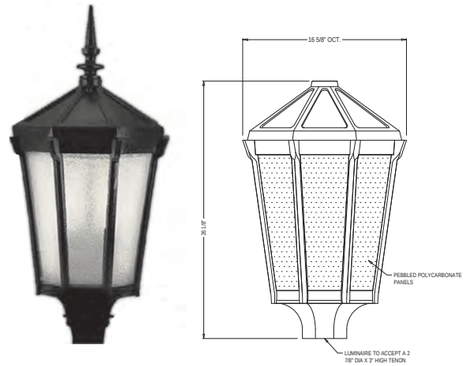
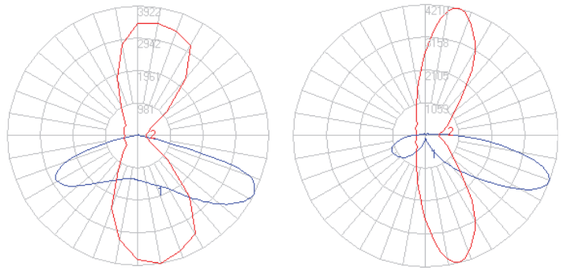
New LED product - Specs

Decorative Post-top:



Spring City - William and Mary Post-top fixture
ALMWMS-LE060-EVX-2G2-27-[OPTIC]-YPBP-CU



Optics used for calculation - T3, T5 type

Decorative Post-top luminaire
T3 Poles: 74, # T5 Poles: 14
Pole height: 12'-2"

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

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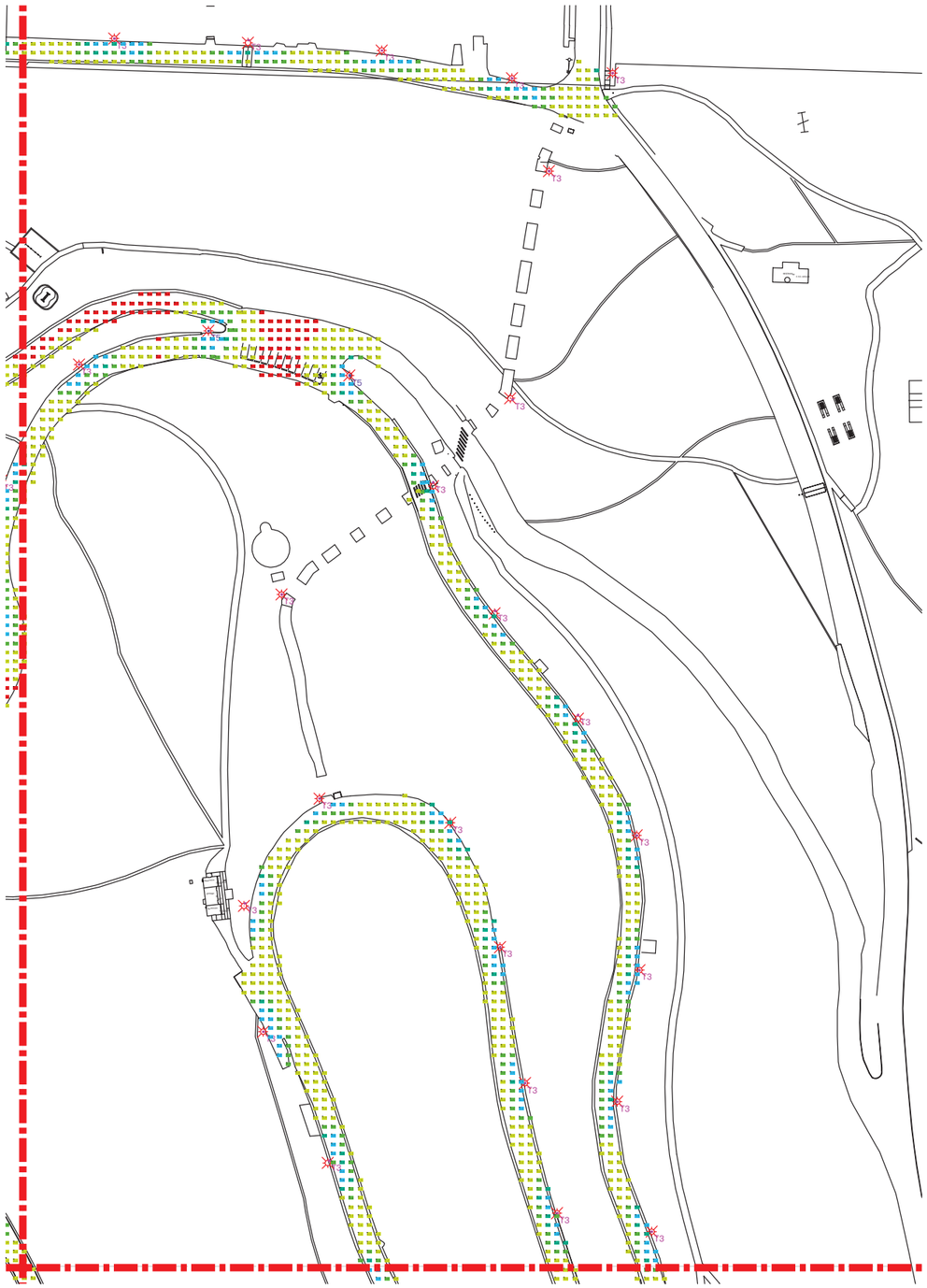

06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.45	2.6	0.0	N.A.
Walkway 2	Fc	0.41	2.5	0.0	N.A.

A Light Loss Factor (LLF) of 0.75 was used to account for light loss due to driver factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

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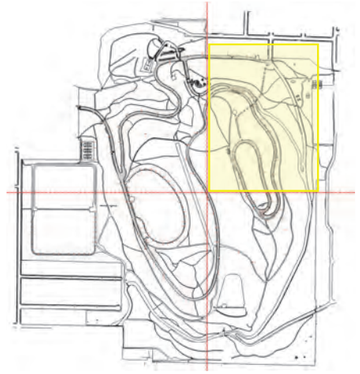

N

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MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

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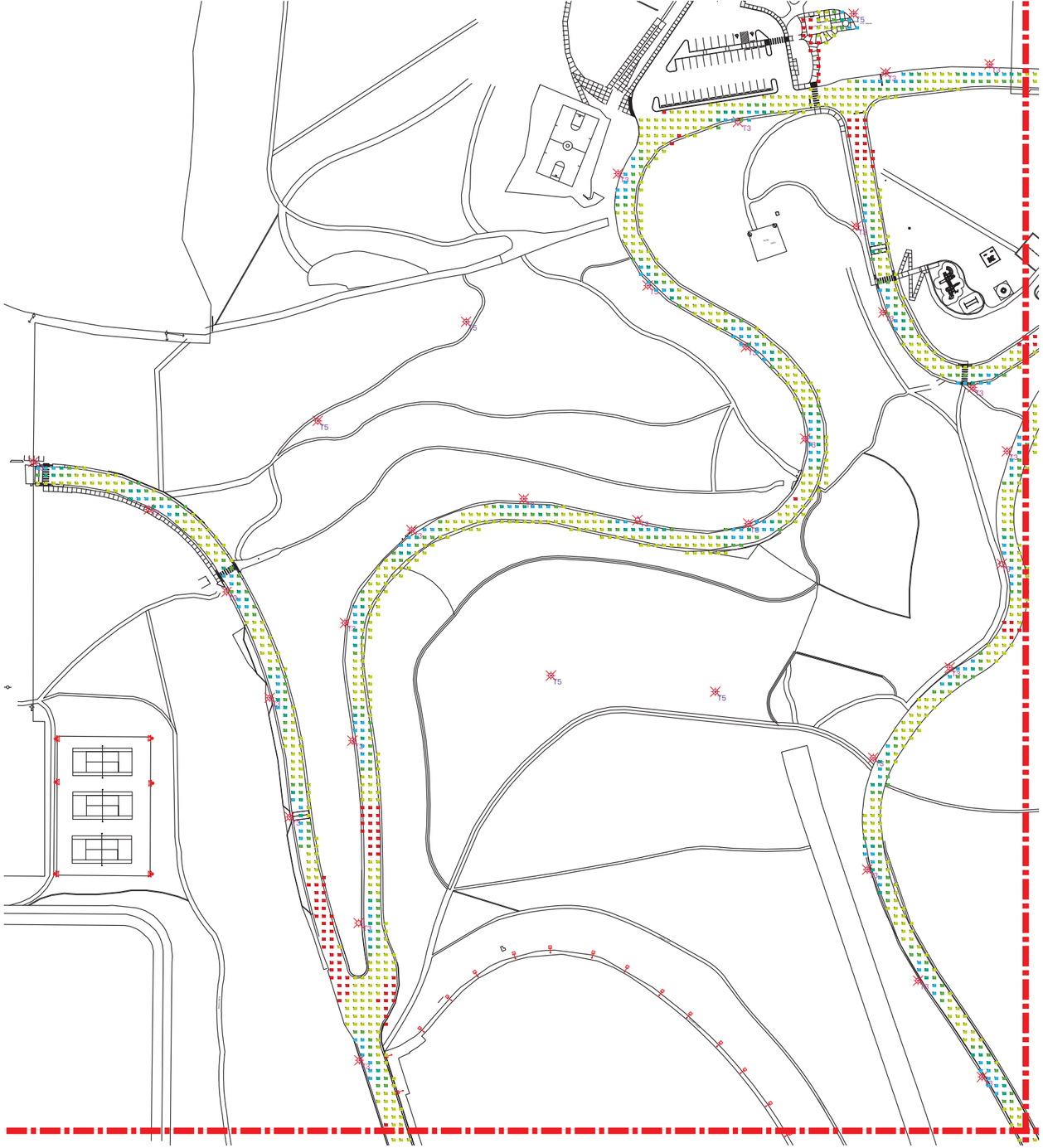

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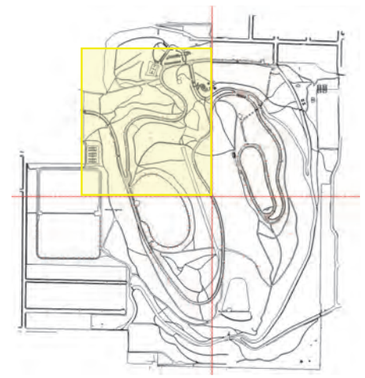
LIGHTING LEVEL (FC) LEGEND

	Range		Color
> =	0	To < = 0	
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



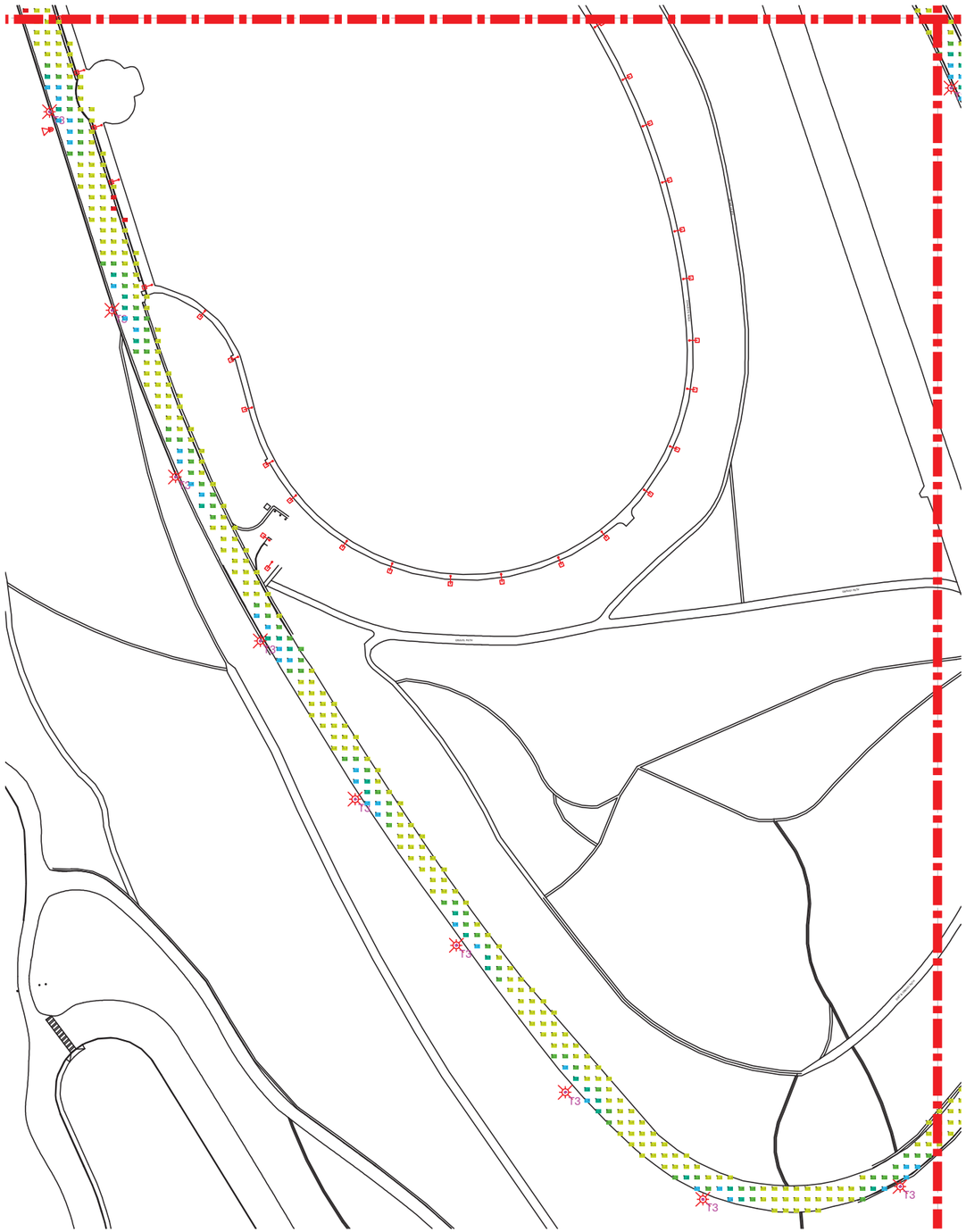
N

Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | DRS INC

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
Walkway	Fc	0.45	2.6	0.0	N.A.
Walkway 2	Fc	0.41	2.5	0.0	N.A.

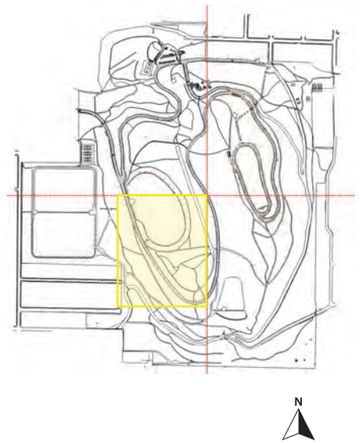
A Light Loss Factor (LLF) of **0.75** was used to account for light loss due to driver factor, ambient fixture temperature, supply voltage variation, fixture surface depreciation, optical factor, lamp lumen depreciation (LLD), luminaire dirt depreciation (LDD), lamp burnouts and room surface dirt depreciation.

Note:

1. Lighting calculations were performed at 0'-0" AFF.
2. Ground reflectance was assumed to be 0.15.
3. This lighting plan represents illumination levels calculated from lab data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/ LEDs and other variable field conditions.
4. Calculations do not include obstructions such as landscaping, buildings. curbs and/or any other architectural elements unless noted. This drawings is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering products.

LIGHTING LEVEL (FC) LEGEND

	Range		Color
> = 0	To < = 0		
> = 0.1	To < = 0.3		
> = 0.4	To < = 0.7		
> = 0.8	To < = 1		
> = 1.1	To < = 100		

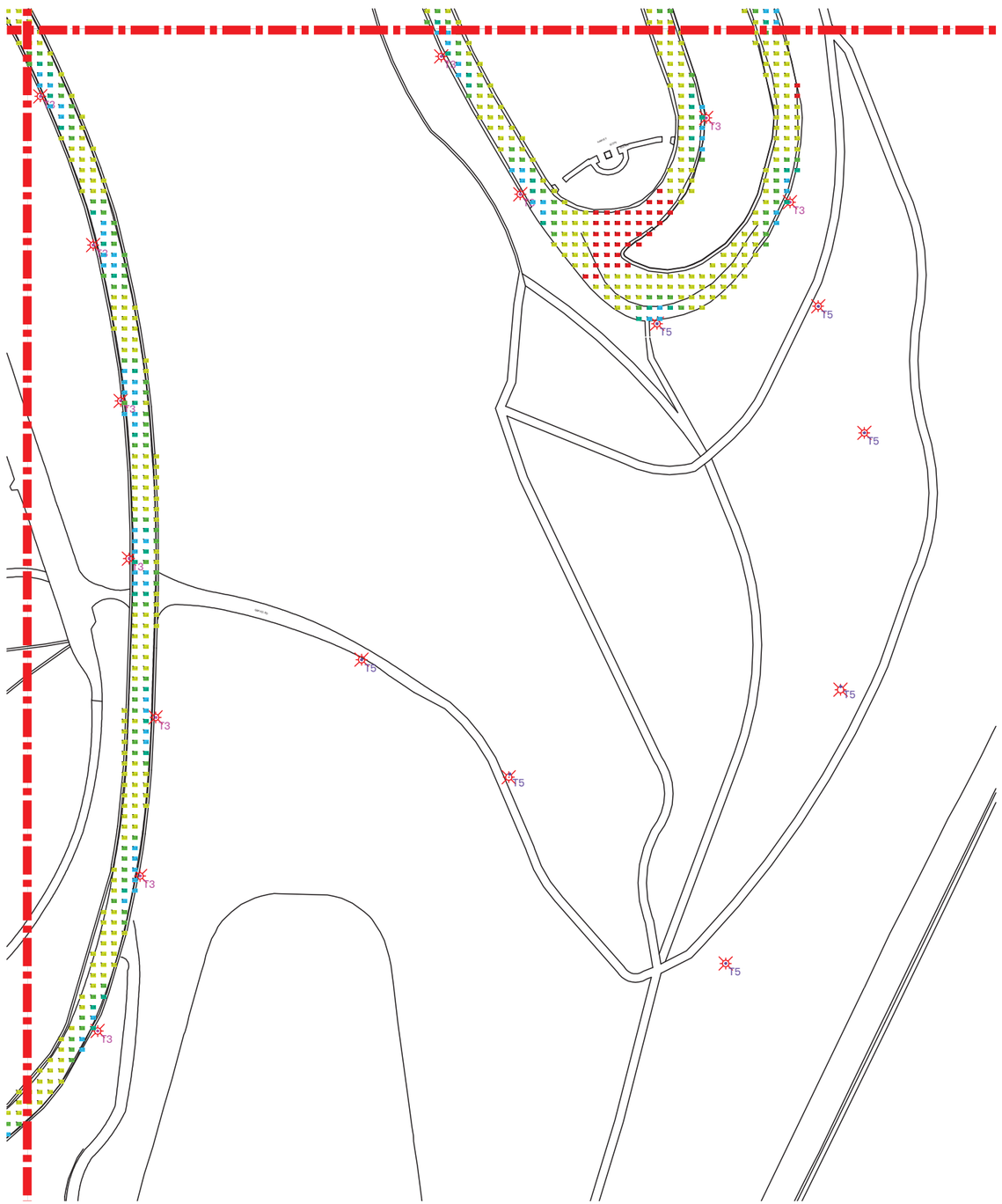


Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | P2S INC

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.



06/21/2023

Mt Tabor Park

SE 60th Ave &, SE Salmon St, Portland, OR 97215

1-1 LED Replacement: Approximate calculations

MT. TABOR - 1-1 REPLACEMENT APPROX. CALC					
Label	**Units**	**Avg**	**Max**	**Min**	**Uniformity Ratio**
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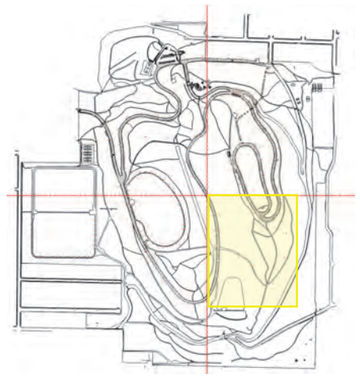
Note:

1. Lighting calculations were performed at 0'-0" AFF.
2. Ground reflectance was assumed to be 0.15.
3. This lighting plan represents illumination levels calculated from lab data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/ LEDs and other variable field conditions.
4. Calculations do not include obstructions such as landscaping, buildings. curbs and/or any other architectural elements unless noted. This drawings is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering products.

LIGHTING LEVEL (FC) LEGEND

	Range		Color
> =	0	To < = 0	
> =	0.1	To < = 0.3	
> =	0.4	To < = 0.7	
> =	0.8	To < = 1	
> =	1.1	To < = 100	



N

Please note that the drawing is not to scale and is for illustrative purposes only.

MT TABOR - NEW LED FIXTURE (1-1 REPLACEMENT)

Portland Parks Photometrics | D2S INC

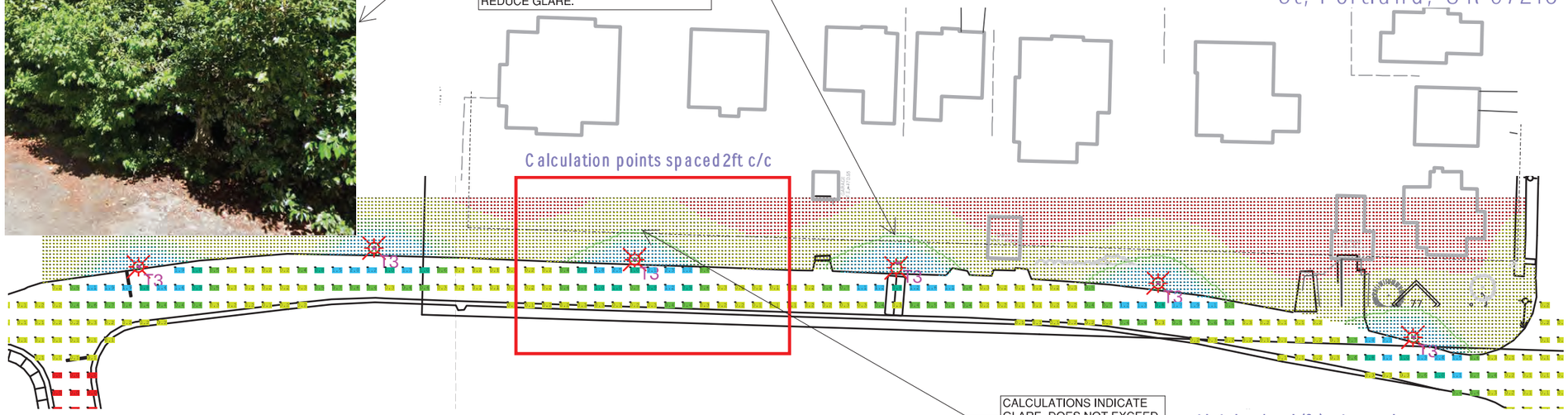
Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Mt Tabor Park
SE 60th Ave &, SE Salmon St, Portland, OR 97215

CALCULATIONS INDICATE GLARE ENCROACHES APPROXIMATELY 2'.

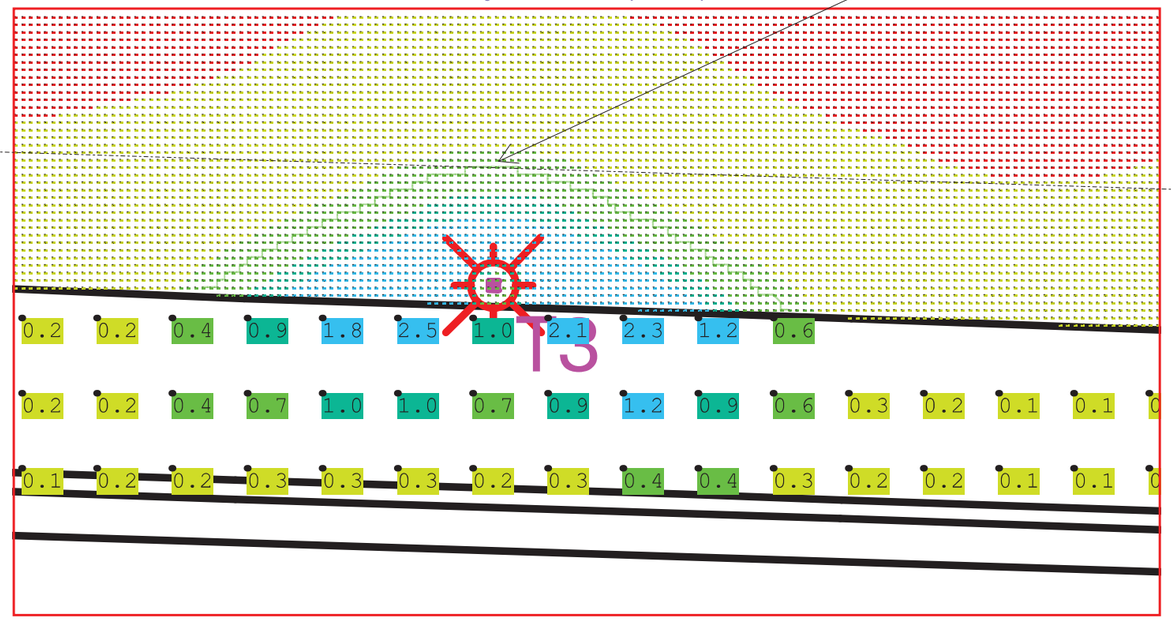
CALCULATIONS DO NOT ACCOUNT FOR OBSTRUCTIONS.

EXISTING VEGETATION LESSENS GLARE AND SHIELDING WILL FURTHER REDUCE GLARE.



CALCULATIONS INDICATE GLARE DOES NOT EXCEED 0.5 FC AT PROPERTY LINE.

Enlarged calculation points spaced 1ft c/c



Lighting level (fc) - Legend

	Range			Color
> =	0	To < =	0	
> =	0.1	To < =	0.3	
> =	0.4	To < =	0.7	
> =	0.8	To < =	1	
> =	1.1	To < =	100	

Key plan

Date

Approved
City of Portland
Bureau of Development Services

Planner

1-25-2024

*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

09/11/2023

Portlan 5 INC

MT TABOR PARK - NEW LED FIXTURE (1-1 REPLACEMENT)

Comparison of Existing and Proposed Distribution Diagrams

The new T3 type lights (to be located in the SE Taylor right-of-way) will greatly reduce the amount of light spill on adjacent properties compared to the existing T5 type lights. The distribution graphs show the total quantity of light emitted (lumens) by the fixture at various angles. Using the two views we can determine the location of maximum illumination; the blue line shows the maximum vertical lumens (section view) and the red line shows maximum horizontal lumens (plan view):

- For new Type 3 fixture, maximum illumination occurs when you are looking up at 20° angle and standing 75° to the side.
    - For a new fixture on a 12’ pole, this would put us about 38’ away from the pole. This would make a brighter light dimmer at a distance.
- The max illumination of 2148 for the old fixture is when you are looking up at a 55° angle and standing 55° to the side.
    - For an old fixture on a 12’ pole, this would put us about 15’ away from the pole. This closer distance would make a dimmer light seem brighter.

Despite the old fixture producing less lumens, by having the light shine closer it ends up being nearly twice as bright as new fixture. Being an omnidirectional fixture, this creates brighter spots all around the pole vs the new directional fixtures.

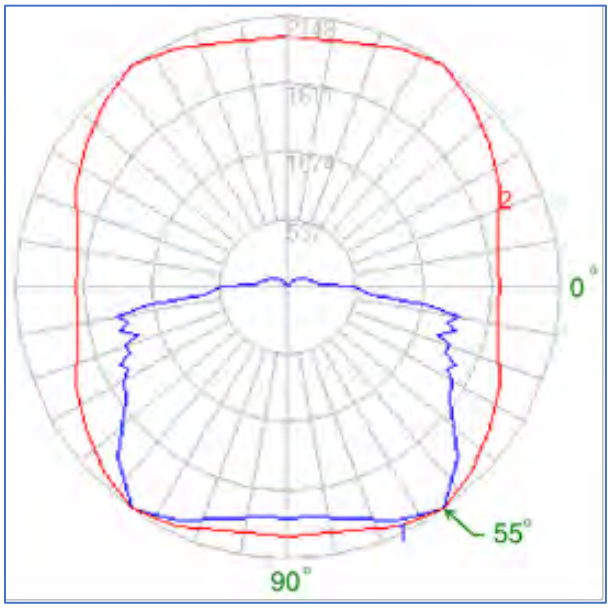


Figure 1. Light Spill from existing T5 fixture

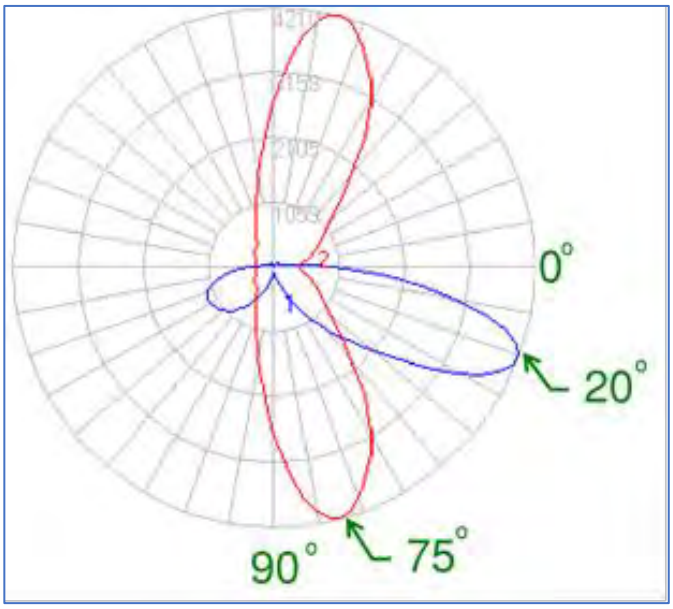


Figure 2. Light Spill from proposed new T3 fixture

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner _____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 17-245440 CU AD
CONDITIONS OF APPROVAL

Condition A: As part of the building *permit* application submittal, the following development-related conditions (B through L) must be noted on each of the four required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-245440 CU AD." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page.

Condition B: At the Upper Nursery, a 15-foot-deep L3 high-screen landscape buffer will be installed outside of the decorative steel fence on the west side of the enclosed area; and a S-foot-deep L3 high- screen landscape buffer, minus the tree requirement, will be installed outside of the decorative steel fence along the north side of the enclosed area landscaping (Exhibit C.4). The landscaping will extend the length of the fenced area. One break in the landscaping up to 20 feet wide will be permitted to provide vehicle access into the Upper Nursery development area. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection for the building or other permits required for the Upper Nursery development.
Response: Condition is met on Plan Sheets L3.3 and L3.4

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16- 113354 CO and 16—113360 CO, must either be removed or brought into conformance with the requirements of the Stormwater Management Manual within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: The trees identified for tree protection in Exhibits C.34, C.35, and C.36 are required to be preserved to Title 11 specifications throughout all related building or other permits required to carry out the work approved herein.
Response: Condition is met on Plan Sheets L0.00 through L0.09

Condition E: A landscape buffer will be provided on the east side of the multi-use path that is at least eight feet wide and planted to the L3 high-screen standard between the path and the proposed decorative steel fence. This landscape buffer will extend from the southern property line up approximately 250 linear feet to the north, where the proposed landscaping widens to more than this 8-foot minimum. The required trees on the east side of the multi-use path will be planted such that they are staggered with the existing row of trees on the adjacent property to the west.
Response: Condition is met on Plan Sheets L3.0.

Condition F: Prior to building permit issuance for the multi-use path, Applicant will provide evidence of a recorded easement allowing PP&R access to a 5-foot-wide strip of land on the eastern edge of 6323 SE DİVi5ion Street, running from the Division Street right-of-way north some 290 linear feet. This easement will allow PP&R to remove the existing fence, build a new or relocated fence, and plant and maintain plantings in the area. Within this 5-foot-wide easement area, the existing fence must be removed; the eastern four feet must be planted as shown on landscape plan L3.00; and any new or relocated fence must be installed in the western one foot of the easement area.
Response: Easement is currently under negotiation with neighbor; design requirements are shown in drawings.

Condition G: If an additional drive aisle is allowed off of SE 64th Avenue for access to the Upper Nursery through the current Historic Resource Review 17-158467 HRM, any one of the existing dirt or gravel vehicle access points on SE 64 h Avenue or within the first 100 feet of the southern Park entrance will be closed, so that the total number of vehicle access points from SE Sherman Street north 700 feet, is limited to four. The drive aisle will be closed as part of the building permit approving development in the Upper Nursery area.
Response: Condition is met on demolition plans, Sheets C0.50.

Condition H:Maintain the landscaping buffer between the western tennis courts and the west property line to the L3 standard for trees and shrubs into perpetuity.
Response: The landscape buffer between the western tennis courts and the property line is within Mt Tabor Park and will be maintained by PP&R staff into the future. Pending response from City.

Condition I: Prior to issuance of a building permit for the new Maintenance Building, Applicant shall remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than six months. All required landscaping must be installed prior to final inspection.
Response: Reference Exhibit A - L3.21.

Condition J: In the event of future construction, maintenance, or other sewerage system activities on the Bureau of Environmental Services sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans L3.00 and L3.10.
Response: Future construction activities related to condtions of approval are not currently planned. PP&R management team will be informed of the condition.

Condition K: In the reduced buffer area between the new maintenance building and the west property line/SE 64t' Avenue right-of-way between the south end of SE Sherman Street and the north end of SE Grant Street, the LI standard for trees and groundcover will be met, and a minimum of 25 shrubs will be planted (Exhibits H.14j and H.14k).
Response: This condition is met on Sheets L3.2.

Condition L: Prior to building or other permit issuance for the multi-use path, Applicant must provide a 20- foot-wide public access easement for a multi-use path that is a minimum of 12-feet wide between SE Sherman and SE Division Street in general alignment with SE 64th Avenue.
Response: Easement work is underway and will be resolved by permit issuance.

LU 17-158467 HRM
CONDITIONS OF APPROVAL

City Of Portland
RECEIVED FOR
CODE COMPLIANCE
Please Do Not Write In This Space

Condition A: As part of the building permit application submittal, the following development-related conditions (B through I) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 17-158467HRM." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
Response: Condition is met on Zoning Compliance Page, and referenced on A0.51 and A0.52.

Condition B: At the time of building permit submittal, a signed Certificate of Compliance form www.portlandoregon.gov/bds/article/623658 must be submitted to ensure the permit plans comply with the Design.
Response: A signed Certificate of Compliance form is included in the building permit submittal.

Condition C: The two temporary modular buildings within the Yard, approved through building permits 16-113354 CO and 16-113360 CO, must either be removed, or brought into conformance with the requirements of the Stormwater Management Manual (SWMM) within three years of the original certificate of occupancy for these buildings (end date of January 31, 2020).
Response: The offsite stormwater management fee was paid to BDS (Reference BDS receipt number 2307687) on February 14, 2020, thus satisfying compliance with Condition C.

Condition D: All trees, structures and fences must be located at least 7 feet from the existing public sanitary sewer pipe. BES will allow shrubs and shallow-rooted vegetated to be planted over the pipe. In the event of future construction, maintenance, or other sewerage system activities on the BES sanitary sewer crossing this site, the property owner will be responsible for replacing any vegetation removed as a result of said work with landscaping matching landscape plans Exhibit C22 & C23.
Response: Condition is met on plan C302. Landscape area is understood to be part of standard PP&R maintenance activities.

Condition E: Prior to building or other permit issuance for the multi-use path, the applicant must provide a 24-foot-wide public access easement for a multi-use path that is a minimum of 12-ft wide between SE Sherman and SE Division Street in general alignment with SE 64th Ave.
Response: Easement work is underway and will be resolved by permit issuance.

Condition F: Prior to installation of the art pieces, an approved encroachment permit from PBOT must be obtained.
Response: PP&R is coordinating the permits with PBOT. Permits will be pursued after building permits are finalized. Noted on Sheets ART1.0 & ART1.1

Condition G: The public art in the three noted locations along the multi-modal pathw
by the Regional Arts & Culture Council (RACC) and installed prior to issuance of the
certificate of occupancy, or sooner.
Response: PP&R has coordinated public art through RACC. Project work is to be a
to certificate of occupancy. Noted on Sheets ART1.0 & ART1.1

Condition H: Public art or significant landscaping will be installed at the south entran
Parks, near the intersection of SE Lincoln Street and SE 65th Avenue as shown in E
the next phase of the Parks Master Plan implementation.
Response: The landscape buffer between the western tennis courts and the propert
Tabor Park and will be maintained by PP&R staff into the future.

Condition I: Railings at the bridge shall be similar to, but simpler than, the recently a
for the Mt. Tabor Park stairway. The railings shall be painted, rather than galvanized
harmonizes with the neighboring landscaping, and need not be black to match the fe
Response: This condition is met on plan sheets A5.13.

Condition J: No field changes allowed.
Response: No field changes will be made.

Date
Approved
City of Portland
Bureau of Development Services
Planner
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

KEY PLAN

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34"

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

opsis
503.525.9511
www.opsisarch.com
920 NORTHWEST SEVENTEENTH AVENUE
PORTLAND | OREGON | 97209

PERMIT SET
11.19.2019

REGISTERED ARCHITECT
PAUL G. KINLEY
PORTLAND, OREGON
4589
STATE OF OREGON

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director
6437 SE Division St, Portland, OR 97206

ZONING COMPLIANCE PAGE
MT. TABOR MAINTENANCE FACILITY
PROJECT MANAGER: ROBIN LAUGHLIN
DRAWN BY: Author
SECTION:
SCALE: REFERENCE DETAILS
DATE: 11.19.2019

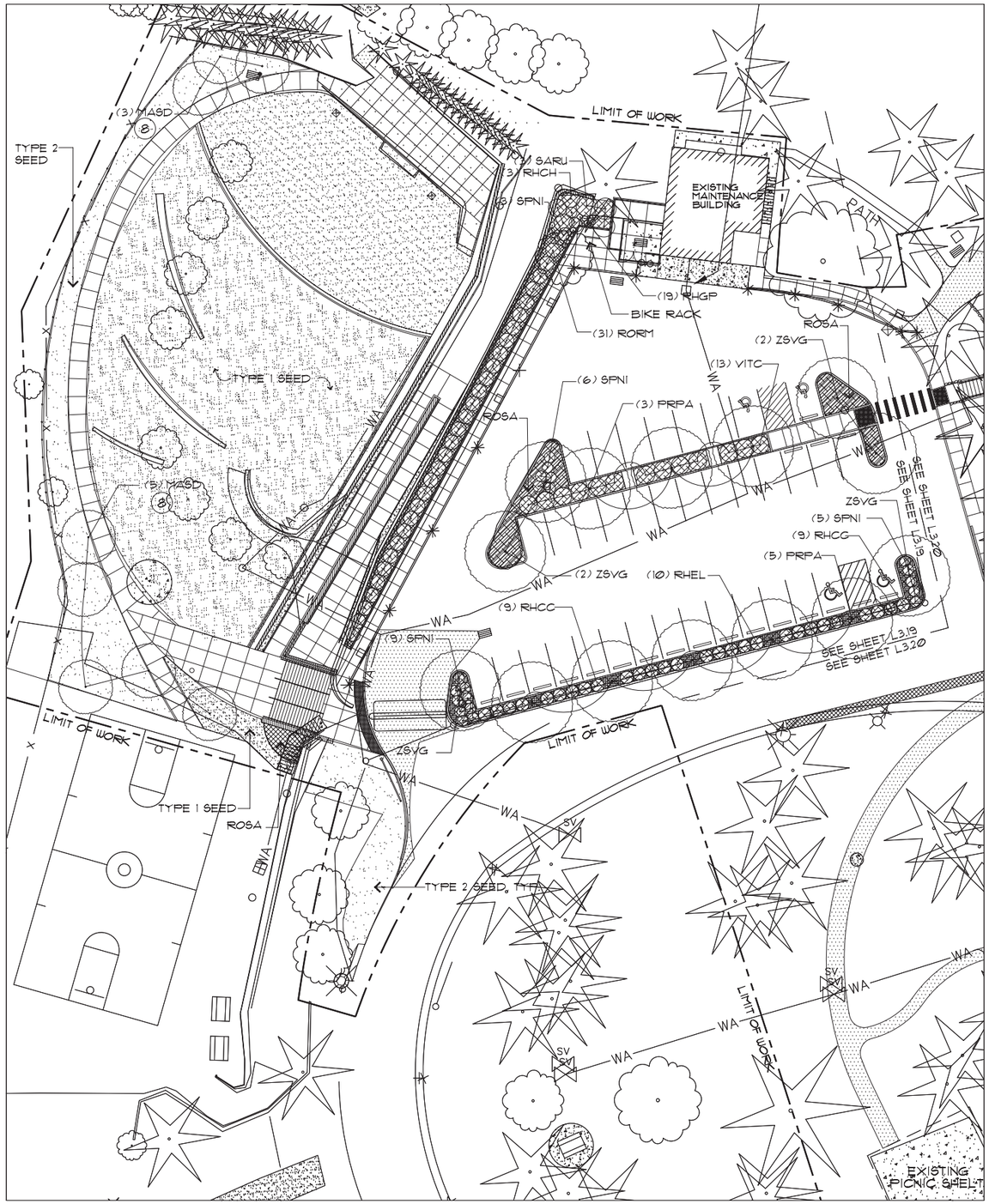
REVISIONS		
DATE	DESCRIPTION	BY
1	Revision 1	02.15.20

PARKS REPLACEMENT BOND 2014

G1.02

Job No.
4654-01

PLOTTED FROM:
PLOTTED BY:
PLOTTED ON: 4/14/2020 12:52:13 PM
DRAWINGS\FILES



PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	CONDITION/SIZE/SPACING
TREE:			
ACMA	ACER MACROPHYLLUM	BIGLEAF MAPLE	B&B/ 3" CAL./ AS SHOWN
ALRU	ALNUS RUBRA	RED ALDER	B&B/ 3" CAL./ AS SHOWN
MASD	MALUS 'SNOWDRIFT'	SNOWDRIFT CRABAPPLE	B&B/ 3" CAL./ AS SHOWN
PRPA	PRUNUS PADUS	EUROPEAN BIRD CHERRY	B&B/ 3" CAL./ AS SHOWN
QURU	QUERCUS RUBRA	RED OAK	B&B/ 3" CAL./ AS SHOWN
ZSVG	ZELKOVA SERATA 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	B&B/ 3" CAL./ AS SHOWN
SHRUB:			
DAOD	DAPHNE ODORA	WINTER DAPHNE	3 GAL. CONT/ AS SHOWN
HYPE	HYDRANGEA MACROPHYLLA 'PINK ELF'	PINK ELF HYDRANGEA	2 GAL. CONT/ AS SHOWN
POMU	POLYSTICHUM MUNITUM	SWORD FERN	1 GAL. CONT/ AS SHOWN
RHCH	RHODODENDRON 'CHRISTMAS CHEER'	CHRISTMAS CHEER RHOD.	12-18"/ AS SHOWN
RHCC	RHODODENDRON 'CREAM CREST'	CREAM CREST RHODODENDRON	12-18"/ AS SHOWN
RHDA	RHODODENDRON 'DORA AMATEIS'	DORA AMATEIS RHODODENDRON	12-18"/ AS SHOWN
RHEL	RHODODENDRON 'ELIZABETH'	ELIZABETH RHODODENDRON	12-18"/ AS SHOWN
RHGP	RHODODENDRON 'GUMPO PINK'	PINK GUMPO AZALEA	12-18"/ AS SHOWN
RHMA	RHODODENDRON 'MARS'	MARS RHODODENDRON	12-18"/ AS SHOWN
RHSW	RHODODENDRON 'SCARLET WONDER'	SCARLET WONDER RHOD.	12-18"/ AS SHOWN
RORM	ROSA 'RED MEIDILAND'	RED MEIDILAND ROSE	2 GAL. CONT/ 4' O.C.
SAHH	SARCOCOCCA HOOKERANA HUMILIS	CREEPING SARCOCOCCA	1 GAL. CONT./ AS SHOWN
SARU	SARCOCOCCA RUSCIFOLIA	FRAGRANT SARCOCOCCA	2 GAL. CONT./ AS SHOWN
SKJA	SKIMMIA JAPONICA	JAPANESE SKIMMIA	2 GAL. CONT/ AS SHOWN
SPNI	SPIRAEA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIRAEA	2 GAL. CONT./ AS SHOWN
VITC	VIBURNUM TINUS 'COMPACTA'	DWARF LAURUSTINUS	5 GAL. CONT./ AS SHOWN
GROUNDCOVERS:			
	ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	1 GAL. CONT./ 18" O.C.
	FRAGARIA CHILOENSIS	WILD STRAWBERRY	1 GAL. CONT./ 12" O.C.
	GERANIUM MACRORRHIZUM 'BEVENS'	BEVENS GERANIUM	1 GAL. CONT./ 12" O.C.
	MAHONIA REPENS	CREEPING MAHONIA	1 GAL. CONT./ 18" O.C.
	NARCISSUS 'GOLDEN SPUR'	GOLDEN SPUR DAFFODIL	PROVIDE 200 BULBS FOR INSTALLATION WHERE SHOWN BY OWNER'S REPRESENTATIVE.
	ROSA 'ROBIN RED BREAST'	ROBIN RED BREAST ROSE	1 GAL. CONT. / 24" O.C./ TRI. SP.
	ROSA 'SNOW ON THE HEATHER'	SNOW ON THE HEATHER ROSE	1 GAL. CONT. / 36" O.C./ TRI. SP.
	TYPE 1 SEED, SEE SPECIFICATIONS.		
	TYPE 2 SEED, SEE SPECIFICATIONS.		

NOTES

1. SEE COVER SHEET FOR GENERAL NOTES.
2. GRADE SMOOTH ALL AREAS DISTURBED BY CONSTRUCTION NOT SCHEDULED FOR OTHER IMPROVEN AND SEED WITH TYPE 1 SEED MIXTURE. SEE SPECIFICATIONS.
3. QUANTITIES INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. INSTALL NUMBER O AS DRAWN.
4. PROVIDE SMOOTH FLOWING TRANSITIONS BETWEEN PLANT MATERIALS. LOCATE PLANTS IN FIELD FO BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
5. ADD BARK MULCH TO EXISTING SHRUB AREAS DISTURBED BY CONSTRUCTION. PROVIDE A MINIMUM FOR DISTURBED SHRUB AREAS, TYPICAL.
6. OWNER'S REPRESENTATIVE TO LOCATE PLANTS IN RESTROOM AREA FOR INSTALLATION.
7. PROVIDE TEMPORARY WATERING TO ALL NEW PLANT MATERIAL LOCATED IN AREAS WHICH DO NOT AUTOMATIC IRRIGATION UNTIL FINAL ACCEPTANCE. SEE SPECIFICATIONS.
8. STAKE ALL TREE LOCATIONS IN FIELD FOR OWNER'S REPRESENTATIVE TO ADJUST PRIOR TO INSTAL
9. WHERE ROSES ARE PLANTED INDIVIDUALLY, MINIMUM PLANTING PIT TO BE 24"X24"X24" DEEP.
10. SEE SHEET L7.1 FOR ADDITIVE ALTERNATE PLANT MATERIAL.

NOT IN CONTRACT, WORK BY OWNER

NOTE: IF SHEET SIZE NOT 22" x 35", SCALE IS INCORRECT.

NORTH

100% CONSTRUCTION DOCUMENTS

City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 09/24/21
Bureau: PP&R
LU 21-248126 CU AD

33.700.020, Conformance With LU 17-245440 CU AD, Conditional Use Review and Adjustment Review, Condition of Approval I. Prior to issuance of the new Maintenance Building building permit, remove damaged plantings and supplement current healthy landscape plantings in the curbed landscape islands within and directly south of the Caldera Parking Lot to match the original 1999 landscape plan, as shown on Exhibit H.14p. The installation of any required landscaping may be deferred during the summer or winter months to the next planting season, but never for more than 6 months. All required landscaping must be installed prior to final inspection.

Date 1-25-2024
"Approved"
City of Portland
Bureau of Development Services
Planner
*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

PORTLAND PARKS & Recreation

REGISTERED NO. 222 MICHAEL W. ZILIS OREGON LANDSCAPE ARCHITECT

WALKER·MACY
121 Southwest Oak Street, Suite 300, Portland, OR (503) 224-3123

Portland Parks and Recreation
JAMES FRANCESCONI, Commissioner
CHARLES JORDAN, Director

AMPHITHEATER and MAIN PARKING
Planting Plan
MT. TABOR PARK
Portland, Oregon

Project Manager: GEORGE LOZOVOY
Construction Manager: GARY WOODRUFF 823-5933
DESIGN BY: ES, JB CHECKED BY: KL, MZ
SCALE: AS NOTED DRAWN BY: ES
DATE: 05/21/99

REVISIONS		
DATE	DESCRIPTION	BY

Let's Portland Parks

L3.21
LR 2.00

PLOTTED BY: $USERNAME$ PLOTTED FROM: $COMPUTERNAME$

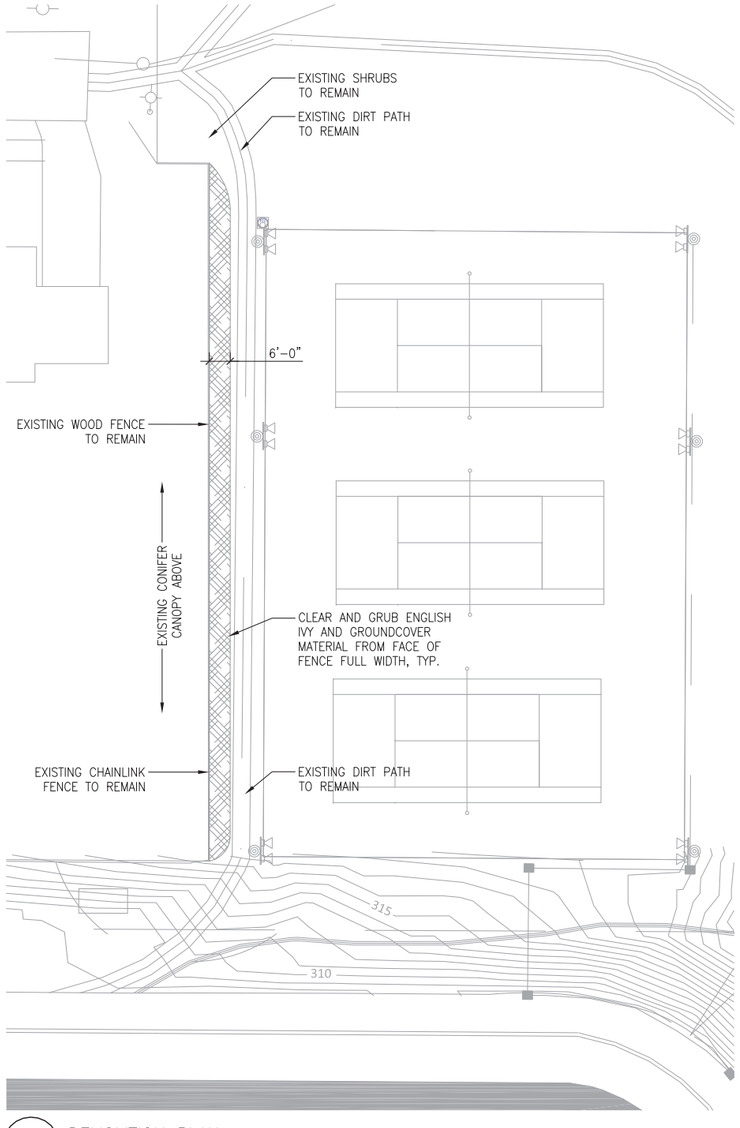
PLOTTED ON: $DATE$

DRAWING: $FILE$

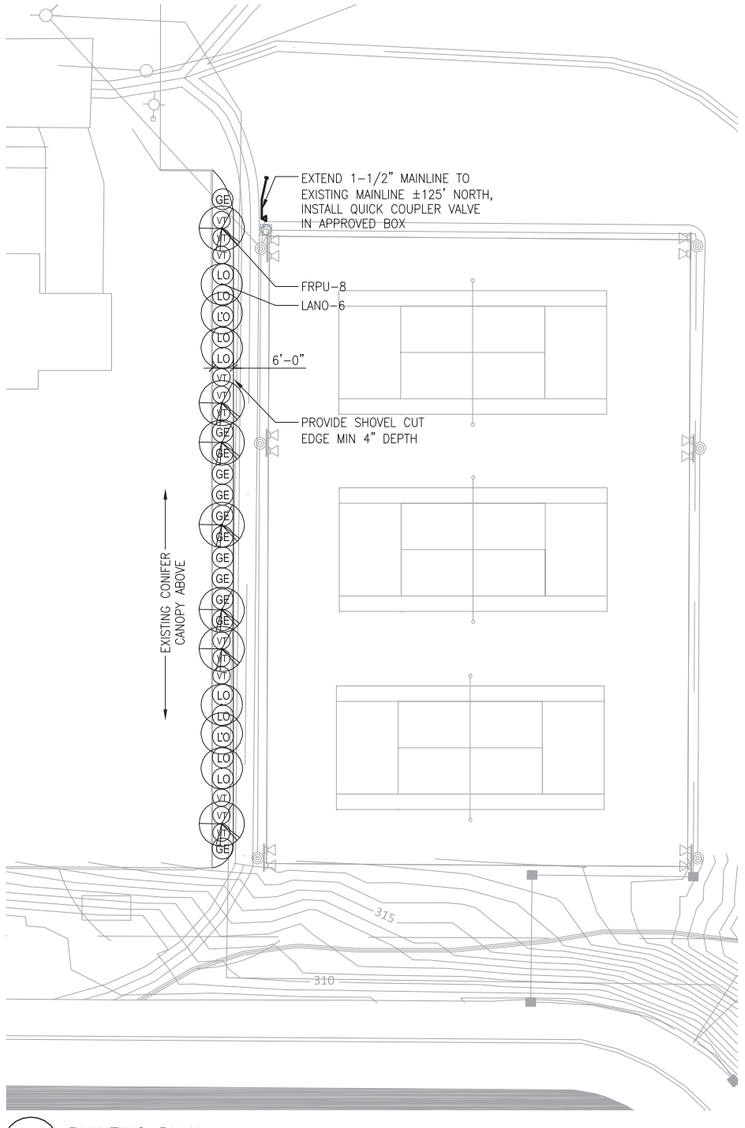
PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	SPACING	HEIGHT
	TREES				
FRPU	FRANGULA PURSHIANA	CASCARA BUCKTHORN	1-1/2" CAL.	AS SHOWN	SMALL TREE
LANO	LAURUS NOBILIS	SWEET BAY	1-1/2" CAL.	AS SHOWN	SMALL TREE
	SHRUBS				
GE	GARRYA ELLIPTICA	WAVYLEAF SILKTASSEL	2 GAL. CONT.	AS SHOWN	6-8'
LO	LOROPETALUM CHINENSE v. RUBRUM	PINK-FLOWERING FRINGE-FLOWER	2 GAL. CONT.	AS SHOWN	6
VT	VIBURNUM TINUS	LAURUSTINUS VIBURNUM	2 GAL. CONT.	AS SHOWN	6-8'

City Of Portland
REVIEWED FOR
CODE COMPLIANCE
Date: 09/24/21
Project#: 19-143914-000-00-CO



1 DEMOLITION PLAN



2 PLANTING PLAN

PLANTING NOTES:

1. VERIFY LOCATION OF EXISTING FEATURES INDICATED TO REMAIN PRIOR TO SOIL PREPARATION. PROTECT ALL TREES AND SHRUBS INDICATED TO REMAIN. PLANTING LOCATIONS SHALL BE ADJUSTED TO BEST FIT EXISTING FEATURES TO REMAIN.
2. PLANTING AREAS TO BE SUFFICIENTLY CLEANED OF ROCK, DEBRIS, AND ENGLISH IVY FROM BASE OF FENCE TO EDGE OF WALK TO REMAIN.

GENERAL NOTES

1. NOT IN SCOPE OF WORK – TO BE COMPLETED BY OWNER
2. 33.258.070, CONFORMANCE WITH LU 17-245440 CU AD, CONDITIONAL USE REVIEW AND ADJUSTMENT REVIEW, CONDITION OF APPROVAL H: MAINTAIN THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE TO THE L3 STANDARD FOR TREES AND SHRUBS INTO PERPETUITY. TO COMPLY WITH THIS CONDITION OF APPROVAL, PLEASE PROVIDE A DETAILED LANDSCAPE PLAN TO DOCUMENT THE EXISTING CONDITIONS AND DEMONSTRATE THE LANDSCAPING BUFFER BETWEEN THE WESTERN TENNIS COURTS AND THE WEST PROPERTY LINE WILL BE MAINTAINED TO COMPLY WITH THE L3 STANDARD AS PART OF THIS PERMIT.

PLANTING REQUIREMENTS

	REQUIRED	PROVIDED
TOTAL FRONTAGE:	186-LF	186-LF
TOTAL TREES:	12.4	13
TOTAL SHRUBS:	31	34

Date
"Approved"
City of Portland
Bureau of Development Services
Planner
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

0 5 10 20 40
SCALE: 1" = 20'-0"

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 22" X 34".

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Nick Fish, Commissioner - Adena Long, Director

Mt Tabor Park Tennis Court Screening
Mt Tabor Park
Portland, Oregon

PROJECT MANAGER: RML
DRAWN BY:G DATKA
SECTION:
SCALE: as shown
DATE: July 29, 2020

REVISIONS

DATE	DESCRIPTION	BY

LR1.00

CASE NO. LU 17-245440 CU AD
EXHIBIT C.1

Mt. Tabor Park Overall Site Plan

Approved
City of Portland
Bureau of Development Services
Planner
Date 1-25-2024
*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

The new development is focused in the Maintenance Yard, Upper Nursery and Long Block, but the Adjustments consider the entire site. The two Adjustments to perimeter and interior parking lot landscaping look at parking in the maintenance yard, at the existing parking lot, and at the shared parking on Tabor Summit Dr. The Buffering Adjustment looks at the entire perimeter of the park.

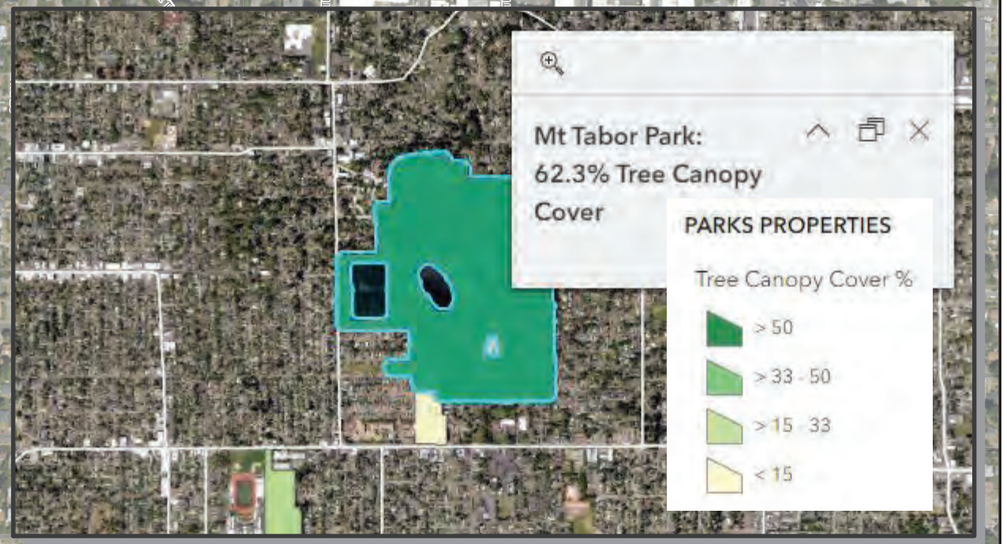
Condition G: Maintain L3 buffer for trees and shrubs counted at this

MT. TABOR PARK

MT TABOR MAINTENANCE BUILDING

PORTLAND PARKS & RECREATION | opsis architecture LLP

Mt Tabor Park Tree Canopy and Inventory



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Mt Tabor Park Tree Inventory

Table Page 1

TreeNo	Genus species	Common Name	DBH	Size
1	Liriodendron tulipifera	tuliptree	4.4	L
2	Cryptomeria japonica	Japanese cedar	10.4	M
3	Pinus strobus	eastern white pine	10.6	L
4	Picea smithiana	Himalayan spruce	6	L
5	Prunus serrulata	Japanese flowering cherry	2.9	S
6	Prunus serrulata	Japanese flowering cherry	30	S
7	Prunus serrulata	Japanese flowering cherry	26.5	S
8	Prunus serrulata	Japanese flowering cherry	6.7	S
9	Prunus serrulata	Japanese flowering cherry	4.3	S
10	Prunus serrulata	Japanese flowering cherry	28.6	S
11	Gymnocladus dioica	Kentucky coffeetree	3.2	L
12	Prunus serrulata	Japanese flowering cherry	14.4	S
13	Pterocarya spp.	wingnut	3.2	S
14	Pseudotsuga menziesii	Douglas-fir	13.9	L
15	Pseudotsuga menziesii	Douglas-fir	15.8	L
16	Pseudotsuga menziesii	Douglas-fir	13.3	L
17	Acer heldreichii	Balkan maple	11.6	M
18	Thuja plicata	western redcedar	13.6	L
19	Chamaecyparis obtusa	Hinoki falsecypress	6	L
20	Carpinus betulus	European hornbeam	12	M
21	Thuja plicata	western redcedar	8	L
22	Abies grandis x concolor	Leuteneggeri hybrid fir	23.8	S
23	Sequoia sempervirens	coast redwood	24.6	L
24	Thuja plicata	western redcedar	23.2	L
25	Acer campestre	hedge maple	5	M
26	Tilia tomentosa	silver linden	40.5	L
27	Acer macrophyllum	bigleaf maple	1.5	L
28	Acer macrophyllum	bigleaf maple	1.7	L
29	Crataegus monogyna	English hawthorn, common	16	S
30	Cedrus deodara	deodar cedar	39.2	L
31	Crataegus monogyna	English hawthorn, common	22.7	S
32	Cedrus deodara	deodar cedar	33	L
33	Crataegus monogyna	English hawthorn, common	11.7	S
34	Cedrus deodara	deodar cedar	35.7	L
35	Crataegus monogyna	English hawthorn, common	18.3	S
36	Sequoiadendron giganteum	giant sequoia	26	L
37	Cedrus deodara	deodar cedar	41.1	L
38	Acer macrophyllum	bigleaf maple	36.7	L
39	Crataegus monogyna	English hawthorn, common	14.3	S
40	Salix spp.	willow	19	M
41	Pseudotsuga menziesii	Douglas-fir	36	L
42	Crataegus monogyna	English hawthorn, common	25.7	S
43	Crataegus monogyna	English hawthorn, common	19.8	S
44	Malus spp.	ornamental crabapple	12.4	S
45	Crataegus monogyna	English hawthorn, common	15.5	S
46	Liquidambar styraciflua	sweetgum	13	M
47	Prunus serrulata	Japanese flowering cherry	23.2	S
48	Quercus palustris	pin oak	3.3	L
49	Prunus serrulata	Japanese flowering cherry	28.2	S
50	Prunus serrulata	Japanese flowering cherry	22.7	S
51	Prunus serrulata	Japanese flowering cherry	28.6	S
52	Gymnocladus dioica	Kentucky coffeetree	7.6	L
53	Prunus serrulata	Japanese flowering cherry	14.7	S
54	Alnus rubra	red alder	12.9	M
55	Pseudotsuga menziesii	Douglas-fir	1.2	L
56	Styrax japonicus	Japanese snowbell	4	S
57	Sequoiadendron giganteum	giant sequoia	29	L
58	Pinus ponderosa	ponderosa pine	14.1	L
59	Chamaecyparis obtusa	Hinoki falsecypress	6	L
60	Picea smithiana	Himalayan spruce	7.5	L
61	Acer davidii	snakebark maple	5.8	S
62	Acer davidii	snakebark maple	8.3	S
63	Thuja plicata	western redcedar	10	L
64	Sequoia sempervirens	coast redwood	29.3	L
65	Calocedrus decurrens	incense cedar	35	L
66	Quercus palustris	pin oak	3.1	L
67	Prunus serrulata	Japanese flowering cherry	2.8	S
68	Prunus serrulata	Japanese flowering cherry	34	S
69	Picea smithiana	Himalayan spruce	6	L
70	Prunus serrulata	Japanese flowering cherry	22.5	S
71	Pinus ponderosa	ponderosa pine	15.8	L
72	Sequoia sempervirens	coast redwood	24.3	L
73	Pseudotsuga menziesii	Douglas-fir	11.2	L
74	Pinus ponderosa	ponderosa pine	12.3	L
75	Chamaecyparis obtusa	Hinoki falsecypress	6	L
76	Chamaecyparis obtusa	Hinoki falsecypress	6	L
77	Crataegus monogyna	English hawthorn, common	0.5	S
78	Acer davidii	snakebark maple	7.8	S
79	Carpinus betulus	European hornbeam	12.5	M
80	Thuja plicata	western redcedar	8	L
81	Calocedrus decurrens	incense cedar	25	L
82	Calocedrus decurrens	incense cedar	25	L
83	Acer platanoides	Norway maple	3.8	M
84	Acer macrophyllum	bigleaf maple	1.7	L
85	Tilia tomentosa	silver linden	63.9	L
86	Crataegus monogyna	English hawthorn, common	20.4	S
87	Sequoiadendron giganteum	giant sequoia	1	L
88	Cedrus deodara	deodar cedar	23	L
89	Cedrus deodara	deodar cedar	31	L
90	Cedrus deodara	deodar cedar	31.9	L
91	Crataegus monogyna	English hawthorn, common	17.5	S
92	Crataegus monogyna	English hawthorn, common	13	S
93	Pseudotsuga menziesii	Douglas-fir	5.4	L
94	Malus spp.	ornamental crabapple	12.5	S
95	Prunus avium	bird cherry	7	M
96	Crataegus monogyna	English hawthorn, common	15	S
97	Pseudotsuga menziesii	Douglas-fir	28.8	L
98	Malus spp.	ornamental crabapple	10.1	S
99	Pseudotsuga menziesii	Douglas-fir	41.2	L
100	Pseudotsuga menziesii	Douglas-fir	23.5	L
101	Prunus serrulata	Japanese flowering cherry	32.4	S
102	Crataegus monogyna	English hawthorn, common	21.2	S
103	Prunus serrulata	Japanese flowering cherry	2.1	S
104	Prunus serrulata	Japanese flowering cherry	28.7	S
105	Prunus serrulata	Japanese flowering cherry	26	S
106	Gymnocladus dioica	Kentucky coffeetree	8.3	L
107	Prunus serrulata	Japanese flowering cherry	25.2	S
108	Pinus ponderosa	ponderosa pine	17.3	L
109	Prunus serrulata	Japanese flowering cherry	34.5	S
110	Pinus ponderosa	ponderosa pine	17.6	L
111	Pterocarya spp.	wingnut	2.1	S
112	Pseudotsuga menziesii	Douglas-fir	1	L
113	Pterocarya spp.	wingnut	3.5	S
114	Pseudotsuga menziesii	Douglas-fir	1.2	L
115	Sequoiadendron giganteum	giant sequoia	32.3	L
116	Sequoiadendron giganteum	giant sequoia	30.8	L
117	Pseudotsuga menziesii	Douglas-fir	15.3	L
118	Chamaecyparis obtusa	Hinoki falsecypress	4.2	L
119	Thuja plicata	western redcedar	10.8	L
120	Chamaecyparis obtusa	Hinoki falsecypress	5	L
121	Picea pungens	Colorado blue spruce	5.3	L
122	Acer davidii	snakebark maple	9.2	S
123	Pinus ponderosa	ponderosa pine	25.1	L
124	Fagus sylvatica	European beech	14	L
125	Styphnolobium japonicum syn. Sophora japonica	Japanese pagoda tree, Chinese	3.6	M
126	Cladrastis kentukea	American yellowwood	12.9	M
127	Calocedrus decurrens	incense cedar	30	L
128	Malus spp.	ornamental crabapple	13.9	S
129	Sequoiadendron giganteum	giant sequoia	11.8	L
130	Malus fusca	Pacific crabapple	14	S
131	Picea pungens	Colorado blue spruce	31.4	L
132	Crataegus monogyna	English hawthorn, common	24.4	S
133	Crataegus monogyna	English hawthorn, common	12.5	S
134	Crataegus monogyna	English hawthorn, common	19.5	S
135	Pyrus calleryana	flowering pear	6.1	M
136	Acer macrophyllum	bigleaf maple	15.5	L
137	Populus nigra	black poplar, Lombardy poplar	13.6	L
138	Ostrya virginiana	American hophornbeam	2.7	M
139	Crataegus monogyna	English hawthorn, common	13	S
140	Pseudotsuga menziesii	Douglas-fir	48.8	L
141	Thuja plicata	western redcedar	4.9	L
142	Acer saccharum	sugar maple	4.9	L
143	Sequoiadendron giganteum	giant sequoia	99	L
144	Cedrus deodara	deodar cedar	37.8	L
145	Cedrus deodara	deodar cedar	40.7	L
146	Sequoiadendron giganteum	giant sequoia	22.4	L
147	Sequoiadendron giganteum	giant sequoia	31.6	L
148	Cedrus deodara	deodar cedar	21.6	L
149	Cedrus deodara	deodar cedar	31	L
150	Crataegus monogyna	English hawthorn, common	11	S
151	Cedrus deodara	deodar cedar	26.2	L
152	Malus spp.	ornamental crabapple	15.8	S
153	Crataegus monogyna	English hawthorn, common	10.8	S
154	Crataegus monogyna	English hawthorn, common	11	S
155	Crataegus monogyna	English hawthorn, common	18.5	S
156	Populus nigra	black poplar, Lombardy poplar	17.7	L
157	Crataegus monogyna	English hawthorn, common	11.8	S
158	Pseudotsuga menziesii	Douglas-fir	44.5	L
159	Ostrya virginiana	American hophornbeam	2.5	M
160	Pseudotsuga menziesii	Douglas-fir	40.6	L
161	Pseudotsuga menziesii	Douglas-fir	56.8	L
162	Acer macrophyllum	bigleaf maple	28.8	L
163	Pseudotsuga menziesii	Douglas-fir	37.3	L
164	Crataegus monogyna	English hawthorn, common	13.6	S
165	Crataegus monogyna	English hawthorn, common	13.1	S
166	Crataegus monogyna	English hawthorn, common	19.9	S
167	Crataegus monogyna	English hawthorn, common	20.2	S
168	Crataegus monogyna	English hawthorn, common	10.3	S
169	Pseudotsuga menziesii	Douglas-fir	34	L
170	Crataegus monogyna	English hawthorn, common	18.2	S
171	Crataegus monogyna	English hawthorn, common	18.2	S
172	Crataegus monogyna	English hawthorn, common	13.2	S
173	Crataegus monogyna	English hawthorn, common	20.4	S
174	Crataegus monogyna	English hawthorn, common	13.1	S
175	Pyrus communis	European pear (including	8.1	M
176	Pseudotsuga menziesii	Douglas-fir	41.3	L
177	Pseudotsuga menziesii	Douglas-fir	37.6	L
178	Pseudotsuga menziesii	Douglas-fir	34.9	L
179	Pseudotsuga menziesii	Douglas-fir	46.1	L
180	Prunus sargentii	Sargent's cherry	9.6	S
181	Pseudotsuga menziesii	Douglas-fir	44.2	L
182	Prunus sargentii	Sargent's cherry	2.5	S
183	Prunus sargentii	Sargent's cherry	6	S
184	Pseudotsuga menziesii	Douglas-fir	49.2	L
187	Pseudotsuga menziesii	Douglas-fir	33.7	L
188	Zelkova serrata	Japanese zelkova	10	M
189	Pseudotsuga menziesii	Douglas-fir	36.7	L
190	Pseudotsuga menziesii	Douglas-fir	27.9	L
191	Pseudotsuga menziesii	Douglas-fir	41.1	L
192	Fagus sylvatica	European beech	25	L
193	Pseudotsuga menziesii	Douglas-fir	47.2	L
194	Pseudotsuga menziesii	Douglas-fir	35.9	L
195	Pseudotsuga menziesii	Douglas-fir	36.1	L
196	Prunus cerasifera	flowering plum	4.9	S
197	Pseudotsuga menziesii	Douglas-fir	31.7	L
198	Pseudotsuga menziesii	Douglas-fir	31	L
199	Pseudotsuga menziesii	Douglas-fir	42.9	L
200	Cornus nuttallii	Pacific dogwood	4.8	M
201	Pseudotsuga menziesii	Douglas-fir	50.2	L
202	Pseudotsuga menziesii	Douglas-fir	48.3	L
203	Thuja plicata	western redcedar	1.3	L
204	Pseudotsuga menziesii	Douglas-fir	45.3	L
205	Pseudotsuga menziesii	Douglas-fir	44.1	L
206	Prunus sargentii	Sargent's cherry	3.4	S
207	Zelkova serrata	Japanese zelkova	13.7	M
208	Zelkova serrata	Japanese zelkova	10.1	M
209	Zelkova serrata	Japanese zelkova	12.5	M
210	Pseudotsuga menziesii	Douglas-fir	24.7	L
211	Pseudotsuga menziesii	Douglas-fir	34.4	L
212	Pseudotsuga menziesii	Douglas-fir	47.4	L
213	Pseudotsuga menziesii	Douglas-fir	30.8	L
214	Zelkova serrata	Japanese zelkova	10.5	M
215	Pseudotsuga menziesii	Douglas-fir	21.8	L
216	Quercus rubra	northern red oak	30.2	L
217	Pseudotsuga menziesii	Douglas-fir	45.9	L
218	Acer platanoides	Norway maple	14.3	M
219	Pseudotsuga menziesii	Douglas-fir	33.9	L
220	Pseudotsuga menziesii	Douglas-fir	69.4	L
221	Pseudotsuga menziesii	Douglas-fir	23	L
222	Pseudotsuga menziesii	Douglas-fir	38.4	L
223	Pseudotsuga menziesii	Douglas-fir	36.8	L
224	Platanus x acerifolia	London plane tree	11.2	L
225	Pseudotsuga menziesii	Douglas-fir	32.7	L
226	Pseudotsuga menziesii	Douglas-fir	37.4	L
227	Thuja plicata	western redcedar	3	L
228	Pseudotsuga menziesii	Douglas-fir	37.1	L
229	Fagus sylvatica	European beech	11	L
230	Pseudotsuga menziesii	Douglas-fir	49.2	L
231	Prunus sargentii	Sargent's cherry	5.7	S
232	Fagus sylvatica	European beech	20.5	L
233	Pseudotsuga menziesii	Douglas-fir	48.7	L
234	Pseudotsuga menziesii	Douglas-fir	33	L
235	Pseudotsuga menziesii	Douglas-fir	35	L
236	Pseudotsuga menziesii	Douglas-fir	30.5	L
237	Pseudotsuga menziesii	Douglas-fir	31.6	L
238	Pseudotsuga menziesii	Douglas-fir	43.8	L
239	Pseudotsuga menziesii	Douglas-fir	33.9	L
240	Pseudotsuga menziesii	Douglas-fir	40.7	L
241	Pseudotsuga menziesii	Douglas-fir	28.6	L
242	Pseudotsuga menziesii	Douglas-fir	47	L
243	Pseudotsuga menziesii	Douglas-fir	20.9	L
244	Pseudotsuga menziesii	Douglas-fir	9	L
245	Pseudotsuga menziesii	Douglas-fir	9	L
246	Pseudotsuga menziesii	Douglas-fir	9	L
247	Pseudotsuga menziesii	Douglas-fir	9	L
248	Pseudotsuga menziesii	Douglas-fir	9	L
249	Acer macrophyllum	bigleaf maple	9	L
250	Acer palmatum	Japanese maple	8.1	S

Date ___ *Approved*
City of Portland
Bureau of Development Services

Planner _____

1-25-2024

*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Mt Tabor Park Tree Inventory

Table Page 2

TreeNo	Genus species	Common Name	DBH	Size
251	Platanus x acerifolia	London plane tree	19.5	L
252	Pseudotsuga menziesii	Douglas-fir	25.7	L
253	Tsuga heterophylla	western hemlock	4.3	L
254	Pseudotsuga menziesii	Douglas-fir	39	L
255	Malus spp.	ornamental crabapple	8.2	S
256	Pseudotsuga menziesii	Douglas-fir	31.6	L
257	Quercus rubra	northern red oak	15.4	L
258	Pseudotsuga menziesii	Douglas-fir	38.8	L
259	Pseudotsuga menziesii	Douglas-fir	35.4	L
260	Pseudotsuga menziesii	Douglas-fir	32.2	L
261	Pseudotsuga menziesii	Douglas-fir	27.7	L
262	Pseudotsuga menziesii	Douglas-fir	53	L
263	Pseudotsuga menziesii	Douglas-fir	44.7	L
264	Pseudotsuga menziesii	Douglas-fir	44.2	L
265	Pseudotsuga menziesii	Douglas-fir	30	L
266	Pseudotsuga menziesii	Douglas-fir	35.9	L
267	Pseudotsuga menziesii	Douglas-fir	40.8	L
268	Pseudotsuga menziesii	Douglas-fir	30.2	L
269	Pseudotsuga menziesii	Douglas-fir	36.2	L
270	Pseudotsuga menziesii	Douglas-fir	36.3	L
271	Pseudotsuga menziesii	Douglas-fir	1.7	L
272	Pseudotsuga menziesii	Douglas-fir	47.5	L
273	Pseudotsuga menziesii	Douglas-fir	47.3	L
274	Pseudotsuga menziesii	Douglas-fir	34.6	L
275	Pseudotsuga menziesii	Douglas-fir	26.9	L
276	Malus spp.	ornamental crabapple	5.2	S
277	Pseudotsuga menziesii	Douglas-fir	26	L
278	Pseudotsuga menziesii	Douglas-fir	41.9	L
279	Betula papyrifera	paper birch	5.7	M
280	Malus fusca	Pacific crabapple	6.9	S
281	Pseudotsuga menziesii	Douglas-fir	37.6	L
282	Tsuga heterophylla	western hemlock	34.2	L
283	Alnus rubra	red alder	12	M
284	Pseudotsuga menziesii	Douglas-fir	29.7	L
285	Pseudotsuga menziesii	Douglas-fir	35.8	L
286	Pseudotsuga menziesii	Douglas-fir	27.6	L
287	Pseudotsuga menziesii	Douglas-fir	42.9	L
288	Fagus grandifolia	American beech	41.9	L
289	Pseudotsuga menziesii	Douglas-fir	23.7	L
290	Pseudotsuga menziesii	Douglas-fir	36.7	L
291	Pseudotsuga menziesii	Douglas-fir	32.6	L
292	Pseudotsuga menziesii	Douglas-fir	45.9	L
293	Pseudotsuga menziesii	Douglas-fir	46.9	L
294	Pseudotsuga menziesii	Douglas-fir	50.4	L
295	Pseudotsuga menziesii	Douglas-fir	25.8	L
296	Pseudotsuga menziesii	Douglas-fir	34.3	L
297	Pseudotsuga menziesii	Douglas-fir	38.1	L
298	Pseudotsuga menziesii	Douglas-fir	37.3	L
299	Pseudotsuga menziesii	Douglas-fir	34.2	L
300	Pseudotsuga menziesii	Douglas-fir	36.4	L
301	Pseudotsuga menziesii	Douglas-fir	31.7	L
302	Pseudotsuga menziesii	Douglas-fir	54.4	L
303	Pseudotsuga menziesii	Douglas-fir	40.1	L
304	Pseudotsuga menziesii	Douglas-fir	34.5	L
305	Tsuga heterophylla	western hemlock	29.4	L
306	Pseudotsuga menziesii	Douglas-fir	26.5	L
307	Pseudotsuga menziesii	Douglas-fir	23	L
308	Pseudotsuga menziesii	Douglas-fir	29.8	L
309	Malus spp.	ornamental crabapple	5.6	S
310	Malus spp.	ornamental crabapple	4.4	S
311	Pseudotsuga menziesii	Douglas-fir	28.9	L
312	Pseudotsuga menziesii	Douglas-fir	34	L
313	Pseudotsuga menziesii	Douglas-fir	32	L
314	Pseudotsuga menziesii	Douglas-fir	41.2	L
315	Alnus rubra	red alder	11.6	M
316	Pseudotsuga menziesii	Douglas-fir	27.7	L
317	Pseudotsuga menziesii	Douglas-fir	27.9	L
318	Pseudotsuga menziesii	Douglas-fir	42.1	L
319	Pseudotsuga menziesii	Douglas-fir	33.4	L
320	Pseudotsuga menziesii	Douglas-fir	34.1	L
321	Calocedrus decurrens	incense cedar	8.8	L
322	Tsuga heterophylla	western hemlock	27.7	L
323	Thuja plicata	western redcedar	12.9	L
324	Sorbus aucuparia	European mountain ash	16.3	S
325	Pseudotsuga menziesii	Douglas-fir	39.7	L
326	Pseudotsuga menziesii	Douglas-fir	39.7	L
327	Pseudotsuga menziesii	Douglas-fir	39.1	L
328	Sorbus aucuparia	European mountain ash	9.8	S
329	Pseudotsuga menziesii	Douglas-fir	50	L
330	Acer macrophyllum	bigleaf maple	48	L
331	Pseudotsuga menziesii	Douglas-fir	39.3	L
332	Pseudotsuga menziesii	Douglas-fir	28.2	L
333	Pseudotsuga menziesii	Douglas-fir	39.8	L
334	Acer macrophyllum	bigleaf maple	56.5	L
335	Pseudotsuga menziesii	Douglas-fir	38.8	L
336	Pseudotsuga menziesii	Douglas-fir	27.5	L
337	Pseudotsuga menziesii	Douglas-fir	50.4	L
338	Pseudotsuga menziesii	Douglas-fir	2.1	L
339	Pseudotsuga menziesii	Douglas-fir	30.7	L
340	Pseudotsuga menziesii	Douglas-fir	35.5	L
341	Crataegus monogyna	English hawthorn, common	7.1	S
342	Pseudotsuga menziesii	Douglas-fir	39.5	L
343	Pseudotsuga menziesii	Douglas-fir	50.6	L
344	Pseudotsuga menziesii	Douglas-fir	24.5	L
345	Pseudotsuga menziesii	Douglas-fir	40.5	L
346	Pseudotsuga menziesii	Douglas-fir	40.4	L
347	Pseudotsuga menziesii	Douglas-fir	37.4	L
348	Pseudotsuga menziesii	Douglas-fir	31.4	L
349	Pseudotsuga menziesii	Douglas-fir	48	L
350	Picea pungens	Colorado blue spruce	7.7	L
351	Pseudotsuga menziesii	Douglas-fir	45	L
352	Malus spp.	ornamental crabapple	9.6	S
353	Pseudotsuga menziesii	Douglas-fir	39	L
354	Betula pendula	European white birch	17.7	M
355	Pseudotsuga menziesii	Douglas-fir	45.9	L
356	Betula pendula	European white birch	15.7	M
357	Pseudotsuga menziesii	Douglas-fir	37.3	L
358	Pseudotsuga menziesii	Douglas-fir	33.8	L
359	Pseudotsuga menziesii	Douglas-fir	10.1	L
360	Pseudotsuga menziesii	Douglas-fir	28.4	L
361	Pseudotsuga menziesii	Douglas-fir	45.2	L
362	Pseudotsuga menziesii	Douglas-fir	36.1	L
363	Pseudotsuga menziesii	Douglas-fir	30.5	L
364	Pseudotsuga menziesii	Douglas-fir	41.9	L
365	Magnolia spp.	magnolia	13.1	S
366	Picea abies	Norway spruce	15.7	L
367	Picea abies	Norway spruce	17.9	L
368	Pseudotsuga menziesii	Douglas-fir	56.4	L
369	Pseudotsuga menziesii	Douglas-fir	50.5	L
370	Malus spp.	ornamental crabapple	6.6	S
371	Acer macrophyllum	bigleaf maple	39.8	L
372	Acer macrophyllum	bigleaf maple	37.1	L
373	Pseudotsuga menziesii	Douglas-fir	32.9	L
374	Pseudotsuga menziesii	Douglas-fir	30.9	L
375	Magnolia spp.	magnolia	7.3	S
376	Pseudotsuga menziesii	Douglas-fir	49.4	L
377	Pseudotsuga menziesii	Douglas-fir	56.8	L
378	Pseudotsuga menziesii	Douglas-fir	49	L
379	Pseudotsuga menziesii	Douglas-fir	51.4	L
380	Pseudotsuga menziesii	Douglas-fir	40.9	L
381	Pseudotsuga menziesii	Douglas-fir	32.5	L
382	Pseudotsuga menziesii	Douglas-fir	52.3	L
383	Pseudotsuga menziesii	Douglas-fir	44.1	L
384	Pseudotsuga menziesii	Douglas-fir	37.1	L
385	Pseudotsuga menziesii	Douglas-fir	39	L
386	Pseudotsuga menziesii	Douglas-fir	63	L
387	Betula pendula	European white birch	8.5	M
388	Malus spp.	ornamental crabapple	7.1	S
389	Pseudotsuga menziesii	Douglas-fir	41	L
390	Pseudotsuga menziesii	Douglas-fir	43.5	L
391	Pseudotsuga menziesii	Douglas-fir	41.3	L
392	Quercus rubra	northern red oak	22.1	L
393	Malus spp.	ornamental crabapple	9.5	S
394	Fagus sylvatica	European beech	22.6	L
395	Juglans regia	English walnut	9.4	L
396	Fagus sylvatica	European beech	17.6	L
397	Fagus sylvatica	European beech	13.4	L
398	Pseudotsuga menziesii	Douglas-fir	40	L
399	Pseudotsuga menziesii	Douglas-fir	29.1	L
400	Betula pendula	European white birch	15.1	M
401	Betula pendula	European white birch	23.7	M
402	Pseudotsuga menziesii	Douglas-fir	55.1	L
403	Pseudotsuga menziesii	Douglas-fir	23.4	L
404	Acer circinatum	vine maple	9.2	S
405	Pseudotsuga menziesii	Douglas-fir	30.2	L
406	Pseudotsuga menziesii	Douglas-fir	23.2	L
407	Prunus avium	bird cherry	11.6	M
408	Pseudotsuga menziesii	Douglas-fir	35.4	L
409	Prunus serrula	paperbark cherry, birchbark	17	S
410	Prunus serrula	paperbark cherry, birchbark	22.3	S
411	Prunus serrula	paperbark cherry, birchbark	19.3	S
412	Pseudotsuga menziesii	Douglas-fir	40.6	L
413	Pseudotsuga menziesii	Douglas-fir	38.4	L
414	Pseudotsuga menziesii	Douglas-fir	33.3	L
415	Pseudotsuga menziesii	Douglas-fir	35.7	L
416	Pseudotsuga menziesii	Douglas-fir	51.4	L
417	Malus spp.	ornamental crabapple	9	S
418	Pseudotsuga menziesii	Douglas-fir	35.4	L
419	Prunus serrulata	Japanese flowering cherry	9.8	S
420	Picea abies	Norway spruce	19	L
421	Picea abies	Norway spruce	14.5	L
422	Betula pendula	European white birch	20.8	M
423	Pseudotsuga menziesii	Douglas-fir	45	L
424	Pseudotsuga menziesii	Douglas-fir	35.4	L
425	Pseudotsuga menziesii	Douglas-fir	38.8	L
426	Pseudotsuga menziesii	Douglas-fir	43.1	L
427	Pseudotsuga menziesii	Douglas-fir	26.5	L
428	Pseudotsuga menziesii	Douglas-fir	45.9	L
429	Pseudotsuga menziesii	Douglas-fir	42.6	L
430	Pseudotsuga menziesii	Douglas-fir	25.8	L
431	Pseudotsuga menziesii	Douglas-fir	41.1	L
432	Acer macrophyllum	bigleaf maple	11.3	L
433	Pseudotsuga menziesii	Douglas-fir	37.3	L
434	Pseudotsuga menziesii	Douglas-fir	24.6	L
435	Pseudotsuga menziesii	Douglas-fir	34.3	L
436	Acer macrophyllum	bigleaf maple	5.3	L
437	Pseudotsuga menziesii	Douglas-fir	20.1	L
438	Acer macrophyllum	bigleaf maple	52.4	L
439	Acer macrophyllum	bigleaf maple	41	L
440	Pseudotsuga menziesii	Douglas-fir	28.9	L
441	Pseudotsuga menziesii	Douglas-fir	57.8	L
442	Pseudotsuga menziesii	Douglas-fir	51	L
443	Pseudotsuga menziesii	Douglas-fir	33.3	L
444	Pseudotsuga menziesii	Douglas-fir	46.3	L
445	Pseudotsuga menziesii	Douglas-fir	27.3	L
446	Quercus garryana	Oregon white oak	2.4	L
447	Pseudotsuga menziesii	Douglas-fir	25.9	L
448	Pseudotsuga menziesii	Douglas-fir	35.4	L
449	Pseudotsuga menziesii	Douglas-fir	43.3	L
450	Pseudotsuga menziesii	Douglas-fir	41.7	L
451	Pseudotsuga menziesii	Douglas-fir	60.3	L
452	Pseudotsuga menziesii	Douglas-fir	7.4	L
453	Pseudotsuga menziesii	Douglas-fir	31.6	L
454	Pseudotsuga menziesii	Douglas-fir	40.6	L
455	Crataegus monogyna	English hawthorn, common	17.5	S
456	Pseudotsuga menziesii	Douglas-fir	39.9	L
457	Pseudotsuga menziesii	Douglas-fir	34.2	L
458	Pseudotsuga menziesii	Douglas-fir	54	L
459	Pseudotsuga menziesii	Douglas-fir	21.7	L
460	Pseudotsuga menziesii	Douglas-fir	54.8	L
461	Pseudotsuga menziesii	Douglas-fir	50.3	L
462	Picea pungens	Colorado blue spruce	10	L
463	Pseudotsuga menziesii	Douglas-fir	44.9	L
464	Pseudotsuga menziesii	Douglas-fir	29.2	L
465	Pseudotsuga menziesii	Douglas-fir	39.9	L
466	Pseudotsuga menziesii	Douglas-fir	27.4	L
467	Pseudotsuga menziesii	Douglas-fir	40	L
468	Pseudotsuga menziesii	Douglas-fir	55.1	L
469	Prunus avium	bird cherry	15.7	M
470	Pseudotsuga menziesii	Douglas-fir	29.6	L
471	Pseudotsuga menziesii	Douglas-fir	44.2	L
472	Pseudotsuga menziesii	Douglas-fir	30.8	L
473	Pseudotsuga menziesii	Douglas-fir	59.5	L
474	Pseudotsuga menziesii	Douglas-fir	49.2	L
475	Pseudotsuga menziesii	Douglas-fir	35.3	L
476	Acer macrophyllum	bigleaf maple	27.8	L
477	Pseudotsuga menziesii	Douglas-fir	45.7	L
478	Pseudotsuga menziesii	Douglas-fir	55.1	L
479	Pseudotsuga menziesii	Douglas-fir	30.9	L
480	Pseudotsuga menziesii	Douglas-fir	41.9	L
481	Pseudotsuga menziesii	Douglas-fir	39	L
482	Pseudotsuga menziesii	Douglas-fir	37.4	L
483	Pseudotsuga menziesii	Douglas-fir	53.2	L
484	Pseudotsuga menziesii	Douglas-fir	35.7	L
485	Pseudotsuga menziesii	Douglas-fir	38.6	L
486	Pseudotsuga menziesii	Douglas-fir	27.4	L
487	Pseudotsuga menziesii	Douglas-fir	28.6	L
488	Pseudotsuga menziesii	Douglas-fir	51.3	L
489	Pseudotsuga menziesii	Douglas-fir	32	L
490	Pseudotsuga menziesii	Douglas-fir	22	L
491	Pseudotsuga menziesii	Douglas-fir	58	L
492	Pseudotsuga menziesii	Douglas-fir	33	L
493	Pseudotsuga menziesii	Douglas-fir	26.8	L
494	Acer macrophyllum	bigleaf maple	56.3	L
495	Pseudotsuga menziesii	Douglas-fir	26.2	L
496	Pseudotsuga menziesii	Douglas-fir	19	L
497	Pseudotsuga menziesii	Douglas-fir	46.4	L
498	Acer macrophyllum	bigleaf maple	34.8	L
499	Pseudotsuga menziesii	Douglas-fir	34.7	L
500	Pseudotsuga menziesii	Douglas-fir	49.8	L
501	Pseudotsuga menziesii	Douglas-fir	52.6	L
502	Pseudotsuga menziesii	Douglas-fir	36.7	L
503	Pseudotsuga menziesii	Douglas-fir	30.8	L
504	Pseudotsuga menziesii	Douglas-fir	27.1	L
505	Acer macrophyllum	bigleaf maple	66.7	L
506	Pseudotsuga menziesii	Douglas-fir	55.1	L

Mt Tabor Park Tree Inventory

Table Page 3

TreeNo	Genus species	Common Name	DBH	Size
507	Pseudotsuga menziesii	Douglas-fir	30.5	L
508	Pseudotsuga menziesii	Douglas-fir	31.4	L
509	Pseudotsuga menziesii	Douglas-fir	58	L
510	Pseudotsuga menziesii	Douglas-fir	20.2	L
511	Pseudotsuga menziesii	Douglas-fir	30	L
512	Pseudotsuga menziesii	Douglas-fir	49.8	L
513	Pseudotsuga menziesii	Douglas-fir	31.6	L
514	Pseudotsuga menziesii	Douglas-fir	22.1	L
515	Pseudotsuga menziesii	Douglas-fir	27.2	L
516	Pseudotsuga menziesii	Douglas-fir	22.2	L
517	Pseudotsuga menziesii	Douglas-fir	33.7	L
518	Pseudotsuga menziesii	Douglas-fir	30.1	L
519	Pseudotsuga menziesii	Douglas-fir	33.2	L
520	Pseudotsuga menziesii	Douglas-fir	27.4	L
521	Pseudotsuga menziesii	Douglas-fir	35	L
522	Pseudotsuga menziesii	Douglas-fir	17.3	L
523	Pseudotsuga menziesii	Douglas-fir	40.3	L
524	Pseudotsuga menziesii	Douglas-fir	42.2	L
525	Pseudotsuga menziesii	Douglas-fir	37.2	L
526	Pseudotsuga menziesii	Douglas-fir	34.8	L
527	Pseudotsuga menziesii	Douglas-fir	23.4	L
528	Pseudotsuga menziesii	Douglas-fir	33.3	L
529	Pseudotsuga menziesii	Douglas-fir	35.1	L
530	Pseudotsuga menziesii	Douglas-fir	22.6	L
531	Pseudotsuga menziesii	Douglas-fir	35.5	L
532	Pseudotsuga menziesii	Douglas-fir	33.1	L
533	Pseudotsuga menziesii	Douglas-fir	43.6	L
534	Pseudotsuga menziesii	Douglas-fir	20.2	L
535	Pseudotsuga menziesii	Douglas-fir	22.2	L
536	Pseudotsuga menziesii	Douglas-fir	40.8	L
537	Pseudotsuga menziesii	Douglas-fir	29.1	L
538	Pseudotsuga menziesii	Douglas-fir	27.8	L
539	Pseudotsuga menziesii	Douglas-fir	28.5	L
540	Pseudotsuga menziesii	Douglas-fir	25.7	L
541	Pseudotsuga menziesii	Douglas-fir	26.7	L
542	Pseudotsuga menziesii	Douglas-fir	36	L
543	Pseudotsuga menziesii	Douglas-fir	18.8	L
544	Pseudotsuga menziesii	Douglas-fir	43.6	L
545	Pseudotsuga menziesii	Douglas-fir	28.3	L
546	Pseudotsuga menziesii	Douglas-fir	27.4	L
547	Pseudotsuga menziesii	Douglas-fir	23.8	L
548	Pseudotsuga menziesii	Douglas-fir	33.5	L
549	Pseudotsuga menziesii	Douglas-fir	19.6	L
550	Pseudotsuga menziesii	Douglas-fir	37.2	L
551	Pseudotsuga menziesii	Douglas-fir	34.7	L
552	Pseudotsuga menziesii	Douglas-fir	43.8	L
553	Pseudotsuga menziesii	Douglas-fir	26.7	L
554	Pseudotsuga menziesii	Douglas-fir	34.7	L
555	Pseudotsuga menziesii	Douglas-fir	25.3	L
556	Pseudotsuga menziesii	Douglas-fir	17.7	L
557	Pseudotsuga menziesii	Douglas-fir	25.8	L
558	Pseudotsuga menziesii	Douglas-fir	40.4	L
559	Pseudotsuga menziesii	Douglas-fir	21.7	L
560	Pseudotsuga menziesii	Douglas-fir	42.7	L
561	Pseudotsuga menziesii	Douglas-fir	37.1	L
562	Pseudotsuga menziesii	Douglas-fir	31.8	L
563	Pseudotsuga menziesii	Douglas-fir	27.2	L
564	Pseudotsuga menziesii	Douglas-fir	29.9	L
565	Pseudotsuga menziesii	Douglas-fir	24.6	L
566	Pseudotsuga menziesii	Douglas-fir	23.4	L
567	Pseudotsuga menziesii	Douglas-fir	36.8	L
568	Pseudotsuga menziesii	Douglas-fir	20.5	L
569	Pseudotsuga menziesii	Douglas-fir	41	L
570	Pseudotsuga menziesii	Douglas-fir	32.1	L
571	Pseudotsuga menziesii	Douglas-fir	37.6	L
572	Pseudotsuga menziesii	Douglas-fir	25.1	L
573	Pseudotsuga menziesii	Douglas-fir	31.4	L
574	Pseudotsuga menziesii	Douglas-fir	20.2	L
575	Crataegus monogyna	English hawthorn, common	14.3	S
576	Pseudotsuga menziesii	Douglas-fir	28.5	L
577	Acer macrophyllum	bigleaf maple	5.8	L
578	Pseudotsuga menziesii	Douglas-fir	18.1	L
579	Pseudotsuga menziesii	Douglas-fir	40	L
580	Pseudotsuga menziesii	Douglas-fir	24.3	L
581	Pseudotsuga menziesii	Douglas-fir	32.7	L
582	Pseudotsuga menziesii	Douglas-fir	38.4	L
583	Pseudotsuga menziesii	Douglas-fir	36.4	L
584	Pseudotsuga menziesii	Douglas-fir	35.5	L
585	Pseudotsuga menziesii	Douglas-fir	29.2	L
586	Pseudotsuga menziesii	Douglas-fir	32.1	L
587	Pseudotsuga menziesii	Douglas-fir	38.4	L
588	Pseudotsuga menziesii	Douglas-fir	39.2	L
589	Pseudotsuga menziesii	Douglas-fir	34.1	L
590	Pseudotsuga menziesii	Douglas-fir	24.6	L
591	Pseudotsuga menziesii	Douglas-fir	27.4	L
592	Pseudotsuga menziesii	Douglas-fir	27.3	L
593	Pseudotsuga menziesii	Douglas-fir	29.2	L
594	Pseudotsuga menziesii	Douglas-fir	39	L
595	Pseudotsuga menziesii	Douglas-fir	36.6	L
596	Pseudotsuga menziesii	Douglas-fir	22.4	L
597	Pseudotsuga menziesii	Douglas-fir	43.8	L
598	Pseudotsuga menziesii	Douglas-fir	30	L
599	Pseudotsuga menziesii	Douglas-fir	22.7	L
600	Pseudotsuga menziesii	Douglas-fir	35.8	L
601	Pseudotsuga menziesii	Douglas-fir	35.1	L
602	Pseudotsuga menziesii	Douglas-fir	34	L
603	Pseudotsuga menziesii	Douglas-fir	16.3	L
604	Pseudotsuga menziesii	Douglas-fir	18.5	L
605	Pseudotsuga menziesii	Douglas-fir	23	L
606	Pseudotsuga menziesii	Douglas-fir	38.8	L
607	Pseudotsuga menziesii	Douglas-fir	30.4	L
608	Pseudotsuga menziesii	Douglas-fir	37.3	L
609	Pseudotsuga menziesii	Douglas-fir	3.9	L
610	Pseudotsuga menziesii	Douglas-fir	40.6	L
611	Pseudotsuga menziesii	Douglas-fir	33.2	L
612	Pseudotsuga menziesii	Douglas-fir	28	L
613	Acer circinatum	vine maple	5.2	S
614	Pseudotsuga menziesii	Douglas-fir	37.8	L
615	Pseudotsuga menziesii	Douglas-fir	31	L
616	Pseudotsuga menziesii	Douglas-fir	37.8	L
617	Pseudotsuga menziesii	Douglas-fir	28.7	L
618	Pseudotsuga menziesii	Douglas-fir	34.2	L
619	Pseudotsuga menziesii	Douglas-fir	27.6	L
620	Pseudotsuga menziesii	Douglas-fir	34.5	L
621	Pseudotsuga menziesii	Douglas-fir	29.2	L
622	Pseudotsuga menziesii	Douglas-fir	35.1	L
623	Acer circinatum	vine maple	5.3	S
624	Pseudotsuga menziesii	Douglas-fir	36.9	L
625	Pseudotsuga menziesii	Douglas-fir	40	L
626	Pseudotsuga menziesii	Douglas-fir	34.6	L
627	Pseudotsuga menziesii	Douglas-fir	43.3	L
628	Pseudotsuga menziesii	Douglas-fir	31.6	L
629	Pseudotsuga menziesii	Douglas-fir	48.4	L
630	Pseudotsuga menziesii	Douglas-fir	32.2	L
631	Pseudotsuga menziesii	Douglas-fir	24.2	L
632	Pseudotsuga menziesii	Douglas-fir	2.7	L
633	Pseudotsuga menziesii	Douglas-fir	24.3	L
634	Fraxinus latifolia	Oregon ash	9.4	M
635	Pseudotsuga menziesii	Douglas-fir	34.9	L
636	Pseudotsuga menziesii	Douglas-fir	39.6	L
637	Pseudotsuga menziesii	Douglas-fir	40.2	L
638	Pseudotsuga menziesii	Douglas-fir	39.8	L
639	Pseudotsuga menziesii	Douglas-fir	31.9	L
640	Pseudotsuga menziesii	Douglas-fir	39.2	L
641	Pseudotsuga menziesii	Douglas-fir	40.2	L
642	Pseudotsuga menziesii	Douglas-fir	50.9	L
643	Acer macrophyllum	bigleaf maple	46.7	L
644	Prunus cerasifera	flowering plum	11.1	S
645	Pseudotsuga menziesii	Douglas-fir	43.6	L
646	Acer macrophyllum	bigleaf maple	36.9	L
647	Acer macrophyllum	bigleaf maple	22.8	L
648	Acer macrophyllum	bigleaf maple	18	L
649	Ulmus x	elm hybrid	10	L
650	Liquidambar styraciflua	sweetgum	7.5	M
651	Pseudotsuga menziesii	Douglas-fir	47.8	L
652	Prunus serrulata	Japanese flowering cherry	23	S
653	Pseudotsuga menziesii	Douglas-fir	45.2	L
654	Prunus serrulata	Japanese flowering cherry	25	S
655	Pseudotsuga menziesii	Douglas-fir	32	L
656	Pseudotsuga menziesii	Douglas-fir	32	L
657	Pseudotsuga menziesii	Douglas-fir	62.1	L
658	Pyrus communis	European pear (including	17.9	M
659	Prunus serrulata	Japanese flowering cherry	8	S
660	Pseudotsuga menziesii	Douglas-fir	48.2	L
661	Sequoiadendron giganteum	giant sequoia	24.5	L
662	Thuja plicata	western redcedar	33.1	L
663	Pseudotsuga menziesii	Douglas-fir	27.9	L
664	Prunus serrulata	Japanese flowering cherry	17.7	S
665	Prunus serrulata	Japanese flowering cherry	27.4	S
666	Amelanchier spp.	serviceberry	2.5	S
667	Pseudotsuga menziesii	Douglas-fir	51.9	L
668	Amelanchier spp.	serviceberry	1.6	S
669	Pseudotsuga menziesii	Douglas-fir	37.1	L
670	Pseudotsuga menziesii	Douglas-fir	48.4	L
671	Pseudotsuga menziesii	Douglas-fir	36.7	L
672	Pseudotsuga menziesii	Douglas-fir	38.1	L
673	Pseudotsuga menziesii	Douglas-fir	30.1	L
674	Pseudotsuga menziesii	Douglas-fir	26.7	L
675	Pseudotsuga menziesii	Douglas-fir	1.1	L
676	Arbutus menziesii	Pacific madrone	1	M
677	Pseudotsuga menziesii	Douglas-fir	52.9	L
678	Pseudotsuga menziesii	Douglas-fir	44.3	L
679	Pseudotsuga menziesii	Douglas-fir	31.7	L
680	Pseudotsuga menziesii	Douglas-fir	33.1	L
681	Pseudotsuga menziesii	Douglas-fir	47.1	L
682	Pseudotsuga menziesii	Douglas-fir	23.5	L
683	Pseudotsuga menziesii	Douglas-fir	29.2	L
684	Pinus sylvestris	Scots pine	15.5	L
685	Cupressus nootkatensis syn. Xanthocyparis nootkatensis	Alaska yellow-cedar	17.5	M
686	Pseudotsuga menziesii	Douglas-fir	53.8	L
687	Acer macrophyllum	bigleaf maple	35	L
688	Pseudotsuga menziesii	Douglas-fir	28.8	L
689	Crataegus monogyna	English hawthorn, common	22.6	S
690	Pseudotsuga menziesii	Douglas-fir	54.3	L
691	Pseudotsuga menziesii	Douglas-fir	41.7	L
692	Pseudotsuga menziesii	Douglas-fir	58.9	L
693	Pseudotsuga menziesii	Douglas-fir	62.1	L
694	Prunus serrulata	Japanese flowering cherry	8.9	S
696	Pseudotsuga menziesii	Douglas-fir	42.9	L
697	Robinia pseudoacacia	black locust	7.5	M
698	Robinia pseudoacacia	black locust	7.5	M
699	Pseudotsuga menziesii	Douglas-fir	52.8	L
700	Thuja plicata	western redcedar	33.7	L
701	Pseudotsuga menziesii	Douglas-fir	37.5	L
702	Pseudotsuga menziesii	Douglas-fir	35.7	L
703	Pseudotsuga menziesii	Douglas-fir	37.2	L
704	Pseudotsuga menziesii	Douglas-fir	45.8	L
705	Cornus spp.	dogwood	1.5	S
706	Acer macrophyllum	bigleaf maple	7.9	L
707	Pseudotsuga menziesii	Douglas-fir	41.4	L
708	Pseudotsuga menziesii	Douglas-fir	31.6	L
709	Pseudotsuga menziesii	Douglas-fir	25.8	L
710	Pseudotsuga menziesii	Douglas-fir	44.4	L
711	Pseudotsuga menziesii	Douglas-fir	38.9	L
712	Pseudotsuga menziesii	Douglas-fir	29.4	L
713	Pseudotsuga menziesii	Douglas-fir	29.4	L
714	Acer circinatum	vine maple	6.2	S
715	Pseudotsuga menziesii	Douglas-fir	33.7	L
716	Pseudotsuga menziesii	Douglas-fir	29.9	L
717	Pseudotsuga menziesii	Douglas-fir	47.3	L
718	Platanus x acerifolia	London plane tree	9.6	L
719	Platanus x acerifolia	London plane tree	14.1	L
720	Pseudotsuga menziesii	Douglas-fir	48.7	L
721	Acer macrophyllum	bigleaf maple	22.7	L
722	Acer macrophyllum	bigleaf maple	28	L
723	Pseudotsuga menziesii	Douglas-fir	59.3	L
724	Pseudotsuga menziesii	Douglas-fir	48.9	L
725	Quercus coccinea	scarlet oak	9.8	L
726	Acer macrophyllum	bigleaf maple	21.7	L
727	Liquidambar styraciflua	sweetgum	7	M
728	Pseudotsuga menziesii	Douglas-fir	40.5	L
729	Pseudotsuga menziesii	Douglas-fir	45	L
730	Prunus serrulata	Japanese flowering cherry	21.3	S
731	Pseudotsuga menziesii	Douglas-fir	54	L
732	Pseudotsuga menziesii	Douglas-fir	50.1	L
733	Pseudotsuga menziesii	Douglas-fir	25.5	L
734	Magnolia spp.	magnolia	20	S
735	Robinia pseudoacacia	black locust	7.5	M
736	Pseudotsuga menziesii	Douglas-fir	41.8	L
737	Pseudotsuga menziesii	Douglas-fir	52	L
738	Pseudotsuga menziesii	Douglas-fir	48.2	L
739	Pseudotsuga menziesii	Douglas-fir	39.6	L
740	Pseudotsuga menziesii	Douglas-fir	32.9	L
741	Pseudotsuga menziesii	Douglas-fir	31.7	L
742	Pseudotsuga menziesii	Douglas-fir	40.4	L
743	Acer macrophyllum	bigleaf maple	6.1	L
744	Pseudotsuga menziesii	Douglas-fir	34.4	L
745	Sorbus aucuparia	European mountain ash	5.3	S
746	Pseudotsuga menziesii	Douglas-fir	50.7	L
747	Pseudotsuga menziesii	Douglas-fir	31.1	L
748	Pseudotsuga menziesii	Douglas-fir	46.4	L
749	Pseudotsuga menziesii	Douglas-fir	34.6	L
750	Acer circinatum	vine maple	6.3	S
751	Pseudotsuga menziesii	Douglas-fir	31.4	L
752	Pseudotsuga menziesii	Douglas-fir	48.4	L
753	Acer circinatum	vine maple	6.2	S
754	Pseudotsuga menziesii	Douglas-fir	33.7	L
755	Pseudotsuga menziesii	Douglas-fir	29.9	L
756	Fraxinus latifolia	Oregon ash	47.3	L
757	Pseudotsuga menziesii	Douglas-fir	9.6	L
758	Pseudotsuga menziesii	Douglas-fir	14.1	L
759	Pseudotsuga menziesii	Douglas-fir	35.6	L

Date

Approved
City of Portland
Bureau of Development Services

Planner

1-25-2024

*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Mt Tabor Park Tree Inventory

Table Page 4

TreeNo	Genus species	Common Name	DBH	Size
760	Pseudotsuga menziesii	Douglas-fir	56.4	L
761	Pseudotsuga menziesii	Douglas-fir	48.6	L
762	Pseudotsuga menziesii	Douglas-fir	40.2	L
763	Sequoiadendron giganteum	giant sequoia	3.7	L
764	Acer macrophyllum	bigleaf maple	39.1	L
765	Acer macrophyllum	bigleaf maple	32	L
766	Prunus cerasifera	flowering plum	19.7	S
767	Acer macrophyllum	bigleaf maple	29	L
768	Sequoia sempervirens	coast redwood	31	L
769	Pseudotsuga menziesii	Douglas-fir	50.7	L
770	Pseudotsuga menziesii	Douglas-fir	44.6	L
771	Liquidambar styraciflua	sweetgum	6.7	M
772	Pseudotsuga menziesii	Douglas-fir	42.2	L
773	Prunus serrulata	Japanese flowering cherry	18	S
774	Pseudotsuga menziesii	Douglas-fir	36.9	L
775	Prunus serrulata	Japanese flowering cherry	20.5	S
776	Pseudotsuga menziesii	Douglas-fir	36.6	L
777	Pseudotsuga menziesii	Douglas-fir	46.5	L
778	Robinia pseudoacacia	black locust	7.5	M
779	Robinia pseudoacacia	black locust	7.5	M
780	Pseudotsuga menziesii	Douglas-fir	2.1	L
781	Prunus serrulata	Japanese flowering cherry	14.8	S
782	Pseudotsuga menziesii	Douglas-fir	51	L
783	Amelanchier spp.	serviceberry	1.6	S
784	Cornus spp.	dogwood	1.3	S
785	Pseudotsuga menziesii	Douglas-fir	38.4	L
786	Pseudotsuga menziesii	Douglas-fir	45.2	L
787	Pseudotsuga menziesii	Douglas-fir	34.9	L
788	Pseudotsuga menziesii	Douglas-fir	35.1	L
789	Pseudotsuga menziesii	Douglas-fir	35.3	L
790	Pseudotsuga menziesii	Douglas-fir	35.3	L
791	Pseudotsuga menziesii	Douglas-fir	19.5	L
792	Pseudotsuga menziesii	Douglas-fir	37.1	L
793	Pseudotsuga menziesii	Douglas-fir	37.1	L
794	Abies grandis	grand fir	12.4	L
795	Pseudotsuga menziesii	Douglas-fir	68.6	L
796	Pseudotsuga menziesii	Douglas-fir	48.1	L
797	Pseudotsuga menziesii	Douglas-fir	33.4	L
798	Pseudotsuga menziesii	Douglas-fir	34.3	L
799	Pseudotsuga menziesii	Douglas-fir	46.4	L
800	Pseudotsuga menziesii	Douglas-fir	17.1	L
801	Pseudotsuga menziesii	Douglas-fir	14.1	L
802	Pseudotsuga menziesii	Douglas-fir	27.8	L
803	Pseudotsuga menziesii	Douglas-fir	38	L
804	Pseudotsuga menziesii	Douglas-fir	33.2	L
805	Sequoia sempervirens	coast redwood	41.1	L
806	Acer macrophyllum	bigleaf maple	6.5	L
807	Pseudotsuga menziesii	Douglas-fir	34	L
808	Pseudotsuga menziesii	Douglas-fir	11	L
809	Pseudotsuga menziesii	Douglas-fir	38.8	L
810	Pseudotsuga menziesii	Douglas-fir	33.9	L
811	Acer macrophyllum	bigleaf maple	34.8	L
812	Sequoiadendron giganteum	giant sequoia	11.2	L
813	Pseudotsuga menziesii	Douglas-fir	36.7	L
814	Pseudotsuga menziesii	Douglas-fir	45.2	L
815	Pseudotsuga menziesii	Douglas-fir	15.5	L
816	Pseudotsuga menziesii	Douglas-fir	40.5	L
817	Pseudotsuga menziesii	Douglas-fir	8.1	L
818	Pseudotsuga menziesii	Douglas-fir	24.6	L
819	Acer rubrum	red maple	4.1	M
820	Pseudotsuga menziesii	Douglas-fir	46.7	L
821	Pseudotsuga menziesii	Douglas-fir	36.3	L
822	Pseudotsuga menziesii	Douglas-fir	3.7	L
823	Sequoiadendron giganteum	giant sequoia	35	L
824	Sequoiadendron giganteum	giant sequoia	28.8	L
825	Pseudotsuga menziesii	Douglas-fir	26.6	L
826	Pseudotsuga menziesii	Douglas-fir	37.3	L
827	Pseudotsuga menziesii	Douglas-fir	40	L
828	Pseudotsuga menziesii	Douglas-fir	9.5	L
829	Pseudotsuga menziesii	Douglas-fir	30.1	L
830	Pseudotsuga menziesii	Douglas-fir	23.5	L
831	Pseudotsuga menziesii	Douglas-fir	30.9	L
832	Pseudotsuga menziesii	Douglas-fir	41	L
833	Pseudotsuga menziesii	Douglas-fir	43.5	L
834	Aesculus hippocastanum	common horsechestnut	35.4	L
835	Fraxinus latifolia	Oregon ash	20.5	M
836	Acer macrophyllum	bigleaf maple	32.5	L
837	Pseudotsuga menziesii	Douglas-fir	31.1	L
838	Pseudotsuga menziesii	Douglas-fir	37.2	L
839	Pseudotsuga menziesii	Douglas-fir	24.3	L
840	Pseudotsuga menziesii	Douglas-fir	31.9	L
841	Pseudotsuga menziesii	Douglas-fir	34.3	L
842	Pseudotsuga menziesii	Douglas-fir	24.4	L
843	Pseudotsuga menziesii	Douglas-fir	44	L
844	Abies grandis	grand fir	12.4	L
845	Pseudotsuga menziesii	Douglas-fir	39.4	L
846	Pseudotsuga menziesii	Douglas-fir	29.4	L
847	Pseudotsuga menziesii	Douglas-fir	37.3	L
848	Acer macrophyllum	bigleaf maple	11.4	L
849	Pseudotsuga menziesii	Douglas-fir	24.9	L
850	Pseudotsuga menziesii	Douglas-fir	43.5	L
851	Pseudotsuga menziesii	Douglas-fir	40	L
852	Pseudotsuga menziesii	Douglas-fir	39.2	L
853	Pseudotsuga menziesii	Douglas-fir	41.1	L
854	Quercus palustris	pin oak	19.9	L
855	Pseudotsuga menziesii	Douglas-fir	27.4	L
856	Pseudotsuga menziesii	Douglas-fir	27.6	L
857	Pseudotsuga menziesii	Douglas-fir	32.6	L
858	Pseudotsuga menziesii	Douglas-fir	39.2	L
859	Acer macrophyllum	bigleaf maple	26.6	L
860	Pseudotsuga menziesii	Douglas-fir	45.6	L
861	Pseudotsuga menziesii	Douglas-fir	36.9	L
862	Pinus nigra	Austrian black pine	15	L
863	Pseudotsuga menziesii	Douglas-fir	20	L
864	Pseudotsuga menziesii	Douglas-fir	47.9	L
865	Pseudotsuga menziesii	Douglas-fir	22.8	L
866	Acer macrophyllum	bigleaf maple	1.2	L
867	Pseudotsuga menziesii	Douglas-fir	69.5	L
868	Pseudotsuga menziesii	Douglas-fir	38.1	L
869	Pseudotsuga menziesii	Douglas-fir	47.8	L
870	Pseudotsuga menziesii	Douglas-fir	43.9	L
871	Pseudotsuga menziesii	Douglas-fir	41.5	L
872	Pseudotsuga menziesii	Douglas-fir	6.9	L
873	Crataegus monogyna	English hawthorn, common	12.4	S
874	Pseudotsuga menziesii	Douglas-fir	31.1	L
875	Pseudotsuga menziesii	Douglas-fir	32.8	L
876	Pseudotsuga menziesii	Douglas-fir	40.7	L
877	Pseudotsuga menziesii	Douglas-fir	33.5	L
878	Crataegus monogyna	English hawthorn, common	30	S
879	Pseudotsuga menziesii	Douglas-fir	32.8	L
880	Pseudotsuga menziesii	Douglas-fir	43.3	L
881	Pseudotsuga menziesii	Douglas-fir	43.5	L
882	Pseudotsuga menziesii	Douglas-fir	33.3	L
883	Pseudotsuga menziesii	Douglas-fir	30.3	L
884	Pseudotsuga menziesii	Douglas-fir	51.6	L
885	Liriodendron tulipifera	tuliptree	9.5	L
886	Pseudotsuga menziesii	Douglas-fir	51.5	L
887	Pseudotsuga menziesii	Douglas-fir	25.2	L
888	Aesculus hippocastanum	common horsechestnut	28	L
889	Tilia tomentosa	silver linden	39.6	L
890	Juglans nigra	black walnut	38.4	L
891	Pseudotsuga menziesii	Douglas-fir	33.5	L
892	Pseudotsuga menziesii	Douglas-fir	33	L
893	Pseudotsuga menziesii	Douglas-fir	52	L
894	Pseudotsuga menziesii	Douglas-fir	16.3	L
895	Pseudotsuga menziesii	Douglas-fir	31.3	L
896	Pseudotsuga menziesii	Douglas-fir	42.6	L
897	Pseudotsuga menziesii	Douglas-fir	48.9	L
898	Pinus ponderosa	ponderosa pine	4.6	L
899	Pinus ponderosa	ponderosa pine	3.8	L
900	Pinus ponderosa	ponderosa pine	2	L
901	Pseudotsuga menziesii	Douglas-fir	39.4	L
902	Pseudotsuga menziesii	Douglas-fir	37.4	L
903	Pseudotsuga menziesii	Douglas-fir	34.8	L
904	Pseudotsuga menziesii	Douglas-fir	35	L
905	Acer macrophyllum	bigleaf maple	31.8	L
906	Pseudotsuga menziesii	Douglas-fir	30.8	L
907	Juglans nigra	black walnut	41.1	L
908	Chamaecyparis obtusa	Hinoki falsecypress	18.2	L
909	Pseudotsuga menziesii	Douglas-fir	22.1	L
910	Pseudotsuga menziesii	Douglas-fir	42.9	L
911	Pseudotsuga menziesii	Douglas-fir	3.9	L
912	Pseudotsuga menziesii	Douglas-fir	32.2	L
913	Pseudotsuga menziesii	Douglas-fir	14.7	L
914	Pseudotsuga menziesii	Douglas-fir	34.6	L
915	Pseudotsuga menziesii	Douglas-fir	39.5	L
916	Pinus ponderosa	ponderosa pine	2.8	L
917	Pseudotsuga menziesii	Douglas-fir	26.8	L
918	Pseudotsuga menziesii	Douglas-fir	44.9	L
919	Pseudotsuga menziesii	Douglas-fir	37.3	L
920	Fraxinus latifolia	Oregon ash	26.4	M
921	Pseudotsuga menziesii	Douglas-fir	42	L
922	Pseudotsuga menziesii	Douglas-fir	22.3	L
923	Pseudotsuga menziesii	Douglas-fir	27.3	L
924	Acer macrophyllum	bigleaf maple	7.7	L
925	Pseudotsuga menziesii	Douglas-fir	43.8	L
926	Quercus rubra	northern red oak	56.4	L
927	Acer macrophyllum	bigleaf maple	24.5	L
928	Pseudotsuga menziesii	Douglas-fir	16.3	L
929	Pseudotsuga menziesii	Douglas-fir	37.5	L
930	Quercus garryana	Oregon white oak	38.9	L
931	Umbellularia californica	Oregon myrtle	29	L
932	Chamaecyparis obtusa	Hinoki falsecypress	21.7	L
933	Pseudotsuga menziesii	Douglas-fir	49.3	L
934	Pseudotsuga menziesii	Douglas-fir	33.7	L
935	Pseudotsuga menziesii	Douglas-fir	38.7	L
936	Pseudotsuga menziesii	Douglas-fir	45.1	L
937	Pseudotsuga menziesii	Douglas-fir	36.3	L
938	Pseudotsuga menziesii	Douglas-fir	5.1	L
939	Pseudotsuga menziesii	Douglas-fir	33.5	L
940	Acer macrophyllum	bigleaf maple	6	L
941	Fraxinus latifolia	Oregon ash	16.8	M
942	Pseudotsuga menziesii	Douglas-fir	34.5	L
943	Fraxinus latifolia	Oregon ash	16.8	M
944	Pseudotsuga menziesii	Douglas-fir	28	L
945	Quercus garryana	Oregon white oak	0.3	L
946	Pseudotsuga menziesii	Douglas-fir	26	L
947	Pseudotsuga menziesii	Douglas-fir	36.4	L
948	Pseudotsuga menziesii	Douglas-fir	37.3	L
949	Cedrus atlantica 'Glauca'	blue Atlas cedar	34.8	L
950	Pseudotsuga menziesii	Douglas-fir	34.2	L
951	Chamaecyparis lawsoniana	Port Orford cedar	35	L
952	Pseudotsuga menziesii	Douglas-fir	30.6	L
953	Pseudotsuga menziesii	Douglas-fir	30.4	L
954	Pseudotsuga menziesii	Douglas-fir	49.5	L
955	Pseudotsuga menziesii	Douglas-fir	30.4	L
956	Pseudotsuga menziesii	Douglas-fir	19.6	L
957	Pseudotsuga menziesii	Douglas-fir	27.8	L
958	Pseudotsuga menziesii	Douglas-fir	29.5	L
959	Pseudotsuga menziesii	Douglas-fir	41.4	L
960	Cornus nuttallii	Pacific dogwood	4.7	M
961	Pseudotsuga menziesii	Douglas-fir	26.5	L
962	Pinus ponderosa	ponderosa pine	3.9	L
963	Pseudotsuga menziesii	Douglas-fir	33.5	L
964	Pseudotsuga menziesii	Douglas-fir	41.4	L
965	Pseudotsuga menziesii	Douglas-fir	25.7	L
966	Pseudotsuga menziesii	Douglas-fir	34	L
967	Pseudotsuga menziesii	Douglas-fir	29.5	L
968	Pseudotsuga menziesii	Douglas-fir	17.4	L
969	Pseudotsuga menziesii	Douglas-fir	33.5	L
970	Pseudotsuga menziesii	Douglas-fir	38.5	L
971	Pseudotsuga menziesii	Douglas-fir	27.5	L
972	Pseudotsuga menziesii	Douglas-fir	29	L
973	Pseudotsuga menziesii	Douglas-fir	36	L
974	Pseudotsuga menziesii	Douglas-fir	33.9	L
975	Pseudotsuga menziesii	Douglas-fir	32.7	L
976	Pseudotsuga menziesii	Douglas-fir	40	L
977	Acer macrophyllum	bigleaf maple	11.3	L
978	Pseudotsuga menziesii	Douglas-fir	9.7	L
979	Pseudotsuga menziesii	Douglas-fir	32	L
980	Pseudotsuga menziesii	Douglas-fir	24.6	L
981	Pseudotsuga menziesii	Douglas-fir	29.3	L
982	Pseudotsuga menziesii	Douglas-fir	29.8	L
983	Pseudotsuga menziesii	Douglas-fir	26.4	L
984	Pseudotsuga menziesii	Douglas-fir	28	L
985	Pseudotsuga menziesii	Douglas-fir	37.7	L
986	Pseudotsuga menziesii	Douglas-fir	26.9	L
987	Sorbus aucuparia	European mountain ash	3.5	S
988	Pseudotsuga menziesii	Douglas-fir	27.5	L
989	Quercus rubra	northern red oak	43.6	L
990	Pseudotsuga menziesii	Douglas-fir	42.7	L
991	Pseudotsuga menziesii	Douglas-fir	31.3	L
992	Pseudotsuga menziesii	Douglas-fir	21	L
993	Fagus sylvatica	European beech	11.6	L
994	Cedrus deodara	deodar cedar	35	L
995	Ulmus americana	American elm	43.4	L
996	Pseudotsuga menziesii	Douglas-fir	31	L
997	Pseudotsuga menziesii	Douglas-fir	34.2	L
998	Pseudotsuga menziesii	Douglas-fir	27	L
999	Pseudotsuga menziesii	Douglas-fir	33.4	L
1000	Pseudotsuga menziesii	Douglas-fir	27.8	L
1001	Prunus avium	bird cherry		
1002	Juglans nigra	black walnut		
1003	Pseudotsuga menziesii	Douglas-fir		
1004	Tsuga heterophylla	western hemlo		
1005	Sorbus aucuparia	European mou		
1006	Cornus nuttallii	Pacific dogwoo		
1007	Fraxinus latifolia	Oregon ash	39.4	M
1008		common horsechestnut	33.2	L

Date

Approved
City of Portland
Bureau of Development Services

Planner

1-25-2024

*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Mt Tabor Park Tree Inventory

TreeNo	Genus species	Common Name	DBH	Size
1009	Aesculus hippocastanum	common horsechestnut	25.5	L
1010	Celtis occidentalis	common hackberry	17	M
1011	Amelanchier spp.	serviceberry	2.1	S
1012	Prunus cerasifera	flowering plum	16.2	S
1013	Juglans nigra	black walnut	45.3	L
1014	Quercus garryana	Oregon white oak	0.3	L
1015	Quercus garryana	Oregon white oak	0.3	L
1016	Platanus x acerifolia	London plane tree	16.6	L
1017	Amelanchier spp.	serviceberry	1.3	S
1018	Pseudotsuga menziesii	Douglas-fir	25.8	L
1019	Juglans nigra	black walnut	45.7	L
1020	Aesculus hippocastanum	common horsechestnut	20.5	L
1021	Pseudotsuga menziesii	Douglas-fir	33.3	L
1022	Aesculus hippocastanum	common horsechestnut	21.8	L
1023	Pseudotsuga menziesii	Douglas-fir	30.8	L
1024	Pseudotsuga menziesii	Douglas-fir	25.4	L
1025	Pseudotsuga menziesii	Douglas-fir	38	L
1026	Pseudotsuga menziesii	Douglas-fir	25	L
1027	Aesculus hippocastanum	common horsechestnut	18.1	L
1028	Aesculus hippocastanum	common horsechestnut	21.6	L
1029	Pseudotsuga menziesii	Douglas-fir	33.9	L
1030	Acer macrophyllum	bigleaf maple	3.4	L
1031	Pseudotsuga menziesii	Douglas-fir	29.3	L
1032	Pseudotsuga menziesii	Douglas-fir	31.7	L
1033	Pseudotsuga menziesii	Douglas-fir	16	L
1034	Pseudotsuga menziesii	Douglas-fir	33.8	L
1035	Pseudotsuga menziesii	Douglas-fir	27.2	L
1036	Pseudotsuga menziesii	Douglas-fir	25.5	L
1037	Pseudotsuga menziesii	Douglas-fir	28.1	L
1038	Thuja plicata	western redcedar	5	L
1039	Crataegus monogyna	English hawthorn, common	17	S
1040	Liquidambar styraciflua	sweetgum	34.6	M
1041	Thuja plicata	western redcedar	12.5	L
1042	Thuja plicata	western redcedar	11.7	L
1043	Quercus garryana	Oregon white oak	0.3	L
1044	Quercus rubra	northern red oak	42.9	L
1045	Prunus serrulata	Japanese flowering cherry	9.3	S
1046	Platanus x acerifolia	London plane tree	18.9	L
1047	Pseudotsuga menziesii	Douglas-fir	33.5	L
1048	Pseudotsuga menziesii	Douglas-fir	34.6	L
1049	Juglans nigra	black walnut	41.5	L
1050	Aesculus hippocastanum	common horsechestnut	28.7	L
1051	Pseudotsuga menziesii	Douglas-fir	32.3	L
1052	Pseudotsuga menziesii	Douglas-fir	28.6	L
1053	Pseudotsuga menziesii	Douglas-fir	56.1	L
1054	Pseudotsuga menziesii	Douglas-fir	29	L
1055	Pseudotsuga menziesii	Douglas-fir	43.4	L
1056	Ilex aquifolium	English holly	11.4	M
1057	Pseudotsuga menziesii	Douglas-fir	37.8	L
1058	Acer macrophyllum	bigleaf maple	22.9	L
1059	Acer circinatum	vine maple	6.3	S
1060	Pseudotsuga menziesii	Douglas-fir	28.3	L
1061	Pseudotsuga menziesii	Douglas-fir	36.5	L
1062	Acer platanoides	Norway maple	21.7	M
1063	Fagus grandifolia	American beech	24.9	L
1064	Quercus rubra	northern red oak	28.5	L
1065	Prunus serrulata	Japanese flowering cherry	9.5	S
1066	Aesculus hippocastanum	common horsechestnut	28.3	L
1067	Pseudotsuga menziesii	Douglas-fir	39.4	L
1068	Pseudotsuga menziesii	Douglas-fir	31.2	L
1069	Pseudotsuga menziesii	Douglas-fir	29	L
1070	Pseudotsuga menziesii	Douglas-fir	24.7	L
1071	Aesculus hippocastanum	common horsechestnut	27.2	L
1072	Pseudotsuga menziesii	Douglas-fir	29.5	L
1073	Pseudotsuga menziesii	Douglas-fir	26.1	L
1074	Metasequoia glyptostroboides	dawn redwood	16.4	L
1075	Prunus cerasifera	flowering plum	10.5	S
1076	Pseudotsuga menziesii	Douglas-fir	32.9	L
1077	Pseudotsuga menziesii	Douglas-fir	21.2	L
1078	Pseudotsuga menziesii	Douglas-fir	43.5	L
1079	Pseudotsuga menziesii	Douglas-fir	39.1	L
1080	Prunus cerasifera	flowering plum	10.3	S
1081	Prunus cerasifera	flowering plum	1.5	S
1082	Crataegus monogyna	English hawthorn, common	20.3	S
1083	Pseudotsuga menziesii	Douglas-fir	45.3	L
1084	Crataegus monogyna	English hawthorn, common	19.8	S
1085	Amelanchier spp.	serviceberry	1.6	S
1086	Amelanchier spp.	serviceberry	2.2	S
1087	Pseudotsuga menziesii	Douglas-fir	15	L
1088	Thuja plicata	western redcedar	11.3	L
1089	Prunus serrulata	Japanese flowering cherry	10.4	S
1090	Prunus serrulata	Japanese flowering cherry	11.2	S
1091	Pseudotsuga menziesii	Douglas-fir	25.5	L
1092	Juglans nigra	black walnut	36.8	L
1093	Aesculus hippocastanum	common horsechestnut	22.7	L
1094	Pseudotsuga menziesii	Douglas-fir	32.8	L
1095	Pseudotsuga menziesii	Douglas-fir	20.5	L
1096	Pseudotsuga menziesii	Douglas-fir	24.8	L
1097	Pseudotsuga menziesii	Douglas-fir	33.5	L
1098	Pseudotsuga menziesii	Douglas-fir	27.8	L
1099	Pseudotsuga menziesii	Douglas-fir	26.7	L
1100	Pseudotsuga menziesii	Douglas-fir	36.9	L
1101	Pinus sylvestris	Scots pine	7.8	L
1102	Pseudotsuga menziesii	Douglas-fir	38.5	L
1103	Pseudotsuga menziesii	Douglas-fir	28.2	L
1104	Pseudotsuga menziesii	Douglas-fir	46.4	L
1105	Pseudotsuga menziesii	Douglas-fir	37.3	L
1106	Pseudotsuga menziesii	Douglas-fir	19.3	L
1107	Pseudotsuga menziesii	Douglas-fir	27.8	L
1108	Pseudotsuga menziesii	Douglas-fir	35	L
1109	Pseudotsuga menziesii	Douglas-fir	38.2	L
1110	Acer negundo	box elder	8.3	L
1111	Acer macrophyllum	bigleaf maple	22.3	L
1112	Pseudotsuga menziesii	Douglas-fir	24	L
1113	Acer macrophyllum	bigleaf maple	21.9	L
1114	Chamaecyparis lawsoniana	Port Orford cedar	25.7	L
1115	Acer macrophyllum	bigleaf maple	22.5	L
1116	Acer macrophyllum	bigleaf maple	28.1	L
1117	Acer macrophyllum	bigleaf maple	11.7	L
1118	Acer macrophyllum	bigleaf maple	12.6	L
1119	Acer macrophyllum	bigleaf maple	15.2	L
1120	Acer macrophyllum	bigleaf maple	36	L
1121	Acer macrophyllum	bigleaf maple	22.5	L
1122	Acer macrophyllum	bigleaf maple	13.4	L
1123	Acer macrophyllum	bigleaf maple	21.4	L

Date ___ *Approved*
City of Portland
Bureau of Development Services
Planner_____
1-25-2024
* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

LU 23-088549 HR DM, Exhibit C.31

S.E. PORTLAND

S.E. Taylor

North Tabor Dr.

LEGEND

= 5' DIA. DISTURBANCE AREA

RIM=476.45
IE=474.45

RIM=476.45
IE=474.45

6" CSP

STATION (DRAIN)
RIM=497.89

CB (OIL TRAP)
RIM=498.71

MAINTENANCE BUILDING
F.F.E.=500.61

CB (OIL TRAP)
RIM=498.67

WATER VAULT
RIM=498.88'

WATER VALVE
BF & VALVE

CB
RIM=493.33
IE OUT(8" NW)=492.78

CB
RIM=498.18
IE=494.68

RESTROOMS
F.F.E.=494.47

C.O.
RIM=494.81

PGE POLE #193
METER #907206E
FOR MAINT. BLDG. &
METER #6586398
FOR REST ROOM BLDG.

Account 297865-310-0
2" Meter 31894780
-feeds 2" Conbraco DCVA HG019 (potable)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA I2343 (irrigation)
-6650 SE Yamhill St

2" Conbraco 40-108-A2T DCVA
Serial # HG019
-fed by 2" Meter 31894780 (POC)
-feeds 1½" Wilkins DCVA 943826 (potable via booster pump)
-feeds 2" Conbraco DCVA I2343 (irrigation)

RIM=483.00
IE IN(SE)=480.70
IE IN(SW)=480.70
IE OUT=480.60

C.O.

C.O.

CB (OIL TRAP)
RIM=496.53
IE OUT(8" W)=494.73

1½" Wilkins 950XL DCVA
Serial # 943826
-fed by 2" Meter 31894780 (POC)
-fed by 2" Conbraco DCVA HG019 (potable)
-feeds potable via booster pump (rest rooms + maint. building + drinking fountain)
-feeds 2" Conbraco DCVA I2343 (irrigation)

CB
RIM=498.60
IE=495.10

CB
RIM=496.80
IE=493.80

DAYLIGHT
IE=494.00

4" OVERFLOW

DRYWELL
IE IN(N&W)=493.40

3" PVC

MATCHLINE
SEE SHEET C3

MATCHLINE
SEE SHEET C2

CB (OIL TRAP)
RIM=482.03

30A, NEMA 3R SERVICE RATED DISCONNECT

PICNIC AREA

IRRIGATION CONTROLLER

IRRIGATION BOOSTER PUMP

I.E. OUT(6" SE)=469.58'

AD
RIM=480.18
IE OUT (6" SW)=478.52

AD
RIM=478.80
IE OUT (6" S)=477.35
IE IN (6" N)=477.35

IE OUT (8" NE)=457.63

70 69 68 67 71 72 82 81 80 25

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Approved
City of Portland
Bureau of Development Services
Planner
Date 1-25-2024

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - Amphitheater and Play Area

Portland, Oregon

PROJECT MANAGER:

DRAWN BY:Mike Van Yserloo

DATE: 9/7/2023

SCALE: 1"=60'

SECTION:

REVISIONS

DATE	DESCRIPTION	BY

N

C1
OF 6

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

LU 23-088549 HR DM, Exhibit C.32

WATER MAIN IN ROADWAY. DISTURBANCE AREA TO BE LIMITED BETWEEN EDGE OF SIDEWALK AND BACK OF CURB.

15.8 FT CLEARANCE BETWEEN DISTURBANCE AREA AND WATER MAIN.

MATCHLINE SEE SHEET C1

MATCHLINE SEE SHEET C3

MATCHLINE SEE SHEET C4

MATCHLINE SEE SHEET C5

Salmon Street Way

Taborlin Dr.

Reservoir

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Date
Approved
City of Portland
Bureau of Development Services
Planner
1-25-2024

*This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - NW
Portland, Oregon

PROJECT MANAGER:
DRAWN BY: Mike Van Yserloo
SCALE: 1"=100'
DATE: 9/7/2023
SECTION:

REVISIONS		
DATE	DESCRIPTION	BY

C2
OF 6

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

PLOTTED FROM: WS30621
PLOTTED BY: pkmichaelv
PLOTTED ON: 9/7/2023

WATER MAIN UNDER STAIRS. DISTURBANCE AREA TO BE LIMITED OUTSIDE OF STAIRS.

MATCHLINE
SEE SHEET C1

MATCHLINE
SEE SHEET C2

MATCHLINE
SEE SHEET C5

S.E. Taylor Dr.
S.E. Taylor
East Tabor Dr.
North Tabor Dr.
Tabor Summit Dr.
S.E. Main
Reservoir 7

ST MH
RIM=445.56
IE OUT (24" N)=435.94
IE IN (10" SW)=440.76
IE IN (10" SW)=440.08
IE IN (8" SE)=439.19

SED MH
RIM=451.70
IE IN(NE)=449.10
IE IN(SE)=449.10
IE OUT(N)=449.00

CB
RIM=449.28
IE OUT (8" PVC NE)=443.56

CB
RIM=451.20
IE=449.68

CB
RIM=454.57
IE=451.07

To East Restroom

2" Gorbracco 40-108-T2 DCVA
Serial by 2" Meter: 99740856 (POC)
Feed by 2" Meter 20002054-D
Feeds portable (pest room + restroom + hose bibb)
(irrigation via booster pump)

Account 197-863-530-0
2" Meter: 99740856
Feeds 2" Conbraco DCVA W991 (potable)
Feeds 2" Conbraco DCVA 4451T
(irrigation via booster pump)

Account 197-863-530-0
2" Meter: 20002054-D
Feeds 2" Conbraco DCVA 08-108-T2
Feeds portable (pest room + restroom + hose bibb)

CB
RIM=384.87
IE OUT (8" E)=382.87

CB
RIM=382.91
IE IN (8" W)=381.76
IE OUT (8" E)=381.26

CB
RIM=384.12
IE IN (6" SW)=382.24
IE OUT (8" E)=381.26

CB
RIM=397.18
IE OUT (10" NW)=394.88

IE OUT (8" E)=547.90

CB
RIM=553.39
IE OUT (8" E)=552.74

OUTFALL
IE OUT (8" PVC NE)=541.24

AD
RIM=559.61
IE OUT (8" CONC N)=557.06

SSMH
RIM=613.45

CB
RIM=480.57
IE IN (6" METAL S)=478.07
IE OUT (6" STEEL N)=478.02

CB
RIM=516.43
IE IN (6" CONC N)=513.13
IE OUT (6" CONC S)=513.08

CB
RIM=466.86
1' TO BOTTOM, NO PIPES

ROOF DRAIN
I.E. OUT

ANTENNA
POWER METER
BOWL SANITARY STANDPIPE
GAS STANDPIPE
ELECT STANDPIPE

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Date
"Approved"
City of Portland
Bureau of Development Services
Planner
1-25-2024

* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

LU 23-088549 HR DM, Exhibit C.33

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - NE

Portland, Oregon

DATE: 9/7/2023

PROJECT MANAGER:

DRAWN BY:Mike Van Yserloo

SECTION:

SCALE: 1"=100'

REVISIONS		
DATE	DESCRIPTION	BY

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

C3
OF 6

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

MATCHLINE

SEE SHEET C2

SEE SHEET C5

POTENTIAL WATER LINE CONFLICT.
LIGHT POLE TO BE RELOCATED
5 FT MIN TO THE NW.

TOP OF PIPE < 378.27 FT
BOT. OF POLE > 407.87 FT
MIN. CLEARANCE > 29.60 FT

POTENTIAL WATER LINE CONFLICT.
LIGHT POLE TO BE RELOCATED
15 FT TO THE SOUTHEAST.

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

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Approved
City of Portland
Bureau of Development Services
Planner 1-25-2024 Date

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - W
Portland, Oregon

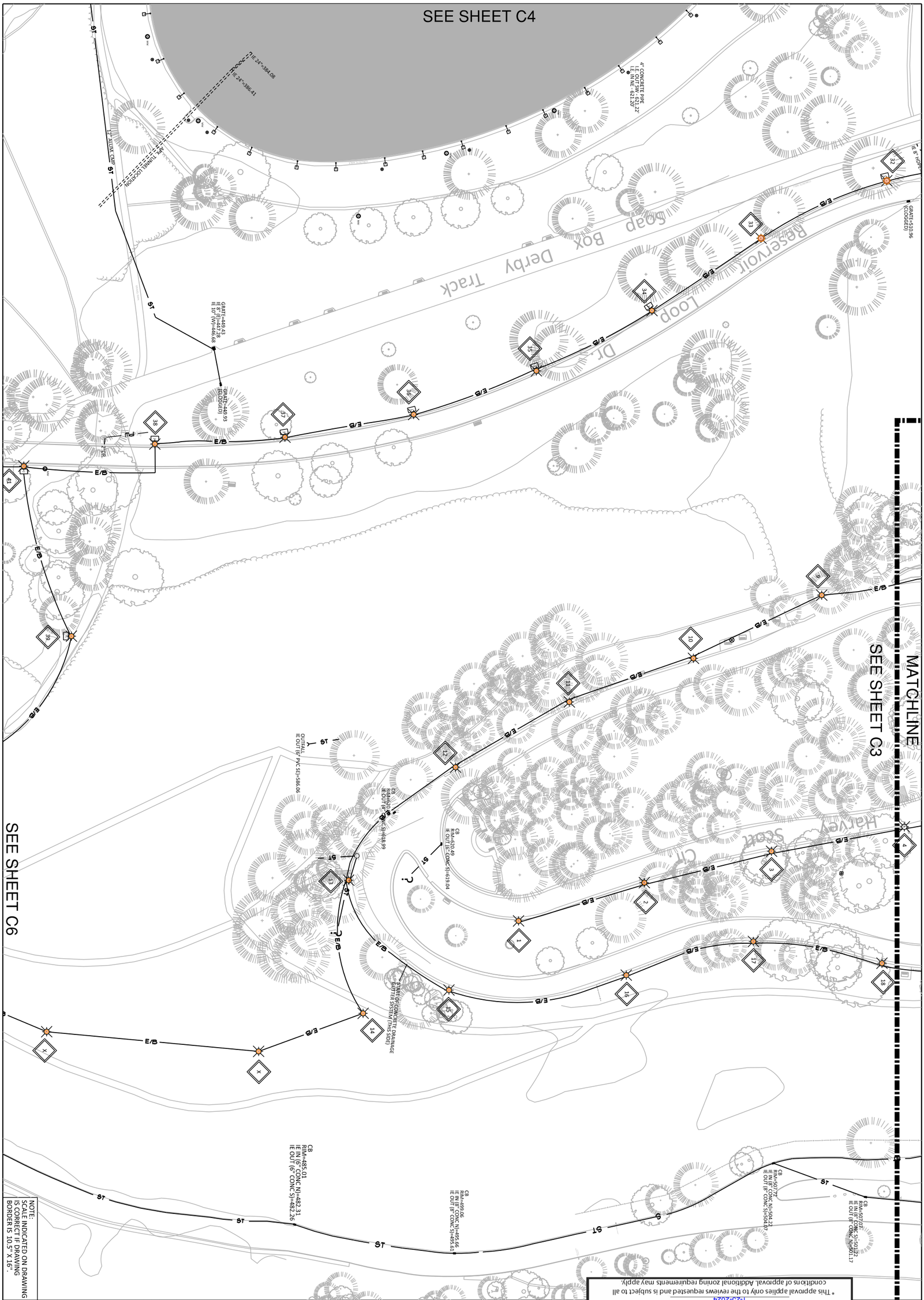
PROJECT MANAGER:
DRAWN BY:Mike Van Yserloo
SECTION:
SCALE: 1"=100'
DATE: 9/7/2023

REVISIONS

DATE	DESCRIPTION	BY

C4
OF 6

LU 23-088549 HR DM, Exhibit C.34



NOTE:
SCALE INDICATED ON DRAWING
IS CORRECT IF DRAWING
BORDER IS 10.5" X 16".

* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

"Approved"
City of Portland
Bureau of Development Services

Planner

Date 1-25-2024

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Portland Parks and Recreation
Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park
Civil Features - E

Portland, Oregon

PROJECT MANAGER:

DATE: 9/7/2023 SCALE: 1"=100' DRAWN BY:Mike Van Yserloo SECTION:

REVISIONS

DATE	DESCRIPTION	BY

C5
OF 6

PLOTTED ON: 9/7/2023 PLOTTED BY: pkmichaelv PLOTTED FROM: WS30621

DRAWING: K:\PARKSITE\MT_Tabor\Engineering\Elect_On\Mt_Tabor_Locate_Maps_Electric.dgn

SEE SHEET C4

SEE SHEET C5

S.E. Lincoln Dr.

East Tabor Dr.

GRATE=444.13 (CLOGGED)

GRATE=443.52 (CLOGGED)

GRATE=420.59 IE 6" (W&E)=416.89

TOP OF PIPE ELEV=396.48

IE 8" INLET=401.54

IE=397.92

GRATE=328.97 IE 8" (N&S)=325.52

GRATE=342.32 IE 8" (N&S)=338.87

TOP OF STANDPIPE 357.33

CB RIM=358.16 IE IN (12" CONC NE)=353.56 IE OUT (12" CONC SW)=353.46

WMH

TOP 4" PIPE ELEV. 249.75

CONDUIT #1

CB RIM=316.29 IE OUT (10" CONC NE)=315.03

ST MH RIM=316.29 IE IN (10" CONC SW)=313.97 IE IN (12" CONC SW)=311.90 IE OUT (12" CONC NE)=311.78

CB RIM=341.31 IE OUT (10" CONC NE)=339.81

ST MH RIM=341.27 IE IN (10" CONC W)=338.47 IE IN (12" CONC SW)=337.42 IE OUT (12" CONC NE)=337.37

12" CI WATER LINE LOCATE MARKS FROM 6/22/10

POTHOLE LOCATION 12" CI 5.25' DEEP

POTHOLE AREA FOR 36" CI, NO PIPE FOUND, 3.5' DEEP

36" CI WATER LINE LOCATE MARKS FROM 6/22/10

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

* This approval applies only to the reviews requested and is subject to all conditions of approval. Additional zoning requirements may apply.

Planner 1-25-2024 Date

Approved
City of Portland
Bureau of Development Services

LU 23-088549 HR DM, Exhibit C.36

Portland Parks and Recreation

Dan Ryan, Commissioner - Adena Long, Director

Mt. Tabor Park

Civil Features - S

Portland, Oregon

DATE: 9/7/2023

SCALE: 1"=100'

PROJECT MANAGER:

DRAWN BY:Mike Van Yserloo

SECTION:

REVISIONS		
DATE	DESCRIPTION	BY

NOTE:
SCALE INDICATED ON DRAWING IS CORRECT IF DRAWING BORDER IS 10.5" X 16".

C6
OF 6

City of Portland, Oregon
Bureau of Development Services
Land Use Services
FROM CONCEPT TO CONSTRUCTION

Carmen Rubio, Commissioner
Rebecca Esau, Director
Phone: (503) 823-7300
TTY: 711
www.portland.gov/bds

Date: December 15, 2023

From: Arthur Graves, Land Use Services
503.865.6517 | Arthur.Graves@portlandoregon.gov

REQUEST FOR RESPONSE

Case File: **LU 23-088549 HR DM**
Pre App: **PC # 23-047200**

This notice is being sent to all service and technical review agencies for their input on the proposal described below. Neighborhood Associations also receive this advance notice via e-mail. *Your timely response, as indicated below, will help the assigned planner determine if applicable approval criteria can be met, or what conditions might be required*.

- The approval criteria are listed below. Although we are interested in any comments you may have, please consider your response in terms of these criteria.
- All agencies are encouraged to use this as an opportunity to inform the applicant of any additional requirements that may be imposed by your agency during building permit phase – especially those that would significantly affect the proposal.
- Please note in your response which requirements are specifically associated with the applicable land use review approval criteria, and which requirements you have the independent authority to impose at time of building permits.
- Neighborhood Associations are encouraged to submit comments by the deadline noted below. To comment, you may write to Arthur Graves at 1900 SW Fourth Ave., Suite 4500, Portland, OR 97201. You can also e-mail your comments to me at my e-mail address identified above. After the staff report is published, please submit your comments to the Landmarks Commission at 1900 SW Fourth Ave., Suite 4500, Portland, OR 97201 and fax them to 503.823.5630.

The Bureau of Development Services recommendation will be published ten days before the scheduled hearing date. You will also receive a Notice of Public Hearing for this proposal, with hearing date and time confirmed, mailed twenty days prior to the hearing.

- **Please send your response to BDS no later than: January 05, 2024 – 21 days after the date of this RFR** (If I receive comments after this date, I may not have enough time to include them in the staff report).
- **We must publish our report by: January 12, 2024.**
- **A public hearing before the Landmarks Commission is tentatively scheduled for January 22, 2024**

Applicant:	Brett Horner | Portland Parks & Recreation 1210 SW 5th Ave Suite 800 | Portland OR 97204 971.409.3518 | Brett.Horner@Portlandoregon.gov
Owner:	City Of Portland 1900 SW 4th Ave Ste 7007 | Portland, OR 97201-5380
Site Address:	6325 SE DIVISION ST
Legal Description:	TL 100 190.32 ACRES, SECTION 05 1S 2E
Tax Account No.:	R992050130
State ID No.:	1S2E05 00100
Quarter Section:	3136,3137,3236,3237
Neighborhood:	Mt. Tabor, contact at contact.MTNA@gmail.com
Business District:	NONE
District Coalition:	Southeast Uplift, contact at operations@seuplift.org
Plan District:	NONE
Other Designations:	Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District
Zoning:	OSc, s: Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
Case Type:	HR DM: Historic Resource Review, Demolition Review
Procedure:	Type III, with a public hearing before the Landmarks Commission. The decision of the Landmarks Commission can be appealed to City Council.

Proposal:
Type III Historic Resource Review for the replacement of 88 light poles: 84 within Mt Tabor Park and 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. Replacement poles will be installed in approximately the same location as the current poles.

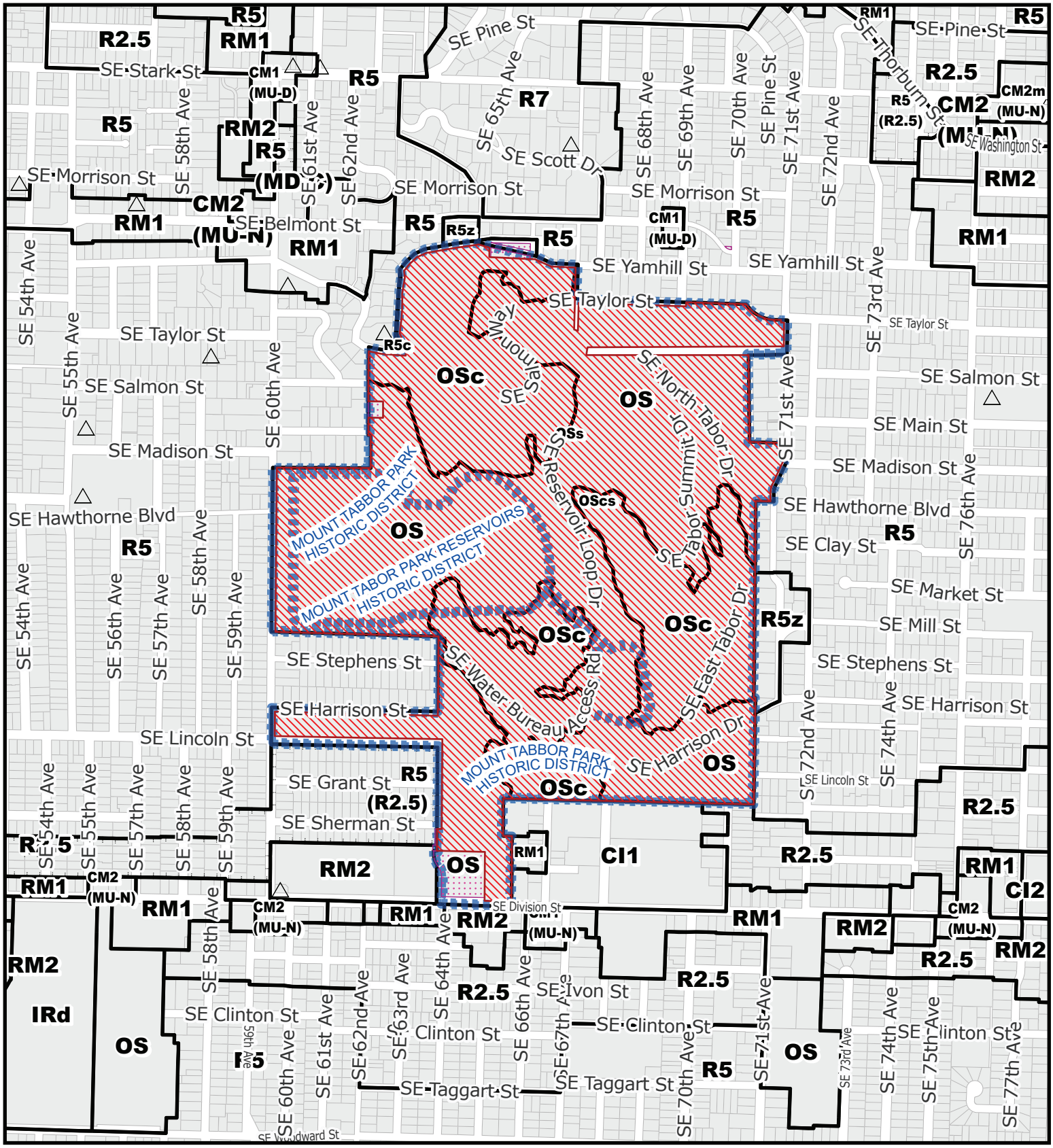
Historic Resource Review is required because the proposal is for non-exempt development within a historic overlay zone, per Section 33.846.

Approval Criteria:
In order to be approved, this proposal must comply with the approval criteria of Title 33, Portland Zoning Code. The applicable approval criteria are:

- *Light Demolition: The four criteria listed under 33.846.080.C*
- *Light Installation: 33.846.060.G. Other Approval Criteria*

Zoning Code Section 33.700.080 states that Land Use Review applications are reviewed under the regulations in effect at the time the application was filed, provided that the application is complete at the time of filing, or complete within 180 days. This application was filed on September 28, 2023 and determined to be complete on December 07, 2023.

Enclosures: Zoning Map, Site Plan, Details



For Zoning Code in Effect Post October 1, 2022

ZONING

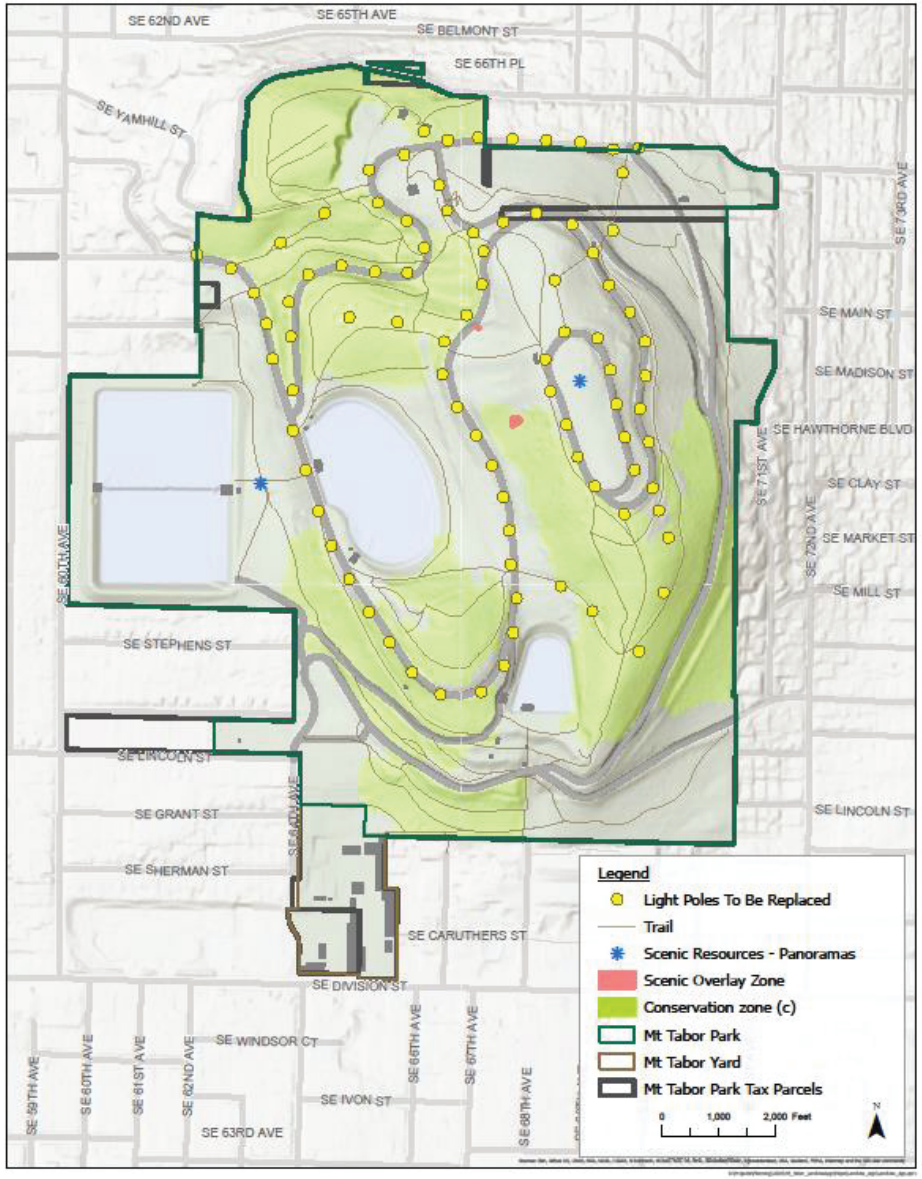
THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

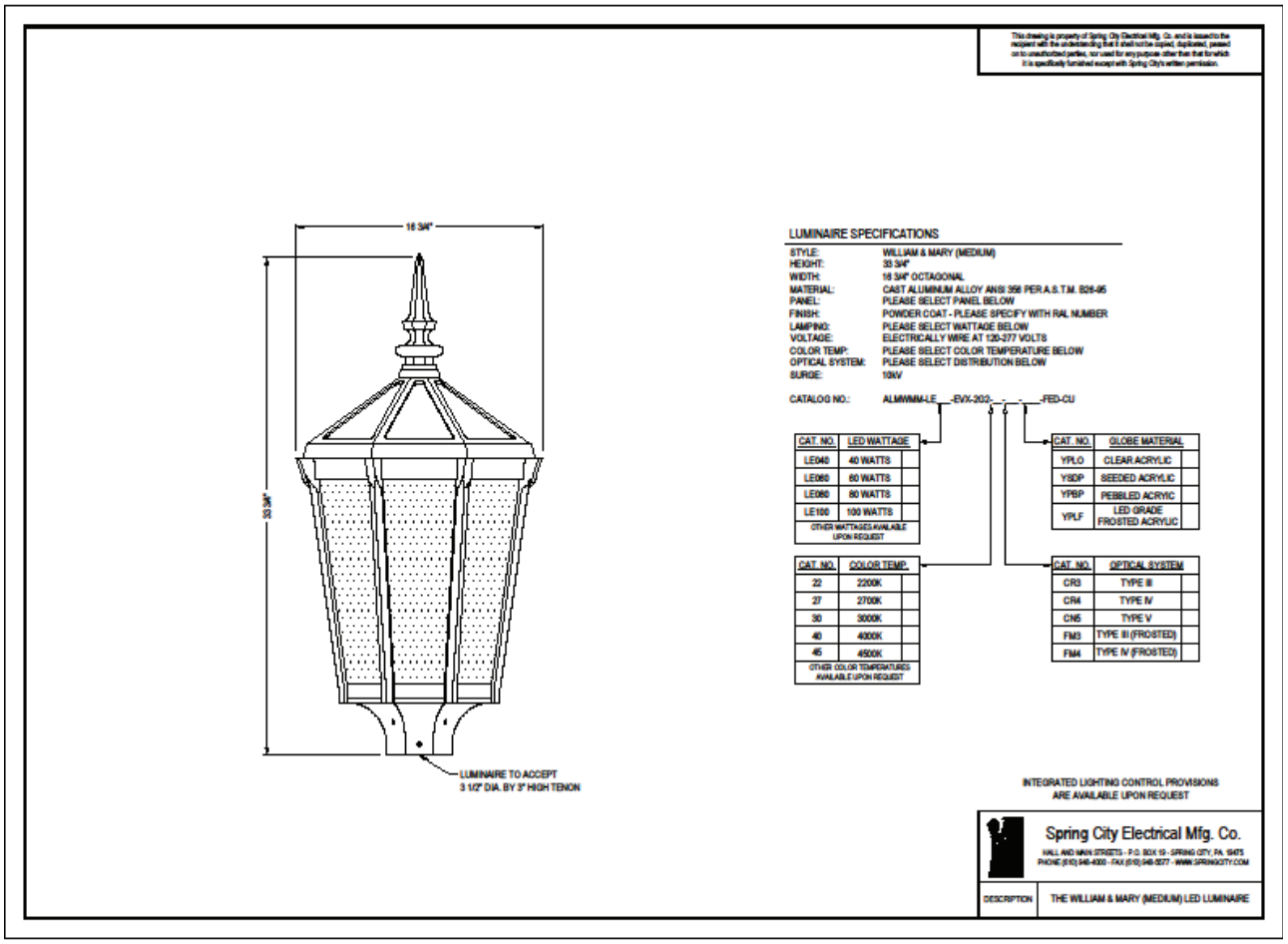
File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

LU 23-088549 HR DM, Exhibit D.1

Light pole locations with Conservation and Scenic Overlays



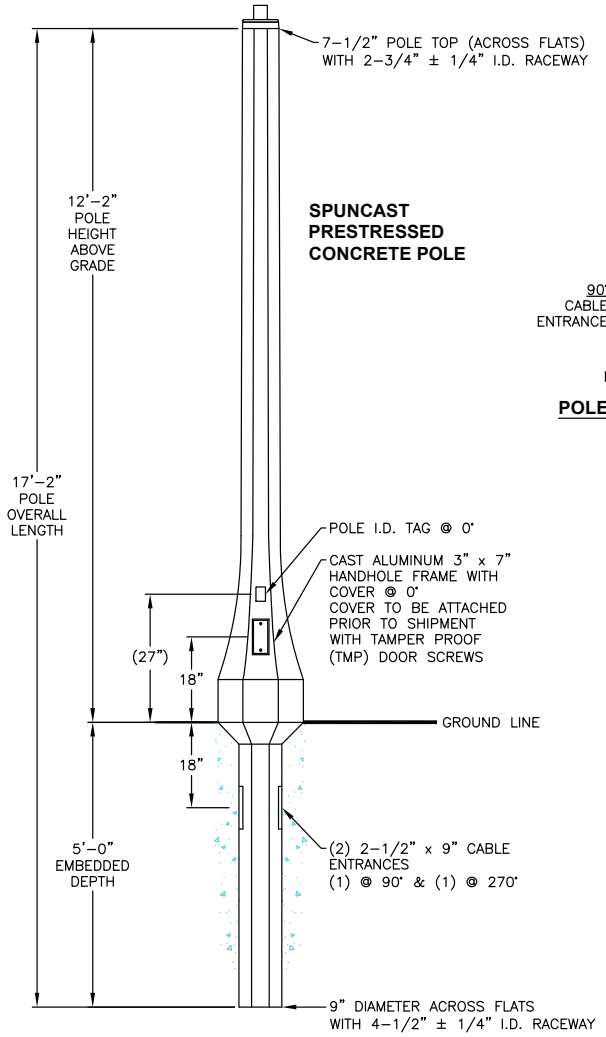
Light poles and fixture schematics



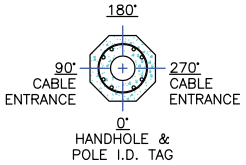
LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV
CATALOG NO.:	
• TYPE III:	ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
• TYPE V:	ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU

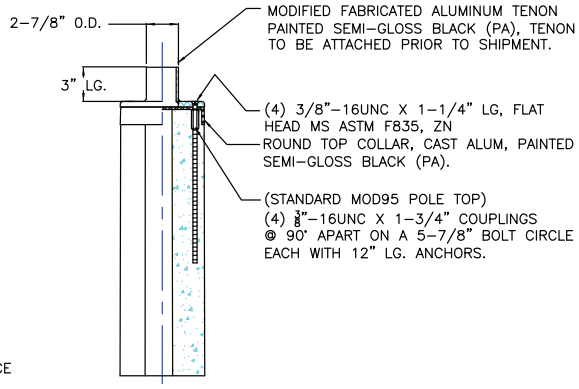
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	



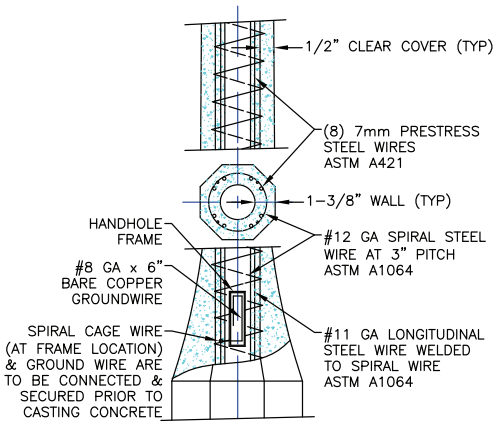
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Ameron POLE PRODUCTS
www.ameronpoles.com

PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

Carmen Rubio, Commissioner
Rebecca Esau, Director
Phone: (503) 823-7310
TTY: (503) 823-6868
www.portland.gov/bds

Date: December 13, 2023

To: Portland Parks & Recreation | Brett Horner
PORTLAND PARKS & RECREATION
1210 SW 5th Ave Suite 800 | Portland OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

From: Arthur Graves | BDS Planner
503-865-6517 | Arthur.Graves@portlandoregon.gov

RE: LU 23-088549 HR DM

Dear Applicant:

I have received your application for a Historic Resource Review DM at 6325 SE DIVISION ST. Your application was deemed complete on December 07, 2023 and the hearing is scheduled for **January 22, 2024**.

The Zoning Code requires you to post notice on the site of your proposal at least 30 days before the hearing. The information below will help you do this. **It is recommended that you work with a sign manufacturer to prepare the posting board.** I am enclosing a digital copy of the posting board, a copy of the notice that must be placed on the posting boards, and instructions for printing and installation.

A. Because the hearing for your case is scheduled for **January 22, 2024**, you must post the notice by December 23, 2023, 30 days before the hearing.

B. **A certification statement is enclosed, which you must sign and return**. The statement affirms that you posted the site. It also confirms your understanding that if you do not post the notice by the date above, your hearing will be automatically postponed. In addition, time limits on our processing of your case will be waived. You must return this statement to us by January 08, 2024, 14 days before the hearing.

C. Your site has multiple frontages. **There must be at least one sign every 600 feet along the entirety of the Mt Tabor frontages**.

D. These signs must be placed within 10 feet of the street frontage line and must be visible to pedestrians and motorists. You may not post in the public right-of-way.

E. You should not remove the notice before the hearing, but it must be taken down within two weeks after the final decision is made on your request.

Encl: Posting Notice
Statement Certifying Posting

cc: Application Case File

Portland Parks & Recreation | Brett Horner
PORTLAND PARKS & RECREATION
1210 SW 5th Ave Suite 800 | Portland OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

DATE: _____

TO: Arthur Graves
Arthur.Graves@portlandoregon.gov
Bureau of Development Services
1900 SW Fourth Ave., Suite 5000
Portland, OR 97201

APPLICANT'S STATEMENT CERTIFYING POSTING

Case File LU 23-088549

This certifies that I have posted notice on my site as required by the Zoning Code. I understand that the hearing is scheduled for January 22, 2024, and that I was required to post the property at least 30 days before the hearing.

The required number of poster boards, with the notices attached, were set up on _____(date). These were placed within 10 feet of the street frontage line so that they were visible to pedestrians and motorists.

I understand that this form must be returned to the Bureau of Development Services no later than January 08, 2024, 14 days before the scheduled hearing. I also understand that if I do not post the notices by 30 days before the hearing, or return this form by 14 days before the hearing, my hearing will automatically be postponed. I also understand this will result in a waiver of the time limits for processing my case.

In addition, I understand that I may not remove the notices before the hearing, but am required to remove them within two weeks of the final decision on my request.

_____
Signature

_____
Print Name

_____
Address

_____
City/State/Zip Code

Type III Land Use Review

Mt. Tabor Removal and Replacement of 88 Light Poles

CASE FILE	**LU 23-088549 HR DM** (EA 23-047200 PC)
WHEN	**MONDAY, January 22, 2024 @ 1:30 PM** (not time certain) *(This is the hearing start time –see Commission agenda for estimated project start time.)*
WHERE	**ONLINE: Link to hearing is available at https://www.portland.gov/bds/landmarks**
HOW	**TO TESTIFY: Follow instructions on the Historic Landmarks Commission agenda or email the planner at Grace.Jeffreys@portlandoregon.gov**
REVIEW BY	**HISTORIC LANDMARKS COMMISSION**
LAND USE REVIEW TYPE	**HISTORIC RESOURCE REVIEW and DEMOLITION REVIEW**
PROPOSAL	Type III Historic Resource Review and Demolition Review for the replacement of 88 light poles: 84 within Mt Tabor Park and 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. Replacement poles will be installed in approximately the same location as the current poles.
REVIEW APPROVAL CRITERIA	• *Light Installation: Portland Zoning Code Section 33.846.060.G. Other Approval Criteria* • *Light Demolition: Portland Zoning Code Section 33.846.080.C.4*
SITE ADDRESS	**Mt Tabor Park: 6325 SE DIVISION ST**
ZONING/ DESIGNATION	OSc, s: Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
FURTHER INFO	Available online at ***www.portlandoregon.gov/bds/dcagenda*** or contact the planner listed below at the Bureau of Development Services.
QUESTIONS? BDS CONTACT	**Grace Jeffreys, City Planner** **503.865.6521 / Grace.Jeffreys@PortlandOregon.gov** Bureau of Development Services, 1900 SW 4th Ave, Suite 5000, Portland, OR 97201

Traducción e interpretación | Chuyển Ngữ hoặc Phiên Dịch | 翻译或传译 | Turjumida ama Fasiraadda | 翻訳または通訳 | ภาษาและล่าม หรือ การอะหึบาย
Письменныйили устный перевод | Traducere sau Interpretare | 번역및통역 | الترجمة التحريرية أو الشفوية | Письмовий або усний переклад

503-823-7300 | BDS@PortlandOregon.gov | www.PortlandOregon.gov/bds/translated | TTY: 503-823-6868 Relay Service: 711

City of
Portland, Oregon
Bureau of Development Services
FROM CONCEPT TO CONSTRUCTION

Carmen Rubio, Commissioner
David Kuhnhausen, Interim Director
Phone: (503) 823-7300
TTY: 711
www.portland.gov/bds

Date: January 2, 2024

To: Interested Person

From: Grace Jeffreys, Land Use Services
503-865-6521 / Grace.Jeffreys@portlandoregon.gov

NOTICE OF A PUBLIC HEARING ON A PROPOSAL IN YOUR NEIGHBORHOOD

CASE FILE: LU 23-088549 HR DM - Mt Tabor Lights
PC # 23-047200

REVIEW BY: Landmarks Commission
WHEN: January 23, 2024, 1:30pm

This land use hearing will be limited to remote participation via Zoom. Please refer to the instructions included with this notice to observe and participate remotely (online or by phone).

Remote Access: Historic Landmarks Commission Agenda
https://www.portland.gov/bds/landmarks

The development proposal, review process, and information on how to respond to this notice are described below. A copy of the site plan and zoning map are attached. I am the staff person handling the case. Please contact me if you have questions regarding this proposal. Please contact the applicant if you have questions regarding any future development on the site.

Applicant: Brett Horner, Portland Parks & Recreation
1210 SW 5th Ave Suite 800, Portland OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

Owner: City of Portland
1900 SW 4th Ave Suite 7007, Portland, OR 97201-5380

Site Address: 6325 SE DIVISION ST

Legal Description: TL 100 190.32 ACRES, SECTION 05 1S 2E
Tax Account No.: R992050130
State ID No.: 1S2E05 00100
Quarter Section: 3136,3137,3236,3237

Neighborhood: Mt. Tabor, contact at contact.MTNA@gmail.com
Business District: NONE
District Coalition: Southeast Uplift, contact at operations@seuplift.org

Plan District: NONE
Other Designations: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District

Zoning: OSc,s: Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)

Case Type: HR DM: Historic Resource Review, Demolition Review
Procedure: Type III, with a public hearing before the Landmarks Commission. The decision of the Landmarks Commission can be appealed to City Council.

Proposal:
Type III Historic Resource Review for the replacement of 88 light poles: 84 within Mt Tabor Park and 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. Replacement poles will be installed in approximately the same location as the current poles.

Historic Resource Review is required because the proposal is for non-exempt development within a historic overlay zone, per Section 33.846.

Relevant Approval Criteria: In order to be approved, this proposal must comply with the criteria of Title 33. The relevant criteria are:

- *Light Demolition: The four criteria listed under 33.846.080.C*
- *Light Installation: 33.846.060.G. Other Approval Criteria*

The Portland Zoning Code is available online at https://www.portland.gov/code/33.

Zoning Code Section 33.700.080 states that land use review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. This application was submitted on September 28, 2023 and determined to be complete on December 7, 2023.

Decision Making Process: The Bureau of Development Services will make a recommendation on this proposal; our report and recommendation will be available 10 days before the hearing. The staff report will be posted on the Bureau of Development Services website at https://www.portland.gov/bds/zoning-land-use/public-notices. Land use review notices are listed on the website by the District Coalition in which the site is located; the District Coalition for this site is identified at the beginning of this notice. If you are interested in viewing the file, please contact the planner listed on the front of this notice. The planner can provide information over the phone or via email. Only digital copies of the material in the file are available for viewing.

We are seeking your comments on this proposal. To comment, you may write or testify at the remote hearing. Please refer to the file number when seeking information or submitting testimony. In your comments, you must address the approval criteria as stated in the administrative report and decision which you previously received. Please note that all correspondence and testimony received will become part of the public record.

Written comments must be received by the close of the record and should include the case file number. Any new written testimony should be emailed to Grace Jeffreys at Grace.Jeffreys@portlandoregon.gov .

Please note regarding USPS mail: If you choose to mail written testimony via USPS, testimony must be received before the close of the record. Therefore, please mail testimony well in advance of the hearing date.

Thank you for any information you can provide regarding this case.

If you plan to testify at the hearing, please refer to instructions included with this notice.

ORS 227.178 states the City must issue a final decision on land use review applications within 120 days of the application being deemed complete. The 120-day review period may be extended at the request of the applicant.

Appeal Process: You can appeal the decision of the Landmarks Commission to the City Council. If appealed, City Council will hold an evidentiary hearing. New evidence can be submitted to the City Council in the event of an appeal of an evidentiary hearing.

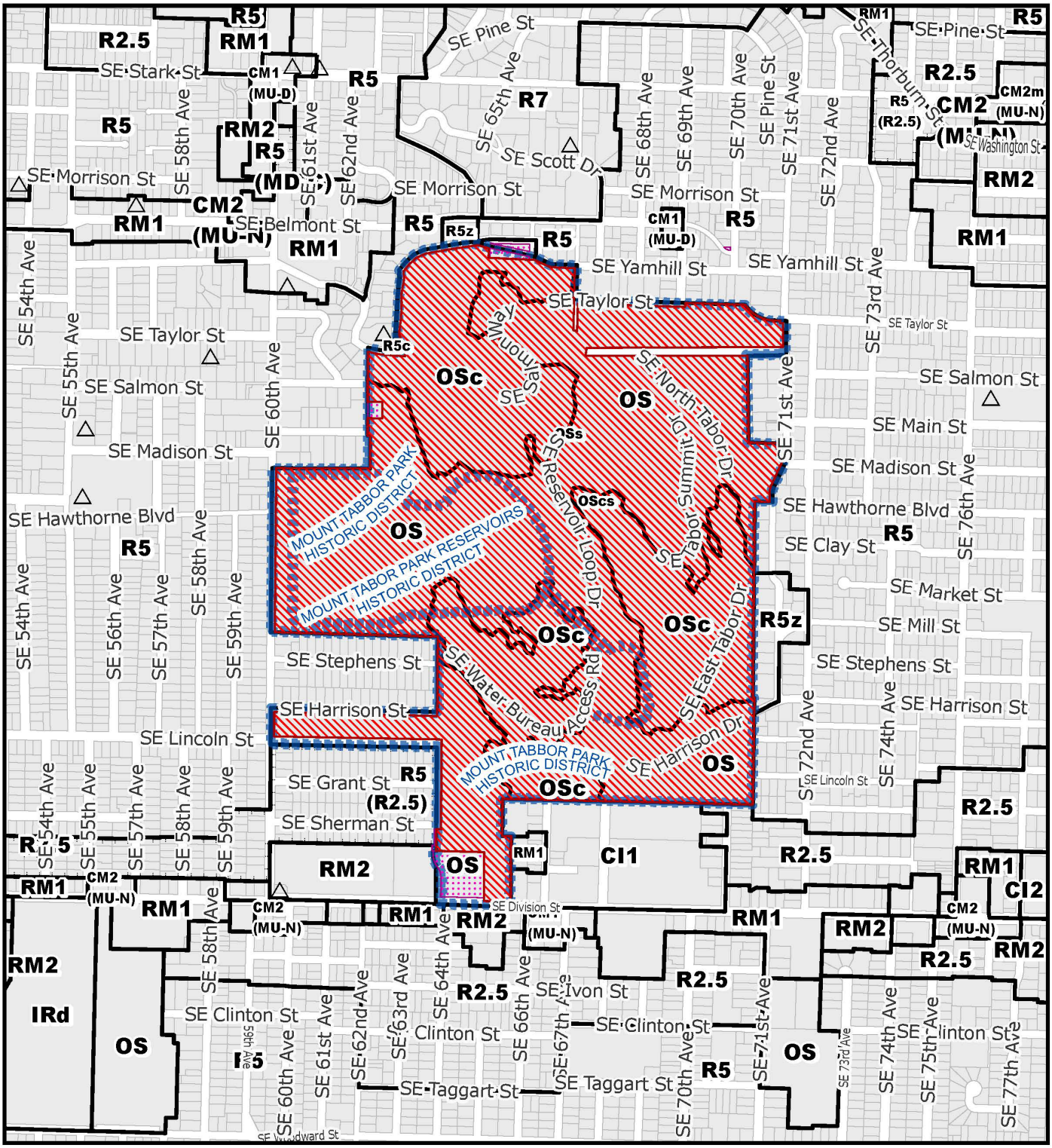
A fee is charged for appeals. Recognized neighborhood associations may qualify for an appeal fee waiver. The City Council's decision may be appealed to the Oregon Land Use Board of Appeals (LUBA).

Failure to raise an issue in person or in writing by the close of the record at or following the final evidentiary hearing on this case may preclude an appeal to LUBA on that issue. If you do not provide enough detailed information to the Landmarks Commission, they may not be able to respond to the issue you are trying to raise. In such a situation an appeal to LUBA based on that issue may not be allowed.

Hearing Cancellation:
This public hearing may be canceled due to inclement weather or other emergency. Please see the agenda for the scheduled date under "Events" on the Commission webpage https://www.portland.gov/bds/landmarks for information regarding cancellations or rescheduling. You may also contact the planner listed on this Notice. If canceled, the hearing will be rescheduled for the earliest possible date. A renotification notice will not be sent.

The Bureau of Development Services is committed to providing equal access to information and hearings. To request an accommodation or alternative format of communication, please contact us at least five business days prior to the hearing at 503-823-7300 (TTY 503-823-6868).

Enclosures:
Zoning Map
Site Plan
Lighting Plans
Land Use Hearing Participation Information



For Zoning Code in Effect Post October 1, 2022

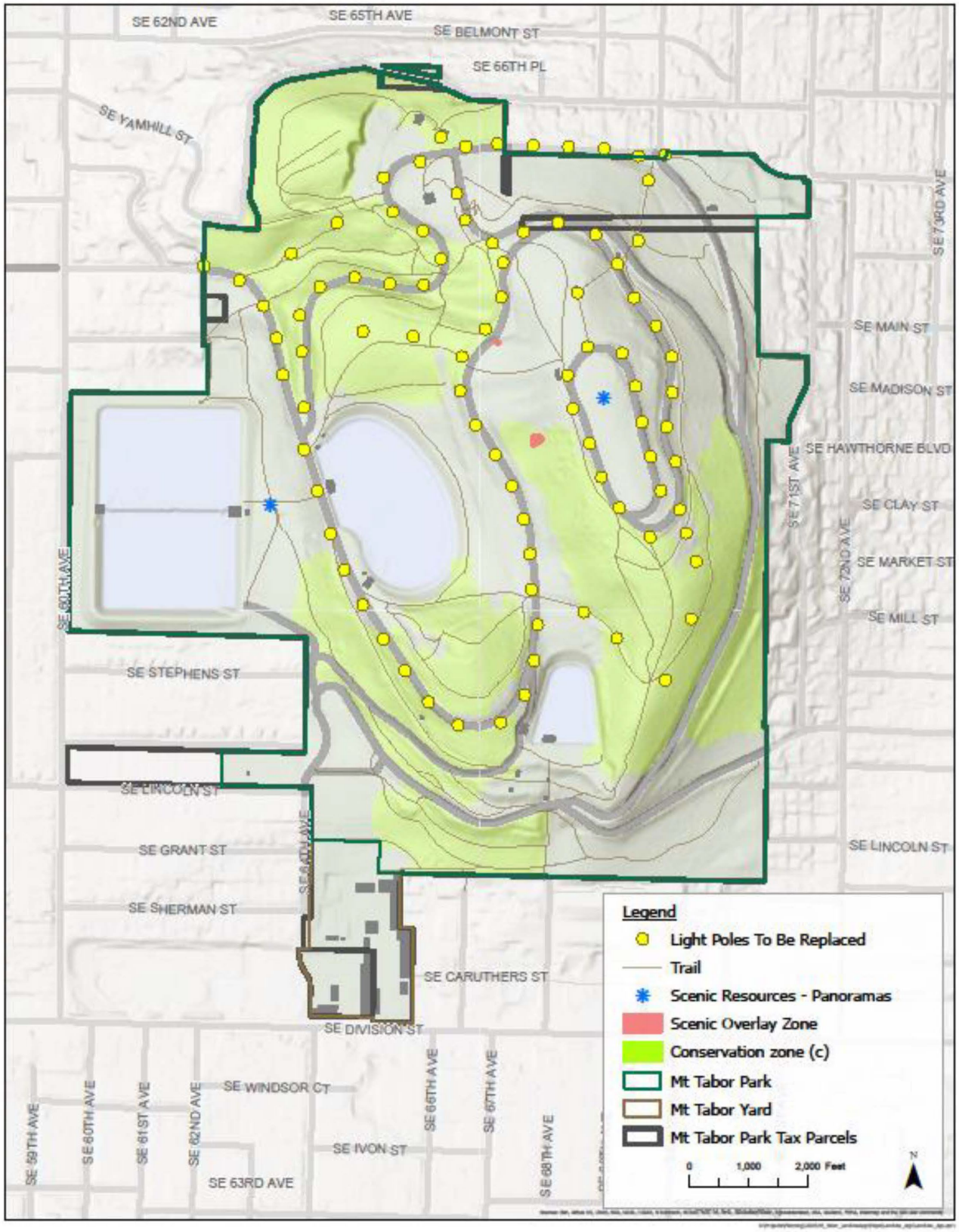
ZONING

THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

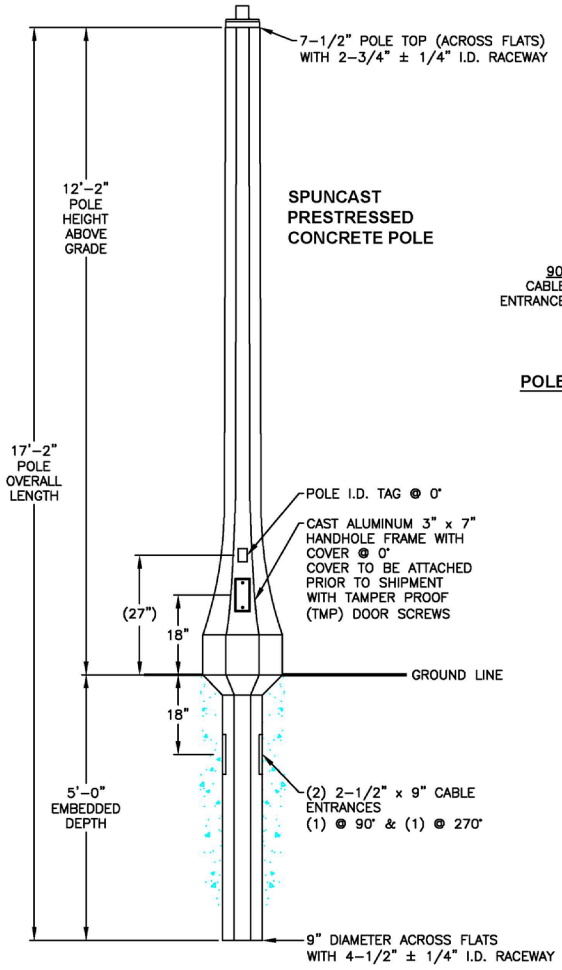
- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

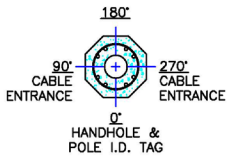
File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

Light pole locations with Conservation and Scenic Overlays

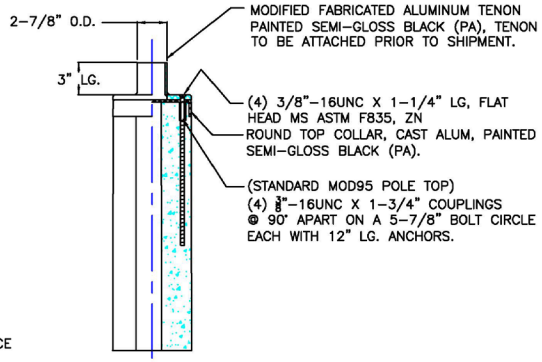


REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	

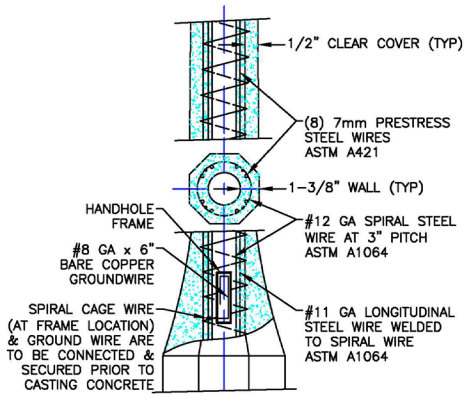




POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Ameron POLE PRODUCTS
www.ameronpoles.com

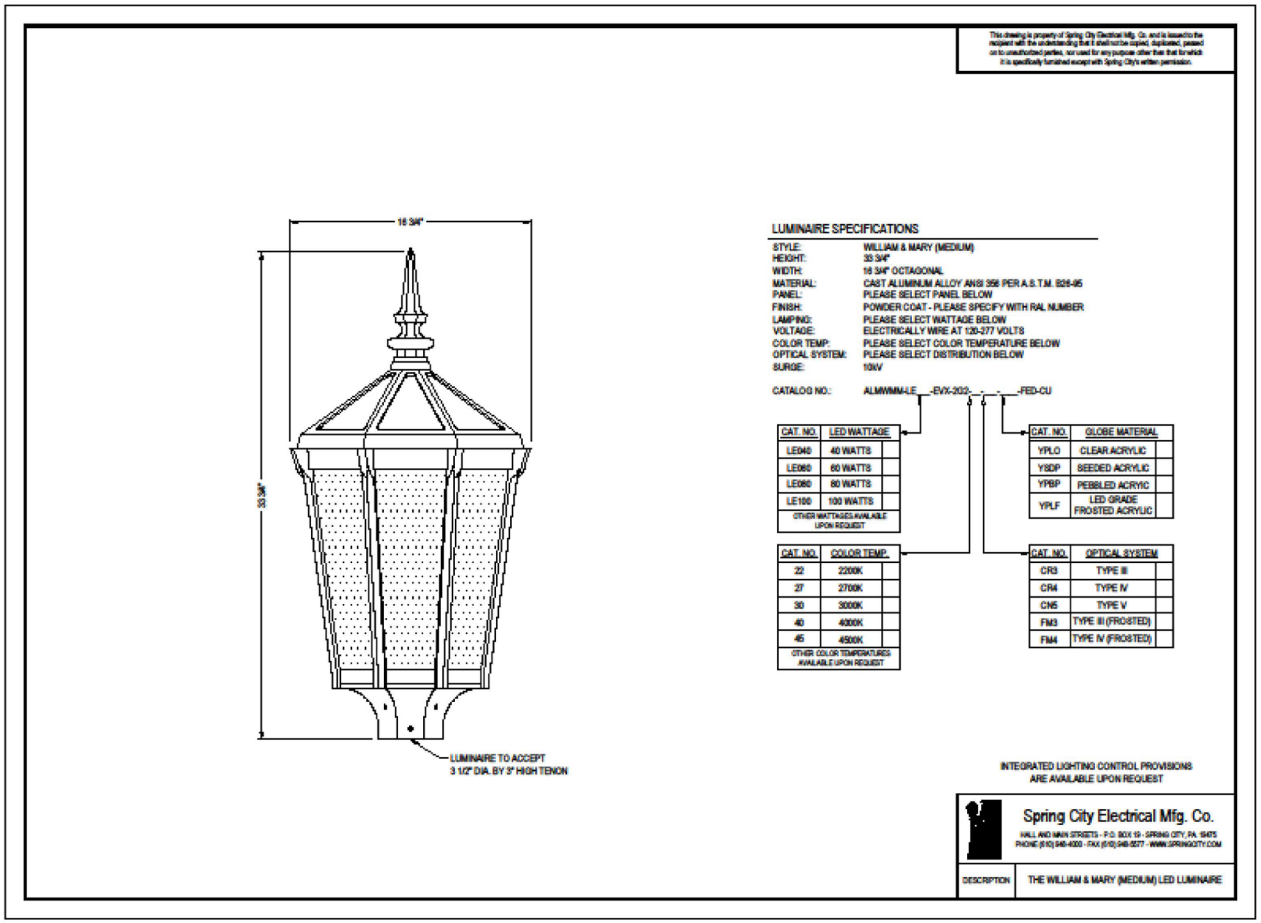
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN:	DATE:	APPR:	DATE:		
BEU	4/6/23				
DRAWING NUMBER		REVISION	SHEET		SCALE
2304-010		B	1 OF 1		NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

LU 23-088549 HR DM

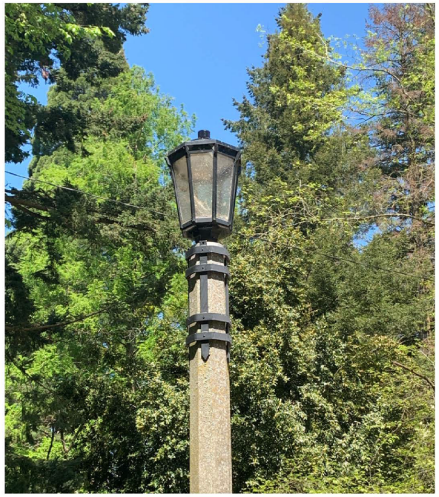
Light poles and fixture schematics



LUMINAIRE SPECIFICATIONS:

STYLE:	WILLIAM AND MARY
HEIGHT:	26 1/8"
WIDTH:	16 5/8"
MATERIAL:	CAST ALUMINUM ALLOY A.N.S.I. 356, PER A.S.T.M. B26-95
PANELS:	PEBBLED ACRYLIC
FINISH:	POWDER COAT - RIVER TEXTURE GLOSS BLACK
LAMPING:	60 WATT LED SYSTEM
VOLTAGE:	ELECTRONICALLY WIRED FOR 120-277 VOLTS
COLOR TEMP.:	2700K (WARM WHITE)
OPTICS:	
• TYPE III:	TYPE III (ASYMMETRIC DISTRIBUTION)
• TYPE V:	TYPE V (SYMMETRIC DISTRIBUTION)
SURGE:	10kV

CATALOG NO.:
- TYPE III: ALMWMS-LE060-EVX-2G2-27-CR3-YPBP-TR7P-CU
- TYPE V: ALMWMS-LE060-EVX-2G2-27-CN5-YPBP-TR7P-CU



Observing or Testifying at the Portland Design Commission, Historic Landmarks Commission, or Adjustment Committee Webinar Hearings

Thank you for your interest in attending a land use public hearing. All hearings are currently held virtually, via Zoom. The information below will help you get connected.

***If you do not have access to the internet from a home computer or mobile phone, please see the end of this document for instructions on how to participate from a City building at 1900 SW 4th Avenue in downtown Portland.

Preparing for the Hearing:

1. To access the Zoom Webinar, please go to the online hearing Agenda, and click the link under the hearing date you are interested in participating: https://www.portlandoregon.gov/bds/42441
2. In advance of the hearing, please review documents and drawings in the project link within the Online Agenda.
    - Please also provide comments to the planner assigned in advance of the hearing.

Getting into the Hearing [Registering in Zoom to observe or participate in Hearing]:

1. In order to observe or testify in the hearing, please be sure to Register for the Webinar as soon as possible.
    - The Webinar Link is posted to the Online Agenda typically one week prior to the hearing date.
2. Once you register you will receive an email notification of how to log-in or access the Webinar.
3. You can enter the Webinar no sooner than ten minutes before the start of the hearing.
4. You will be held in the Zoom waiting room until the Webinar begins. (Please note each individual agenda item has an estimated start time.)
5. If using a smartphone or tablet, download the Zoom app for easy entry into the Webinar.

Public participation in the Hearing:

1. After Staff and Applicant presentations, the Chair will announce public testimony is open, and will ask if anyone else would like to testify.
2. You can provide public comment in this Webinar in several ways:
    - If during registration you indicated you would like to testify, we will put your name in order of request. Once in the hearing, testifiers will be renamed "Testifier 1 – (Your Name)"
    - Members of the public will be automatically muted except for when they are called by the Hearings Clerk for their public comment. During the Webinar, the Hearings Clerk will promote participants to "Panelists" in the order of Webinar Registrations received. When it is your turn to provide testimony, please accept the Clerk's invitation to be promoted to Panelist.
    - If you indicated in your registration that you did not want to testify but later changed your mind, when testimony is open:
        - Click the "raise your hand" function in ZOOM, and the Hearings Clerk will add you to the list of testifiers.
        - If you will be participating by call-in, raise your hand by pressing *9 - the Webinar host will see this notification.
    - When you are moved to Panelist position for your testimony, your name will be announced by the Chair or Hearings Clerk. Please be prepared to provide testimony.
    - Each testifier is allotted 2 minutes of testimony unless the Chair grants additional time.
    - Please manage your time when testifying. As a courtesy to other testifiers and our volunteer Commissions, please do not attempt to exceed the allotted amount of time.
3. We will enable screen sharing of presentations only for Design and Landmarks Commission members, project teams, and staff participating in the Webinar.
4. Testifiers who engage in inappropriate behavior or language will be promptly removed from the hearing.

Follow-up:

1. The Webinar will be recorded and uploaded to the City of Portland Auditors website, under the Case File Number, here: https://efiles.portlandoregon.gov/Search.

If you do not have access to the internet from a home computer or mobile phone, we can provide accommodations for you to view a live video display of the hearing from 1900 SW 4th Avenue in downtown Portland. This option for participation requires you to travel to a City building where we will provide a computer for viewing the hearing. City staff will not be present at this viewing location. If you require such accommodation, please contact the BDS Hearings Clerk at 503-865-6525 before 8 AM on the day of the hearing.

	A	B	C	D	E	F
1	ENDORSEMENT	INFO1	INFO2	NAME	ADDRESS/IO ADDRESS	CITYSTATEZIP/ADDRESSEE
2	RETURN SERVICE REQUESTED		1S2E05AB 16000	WURSTER WILLIAM & WURSTER LINDSEY	7103 SE YAMHILL ST	PORTLAND OR 97215
3	RETURN SERVICE REQUESTED		1S2E05AB 19400	MOYAL DEBRA R	7214 SE YAMHILL ST	PORTLAND OR 97215-2274
4	RETURN SERVICE REQUESTED		1S2E05AB 19500	SUSAN JEAN ROACH TR & ROACH THOMAS	7204 SE YAMHILL ST	PORTLAND OR 97215
5	RETURN SERVICE REQUESTED		1S2E05AB 19600	SHERIDAN STACIE	7148 SE YAMHILL ST	PORTLAND OR 97215
6	RETURN SERVICE REQUESTED		1S2E05AB 19601	MCKINNON FRANK V	2345 NW WILSON ST	PORTLAND OR 97210-2319
7	RETURN SERVICE REQUESTED		1S2E05AB 19700	HEADLEY ALICE C & PIRKLE EMILY L	7138 SE YAMHILL ST	PORTLAND OR 97215
8	RETURN SERVICE REQUESTED		1S2E05AB 19800	GARNER LINDSEY & GARNER SAMSON	7124 SE YAMHILL ST	PORTLAND OR 97215-2272
9	RETURN SERVICE REQUESTED		1S2E05AB 19900	CANADAY CHARITY	7110 SE YAMHILL ST	PORTLAND OR 97215-2272
10	RETURN SERVICE REQUESTED		1S2E05AB 20000	STUART FRED TR & STUART CONNIE TR	1010 SE 71ST AVE	PORTLAND OR 97215-2203
11	RETURN SERVICE REQUESTED		1S2E05AB 20100	KALBERG MICHAEL & KALBERG PAMELA	1022 SE 71ST AVE	PORTLAND OR 97215-2203
12	RETURN SERVICE REQUESTED		1S2E05AB 20200	WITTROCK JOHN T	1034 SE 71ST AVE	PORTLAND OR 97215
13	RETURN SERVICE REQUESTED		1S2E05AB 20300	THOMPSON GARY & THOMPSON LAURIE	7109 SE TAYLOR ST	PORTLAND OR 97215-2259
14	RETURN SERVICE REQUESTED		1S2E05AB 20400	FUERSTENAU DENNIS A	7125 SE TAYLOR ST	PORTLAND OR 97215-2259
15	RETURN SERVICE REQUESTED		1S2E05AB 20500	SHUE LINDA M	7133 SE TAYLOR ST	PORTLAND OR 97215-2259
16	RETURN SERVICE REQUESTED		1S2E05AB 20700	LEIGHTON JEFFREY & SHERVEY JULIE	7215 SE TAYLOR ST	PORTLAND OR 97215
17	RETURN SERVICE REQUESTED		1S2E05AB 20800	BAUER BRIAN D & LOPACH LAURA C	7227 SE TAYLOR ST	PORTLAND OR 97215
18	RETURN SERVICE REQUESTED		1S2E05AB 21000	HUGO RICHARD & CARLSON JENNIFER	7239 SE TAYLOR ST	PORTLAND OR 97215-2260
19	RETURN SERVICE REQUESTED		1S2E05AC 12300	HARE VIRGINIA A	7236 SE TAYLOR ST	PORTLAND OR 97215-2261
20	RETURN SERVICE REQUESTED		1S2E05AC 12400	SHUE ROBIN L	7224 SE TAYLOR ST	PORTLAND OR 97215
21	RETURN SERVICE REQUESTED		1S2E05AC 12500	COLE TONY TR & COLE MIKIKO TR	7214 SE TAYLOR ST	PORTLAND OR 97215
22	RETURN SERVICE REQUESTED		1S2E05AC 12600	JONES JENNIFER A	7204 SE TAYLOR ST	PORTLAND OR 97215
23	RETURN SERVICE REQUESTED		1S2E05AC 12700	VEDANTA SOCIETY	7207 SE SALMON ST	PORTLAND OR 97215-2957
24	RETURN SERVICE REQUESTED		1S2E05AC 12800	DUNN ZACHARY J & DUNN JULIA C	7215 SE SALMON ST	PORTLAND OR 97215
25	RETURN SERVICE REQUESTED		1S2E05AC 12900	STAUDINGER MICHAEL & KATHLEEN	7225 SE SALMON ST	PORTLAND OR 97215
26	RETURN SERVICE REQUESTED	1S2E05AC 13000	CRAIG D CLINTON &	BARBARA ELISABETH BURDON TR	7235 SE SALMON ST	PORTLAND OR 97215
27	RETURN SERVICE REQUESTED		1S2E05AC 13600	VAN DRIESCHE KELLY J	7226 SE SALMON ST	PORTLAND OR 97215
28	RETURN SERVICE REQUESTED		1S2E05AC 13700	LIPKIND DAVID I	7216 SE SALMON ST	PORTLAND OR 97215-2958
29	RETURN SERVICE REQUESTED		1S2E05AC 13800	HENNRICH MARY L	7206 SE SALMON ST	PORTLAND OR 97215
30	RETURN SERVICE REQUESTED		1S2E05AC 13900	SCHLOE ROGER TR & SCHLOE MARGRET TR	1226 SE 72ND AVE	PORTLAND OR 97215-2901
31	RETURN SERVICE REQUESTED		1S2E05AC 14000	BERTHA GUPTILL REV LIV TR	7217 SE MAIN ST	PORTLAND OR 97215
32	RETURN SERVICE REQUESTED		1S2E05AC 14100	H & HBO TR	7225 SE MAIN ST	PORTLAND OR 97215-2949
33	RETURN SERVICE REQUESTED		1S2E05AC 14200	KUBERNICK SAMUEL & CHILDS MARISHA	7233 SE MAIN ST	PORTLAND OR 97215
34	RETURN SERVICE REQUESTED	1S2E05AC 14700	STAMBAUGH CHRISTOPHER J &	POMERANZ ANNE E	7234 SE MAIN ST	PORTLAND OR 97215
35	RETURN SERVICE REQUESTED		1S2E05AC 14800	GROVE STEPHEN & CORNETT KATHLEEN	7206 SE MAIN ST	PORTLAND OR 97215-2950
36	RETURN SERVICE REQUESTED		1S2E05AC 14900	KATNER CLARE & JARRETT AARON R	1326 SE 72ND AVE	PORTLAND OR 97215
37	RETURN SERVICE REQUESTED		1S2E05AC 14901	SHARON GAYLER AMESTOY LIV TR	7209 SE MADISON ST	PORTLAND OR 97215-2937
38	RETURN SERVICE REQUESTED		1S2E05AC 15000	BELCHERE AARON & THUOT TARALYN	7221 SE MADISON ST	PORTLAND OR 97215
39	RETURN SERVICE REQUESTED		1S2E05AC 15100	ROWE KATHLEEN & ROWE CHRISTOPHER	7235 SE MADISON ST	PORTLAND OR 97215
40	RETURN SERVICE REQUESTED		1S2E05AC 15500	KASTER KURT	7234 SE MADISON ST	PORTLAND OR 97215
41	RETURN SERVICE REQUESTED		1S2E05AC 15600	BENNETT DARRELL & KRAUS SARA	7726 SE MADISON ST	PORTLAND OR 97215
42	RETURN SERVICE REQUESTED		1S2E05AC 15700	DUDEN CHRISTOPHER	13221 NE COUCH ST	PORTLAND OR 97230
43	RETURN SERVICE REQUESTED		1S2E05AC 15800	YOST LOWELL A	7204 SE MADISON ST	PORTLAND OR 97215-2938
44	RETURN SERVICE REQUESTED		1S2E05AC 15900	HUMKE KENNETH T	1432 SE 72ND AVE	PORTLAND OR 97215-2912
45	RETURN SERVICE REQUESTED		1S2E05AC 16000	SCHMIDT SARA	7215 SE HAWTHORNE BLVD	PORTLAND OR 97215
46	RETURN SERVICE REQUESTED		1S2E05AC 16100	HENLEY DIANE R	7227 SE HAWTHORNE BLVD	PORTLAND OR 97215
47	RETURN SERVICE REQUESTED	1S2E05AC 16200	LYNCH X NEPTUNE A TR &	LYNCH KATHERINE J TR	7233 SE HAWTHORNE BLVD	PORTLAND OR 97215
48	RETURN SERVICE REQUESTED		1S2E05AC 16500	HARGER LORN S	1510 SE 72ND AVE	PORTLAND OR 97215-2914
49	RETURN SERVICE REQUESTED	1S2E05AC 16600	MC KAMEY NEIL A &	GONZALEZ-MC KAMEY FANNY	7212 SE HAWTHORNE BLVD	PORTLAND OR 97215-2930
50	RETURN SERVICE REQUESTED		1S2E05AC 16700	ISKOWITZ BELLE & ASCH ANTHONY	7222 SE HAWTHORNE BLVD	PORTLAND OR 97215
51	RETURN SERVICE REQUESTED		1S2E05BA 11500	DUNCAN LILA M TR	905 SE 70TH AVE	PORTLAND OR 97215-2163
52	RETURN SERVICE REQUESTED		1S2E05BA 11600	SEMPREVIVO DAMIEN & OTSU JUNKO	915 SE 70TH AVE	PORTLAND OR 97215-2163
53	RETURN SERVICE REQUESTED		1S2E05BA 11700	PORTLAND CITY OF	1120 SW 5TH AVE #1000	PORTLAND OR 97204-1912
54	RETURN SERVICE REQUESTED		1S2E05BA 11800	GREENBAUM PAUL B	916 SE 70TH AVE	PORTLAND OR 97215-2130
55	RETURN SERVICE REQUESTED		1S2E05BA 11900	JONES BRIDGET & KLIEWER MICHAEL	904 SE 70TH AVE	PORTLAND OR 97215
56	RETURN SERVICE REQUESTED		1S2E05BA 12900	YUEN COLLINS REV LIV TR	915 SE 71ST AVE	PORTLAND OR 97215
57	RETURN SERVICE REQUESTED		1S2E05BA 13000	MORROW DENNIS & MORROW VICTORIA	7037 SE YAMHILL ST	PORTLAND OR 97215-2159
58	RETURN SERVICE REQUESTED		1S2E05BA 13100	LENTZ EDWARD L JR & EMERY LINDSEY	7025 SE YAMHILL ST	PORTLAND OR 97215
59	RETURN SERVICE REQUESTED		1S2E05BA 13200	WEIT-MARTUS FAMILY TR	7015 SE YAMHILL ST	PORTLAND OR 97215
60	RETURN SERVICE REQUESTED	1S2E05BA 13400	LANG MITCHELL TR & LANG PAULA TR	(LANG FAMILY TRUST)	928 SE 70TH AVE	PORTLAND OR 97215-2130
61	RETURN SERVICE REQUESTED	1S2E05BA 13500	DEN HERDER NANCY J TR &	WILLIAMS MARY M-LE	6939 SE YAMHILL ST	PORTLAND OR 97215-2157
62	RETURN SERVICE REQUESTED		1S2E05BA 13600	BRAKE HUGHES BELLERMANN LLP	1701 PENNSYLVANIA AVE NW #200	WASHINGTON DC 20006
63	RETURN SERVICE REQUESTED		1S2E05BA 13600	SUMMER MARY & CHURILLA PAUL	6929 SE YAMHILL ST	PORTLAND OR 97215
64	RETURN SERVICE REQUESTED		1S2E05BA 13700	PAPAJACK JOHN	1932 NW NORFOLK CT	PORTLAND OR 97229
65	RETURN SERVICE REQUESTED		1S2E05BA 13800	SLOAN FAMILY TRUST	7000 SE YAMHILL ST	PORTLAND OR 97215
66	RETURN SERVICE REQUESTED		1S2E05BA 13900	ROBINSON KEVIN R	6909 SE YAMHILL ST	PORTLAND OR 97215-2157
67	RETURN SERVICE REQUESTED		1S2E05BA 14000	PETERSEN RYAN & PETERSEN ROBERTA	930 SE 69TH AVE	PORTLAND OR 97215
68	RETURN SERVICE REQUESTED		1S2E05BA 14100	WARNER ROGER	6920 SE BELMONT ST	PORTLAND OR 97215
69	RETURN SERVICE REQUESTED		1S2E05BA 14200	STEVENSON JENNIFER	6914 SE BELMONT ST	PORTLAND OR 97215
70	RETURN SERVICE REQUESTED		1S2E05BA 14300	MEYERS JAMES F & MEYERS JOY C	920 SE 69TH AVE	PORTLAND OR 97215-2120
71	RETURN SERVICE REQUESTED		1S2E05BA 14400	THERIAULT MYRA & FRANCESCHI MONICA	908 SE 69TH AVE	PORTLAND OR 97215
72	RETURN SERVICE REQUESTED		1S2E05BA 14500	GEORGE & ISABELLE ZIFCAK FAMILY TR	4928 NE ALAMEDA ST	PORTLAND OR 97213
73	RETURN SERVICE REQUESTED		1S2E05BA 14600	WILLIAMS REBECCA M	931 SE 69TH AVE	PORTLAND OR 97215-2119

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74	RETURN SERVICE REQUESTED		1S2E05BA 14700	WESTLIND DENNIS E & WESTLIND EVA A	6835 SE YAMHILL ST	PORTLAND OR 97215-2156
75	RETURN SERVICE REQUESTED		1S2E05BA 14800	BARCLAY BRUCE W	940 SE 68TH AVE	PORTLAND OR 97215-2110
76	RETURN SERVICE REQUESTED	1S2E05BA 14900	MERCER SETH &	GERSKOVICH-MERCER ANNA	932 SE 68TH AVE	PORTLAND OR 97215
77	RETURN SERVICE REQUESTED		1S2E05BA 15000	SIRI LIVING TRUST	6816 SE BELMONT ST	PORTLAND OR 97215
78	RETURN SERVICE REQUESTED		1S2E05BA 15200	MA YENLY	905 SE 68TH AVE	PORTLAND OR 97215
79	RETURN SERVICE REQUESTED		1S2E05BA 15300	BAILEY DOUGLAS P	915 SE 68TH AVE	PORTLAND OR 97215
80	RETURN SERVICE REQUESTED		1S2E05BA 15400	TIAN GEORGE & GU WENJIE	5821 ABERNATHY DR	LOS ANGELES CA 90045
81	RETURN SERVICE REQUESTED		1S2E05BA 15500	BARRON JANET S	939 SE 68TH AVE	PORTLAND OR 97215-2109
82	RETURN SERVICE REQUESTED		1S2E05BA 15600	KIDD CLAIR E TR & KIDD SHARON M TR	6723 SE YAMHILL ST	PORTLAND OR 97215-2031
83	RETURN SERVICE REQUESTED		1S2E05BA 15700	BRIM EVONA M TR	2165 SW MAIN ST	PORTLAND OR 97205
84	RETURN SERVICE REQUESTED		1S2E05BA 15800	LEMS ANNET	6705 SE YAMHILL ST	PORTLAND OR 97215-2031
85	RETURN SERVICE REQUESTED		1S2E05BA 15900	GREEN WILLIAM C & GREEN DEBORAH S	920 SE 67TH AVE	PORTLAND OR 97215-2008
86	RETURN SERVICE REQUESTED		1S2E05BA 16000	NG JAMES TR & STENZEL MOLLY TR	6704 SE BELMONT ST	PORTLAND OR 97215
87	RETURN SERVICE REQUESTED		1S2E05BA 16200	DESSERAULT MICHAEL & IVERSON JANI	6306 SE 36TH AVE	PORTLAND OR 97202
88	RETURN SERVICE REQUESTED		1S2E05BA 16300	SMITH JAMES L & SMITH GAIL M	922 SE 66TH AVE	PORTLAND OR 97215-2006
89	RETURN SERVICE REQUESTED		1S2E05BA 16400	MT HOPE INVESTMENTS LLC	6666 SE YAMHILL ST	PORTLAND OR 97215-2030
90	RETURN SERVICE REQUESTED		1S2E05BA 16500	BELAND KATHLEEN & KOKOPELL PETER	6677 SE YAMHILL ST	PORTLAND OR 97215
91	RETURN SERVICE REQUESTED	1S2E05BA 16600	BRIM-EDWARDS JULIA &	EDWARDS RANDALL	6666 SE YAMHILL ST	PORTLAND OR 97215-2030
92	RETURN SERVICE REQUESTED		1S2E05BA 16700	FAUNT KAREN & DEMPSTER ROBERT	6700 SE YAMHILL ST	PORTLAND OR 97215-2032
93	RETURN SERVICE REQUESTED		1S2E05BA 16800	GOULD DAVID F	6720 SE YAMHILL ST	PORTLAND OR 97215-2032
94	RETURN SERVICE REQUESTED		1S2E05BA 16900	BOTTLES COLIN E & CHEN CATHERINE X	6732 SE YAMHILL ST	PORTLAND OR 97215
95	RETURN SERVICE REQUESTED		1S2E05BA 17000	LOUISE K GLUR FAMILY TR	15537 VILLAGE PARK CT	LAKE OSWEGO OR 97034
96	RETURN SERVICE REQUESTED		1S2E05BA 17100	FREY NATHAN A & WALKER LINDA A	6810 SE YAMHILL ST	PORTLAND OR 97215
97	RETURN SERVICE REQUESTED		1S2E05BA 17200	KNEELAND SCOTT & KNEELAND LINDSAY	1005 SE 69TH AVE	PORTLAND OR 97215
98	RETURN SERVICE REQUESTED		1S2E05BA 17300	HASSETT-LANDSMAN REV LIV TR	1015 SE 69TH AVE	PORTLAND OR 97215
99	RETURN SERVICE REQUESTED		1S2E05BA 17400	SESAR NADA	1027 SE 69TH AVE	PORTLAND OR 97215
100	RETURN SERVICE REQUESTED		1S2E05BA 17500	TOMPKINS SUSAN G	1030 SE 69TH AVE	PORTLAND OR 97215-2122
101	RETURN SERVICE REQUESTED		1S2E05BA 17601	COSEO DAVID C & COSEO NADINE M	6912 SE YAMHILL ST	PORTLAND OR 97215-2158
102	RETURN SERVICE REQUESTED		1S2E05BA 17602	CORNEJO JILL T & CORNEJO BRANDON J	1010 SE 69TH AVE	PORTLAND OR 97215
103	RETURN SERVICE REQUESTED		1S2E05BA 17700	KWON ANNIE	6926 SE YAMHILL ST	PORTLAND OR 97215
104	RETURN SERVICE REQUESTED		1S2E05BA 17800	TIERMAN PAUL B & CURRY SARAH E	6934 SE YAMHILL ST	PORTLAND OR 97215
105	RETURN SERVICE REQUESTED		1S2E05BA 17900	THOMAS G MEYERS TR	6944 SE YAMHILL ST	PORTLAND OR 97215
106	RETURN SERVICE REQUESTED		1S2E05BA 18000	FREEMAN KIMBERLY & YELLIN BRIAN	6954 SE YAMHILL ST	PORTLAND OR 97215-2158
107	RETURN SERVICE REQUESTED		1S2E05BA 18200	BEISTEL TESS	7020 SE YAMHILL ST	PORTLAND OR 97215-2160
108	RETURN SERVICE REQUESTED		1S2E05BA 18400	VETTER STEPHANIE J	7050 SE YAMHILL ST	PORTLAND OR 97215
109	RETURN SERVICE REQUESTED		1S2E05BA 18500	DUANE A SORENSON TR	1025 SE 71ST AVE	PORTLAND OR 97215
110	RETURN SERVICE REQUESTED		1S2E05BA 18600	FARRAN MAUREEN P & KRASNER STEFANIE	1055 SE 71ST AVE	PORTLAND OR 97215-2202
111	RETURN SERVICE REQUESTED		1S2E05BA 9400	BELLING JOHN C II & BELLING CHERI	818 SE 67TH AVE	PORTLAND OR 97215
112	RETURN SERVICE REQUESTED		1S2E05BB 10000	PRENTICE JASON M & BUXTON ERIN O	6503 SE YAMHILL CT	PORTLAND OR 97215-2035
113	RETURN SERVICE REQUESTED		1S2E05BB 10100	FLECK JONATHAN E	6527 SE YAMHILL CT	PORTLAND OR 97215
114	RETURN SERVICE REQUESTED		1S2E05BB 10200	HURLEY ANDREW	6545 SE YAMHILL CT	PORTLAND OR 97215
115	RETURN SERVICE REQUESTED		1S2E05BB 10300	GRAVES JUDY J	6611 SE YAMHILL CT	PORTLAND OR 97215
116	RETURN SERVICE REQUESTED		1S2E05BB 10400	SIMKO JOAN M	6639 SE YAMHILL CT	PORTLAND OR 97215-2029
117	RETURN SERVICE REQUESTED	1S2E05BB 10600	DAVIS BENJAMIN P &	STRINGFELLOW-DAVIS MARY G	6645 SE YAMHILL CT	PORTLAND OR 97215-2029
118	RETURN SERVICE REQUESTED		1S2E05BB 10700	HALLIGAN KERRY Q & ITEN RHONDA L	6635 SE YAMHILL CT	PORTLAND OR 97215-2029
119	RETURN SERVICE REQUESTED		1S2E05BB 10800	CHANDLER CHRIS & LEON-CHANDLER TONI	6621 SE YAMHILL CT	PORTLAND OR 97215-2029
120	RETURN SERVICE REQUESTED	1S2E05BB 11100	JEREMY J SHRALL REV TR &	CATHERINE M SHRALL REV TR	6373 SE YAMHILL ST	PORTLAND OR 97215-2832
121	RETURN SERVICE REQUESTED	1S2E05BB 11200	SHRALL JEREMY JOHN &	SHRALL CATHERINE MISHCA	6373 SE YAMHILL ST	PORTLAND OR 97215
122	RETURN SERVICE REQUESTED		1S2E05BB 3500	TRAFFLEY CAROLE & PERINI RAYMOND	17 CARLEY AVE	HUNTINGTON NY 11743
123	RETURN SERVICE REQUESTED		1S2E05BB 3600	YAZZOLINO BRAD & FIEDLER NADINE A	6451 SE MORRISON CT	PORTLAND OR 97215-1949
124	RETURN SERVICE REQUESTED		1S2E05BB 3700	HURST TERA	6501 SE MORRISON ST	PORTLAND OR 97215
125	RETURN SERVICE REQUESTED		1S2E05BB 3800	MC CAULEY DALE & MC CAULEY EMMA	6515 SE MORRISON ST	PORTLAND OR 97215-2014
126	RETURN SERVICE REQUESTED		1S2E05BB 4700	WELCH SHANE C	6649 SE BELMONT ST	PORTLAND OR 97215
127	RETURN SERVICE REQUESTED		1S2E05BB 4800	BUSCH JORDAN S & BUSCH JAMIE L	6615 SE BELMONT ST	PORTLAND OR 97215
128	RETURN SERVICE REQUESTED	1S2E05BB 4900	CARDER PAULA &	SCHNABEL JOHN JEFFREY	6562 SE MORRISON ST	PORTLAND OR 97215
129	RETURN SERVICE REQUESTED		1S2E05BB 5000	PARKER PETER & ARPS CARIE	6550 SE MORRISON ST	PORTLAND OR 97215-2015
130	RETURN SERVICE REQUESTED		1S2E05BB 5200	JUDY BROWN TR	9999 S WILDCAT RD	MOLALLA OR 97038
131	RETURN SERVICE REQUESTED	1S2E05BB 5300	HAUSS ROBERT T & HAUSS BONNIE	HASTINGS BONNIE	6510 SE MORRISON ST	PORTLAND OR 97215-2015
132	RETURN SERVICE REQUESTED		1S2E05BB 5400	LEMING GEORGE III & WYRES TRACEY	6431 SE MORRISON ST	PORTLAND OR 97215
133	RETURN SERVICE REQUESTED		1S2E05BB 5500	DONOVAN GEOFFREY & WHITE RACHEL	6421 SE MORRISON ST	PORTLAND OR 97215
134	RETURN SERVICE REQUESTED		1S2E05BB 5600	MILLARD ANDREW & MILLARD MARTA J	2134 SE 53RD AVE	PORTLAND OR 97215
135	RETURN SERVICE REQUESTED		1S2E05BB 5700	LIPPERT JODI M & BARR TIMOTHY L	6407 SE MORRISON ST	PORTLAND OR 97215-1945
136	RETURN SERVICE REQUESTED		1S2E05BB 5800	LORENZEN TERI K & WENTLAND SUSAN A	6348 SE MORRISON CT	PORTLAND OR 97215
137	RETURN SERVICE REQUESTED		1S2E05BB 7700	MANASSE WENDY L & WIESE DAVID H	4330 PEPPERWOOD AVE	LONG BEACH CA 90808
138	RETURN SERVICE REQUESTED		1S2E05BB 7800	DAVIS KATHARINE E	6316 SE MORRISON ST	PORTLAND OR 97215
139	RETURN SERVICE REQUESTED		1S2E05BB 7900	BORG THOMAS D JR & FERRO ERIN E	6326 SE MORRISON ST	PORTLAND OR 97215
140	RETURN SERVICE REQUESTED		1S2E05BB 8000	VELIS CAROLINA	6338 SE MORRISON ST	PORTLAND OR 97215
141	RETURN SERVICE REQUESTED		1S2E05BB 8100	CONNIE & JEROME ISGRO TR	6400 SE MORRISON ST	PORTLAND OR 97215
142	RETURN SERVICE REQUESTED		1S2E05BB 8200	GENE H WIBE TR	6424 SE MORRISON ST	PORTLAND OR 97215
143	RETURN SERVICE REQUESTED	1S2E05BB 8300	ARNOLD M COGAN REV LIV TR &	ELAINE COGAN REV LIV TR	6436 SE MORRISON ST	PORTLAND OR 97215
144	RETURN SERVICE REQUESTED		1S2E05BB 8400	MULLIN DEAN & MULLIN RACHEL	807 SE 65TH AVE	PORTLAND OR 97215-2039
145	RETURN SERVICE REQUESTED		1S2E05BB 8500	CAMBLIN CASEY D & CAMBLIN LAURA A	6946 E 4TH AVE	DENVER CO 80220-6163
146	RETURN SERVICE REQUESTED		1S2E05BB 8600	STEVENSON CHRIS	6401 SE BELMONT ST	PORTLAND OR 97215-1942

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147	RETURN SERVICE REQUESTED		1S2E05BB 8700	NELSON KORY J	6333 SE BELMONT ST	PORTLAND OR 97215
148	RETURN SERVICE REQUESTED		1S2E05BB 8800	BRINES BRIANA & BRINES JONATHAN	6315 SE BELMONT ST	PORTLAND OR 97215
149	RETURN SERVICE REQUESTED		1S2E05BB 8900	HARPER PHILIP J	6305 SE BELMONT ST	PORTLAND OR 97215
150	RETURN SERVICE REQUESTED		1S2E05BB 9000	BELMONT HOUSE LLC	2000 NE 42ND AVE #D PMB 277	PORTLAND OR 97213-1359
151	RETURN SERVICE REQUESTED		1S2E05BB 9100	MARY E OLDEN TR	39 WATERSHORE CIR	SACRAMENTO CA 95831
152	RETURN SERVICE REQUESTED		1S2E05BB 9200	LEVINE ERIC A & LEVINE LARA R	6248 SE BELMONT ST	PORTLAND OR 97215-1940
153	RETURN SERVICE REQUESTED		1S2E05BB 9300	TELLA MALLIK N	5103 UTAH ST	VANCOUVER WA 98661
154	RETURN SERVICE REQUESTED		1S2E05BB 9400	FUNABASHI YOKO	6385 SE YAMHILL ST	PORTLAND OR 97215-2832
155	RETURN SERVICE REQUESTED		1S2E05BB 9600	DUKE DAVID R & VROOM KATHLEEN	6393 SE YAMHILL ST	PORTLAND OR 97215
156	RETURN SERVICE REQUESTED		1S2E05BB 9700	PENA ANTONIO & PENA JULIE V	6425 SE YAMHILL ST	PORTLAND OR 97215
157	RETURN SERVICE REQUESTED		1S2E05BB 9800	ELIAS JULES M & ELIAS RENEE	6435 SE YAMHILL ST	PORTLAND OR 97215-2027
158	RETURN SERVICE REQUESTED		1S2E05BB 9900	SMITH KENNETH & BAUGNON BARBARA	6465 SE YAMHILL ST	PORTLAND OR 97215
159	RETURN SERVICE REQUESTED		1S2E05BC 101	BINKLEY BYRON & BECKER KARA	6371 SE YAMHILL ST	PORTLAND OR 97215
160	RETURN SERVICE REQUESTED		1S2E05BC 103	NIEDERMEIER MIKE & SHINSATO ALISON	6291 SE YAMHILL ST	PORTLAND OR 97215-2831
161	RETURN SERVICE REQUESTED		1S2E05BC 201	CHO AUNA S & CHO SUNGEY#D	6359 SE YAMHILL ST	PORTLAND OR 97215
162	RETURN SERVICE REQUESTED		1S2E05BC 202	EASTON JOHNATHAN & EASTON LEAH R	6303 SE YAMHILL ST	PORTLAND OR 97215
163	RETURN SERVICE REQUESTED		1S2E05BC 301	MOBERG WALTER & MOBERG VONDA	3420 SE 36TH AVE	PORTLAND OR 97202
164	RETURN SERVICE REQUESTED	1S2E05BC 302	SLUSARSKI STEPHEN TR &	LAPAGLIA NANCY TR	6347 SE YAMHILL ST	PORTLAND OR 97215
165	RETURN SERVICE REQUESTED	1S2E05BC 400	PORTLAND CITY OF PARKS & REC	CAITLIN MURPHY & DANNY OSBORN	1120 SW 5TH AVE #858	PORTLAND OR 97204-1912
166	RETURN SERVICE REQUESTED		1S2E05BD 100	LENNON-MARHOEFER TR	1109 SE 72ND AVE	PORTLAND OR 97215
167	RETURN SERVICE REQUESTED		1S2E05BD 1000	GOTSCH STEVE & GOTSCH STEPHANIE	7117 SE MAIN ST	PORTLAND OR 97215
168	RETURN SERVICE REQUESTED		1S2E05BD 1100	KAPLAN-OEHLER FAMILY TR	7110 SE MAIN ST	PORTLAND OR 97215
169	RETURN SERVICE REQUESTED		1S2E05BD 1200	KOCHER GREGORY A & KOCHER PAULA J	1321 SE 72ND AVE	PORTLAND OR 97215-2910
170	RETURN SERVICE REQUESTED		1S2E05BD 1400	DUSTIN CHARLES & REED KATHERINE	1405 SE 72ND AVE	PORTLAND OR 97215-2911
171	RETURN SERVICE REQUESTED		1S2E05BD 1500	HALIBURTON MELANIE & ANDREW	1425 SE 72ND AVE	PORTLAND OR 97215
172	RETURN SERVICE REQUESTED		1S2E05BD 1600	PLUNKETT MICHAEL & CALDWELL AMELIA	1501 SE 72ND AVE	PORTLAND OR 97215
173	RETURN SERVICE REQUESTED		1S2E05BD 1700	DOVE PHILLIP M	1525 SE 72ND AVE	PORTLAND OR 97215
174	RETURN SERVICE REQUESTED		1S2E05BD 1800	VYCHODIL BORIS	1528 SE 71ST AVE	PORTLAND OR 97215
175	RETURN SERVICE REQUESTED		1S2E05BD 1900	SANY LYNN FAMILY TR	1504 SE 71ST AVE	PORTLAND OR 97215
176	RETURN SERVICE REQUESTED	1S2E05BD 200	AYERSMAN TIMOTHY &	GRAY-AYERSMAN PERYLL	1121 SE 72ND AVE	PORTLAND OR 97215
177	RETURN SERVICE REQUESTED	1S2E05BD 2000	RICHARD L COLLINS TR &	SHERIDAN P COLLINS TR	1428 SE 71ST AVE	PORTLAND OR 97215
178	RETURN SERVICE REQUESTED		1S2E05BD 2200	GHAN RYAN & WAGNER-MCCOY SARAH	1275 SE 71ST AVE	PORTLAND OR 97215
179	RETURN SERVICE REQUESTED		1S2E05BD 2300	NANCY MATELA LIV TRUST	1263 SE 71ST AVE	PORTLAND OR 97215-2902
180	RETURN SERVICE REQUESTED		1S2E05BD 2400	MARMION MELANIE E & CONKLIN GUY W	1253 SE 71ST AVE	PORTLAND OR 97215
181	RETURN SERVICE REQUESTED		1S2E05BD 2401	SMITHRUD CHRISTIAN D	1259 SE 71ST AVE	PORTLAND OR 97215-2902
182	RETURN SERVICE REQUESTED		1S2E05BD 2500	GOODREAU RENEE & BEAN JOSH	1233 SE 71ST AVE	PORTLAND OR 97215
183	RETURN SERVICE REQUESTED		1S2E05BD 2600	MAY ROBERT S & MAY NADINE M	1221 SE 71ST AVE	PORTLAND OR 97215-2902
184	RETURN SERVICE REQUESTED		1S2E05BD 2700	GARDNER HALLIE & TOMLINSON JOHN S	1201 SE 71ST AVE	PORTLAND OR 97215
185	RETURN SERVICE REQUESTED		1S2E05BD 2800	WHITNEY & STOCKARD WALTER A III	1145 SE 71ST AVE	PORTLAND OR 97215
186	RETURN SERVICE REQUESTED		1S2E05BD 300	NEWMAN DAVID & ORGEL LAURA J	1141 SE 72ND AVE	PORTLAND OR 97215
187	RETURN SERVICE REQUESTED		1S2E05BD 3600	MICHAELS JOSHUA & WHITE MARIJANE	7005 SE MAIN ST	PORTLAND OR 97215
188	RETURN SERVICE REQUESTED		1S2E05BD 3700	MADSEN MARK R & WHIPKEY KIMBERLY S	1505 SE 71ST AVE	PORTLAND OR 97215-2907
189	RETURN SERVICE REQUESTED		1S2E05BD 3800	SANCHEZ RACHEL & SANCHEZ BRADLEY	11124 NE HALSEY ST PMB 444	PORTLAND OR 97220-2021
190	RETURN SERVICE REQUESTED		1S2E05BD 500	RICHTER CARRIE A	1151 SE 72ND AVE	PORTLAND OR 97215
191	RETURN SERVICE REQUESTED		1S2E05BD 600	MERRITHEW TONY C	1203 SE 72ND AVE	PORTLAND OR 97215-2909
192	RETURN SERVICE REQUESTED		1S2E05BD 800	PACKARD DEE	1207 SE 72ND AVE	PORTLAND OR 97215-2909
193	RETURN SERVICE REQUESTED		1S2E05BD 900	WRIGHT STEPHEN & WRIGHT SARA	1229 SE 72ND AVE	PORTLAND OR 97215
194	RETURN SERVICE REQUESTED		1S2E05CA 100	JELINEO-FONK MARY & FONK MICHAEL	1537 SE 72ND AVE	PORTLAND OR 97215
195	RETURN SERVICE REQUESTED		1S2E05CA 1000	UTTERSTROM FLORENCE M	1630 SE 71ST AVE	PORTLAND OR 97215-3502
196	RETURN SERVICE REQUESTED		1S2E05CA 1100	WOOD MARY K & WOOD ERIC M	1630 SE 71ST AVE	PORTLAND OR 97215
197	RETURN SERVICE REQUESTED		1S2E05CA 1300	OSTRANDER JON & OSTRANDER SHANNON	1622 SE 71ST AVE	PORTLAND OR 97215
198	RETURN SERVICE REQUESTED	1S2E05CA 1400	COREY RICHARD &	WELTNER KATHERINE LYLE	8606 N SEWARD AVE	PORTLAND OR 97217-7348
199	RETURN SERVICE REQUESTED		1S2E05CA 1500	BERLOT HYNES LIV TR	1538 SE 71ST AVE	PORTLAND OR 97215
200	RETURN SERVICE REQUESTED		1S2E05CA 1700	WILLIAMS THOMAS M	1543 SE 71ST AVE	PORTLAND OR 97215-2907
201	RETURN SERVICE REQUESTED		1S2E05CA 1800	RON MCCOY & SANDRA MCCOY FAMILY TR	1607 SE 71ST AVE	PORTLAND OR 97215
202	RETURN SERVICE REQUESTED		1S2E05CA 1900	WEAVER ALICE E	1629 SE 71ST AVE	PORTLAND OR 97215
203	RETURN SERVICE REQUESTED	1S2E05CA 200	THOMAS M HORVAT REV LIV TR &	PATRICIA J IRINAGA REV LIV TR	1605 SE 72ND AVE	PORTLAND OR 97215
204	RETURN SERVICE REQUESTED		1S2E05CA 2000	HARTMAN GREGORY A & COLLIER TANYA	1641 SE 71ST AVE	PORTLAND OR 97215-3501
205	RETURN SERVICE REQUESTED	1S2E05CA 2200	GONCALVES HELEN CAROLISE &	NEWMAN HOWARD ALAN	1707 SE 71ST AVE	PORTLAND OR 97215
206	RETURN SERVICE REQUESTED		1S2E05CA 2300	BEVELS-WILSON AMRON S	1721 SE 71ST AVE	PORTLAND OR 97215
207	RETURN SERVICE REQUESTED		1S2E05CA 2400	QUINN MICHAEL T	PO BOX 5908	PORTLAND OR 97228-5908
208	RETURN SERVICE REQUESTED		1S2E05CA 2600	LEEBORG NICKY J & LEEBORG NEIL F	1811 SE MOUNTAIN VIEW DR	PORTLAND OR 97215-3550
209	RETURN SERVICE REQUESTED		1S2E05CA 2700	SIMPSON DANIEL & FIELDS JOY & AMY	1825 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
210	RETURN SERVICE REQUESTED		1S2E05CA 2800	WILKEN NOLA J & DEMAREST THERESA C	1909 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
211	RETURN SERVICE REQUESTED		1S2E05CA 2900	CHINN DANIEL W & CHINN SALLY A	1919 SE MOUNTAIN VIEW DR	PORTLAND OR 97215-3552
212	RETURN SERVICE REQUESTED		1S2E05CA 300	HUANG CHING-LI	1635 SE 72ND AVE	PORTLAND OR 97215-3507
213	RETURN SERVICE REQUESTED		1S2E05CA 3000	WELLS JACK	7101 SE HARRISON ST	PORTLAND OR 97215
214	RETURN SERVICE REQUESTED		1S2E05CA 3100	MARTORANO JOANN K & MINARD JULIEN L	7106 SE HARRISON ST	PORTLAND OR 97215
215	RETURN SERVICE REQUESTED		1S2E05CA 3200	HILGART KAREN	7103 SE HARRISON CT	PORTLAND OR 97215-4035
216	RETURN SERVICE REQUESTED		1S2E05CA 3300	MCCONNELL FAMILY TR	7111 SE HARRISON CT	PORTLAND OR 97215
217	RETURN SERVICE REQUESTED		1S2E05CA 3400	AUER ROXANE & MILBOURN SCOTT	7143 SE HARRISON CT	PORTLAND OR 97215
218	RETURN SERVICE REQUESTED		1S2E05CA 3500	WARE REVOCABLE TRUST	2035 SE 72ND AVE	PORTLAND OR 97215
219	RETURN SERVICE REQUESTED		1S2E05CA 3600	GANTZ MATTHEW	2009 SE 72ND AVE	PORTLAND OR 97215

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220	RETURN SERVICE REQUESTED		1S2E05CA 3700	FLINN JOHN B II	7152 SE HARRISON ST	PORTLAND OR 97215
221	RETURN SERVICE REQUESTED		1S2E05CA 3800	DAVIS BRIAN F & DAVIS LAURA D	1736 KILLARNEY DR	WEST LINN OR 97068-3925
222	RETURN SERVICE REQUESTED		1S2E05CA 3900	PALAZZO TANIA & WILLIS PHILIPPE G	7155 SE HARRISON ST	PORTLAND OR 97215-4033
223	RETURN SERVICE REQUESTED	1S2E05CA 400	HIROKO I ONO REV TR &	TADAHIKO ONO REV TR	1645 SE 72ND AVE	PORTLAND OR 97215-3507
224	RETURN SERVICE REQUESTED		1S2E05CA 4000	DIEDE MELISSA M	1912 SE MOUNTAIN VIEW DR	PORTLAND OR 97215-3553
225	RETURN SERVICE REQUESTED		1S2E05CA 4100	CREDIT SHELTER TR	1906 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
226	RETURN SERVICE REQUESTED	1S2E05CA 4200	JAMES P O'ROURKE TR &	KAREN A HERY TR	1822 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
227	RETURN SERVICE REQUESTED		1S2E05CA 4300	STIPE SCOTT & STIPE KRISTI	1812 SE MOUNTAIN VIEW DR	PORTLAND OR 97215-3551
228	RETURN SERVICE REQUESTED		1S2E05CA 4400	GRANT MICHAEL J TR	1808 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
229	RETURN SERVICE REQUESTED		1S2E05CA 500	STUTZ BARBARA	1711 SE 72ND AVE	PORTLAND OR 97215
230	RETURN SERVICE REQUESTED		1S2E05CA 600	ANDERTON JOHN M & HUNTER SUSAN KAY	1725 SE 72ND AVE	PORTLAND OR 97215-3509
231	RETURN SERVICE REQUESTED		1S2E05CA 700	DB WOODS LLC	1725 SE 72ND AVE	PORTLAND OR 97215-3509
232	RETURN SERVICE REQUESTED		1S2E05CA 800	DOUGLAS RANDI L & COE MICHAEL T	1732 SE 71ST AVE	PORTLAND OR 97215-3504
233	RETURN SERVICE REQUESTED	1S2E05CA 900	WILLIAMS ROSALIE C TR &	WILLIAMS ROSALIE C TR	1718 SE 71ST AVE	PORTLAND OR 97215-3504
234	RETURN SERVICE REQUESTED		1S2E05CB 100	MICHAELSON LARRY & CLAUDIA	6345 SE STEPHENS ST	PORTLAND OR 97215-3451
235	RETURN SERVICE REQUESTED		1S2E05CB 1000	D'AGUANNO JOHN & MICHAELSON JODY L	6216 SE STEPHENS ST	PORTLAND OR 97215
236	RETURN SERVICE REQUESTED		1S2E05CB 1100	GRANT DONALD K & GRAY LOUISE W	6224 SE STEPHENS ST	PORTLAND OR 97215-3450
237	RETURN SERVICE REQUESTED		1S2E05CB 1200	STREETER KELSEY M	1010 SW TAYLORS FERRY RD	PORTLAND OR 97219-4540
238	RETURN SERVICE REQUESTED		1S2E05CB 1300	RAMSAY REBECCA & RAMSAY CHARLES	6246 SE STEPHENS ST	PORTLAND OR 97215
239	RETURN SERVICE REQUESTED		1S2E05CB 1400	BLOOM WILLIAM R	6306 SE STEPHENS ST	PORTLAND OR 97215-3452
240	RETURN SERVICE REQUESTED		1S2E05CB 1500	FAUST DAVID N & FAUST SUSAN L	6316 SE STEPHENS ST	PORTLAND OR 97215
241	RETURN SERVICE REQUESTED	1S2E05CB 1600	PEDLEY DOUGLAS &	MANCHESTER KIMBERLY	6326 SE STEPHENS ST	PORTLAND OR 97215-3452
242	RETURN SERVICE REQUESTED		1S2E05CB 1700	CHAUMETON NIGEL & CHAUMETON AMY	6344 SE STEPHENS ST	PORTLAND OR 97215-3452
243	RETURN SERVICE REQUESTED		1S2E05CB 1800	JONES TUCKER & JONES STACY	6345 SE HARRISON ST	PORTLAND OR 97215
244	RETURN SERVICE REQUESTED		1S2E05CB 1900	HOGUE DEWEY T III & HOGUE JANICE B	6325 SE HARRISON ST	PORTLAND OR 97215-3347
245	RETURN SERVICE REQUESTED	1S2E05CB 200	BURKE DEBRA TR &	SPAULDING THOMAS TR	6335 SE STEPHENS ST	PORTLAND OR 97215-3451
246	RETURN SERVICE REQUESTED		1S2E05CB 2000	JORGENSEN JERED & TRANCHESE CLAIRE	6315 SE HARRISON ST	PORTLAND OR 97215-3447
247	RETURN SERVICE REQUESTED		1S2E05CB 2100	GORDON NOAH J & HABERLAND TERESA A	6303 SE HARRISON ST	PORTLAND OR 97215
248	RETURN SERVICE REQUESTED		1S2E05CB 2200	OUDINOT ROY	6245 SE HARRISON ST	PORTLAND OR 97215
249	RETURN SERVICE REQUESTED		1S2E05CB 2300	RONALD & KATHERINE HALL FAMILY TR	6231 SE HARRISON ST	PORTLAND OR 97215
250	RETURN SERVICE REQUESTED		1S2E05CB 2400	THOMPSON FAMILY TRUST	6221 SE HARRISON ST	PORTLAND OR 97215
251	RETURN SERVICE REQUESTED		1S2E05CB 2500	STARR STEPHEN W & STARR BARBARA J	6211 SE HARRISON ST	PORTLAND OR 97215-3446
252	RETURN SERVICE REQUESTED		1S2E05CB 300	MCPENCOW DENNIS & MCPENCOW BARBARA	6325 SE STEPHENS ST	PORTLAND OR 97215
253	RETURN SERVICE REQUESTED		1S2E05CB 500	GABRIELA GOLDFARB & PAUL C SIMON TR	6307 SE STEPHENS ST	PORTLAND OR 97215
254	RETURN SERVICE REQUESTED		1S2E05CB 600	WILLIAMSON JULIE M	6247 SE STEPHENS ST	PORTLAND OR 97215
255	RETURN SERVICE REQUESTED		1S2E05CB 700	DIETZ WAYNE TR & DIETZ DARLENE TR	6233 SE STEPHENS ST	PORTLAND OR 97215-3449
256	RETURN SERVICE REQUESTED		1S2E05CB 800	LUDEMAN ROSS & LUDEMAN MELISSA	6225 SE STEPHENS ST	PORTLAND OR 97215
257	RETURN SERVICE REQUESTED		1S2E05CB 900	MORANO KALYNN & MCMAHON CHRISTOPHER	6215 SE STEPHENS ST	PORTLAND OR 97215
258	RETURN SERVICE REQUESTED		1S2E05CC 100	LE CALVIN K	6336 SE LINCOLN ST	PORTLAND OR 97215
259	RETURN SERVICE REQUESTED		1S2E05CC 1000	CLATTENBURG CHRISTINE & STANLEY	6229 SE GRANT ST	PORTLAND OR 97215-4058
260	RETURN SERVICE REQUESTED		1S2E05CC 1100	NGO MAI & NGUYEN MAI T T	6235 SE GRANT ST	PORTLAND OR 97215
261	RETURN SERVICE REQUESTED		1S2E05CC 1200	WOOKIE TRUST	6309 SE GRANT ST	PORTLAND OR 97215
262	RETURN SERVICE REQUESTED		1S2E05CC 1300	QU BAOLI & LIU MEIRU	PO BOX 513	PORTLAND OR 97207-0513
263	RETURN SERVICE REQUESTED		1S2E05CC 1500	GRAHAM DAVID E	6319 SE GRANT ST	PORTLAND OR 97215
264	RETURN SERVICE REQUESTED		1S2E05CC 1600	STONE LARRY & MCDANIEL ELAINE	16630 SE LILLIAN WAY	PORTLAND OR 97236
265	RETURN SERVICE REQUESTED		1S2E05CC 1700	SCHOFIELD JENNIFER L	2203 SE 64TH AVE	PORTLAND OR 97215
266	RETURN SERVICE REQUESTED		1S2E05CC 1800	WILCOX SUSAN	6320 SE GRANT ST	PORTLAND OR 97215
267	RETURN SERVICE REQUESTED		1S2E05CC 1900	CILEK PETER & CILEK AMANDA	6310 SE GRANT ST	PORTLAND OR 97215
268	RETURN SERVICE REQUESTED		1S2E05CC 200	AMANN MARY ANN	6318 SE LINCOLN ST	PORTLAND OR 97215
269	RETURN SERVICE REQUESTED		1S2E05CC 2000	IANNONE MARK & ROMAN MIRTHA	6304 SE GRANT ST	PORTLAND OR 97215-4059
270	RETURN SERVICE REQUESTED		1S2E05CC 2100	NGUYEN CUONG & NGUYEN SOPHIE	6240 SE GRANT ST	PORTLAND OR 97215-4057
271	RETURN SERVICE REQUESTED		1S2E05CC 2200	LE PHAN HUY & VU KHUE NGOC	6236 SE GRANT ST	PORTLAND OR 97215
272	RETURN SERVICE REQUESTED		1S2E05CC 2300	PATTIE LILIANA	6230 SE GRANT ST	PORTLAND OR 97215
273	RETURN SERVICE REQUESTED		1S2E05CC 2400	GEDZ ROMAN & GEDZ BEVERLY J	6224 SE GRANT ST	PORTLAND OR 97215-4057
274	RETURN SERVICE REQUESTED		1S2E05CC 2500	CHAN CAI LING	6225 SE SHERMAN ST	PORTLAND OR 97215
275	RETURN SERVICE REQUESTED		1S2E05CC 2600	TRUONG NGOCCAM THI	6233 SE SHERMAN ST	PORTLAND OR 97215-4063
276	RETURN SERVICE REQUESTED		1S2E05CC 2700	MAH YIM CHONG & MAH LAI LING CHAN	6247 SE SHERMAN ST	PORTLAND OR 97215-4063
277	RETURN SERVICE REQUESTED		1S2E05CC 2800	MITCHELL ELIZABETH J	6305 SE SHERMAN ST	PORTLAND OR 97215
278	RETURN SERVICE REQUESTED		1S2E05CC 2900	LABARRE RYAN D	6315 SE SHERMAN ST	PORTLAND OR 97215
279	RETURN SERVICE REQUESTED		1S2E05CC 300	NICOLA NANCY C	84-544 MANUKU ST	MAKAHA HI 96792
280	RETURN SERVICE REQUESTED		1S2E05CC 3000	TAN QIU Z	6325 SE SHERMAN ST	PORTLAND OR 97215-4068
281	RETURN SERVICE REQUESTED		1S2E05CC 3200	KLASSY CHARLES R & KLASSY SUSANNE	6335 SE SHERMAN ST	PORTLAND OR 97215-4068
282	RETURN SERVICE REQUESTED		1S2E05CC 3300	BENTING DIANNA R	6344 SE SHERMAN ST	PORTLAND OR 97215-4067
283	RETURN SERVICE REQUESTED		1S2E05CC 3400	CHAN KIN HOI & PEAKE BRITTNEY H	6336 SE SHERMAN ST	PORTLAND OR 97215
284	RETURN SERVICE REQUESTED		1S2E05CC 3500	STEPAN DIANE M TR	6324 SE SHERMAN ST	PORTLAND OR 97215-4067
285	RETURN SERVICE REQUESTED	1S2E05CC 3600	MARILYN M CRILLEY CREDIT SHELTER TR	& CRILLEY & ROWBOTTOM TRUST	6314 SE SHERMAN ST	PORTLAND OR 97215
286	RETURN SERVICE REQUESTED		1S2E05CC 3700	WINTER KATHLEEN A	6306 SE SHERMAN ST	PORTLAND OR 97215-4067
287	RETURN SERVICE REQUESTED		1S2E05CC 3800	HARTER MICHAEL	6244 SE SHERMAN ST	PORTLAND OR 97215
288	RETURN SERVICE REQUESTED		1S2E05CC 3900	STEVENSON MARJORIE L	6232 SE SHERMAN ST	PORTLAND OR 97215
289	RETURN SERVICE REQUESTED		1S2E05CC 400	FOX MARJORIE L	5741 SE INSLEY ST	PORTLAND OR 97206
290	RETURN SERVICE REQUESTED		1S2E05CC 4000	BILODEAU MARK ET AL	6226 SE SHERMAN ST	PORTLAND OR 97215
291	RETURN SERVICE REQUESTED		1S2E05CC 4200	WESTON INVESTMENT CO LLC	2154 NE BROADWAY	PORTLAND OR 97232-1590
292	RETURN SERVICE REQUESTED		1S2E05CC 4600	FLOWERS ORVILLE L	7715 NE 21ST AVE	PORTLAND OR 97211-1963

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293	RETURN SERVICE REQUESTED		1S2E05CC 4800	BOGAR LISA F & BOGAR EDWARD L	2245 SE 66TH AVE	PORTLAND OR 97215
294	RETURN SERVICE REQUESTED		1S2E05CC 500	TRAN MICHAEL & TRAN ANTHONY	6238 SE LINCOLN ST	PORTLAND OR 97215
295	RETURN SERVICE REQUESTED		1S2E05CC 600	POH LEONG CHIN & FELICIA HANG-KU	10526 160TH AVE NE	REDMOND WA 98052
296	RETURN SERVICE REQUESTED		1S2E05CC 6000	STANUCK LLC	7458 SW ASHFORD ST	TIGARD OR 97224-7142
297	RETURN SERVICE REQUESTED		1S2E05CC 6100	DOMANSKI JAMES& DOMANSKI JENNIFER	2425 SE 67TH AVE	PORTLAND OR 97206-1214
298	RETURN SERVICE REQUESTED		1S2E05CC 6200	DOLAN PORTLAND PROPERTIES LLC	20279 N 102ND PL	SCOTTSDALE AZ 85255
299	RETURN SERVICE REQUESTED		1S2E05CC 6300	FOSTER STEPHEN M & FOSTER SALLY	2417 SE 66TH AVE	PORTLAND OR 97206-1205
300	RETURN SERVICE REQUESTED		1S2E05CC 6400	2407 SE 66TH LLC	12999 S CASTO RD	OREGON CITY OR 97045
301	RETURN SERVICE REQUESTED		1S2E05CC 6500	DIVISION STREET APTS NUMBER 1 LLC	82 UNDERHILL RD	ORINDA CA 94563
302	RETURN SERVICE REQUESTED		1S2E05CC 700	YOUNGER JACK W JR & YOUNGER AYAKA	6228 SE LINCOLN ST	PORTLAND OR 97215
303	RETURN SERVICE REQUESTED		1S2E05CC 7100	FAYEN JASON L & FAYEN ANN M	2428 SE 64TH AVE	PORTLAND OR 97206
304	RETURN SERVICE REQUESTED		1S2E05CC 7200	OTT STEVE M	6332 SE DIVISION ST	PORTLAND OR 97206
305	RETURN SERVICE REQUESTED		1S2E05CC 7300	NEGEN CLARK	6320 SE DIVISION ST #1	PORTLAND OR 97206
306	RETURN SERVICE REQUESTED	1S2E05CC 7400	MAGDALENO JOHNNY &	HAY-MAGDALENO SANDRA	6316 SE DIVISION ST	PORTLAND OR 97206-1352
307	RETURN SERVICE REQUESTED		1S2E05CC 7500	GUNDERSON PROPERTIES LLC	3529 SE KNAPP ST	PORTLAND OR 97202
308	RETURN SERVICE REQUESTED		1S2E05CC 800	KHUT SAKHENN & KHUT SAY K	6222 SE LINCOLN ST	PORTLAND OR 97215-4074
309	RETURN SERVICE REQUESTED		1S2E05CC 8400	WARD STRAUSS FAMILY TR	6319 SE WINDSOR CT	PORTLAND OR 97206-1366
310	RETURN SERVICE REQUESTED		1S2E05CC 8500	ALEX CHERYL A	2425 SE 64TH AVE	PORTLAND OR 97206-1368
311	RETURN SERVICE REQUESTED		1S2E05CC 8600	BROWNBRIDGE FINN & CHLOE	2427 SE 64TH AVE	PORTLAND OR 97206-1368
312	RETURN SERVICE REQUESTED	1S2E05CC 8701	SSSHT OPCO SE DIVISION STREET LLC	RYAN LLC	15 W 6TH ST #2400	TULSA OK 74119
313	RETURN SERVICE REQUESTED	1S2E05CC 8701	SSSHT PROPCO SE DIVISION STREET LLC	SSSHT ACQUIS LLC/MICHAEL TERJUNG	10 TERRACE RD	LADERA RANCH CA 92694-1182
314	RETURN SERVICE REQUESTED		1S2E05CC 900	TAVAN EMMANUEL TRUNG TOAN	6223 SE GRANT ST	PORTLAND OR 97215
315	RETURN SERVICE REQUESTED	1S2E05CC 90000	ASSOCIATION OF UNIT OWNERS OF	TABOR PARK CONDOMINIUM	PO BOX 28205	PORTLAND OR 97228-8205
316	RETURN SERVICE REQUESTED		1S2E05CC 90001	MURRAY CHRISTOPHER	6600 SE DIVISION ST #101	PORTLAND OR 97206
317	RETURN SERVICE REQUESTED		1S2E05CC 90002	TURNQUIST JOSEPH & TURNQUIST KAORI	6600 SE DIVISION ST #102	PORTLAND OR 97206
318	RETURN SERVICE REQUESTED		1S2E05CC 90003	SWOPE PARKER ET AL	6600 SE DIVISION ST #103	PORTLAND OR 97206
319	RETURN SERVICE REQUESTED		1S2E05CC 90004	SCHILLING ELI N	6600 SE DIVISION ST #104	PORTLAND OR 97206
320	RETURN SERVICE REQUESTED		1S2E05CC 90005	ARETA WILLIAMS REV LIV TR	2103 NE 158TH PL	PORTLAND OR 97230-8246
321	RETURN SERVICE REQUESTED		1S2E05CC 90006	VORE RACHEL ANN	6600 SE DIVISION ST #106	PORTLAND OR 97206
322	RETURN SERVICE REQUESTED		1S2E05CC 90008	THOMAS E HERING REV LIV TR	1908 NE 70TH AVE	PORTLAND OR 97213-5329
323	RETURN SERVICE REQUESTED		1S2E05CC 90009	SEIPP DALE E JR & SEIPP DANA	6600 SE DIVISION ST #202	PORTLAND OR 97206-1285
324	RETURN SERVICE REQUESTED		1S2E05CC 90010	MANEK EWA	6600 SE DIVISION ST #203	PORTLAND OR 97206
325	RETURN SERVICE REQUESTED		1S2E05CC 90011	FROHMAN JENNIFER L	6600 SE DIVISION ST #204	PORTLAND OR 97206
326	RETURN SERVICE REQUESTED		1S2E05CC 90012	ROSEN BENJAMIN H	6600 SE DIVISION ST #205	PORTLAND OR 97206
327	RETURN SERVICE REQUESTED		1S2E05CC 90013	SMITH TANNER J	6600 SE DIVISION ST #206	PORTLAND OR 97206
328	RETURN SERVICE REQUESTED	1S2E05CC 90014	MUGGLESTONE IANTHE &	GREY ALEXANDRIA	6600 SE DIVISION ST #207	PORTLAND OR 97206
329	RETURN SERVICE REQUESTED		1S2E05CC 90015	WENDY PATTEE SUPPLEMENTAL NEEDS TR	5523 SE CESAR E CHAVEZ BLVD	PORTLAND OR 97202
330	RETURN SERVICE REQUESTED		1S2E05CC 90016	SHORR SCOTT & SHORR KAREN	3110 NE KLICKITAT ST	PORTLAND OR 97212
331	RETURN SERVICE REQUESTED		1S2E05CC 90017	WATSON CRAIG R & WATSON SUSAN M	1215 CARRIAGE DR	EAST AURORA NY 14052
332	RETURN SERVICE REQUESTED		1S2E05CC 90018	C JANSEN LLC	31618 BRYANT WAY SW	ALBANY OR 97321
333	RETURN SERVICE REQUESTED		1S2E05CC 90019	YEE SHARNA	6600 SE DIVISION ST #303	PORTLAND OR 97206
334	RETURN SERVICE REQUESTED		1S2E05CC 90020	HEFFRON DIANE M	6600 SE DIVISION ST #304	PORTLAND OR 97206
335	RETURN SERVICE REQUESTED		1S2E05CC 90021	CARMONA MANUEL	6600 SE DIVISION ST #305	PORTLAND OR 97206
336	RETURN SERVICE REQUESTED		1S2E05CC 90022	ERWERT ANNA M	6600 SE DIVISION ST #306	PORTLAND OR 97206
337	RETURN SERVICE REQUESTED		1S2E05CC 90023	BERMAN ALYSON	6600 SE DIVISION ST #307	PORTLAND OR 97206
338	RETURN SERVICE REQUESTED		1S2E05CC 90024	DRUI LAURENT A	6600 SE DIVISION ST #308	PORTLAND OR 97206
339	RETURN SERVICE REQUESTED		1S2E05CC 90025	HO DAVID V	7610 SE TAGGART ST	PORTLAND OR 97206
340	RETURN SERVICE REQUESTED		1S2E05CD 100	WITTHAUS DENA & WIENER MICHAEL	2045 SE 72ND AVE	PORTLAND OR 97215
341	RETURN SERVICE REQUESTED		1S2E05CD 1000	ROSS LOREN M & LAFRANCHISE JULIE M	2103 SE 72ND AVE	PORTLAND OR 97215
342	RETURN SERVICE REQUESTED		1S2E05CD 1100	HOWARD ROBERT B & HOWARD AMY L	7120 SE LINCOLN ST	PORTLAND OR 97215
343	RETURN SERVICE REQUESTED		1S2E05CD 1200	FLETCHER JEFFREY ALAN	7112 SE LINCOLN ST	PORTLAND OR 97215-4052
344	RETURN SERVICE REQUESTED		1S2E05CD 1300	PAULA MALONE TR	7108 SE LINCOLN ST	PORTLAND OR 97215-4052
345	RETURN SERVICE REQUESTED		1S2E05CD 1400	MOWREY MARY	7104 SE LINCOLN ST	PORTLAND OR 97215
346	RETURN SERVICE REQUESTED		1S2E05CD 1500	WILTON CHERYL &KAUFER ELLEN NELLY	7103 SE GRANT ST	PORTLAND OR 97215
347	RETURN SERVICE REQUESTED		1S2E05CD 1600	LEE JENSEN G & LEE MARY J	7107 SE GRANT ST	PORTLAND OR 97215-4031
348	RETURN SERVICE REQUESTED	1S2E05CD 1800 RODRIGUEZ	FERNANDO & SCHULZ-RODRIGUEZ SERENA	& SCHULZ ERIC	7121 SE GRANT ST	PORTLAND OR 97215
349	RETURN SERVICE REQUESTED		1S2E05CD 1900	SHERMAN MARK & SHERMAN KAREN M	2115 SE 72ND AVE	PORTLAND OR 97215-4045
350	RETURN SERVICE REQUESTED		1S2E05CD 2000	ANDERSON CHRIS & ANDERSON FAWN	2129 SE 72ND AVE	PORTLAND OR 97215-4045
351	RETURN SERVICE REQUESTED		1S2E05CD 2100	PENDLAND AARON	2217 SE 72ND AVE	PORTLAND OR 97215
352	RETURN SERVICE REQUESTED		1S2E05CD 2200	RPWILL LLC	940 ROBLE RIDGE RD	PALO ALTO CA 94306-2609
353	RETURN SERVICE REQUESTED		1S2E05CD 2300	TI DAVID	7106 SE GRANT ST	PORTLAND OR 97215-4032
354	RETURN SERVICE REQUESTED		1S2E05CD 2500	GARBER JONATHAN S & TURNER TAMMY N	2227 SE 72ND AVE	PORTLAND OR 97215-4047
355	RETURN SERVICE REQUESTED		1S2E05CD 2600	BURBACH DAVID & BERGIN PATRICIA	2235 SE 72ND AVE	PORTLAND OR 97215-4047
356	RETURN SERVICE REQUESTED		1S2E05CD 2700	HUDSON CHARLES & CHISHOLM SARAH	2244 SE 70TH AVE	PORTLAND OR 97215
357	RETURN SERVICE REQUESTED		1S2E05CD 2800	CAIRO ELIAS J & HERETH JESSICA R	2245 SE 72ND AVE	PORTLAND OR 97215
358	RETURN SERVICE REQUESTED		1S2E05CD 2900	KOEHLER PETER & TILLOTSON KEELEY	1411 SE 55TH AVE	PORTLAND OR 97215-2665
359	RETURN SERVICE REQUESTED		1S2E05CD 300	BATHURST ELIZABETH A	7122 SE HARRISON CT	PORTLAND OR 97215
360	RETURN SERVICE REQUESTED		1S2E05CD 3100	CATO LINDA	7069 SE DIVISION ST	PORTLAND OR 97206
361	RETURN SERVICE REQUESTED		1S2E05CD 400	WORTH ERIN J & WORTH DAVID J	7110 SE HARRISON CT	PORTLAND OR 97215
362	RETURN SERVICE REQUESTED		1S2E05CD 4100	BROWN MARIA M	2314 SE 70TH AVE	PORTLAND OR 97215
363	RETURN SERVICE REQUESTED		1S2E05CD 4201	MEYER RODRICK H	PO BOX 38	UNDERWOOD WA 98651
364	RETURN SERVICE REQUESTED		1S2E05CD 4202	BUSSEL-AST LIV TR	2308 SE 70TH AVE	PORTLAND OR 97215
365	RETURN SERVICE REQUESTED	1S2E05CD 4300	JULIAN F ORTIZ MORENO &	FIONA M ORTIZ JOINT TENANCY TR	6005 N KIMBALL AVE #4C	CHICAGO IL 60659

	A	B	C	D	E	F
366	RETURN SERVICE REQUESTED		1S2E05CD 4500	DIANE M DELUCA LIV TR	2236 SE 70TH AVE	PORTLAND OR 97215
367	RETURN SERVICE REQUESTED		1S2E05CD 4600	KREUTZER ELIZABETH A	2829 SE 46TH AVE	PORTLAND OR 97206-1663
368	RETURN SERVICE REQUESTED		1S2E05CD 4700	ALMIRALL JOHN	2220 SE 70TH AVE	PORTLAND OR 97215
369	RETURN SERVICE REQUESTED		1S2E05CD 4800	HARTLEY GEORGE W IV & WITTMAN PAUL	PO BOX 1036	GRESHAM OR 97030-0222
370	RETURN SERVICE REQUESTED		1S2E05CD 4900	JARCHO DEBRA L	2204 SE 70TH AVE	PORTLAND OR 97215
371	RETURN SERVICE REQUESTED		1S2E05CD 500	FRIEDLANDER DAVID M	7332 SE HARRISON CT	PORTLAND OR 97215-4142
372	RETURN SERVICE REQUESTED		1S2E05CD 500	FORD BARBARA E TR & RIOS MELANIE TR	7100 SE HARRISON CT	PORTLAND OR 97215-4036
373	RETURN SERVICE REQUESTED	1S2E05CD 5000	DALE & MONICA MONROE TR &	WARNER PACIFIC UNIVERSITY	848 NE 52ND AVE	PORTLAND OR 97213
374	RETURN SERVICE REQUESTED		1S2E05CD 5300	ZAUGRA MARK E & IKEDA TERI L	PO BOX 18091	PORTLAND OR 97218
375	RETURN SERVICE REQUESTED	1S2E05CD 5900	SODEXO AMERICA LLC	INTERNATIONAL APPRAISAL CO	6 ARROW RD #100	RAMSEY NJ 07446-1254
376	RETURN SERVICE REQUESTED		1S2E05CD 5900	WARNER PACIFIC COLLEGE	2219 SE 68TH AVE	PORTLAND OR 97215
377	RETURN SERVICE REQUESTED		1S2E05CD 600	COLLINS DIANA & GRUMICH ANNALISA	7105 SE LINCOLN ST	PORTLAND OR 97215
378	RETURN SERVICE REQUESTED		1S2E05CD 6100	WSCO PETROLEUM CORP	2929 NW 29TH AVE	PORTLAND OR 97210-1705
379	RETURN SERVICE REQUESTED		1S2E05CD 6100	EARLYOIL LLC	2929 NW 29TH AVE	PORTLAND OR 97210-1705
380	RETURN SERVICE REQUESTED		1S2E05CD 700	CROSETTI AURORA R & THOMAS JEFF	7111 SE LINCOLN ST	PORTLAND OR 97215
381	RETURN SERVICE REQUESTED		1S2E05CD 800	TREACY DARRELL & TREACY LINDA	7115 SE LINCOLN ST	PORTLAND OR 97215-4051
382	RETURN SERVICE REQUESTED		1S2E05CD 900	BARNES-RICKETT ALEX & CLAYTON	7125 SE LINCOLN ST	PORTLAND OR 97215-4051
383	RETURN SERVICE REQUESTED		1S2E05DB 11900	VAUPEL JASON	7211 SE CLAY ST	PORTLAND OR 97215
384	RETURN SERVICE REQUESTED		1S2E05DB 12000	WILBANKS REIS	1530 SE 72ND AVE	PORTLAND OR 97215
385	RETURN SERVICE REQUESTED		1S2E05DB 12100	LANDA-SUGNET TR	7210 SE CLAY ST	PORTLAND OR 97215
386	RETURN SERVICE REQUESTED	1S2E05DB 13000	EAMON HAYES BRENNAN-KOS &	JENNIFER BRENNAN-KOS LIV TR	1632 SE 72ND AVE	PORTLAND OR 97215
387	RETURN SERVICE REQUESTED		1S2E05DB 13100	COOMER ROBERT M & BREWER APRIL L	1640 SE 72ND AVE	PORTLAND OR 97215-3508
388	RETURN SERVICE REQUESTED		1S2E05DB 13200	RICHARDSON KATHLEEN	1708 SE 72ND AVE	PORTLAND OR 97215-3510
389	RETURN SERVICE REQUESTED	1S2E05DB 14300	CARLSON THEODORE J TR &	CARLSON LINDA J TR	1720 SE 72ND AVE	PORTLAND OR 97215
390	RETURN SERVICE REQUESTED		1S2E05DB 14400	OWENS JASON D & OWENS JENNIFER E	1730 SE 72ND AVE	PORTLAND OR 97215
391	RETURN SERVICE REQUESTED		1S2E05DB 14500	DB WOODS II LLC	1725 SE 72ND AVE	PORTLAND OR 97215
392	RETURN SERVICE REQUESTED		1S2E05DB 15500	PATTERSON KATHLEEN & KEITH	1822 SE 72ND AVE	PORTLAND OR 97215
393	RETURN SERVICE REQUESTED		1S2E05DB 15600	MCCONNELL SHAD	1836 SE 72ND AVE	PORTLAND OR 97215
394	RETURN SERVICE REQUESTED		1S2E05DB 15700	MAGANA EVELIA	1906 SE 72ND AVE	PORTLAND OR 97215
395	RETURN SERVICE REQUESTED		1S2E05DB 15800	SMITH MICHAEL & SMITH AILEEN	1918 SE 72ND AVE	PORTLAND OR 97215
396	RETURN SERVICE REQUESTED		1S2E05DB 16700	MAREMONT STEPHEN A	1932 SE 72ND AVE	PORTLAND OR 97215-3513
397	RETURN SERVICE REQUESTED		1S2E05DB 16800	WHITELIBBEY & DOW MARK	2004 SE 72ND AVE	PORTLAND OR 97215
398	RETURN SERVICE REQUESTED		1S2E05DB 16900	POSTULA DONALD & POSTULA SUZANNE	2018 SE 72ND AVE	PORTLAND OR 97215-4044
399	RETURN SERVICE REQUESTED		1S2E05DB 17700	HIGUERA JOHN	1147 SE 51ST AVE	PORTLAND OR 97215-2612
400	RETURN SERVICE REQUESTED		1S2E05DC 10800	EVANS CHRISTINE E	2232 SE 72ND AVE	PORTLAND OR 97215-4048
401	RETURN SERVICE REQUESTED		1S2E05DC 5100	STEVENSON KAREN I	2048 SE 72ND AVE	PORTLAND OR 97215-4086
402	RETURN SERVICE REQUESTED		1S2E05DC 5200	KAYSER MELODY D	2064 SE 72ND AVE	PORTLAND OR 97215
403	RETURN SERVICE REQUESTED		1S2E05DC 5300	MILBRODT DUSTIN CHARLES	7205 SE LINCOLN ST	PORTLAND OR 97215
404	RETURN SERVICE REQUESTED		1S2E05DC 9000	VEGAS EMRIE	2104 SE 72ND AVE	PORTLAND OR 97215
405	RETURN SERVICE REQUESTED		1S2E05DC 9100	SCHENK AMELIA T & SCHENK DANIEL P	3659 SE LEXINGTON ST	PORTLAND OR 97202
406	RETURN SERVICE REQUESTED		1S2E05DC 9200	LEVENSPIEL MORRIS	6240 C AVE	OTTER ROCK OR 97369-9738
407	RETURN SERVICE REQUESTED		1S2E05DC 9300	FRE 569 LLC	2206 SE 72ND AVE	PORTLAND OR 97215-4048
408	RETURN SERVICE REQUESTED		1S2E06AA 1100	DUKE RACHAEL A S & DUKE JOHN M III	6225 SE BELMONT ST	PORTLAND OR 97215-1939
409	RETURN SERVICE REQUESTED		1S2E06AA 1200	STREEDAIN ANDREA & RICHARD	12703 W BUCKHORN RD	LITTLETON CO 80127
410	RETURN SERVICE REQUESTED	1S2E06AA 1301	GRAFF MATTHEW D &	KENNEDY-DARLING MOLLY L	6208 SE BELMONT ST	PORTLAND OR 97215
411	RETURN SERVICE REQUESTED		1S2E06AA 1302	SABATINI JEFFERY & BOWDEN KRISTIN	6216 SE BELMONT ST	PORTLAND OR 97215
412	RETURN SERVICE REQUESTED		1S2E06AA 1400	MARQUIS COMPANIES I INC	4560 SE INTERNATIONAL WAY #100	MILWAUKIE OR 97222-4615
413	RETURN SERVICE REQUESTED		1S2E06AA 1400	MEDILOGIX LLC	1512 LARIMER ST #400	DENVER CO 80202
414	RETURN SERVICE REQUESTED		1S2E06AA 1400	REHAM 6 LLC ET AL	PO BOX 14955	PORTLAND OR 97293
415	RETURN SERVICE REQUESTED	1S2E06AA 1402	OSBORN JUSTIN E &	LECHLER-OSBORN SUSANNE	6141 SE YAMHILL ST	PORTLAND OR 97215-2824
416	RETURN SERVICE REQUESTED		1S2E06AA 1403	RIEDL MARCO & RIEDL ANNA K	6191 SE YAMHILL ST	PORTLAND OR 97215-2824
417	RETURN SERVICE REQUESTED		1S2E06AA 1404	MACMULLIN CAMERON & ROCHA JUNEA	6381 SE YAMHILL ST	PORTLAND OR 97215
418	RETURN SERVICE REQUESTED		1S2E06AA 1405	ELLIN BRIAN C & ELLIN DEVIN N	6377 SE YAMHILL ST	PORTLAND OR 97215
419	RETURN SERVICE REQUESTED		1S2E06AA 1407	BRENNEIS/FURTH FAMILY REV TR	6207 SE YAMHILL ST	PORTLAND OR 97215
420	RETURN SERVICE REQUESTED		1S2E06AA 1408	DOUGHERTY CONNOR	6215 SE YAMHILL ST	PORTLAND OR 97215
421	RETURN SERVICE REQUESTED	1S2E06AA 80000	TABOR TERRACE CONDO OWNERS ASSN	ATTN SWEET HOME TABOR LLC	3050 SE DIVISION ST #235	PORTLAND OR 97202-1995
422	RETURN SERVICE REQUESTED		1S2E06AD 100	FOWLER CEDAR J	717 NW 33RD ST	CORVALLIS OR 97330
423	RETURN SERVICE REQUESTED		1S2E06AD 10000	GOLDSMITH SUSAN	5921 SE HAWTHORNE BLVD	PORTLAND OR 97215-3457
424	RETURN SERVICE REQUESTED		1S2E06AD 10100	BYLOOS MATTHEW & SEITZINGER CARRIE	5933 SE HAWTHORNE BLVD	PORTLAND OR 97215-3457
425	RETURN SERVICE REQUESTED		1S2E06AD 10200	HUNTER VALERIE	1400 SE 60TH AVE	PORTLAND OR 97215-2809
426	RETURN SERVICE REQUESTED		1S2E06AD 10300	PAIGE NIEBA	1322 SE 60TH AVE	PORTLAND OR 97215
427	RETURN SERVICE REQUESTED		1S2E06AD 10400	ORR GENEVIEVE B ET AL	6038 SE MAIN ST	PORTLAND OR 97215-2813
428	RETURN SERVICE REQUESTED		1S2E06AD 10600	WAX STEVEN T & HALEY KATHLEEN	6110 SE MAIN ST	PORTLAND OR 97215-2815
429	RETURN SERVICE REQUESTED		1S2E06AD 10700	DOLKAS LUKE J & DOLKAS RACHEL L	6126 SE MAIN ST	PORTLAND OR 97215-2815
430	RETURN SERVICE REQUESTED		1S2E06AD 10800	EPLEY JON R & EPLEY KELLY L	6136 SE MAIN ST	PORTLAND OR 97215-2815
431	RETURN SERVICE REQUESTED		1S2E06AD 10900	LANCEFIELD RICHARD & FRANCES	6210 SE MAIN ST	PORTLAND OR 97215-2817
432	RETURN SERVICE REQUESTED		1S2E06AD 11000	MCDONALD BYRD & SHICK DOUG	6224 SE MAIN ST	PORTLAND OR 97215
433	RETURN SERVICE REQUESTED		1S2E06AD 11000	MORROW CREATIVE GROUP INC	6224 SE MAIN ST	PORTLAND OR 97215
434	RETURN SERVICE REQUESTED		1S2E06AD 11100	OSBORNE EVA & OSBORNE ALEX	11821 S PARK AVE	LOS ANGELES CA 90066
435	RETURN SERVICE REQUESTED		1S2E06AD 11200	RAVEAUX GREGORY & RAVEAUX LINDA	6133 SE MAIN ST	PORTLAND OR 97215-2814
436	RETURN SERVICE REQUESTED		1S2E06AD 11300	LEE JEFF S TR & CHANG MAY M TR	6115 SE MAIN ST	PORTLAND OR 97215-2814
437	RETURN SERVICE REQUESTED		1S2E06AD 11400	MCKINLEY LINDSEY R & AUSTIN CARRIE	6105 SE MAIN ST	PORTLAND OR 97215
438	RETURN SERVICE REQUESTED		1S2E06AD 11500	BERGER DANIEL R & ROBERTS KERI A	6027 SE MAIN ST	PORTLAND OR 97215-2812

	A	B	C	D	E	F
439	RETURN SERVICE REQUESTED		1S2E06AD 11600	DWORK JOHNNY	1242 SE 60TH AVE #A	PORTLAND OR 97215
440	RETURN SERVICE REQUESTED		1S2E06AD 11700	MOE GARY L & ATALAY ERKAN	1214 SE 60TH AVE	PORTLAND OR 97215
441	RETURN SERVICE REQUESTED		1S2E06AD 12000	RADEMACHER JO & RADEMACHER JO TR	6112 SE SALMON ST	PORTLAND OR 97215-2820
442	RETURN SERVICE REQUESTED		1S2E06AD 12100	DAVID S STUTZ LIV TR	6122 SE SALMON ST	PORTLAND OR 97215
443	RETURN SERVICE REQUESTED		1S2E06AD 12200	HILL JASON R & HILL CAMERON A	8222 SW QUARTERMASTER DR	VASHON WA 98070
444	RETURN SERVICE REQUESTED		1S2E06AD 12300	CORLISS BENJAMIN & PATTUMMA	6220 SE SALMON ST	PORTLAND OR 97215
445	RETURN SERVICE REQUESTED		1S2E06AD 12400	ALL HAT LLCC/O ROBERTSON ACCTNG	11234 S SOUTHRIDGE DR	PORTLAND OR 97219
446	RETURN SERVICE REQUESTED		1S2E06AD 13101	KAPPES FRANCES & CALLANAN MATT	6120 SE TAYLOR CT	PORTLAND OR 97215
447	RETURN SERVICE REQUESTED		1S2E06AD 13300	ROBBINS RICHARD & ROBBINS NANCY	6154 SE TAYLOR CT	PORTLAND OR 97215-2828
448	RETURN SERVICE REQUESTED		1S2E06AD 13400	NEIDHART CARL E & NEIDHART KAREN M	6176 SE TAYLOR CT	PORTLAND OR 97215
449	RETURN SERVICE REQUESTED		1S2E06AD 13500	THOMAS MARKS TR & ERIKA MARKS TR	6187 SE TAYLOR CT	PORTLAND OR 97215
450	RETURN SERVICE REQUESTED		1S2E06AD 13600	BRUCE ANDERSON TR	6177 SE TAYLOR CT	PORTLAND OR 97215
451	RETURN SERVICE REQUESTED		1S2E06AD 13700	MORGAN PATRICIA J TR	6135 SE TAYLOR CT	PORTLAND OR 97215-2827
452	RETURN SERVICE REQUESTED		1S2E06AD 13800	KUMMEL JULIE & KUMMEL MARC	5100 E CAMINO CIELO	SANTA BARBARA CA 93105
453	RETURN SERVICE REQUESTED		1S2E06AD 13900	CAMBIER ABRAHAM & CAMBIER JENNIFER	6310 SE YAMHILL ST	PORTLAND OR 97215-2833
454	RETURN SERVICE REQUESTED		1S2E06AD 14000	DOHT LYNETTE A	6320 SE YAMHILL ST	PORTLAND OR 97215-2833
455	RETURN SERVICE REQUESTED		1S2E06AD 14100	KINGSTON STEVEN & KINGSTON JOANN	6330 SE YAMHILL ST	PORTLAND OR 97215-2833
456	RETURN SERVICE REQUESTED		1S2E06AD 14300	JOHNSON CLAIRE I	6215 SE SALMON ST	PORTLAND OR 97215-2821
457	RETURN SERVICE REQUESTED		1S2E06AD 200	SOLOMON SUSAN C	6132 SE YAMHILL ST	PORTLAND OR 97215
458	RETURN SERVICE REQUESTED		1S2E06AD 301	CARPENTER BRENT & REDDY DEEPIKA	PO BOX 14336	PORTLAND OR 97293
459	RETURN SERVICE REQUESTED		1S2E06AD 302	RESKI JOHN	6212 SE YAMHILL ST	PORTLAND OR 97215
460	RETURN SERVICE REQUESTED	1S2E06AD 400	KING KATY MARY KATHLEEN ET AL	C/O KING TIMOTHY IGOE	6300 SE YAMHILL ST	PORTLAND OR 97215
461	RETURN SERVICE REQUESTED		1S2E06AD 4600	VOMINH TAN TR & VOMINH THANH HAI TR	1225 SE 60TH AVE	PORTLAND OR 97215-2806
462	RETURN SERVICE REQUESTED		1S2E06AD 4700	MILLER LOUISE L	5925 SE MADISON ST	PORTLAND OR 97215-2735
463	RETURN SERVICE REQUESTED		1S2E06AD 5000	RODAL MONICA B	5833 SE MADISON ST	PORTLAND OR 97215-2733
464	RETURN SERVICE REQUESTED	1S2E06AD 5200	CORRIGAN DENNIS TR &	CORRIGAN PHYLLIS J TR	5821 SE MADISON ST	PORTLAND OR 97215-2733
465	RETURN SERVICE REQUESTED		1S2E06AD 5300	FUCHS ANDREW & MULHOLLAND PATRICIA	1318 SE 58TH AVE	PORTLAND OR 97215
466	RETURN SERVICE REQUESTED		1S2E06AD 5400	IRVINE JOHN D & IRVINE BRENDA D	1304 SE 58TH AVE	PORTLAND OR 97215-2728
467	RETURN SERVICE REQUESTED		1S2E06AD 800	GUFFANTI GREGORY T & CORBETT LUCY E	6041 SE TAYLOR CT	PORTLAND OR 97215-2825
468	RETURN SERVICE REQUESTED		1S2E06AD 8200	PALMER PATRICIA A	1406 SE 58TH AVE	PORTLAND OR 97215
469	RETURN SERVICE REQUESTED		1S2E06AD 8300	HARTLEY GLORIA	1416 SE 58TH AVE	PORTLAND OR 97215
470	RETURN SERVICE REQUESTED		1S2E06AD 8400	BURNS MATTHEW & WILD ANDREA	1424 SE 58TH AVE	PORTLAND OR 97215
471	RETURN SERVICE REQUESTED		1S2E06AD 8500	APPERSON ERIN E & SOLOMON GARY P R	1434 SE 58TH AVE	PORTLAND OR 97215
472	RETURN SERVICE REQUESTED		1S2E06AD 8600	ALLEN RACHEL D & ALLEN MATTHEW F	1446 SE 58TH AVE	PORTLAND OR 97215-2730
473	RETURN SERVICE REQUESTED		1S2E06AD 8700	STOKES AMY K	1454 SE 58TH AVE	PORTLAND OR 97215
474	RETURN SERVICE REQUESTED		1S2E06AD 8800	COWAN PETER	5829 SE HAWTHORNE BLVD	PORTLAND OR 97215
475	RETURN SERVICE REQUESTED		1S2E06AD 8900	ANNETTE S LEVY REV LIV TR	5837 SE HAWTHORNE BLVD	PORTLAND OR 97215-3455
476	RETURN SERVICE REQUESTED		1S2E06AD 9000	ROSS GRAHAM A & ROSS SHARON L	5908 SE MADISON ST	PORTLAND OR 97215-2736
477	RETURN SERVICE REQUESTED		1S2E06AD 9200	PRUKOP DAVID L & PRUKOP KRISTIN	5826 SE MADISON ST	PORTLAND OR 97215
478	RETURN SERVICE REQUESTED	1S2E06AD 9300	SAVAGE JOHNSON FAM TR	MICHAEL & JOHNSON AMY TR	5836 SE MADISON ST	PORTLAND OR 97215
479	RETURN SERVICE REQUESTED		1S2E06AD 9500	HILLEBRANDT MARK & ROWE DIANE	1409 SE 60TH AVE	PORTLAND OR 97215
480	RETURN SERVICE REQUESTED		1S2E06AD 9600	SIGALOV CALLISTA	1421 SE 60TH AVE	PORTLAND OR 97215
481	RETURN SERVICE REQUESTED		1S2E06AD 9700	WAKEFIELD JONATHAN & ILENE	1431 SE 60TH AVE	PORTLAND OR 97215-2808
482	RETURN SERVICE REQUESTED		1S2E06AD 9800	DAKAN SEANN S & DAKAN LISA L	1443 SE 60TH AVE	PORTLAND OR 97215-2808
483	RETURN SERVICE REQUESTED		1S2E06AD 9900	SCHWARTZ KATHRYN N	5907 SE HAWTHORNE BLVD	PORTLAND OR 97215
484	RETURN SERVICE REQUESTED		1S2E06DA 100	JUNTA ROBERT J TR	32675 SW LAKE POINT CT	WILSONVILLE OR 97070
485	RETURN SERVICE REQUESTED		1S2E06DA 10000	DETRICK LIZA J	1702 SE 59TH AVE	PORTLAND OR 97215
486	RETURN SERVICE REQUESTED		1S2E06DA 10100	CARREL MARK D & WONG JOYCE K	12833 ROSE AVE	LOS ANGELES CA 90066
487	RETURN SERVICE REQUESTED		1S2E06DA 10200	BALSIGER HOMES LLC	3140 NE 135TH AVE	PORTLAND OR 97230-2814
488	RETURN SERVICE REQUESTED		1S2E06DA 10300	WINTERS JANINE	1734 SE 59TH AVE #A	PORTLAND OR 97215
489	RETURN SERVICE REQUESTED	1S2E06DA 10400	WAYLAND LI &	LINDA YU SHAN REV LIV TR	1806 SE 59TH AVE	PORTLAND OR 97215
490	RETURN SERVICE REQUESTED		1S2E06DA 10500	LEE GERALD E & LEE ROSANNE S	1814 SE 59TH AVE	PORTLAND OR 97215-3431
491	RETURN SERVICE REQUESTED		1S2E06DA 10600	O'QUINN SANDY L	1824 SE 59TH AVE	PORTLAND OR 97215
492	RETURN SERVICE REQUESTED		1S2E06DA 10700	GUTH JEAN A	1834 SE 59TH AVE	PORTLAND OR 97215
493	RETURN SERVICE REQUESTED	1S2E06DA 10800	PAYNE MICHAEL &	HUTCHINSON ELIZABETH	1844 SE 59TH AVE	PORTLAND OR 97215-3431
494	RETURN SERVICE REQUESTED		1S2E06DA 10900	DAVIS DAVID P & DAVIS BETTY A	1904 SE 59TH AVE	PORTLAND OR 97215-3433
495	RETURN SERVICE REQUESTED		1S2E06DA 11000	TAYLOR AVALYN	1914 SE 59TH AVE	PORTLAND OR 97215
496	RETURN SERVICE REQUESTED		1S2E06DA 11100	KIBZEY RODNEY J	1924 SE 59TH AVE	PORTLAND OR 97215
497	RETURN SERVICE REQUESTED		1S2E06DA 11200	RAP LLC	2020 SW 4TH AVE #600	PORTLAND OR 97201
498	RETURN SERVICE REQUESTED	1S2E06DA 11300	BEST CHRISTOPHER J TR &	SANDER NANCY A TR	1944 SE 59TH AVE	PORTLAND OR 97215
499	RETURN SERVICE REQUESTED		1S2E06DA 11400	SUSAN E MONSON LIV TR	2002 SE 59TH AVE	PORTLAND OR 97215
500	RETURN SERVICE REQUESTED		1S2E06DA 11500	CAMP GREGORY TR & CAMP SARAH TR	2014 SE 59TH AVE	PORTLAND OR 97215
501	RETURN SERVICE REQUESTED		1S2E06DA 11600	PRISBY STEPHEN V	2015 SE 60TH AVE	PORTLAND OR 97215-3443
502	RETURN SERVICE REQUESTED		1S2E06DA 11700	MAXWELL RALPH N	2007 SE 60TH AVE	PORTLAND OR 97215
503	RETURN SERVICE REQUESTED		1S2E06DA 11800	RHIGER BARBARA L	1945 SE 60TH AVE	PORTLAND OR 97215
504	RETURN SERVICE REQUESTED		1S2E06DA 11900	TORRES ISABEL & TORRES JORGE E	1935 SE 60TH AVE	PORTLAND OR 97215
505	RETURN SERVICE REQUESTED		1S2E06DA 12000	SMITH KAREN M	1925 SE 60TH AVE	PORTLAND OR 97215-3441
506	RETURN SERVICE REQUESTED	1S2E06DA 12100	BORGMAN BEVERLY &	BURCK CHARLES PEARSON	1917 SE 60TH AVE	PORTLAND OR 97215
507	RETURN SERVICE REQUESTED		1S2E06DA 12200	SPITZER MICHAEL J	1903 SE 60TH AVE	PORTLAND OR 97215
508	RETURN SERVICE REQUESTED		1S2E06DA 12300	SWENTEK SCOTT	1843 SE 60TH AVE	PORTLAND OR 97215
509	RETURN SERVICE REQUESTED		1S2E06DA 12400	CAMPBELL LARS & PHILLIPS REBEKAH	1833 SE 60TH AVE	PORTLAND OR 97215
510	RETURN SERVICE REQUESTED		1S2E06DA 12500	O'QUINN SANDY	PO BOX 86220	PORTLAND OR 97286
511	RETURN SERVICE REQUESTED		1S2E06DA 12600	LANDSMAN JORDANA M	3722 GLENEAGLES DR	TARZANA CA 91356-5623

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512	RETURN SERVICE REQUESTED		1S2E06DA 12700	HATCH JOSH & HATCH BRIGIT A	1803 SE 60TH AVE	PORTLAND OR 97215
513	RETURN SERVICE REQUESTED		1S2E06DA 12800	NOLAN BOONE W	1735 SE 60TH AVE	PORTLAND OR 97215
514	RETURN SERVICE REQUESTED		1S2E06DA 12900	THOMAS JAMES S & HASTINGS LANCE C	1725 SE 60TH AVE	PORTLAND OR 97215-3438
515	RETURN SERVICE REQUESTED		1S2E06DA 13000	MCKINNEY SARA R	PO BOX 15201	PORTLAND OR 97293
516	RETURN SERVICE REQUESTED		1S2E06DA 13100	HAMILTON NICOLE & WINGER ZACHARY	1707 SE 60TH AVE	PORTLAND OR 97215
517	RETURN SERVICE REQUESTED		1S2E06DA 13200	LESLIE KATHLEEN & SLAUGHTER LELAND	1631 SE 60TH AVE	PORTLAND OR 97215
518	RETURN SERVICE REQUESTED		1S2E06DA 13300	WIELAND JOE & MCKENNA CARLA	1611 SE 60TH AVE	PORTLAND OR 97215-3437
519	RETURN SERVICE REQUESTED		1S2E06DA 13400	YOUNG ADAM H	1601 SE 60TH AVE	PORTLAND OR 97215
520	RETURN SERVICE REQUESTED		1S2E06DA 13500	ROBERTSON ROBERT & MELISSA	1535 SE 60TH AVE	PORTLAND OR 97215
521	RETURN SERVICE REQUESTED		1S2E06DA 13600	JACOBSON-SWARTFAGER JEFFREY & JODI	1523 SE 60TH AVE	PORTLAND OR 97215
522	RETURN SERVICE REQUESTED		1S2E06DA 13700	GOODHART MAX & GOODHART LAUREL	1505 SE 60TH AVE	PORTLAND OR 97215
523	RETURN SERVICE REQUESTED		1S2E06DA 13800	VEGAS MATTHEW	1824 SE 60TH AVE	PORTLAND OR 97215
524	RETURN SERVICE REQUESTED		1S2E06DA 13900	HOESING THOMAS G & HOESING SALLY H	6003 SE STEPHENS ST	PORTLAND OR 97215
525	RETURN SERVICE REQUESTED		1S2E06DA 14000	CARMICHAEL LINDA L	6023 SE STEPHENS ST	PORTLAND OR 97215-3458
526	RETURN SERVICE REQUESTED		1S2E06DA 14100	WHITE HEATHER K	125 FAIR OAKS ST	SAN FRANCISCO CA 94110
527	RETURN SERVICE REQUESTED		1S2E06DA 14200	DREASHER RICHARD & DREASHER DAWN	6045 SE STEPHENS ST	PORTLAND OR 97215
528	RETURN SERVICE REQUESTED		1S2E06DA 14300	ROWELL GRETCHEN & ROWELL JAMES	6107 SE STEPHENS ST	PORTLAND OR 97215
529	RETURN SERVICE REQUESTED		1S2E06DA 14400	CARTER RAPHIEL	6115 SE STEPHENS ST	PORTLAND OR 97215-3460
530	RETURN SERVICE REQUESTED		1S2E06DA 14500	GRIMALA GRETTA G TR	6125 SE STEPHENS ST	PORTLAND OR 97215-3460
531	RETURN SERVICE REQUESTED		1S2E06DA 14600	LEVINE GABRIEL & LEVINE KIMBERLY	6135 SE STEPHENS ST	PORTLAND OR 97215-3460
532	RETURN SERVICE REQUESTED		1S2E06DA 14700	MT TABOR TERRACE LLC	5353 FIRWOOD RD	LAKE OSWEGO OR 97035
533	RETURN SERVICE REQUESTED		1S2E06DA 14800	STINE MICHAEL & HODGES JANE L	6207 SE STEPHENS ST	PORTLAND OR 97215-3449
534	RETURN SERVICE REQUESTED		1S2E06DA 14900	PORTER JOHN L & NIELSEN NATASHA	6208 SE STEPHENS ST	PORTLAND OR 97215-3450
535	RETURN SERVICE REQUESTED		1S2E06DA 15000	CROSS ANDREW B & FRANK BARBARA A	6146 SE STEPHENS ST	PORTLAND OR 97215
536	RETURN SERVICE REQUESTED		1S2E06DA 15100	ARMBRUSTER AARON & NATALIE	6134 SE STEPHENS ST	PORTLAND OR 97215-3448
537	RETURN SERVICE REQUESTED	1S2E06DA 15200	BENNETT JAMES S TR &	BENNETT LEILE M TR	6126 SE STEPHENS ST	PORTLAND OR 97215
538	RETURN SERVICE REQUESTED		1S2E06DA 15300	AMES JOINT REV LIV TR	6116 SE STEPHENS ST	PORTLAND OR 97215
539	RETURN SERVICE REQUESTED		1S2E06DA 15400	D'ONOFRIO PHILIP & LEE ILEANA	6106 SE STEPHENS ST	PORTLAND OR 97215-3448
540	RETURN SERVICE REQUESTED		1S2E06DA 15500	STRECKER DYLAN & STRECKER LAURIE	6044 SE STEPHENS ST	PORTLAND OR 97215
541	RETURN SERVICE REQUESTED		1S2E06DA 15600	REYES-CHECKOWAY FAM TR	6034 SE STEPHENS ST	PORTLAND OR 97215
542	RETURN SERVICE REQUESTED		1S2E06DA 15700	HOJNACKI MICHAEL & HOJNACKI LAUREN	6006 SE STEPHENS ST	PORTLAND OR 97215
543	RETURN SERVICE REQUESTED		1S2E06DA 15800	DOUGLAS C WATSON REV TR	1912 SE 60TH AVE	PORTLAND OR 97215
544	RETURN SERVICE REQUESTED		1S2E06DA 15900	MONTGOMERY CATHERINE S	1928 SE 60TH AVE	PORTLAND OR 97215
545	RETURN SERVICE REQUESTED		1S2E06DA 16000	SUDOFSKY KYRA A	1942 SE 60TH AVE	PORTLAND OR 97215
546	RETURN SERVICE REQUESTED		1S2E06DA 16100	VANDESTREEK LYLE & SUSAN	6015 SE HARRISON ST	PORTLAND OR 97215-3444
547	RETURN SERVICE REQUESTED		1S2E06DA 16200	TATAR ABDI & TATAR BARIS EMEK SUNAT	6025 SE HARRISON ST	PORTLAND OR 97215-3444
548	RETURN SERVICE REQUESTED		1S2E06DA 16300	AMANN EDWARD T	6035 SE HARRISON ST	PORTLAND OR 97215
549	RETURN SERVICE REQUESTED		1S2E06DA 16400	GALLAGHER SCOTT & GALLAGHER JULIE	6045 SE HARRISON ST	PORTLAND OR 97215
550	RETURN SERVICE REQUESTED		1S2E06DA 16500	ILL DAVID & MARX MIRIAM	6105 SE HARRISON ST	PORTLAND OR 97215-3445
551	RETURN SERVICE REQUESTED		1S2E06DA 16600	ANDREWS ROGER & GOODALL JOCELYN	6115 SE HARRISON ST	PORTLAND OR 97215-3445
552	RETURN SERVICE REQUESTED		1S2E06DA 16700	FANNING ELIZABETH & FANNING SHANE	6125 SE HARRISON ST	PORTLAND OR 97215-3445
553	RETURN SERVICE REQUESTED		1S2E06DA 16800	ZAPAR ROXANNE ET AL	6135 SE HARRISON ST	PORTLAND OR 97215
554	RETURN SERVICE REQUESTED		1S2E06DA 16900	KEHDI EDMUND & KEHDI SUZAN	6201 SE HARRISON ST	PORTLAND OR 97215-3445
555	RETURN SERVICE REQUESTED		1S2E06DA 4400	WAKERHAUSER CHERYL A	5808 SE HAWTHORNE BLVD	PORTLAND OR 97215-3456
556	RETURN SERVICE REQUESTED		1S2E06DA 4500	WARNER JOSHUA P	1518 SE 58TH AVE	PORTLAND OR 97215
557	RETURN SERVICE REQUESTED		1S2E06DA 4600	HUNTLEY DEANNA J	1524 SE 58TH AVE	PORTLAND OR 97215
558	RETURN SERVICE REQUESTED		1S2E06DA 4700	PHILLIPSON THOMAS & JORGENSON BRITT	1536 SE 58TH AVE	PORTLAND OR 97215
559	RETURN SERVICE REQUESTED		1S2E06DA 4800	GENNIFER R GORTNER TR	1604 SE 58TH AVE	PORTLAND OR 97215
560	RETURN SERVICE REQUESTED		1S2E06DA 4900	BRADLEY FAMILY REVOCABLE TR	1616 SE 58TH AVE	PORTLAND OR 97215-3415
561	RETURN SERVICE REQUESTED		1S2E06DA 5000	T&T REAL ESTATE INVESTMENTS LLC	1225 SE 60TH AVE	PORTLAND OR 97215
562	RETURN SERVICE REQUESTED		1S2E06DA 5100	CATAXINOS DANIELLE	1638 SE 58TH AVE	PORTLAND OR 97215
563	RETURN SERVICE REQUESTED		1S2E06DA 5200	ST LAWRENCE JULIA	1704 SE 58TH AVE	PORTLAND OR 97215
564	RETURN SERVICE REQUESTED		1S2E06DA 5300	BOGGS AMY	1712 SE 58TH AVE	PORTLAND OR 97215
565	RETURN SERVICE REQUESTED		1S2E06DA 5400	KNEELAND PROPERTIES LLC	10415 SE WAVERLY CT #3164	MILWAUKIE OR 97222
566	RETURN SERVICE REQUESTED		1S2E06DA 5500	MAHAN VINCENT & MAHAN ALESSANDRA	1732 SE 58TH AVE	PORTLAND OR 97215
567	RETURN SERVICE REQUESTED		1S2E06DA 5600	JOSEPH & SUSAN CARTER TR	1804 SE 58TH AVE	PORTLAND OR 97215
568	RETURN SERVICE REQUESTED		1S2E06DA 5700	BURDEN VERNA & MONROE DUANE	1814 SE 58TH AVE	PORTLAND OR 97215
569	RETURN SERVICE REQUESTED		1S2E06DA 5800	HALL LYRA S & LYONS LANA A	1822 SE 58TH AVE	PORTLAND OR 97215
570	RETURN SERVICE REQUESTED		1S2E06DA 5900	SCHIFF ALEXANDER & SCHIFF CATHERINE	1834 SE 58TH AVE	PORTLAND OR 97215
571	RETURN SERVICE REQUESTED		1S2E06DA 6000	BRINK ANETTE S	1846 SE 58TH AVE	PORTLAND OR 97215-3419
572	RETURN SERVICE REQUESTED		1S2E06DA 6300	YOSHIHARA JAY & CLAUDIA	1924 SE 58TH AVE	PORTLAND OR 97215
573	RETURN SERVICE REQUESTED		1S2E06DA 6400	SULLIVAN MARY A	6323 SE DIVISION ST #301	PORTLAND OR 97206-1386
574	RETURN SERVICE REQUESTED		1S2E06DA 6500	TELLES RONALD L	1944 SE 58TH AVE	PORTLAND OR 97215
575	RETURN SERVICE REQUESTED		1S2E06DA 6600	HETZ CHRISTINE & HETZ MARTIN	2004 SE 58TH AVE	PORTLAND OR 97215
576	RETURN SERVICE REQUESTED		1S2E06DA 6700	LEE RAYMOND & BRENNEIS VALANCE	2016 SE 58TH AVE	PORTLAND OR 97215-3423
577	RETURN SERVICE REQUESTED		1S2E06DA 6800	COOGAN CHRISTOPHER & COOGAN DENISE	2013 SE 59TH AVE	PORTLAND OR 97215
578	RETURN SERVICE REQUESTED		1S2E06DA 6900	FUREY CHRISTOPHER H	2005 SE 59TH AVE	PORTLAND OR 97215-3434
579	RETURN SERVICE REQUESTED		1S2E06DA 7000	TORVIK SHARON E & EADIE MARJORIE A	1945 SE 59TH AVE	PORTLAND OR 97215-3432
580	RETURN SERVICE REQUESTED		1S2E06DA 7100	SCHMIDT SERGEI & PILGRIM KRISTEN	1935 SE 59TH AVE	PORTLAND OR 97215-3432
581	RETURN SERVICE REQUESTED		1S2E06DA 7200	ALEXANDER HESSLER TR	1925 SE 59TH AVE	PORTLAND OR 97215
582	RETURN SERVICE REQUESTED		1S2E06DA 7300	SARAH L BAKER FAMILY TR	1915 SE 59TH AVE	PORTLAND OR 97215
583	RETURN SERVICE REQUESTED		1S2E06DA 7400	NAMBA JOE T & NAMBA CRAIG	1905 SE 59TH AVE	PORTLAND OR 97215
584	RETURN SERVICE REQUESTED		1S2E06DA 7500	ADAMS PAMELA A	1843 SE 59TH AVE	PORTLAND OR 97215-3430

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585	RETURN SERVICE REQUESTED		1S2E06DA 7600	MATHEWS MICHAEL & MATHEWS TAMARA	1835 SE 59TH AVE	PORTLAND OR 97215-3430
586	RETURN SERVICE REQUESTED		1S2E06DA 7700	PEARSE FAMILY TR	2558 LANDSFORD AVE	SAN JOSE CA 95125
587	RETURN SERVICE REQUESTED		1S2E06DA 7800	DAVIDSON HEATHER J	1813 SE 59TH AVE	PORTLAND OR 97215
588	RETURN SERVICE REQUESTED		1S2E06DA 7900	WARNER KATHRYN & WARNER MICHAEL	1805 SE 59TH AVE	PORTLAND OR 97215-3430
589	RETURN SERVICE REQUESTED		1S2E06DA 8000	JOHN & MAUREEN MOORE REV TR	1735 SE 59TH AVE	PORTLAND OR 97215-3428
590	RETURN SERVICE REQUESTED		1S2E06DA 8100	WILLSON DENNIS & GOODWIN MARCIA	1723 SE 59TH AVE	PORTLAND OR 97215-3428
591	RETURN SERVICE REQUESTED		1S2E06DA 8200	MICHAEL & PATRICIA FAMILY TR	1971 OLD MILITARY RD	CENTRAL POINT OR 97502
592	RETURN SERVICE REQUESTED		1S2E06DA 8300	WHITE KAMI J & COMINSKY JOSEPH R	1703 SE 59TH AVE	PORTLAND OR 97215-3428
593	RETURN SERVICE REQUESTED		1S2E06DA 8400	HAYMOND LARRY R & HAYMOND MELANIE	1639 SE 59TH AVE	PORTLAND OR 97215-3426
594	RETURN SERVICE REQUESTED		1S2E06DA 8500	BEATY ERIN M & BEATY CATHRINE L	1631 SE 59TH AVE	PORTLAND OR 97215-3426
595	RETURN SERVICE REQUESTED		1S2E06DA 8600	HEYING CHARLES	1619 SE 59TH AVE	PORTLAND OR 97215
596	RETURN SERVICE REQUESTED		1S2E06DA 8700	HEALY ALEXANDRA & SCOGGIN SCOTT	1607 SE 59TH AVE	PORTLAND OR 97215
597	RETURN SERVICE REQUESTED		1S2E06DA 8800	LANNING STEPHEN II & STEPHANIE	1535 SE 59TH AVE	PORTLAND OR 97215
598	RETURN SERVICE REQUESTED		1S2E06DA 8900	WHEELER GLENDA R	1525 SE 59TH AVE	PORTLAND OR 97215-3424
599	RETURN SERVICE REQUESTED		1S2E06DA 9000	JEMISON JALAL J & BULFIN EMILY L	1517 SE 59TH AVE	PORTLAND OR 97215-3424
600	RETURN SERVICE REQUESTED		1S2E06DA 9100	BROWN LARISSA G & BROWN MARTIN J	5826 SE HAWTHORNE BLVD	PORTLAND OR 97215
601	RETURN SERVICE REQUESTED		1S2E06DA 9200	NIMZ ILEANA	12226 SE 104TH CT	HAPPY VALLEY OR 97086
602	RETURN SERVICE REQUESTED	1S2E06DA 9300	THE CRAIG R GARSHELIS 2001 TRUST &	THE MICHAEL ANDREWS LIVING TRUST	533 CHENERY ST	SAN FRANCISCO CA 94131-3031
603	RETURN SERVICE REQUESTED	1S2E06DA 9400	ALYSSA GASCA CONSULTING LLC	PETRUCCI BRIAN J & GASCA ALYSSA R	1534 SE 59TH AVE	PORTLAND OR 97215
604	RETURN SERVICE REQUESTED		1S2E06DA 9500	STIRNKORB FAM TR	1600 SE 59TH AVE	PORTLAND OR 97215
605	RETURN SERVICE REQUESTED		1S2E06DA 9600	ROBERT & DONNA CAIN LIV TR	1612 SE 59TH AVE	PORTLAND OR 97215
606	RETURN SERVICE REQUESTED	1S2E06DA 9700	HUMPHRIES GRANT N &	GARCIA-HUMPHRIES JESSICA R	1620 SE 59TH AVE	PORTLAND OR 97215
607	RETURN SERVICE REQUESTED		1S2E06DA 9800	HALL MATTHEW W & HALL JANET	1630 SE 59TH AVE	PORTLAND OR 97215
608	RETURN SERVICE REQUESTED		1S2E06DA 9900	JOY N ELLIS REV TR	1640 SE 59TH AVE	PORTLAND OR 97215
609	RETURN SERVICE REQUESTED		1S2E06DD 11000	HANSEN JANE & GAMGONEISHVILI YEFIM	907 W ST	PORT TOWNSEND WA 98368
610	RETURN SERVICE REQUESTED		1S2E06DD 11100	MISSONA COURTNEY & MISSONA PETER	2203 SE 60TH AVE	PORTLAND OR 97215-4061
611	RETURN SERVICE REQUESTED		1S2E06DD 11101	ENNIS BRENSON & MADSEN ALAINA	2213 SE 60TH AVE	PORTLAND OR 97215
612	RETURN SERVICE REQUESTED		1S2E06DD 11200	HIRANO SEN H & YANG CHING-WEN W	2145 SE 60TH AVE	PORTLAND OR 97215-4019
613	RETURN SERVICE REQUESTED		1S2E06DD 11300	KAMALI M REZA & KAMALI DIANE	PO BOX 16068	PORTLAND OR 97292-0068
614	RETURN SERVICE REQUESTED		1S2E06DD 11400	BIRMINGHAM JUSTIN & DINA	2115 SE 60TH AVE	PORTLAND OR 97215-4019
615	RETURN SERVICE REQUESTED		1S2E06DD 11500	HERNANDEZ STEVEN & HERNANDEZ JAMIE	5932 SE LINCOLN ST	PORTLAND OR 97215
616	RETURN SERVICE REQUESTED		1S2E06DD 11600	LI CHRISTINA & LI CARMEN	6026 SE LINCOLN ST	PORTLAND OR 97215
617	RETURN SERVICE REQUESTED		1S2E06DD 11700	BRUMBELOW THOMAS & KUBOTERA NATSUKI	2120 SE 60TH AVE	PORTLAND OR 97215
618	RETURN SERVICE REQUESTED		1S2E06DD 11800	VILLA BARRANCA CRISTOPHER J	6032 SE LINCOLN ST	PORTLAND OR 97215-4073
619	RETURN SERVICE REQUESTED		1S2E06DD 11900	KOHSE WILL & KOHSE SYLVIA	6044 SE LINCOLN ST	PORTLAND OR 97215
620	RETURN SERVICE REQUESTED	1S2E06DD 12000	PHIMMASONE SOPHON OUK &	PHIMMASONE VIRAT	6102 SE LINCOLN ST	PORTLAND OR 97215
621	RETURN SERVICE REQUESTED		1S2E06DD 12100	LEE SIMON S & LEE MEI MEI Y	6110 SE LINCOLN ST	PORTLAND OR 97215
622	RETURN SERVICE REQUESTED	1S2E06DD 12200	CHU XUAN MAI THI &	TRUONG KHIEM DINH	6118 SE LINCOLN ST	PORTLAND OR 97215-4078
623	RETURN SERVICE REQUESTED		1S2E06DD 12300	LARSEN STACY L	6126 SE LINCOLN ST	PORTLAND OR 97215
624	RETURN SERVICE REQUESTED		1S2E06DD 12400	STEPPA CINDY & KINGSBURY G GAGE	6134 SE LINCOLN ST	PORTLAND OR 97215-4078
625	RETURN SERVICE REQUESTED		1S2E06DD 12500	HEGEDUS-SZTARAY FAMILY TR	6206 SE LINCOLN ST	PORTLAND OR 97215
626	RETURN SERVICE REQUESTED		1S2E06DD 12600	BARISH NOAH & BARISH CALLIE	6214 SE LINCOLN ST	PORTLAND OR 97215-4074
627	RETURN SERVICE REQUESTED	1S2E06DD 12700	VAN COURT PETER M &	REYNAUD-VAN COURT ANNE	17627 VINEYARD RD	CASTRO VALLEY CA 94546
628	RETURN SERVICE REQUESTED		1S2E06DD 12800	ORTMAN DAVID S	6203 SE GRANT ST	PORTLAND OR 97215
629	RETURN SERVICE REQUESTED		1S2E06DD 12900	WELDING JEANNINE P	6145 SE GRANT ST	PORTLAND OR 97215-4056
630	RETURN SERVICE REQUESTED		1S2E06DD 13000	GIEDWOYN ANNA & JERZY & BOZENA	6133 SE GRANT ST	PORTLAND OR 97215
631	RETURN SERVICE REQUESTED		1S2E06DD 13100	DOPP ALLISON & SCHAFFSTALL SAMANTHA	6125 SE GRANT ST	PORTLAND OR 97215
632	RETURN SERVICE REQUESTED		1S2E06DD 13200	TARA M ASAI TR	6115 SE GRANT ST	PORTLAND OR 97215
633	RETURN SERVICE REQUESTED		1S2E06DD 13300	JOHNSON JESSICA & JOHNSON JUSTIN	6103 SE GRANT ST	PORTLAND OR 97215-4056
634	RETURN SERVICE REQUESTED		1S2E06DD 13400	AGUILERA-TITUS ALEJANDRO & MARY	13134 VALLEYWOOD DR	SILVER SPRING MD 20906-3959
635	RETURN SERVICE REQUESTED		1S2E06DD 13500	TRANG TRACEY BUI	6033 SE GRANT ST	PORTLAND OR 97215
636	RETURN SERVICE REQUESTED		1S2E06DD 13600	COX CLIFFORD & ROSENTHAL CASSANDRA	2126 SE 60TH AVE	PORTLAND OR 97215-4072
637	RETURN SERVICE REQUESTED		1S2E06DD 13700	BUTLER GARRETT & GRIESS JILL	2134 SE 60TH AVE	PORTLAND OR 97215
638	RETURN SERVICE REQUESTED		1S2E06DD 13800	CARPLES JEREMY	2204 SE 60TH AVE	PORTLAND OR 97215-4075
639	RETURN SERVICE REQUESTED		1S2E06DD 13900	PLEISS ABIGAIL & WILSON JAYDEN	4262 N VANCOUVER AVE #503	PORTLAND OR 97217
640	RETURN SERVICE REQUESTED		1S2E06DD 14000	PAUNSAKHAN & PAUNMANA KEO	6034 SE GRANT ST	PORTLAND OR 97215-4053
641	RETURN SERVICE REQUESTED	1S2E06DD 14100	MANDELL NIKKI D TR &	MARCH RICHARD A TR	6044 SE GRANT ST	PORTLAND OR 97215
642	RETURN SERVICE REQUESTED		1S2E06DD 14200	SCHADE DAVID F	6104 SE GRANT ST	PORTLAND OR 97215-4055
643	RETURN SERVICE REQUESTED		1S2E06DD 14300	TRUONG PHUONG NGOC & TRUONG DENNIS	6116 SE GRANT ST	PORTLAND OR 97215-4055
644	RETURN SERVICE REQUESTED		1S2E06DD 14400	FISHER CLAIRE M ET AL	6126 SE GRANT ST	PORTLAND OR 97215
645	RETURN SERVICE REQUESTED		1S2E06DD 14500	KATZ DAVID W TR & KATZ MARY J TR	8825 SW MAYO ST	PORTLAND OR 97223
646	RETURN SERVICE REQUESTED		1S2E06DD 14600	NGUYEN CHI LAN	6146 SE GRANT ST	PORTLAND OR 97215-4055
647	RETURN SERVICE REQUESTED		1S2E06DD 14700	CHUDD PAULA L & SAFFIR DUNCAN Z	6204 SE GRANT ST	PORTLAND OR 97215
648	RETURN SERVICE REQUESTED		1S2E06DD 14800	MARTINSON WALLACE & LYNNE	6216 SE GRANT ST	PORTLAND OR 97215-4057
649	RETURN SERVICE REQUESTED	1S2E06DD 200	TRACY RONALD &	RELATIVO-TRACY MARLEEN	2033 SE 60TH AVE	PORTLAND OR 97215-3443
650	RETURN SERVICE REQUESTED		1S2E06DD 300	DILLENDER MARGARET T	2024 SE 59TH AVE	PORTLAND OR 97215-3435
651	RETURN SERVICE REQUESTED		1S2E06DD 400	ERREND LEE D & ERREND LAURIE R	5915 SE LINCOLN ST	PORTLAND OR 97215-4041
652	RETURN SERVICE REQUESTED		1S2E06DD 500	DELUCA SARA & DELUCA DALLAS	2033 SE 59TH AVE	PORTLAND OR 97215-3434
653	RETURN SERVICE REQUESTED		1S2E06DD 600	IWEO KIKUYO & JURGENS BURT	2025 SE 59TH AVE	PORTLAND OR 97215-3434
654	RETURN SERVICE REQUESTED		1S2E06DD 700	SORENSEN MARY ANN	2026 SE 58TH AVE	PORTLAND OR 97215-3423
655	RETURN SERVICE REQUESTED		1S2E06DD 7800	MACIAS HELENA Z & SQUIRE COREY Z	2135 SE 59TH AVE	PORTLAND OR 97215
656	RETURN SERVICE REQUESTED		1S2E06DD 7900	WALKER PETER & COATNEY CAROLINE	2125 SE 59TH AVE	PORTLAND OR 97215-4013
657	RETURN SERVICE REQUESTED		1S2E06DD 800	SUHADOLNIK KATE & HANNAH	5809 SE LINCOLN ST	PORTLAND OR 97215

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658	RETURN SERVICE REQUESTED		1S2E06DD 8000	RENARD LISA S	2131 SE 54TH AVE	PORTLAND OR 97215
659	RETURN SERVICE REQUESTED		1S2E06DD 8100	TREAT BRUCE & TREAT LYNN E	5834 SE LINCOLN ST	PORTLAND OR 97215
660	RETURN SERVICE REQUESTED		1S2E06DD 8300	GERDING ROBERT G	5916 SE LINCOLN ST	PORTLAND OR 97215-4042
661	RETURN SERVICE REQUESTED		1S2E06DD 8400	HANSON DONALD E & HANSON BARBARA J	2124 SE 59TH AVE	PORTLAND OR 97215-4014
662	RETURN SERVICE REQUESTED		1S2E06DD 8500	HOYLE DANA B	2136 SE 59TH AVE	PORTLAND OR 97215-4014
663	RETURN SERVICE REQUESTED		1S2E06DD 8600	WHITLEY BRITTA	2144 SE 59TH AVE	PORTLAND OR 97215
664	RETURN SERVICE REQUESTED		1S2E06DD 8700	JONES FLOY E	2204 SE 59TH AVE	PORTLAND OR 97215-4016
665	RETURN SERVICE REQUESTED		1S2E06DD 8800	KOCH GEOFFREY A & IZUMI BETTY T	2214 SE 59TH AVE	PORTLAND OR 97215-4016
666	RETURN SERVICE REQUESTED		1S2E08BB 1000	CANFIL ADRIANNE & BULHOES MARY ANN	2501 SE 66TH AVE	PORTLAND OR 97206
667	RETURN SERVICE REQUESTED		1S2E08BB 101	MOSTACHETTI MICHAEL & ISA	2491 SE 67TH AVE	PORTLAND OR 97206
668	RETURN SERVICE REQUESTED		1S2E08BB 102	CARLSON AMANDA & CARLSON JOSHUA	2505 SE 67TH AVE	PORTLAND OR 97206
669	RETURN SERVICE REQUESTED		1S2E08BB 1100	KEYES JESSE & DRAPER LORELEI L	2507 SE 66TH AVE	PORTLAND OR 97206
670	RETURN SERVICE REQUESTED		1S2E08BB 1200	HYDE LIV TR	2516 NE 61ST AVE	PORTLAND OR 97213
671	RETURN SERVICE REQUESTED		1S2E08BB 1500	WINDSOR CT HOUSES LLC	12999 S CASTO RD	OREGON CITY OR 97045
672	RETURN SERVICE REQUESTED		1S2E08BB 2400	LIPINSKY BILL R	2514 SE 64TH AVE	PORTLAND OR 97206-1370
673	RETURN SERVICE REQUESTED		1S2E08BB 2500	CENEDELLA MICHAEL	2504 SE 64TH AVE	PORTLAND OR 97206-1370
674	RETURN SERVICE REQUESTED		1S2E08BB 700	SLUSHER CHARLES	2514 SE 66TH AVE	PORTLAND OR 97206
675	RETURN SERVICE REQUESTED		1S2E08BB 800	ROSE THOMAS P & ROSE KAREN L	207 SE CLAY ST	PORTLAND OR 97214
676	RETURN SERVICE REQUESTED		1S2E08BB 900	GRABOWSKI JOHN & GRABOWSKI ABBY	2437 SE 66TH AVE	PORTLAND OR 97206-1205
677				CURRENT RESIDENT	1226 SE 63RD AVE	PORTLAND OR 97215
678				CURRENT RESIDENT	1335 SE 72ND AVE	PORTLAND OR 97215
679				CURRENT RESIDENT	1508 SE 59TH AVE	PORTLAND OR 97215
680				CURRENT RESIDENT	1522 SE 59TH AVE	PORTLAND OR 97215
681				CURRENT RESIDENT	1628 SE 58TH AVE	PORTLAND OR 97215
682				CURRENT RESIDENT	1722 SE 58TH AVE	PORTLAND OR 97215
683				CURRENT RESIDENT	1810 SE 72ND AVE	PORTLAND OR 97215
684				CURRENT RESIDENT	1813 SE 60TH AVE	PORTLAND OR 97215
685				CURRENT RESIDENT	1846 SE 58TH AVE #B	PORTLAND OR 97215
686				CURRENT RESIDENT	1934 SE 58TH AVE	PORTLAND OR 97215
687				CURRENT RESIDENT	2203 SE 60TH AVE #A	PORTLAND OR 97215
688				CURRENT RESIDENT	2206 SE 72ND AVE #A	PORTLAND OR 97215
689				CURRENT RESIDENT	2206 SE 72ND AVE #B	PORTLAND OR 97215
690				CURRENT RESIDENT	2213 SE 60TH AVE #B	PORTLAND OR 97215
691				CURRENT RESIDENT	2215 SE 68TH AVE	PORTLAND OR 97215
692				CURRENT RESIDENT	2220 SE 72ND AVE #B	PORTLAND OR 97215
693				CURRENT RESIDENT	2231 SE 66TH AVE	PORTLAND OR 97215
694				CURRENT RESIDENT	2252 SE 70TH AVE	PORTLAND OR 97215
695				CURRENT RESIDENT	2259 SE 66TH AVE	PORTLAND OR 97215
696				CURRENT RESIDENT	2260 SE 70TH AVE	PORTLAND OR 97215
697				CURRENT RESIDENT	2265 SE 66TH AVE	PORTLAND OR 97215
698				CURRENT RESIDENT	2304 SE 66TH AVE	PORTLAND OR 97215
699				CURRENT RESIDENT	2307 SE 66TH AVE	PORTLAND OR 97215
700				CURRENT RESIDENT	2309 SE 66TH AVE	PORTLAND OR 97215
701				CURRENT RESIDENT	2315 SE 66TH AVE	PORTLAND OR 97215
702				CURRENT RESIDENT	2409 SE 66TH AVE	PORTLAND OR 97206
703				CURRENT RESIDENT	2411 SE 66TH AVE	PORTLAND OR 97206
704				CURRENT RESIDENT	2430 SE 66TH AVE #2	PORTLAND OR 97206
705				CURRENT RESIDENT	2517 SE 66TH AVE	PORTLAND OR 97206
706				CURRENT RESIDENT	6040 SE BELMONT ST	PORTLAND OR 97215
707				CURRENT RESIDENT	6115 SE TAYLOR CT	PORTLAND OR 97215
708				CURRENT RESIDENT	6120 SE YAMHILL ST	PORTLAND OR 97215
709				CURRENT RESIDENT	6125 SE DIVISION ST #111	PORTLAND OR 97206
710				CURRENT RESIDENT	6125 SE DIVISION ST #112	PORTLAND OR 97206
711				CURRENT RESIDENT	6125 SE DIVISION ST #114	PORTLAND OR 97206
712				CURRENT RESIDENT	6125 SE DIVISION ST #116	PORTLAND OR 97206
713				CURRENT RESIDENT	6125 SE DIVISION ST #131	PORTLAND OR 97206
714				CURRENT RESIDENT	6125 SE DIVISION ST #132	PORTLAND OR 97206
715				CURRENT RESIDENT	6125 SE DIVISION ST #134	PORTLAND OR 97206
716				CURRENT RESIDENT	6125 SE DIVISION ST #160	PORTLAND OR 97206
717				CURRENT RESIDENT	6125 SE DIVISION ST #171	PORTLAND OR 97206
718				CURRENT RESIDENT	6125 SE DIVISION ST #183	PORTLAND OR 97206
719				CURRENT RESIDENT	6125 SE DIVISION ST #203	PORTLAND OR 97206
720				CURRENT RESIDENT	6125 SE DIVISION ST #206	PORTLAND OR 97206
721				CURRENT RESIDENT	6125 SE DIVISION ST #215	PORTLAND OR 97206
722				CURRENT RESIDENT	6125 SE DIVISION ST #221	PORTLAND OR 97206
723				CURRENT RESIDENT	6125 SE DIVISION ST #223	PORTLAND OR 97206
724				CURRENT RESIDENT	6125 SE DIVISION ST #235	PORTLAND OR 97206
725				CURRENT RESIDENT	6125 SE DIVISION ST #253	PORTLAND OR 97206
726				CURRENT RESIDENT	6125 SE DIVISION ST #255	PORTLAND OR 97206
727				CURRENT RESIDENT	6125 SE DIVISION ST #256	PORTLAND OR 97206
728				CURRENT RESIDENT	6125 SE DIVISION ST #258	PORTLAND OR 97206
729				CURRENT RESIDENT	6125 SE DIVISION ST #260	PORTLAND OR 97206
730				CURRENT RESIDENT	6125 SE DIVISION ST #264	PORTLAND OR 97206

	A	B	C	D	E	F
731				CURRENT RESIDENT	6125 SE DIVISION ST #271	PORTLAND OR 97206
732				CURRENT RESIDENT	6125 SE DIVISION ST #273	PORTLAND OR 97206
733				CURRENT RESIDENT	6125 SE DIVISION ST #276	PORTLAND OR 97206
734				CURRENT RESIDENT	6125 SE DIVISION ST #282	PORTLAND OR 97206
735				CURRENT RESIDENT	6125 SE DIVISION ST #304	PORTLAND OR 97206
736				CURRENT RESIDENT	6125 SE DIVISION ST #306	PORTLAND OR 97206
737				CURRENT RESIDENT	6125 SE DIVISION ST #308	PORTLAND OR 97206
738				CURRENT RESIDENT	6125 SE DIVISION ST #310	PORTLAND OR 97206
739				CURRENT RESIDENT	6125 SE DIVISION ST #311	PORTLAND OR 97206
740				CURRENT RESIDENT	6125 SE DIVISION ST #313	PORTLAND OR 97206
741				CURRENT RESIDENT	6125 SE DIVISION ST #324	PORTLAND OR 97206
742				CURRENT RESIDENT	6125 SE DIVISION ST #326	PORTLAND OR 97206
743				CURRENT RESIDENT	6125 SE DIVISION ST #328	PORTLAND OR 97206
744				CURRENT RESIDENT	6125 SE DIVISION ST #330	PORTLAND OR 97206
745				CURRENT RESIDENT	6125 SE DIVISION ST #331	PORTLAND OR 97206
746				CURRENT RESIDENT	6125 SE DIVISION ST #333	PORTLAND OR 97206
747				CURRENT RESIDENT	6125 SE DIVISION ST #350	PORTLAND OR 97206
748				CURRENT RESIDENT	6125 SE DIVISION ST #370	PORTLAND OR 97206
749				CURRENT RESIDENT	6125 SE DIVISION ST #374	PORTLAND OR 97206
750				CURRENT RESIDENT	6125 SE DIVISION ST #376	PORTLAND OR 97206
751				CURRENT RESIDENT	6125 SE DIVISION ST #378	PORTLAND OR 97206
752				CURRENT RESIDENT	6125 SE DIVISION ST #382	PORTLAND OR 97206
753				CURRENT RESIDENT	6134 SE GRANT ST	PORTLAND OR 97215
754				CURRENT RESIDENT	6147 SE STEPHENS ST	PORTLAND OR 97215
755				CURRENT RESIDENT	6186 SE YAMHILL ST #B	PORTLAND OR 97215
756				CURRENT RESIDENT	6211 SE DIVISION ST #141	PORTLAND OR 97206
757				CURRENT RESIDENT	6211 SE DIVISION ST #148	PORTLAND OR 97206
758				CURRENT RESIDENT	6211 SE DIVISION ST #149	PORTLAND OR 97206
759				CURRENT RESIDENT	6211 SE DIVISION ST #151	PORTLAND OR 97206
760				CURRENT RESIDENT	6211 SE DIVISION ST #236	PORTLAND OR 97206
761				CURRENT RESIDENT	6211 SE DIVISION ST #237	PORTLAND OR 97206
762				CURRENT RESIDENT	6211 SE DIVISION ST #239	PORTLAND OR 97206
763				CURRENT RESIDENT	6211 SE DIVISION ST #241	PORTLAND OR 97206
764				CURRENT RESIDENT	6211 SE DIVISION ST #243	PORTLAND OR 97206
765				CURRENT RESIDENT	6211 SE DIVISION ST #245	PORTLAND OR 97206
766				CURRENT RESIDENT	6211 SE DIVISION ST #246	PORTLAND OR 97206
767				CURRENT RESIDENT	6211 SE DIVISION ST #247	PORTLAND OR 97206
768				CURRENT RESIDENT	6211 SE DIVISION ST #251	PORTLAND OR 97206
769				CURRENT RESIDENT	6211 SE DIVISION ST #341	PORTLAND OR 97206
770				CURRENT RESIDENT	6211 SE DIVISION ST #343	PORTLAND OR 97206
771				CURRENT RESIDENT	6211 SE DIVISION ST #344	PORTLAND OR 97206
772				CURRENT RESIDENT	6228 SE BELMONT ST	PORTLAND OR 97215
773				CURRENT RESIDENT	6230 SE BELMONT ST	PORTLAND OR 97215
774				CURRENT RESIDENT	6236 SE STEPHENS ST	PORTLAND OR 97215
775				CURRENT RESIDENT	6239 SE GRANT ST	PORTLAND OR 97215
776				CURRENT RESIDENT	6243 SE BELMONT ST	PORTLAND OR 97215
777				CURRENT RESIDENT	6255 SE YAMHILL ST	PORTLAND OR 97215
778				CURRENT RESIDENT	6306 SE DIVISION ST	PORTLAND OR 97206
779				CURRENT RESIDENT	6308 SE LINCOLN ST	PORTLAND OR 97215
780				CURRENT RESIDENT	6323 SE DIVISION ST #101	PORTLAND OR 97206
781				CURRENT RESIDENT	6323 SE DIVISION ST #103	PORTLAND OR 97206
782				CURRENT RESIDENT	6323 SE DIVISION ST #104	PORTLAND OR 97206
783				CURRENT RESIDENT	6323 SE DIVISION ST #105	PORTLAND OR 97206
784				CURRENT RESIDENT	6323 SE DIVISION ST #106	PORTLAND OR 97206
785				CURRENT RESIDENT	6323 SE DIVISION ST #207	PORTLAND OR 97206
786				CURRENT RESIDENT	6323 SE DIVISION ST #211	PORTLAND OR 97206
787				CURRENT RESIDENT	6323 SE DIVISION ST #213	PORTLAND OR 97206
788				CURRENT RESIDENT	6323 SE DIVISION ST #237	PORTLAND OR 97206
789				CURRENT RESIDENT	6323 SE DIVISION ST #238	PORTLAND OR 97206
790				CURRENT RESIDENT	6323 SE DIVISION ST #303	PORTLAND OR 97206
791				CURRENT RESIDENT	6323 SE DIVISION ST #304	PORTLAND OR 97206
792				CURRENT RESIDENT	6323 SE DIVISION ST #305	PORTLAND OR 97206
793				CURRENT RESIDENT	6323 SE DIVISION ST #309	PORTLAND OR 97206
794				CURRENT RESIDENT	6323 SE DIVISION ST #316	PORTLAND OR 97206
795				CURRENT RESIDENT	6323 SE DIVISION ST #328	PORTLAND OR 97206
796				CURRENT RESIDENT	6323 SE DIVISION ST #331	PORTLAND OR 97206
797				CURRENT RESIDENT	6323 SE DIVISION ST #333	PORTLAND OR 97206
798				CURRENT RESIDENT	6323 SE DIVISION ST #334	PORTLAND OR 97206
799				CURRENT RESIDENT	6323 SE DIVISION ST #335	PORTLAND OR 97206
800				CURRENT RESIDENT	6409 SE BELMONT ST	PORTLAND OR 97215
801				CURRENT RESIDENT	6415 SE MORRISON ST	PORTLAND OR 97215
802				CURRENT RESIDENT	6418 SE DIVISION ST	PORTLAND OR 97206
803				CURRENT RESIDENT	6424 SE DIVISION ST	PORTLAND OR 97206

	A	B	C	D	E	F
804				CURRENT RESIDENT	6428 SE DIVISION ST	PORTLAND OR 97206
805				CURRENT RESIDENT	6437 SE DIVISION ST	PORTLAND OR 97206
806				CURRENT RESIDENT	6444 SE DIVISION ST	PORTLAND OR 97206
807				CURRENT RESIDENT	6454 SE DIVISION ST	PORTLAND OR 97206
808				CURRENT RESIDENT	6456 SE DIVISION ST	PORTLAND OR 97206
809				CURRENT RESIDENT	6468 SE DIVISION ST	PORTLAND OR 97206
810				CURRENT RESIDENT	6472 SE DIVISION ST	PORTLAND OR 97206
811				CURRENT RESIDENT	6476 SE DIVISION ST	PORTLAND OR 97206
812				CURRENT RESIDENT	6512 SE DIVISION ST #4	PORTLAND OR 97206
813				CURRENT RESIDENT	6512 SE DIVISION ST #6	PORTLAND OR 97206
814				CURRENT RESIDENT	6512 SE DIVISION ST #9	PORTLAND OR 97206
815				CURRENT RESIDENT	6518 SE DIVISION ST #101	PORTLAND OR 97206
816				CURRENT RESIDENT	6541 SE DIVISION ST	PORTLAND OR 97206
817				CURRENT RESIDENT	6547 SE DIVISION ST	PORTLAND OR 97206
818				CURRENT RESIDENT	6600 SE DIVISION ST #107	PORTLAND OR 97206
819				CURRENT RESIDENT	6600 SE DIVISION ST #201	PORTLAND OR 97206
820				CURRENT RESIDENT	6621 SE YAMHILL ST	PORTLAND OR 97215
821				CURRENT RESIDENT	6658 SE BELMONT ST	PORTLAND OR 97215
822				CURRENT RESIDENT	6732 SE DIVISION ST	PORTLAND OR 97206
823				CURRENT RESIDENT	7120 SE HARRISON ST	PORTLAND OR 97215
824				CURRENT RESIDENT	1460 SE 58TH AVE	PORTLAND OR 97215
825				CURRENT RESIDENT	1523 SE 71ST AVE	PORTLAND OR 97215
826				CURRENT RESIDENT	1631 SE 59TH AVE #B	PORTLAND OR 97215
827				CURRENT RESIDENT	1717 SE 60TH AVE	PORTLAND OR 97215
828				CURRENT RESIDENT	1805 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
829				CURRENT RESIDENT	1906 SE 58TH AVE	PORTLAND OR 97215
830				CURRENT RESIDENT	2036 SE 72ND AVE	PORTLAND OR 97215
831				CURRENT RESIDENT	2203 SE 60TH AVE #B	PORTLAND OR 97215
832				CURRENT RESIDENT	2211 SE 66TH AVE	PORTLAND OR 97215
833				CURRENT RESIDENT	2213 SE 60TH AVE #A	PORTLAND OR 97215
834				CURRENT RESIDENT	2219 SE 66TH AVE	PORTLAND OR 97215
835				CURRENT RESIDENT	2227 SE 70TH AVE	PORTLAND OR 97215
836				CURRENT RESIDENT	2229 SE 70TH AVE	PORTLAND OR 97215
837				CURRENT RESIDENT	2241 SE 66TH AVE	PORTLAND OR 97215
838				CURRENT RESIDENT	2251 SE 70TH AVE	PORTLAND OR 97215
839				CURRENT RESIDENT	2263 SE 66TH AVE	PORTLAND OR 97215
840				CURRENT RESIDENT	2267 SE 66TH AVE	PORTLAND OR 97215
841				CURRENT RESIDENT	2271 SE 66TH AVE	PORTLAND OR 97215
842				CURRENT RESIDENT	2303 SE 66TH AVE	PORTLAND OR 97215
843				CURRENT RESIDENT	2309 SE 70TH AVE	PORTLAND OR 97215
844				CURRENT RESIDENT	2325 SE 66TH AVE	PORTLAND OR 97215
845				CURRENT RESIDENT	2335 SE 66TH AVE	PORTLAND OR 97215
846				CURRENT RESIDENT	2350 SE 60TH AVE	PORTLAND OR 97215
847				CURRENT RESIDENT	2407 SE 66TH AVE	PORTLAND OR 97206
848				CURRENT RESIDENT	2426 SE 66TH AVE #3	PORTLAND OR 97206
849				CURRENT RESIDENT	2427 SE 67TH AVE	PORTLAND OR 97206
850				CURRENT RESIDENT	5826 SE HAWTHORNE BLVD #2	PORTLAND OR 97215
851				CURRENT RESIDENT	6109 SE TAYLOR CT	PORTLAND OR 97215
852				CURRENT RESIDENT	6125 SE DIVISION ST #105	PORTLAND OR 97206
853				CURRENT RESIDENT	6125 SE DIVISION ST #125	PORTLAND OR 97206
854				CURRENT RESIDENT	6125 SE DIVISION ST #158	PORTLAND OR 97206
855				CURRENT RESIDENT	6125 SE DIVISION ST #161	PORTLAND OR 97206
856				CURRENT RESIDENT	6125 SE DIVISION ST #172	PORTLAND OR 97206
857				CURRENT RESIDENT	6125 SE DIVISION ST #174	PORTLAND OR 97206
858				CURRENT RESIDENT	6125 SE DIVISION ST #176	PORTLAND OR 97206
859				CURRENT RESIDENT	6125 SE DIVISION ST #178	PORTLAND OR 97206
860				CURRENT RESIDENT	6125 SE DIVISION ST #185	PORTLAND OR 97206
861				CURRENT RESIDENT	6125 SE DIVISION ST #204	PORTLAND OR 97206
862				CURRENT RESIDENT	6125 SE DIVISION ST #211	PORTLAND OR 97206
863				CURRENT RESIDENT	6125 SE DIVISION ST #213	PORTLAND OR 97206
864				CURRENT RESIDENT	6125 SE DIVISION ST #220	PORTLAND OR 97206
865				CURRENT RESIDENT	6125 SE DIVISION ST #224	PORTLAND OR 97206
866				CURRENT RESIDENT	6125 SE DIVISION ST #231	PORTLAND OR 97206
867				CURRENT RESIDENT	6125 SE DIVISION ST #233	PORTLAND OR 97206
868				CURRENT RESIDENT	6125 SE DIVISION ST #261	PORTLAND OR 97206
869				CURRENT RESIDENT	6125 SE DIVISION ST #263	PORTLAND OR 97206
870				CURRENT RESIDENT	6125 SE DIVISION ST #278	PORTLAND OR 97206
871				CURRENT RESIDENT	6125 SE DIVISION ST #280	PORTLAND OR 97206
872				CURRENT RESIDENT	6125 SE DIVISION ST #284	PORTLAND OR 97206
873				CURRENT RESIDENT	6125 SE DIVISION ST #314	PORTLAND OR 97206
874				CURRENT RESIDENT	6125 SE DIVISION ST #322	PORTLAND OR 97206
875				CURRENT RESIDENT	6125 SE DIVISION ST #334	PORTLAND OR 97206
876				CURRENT RESIDENT	6125 SE DIVISION ST #355	PORTLAND OR 97206

	A	B	C	D	E	F
877				CURRENT RESIDENT	6125 SE DIVISION ST #359	PORTLAND OR 97206
878				CURRENT RESIDENT	6125 SE DIVISION ST #360	PORTLAND OR 97206
879				CURRENT RESIDENT	6125 SE DIVISION ST #371	PORTLAND OR 97206
880				CURRENT RESIDENT	6125 SE DIVISION ST #373	PORTLAND OR 97206
881				CURRENT RESIDENT	6211 SE DIVISION ST #138	PORTLAND OR 97206
882				CURRENT RESIDENT	6211 SE DIVISION ST #139	PORTLAND OR 97206
883				CURRENT RESIDENT	6211 SE DIVISION ST #248	PORTLAND OR 97206
884				CURRENT RESIDENT	6211 SE DIVISION ST #339	PORTLAND OR 97206
885				CURRENT RESIDENT	6211 SE DIVISION ST #349	PORTLAND OR 97206
886				CURRENT RESIDENT	6215 SE GRANT ST	PORTLAND OR 97215
887				CURRENT RESIDENT	6245 SE BELMONT ST	PORTLAND OR 97215
888				CURRENT RESIDENT	6302 SE LINCOLN ST	PORTLAND OR 97215
889				CURRENT RESIDENT	6320 SE DIVISION ST	PORTLAND OR 97206
890				CURRENT RESIDENT	6323 SE DIVISION ST #107	PORTLAND OR 97206
891				CURRENT RESIDENT	6323 SE DIVISION ST #204	PORTLAND OR 97206
892				CURRENT RESIDENT	6323 SE DIVISION ST #205	PORTLAND OR 97206
893				CURRENT RESIDENT	6323 SE DIVISION ST #209	PORTLAND OR 97206
894				CURRENT RESIDENT	6323 SE DIVISION ST #221	PORTLAND OR 97206
895				CURRENT RESIDENT	6323 SE DIVISION ST #223	PORTLAND OR 97206
896				CURRENT RESIDENT	6323 SE DIVISION ST #302	PORTLAND OR 97206
897				CURRENT RESIDENT	6323 SE DIVISION ST #317	PORTLAND OR 97206
898				CURRENT RESIDENT	6323 SE DIVISION ST #318	PORTLAND OR 97206
899				CURRENT RESIDENT	6323 SE DIVISION ST #330	PORTLAND OR 97206
900				CURRENT RESIDENT	6323 SE DIVISION ST #337	PORTLAND OR 97206
901				CURRENT RESIDENT	6323 SE DIVISION ST #338	PORTLAND OR 97206
902				CURRENT RESIDENT	6325 SE DIVISION ST	PORTLAND OR 97206
903				CURRENT RESIDENT	6408 SE DIVISION ST	PORTLAND OR 97206
904				CURRENT RESIDENT	6414 SE DIVISION ST	PORTLAND OR 97206
905				CURRENT RESIDENT	6420 SE DIVISION ST	PORTLAND OR 97206
906				CURRENT RESIDENT	6426 SE DIVISION ST	PORTLAND OR 97206
907				CURRENT RESIDENT	6432 SE DIVISION ST	PORTLAND OR 97206
908				CURRENT RESIDENT	6446 SE WINDSOR CT	PORTLAND OR 97206
909				CURRENT RESIDENT	6456 SE WINDSOR CT	PORTLAND OR 97206
910				CURRENT RESIDENT	6506 SE WINDSOR CT	PORTLAND OR 97206
911				CURRENT RESIDENT	6512 SE DIVISION ST #1	PORTLAND OR 97206
912				CURRENT RESIDENT	6512 SE DIVISION ST #8	PORTLAND OR 97206
913				CURRENT RESIDENT	6539 SE DIVISION ST	PORTLAND OR 97206
914				CURRENT RESIDENT	6545 SE DIVISION ST	PORTLAND OR 97206
915				CURRENT RESIDENT	6567 SE BELMONT ST	PORTLAND OR 97215
916				CURRENT RESIDENT	6600 SE DIVISION ST #208	PORTLAND OR 97206
917				CURRENT RESIDENT	6600 SE DIVISION ST #209	PORTLAND OR 97206
918				CURRENT RESIDENT	6702 SE DIVISION ST	PORTLAND OR 97206
919				CURRENT RESIDENT	7110 SE GRANT ST	PORTLAND OR 97215
920				CURRENT RESIDENT	7120 SE GRANT ST	PORTLAND OR 97215
921				CURRENT RESIDENT	7126 SE GRANT ST	PORTLAND OR 97215
922				CURRENT RESIDENT	7207 SE TAYLOR ST	PORTLAND OR 97215
923				CURRENT RESIDENT	806 SE 62ND AVE	PORTLAND OR 97215
924				CURRENT RESIDENT	925 SE 68TH AVE	PORTLAND OR 97215
925				CURRENT RESIDENT	1534 SE 71ST AVE	PORTLAND OR 97215
926				CURRENT RESIDENT	1606 SE 71ST AVE	PORTLAND OR 97215
927				CURRENT RESIDENT	1616 SE 58TH AVE #B	PORTLAND OR 97215
928				CURRENT RESIDENT	1724 SE 59TH AVE	PORTLAND OR 97215
929				CURRENT RESIDENT	1734 SE 59TH AVE #B	PORTLAND OR 97215
930				CURRENT RESIDENT	1821 SE 72ND AVE	PORTLAND OR 97215
931				CURRENT RESIDENT	1944 SE 59TH AVE #B	PORTLAND OR 97215
932				CURRENT RESIDENT	2057 SE 72ND AVE	PORTLAND OR 97215
933				CURRENT RESIDENT	2106 SE 59TH AVE	PORTLAND OR 97215
934				CURRENT RESIDENT	2133 SE 60TH AVE	PORTLAND OR 97215
935				CURRENT RESIDENT	2133 SE 64TH AVE	PORTLAND OR 97215
936				CURRENT RESIDENT	2200 SE 64TH AVE	PORTLAND OR 97215
937				CURRENT RESIDENT	2212 SE 60TH AVE	PORTLAND OR 97215
938				CURRENT RESIDENT	2225 SE 60TH AVE	PORTLAND OR 97215
939				CURRENT RESIDENT	2225 SE 66TH AVE	PORTLAND OR 97215
940				CURRENT RESIDENT	2255 SE 70TH AVE	PORTLAND OR 97215
941				CURRENT RESIDENT	2273 SE 66TH AVE	PORTLAND OR 97215
942				CURRENT RESIDENT	2275 SE 66TH AVE	PORTLAND OR 97215
943				CURRENT RESIDENT	2305 SE 66TH AVE	PORTLAND OR 97215
944				CURRENT RESIDENT	2413 SE 66TH AVE	PORTLAND OR 97206
945				CURRENT RESIDENT	2426 SE 66TH AVE #4	PORTLAND OR 97206
946				CURRENT RESIDENT	2491 SE 67TH AVE #A	PORTLAND OR 97206
947				CURRENT RESIDENT	5824 SE LINCOLN ST	PORTLAND OR 97215
948				CURRENT RESIDENT	6043 SE GRANT ST	PORTLAND OR 97215
949				CURRENT RESIDENT	6122 SE YAMHILL ST	PORTLAND OR 97215

	A	B	C	D	E	F
950				CURRENT RESIDENT	6125 SE DIVISION ST #102	PORTLAND OR 97206
951				CURRENT RESIDENT	6125 SE DIVISION ST #106	PORTLAND OR 97206
952				CURRENT RESIDENT	6125 SE DIVISION ST #113	PORTLAND OR 97206
953				CURRENT RESIDENT	6125 SE DIVISION ST #121	PORTLAND OR 97206
954				CURRENT RESIDENT	6125 SE DIVISION ST #122	PORTLAND OR 97206
955				CURRENT RESIDENT	6125 SE DIVISION ST #124	PORTLAND OR 97206
956				CURRENT RESIDENT	6125 SE DIVISION ST #126	PORTLAND OR 97206
957				CURRENT RESIDENT	6125 SE DIVISION ST #133	PORTLAND OR 97206
958				CURRENT RESIDENT	6125 SE DIVISION ST #163	PORTLAND OR 97206
959				CURRENT RESIDENT	6125 SE DIVISION ST #175	PORTLAND OR 97206
960				CURRENT RESIDENT	6125 SE DIVISION ST #182	PORTLAND OR 97206
961				CURRENT RESIDENT	6125 SE DIVISION ST #184	PORTLAND OR 97206
962				CURRENT RESIDENT	6125 SE DIVISION ST #205	PORTLAND OR 97206
963				CURRENT RESIDENT	6125 SE DIVISION ST #208	PORTLAND OR 97206
964				CURRENT RESIDENT	6125 SE DIVISION ST #226	PORTLAND OR 97206
965				CURRENT RESIDENT	6125 SE DIVISION ST #228	PORTLAND OR 97206
966				CURRENT RESIDENT	6125 SE DIVISION ST #232	PORTLAND OR 97206
967				CURRENT RESIDENT	6125 SE DIVISION ST #259	PORTLAND OR 97206
968				CURRENT RESIDENT	6125 SE DIVISION ST #262	PORTLAND OR 97206
969				CURRENT RESIDENT	6125 SE DIVISION ST #270	PORTLAND OR 97206
970				CURRENT RESIDENT	6125 SE DIVISION ST #274	PORTLAND OR 97206
971				CURRENT RESIDENT	6125 SE DIVISION ST #285	PORTLAND OR 97206
972				CURRENT RESIDENT	6125 SE DIVISION ST #303	PORTLAND OR 97206
973				CURRENT RESIDENT	6125 SE DIVISION ST #320	PORTLAND OR 97206
974				CURRENT RESIDENT	6125 SE DIVISION ST #321	PORTLAND OR 97206
975				CURRENT RESIDENT	6125 SE DIVISION ST #323	PORTLAND OR 97206
976				CURRENT RESIDENT	6125 SE DIVISION ST #335	PORTLAND OR 97206
977				CURRENT RESIDENT	6125 SE DIVISION ST #354	PORTLAND OR 97206
978				CURRENT RESIDENT	6125 SE DIVISION ST #356	PORTLAND OR 97206
979				CURRENT RESIDENT	6125 SE DIVISION ST #358	PORTLAND OR 97206
980				CURRENT RESIDENT	6125 SE DIVISION ST #362	PORTLAND OR 97206
981				CURRENT RESIDENT	6125 SE DIVISION ST #372	PORTLAND OR 97206
982				CURRENT RESIDENT	6125 SE DIVISION ST #381	PORTLAND OR 97206
983				CURRENT RESIDENT	6125 SE DIVISION ST #383	PORTLAND OR 97206
984				CURRENT RESIDENT	6125 SE DIVISION ST #385	PORTLAND OR 97206
985				CURRENT RESIDENT	6186 SE YAMHILL ST #A	PORTLAND OR 97215
986				CURRENT RESIDENT	6200 SE SALMON ST	PORTLAND OR 97215
987				CURRENT RESIDENT	6211 SE DIVISION ST #137	PORTLAND OR 97206
988				CURRENT RESIDENT	6211 SE DIVISION ST #140	PORTLAND OR 97206
989				CURRENT RESIDENT	6211 SE DIVISION ST #143	PORTLAND OR 97206
990				CURRENT RESIDENT	6211 SE DIVISION ST #145	PORTLAND OR 97206
991				CURRENT RESIDENT	6211 SE DIVISION ST #147	PORTLAND OR 97206
992				CURRENT RESIDENT	6211 SE DIVISION ST #242	PORTLAND OR 97206
993				CURRENT RESIDENT	6211 SE DIVISION ST #244	PORTLAND OR 97206
994				CURRENT RESIDENT	6211 SE DIVISION ST #249	PORTLAND OR 97206
995				CURRENT RESIDENT	6211 SE DIVISION ST #336	PORTLAND OR 97206
996				CURRENT RESIDENT	6211 SE DIVISION ST #337	PORTLAND OR 97206
997				CURRENT RESIDENT	6211 SE DIVISION ST #338	PORTLAND OR 97206
998				CURRENT RESIDENT	6211 SE DIVISION ST #346	PORTLAND OR 97206
999				CURRENT RESIDENT	6211 SE DIVISION ST #348	PORTLAND OR 97206
1000				CURRENT RESIDENT	6211 SE DIVISION ST #351	PORTLAND OR 97206
1001				CURRENT RESIDENT	6211 SE DIVISION ST #353	PORTLAND OR 97206
1002				CURRENT RESIDENT	6243 SE YAMHILL ST	PORTLAND OR 97215
1003				CURRENT RESIDENT	6247 SE YAMHILL ST	PORTLAND OR 97215
1004				CURRENT RESIDENT	6303 SE GRANT ST	PORTLAND OR 97215
1005				CURRENT RESIDENT	6304 SE BELMONT ST	PORTLAND OR 97215
1006				CURRENT RESIDENT	6304 SE DIVISION ST	PORTLAND OR 97206
1007				CURRENT RESIDENT	6304 SE MORRISON ST	PORTLAND OR 97215
1008				CURRENT RESIDENT	6308 SE DIVISION ST	PORTLAND OR 97206
1009				CURRENT RESIDENT	6323 SE DIVISION ST #102	PORTLAND OR 97206
1010				CURRENT RESIDENT	6323 SE DIVISION ST #214	PORTLAND OR 97206
1011				CURRENT RESIDENT	6323 SE DIVISION ST #215	PORTLAND OR 97206
1012				CURRENT RESIDENT	6323 SE DIVISION ST #216	PORTLAND OR 97206
1013				CURRENT RESIDENT	6323 SE DIVISION ST #228	PORTLAND OR 97206
1014				CURRENT RESIDENT	6323 SE DIVISION ST #230	PORTLAND OR 97206
1015				CURRENT RESIDENT	6323 SE DIVISION ST #234	PORTLAND OR 97206
1016				CURRENT RESIDENT	6323 SE DIVISION ST #236	PORTLAND OR 97206
1017				CURRENT RESIDENT	6323 SE DIVISION ST #307	PORTLAND OR 97206
1018				CURRENT RESIDENT	6323 SE DIVISION ST #321	PORTLAND OR 97206
1019				CURRENT RESIDENT	6323 SE DIVISION ST #323	PORTLAND OR 97206
1020				CURRENT RESIDENT	6323 SE DIVISION ST #324	PORTLAND OR 97206
1021				CURRENT RESIDENT	6323 SE DIVISION ST #325	PORTLAND OR 97206
1022				CURRENT RESIDENT	6323 SE DIVISION ST #329	PORTLAND OR 97206

	A	B	C	D	E	F
1023				CURRENT RESIDENT	6323 SE DIVISION ST #332	PORTLAND OR 97206
1024				CURRENT RESIDENT	6338 SE STEPHENS ST	PORTLAND OR 97215
1025				CURRENT RESIDENT	6406 SE DIVISION ST	PORTLAND OR 97206
1026				CURRENT RESIDENT	6410 SE DIVISION ST	PORTLAND OR 97206
1027				CURRENT RESIDENT	6412 SE DIVISION ST #A	PORTLAND OR 97206
1028				CURRENT RESIDENT	6434 SE DIVISION ST	PORTLAND OR 97206
1029				CURRENT RESIDENT	6438 SE DIVISION ST	PORTLAND OR 97206
1030				CURRENT RESIDENT	6440 SE DIVISION ST	PORTLAND OR 97206
1031				CURRENT RESIDENT	6450 SE DIVISION ST	PORTLAND OR 97206
1032				CURRENT RESIDENT	6452 SE DIVISION ST	PORTLAND OR 97206
1033				CURRENT RESIDENT	6462 SE DIVISION ST	PORTLAND OR 97206
1034				CURRENT RESIDENT	6466 SE DIVISION ST	PORTLAND OR 97206
1035				CURRENT RESIDENT	6470 SE DIVISION ST	PORTLAND OR 97206
1036				CURRENT RESIDENT	6510 SE WINDSOR CT	PORTLAND OR 97206
1037				CURRENT RESIDENT	6512 SE DIVISION ST #10	PORTLAND OR 97206
1038				CURRENT RESIDENT	6512 SE DIVISION ST #11	PORTLAND OR 97206
1039				CURRENT RESIDENT	6512 SE DIVISION ST #12	PORTLAND OR 97206
1040				CURRENT RESIDENT	6512 SE DIVISION ST #3	PORTLAND OR 97206
1041				CURRENT RESIDENT	6512 SE DIVISION ST #7	PORTLAND OR 97206
1042				CURRENT RESIDENT	6518 SE DIVISION ST #100	PORTLAND OR 97206
1043				CURRENT RESIDENT	6518 SE DIVISION ST #302	PORTLAND OR 97206
1044				CURRENT RESIDENT	6520 SE MORRISON ST	PORTLAND OR 97215
1045				CURRENT RESIDENT	6600 SE DIVISION ST #302	PORTLAND OR 97206
1046				CURRENT RESIDENT	6654 SE BELMONT ST	PORTLAND OR 97215
1047				CURRENT RESIDENT	6738 SE YAMHILL ST	PORTLAND OR 97215
1048				CURRENT RESIDENT	6838 SE BELMONT ST	PORTLAND OR 97215
1049				CURRENT RESIDENT	6919 SE YAMHILL ST	PORTLAND OR 97215
1050				CURRENT RESIDENT	6928 SE BELMONT ST	PORTLAND OR 97215
1051				CURRENT RESIDENT	7111 SE GRANT ST	PORTLAND OR 97215
1052				CURRENT RESIDENT	7112 SE GRANT ST	PORTLAND OR 97215
1053				CURRENT RESIDENT	7214 SE MADISON ST	PORTLAND OR 97215
1054				CURRENT RESIDENT	904 SE 69TH AVE	PORTLAND OR 97215
1055				CURRENT RESIDENT	909 SE 69TH AVE	PORTLAND OR 97215
1056				CURRENT RESIDENT	1245 SE 60TH AVE	PORTLAND OR 97215
1057				CURRENT RESIDENT	1504 SE 71ST AVE #B	PORTLAND OR 97215
1058				CURRENT RESIDENT	1631 SE 59TH AVE #A	PORTLAND OR 97215
1059				CURRENT RESIDENT	1714 SE 59TH AVE	PORTLAND OR 97215
1060				CURRENT RESIDENT	1715 SE 59TH AVE	PORTLAND OR 97215
1061				CURRENT RESIDENT	1801 SE MOUNTAIN VIEW DR	PORTLAND OR 97215
1062				CURRENT RESIDENT	1823 SE 60TH AVE	PORTLAND OR 97215
1063				CURRENT RESIDENT	1825 SE 59TH AVE	PORTLAND OR 97215
1064				CURRENT RESIDENT	1934 SE 59TH AVE	PORTLAND OR 97215
1065				CURRENT RESIDENT	2120 SE 72ND AVE	PORTLAND OR 97215
1066				CURRENT RESIDENT	2205 SE 70TH AVE	PORTLAND OR 97215
1067				CURRENT RESIDENT	2219 SE 70TH AVE	PORTLAND OR 97215
1068				CURRENT RESIDENT	2228 SE 70TH AVE	PORTLAND OR 97215
1069				CURRENT RESIDENT	2237 SE 70TH AVE	PORTLAND OR 97215
1070				CURRENT RESIDENT	2239 SE 70TH AVE	PORTLAND OR 97215
1071				CURRENT RESIDENT	2261 SE 66TH AVE	PORTLAND OR 97215
1072				CURRENT RESIDENT	2269 SE 66TH AVE	PORTLAND OR 97215
1073				CURRENT RESIDENT	2301 SE 66TH AVE	PORTLAND OR 97215
1074				CURRENT RESIDENT	2307 SE 72ND AVE	PORTLAND OR 97215
1075				CURRENT RESIDENT	2312 SE 66TH AVE	PORTLAND OR 97215
1076				CURRENT RESIDENT	2313 SE 66TH AVE	PORTLAND OR 97215
1077				CURRENT RESIDENT	2427 SE 66TH AVE	PORTLAND OR 97206
1078				CURRENT RESIDENT	2430 SE 66TH AVE #1	PORTLAND OR 97206
1079				CURRENT RESIDENT	2491 SE 67TH AVE #B	PORTLAND OR 97206
1080				CURRENT RESIDENT	2506 SE 66TH AVE	PORTLAND OR 97206
1081				CURRENT RESIDENT	6035 SE STEPHENS ST	PORTLAND OR 97215
1082				CURRENT RESIDENT	6125 SE DIVISION ST #103	PORTLAND OR 97206
1083				CURRENT RESIDENT	6125 SE DIVISION ST #107	PORTLAND OR 97206
1084				CURRENT RESIDENT	6125 SE DIVISION ST #110	PORTLAND OR 97206
1085				CURRENT RESIDENT	6125 SE DIVISION ST #115	PORTLAND OR 97206
1086				CURRENT RESIDENT	6125 SE DIVISION ST #123	PORTLAND OR 97206
1087				CURRENT RESIDENT	6125 SE DIVISION ST #128	PORTLAND OR 97206
1088				CURRENT RESIDENT	6125 SE DIVISION ST #130	PORTLAND OR 97206
1089				CURRENT RESIDENT	6125 SE DIVISION ST #135	PORTLAND OR 97206
1090				CURRENT RESIDENT	6125 SE DIVISION ST #155	PORTLAND OR 97206
1091				CURRENT RESIDENT	6125 SE DIVISION ST #159	PORTLAND OR 97206
1092				CURRENT RESIDENT	6125 SE DIVISION ST #162	PORTLAND OR 97206
1093				CURRENT RESIDENT	6125 SE DIVISION ST #164	PORTLAND OR 97206
1094				CURRENT RESIDENT	6125 SE DIVISION ST #173	PORTLAND OR 97206
1095				CURRENT RESIDENT	6125 SE DIVISION ST #181	PORTLAND OR 97206

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1096				CURRENT RESIDENT	6125 SE DIVISION ST #202	PORTLAND OR 97206
1097				CURRENT RESIDENT	6125 SE DIVISION ST #207	PORTLAND OR 97206
1098				CURRENT RESIDENT	6125 SE DIVISION ST #210	PORTLAND OR 97206
1099				CURRENT RESIDENT	6125 SE DIVISION ST #212	PORTLAND OR 97206
1100				CURRENT RESIDENT	6125 SE DIVISION ST #214	PORTLAND OR 97206
1101				CURRENT RESIDENT	6125 SE DIVISION ST #222	PORTLAND OR 97206
1102				CURRENT RESIDENT	6125 SE DIVISION ST #230	PORTLAND OR 97206
1103				CURRENT RESIDENT	6125 SE DIVISION ST #234	PORTLAND OR 97206
1104				CURRENT RESIDENT	6125 SE DIVISION ST #252	PORTLAND OR 97206
1105				CURRENT RESIDENT	6125 SE DIVISION ST #254	PORTLAND OR 97206
1106				CURRENT RESIDENT	6125 SE DIVISION ST #281	PORTLAND OR 97206
1107				CURRENT RESIDENT	6125 SE DIVISION ST #283	PORTLAND OR 97206
1108				CURRENT RESIDENT	6125 SE DIVISION ST #302	PORTLAND OR 97206
1109				CURRENT RESIDENT	6125 SE DIVISION ST #305	PORTLAND OR 97206
1110				CURRENT RESIDENT	6125 SE DIVISION ST #307	PORTLAND OR 97206
1111				CURRENT RESIDENT	6125 SE DIVISION ST #312	PORTLAND OR 97206
1112				CURRENT RESIDENT	6125 SE DIVISION ST #325	PORTLAND OR 97206
1113				CURRENT RESIDENT	6125 SE DIVISION ST #332	PORTLAND OR 97206
1114				CURRENT RESIDENT	6125 SE DIVISION ST #352	PORTLAND OR 97206
1115				CURRENT RESIDENT	6125 SE DIVISION ST #361	PORTLAND OR 97206
1116				CURRENT RESIDENT	6125 SE DIVISION ST #375	PORTLAND OR 97206
1117				CURRENT RESIDENT	6125 SE DIVISION ST #380	PORTLAND OR 97206
1118				CURRENT RESIDENT	6125 SE DIVISION ST #384	PORTLAND OR 97206
1119				CURRENT RESIDENT	6211 SE DIVISION ST #136	PORTLAND OR 97206
1120				CURRENT RESIDENT	6211 SE DIVISION ST #142	PORTLAND OR 97206
1121				CURRENT RESIDENT	6211 SE DIVISION ST #144	PORTLAND OR 97206
1122				CURRENT RESIDENT	6211 SE DIVISION ST #146	PORTLAND OR 97206
1123				CURRENT RESIDENT	6211 SE DIVISION ST #150	PORTLAND OR 97206
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1126				CURRENT RESIDENT	6211 SE DIVISION ST #250	PORTLAND OR 97206
1127				CURRENT RESIDENT	6211 SE DIVISION ST #252	PORTLAND OR 97206
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1129				CURRENT RESIDENT	6211 SE DIVISION ST #342	PORTLAND OR 97206
1130				CURRENT RESIDENT	6211 SE DIVISION ST #347	PORTLAND OR 97206
1131				CURRENT RESIDENT	6211 SE DIVISION ST #350	PORTLAND OR 97206
1132				CURRENT RESIDENT	6211 SE DIVISION ST #352	PORTLAND OR 97206
1133				CURRENT RESIDENT	6213 SE MAIN ST	PORTLAND OR 97215
1134				CURRENT RESIDENT	6234 SE LINCOLN ST	PORTLAND OR 97215
1135				CURRENT RESIDENT	6259 SE YAMHILL ST	PORTLAND OR 97215
1136				CURRENT RESIDENT	6323 SE DIVISION ST #109	PORTLAND OR 97206
1137				CURRENT RESIDENT	6323 SE DIVISION ST #111	PORTLAND OR 97206
1138				CURRENT RESIDENT	6323 SE DIVISION ST #113	PORTLAND OR 97206
1139				CURRENT RESIDENT	6323 SE DIVISION ST #115	PORTLAND OR 97206
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1141				CURRENT RESIDENT	6323 SE DIVISION ST #202	PORTLAND OR 97206
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1144				CURRENT RESIDENT	6323 SE DIVISION ST #217	PORTLAND OR 97206
1145				CURRENT RESIDENT	6323 SE DIVISION ST #224	PORTLAND OR 97206
1146				CURRENT RESIDENT	6323 SE DIVISION ST #225	PORTLAND OR 97206
1147				CURRENT RESIDENT	6323 SE DIVISION ST #226	PORTLAND OR 97206
1148				CURRENT RESIDENT	6323 SE DIVISION ST #229	PORTLAND OR 97206
1149				CURRENT RESIDENT	6323 SE DIVISION ST #231	PORTLAND OR 97206
1150				CURRENT RESIDENT	6323 SE DIVISION ST #232	PORTLAND OR 97206
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1154				CURRENT RESIDENT	6323 SE DIVISION ST #313	PORTLAND OR 97206
1155				CURRENT RESIDENT	6323 SE DIVISION ST #314	PORTLAND OR 97206
1156				CURRENT RESIDENT	6323 SE DIVISION ST #315	PORTLAND OR 97206
1157				CURRENT RESIDENT	6323 SE DIVISION ST #322	PORTLAND OR 97206
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1159				CURRENT RESIDENT	6323 SE DIVISION ST #336	PORTLAND OR 97206
1160				CURRENT RESIDENT	6336 SE SHERMAN ST #B	PORTLAND OR 97215
1161				CURRENT RESIDENT	6353 SE YAMHILL ST	PORTLAND OR 97215
1162				CURRENT RESIDENT	6402 SE DIVISION ST	PORTLAND OR 97206
1163				CURRENT RESIDENT	6416 SE DIVISION ST	PORTLAND OR 97206
1164				CURRENT RESIDENT	6422 SE DIVISION ST	PORTLAND OR 97206
1165				CURRENT RESIDENT	6430 SE DIVISION ST	PORTLAND OR 97206
1166				CURRENT RESIDENT	6436 SE DIVISION ST	PORTLAND OR 97206
1167				CURRENT RESIDENT	6441 SE MORRISON CT	PORTLAND OR 97215
1168				CURRENT RESIDENT	6442 SE DIVISION ST	PORTLAND OR 97206

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1169				CURRENT RESIDENT	6458 SE DIVISION ST	PORTLAND OR 97206
1170				CURRENT RESIDENT	6458 SE WINDSOR CT	PORTLAND OR 97206
1171				CURRENT RESIDENT	6460 SE DIVISION ST	PORTLAND OR 97206
1172				CURRENT RESIDENT	6502 SE WINDSOR CT	PORTLAND OR 97206
1173				CURRENT RESIDENT	6512 SE DIVISION ST #2	PORTLAND OR 97206
1174				CURRENT RESIDENT	6512 SE DIVISION ST #5	PORTLAND OR 97206
1175				CURRENT RESIDENT	6517 SE DIVISION ST	PORTLAND OR 97206
1176				CURRENT RESIDENT	6518 SE DIVISION ST #301	PORTLAND OR 97206
1177				CURRENT RESIDENT	6600 SE DIVISION ST #105	PORTLAND OR 97206
1178				CURRENT RESIDENT	6600 SE DIVISION ST #301	PORTLAND OR 97206
1179				CURRENT RESIDENT	6600 SE DIVISION ST #309	PORTLAND OR 97206
1180				CURRENT RESIDENT	6659 SE YAMHILL ST	PORTLAND OR 97215
1181				CURRENT RESIDENT	6715 SE YAMHILL ST	PORTLAND OR 97215
1182				CURRENT RESIDENT	7114 SE GRANT ST	PORTLAND OR 97215
1183				CURRENT RESIDENT	7122 SE GRANT ST	PORTLAND OR 97215
1184				CURRENT RESIDENT	7124 SE GRANT ST	PORTLAND OR 97215
1185				CURRENT RESIDENT	7203 SE MAIN ST	PORTLAND OR 97215
1186				CURRENT RESIDENT	7220 SE STEPHENS ST	PORTLAND OR 97215
1187				CURRENT RESIDENT	7226 SE MADISON ST	PORTLAND OR 97215
1188				CURRENT RESIDENT	912 SE 69TH AVE	PORTLAND OR 97215
1189				CURRENT RESIDENT	922 SE 66TH PL	PORTLAND OR 97215
1190	RETURN SERVICE REQUESTED	OWNER	1S2E05 100	PORTLAND CITY OF	1900 SW 4TH AVE #7007	PORTLAND OR 97201-5380
1191	RETURN SERVICE REQUESTED	APPLICANT/OWNERS AGENT	PORTLAND PARKS & RECREATION	HORNER BRETT	1210 SW 5TH AVE #800	PORTLAND OR 97204
1192	RETURN SERVICE REQUESTED		LAND USE CONTACT C/O SEUL	MT TABOR NEIGHBORHOOD ASSOCIATION	3534 SE MAIN ST	PORTLAND OR 97214
1193	RETURN SERVICE REQUESTED		PORTLAND SCHOOL DISTRICT	LAND USE NOTICE CONTACT	501 N DIXON	PORTLAND OR 97227
1194	RETURN SERVICE REQUESTED		SOUTH TABOR NEIGHBORHOOD ASSOC	CARR JOHN	2918 SE 67TH AVE	PORTLAND OR 97206
1195	RETURN SERVICE REQUESTED		LAND USE CONTACT	SE UPLIFT NEIGHBORHOOD PROGRAM	3534 SE MAIN ST	PORTLAND OR 97214
1196	RETURN SERVICE REQUESTED		BELMONT AREA BUSINESS ASSOCIATION	COOK NICHOLAS	PO BOX 14472	PORTLAND OR 97293
1197	RETURN SERVICE REQUESTED		HAWTHORNE BLVD BUSINESS ASSOCIATION	LEVESQUE WILLIAM	PO BOX 15271	PORTLAND OR 97293
1198	RETURN SERVICE REQUESTED			KARLA MOORE-LOVE (CITY HALL)	1221 SW 4TH AVE #130	PORTLAND OR 97204
1199	RETURN SERVICE REQUESTED		RISK & LAND DEPARTMENT	NW NATURAL	250 SW TAYLOR ST	PORTLAND OR 97204-3038
1200	RETURN SERVICE REQUESTED		LAND USE CONTACT	PACIFIC POWER & LIGHT	7544 NE 33RD DR	PORTLAND OR 97211
1201	RETURN SERVICE REQUESTED		PORTLAND METRO REGIONAL SOLUTIONS	C/O DLCD REGIONAL REPRESENTATIVE	1600 SW FOURTH AVE #109	PORTLAND OR 97201
1202	RETURN SERVICE REQUESTED		LAND USE CONTACT	PORT OF PORTLAND PLANNING	PO BOX 3529	PORTLAND OR 97208
1203	RETURN SERVICE REQUESTED		LAND USE CONTACT	TRANSIT DEVELOPMENT	1800 SW FIRST AVE #300	PORTLAND OR 97201
1204	RETURN SERVICE REQUESTED		LAND USE CONTACT	STATE HISTORIC PRESERVATION OFFICE	725 SUMMER NE #C	SALEM OR 97301
1205	RETURN SERVICE REQUESTED			JUDY PETERS	6916 NE 40TH ST	VANCOUVER WA 98661
1206				PORTLAND PARK TRAIL	TATE WHITE	B106/R1302
1207				LAND USE CONTACT	PROSPER PORTLAND	129/PROSPER
1208					HEARINGS CLERK	299/3100
1209					DAWN KRANTZ	B299/R5000

RESPONSE TO THE BUREAU OF DEVELOPMENT SERVICES
LAND USE REVIEW REQUEST

Portland Transportation
Development Review
Bureau of Transportation Engineering & Development

LU: 23-088549-LU Date: January 5, 2024

To: Grace Jeffreys, Bureau of Development Services

503-865-6521, grace.jeffreys@portlandoregon.gov

From: Eileen Cunningham, PBOT Development Review

503-823-2999, Eileen.Cunningham@portlandoregon.gov

Applicant: Brett Horner
PORTLAND PARKS & RECREATION
1210 SW 5TH AVE SUITE 800
PORTLAND OR 97204

Location: 6325 SE DIVISION ST

TYPE OF REQUEST: Type 3 procedure HR - Historic Resource Review

DESCRIPTION OF PROJECT

HLC HEARING - Type III Historic Resource Review for the replacement of 88 light poles: 84 within Mt Tabor Park and 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. Replacement poles will be installed in approximately the same location as the current poles.Historic Resource Review is required because the proposal is for non-exempt development within a historic overlay zone, per Section 33.846.

RESPONSE

Portland Transportation/Development Review has reviewed the application for its potential impacts regarding the public right-of-way, traffic impacts and conformance with adopted policies, street designations, Title 33, Title 17, and for potential impacts upon transportation services.

1. There are no transportation related approval criteria for the subject review.
2. The proposal does not trigger either of the public improvement requirements of 17.88.020. No public improvements or dedication are required.
3. The light poles to be replaced are not PBOT assets, although at least one light pole appears to be within the right-of-way. The poles will be replaced in their current location.
4. Any encroachments within the right-of-way will require an encroachment permit. The City's Encroachment Policy has provisions for recognizing pre-existing encroachments. (See page 4 at https://www.portland.gov/sites/default/files/2020-03/409066.pdf.) If the site contains existing

encroachment within right-of-way, PBOT will require a current encroachment permit to document all the encroachments on the site. If so, the applicant will be required to apply for an encroachment permit, which will need to be approved prior to land use review approval. The encroachment permit application is available at https://www.portland.gov/transportation/development/encroachment-permits, including applicable fees. Please email the application and all supporting documentation to: encroachments@portlandoregon.gov. Please contact PBOT encroachment questions via email at encroachments@portlandoregon.gov (preferred). You may also call 503-823-7002 and select Option 3. For an overview of the encroachment permit process, please visit https://www.portland.gov/transportation/development/encroachment-permits.

5. If the proposed development will impact the use of an area within the public right-of-way, a separate street temporary closure permit will be required. Additionally, closures that do not allow safe passage and unobstructed flow of normal public use in a partially open area or lane, will also require a City approved Traffic Control Plan. For an application, general information, cost, and submittal information, please visit Temporary Street Use Permitting (TSUP) | Portland.gov or call 503-823-7365.

RECOMMENDATION

PBOT has no objection to the subject request.

PORTLAND PARKS & RECREATION
Healthy Parks, Healthy Portland

Urban Forestry
1900 SW 4th Ave. Ste 5000, Portland, OR 97201
Tel: 503-823-TREE (8733) Fax: 503-823-4493
email: trees@portlandoregon.gov
web: portlandoregon.gov/trees

Urban Forestry
Land Use Review Response

Date: December 22, 2023
From: Mariano Masolo
503-823-4560, Mariano.Masolo@portlandoregon.gov
Case File: 23-088549-000-00-LU
Location 6325 SE DIVISION ST
Proposal: HLC HEARING - Type III Historic Resource Review for the replacement of 88 light poles: 84 within Mt Tabor Park and 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. Replacement poles will be installed in approximately the same location as the current poles.

Historic Resource Review is required because the proposal is for non-exempt development within a historic overlay zone, per Section 33.846.

Urban Forestry has reviewed the proposal for its impact on existing city trees, street trees and heritage trees, street tree planting requirements and related mitigation in accordance with Title 11, Trees and for potential impacts upon urban tree canopy. It is the applicant's responsibility to disclose all aspects of their land use proposal that may impact required street tree plantings and existing street trees during the land use review process.

UNLESS EXPLICITLY STATED HEREIN, THIS REVIEW DOES NOT APPROVE STREET TREE REMOVALS AND DOES NOT PROVIDE ANY EXEMPTIONS TO TITLE 11 REQUIRMENTS.

Permits required after land use approval are subject to all applicable development standards and all provisions of the City Code, including Title 11. Title 11 regulations will be applied during the permit review process.

PLEASE NOTE THERE MAY BE OTHER APPLICABLE TREE REQUIREMENTS AS PER TITLE 33 PLANNING & ZONING.

A. Response Summary

The applicant has not provided a Tree Protection Plan.
Tree protection is required for all trees required to be retained in accordance with Title 11 Trees, Protection Methods (11.60.030).

With the conditions recommended in this response, Urban Forestry does not object to approval of the land use proposal.
The proposed development will be subject to Title 11 regulations during the permit review process.

A. Tree Plan (11.50.070)

A Title 11 compliant tree plan must be submitted with each phase of development review and permitting including land use reviews, building permits, and public works permits. The same tree plan shall be included with each permit.
A tree plan was not submitted with the land use proposal, and additional tree information is required.

The following information is required for street trees, Heritage trees, and trees on city owned property and was not included with the proposal:

a. Exiting trees
    1. Heritage trees
    2. Private trees at least 12 inches in diameter
    3. City trees at least 6 inches in diameter
    4. Street trees at least 3 inches in diameter

b. Proposed tree activity
    1. Indicate trees to be retained and proposed tree protection.
    2. Indicate trees to be removed.
    3. Show location, species, planting size and number of trees to be planted.

c. Protection plan
    i. The protection plan must describe the potential impacts of construction methods, staging areas, equipment usage, loading areas, and building materials that will impact regulated trees. The plan must describe how the existing street, heritage, and city trees will have continued protection, in accordance with the protection requirements of 11.60, during the proposed development.

B. Street Trees

1. *Existing Street Conditions*
   According to available GIS data, the frontages have the following configuration.
   a. SE Taylor St: The site has approximately 600 feet of street frontage. The right-of-way is improved with pavement. There are no curbs, nor planting strip and sidewalks. There are no overhead high voltage power lines. There are five street trees.
      A field visit by Urban Forestry staff have confirmed the following trees:
      i. 5 Bradford pear (*Pyrus calleryana* ' Bradford'), 10"-16" DBH. Trees are in fair condition.

2. *Street Tree Preservation* (11.50.040)
   The land use proposal has not provided adequate information to determine if existing trees may be approved and permitted for removal as part of the proposed development. All trees not approved for removal are required to be retained and protected during all stages of the development.

3. *Street Tree Protection Specifications* (11.60.030)
   The applicant has not provided a street tree protection plan. Tree protection is required for all trees required to be retained in accordance with Title 11 Trees, Protection Methods (11.60.030).
   Tree protection shall follow either the Prescriptive or Performance path. Protection methods must be shown on the tree plan. If using the Performance path, the alternate tree protection plan must be prepared by an arborist who has visited the site.
   The protection plan must describe the potential impacts of construction methods, staging areas, equipment usage, loading areas, and building materials that will impact regulated trees.

C. On Site Trees

City Managed Sites (11.50.040.C.2.a)
For development on City owned or managed sites applicants are required to consult with the City Forester at the preliminary project design phase if City or Street Tree removal is likely to occur to complete the project. The purpose of this consultation is to identify potential impacts and opportunities to retain existing trees, as well as any measures required to protect trees on site. (11.50.040)

The proposal is being reviewed by Urban Forestry in case 23-101463-UF.

1. *On-Site Tree Preservation* (11.50.040)
   The land use proposal has not provided adequate information to determine if existing trees may be approved and permitted for removal as part of the proposed development during the permit review process.
   If the applicant believes the tree(s) require removal to facilitate development, the applicant must provide an adequate written technical analysis report demonstrating how and why the tree(s) cannot be preserved while developing the site to City standards.
   The written technical analysis must include, but is not limited to, a feasibility study of the alternative measures considered in an effort to retain the tree(s). The technical analysis may address any relevant topics such as tree condition, equipment requirements, construction methodology, or cost. The submittal of a technical analysis and feasibility study does not provide approvals or permits for tree removals. Technical analysis and feasibility study documents will be reviewed by the City Forester to make a final determination.

   All trees not approved for removal are required to be retained and protected during all stages of the development.

1. *On-Site Tree Protection Specifications* (11.60.030)
   The applicant has not provided a street tree protection plan. Tree protection is required for all trees required to be retained in accordance with Title 11 Trees, Protection Methods (11.60.030).
   Tree protection shall follow either the Prescriptive or Performance path. Protection methods must be shown on the tree plan.
   If using the Performance path, the alternate tree protection plan must be prepared by an arborist who has visited the site. The protection plan must describe the potential impacts of construction methods, staging areas, equipment usage, loading areas, and building materials that will impact regulated trees.

2. *On-Site Tree Density Standards* (11.50.050.D)
   The applicant has not provided a tree planting plan. The required tree area is based on the size and the type of proposed existing development as shown in Title 11 Table 50-2. Trees must be planted at a minimum 1.5 caliper inches. Trees will be required to be planted through the permit review process.

D. Heritage Trees

1. *Heritage Trees* (11.20.060):
   There are two trees located on the site on the City of Portland's Heritage Tree list:

Sequoiadendron giganteum and *Tilia tomentosa*.
These tree must be retained and protected unless removal is approved by the Urban Forestry Commission.
Written authorization from Urban Forestry is required prior to any work done to the trees or within the root protection zone.
The protection methods must be shown on the Tree Preservation Plan.

E. Recommendations

Urban Forestry requires the following conditions be included in the decision:

1. A Tree Protection Plan must be submitted by an arborist, as defined in chapter 11.80.020.B.3:
2. The Tree Protection Plan for the existing park trees and street trees must be approved by Urban Forestry prior to any construction.

To: Grace Jeffreys
From: Sloan Shelton, Life Safety Plans Examiner
Date: December 20, 2023
RE: 6325 SE DIVISION ST, 23-088549-LU

LIFE SAFETY PLAN REVIEW RESPONSE
The following comments are based on the plans and documents provided to the Life Safety Plan reviewer. They are intended to provide the applicant with preliminary Building Code information that could affect the Land Use Review, Public Records request and/or future Building Permit reviews. The comments may not identify all conflicts between the Land Use proposal and the Building Codes. A complete Life Safety plan review will be provided at the time of Building Permit submittal at which time any additional Building Code issues will be noted. The comments are based on the Oregon Structural Specialty Code (OSSC), the International Existing Building Code (IEBC), the Oregon Mechanical Specialty Code (OMSC), or the Oregon Residential Specialty Code (ORSC).

RESPONSE SUMMARY
☐ Life Safety Plan Review does not object to the approval of this proposal. The applicant should be aware that several building code requirements may impact the final design of this building. For information regarding future compliance, see the **GENERAL LIFE SAFETY COMMENTS** below.

Item #	GENERAL LIFE SAFETY COMMENTS
1	**Building Permit Required -** A separate Building Permit is required for the work proposed and the proposal must be designed to meet all applicable building codes and ordinances. Information about submitting a permit application request is available online at https://www.portland.gov/bds/permit-review-process/apply-or-pay-permits.

From: Powell, Jesse (he/him)
To: Jeffreys, Grace
Subject: Mt. Tabor Light Pole Proposal
Date: Tuesday, January 2, 2024 10:17:30 PM

Hello,

I recently became aware of the proposal to remove the historic lighting from Mt Tabor Park. I am a long-time resident of the Mt Tabor neighborhood and visit the park almost every day for exercise and recreation. I am VEHEMENTLY opposed to the removal of the historic light posts. They provide a wonderful charm and character to the park. I was so sad when the post on the upper forest trail was replaced. Removing all of them would be almost as tragic as removing a mature Douglas Fir tree from the park. That money should be devoted to GOOD causes for the city, not the destruction of historic architecture. Please please don't do this.

Jesse Powell

From: David Kaplan
To: Jeffreys, Grace
Subject: Case file LU 23-088549 HR DM
Date: Thursday, January 4, 2024 11:35:40 AM

Mt. Tabor lights PC # 23-047200

Commissioners,

I was very skeptical when I first heard that all of the historic park lamp posts were declared a hazard after an ill-advised attempted nap in a hammock. I feared that the Parks Bureau would replace the lighting with cheaper modern fixtures.

I raised the concerns with Friends of Mt. Tabor Park and several civic agencies (including Landmarks and SHPO), citing the language of the Historic District listing with the National Park Service.

I am happy to see that the Parks Bureau has chosen a replacement design that closely resembles the original posts and lanterns. Today, I visited Colonel Summers Park to see the new fixtures. They are beautiful.

My only question is how these installations can be so expensive. My calculations based on the project budget for parks citywide show a unit cost of about $74,000. I am not an engineer or architect, but that seems to be a pretty big figure. A high level breakdown of these cost elements would be of interest.

Again, I am very pleased at the proposed replacement lighting in the park, and urge approval by the commission.

David Kaplan
7110 SE Main St.
Portland, Oregon 97215

From: LINDA RAVEAUX
To: Jeffreys, Grace
Subject: LU 23-088549. PC#23-047200
Date: Wednesday, January 10, 2024 4:14:41 PM

Dear Ms Jeffrey's,
I am a neighbor of Mt Tabor Park and wish to comment on what I would like to see in the replacement of the lampposts. Since the park recently received a national award for the quiet, it is my opinion that light contributes to that quiet. Low light, with the light aimed down would be wonderful. Going into the park to see the sky is such a blessing. In addition, the style of the lamppost should be the same style as the current lampposts. It is a historical site and, in my opinion, the historical appearance should be replicated.
Thank you for your consideration of my thoughts.
Linda Raveaux
Sent from my iPad

City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 | 503-823-7300 | www.portland.gov/bds

Land Use Review Application

File Number: LU 23-088549 HR DM

FOR INTAKE, STAFF USE ONLY

Date Rec 9/28/23 by ejd

☐ Type I ☐ Type Ix ☒ Type II ☐ Type IIx ☒ Type III ☐ Type IV ☐ ELD

LU Reviews Type III HR & Type II Demo

[Y] [N] Unincorporated MC

[Y] [N] Flood Hazard Area (LD & PD only)

[Y] [N] Potential Landslide Hazard Area (LD & PD only)

[Y] [N] 100-year Flood Plain [Y] [N] DOGAMI

Qtr Sec Map(s) 3136,3137,3236,3237 Zoning OS, OSc, OScs, OSs

Plan District None

Historic and/or Design District Mt Tabor Park HD

Neighborhood Mt Tabor

District Coalition SEU

Business Assoc None

Related File # EA 23-047200 PC

APPLICANT: Complete all sections below that apply to the proposal. Please print legibly.
Email this application and supporting documents to: LandUseIntake@portlandoregon.gov

Development Site Address or Location Mt Tabor Park (6325 SE DIVISION ST)

Cross Street SE Salmon St and SE 60th Ave **Sq. ft./Acreage** 176 acres (park only)

Site tax account number(s)

R 332503	**R** 149581	**R**
R 332679	**R** 149582	**R**

Describe project (attach additional page if necessary)

As part of the city's light pole safety project, install 84 light poles within Mt. Tabor Park and an additional 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. The lighting system is a basic utility that functions as an accessory use to the primary park use on the site. Replacement poles will be installed in the same location as the current poles to maintain the historic spatial pattern of the lighting system except where relocation is required to retain trees and limit impacts to trees consistent with Title 11.

Describe proposed stormwater disposal methods

No changes are proposed.

Identify requested land use reviews

Type III Historic Review for accessory utility upgrades to replace light poles

- **Design & Historic Reviews -** For **new development**, provide project valuation. $_____
  For **renovation**, provide exterior alteration value. $_____
  AND provide total project valuation. $ 704,000
- **Land Divisions -** Identify number of lots (include lots for existing development). _____
  New street (public or private)? ☐ yes ☐ no
- **Affordable Housing -** For buildings containing five or more dwelling units, will 50% or more of the units be affordable to households with incomes equal to or less than 60% of the median family income for the county or state, whichever is greater? ☐ yes ☐ no ☑ N/A

continued / over

Applicant Information

- Identify the primary contact person, applicant, property owner and contract purchaser. Include any person that has an interest in your property or anyone you want to be notified. Information provided, including telephone numbers and e-mail addresses, will be included in public notices.
- For all reviews, the applicant must sign the Responsibility Statement.
- For land divisions, all property owners must sign the application.

PRIMARY CONTACT:

Typed Full Name: Brett Horner, Parks and Trails Planning Manager ☑ I acknowledge this typed name as my signature

Company/Organization: Portland Parks & Recreation Bureau, City of Portland

Mailing Address: 1210 SW 5th Ave Suite 800

City: Portland State: OR Zip Code: 97204

Day Phone: 971-409-3518 FAX: email: brett.horner@portlandoregon.gov

Check all that apply ☐ Applicant ☒ Owner ☐ Other

Typed Full Name: City of Portland ☐ I acknowledge this typed name as my signature

Company/Organization:

Mailing Address:

City: State: Zip Code:

Day Phone: FAX: email:

Check all that apply ☐ Applicant ☐ Owner ☐ Other

Typed Full Name: ☐ I acknowledge this typed name as my signature

Company/Organization:

Mailing Address:

City: State: Zip Code:

Day Phone: FAX: email:

Check all that apply ☐ Applicant ☐ Owner ☐ Other

Typed Full Name: ☐ I acknowledge this typed name as my signature

Company/Organization:

Mailing Address:

City: State: Zip Code:

Day Phone: FAX: email:

Check all that apply ☐ Applicant ☐ Owner ☒ Other

Responsibility Statement As the applicant submitting this application for a land use review, I am responsible for the accuracy of the information submitted. The information being submitted includes a description of the site conditions. I am also responsible for gaining the permission of the owner(s) of the property listed above in order to apply for this review and for reviewing the responsibility statement with them. If the proposal is approved, the decision and any conditions of the approval must be recorded in the County Deed Records for the property. The City of Portland is not liable if any of these actions are taken without the consent of the owner(s) of the property. In order to process this review, City staff may visit the site, photograph the property, or otherwise document the site as part of the review. I understand that the completeness of this application is determined by the Director. By my signature, I indicate my under-standing and agreement to the Responsibility Statement.

Name of person submitting this application agrees to the above Responsibility Statement and acknowledges typed name as signature:

Brett Horner Date: September 27, 2023

Phone number: 971-409-3518

Email this application and supporting documents to LandUseIntake@portlandoregon.gov

Submittal of locked or password protected documents will delay intake of your application.

City of Portland, Oregon
Bureau of Development Services
Land Use Services
FROM CONCEPT TO CONSTRUCTION

Carmen Rubio, Commissioner
Rebecca Esau, Director
Phone: (503) 823-7310
TTY: (503) 823-6868
www.portland.gov/bds

October 19, 2023

Brett Horner
PORTLAND PARKS & RECREATION
1210 SW 5th Ave Suite 800
Portland OR 97204

Re: Land Use Review LU 23-088549 HR DM

Dear Brett Horner:

The Bureau of Development Services received your application for a Historic Resource Review located at 6325 SE DIVISION ST on September 28, 2023. Your case has been assigned to me, Arthur Graves. In order to continue to review your application, additional information is needed. Once you submit this information, your application will be considered complete, and I will proceed with a full review of your proposal. Up to this point, your application has been reviewed only to determine if all required information has been submitted. The application has not been fully reviewed to determine if it meets the relevant approval criteria, however some issues you may want to consider are identified in Section II below.

I. Information Necessary to Complete Application
RESPOND TO EACH OF THE ISSUE LISTED BELOW IN ORDER, PROVIDING THE COMPLETE RESPONSE/ANSWER AFTER THE STATED ISSUE.
The following information must be submitted before your proposal can be evaluated:

1. Please clarify the specific reason for the removal of the proposed historic light poles from the Mt Tabor Historic District.
2. Please clarify the submitted Exhibits with labels and page numbers. When referencing Exhibits cite the specific Exhibit and page number.
3. Please clarify the statements on page 5 of the *Application Narrative* regarding the existing light poles not meeting building code requirements. Please provide documentation and support for this.
4. Please provided information clarifying the structural integrity of the light poles to be removed. Provide both documentation and drawings.
5. Please provide the engineers report(s) mentioned on page 7 of the *Application Narrative*.
6. Please clarify which of the poles to be replaced will not be located in exactly the same locations as the existing light pole to be removed/replaced. Please provided documentation and drawings.
7. Please provide complete drawings (plans, elevations, sections, etc.) of the historic light poles. ALL DRAWINGS MUST BE TO SCALE.
8. Please provide complete drawings (plans, elevations, sections, etc.) of the proposed replacement light poles. ALL DRAWINGS MUST BE TO SCALE.
9. Please clarify exactly which of the historic light poles are failing and need to be removed due to clearly visible structural deterioration.
10. Please clarify specifically what "'dark skies' compliance" (mentioned on page 7 of the *Application Narrative*) refers to.
11. Within the 'dark skies' comment, please clarify how the proposed light poles are shielded.

12. Please clarify the statement in the fourth bullet on page 7 of *Application Narrative* regarding lumens. Is this saying the proposed lights will be 33% less bright?
13. Please clarify the statement on page 7 of the *Application Narrative* starting, "Due to an inadequate anchoring system…it is not practicable to reuse the poles". Please provide information clarifying why existing historic light poles footings cannot be repaired and/or reinforced.
14. Please clarify what the industry standard is for light pole installation in parks.
15. Please clarify where the specific structural issue is with the historic light poles: the footing, base, poles, light, etc. Clarify if this a systemic issue will all historic light poles within the Mt Tabor Historic District.
16. On page 7 of the *Application Narrative*, in the last paragraph, "other information" is mentioned regarding "determining full replacement". Please provide this "other information".
17. The closure of the Columbia Pool is mentioned on page 8 of the *Application Narrative*. Please clarify why this pool was closed.
18. On page 14 of the *Application Narrative*, in the fourth paragraph, a comment is made about, "Similar poles at historic parks…" Please provide the supporting citation for this comment.
19. On page 15 of the *Application Narrative*, in the second paragraph, a comment is made about 61 light poles. Please clarify in drawings where these light poles are located.
20. Please provide a schedule and corresponding plan for the light poles in the Mt Tabor Historic District to include: light pole age, installation date, construction type, degree of deterioration, reason for proposed removal and replacement. Number light poles 1-88 on the plan and in schedule.
21. Please clarify in drawings (plans, elevations, etc.) where Nonconforming Situations associated with LU 17-245440 and mentioned on page 23 of the *Application Narrative* will be installed.
22. Please clarify why irrigation drawings have been submitted.
23. Please clarify how conduit will be concealed with the proposed replacement light poles.
24. Please clarify where "Sheet 4" is located (this is mentioned on page 41 of the *Application Narrative*.
25. Please clarify why the bases/footings of the existing historic light poles cannot be repaired and/or reinforced.
26. Please clarify options investigated to repair the historic light poles. Please provide restoration experts/specialists consulted.

II. Time to Complete Application

The Portland Zoning Code allows you up to 180 days to complete your application. Since the 180-day period began on the day we received the application, the deadline to make your application complete is **Tuesday March 26, 2024.**

III. Determination of a Complete Application

The application will be determined complete when you have submitted:

1. All of the requested information included in Section I, above. If you cannot provide all of the requested information at one time and intend to submit additional information, please include a written statement with each separate submittal indicating that you still intend to provide the additional missing information by the **Tuesday March 26, 2024** deadline, **or**

2. Some of the requested information included in Section I, above, and a written statement that no additional information will be provided; **or**

3. A written statement that none of the requested information included in Section I, above, will be provided.

Please be aware that not submitting the requested information may result in your application being denied. The information is needed to demonstrate the approval criteria are met. Once the application is deemed complete, review of your application can proceed using the information you have provided.

Your application will be approved if it meets the relevant land use review approval criteria. It is your responsibility to document how the approval criteria are met. The items listed above will help provide that documentation.

Voiding of Application
If your application is not complete by **Tuesday March 26, 2024**, it will be voided, and the application fee will not be refunded. The City's land use review procedures are outlined in Chapter 33.730 of the Portland Zoning Code.

Please contact me if you have any questions about this letter. My telephone number is **503.865.6517**, and my e-mail address is Arthur.Graves@portlandoregon.gov. Requested information noted above should be emailed to me. Please e-mail me for file dropbox instructions if document or drawing file sizes are greater than 5MB. Please label all correspondence and materials you submit with the case number LU 23-088549 HR DM.

Sincerely,

Arthur Graves, Planner
Land Use Services Division

cc: City of Portland | 1900 SW 4th Ave Suite 7007 | Portland OR 97201
Application Case File

Completeness Response

Date: October 27, 2023

To: Arthur Graves, BDS Land Use Services
503-865-6517, Arthur.Graves@portlandoregon.gov

From: Ella Ruth, BES Systems Development
503-823-8068, Ella.Ruth@portlandoregon.gov

Case File: LU 23-088549

Location: 6325 SE DIVISION ST

Proposal: As part of the city's light pole safety project, install 84 light poles within Mt. Tabor Park and an additional 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. The lighting system is a basic utility that functions as an accessory use to the primary park use on the site. Replacement poles will be installed in the same location as the current poles to maintain the historic spatial pattern of the lighting system except where relocation is required to retain trees and limit impacts to trees consistent with Title 11.

BES provides the following comments in response to materials received for the purpose of determining completeness of the above-referenced Land Use application. Items requested in this memo should not be considered final, as staff reserves the right to request additional materials during the formal review period.

1. The applicant has submitted the minimum level of information for BES to begin conducting a full review of the land use application. As staff begins reviewing the application against relevant approval criteria and BES code requirements, additional information may be requested.

RESPONSE TO THE BUREAU OF DEVELOPMENT SERVICES
Request for Completeness

Portland Transportation
Development Review
Bureau of Transportation Engineering & Development

LU: 23-088549-LU Date: October 30, 2023

To: Arthur Graves, Bureau of Development Services

503-865-6517, arthur.graves@portlandoregon.gov

From: Eileen Cunningham, PBOT Development Review

503-823-2999, Eileen.Cunningham@portlandoregon.gov

Applicant: Brett Horner
PORTLAND PARKS & RECREATION
1210 SW 5TH AVE, SUITE 800
PORTLAND, OR 97204

Location: 6325 SE DIVISION ST

TYPE OF REQUEST: Type 3 procedure HR - Historic Resource Review

DESCRIPTION OF PROJECT

As part of the city's light pole safety project, install 84 light poles within Mt. Tabor Park and an additional 4 light poles in the SE Taylor Street right-of-way that are part of an existing and historic illuminated circulation system. The lighting system is a basic utility that functions as an accessory use to the primary park use on the site. Replacement poles will be installed in the same location as the current poles to maintain the historic spatial pattern of the lighting system except where relocation is required to retain trees and limit impacts to trees consistent with Title 11.

RESPONSE

Portland Transportation/Development Review has reviewed the application for its potential impacts regarding the public right-of-way, traffic impacts and conformance with adopted policies, street designations, Title 33, Title 17, and for potential impacts upon transportation services.

1. There are no transportation related approval criteria for the subject review.
2. The proposal does not trigger either of the public improvement requirements of 17.88.020. No public improvements or dedication are required.
3. The light poles to be replaced are not PBOT assets, although at least one light pole appears to be within the right-of-way. The poles will be replaced in their current location.
4. Any encroachments within the right-of-way will require an encroachment permit. The City's Encroachment Policy has provisions for recognizing pre-existing encroachments. (See page 4 at

https://www.portland.gov/sites/default/files/2020-03/409066.pdf.) If the site contains existing encroachment within right-of-way, PBOT will require a current encroachment permit to document all the encroachments on the site. If so, the applicant will be required to apply for an encroachment permit, which will need to be approved prior to land use review approval. The encroachment permit application is available at https://www.portland.gov/transportation/development/encroachment-permits, including applicable fees. Please email the application and all supporting documentation to: encroachments@portlandoregon.gov. Please contact PBOT encroachment questions via email at encroachments@portlandoregon.gov (preferred). You may also call 503-823-7002 and select Option 3. For an overview of the encroachment permit process, please visit https://www.portland.gov/transportation/development/encroachment-permits.

5. If the proposed development will impact the use of an area within the public right-of-way, a separate street temporary closure permit will be required. Additionally, closures that do not allow safe passage and unobstructed flow of normal public use in a partially open area or lane, will also require a City approved Traffic Control Plan. For an application, general information, cost, and submittal information, please visit Temporary Street Use Permitting (TSUP) | Portland.gov or call 503-823-7365.

RECOMMENDATION

PBOT has no objection to the application being deemed complete.

City of Portland
Historic Landmarks Commission

Briefing

SUMMARY MEMO

Date: **March 27, 2023**

To: **Brett Horner, Portland Parks & Recreation**

From: **Hillary Adam, Design / Historic Review**
hillary.adam@portlandoregon.gov, 503-823-8953

Re: **Briefing on Lighting in Historic Parks**
Summary of March 13, 2023 Landmarks Commission Briefing

Thank you for taking advantage of the opportunity to hold a preliminary briefing with the Landmarks Commission regarding your project. I hope you find it informative and valuable as you continue with your project development. Attached is a brief summary of the comments provided by the Landmarks Commission at the March 13, 2023 hearing. This summary was generated from notes taken at the public meeting and a subsequent review of the public meeting recordings. To review those recordings, please visit: https://efiles.portlandoregon.gov/Record/15910294/.

These Landmarks Commission comments are intended to guide you in further design exploration of your project. These comments may also inform City staff when giving guidance over the course of future related land use reviews. It should be understood that these comments address the project as presented on March 13, 2023. As the project design evolves, the comments, too, may evolve or may no longer be pertinent.

Preliminary briefings are not intended to substitute for other Code-required land use or legislative procedures.

Please continue to coordinate with me, Hillary Adam, as necessary as you prepare your formal land use application.

Encl:
Summary Memo

Cc: *Landmarks Commission*

This memo summarizes **Landmarks Commission** design direction provided on March 13, 2023.

Commissioners in attendance on March 13, 2023 include: Smith, Minor, Roman, Foty, Moretti

Executive Summary:

- Commissioners suggested that repair is preferable to replacement. Commissioners noted a desire to better understand the structural issues and expressed a desire to see the engineer's report when it is released, adding that this information should be in the public record. Commissioners noted that the issue seems to primarily be the anchoring system rather than the concrete poles and noted that this should be further explored so that repair could be further explored as an option. Commissioners expressed a desire for coherency within each park with regard to each park's lighting scheme.

Comments include:

- Commissioners asked for clarification if the flaw in the light poles is with the anchors at the base of the poles or with the poles themselves. The Commission asked for more explanation on what the systemic issue is across all the light poles.
- Following some explanation on how the historic poles were installed and connected at the bases, the Commission noted that the issue appears to be primarily at the anchors.
- One Commissioner asked if there had been any thought to try to replicate the original acorn glass globes.
- One Commissioner noted that, during a prior land use review for the Maintenance Yard, the Commission recommended that Parks look at the existing lighting in the Park and develop a consistent lighting scheme for the park. He also asked if foundation work would also be needed if the lights are replaced. Another Commissioner noted that each park's lighting scheme should be coherent within each park.
- One Commissioner suggested sensitively decommissioning the lights rather than throwing them away.
- Commissioners noted that while the light poles are utilitarian concrete and have been modified over time, they are significant character-defining features of the parks. One Commissioner noted that Mt. Tabor Park has seen an erosion of character-defining features over the years. It was suggested that any poles that need to be replaced should be replaced in-kind to match the historic light poles rather than installing something with a similar aesthetic.
- A couple Commissioners noted that it didn't seem like there has been much exploration into whether or not the bases could be reinforced. One Commissioner noted there should be a conditions assessment of each pole to identify which ones truly need to be replaced and which may be able to be reinforced. For those that need to be replaced, the characteristics should be analyzed and closely matched in the replacements.
- In response to Parks representatives noting an engineer's report about the poles, one Commissioner suggested that reinforcement was probably insufficient when the poles were first installed. He noted that this documentation is important for the record.
- One Commissioner suggested that Parks should identify which poles are higher risk with more vehicular and pedestrian activity nearby and those that are less likely to be impacted by neighboring activities.
- One Commissioner noted that hooded fixture options may be a good choice toward meeting Dark Skies goals even if they are not replicating the original.

- One Commissioner noted an acceptance of the need to replace the concrete poles, but suggested that the poles and fixtures should be decoupled with the existing fixtures installed on new poles. The intent would be to minimize loss of existing materials, whether historic or not.
- A couple Commissioners noted that it was strange that the poles in Laurelhurst Park are structurally sound when they appear to be of the same vintage as other light poles in other parks. One Commissioner noted that if the lights at Laurelhurst are fine because they have a good anchoring system, then it's likely that some of the poles in other parks that seem to be okay except for their base connections could potentially be saved with better base connections.
- One Commissioner suggested all repair options should be exhausted before replacement is proposed. He noted that the one pole that was shown to have a crack running along the length of it appeared to be a separate issue than the base – likely water intruded into the concrete and eroded the rebar and cracked the column, which is a separate issue than faulty anchors.
- One Commissioner strongly disagreed with the assertion that 100-year old concrete is inherently in need of replacement, noting that her firm specifically is in the business of analyzing and preserving historic masonry and concrete structures. She noted that there are many reasons why concrete could fail, including rust jacking as evidenced in the photo of the cracked light pole. But she noted there are ways to better understand the true condition of the concrete poles (if that is desired) through a more thorough investigation. She also noted there are ways to protect concrete from water intrusion as well. She noted that if there is a funding issue then repair should definitely be considered with only the most damaged (cracked) to be replaced.

Files related to this Briefing can be found here: ***https://efiles.portlandoregon.gov/record/15884446.***

Please contact me with any questions.

Carmen Rubio, Commissioner
David Kuhnhausen, Interim Director
Phone: (503) 823-7300
TTY: 711
www.portland.gov/bds

STAFF REPORT AND RECOMMENDATION TO THE LANDMARKS COMMISSION

CASE FILE: LU 23-088549 HR DM
PC # 23-047200
Replacement of Mt Tabor Light Poles and Fixtures
REVIEW BY: Landmarks Commission
WHEN: January 22, 2024, 1:30pm
REMOTE ACCESS: Historic Landmarks Commission Agenda
https://www.portlandoregon.gov/bds/HLCagenda

This land use hearing will be limited to remote participation via Zoom. Please refer to the instructions included with this notice to observe and participate remotely.

Bureau of Development Services Staff: Grace Jeffreys 503-865-6521 / Grace.Jeffreys@portlandoregon.gov

GENERAL INFORMATION

Applicant: Brett Horner, Portland Parks & Recreation
1210 SW 5th Ave Suite 800, Portland OR 97204
971.409.3518 | Brett.Horner@Portlandoregon.gov

Owner: City Of Portland
1900 SW 4th Ave Ste 7007, Portland, OR 97201-5380

Site Address: **6325 SE DIVISION ST**

Legal Description: TL 100 190.32 ACRES, SECTION 05 1S 2E
Tax Account No.: R992050130, R992050130, R992050130, R992050130, R992050130
State ID No.: 1S2E05 00100, 1S2E05 00100, 1S2E05 00100, 1S2E05 00100, 1S2E05 00100
Quarter Section: 3136,3137,3236,3237

Neighborhood: Mt. Tabor, contact at contact.MTNA@gmail.com
Business District: NONE
District Coalition: Southeast Uplift, contact at operations@seuplift.org

Plan District: NONE
Other Designations: Mount Tabor Parks Historic District, Mount Tabor Park Reservoirs Historic District

Zoning:	**OSc,s:** Open Space base zone (33.100 Multi-Dwelling Zone) and Historic Resource Protection Overlay Zone (33.445), Environmental Protection Overlay Zone (33.430), Scenic Resource Zone (33.480)
Case Type:	**HR DM:** Historic Resource Review, Demolition Review
Procedure:	**Type III HR and DM,** with a public hearing before the Landmarks Commission. The decision of the Landmarks Commission can be appealed to City Council.

Proposal:
Type III Historic Resource Review and Demolition Review for the replacement of 88 light poles and fixtures which are part of part an existing historic lighting system which is considered a contributing aspect of the Mt Tabor Historic District. Of the 88 existing poles to be replaced:

- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal flight fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Reviews:

- Demolition Review is required because the proposal to remove historic light poles and fixtures is for non-exempt demolition of contributing features within a Historic District, per Section 33.445.200.E.
- Historic Resource Review is required because the proposal to add new light poles and fixtures is for non-exempt development within a historic overlay zone, per Section 33.846.

Relevant Approval Criteria:
In order to be approved, this proposal must comply with the approval criteria of Title 33. The relevant approval criteria are:

- Demolition of existing poles and fixtures: One of the four criteria listed under 33.846.080.C.
- Installation of new poles and fixtures: 33.846.060.G. Other Approval Criteria.

ANALYSIS

Site and Vicinity: The project site, Mt. Tabor Park, is roughly bound by SE Division Street on the south, SE 64th Avenue and SE 60th Avenue on the east, SE Yamhill on the north, and SE 71st Avenue on the west.

Mt. Tabor Park is a 196-acre public park located in a residential area of southeast Portland. The park encompasses most of a volcanic butte, with four peaks. The tallest summit rises to an elevation of 643 feet, making it a prime landmark visible from points all around the city. Because of its elevation, the site became a distribution site for Portland's gravity-fed, mountain-source drinking water in 1894 with the construction of two open reservoirs, Reservoir 1, and the since-demolished Reservoir 2. In 1903, Mt. Tabor was identified as a potential city park by John Charles Olmsted, adopted son of Frederick Law Olmsted, and who, along with his brother Frederick Law Olmsted Jr., operated the landscape firm Olmsted Brothers landscape firm which carried forth the legacy of their father. In 1909, voter-approved bonds were used to purchase the properties that made up the park. Emanuel Tillman Mische, who had previously worked for Olmsted Brothers, was hired the prior year as Portland's Park superintendent and

designed the park. Two additional open reservoirs, Reservoirs 5 and 6, were constructed in 1911 on the western slope of the park.

Mt. Tabor Park is individually listed in the National Register and is classified as a Historic District. The "historic lighting system" is identified as one of the contributing aspects of the site. In the Nomination for the Historic District, the lighting system is described in detail:

> *Adding distinctive charm and illumination is the period lighting system comprised of eighty-eight single concrete standard lampposts that follow the drives and some of the main interior pathways throughout the park. These lampposts give off a soft, friendly light, reminiscent of gaslights, especially in the interior forested areas where they serve as a reminder of the original design of accessibility. The lighting encourages pedestrian exploration of the hills and dells throughout the park even in the short days of the colder months. Originally topped with a single, white, glass globe, polygonal lantern-style shades have replaced the globes. In 1911, Superintendent Mische requested of the Park Board, lampposts with glass globes to be serviced by an alternating current feed. He also requested underground conduits. The lampposts are serviced via underground conduits. The lighting system dates from 1924 and 1925.*

Zoning: The Open Space (OS) zone is intended to preserve public and private open, natural, and improved park and recreation areas identified in the Comprehensive Plan. These areas serve many functions including: providing opportunities for outdoor recreation; providing contrasts to the built environment; preserving scenic qualities; protecting sensitive or fragile environmental areas; preserving the capacity and water quality of the stormwater drainage system; and providing pedestrian and bicycle transportation connections.

The Environmental Conservation Zone "c" overlay conserves important resources and functional values in areas where the resources and functional values can be protected while following environmentally sensitive urban development.

The historic resource overlay zone protects historic resources that have been identified as significant to the history of the city and region. The regulations implement Portland's Comprehensive Plan policies that address historic preservation. These policies recognize the role historic resources have in promoting education and enjoyment for those living in and visiting the region. The regulations foster awareness, memory, and pride among the region's current and future residents in their city and its diverse architecture, culture, and history. Historic preservation recognizes social and cultural history, retains significant architecture, promotes economic and environmental health, and stewards important resources for the use, education, and enjoyment of future generations.

The Scenic Resource Zone "s" overlay is intended to protect Portland's significant scenic resources as identified in the *Scenic Resources Protection Plan* (1991) and the *Central City Scenic Resources Protection Plan* (2017); enhance the appearance of Portland to make it a better place to live and work; create attractive entrance ways to Portland and its districts; improve Portland's economic vitality by enhancing the City's attractiveness to its citizens and to visitors; and implement the scenic resource policies and objectives of Portland's Comprehensive Plan. The purposes of the Scenic Recourse zone are achieved by establishing height limits within view corridors to protect significant views and by establishing additional landscaping and screening standards to preserve and enhance identified scenic resources.

Land Use History: City records indicate that prior land use reviews include the following:

- LU 61-001380 (ref. file: CU 029-61) – Conditional Use approval for a small storage building;
- LU 64-002651 CU (ref. file: CU 067-64) - Conditional Uwe approval to construct a plant potting building on the SW corner of Mt. Tabor Park on park warehouse land;
- LU 65-002285 CU (ref. file: CU 056-65) – Conditional Use Approval with the condition that planting.
- be provided to screen the facilities from adjacent park and residential areas;
- LU 67-003406 (ref. file: CU 93-67) – Conditional Use approval for a maintenance building and office;
- LU 74-000650 (ref. file: CU 007-74) – Conditional Use approval for a greenhouse;
- LU 74-002392 (ref. file: CU 059-74) – Conditional Use approval for a picnic shelter;
- LU 77-002064 (ref. file: CU 49-77) – Conditional Use approval for a water pumping station;
- LU 89-003906 CU (ref. file: CU 26-89) – Conditional Use approval for parking lot expansion;
- LU 89-021552 (ref. file: MP 107-89) – Approval of a 3-lot minor partition;
- LU 90-024202 – Approval to locate and maintain a motor vehicle service building;
- LU 99-017214 EN (ref. file: LUR 99-00809) – Environmental Review approval of trail constructions and improvements in the Environmental Concern zone;
- LU 06-178213 HDZ – Historic Design Review approval for an 8' wide accessible path on the north side of Reservoir #6;
- LU 07-139442 HDZ – Historic Design Review approval for interim security and deferred maintenance improvements;
- LU 14-218444 HR EN – Historic Resource Review and Environmental Review approval of disconnection of reservoirs #1, #5, and #6 from the public drinking water system;
- LU 16-148005 HR – Historic Resource Review approval for rehabilitation of the Mt. Tabor Summit Restroom building;
- LU 17-158467 HRM – Historic Resource Review approval for exterior alterations to the Mount Tabor Yards;
- LU 17-206893 HR – Historic Resource Review approval for the replacement of existing and addition of new railings along the existing stairway of the Mount Tabor steps and the Summit Comfort Station;
- LU 17-245440 HR – Conditional Use approval for uses and improvements for the 13.3-acre project area including the Yard, Upper Nursery and Long Block areas of the park in the Mount Tabor Park Historic District;
- LU 18-103566 HR – Historic Resource Review approval for replacement of existing non-historic light poles with new, historically-appropriate pole lighting; and
- LU 21-053526 HR – Historic Resource Review approval for installation of an Interpretive Program to satisfy the requirement per Condition of Approval 'C' of LU 14-218444 HR EN.

Agency Review: A "Notice of proposal in Your Neighborhood" was mailed **January 2, 2024**. The following seven Bureaus, Divisions and/or Sections responded with no objections, and three of these included written comments, found in Exhibits E.1-E.3:

- Bureau of Transportation Engineering (Exhibit E.1)
- Bureau of Parks-Forestry Division (Exhibit E.2)
- Life Safety Section of BDS (Exhibit E.3)
- Bureau of Environmental Services
- Water Bureau
- Fire Bureau
- Site Development Section of BDS

Neighborhood Review: A Notice of Proposal in Your Neighborhood was mailed on **January 2, 2024**. Three written responses have been received from either the Neighborhood Association or notified property owners in response to the proposal.
1. Jesse Powell, 1-2-2024, wrote in opposition of removing historic lighting posts.
2. David Kaplan, 1-4-2024, wrote in support of the replacement design because it closely resembles the original posts and lanterns.
3. Linda Raveaux, 1-10-24, wrote in support of low light that is aimed downward to maintain the award winning "quiet" aspect of the park. Also supported maintaining existing historic appearance of the posts and fixtures.

Staff Response: Staff appreciates these neighbors for taking the time to share their thoughtful comments. Commission (Exhibit G.3) and Staff agree that repair is preferable to replacement However, the applicant's submittals show that options to retain, rehabilitate, and reuse the existing light poles were explored, however, there was not an acceptable way for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity. Commission (Exhibit G.3) and Staff also support replacement design that closely resembles the original posts and lanterns, with respect for Dark Skys.

Procedural History:
1. A voluntary Briefing on Lighting in Historic Parks was held in 3-13-2023, which included this work (Exhibit G.3). From the Summary Memo:

   Commissioners suggested that repair is preferable to replacement. Commissioners noted a desire to better understand the structural issues and expressed a desire to see the engineer's report when it is released, adding that this information should be in the public record. Commissioners noted that the issue seems to primarily be the anchoring system rather than the concrete poles and noted that this should be further explored so that repair could be further explored as an option. Commissioners expressed a desire for coherency within each park with regard to each park's lighting scheme.

ZONING CODE APPROVAL CRITERIA

Historic Resource Review Process
Chapters 33.445, Historic Resource Overlay Zone, and 33.846, Historic Resource Reviews

33.445.010 Purpose [of Historic Resource Overlay Zone]
The historic resource overlay zone protects historic resources that have been identified as significant to the history of the city and region. The regulations implement Portland's Comprehensive Plan policies that address historic preservation. These policies recognize the role historic resources have in promoting education and enjoyment for those living in and visiting the region. The regulations foster awareness, memory, and pride among the region's current and future residents in their city and its diverse architecture, culture, and history. Historic preservation recognizes social and cultural history, retains significant architecture, promotes economic and environmental health, and stewards important resources for the use, education, and enjoyment of future generations.

33.846.010 Purpose [of Historic Resource Review]
This chapter provides procedures and establishes the approval criteria for all historic reviews. The approval criteria protect the region's historic resources and preserve significant parts of the region's heritage. The reviews recognize and protect the region's historic and architectural resources, ensuring that changes to a designated historic

resource preserve historic and architectural values and provide incentives for historic preservation.

33.846.080 Demolition Review

33.445.200.E Demolition of resources in a Historic District.
Demolition of contributing resources within a Historic District requires demolition review to ensure their historic value is considered and that there is an opportunity for the owner and community to consider alternatives to demolition.

33.846.080 A. Purpose of Demolition Review
Demolition review protects landmarks and contributing resources in districts. Demolition review recognizes that historic resources are irreplaceable assets significant to the region's architectural, cultural, and historical identity and their preservation promotes economic and community vitality, resilience, and memory. In the event that demolition of a historic resource is approved, demolition review also addresses the potential for mitigation of the loss.

> **Findings:** The applicant has applied for Demolition Review to demolish contributing resources within the boundary of an existing Historic District.
>
> Mt. Tabor Park is individually listed in the National Register and is classified as a Historic District. Within that District, the park land is counted as a contributing feature, and the historic lighting system is a component of the park land, as noted in the Nomination:
>
> > *Mount Tabor Park contains one contributing site, seven contributing buildings, five contributing structures, and one contributing object… The park land was counted as one contributing site; infrastructure such as driveways, paths, maintenance yard, and the lighting system, as well as those areas with loose physical definition such as play and picnic grounds, and the nursery, are included as part of the site.*
>
> The light poles and light fixtures, which are part of that historic lighting system, are therefore subject to demolition review.

33.846.080.C. Demolition Review Approval criteria
Proposals to demolish a historic resource will be approved if the review body finds that one of the following approval criteria is met:

1. **Demolition of the resource has been evaluated against and, on balance, demolition has been found to be equally or more supportive of the relevant goals and policies of the Comprehensive Plan,** and any relevant area plans, than preservation, rehabilitation, or reuse of the resource. The evaluation must consider:
   a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
   b. The economic consequences for the owner and the community;
   c. The merits of demolition;
   d. The merits of development that could replace the demolished resource, either as specifically proposed for the site or as allowed under the existing zoning;
   e. The merits of preserving the resource, taking into consideration the purposes described in Subsection A; and
   f. Any proposed mitigation for the demolition.

2. **The proposal is to demolish a contributing resource in a Conservation District or National Register District,** and demolition of the resource will be mitigated to enhance, preserve, or restore the archaeological, architectural, cultural, or historic significance or integrity of the district. The mitigation must be responsive to the significance and integrity of the resource proposed for demolition. The evaluation must consider:
   a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
   b. The economic consequences for the owner and the community;
   c. Relevant goals and policies of the Comprehensive Plan.

3. **The proposal is to demolish a contributing resource in a single-dwelling zone in a National Register District**, and demolition of the resource will facilitate the creation of more deeply affordable dwelling units than could practicably result from preservation, rehabilitation, or reuse of the resource. In this case, deeply affordable means permanently affordable to those earning no more than 60 percent of the area median family income. The evaluation must consider:
   a. The resource's age, condition, historic integrity, historic significance, design or construction rarity, value to the community, and association with historically marginalized individuals or communities;
   b. The economic consequences for the owner and the community;
   c. Relevant goals and policies of the Comprehensive Plan.

4. **The proposal is to demolish an accessory structure**, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.

Findings:
One of the four approval criteria under 33.846.080.C must be shown to be met to demolish these contributing features.

The primary uses on this site are Parks and Open Areas, and the light poles and fixtures that are the subject of this demolition review are of secondary importance to these primary uses. Therefore, they are considered "accessory structures" under PZC 33.190 Definitions:

> ***33.910 Definitions; Accessory Structure.*** *A structure of secondary importance or function on a site. In general, the primary use of the site is not carried on in an accessory structure. Accessory structures may be attached or detached from the primary structure. Examples of accessory structures include garages, decks, fences, trellises, flag poles, stairways, heat pumps, awnings, and other structures.*

Because the light poles and fixtures are accessory structures, the proposal to remove and replace light poles within Mt. Tabor Park may be reviewed under the approval criterion of C.4.

> ***4. The proposal is to demolish an accessory structure****, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.*

As the findings below will describe, the demolition and replacement of the existing light poles and fixtures will not significantly diminish the architectural, cultural, or historic significance or integrity of the district.

The light fixtures are not original fixtures. All of the current fixtures to be removed and replaced are not original. The Nomination notes that while the lighting system dates from 1924 and 1925, the original single, white, glass globes were later replaced with polygonal lantern-style shades seen today.

Parks notes in their narrative that the current fixtures are consistent in design to existing lantern-style metal framed fixtures within Mt. Tabor Park and those found in other city parks (Irvington, Lair Hill Parks, Laurelhurst, Washington, etc.). Archival records indicate the now iconic lantern-style fixtures were first installed at Mt. Tabor Park in the 1950s.

The proposed replacement fixtures will match the existing fixtures in both materials and design (see Exhibit A-10, pages 15APP-G).

Some light poles may be original, however, documentation for individual poles varies. Some of the light poles were replaced at least once before with installation dates ranging from the 1950s through the 1980s (See Exhibit A.10, page 15). Currently, there are only 81 poles are installed at Mt. Tabor Park along the circulation system, and at most, 61 of the poles currently illuminating the park's circulation system are original installations.

The light poles are showing their age and the foundations do not meet current building code. Conditions include cracking and flaking in the concrete surface, as well as efflorescence (white discoloration from moisture loss), pitting, and even external evidence of corrosion of internal metal components, or 'spalling' (see photographs included in Exhibit A.10 – APP H).

The earlier poles were installed using an anchoring system that does not meet current building code (Exhibit A.6, pages 2-3). The primary issue with the wire anchor connector is that the steel tie wire connection was not designed to meet lateral loads. Additionally, some tie wires have deteriorated over time because of water/moisture influence. According to consulting engineers, even with a retrofit to replace the wire anchor, the following light pole elements would not meet code requirements (Exhibit A.6, pages 4-10):

- Footing depth
- Reinforcing steel; and
- lack of vertical steel with transverse ties.

These code deficiencies led the consultant to recommend replacement of the entire light poles and their footings, as documented in the Emergency declaration issued by the Commissioner-in-charge on December 28, 2022 (Exhibit A.10 – APP K).

The project team and engineering consultants explored options to retain, rehabilitate, and reuse the existing light poles in Mt. Tabor Park. However, this is not practicable as there is not an acceptable way for them to be anchored in a manner that would meet current building code for anchoring, while also retaining enough of the pole's historic and design integrity. Therefore, all the poles must be removed and replaced.

The light system will be restored to 88 light poles to match the number of poles identified in the historic nomination. All of the new replacement poles will match the existing ones in design and material (see Exhibit C.5-7 drawings, and Exhibit A.10 – APP G photos).

Finally, the quality of the overall illumination that the historic light system provides to the circulation system is valued as an important feature within the park site, rather than the individual light poles and fixtures.

In terms of the historical listing, the primary cultural or historic significance of Mt. Tabor Park is the Park's association with the Olmsted Brothers through the 1903 Olmsted Plan, which identified Mt. Tabor as a desirable site for a public park, and its design, which embodies the principles of landscape architecture espoused by the Olmsteds.

As such, the historic lighting system is a feature within the contributing resource of the park landscape as a whole and provides historic and functional value by illuminating the park's circulation system. In the nomination, some care was taken to determine when the various drives and formal pathways were constructed for the historical nomination, however, no such attempt was made regarding the lighting system. Further, no attempt was made to distinguish individual poles or their location, date individual poles to the period of significance, or assign historical value to individual poles in the nomination.

Updating the light poles within the existing landscape will do nothing to erode the cultural importance of Mt. Tabor Park as a significant park within the Portland Park System, nor will it impact the integrity of the landscape itself. In fact, by replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

This criterion is met.

Staff note: While the light poles clearly met criterion C.4. for accessory structures, the applicant's submittal, Exhibit A.7, provide findings demonstrating how the proposal also meets criteria C.1. and C.2.

33.846 Historic Resource Review

33.846.060 E. Historic Resource Review Approval Criteria
Requests for Historic Resource Review will be approved if the review body finds the applicant has shown that all of the approval criteria have been met.

Findings: The site is within in a Historic District, and the proposal is for non-exempt treatments. Therefore, the proposal requires Historic Resource Review approval. The approval criteria are those listed in *33.846.060 G. – Other Historic Approval Criteria.*

Staff has considered all of the approval criteria and addressed only those applicable to this proposal.

33.846.060 G. Other Historic Approval Criteria

1. Historic character. The historic character of the landmark or contributing resource will be retained and preserved. Removal of historic materials or alteration of

features and spaces that contribute to the historic significance of the landmark or contributing resource will be avoided.

Findings:
The historic listing identifies multiple parcels totaling 196-acres for the Mt. Tabor Park historical district, including both the park and maintenance yard. The district contains multiple contributing resources in addition to the park's landscape. The lighting system is just one component of the overall park site.

The replacement of the existing light poles and fixtures will have little to no impact on the existing natural areas and decorative landscaping, as the areas around the poles are typically kept clear of vegetation. Minor refinements to pole locations to avoid impacts to landscaping and tree could occur if needed to preserve the character of the landscaping and ensure trees are protected (See Exhibit C.31-36). The vast majority of the landscape, the historic vehicle entrances, and meandering drives, and all of the contributing buildings and structures will remain untouched by the light pole replacement project.

The lighting system itself will remain, even if components are replaced. Many of the original system components were replaced prior to the historical nomination, including all the light fixtures and 27 of the poles currently in use. The alternative to removing current poles would be to rehabilitate the existing poles despite their age and condition.

Bureau staff has verified with the consulting engineers at KPFF that the work necessary to mount existing poles to current code (installing rebar or other structural supports within the pole) is not considered practicable or cost-effective. For reuse, poles and footings would need to be removed and poles structurally altered to increase their structural capacity and then anchored to a new footing to meet current code standards. External alterations to enhance structural capacity would have a detrimental effect on the look and character of the pole, while internal alterations to replace or add reinforcing steel would significantly impact the structural integrity of the concrete. Internal alterations to 99-year-old concrete that was not originally built to meet current building code standards would significantly compromise the integrity of the poles (Exhibit A.6, pages 1-9)

By preserving the spatial pattern of poles (adjacent to the circulation system and distributed across the landscape), and installing poles of similar materials and design, the illuminated pathways will retain their historical character. The compelling nature of the park's landscape as a place of urban refuge offering a variety of forested, pastoral, and scenic experiences will be preserved through this project. Therefore, the contributing resource, the park's landscape will not be negatively affected by this project.

This criterion is met.

2. Record of its time. The landmark or contributing resource will remain a physical record of its time, place, and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings will be avoided.

Findings:
The illuminated circulation system provided vehicular access at the dawning of the automobile age to one of the city's most prominent natural features and

ensured even nighttime visits would be safe and enjoyable. Pole and fixture replacement will result in a restoration of the illumination system at the time of the historic nomination, thus preserving the warmly illuminated meandering drives that provide access throughout the park, even in the darkest of forested areas.

This criterion is met.

3. Historic changes. Most resources change over time. Those changes that have acquired historic significance will be preserved.

Findings:
The project proposes to provide light pole replacements consistent in number to the historical listing. Locations will match that documented in 1988 and 1989 to the extent possible. Although not part of the period of significance, the current lantern-style fixtures, and the metal strapping at the top of certain light poles have acquired significance and are considered representative of Mt. Tabor Park in particular. The proposed new light poles will be topped with lantern-style fixtures along with metal strapping of similar in design and style, as shown in the Exhibit A.10 - APP G, to maintain the iconic significance these features have acquired over time.

This criterion is met.

4. Historic features. Generally, deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence.

Findings:
The lighting system that illuminates the circulation system is identified as contributing to the park's historic landscape. The replacement of 88 poles is needed to maintain structural safety of the lighting system due to severe deterioration, as certified by the city's consulting engineers. Installing modern fixtures at the same time poles are replaced will ensure the illumination system meets current electrical code, will reduce the need for future spot replacements, and will generate significant saving by reducing energy consumption. The new poles will match the historic ones in material, texture, color, and design (as shown in the comparison photographs in Exhibit A.10 - APP Exhibit G).

Written and graphic evidence regarding the existing system is provided in Exhibit A.10 - APP Exhibit F, which documents at least 27 pole replacements over time and the installation of the now iconic lantern-style fixtures. While the first elements of the lighting system were installed in 1924 and 1925, development of the park's physical elements occurred over time and it is likely some individual poles were added later, for example when the bridle path was established in 1929 and Mt. Tabor Drive was constructed (circa 1934). The earliest record of the number and location of light poles dates from the 1950s (outside the period of significance). Over time, individual poles have been replaced as needed – however the overall system of illuminated drives and paths providing circulation through the landscape has been maintained. Documentation of the lighting system is also located in the historic listing (Exhibit A.10 - APP J, pages 7-8, 44, 78, 86, 88). The existing light poles and

fixtures are compared in photographs in Exhibit A.10 - APP G and details of the proposed replacements are shown in the specification sheets in Exhibit C.5-7.

This criterion is met.

5. Historic materials. Historic materials will be protected. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials will not be used.

Findings:
Poles will be ground-mounted, and the installation will not affect historic materials. Under normal circumstances, a direct buried concrete pole can be set directly into an augered hole that minimizes the amount of ground disturbance or impacts to surrounding soils or any historic concrete. Depending on the strength of the soil, backfilling can be accomplished with aggregate, concrete, or the original soil. This technique does not require the use of sandblasting or chemicals and meets modern building code requirements for structural safety.

This criterion is met.

6. Archaeological resources. Significant archaeological resources affected by a proposal will be protected and preserved to the extent practical. When such resources are disturbed, mitigation measures will be undertaken.

Findings:
There are no known archaeological resources on site. Development, including significant ground disturbance and excavation on the site has been documented since 1894. Given the project will install replacement light poles in previously developed locations using modern techniques that limit ground disturbance, it is very unlikely any materials of archaeological interest will be encountered. Regardless, should any archaeological discoveries occur, work will be stopped in the affected area and the Bureau will notify the State Historic Preservation Office (SHPO). Prior to submitting this application, the Parks Bureau contacted the SHPO but has not heard back from them regarding any state requirements, concerns, or suggestions about this project.

This criterion is met.

7. Differentiate new from old. New additions, exterior alterations, or related new construction will not destroy historic materials that characterize a landmark or contributing resource. New work may be differentiated from the old if the differentiation does not diminish the character, features, materials, form, or integrity of the landmark or contributing resource and, if in a Historic District, the district as a whole.
8. Architectural compatibility. New additions, exterior alterations, or new construction will be compatible with the massing, size, scale, and architectural features of the landmark or contributing resource and, if in a district, the district as a whole. When retrofitting to improve accessibility for persons with disabilities or accommodate seismic improvements, design solutions will not compromise the architectural integrity of the landmark or contributing resource.

Findings for 7 and 8:
The integrity of the park's landscape (the contributing resource) will not be affected by the replacement poles, as they will maintain the existing spatial pattern of the lighting system adjacent to the circulation system. As previously

noted, poles will match those in existence today and at the time of the historical listing. Any new conduit needed will be concealed.

Many of the current components of the light system are almost a hundred years old. By replacing the poles now, the structural integrity of the lighting system is assured for a long time to come. No other changes to the landscape or to any of the contributing architectural structures or buildings are proposed.

These criteria are met.

9. Preserve the form and integrity of historic resources. New additions, exterior alterations, or new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the landmark or contributing resource and, if in a district, the district as a whole would be unimpaired.

Findings:
The lighted circulation system is an integral component of the landscape in the Mt. Tabor Park Historic District, as the illumination provided alongside the historic drives and formal pathways enhances access to the park's various experiences. However, individual pole replacement has occurred repeatedly over time without affecting the integrity of the overall system of lighting or circulation. Therefore, it is reasonable to conclude that if an individual pole needs to be removed in the future, as long as it was replaced in the same vicinity and with similar materials and design, neither the system of illumination or circulation would be affected, and the character of the landscape would remain unimpaired.

This criterion is met.

10. Hierarchy of compatibility. New additions, exterior alterations, or new construction will be designed to be compatible primarily with the landmark or contributing resource and, if located within a district, secondarily with contributing resources within 200 feet and, finally, with the rest of the district. Where practical, compatibility in districts will be pursued on all three levels.

Findings:
The lighting system will maintain its function and role of illuminating the park's circulation system. Replacement poles will maintain the look and design of the current poles within the illumination system. There is a compelling relationship between the lighting system and the circulation system. Areas in the vicinity of the existing lighting system that are part of the circulation system will not be affected by the replacement, as the overall lighting system will remain intact and individual replacement poles are of compatible materials and design to existing ones. Most importantly, the illuminated nature of the circulation system will be maintained.

No changes are proposed to the location or pattern of the circulation system within the park. The replacement of individual poles will not affect the contributing architectural resources. No changes are proposed to alter other aspects of the landscape, such as the terrain or vegetation.

The overall spatial pattern of the light poles illuminating the circulation pattern will be retained. Only minor refinements to pole locations are anticipated. Two poles near Reservoir 5 may conflict with water lines, as shown in the

disturbance area site plans (Exhibit C.31-36), however, no changes are proposed that would affect the contributing resources within the Mt. Tabor Park Reservoir Historic District.

Based on the above, the planned pole replacements will be compatible with the circulation system, the landscape as a whole, other contributing resources, and both of the historic districts at the site.

This criterion is met.

DEVELOPMENT STANDARDS AND ADDITIONAL PROCESS

Unless specifically required in the approval criteria listed above, this proposal does not have to meet the development standards in order to be approved during this review process. The plans submitted for a building or zoning permit must demonstrate that all development standards of Title 33 can be met or have received an Adjustment or Modification via a land use review prior to the approval of a building or zoning permit.

Of the 88 existing light poles to be replaced, 4 are located in the SE Taylor Street right of way (ROW), Poles in the ROW will be addressed through the Portland Bureau of Transportation (PBOT) permit process for existing utility structures (encroachment permit review).

CONCLUSIONS

The purpose of the Historic Resource Review process is to ensure that additions, new construction, and exterior alterations to historic resources do not compromise their ability to convey historic significance.

This project will replace 88 light poles and fixtures adjacent to the park's circulation system. Approximately 60 of the poles may date from the park district's historic period of significance, and none of the fixtures do. Options to retain, rehabilitate, and reuse the existing light poles were explored. However, there was not an acceptable way for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity.

The materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. Efforts have been made to preserve the spatial pattern of the illumination system. Replacement of the poles and the fixtures will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park. By replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

This proposal meets the applicable Historic Resource Review criteria and Demolition Review criteria and therefore warrants approval.

TENTATIVE STAFF RECOMMENDATION

(May be revised upon receipt of new information at any time to the Landmarks Commission decision)

Staff recommends approval of Historic Resource Review and Demolition Review for the replacement of 88 light poles and light fixtures in Mt Tabor Park. Of the 88 existing poles to be replaced:

- 84 are located within Mt. Tabor Park.
- 4 are located in the SE Taylor St. right-of-way (ROW).

The new concrete light poles will be hexagonal to match existing, and the new light fixtures will be acrylic/metal flight fixtures with decorative metal strapping. The proposed replacement poles and fixtures will be installed in approximately the same location as the current poles.

Staff recommends approval per the following conditions of approval:

A. As part of the building permit application submittal, the following development-related conditions (B through C) must be noted on each of the 4 required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 23-088549 HR DM". All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."

B. At the time of building permit submittal, a signed Certificate of Compliance form (*Certificate of Compliance for Design and Historic Resource Review Approvals | Portland.gov*) must be submitted to ensure the permit plans comply with the Design/Historic Resource Review decision and approved exhibits.

C. No field changes allowed.

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Procedural Information. The application for this land use review was submitted on September 28, 2023, and was determined to be complete on December 7, 2023.

Zoning Code Section 33.700.080 states that Land Use Review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. Therefore, this application was reviewed against the Zoning Code in effect on September 28, 2023.

ORS 227.178 states the City must issue a final decision on Land Use Review applications within 120-days of the application being deemed complete. The 120-day review period may be waived or extended at the request of the applicant. In this case, the applicant waived the 120-day review period, as stated with Exhibit A.5. Unless further extended by the applicant, **the 120 days will expire on: December 6, 2024.**

Some of the information contained in this report was provided by the applicant. As required by Section 33.800.060 of the Portland Zoning Code, the burden of proof is on the applicant to show that the approval criteria are met. The Bureau of Development Services has independently reviewed the information submitted by the applicant and has included this information only where the Bureau of Development Services has determined the information satisfactorily demonstrates compliance with the applicable approval criteria. This report is the recommendation of the Bureau of Development Services with input from other City and public agencies.

This report is not a decision. The review body for this proposal is the Landmarks Commission who will make the decision on this case. This report is a

recommendation to the Landmarks Commission by the Bureau of Development Services. The review body may adopt, modify, or reject this recommendation. The Landmarks Commission will make a decision about this proposal at the hearing or will grant a continuance. Your comments to the Landmarks Commission can be mailed, c/o the Landmarks Commission, 1900 SW Fourth Ave., Suite 5000, Portland, OR 97201 or faxed to 503-823-5630.

You will receive mailed notice of the decision if you write a letter received before the hearing or testify at the hearing, or if you are the property owner or applicant. You may review the file on this case by appointment at our office at 1900 SW Fourth Ave., Suite 5000, Portland, OR 97201. Please call the file review line at 503-823-7617 to schedule an appointment.

Appeal of the decision. The decision of the Landmarks Commission may be appealed to City Council, who will hold a public hearing. If you or anyone else appeals the decision of the Landmarks Commission, City Council will hold an evidentiary hearing, one in which new evidence can be submitted to them. Upon submission of their application, the applicant for this land use review chose to waive the 120-day time frame in which the City must render a decision. This additional time allows for any appeal of this proposal to be held as an evidentiary hearing.

Who can appeal: You may appeal the decision only if you write a letter which is received before the close of the record for the hearing, if you testify at the hearing, or if you are the property owner/applicant. **Appeals must be filed within 14 days of the decision. An appeal fee of $5,000.00 will be charged.**

Additional information on how to file and the deadline for filing an appeal will be included with the decision. Assistance in filing the appeal and information on fee waivers are available from the Bureau of Development Services in the Development Services Center, 1900 SW Fourth Ave., First Floor. Neighborhood associations recognized by the Office of Neighborhood Involvement may qualify for a waiver of the appeal fee provided that the association has standing to appeal. The appeal must contain the signature of the Chairperson or other person authorized by the association, confirming the vote to appeal was done in accordance with the organization's bylaws.

Neighborhood associations, who wish to qualify for a fee waiver, must complete the Type III Appeal Fee Waiver Request for Organizations Form and submit it prior to the appeal deadline. The Type III Appeal Fee Waiver Request for Organizations Form contains instructions on how to apply for a fee waiver, including the required vote to appeal.

Recording the final decision.
If this land use review is approved the final decision will be recorded with the County Recorder. *Unless appealed,* the final decision will be recorded by the Bureau of Development Services.

Expiration of this approval. An approval expires three years from the date the final decision is rendered unless a building permit has been issued, or the approved activity has begun.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

Zone Change and Comprehensive Plan Map Amendment approvals do not expire.

Applying for your permits. A building permit, occupancy permit, or development permit must be obtained before carrying out this project. At the time they apply for a permit, permittees must demonstrate compliance with:

- All conditions imposed here.
- All applicable development standards, unless specifically exempted as part of this land use review.
- All requirements of the building code.
- All provisions of the Municipal Code of the City of Portland, and all other applicable ordinances, provisions, and regulations of the city.

The Bureau of Development Services is committed to providing equal access to information and hearings. Please notify us no less than five business days prior to the event if you need special accommodations. Call 503-823-7300 (TTY 503-823-6868).

Grace Jeffreys
January 12, 2024

EXHIBITS – NOT ATTACHED UNLESS INDICATED

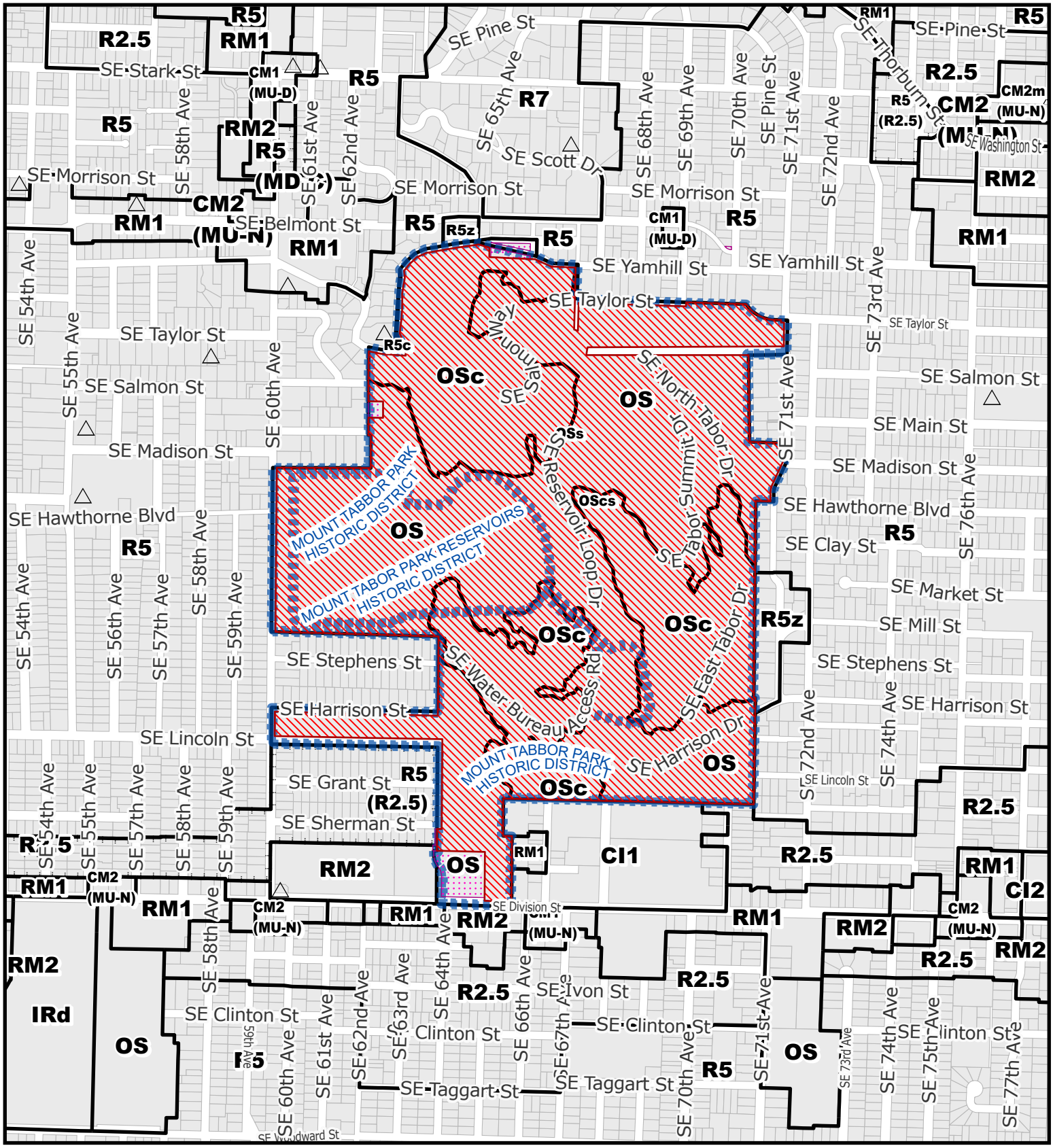
A. Applicant's Submittals
   1. Narrative, 9-28-2023
   2. Appendix, 9-28-2023.
   3. Plans, 9-28-2023
   4. Pre -App Summary, 9-28-2023
   5. 120-day waiver, 10-12-2023
   6. Incomplete Response, 12-7-2023
   7. Revised narrative, 12-7-2023
   8. New Site Plans, 12-7-2023
   9. New Construction Plans, 12-7-2023
   10. Revised Appendix, 12-7-2023
   11. Revised Plans, 12-7-2023
B. Zoning Map (attached)
C. Plan & Drawings
   1. Contents
   2. Vicinity Plan
   3. Historic District plan
   4. Site Plan **(attached)**
   5. Light Fitting drawings **(attached)**
   6. Light pole drawings
   7. Light pole drawings **(attached)**
   8. Light pole details
   9. - 20. Illumination studies
   21. - 24. Permitted Landscape Plans
   25. - 30. Tree plans
   31. - 36. Disturbance Area Plans
D. Notification information:
   1. Request for response
   2. Posting letter sent to applicant.
   3. Notice to be posted.
   4. Applicant's statement certifying posting.
   5. Mailed notice.
   6. Mailing list

E. Agency Responses:
   1. Bureau of Transportation Engineering and Development Review
   2. Bureau of Parks, Forestry Division
   3. Life Safety Review Section of BDS

F. Letters
   1. Jesse Powell, 1-2-2024, wrote in opposition of removing historic lighting posts.
   2. David Kaplan, 1-4-2024, wrote in support of the replacement design because it closely resembles the original posts and lanterns.
   3. Linda Raveaux, 1-10-24, wrote in support of low light that is aimed downward to maintain the award winning "quiet" aspect of the park. Also supported maintaining existing historic appearance of the posts and fixtures.

G. Other
   1. Original LUR Application
   2. Incomplete letter 10-19-23
      a. RFR response - Bureau of Environmental Services
      b. RFR response - Bureau of Transportation Engineering and Development
   3. Summary from Briefing on Lighting in Historic Parks 3-13-23
   4. Matrix of Guidelines

H.



For Zoning Code in Effect Post October 1, 2022

ZONING

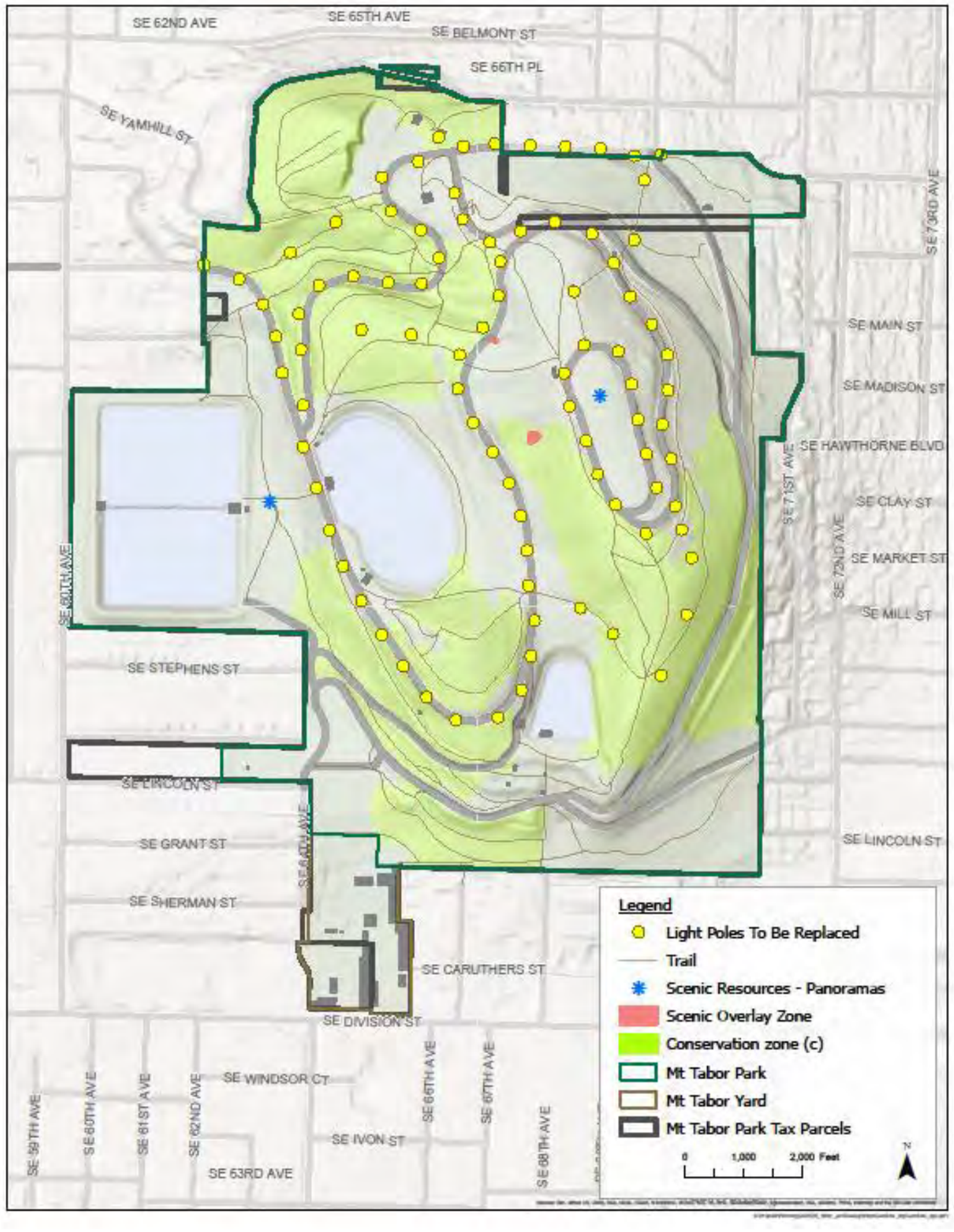
THIS SITE LIES WITHIN THE:
MOUNT TABOR PARK HISTORIC DIST

- Site
- Also Owned Parcels
- Historic District
- Historic Landmark

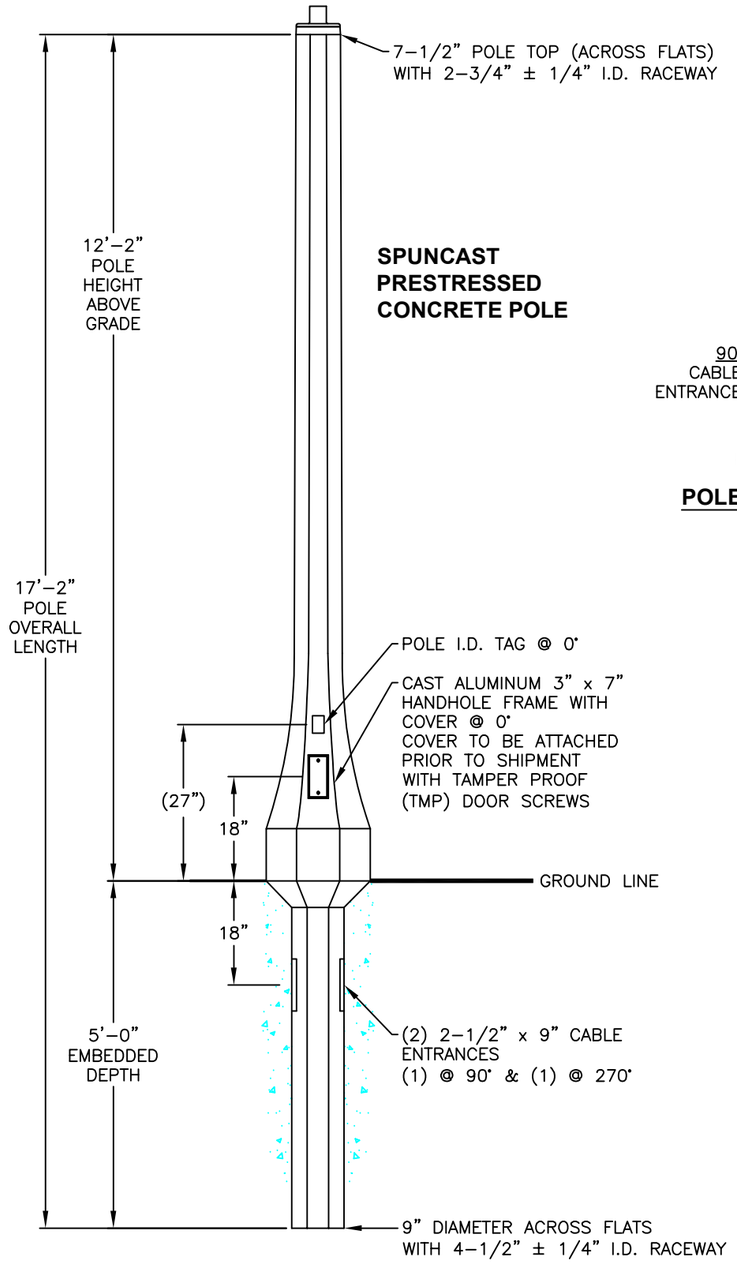
File No.	LU 23 - 088549 HR DM
1/4 Section	3136-37,3236-37
Scale	1 inch =800 feet
State ID	1S2E05 100
Exhibit	B Sep 28, 2023

LU 23-088549 HR DM, Exhibit H.1

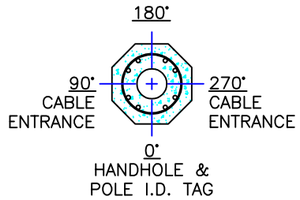
Light pole locations with Conservation and Scenic Overlays



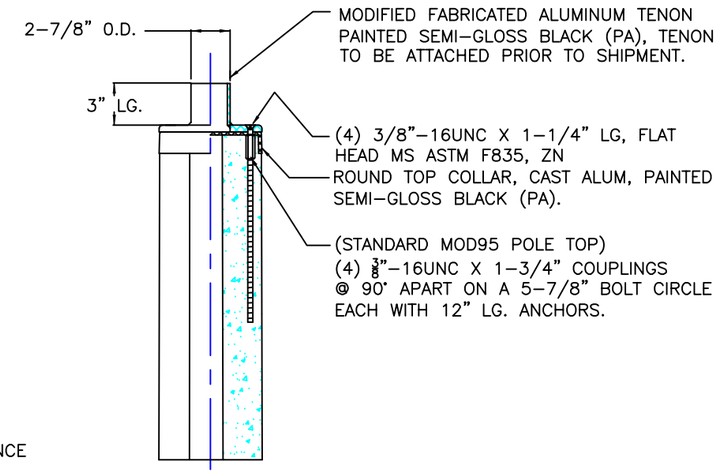
REV	DATE	DESCRIPTION	BY	APPR
B	4/23	SCREW WAS STANDARD. REMOVED GFI	D.O.	



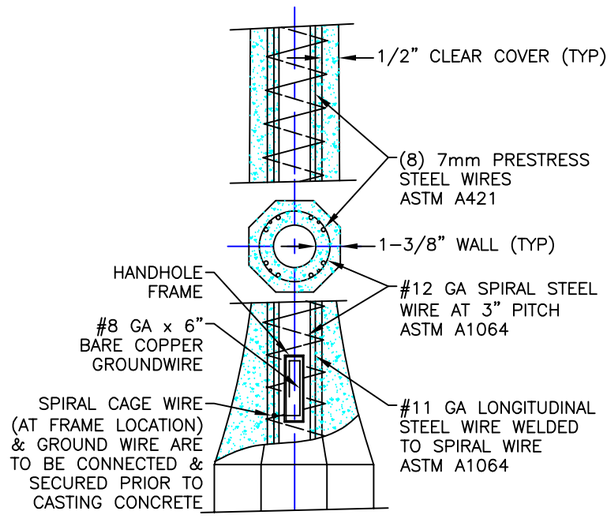
SPUNCAST PRESTRESSED CONCRETE POLE



POLE ORIENTATIONS



POLE TOP DETAIL



POLE SECTION

VICTORIAN III EMBEDDED FLUTED POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	EMBEDDED DEPTH	OVERALL POLE LENGTH	BUTT DIA	ULTIMATE GROUND LINE MOMENT (ft-lbs)	POLE WEIGHT (lbs)
VEO03.7	12'-2"	5'-0"	17'-2"	18"	22,500	1,050

"F" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
COATING	I	
HH COVER	66538E	
DOOR SCREWS	TMP	
MISC. MOD	MODFE	NOTE 7

"P" LEVEL POLE CONFIG CODES		
OPTION CLASS	ENTRY	INFO
MIX	11E	EVT MATCH
FINISH	3	
COLLAR	65850EPA	ROUND
POLE TOP CONFIG.	MOD95	
STRUCT. MOD	MODDCI	NOTE 8

QTY	SHIPPING ASSEMBLY 2304-010 BILL OF MATERIAL
1	VEO03.7*11E3I-3
1	40195EM3PAA - MODIFIED FABRICATED ALUMINUM TENON ASSEMBLY, 2-7/8" O.D. x 3" LG (PA)

NOTES:
1. MIX (11E3I): GRAY NATURAL (EVT MATCH), EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.
2. ASTM C-595 TYPE 1L GRAY CEMENT.
3. f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-19 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. MODFE: POLE BOTTOM PREPARATION FOR FREEZING OR CORROSIVE COASTAL ENVIRONMENT; SEE DOCUMENTATION.
8. MODDCI: CORROSION INHIBITOR MIX MODIFICATION.
9. POLE FULLY PRESTRESSED WITH (8) 7mm ASTM A421 STEEL WIRES.
10. THE POLE (& IMPLIED TENON TOP ASSEMBLY) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE POST TOP LUMINAIRE (NOT TO EXCEED 1.5 SQ FT EPA & 47 LBS) AS DESIGNED PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. NO TORSIONAL (ARM OR TWIST) LUMINAIRE LOADS ANALYZED. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.

MATERIAL LIST

QTY	PART NUMBER	DESCRIPTION	ORG	NOTES
1	2304-010	SHIPPING ASSEMBLY	ANN	
1	45126E	TAMPER PROOF WRENCH	ANN	1 FOR EVERY 5 POLES

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

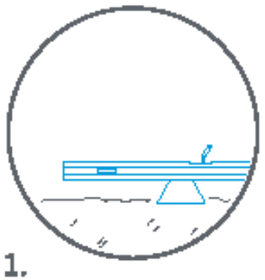
PORTLAND PARKS
PORTLAND, OR
VEO03.7 POLE WITH TENON ASSEMBLY

DRAWN: BEU	DATE: 4/6/23	APPR:	DATE:

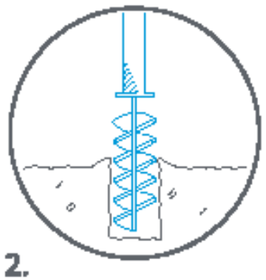
DRAWING NUMBER	REVISION	SHEET	SCALE
2304-010	B	1 OF 1	NTS

COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

Installation Steps for a Direct Embedded Ameron™ Concrete Pole

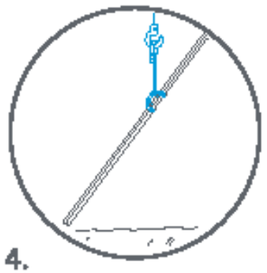


1.
Position pole for pre-wiring. Protect pole as described in handling and storage guide. Wire and install luminaire.

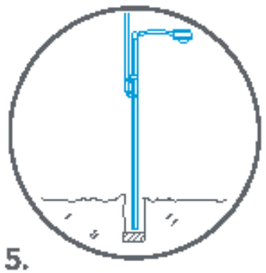


2.
Excavate hole to proper depth (plus 6-in. if special backfill is required).

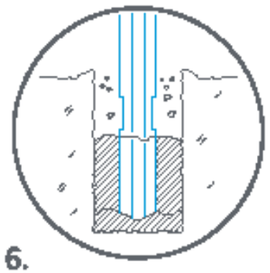
3.
Use proper backfill. See recommended backfill requirements below. Tamp a 6-in. base to ensure correct setting depth and drainage (if required).



4.
Use only synthetic straps. Single pick point is preferred method of handling. Use double clove hitch to avoid slippage.



5.
Set pole. Align/plumb. Maintain tension on the pole until compacted to bottom of cable entrance.



6.
Compact required backfill in two operations. Tamp 9-in. intervals to bottom of cable entrance. Install underground cable. Check alignment. Finish compaction to a height of 2-in. above grade sloping away from pole to allow proper drainage.

Recommended backfill requirements*

Good soil

Compact well-graded sand and gravel, hard clay, or well-graded fine and coarse sand (all drained so that water will not stand).

Use as is for backfill.

Medium soil

Compact fine sand, medium and clay, compact sandy loam, loose coarse sand and gravel (all drained so that water will not stand).

Requires select backfill—clean, washed sand or ¾-in. minus well-graded gravel.

Poor soil

Soft clay, clay loam, poorly compacted sand, or clays containing large amounts of silt. Water may stand during wet season.

Use compacted earth backfill—mix one part dry cement powder to 15 parts clean, washed sand.

*Based on location review by a qualified civil engineer.

Ameron Concrete Pole Handling Instructions

Ameron™ poles are made of pre-stressed concrete, a tough, elastic, durable material not limited by the properties of low strength, conventionally reinforced concrete. Like many other fabricated structures, Ameron poles are designed to withstand specific service loads and handling loads—with safety factors considered. Loads induced through handling are perhaps the ones most easily overlooked, even though only a few simple rules need be remembered. Attention to the following will minimize damage from handling and storage.

Storage

(See Figs. 1 through 3)

1. Store on dunnage placed ⅙ of the total length from each end. Location of temporary support points may vary from this rule for both storage and handling. Dunnage is ideally made from 4×4 fir, pine, or a similar wood, which is finished enough to have opposite sides flat and parallel (no logs or branches). The dunnage should be in one piece for the full width of the stack and be of sufficient thickness as to allow the placing of slings or the insertion of forklift fingers between the layers of poles. Weathered lumber is better than newly cut because the latter may stain the concrete when moisture is present.

2. Store on a level surface. If surface is not paved, be certain the ground is solid enough so that the dunnage does not sink into it.

3. When poles are stored in more than one layer, each piece of dunnage must be placed one above the other, so that the weight of the poles above is transmitted directly downward through the dunnage and does not induce bending stresses in the poles.

4. Distribution poles should be stacked no higher than nine layers and smaller poles no higher than 12 layers.

5. Each succeeding layer of poles should be placed with the tips in the opposite direction of the layer below.

6. Poles should be aligned so that the tips in each layer form a straight line normal to the center line of the poles.

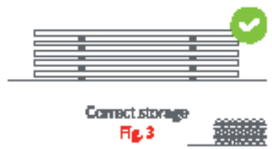
7. Place wedges on the dunnage next to the poles to prevent their rolling.

8. Do not step on the cantilevered tips of small poles in storage.

9. Handle poles with reasonable care so as to avoid dropping or otherwise striking them against each other or other hard, solid objects.

Incorrect storage
Fig. 1

Incorrect storage
Fig. 2



Correct storage
Fig. 3

Handling

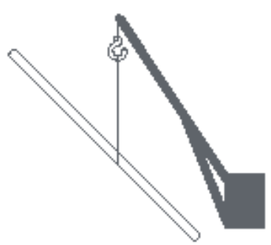
(See Fig. 4)

1. In lifting the pole from a single pick-up point, use either a choker sling or a loop sling with one complete extra turn around the pole just above the balance point.

2. When lifting the pole using two pick-up points from a single hook, a choker-type attachment should be used on the pole.

3. Poles with a polished or textured surface should be handled with a nylon or other non-metallic sling. For these poles, fingers of a forklift should be fitted with protective covers.

4. When using a forklift to handle poles, always use softeners on the fork tines. Also, always use wedges to prevent poles from rolling.



Handling by crane
Fig. 4

City of Portland
Historic Landmarks Commission

Type III Land Use Review

MEMORANDUM

Date: **January 12, 2024**

To: **Historic Landmarks Commission**

From: **Grace Jeffreys, Design / Historic Review Team**

503-865-6521 | grace.jeffreys@portlandoregon.gov

Re: **LU 23-088549 HR DM – Replacement of Mt Tabor Light Poles and Fixtures**
Type III Design Review– January 22, 2024

Attached is a drawing set for the Type III Historic Resource review scheduled on January 22, 2024. Please contact me with any questions or concerns.

I. PROGRAM OVERVIEW

Type III Historic Resource Review and Demolition Review for the replacement of 88 light poles and fixtures: 84 within Mt Tabor Park and 4 within the SE Taylor Street right-of-way, that are part of an existing and historic illuminated circulation system. Replacement poles and fixtures will be installed in approximately the same location as the current ones.

II. DEVELOPMENT TEAM BIO

Applicant	Brett Horner, Portland Parks & Recreation
Owner	City of Portland
Project Valuation	**$** 704,000

III. DEMOLITION REVIEW – One of the four criteria listed under 33.846.080.C, See attached matrix.

IV. HISTORIC REVIEW APPROVAL CRITERIA – 33.846.060.G, See attached matrix.

V. STAFF RECOMMENDATION

Staff found that the proposal meets the applicable Historic Resource Review criteria and Demolition Review criteria, therefore, the Staff Report recommends approval. From the SR conclusion:

This project will replace 88 light poles and fixtures adjacent to the park's circulation system. Approximately 60 of the poles may date from the park district's historic period of significance, and none of the fixtures do. Options to retain, rehabilitate, and reuse the existing light poles were explored. However, there was not an acceptable way for them to be anchored in a manner that would meet current building codes while also retaining enough of the pole's historic and design integrity.

The materials and design of replacement poles closely resembles existing ones and will preserve the historic character of the lighting system. Efforts have been made to preserve the spatial pattern of the illumination system. Replacement of the poles and the fixtures will ensure the system of illuminated pathways, staircases, and historic drives continues to provide comfort and safety as community members explore the historic landscape and cherished scenic views of Mt. Tabor Park.

By replacing the outdated light poles with structurally sound poles using current construction methods, this project will maintain and preserve a lighted circulation system within the Mt. Tabor Park landscape for many years to come.

VI. CONDITIONS OF APPROVAL

The standard three conditions of approval have been added.

VII. PROCEDURAL NOTES

- The subject proposal was heard before at a voluntary Briefing on Lighting in Historic Parks which included this work, held on March 13, 2023 (Commissioners present: Smith, Minor, Roman, Foty, Moretti). See the attached summary of Commission comments.
- The application was deemed complete on December 7, 2023.

Reference Materials: https://efiles.portlandoregon.gov/record/16493309

- Exhibits C.1-36: Drawing Set 12-7-23.
- Exhibit G.4: Guidelines Matrix
- Exhibit G.3: Summary Notes from the Briefing held on March 13, 2023
- Exhibit A.7: Applicant's Narrative

CITY OF PORTLAND, OREGON - BUREAU OF DEVELOPMENT SERVICES

1900 SW Fourth Avenue, Portland, Oregon 97201, www.portlandoregon.gov/bds

APPROVAL CRITERIA: **- DEMOLITION REVIEW - 33.846.080.C** **- HISTORIC RESOURCE REVIEW - 33.846.060.G**	**PROJECT NAME:** **Mt Tabor Light Poles**	**CASE NUMBER: LU 23-088549 HR DM**
DATE: 1-12-24	**PROJECT APPLICANT: Brett Horner, PP&R**	**PROJECT VALUE $ 704,000**

DEMOLITION REVIEW - 33.846.080.C

Choose one of four	**STAFF**		**COMMISSION**	
	+ / -	*Comments*	**+ / -**	*Comments*
1. Demolition of the resource has been evaluated against and, on balance, demolition has been found to be equally or more supportive of the relevant goals and policies of the Comprehensive Plan, and any relevant area plans, than preservation, rehabilitation, or reuse of the resource.				
2. The proposal is to demolish a contributing resource in a Conservation District or National Register District, and demolition of the resource will be mitigated to enhance, preserve, or restore the archaeological, architectural, cultural, or historic significance or integrity of the district. The mitigation must be responsive to the significance and integrity of the resource proposed for demolition.				
3. The proposal is to demolish a contributing resource in a single-dwelling zone in a National Register District, and demolition of the resource will facilitate the creation of more deeply affordable dwelling units than could practicably result from preservation, rehabilitation, or reuse of the resource. In this case, deeply affordable means permanently affordable to those earning no more than 60 percent of the area median family income.				
4. The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.	**+**			

HISTORIC RESOURCE REVIEW - 33.846.060.G

MACRO	**STAFF**		**COMMISSION**	
	+ / -	*Comments*	**+ / -**	*Comments*
1. Historic character. The historic character of the landmark or contributing resource will be retained and preserved. Removal of historic materials or alteration of features and spaces that contribute to the landmark or contributing resource will be avoided.	**+**			
8. Architecural compatibility. New additions, exterior alterations, or new construction will be compatible with the resource's massing, size, scale, and architectural features of the landmark or contributing resource and, if in a district, the district as a whole. When retrofitting to improve accessibility for persons with disabilities or accommdate seismic improvements, design solutions will not compromise the architectural integrity of the landmark or contributing resource.	**+**			

9. Preserve the form and integrity of historic resources. New additions, exterior alterations, or new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the landmark or contributing resource and, if in a district, the district as a whole would be unimpaired.	+			
10. Hierarchy of compatibility. New additions, exterior alterations, or new construction will be designed to be compatible primarily with the landmark or contributing resource and, if located within a district, secondarily with contributing resources located within 200 feet and, finally, with the rest of the district. Where practical, compatibility will be pursued on all three levels.	+			
MID	**STAFF**		**COMMISSION**	
	+ / -	*Comments*	**+ / -**	*Comments*
2. Record of its time. The landmark or contributing resource will remain a physical record of its time, place, and use. Changes that create a false sense of historic development, such as adding conjectural features or architectural elements from other buildings will be avoided.	+			
3. Historic changes. Most properties change over time. Those changes that have acquired historic significance will be preserved.	+			
4. Historic features. Generally, deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the historic feature in design, color, texture, and other visual qualities and, where practical, in materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence.	+			
7. Differentiate new from old. New additions, exterior alterations, or new construction will not destroy historic materials that characterize a landmark or contributing resource. New work may be differentiated from the old if the differentiation does not diminish the character, features, materials, form, or integrity of the landmark or contributing resource and, if in a Historic District, the distrcit as a whole.	+			
MICRO	**STAFF**		**COMMISSION**	
	+ / -	*Comments*	**+ / -**	*Comments*
5. Historic materials. Historic materials will be protected. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials will not be used.	+			
6. Archaeological resources. Significant archaeological resources affected by a proposal will be protected and preserved to the extent practical. When such resources are disturbed, mitigation measures will be undertaken.	+			

Existing

Proposed

City of Portland

Historic Landmarks Commission

Type III Land Use Review

LU 23-088549 HR DM

6325 SE Division

Replacement of Mt Tabor Light Poles & Fixtures

January 22, 2024

Staff Presentation

Context

Location
Zoning
Program Overview
Approval Criteria
Project History

Applicant Presentation

Staff Recommendation

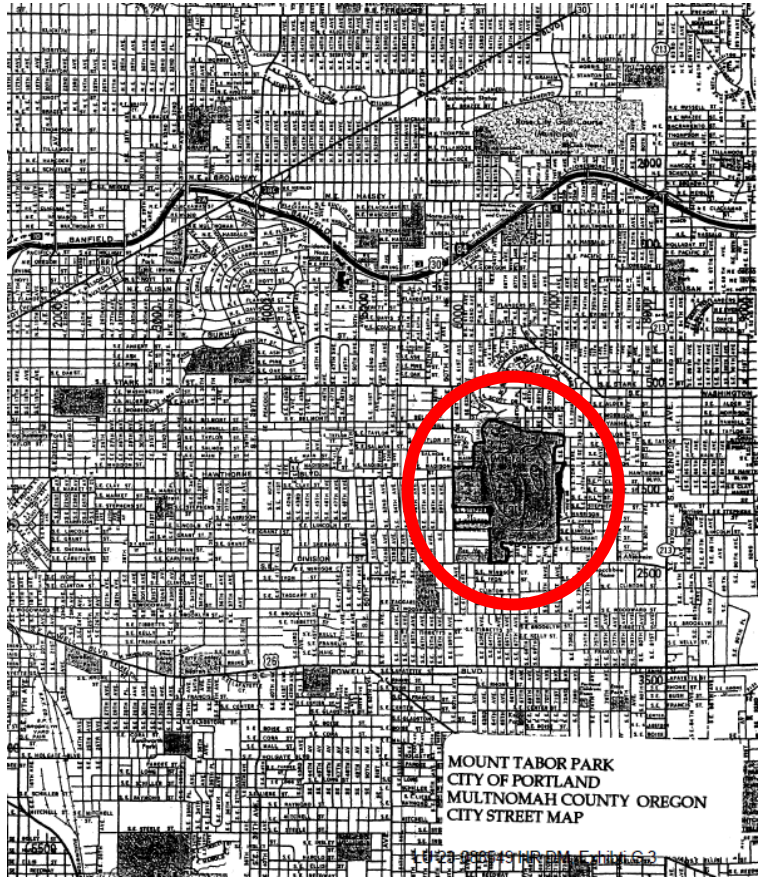
Conditions of Approval
Next Steps

Context

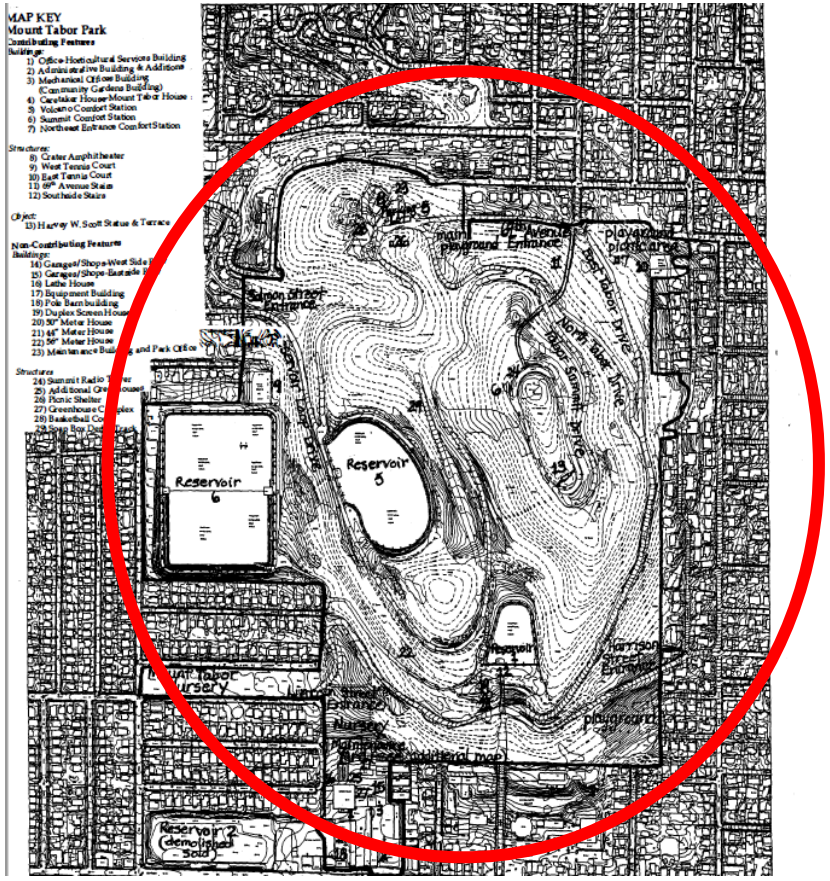
LU 23-088549 HR DM, Exhibt H.4

Location

Mt Tabor Park Historic District

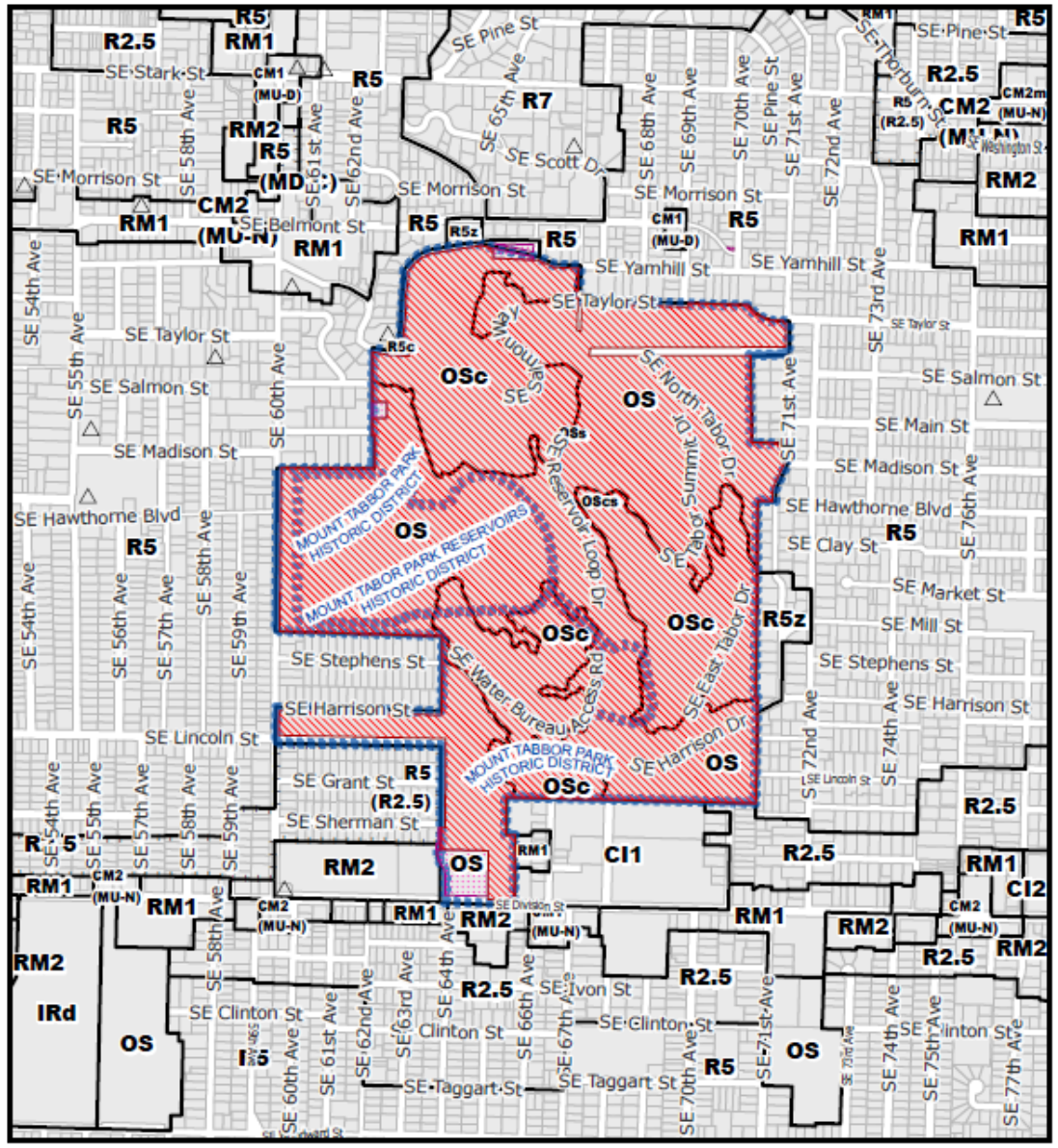


Vicinity Plan



Mt Tabor Park Historic District

LU 23-088549 HR DM, Exhibit H.4



Zoning Map

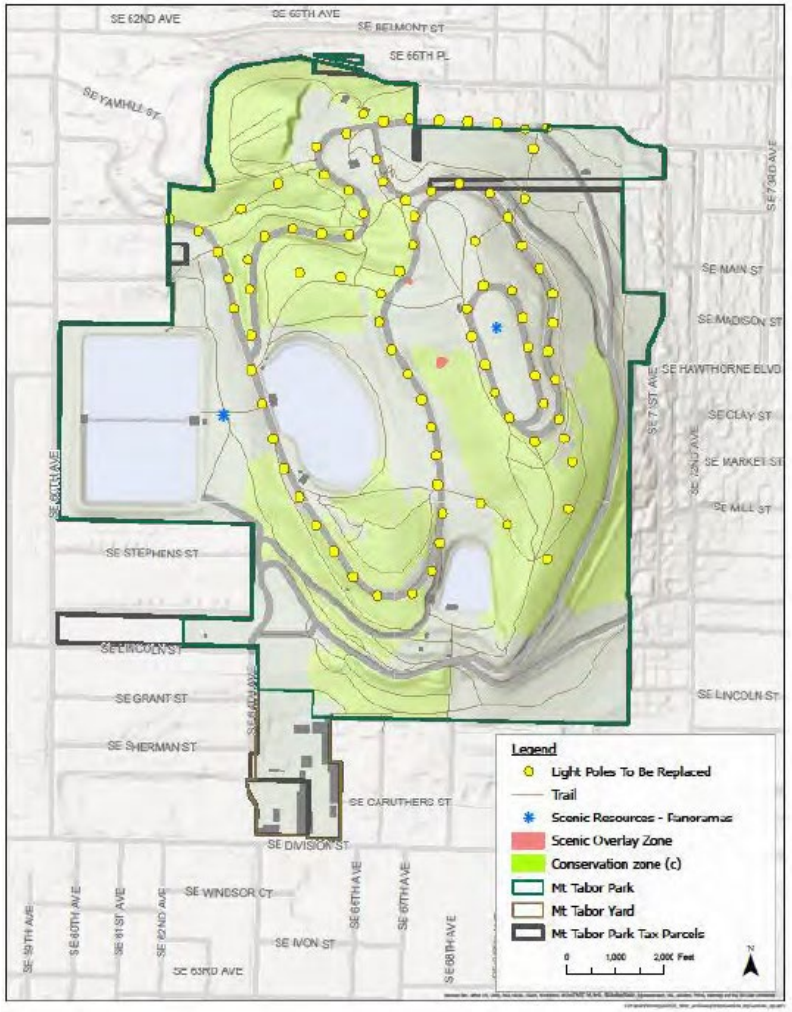
Zoning

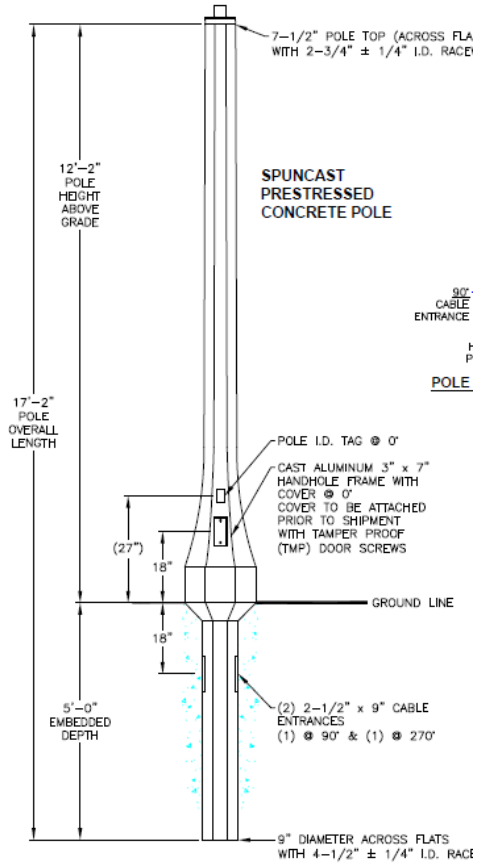
Base Zone:

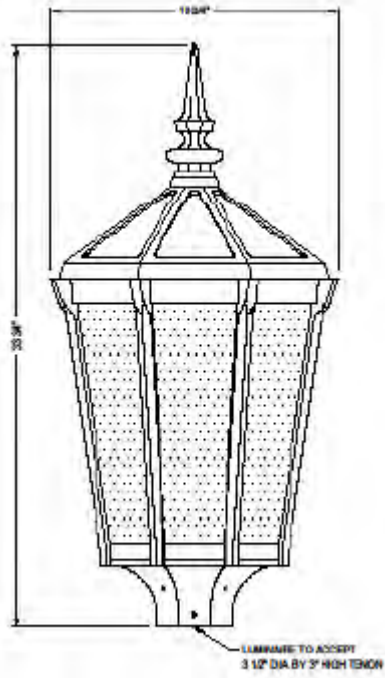
OS, Open Space

Overlays:

- Historic Resource Protection
- Environmental Protection (c)
- Scenic Resource (s)







Program Overview

Replacement of 88 light poles and fixtures:

- 84 within Mt. Tabor Park.
- 4 in the SE Taylor St. right-of-way (ROW).

Proposal

LU 23-088549 HR DM, Exhibt H.4

Existing

Proposed

Program Overview

<u>Replacement of 88 light poles and fixtures</u>:

- 84 within Mt. Tabor Park.
- 4 in the SE Taylor St. right-of-way (ROW).

LU 23-088549 HR DM, Exhibt H.4

Comparison

Existing

Proposed

LU 23-088549 HR DM, Exhibit A.10

Program Overview

Replacement of 88 light poles and fixtures:

- 84 within Mt. Tabor Park.
- 4 in the SE Taylor St. right-of-way (ROW).

LU 23-088549 HR DM, Exhibt H.4

Reviews & Approval Criteria

Demolition Review:

One of the four criteria listed under 33.846.080.C.

Historic Resource Review:

33.846.060.G. Other Approval Criteria.

From the Summary Memo:

- *Suggested that repair is preferable to replacement.*
- *Noted a desire to better understand the structural issues and expressed a desire to see the engineer's report.*
- *Noted that the issue seems to primarily be the anchoring system rather than the concrete poles and noted that this should be further explored so that repair could be further explored as an option.*
- *Expressed a desire for coherency within each park regarding each park's lighting scheme.*

Project History

Briefing held 3-13-23
Lighting in Historic Parks

Applicant Presentation

LU 23-088549 HR DM, Exhibt H.4

Staff Recommendations

LU 23-088549 HR DM, Exhibt H.4

Staff Report recommends approval.

Existing

Proposed

Conditions of Approval

Three standard conditions

LU 23-088549 HR DM, Exhibt H.4

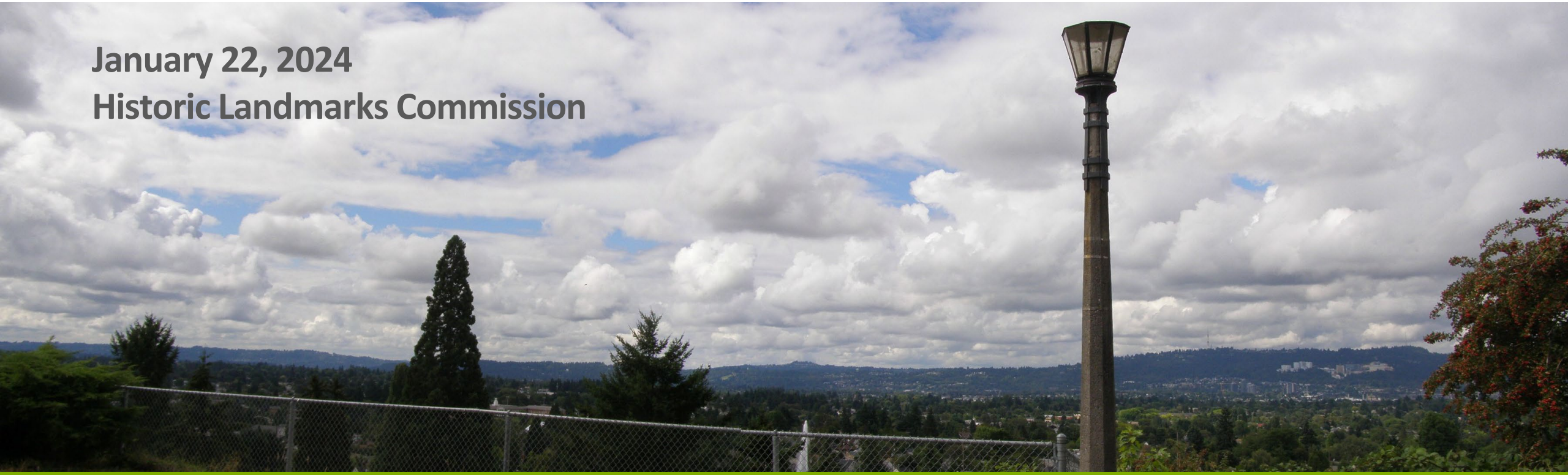
Questions

LU 23-088549 HR DM, Exhibt H.4

PORTLAND PARKS & RECREATION℠
Healthy Parks, Healthy Portland

Light Pole Safety Project: Mt Tabor Park

Type III Historic Resource Review



January 22, 2024
Historic Landmarks Commission

Application Overview

Project Site: Mt Tabor Park

Project Need: Why Are The Light Poles Being Removed?

Project Proposal: Mt Tabor Park Proposed Replacements

Approval Criteria Met

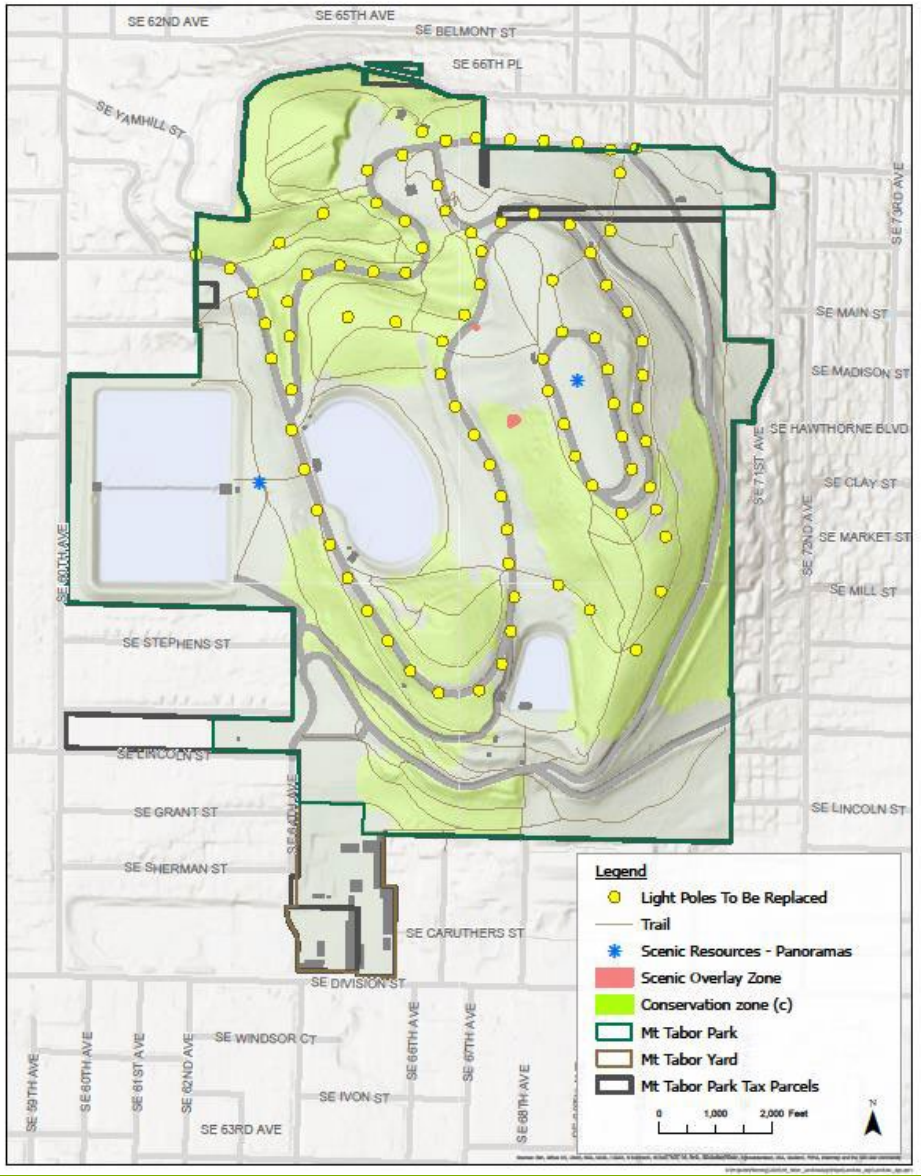


Mt. Tabor Park

- **176-acre park in SE Portland.**
- Has playground areas, tennis courts, picnic areas, trails, a dog off-leash area, a community garden, and a historic amphitheater.
- **Site History**
  - 1894 - Public water reservoir established
  - 1903 - Proposed for park use in Olmsted plan
  - 1909 - Park use established
  - 1911 - Park Plan of Development
  - 1924/1925 - first paved drives illuminated

Mt. Tabor Park's Illuminated Circulation System

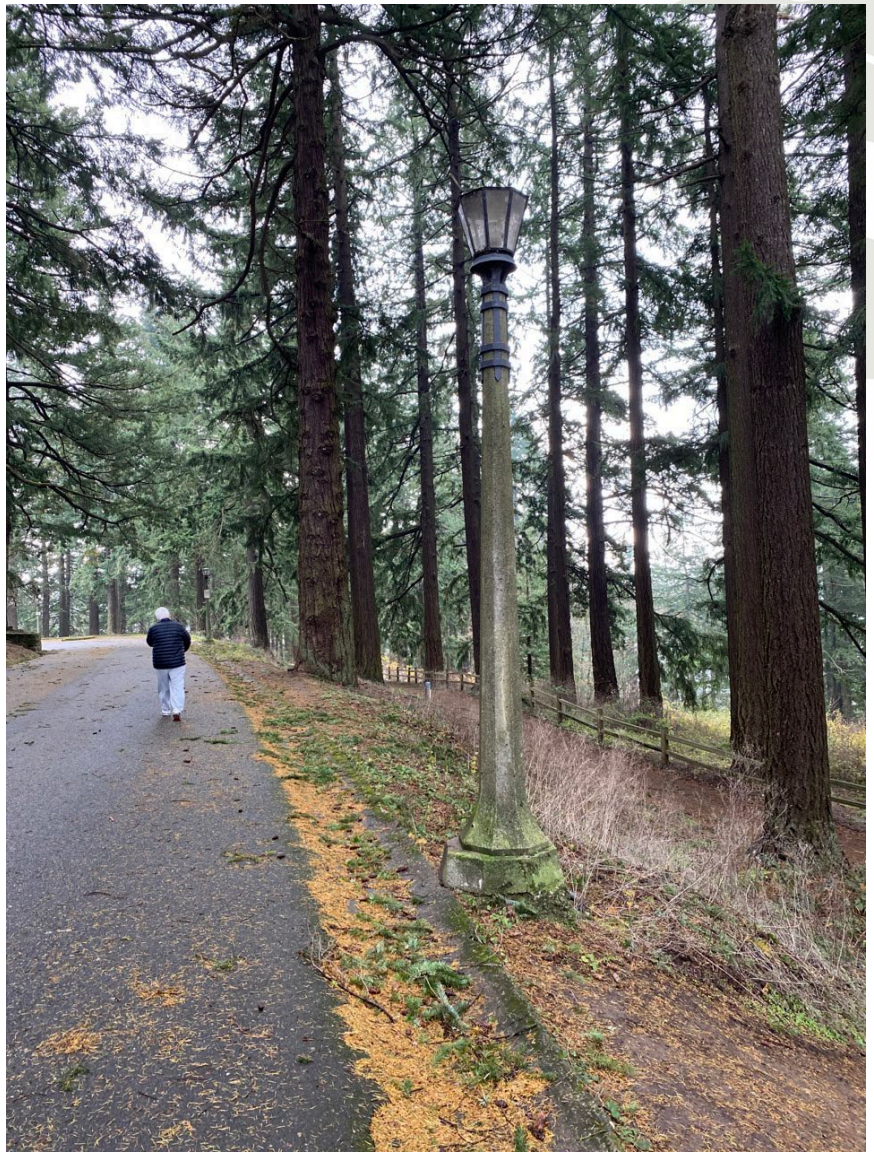
- Paved drives, stairways, and some trails.
- Historic listing - 88 poles in the system.
- 84 are located within park boundaries, 4 on SE Taylor St.



LU 23-088549 HR DM, Exhibit H.5

The Illuminated Circulation System in the Park's Design

- The paved drives
- Automobile access to the cinder cone volcano
- Lighting the paved drives ensured night access
- Nationwide trend for parks at the time



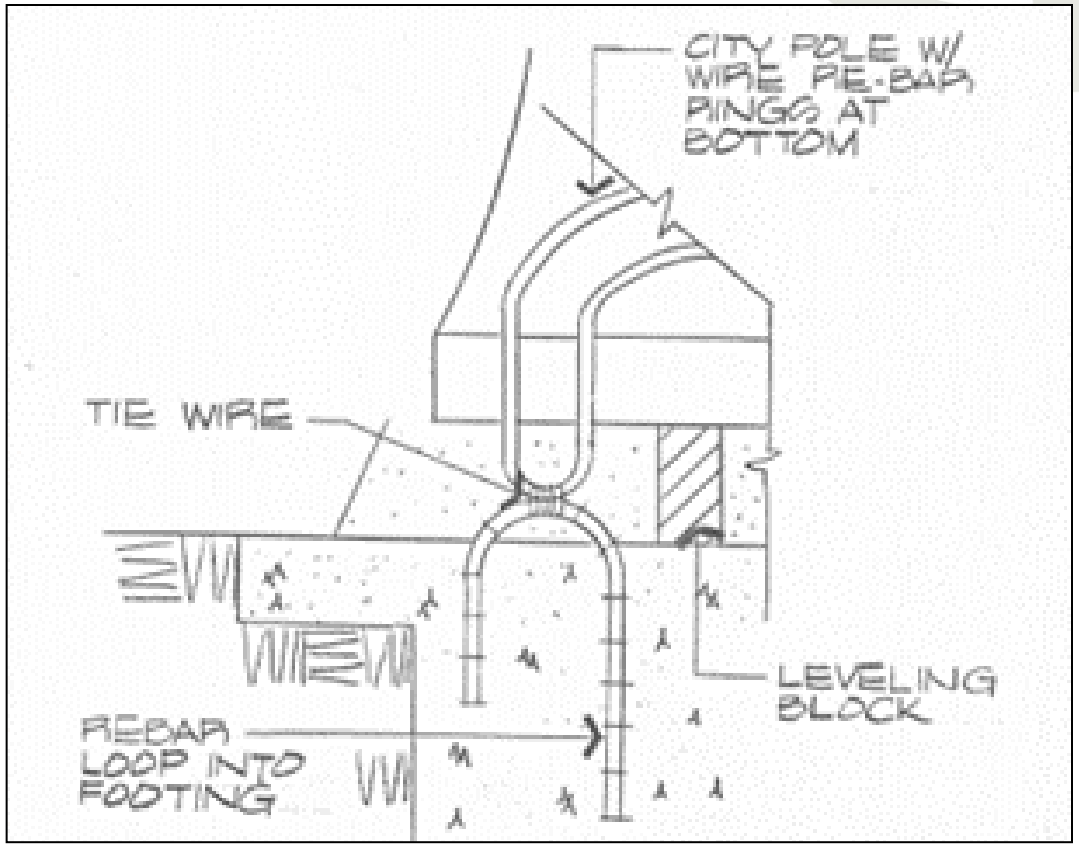
Project Need:
Why Are the Light Poles Being Removed?

- PP&R evaluated a specific type of light pole in the park system.
- A flawed anchoring system.
- >250 decorative concrete light poles.
- 12 Portland parks.
- Potential life and safety hazards.
- PP&R started to remove flawed light poles.
- Work paused until replacement poles and fixtures available.

Wire Anchor Connection

Tie wire used to connect poles to footings within the grout base via rebar

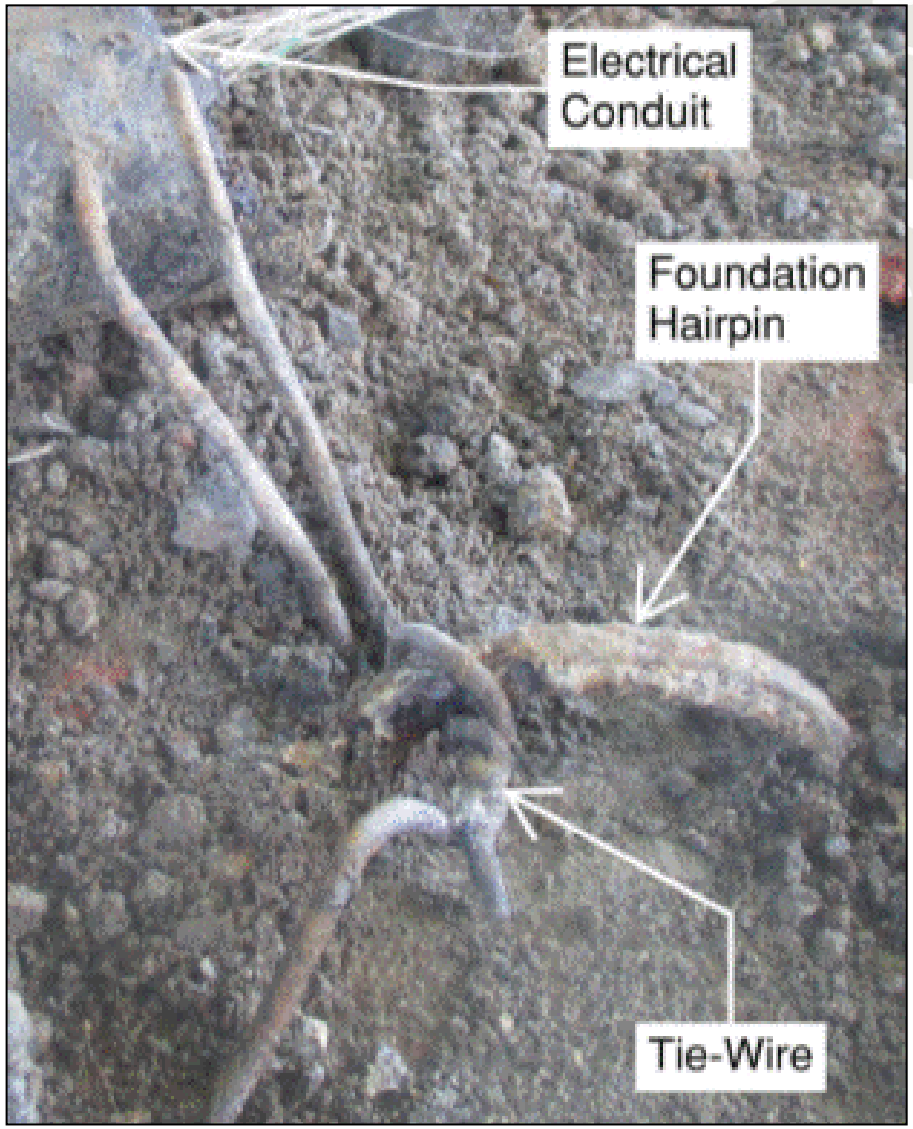
- Both poles and buried concrete footings contain reinforcing steel bars.
- Rebar bent into hairpin-shaped loops.
- Steel tie wire was wrapped around the rebar loops within the grout base.



Wire Anchor Connection

Tie wire used to connect poles to footings within the grout base via rebar

- Rebar had signs of oxidation
- Steel ties had oxidation, deterioration, and breakage.
- The grout bases have deteriorated or broken.



Safety Issues

The wire anchor does meet lateral loads currently required by code

- Steel wires have deteriorated.

Other code deficiencies found:

- Insufficient footing depth
- Insufficient reinforcing steel in footings and poles

Some poles in Mt Tabor Park are original, but many have been replaced in recent decades

Original 1920s era pole

Unknown install date, but most likely 1980s

Efflorescence, flaking, erosion, and cracking on base and bottom of poles

Utility Pole Life span

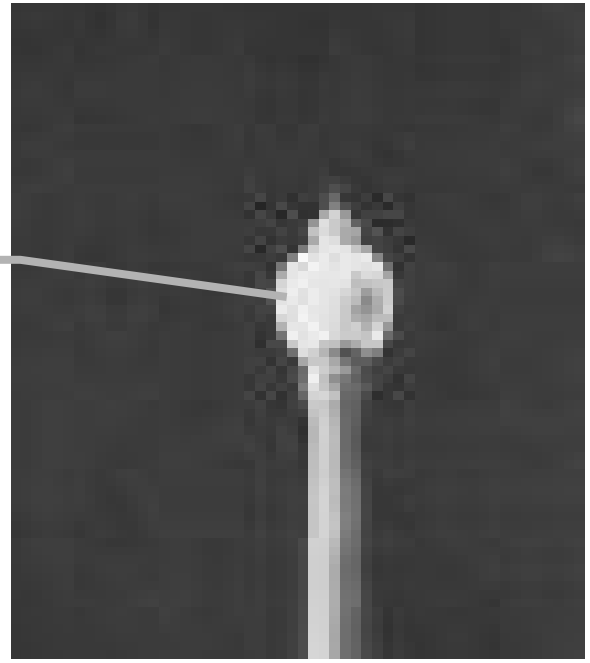
Buildings and structures have life spans, beyond which time, replacement is recommended.

- City policy for asset management identifies a 30-year life span for lighting.
- While concrete is considered a long-lasting construction material, it doesn't last forever.

Pole Material	Life span
Concrete	30 – 80 years
Steel	15 – 80 years
Wood	25 – 50 years
Fiberglass	15 – 20 years

Life span range based on figures from 4 light pole producers and one public utility industry article

None of the light fixtures being removed are original. The Mt Tabor Park historic designation notes this fact.



Original 1920s era light fixture

Existing lights from the 1950s and 1980s

Replacement Design Considerations

- Honor the Historic Importance and Look
- Durability, Ease of Care, and Maintenance Needs
- Cost Effective and Conserve Energy
- Bird-Friendly
- Minimize Spill (Dark Sky)
- Provide Adequate Light for Safety and Enjoyment
- Known Quantity

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Mt. Tabor Park Light Poles

- Original circulation system's lighting system (red).
- Other light poles (yellow) are specific to the Historic Reservoirs and are not affected by this project.
- Project will restore the historical system and install 88 poles.

LU 23-088549 HR DM, Exhibit H.5

Proposed Replacement Fixture and Metal Straps

A View Side By Side Light Fixtures

Existing

Proposed

Side-by-Side Comparison Light Poles with Fixtures

Existing

Proposed

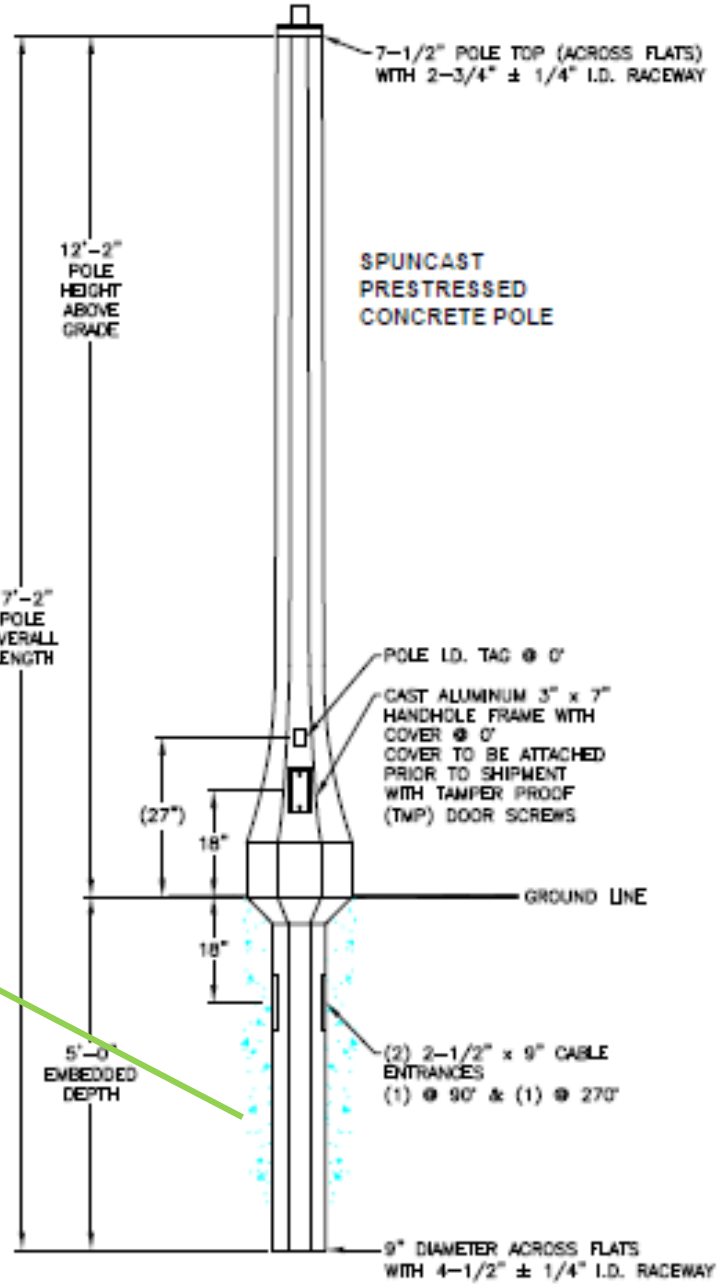
Proposed Replacement Pole

Octagonal Shape Just Like Existing Ones

Proposed Replacement Pole

Footing will ensure the poles are more stable.

Pole extends 5’ underground



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Approval Criteria to install replacement light poles

33.846.060 Historic Resource Review

G. Other historic approval criteria.

1. Historic character.

2. Record of its time

3. Historic changes

- Mt. Tabor Park development was designed with Olmsted Brothers Landscape Architects' influence
- Constructed during the dawn of the automobile age
- Paved drives guide visitors through scenic and pastoral areas to reach the summit
- Project proposes to restore the historic illuminated circulation system

Approval Criteria to install replacement light poles

33.846.060 Historic Resource Review

G. Other historic approval criteria.
4. Historic features

…Where the severity of deterioration requires replacement, the new features will match the historic in design, color, texture and other visual qualities and, where practical in materials.

- The replacement light poles will match the existing poles
  - Replacement poles are octagonal shape concrete, and with a matching color.
  - Replacement fixtures are metal framed, lantern-style, similar in shape and color to existing fixtures.
  - Metal strapping on replacement poles is similar in shape and color to original historic poles.

Approval Criteria to install replacement light poles

G. Other historic approval criteria.
5. Historic materials
6. Archaeological resources
7. Differentiate new from old
8. Architectural compatibility
9. Preserve the form and integrity
10. Hierarchy of compatibility

- Other historic resources on-site not affected by the replacement
- There are no known archaeological resources onsite
- No new park elements are proposed, therefore the existing architectural forms and hierarchy are not affected
- Replacement ensures that aging or structural deficient poles don't damage contributing architectural resources

Approval Criteria to remove accessory structures

33.846.080 C. 4.

The proposal is to demolish an accessory structure, and demolition of the resource will not significantly diminish the architectural, cultural, or historic significance or integrity of the associated landmark or district.

- The light poles are accessory structures
- Removal will not dimmish the historic values associated with the circulation system or the park district since the new poles match the old ones
- Restoring the existing historic illuminated circulation system ensures the historical integrity of the historic park district

Summary of Public Process

Public Meetings

- Historic Landmarks Commission, March 13, 2023
- Portland City Council, April 5, 2023
- Light Pole Safety Project neighborhood meetings, May 11 & 12, 2023
- Light Pole Safety Project community-wide meeting, May 17, 2023

Comments At Meetings

- No objections to look and design of replacement light poles and fixtures
- Interest in reuse or restoration was expressed.

Comments Submitted to BDS/HLC

- Interest in maintaining historic design features and support for replacement design
- Interest in keeping the existing lighting as is
- Interest in “low” light that is directed groundward

Reuse

We cannot reuse the poles or fixtures; however, local organizations have accepted donations, and every effort will be made to recycle what can be recycled, including the concrete.

Fixtures Accepted by:
Oregon Historical Society (2)
Oregon Architectural Heritage Center (4)
Habitat for Humanity ReStore (35)

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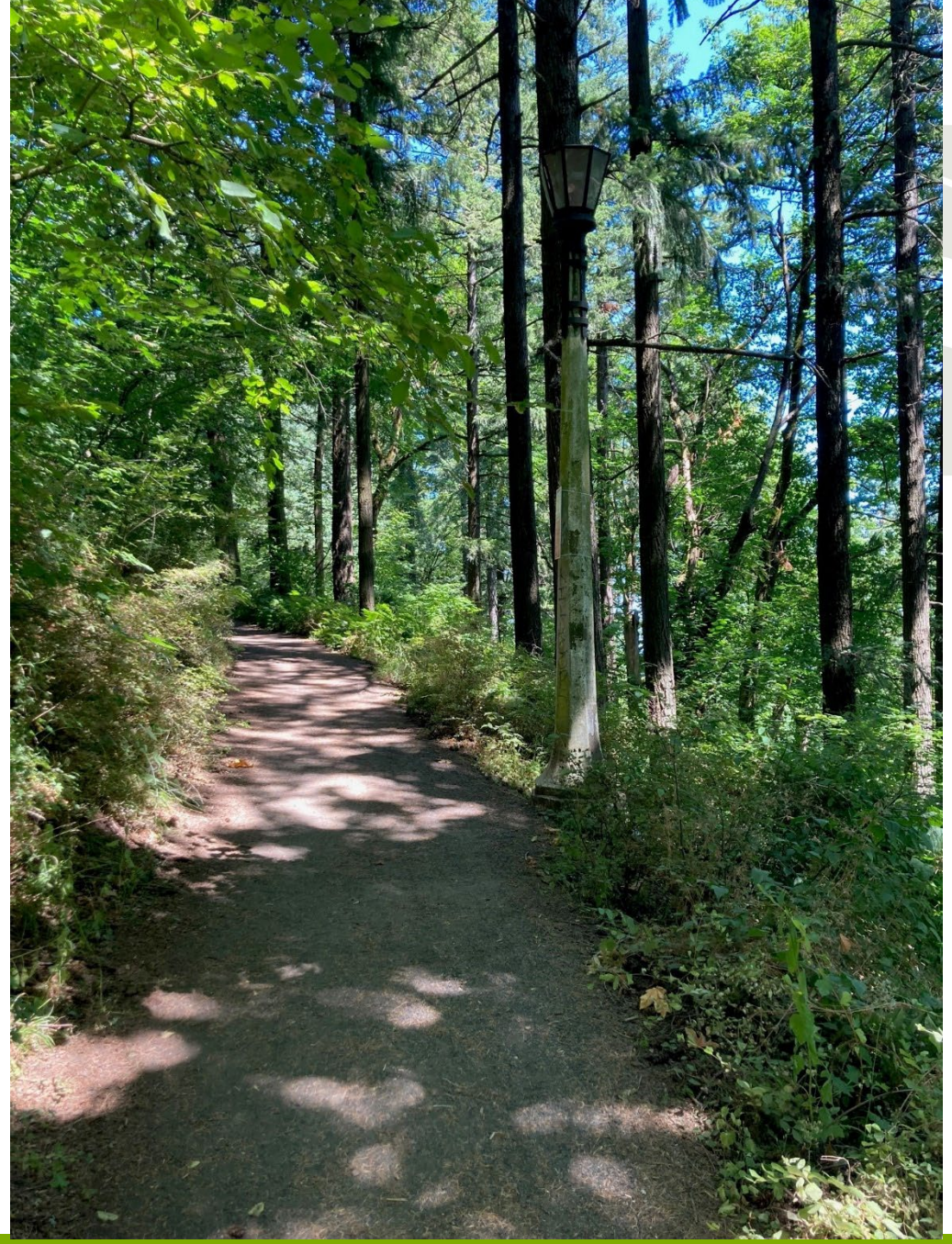
Questions and Discussion



Questions and Discussion

- Contact: Brett Horner (Brett.Horner@portlandoregon.gov)
- Resources for the public:
  - Check the Light Pole Safety Project Frequently Asked Questions available online for more information:
  - https://www.portland.gov/parks/construction/light-pole-safety-project

1-22-24 - LANDMARKS COMMISSION

LU 23-088549 HR DM – Mt Tabor Lights Replacement

ATTENDEES - TESTIFIERS IN RED *(subject to change)*

FIRST NAME	LAST NAME	EMAIL	WOULD YOU LIKE TO TESTIFY	ARE YOU FOR OR AGAINST	TESTIFIED
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Kate	Dolan	dolkathleen@gmail.com	NO	N/A	
marisha	childs	marisha.childs@portlandoregon.gov	NO	N/A	
Alexa	Croft	alexa.croft@portlandoregon.gov	NO	N/A	