

# PBOT

PORTLAND BUREAU OF TRANSPORTATION

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Chloe Eudaly Commissioner Chris Warner Interim Director

## EXHIBIT A

### CITY ENGINEER'S REPORT TO CITY COUNCIL *For a Below-Grade Encroachment Tunnel in SW Meade St*

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<b>Applicant:</b>	Oregon Health & Science University, Owner 3181 SW Sam Jackson Park Road Portland, OR 97239
<b>Date:</b>	January 18 <sup>th</sup> , 2019
<b>Site Address:</b>	2750 SW MOODY AVENUE
<b>Legal Description:</b>	TL 200 12.42 ACRES, SECTION 10 1S 1E
<b>Tax Account No.:</b>	R991100630
<b>State ID No.:</b>	1S1E10 00200
<b>Quarter Section:</b>	3229
<b>Neighborhood:</b>	South Portland NA., contact Jim Davis at 503-248-9820.
<b>District Coalition:</b>	Southwest Neighborhoods Inc., contact Leonard Gard at 503-823-4592.
<b>Plan District:</b>	Central City - South Waterfront
<b>Zoning:</b>	CXdg – Central Commercial with design and greenway overlay
<b>Case Type:</b>	Major Encroachment Review in the Public Right-of-Way
<b>Review Type:</b>	Below-grade encroachment for underground structure in the City-Wide District (1982 Bureau of Planning document, Encroachments in the Public Right-of-Way)

**Proposal:** The applicant requests encroachment approval for a new second underground 8'0" wide by 8'0" tall tunnel connecting the basement of the Collaborative Life Sciences Building (CLSB currently under construction) and the basement of a future medical research building for OHSU located on the north side of SW Meade St Right-of-Way (ROW). The tunnel will be used exclusively by research scientists. The structure would be owned, operated and maintained by the applicant.

#### Review of Encroachments in the Public Right-of-Way

All privately owned and maintained above-grade, at-grade and below-grade encroachments in the public right-of-way are subject to Encroachment Review.

The approval criteria for encroachments are the General Policies (Section III), City-Wide District Policies (Section VII) and Standards for Encroachment (Section VIII) of Chapter One of the 1982 Bureau of Planning document, Encroachments in the Public Right-of-Way.



The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.

**Scope of Encroachment Review:** This encroachment review will evaluate the following areas:

Tunnel access extending beyond the curb line and under SW Meade Street

**Encroachment Review Process:** The structure is a below-grade encroachment located in a portion of the City covered by City Wide Policies. The structure meets the definition of Other Underground Structures.

### **OHSU – Major Encroachment Permit Narrative**

The following is a point-by-point response to the sections of the City of Portland Encroachments in the Public Right-of-Way (adopted June 10, 1982) specifically related to the proposed project.

#### **City wide policy on encroachments in the public right-of-way**

### **SECTION I**

#### **Sub-section -2**

### **INTRODUCTION**

Downtown Portland: The area enclosed by the west bank of the Willamette River, the Broadway Bridge and Broadway Ramp, Hoyt Street, the Stadium Freeway, and Marquam Bridge, excluding Downtown Retail Core (as described in Item-1 of this section).

*The subject project is defined as the area between SW Porter Avenue on the south, SW Meade on the North, the OHSU Promenade on the West and SW Bond on the east. The requested below-grade encroachment falls in the sixty-two feet of SW Meade -from south ROW to north ROW line. The encroachment policies for Downtown Portland (section V) and the General Policies (section III) are then interpreted as the governing policies.*

*Below is a description of the purpose, use and intent of the encroachment:*

- 1. A secure tunnel below grade for future connection of the SCB8 building on the south side of SW Meade Street to the future tunnel under the OHSU Commons located on the north side of SW Meade Street right-of-way (ROW).*
- 2. The tunnel interior dimension will measure 10'-0" wide by 8'-0" tall per requirements of Section VIII-C-1.*
- 3. The tunnel will be used exclusively by OHSU Staff. It is not the intended for the public to use this tunnel at any time as a means of connection between the two future buildings*
- 4. It is planned by OHSU that the future building connections to the tunnel will have a highly secure, access-controlled portion of the building allowing only those few people with the proper credentials entry.*
- 5. The tunnel will be used to transport prepared research samples to and from OHSU research buildings.*
- 6. The tunnel connection will allow for an efficient use of OHSU resources by facilitating material distributions between buildings with similar programs.*

### **SECTION II-B**

### **DEFINITIONS**

#### **BELOW GRADE ENCROACHMENTS**

#### **Sub-section-1**

### **Underground Walkway**

Underground Walkway: Below-grade pedestrian walkway crossing the right-of-way (ROW) between buildings.



*The proposed encroachment does not meet the criteria for Underground Walkway. It is NOT intended for inter-building pedestrian traffic. (Does not meet definition of Underground Walkway)*

**Sub-section-2**

**Underground Mall**

Underground Mall: Below-grade structures within a ROW extending beyond the curb line designed to accommodate uses normally contained in or ancillary to a building, such as shops, offices, restaurants or plazas. Underground malls may serve pedestrian movements across a ROW.

*The proposed encroachment does not meet the criteria for Underground Mall. (Does not meet definition of Underground Mall)*

**Sub-section-3**

**Building Vaults**

Building Vault: Below-grade building extensions into the ROW no further than the curb line.

*The proposed encroachment is not considered a building vault. (Does not meet the definition of Building Vaults)*

**Sub-section-4**

**Underground Parking**

Underground Parking: Below grade parking and access structures.

*The proposed encroachment does not meet the criteria for Underground Parking. (Does not meet definition of Underground Parking)*

**Sub-section-5**

**Other Underground Structures**

Other Underground Structures: Below-grade structures within the ROW not in categories above. Such structures would normally be used for the movement of either vehicles or goods.

*The proposed encroachment does meet the criteria for Other Underground Structures. As stated above, the intent of the tunnel is for the exclusive use by OHSU staff between future OHSU research buildings. (Does meet definition of Other Underground Structures)*

**SECTION III**

**GENERAL POLICIES**

**Sub-section A-1**

The public ROW provides for the movement of pedestrian and vehicles, and for the open space, landscaping, light, air, and vistas. As an important public resource, the public ROW should not be easily given up for private ownership or use.

*The at-grade level of SW Meade shall not be impeded by this below-grade tunnel. The public realm will still satisfy and include those elements required by urban design goals as set forth by the City of Portland. Pedestrian traffic and materials distribution by OHSU staff through tunnel connecting the future research buildings is not to provide an exclusive path and circumvent active streets by a limited few people. It is to protect both the public and the research materials from exposure while being transported from one research laboratory to the next laboratory.*

## Sub-section A-2

The street level sidewalks are the primary pedestrian circulation system and encroachments should not be permitted which adversely affect this system.

*The street level pedestrian circulation system is not adversely affected by the underground tunnel. As stated above, all required street level improvements will remain. The presence of the tunnel will go unnoticed by nearly all who use or visit the future research buildings. Only those few OHSU staff who need access to research buildings transporting materials will use the tunnel.*

*All building entrances for the future research buildings will be at-grade similar to Collaborative Life Science Building (CLSB) and Knight Cancer Research Building (KCRB). Access to the tunnel will be similar to the CLSB tunnel in which the entrances will be highly secure, access-controlled portion of the building where only a few people would be allowed.*

## Sub-section B

As a public resource, encroachments shall only be permitted as a part of a project fulfilling a significant public goal of the Comprehensive Plan, the Downtown Plan, or other adopted Plans and Policies. Encroachments must be in conformance with the City objectives for promoting the "Portland Character" as defined by the rivers, parks, vistas, buildings of architectural significance, and other important visual images as defined in the Comprehensive Plan, Downtown Plans, Development Regulations, and Design Guidelines, or neighborhood or area plans or guidelines.

*The proposed encroachment will allow the overall project to meet several of the goals delineated in the **Comprehensive Plan – Goals and Plans**.*

### Goal 2 – Urban Development

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.

*The SW Meade Street Extension project and underground tunnel is part of the South Waterfront OHSU Schnitzer Campus. The tunnel's connection to the future OHSU Research buildings is vital for continued medical research. The continued expansion of the OHSU Schnitzer Campus extends the boundaries of Portland's largest employer. The campus extensions help promote jobs, housing and business opportunities in and around the South Waterfront.*

*Specifically, this project and the below grade encroachment requested supports the following goal objectives:*

- 2.1 Population Growth*
- 2.2 Urban Diversity*
- 2.7 Willamette River Greenway Plan*
- 2.9 Residential Neighborhoods*



- 2.10 Downtown Portland
- 2.11 Commercial Centers
- 2.12 Transit Corridors
- 2.15 Living Closer to Work
- 2.16 Strip Development (discouraged)
- 2.17 Transit Stations and Transit Centers
- 2.19 Infill and Redevelopment
- 2.20 Utilization of Vacant Land
- 2.22 Mixed Use
- 2.25 Central City Plan

### **Goal 3 – Neighborhoods**

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

*The OHSU Schnitzer Campus buildings and future research buildings are located within walking distance of the North Macadam neighborhood. The research buildings will support the need of residential development in this neighborhood. The requested encroachment enforces this support by creating economic efficiency of shared OHSU resources.*

*Specifically, this project and the below grade encroachment requested supports the following goal objectives:*

- 3.2 Social Conditions
- 3.3 Neighborhood Diversity.

### **Goal 5 – Economic Development**

Foster a strong and diverse economy, which provides a full range of employment and economic choices for individuals and families in all parts of the city.

*The current and future research buildings on the OHSU Schnitzer campus will include economic opportunity over a wide and varying range of employment types. The range can be seen as beginning with higher education students to administrative support staff, academic teaching and research scientists. The future research buildings, which this encroachment will connect, will provide a similar range of employments.*

*Specifically, this project and the below grade encroachment requested supports the following goal objectives:*

- 5.1 A, B, E Urban Development and Revitalization
- 5.2 A, B Business Development
- 5.4 B, C, D, E, G Transport System
- 5.5 C, D Infrastructure Development
- 5.7 A, D, E, F Science and Technology Quarter

## **Goal 8 – Environment**

Develop a balanced, equitable, and efficient transportation system that provides a range of transportation choices; reinforces the livability of neighborhoods; supports a strong and diverse economy; reduces air, noise, and water pollution; and lessens reliance on the automobile while maintaining accessibility.

*The current KCRB and CLSB buildings include several enhanced transportation components; ample short and long-term bicycle parking, long-term bicycle transportation amenities, bike share opportunities, development of a pedestrian promenade, active street levels adjacent to transit stops, and retail uses orientated to public at grade environments. The below grade encroachment requested will not impact this investment at all. In point of fact, the requested encroachment will support these activities by the judicious use of future funding by building now. OHSU plans to connect this tunnel to future OHSU Schnitzer Campus Research buildings.*

*Specifically, this project and the below grade encroachment requested supports the following goal objectives:*

- 6.5 B, C, D, E, F Traffic Classification Descriptions*
- 6.6 B, C, D, E, F, H Transit Classification Descriptions*
- 6.7 A, B, C Bicycle Classification Descriptions*
- 6.8 A, B, C, D, E Pedestrian Classification Descriptions*
- 6.11 C, E, F, I, J Street Design Classification Descriptions*
- 6.17 Coordinate Land Use and Transportation*
- 6.19 A, C, D Transit-Oriented Development*
- 6.20 A, C Connectivity*
- 6.22 A, B, C, D, E Pedestrian Transportation*
- 6.23 A, B, C, D, E, F, G, H Bicycle Transportation*
- 6.24 A, B, C, D, F, H Public Transportation*
- 6.25 A, B, C Parking Management*

## **Goal 12- Urban Design**

Enhance Portland as a livable city, attractive in its setting and dynamic in its urban character by preserving its history and building a substantial legacy of quality private development and public improvement for future generations.

*The requested encroachment supports this goal in several aspects. The below grade tunnel allows the pedestrian realm to be unaffected by this tunnel. As stated above, the tunnel will be used exclusively OHSU staff to transfer materials between buildings. It also supports basic urban design principals by preserving view corridors and access. With the tunnel below grade, a secure above-grade sky structure is not required. This decision has allowed the building massing to adhere to basic urban design principals of building massing designed for the public street, allow light to the ground level and not detract from pedestrian movement at-grade.*



*Specifically, this project and the below grade encroachment requested supports the following goal objectives:*

*12.1 A, C, H, I Portland Character*

*12.4 A, B, C, D, G Provide for Pedestrians*

*12.5 A, D Promote the Arts*

*12.7 A, B, C, E, F Design Quality*

#### **Sub-section-C**

In order to receive City approval for encroachments, an applicant must demonstrate a public benefit, which cannot be achieved without the encroachment.

*The revitalization of an entire multi-block area of former industrial use buildings can only be viewed as an enormous benefit to the public. Future research buildings will be able to share resources in an efficient manner.*

*The configuration and forethought of OHSU to plan for efficient use of resources will work to an economic benefit for the South Waterfront and the OHSU Schnitzer Campus. Since this is part of the SW Meade Street Extension project, there will be less construction burden to have the tunnel installed with this project to avoid complicated utility crossings. By constructing the tunnel now, the resources and funding for future buildings can be focused on elsewhere for a higher and better economic use.*

#### **SECTION V**

#### **DOWNTOWN POLICIES**

##### **Sub-section A-1**

In Downtown, the sidewalks shall retain their role as the primary pedestrian system.

*The street level pedestrian circulation system is not adversely affected by the underground tunnel. As stated above, all required street level improvements will remain. The presences of the tunnel will go unnoticed by nearly all who use or visit the OHSU Schnitzer Campus buildings. Only those few OHSU staff will use the tunnel.*

*All building entrances to OHSU CLSB and KCRB are at-grade. The building entrances for future research buildings are presumed to be similar. Currently the CLSB has seven main building entrances: one at SW Meade; four at SW Moody; and two along the pedestrian promenade on the east. KCRB also has seven main building entrances: three at SW Meade; three at SW Moody; one along the pedestrian promenade on the east. The existing tunnel that connects CLSB to KCRB have entrances through a highly secure, access-controlled portion of the buildings where only a few people would be allowed. The security for the future research buildings is presumed to be similar.*

##### **Sub-section A-2**

The intent of any permitted encroachment shall be to enhance Downtown's role as the leading center for retail goods and consumer services.

*The proposed encroachment will have no adverse effect on Downtown's role as a leading center for retail goods and consumer services. In support of these goals, the tunnel will further the South Waterfront as a leading economic and employment center. The tunnel will allow the efficient use of shared resources among future research buildings. The OHSU Schnitzer Campus is between two mixed-use residential neighborhoods, both within*

walking distance. The creation and construction of these future research buildings will only reinforce these two areas of Downtown as residential centers.

**Sub-section A-3**

In the Downtown Industrial area (MX Zone), the intent of any permitted encroachment shall be to maintain manufacturing, warehousing, and wholesale supportive of downtown activities.

*This policy is not applicable. The CLSB, KCRB, and future campus research buildings are located in the CX Zone.*

**Sub-section A-4**

To protect the sidewalk as the primary pedestrian system, sky structures and underground walkways shall not be built in lieu of at-grade improvements. Improvement to immediate street level pedestrian environment and circulation system shall be made prior to or in conjunction with above grade or below grade improvements.

*The proposed underground tunnel/encroachment is not intended to be a public underground walkway for pedestrians. The streetscape improvements meet or exceed the options offered in the referenced sub-section and will be built in conjunction with the SW Meade Street Extension construction.*

Rain protection over sidewalks.

*The design of CLSB and KCRB includes canopies at all major building entrances. The building entrances for future research buildings are presumed to be similar.*

Street furniture, signings, lighting, tree planting, public art, and other amenities to enhance the pedestrian environment.

*Existing SW Meade Street includes integrated bench seating, planters, South Waterfront standard lighting, street trees, and patterned concrete throughout. There is currently a promenade that stretches from OHSU CLSB to OHSU KCRB. The promenade will be extended by future development to provide a central pedestrian circulation spine throughout the OHSU Schnitzer Campus. Bike parking is offered throughout the CLSB and KCRB site. Future research buildings will have similar pedestrian amenities.*

Sidewalk widening to minimize pedestrian traffic conflicts and increase pedestrian space.

*SW Meade Street is the only street and sidewalk being built for this project. SW Moody to the west was recently built to accommodate new streetcar lines. SW Porter Avenue provides Tri-Met public transportation services only with no private automobile access. SW Meade is designed with curb extensions to slow traffic and maximize the pedestrian space at the intersection.*

**SUB-SECTION C**

**POLICIES FOR BELOW-GRADE ENCROACHMENTS**

**Sub-section C-1**

Below-grade encroachments can only be permitted if the applicant demonstrates to the City's satisfaction that the encroachments meet the requirements of Chapter 1, Sections III and V.



*Refer to responses in the previous sections of this application.*

**Sub-section C-2a**

Underground walkways (and other underground structures) can only be permitted if the applicant demonstrates to the City's satisfaction the encroachment:

Is essential to the projects function or economic feasibility.

*SW Meade is being funded and built through in conjunction with the OHSU KCRB project and construction of SW Bond Avenue. It would be cost-prohibitive to construct the tunnel section after the roadway is built. The purpose of the tunnel is to utilize resources between buildings in a campus environment. The tunnel is a critical component of judicious future expenditures by OHSU; essentially planning now to save later.*

**Sub-section 2b**

...connects building's, which are consumer services, or connects consumer services buildings with short-term parking.

*The CLSB contains retail at the ground level on three sides of the building. The KCRB contains retail at the ground level on two sides of the building.*

**Sub-section 2c**

...meets a public goal in the **Portland Downtown Plan**.

*The proposed encroachment makes it feasible for this project includes:*

- *Enhancements and reinforce Downtown as the center for retail and consumer services (Goal 2-Urban Development, Goal 5-Economic Development, Goal 12-Urban Design)*
- *Enhances the pedestrian experience (Goal 2-Urban Development, Goal 6-Transportation, Goal 12-Urban Design)*
- *Extends the Science and Technology Quarter (Goal 5-Economic Development)*
- *Supports residential neighborhoods by providing a commercial center within walking distance (Goal 3-Neighborhoods)*

**Sub-section 2d**

...is used only for pedestrian/vehicular movement.

*The tunnel will be used exclusively for transporting scientific samples, by researchers between future research buildings. This maintains the goal of the sidewalk was the primary pedestrian circulation system.*

**Sub-section 2e**

...meets the policies of Chapter 1, Sections III, V and VIII of this policy.

*Refer to responses provided herein.*

**Section VIII-C**

**STANDARDS FOR ENCROACHMENT  
Standards for Below-Grade Structures**

**Sub-section C-1**

Underground structures shall have a minimum of 8 feet of headway.

*The current design shows that the interior dimension of the tunnel will be 10'-0" wide by 8'-0" tall.*

**Sub-section C-2**

Public access to underground walkways (and parking) should be clearly designated on street or ground level.

*Since the tunnel will be for OHSU staff only and that the entry point of the tunnel will be through a very secure portion of the future buildings, this policy is not applicable. The intent is not for public access to the tunnel.*

**Sub-section C-3**

Underground walkways (and parking) shall be kept clear of furniture or other forms of obstructions that may impede pedestrian (or vehicular) flow.

*Since the tunnel will be for OHSU staff only and the transporting of materials, it is intended that the tunnel be kept clear of furniture or other forms of obstructions.*

**City Engineer's Recommendation: Approval subject to the following conditions:**

1. The property owner shall enter into a lease agreement with the City for use of space(s) in the public right-of-way. The lease agreement shall be completed prior to release of the Building Permit for the tunnel.
2. The tunnel shall be constructed in substantial compliance with preliminary plans that have been submitted by the applicant and reviewed by the City.
3. The applicant shall construct the tunnel in relation to the public right-of-way improvements and in a manner acceptable to the City of Portland Bureau of Transportation.
4. This encroachment approval is specific to the adjacent land use and is voided if the adjacent approved developments are not constructed. This encroachment approval will expire five years from the date of the approval ordinance if the building has not been constructed.

**Exhibits (attached)**

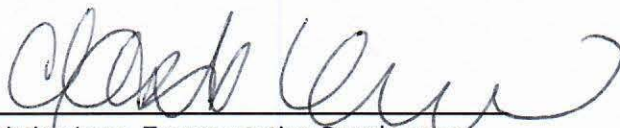
Exhibit 1 Vicinity Map

Exhibit 2 Tunnel Cross Section

Exhibit 3 Plan/Profile

The City Engineer finds that the proposed sky-bridge and tunnel satisfy the applicable policies contained in the CITY POLICY ENCROACHMENTS IN THE PUBLIC RIGHT-OF-WAY (ADOPTED 1982) and recommends approval of said sky-bridge.





Christine Leon, Transportation Development  
Permitting & Transit Group Manager

1/29/19  
Date



Kurt Krueger, P.E.

~~00/00/00~~ 1/24/18

**Exhibits**

NOT ATTACHED UNLESS INDICATED

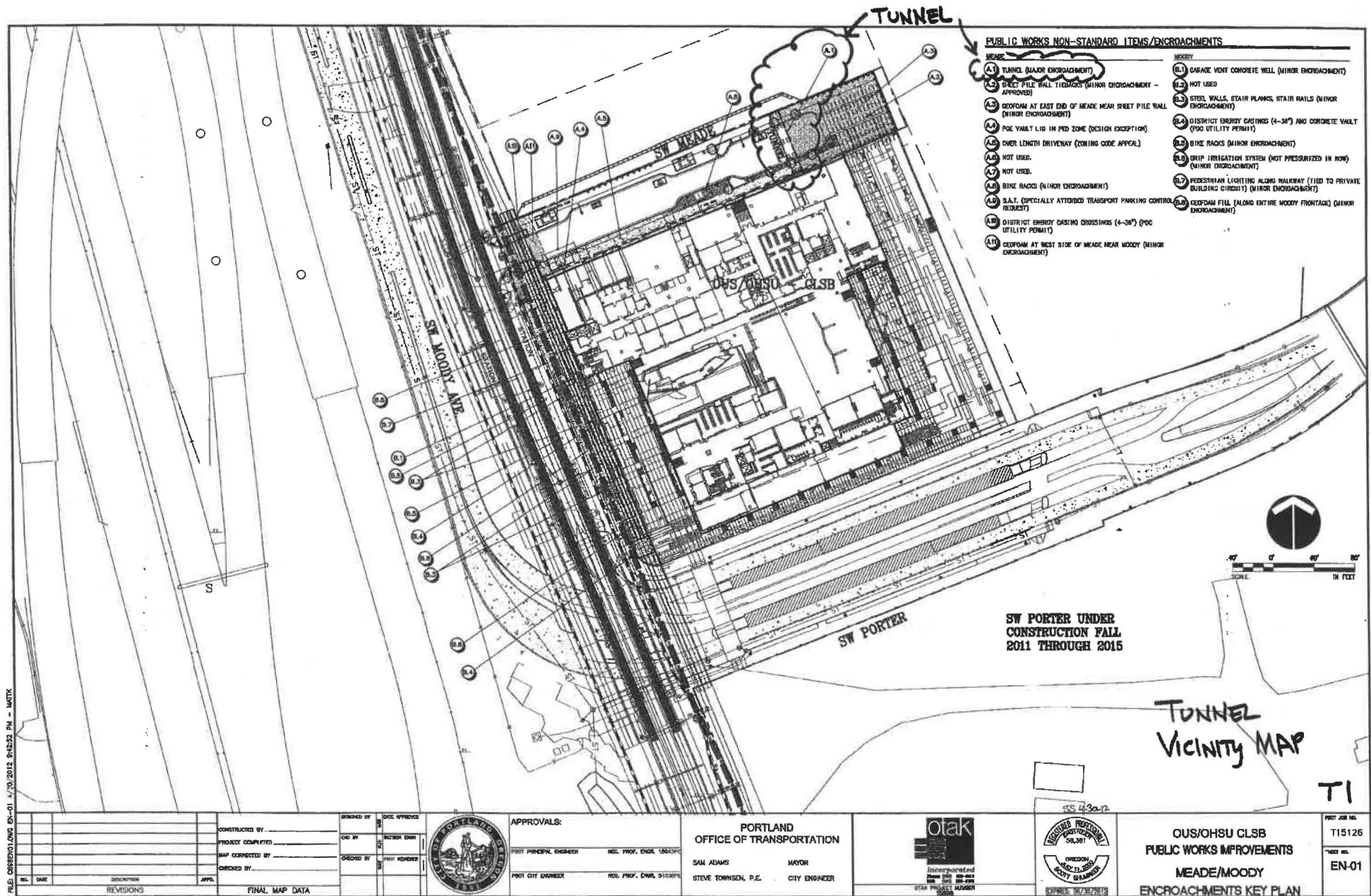
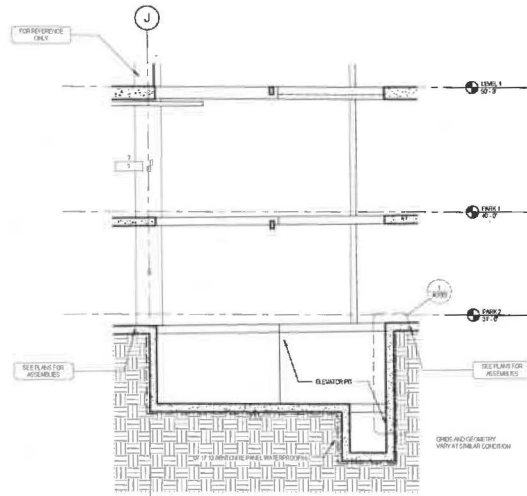
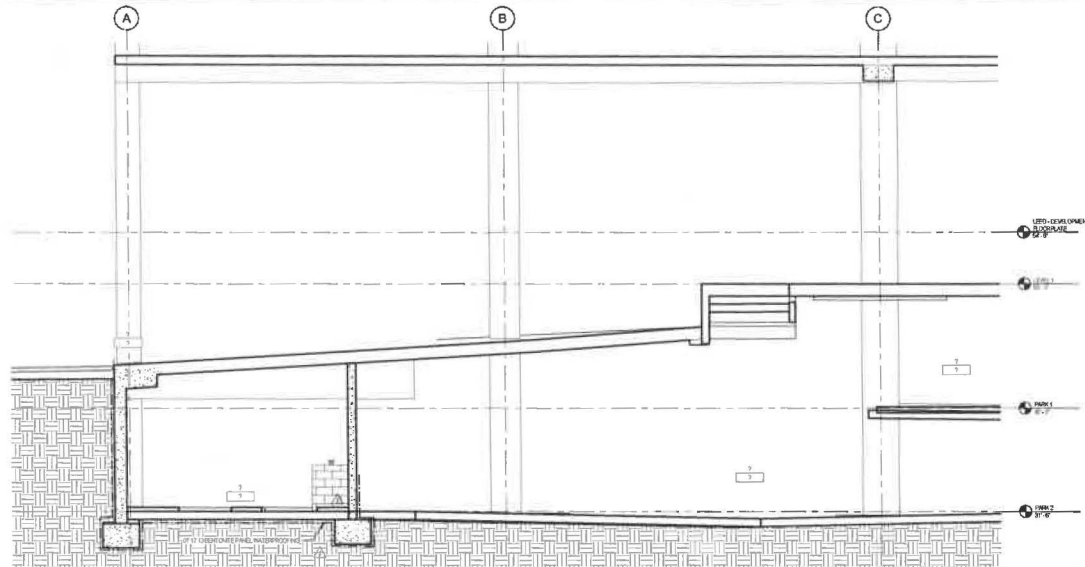


Exhibit 1 - Vicinity Map

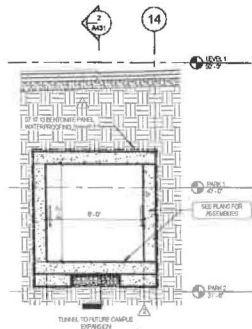




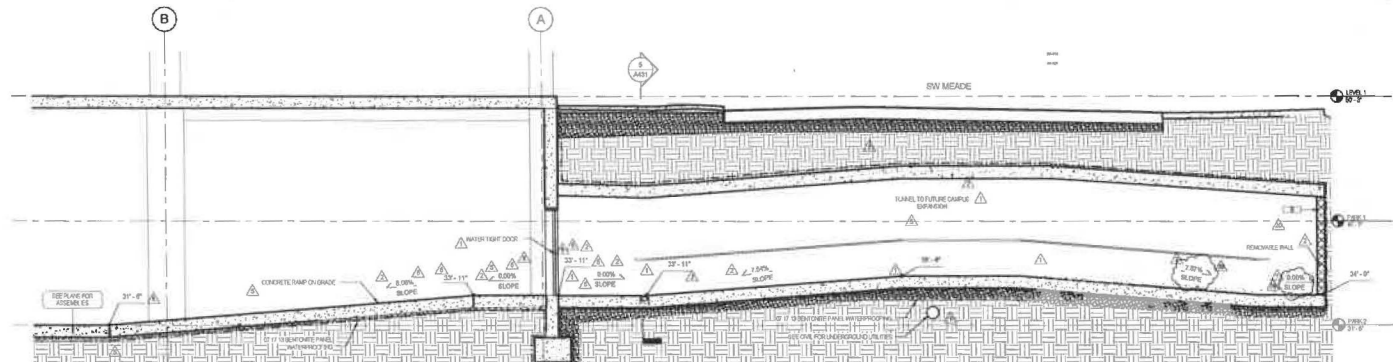
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1/4\"/>



SECTION @ LOADING DOCK  
1/4\"/>



TUNNEL - CROSS SECTION  
1/4\"/>



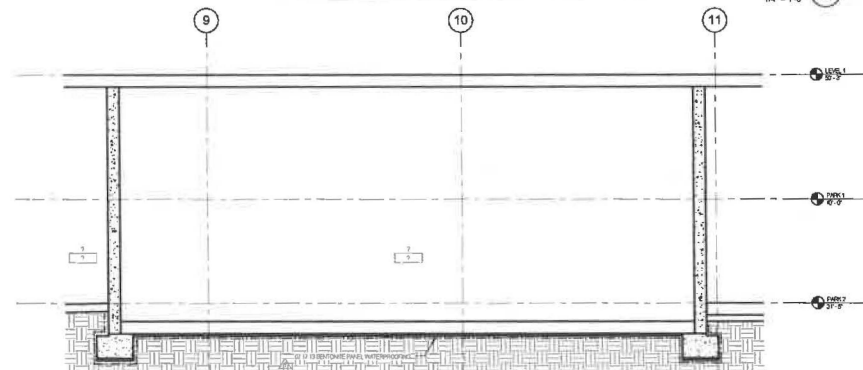
SECTION @ TUNNEL  
1/4\"/>

**LEGEND - WALL SECTION**

- 07 11 13 BITUMINOUS DAMPROOFING
- 07 12 13 BENTONITE PANEL WATERPROOFING
- 07 13 05 SHEET WATERPROOFING UP TO 36"

REFER TO PLANS FOR ASSEMBLY TYPES IF  
CONCRETE WALL TYPES DIFFER IN  
SECTIONS

REFER TO NOTES FOR TYPICAL WALL SECTIONS



SECTION @ WATER TANK  
1/4\"/>



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**OHSU / OHSU COLLABORATIVE LIFE SCIENCES  
BUILDING & OHSU SKOURTES TOWER**

CHSCL38  
3000 S.W. Meadham Avenue, M/C104  
Portland, Oregon 97229

REVISIONS

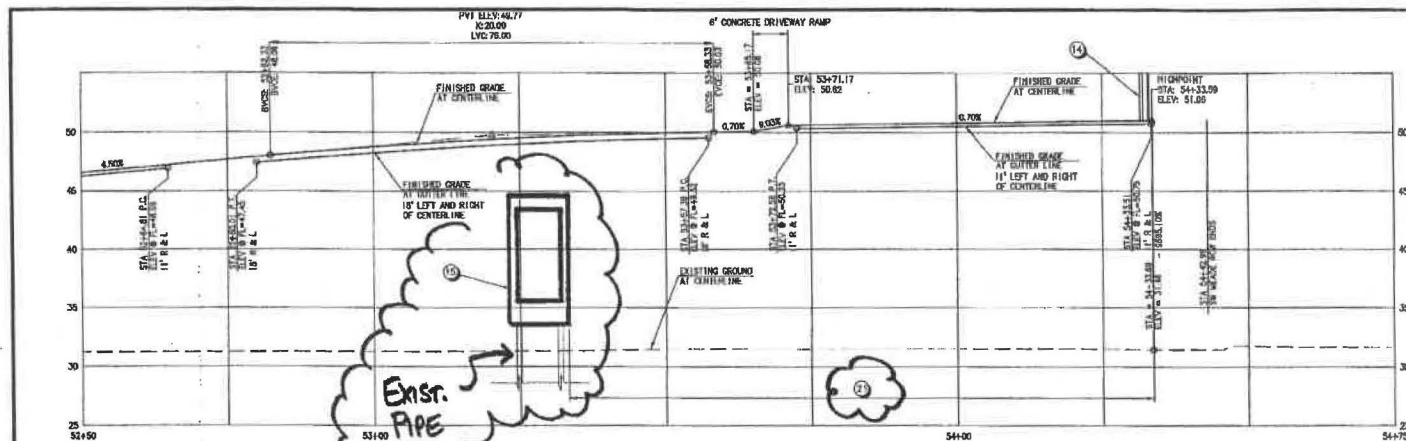
1. APPROVAL	03/01/11
2. CITY REVIEW	04/01/11
3. ARCH	04/01/11
4. ARCH	04/01/11
5. ARCH	04/01/11

DESIGNED BY  
SEA ARCHITECTS  
PROJECT NO.

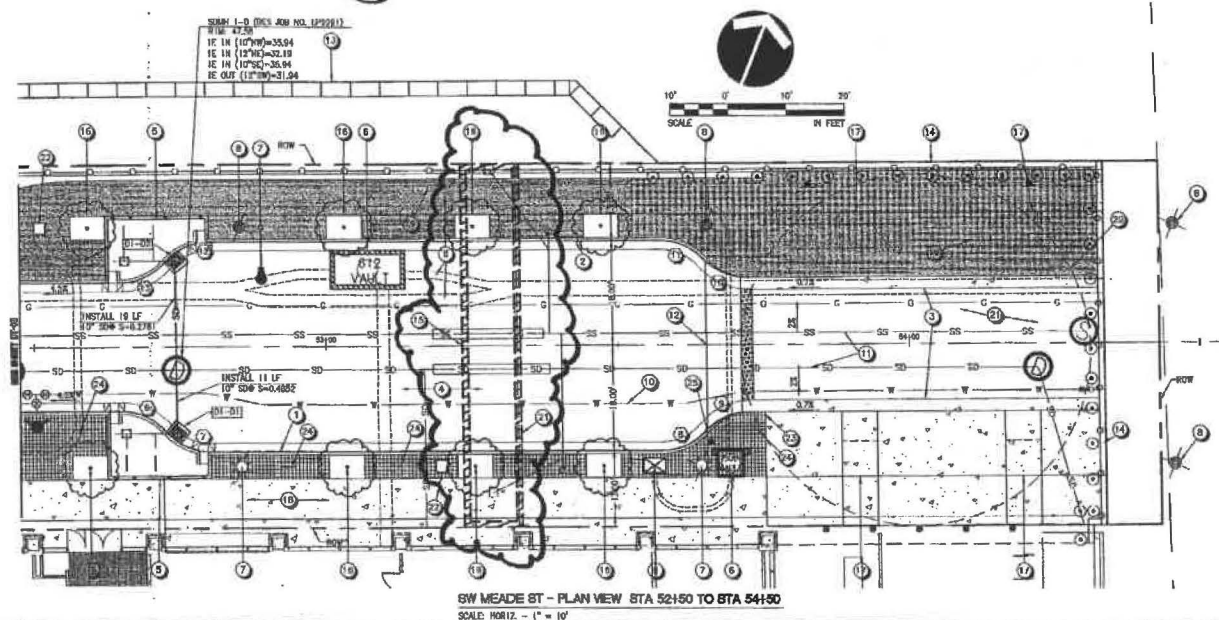
PARTIAL  
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PERMIT SET

Exhibit 2 - Tunnel Cross Section



SW MEADE ST - PROFILE VIEW STA 52+50 TO STA 54+75  
SCALE: HORIZ. - 1" = 10'  
VERT. - 1" = 4'



SW MEADE ST - PLAN VIEW STA 52+50 TO STA 54+75  
SCALE: HORIZ. - 1" = 10'

#### GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. REFER TO EC SHEETS FOR EROSION PREVENTION AND SEDIMENT CONTROL PLANS AND DETAILS.

#### STREET LIGHT TABLE

STATION	TYPE
52+50.00	20.50' R
52+50.25 (FUTURE)	20.50' L
52+50.00 (TEMPORARY)	20.50' L
53+44.00 (FUTURE)	20.50' L
53+55.00	20.50' R

NOTE: OFFSET IS TO CENTER OF LIGHT POLE

#### CURVE DATA

6	SEE SHEET CP-03
7	SEE SHEET CP-03
8	SEE SHEET CP-03
9	SEE SHEET CP-03
10	SEE SHEET CP-03
11	SEE SHEET CP-03
12	SEE SHEET CP-03
13	SEE SHEET CP-03

#### INLET AND INLET LEAD TABLE

INLET NO.	STA. STA/OFFSET	ELEVATION AT FLOW LINE MINUS 2"	INLET OR FLOW LINE	LENGTH	SLOPE (FT/FT)
01-01	52+73.02 15.5' R	FL-2"=47.13	41.25 10" DIA.	10.74'	0.0052
01-02	52+73.02 15.5' L	FL-2"=47.13	41.25 10" DIA.	18.73'	0.2871

#### INLET AND INLET LEAD NOTES

1. ALL PUBLIC STORM DRAIN INLET LEADS SHALL BE PVC AS SPECIFIED IN GENERAL NOTE NO. 33 ON SHEET CP-02.
2. INLET LEADS SHALL BE 10-INCH DIAMETER, INSTALLED AT A MINIMAL SLOPE OF 0.2%.
3. MINIMUM COVER AT INLET LEADS IS 2-FEET.

#### CONSTRUCTION NOTES

1. CONSTRUCT COMBINATION CURB AND GUTTER PER MODIFIED CITY OF PORTLAND STANDARD PLAN NO. 3-100C. SEE DETAIL X, SHEET XX-30C.
2. CONSTRUCT KEYED 24" COMBINATION CURB AND GUTTER PER MODIFIED CITY OF PORTLAND STANDARD PLAN NO. 3-100C. SEE DETAIL X, SHEET XX-30C.
3. CONSTRUCT FLUSH GUTTER PER DETAIL X, SHEET XX-30C.
4. REFER TO SHEET CP-04 FOR TYPICAL PAVEMENT SECTION.
5. CONSTRUCT PUBLIC STORMWATER FLOW-THROUGH PLANTER (WATER QUALITY FACILITY) FOR PUBLIC STREET RAMP. REFER TO SHEETS D2-01, D2-02, D2-03, AND D2-04 FOR PLAN AND DETAILS (JOINT FOOT/DESK PERMIT).
6. FURNISH UTILITY TRENCH, VALVES, AND CONDUIT PER SHEET UT-01, UNDER SEPARATE PERMIT. INSTALL NON-SLIP LIDS AT A MAX OF 2% CROSS SLOPE.
7. INSTALL STREET LIGHT PER LIGHTING PLANS. SEE STREET LIGHT TABLE THIS SHEET.
8. FUTURE STREET LIGHT TO BE INSTALLED WITH FUTURE BUILDING AND FRONTAGE IMPROVEMENTS.
9. INSTALL STREET LIGHT CABINET, (STA 53+55.00, 20.50' RT) PER STREET LIGHTING PLANS.
10. SEE CLS WATER BUREAU PLANS FOR WATER LINE INSTALLATION. (PROJECT XXXX)
11. STORM AND SANITARY SEWERS TO BE CONSTRUCTED UNDER DESK PERMIT NO. CP291.
12. CONSTRUCT 29" WIDE PORTLAND CEMENT CONCRETE DRIVEWAY RAMP PER CITY OF PORTLAND STANDARD PLAN 3-100C FROM STA 53+55.17 TO STA 53+71.17.
13. RETAINING WALL UNDER SEPARATE PERMIT.
14. INSTALL 140 LB VEHICLE BARRICADE WITH RAILING, BEGINNING AT STA 53+36.36, 28.67' LT. SEE STRUCTURAL PLANS FOR DETAILS.
15. UNDERGROUND TUNNEL.
16. PROPOSED 87.5' TIES WELL.
17. FUTURE TIE WELL.
18. CONSTRUCT SIDEWALK PER STANDARD PLAN 10726, SHEET XX-30C.
19. CONSTRUCT TEMPORARY ASPHALT PATHWAY PER DETAIL X, SHEET XX-30C.
20. EMERGENCY VEHICLE AND STANDARD VEHICLE TURN AROUND AREA, THIS 80' DIAMETER AREA TO REMAIN CLEAR OF ANY ABOVE GRADE OBSTACLES TO ALLOW VEHICLES TURNING MOVEMENTS UNTIL OFF BEHIND TO BE INSTALLED IN THE FUTURE.
21. STRUCTURE FROM FILL FROM STA 52+28.07 TO STA 54+33.03.
22. INSTALL PARKING PAY STA 52+51.00, 20.50' L AND STA 53+15.00, 20.50' R.
23. END PAVERS STA 53+25.17. BEGIN CONCRETE SIDEWALK IN FURNISHING ZONE.
24. INSTALL BUREAU RACK. SEE NOTE 28 ON SHEET CP-02.
25. CITY TO INSTALL FIRE-TURNAROUND SIGN. SEE GENERAL NOTE XX, SHEET CP-02 FOR STREET SIGN INSTALLATION.

TUNNEL  
ENLARGED  
PLAN/PROFILE

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DESIGNED BY: [ ] CHECKED BY: [ ] DATE: [ ]		APPROVALS: PORTLAND OFFICE OF TRANSPORTATION SAN ADAMS MAYOR STEVE TOWNSEND, P.E. CITY ENGINEER						OUS/OHSU CLSB PUBLIC WORKS IMPROVEMENTS SW MEADE ST PLAN AND PROFILE - EAST		PROJECT NO. T15126 SHEET NO. C2-02 8 of 41	
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Exhibit 3 - Plan/Profile