

**IN THE CITY COUNCIL OF THE  
CITY OF  
PORTLAND OREGON**

**IN THE MATTER OF AN APPLICATION  
BY MARK BELLO ON BEHALF OF GUENTHER LLC. FOR A  
LAND DIVISION, ENVIRONMENTAL REVIEW ENVIRONMENTAL MODIFICATIONS  
AND PLANNED DEVELOPMENT WITH MODIFICATIONSSITE LOCATION ADJACENT  
TO 1315 SW BROADWAY DR. LU 18-119056 LDP EN PD**

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**FINDINGS AND CONCLUSIONS**

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**ADOPTED BY THE CITY COUNCIL ON  
January 15, 2020**

**APPROVAL OF LAND DIVISION, ENVIRONMENTAL REVIEW WITH MODIFICATION  
AND PLANNED DEVELOPMENT REVIEW WITH MODIFICATIONS**

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IN THE MATTER OF AN APPLICATION  
BY **MARK BELLO ON BEHALF OF GUENTHER LLC** FOR A  
**APPROVAL OF LAND DIVISION, ENVIRONMENTAL REVIEW WITH MODIFICATION  
AND PLANNED DEVELOPMENT REVIEW WITH MODIFICATIONS** SITE LOCATION  
ADJACENT TO 1315 SW BROADWAY DR. LU 18-119056 LDP EN PD

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**FINDINGS AND CONCLUSIONS**

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The findings and conclusions of the City Council in this matter are set forth below.

**I. GENERAL INFORMATION**

This matter concerns an appeal of Hearings Officer Decision 419006, which approved a land division, environmental review with environmental modifications and a planned development with modifications for vacant property located adjacent to 1315 SW Broadway Drive (referred to herein as the “Application” or the “Project”). An appeal of the Hearings Officer Decision was filed by Southwest Hills Residential League (“SWHRL”).

**II. INTRODUCTION AND PROCEDURAL HISTORY**

**Original Proposal:**

Applicant proposed a Land Division in order to divide the 4.76-acre site (the “Subject Property”) into one parcel measuring 58,092 square feet in area (the “Parcel”), an Environmental Resource Tract (“Environmental Tract”) measuring 142,500 square feet, and a pedestrian right-of-way connecting SW Tangent Street to SW Broadway Drive (6,875 square feet as noted on Exhibit C.5.1 – hereafter the “Path”). Applicant proposed 20 townhouse-style residences on the Parcel. The Environmental Resource Tract is proposed to protect environmental resources.

An **Environmental Review** is requested which, if approved, would allow 69,419 square feet of total disturbance area within the Environmental Conservation zone. Applicant also requested an Environmental Modification to the maximum lot size standard in the R10 base zone (17,000 square feet), to allow an increase to 58,092 square feet for the Parcel.

Applicant requested a **Planned Development** review to allow multi-dwelling development on one large lot (the “Parcel”) in the R10 (single dwelling) zone per the City of Portland Zoning Code (“PCC”) 33.638.100.E. The development will consist of 10 buildings, two units each, for a total of 20 units with a shared access driveway connecting to SW Tangent Street with 25 surface parking spaces, garage parking in every unit, and shared outdoor common space. Applicant also proposed a public pedestrian connection (the “Path”) through the Subject Property connecting SW Tangent

Street to SW Broadway Drive. Per PCC 33.665.320, Applicant requested several modifications to site-related development standards including: maximum building coverage standards (PCC 33.110.225), reduction in parking space width (PCC 33.266.130, table 266-4), reduction in dimension of tree wells within shared driveway for interior landscaping (PCC 33.266.130, table 266-7), outdoor area for each unit (PCC 33.110.235), and parking area setback from the edge of the proposed turnaround (PCC 33.266.130.G) for development proposed on the Parcel.

The Subject Property is located within the City's Environmental Conservation overlay zone ("c"); a small portion is within the transition area. Environmental standards for Land Divisions and Planned Developments in PCC 33.430.160 must be met to allow the Land Division/Planned Development to occur without discretionary Environmental Review. If the standards are not met, an Environmental Review is required. In this case, the proposal would result in 69,419 square feet of total disturbance (64,967 square feet of permanent disturbance in the Parcel and the pedestrian right-of-way, and 4,452 square feet of temporary construction disturbance) in the resource area. The area of proposed disturbance exceeds the limits identified in Table 430-4. Therefore, the PCC 33.430.160.D standard is not met and the Land Division/Planned Development must be approved through an Environmental Review.

Applicant's land division proposal is reviewed through the Type III land use review procedure because it requires a concurrent environmental review (See PCC 33.660.110).

For purposes of State Law, this land division is considered a partition. To partition land is to divide an area or tract of land into two or three parcels within a calendar year (See Oregon Revised Statutes ["ORS"] 92.010). ORS 92.010 defines "parcel" as a single unit of land created by a partition of land. Applicant's proposal is to create two units of land (one lot and one tract). Therefore, this land division is considered a partition.

**Relevant Approval Criteria:**

In order to be approved, this proposal must comply with the approval criteria of PCC Title 33. The applicable approval criteria are:

- **Section 33.660.120, Approval Criteria for Land Divisions in Open Space and Residential Zones**
- **Section 33.665.310, Approval Criteria for Planned Developments in All Zones**
- **Section 33.665.320, Approval Criteria for Modifications requested through a Planned Development**
- **Section 33.430.250.A, Approval Criteria for Environmental Review**
- **Section 33.430.280, Approval Criteria for Environmental Modifications.**

**Procedural History:**

On February 7, 2018, the Applicant submitted an application for Land Division (Partition), Environmental Review with Modifications, and Planned Development Review with Modifications. The application was deemed complete on August 6, 2018. The regulations in effect on February 7, 2018 govern review of the Application.

A Notice of Proposal was mailed on April 5, 2019 to SWHRL and owners within the notice area. Written comments were received before BDS staff issued its Staff Report on April 19, 2019. A Notice of Public Hearing was posted on the site by March 30, 2019. A Notice of Public Hearing was mailed on April 5, 2019.

The Hearings Officer held an initial public hearing on April 29, 2019. The record was left open until May 20, 2019 for new evidence and until May 28, 2019 for rebuttal evidence. The Applicant submitted Final Written argument on June 4, 2019 and the record closed that date. The Hearings Officer's decision was mailed on June 19, 2019.

On July 2, 2019, SWHRL filed an appeal of the Hearings Officer's decision. The City mailed Notice of Appeal Hearing on July 16, 2019 and September 25, 2019.

The City Council held a de novo appeal hearing on October 16, 2019 and received written and oral testimony. City Council continued the matter until December 4, 2019 for deliberations and left the record open until December 4, 2019 for additional written testimony. On December 4, 2019, City Council reconvened the appeal hearing for deliberations and tentatively voted to deny the appeal and affirm the Hearings Officer decision with one modification to a condition of approval.

### **III. ANALYSIS**

#### **Site and Vicinity:**

Four tax parcels make up the Subject Property, which is 4.762 acres of vacant land. The Subject Property is in Southwest Portland between Marquam Nature Park and Governors Park, northwest of Marquam Gulch. The Subject Property fronts SW Broadway Drive for approximately 740 feet, just west of the Broadway Heights Apartments. Sloping steeply up from SW Broadway Drive for approximately 250 feet, the Subject Property also fronts the west terminus of SW Tangent Street at the northeast corner of the Subject Property.

The steepest portions of the Subject Property are along SW Broadway Drive with overall site slopes averaging over 35 percent. A small hillside seep (wetland) is situated immediately above SW Broadway Drive just west of center along this frontage. The entire Subject Property is zoned as Residential (R10) with an environmental conservation ("c") overlay zone and is identified within the *Southwest Hills Resource Protection Plan* (SHRPP) Site 113. Site 113 is described as providing wildlife habitat, groundwater recharge, scenic, recreational, perennial and seasonal creeks, and forested wetland resources. The Subject Property is dominated by bigleaf maple forest with scattered mature Douglas fir trees. The understory contains few native shrubs and ground covers due to past logging.

Much of the Subject Property is threatened by invasive species including English ivy, English hawthorn, English holly, and sweet cherry. English ivy has overtaken the trunks of numerous mature native trees.

Surrounding areas include natural area and parkland to the south and west, medium density residential neighborhoods to the north, and multi-dwelling residences to the east.

#### **Zoning:**

The zoning designation on the Subject Property includes the Residential 10,000 (R10) base zone, with the Environmental Conservation ("c") overlay zone (Exhibit B).

The R10 zone designation is one of the City's single-dwelling zones which is intended to preserve land for housing and to promote housing opportunities for individual households. The zone implements the comprehensive plan policies and designations for

single-dwelling housing on lots having a minimum area of 6,000 square feet. Newly created lots must have a minimum density of one unit per 10,000 square feet based on 80 percent of site area. The purpose of this land use review is to ensure the property is divided and developed according to the provisions of the R10 base zone.

Environmental overlay zones protect environmental resources and functional values that have been identified by the City as providing benefits to the public. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to be sensitive to a site's protected resources. The environmental zones protect the most important environmental features and resources while allowing environmentally sensitive urban development where resources are less sensitive.

The Environmental Conservation overlay zone ("c") conserves important resources and functional values in areas where the resources and functional values can be protected while allowing environmentally sensitive urban development. The purpose of this land use review is to ensure the Subject Property is developed according to the provisions of the environmental overlay zone.

#### **Land Use History:**

City records indicate there are no prior land use reviews for the Subject Property.

#### **Agency and Neighborhood Review:**

A Notice of Proposal in your Neighborhood was mailed on April 5, 2019.

##### **1. Agency Review**

Several bureaus and agencies have responded to this proposal and relevant comments are addressed under the applicable approval criteria. Complete agency responses are included in the "E" Exhibits for this case.

##### **2. Neighborhood Review:**

Written responses were received, prior to the issuance of the BDS Staff Report (Exhibit H.3), from the Neighborhood Association and notified neighboring citizens in response to the proposal. The pre-Staff Report responses are included in the file for this case and identified as the "F" Exhibits. Numerous interested persons testified at the April 29, 2019 public hearing (the "Hearing") before a City Hearings Officer. Also, numerous interested persons submitted written comments/evidence/arguments into the public record. The documents submitted into the record after the publication of the BDS Staff report, prior to the Hearing, at the Hearing, and during the open-record period, are identified as "H" Exhibits. Responses to the issues raised by SWHRL and other opponents are summarized under the relevant approval criteria below. City Council, in making this decision, considered all Exhibits contained in the file for this case and also considered the Hearing testimony. City Council addresses many of the written and oral comments/evidence/arguments in the findings below

#### **IV. ZONING CODE APPROVAL CRITERIA AND FINDINGS**

***Approval Criteria For Land Divisions in Open Space and Residential Zones  
33.660.120 The Preliminary Plan for a land division will be approved if the review body finds that the applicant has shown that all of the following approval criteria have been met.***

- o Due to the specific location of the Subject Property and the nature of the proposal, some of the land division approval criteria are not applicable. The following table summarizes the criteria that are **not** applicable. Applicable criteria are addressed below the table.

<b>Criterion</b>	<b>Code Chapter/Section and Topic</b>	<b>Findings: Not applicable because:</b>
B	33.630 – Tree Preservation	All the trees are located on the Subject Property are fully located within the Environmental zone and are exempt from these regulations.
C	33.631 - Flood Hazard Area	The Subject Property is not within the flood hazard area.
F	33.634 - Recreation Area	The proposed density is less than 40 units.
I	33.639 - Solar Access	These regulations apply to detached single family development. This proposal is for multi-family development.
J	33.640 - Streams, Springs, and Seeps	No streams, springs, or seeps are evident on the Subject Property outside of environmental zones.
L	33.654.110.B.2 - Dead end streets	No dead-end streets are proposed.
	33.654.110.B.3 - Pedestrian connections in the I zones	The Subject Property is not located within an I zone.
	33.654.110.B.4 - Alleys in all zones	No alleys are proposed or required.
	33.654.120.C.3.c - Turnarounds	No turnarounds within right of way are proposed or required.
	33.654.120.D - Common Greens	No common greens are proposed or required.
	33.654.120.F - Alleys	No alleys are proposed or required.
	33.654.120.G - Shared Courts	No shared courts are proposed or required.
	33.654.130.C - Future extension of proposed dead-end streets & pedestrian connections	No future extensions of dead end streets or pedestrian connections are proposed or required
	33.654.130.D - Partial rights-of-way	No partial public streets are proposed or required.

**Applicable Approval Criteria are:**

**A. Lots. The standards and approval criteria of Chapters 33.605 through 33.612 must be met.**

**Findings:** City Council finds that the Subject Property is zoned R10. This review includes an Environmental (EN) and Planned Development (PD) Review. The Planned Development and Environmental review approval criteria are addressed later in this decision.

**Lots in the R10 Zone**

Chapter 33.610 contains the density and lot dimension requirements applicable in the RF through R5 zones. The maximum density is one unit per 10,000 square feet. Minimum density is one unit per 10,000 square feet based on 80 percent of the site

area. Because the Subject Property is within the potential landslide hazard area, the Subject Property has no **minimum** density. The inclusion of the Public Pedestrian Path in Applicant’s proposal does not impact density.

The Subject Property contains 207,451 square feet of overall site area. This area divided by 10,000 square feet equals 20.74, which is rounded up to a maximum density of 21 units per Zoning Code section 33.930.020.B.2.b(2).

Applicant proposed one Parcel with a total of 20 units.

The proposed Parcel exceeds the maximum lot size standards in the R10 zone. Applicant requested a modification to this standard. A discussion of Applicant’s requested modification is found in the Environmental Modification findings that follow later in this decision.

- The lot dimensions required and proposed are shown in the following table:

	<b>Min. Lot Area (square feet)</b>	<b>Max. Lot Area (square feet)</b>	<b>Min. Lot Width* (feet)</b>	<b>Min. Depth (feet)</b>	<b>Min. Front Lot Line (feet)</b>
<b>R10 Zone</b>	3,000	8,500	50	30	30
Parcel	58,092**		150’	275	56’

\* Width is measured by placing a rectangle along the minimum front building setback line specified for the zone. The rectangle must have a minimum depth of 40 feet, or extend to the rear of the property line, whichever is less.

\*\*Modification to this standard is addressed by the Hearings Officer later in the Modification findings in this decision.

As shown in the table above, Parcel is larger than the maximum lot size. As previously noted, Applicant requested an Environmental Modification to maximum lot size for the Parcel. The City Council addresses this request in the findings for the Modification which can be found later in this decision. In addition, the Parcel is subject to Planned Development Review addressed in the findings related to the Plan Development approval criteria.

The Hearings Officer found that the applicable density and lot dimension standards can be met in the R10 zone provided the Environmental Review and Planned Development review criteria can be met.

City Council agrees with the Hearings Officer that this approval criterion is met so long as the approval criterion for Applicant’s requested Planned Development review and Environmental review can also be met.

**D. Potential Landslide Hazard Area. If any portion of the site is in a Potential Landslide Hazard Area, the approval criteria of Chapter 33.632, Sites in Potential Landslide Hazard Areas, must be met.**

**Findings:** City Council finds that the entire Subject Property is located within the Potential Landslide Hazard Area. The approval criteria state that the lots, buildings, services, and utilities must be located on parts of the Subject Property that are suitable for development in a manner that reasonably limits the risk of a landslide affecting the Subject Property, adjacent properties, and properties directly across a street or alley from the Subject Property.

In order to evaluate the proposal against this approval criterion, Applicant has submitted a geotechnical evaluation of the Subject Property and proposed land division, prepared by a Certified Engineering Geologist and a Geotechnical Engineer (Exhibits A.2, A.4, A.6, and A.8). That geotechnical report was evaluated by the Site Development Division of BDS, the City agency that makes determinations regarding soil stability.

Applicant's geotechnical evaluation indicated the following:

*“The results of our review of landslide mapping, site reconnaissance, and preliminary explorations indicate that the proposed development of the property is geotechnically feasible. A design layout that minimizes required cuts and fills and limits concentration of surface water runoff at the site will increase the overall stability of the project. It is likely that some retaining structures will be required to construct the proposed roadway alignment. We anticipate the homes on the north side of the roadway will be constructed on conventional spread footing foundations and cantilever retaining walls. The houses on the south side of the private road will be supported using drilled pier foundation systems to limit the amount of excavation that would be required to achieve sufficient setbacks for spread footings. These houses will be supported on a braced frame structures. We anticipate the only excavations required for the homes on the south side of the road will be for temporary construction access to install drilled pier foundations. As presently shown on the December 14, 2018 site plan, the lots, buildings, services and utilities have been located on the safest portion of the site and the risk of a landslide affecting the site, adjacent sites, and sites directly across a street or alley from the site, is relatively low. The site is suitable for the proposed development and the risk of slope instability is relatively low provided the general recommendations for geotechnical support of the road and structures as well as recommendations for control of surface water and subsurface water drainage are followed.”*

A number of opponents testified before the Hearings Officer and offered written comments related to this approval criterion (See Exhibits H.8, H.12r, H.12n, H.19, H.22, H.36c, H.38a, and H.41). Opponents, in the referenced testimony and documents, disagreed with Applicant's geotechnical evaluation (as partially quoted above). Opponents most frequent disagreements with the geotechnical evaluation related to a geotechnical evaluation statement that “the hillside has in fact had two slides and closures of Broadway Drive for repairs in the last 10 years.” (Exhibit H.35) Another opponent stated that “in 1996, a large landslide from this property onto Broadway Drive happened, which required the construction of a retaining wall in the southwest corner of the lot.” (Exhibit H.19)

Opponents also submitted a letter from Dr. Scott Burns (Exhibit H.38a). Dr. Burns pointed out, in Exhibit H.38a, that “I have read the report by the geotechs and it is good. They are a competent company and I know the people who did the investigation.” Dr. Burns noted that Applicant's geotechnical evaluation relied upon one database (SLIDO) which indicated no “past landslides for the site.” However, Dr. Burns also noted, in Exhibit H.38a, that there is another database (DOGAMI) that indicated that “this site is considered a high susceptibility site even though SLIDO has no past slides on the site. The site is conducive to landslides and rockfall.”

Dr. Burns concluded his letter (Exhibit H.38a) by stating that “care must be taken in development” of the Subject Property.

Applicant's geotechnical consultant provided a response to the opponents' and Dr. Burn's comments referenced above. The consultants responded as follows:



*“Overriding response to the information presented is fairly simple: ‘Construction of the Tangent Village project improves the resistance to land sliding on the site by controlling surface water, reducing groundwater intrusion and by constructing physical structures that support steep slope.’ All of the planned improvements will be designed by competent professionals who take seriously their role to protect the public from harm.*

*Dr. Burns comments are central to many of the objections presented. We have encounter[ed] Dr. Burns in every one of several recent site evaluations for projects in the Southwest Hills. He is apparently contacted by neighborhood associations when new development threatens to place new homes into established neighborhoods. As in his previous comments for other projects, Dr. Burns comments in general terms and not in specifics for the site of interest. We concur with Dr. Burns that the site includes steep slopes that are problematic, that stormwater should not be directed to steep slopes in a concentrated way, that the new DOGAMI database identifies locations of low, moderate, and high landslide susceptibility, and that seepage areas should be taken seriously.*

*In response to Mr. Mehlman and Mr. Koon, as discussed in our March 7, 2019 memo addresses land use questions, there are no documented landslides on the project site and there is no evidence of instability within the boundaries of the project site. There is one documented slope failure on SW Broadway drive in the right-of-way south of the Mehman property that occurred in the 1996 rainfall event. This was due to an over steepened cut in the right of way and was triggered by concentrated runoff in the drainage ditch. The right-of-way was repaired by PBOT using a segmental block retaining wall.*

*The only other history of instability nearby is a couple of small surficial slides, also occurring during the 1996 rainfall event and a couple of slides on the downslope side along SW Broadway Drive. One of these was due to a broken City water line and the other due to the City stockpiling snow plowed from SW Broadway Drive onto historically side-cast fill. Slope stability issues along the downhill side of SW Broadway are mostly due to side-cast fill issues from original road construction and are not indicative of instability at the site. The risk of slope instability of the proposed project has been addressed extensively in the Landslide Hazard Study prepared for the proposed development.*

*Our work on the Tangent Village project has included subsurface explorations, laboratory testing, and slope stability analysis. Our work shows that there are no conditions on the site that increase the risk to people or structures by construction of the project.” (Exhibit H.50)*

City Council finds the Landslide Hazard Study and comments made by the geotechnical consultants quoted above (Exhibit H. 50) are persuasive. Applicant’s geotechnical consultants followed industry standards required by PCC 33.632.100. The City Council finds the proposed land division will result in a lot, buildings, services, and utilities that will not significantly increase the risk of landslide potential on the Subject Property or other properties in the vicinity of the Subject Property.

City Council agrees with the Hearings Officer’s finding that Applicant’s geotechnical evaluation concluded that Applicant’s proposed method of stormwater disposal at the Subject Property will not have a significant detrimental impact on the slope stability on or around the Subject Property. Stormwater is expected to be detained on site and then discharged to the combined sewer in SW Tangent Street.

The BDS Site Development section has concurred with the findings (Exhibit E.5) of Applicant’s geotechnical report.

City Council finds, based upon the evidence in the record, that this approval criterion is met.

**G. Clearing, Grading and Land Suitability. The approval criteria of Chapter 33.635, Clearing, Grading and Land Suitability must be met.**

**Findings:**

***Clearing and Grading***

City Council finds that the regulations of Chapter 33.635 ensure that the proposed clearing and grading is reasonable given the infrastructure needs, site conditions, tree preservation requirements, and limit the impacts of erosion and sedimentation to help protect water quality and aquatic habitat. In this case, the site has steep grades (over 20 percent), is located in the Potential Landslide Hazard area, and requires extensive grading for a new private driveway, shared parking lot, and slope stabilization measures. Therefore, the clearing and grading associated with preparation of the lots must occur in a way that will limit erosion concerns and assure that the preserved trees on the Subject Property will not be disturbed.

Applicant submitted a Preliminary Clearing and Grading Plan (Exhibits C.8 and C.9) that depicts the proposed work, including existing and proposed elevation contours, undisturbed areas, and temporary disturbance with Environmental Resource Tract (see Environmental findings) consistent with the root protection zones of trees to be preserved, per Applicant's Tree Preservation Plan, and the overall limits of disturbed area.

Additionally, Applicant submitted a geotechnical evaluation (Exhibits A.2, A.4, A.6, and A.8) that described how clearing and grading should occur on the Subject Property to minimize erosion risks. Applicant also provided an Arborist Report (Exhibits A.2, A.4, A.6, and A.8) that addressed how to protect the roots of the trees on the Subject Property that will be preserved. Tree preservation is addressed in greater detail in findings later in this decision.

The Hearings Officer found that following the recommendations of the Landslide Hazard Study will help to limit erosion and sedimentation concerns by removing undocumented fill, evaluation of exposed subgrade, removing and backfilling of old drywells and septic areas, using on-site native soils as engineered fill, limiting or avoiding wet-weather earthwork, following recommendations for structural foundations and below-grade structural retaining walls, managing stormwater, and providing seismic design for the structures on the subject Property.

Erosion during construction can be minimized by implementing the project's erosion control plan, which should include judicious use of straw, "bio-bags," silt fences, and/or other appropriate technology. Where used, these erosion control devices should be in place and remain in place through site preparation and construction.

The proposed clearing and grading shown on Exhibits C.8 and C.9 included grading of the public pedestrian path, as well as on the lot, to allow Applicant to conduct the majority of the clearing and grading on the Subject Property at one time. This will help manage erosion and sedimentation concerns, assure that the necessary tree protection measures are in place before the grading begins, and limit the disturbance on the adjacent properties. The contour changes proposed are not anticipated by Applicant to increase runoff or erosion because all of the erosion control measures described on the grading plan must be installed prior to starting the grading work and stormwater will be managed and maintained on the Subject Property throughout the project.

As indicated in the Landslide Hazard studies (Exhibits A.2, A.4, A.6, and A.8.):

*“We expect that surface storm water services will include on site detention with controlled discharge to the existing storm and combined sewers located in SW Tangent Street and SW Broadway Drive. There should be no on-site infiltration of surface water. Detention reservoirs should be water tight.*

*Much of the existing overland storm water flow from nearby properties will likely be captured and controlled by planned street improvements. Provision should be made to intercept surface water and roof drainage from residential properties that abut the site. This could be in the form of a shallow swale or trench drain behind the three structures on the north side of the driveway. Water could be collected in a catch basin and routed to the stormwater disposal system.*

*Subdrains should be placed in areas where fill will be placed and trench drains may be needed at the back of cut slopes to intercept seepage. Footing drains, basement wall drains, soldier pile wall drains, and under slab drains should be included for the road way and all of the buildings.*

*In our opinion subsurface drains for the south cantilever soldier pile wall and bench drains can be routed and daylighted to a spreader trench above the seepage area identified on the site plan. Foundation drains for the embedded structures can also be day-lighted to a spreader trench in this area unless elevations permit them to be tied into the stormwater disposal system without the need for sumps and pumps. At this point we anticipate minimal amounts of seepage will be collected and discharged from these subsurface drainage systems. The only springs identified at the site are located to the southwest of the development and outside planned disturbance areas.”*

Applicant’s consultant and the Bureau of Environmental Services (BES) indicated that stormwater will be appropriately managed. The clearing and grading plan did not indicate where topsoil storage and stockpiling will take place on the Subject Property. Therefore, prior to final plat approval, the Clearing and Grading Plan submitted with the Site Development permit for mass grading on the Subject Property must include information addressing where topsoil storage and stockpiling will take place.

The Subject Property is vacant of any structures and no stockpiling will be allowed to take place near any trees proposed for preservation. Preserving these trees will help limit erosion by assuring that the tree roots will help to hold the soil in place. Erosion control methods will be reviewed at the time of the Site Development Permit application.

Opponents did not raise any issue under this specific criterion during the appeal period. A Site Development Permit will be required for the construction of the proposed grading and retaining wall installation. The City Council agrees with the Hearings Officer that the Preliminary Clearing and Grading Plan meets the approval criteria with the condition that the clearing and grading plan required in correlation with the Site Development permit noted above include topsoil storage and stockpiling areas.

This City Council finds this section of the approval criterion can be met so long as a condition of approval requires Applicant to submit a Site Development permit prior to final plat approval and the final clearing and grading plan is consistent with the preliminary clearing and grading plan and Applicant’s Arborist Report.

### **Land Suitability**

The subject Property is currently vacant. As indicated above, the Subject Property has gone through extensive geotechnical evaluation and, based upon findings above, the

Hearings Officer determined that with the application of recommendations from the Landslide Hazard Study, the Subject Property can be safely developed for residential use. Therefore, the City Council finds that there are no anticipated land suitability issues and the new lots can be considered suitable for new development and that this section of this approval criterion is met.

**H. Tracts and easements. The standards of Chapter 33.636, Tracts and Easements must be met;**

**Findings:** Opponents did not raise any issues regarding the Application's ability to meet this criterion during the Appeal period. City Council finds that the following tracts are proposed: Environmental Resource Tract (Tract 1). With a condition that the proposed tract be owned in common by the owners of the Parcel or meet the requirements of 33.430.160.E, the Hearings Officer finds this section of the approval criterion can be met.

As stated in Section 33.636.100 of the Zoning Code, a maintenance agreement will be required describing maintenance responsibilities for the tract described above and facilities within those areas. This criterion can be met with the condition that a maintenance agreement(s) is prepared and recorded with the final plat. In addition, the plat must reference the recorded maintenance agreement(s) with a recording block substantially similar to the following example: "*A Declaration of Maintenance agreement for (name of feature) has been recorded as document no. \_\_\_\_\_, Multnomah County Deed Records.*"

The City Council finds that with the conditions of approval discussed above, this approval criterion is met.

**K. Transportation impacts. The approval criteria of Chapter 33.641, Transportation Impacts, must be met; and,**

**PCC 33.641.020 Approval Criterion The transportation system must be capable of safely supporting the proposed development in addition to the existing uses in the area. Evaluation factors include: street capacity and level-of-service; vehicle access and loading; on-street parking impacts; the availability of transit service and facilities and connections to transit; impacts on the immediate and adjacent neighborhoods; and safety for all modes.**

**PCC 33.641.030 Mitigation The applicant may meet the criterion in Section 33.641.020, above, by including mitigation measures as part of the land division proposal. Mitigation measures must be acceptable to the City Engineer and may include providing transportation demand management measures, an access management plan, constructing streets, alleys, or bicycle, pedestrian, or transit facilities on or off the site or other capital improvement projects such as traffic calming devices.**

**Findings:** City Council finds that the transportation system must be capable of safely supporting the proposed development in addition to the existing uses in the area. The City Council finds that the criterion requires evaluation of all factors listed in PCC 33.641.020. The City Council finds that an applicant may meet the approval criterion through mitigation measures as part of the land division proposal. The approval criteria in PCC 33.641.020 and PCC 33.641.030 raised considerable disagreement among those participating in this case. Participants disagreed as to the severity of transportation-related impacts that could/would result from approval of the Application. Participants disagreed as to what, if any, mitigation is necessary to satisfy the code requirements of

PCC 33.641.020 and PCC 33.641.030. Specifically, opponents and the Applicant had dramatically different views on the level of vehicular and pedestrian impacts the proposal would place on the segment of SW Broadway Drive adjacent to the site and the extent to which the City could require the Applicant to construct pedestrian improvements along that frontage (the north side of SW Broadway Drive). The Applicant contended that due to a variety of factors, including topographic conditions, the opponents' proposed pedestrian improvements to SW Broadway were not roughly proportionate to the impacts generated by the proposal. Thus, the Applicant maintained that the City could not impose a condition requiring such improvements under the United States Constitution. Opponents contended that pedestrian improvements in addition to what the Applicant proposed could be constructed within the limits of the Constitution.

In this case, City Council addresses the disagreement over the above-discussed criteria through analyzing the following four questions:

- 1. What is a plausible and legally defensible interpretation of the following PCC 33.641.020 language: "the transportation system must be capable of safely supporting the proposed development in addition to the existing uses in the area?"**
- 2. What specific elements (i.e. which roads, paths, sidewalks, transit stations, etc.) of the "transportation system" must be considered in this case?**
- 3. Were the "evaluation factors" appropriately addressed in this case?**
- 4. If Broadway Drive, or any other element is determined not to meet the PCC 33.641.020 criterion, then what, if any, mitigation can/should be required?**

City Council addresses each question in the order presented above. City Council considered the evidence presented to the Hearings Officer and City Council during the appeal process. Additionally, City Council considered evidence submitted by Applicant, several opponents, and City bureaus after the Hearings Officer's decision was issued. (i.e., Exhibits I.10, I.11, I.12, I.13, I.50, I.51, I.52, I.53, I.55, I.57).

- 1. What is a plausible and legally defensible interpretation of the following PCC 33.641.020 language: "the transportation system must be capable of safely supporting the proposed development in addition to the existing uses in the area?"**

Historically the City, in particular the Portland Bureau of Transportation ("PBOT"), has interpreted the "capable of safely supporting..." language as requiring an analysis of each of the "evaluation factors" listed in PCC 33.641.020. PBOT, in the past, has considered traffic data related to the number of vehicular, pedestrian, and bicycle trips generated by a proposed development. PBOT would consider transportation data related to trip generation, street capacity, level of service, on-street parking supply and demand, transit availability, crash history of intersections, and access and loading impacts. Based upon the data related to these evaluation factors, PBOT would then make a qualitative judgment as to the significance of expected transportation related impacts resulting from a proposed development upon the surrounding neighborhood. PBOT would also, based upon the transportation related data, reach a qualitative conclusion as to whether the proposed project would meet the test of "safety for all modes."

The City Council interprets PCC 33.641.020 as requiring the Applicant to evaluate each of the “evaluative factors” listed therein. City Council also finds that PBOT’s approach towards PCC 33.641.020 and PCC 33.641.030 is consistent with City Council’s interpretation of the code. City Council, in this case, will expand upon PBOT’s general “qualitative” approach in addressing the PCC 33.641.020 language: “capable of safely supporting.”

PCC 33 (How to Use This Document) states that terms in the PCC are:

“Written in ‘plain English’ style and the meaning is intended to be clear. However, because it is also a legal document and because the need for terms for specific meanings, the code also provides guidance on how specific terms are used. Chapter 33.910, Definitions, defines words that have a specific meaning in the code. 33.700.070, General Rules for Application of the Code Language, contains other information on how terms are used in this code.”

City Council considers PCC 33.700.070.A, which states, “Literal readings of the code will be used. Regulations are no more or less strict than as stated.” PCC 33.700.070.D states that “words used in the zoning code have their dictionary meaning unless they are listed in Chapter 33.910, Definitions. Words listed in the Definitions chapter have the specific meaning stated, unless the context clearly indicates another meaning.”

City Council reviewed PCC 33.910 and finds that there are no specific code definitions for “transportation system,” “capable,” “safely,” or “supporting.”

City Council finds that the phrase “transportation system” relates to all City streets, pedestrian facilities, bicycle facilities, and transit facilities that provide the connection grid permitting the movement of people from one location to another. City Council finds that PCC 33.641.020 qualifies the “transportation system” language to include those transportation elements, such as streets, transit facilities, and sidewalks, that support the proposed development and uses located “In the area.” For example, in this case roads in the vicinity of the Portland Airport or the Pearl District need not be considered.

Common dictionary definitions of “capable” suggest that it means “having the ability, power or qualities to be able to do something.” Common dictionary definitions of “safely” suggest that it means “without experiencing or causing danger or harm.” “Support” is generally defined, in the context of PCC 33.641.020, to mean “sustain and/or provide for transportation system safety.” City Council finds that the dictionary definitions of “transportation system,” “capable,” “safely,” and “supporting,” as used in PCC 33.641.020, may be interpreted to mean that the transportation system, in the area of the proposed development, must have the ability to move people and vehicles without causing danger or harm to those individuals.

City Council finds the term “capable” does not require that the transportation system is currently safe. The Hearings Officer finds that the term “capable,” in the context of PCC 33.641.020, contemplates some level of “anticipatory reality.” For example, PBOT Staff (Exhibits E.2, G.9, G.10, and G.11, I.11, and I.13), Applicant’s traffic consultant (Exhibits A.2, A.4, A.6, A.8, H.54, I.52, and I.53), Southwest Hills Residential League (SWHRL) (Exhibits H.13, H.37, H.44, I.51, and I.59), and many opponents ( i.e. Exhibits H.7, H.8, and H.12) suggest that Broadway Drive can and/or should be improved to make that road safe(r) for pedestrians and bicycles. City Council, using SW Broadway Drive as an example, finds that Broadway Drive is “capable” of supporting the proposed development and existing uses in the area.

City Council finds that PCC 33.641.020 sets forth a methodology for determining whether or not the transportation system is capable of safely supporting the proposed development. PCC 33.641.020 lists several “evaluation factors.” In a November 6, 2017 PBOT memorandum submitted to the Portland City Council as part of the record in an appeal for a land division (LU 16-213734 LDS EN M EV – aka “Macadam Ridge”), the PBOT representative stated the following: “All of the relevant approval criteria must be met. There is nothing in the language of 33.641.020 or the purpose statement in 33.641.010 that allows for making an ‘on balance’ finding and that failure of one or more of the evaluation factors is not a basis for denial.”

City Council agrees with the above-quoted PBOT statement when it stated that each and every one of the evaluation factors must be considered. The Hearings Officer also agrees with the PBOT quoted statement that the evaluation factors are not to be balanced.

Applicant’s traffic consultant provided data and analysis related to the “safety” of vehicular traffic. Applicant’s traffic consultant and PBOT concluded that the transportation system was capable of safely meeting the needs of the proposed development and existing area uses when considering street capacity, level-of-service, vehicular access and loading, and on-street parking impacts. (Exhibits E.2, G.9, G.10, G.11, A.2, A.4, A.6, A.8, H.54, I.11, I.52, I.53). While many opponents expressed their disagreement with the conclusions reached by Applicant’s traffic consultant and PBOT with respect to vehicular traffic, the opponents seemed to be most concerned about pedestrian safety, bicycle safety, and access to transit.

City Council finds that pedestrian safety, bicycle safety, and transit access must be “evaluated” under PCC 33.641.020. However, City Council finds PCC 33.641.020 does not require that all streets or other transportation system elements be currently safe; only that they are “capable” of becoming safe.

Support for these findings can be found in a recent City Council appeal decision dealing with the Macadam Ridge development application. In that case, the Macadam Ridge Applicant’s traffic consultant and PBOT generally agreed that SW Taylor’s Ferry Road was not safe for pedestrians (and perhaps even bicycles). City Council also agreed with PBOT’s assertion that a nearby intersection (SW Taylors Ferry Road and SW Terwilliger) did not meet the City’s performance standards.

City Council, in the Macadam Ridge appeal decision, found that even though the section of SW Taylors Ferry Road located in close proximity to the proposed Macadam Ridge project was generally currently unsafe for pedestrians and bicycles, it (SW Taylors Ferry) could be made “safe” for pedestrians crossing the roadway from the proposed development to a bus stop.

City Council decided that the Macadam Ridge application could be denied because the Macadam Ridge Applicants did not propose a safe means to access bus stops on SW Taylors Ferry Road. City Council did not deny the Macadam Ridge application because Taylors Ferry, from SW Macadam to SW Terwilliger (the segment of Taylors Ferry in proximity to the development) was overall unsafe. City Council denied the Macadam Ridge application, in the findings for the PCC 33.641.020 and .030 approval criteria, because the Macadam Ridge applicant did not fully evaluate and address the availability of the transit evaluation factor.

City Council finds that PCC 33.641.020 does not allow the denial of an application because a single transportation evaluation factor is not currently “safe.” City Council finds PCC 33.641.020 and .030 require that all evaluation factors be

considered/analyzed and that if such evaluation determines that an evaluation factor indicates it is not currently “safe,” then the applicant is required to consider/analyze possible mitigation factors.

**2. What transportation system elements (i.e. which roads, paths, sidewalks, transit stations, etc.) of the “transportation system” must be considered “capable of safely supporting the proposed development in addition to the existing uses in the area?”**

City Council reviewed written submissions by PBOT (Exhibits E.2, G.9, G.10, and G.11) and Applicant’s traffic consultant (Exhibits A.2 a-3, A.4 a-3, A.5 a-3, A.8 a-3, H.42c, H.42d, H.42e, H.42g, and H.54). City Council also takes notice of opposition testimony at the Hearing and written submissions in the record related to transportation issues (i.e. Exhibits H.12, H.14, H.15, H.16, H.19, H.20, H.21, H.22, H.35, H.36, H.37, H.43, H.44, and H.45). Additionally, City Council reviewed submissions from PBOT, the Applicant’s traffic consultant, and opposition testimony submitted into the record after the Hearings Officer’s decision was issued. (i.e. Exhibits I.11, I.13, I.47, I.48, I.51, I.52, I.53, I.57, I.59).

City Council finds that the transportation elements identified by Applicant’s traffic consultant and PBOT are relevant to the evaluation factors listed in PCC 33.641.020. City Council finds that the key roadways identified by Applicant’s traffic consultant, PBOT, and opponents were SW Broadway Drive, SW Davenport Street, SW Tangent Street, and SW Hoffman Avenue. City Council finds the key intersections identified by Applicant’s traffic consultant, PBOT, and opponents are the Tangent/Davenport intersection, the Davenport/Broadway intersection, and the Hoffman/Broadway intersection. City Council finds that a pedestrian path (the “Path”), connecting SW Tangent Street and SW Broadway Drive, is included in Applicant’s proposal.

City Council finds that the most significant transportation elements for this case are those noted in the preceding paragraph.

**3. Were the “evaluation factors” appropriately addressed in this case?**

City Council finds that Applicant’s traffic consultants (Exhibits A.2 a-3, A.4 a-3, A.5 a-3, A.8 a-3, H.42c, H.42d, H.42e, H.42g, H.54, I.52, and I.53) and PBOT (Exhibit E.2, I.11) did address each of the evaluation factors identified in PCC 33.641.020. In particular, City Council finds that Applicant’s traffic consultants and PBOT adequately addressed evaluation factors related to street capacity, level-of-service, vehicle access/loading, and on-street parking. City Council adopts PBOT’s comments (Exhibit E.2, I.11, and I.13) as additional findings related to the street capacity, level-of-service, vehicle access/loading, and on-street parking evaluation factors. City Council finds that the availability of transit service and connections to transit and the safety for all modes evaluation factors required additional discussion.

City Council first addresses the availability of transit evaluation factor. Applicant’s traffic consultants and PBOT discussed the distance of transit stops from Applicant’s proposed development (Exhibits E.2, A.6, A.8, and H.42g). Opponents, in many instances, disagreed with Applicant’s traffic consultant and PBOT’s “distance” related facts. (i.e. Exhibit H.12). City Council finds that a “rough” distance to a transit stop from the proposed development is approximately half of a mile. City Council finds that the “as a crow flies” distance from transit stops, in this case, is less important than the “on the ground” roadway realities: circuitous roadways; hilly topography; and lack of sidewalks. City Council finds that under PCC 33.641.020, the Subject Property is adequately served by transit. City Council finds that SW Davenport, SW Tangent, SW



Hoffman, and other nearby local streets can be traveled safely on foot and by bicycle to access nearby transit facilities. (Exhibits A.4, A.6, A.8, E.2, H.42c, H.42d, H.52, H.54, I.53). City Council also finds that while connections to transit services and facilities can continue to be accessed, that access is not convenient and/or easy. City Council finds that problems related to the ease of accessing transit cannot be solved by Applicant by any level of physical improvements to the road frontages of the Subject Property. City Council finds that the Applicant evaluated and addressed the availability of transit service and facilities and connections to transit.

City Council adopts the findings of Applicant's traffic consultant and PBOT that the transportation system is capable of providing safe vehicular access to/from the Subject Property. City Council finds the current state/condition of the transportation system allows for the safe movement of vehicular traffic.

City Council finds that the transportation system, with the exception of SW Broadway Drive, currently provides, safe pedestrian and bicycle access for the Subject Property and the existing uses in the area. City Council finds that even without sidewalks, SW Tangent, SW Davenport, SW Hoffman and other nearby local service streets can be traveled safely on foot and on a bicycle. City Council agrees with Applicant's traffic consultant that SW Hoffman is operating at acceptable safety standards and that the proposed development will have little to no effect on the traffic at that intersection. (Exhibit I.53. City Council agrees with the attorney for some of the opponents when he states the section of SW Broadway Drive, adjacent to the Subject Property, is "nearly impassable – at least not safely – by pedestrians and bicycles due to the roadway's curve and total lack of safe shoulders or sidewalks on the north side" (Exhibit H.41). However, City Council finds that the attorney's "virtually impassable" comments do not relate solely to the Subject Property frontage on SW Broadway but rather to much of the SW Broadway Drive segment between SW Vista and SW 9<sup>th</sup>.

City Council finds the evaluation of pedestrian safety, as related to SW Broadway Drive, is complicated by the proposed "Path" connecting SW Tangent and SW Broadway. But for the Path, City Council, in findings above, concluded that the transportation system currently provides the Subject Property (including proposed development) and existing uses safe pedestrian and bicycle access. With the Path connecting into SW Broadway Drive, the safety for pedestrians becomes an issue.

City Council recognizes that PCC 33.654.110 connectivity standards suggest that SW Tangent and SW Broadway Drive should be connected. City Council finds and agrees with Applicant and PBOT Staff that a vehicular connection between SW Tangent Street and SW Broadway Drive is physically difficult/challenging because of slope/topography. City Council also appreciates that any vehicular connection to SW Broadway Drive would involve "site distance" problems. City Council also finds that a roadway connecting SW Tangent to SW Broadway would require a large area of environmentally zoned land and would be very expensive. (See Exhibit G.10, Ard Technical Memorandum, page 6 of 8 and Exhibit H.42d, I.52). City Council also finds that a City exaction requiring the dedication and construction of a vehicular connection between SW Tangent Street and SW Broadway Drive would not be roughly proportional with the negligible impacts of the proposed development.

The proposed Path, between SW Tangent and SW Broadway Drive, is planned to be constructed to recreational path standards. This means that the connective path will not meet Americans with Disability Act (ADA) standards, would have a soft (not paved) surface, include many "steps," be relatively steep, and include one or more switchbacks. (Exhibits A.8 a-4, H.54, I.13). City Council finds that the Path will be used by pedestrians and seldom, if at all, by bicycles.

An attorney for a number of the opponents stated:

“The pedestrian path proposed by the applicant and recommended by PBOT will funnel additional bike/ped trips down to and up from SW Broadway Drive to access these mass-transit stops. This path will serve as the primary pedestrian and bicycle access out of and into this neighborhood, and it is inherently unsafe.” (Exhibit H.41).

Applicant’s traffic consultant responded by stating that:

“Providing a soft-surfaced pathway on steep terrain with switchbacks and stairs at the end of an existing low-volume, dead-end roadway would not be expected to draw a significant number of new pedestrian and bicycle trips either to the new pathway or to SW Broadway Drive. In particular, people riding bicycles would need to dismount and carry their bicycle down the stairs when hard-surfaced streets are available that make continuous connections to locations both uphill and downhill from the proposed path. Rather it is likely that the path would be used by a very small number of pedestrians, all of which are already walking the streets in the site vicinity.” (Exhibit H.54)

Applicant’s traffic consultant then referred to an earlier Applicant traffic report that stated that:

“Given the location of the project site within the west hills, it is reasonable to expect that no more than 3-5% of site trips will be made via walking and biking. This represents no more than about 7-8 daily trips...accordingly, a negligible increase in pedestrian and bicycle traffic volumes on Broadway Drive is anticipated to result from the proposed development.” (Exhibit H.54 citing Exhibit A.8 a-4).

City Council finds that Applicant’s traffic consultant, as quoted above, reached a reasonable conclusion; the proposed development will likely generate only a few new pedestrian trips on SW Broadway Drive and that most of those trips will access SW Broadway Drive from the new Path. City Council also agrees with Applicant’s traffic consultant that no new bicycle trips can be expected to be generated by the construction of the Path.

City Council finds that the proper analysis of the safety for all modes factor, with respect to pedestrian and bicycle use of SW Broadway Drive, requires City Council to reach the conclusion that only a negligible increase in pedestrian and bicycle use of SW Broadway Drive can be expected to result if Applicant’s proposed development is approved. City Council finds Applicant, PBOT, and BDS Staff properly evaluated the PCC 33.641.020 factors. City Council finds that, as a practical matter, transit is available but inconvenient to access irrespective of whether Applicant’s development is approved or not.

In sum, with the exception of the safety for all modes factor regarding SW Broadway Drive, City Council finds that the transportation system is capable of safely supporting pedestrian and bicycle access for the Subject Property and the existing uses in the area. City Council finds that the proposed development and that the applicant and PBOT properly evaluated and addressed the evaluative factors under PCC 33.641.020. Therefore, the remaining question is what mitigation on SW Broadway Drive, if any, can and should be required under PCC 33.641.030 to meet the requirements of PCC 33.641.020.

**4. If Broadway Drive, or any other element is determined not to meet the PCC 33.641.020 criterion then what, if any, mitigation can/should be required?**

Many of the opponents to Applicant's proposed development argued that Applicant should, as PCC 33.641.030 mitigation, construct full half-street improvements along the Subject Property frontage on SW Broadway Drive. (i.e., Exhibit H.12, H.41). As an alternative, some opponents argued that Applicant needs to provide additional assurances that safe access is provided from the Path to and across SW Broadway Drive. This alternative argument, for some opponents, included the suggestion that asphalt pavement be substituted for the PBOT recommended gravel, one or more jersey barrier(s) be installed, and/or one or more speed control device(s) ("painted crosswalk and bump[s]") be installed. Some opponents argued that the application should be conditioned on a 4- to 6-foot wide asphalt shoulder on the north side of SW Broadway Drive's frontage and a physical barrier acceptable to PBOT. (Exhibit I.51). More than one opponent suggested that City Council require Applicant, prior to approval, submit engineering/architectural plans that more clearly demonstrated the feasibility of constructing the Path and "landing zones" on either side of SW Broadway.

PBOT, Applicant's attorney and traffic consultant, and opponents (particularly opponent's attorney) offered legal analyses and opinions regarding what improvements to the Subject Property's frontage on SW Broadway Drive the City could require from Applicant within the limits of the U.S. Constitution. When a government, such as the City of Portland, conditions the approval of a land use permit on an exaction, the property owner's Fifth Amendment right to just compensation is implicated. The Takings Clause of the Fifth Amendment to the U.S. Constitution prohibits the taking of private property for public use without just compensation. One purpose of the Takings Clause is to bar governments "from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Dolan v. City of Tigard*, 512 U.S. 374, 384 (1994) (quoting *Armstrong v. United States*, 364 U.S. 40, 49 (1960)). On the other hand, the Supreme Court has also recognized that governments have legitimate interests in using dedications of property to offset land uses that "threaten to impose costs on the public." *Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595, 604-05 (2013).

To reconcile these two realities, the Supreme Court employs a two-part analysis originally announced in *Nollan v. California Coastal Comm'n*, 483 US 825 (1987) and *Dolan v. City of Tigard*, 512 US 374 (1994). The legal tests established by these cases are often referred to as the *Nollan/Dolan* "essential nexus" and "rough proportionality" tests. At step one, the analysis begins by determining whether there is an "essential nexus" between the exaction and the asserted legitimate government interest. The exaction must "substantially advance the same legitimate government interest that the land use authorities asserted would allow them to deny the permit altogether." *Nollan*, 483 U.S. at 837. At step two, the government must determine whether there is rough proportionality "between the government's demand and the effects of the proposed land use." *Koontz*, 570 U.S. at 599. The rough proportionality analysis involves an "individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development." *Dolan*, 512 U.S. at 392. While no "precise mathematical calculation is required," the government "must make some effort to quantify its findings" that the dedication will offset the development's impacts. *Dolan*, 512 U.S. at 395-96.

In summary, a governmental entity, such as the City of Portland, may require something to be done by a developer as a condition of approval, if there is a "nexus" (connection) between a legitimate governmental interest that would furnish a valid ground for the denial of the applicant's request (the "Nollan" part) and that the nature and extent of the exaction is roughly proportional to the effect of the proposed development (the "Dolan" part).

Opponents argued that requiring Applicant to accept SW Broadway Drive related conditions of approval (i.e. dedicate right-of-way along the Subject Property frontage, require physical improvements to the dedicated property, and add jersey barriers and speed control devices) meets the *Nollan/Dolan* tests. Applicant and PBOT indicated that conditioning approval of Applicant's proposal upon dedication and construction of standard street improvements for the entire frontage of the Subject Property was not "roughly proportional" to the impacts anticipated to be caused by approval of Applicant's proposal.

First, the Applicant's engineer agreed with several opponents that there is an "essential nexus" between the provision of frontage improvements to SW Broadway Drive and the City's legitimate interest in pedestrian and cyclist safety. (Exhibit H.54). City Council disagrees with the Applicant's representation after the Hearings Officer's decision that an essential nexus cannot be established. (Exhibit I.57). City Council finds that there is an "essential nexus" between the frontage improvements described above that opponents propose and the legitimate government interest in pedestrian and cyclist safety. Accordingly, the "*Nollan*" part of the Constitutional analysis has been addressed.

Next, City Council must determine whether the opponents' proposed frontage improvements to SW Broadway Drive, if imposed as a condition by the City, are roughly proportional in nature and extent to the proposed development's impacts. As an initial matter, the Applicant and several opponents disagree as to what metric should be used for measuring the proposed development's impacts. City Council finds that the appropriate impacts to be considered as part of the rough proportionality analysis are the proposed development's impacts on pedestrian and bicycle traffic and safety on SW Broadway Drive. City Council disagrees with some opponents and finds that the construction costs and resale values of the proposed development's units are not the appropriate measure of impacts for the purpose of determining rough proportionality. (See, Exhibit H.45).

As noted in findings above, City Council determined that the transportation impacts arising from approval of Applicant's proposal were not significant. As City Council found above, less than 3-5% of site trips will be made via walking and biking, representing no more than 7-8 daily trips. (Exhibit 54 citing Exhibit A.8 a-4). As City Council found above, the proposed development will likely generate only a few new pedestrian trips on SW Broadway Drive and no new bicycle trips can be expected to be generated by the Path.

Next, City Council considers whether the opponents' proposed frontage improvements to SW Broadway Drive are roughly proportional with the above-described pedestrian- and bicycle-related impacts. City Council is persuaded by Applicant's arguments (Applicant's attorney's argument in Exhibits H.52, H.55 and I.57 and Applicant's traffic consultant's discussion in Exhibits G.10, H.42d, H.54, I.52, and I.53). City Council finds that requiring standard street improvements along the entire Subject Property frontage with SW Broadway Drive would not, even closely, be roughly proportional with the proposed development's impacts identified above. City Council also finds that opponents' alternative proposed improvements in lieu of standard street improvements are also not roughly proportional with the proposed development's impacts. City Council further finds that opponents' proposed frontage improvements have not been shown to be feasible, nor have they been shown to actually offset the opponents' underlying safety concerns regarding SW Broadway Drive. City Council finds that the Applicant provided ample evidence showing that constructing opponents' proposed improvements (particularly to the north side of SW Broadway Drive) would cost approximately \$700,000. Indeed, on November 18, 2019, The Applicant's engineer

submitted testimony increasing that estimate to \$1,312,500, based on costs not included in the original figure, including: engineered drawings and the installation of additional storm drainage systems. (Exhibit I.50). City Council finds that such improvements would involve significant demolition, excavation, and construction on the hillside abutting the Subject Property, including but not limited to, the erection of a large retaining wall. (i.e., Exhibit A.4 a-3, A.6 a-3, A.8 a-3, H.42, and I.52). The project would also require a setback into the wetlands of 50 feet in each direction, falling within the buffer area. City Council finds that the Applicant's cost estimates for frontage improvements supported by competent record evidence. Additionally, the lack of pedestrian and bicycle crash data on SW Broadway (including the intersection with SW Hoffman Avenue) supports the conclusion that the opponents' proposed frontage improvements will not offset the proposed development's impacts. (Exhibit H.54, I.52, and I.53).

In sum, City Council finds that requiring applicants to provide opponents' proposed frontage improvements is not roughly proportional with the proposed development's impacts. (See Exhibit H.37, H.41, H.45, H.52, H.54, H.55). Accordingly, City Council interprets PCC 33.641.020 and 33.641.030 in a manner consistent with the Fifth Amendment of the U.S. Constitution. To apply PCC 33.641.020 and 33.641.030, City Council finds that it cannot require mitigation that is not roughly proportional in nature and extent to the proposed development's impacts. Therefore, City Council interprets PCC 33.641.020 and 33.641.030 such that City Council cannot, consistent with the Fifth Amendment of the U.S. Constitution, condition approval of the Applicant's proposed development on the frontage improvements to SW Broadway Drive that the opponents propose.

The final issue to be addressed in this section of the findings is whether the proposed Path connection with SW Broadway meets what City Council refers to as the Macadam Ridge analysis. Recall that in Macadam Ridge, City Council found that the Applicant's proposal could be denied because it failed to "evaluate" safe access to a nearby bus stop. City Council found that despite SW Taylors Ferry Road being "unsafe" for pedestrians, the Applicant was obligated to evaluate and/or consider transportation improvements that would allow for the "safe" crossing of SW Taylors Ferry Road to get to a bus stop. City Council finds the Macadam Ridge analysis is relevant to this case. Applying the Macadam Ridge analysis to this case, City Council finds that Applicant is required to evaluate and/or consider transportation improvements that would make accessing and crossing SW Broadway Drive adequate PCC 33.641.030 mitigation.

City Council finds that crossing SW Broadway Drive from the Subject Property to the south side of SW Broadway has no clear purpose similar to the Macadam Ridge purpose of accessing a bus stop (related to the availability of transit evaluation factor). However, if the Path is constructed it must be presumed that the purpose of the Path is related to accessing and crossing SW Broadway Drive.

Applicant's traffic consultant, in Exhibit H.42c, addressed Applicant's proposed pedestrian improvements that will be constructed in conjunction with the Tangent Village development.

In the Hearings Officer's decision, the Hearings Officer considered the following statements from the Applicant's traffic consultant, in Exhibit H.42c:

*"The planned pedestrian improvements will consist of four primary elements:*

- *Constructing a pedestrian path built to recreational trail standards within public right-of-way connecting the existing western terminus of SW Tangent Street to SW Broadway Drive along the east side of the subject property;*
- *Improving the existing roadway shoulder on the south side of SW Broadway Drive along the full length of the subject property's frontage;*
- *Constructing a 4-foot wide asphalt pathway extending from the pedestrian crossing location to approximately 125 feet east of the crossing; and*
- *Improving the existing roadway shoulder on the north side of SW Broadway Drive between the pedestrian path leading to SW Tangent Street and the pedestrian crossing location.*

*With construction of these planned improvements, it is expected that pedestrian connectivity and safety will be improved in the site vicinity. A more detailed description of each of these improvements follows.*

#### *Pedestrian Connection Between SW Tangent Street and SW Broadway Drive*

*The subject property has steep slopes which prevent construction of a full street connection between SW Tangent Street and SW Broadway Drive. However, a proposed pedestrian path constructed to recreational standards will connect these streets to enhance pedestrian connectivity and safety in the site vicinity. The soft-surface path will be located within the dedicated right-of-way which will roughly follow the east side of the subject property but will zig-zag as needed to avoid existing native trees. In steep locations, stairs constructed of compressed wood risers and wood chip step surfaces will be provided to ensure that drainage is not significantly affected by the trail, maintain a forest trail feeling, and minimize potential impacts on existing trees.*

*As currently planned, the trail will intersect SW Broadway Drive immediately west of the site's east property line. However, it should be noted that the ideal terminus for the trail would be approximately 75 feet farther east, within the frontage of the Portland Water Bureau's property and directly opposite the planned pedestrian crossing location. However, since we were unable to secure permission to place the trail on the city's property, the trail was located as close as possible to the planned crossing. If the adjacent site to the east redevelops in the future, it may be appropriate to relocate the trail terminus in conjunction with that redevelopment.*

#### *SW Broadway Drive South Shoulder Improvements*

*The planned improvements along the south side shoulder of SW Broadway Drive will consist of removing existing loose material to a depth of six inches and placing compacted gravel to form a level surface. The shoulder improvement will extend up to six feet from the near edge of the southbound travel lane wherever sufficient width is available, narrowing as needed based on existing restrictions such as guardrails, utility poles, retaining walls and other roadside objects. The extents and width of the of the pedestrian path along the south side of the roadway (including where the path is restricted to less than six feet in width by existing roadside objects) are shown in the attached drawings. It should be noted that some portions of the identified pedestrian improvement area are already paved with asphalt. It is anticipated that these hard-surfaced areas will remain in place where they provide a pedestrian-friendly surface and the compacted gravel will be added around these paved surfaces. Additional asphalt pavement is not planned within the improvement area, since adding impervious surface area would trigger stormwater requirements in the Stormwater Management Manual and would require the addition of vegetated facilities along Broadway. Such facilities would further restrict the width available for the planned pedestrian improvements.*

*Where existing objects are embedded within the roadside surface, such as manholes, junction boxes and drainage inlets, the improved surface will be made flush with these*

*objects to ensure that the shoulder width is usable by pedestrians and to avoid tripping hazards.*

*Some portions of the south-side shoulder are also currently used for on-street parking. The City of Portland may choose to restrict parking in some or all of these areas to ensure that the pedestrian path is unobstructed by parked vehicles. However, such restrictions are made under the authority of the city and are not under the control of the applicant.*

#### *Asphalt Pathway at Pedestrian Crossing*

*In conjunction with the City of Portland staff, we worked to identify a safe crossing location which would allow pedestrians to cross from the planned trail on the north side of SW Broadway Drive to the improved shoulder on the south side of the roadway. Based on the speeds of vehicles traveling along SW Broadway Drive there were no locations within the site frontage at which stopping sight distance could be attained in both directions. However, a safe crossing location was identified approximately 75 feet east of the site frontage. The planned crossing location has sufficient sight distance available in each direction and has sufficient width available on each side of the roadway to provide a pedestrian landing.*

*In order to highlight the desired crossing location, city staff requested construction of an asphalt landing on the south side of the roadway. The maximum additional impervious surface area that can be added without triggering the requirements of the Stormwater Management Manual is 500 square feet. Accordingly, the city requested that an asphalt surface 4 feet wide be constructed, extending to the east from the crossing location. The total area of asphalt surface will be 500 feet, including any paving needed for a landing on the north side of the crossing and extending east while maintaining 4 feet of width until the 500 square foot maximum is reached. This will result in improved safety and will extend the south side shoulder side shoulder improvements approximately 180 feet beyond the east end of the subject property. It will bring the total length of the south-side shoulder improvements up to approximately 950 feet.*

#### *SW Broadway Drive North Shoulder Improvements*

*The planned pedestrian trail to SW Tangent will intersect SW Broadway Drive immediately west of the site's east property line. Since the pedestrian crossing is located approximately 70 feet east of the trail it is necessary to provide a safe pedestrian connection between the trail terminus and the crossing location. The north-side shoulder will be widened within this segment to provide 6 feet of usable width for the pedestrian connection. If deemed appropriate, a widened asphalt landing will also be provided at the north side of the pedestrian crossing as part of the 500 square feet of allowable impervious surface area."*

*Applicant's traffic consultant, along with the above-quoted narrative, included four diagrams (the Hearings Officer designated the four pages of diagrams as Exhibit H.42c.1). The Hearings Officer finds the Exhibit H.42c.1 diagrams provide clarity and detail to the above-quoted narrative.*

City Council finds that since the Hearings Officer's Decision, Applicant's proposed enhanced mitigation under PCC 33.641.030. (I.e., Exhibits I.11, I.12, I.13, I.50, I.51, I.52, and I.63). In particular, City Council recognizes that the improvements approved through the Public Works review included additional paving along the southside of SW Broadway Drive. The City Council finds that with the BES special circumstance waiver, it is feasible to construct the south side shoulder improvements consistent with the conceptual Public Works drawing the Applicant submitted and finds that it is appropriate to modify Condition B.1 in the Hearing Officer decision. The modified

Condition B.1 will be set forth in the Conditions of Approval later in City Council's Findings.

City Council finds that with the above described conditions of approval, the criteria in PCC 33.641.020 and 030 can be met.

City Council finds that it must evaluate SW Broadway Drive against the factors in PCC 33.641.020 and that SW Broadway Drive is not currently safe for all modes of transportation, specifically pedestrians and bicyclists. City Council finds that in light of the evidence of the negligible impacts that the proposal will produce on the relevant segment of SW Broadway Drive, and the unique topographic constraints, the cost of constructing additional pedestrian improvements on the north side of SW Broadway adjacent to the site would not be roughly proportional with the proposed development's impacts. City Council understands that pedestrian improvements on the south side of SW Broadway may not be the preferred improvements and may not fully address opponents' safety concerns. However, the City Council finds that the south side improvements are the best option to provide some increased measure of pedestrian safety while complying with the Fifth Amendment to the U.S. Constitution.

**L. Services and utilities. The regulations and criteria of Chapters 33.651 through 33.654, which address services and utilities, must be met.**

**Findings:** The City Council finds that PCC 33.651 through 33.654 address water service standards, sanitary sewer disposal standards, stormwater management, utilities, and rights-of-way. The City Council finds these approval criteria and standards are met as described below:

- **33.651 Water Service standard** (See Exhibit E.3 for detailed bureau comments): The Water Bureau indicated that service is available to the Subject Property (Exhibit E.3). As a result of the proposed land division, the Fire Bureau (Exhibit E.4) is requiring a new fire hydrant to be installed (Exhibits E.4 and H.34). The Water Bureau has indicated that the hydrant must receive service from a 6-inch water main. The existing water main in SW Tangent Street is 4-inches. Therefore, since the existing 4-inch main is insufficient to install the hydrant that is required by the Fire Bureau, it must be upsized at the expense of Applicant. Prior to final plat approval, payment must be made to the Water Bureau to upsize the main in SW Tangent Street. Based on this requirement, the City Council finds this approval criterion is met.
- **33.652 Sanitary Sewer Disposal Service standards** (See Exhibit E.1 for detailed comments): BES indicated that service is available to the Subject Property (Exhibits E.1 and H.53). The site plans show a proposed sanitary lateral connection from the Subject Property to the existing sanitary manhole in SW Tangent Street. BES indicated that this proposed sanitary connection is acceptable and no additional information is required by BES prior to approval of this application. Subject to BES requirements set forth in Exhibits E.1 and H.53, the City Council finds this approval criterion is met.
- **33.653.020 and .030 Stormwater Management criteria and standards** (See Exhibit E.1): No stormwater tract is proposed or required. The City Council agrees with the Hearings Officer that finds criterion A is not applicable. Applicant proposed the following stormwater management methods: Stormwater runoff from this project must comply with all applicable standards of the Stormwater Management Manual ("SWMM") and be conveyed to a discharge point along a route of service approved by the BES Director or the Director's designee. Applicant submitted a stormwater report from WDY (dated August 6, 2018) and Preliminary Geotechnical Evaluation from Geo Consultants Northwest (dated January 16, 2018). The Preliminary Geotechnical Evaluation recommends



against onsite infiltration of stormwater; therefore, Applicant proposed to discharge runoff offsite to the combined sewer in SW Tangent Avenue after flow and volume control standards are met with underground detention systems sized per the Performance Approach. BES did not object to offsite disposal of stormwater to the combined sewer in SW Tangent Avenue. The SWMM requires the use of vegetated facilities to the maximum extent feasible (see pages 1-23 of the SWMM). In the previous response, BES required Applicant either provide a narrative explaining why vegetated facilities cannot be utilized for the proposed impervious areas or revise the proposed facility design and stormwater report to include vegetated facilities. Per the revised stormwater report, Applicant determined that it is not feasible to install vegetated stormwater facilities because of existing steep slopes on the Subject Property, the fact that vegetated facilities would necessitate pumping of stormwater, and the additional impact to the Environmental Conservation zone that would be necessary to provide sufficient space for vegetated facilities. Based on this information, Applicant's proposed stormwater disposal system was found to be acceptable to BES. The City Council finds this approval criterion is met.

- **33.654.110.B.1 Through streets and pedestrian connections** and **33.654.130.B Existing public dead-end streets and pedestrian connections:** Findings: The City Council finds that the Application must comply with the provisions in PCC 33.654.110.B.1 and PCC 33.654.130.B.

*The Hearings Officer made the following findings under those provisions: The Hearings Officer incorporates the findings for PCC 33.641.K as additional findings for these approval criteria. Generally, through streets should be provided no more than 530 feet apart and at least 200 feet apart and pedestrian connections 330 feet apart. Southwest Davenport Street (the nearest east-west through street to the north) and SW Broadway Drive (the nearest east-west through street to the south) have a distance between them of approximately 500-650 feet without a north-south through street connecting these streets. In addition, SW Tangent Street (an east-west street), comes to a dead end along the east property boundary of the Subject Site. There are no north-south through streets between SW Hoffman Avenue (approximately 1,150 feet east of the Subject Property) and SW Davenport Street (approximately 1,230 feet west of the Subject Property) for a total distance between these streets of approximately 3,000 feet. Based on the information above, the block on which the Subject Property is located does not meet the PCC 33.654.110.B.1 spacing standards. Therefore, there should be a north-south connection provided in the vicinity of the Subject Property. The Hearings Officer reviewed Exhibits related to connectivity (i.e. Exhibits A.8, a-3 and a-4, E.2, and G.10). The Hearings Officer was persuaded by Applicant's traffic consultants' reports (Exhibits A.8, a-3 and a-4 and G.10) and PBOT's analysis (Exhibit E.2) that a vehicular connection between SW Tangent Street and SW Broadway Drive was extremely difficult, from an engineering perspective, because of slope, tree, and environmental issues. The Hearings Officer was persuaded by Applicant's traffic consultants (Exhibits A.8, a-3 and a-4 and G.10) that construction of a vehicular connection between SW Tangent Street and SW Broadway Drive was economically not feasible. The Hearings Officer also notes that a number of opponents of Applicant's proposal were generally supportive of a pedestrian connection between SW Tangent Street and SW Broadway Drive (i.e. Exhibits H.8, H.13, and H.20). The Hearings Officer finds that Applicant's proposed pedestrian path, constructed to trail standards, provides pedestrian connectivity. The proposed new north-south public pedestrian connection will be located approximately 1,900 feet east of SW Davenport Street (where it intersects with SW Broadway Drive). The pedestrian path will connect SW Tangent Street to SW Broadway Drive approximately 1,300 feet west of the intersection between SW*

*Hoffman Street and SW Broadway Drive. This public through street connection will help better meet the spacing requirements described above. In addition, PBOT had the following comments regarding the public pedestrian path (exhibit E-2):*

*To meet connectivity standards, the applicant will be required to provide a pedestrian connection constructed to public trail standards from SW Tangent to SW Broadway Drive. A site distance study found there would be inadequate site distance if the trail used the existing gravel driveway used by the Water Bureau as a landing point. Shoulder widening will be required from the potential landing points on SW Broadway Dr to the east where adequate site distance for pedestrian crossings can be obtained. Asphalt pads outside of the travel lanes shall be provided on both sides of SW Broadway to create landing points for pedestrians.*

*Dedication for this connection will be required as a condition of Final Plat approval.*

*Due to the sloped topography of the site, environmental zoning and desire to protect mature tree canopy, the Pedestrian path must meander north to south, east to west and then north to south across the site in order to utilize the existing grades without triggering additional grading on the site and impact to the environmental resources. However, the location and configuration of the new path will allow the applicant to provide a public right of way connection between SW Tangent Street and SW Broadway Drive that will better meet the spacing standards noted above.*

The Hearings Officer addressed the safety aspects of the connection of the pedestrian path to SW Broadway Drive in the findings for PCC 33.641.K. The Hearings Officer found that in order for the pedestrian path to provide a safe access to SW Broadway Drive, that in addition to the above-referenced PBOT requirements, the Applicant needs to be required to provide scaled engineering drawings to PBOT sufficient to allow PBOT, or other relevant City Bureau, to determine if the installation of two jersey barriers can meet City and State safety requirements; if PBOT determines jersey barriers can be safely installed on the south side of SW Broadway, approval of Applicant's proposed development shall be conditioned upon the installation of the jersey barriers. Further, the Hearings Officer found that marking of the crosswalk area from the end of the path to the south side of SW Broadway is necessary to assure the pedestrian path provides for safe access to SW Broadway. The City Council agrees with the Hearings Officer and finds that that with the PBOT and Hearings Officer conditions of approval, noted above and in the findings for PCC 33.641.K (as modified by City Council), this approval criterion can be met.

- **33.654.120.B and C Width & elements of the right-of-way:** Findings: The City Council finds that the Application must comply with the provisions in PCC 33.654.120.B. The Hearings Officer made the following findings under those provisions:

*The Hearings Officer incorporates the findings for PCC 33.641.K as additional findings for these approval criteria. At this location, SW Broadway Drive is classified by the City of Portland as a Neighborhood Collector, a Local Service Transit Street, City Walkway, a Major Emergency Response, City Bikeway, and a Local Service Street for all other modes. The roadway has one travel lane in each direction with centerline striping. On-street parking, curbs, and sidewalks are not available along either side of the roadway in the site vicinity. SW Tangent Street is classified by the City of Portland as a Local Service Street for all modes. The roadway has one travel lane in each direction with no centerline striping. A*

*statutory residential speed limit of 25 MPH applies to the roadway. On-street parking, curbs, and sidewalks are not available along either side of the roadway in the site vicinity. PBOT recommended in Exhibit E.2, and BDS Staff, in Exhibit H.3, recommended that Applicant be required to provide a pedestrian connection constructed to public trail standards from SW Tangent to SW Broadway Drive. A site distance study found there would be inadequate site distance if the trail used the existing gravel driveway used by the Water Bureau as a landing point. PBOT, in Exhibit E.2, recommended shoulder widening will be required from the potential landing points on SW Broadway Drive to the east where adequate site distance for pedestrian crossings can be obtained. PBOT recommended that asphalt pads outside of the travel lanes be provided on both sides of SW Broadway to create landing points for pedestrians. PBOT noted that some existing on-street parking may have to be removed to increase site distance. Instead of constructing standard frontage improvements along the north side of SW Broadway Drive that would require up to 10-foot high retaining walls and impact protected wetlands, PBOT recommended (Exhibits E.2, G.19, G.10, and G.11) that Applicant be required to provide gravel shoulder enhancements along the south side of SW Broadway across from the site frontage. The PBOT recommended gravel shoulder improvements will range from 6-foot wide down to 3-foot where there are existing constraints such as guard rails, private driveway(s), and above grade utility cabinets. PBOT, in Exhibit E.2, stated the following: "To reduce the improvements from the initial standard frontage requirements, the applicant applied for several Public Works Alternative Reviews (Exhibits G.9-11). The first one eliminated the requirement to extend SW Tangent to SW Broadway Dr (18-198199 PW). The second one required the pedestrian connection between SW Tangent and SW Broadway Dr and a 6-ft asphalt shoulder widening along the site's SW Broadway frontage (18-255004 PW). The third eliminated 6-ft the asphalt shoulder widening on their side of SW Broadway Dr and requires the gravel shoulder widening on the south side of SW Broadway Drive and provide a safe pedestrian crossing points (19-135537 PW). The shoulder widening must be constructed under a separate public works permit as a condition of final plat approval. The reasons for the reductions from standard improvements to a gravel shoulder widening are related to severe topographical challenges along the site's frontage on SW Broadway Drive. In addition, the wetland restoration required through the environmental review would be impacted by the required upslope grading needed to construct up to 10-ft high retaining walls.*

- *RECOMMENDATION*
- *No objection to approval subject to the following conditions of final plat approval.*
- *The applicant shall construct gravel shoulder improvements along the south side of SW Broadway Dr in substantial conformance to the improvements outlined in this report under Connectivity and Location of Right-of-Way. The improvements must be constructed under a separate public works permit per the requirements of the City Engineer. A bond and contract ensuring the improvements shall be completed shall also be a condition of final plat approval. The public works permit, and bond shall include the pedestrian path and required landing area along the north side of SW Broadway Drive.*
- *The applicant shall dedicate 12-ft on SW Broadway Dr (outside of wetland as shown on exhibit G.12) and provide signed Waivers or Remonstrance.*
- *The applicant shall dedicate right of way (as shown on exhibit C.3) for the public pedestrian path between SW Tangent Street and SW Broadway Drive.*

*The Hearings Officer generally agrees with PBOT's above-quoted comments. The Hearings Officer notes that many of the opponents argued that Applicant be*

*required to construct standard right-of-way improvements (i.e. Exhibits H.12, H.20, H.33, and H.36). As noted in the findings for PCC 33.641.K, PCC 33.654.110.B.1, and PCC 33.654.130, which are incorporated herein, the Hearings Officer found that constructing standard right-of-way improvements (i.e. standard width travel lanes, sidewalks, and planting strips) is not feasible because of the severe topography on the Subject Property, SW Broadway Drive, and south of SW Broadway Drive, and also the existence of the wetland on the Subject Property. The Hearings Officer finds that requiring Applicant to construct standard right-of-way improvements to SW Broadway along the Subject Property frontage with SW Broadway Drive would not meet the Nollan/Dolan tests as discussed in the findings for PCC 33.641.K. The Hearings Officer finds that requiring SW Broadway Drive right-of-way improvements noted in the findings above for PCC 33.654, PCC 33.654.110.B.1, and PCC 33.654.130 meets the constitutional exaction Nollan/Dolan tests.*

The City Council agrees with and adopts the Hearings Officer's findings above. With the conditions of approval as described in the findings in PCC 33.654, PCC 33.654.110.B.1, and PCC 33.654.130 as modified by City Council, the City Council finds this approval criterion is met.

- **33.654.120.E. Approval criterion for the width of pedestrian connections.** Findings: The City Council Hearings Officer incorporates the findings for PCC 33.641.K, PCC 33.654, PCC 33.654.110.B.1, PCC 33.654.130, and PCC 33.654.120.B and C as additional findings for this approval criterion. As noted above, PBOT reviewed and recommended approval of a new public pedestrian path between the north and south property boundaries of the Subject Property, connecting SW Tangent Street to SW Broadway Drive. The City Council Hearings Officer finds that the pedestrian connection will meet applicable PBOT requirements for recreational trails, which will include stairs and a soft surface trail. The trail right-of-way width ranges from 10-feet to 15-feet, which will allow trail and buffer area and is expected to provide a safe environment for pedestrians based on the required improvements requested. The City Council Hearings Officer finds this approval criterion is met.
- **33.654.130.A - Utilities (defined as telephone, cable, natural gas, electric, etc.)** Findings: No opponent raised any issue over this criterion during the Appeal. The criterion requires that any easements that may be needed for private utilities that cannot be accommodated within the adjacent rights-of-way can be provided on the final plat. The City Council finds that at this time no specific utility easements adjacent to the right-of-way have been identified as being necessary. Therefore, the City Council finds this approval criterion is met.

#### **APPROVAL CRITERIA FOR PLANNED DEVELOPMENT REVIEW**

##### **33.665.300 Approval Criteria in General**

The City Council finds that Planned Developments in all zones must meet the criteria in Section 33.665.310. Some proposals must also meet additional approval criteria, as follows:

- A.** Proposals to modify site-related development standards must meet the criteria in Section 33.665.320.
- B.** Proposals for commercial uses in residential zones must meet the criteria in PCC 33.665.330.
- C.** Proposals that do not include a land division must meet the criteria in Section 33.665.340.

A Planned Development has been triggered by this proposal since multi-dwelling development (20 units on one Parcel) is proposed within the R10 zone. A request for a Planned Development will be approved if the review body finds that the applicant has shown that all of the approval criteria have been met. Approval criteria B and C do not apply to this proposal.

### **33.665.310 Approval Criteria for Planned Developments in All Zones**

#### **A. Visually integrate both the natural and built features of the site and the natural and built features of the surrounding area. Aspects to be considered include:**

- 1. Orienting the site and development to the public realm, while limiting less active uses of the site such as parking and storage areas along the public realm;**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, the proposed development on the Parcel includes 20 units (10 sets of “townhouse” style development) as multi-dwelling development (proposed under Zoning Code section 33.638.100.E), and will be oriented toward the private driveway which is designed to also function as a common public area for the Parcel, with all main entrances facing this common area in the center of the development. The uphill units (17-20) will also face south and be oriented toward this “public realm,” while the downhill units (1-16) will have main entrances facing north also toward the private driveway (public realm).

Homes on the Parcel will have garages that are intended to blend into the façade of the units in order to mitigate for their appearance so they are not as prominent. Parking will be accommodated in internal garages. In addition, the downhill units (units 1-16) will have 15 parking spaces tucked in-between each set of attached units outside the private driveway and common area. The garages in the uphill units (units 17-20) are wider and will accommodate two vehicles (the garages on the downhill units, 1-16, will accommodate one vehicle per unit). In addition, guest parking (10 spaces) is proposed in the northwestern portion of the site directly north of units 5-10. These parking spaces are located outside the driveway aisle serving the Subject Property.

Applicant, in Exhibit A.4, stated (Exhibit A.4-zoning narrative):

*“The site’s exposure to the public realm is limited to the long frontage at SW Broadway Drive and a small frontage at the end of SW Tangent Street. The existing condition along much of the SW Broadway Drive frontage is a steep, overgrown bank uphill from the road. The existing condition at the end of SW Tangent Street is a steep, overgrown hill sloping away from the end of the road. Because of the site’s topography and the mandate to preserve an unfragmented tract in the Environmental Conservation overlay, development will be concentrated closer to the north/northeast property lines, with an entrance at the end of Tangent Street. The public realm at the SW Broadway frontage will remain largely unchanged, with the exception of the removal of nuisance species as part of the required environmental mitigation. The public realm at the end of SW Tangent Street will be activated, as the entrance to the new development, to an extent in keeping with the residential nature of the surrounding neighborhood.*

*The private drive can also be regarded as a “public realm” insofar as it serves as a common space for the residents of Tangent Village. With this in mind, the project is intended to provide a quality pedestrian experience, emphasizing pedestrian scale over automobiles/ garages in the streetscape. The private drive has been designed as a multi-*

*use court or piazza, in the style of a shared court. A supergraphic of varied colors or materials (such as cobblestones or stamped concrete) is overlaid on the drive to create pedestrian-scale paths connecting separate areas of the site, and to define the open space. The largest area near the fire truck turnaround is defined as a circle, perhaps laid up in reclaimed old Portland cobblestone. Landscaping and street furnishings are provided as a community amenity, and the decorative paving pattern helps to indicate that the entire street is intended for pedestrians as well as vehicles.*

*The homes also emphasize the pedestrian over the automobile. The buildings use a series of open-ended volumes or apertures to define different types of openings or portals. In increasing importance or value, the portal types are as follows:*

- 0. Garage doors (least importance or value)*
  - 1. Bedrooms*
  - 2. Living Space*
  - 3. Deck/Outdoor space*
  - 4. Entry (most importance or value)*

*The entrances to the townhomes are emphasized by canopies and bench seating and are marked by street trees. Building scale and massing are also used to enhance the street-level experience of the development. As seen from the private drive, the townhomes to the south of the drive alternate between one and two stories above grade, with a maximum height of 23 feet above street grade. The townhomes to the north of the drive are staggered and the front facades step back from the edge of the drive, to preserve a sense of openness.”*

Applicant indicated (Exhibits C.12.1 and C.12.2) that the homes on the Parcel along the north side of the private driveway will have facades that are at least 39 percent doors and windows facing the shared driveway which will function as the internal “public realm” for the 20 units proposed on the Parcel. In addition, the downhill units will have 26 percent doors and windows facing the private driveway. This will promote active interaction with the shared driveway area/”public realm.” In addition, the units which abut the public pedestrian path (Units 1 and 2) will have a minimum 15 percent window/door area along the façade abutting each element. This creates a connection between the units abutting the public pedestrian path along with the shared driveway, ensuring future development does not turn its back on these areas.

The parking area will be surrounded by landscaping to minimize the visual impact of the parking area and access drive from the public street (Exhibit C.11.2). Garages for these homes will not be visible from the “public realm” along SW Tangent Street. In addition, the garages internal to the Parcel will be required to match the siding on each unit in order to ensure these garage doors do not become a dominant feature within the sites internal “public realm” along the private driveway.

The City Council finds this approval criterion is met.

**2. Preservation of natural features on the site, such as stands of trees, water features or topographical elements;**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, the natural grade of the Subject Property, from the lower portion fronting SW Broadway Drive, slopes up significantly (more than 20 percent grade) toward the upper portion of the Subject Property fronting SW Tangent Street. Given the Environmental zoning on the Subject Property, the complexity of the topography, and shape of the Subject Property,

Applicant proposed to keep development on the Parcel oriented toward the northwestern end of the Subject Property where it connects to SW Tangent Street and away from the more significant environmental resources (see the findings for Environmental review for additional details).

As indicated in the findings for the Environmental review, the Hearings Officer approved the “disturbance area” on this Subject Property where new development can occur. The vast majority of the natural features on the Subject Property will be within the 3.27-acre Environmental Resource Tract (“Environmental Tract”) and not within the Parcel. Applicant proposed to protect a significant tree (58-inch diameter Redwood, Tree #6) located on the Parcel (just north of the shared driveway adjacent to Units 3-4) which will be located outside the proposed Environmental Tract. Applicant provided documentation (Exhibit A.8) from a certified arborist noting that this tree can survive the development of the driveway and retaining wall proposed approximately 23-feet south of this tree if the recommendations in the Arborist Report are followed. This includes arborist oversight during construction.

Neighbors opposing Applicant’s development retained an arborist to review Applicant’s tree inventory and plan to save various trees (Exhibit H.12i, duplicate copy H.41a). Before the Hearings Officer, the neighbor’s arborist noted that Applicant’s arborist failed to accurately inventory trees on the Subject Property. The neighbor’s arborist also disagreed with Applicant’s plan to save trees identified as #1, #6, and #38.

Applicant’s arborist responded to the issues raised in Exhibit H.12i (duplicate – H.41a) in Exhibit H.42f. Applicant’s arborist admitted Applicant’s original tree inventory was not correct. Applicant’s arborist indicated, in Exhibit H.42f, that he re-surveyed all trees on the Subject Property and provided an updated inventory reflecting the few trees that were not included in the original inventory. Applicant’s arborist commented that four trees identified by the neighbor’s arborist “are potentially offsite.” Applicant’s arborist, in Exhibit H.42f, described the methodology proposed by Applicant to preserve, in a healthy state, trees #1, #6, and #38. Applicant’s arborist agreed with the neighbor’s arborist that tree #6 is significant and efforts are necessary to preserve it. Applicant’s arborist, in Exhibit H.42f, described in detail the steps to be taken by Applicant to preserve tree #6. Applicant’s arborist also provided examples of other coastal redwoods, such as tree #6, that have survived close-by construction activity. Applicant’s arborist, in Exhibit H.42f, described steps to be taken to preserve tree #1 including providing support for the proposed root protection zone. Finally, Applicant’s arborist described steps to preserve tree #38 and more generally the methods of construction of the pedestrian path which will be located in close proximity to tree #38.

The Hearings Officer stated in his findings that he was persuaded by the candidness of Applicant’s arborist through his admission of one or more errors in the tree inventory. The Hearings Officer found that both Applicant’s and the neighbor’s arborists are professional and qualified to assess the health and vitality of trees. The Hearings Officer found that Applicant’s arborist conducted more than one thorough on-site investigation of the trees on the Subject Property. The Hearings Officer found that Applicant’s arborist was privy to detailed engineering construction plans when creating a tree protection plan for Applicant’s proposed development. The Hearings Officer found that Applicant’s arborist is more credible, in this case, than the neighbor’s arborist.

In addition, the public pedestrian path proposed to connect SW Tangent Street to SW Broadway Drive is oriented to avoid a stand of trees (numbered 35 and 37-38, along with trees numbered 191-201 and 207) which will all be preserved. Trees 35 and 37-38 will also serve as a natural buffer for the property located directly west of the Subject Property.

In addition, Applicant provided the following comments:

*“The existing natural features on the site consist of trees and vegetation, a small seep, and a steep slope. The development is intended to preserve these natural features to the maximum extent compatible with residential development. The private driveway has been carefully configured to minimize disturbance to the existing topography and impacts on the seep. Townhomes are arranged to preserve significant trees, and oriented to take advantage of the site’s southern and western exposure.”* (Exhibit A.4)

Applicant proposed the creation of an Environmental Resource Tract (Environmental Tract) in order to preserve a 142,500 square foot area (3.27 acres) on the Subject Property (approximately 69 percent of the overall site area). The preservation of this area will allow preservation of a significant number of natural features on the Subject Property, such as stands of trees, water features, or topographical elements. Due to the steep slopes, retaining walls are required on the Subject Property to provide stability and to allow construction of the shared driveway as well as stabilize the hillside behinds Units 17-20. The proposed Environmental Tract will preserve a substantial portion of the natural grades on the Subject Property in order to preserve slope stability, minimize erosion, and maintain natural site features, such as many trees.

The City Council agrees with the Hearings Officer findings above. City Council finds that with conditions of approval requiring arborist oversight for construction of the proposed retaining walls and driveway directly south of tree number #6 (58” diameter Redwood Tree), and a requirement that Applicant execute an Acknowledgement of Tree Preservation Land Use Condition (referenced on and recorded with the final plat) agreement prior to final plat approval that notes tree preservation requirements that apply to the Parcel (outside of Environmental Resource Tract), this approval criterion can be met.

**3. Inclusion of architectural features that complement positive characteristics of surrounding development, such as similar building scale and style, building materials, setbacks, and landscaping;**

**Findings:** Applicant provided the following information regarding this criterion (Exhibit A.4):

*“Surrounding development is varied in style, size, and architectural quality. There are homes in the neighborhood constructed as far back as the 1890s, and as recently as 2015. The homes along SW Tangent Street, leading to the site entrance, are for the most part architecturally undistinguished, with the exception of the two homes flanking the site entrance: 1020 SW Tangent, from 1961, designed by Van Evera Bailey, and 1029 SW Tangent, from 1965, designed by John Storrs.*

*Each of these homes is, in its own way, emblematic of midcentury Pacific Northwest Modernism. This style of architecture is characterized by the use of natural materials that reflect the Northwest environment and construction traditions; generous glazing to maximize light in overcast weather and short daylight hours and offer a connection to the environment; deep roof overhangs to provide shelter; and flexible plans that foster open, informal living. Building forms are integrated with the setting, and landscaping is typically naturalistic, harmonizing with the existing Northwest environment.*

*The design of the proposed development will honor this tradition while updating it for contemporary residents. Some typical Northwest Modernist features were driven by the technology of their time and are no longer necessary: pitched roofs with deep overhangs,*



*designed to shed water quickly and protect siding from rainfall, can be replaced with low-slope eco-roofs that reduce impact on stormwater systems, and rainscreen construction techniques to protect siding. Other features are timeless, reflective of the climate and of the Northwest ethos: large windows, some covered outdoor spaces, and casual living. The site layout orients the townhomes and private driveway to the existing site contours and integrates the massing of the homes with the slope of the hillside.”*

Applicant then added that:

*“preserving the natural landscape and giving a feeling of a gathering in the forest. Landscaping is informal and uses a mix of plant materials appropriate to the woodland setting:*

*Each design is mirrored (with some variations) to form a pair of townhomes. The homes share common design characteristics that give the development a cohesive identity. Siding material echo of the Northwest setting and visually harmonizes with the surrounding trees. Large windows, oriented to the south, provide ample daylight year-round and are protected by overhangs from undesirable heat and glare in the summer months. Generous openings provide a connection to the landscape, and covered outdoor decks make the outdoors accessible in inclement weather. Interior spaces are relaxed and flexible, in keeping with the Oregon lifestyle.”*

Applicant had proposed wood siding and green eco-roofs (Exhibit A.15); however, due to Fire Bureau requirements triggered by the fact that the Subject Property is located in a Wildfire Hazard zone, Applicant was required to utilize different siding materials (Fiber cement) and roof materials to meet applicable Fire Bureau requirements (Exhibit E.4).

Applicant noted (Exhibit A.8) that:

*“The Fire Bureau requires that the siding be non-combustible and that the roof be Class A. The siding cannot be wood. We will be using a cement type product—Hardie exterior siding products. The cementitious siding will be an artful board and baton indicative of Pacific Northwest Regional Modernist Style. Paint to be dark brown at sides and back to echo the North west setting and visually harmonize with the surrounding trees. The white façade at the south façade is designed to enhance generous operable glazing to maximize light in overcast weather and short daylight hours and offer a connection to the environment; and bring the outside in to the open and flexible plans*

*Each of the duplexes maintains, in its own way, the midcentury Pacific Northwest Modernism. This style of architecture is characterized by the use of natural looking materials that reflect the Northwest environment and construction traditions; generous operable glazing to maximize light in overcast weather and short daylight hours and offer a connection to the environment; and flexible plans that foster open, informal living. Building forms are integrated with the setting, and landscaping is typically naturalistic, harmonizing with the existing Northwest environment.*

*We will be using a cement type product that is noncombustible:*

- *Hardie Siding and Trim SDS: ‘James Hardie® fiber-cement products are neither flammable nor explosive.’*

*An eco-roof does not meet the requirement of a class A roof covering. Hence we will not be creating an eco-roof. The roof will be class A as provided by following or equivalent alternate:*

- *Class A Malarky AC/N-35 non-combustible deck.*
- *Class A Sure-Flex [PVC] membrane,*
- *Class A Thermal Plastic Polyolefin (TPO) membrane.”*

Applicant added (Exhibit A.8) the following:

*“We will be using a cement type product—Hardie exterior siding products. The cementitious siding will be an artful board and baton indicative of Pacific Northwest Regional Modernist Style. Paint to be dark brown at East and West and North Elevations to echo the North West setting and visually harmonize with the surrounding trees. The smooth white façade at the south is designed to enhance the generous operable glazing; to maximize light in overcast weather and short daylight hours; offer a connection to the environment; and bring the outside in to the open and flexible plans. The stamped and tooled concrete will be utilized for the surface of the shared driveway. The pattern is inspired by Mid Century Modernist, painter and Landscape Designer Roberto Burle Marx. He was known as a modern nature artist and a public urban space designer. The patterns in the paving and shapes are bold and joyous, and they celebrate the modern city, the Pacific Northwest and the people of this place.”*

The Subject Property is located in the SWHRL Neighborhood Association. Based on photographic evidence submitted by Applicant (Exhibits A.2 and A.4), the surrounding area consists primarily of single family homes and multi-family development (addressed approximately 911 SW Broadway Drive) approximately 60 feet southeast of the site along SW Broadway Drive. There is a large range in architectural features and styles with few unifying characteristics.

Applicant opted to meet this approval criteria based on the specific design of the houses (as shown on exhibits C.12.1 and C.12.2). The Hearings Officer found Applicant’s specific designs are responsive to some of the features of the surrounding neighborhood such as height, use of high-quality materials, transparent front-facing facades, and consistent and cohesive design. The Hearings Officer found that the proposed development will generally be consistent with the character and quality of the neighborhood while ensuring that natural features are preserved and maintained. The City Council agrees with the Hearings Officer findings above and adopts them.

The City Council also agrees with the Hearings officer’s finding that Applicant’s proposed new development (Exhibits C.12.1 and C.12.2) demonstrates that high quality building materials will be utilized in a manner that will allow the future homes to be integrated into the surrounding neighborhood in a positive manner. The Hearings Officer found Applicant’s proposed development addresses maximum height, roofing material, trim width, eave size, window material, siding material (primary and secondary), balconies/deck location and size, etc. The development proposed conforms to the base zone (max height for example) and goes beyond what is typically required for new development under the base zone in the Zoning Code to ensure future development on the Parcel will complement the positive characteristics of the surrounding neighborhood.

The Hearings Officer found that for purposes of measuring height, the private driveway will be utilized like a typical “street” would be utilized under the Zoning Code in a Single Family Residential zone. For example, based on Applicant’s proposed development (Exhibits C.12.1 and C.12.2), the new units on the downhill side of the Parcel (Units 1-16) will be limited to 23 feet in height from driveway grade (which meets the standards of Zoning Code section 33.110.215.D.1), while the uphill units will be limited to 30 feet (measured from base point 2 as defined under figure 930-7 of the Zoning Code) in height which matches the maximum height standards for new development in the R10

zone. Exhibits C.12.1-C.12.5 show a façade rendering and elevations proposed for new development on the Parcel.

In addition, the Hearings Officer noted that Applicant submitted a landscape plan (Exhibit C.11.2) which demonstrates that adequate landscaping will be installed throughout the portion of the Subject Property associated with the Planned Development on the Parcel. The landscape plan includes combination of plantings (ground cover and shrubs) and 13 new small trees along the private driveway within trees wells and landscaped buffers abutting the driveway which soften the appearance of the hardscaped area while the tree wells provide visual cues to buffer pedestrians from the drive aisle. The City Council agrees with the Hearings Officer's findings and discussion above.

The City Council finds this approval criterion is met.

**4. Mitigation of differences in appearance through means such as setbacks, screening, landscaping and other design features;**

**Findings:** Applicant provided the following comments to address this criterion (Exhibit A.4):

*“The steep, wooded site provides the new development with built-in mitigation. The area is heavily wooded, both on- and off-site. Tree preservation and mitigation planting will provide ample screening between the new development and surrounding areas. The proposed development is concentrated towards the northern edge of the property, with the Environmental Resource tract providing a minimum 60-foot-deep buffer along the entire SW Broadway Drive frontage. Existing vegetation along SW Broadway Drive is sufficiently dense that it is impossible to see more than 5-10 feet into the site. The new construction will be a minimum of 50 feet above the grade of the road, as well as being screened by existing and new vegetation. From further southwest, on the other side of Marquam Gulch, houses will be largely hidden by trees located both on- and off-site. From the north and northeast, the new development is well separated from the neighboring houses on SW Davenport Street. The houses on SW Davenport are uniformly located towards the street edge of lots that are a minimum of 150 feet deep, and the average grade of this portion of SW Davenport Street is approximately 50 feet above the grade of the new private driveway. A number of large trees will be preserved along the property line, and there are additional large trees on the neighboring properties.*

*Although the Planned Development is a single large lot, the spacing of the houses and their orientation to the driveway follow the surrounding development pattern (particularly as seen on SW Chelmsford Ave. and SW Buckingham Ave., where lots have similar slopes to this site) of houses set close to the street.”*

The most notable difference in appearance from surrounding development is the proposal to have 10 sets of attached townhouses located on a single oversized lot (the Parcel) within the single dwelling zone. The Parcel is proposed to have a single shared parking area oriented toward the SW Tangent Street frontage, shared by all the homes on the Parcel.

In order to mitigate for the difference in the development pattern, Applicant proposed a 3.27 acre environmental resource tract (Environmental Tract) around the Parcel and new landscaping within the Parcel which is anticipated to provide screening of the shared parking area as shown on the Plan (Exhibit C.11.2). Development on the Parcel is proposed to be oriented toward the middle of the Subject Property, so it will be effectively screened from the surrounding area by the existing vegetation, the

Environmental Tract, and the topography of the Subject Property. Although the homes on the Parcel will not be on individual lots, the houses on the Parcel are designed as 10 townhouse style dwellings with small private outdoor areas, which will not look out of character with the neighborhood.

The design proposed requires that all homes facing the shared driveway have at least 26-39 percent doors and windows, which will further mitigate the difference in overall appearance of the Parcel by bringing attention and interaction between the new homes and the “public realm.”

The design proposed for new development on the Parcel ensures that there is enough room for 10 sets of attached units with space for individual outdoor areas and shared common areas, which mitigates the difference in appearance of the overall development pattern on the Parcel. Units on the Parcel will appear to be like typical townhouse style homes in a very private setting buffered from adjacent homes by mature vegetation and the proposed Environmental Tract and the fact that the proposed driveway is located at the end of an existing dead-end street which means it will maintain a very private setting. The design elements provided in the façade elevation renderings on the new units and the landscape plan adequately mitigate for differences in appearance.

As indicated above, the height of the proposed structures (23-feet above driveway grade on the southside and 36-feet above driveway grade along the north side) meet the max height standards in the R10 zone. PCC 33.930.050 (figure 930-7) would allow the units on the northside of the driveway to be as tall as 40-feet from the grade of the driveway.

Discussing this criterion, the Hearings Officer stated:

*The Hearings Officer finds that a significant amount of the existing mature vegetation is proposed to be preserved on the Subject Property. Further, Applicant has proposed the creation of the Environmental Tract development which will surround the Parcel and buffer the development’s impacts upon nearby residences. As indicated above, Applicant proposed to protect tree number #6 (58-inch diameter coastal redwood) which will provide additional buffering from the existing home (addressed 1029 SW Tangent Street) abutting the site’s northwestern property boundary in an area not encompassed by the proposed Environmental Tract. In addition, the shared parking area located along the northern edge of the Parcel (directly north of Units 5-9) is proposed to include a 10-foot wide landscape buffer which will further buffer the property to the north from the impacts of this proposal.*

*The Hearings Officer incorporates the PCC 33.665.310.A.2 findings, as related to trees, as additional findings for this approval criterion.*

The City Council finds the Hearings Officer’s finding persuasive and based on them finds this approval criterion is met.

#### **5. Minimizing potential negative effects on surrounding residential uses;**

**Findings:** The City Council incorporates the findings for PCC 33.655.310.A.2, A.3, and A.4 as additional findings for this approval criterion.

Applicant provided the following comments related to this approval criterion:

*“As discussed above, the proposed development incorporates positive features of surrounding development, and mitigates differences through existing topography, new and existing vegetation, and site design. The proposed development will have a negligible impact on traffic and parking levels in the neighborhood, as detailed in Exhibit A3,*

*Transportation Analysis. The development provides more than twice the required parking for the R10 zone: each unit has 2 parking spaces in attached garages and/or parking pads, and there are up to 10 additional parking spaces provided along the private driveway.” (Exhibit A.4)*

As noted in earlier findings, the development pattern proposed for the Parcel will not be dramatically different from existing surrounding residential uses. The design of the buildings on the Parcel provide for adequate parking for each new unit. The City Council finds Applicant’s proposed design for the units on the Parcel will result in less paving and will allow for the preservation of more trees within the Environmental Tract which provides a 3.27-acre buffer around the majority of the Subject Property and preserves trees and topography in-place and lessens the visual impact of this proposal on the surrounding neighborhood.

The design for the entire site puts the pedestrian connection and the driveway entrance predominately in the “public realm.” The orientation of the proposed residential units entrances will face toward the new driveway and new landscaping screening that is required north of the parking area on the Parcel will draw focus away from the driveway entrance of the Parcel and reduce the impact of allowing a shared parking area in a single-dwelling zone. In addition, the shared parking area will be buffered from the main entrance by the large retaining wall located along its eastern edge which will block the view of this shared parking area from the entry to the Parcel where the private driveway connects to SW Tangent Street. In addition, the preservation of the large Redwood tree (Tree #6, 58-inch diameter) directly north of the driveway entry into the Parcel will provide additional buffering to the adjacent property to the north of this driveway from the impacts of the proposal.

The new pedestrian connection will improve connectivity for surrounding residential users, allowing a faster pedestrian connection from SW Tangent Street to SW Broadway Drive.

The overall design of the Parcel includes common areas internal to the Parcel for use by the 20 residential units which will minimize the impacts of adding additional new homes to the neighborhood. The design of the units on the Parcel contributes to the proposed development blending into the existing neighborhood. In addition, the potential negative effects of this proposal on surrounding residential users have been reduced greatly by the creation and location of the 3.27-acre Environmental Tract that surrounds the majority of the Subject Property. The City Council finds that the impact on the surrounding neighborhood will be greatly reduced by Applicant’s proposed development plan.

The City Council finds this approval criterion in met.

#### **6. Preservation of any City-designated scenic resources; and**

Findings: There are no City-designated scenic resources impacted on the Subject Property.

Applicant provided the following comments related to this approval criterion:

*“The closest City-designated scenic resources are CCSW41, SW Davenport at Governors’ Park, Upland Tier III, and CCSW45, SW Broadway Drive North of SW Hoffman Avenue, Upland Tier II. CCSW41 is to the northwest of the site, with views to the northeast. This viewpoint is not impacted by development of the site, which is southeast of the field of view. In addition, the viewpoint is described in the Scenic Resource Inventory of February*

2016 as “almost entirely obscured by vegetation, even during leaf-off... not in a highly trafficked area of Portland and difficult to access, even by car.” Because of the significant drop-off from the viewpoint to the site, development should be largely invisible from the viewpoint. CCSW45 is not impacted by the development of this site, as the viewpoint is to the east of the site and the focus of the view is eastward. None of the viewpoints identified in the Scenic Resources Inventory along SW Terwilliger Boulevard (CCSW47-CCSW57), to the east of the site, are impacted by the development, as they are all focused eastward.” (Exhibit A.4)

The City Council finds this approval criterion is not applicable in this case.

**B. Provision of adequate open area on sites zoned RF through R2.5 where proposed development includes attached houses, duplexes, attached duplexes, or multi-dwelling structures. Open area does not include vehicle areas.**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Nevertheless, City Council notes that Applicant provided the following comments related to this approval criterion:

*“The Zoning Code calls for ‘adequate open area’ on this site. The revised proposal submitted this January provides open space in the form of 2,532 sq. ft. of private decks that are integrated and accessible from each unit, 69 sq. ft. of open balconies and 57 sq. ft. of enclosed balconies per unit average. The units also have front porches, averaging of 34 sq. ft. each, that act as inlets from the shared pedestrian realm into the private homes. In addition, the shared drive provides for a blend of pedestrian and vehicles within the ‘village’ grouping created by the placement of the buildings on the site surrounding the paved area. Although the vehicle area – the 20-foot clearance zone – does not count, there is approximately 3,997 square feet of paving and 877 sq. ft. of usable green space dedicated to pedestrians and outdoor activities. The environmental tract, which is 142,500 sq. ft. in area, is open space, and a new 1,879 sq. ft. private park is proposed at the end of the private drive for recreation purposes. In general, the developed portion of the site, including paved area, is only 18.9 percent of the entire site. Even excluding hardscaped pedestrian areas within parcel 1, the site is 81.1 percent open and pervious.”* (Exhibit A.8)

The Parcel is proposed to be an oversized multi-dwelling development site with 20 units (10 sets of attached units). The Environmental Tract proposed will provide open space in the form of a 142,500 square foot property (3.27 acres) that preserves approximately 69 percent of the Subject Property. In addition, Applicant designed the shared driveway to provide additional shared common area including 1,988 square feet shared outdoor open area outside of the drive aisle located at the western edge of the shared driveway (adjacent to Units 16 and 20).

The common natural area, shared courtyard-like area, and shared parking areas give the appearance of additional open space. Each individual unit will also have a private open space provided on decks and balconies. In total, these outdoor areas (including the Environmental Resource Tract) are in excess of what would be required for 20 individual single family homes on individual lots.

The City Council finds this approval criterion is met.

**33.665.320 Additional Approval Criteria for Modifications of Site-Related Development Standards**

The following criteria apply to modifications of site-related development standards, including parking standards. These modifications are done as part of the Planned Development review and do not have to go through the Adjustment process. The modification will be approved if the following approval criteria are met:

**A. Better meets approval criteria. The resulting development will better meet the approval criteria of Section 33.665.310, above;**

**Findings:** Applicant requested several modifications to site related development standards including: maximum building coverage standards (PCC 33.110.225), reduction in parking space width (PCC 33.266.130, table 266-4), reduction in dimension of tree wells within shared driveway for interior landscaping (PCC 33.266.130, table 266-7), outdoor area for each unit (PCC 33.110.235), parking area setback from the edge of the proposed turnaround (PCC 33.266.130.G) for development proposed on the Parcel, and a modification to the setback standards (PCC 33.110.220, table 110-3) in the R10 zone for any units that are located closer than 10-feet from the proposed Environmental Tract.

**Building Coverage**

The maximum allowed building coverage for the Parcel is 7,359 square feet. Applicant proposed to increase the maximum building coverage to 21,352 square feet (approximately 37 percent of the lot area). The Parcel is 58,092 square feet. It should be noted that a typical 10,000 square foot lot in the R10 zone would be allowed 30 percent (3,000 square feet) of building coverage by right based on Zoning Code section PCC 33.110.225 (table 110-4). In addition, a 6,000 square foot lot in the R10 zone (minimum lot size allowed if lots were created for separate detached units) would allow 2,400 square feet of building coverage (40 percent of overall site area). Based on the size of the lot, the R10 zone typically allows between 30-40 percent building coverage based on Table 110-4. It should also be noted that if 20 units were placed on 20 separate lots based on the minimum lot size standards noted above, this would result in 120,000 square feet of lot area and would allow 48,000 square feet of building coverage (2,400 square feet per lot based on minimum lot size noted above).

Applicant provided the following comments related to this approval criterion:

*“The townhomes are located downslope from existing homes. Further, they are designed to blend into the natural surroundings, landscaped in a naturalistic style, and set among the larger trees on-site. They are part of an overall design that visually integrates natural and built features. As described in the planned development portion of this narrative, the project meets Planned Development approval criteria. The size of Parcel 1 has been substantially reduced in response to City concerns, resulting in a higher relative percentage of building coverage, although the total square footage of building coverage is lower than the earlier design. Furthermore, the placement of the buildings and total building coverage has been determined after the alternative’s analysis provided as part of the environmental review requirements. The environmental analysis indicates how this amount of development is compatible with preservation of natural resources.*

*The standard is based on the concept of one house per lot. The Planned Development results in multiple dwelling units on a single lot, skewing the relationship of lot size to building coverage.*

*Furthermore, the environmental conservation overlay results in additional reduction of the lot size when the site is divided into Parcel 1 and Tract A. Under these circumstances, the standard would allow for so little development as to be impracticable. The feedback from*

*the initial Land Use Application for Tangent Village indicated that City staff placed a high priority on maintaining open space, aligned with Marquam Nature Park and Governors Park, to create a corridor for wildlife and public benefit. This goal was compatible with the staff's emphasis on density and a more clustered development, but exacerbated the challenges posed by the environmental conservation overlay. These challenges are particularly acute because the site topology is more severe on the northeastern edge, where we were encouraged to concentrate the development. We believe the proposed development of Tangent Village meets the City's goals by clustering high quality townhomes around a unique shared space in a natural and beautiful setting. This proposed development, close to downtown, is an environmentally-friendly and a community-thoughtful development and is an ideal addition to the City of Portland."* (Exhibit A.4)

Applicant also included the following information in regard to criterion A:

*"As noted in the August 2018 submittal (noted above), a modification to building coverage is requested, see Modification Requests. The Portland Zoning Code sets the maximum building coverage as 18,559 sq. ft. (based on site whole 4.76 acre site). The current request is 21,352 sq. Ft."*

*In summary, in allowing a more "concentrated" site plan, the six purposes of 33.665.310 are met. The space between units is human-scaled and parking and storage areas are reduced in scope. The smaller Parcel 1 allows for preservation of natural features in the resource tract. The NW Modernist architecture complements surrounding development. Landscaping and other design techniques mitigate difference in appearance and potential negative effects on surrounding residential areas. No scenic resources are impacted.*

*The buildings have a tight footprint, as narrow as 19 feet for the 16 downslope units. These downslope units have a small 952 sq. ft. building footprint plus 72 feet for an outside deck. The four upslope units are wider, 25 feet in width, for a 1,250 sq. ft. footprint. The building coverage as a percentage of Parcel 1 is 21,352 / 58,092 or 36.7%. However, the building coverage as a percent of the site is only 10.2%. Or, calculating maximum building coverage with the site as the basis for understanding how built upon the site is, allowed maximum building coverage would be 18,559 sq. Ft. Thus, the proposed building coverage is much closer considering the site as the denominator rather than the reduced Parcel 1.*

*This project originated as a standard subdivision. Due to environmental considerations, units are now clustered in a single Parcel in a Planned Development proposal. The Planned Development results in multiple dwelling units on a single lot, skewing the relationship of lot size to building coverage. The maximum density on this site is 21 units, but the building coverage requirement, unless modified would result in only 17 duplex units built. As elsewhere noted, reduction of the density to 17 units is impracticable. We request a modification to allow total building coverage of 21,352 sq. ft." (Exhibit A.8)*

The R10 zone has a very conservative maximum lot coverage for large lots as it envisions a single house on a large lot. The Zoning Code would only allow a building coverage of 30-40 percent for a single house. In this case, there will be 20 units on the large Lot in the R10 zone, so an appropriate amount of building coverage for the 20 units is needed. Applicant proposed a building footprint for each unit on the Parcel to be between 1,022-1,250 square feet. The 20 units proposed will have a maximum of 21,352 square feet of building coverage.

Staff indicated, in the Staff Report (Exhibit H.2) that in order to allow for a reasonable footprint for each residential unit and enough building coverage, an increase in building



coverage is acceptable. The Hearings Officer in turn agreed with Staff because when considering the size of the entire Subject Property, the building coverage is reasonable.

The City Council agrees with Staff and the Hearings Officer and finds that allowing an increase in building coverage will minimize the impact of allowing an oversized lot in the single-dwelling zone, therefore helping mitigate the difference in appearance of the Parcel from the surrounding single-dwelling lots. While the Parcel could potentially be divided into individual lots for development, this would require some form for a new typical style street access. Requiring a street to access individual lots would increase vehicle area and limit space available for more active and communal uses. The City Council finds that increasing building coverage on the Parcel will also provide 20 additional units of housing without requiring traditional street frontage for individual lots (street area in single family residential zones is typically located in separate right-of-way), which will better preserve the natural features of the Subject Property while allowing for more open space, common areas, and landscaping than is required by the base zone standards. The City Council finds this approval criterion is met.

### **Parking Space Dimension**

Parking Space Width is regulated by PCC 33.266.130, Table 266-4. A modification is requested to this code provision to reduce the minimum width of the proposed parking spaces from 8'6" to 7'6". The Zoning Code parking standards require that parking spaces "for all other uses" be a minimum width of 8'6". The proposed open-air parking spaces south of the driveway are 8'-7'6".

Applicant included the following info to address this approval criterion:

*"The reduced parking space width, six inches for one space, or seven feet, six inches for 15 spaces along the south side of the private drive, has negligible visual impact. And impacts 15 spaces. But as far as the visual impact is discernible, the reduction in paving reduces the amount of impervious pavement, allows for a smaller disturbance area and most notably, allows for parking while keeping units 1 – 16 out of the wetland/ seep.*

*In addition, maintaining more than 2 spaces per unit is a major goal of the overall development. The modification does not alter the relationship of this planned development to SW Tangent; it reduces the disturbance area and so helps preserve natural features; architectural features considerations do not apply, the modification reduces the amount of pavement for vehicle parking, and it minimizes the negative effect of pavement by eliminating approximately 150 sq. ft. of pavement; there are no City-designated scenic features. It does not affect the provision." (Exhibit A.8)*

The reduction of parking space area, as noted above, reduces the amount of paving necessary and the overall area on the Subject Property that must be dedicated to vehicle area without sacrificing the function of the parking spaces which will still provide enough area to accommodate typical sized motorized vehicles. As noted in earlier findings, the "public realm" is used for vehicular movement, parking, and "common area." The City Council finds that the approval criteria in PCC 33.665.310.A will be met since less area in parking space will limit less active uses (parking) within the "public realm."

In addition, the reduction in vehicle area will allow the preservation of natural resources on the Subject Property because it further reduces the development area impact on the Subject Property. As shown on Applicant's architectural site plan (Exhibit C.11.2), the parking areas will be delineated from the drive aisle and accessible route (pedestrian area south of drive aisle) which will complement the positive characteristics of the architectural style proposed. The parking proposed outside of the garages for the

downhill facing units will be tucked between each set of attached units which will mitigate the differences in appearance since these parking spaces will not appear prominent when viewed from the driveway since the proposed set of attached units will buffer these spaces between each set of units. In addition, the 10 shared parking spaces located along the northside of the driveway will be buffered from the adjacent property to the north by a 10-foot setback with a landscape buffer, which will minimize the potential negative impact on the surrounding residential uses. No City designated resources are impacted. The City Council finds this approval criterion is met.

#### **Parking Lot Landscaping**

PCC 33.266.130.G.3.g states that where an individual tree is planted in a space surrounded by pavement, the planting area must have a minimum interior dimension of five feet (see Figure 266-7). Applicant proposed trees wells in front of each set of attached units between Units 1-14 (and adjacent to Unit 20) that are surrounded by pavement and located in tree wells that are 3-foot by 7-foot. The tree wells also provide a buffer for the designated pedestrian area proposed along the private driveway (assessable route) located directly south of the 20-foot drive aisle, providing not only a separation between motorized vehicles and pedestrians, but also providing a visual cue to drivers to stay outside of the pedestrian zone (which will be further delineated by the paving pattern).

Applicant included the following comments to address this approval criterion:

*“The slight reduction in the area of the tree wells from 5’ by 5’ to 3’ by 7’ will continue to allow this proposal to meet the applicable approval criteria in 33.665.310.A. Based on the constraints of the site (environmental zoning) the applicant had to fit in several design amenities such as tree wells within a constrained area. The reduction in the area for each of the tree wells will allow the positive benefits of the trees to be present on the site without impacting the site in a negative manner. The location of the trees along the private driveway separating the pedestrian accessway from the area utilized by motorized vehicles is orientated toward the public realm on the site will help limit less active uses since its will buffer pedestrians from motorized vehicles, helping limit the area within the private driveway where motorized vehicles can travel. It should be noted that every foot on this site matters as far as overall development impact. The reduction in the size of the trees wells allows the overall site disturbance area to be smaller than if the tree wells were larger (which would have required a wider area dedicated to driveways and had an overall domino effect and cause the entire disturbance area to grow in size).” (Exhibit A.8).*

The location of the tree wells in front of the majority of the downhill units (Units 1-14), between Units 18-19, and adjacent to Unit 20 will complement the positive architectural features proposed on the set of attached units that are oriented near these tree wells by providing some needed green space within the shared driveway adjacent to these units. The location of the tree wells will help soften the appearance of the front façade of these units where they abut the shared driveway (public realm) while also providing some screening along the drive aisle for pedestrians as indicated above. The tree wells are located internal to the Parcel’s access driveway and will not impact the surrounding residential uses or City designated scenic resources. The City Council finds this approval criterion is met.

#### **Parking Area Setback**

PCC 33.266.130.G relates to parking area setbacks and landscaping. The Zoning Code (PCC) has additional development standards that impact surface parking areas that include maneuvering areas for circulation of motorized vehicles. PCC 33.266.130.G has setback and perimeter landscaping requirements when a surface parking area is

abutting a lot line which impacts the current turnaround abutting the north lot line directly east of Unit 17. Approximately 10 feet of the northeastern edge of the proposed turnaround (which extended approximately 50 feet north of the 20-foot drive aisle within the shared driveway) abuts the property located directly north of the Subject Property (addressed 1029 SW Tangent).

PCC 33.266.130.G.C establishes minimum required setback and landscaping requirements (per Table 266-5) which would require a 5-foot setback landscaped to the L3 standard found in section 33.248 of the Zoning Code. The turnaround proposed currently abuts the northeastern lot line without the required setback or landscaping. Therefore, the City Council finds that a modification to this standard must be requested.

Applicant addressed this approval criteria with the following comments:

*“As indicated above, the northwest corner of the proposed turnaround abuts the property to the east without the required 5’ setback or landscaping required. The applicant has provided a 10’ setback north of the 10 parking spaces proposed along the northern edge of the shared driveway abutting the residentially zoned property to the north (addressed 1029 SW Tangent St).*

*This proposed setback and landscaping extend along the site’s north setback to the turnaround which is located directly west of this shared parking area. The applicant’s development plan provides a 13’ setback between the southeastern edge of the turnaround and the residentially zoned property to the east. However, this proposed setback reduces to below 5’ for the northeastern 10’ edge of the turnaround where its located adjacent to the residentially zoned property to the east without the required 5’ setback or landscaping.*

*However, due to the steep slopes on the site a 17’ retaining wall (see Exhibit C.10.13) is proposed along the northeastern edge of the turnaround where it abuts the property to the east within the required 5’ setback. Therefore, the turnaround will be well below the grade of the adjacent property to the east and will not be visible. Since the turnaround will be located well below the grade of the adjacent property to the east, the area of the proposed turnaround that is located within 5’ of this property will not be visible even if a person is standing at the edge of the property boundary since the top of the retaining wall will be required to have a fence to meet applicable building code safety requirements. The required fence will likely be further screened by existing landscaping located on the adjacent property to the east (based on an aerial view) that will further buffer the adjacent site from the fence which will be located along this property boundary which will likely mimic the look of fences that are heavily utilized in residential areas throughout the City to delineate property boundaries.*

*Furthermore, the turnaround will not allow parking for motorized vehicles and/or storage and will be oriented towards the site’s public realm (as part of the private driveway). It will be required to remain clear (no parking or storage allowed) so it can function as a turnaround as proposed. The turnaround will have a paving pattern that mimic the pattern within the shared driveway which is intended to complement the overall design concept proposed which utilizes unique paving patterns within the driveway to enhance the overall aesthetics of the proposal, so the vehicle area compliments the positive characteristics of the architectural features of the buildings proposed.” (Exhibit A.8)*

The Hearings Officer found the fence required at the top of the retaining wall (along with the large grade change discussed above) where the turnaround abuts the Subject Property to the north will provide further screening that will mitigate for the location of the proposed turnaround within this 5-foot setback area and minimizes the negative

effects on the adjacent residential property. The City Council agrees with the Hearings Officer's finding above and finds this request can meet the applicable criteria in PCC 33.665.310.A.

**Outdoor Area:**

PCC 33.110.235 relates to required outdoor areas in single family zones. This code section states that each dwelling unit should have at least 250 square feet of outdoor area that is at least 12-feet by 12-feet. Applicant requested modifications to this code provision. PCC 33.110.235.C states the following:

- “1. The required outdoor area must be a contiguous area and may be on the ground or above ground.*
- 2. The area must be surfaced with lawn, pavers, decking, or sport court paving which allows the area to be used for recreational purposes. User amenities, such as tables, benches, trees, planter boxes, garden plots, drinking fountains, spas, or pools may be placed in the outdoor area. It may be covered, such as a covered patio, but it may not be fully enclosed.*
- 3. General landscaped areas which are included as part of the required outdoor area may extend into the required side and rear building setback, but the required outdoor area may not be located in the front building setback.”*

Applicant provided the following comments related to this approval criterion:

*“10,074 sq. ft. of total outdoor area will be provided. Individual units will have exclusive use of private balconies (69 sq. ft. Average per unit), front porches (34 sq. ft. average), access to the non-vehicular pedestrian area (200 sq. ft. average), and the park at the west end of the extension of SW Tangent (143 sq. ft. average).” (Exhibit A.8)*

The minimum outdoor area requirements noted above (12-feet by 12-feet and 250 square feet) typically applies in single family residentially zoned properties for single family detached homes located on individual lots. This standard, on typical single-family zoned lots, is generally easily met due to the combination of minimum setbacks and building coverage regulations that apply to single family type development on a single lot.

In this case, the Subject Property has the environmental zoning overlay and also has significant topographical conditions. Applicant's proposal is for 20 units clustered on a single lot (the Parcel) measuring 58,092 square feet (2,904 square feet of lot area per unit) surrounded by the 142,500 square feet Environmental Tract (7,125 square feet per unit). The Environmental Tract provides an abundance of open space abutting the Parcel. Based on the environmental zoning and the desire to “cluster” development on the Subject Property, to lessen the impact of the environment, Applicant determined that it was not practical to provide a 12-feet by 12-feet area with 250 square feet of outdoor area for each unit. Instead, Applicant provided private balconies, porches (as indicated above) and access to the 1,988 square feet open area proposed at the west end of the private driveway in order to meet this requirement. In addition, the private driveway is designed to have areas that function as “shared pedestrian area” (as shown on exhibit C.11.2).

The proposed outdoor area on the Parcel for the 20 units orients balconies to provide private outdoor area toward the shared driveway. The Hearings Officer found Applicant's proposed private balconies facing the shared driveway minimally satisfies this approval criteria because it orients this area toward the “public realm” within the Parcel and Subject Property. The reduction in larger outdoor areas for each unit also allowed more Subject Property area to be placed into the Environmental Tract which will result in greater preservation of natural resources, including stands of trees, water

features, and topographical features. The balconies provide private open space within each unit and are integrated into the architectural design of the units on the front and rear facades of the units in a manner that provides eyes on the street (in this case the shared private driveway which will function like a street) and will also maximize views for the future residents.

In addition, the shared outdoor recreation area provides a contiguous 1,988 square feet area at the western edge of the driveway that can be utilized by residents to make up for the lack of contiguous outdoor area next to each unit or along the private driveway.

The City Council agrees with the Hearings Officer finding that Applicant's proposed reduction in outdoor area for each unit has no negative impacts on the surrounding residential neighborhood. As indicated above, this reduction results in a more clustered development plan which allows for a larger Environmental Tract. The City Council finds this approval criterion is met.

### **Single-Dwelling Zone Setbacks**

Applicant requested a setback modification. The requested modification would reduce the minimum rear setback for the proposed decks extending off the south façade of project buildings on the downhill side of the project (impacting Units 2-16). Applicant's proposal would encroach 5 feet into the required 10-foot setback. Applicant included these decks in order to create additional private outdoor "open space" for these units.

The setback requirements in the PCC do not require a setback between Units 1 and 2 where they abut the public pedestrian right-of-way due to the environmental zoning (PCC 33.110.220.D.3). While perhaps self-evident, the decks cannot cross the property line. Any buildings or decks adjacent to the Environmental Tract must meet the 10-foot setback requirement in the R10 zone or have a setback modification approved via the Planned Development review.

PCC 33.110.220 references Table 110-3 which establishes building setbacks. The minimum rear building setback is 10 feet.

Applicant provided the following comments addressing this approval criterion:

*"The boundaries of Parcel 1 are minimized to create the largest possible environmental tract surrounding Parcel 1. The driveway is the minimum necessary dimension and the units have the smallest possible footprint. Beyond the south boundary wall of the units a ten-foot disturbance zone is created and above this disturbance zone, decks are placed well above grade. Placing the deck above the ground level allows for integration of building and site. The rear setback is located adjacent to the environmental tract, away from the private drive and SW Tangent Street. The diminution of the rear setback allows for greater preservation of natural features on site, not less.*

*The decks are architecturally compatible with the units and are compatible in terms of architectural styles and materials. The decks are not visible from residential lots to the north and are away from any proximate development. There are no City-designated scenic resources on site."* (Exhibit A.12)

The modification to reduce the rear building setbacks for decks extending off the rear of Units 2-16 from 10 feet to 5 feet where the Parcel abuts the Environmental Resource Tract will not impact the "public realm." The impact area on the Parcel (internal to the Subject Property) are outside the Environmental Tract (which provides substantial preservation of natural features, such as trees and topographical features). The decks

will extend off the south facing façade and not be visible from the “public realm” and will provide additional private outdoor open spaces for each unit.

The Environmental Tract will effectively function as additional setback of between 110 feet and 170 feet between the downhill homes and SW Broadway Drive to the south. This large setback will continue to maintain light, air, and separation from adjacent development south of SW Broadway Drive.

The City Council finds that allowing setback reductions for Units 2-16 will allow each unit to have private decks without impacting the Environmental Tract which will help preserve significant trees and allow the location of these decks to work well within the natural grade of the site. The City Council finds this approval criterion is met.

**B. Purpose of the standard.** On balance, the proposal will be consistent with the purpose of the standards for which a modification is requested.

### **Building Coverage**

**Findings:** The purpose section of 33.110.225.A is as follows:

*“The building coverage standards, together with the height and setback standards control the overall bulk of structures. They are intended to assure that taller buildings will not have such a large footprint that their total bulk will overwhelm adjacent houses. Additionally, the standards help define the character of the different zones by limiting the amount of buildings allowed on a site.”*

Applicant offered the following comments addressing this approval criterion:

*“The building coverage standard is 4,500 sq. ft. + 7.5 percent of Parcel 1 area over 20,000 sq. ft. Parcel 1 is 58,092 sq. ft. so the maximum building coverage is 7356.9 sq. ft. Buildings have a tight footprint, as narrow as 19 feet for the 16 downslope units. These downslope units have a small 952 sq. ft. building footprint plus 72 feet for an outside deck. The four upslope units are wider, 25 feet in width, for a 1,250 sq. ft. footprint. The building coverage as a percentage of Parcel 1 is 21,352 / 58,092 or 36.7%. However, the building coverage as a percent of the site is only 10.2% Or, calculating maximum building coverage with the site as the basis for understanding how built upon the site is, allowed maximum building coverage would be 18,369.2 sq. ft. Thus, the proposed building coverage is much closer considering the site as the denominator rather than the reduced Parcel 1. Building coverage is a factor of both building size and parcel size. The previous preferred option (Alternate 5) had a parcel size of 89,355 sq. ft. and total building coverage of 32,802 sq. ft., or 37% of the parcel.*

*The size of Parcel 1 has been substantially reduced in response to City concerns, resulting in a higher relative percentage of building coverage, although the total square footage of building coverage is lower than the earlier design, Alternate 5. The townhomes are located downslope from existing homes and will not interrupt view to the south from residences farther up the hill. Further, they are designed to blend into the natural surroundings, landscaped in a naturalistic style, and set among the larger trees on-site. They are part of an overall design that visually integrates natural and built features. As described in the planned development portion of this narrative, the project meets Planned Development approval criteria.*

*Furthermore, the placement of the buildings and total building coverage has been determined after the alternatives analysis provided as part of the environmental review requirements. The environmental analysis indicates how this amount of development is compatible with preservation of natural resources. This project originated as a standard*

*subdivision. Due to environmental considerations, units are now clustered in a single Parcel in a Planned Development proposal. The Planned Development results in multiple dwelling units on a single lot, skewing the relationship of lot size to building coverage. The maximum density on this site is 21 units, but the building coverage requirement, unless modified would result in only 17 duplex units built. As elsewhere noted, reduction of the density to 17 units is impracticable. We request a modification to allow total building coverage of 21,352 sq. ft.” (Exhibit A.4)*

As noted in the findings above, the R10 zone has a fairly limited building coverage allowance as it envisions a single-family home on a moderately sized lot, as opposed to this proposal, which is 20 attached units on a single oversized lot.

Although the Parcel will have approximately three times the allowed building coverage based on Zoning Code section 33.110.225 (Figure 110-4), it will still only cover approximately 37 percent of the area of the Parcel. In addition, the total percentage of building coverage (21,352 square feet) will be approximately 10 percent of overall site area of the Subject Property (207,451 square feet).

Applicant’s proposed development on the Parcel will be limited in height and massing by the design proposed via the Planned Development which is consistent with allowed development in single dwelling zones. The size of the units on the Parcel will be generally consistent with that of the surrounding development, in that it will consist of reasonably sized homes of similar size and scale. Additionally, the combination of the common area along the shared driveway, the common open area within the Parcel, and the Environmental Tract surrounding the Parcel will reduce the impact of allowing additional building coverage. The driveway and common area help break up the massing of structures across the entire lot and the environmental resource tract provides buffering from the development from the adjacent development.

On balance, the modification to increase building coverage is consistent with the purpose of the standard. As noted above, a typical 10,000 square foot lot in the R10 zone would be allowed 30 percent (3,000 square feet) of building coverage by right based on PCC 33.110.225 (Table 110-4). The overall building coverage on the site as a whole is much lower (10 percent). The City Council finds, based upon the evidence in the record and earlier findings, this approval criterion is met.

The modifications requested for Parking Space Dimensions, Parking Lot Landscaping, and **Parking Area Setback** are all based on the same purpose statement as indicated below:

The purpose of Development Standards for All Other Uses (PCC 33.226.130.A) for Parking and Loading is as follows:

*“The development standards promote vehicle areas which are safe and attractive for motorists and pedestrians. Vehicle area locations are restricted in some zones to promote the desired character of those zones. Together with the transit street building setback standards in the base zone chapters, the vehicle area restrictions for sites on transit streets and in Pedestrian Districts:*

- *Provide a pedestrian access that is protected from auto traffic; and*
- *Create an environment that is inviting to pedestrians and transit users.*
- *The parking area layout standards are intended to promote safe circulation within the parking area, provide for the effective management of stormwater runoff from vehicle areas, and provide for convenient entry and exit of vehicles*

- *The setback and landscaping standards:*
  - *Improve and soften the appearance of parking areas;*
  - *Reduce the visual impact of parking areas from sidewalks, streets, and especially from adjacent residential zones;*
  - *Provide flexibility to reduce the visual impacts of small residential parking lots;*
  - *Direct traffic in parking areas;*
  - *Shade and cool parking areas;*
  - *Reduce the amount and rate of stormwater runoff from vehicle areas;*
  - *Reduce pollution and temperature of stormwater runoff from vehicle areas; and decrease airborne and waterborne pollution.”*

**Parking Space dimensions:**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, Applicant provided the following comments addressing this approval criterion:

*“The reduction in parking space width is consistent with the protected pedestrian markings within the shared drive design. The reduction of parking space width remains inviting to pedestrians in that the vehicle area in the driveway is reduced. The difference in width does not diminish the strong relationship between the units and shared court style private drive. There is no impact to transit street frontage.”* (Exhibit A.8)

The small reduction in parking space sizes by 1 foot (from 8’6” to 7’6”-8’) does not impact the setback and landscaping standards or effect the visual impact of parking areas from sidewalks, streets, and adjacent residential zones. In addition, this reduction does not impact the direction of traffic or pedestrian access to the Subject Property while also providing flexibility to allow less overall site disturbance. The parking spaces are located in a safe location between each set of units (outside the drive aisle) and are conveniently located next to units they will serve. In addition, the paving pattern utilized will ensure the parking space will be attractive and blend into the overall design concept.

The reduction in vehicle area (paving) also slightly reduces the amount of stormwater runoff since less paved area is necessary since the parking spaces are slightly narrower. The parking spaces proposed are not located off a transit street or within a pedestrian zone so that portion of the purpose statement is not applicable.

Based on the discussion above, the City Council finds this approval criterion is met.

**Parking Lot Landscaping**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, the purpose of Development Standards for All Other Uses, PCC 33.226.130.A (Parking Lot landscaping), is referenced above.

Applicant provided the following comments to address this criterion:

*“The tree wells and trees are part of traffic calming features with the vehicle/pedestrian link extending west from SW Tangent Street. The trees are part of a typical block frontage but compressed. There are no transit or pedestrian streets nearby.”* (Exhibit A.8)



As noted in the findings above, a shared parking area is proposed for the Parcel. The parking area is located in the most practical location on the Parcel based on the sloped topography. The Subject Property is fully located within an environmental overlay zone and the allowed disturbance area creates some limitations on Applicant's ability to meet this required landscaping standard since they are trying to minimize the impacts of development. The 3 foot by 7-foot tree wells are located just outside the 20-foot drive aisle for the private driveway providing a buffer between the drive aisle and the shared pedestrian area (accessible route) located along the southern edge of the driveway (adjacent to Units 1-10, 13-14, and between Units 18-19 and next to Unit 20).

The location of the nine tree wells proposed will improve and soften the appearance of the overall parking area, reduce the visual impact of parking areas, and direct motorized vehicles away from the pedestrian zone while also providing shade and cooling to the parking area. The Hearings Officer found that the overall landscaping provided surrounding the shared driveway will meet the standards in the Zoning Code. The City Council concurs with that finding.

On balance, the City Council finds that this modification will be consistent with the purpose of the parking lot landscaping standards. The City Council finds this approval criterion is met.

**Parking Area Setback:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, the purpose of Development Standards for All Other Uses is set forth in PCC 33.226.130.A and quoted and discussed in earlier findings.

Applicant provided the following comments related to this approval criterion:

*"As previously indicated, the turnaround will be well below the grade of the adjacent property to the east that will be most impacted and will not be visible due to the 17' retaining wall. Since the turnaround will be located well below the grade of the adjacent property to the east, the area of the proposed turnaround that is located within 5' of this property will not be visible even if a person is standing at the edge of the property boundary since the top of the retaining wall will be required to have a fence to meet applicable building code safety requirements. Therefore, the adjacent residential property to the east will not be impacted and the appearance of this element of the parking area will be naturally mitigated for due to the site's steep topography which will soften the appearance of the parking area and reduce the visual impact."* (Exhibit A.8)

The City Council finds, based upon findings for B. as set forth above, and Applicant's comments quoted above, this approval criterion is met.

**Outdoor Area:**

**Findings:** No opponent specifically raised any issue over this requested modification in the Appeal. The purpose of the Outdoor area is found in PCC 33.110.235.A, and states:

*"The required outdoor areas standards assure opportunities in the single-dwelling zones for outdoor relaxation or recreation. The standards work with the maximum building coverage standards to ensure that some of the land not covered by buildings is of an adequate size and shape to be usable for outdoor recreation or relaxation. The location requirements provide options for private or semiprivate areas. The requirement of a required outdoor area serves in lieu of a large rear setback requirement and is an important aspect in addressing the livability of a residential structure."*

Applicant provided the following comments addressing this approval criterion:

*“10,074 sq. ft. of total outdoor area will be provided. Individual units will have exclusive use of private balconies (69 sq. ft. Average per unit), front porches (34 sq. ft. average), access to the non-vehicular pedestrian area (200 sq. ft. average), and the park at the west end of the extension of SW Tangent (143 sq. ft. average).*

*This requirement could be accomplished in a standard subdivision on a relatively level site. However, to reduce the environmental impact, each townhome is designed so there is minimal disturbance. It is anticipated that most residents will have access to balconies exterior to their unit or covered and uncovered spaces adjacent to accordion doors that can be opened to erase the distinction between outdoor and indoor. In addition to exclusive spaces residents may use the shared drive outside the units and the community at the west.” (Exhibit A.8)*

The Hearings Officer address this request in the Hearing Officer decision as follows:

*The Hearings Officer finds that a number of aspects of Applicant’s proposal address this criterion. The Hearings Officer takes note of the private outdoor balconies proposed for each unit, common open areas shown along the driveway and within the shared outdoor area at the western end of the private driveway, and the 3.27-acre Environmental Tract combine to soften the impacts from the reduction in outdoor area proposed for each unit. The Hearings Officer finds these design aspects result in the proposal meeting the purpose statement referenced above. Buildings are proposed to cover approximately 10 percent of the site (based on the entire 4.76-acre site).*

*Based on the environmental zoning and the desire to “cluster” development on the Subject Property in order to lessen the impact on the environment, Applicant determined that it was not practical to provide a 12-foot by 12-foot area with 250 square feet of outdoor area for each unit. Instead, Applicant proposed private balconies, porches (as indicated above), and access to the 1,988 square foot open area proposed at the west end of the private driveway. In addition, the private driveway is designed to have areas that function as “shared pedestrian area” (as shown on Exhibit C11.2). The Hearings Officer finds that Applicant’s proposed open space will ensure future residents have adequate space for outdoor recreation and relaxation in private and semiprivate areas. The Hearings Officer finds this approval criterion is met.*

The City Council finds no basis to disagree with the Hearings Officer’s findings and therefore, finds the criterion to be met.

### **Single-Dwelling Zone Setbacks**

**Findings:** No opponent specifically raised any issue over this requested modification during the Appeal. The purpose of setbacks in single dwelling zones is set forth in PCC 33.110.220.A. PCC 33.110.220.A states the following:

*“Purpose.* The setback regulations for buildings and garage entrances serve several purposes:

- They maintain light, air, separation for fire protection, and access for fire-fighting;
- They reflect the general building scale and placement of houses in the city's neighborhoods;
- They promote a reasonable physical relationship between residences;
- They promote options for privacy for neighboring properties;
- They require larger front setbacks than side and rear setbacks to promote open, visually pleasing front yards;

- They provide adequate flexibility to site a building so that it may be compatible with the neighborhood, fit the topography of the site, allow for required outdoor areas, and allow for architectural diversity; and
  - They provide room for a car to park in front of a garage door without overhanging the street or sidewalk, and they enhance driver visibility when backing onto the street.”

Applicant provided the following comments to address this approval criterion:

*“Parcel 1 is surrounded by the environmental tract and the adjacency of the decks to the tract does not affect light, air, fire protection, etc., for adjacent neighbors as the decks face away from neighbors to the north and there are not between the buildings and SW Broadway Drive to the south. The project is isolated from other development on the hill and the decks are not visible from other development to the north. There is no impact on privacy from the reduced setback from deck to surrounding woods. This is a planned development and there is no effect upon the streetscape. The project is ‘flexible’ in that it is designed to provide cluster housing while minimizing environmental impact. The site is quite steep, and the decks provide required outdoor areas above the grade of the site. Car parking is located on the ‘front façade’ of the buildings, not at the rear where the modification request applies.”* (Exhibit A.12)

The Hearings Officer addressed this requested modification in his decision. He noted that, as discussed earlier in his decision, , the requested setback modifications will have no impact on surrounding development. The setback modification to reduce the rear building setbacks for decks extending off the rear of Units 2-16 from 10 feet to 5 feet where the Parcel abuts the Environmental Tract will not impact the “public realm.” Granting the setback modification will result in substantial preservation of natural features on the Subject Property. The decks will extend off the south facing façade and not be visible from the “public realm” and will provide additional private outdoor open spaces for each unit.

The Environmental Tract will effectively function as additional setback of between 110 feet and 170 feet between the downhill homes with the decks between the south facing façade and SW Broadway Drive to the south. This large setback will continue to maintain light, air, and separation from adjacent development south of SW Broadway Drive. Granting the requested setback reductions for Units 2-16 will allow each unit to have private decks without impacting the Environmental Tract which will help preserve significant trees and allow the location of these decks to work well within the natural grade of the Subject Property. Based upon the Hearings Officer’s discussion and findings, which the City Council finds correct, the City Council finds this approval criterion is met.

### **Conclusion**

On balance, the City Council finds that Applicant’s proposal will be consistent with the purpose of building coverage, parking area standards, outdoor area, and building setback standards in the single dwelling residential zone as demonstrated by the preceding findings. In order to ensure that the parking area and associated landscaping on the Parcel are built in a manner that allows construction on the Subject Property to proceed without damaging these areas, the following condition of approval is necessary:

1. *Prior to finalizing the building permit approval for new development on Parcel 1 (20 units are allowed), a Site Development permit is required to be finalized for construction of the shared driveway, parking lot, and installation of the required landscaping plan in conformance with Exhibits A.8 and Exhibit C0.1-C12.5.*

Based upon the findings above, the City Council finds that this approval criterion is met.

**33.430.250 Approval Criteria for Environmental Reviews**

**A. Public safety facilities, rights-of-way, driveways, walkways, outfalls, utilities, land divisions, Property Line Adjustments, Planned Developments, and Planned Unit Developments. Within the resource areas of environmental zones, the applicant's impact evaluation must demonstrate that all of the general criteria in Paragraph A.1 and the applicable specific criteria of Paragraphs A.2, 3, or 4, below, have been met:**

**A.1. General criteria for public safety facilities, rights-of-way, driveways, walkways, outfalls, utilities, land divisions, Property Line Adjustments, Planned Developments, and Planned Unit Developments;**

**A1.a. Proposed development locations, designs, and construction methods have the least significant detrimental impact to identified resources and functional values of other practicable and significantly different alternatives including alternatives outside the resource area of the environmental zone;**

**Findings:** The City Council finds that this criterion requires an applicant to demonstrate that alternatives were considered during the design process, and that there are no practicable alternatives that would be less detrimental to the identified resources and functional values.

Before the Hearings Officer, there was a significant amount of evidence and discussion over the alleged existence, or not, of an “unmarked drainageway” on the Subject Property (i.e. Exhibits H.18, H.22, H.33, H.33a, H.41, H.47, H.48, H.49, H.52, and H.55). The Hearings Officer addressed that issue as follows:

*Opponent Koon, in Exhibit H.33a, stated that, “I am concerned that the project has an unmarked drainage, that significant portions of this drainage are to be destroyed and built over, and that this feature needs to be investigated by BES before approval.”*

*Opponent Koon, in Exhibit H.33a, also described with specificity the location of the suspected “unmarked drainage.”*

*BES and BDS planning staff responded to the drainage claims made in Exhibit H.33a (Exhibits H.32 and H.33). Applicant’s environmental consultant also provided responses to the claim that an “unmarked drainage” had been overlooked by Applicant during its project planning process (Exhibits H.47 and H.48).*

*The Hearings Officer is persuaded by the comments made by the BES representative in Exhibit H.32 and the comments made by Applicant’s environmental consultant in Exhibit H.47. The Hearings Officer finds the BES representative and Applicant’s environmental consultant both conducted field inspections of the Subject Property and particularly the area described in Exhibit H.33a. The conclusion expressed by both the BES representative (Exhibit H.32) and Applicant’s environmental consultant (Exhibit H.33) was that “no other drainageways were identified” (Exhibit H.32).*

*The Hearings Officer finds that no “unmarked drainageway” exists on the Subject Property.*

No opponent specifically raised an issue over the existence or not of the alleged drainageway during the Appeal. Nonetheless, the City Council concurs with the

Hearings Officer's finding that there is no unmarked drainageway on the Subject Property.

Applicant provided an extensive Environmental Review Application, found in the application case file Exhibit A.8.a-2, as "Exhibit 2 Tangent Village Environmental Review Application - LU 18-119056 LDP EN PD" dated March 2019. The Applicant included an Alternatives Analysis, as summarized earlier in the Hearings Officer decision. No opponent specifically raised an issue over whether the Hearings Officer's findings on the Applicant's alternative analysis were adequate or supported by substantial evidence. .

Practicable and significantly different alternatives, including alternatives outside of the resource area of the environmental zone were explored in their Alternatives Analysis. An attorney for some opposition neighbors (Exhibit H.41) argued that Applicant is required, under PCC 33.430.250, to consider specific "alternatives" as "practicable." The Hearings Officer considered the comments of Applicant's attorney related to "alternative analysis" in Exhibit H.52. The Hearings Officer found that while PCC 33.430.250 may allow the attorney for opposing neighbors to propose one or more alternatives, it is not the Applicant's burden to disprove such alternatives. The City Council finds that the Applicant in this case has the burden of providing evidence related to the alternatives Applicant proposed with respect to practicability, significant difference, and impacts upon the identified resources and functional values.

The Hearings Officer found, based upon a review of the evidence in the record, that Applicant's analysis demonstrates that there are no practical or economically viable development alternatives that would avoid impacts to the resource area of the environmental zone. The layout of the preferred alternative, Alternative 7, has been designed to minimize earthwork, impacts to large native trees, and encroachment into the seep (wetland) buffer.

The Hearings Officer found that Alternatives 4, 6, and 7 concentrate development in the eastern half of the Subject Property adjacent to existing site access via SW Tangent Street. The Hearings Officer found that Applicant's preferred layout, Alternative 7, results in the least amount of tree removal and no impact to the wetland buffer. Along with greater tree preservation, Alternative 7 avoids fragmentation of the western forested portion of the Subject Property. Furthermore, despite providing 20 residences, Alternative 7 results in the least building coverage (21,352 square feet) compared to other development options. The Alternative 7 layout enhances and preserves wooded areas in the western half and southern portion of the Subject Property along SW Broadway Drive and maintains the canopy connection with Governors Park and Marquam Nature Park. The preserved forested corridor would contribute to ecological and scenic values in the Southwest Hills.

Before the Hearings Officer SWHRL, , argued that the proposal did not consider an alternative with fewer duplex-style units clustered at the east side of the property, and that such an approach would result in much less detrimental impact to the Subject Property's resources and functional values compared to Alternative 7. Applicant provided a thorough reply to the SWHRL letter (Exhibit A.8.a). Applicant described the need for a minimum of 20 units to offset increased infrastructure costs in concert with recent housing market changes that have led to a lower price range expected for the units. Applicant also highlighted the considerable portion of the 4.7-acre site to remain in an undeveloped and natural state within the proposed Environmental Tract and the public pedestrian right-of-way (approximately 72 percent of the Subject Property). Only 28 percent of the Subject Property will be permanently developed in the Parcel, with actual building coverage on only 10 percent of the Subject Property.

To meet connectivity requirements for subdivision, a pedestrian path is provided at the east end of the Subject Property. The path will be constructed within a narrow corridor and all other areas within the Environmental Tract will be left undisturbed.

The Hearings Officer found that Applicant provided assessment of seven formal alternatives that are substantially different in building coverage, open space, road lengths, and housing types. In addition, Applicant's development team evaluated numerous other configurations which are not practicable, that is, not capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.

The Hearings Officer found that Applicant, in both the Environmental Review narrative and the responses to City Staff and the Neighborhood Association, have provided abundant information describing how the proposed land division and planned development would be less detrimental to identified resources and functional values than other practicable and significantly different alternatives. As noted, opponents did not raise any specific challenge to the Hearings Officer's above findings. Therefore, the City Council finds this approval criterion is met.

**A.1.b. There will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed;**

**Findings:** The City Council finds that this approval criterion requires the protection of resources outside of the proposed disturbance area from impacts related to the proposal, such as damage to vegetation beyond the approved limits of disturbance, erosion of soils off the Subject Property, and downstream impacts to water quality and fish habitat from increased stormwater runoff and erosion off the Subject Property. Applicant described proposed construction methods in its March 21, 2019 "Exhibit 1B: Responses to City Comments (BDS LUS)," found in the application case file Exhibit A.8.a, under Responses 34 and 35. This description is summarized earlier in this decision.

In response to BDS Site Development's initial comments expressing concerns with the grading needed to construct buildings and retaining walls not being feasible within identified construction and tree-protection limits, Applicant revised construction plans and described construction management techniques in "Exhibit 1.E: Response to City Comments (Site Development Section, BDS)." Additionally, Applicant described the stormwater management proposal in both "Exhibit 1.F: Response to City Comments (BES)" and "Exhibit 6: Revised Preliminary Stormwater Management Report" (see details in Exhibit A.8.a in the application case file).

The Hearings Officer incorporated the findings for PCC 33.665.310.B as additional findings for this approval criterion and found that they were met. Opponents did not raise any issue over the Hearings Officer's findings under this criterion with sufficient specificity to require City Council to address it. Nevertheless, the City Council finds that the criterion is met based upon the following discussion in the Hearings Officer's decision:

*Applicant described tree protection measures in "Exhibit 1.B: Response to City Comments (BDS LUS)," Responses 13 through 21, as well as in "Exhibit 5: Revised Arborists Report" (see details in Exhibit A.8.a-5 in the application case file). Applicant's tree protection plan provides most trees with the full root protection zone prescribed in Title 11, with the trees number 1, 6, 35, 36, 37, 38, 130, 131, 134, 135, 180, 191, 192, 201, 207, 266, and 308 deserving special consideration as recommended by the project arborist. Tree number 1, a*

*30-inch grand fir, is within the environmental overlay zone and within the existing right-of-way for SW Tangent Street, must be preserved, despite the graphic shown on the Tree Removal Plan. See Exhibit H.4f for Applicant's proposal to retain Tree 1.*

*Construction management techniques proposed by Applicant are anticipated to help minimize impacts to identified resources and functional values beyond the designated disturbance area. Construction techniques proposed include:*

- use of hand-held equipment near sensitive areas such as the hillside seep and other areas outside of the delineated disturbance boundary, and*
- use of construction fencing to identify the disturbance boundary, and*
- silt fencing to prevent erosion of soils beyond the development areas, and*
- material stockpiling occurring within the footprint of the private drive, and*
- tree protection to be conducted under the oversight of a project arborist.*

*Applicant described the possible use of "lightweight tracked equipment" to construct the 4-foot wide pedestrian path on steep hillsides between SW Tangent Street and SW Broadway Drive. The area identified for the Path is characterized by steep slopes. Existing trees are proposed to be preserved adjacent to the Path alignment. For these reasons, in order to ensure no significant detrimental impact on surrounding slopes and native vegetation, the construction of the Path should be conducted using hand held equipment only.*

*Applicant proposed to collect storm runoff from impervious surfaces and discharge it into large diameter detention pipes constructed below the proposed private drive, prior to its release into the City's combined sewer system in SW Tangent Street. In addition, the stormwater from retaining wall foundation drains will be routed to a level spreader above the wetland seep in the Environmental Tract.*

*The SWHRL letter (Exhibit F.2) as well as BES and BDS's Site Development staff raised questions regarding the project's approach to managing stormwater and slope stability. In the "Response to City Comments" presented in Exhibit A.8.a, Applicant provided technical responses for review by Site Development and BES staff. In BES's LUR Addendum (Exhibit E.1--April 2, 2019), they stated that the proposed stormwater disposal system is acceptable.*

*BDS Site Development staff noted in their February 21, 2109 response (Exhibit E.5) that a Site Development Permit would be required for the mass grading associated with the private drive construction and for utility installation.*

*The Hearings Officer finds that with effective implementation and oversight, the construction plans, including tree protection, and stormwater management plans will prevent significant detrimental impacts to resources and functional values outside of the project disturbance limits. To ensure effective protection of resources outside of the approved disturbance area, Applicant will be required to demonstrate that the project arborist is present on the Subject Property to oversee the excavation, fill, and all construction activities with the prescriptive root protection zones for trees numbered 1, 6, 35, 36, 37, 38, 130, 131, 134, 135, 180, 191, 192, 201, 207, 266, and 308, to ensure their preservation, as noted on Exhibits C.5.1 and C.5.2, Tree Protection/Removal Plans. Tree number 1, a 30-inch grand fir, must be preserved consistent with the methodology described, by Applicant's arborist, in Exhibit H.43f. Further, Applicant will be required to install construction fencing at the edge of the temporary disturbance boundary, including the proposed boundary of the pedestrian right-of-way. The pedestrian pathway will be required to be conducted using hand held equipment only. Applicant will also be required*

*to apply for a Site Development Permit. The Hearings Officer finds that with these conditions of approval, this approval criterion may be met.*

**A.1.c. The mitigation plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for;**

**Findings:** The City Council finds that this criterion requires the Applicant to quantify unavoidable impacts and propose mitigation that is proportional to the impacts, as well as comparable in character, so as to replace lost resource functions and values. There is a lengthy description of Applicant's mitigation proposal on pages 10 through 14 of their Environmental Review Application (Exhibit A.8.a-2), that is summarized earlier in this decision. It includes invasive species removal, planting of 365 native trees, 2,620 native shrubs, over 12,000 ground covers and ferns, and seeding of native grasses, sedges, and forbs. The plan is proposed to offset 69,419 square feet of total disturbance area and mitigate the removal of 118 trees.

The Hearings Officer found that Applicant's proposed mitigation plan will enhance the degraded understory on the Subject Property with a mix of native groundcover species, shrubs, and trees to increase species diversity and improve water quality and wildlife habitat functions. Removal and control of English ivy, English hawthorn, English holly, and sweet cherry - nuisance species which currently threaten the long-term health of the forest - is proposed to promote successful establishment of a native forest community. Temporary construction disturbances will be mitigated through the proposed revegetation plan, which will improve conditions in the impact areas over the long-term by removing invasive species and establishing native plant communities that are suitable for the site. The proposed mitigation plan is anticipated to increase plant diversity, preserve native conifers, and promote soil and slope stability.

Applicant provided "typical" planting diagrams (Exhibit C.4.3) to indicate the location and number of mitigation trees and shrubs that would be provided in each mitigation area shown on mitigation plans. The planting "typicals" provided a general idea of what a 40-foot by 40-foot planting area might look like for the different areas on the Subject Property.

In order to confirm appropriate and timely placement and adequate coverage of mitigation plantings, the Site Development Permit inspection must include on-site inspection, at installation, of the mitigation planting. At the time of the Site Development Permit, Applicant must indicate whether the mitigation plantings will be tagged for inspection or if Applicant (or Applicant's representative) will accompany the BDS Site Development inspector to the Subject Property to indicate where mitigation planting has occurred.

Removal of trees from the Subject Property would ordinarily result in a loss of organic input, a loss of slope stabilization functions, a loss of wildlife habitat functions, and of diverse forest structure. To offset these impacts, Applicant will be required to retain all sections of tree trunks greater than 12 inches in diameter on the Subject Property in order to replace some of these lost functions.

The proposed Mitigation Plan will be installed and maintained under the regulations outlined in Section 33.248.040.A-D (Landscaping and Screening). Two years of monitoring and maintenance will ensure survival of proposed mitigation plantings. To confirm maintenance of the required plantings for the initial establishment period, Applicant will be required to have the plantings inspected by applying for a Zoning Permit two years after plantings are installed.



The Hearing Officer found that with conditions, as described above, to ensure that at least the minimum number of replacement plantings are planted on the site, that all cut trees with trunks greater than 12 inches in diameter are retained on site, and that plantings required for this Environmental Review are maintained and inspected as described above, this approval criterion can be met.

Again, the City Council finds that as part of the Appeal, no opponent raised an issue over this criterion with sufficient specificity that would provide any basis to reject the Hearings Officer's findings. Therefore, Council accepts the Hearings Officer's findings and finds that the criterion can be met.

**A.1.d. Mitigation will occur within the same watershed as the proposed use or development and within the Portland city limits except when the purpose of the mitigation could be better provided elsewhere; and**

**A.1.e. The applicant owns the mitigation site; possesses a legal instrument that is approved by the City (such as an easement or deed restriction) sufficient to carry out and ensure the success of the mitigation program; or can demonstrate legal authority to acquire property through eminent domain.**

**Findings:** Mitigation for significant detrimental impacts will be conducted on the same site as the proposed use or development, and Applicant owns the proposed on-site mitigation area. The City Council agrees with the Hearings Officer finding that these approval criteria are met.

**A.3. Rights-of-way, driveways, walkways, outfalls, and utilities;**

**A.3.a. The location, design, and construction method of any outfall or utility proposed within the resource area of an environmental protection zone has the least significant detrimental impact to the identified resources and functional values of other practicable alternatives including alternatives outside the resource area of the environmental protection zone;**

**Findings:** No opponent raised an issue over whether this specific criterion was met during the appeal proceedings. City Council agrees with the findings under this criterion set forth in the Hearings Officer decision. Specifically, this criterion reiterates criterion 33.430.250.A.1.a, above, with specific reference to activities within the Environmental Protection ("p") overlay zone. As this Subject Property has no Environmental Protection ("p") zoning, the City Council agrees with the Hearings Officer finding that this approval criterion does not apply.

**A.3.b. There will be no significant detrimental impact on water bodies for the migration, rearing, feeding, or spawning of fish; and**

**Findings:** There are no fish bearing water bodies within or near the development area. Stormwater from the proposed private drive would be detained on-site and discharged to the combined sewer. Applicant's stormwater plan and construction management proposal, as described in findings presented above for criterion 33.430.250.A.1.b, demonstrate that no adverse impacts will occur to downstream waterways in the Marquam Gulch. To the extent that Applicant's proposal meets the approval criterion A.1.b, the Hearings Officer found that there will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed. The City Council agrees with the Hearings Officer finding that this approval criterion is met.

**A.3.c. Water bodies are crossed only when there are no practicable alternatives with fewer significant detrimental impacts.**

**Findings:** No water bodies will be crossed by the proposed development. The City Council finds this approval criterion does not apply.

**A.4. Land divisions, Property Line Adjustments, Planned Developments and Planned Unit Developments:**

**A.4.a. Proposed uses and development must be outside the resource area of the Environmental Protection zone except as provided under Paragraph A.3 above. Other resource areas of Environmental Protection zones must be in environmental resource tracts;**

**Findings:** This criterion applies to activities within the Environmental Protection (“p”) overlay zone specifically, and does not apply to the Subject Property, as it has no Environmental Protection (“p”) zoning.

**A.4.b. There are no practicable arrangements for the proposed lots, tracts, roads, or parcels within the same site, that would allow for the provision of significantly more of the building sites, vehicular access, utility service areas, and other development on lands outside resource areas of a conservation zone; and**

**Findings:** No opponent raised an issue over this criterion with sufficient specificity to provide City Council with any basis upon which to reject the Hearings Officer’s findings. Therefore, City Council accepts the Hearings Officer’s findings as follow:

*Development cannot be moved further outside of the resource area of the Environmental Conservation (“c”) overlay zone on the Subject Property. Transition area is mapped along a 25-foot wide band along most of the Subject Property’s SW Broadway Drive frontage. A small area of transition area is also mapped at the end of the SW Tangent Street cul-de-sac. Development along SW Broadway Drive would include a 12-foot dedication for right-of-way improvements permitted through a Public Works Permit, which would reduce the transition area width to 13 feet. Development in the transition area along SW Broadway Drive would not likely be permitted (i.e. would not be practicable) given the transportation safety impacts associated with having multiple new curb cuts along SW Broadway Drive.*

*The above-referenced site layout would also be associated with substantial environmental impacts within the resource area. The steepest portion of the Subject Property (1.5H:1V) is located along SW Broadway Drive. If right-of-way improvements were required to be constructed in the 12-foot dedication, engineered retaining walls would be required along the length of the southern property boundary (730 feet). Significant earthwork in the resource area and retaining walls over 10 feet in height would be required to construct even a minimal ground floor footprint for vehicular parking and access to the upper floors of each unit.*

*Lack of utilities in SW Broadway Drive would further complicate construction. The only utility along SW Broadway Drive is a storm drain system that consists predominantly of a perforated drain pipe and open ditches. Stormwater from proposed units would likely exceed the capacity of the existing system. Storm and sanitary sewer connections for the proposed units would likely require an easement across private property located south of SW Broadway Drive, construction of a lift station to access the combined sewer in SW Tangent Drive, or construction of public sewer extension along SW Broadway Drive. Because of the site constraints on the Subject Property described above, it is not practicable to propose more of the development outside of the resource area. The Hearings Officer finds this approval criterion is met.*

**A.4.c. Development, including building sites, vehicular access and utilities, within the resource area of a conservation zone must have the least amount of detrimental impact on identified resources and functional values as is practicable. Significantly different but practicable development alternatives, including alternative housing types or a reduction in the number of proposed or required units or lots, may be required if the alternative will have less impact on the identified resources and functional values than the proposed development.**

**Findings:** The City Council finds that the Hearings Officer made findings that the above criterion were met and that no opponent raised any issue over those findings with sufficient specificity to give City Council any basis upon which to reject the Hearings Officer's findings. Therefore, the City Council accepts and adopts the Hearings officer's findings below:

*The Hearings Officer incorporates the findings for PCC 33.430.250.A.1 and A.2 as additional findings for this approval criterion.*

*Seven alternatives, including alternative housing types and numbers of units, were outlined/described by Applicant in the Environmental Review Application, found in the application case file Exhibit A.8.a-2, as "Exhibit 2 Tangent Village Environmental Review Application - LU 18-119056 LDP EN PD" dated March 2019. In it, Applicant included an Alternatives Analysis, as summarized earlier in this decision.*

*The location of building sites, vehicular access, and utilities has been designed to minimize earthwork, encroachment into the root protection zones of large native trees and encroachment into the 50-foot seep (wetland) buffer. As detailed in findings for approval criterion 33.430.250.A.1.a, above, Applicant demonstrated that the preferred development option (Alternative 7) results in the least amount of total diameter tree removal and the least amount of wetland buffer impact, avoids fragmentation of the western forested portion of the Subject Property, and maintains a forested corridor along the southern and western portions of the Subject Property that would contribute to the greater value of Marquam Gulch and the forested habitat of the Southwest Hills. Additionally, the preferred alternative has the smallest total building coverage (21,352 square feet) in the Environmental Conservation ("c") zone. The proposal would preserve the forested character of the site and neighborhood, and results in the least detrimental impact of other significantly different practicable alternatives. The Hearings Officer finds this approval criterion is met.*

*33.430.280 Modifications That Will Better Meet Environmental Review Requirements*

*The review body may consider modifications for lot dimension standards or site-related development standards as part of the environmental review process. The review body may not consider modifications to standards for which adjustments are prohibited. Modifications are done as part of the environmental review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as floor-area ratios, intensity of use, size of the use, number of units, or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations. For modifications to lot dimension standards, the review body must also find that the development will not significantly detract from the livability or appearance of the area.*

**Findings:** Applicant's proposal specifically requests an Environmental Modification of the maximum lot area standard of 17,000 square feet in the R10 base zone (Zoning Code section 33.610.200). Applicant requested the Parcel have an area of 58,092 square

feet. City Council finds that the Environmental Modification approval criterion 33.430.280 applies, as this constitutes a modification of lot dimension standards.

The approval criterion requires demonstration that increasing the maximum allowed lot area of 17,000 square feet --stipulated by Table 610-2--to the 58,092 square feet proposed, will result in greater protection of resources and functional values identified on the Subject Property.

Secondly, the criterion requires that the proposal must also be consistent with the purpose of the applicable regulations to be modified. In this case, Applicant proposed to modify the maximum lot area stipulated in Zoning Code section 33.610.200 Lot Dimension Regulations. The purposes of the lot dimension regulations area listed in 33.610.200 A:

**33.610.200 A. Purpose. The lot dimension regulations ensure that:**

- Each lot has enough room for a reasonably-sized house and garage;
- Lots are of a size and shape that development on each lot can meet the development standards of the zoning code;
- Lots are not so large that they seem to be able to be further divided to exceed the maximum allowed density of the site in the future;
- Each lot has room for at least a small, private outdoor area;
  - Lots are compatible with existing lots;
- Lots are wide enough to allow development to orient toward the street;
- Lots don't narrow to an unbuildable width close to the street
- Each lot has adequate access from the street;
- Each lot has access for utilities and services;
- Lots are not landlocked; and
- Lots are regularly shaped.

Lastly, as a modification to lot dimension standards, the criterion requires the development will not detract from the livability or appearance of the area.

Applicant provided the following information on August 18, 2018 (Exhibit A.4), and on March 26, 2019 (Exhibit A.9):

*“Given the R10 zoning and the environmental conservation overlay zoning the project seeks to protect the resources on-site while allowing home construction. The Tangent Village PD would preserve the forested character of the site and neighborhood (p. 29, Tangent Village Environmental Review Application, January 2019—Exhibit A.6.a-2 in the application case file). More specifically, there is a single parcel proposed, Parcel 1, 58,092 sf in area. This parcel is proposed as the “disturbance area” within which townhomes, associated outdoor areas, and parking and access via the private driveway are required to be separated from the resource tract by environmental regulatory considerations.*

*The proposal provides an average of 2,905 sq. ft. per unit which includes the private access driveway. This is approximately 3,000 sq. ft. less than the minimum lot size of the R10 zoning for standard residential lots, indicating that the proposal yields the least practicable impact while also providing the needed dwelling units. Each townhome is “paired” to maximize space efficiency while allowing windows along three exterior walls. Typical building footprints for these townhomes range from approximately 950 sq. ft. to 1250 sq. ft. All townhomes have garaged parking, with additional visitor parking provided either adjacent to units or in common area. A small open space is provided at the west end to address Planned Development approval criteria. The size of Parcel 1 was determined by these programmatic elements.*

*Clustering the residences on a single Parcel 1 of 58,092 square feet, allows for the creation of a 142,500 square-foot Environmental Resource tract. Clustering the units on a single lot, with a single access and tighter spacing of the allowed residences allows a large tract of protected natural resources to remain.*

*As described above, Parcel 1 is the appropriate size to accommodate the programmatic elements of the proposal. There is no proposal for further lot partition or division. The allowed maximum density for this site is 21 units; the proposed density is 20 units. Sixteen townhomes have a small private outdoor deck area, averaging 72 sq. ft. total per unit, as well as access to the outdoor area between the buildings and the perimeter of Parcel 1, which provides an additional 22,292 sq. ft. of shared open space. In addition, the private drive is designed to accommodate pedestrians, bicycles, and vehicles in the same space, in the style of a shared court. Landscaping and street furnishings are provided as a community amenity. The 20-foot drive aisle is visually delineated from the adjoining apron, but the decorative paving pattern helps to indicate that the entire street is intended for shared use. The paved area outside of the drive aisle provides 3,997 sq. ft. of shared open space to the development.*

*Existing residences on SW Tangent Street represent numerous architectural examples. The oldest is a 1940 farm house. The newest is a late 1960's ranch. The nearest are two mid 1960 NW Modern homes adjacent to proposed Parcel 1. Each proposed townhome in Tangent Village is part of a unified site design, compatible with its neighbors. Proposed residences on Parcel 1, with a forested Pacific Northwest architectural style, are compatible with surrounding residences in the neighborhood.*

*Parcel 1 is wide enough to allow townhomes and parking on either side of the private drive and each townhome fronts on the new private drive—none are landlocked. Townhomes range from 19 to 25 feet wide along the private drives, adequate for both cars/garage and residents.*

*All townhomes, and the parcel generally, have access for utilities and services, primarily via SW Tangent Street. All utilities and services are located within the private driveway. Residences are placed along the drive so as to allow parking for each home, as well as area for ten visitor parking spaces. All townhomes are oriented to the private driveway and have regular massing in relation to the private driveway. The townhome sites are all regularly shaped with orthogonal orientation to the private drive. The private drive follows the contours of the site with greater than a 20 ft. width, including areas near SW Tangent Street. Each townhome is part of a unified site design and is compatible with its neighbors; the design incorporates positive features of surrounding development, and mitigates differences through existing topography, planting new and preserving existing vegetation, and attentive site design. These features of the proposal, together with the general layout of Parcel 1, and a forested Pacific Northwest architectural style, is compatible with the surrounding lots in the SWHRL neighborhood. The proposed development will not significantly detract from the livability or appearance of the area.*

*Importantly, the placement of the buildings and total building coverage have been determined based upon the alternatives analysis provided as part of the environmental review requirements. The environmental analysis indicates how this amount of development, clustered within a single parcel occupying less than one-third of the site, will result in the maximum preservation of natural resources.*

The Hearings Officer found the above comments adequately address the factors listed in the PCC 33.610.200.A Purpose Statement. The Hearings Officer found this approval criterion is met. As part of the Appeal, no opponent raised any issue over the Hearings

Officer's findings with sufficient specificity to provide City Council with any basis upon which to reject the Hearings Officer's findings. Therefore, the City Council accepts those findings and finds that the approval criterion is met.

### **DEVELOPMENT STANDARDS**

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 11 can be met, and those 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.

The environmental development standards in Zoning Code Section 33.430.160 apply to the proposed land division/planned development. Standard 33.430.160.D is not met and is the subject of the Environmental Review in this decision. All other applicable environmental standards must be shown to be met as follows.

- The Environmental Tract (Tract 1) must be owned in common by all of the owners of the land division site, by a Homeowners' Association, by a public agency, or by a non-profit organization (PCC 33.430.160. E). Applicant proposed to place Tract 1 under the authority of a Homeowners' Association.
- The combined total diameter of trees cut may not exceed 225 inches per dwelling unit in residential zones (PCC 33.430.160.F). This standard allows removal of 4,500 diameter inches of trees and Applicant proposed to remove 1,997.5 diameter inches.
- Trees cut are replaced as shown on Table 430-3 (PCC 33.430.140.K). This standard will be met by planting at least 339 trees and 387 shrubs, and Applicant proposed to plant 365 native trees and 2,620 native shrubs.
- Nuisance species will be removed from an area equal to 50% of the proposed development area (PCC 33.430.140. L). Applicant proposed to remove nuisance species from all areas to be planted: over 45,000 square feet on Tract 1.
- All vegetation planted in a resource area is native and listed on the Portland Plant List. Plants listed on the Nuisance Plant List are prohibited (PCC 33.430.140.M). The proposed plantings are native and on the Portland Plant List.
- The minimum front and street building setback and garage entrance setback of the base zone may be reduced to any distance between the base zone minimum and zero. Where a side lot line is also a street lot line the side building and garage entrance setback may be reduced to any distance between the base zone minimum and zero. Parking spaces may be allowed within the first 10 feet from a front lot line and within a minimum side street setback (33.430.140.N). Unit 1 will be 10 feet from the front lot line.
- The front building or street setback of the base zone is the maximum building setback for primary structures (PCC 33.430.140.O). Unit 1 will be 10 feet from the front lot line.
- Fences are allowed only within the disturbance area (lots) (PCC 33.430.140.P). Fences are not proposed.
- The guest parking area must include a 10-foot wide buffer along its north edge, landscaped to the L2 standard (PCC 33.430.140 Q). Applicant proposed to landscape this area to the L2 standard.
- Exterior lights must be spaced at least 25 feet apart. Incandescent lights exceeding 200 watts (or other light types exceeding the brightness of a 200-watt incandescent light) must be placed so they do not shine directly into resource areas (PCC

33.430.140.R). Exterior lights will not be incandescent and will be at least 25 feet apart.

- Utility construction must meet the applicable standards of PCC 33.430.150. Private utility lines on a lot where the entire area of the lot is approved to be disturbed and where the private utility line provides connecting service directly to the lot from a public system or exempt from this standard (PCC 33.430.160.J) Private connections (laterals) and the private main line that would connect to the existing utilities in SW Tangent Street would be located within the Parcel, within the footprint of private residential driveways and the private drive for the planned development. Private utilities would include storm water, sanitary sewer, and water lines. Utilities are exempt from this standard.

Conditions have been included for the requirements above that apply at the time of final plat and at the time of development.

Development standards that are not relevant to the land division review, have not been addressed in the review, but will have to be met at the time that each of the proposed lots is developed.

**Future Development**

Among the various development standards that will be applicable to this lot, Applicant should take note of:

Development on the Parcel will be subject to the development approved (Exhibits C0.1-C12.5), landscaping and driveway design, and tree preservation approved through the Planned Development Review.

The Subject Property is currently vacant, so the division of the property will not cause structures to move out of conformance or further out of conformance with any development standard applicable in the R10 zones. Therefore, this land division proposal can meet the requirements of PCC 33.700.015.

**OTHER TECHNICAL REQUIREMENTS**

Technical decisions have been made as part of this review process. These decisions have been made based on other City Titles, adopted technical manuals, and the technical expertise of appropriate service agencies. These related technical decisions are not considered land use actions. If future technical decisions result in changes that bring the project out of conformance with this land use decision, a new land use review may be required. The following is a summary of technical service standards applicable to this preliminary partition proposal.

- Development Services: Title 24 – Building Code, Flood plain; Title 10 – Erosion Control, Site Development; Administrative Rules for Private Rights-of-Way
- Environmental Services: Title 17 – Sewer Improvements; 2008 Stormwater Management Manual
- Fire Bureau: Title 31 Policy B-1 – Emergency Access
- Transportation: Title 17 – Public Right-of-Way Improvements Transportation System Plan
- Urban Forestry (Parks): Title 11 –Trees
- Water Bureau: Title 21 – Water availability



As authorized in PCC 33.800.070, conditions of approval related to these technical standards have been included in the Final Decision.

Applicant must meet the requirements of the Fire Bureau in regard to addressing requirements; recording an Acknowledgement of Special Land Use Conditions that requires the provision of internal fire suppression sprinklers on Units 1-20 and Fire access including installation of no parking signs along private driveway meeting applicable turning radius, driving surface, and vertical clearance requirements.

In addition, Applicant will be required to designate the private driveway a Fire Department Access Lane. An Emergency Vehicle Access Easement (“EVAE”) must be shown on the plat survey as a condition of approval. It should be noted that this site is located within a Wildfire Hazard zone which has a minimum fire flow requirement of 1,750 gallons per minute. The fire flow available to the site is much lower at 350 gallons per minute (see Exhibit A.2). Therefore, Applicant was required to file for a Fire Code Appeal (discussed below) in order to demonstrate it can mitigate for this low fire flow. In addition, the Fire Bureau (Exhibit E.4) indicated the Fire Hydrant spacing must be met, and therefore public and private Fire Hydrants are required (per the fire code appeal). Applicant must also submit a maintenance agreement for the private driveway which details how maintenance responsibilities will be handled in correlation with applicable Fire Bureau requirements within this shared driveway since its serving as Fire Bureau access to the site.

Applicant has been granted a Fire Code Appeal (#18378) related to the low fire flow and fire hydrant spacing. The Fire Code Appeal (Exhibit G.8) was approved and requires residential fire sprinklers to be installed on all residential structures (Units 1-20) located on the Parcel. Applicant is required to provide an Acknowledgement of Special Land Use Conditions form to be recorded and noted on the plat in reference to this requirement. The Fire Code appeal also requires class A roofing material and non-combustible siding for all structures as proposed. In addition, the Fire Code appeal is requiring a new fire hydrant on SW Tangent Street adjacent to the Subject Property and another Fire hydrant within the private driveway.

As noted in the Fire Code Appeal, the private driveway serving Parcel 1 can be utilized as a fire apparatus access road to serve the Subject Property. The driveway aisle provides a 20 foot wide connection where it meets SW Tangent Street which could accommodate a fire truck entering the drive aisle.

The drive aisle maintains 20 feet of width in order to serve the interior parking lot. No parking will be allowed anywhere within the drive aisle in order to ensure access to the parking spaces. No parking signs and/or stripping will be required to ensure residents and visitors are aware of the restrictions. In addition, the grade of the driveway is below the maximum grade allowed for Fire apparatus access roads. The turnaround provided adjacent to Unit 17 will allow a fire truck to turnaround on the Subject Property as required by the Fire Bureau which allows Fire Bureau apparatus access requirements to be met.

Based on the plans submitted for review, Applicant has demonstrated that adequate fire apparatus access is available to serve the site based on the approved Fire Code Appeal approved and the Fire Bureau response provided (exhibit E.4).



These requirements are based on the technical standards of Title 31 and Fire Bureau Policy B-1.

## **V. CONCLUSIONS**

Applicant proposed a 1-lot parcel (the "Parcel") an Environmental Resource Tract ("Environmental Tract"), and a Planned Development and Environmental Review as shown on the attached preliminary land division, Development and Landscaping Plan (Exhibits C01-C12.5). As discussed in this decision, the relevant standards and approval criteria have been met, or can be met with conditions.

The Planned Development review included modifications to building coverage, parking lot landscaping, setbacks for parking areas in residential zones, outdoor area, and rear setbacks.

The Hearings Officer found that Applicant's proposal is able to meet the relevant approval criteria based on the development proposed and positive attributes of established situations in the surrounding neighborhoods. With approval requiring that the permit drawings be in substantial conformance to the attached site plans, architectural renderings proposed, and Landscaping Plan, Applicant's request meets applicable criteria and is approved. As stated herein, the City Council agreed with and accepted the Hearings Officer's findings.

## **VI. DECISION**

**It is the decision of the City Council to DENY the Appeal in its entirety and approve the Application for Land Division, Environmental Review with Conditions and Planned Development Review with Modifications with conditions.**

**Therefore, the City Council:**

**Approves a Preliminary Plan** for a 1-lot partition that will result in one parcel for multi dwelling development, an Environmental Resource Tract, and new pedestrian right-of-way as illustrated with Exhibits C0.1-C12.5.

**Approves a Planned Development Review** for the Parcel with the following modifications:

- An increase in allowed building coverage from 7,539 square feet to 21,352 square feet (PCC 33.110.225);
- A reduction in parking space dimension requirements (PCC 33.266.130, Table 266-4) as shown on the site plan (Exhibit C11.2) reducing spaces between Units 1-16 from 8'6" to 7'6";
- A reduction to rear building setbacks for decks on Units 2-16 from 10 feet to 5 feet on the south side of the Parcel (PCC 33.110.220);
- A reduction in the dimension of tree wells within the shared driveway for interior landscaping (PCC 33.266.130, Table 266-7) from 5-feet by 5-feet to 3-feet by 7-feet as shown on Exhibit C11.1);
- A reduction in outdoor area requirements for each unit (PCC 33.110.235) from 12-feet by 12-feet and 250 square feet to allow the shared open space on the Parcel as shown on Exhibits C0.1-C12.5;
- A reduction in parking area setback from the edge of the proposed turnaround (PCC 33.266.130.G) from 5-feet to zero where the northeast corner of the turnaround abuts the adjacent property as shown on Exhibits C0.1-C12.5.

**Approves an Environmental Review** for development of a 58,092 square-foot parcel with 20 residential units and associated utilities and infrastructure; and a 6,875 square-foot pedestrian right-of-way and associated pedestrian pathway, in the Environmental Conservation overlay zone; all as illustrated with Exhibits C.2-C.12.5.

This approval is per the approved site plans, elevation plans, and Landscape Plan (as shown on Exhibits C0.1-C12.5), subject to the following conditions:

**A. The final plat must show the following:**

1. Applicant shall meet the street dedication requirements of the City Engineer for SW Broadway Drive and the public pedestrian path between SW Tangent Street and SW Broadway Drive. The required right-of-way dedication must be shown on the final plat survey.
2. An Emergency Vehicle Access Easement, granted to the City of Portland, shall be shown over the relevant portions of the private driveway to the satisfaction of the Fire Bureau.
3. A recording block for each of the legal documents such as maintenance agreement(s), acknowledgement of special land use conditions, or Declarations of Covenants, Conditions, and Restrictions (CC&Rs) as required by Conditions A.9-A.12 below. The recording block(s) shall, at a minimum, include language substantially similar to the following example: "A Declaration of Maintenance Agreement for (name of feature) has been recorded as document no. \_\_\_\_\_, Multnomah County Deed Records."
4. The Environmental Resource Tract shall be noted on the plat as "Tract 1: Open Space (Environmental Resource)." A note must also be provided on the plat indicating that the tract will be commonly owned and maintained by the owners of residential units 1 through 20 or be consistent with the ownership requirements of 33.430.160.E.

**B. The following must occur prior to Final Plat approval:**

**Streets**

1. Applicant shall meet the requirements of the City Engineer for right-of-way improvements along the Subject Property's SW Broadway Drive street frontage and associated pedestrian connection between SW Tangent Street and SW Broadway Drive consistent with Exhibits G.9, G.10, and G.11. Specifically, the applicant shall be required to make pedestrian path and SW Broadway Drive improvements per Concept Public Works approval under 19-219169 WT.
2. Applicant shall complete street and storm sewer waivers of remonstrance (for future street and storm sewer improvements) as required by the City Engineer. Waiver forms and instructions will be provided to Applicant during the final plat review process.
3. Applicant shall submit an application for a Site Development Permit for construction of the mass grading and utility construction for the new development and related site development improvements. Design plans must be prepared by, or under the direction of, an Oregon licensed civil engineer. The permit plans must substantially conform to the tree protection and erosion control plan (Exhibit C.5.1),

construction management plan (Exhibit C.6), overall utility plan (Exhibit C.7), overall finish grading plan (Exhibit C.8), overall temporary cut grading plan (Exhibit C.8.B), and overall storm drainage plan (Exhibit C.9) with the following additions:

- Plans shall show construction fencing at the edge of the temporary disturbance boundary and the boundary of the proposed pedestrian right-of-way;
- Plans shall note that construction of the pedestrian pathway shall be conducted using hand held equipment only;
- Plans shall include the root protection zone for Tree #1, the 30-inch grand fir at the site's northwest corner, consistent with Exhibit H.42f;
- Applicant shall provide a copy of the contract confirming that the project arborist will be present on the Subject Property overseeing excavation, fill, and all construction activities that may occur within the prescriptive root protection zones for trees numbered 1, 6, 35, 36, 37, 38, 130, 131, 134, 135, 180, 191, 192, 201, 207, 266, and 308, to ensure their preservation;
- A Mitigation Plan must be provided in substantial conformance with Exhibits C.4.1, C.4.2, and C.4.3, and as required in Condition D.2;
- It must show stockpile area;
- It must note that topsoil must be stockpiled on site and re-used to the extent practicable;
- It must show required improvements in shared driveway (paving pattern) and landscaping; and
- It must demonstrate how all applicable Fire Bureau requirements are met.

#### **Utilities**

4. Applicant shall meet the requirements of the Water Bureau concerning the existing water main located in SW Tangent Street which is required to be upsized at the expense of Applicant. Prior to final plat approval, Applicant shall provide plans and financial assurances for the water main extension to the satisfaction of the Water Bureau.
5. Applicant shall meet the requirements of the Fire Bureau for installing new fire hydrants. Applicant must contact the Water Bureau, Development Services Department at 503-823-7368, for fee installation information related to the purchase and installation of fire hydrants. Applicant must purchase the hydrant and provide verification to the Fire Bureau that the Water Bureau will be installing the required fire hydrant, with the required fire flow and pressure.

#### **Required Legal Documents**

6. A Maintenance Agreement shall be executed for the Private Driveway to the satisfaction of the Fire Bureau. The agreement shall include provisions assigning maintenance responsibilities for the easement area described in condition A.2 above and any shared facilities within that area, consistent with the purpose of the easement, and all applicable City Code standards. The agreement must be reviewed by the Fire Bureau, City Attorney, and the Bureau of Development Services, and approved as to form, prior to final plat approval.
7. A Maintenance Agreement shall be executed for Tract 1, the Environmental Resource Tract, described in Condition A.4 above. The agreement must be reviewed by the City Attorney and the Bureau of Development Services, and approved as to form, prior to final plat approval. The agreement must also include:

- a. assign common, undivided ownership of the tract to the owners of all residential units, a homeowner's association or meet the requirements of PCC 33.430.160.E;
  - b. include provisions for assigning maintenance responsibilities for the Environmental Resource Tract;
  - c. provisions assigning maintenance responsibilities for mitigation plantings located within the Environmental Resource Tract;
  - d. include a description of allowed/prohibited activities consistent with PCC 33.430;
  - e. acknowledge any easements within the Environmental Resource Tract and related facilities; and
  - f. include conditions of this land use approval that apply to the Environmental Resource Tract.
8. Applicant shall execute an Acknowledgement of Special Land Use conditions requiring residential development on the Parcel to contain internal fire suppression sprinklers and class A roofing and non-combustible siding, per Fire Bureau Appeal 18378. The acknowledgement shall be referenced on and recorded with the final plat.
9. Applicant shall execute an Acknowledgement of Tree Preservation Land Use Conditions that notes tree preservation requirements that apply to the Parcel. A copy of the approved Tree Preservation Plan must be included as an exhibit to the Acknowledgement. The Acknowledgment shall be referenced on, and recorded with, the final plat.

**C. The following is required as part of the Site Development permit:**

1. Prior to any construction activity on the Subject Property, tree protection fencing shall be installed according to Title 11 Tree Code, Chapter 11.60, Tree Protection Measures, except as otherwise specified below. Four-foot high temporary orange construction fencing shall be installed at the edge of the construction disturbance limits or at the edge of the prescriptive or performance root protection zones of trees to be protected, as shown on the tree protection and erosion control plan (Exhibit C.5.1), and as recommended by the project arborist required to oversee construction activity near trees to be protected as described in Condition B.2 above; or as required by inspection staff during the plan review and/or inspection stages.
  - a. No mechanized construction vehicles are permitted beyond the approved "Construction Disturbance Limits" delineated by the temporary construction fence. All planting work, invasive vegetation removal, and other work to be done beyond the Construction Disturbance Limits shall be conducted using hand held equipment.
2. Mitigation Plantings shall be planted in Tract 1 (Environmental Resource Tract), in substantial conformance with Exhibits C.4.1 Mitigation Plan as follows:
  - a. At the time of permit review for grading at the Subject Property, the Mitigation Plan shall be submitted to the Bureau of Development Services in substantial conformance with Exhibits C.4.1, C.4.2, and C.4.3.
  - b. Applicant shall indicate on the plans selection of either tagging plants for identification or accompanying the Bureau of Development Services inspector for an on-site inspection.

- c. Prior to installing required mitigation plantings, non-native invasive plants shall be removed from all areas within 15 feet of mitigation plantings, using handheld equipment.
  - d. A total of 365 native trees, 2,620 native shrubs, 12,615 native ground covers and ferns, and seeding of native grasses, sedges, and forbs, are required to be planted in Tract 1 in the Environmental zone.
  - e. Any disturbance areas in the Environmental zones not planted as required above must be seeded with a native seed mix with species contained in the *Portland Plant List*.
  - f. All portions of trees to be removed, that are 12 inches or greater in diameter, shall be placed within the Environmental zone in Tract 1.
  - g. All mitigation shrubs and trees shall be shall be marked in the field by a tag attached to the top of the plant for easy identification by the City Inspector; or Applicant shall arrange to accompany the Bureau of Development Services inspector to the Subject Property to locate mitigation plantings for inspection. If tape is used, it shall be a contrasting color that is easily seen and identified.
  - h. Plantings shall be installed between October 1 and March 31 (the planting season). Any changes or substitutions to approved planting plans shall first receive written approval from Bureau of Development Services Land Use Review staff.
  - i. After installing the required mitigation plantings, Applicant shall request inspection of mitigation plantings and finalize the Site Development Permit.
3. **An inspection of Permanent Erosion Control Measures shall be required** to document installation of the required mitigation plantings.
- a. The **Permanent Erosion Control Measures** inspection (“IVR 210”) shall not be approved until the required mitigation plantings have been installed (as described in Condition C.2 above);  
--OR--
  - b. If the **Permanent Erosion Control Measures** inspection (“IVR 210”) occurs outside the planting season (as described in Condition C.2 above), then the Permanent Erosion Control Measures inspection may be approved prior to installation of the required mitigation plantings – if Applicant obtains a separate **Zoning Permit** for the purpose of ensuring an inspection of the required mitigation plantings by March 31 of the following year.

**D. The following conditions are applicable to site preparation and the development of individual lots:**

- 1. Development shall be in conformance with the following:
  - a. Prior to starting construction on the Parcel, Applicant shall install 4-foot high temporary construction fencing along any lot line that abuts Tract 1 Environmental Resource Tract. The fence must be shown on building permit plans. The fence shall remain in place until the final erosion control inspection is completed for all development on the Parcel.
  - b. All vegetation planted in a resource area of environmental zones is native and listed on the *Portland Plant List*. Plants listed on the Portland Nuisance Plant List or Prohibited Plant List are prohibited.
  - c. A minimum of 10 feet of L2 landscaping shall be provided between the guest parking spaces and the north property line of the Parcel.

- d. Exterior lights must be spaced at least 25 feet apart. Incandescent lights exceeding 200 watts (or other light types exceeding the brightness of a 200-watt incandescent light) must be placed so they do not shine directly into resource areas.
2. Development on the Parcel shall be in conformance with the Tree Preservation Plan (Exhibit C.2) and Applicant's Arborist Report (Exhibit A.8). Specifically, trees numbered 6 and 134 are required to be preserved, with the root protection zones indicated on Exhibit C.2 following the recommendations of the arborist as found under Exhibit A.8. Tree protection fencing is required along the root protection zone of each tree to be preserved. The fence must be 6-foot high chain link and be secured to the ground with 8-foot metal posts driven into the ground. Encroachment into the specified root protection zones may only occur under the supervision of a certified arborist. Planning and Zoning approval of development in the root protection zones is subject to receipt of a report from an arborist, explaining that the arborist has approved of the specified methods of construction, and that the activities will be performed under his/her supervision.
3. Prior to Planning and Zoning approval of a Site Development permit for new development on the Parcel within the root protection zone of Tree 6 (which is required to be protected per condition C.1 above), the application must include an arborist contract conforming with Exhibit A.8 which clearly indicates that the arborist has been hired to monitor excavation work within the root protection zone of trees 1 and 6.
4. As part of the building permit application submittal for the Parcel, required site plans and any additional drawings must reflect the development design approved by this land use review as indicated in Exhibits C0.1-C12.5. The sheets on which this information appears must be labeled, "Proposal and design as approved in Case File #18-119056 LDP EN PD. No Field changes allowed."
5. Prior to final inspection approval of the last building permit for new development on the Parcel (20 units are allowed), a Site Development permit is required to be finalized for construction of the shared driveway, parking lot, and installation of the required onsite landscaping plan and mitigation plantings in conformance with Exhibits C0.1-C12.5.
6. Applicant will be required to install residential sprinklers in the new units (1-20) on the Parcel to the satisfaction of the Fire Bureau. In addition, Class A roofing material and non-combustible siding is required for all structures per Fire Code Appeal 18378.

**E. The owner(s) of Tract 1 shall maintain and monitor the required plantings** for two years to ensure survival and replacement. The owner(s) is/are responsible for ongoing survival of required plantings during and beyond the designated two-year monitoring period. The landowner shall:

1. Obtain a Zoning Permit for a final inspection at the end of the 2-year maintenance and monitoring period. The permit must be finalized no later than two years from the final inspection for the installation of mitigation planting, for the purpose of ensuring that the required plantings remain. Any required plantings that have not survived must be replaced.

F. Failure to comply with any of these conditions may result in the City's reconsideration of this land use approval pursuant to Portland Zoning Code Section 33.700.040, and/or enforcement of these conditions in any manner authorized by law.

**It is the decision of Council to: deny the appeal and grant the application for a land division, environmental review with modifications, and planned development review with modifications.**

**The applicants prevailed with a proposal and site plan that could meet the approval criteria.**

## **VII. APPEAL INFORMATION**

### **Appeals to the Land Use Board of Appeals (LUBA)**

This is the City's final decision on this matter. It may be appealed to the Oregon Land Use Board of Appeals (LUBA), within 21 days of the date of the decision, as specified in the Oregon Revised Statute (ORS) 197.830. Among other things, ORS 197.830 requires that a petitioner at LUBA must have submitted written testimony during the comment period or this land use review. You may call LUBA at 1 (503) 373-1265 for further information on filing an appeal.

EXHIBITS NOT ATTACHED UNLESS INDICATED

### **EXHIBITS**

Not Attached Unless Indicated

- A. Applicant's Statements
  - 1. 120-day waiver
  - 2. Applicant submittal (in binder) dated February 2018 includes Exhibits A.1 through A.10 and d.1-3 and g-2 listed below:**
    - a-1. Narrative addressing Zoning Criteria
    - a-2 Environmental Review Application
    - a-3 Transportation Analysis
    - a-4 Arborist Report
    - a-5 Preliminary Stormwater Management Report
    - a-6 Preliminary Geotechnical Report/ Landslide Hazard Study
    - a-7 Fire Flow Report
    - a-8 Deed History
    - a-9 Neighborhood Context Photographs
    - a-10 Design Standards
    - d-1-3 Applicant's Early Neighborhood Notification
    - g-2 Preapplication meeting notes
  - 3. E-mail from Applicant dated March 29, 2018
  - 4. Applicant submittal (in binder) dated August 2018 includes Exhibits A.1. through A.9 and g-2 listed below:**
    - a-1 Revised Narrative addressing Zoning Criteria
    - a-2 Revised Environmental Review Application
    - a-3 Revised Transportation Analysis
    - a-4 Revised Arborist Report
    - a-5 Preliminary Stormwater Management Report
    - a-6 Preliminary Geotechnical Report/ Landslide Hazard Study
    - a-7 Fire Flow Report
    - a-8 Revised Deed History
    - a-9 Neighborhood Context Photographs
  - g-2 Incomplete letter dated 3/9/18
  - 5. Letter from Christopher P. Koback dated January 2, 2019

**6. Applicant submittal (in packet) dated January 2019 includes Exhibits A.1 through A.8 listed below:**

- a-1. Narrative Addendum Memo (1/19)
- a-2. Revised Environmental Review Application (1/19)
- a-3. Transportation Analysis Addendum (1/19)
- a-4. Arborist's Report Addendum & Updated Tree Table (1/19)
- a-5. Revised Preliminary Storm Water Management Report (1/19)
- a-6. Revised Preliminary Geotechnical Evaluation (1/19)
- a-8 Deed History Addendum (12/19)
- 7. Letter from Guenther LLC dated March 7, 2019

**8. Applicant submittal (bound) dated March 2019 includes Exhibits A (1A-1G) through A.13 listed below:**

- a. Response to City Comments (3/19)
  - 1A. BDS
  - 1B. BDS Environmental
  - 1C. Life Safety
  - 1D. Fire Bureau
  - 1E. Site Development
  - 1F. Bureau of Environmental Services
  - 1G. SWHRL
- a-2. Revised Environmental Review Application -(3/19)
- a-3. Transportation Technical Memorandum –Lancaster Engineering (3/19)
- a-4. Transportation Technical Memorandum –Ard Engineering (3/19)
- a-5. Revised Arborist Report (3/19)
- a-6. Revised Preliminary Storm Water Management Report (3/19)
- a-8 Deed History Addendum (3/19)
- a-9. Modification Requests (3/19)
- a-10. Service letter (3/19)
- a-11. Material specifications (3/19)
- a-12. Technical Memorandum – Geo Consultants Northwest (3/19)
- a-13. Revised Tree Table (3/19)
- 9. Applicant Revised Modification Request dated March 27, 2019
- 10. Applicant Revised Tree Table dated March 27, 2019
- 11. Applicant Request for Environmental Review of Dedication of Pedestrian Path dated April 3, 2019
- 12. Applicant Request for Review of Planned Development modification for rear setback dated April 3, 2019
- 13. Site Plan set submitted February 2018
- 14. Site Plan Set submitted August 2018
- 15. Elevation renderings August 2018
- 16. Site Plan set dated February 2019
- B. Zoning Map
- C. Plans and Drawings dated March 20, 2019, **C0.1-C12.5**:
  - 0.1. Cover Sheet
  - 0.2. Notes & Legends
  - 0.3. Site Tree Schedule
  - 0.4. Site Tree Schedule
    - 1. Existing Conditions
    - 2. Proposed Development Improvement Plan
    - 3. Parcel Sheet
    - 4.1. Mitigation Plan
    - 4.2. Planting Schedules
    - 4.3. Planting Details/Notes
  - 5.1. Tree Protection and Erosion Control Plan
  - 5.2. Tree Removal Plan



6. Construction Management Plan
7. Overall Utility Plan
8. Overall Finish Grading Plan
- 8.B. Overall Temporary Cut Grading Plan
9. Overall Storm Drainage Plan
- 10.1. Street Plan & Profile
- 10.2. Street Plan & Profile
- 10.3. Typical Cross Sections
- 10.4. Typical Cross Sections
- 10.5. Typical Cross Sections
- 10.6. Typical Cross Sections
- 10.7. Typical Cross Sections
- 10.8. Typical Cross Sections
- 10.9. Typical Cross Sections
- 10.10. Typical Cross Sections
- 10.11. Typical Cross Sections
- 10.12. Typical Cross Sections
- 10.13. Typical Cross Sections
- 10.14. South Retaining Wall Elevation
- 10.15. South Retaining Wall Elevation
- 10.16. North Retaining Wall Elevation
- 11.1. Architectural Site Plan (**attached**)
- 11.2. Architectural Zoning Site Plan (**attached**)
- 12.1. Building Elevations (**attached**)
- 12.2. Building Elevations (**attached**)
- 12.3. Perspective View
- 12.4. Perspective View
- 12.5. Perspective View
- 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. Mailing list
  6. Mailed notice
- E. Agency Responses
  1. Bureau of Environmental Services
  2. Bureau of Transportation Engineering and Development Review
  3. Water Bureau
  4. Fire Bureau
  5. Site Development Review Section of Bureau of Development Services
  6. Bureau of Parks, Forestry Division
  7. Life Safety
- F. Letters
  1. Craig Koon, multiple electronic messages between February 2018 and April 2019
  2. Southwest Hills Residential League (SWHRL), August 29, 2018
  3. Southwest Hills Residential League (SWHRL), February 21, 2019
  4. Daniel Kearns, multiple electronic messages between March 2018 and April 2019
- G. Other
  1. Original LUR Application
  2. Incomplete Letter dated March 9, 2018
  3. Pre-Application Conference Summary Notes

4. Memo to applicant from Stacey Castleberry dated 9/6/18
  5. Memo to applicant from Shawn Burgett dated 9/25/18
  6. Memo to applicant from Stacey Castleberry dated 2/21/19
  7. Memo to applicant from Shawn Burgett dated 2/22/19
  8. Fire Code appeal (ID 18378)
  9. Public works Alternative review dated 7/11/18
  10. Public works Alternative review dated 12/6/18
  11. Public works Alternative review dated 4/15/19
  12. Site Plan showing location of wetland near SW Broadway Drive right of way.
- H. Received in the Hearings Office
1. Hearing Notice - Burgett, Shawn
  2. Letter in Opposition - Moore, Melissa
  3. Staff Report - Burgett, Shawn
  4. 4/19/19 Request to keep open the Record letter - Kearns, Daniel
  5. 4/23/19 letter - Young, Scott
  6. 4/23/19 letter - Goodridge, Mickey T.
    - a. 4/24/19 letter from Yvonne Leonguerrero - Goodridge, Mickey T.
  7. Letter in Opposition (3 pgs.) - Kennedy, Jim and Rhonda
  8. Letter in Opposition - Stecker, Eric and Strelich, Katherine
  9. PowerPoint presentation printout - Castleberry, Stacey
  10. Letter - Klevit, Josephine Z.
  11. 4/28/19 letter (2 pages) - Kennedy, Jim and Rhonda
  12. Letter with photos - Koon, Craig
    - a. Incomplete letter, pgs. 5-6 - Koon, Craig
    - b. Map - Koon, Craig
    - c. Southwest in Motion April 2019 Public Review Draft excerpts - Koon, Craig
    - d. October 2013 Costs for Pedestrian and Bicyclist Infrastructure Improvements excerpts - Koon, Craig
    - e. Map - Koon, Craig
    - f. Zoning Code excerpts - Koon, Craig
    - g. 2016 SWMM page 11 - Koon, Craig
    - h. Environmental Regulations Residential Lands and 4G video file on SD card - Koon, Craig
    - i. 4/26/19 letter from Damon Schrosk/Treecology - Koon, Craig
    - j. Tree Preservation Plan (2 pages) - Koon, Craig
    - k. Partial list of concerned neighbors - Koon, Craig
    - l. 4/28/19 letter from Jim & Rhonda Kennedy (2 pages) - Koon, Craig
    - m. 4/28/19 letter from Randee Ayres - Koon, Craig
    - n. Letter from Fred and Harriet Hegge (3 pages) - Koon, Craig
    - o. 4/28/19 letter from Robert Doneker (2 pages) - Koon, Craig
    - p. 4/21/18 letter (2 pages) - Koon, Craig
    - q. 4/27/19 letter from James Boehnlein and Mary Carr - Koon, Craig
    - r. Written testimony - Koon, Craig
    - s. 4/29/19 letter from Michela Bedard - Koon, Craig
  13. 4/28/19 letter from SWHRL - Neumann, John
  14. 4/24/19 letter - Leonguerrero, Yvonne
  15. 4/23/19 letter - Goodridge, Mickey T.
  16. 4/23/19 letter - Young, Scott
  17. 4/25/19 Memorandum from Guenther LLC - Phillips, Ralph
  18. 4/23/19 Memorandum, Sarah Hartung to Phillips - Phillips, Ralph
  19. Letter - Spiegel, Jeff
  20. 4/29/19 letter (2 pages) - BenBen, Layne M.
  21. 4/28/19 letter (2 pages) - Doneker, Robert
  22. Letter (2 pages) - Torgerson, Laura
  23. Address - Ersson, Ole

24. Address - Reinhart, Ann
25. 4/29/19 letter - Bedard, Michela
26. Address - Melum-Yeager, Patricia
27. Record Closing Information - Hearings Office
28. 4/26/19 letter - Schrosk, Damon
29. 4/23/19 letter - Talbot, Julie
30. Letter - Melman, Mark
31. Memo (2 pages) - Kosydar, John
32. 5/16/19 Land Use Response Addendum #2 from BES - Castleberry, Stacey
33. 5/16/18 Memo - Castleberry, Stacey
  - a. 5/2/19 Email from Craig Koon - Castleberry, Stacey
  - b. Map - Castleberry, Stacey
  - c. Photos - Castleberry, Stacey
  - d. Site No. 113: Marquam Hill Ravine - Castleberry, Stacey
  - e. Chapter 33.910 Definitions - Castleberry, Stacey
34. 5/17/19 Email from Dawn Krantz - Burgett, Shawn
  - a. 4/30/19 Reconsideration Appeal letter, Nate Takara to Chris DesLauriers (3 pages) - Burgett, Shawn
  - b. Fire Code Appeal Form - Burgett, Shawn
  - c. Fire Code Appeal Form - Burgett, Shawn
35. Letter with attachments - Torgerson, Laura
  - a. Photos - Torgerson, Laura
36. Letter - Koon, Craig
  - a. Written testimony - Koon, Craig
  - b. Written testimony - Koon, Craig
  - c. Written testimony - Koon, Craig
  - d. Written testimony - Koon, Craig
  - e. Written testimony - Koon, Craig
  - f. Written testimony - Koon, Craig
37. 5/20/19 letter from SWHRL - Koon, Craig
38. 5/20/19 letter from Nancy Seton with attachment - Koon, Craig
  - a. Letter, Dr. Scott Burns to SWHRL - Koon, Craig
39. Letter from Jeff Spiegel - Koon, Craig
40. 5/19/19 letter - Bedard, Michela
41. 5/20/19 letter with attachment - Kearns, Daniel
  - a. 4/26/19 Memo from Damon Schrosk/Treecology, Inc. - Kearns, Daniel
42. 5/20/19 letter with attachments - Phillips, Lisa Guenther and Ralph
  - a. 5/10/19 Memorandum from Sarah Hartung/ESA - Phillips, Lisa Guenther and Ralph
  - b. 4/23/19 Memorandum from Sarah Hartung/ESA - Phillips, Lisa Guenther and Ralph
  - c. 5/19/19 Technical Memorandum from Michael Ard/Ard Engineering - Phillips, Lisa Guenther and Ralph **(attached)**
  - d. 3/13/19 Technical Memorandum from Michael Ard/Ard Engineering - Phillips, Lisa Guenther and Ralph
  - e. 1/11/19 Technical Memorandum from William R. Farley/Lancaster Engineering - Phillips, Lisa Guenther and Ralph
  - f. Response to Letter from Ryan Neumann - Phillips, Lisa Guenther and Ralph
    - g. 5/14/19 Technical Memorandum from William R. Farley/Lancaster Engineering - Phillips, Lisa Guenther and Ralph
    - h. 5/15/19 Memo from Chris Deslauriers - Phillips, Lisa Guenther and Ralph
    - i. 5/19/19 Memo from Guenther LLC - Phillips, Lisa Guenther and Ralph
    - j. 5/19/19 Memo from Guenther LLC - Phillips, Lisa Guenther and Ralph
    - k. 5/19/19 Memo from Guenther LLC - Phillips, Lisa Guenther and Ralph
    - l. 5/19/19 Memo from Guenther LLC - Phillips, Lisa Guenther and Ralph

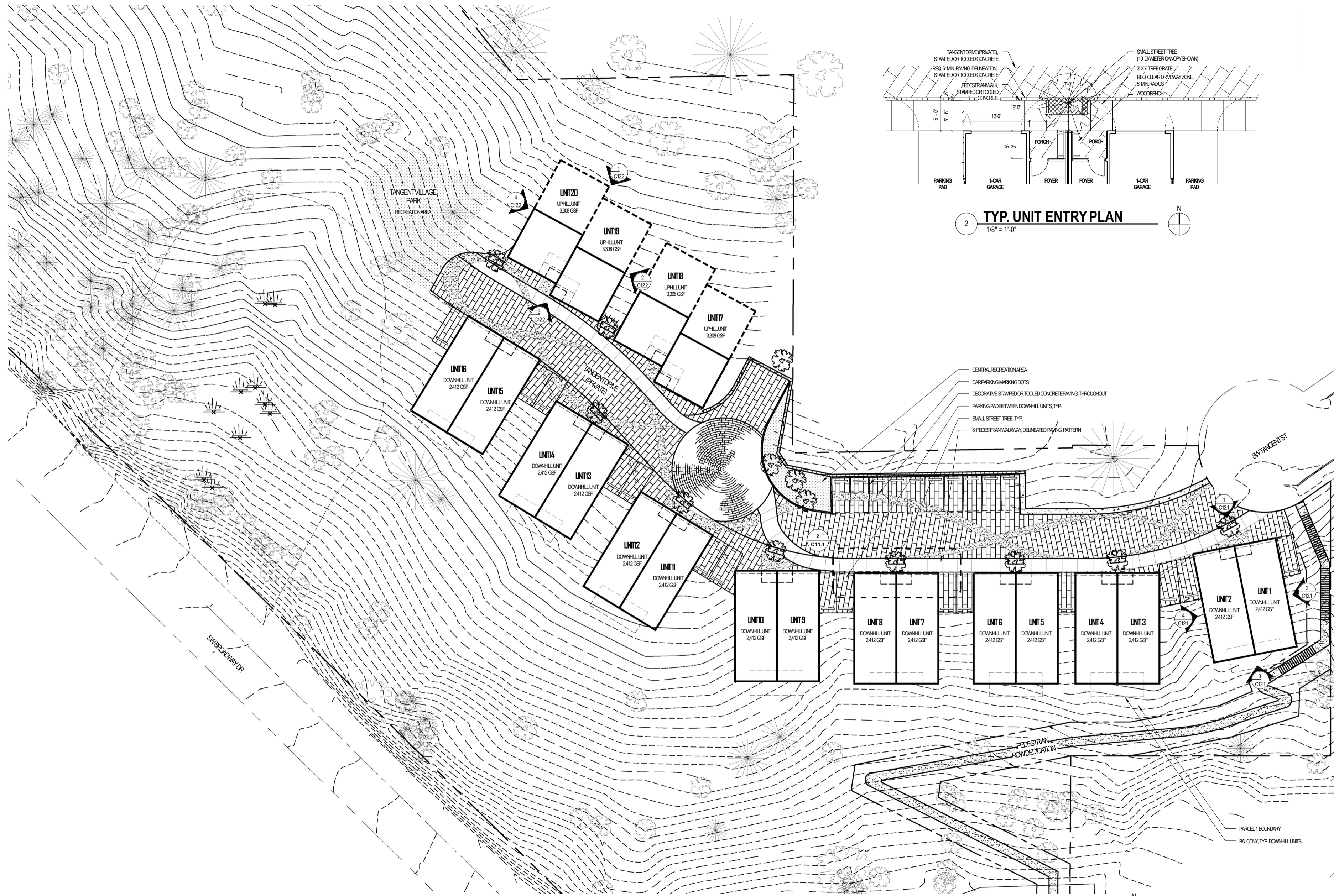
43. 5/20/19 Memo - Claypool, Jim
44. 5/28/19 letter from SWHRL - Koon, Craig
45. 5/28/19 letter from Daniel Kearns - Koon, Craig
46. Letter with attachments - Koon, Craig
47. 4/23/19 Memorandum from Sarah Hartung/ESA - Phillips, Ralph
48. 5/10/19 Memorandum from Sarah Hartung/ESA - Phillips, Ralph
49. 5/24/19 Memorandum from Sarah Hartung/ESA - Phillips, Ralph
50. 5/28/19 Technical Memorandum from Britton W. Gentry/GEO Consultants NW - Phillips, Ralph
51. 5/27/19 Memo from Ken Guenther - Phillips, Ralph
52. 5/28/19 Letter from Christopher P. Koback - Phillips, Ralph
53. 5/28/19 Land Use Response Addendum from Emma Kohlsmith/BES - Castleberry, Stacey
54. 5/28/19 Technical Memorandum - Ard, Mike
  - a. Appendix - Ard, Mike
55. 6/4/19 letter from Christopher P. Koback - Phillips, Ralph

#### I. Appeal

1. Appeal Submittal
2. Appealed Decision
3. Memo dated July 11, 2019 from BDS Director to Southwest Hills Residential League (SWHR) waiving appeal fee
4. Notice of Appeal dated July 16, 2019
5. NOA Mailing list dated July 16, 2019
6. Notice of Appeal dated September 25, 2019
7. NOA Mailing listed dated September 25, 2019
8. Memo dated October 16, 2019 from BDS Director to Mayor and City Council providing summary of land use review and appeal
9. Impact Statement
10. Commissioners Assistant Briefing packet with PBOT and BES comments dated October 10, 2019 from Shawn Burgett and Stacey Castleberry
11. PBOT memo dated October 9, 2019
12. BES memo dated October 8, 2019
13. Concept Public Works approval 19-219169 WT (**attached**)
14. E-mail testimony from Julia Harris dated September 29, 2019
15. E-mail testimony from Jim Claypool dated October 10, 2019
16. E-mail testimony from Jim Claypool dated October 10, 2019
17. E-mail testimony from Lisa Caballero from SWHRL dated October 11, 2019
18. E-mail testimony from Mickey T. Goodridge dated October 12, 2019
19. E-mail testimony from Julie Talbot dated October 12, 2019
20. E-mail testimony from Fred Trullinger dated October 13, 2019
21. E-mail testimony from Craig Koon dated October 13, 2019
22. E-mail testimony from Tammie Krisciunas dated October 13, 2019
23. E-mail testimony from Lisa Caballero dated October 12, 2019
24. E-mail testimony from Christopher P. Koback, applicants representative dated October 14, 2019
25. E-mail testimony from Davenport Neighbors Group dated October 14, 2019
26. E-mail testimony from Daniel Kearns, appellants representative dated October 14, 2019
27. Email testimony from Ken & Collette Gray dated October 14, 2019

28. E-mail testimony from Robert Duvoisin dated October 14, 2019
29. E-mail testimony from Josephine Z. Klevit dated October 14, 2019
30. E-mail testimony from Mark Melman dated October 14, 2019
31. E-mail testimony from Jim & Rhonda Kennedy dated October 14, 2019
32. E-mail testimony from Daniel Kearns, appellants representative dated October 14, 2019. Revised Testimony intended to correct prior memo
33. E-mail testimony from Roger N. Smith & Vicki Hess-Smith dated October 15, 2019
34. E-mail testimony from Roger E. Brown dated October 15, 2019
35. E-mail testimony from Norm and Barbara Sepenuk received 10/15/19
36. E-mail testimony from Mark Van Der Veer dated October 15, 2019
37. E-mail testimony from Eric Stecker dated October 15, 2019
38. E-mail testimony from Laura Torgerson dated October 15, 2019
39. E-mail testimony from Frances & John von Schlegell dated October 15, 2019
40. E-mail testimony from Ryan Fedie dated October 15, 2019.
41. E-mail testimony from Douglas Adams dated October 16, 2019
42. City staff's PowerPoint Presentation to City Council dated October 16, 2019
43. E-mail testimony from John Williams dated October 16, 2019
44. Safety analysis memo from Michael Ard, applicants representative dated October 15, 2019
45. E-mail testimony from Don Baack dated October 16, 2019
46. E-mail testimony from Craig Koon dated October 17, 2019
47. E-mail testimony from Craig Koon and Lisa Caballero of SWHRL dated November 25, 2019
48. E-mail testimony from Lisa Caballero of SWHRL dated November 25, 2019
49. E-mail testimony from Leslie Hammond and Sylvia Bogert of Southwest Neighborhood Inc. dated November 26, 2019
50. E-mail testimony from Chris P. Koback, applicants representative dated November 27, 2019
51. E-mail testimony from Daniel Kearns, appellants representative dated November 27, 2019
52. E-mail testimony from Michael Ard, applicants representative dated November 27, 2019.
53. E-mail testimony from Michael Ard, applicants representative dated November 27, 2019
54. E-mail testimony from Mark Melvin dated November 27, 2019
55. E-mail testimony from Davenport Neighborhood Group and Craig Koon dated December 2, 2019
56. E-mail testimony from Lisa Caballero from SWHRL dated December 2, 2019
57. E-mail testimony from Christopher P. Koback, applicants representative dated December 2, 2019
58. PowerPoint presentation sent to City Council from City staff on December 3, 2019
59. E-mail testimony from Ryan Fedie dated December 3, 2019
60. E-mail testimony from Michela Bedard dated December 3, 2019
61. E-mail testimony from Harriet & Fred Hegge dated December 4, 2019

62. E-mail testimony from Laura Torgerson dated December 4, 2019
63. Memo from City Staff (Shawn Burgett and Stacey Castleberry) to Mayor and City Council dated December 4, 2019
64. E-mail testimony from Daniel Kearns, appellants representative dated December 2, 2019
65. E-mail testimony from Daniel Kearns, appellants representative dated December 3, 2019
66. E-mail testimony/letter from Ken Guenther, applicant/owner dated December 4, 2019



1 **ARCHITECTURAL SITE PLAN**  
1" = 20'-0"

2 **TYP. UNIT ENTRY PLAN**  
1/8" = 1'-0"

**wright** architecture  
www.wrightarchitecture.com  
2222 NE Oregon Street, Suite 213  
Portland, Oregon 97232  
john@wrightarchitecture.com  
503.208.6380

REGISTERED ARCHITECT  
JOHN M. WRIGHT  
PORTLAND, OR  
STATE OF OREGON

Project Owner:  
GUENTHER LLC  
C/O LISA GUENTHER PHILLIPS  
01803 SW GREENWOOD RD  
PORTLAND, OR 97221

Project Owner:  
**TANGENT VILLAGE**  
SW BROADWAY DRIVE &  
SW TANGENT STREET

LAND USE  
ALTERNATE 7

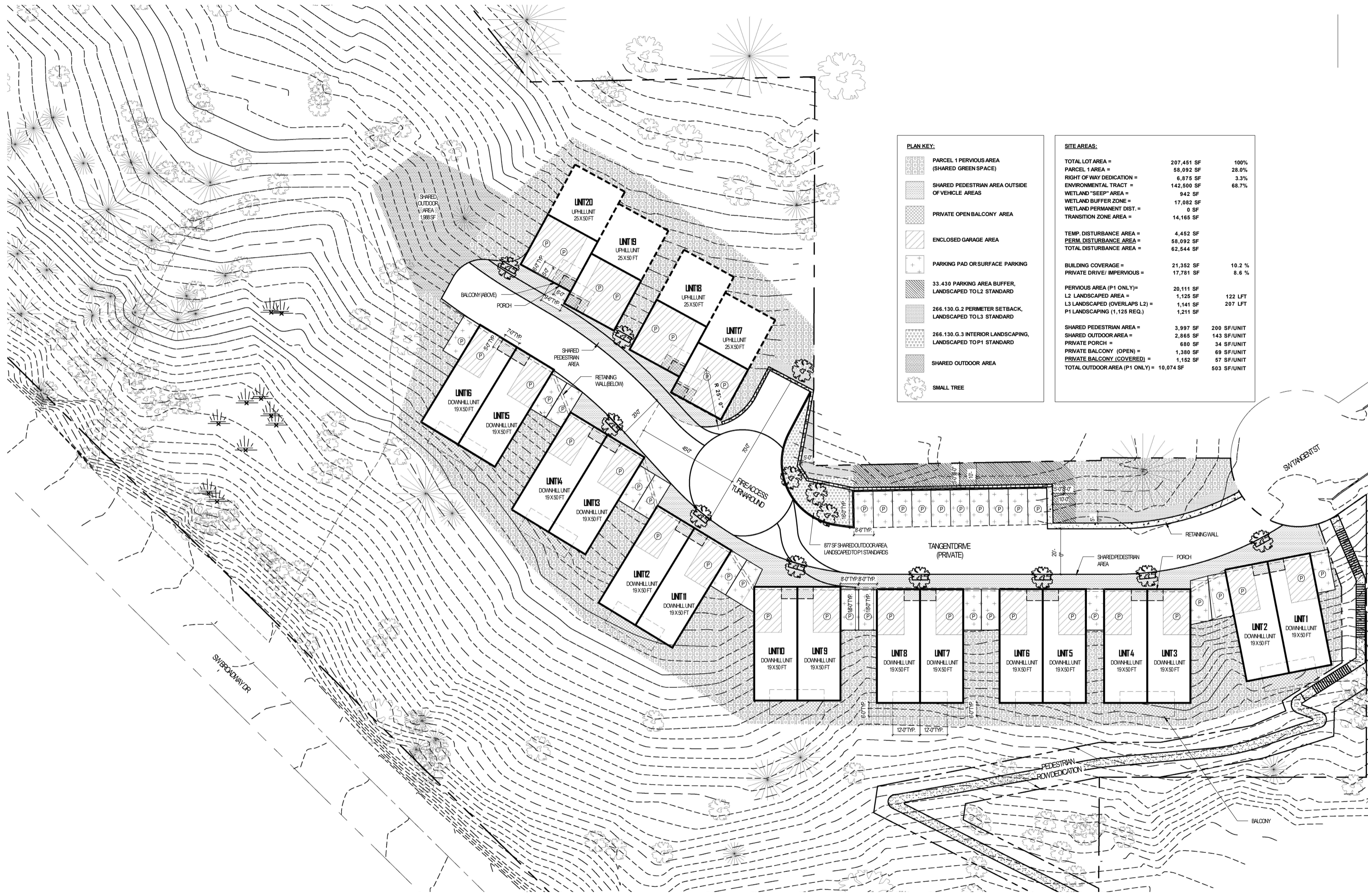
Issued:

LUR SUBMITTAL	2.1.2018
REV. LUR SUBMITTAL	8.6.2018
LUR ADDENDUM	1.28.2019
LUR REFINEMENTS	3.20.2019

Job #: 1709  
ORIGINAL SHEET SIZE: 22" x 34"  
HALE SIZE: 11" x 17"

**ARCHITECTURAL SITE PLAN**

Drawing Number  
**C11.1**



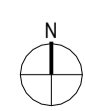
**PLAN KEY:**

- PARCEL 1 PERVIOUS AREA (SHARED GREEN SPACE)
- SHARED PEDESTRIAN AREA OUTSIDE OF VEHICLE AREAS
- PRIVATE OPEN BALCONY AREA
- ENCLOSED GARAGE AREA
- PARKING PAD OR SURFACE PARKING
- 33,430 PARKING AREA BUFFER, LANDSCAPED TO L2 STANDARD
- 266,130 G.2 PERIMETER SETBACK, LANDSCAPED TO L3 STANDARD
- 266,130 G.3 INTERIOR LANDSCAPING, LANDSCAPED TO P1 STANDARD
- SHARED OUTDOOR AREA
- SMALL TREE

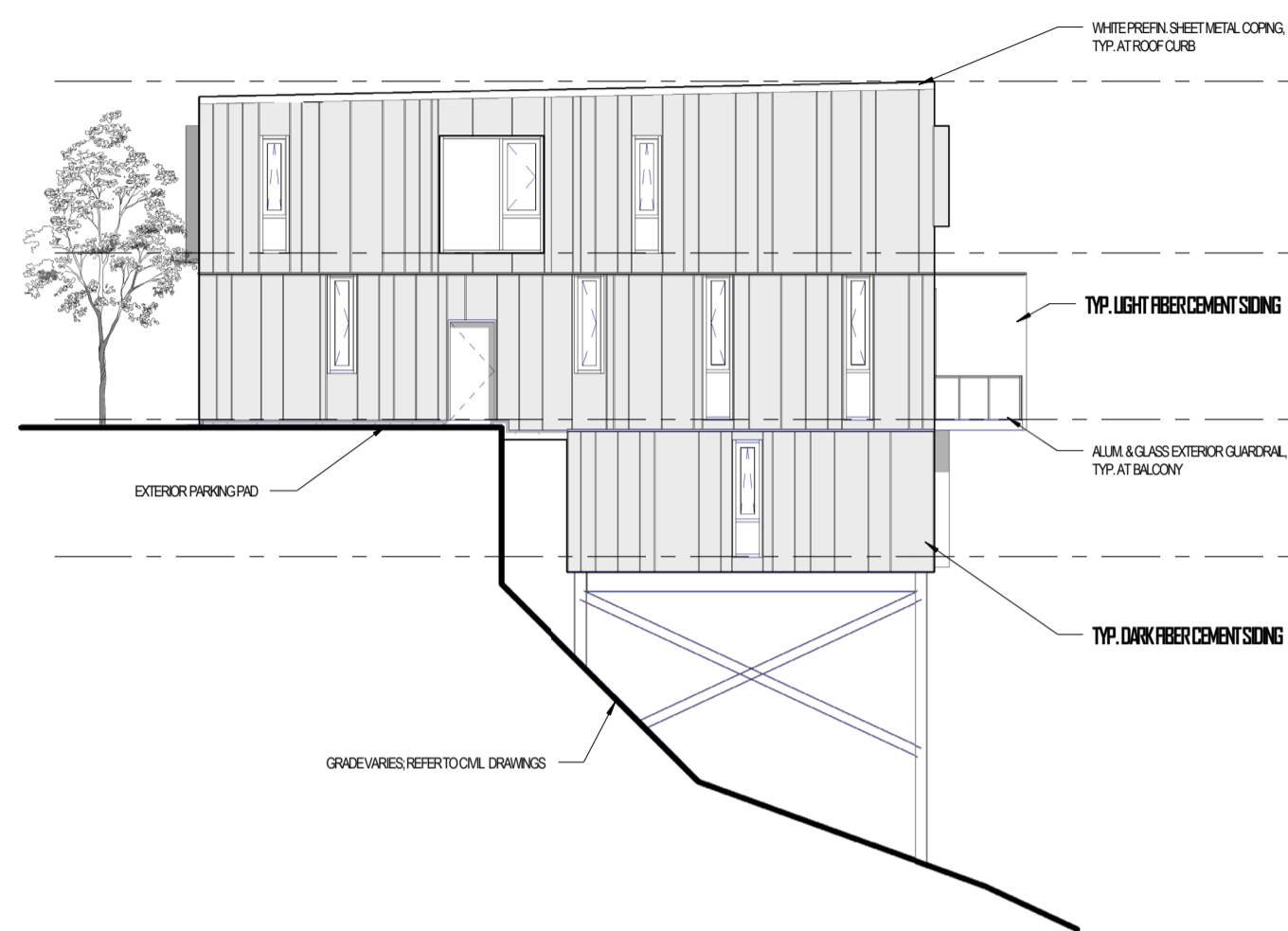
**SITE AREAS:**

TOTAL LOT AREA =	207,451 SF	100%
PARCEL 1 AREA =	58,092 SF	28.0%
RIGHT OF WAY DEDICATION =	6,875 SF	3.3%
ENVIRONMENTAL TRACT =	142,500 SF	68.7%
WETLAND "SEEP" AREA =	942 SF	
WETLAND BUFFER ZONE =	17,082 SF	
WETLAND PERMANENT DIST. =	0 SF	
TRANSITION ZONE AREA =	14,165 SF	
TEMP. DISTURBANCE AREA =	4,452 SF	
PERM. DISTURBANCE AREA =	58,092 SF	
TOTAL DISTURBANCE AREA =	62,544 SF	
BUILDING COVERAGE =	21,352 SF	10.2%
PRIVATE DRIVE/ IMPERVIOUS =	17,781 SF	8.6%
PERVIOUS AREA (P1 ONLY) =	20,111 SF	
L2 LANDSCAPED AREA =	1,125 SF	122 LFT
L3 LANDSCAPED (OVERLAPS L2) =	1,141 SF	207 LFT
P1 LANDSCAPING (1,125 REQ.) =	1,211 SF	
SHARED PEDESTRIAN AREA =	3,997 SF	200 SF/UNIT
SHARED OUTDOOR AREA =	2,865 SF	143 SF/UNIT
PRIVATE PORCH =	680 SF	34 SF/UNIT
PRIVATE BALCONY (OPEN) =	1,380 SF	69 SF/UNIT
PRIVATE BALCONY (COVERED) =	1,152 SF	57 SF/UNIT
TOTAL OUTDOOR AREA (P1 ONLY) =	10,074 SF	503 SF/UNIT

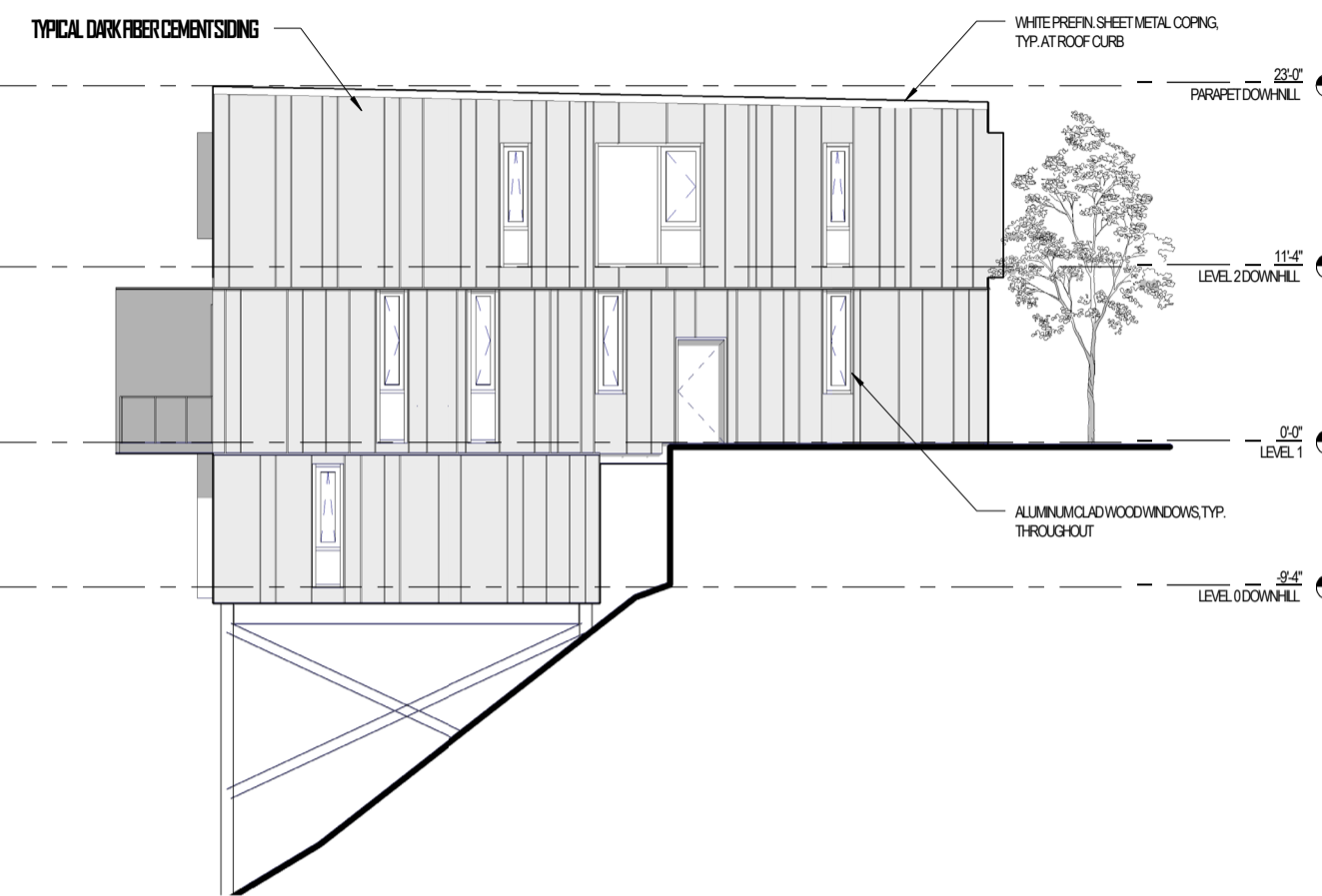
1 ZONING SITE PLAN - OPEN SPACE AND PARKING  
1" = 20'-0"



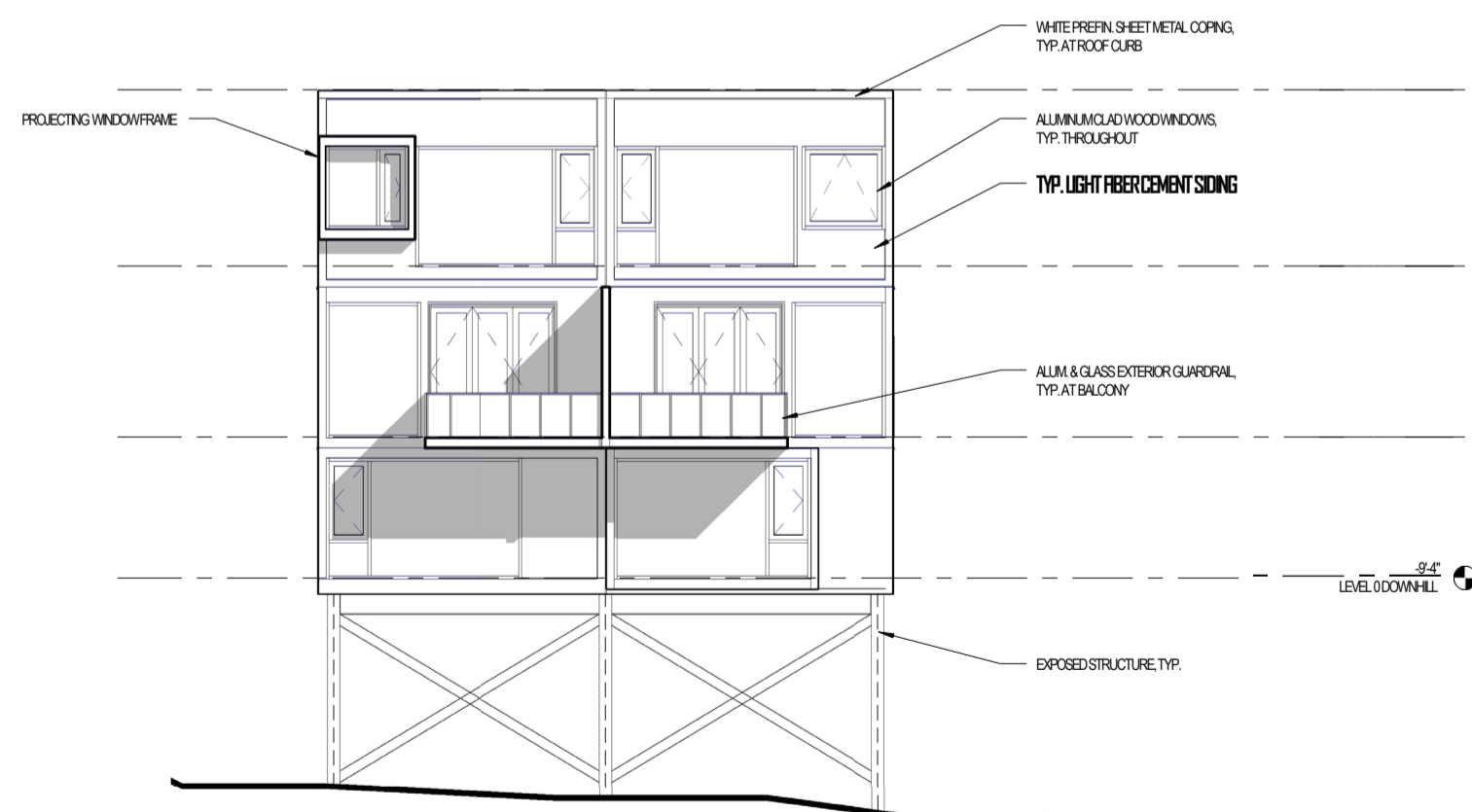




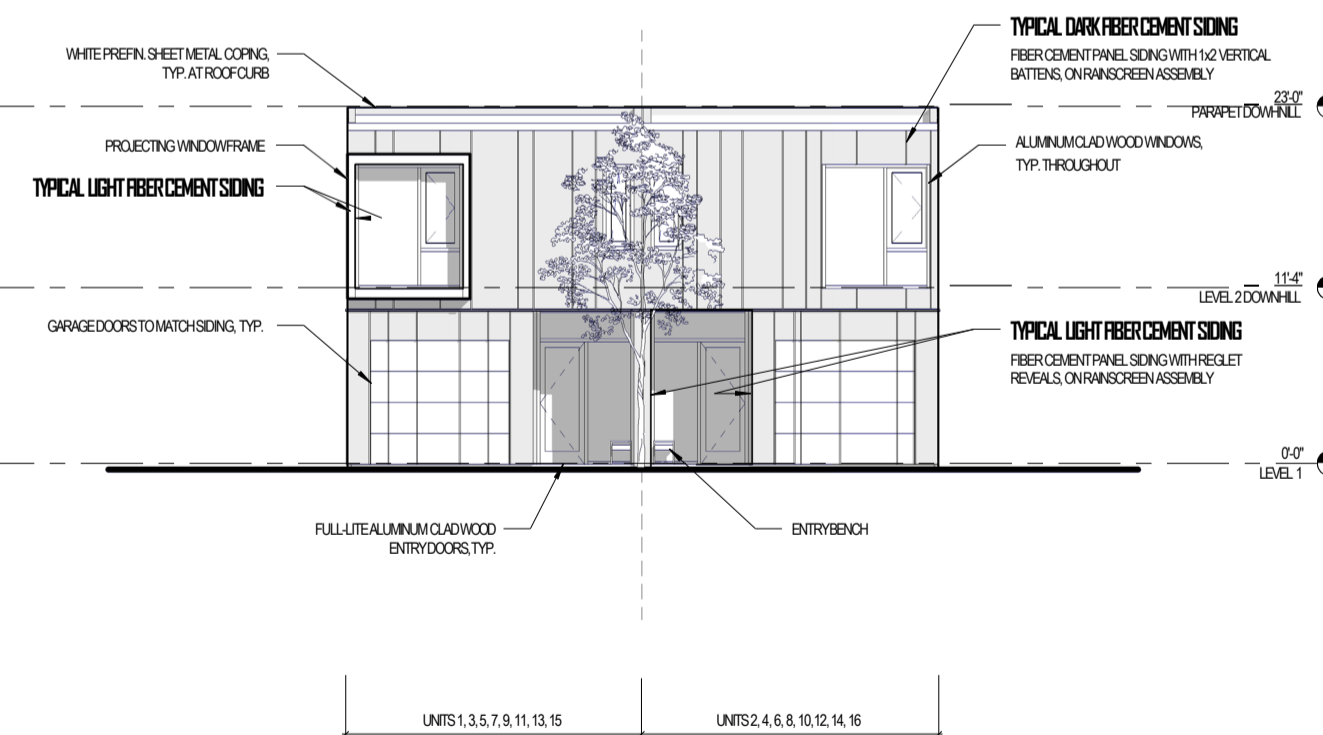
**4 DOWNHILL UNITS - WEST ELEVATION**  
1/8" = 1'-0"



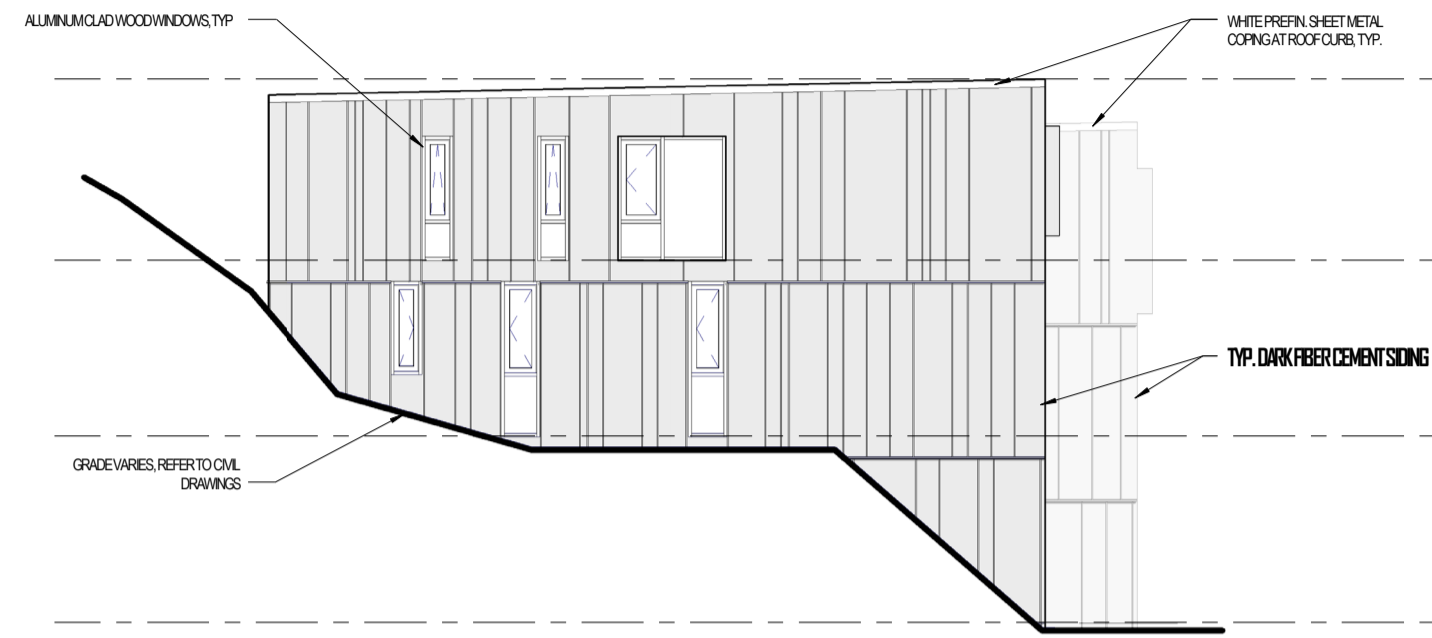
**2 DOWNHILL UNITS - EAST ELEVATION**  
1/8" = 1'-0"



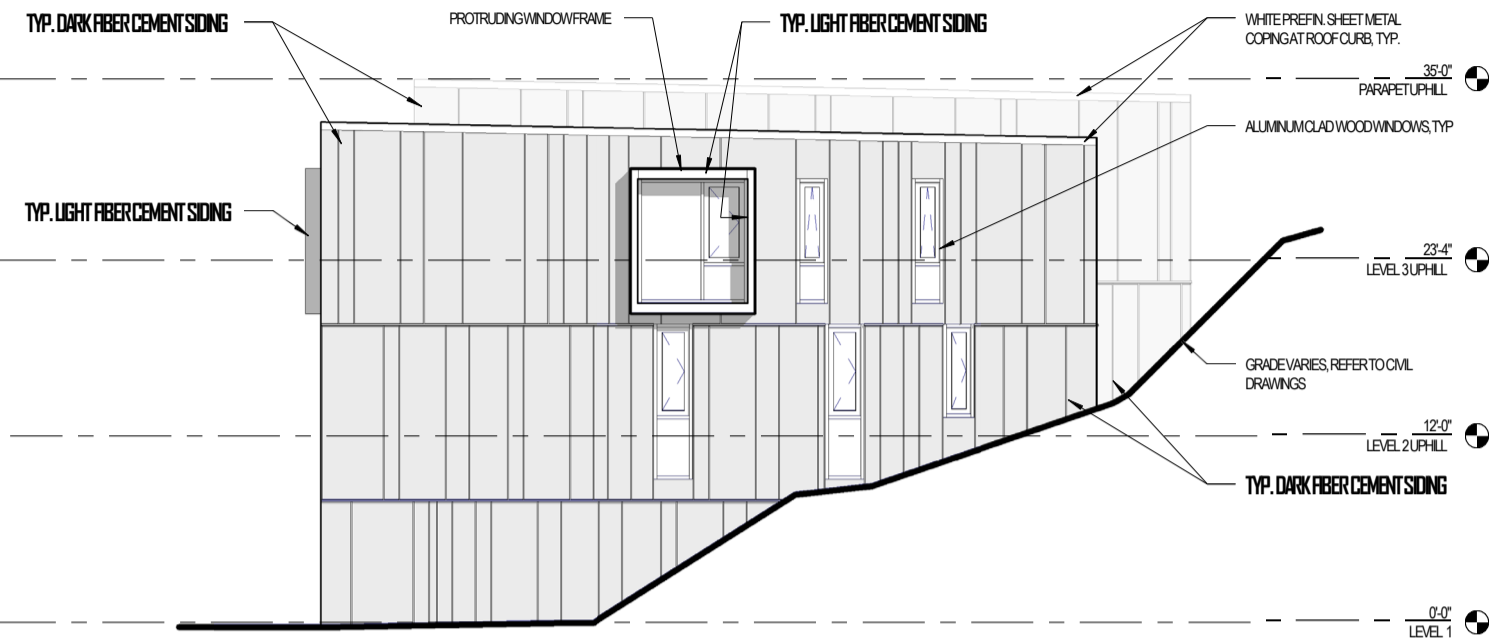
**3 DOWNHILL UNITS - SOUTH ELEVATION**  
1/8" = 1'-0"



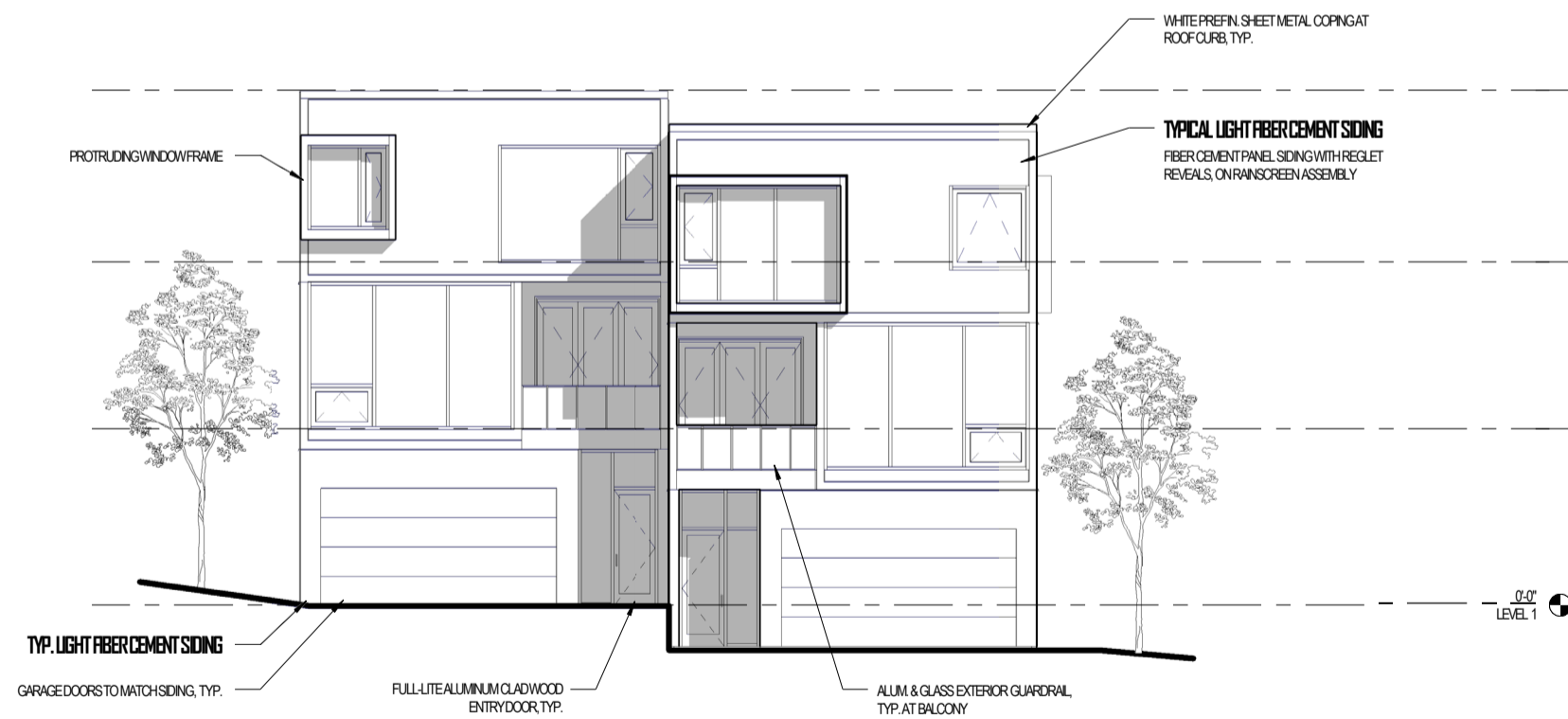
**1 DOWNHILL UNITS - NORTH ELEVATION**  
1/8" = 1'-0"



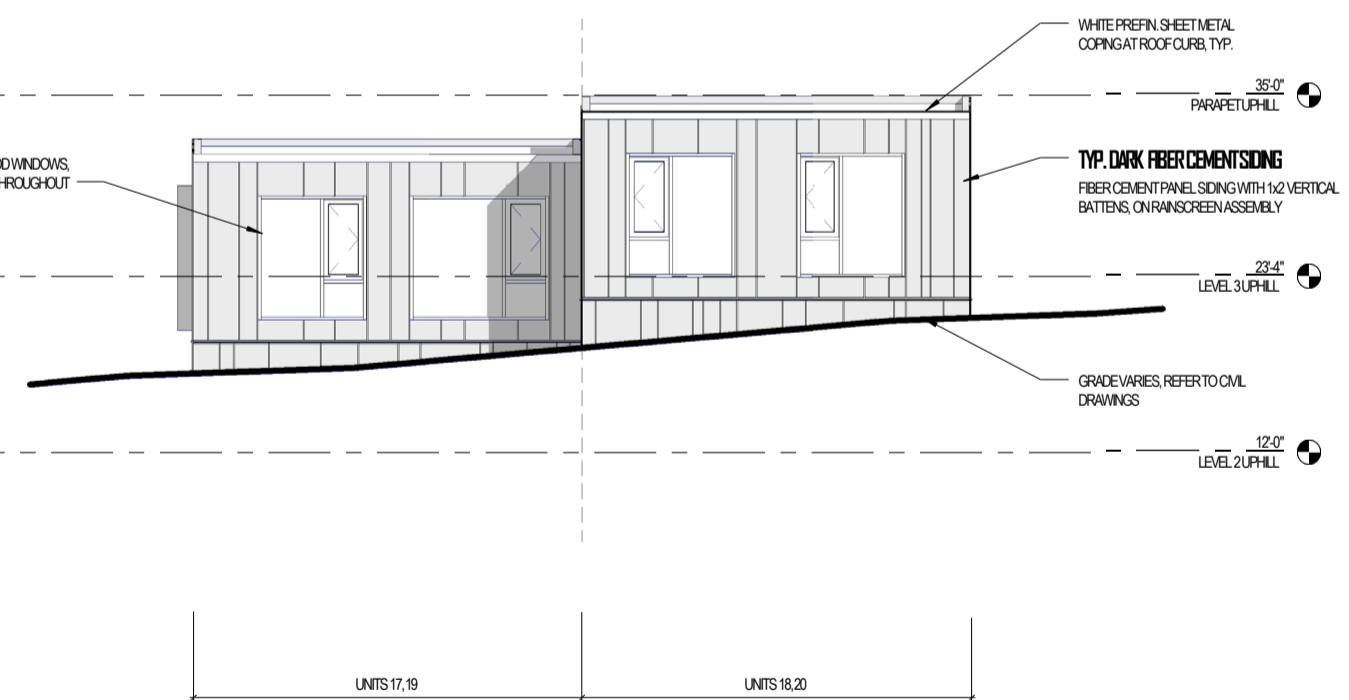
4 **UPHILL UNITS - WEST ELEVATION**  
1/8" = 1'-0"



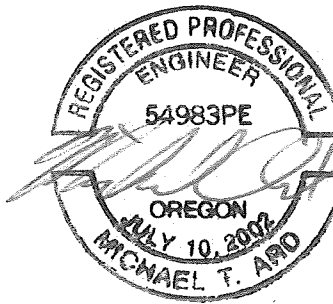
2 **UPHILL UNITS - EAST ELEVATION**  
1/8" = 1'-0"



3 **UPHILL UNITS - SOUTH ELEVATION**  
1/8" = 1'-0"



1 **UPHILL UNITS - NORTH ELEVATION**  
1/8" = 1'-0"



21370 SW Langer Farms Pkwy  
Suite 142, Sherwood, OR 97140

# Technical Memorandum

EXPIRES: 12/31/19

RECEIVED

To: Gregory Frank, City of Portland Hearings Officer

From: Michael Ard, PE

MAY 20 2019

Date: May 19, 2019

HEARINGS OFFICE

Re: Tangent Village LU 18-119056 LDS PD EN – Description of Planned Pedestrian Improvements

This memorandum is written to provide additional information regarding the proposed pedestrian improvements that will be constructed in conjunction with the Tangent Village development. The improvements herein described have previously been approved through a Public Works Alternative Review. The public works approval and the detailed information provided to the review committee are included in the attached appendix. Also attached are drawings showing the planned improvements along SW Broadway Drive.

### ***DESCRIPTION OF PLANNED IMPROVEMENTS***

The planned pedestrian improvements will consist of four primary elements:

- Constructing a pedestrian path built to recreational trail standards within public right-of-way connecting the existing western terminus of SW Tangent Street to SW Broadway Drive along the east side of the subject property;
- Improving the existing roadway shoulder on the south side of SW Broadway Drive along the full length of the subject property's frontage;
- Constructing a 4-foot wide asphalt pathway extending from the pedestrian crossing location to approximately 125 feet east of the crossing; and
- Improving the existing roadway shoulder on the north side of SW Broadway Drive between the pedestrian path leading to SW Tangent Street and the pedestrian crossing location.

With construction of these planned improvements, it is expected that pedestrian connectivity and safety will be improved in the site vicinity. A more detailed description of each of these improvements follows.

### **Pedestrian Connection Between SW Tangent Street and SW Broadway Drive**

The subject property has steep slopes which prevent construction of a full street connection between SW Tangent Street and SW Broadway Drive. However, a proposed pedestrian path constructed to recreational trail standards will connect these streets to enhance pedestrian connectivity and safety in the site vicinity. The soft-surface path will be located within a dedicated right-of-way which will roughly follow the east side of the subject property but will zig-zag as needed to avoid existing native trees. In steep sections, stairs constructed of compressed wood risers and wood chip step surfaces will be provided to ensure that drainage

CITY OF PORTLAND
HEARINGS OFFICE
Exhibit #H-42c
Case # 4190006
Bureau Case # 18-119056 LDP



Gregory Frank

May 19, 2019

Page 2 of 3

is not significantly affected by the trail, maintain a forest trail feeling, and minimize potential impacts on existing trees.

As currently planned, the trail will intersect SW Broadway Drive immediately west of the site's east property line. However, it should be noted that the ideal terminus for the trail would be approximately 75 feet farther east, within the frontage of the Portland Water Bureau's property and directly opposite the planned pedestrian crossing location. However, since we were unable to secure permission to place the trail on the city's property, the trail was located as close as possible to the planned crossing. If the adjacent site to the east redevelops in the future, it may be appropriate to relocate the trail terminus in conjunction with that redevelopment.

#### SW Broadway Drive South Shoulder Improvements

The planned improvements along the south side shoulder of SW Broadway Drive will consist of removing existing loose material to a depth of 6 inches and placing compacted gravel to form a level surface. The shoulder improvement will extend up to six feet from the near edge of the southbound travel lane wherever sufficient width is available, narrowing as needed based on existing restrictions such as guard rails, utility poles, retaining walls and other roadside objects. The extents and width of the pedestrian path along the south side of the roadway (including where the path is restricted to less than six feet in width by existing roadside objects) are shown in the attached drawings.

It should be noted that some portions of the identified pedestrian improvement area are already paved with asphalt. It is anticipated that these existing hard-surfaced areas will remain in place where they provide a pedestrian-friendly surface and the compacted gravel will be added around these paved surfaces. Additional asphalt pavement is not planned within the improvement area, since adding impervious surface area would trigger the stormwater requirements in the Stormwater Management Manual and would require the addition of vegetated facilities along Broadway. Such facilities would further restrict the width available for the planned pedestrian improvements.

Where existing objects are embedded within the roadside surface, such manholes, junction boxes and drainage inlets, the improved surface will be made flush with these objects to ensure that the shoulder width is usable by pedestrians and to avoid tripping hazards.

Some portions of the south-side shoulder are also currently used for on-street parking. The City of Portland may choose to restrict parking in some or all of these areas to ensure that the pedestrian path is unobstructed by parked vehicles. However, such restrictions are made under the authority of the city and are not under the control of the applicant.



Gregory Frank  
May 19, 2019  
Page 3 of 3

#### Asphalt Pathway at Pedestrian Crossing

In conjunction with City of Portland staff, we worked to identify a safe crossing location which would allow pedestrians to cross from the planned trail on the north side of SW Broadway Drive to the improved shoulder on the south side of the roadway. Based on the speeds of vehicles traveling along SW Broadway Drive, there were no locations within the site frontage at which stopping sight distance could be attained in both directions. However, a safe crossing location was identified approximately 75 feet east of the site frontage. The planned crossing location has sufficient sight distance available in each direction and has sufficient width available on each side of the roadway to provide a pedestrian landing.

In order to highlight the desired crossing location, city staff requested construction of an asphalt landing on the south side of the roadway. The maximum additional impervious surface area that can be added without triggering the requirements of the Stormwater Management Manual is 500 square feet. Accordingly, the city requested that an asphalt surface 4 feet wide be constructed, extending to the east from the crossing location. The total area of asphalt surface will be 500 feet, including any paving needed for a landing on the north side of the crossing and extending east while maintaining 4 feet of width until the 500 square foot maximum area is reached. This will result in improved safety and will extend the south side shoulder improvements approximately 180 feet beyond the east end of the subject property. It will bring the total length of the south-side shoulder improvements up to approximately 950 feet.

#### SW Broadway Drive North Shoulder Improvements

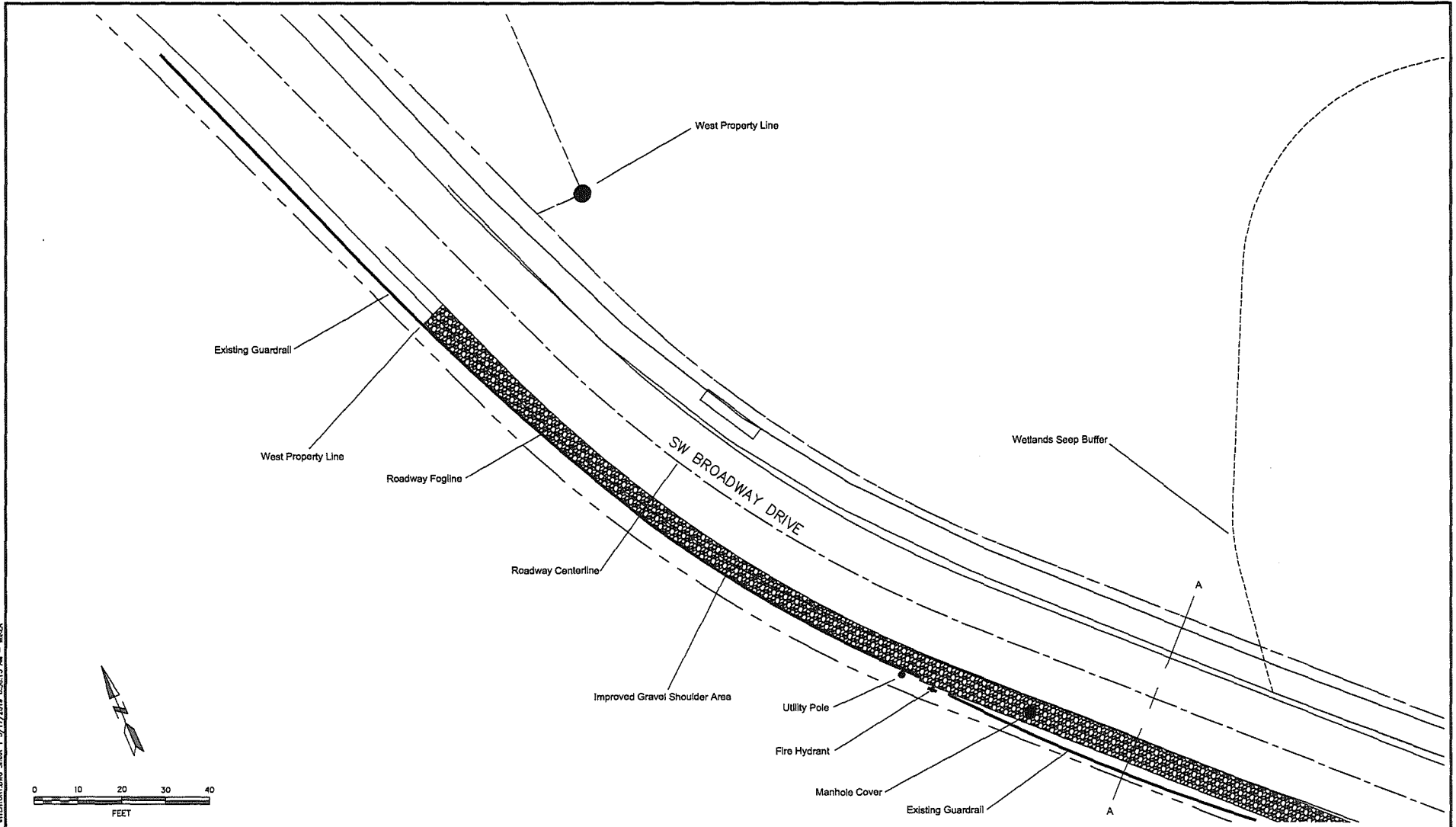
The planned pedestrian trail to SW Tangent Street will intersect SW Broadway Drive immediately west of the site's east property line. Since the pedestrian crossing is located approximately 70 feet east of the trail, it is necessary to provide a safe pedestrian connection between the trail terminus and the crossing location. The north-side shoulder will be widened within this segment to provide 6 feet of usable width for the pedestrian connection. If deemed appropriate, a widened asphalt landing will also be provided at the north side of the pedestrian crossing as part of the 500 square feet of allowable impervious surface area.

#### ***CONCLUSIONS***

In conjunction with the requirement for street dedication and waivers of non-remonstrance that will allow sufficient space for standard street improvements and improve the ability to form a local improvement district to fund comprehensive improvements for the entire SW Broadway Drive corridor, the proposed pedestrian improvements will enhance pedestrian safety and connectivity in the site vicinity. Based on the above, the transportation system is capable of safely supporting the proposed development in addition to the existing uses in the area, and the proposed improvements as described fall within the appropriate limits of proportionality in consideration of the minimal impacts that the project will have on SW Broadway Drive.

## Appendix

FILE: SW BROADWAY ROADWAY INVENTORY.rvt, Sheet 1 of 4, 1/17/2019 8:56:15 AM - MKCA



NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	
		FINAL MAP DATA	

DESIGNED BY	DATE APPROVED
DWG BY	SECTION DATA
CHECKED BY	PROJECT REVIEWER



APPROVALS:

PRINCIPAL ENGINEER	REG. PROF. ENGR. 33982/PC
PROJ. CITY ENGINEER	REG. PROF. ENGR. 31038/PC

PORTLAND  
BUREAU OF TRANSPORTATION

CHLOE EUDALY  
COMMISSIONER

STEVE TOWNSEN, P.E.  
CITY ENGINEER



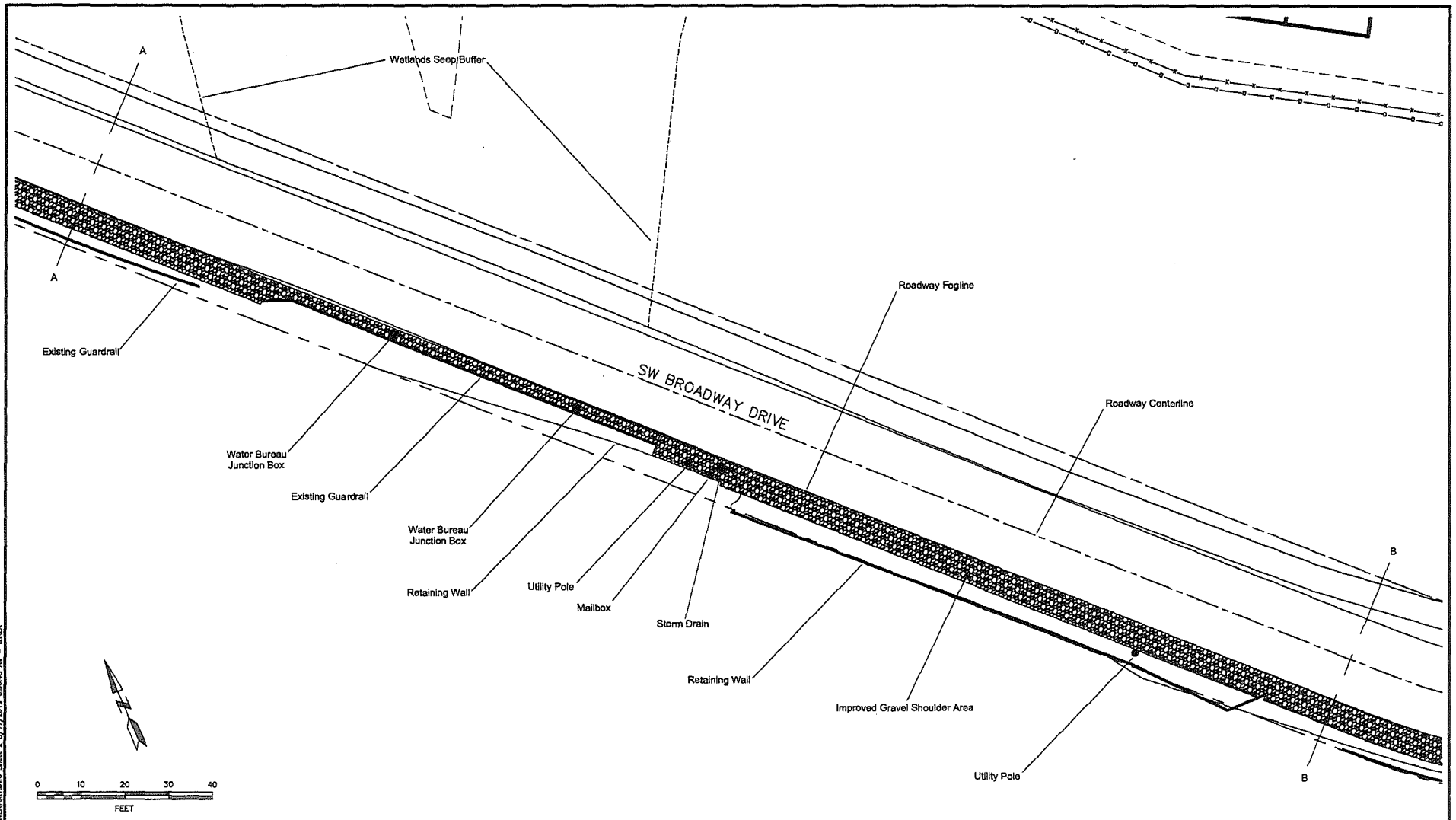
ARD ENGINEERING  
21370 SW Langer Farms Pkwy  
Suite 142  
Sherwood, OR 97140  
(503) 537-8511

PROJECT NO.	XXXXX
DRAWING NO.	

SW BROADWAY DRIVE  
ROADWAY INVENTORY  
AND IMPROVEMENT PLANS

R11  
1 of 4

FILE: SW BROADWAY ROADWAY INVENTORY.DWG, Sheet 2, 9/17/2019, 8:58:18 AM - LINDA



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REVISIONS			
FINAL MAP DATA			

DESIGNED BY	DATE APPROVED
DWG BY	SECTION ENGINEER
CHECKED BY	PROJECT MANAGER
CHECKED BY	



APPROVALS:

PRINCIPAL ENGINEER	REG. PROF. ENGR. 33829PL
FIRST CITY ENGINEER	REG. PROF. ENGR. 01420PL

PORTLAND  
BUREAU OF TRANSPORTATION

CHLOE EUDALY  
COMMISSIONER

STEVE TOWNSEN, P.E.  
CITY ENGINEER

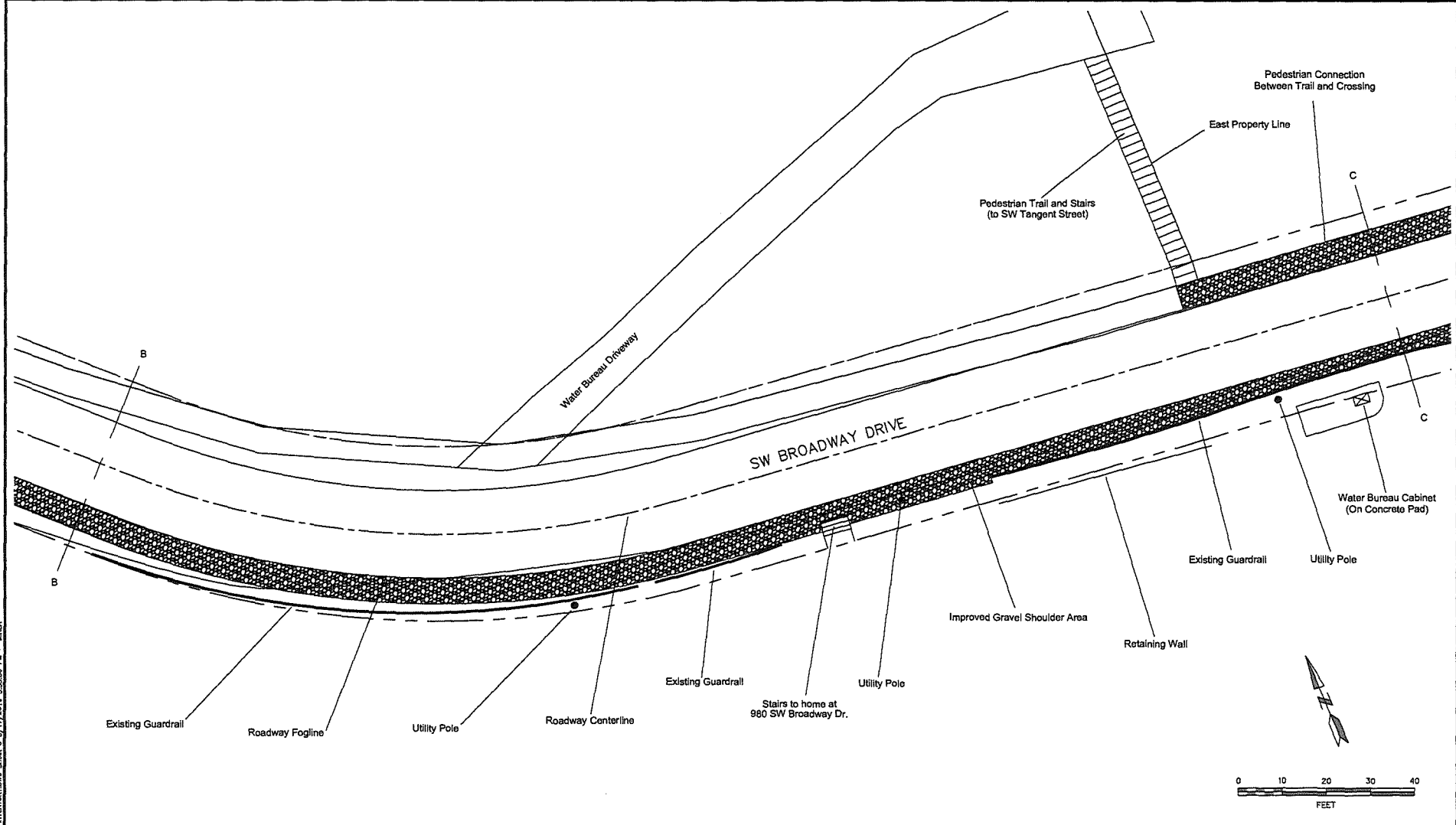


ARD ENGINEERING  
21370 SW Langer Farms Pkwy  
Suite 142  
Sherwood, OR 97140  
(503) 537-8511

PROJECT NO.	XXXXX
SHEET NO.	R12
	2 of 4

SW BROADWAY DRIVE  
ROADWAY INVENTORY  
AND IMPROVEMENT PLANS





FILE: BROADWAY ROADWAY INVENTORY.dwg Sheet 3 of 17/2019 3:53:56 PM - WBEA

NO.	DATE	DESCRIPTION	APP.
REVISIONS			
FINAL MAP DATA			

CONSTRUCTED BY	DESIGNED BY	DATE APPROVED
PROJECT COMPLETED	DWG BY	SECTION ENGR
MAP CORRECTED BY	CHECKED BY	POST REVIEWER
CHECKED BY		

APPROVALS:

PRINCIPAL ENGINEER	REG. PROF. ENGR. 53629PC
POST CITY ENGINEER	REG. PROF. ENGR. 51438PC

PORTLAND  
BUREAU OF TRANSPORTATION

CHLOE ELDALY      COMMISSIONER  
STEVE TOWNSEN, P.E.      CITY ENGINEER

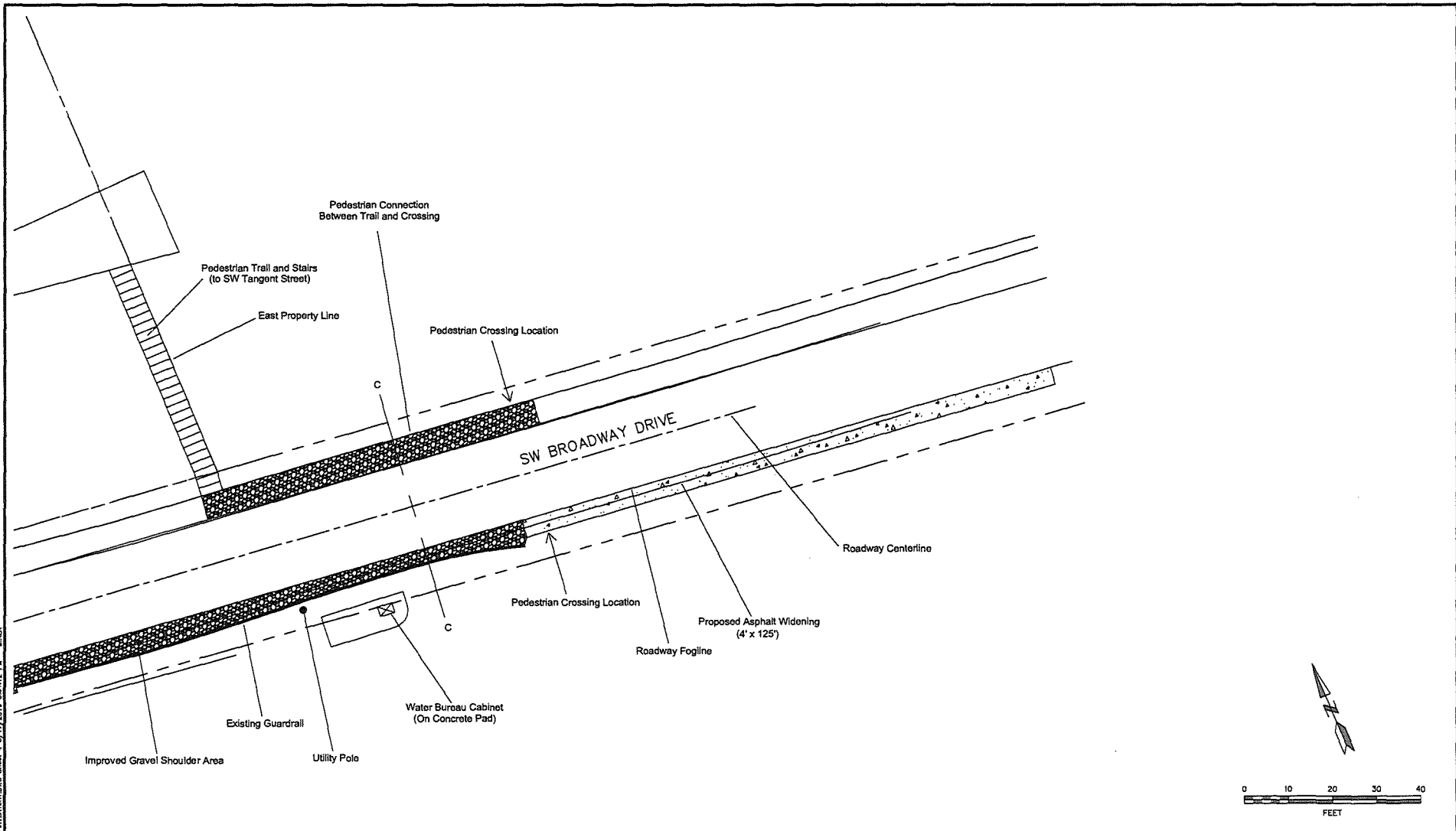


ARD ENGINEERING  
21370 SW Linger Farms Pkwy  
Suite 142  
Sherwood, OR 97140  
(503) 537-8511

SW BROADWAY DRIVE  
ROADWAY INVENTORY  
AND IMPROVEMENT PLANS

PROJ. JOB NO. XXXXX  
SHEET NO. R13  
3 of 4

FILE: BROADWAY ROADWAY INVENTORY.DWG, Sheet 4 of 5/17/2019 3:54:12 PM - WUSA



DESIGNED BY	DATE APPROVED		
CAD BY	SECTION CHECK		
CHECKED BY	PROF. REVIEWER		
CONSTRUCTED BY			
PROJECT COMPLETED			
MAP CORRECTED BY			
CHECKED BY			
NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			
FINAL MAP DATA			



APPROVALS:

PRINCIPAL ENGINEER \_\_\_\_\_ REG. PROF. ENGR. 33829E

PROJ. CITY ENGINEER \_\_\_\_\_ REG. PROF. ENGR. 31039E

PORTLAND  
BUREAU OF TRANSPORTATION

CHLOE EUDALY COMMISSIONER

STEVE TOWNSEN, P.E. CITY ENGINEER



ARD ENGINEERING  
21370 SW Langer Farms Pkwy  
Suite 142  
Sherwood, OR 97140  
(503) 537-6511

PROJECT NO. XXXXX

SHEET NO. R14  
4 of 4

SW BROADWAY DRIVE  
ROADWAY INVENTORY  
AND IMPROVEMENT PLANS



**Public Works  
Alternative Review  
Decision Form**



Review Number: 19 - 135537 - PW

Original Requirement: 17 - 09164 - EA

Date Reviewed: 4 / 15 / 2019

Decision Expires: 4 / 15 / 2020

**PUBLIC WORKS ALTERNATIVE REVIEW COMMITTEE DECISION**

A decision has been made for this review and the submitted proposal will not receive further consideration as a Public Works Alternative Review. Please read this decision carefully and take any needed actions such as correcting a building permit plan set or contacting the affected reviewers assigned to an active land use review.

Public Works Alternatives remain in effect for one year from the approval date and expire at the close of business on the date indicated above. If expired, the applicant is required to submit a new Public Works Alternative request.

This decision can be appealed through the Public Works Appeals program. **NOTE: The applicant must receive a final decision from the City, in the form of either a Land Use decision from PBOT or a Building Permit checksheet, prior to proceeding with any appeal beyond the Public Works Alternative Review.** Please visit <http://www.portlandoregon.gov/transportation/PublicWorksAppeal> for more information on the appeal process.

- Approved as Proposed       Approved with Conditions       Denied

Applicant's Proposed Alternative:

Construct a pedestrian connection built to public trail standards between SW Tangent and SW Broadway Drive and construct gravel shoulder enhancements on the south side of SW Broadway Dr.

Committee Findings:

In the technical memorandum prepared by ARD Engineering, the applicant's traffic engineer identified the challenges of constructing a 6-ft pavement widening on the north side of SW Broadway Dr along the site's 740 lineal feet of frontage as previously required by PBOT in 18-255004 PW. PBOT concurs with those findings that widening the existing roadway by 6-ft is not practical given the topographical and environmental restraints. To meet connectivity requirements, the applicant will not be required to connect SW Tangent to SW Broadway. A new street connection could not meet maximum slope limitations and intersection site distance standards. The applicant will be required to provide a pedestrian connection from SW Tangent to SW Broadway Dr. The connection will be constructed to public trail standards. The applicant provided a site distance study outlining where a landing on SW Broadway could be provided that allowed adequate site distance for pedestrians to cross to the south side of SW Broadway Dr. PBOT staff met on SW Broadway Dr with the applicant's traffic engineer and tentatively approved a location and related improvements to the south side of SW Broadway Dr opposite the applicant's site. One option for the landing location on the north side of SW Broadway Dr would require a pedestrian easement of adjacent Water Bureau property. If that easement cannot be obtained, the applicant will be required to widen the shoulder on their site and the Water Bureau site within existing Water Bureau frontage to provide access to a safe crossing location. The final location and design improvements will be determined during the engineering phase of the public works permit review. The applicant shall be required to provide a paved landing on both sides of SW Broadway at the crossing location. The applicant will also be required to provide gravel shoulder improvements to the south side of SW Broadway where feasible given the existing constraints of driveways, mechanical equipment, and guard rail locations. A survey of existing conditions on the south side of SW Broadway documents where a gravel shoulder up to 6-ft wide may be obtained in addition to constraints that would limit gravel shoulder widening pinch points where less than 6-ft could be obtained to as narrow as 3-ft.

  
\_\_\_\_\_  
Signature, Public Works Alternative Review Committee Chairperson

Date: 9/15/19



**Public Works  
Alternative Review  
Request Form**



**PROJECT INFORMATION**

Project Description (required): Improvements for connection of Tangent Drive to Broadway Drive and improvements along SW Broadway Drive

Site Address or Property ID (e.g. R123456) (list all taxlots): R326789, R327706, R327705, R258374

Permit or case number of decision to be reviewed (e.g. 12-345678-LU) (required): 17 - 109164 - EA

Additional permit or case numbers if included in review: 18 - 119056 - LU & - -

City staff involved in reviews or discussions: Kurt Krueger, Robert Haley, Amanda Owings, Shawn Burgett

**APPLICANT INFORMATION**

Applicant Name: Michael Ard, PE Applicant Company: Ard Engineering, LLC

Applicant Phone: 503-537-8511 Applicant Email: mike.ard@gmail.com

Applicant Role in Project:  Owner  Engineer/Architect/Designer  Other: \_\_\_\_\_

I certify that the information provided on or attached to this request is true and accurate to the best of my knowledge and that I have the authority to sign.

Applicant Signature:  Date: 3 / 13 / 2019

**PROPOSED ALTERNATIVE**

Has a previous Public Works Alternative Review been requested for this project?  Yes  No

Number of Pages Attached (11"x17" maximum page size) (count front and back if double-sided): 22

Provide a description of the proposed alternative to the design requirements for which the project is seeking an alternative review. The proposed alternative should be thoroughly described and reasons for supporting the proposed alternative should be provided. This description can be written below or it can be included with the request submittal. Also include any maps, drawings, plans, reports or other materials supporting the proposed alternative.

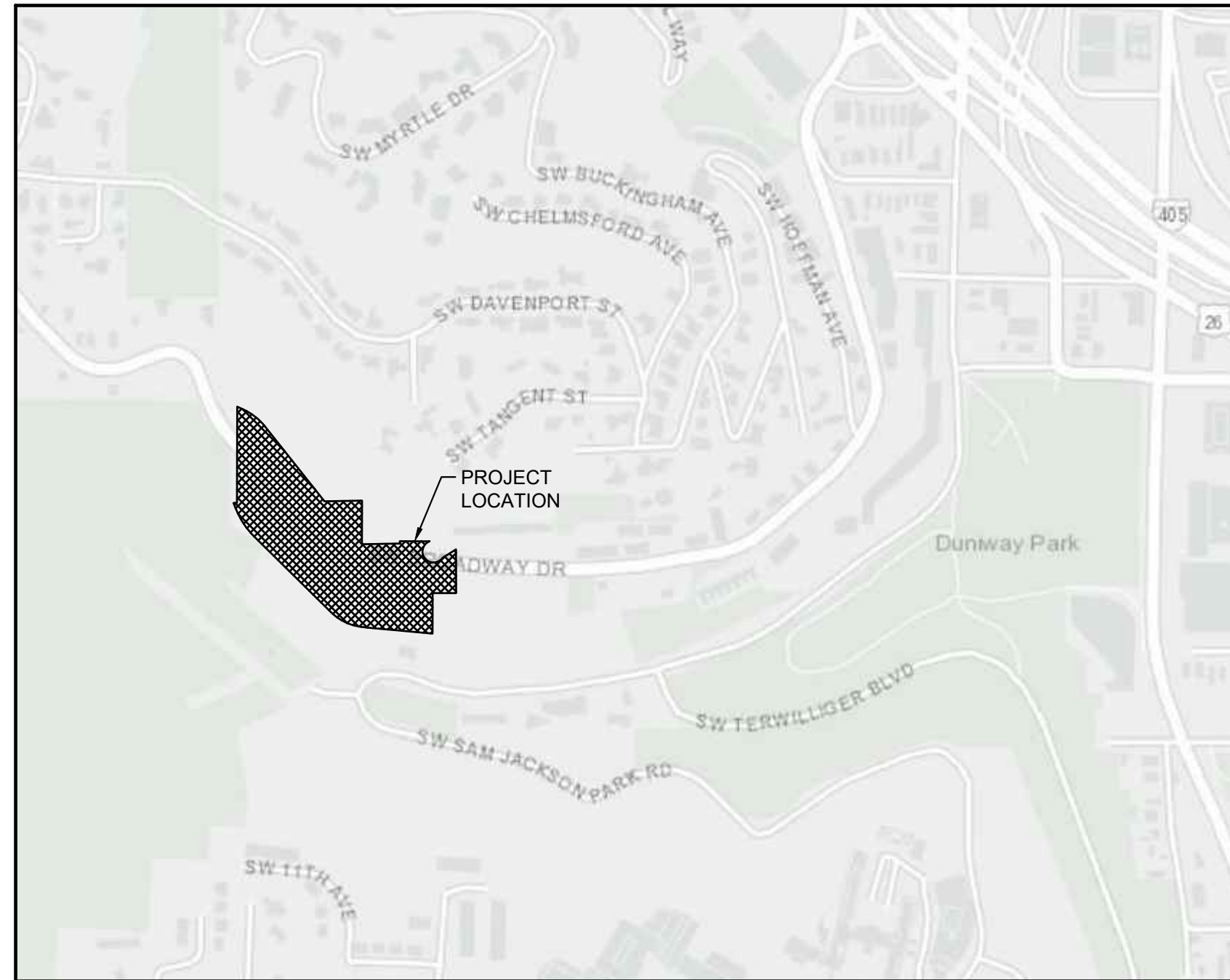
This request is to provide a pedestrian path constructed to recreation trail standards in lieu of an impracticable public street connection between SW Tangent Street and SW Broadway Drive and to eliminate the requirement for the addition of a 6-foot paved shoulder along the site frontage on SW Broadway Drive.

In lieu of the standard improvements along the site frontage on the north side of SW Broadway Drive, improvements will be made to the south side of the roadway. The details of the new pedestrian path between SW Tangent Street and SW Broadway Drive are to be approved through the public works permitting process. A more detailed discussion of the request is provided in the attached technical memorandum dated March 13, 2019.

**CITY STAFF USE ONLY**

Request Number: - -PW Received: / / Paid: / / Complete: / /

# FRONTAGE IMPROVEMENTS FOR TANGENT VILLAGE SW BROADWAY DRIVE, PORTLAND OR 97201

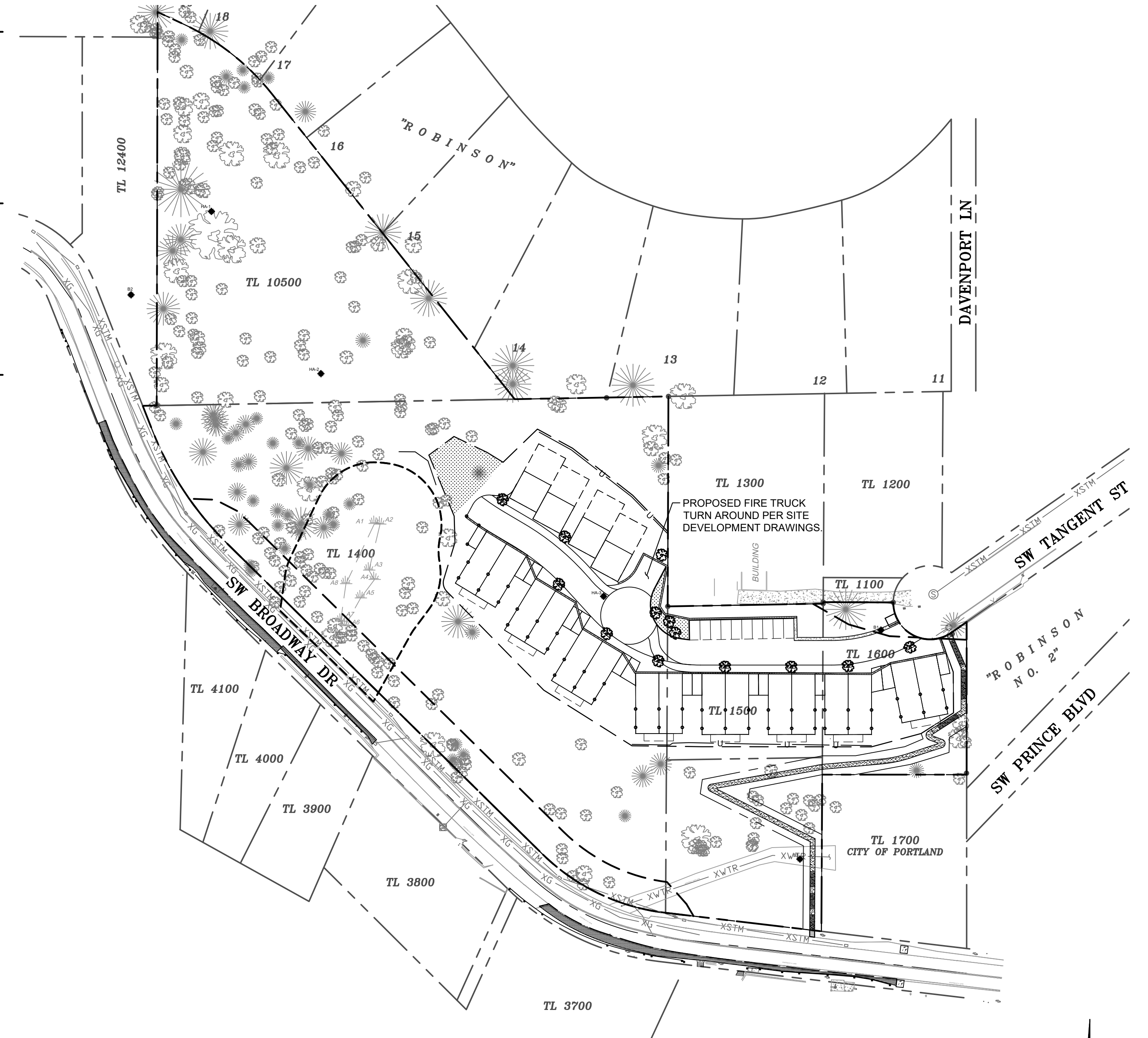


VICINITY MAP

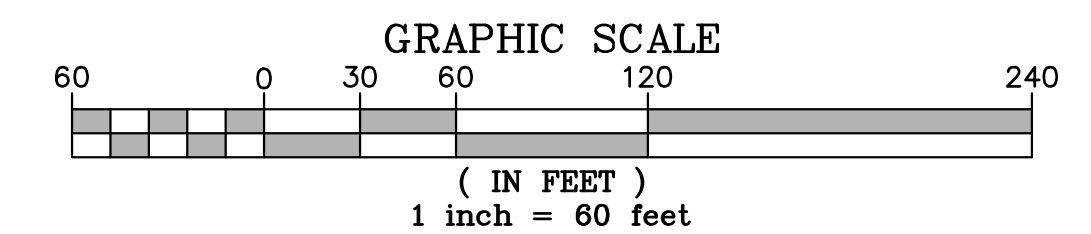
**OWNER**  
**GUENTHER LLC**  
 1603 SW GREENWOOD RD  
 PORTLAND, OR 97219  
 ATTN: KEN GUENTHER  
 T: 503-292-0857 E: KENGUNTH@COMCAST.NET

**ARCHITECT**  
**WRIGHT ARCHITECTURE**  
 2222 NE OREGON ST, STE 213  
 PORTLAND, OR 97232  
 ATTN: JOHN WRIGHT  
 T: 503-460-7994

**CIVIL ENGINEER**  
**WDY, INC.**  
 6443 SW BEAVERTON-HILLSDALE HWY, STE 210  
 PORTLAND, OR 97221  
 ATTN: CHRISTOPHER DESLAURIERS  
 T: 503-203-8111 F: 503-203-8122



**1**  
**C01** **OVERALL SITE PLAN**  
 SCALE: 1" = 60'-0"



**NOTICE TO EXCAVATORS:**  
 ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.  
 (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS

**Dig Safely.**

Call the Oregon One-Call Center  
 DIAL 811 or 1-800-332-2344

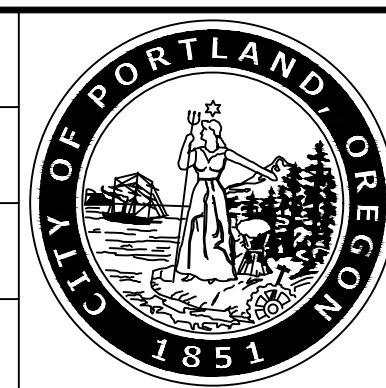
EMERGENCY TELEPHONE NUMBERS

NW NATURAL GAS	M-F 7am-6pm	503-226-4211 Ext.4313
	AFTER HOURS	503-226-4211
PGE		503-464-7777
CENTURYLINK		1-800-573-1311
CITY BUREAU OF MAINTENANCE		503-823-1700
CITY WATER		503-823-4874
VERIZON		1-800-483-1000

CIVIL OFFSITE DRAWING LIST		
Page No.	Sheet No.	Sheet Title
1	C01	COVER SHEET
2	C02	NOTES & ABBREVIATIONS
3	C03	EXISTING CONDITIONS
4	C04	DEMOLITION PLAN
5	C05	OVERALL SITE PLAN
6	CX01	ROADWAY SECTIONS
7	PP01	PLAN & PROFILE
8	PP02	PLAN & PROFILE
9	PP03	PLAN & PROFILE
10	PP04	PLAN & PROFILE
11	PP05	PEDESTRIAN PLAN & PROFILE
12	PP06	PEDESTRIAN PLAN & PROFILE
13	PP07	PEDESTRIAN PLAN & PROFILE
14	PP08	PEDESTRIAN PLAN & PROFILE
15	DT01	STANDARD DETAILS
--	ESC01	EROSION & SEDIMENT CONTROL PLAN

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DESIGNED BY CJD	DATE APPROVED		
PROJECT COMPLETED	SECTION ENGR		
MAP CORRECTED BY RTN	BES REVIEWER		
CHECKED BY CJD	PBOT REVIEWER		
CHECKED BY			
NO.	DATE	DESCRIPTION	APPD.
REVISIONS		FINAL MAP DATA	



**APPROVALS:**

BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

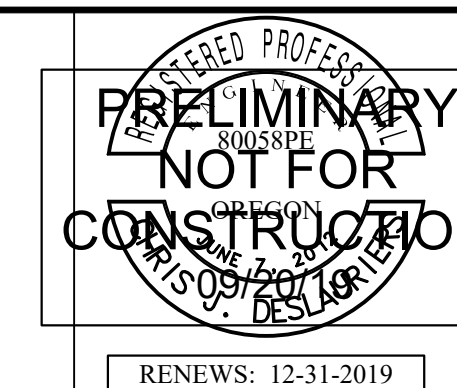
**BUREAU OF ENVIRONMENTAL SERVICES**

NICK FISH      COMMISSIONER  
 WILLIAM F. RYAN, P.E.      CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**

CHLOE EUDALY      COMMISSIONER  
 STEVE TOWNSEN, P.E.      CITY ENGINEER

**WDY** Structural-Civil Engineers  
 6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
 ph:503.203.8111 fx:503.203.8122 www.wdyi.com



**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

COVER SHEET

BES JOB NO. EP566  
 PBOT JOB NO. TB0100  
 SHEET NO. C01  
 1 OF 15

FILE: 17240\_SHT-01.DWG C01 9/20/2019 10:54:43 AM - NGUYEN

CIVIL ABBREVIATIONS

Table of civil abbreviations including ABBR, ABBREVIATION, INFO, and INFORMATION columns with various engineering symbols and their meanings.

COMMONLY USED GENERAL NOTES

GENERAL

- 1. ERRORS AND OMISSIONS ARE THE RESPONSIBILITY OF THE 'ENGINEER OF RECORD'... IF ERRORS OR OMISSIONS ARE FOUND AFTER THE PERMIT HAS BEEN ISSUED...
2. THE CONTRACTOR SHALL HAVE AT ALL TIMES ON-SITE, THE APPROVED CONSTRUCTION DRAWINGS & SPECIAL SPECIFICATIONS...

ENCROACHMENTS

- 7. STREET FURNISHINGS ARE SHOWN FOR REFERENCE ONLY. THE INSTALLATION OF ALL STREET FURNITURE INCLUDING BUT NOT LIMITED TO BENCHES, NON-CITY INSTALLED BIKE RACKS, GARBAGE CANS, ELECTRICAL SYSTEMS...

UNANTICIPATED CONTAMINATED MATERIAL

- 8. REMOVE AND DISPOSE (AT A PROPER LOCATION OR LANDFILL) ALL MATERIALS EXCAVATED FROM WORK IN THE RIGHT-OF-WAY. FOR DISPOSAL ON PRIVATE PROPERTY, SECURE A FILL PERMIT...
FOR UNANTICIPATED CONTAMINATED MEDIA ENCOUNTERED, THE PERMITTEE/APPLICANT OR ITS AGENT SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE MANAGEMENT, AND DISPOSAL OF CONTAMINATED MEDIA ENCOUNTERED...

UTILITIES

- 9. UTILITIES SHOWN ON THESE PLANS ARE FOR INFORMATION AND COORDINATION PURPOSES ONLY AND ARE NOT AUTHORIZED FOR INSTALLATION UNDER THE PUBLIC STREET IMPROVEMENT PERMIT...
10. COORDINATION OF ALL UTILITY RELOCATES, REMOVALS, OR INSTALLATION WITHIN THE LIMITS OF WORK IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR...
11. STORM SEWERS ARE BEING CONSTRUCTED UNDER PBOT JOB #TH0578, AS APPROVED BY THE BUREAU OF ENVIRONMENTAL SERVICES.

STREET PAVEMENT

- 12. ALL MANHOLE LIDS AND VALVE BOXES SHALL BE ADJUSTED TO FINISHED STREET GRADE.
13. THE STREET INSPECTOR WILL MAKE THE FINAL DETERMINATION OF THE LIMITS OF PAVEMENT RESTORATION, INCLUDING SAWCUT LINES AND SKIN PATCHING...
14. SAWCUTS SHALL BE STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING PAVEMENT AND NEW PAVEMENT AND ALL NEW PAVEMENT JOINTS SHALL BE SAND SEALED.

CURBS, SIDEWALKS, AND DRIVEWAYS

- 17. UTILITY LIDS, MANHOLE COVERS, VALVE COVERS (THAT ARE NOT SHOWN ON THESE CONSTRUCTION DRAWINGS) ARE NOT ALLOWED IN THE THROUGH PEDESTRIAN ZONE. THEY MUST BE PLACED IN THE SIDEWALK FURNISHING OR BUILDING ZONE IF THE PROPER PBOT UTILITY PERMIT HAS BEEN SECURED.
18. FULL HEIGHT CURBS SHALL BE CONSTRUCTED AT ALL LOCATIONS UNLESS A NEW DRIVEWAY IS CONSTRUCTED AT THE SAME TIME AS THE CURB.
19. ALL SIDEWALK CONTRACTION JOINTS SHALL BE PER SECTION 00759.49 - 'CONTRACTION JOINTS' OF THE STANDARD CONSTRUCTION SPECIFICATION AND CITY STANDARD DWG P-551.

STORM SEWER PIPE

- 24. THE ACCEPTABLE INLET LEAD PIPE MATERIALS ARE AS FOLLOWS:
- C.S.P. ASTM C-14, CLASS 3 WITH CLASS 'B' BEDDING AND BACKFILL
- HDPE D 3035 SDR 26 WITH FLEXIBLE PIPE BEDDING AND GRANULAR BACKFILL
- PVC ASTM D 3034 SDR 35 WITH FLEXIBLE PIPE BEDDING AND GRANULAR BACKFILL
- PIPE BEDDING AND BACKFILL PER STANDARD PLAN NOS. P-100 AND P-101.
- SURFACING PER STD. DWG. P-515, P-516 AND P-517.
25. FOR PLUGGING OF ABANDONED SEWER PIPES, AND FILLING ABANDONED PIPES, MANHOLES, AND CATCH BASINS, SEE SECTIONS 00490.43 AND 00490.44 RESPECTIVELY OF THE STANDARD SPECIFICATION.

CATCH BASINS AND INLETS

- 26. ALL CATCH BASIN AND INLETS SHALL BE CAST-IN-PLACE. CONSTRUCT CAST-IN-PLACE CATCH BASINS AND INLETS ACCORDING TO SECTION 00470.

TRAFFIC AND PARKING CONTROL

- 27. THE CONTRACTOR MUST ACQUIRE AN APPROVED TEMPORARY STREET USE PERMIT (TSUP) PRIOR TO CLOSURE OF ANY STREET, SIDEWALK, TRAVEL LANE OR PARKING LANE. THE TSUP IS ACQUIRED FROM THE PERMIT CENTER LOCATED AT 1900 SW 4TH AVENUE.
28. THE CONTRACTOR SHALL NOT REMOVE OR COVER ANY TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, OR BARRICADES THAT ARE NOT IDENTIFIED ON THE APPROVED TEMPORARY TRAFFIC CONTROL PLAN.
29. THE CONTRACTOR SHALL MAINTAIN ALL NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES (INCLUDING BUT NOT LIMITED TO THE FOLLOWING - SIGNS, PAVEMENT MARKINGS, AND BARRICADES) UNTIL THE PERMANENT TRAFFIC CONTROL DEVICES ARE INSTALLED.

- 30. WHEN WORK INTERFERES WITH THE OPERATION OF A TRIMET BUS OR BUS STOP, CONTACT TRIMET AT 503-962-4949 A MINIMUM OF 14 DAYS PRIOR TO CLOSING OR DISRUPTING TRIMET'S OPERATION.
31. THE CONTRACTOR SHALL INSTALL OR REINSTALL ALL PERMANENT TRAFFIC CONTROL SIGNING, CURB AND PAVEMENT MARKINGS, AND BARRICADES.
32. THE CONTRACTOR SHALL SUBMIT MATERIALS LIST FOR APPROVAL 14 DAYS PRIOR TO INSTALLING PERMANENT TRAFFIC CONTROL SIGNING, CURB AND PAVEMENT MARKINGS, AND BARRICADES.
33. ALL NEW SIGN MATERIALS SHALL COMPLY WITH SECTION 2910 OF THE CITY OF PORTLAND STANDARD CONSTRUCTION SPECIFICATIONS. ALL SIGNS SHALL BE TYPE III OR IV BACKGROUND SHEETING ON ALUMINUM SIGN BLANKS. SIGN TYPES FOR EACH SIGN, AS SPECIFIED IN SECTION 2910.02, ARE NOTED IN THE PLANS.
34. SIGNS AND SIGN POSTS REMOVED BY THE PERMITTEE OR ITS AGENT SHALL BE DELIVERED TO THE BUREAU OF MAINTENANCE, ALBINA YARD. CONTACT 503-823-4056 TO ARRANGE A DELIVERY TIME. REMOVE ALL SIGNS, CONCRETE AND DEBRIS FROM THE POST PRIOR TO DELIVERY.
35. ALL CURB AND PAVEMENT MARKING MATERIALS SHALL BE ON THE CITY'S CONSTRUCTION PRODUCTS LIST (CPL) OR THE STATE'S QUALIFIED PRODUCTS LIST (QPL). ALL MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURERS APPROVED APPLICATION PROCEDURE.
36. ALL LONGITUDINAL LINE WORK TO BE METHOD B (NON-PROFILE) EXTRUDED THERMOPLASTIC, 120 MILS THICK.
37. ALL TRANSVERSE LINE WORK, LEGENDS, SYMBOLS, AND ARROWS SHALL BE TYPE 'B-HS' PREFORMED THERMOPLASTIC, BIKE LANE STENCILS, GREEN BICYCLE LANE MARKINGS, AND BIKE PATH RAILROAD MARKINGS SHALL BE 90 MILS THICK. ALL OTHER TRANSVERSE PAVMENT MARKINGS SHALL BE 120-125 MILS THICK.
38. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY CURB OR PAVEMENT MARKINGS DAMAGED, WORN OUT OR REMOVED DUE TO CONTRACTOR'S OPERATION.
39. ALL TREE REMOVAL SHALL COMPLY WITH THE FEDERAL MIGRATORY BIRD TREATY ACT. SEE THE SPECIAL PROVISIONS FOR REQUIREMENTS PRIOR TO CUTTING OF ANY TREE.
40. ALL GROUND DISTURBANCES NEAR TREES REQUIRES ROOT INSPECTION! CONTACT URBAN FORESTRY (URBAN FORESTRY AT 503-823-8733; FOR ROOT INSPECTIONS PRESS 3) PRIOR TO ALL EXCAVATIONS ADJACENT TO TREES. CONSULTATION WITH THE URBAN FORESTER IS REQUIRED BEFORE CUTTING OF ROOTS.
41. FOR ALTERNATE TREE SPECIES OR ALTERNATE TREE PLANTING LOCATION APPROVAL (PRIOR TO PLANTING), CONTACT URBAN FORESTRY AT 503-823-8733; TO LEAVE A MESSAGE FOR THE TREE INSPECTOR PRESS 5.

EROSION CONTROL

- 42. EROSION/SEDIMENTATION CONTROL (ESC) IS REQUIRED ON THIS PROJECT. IMPLEMENTATION OF THE ESC AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE OR ITS AGENT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED. THE PERMITTEE OR ITS AGENT SHALL PROVIDE INLET PROTECTION TO DOWNSTREAM INLETS FROM THE SITE PER THE EROSION CONTROL MANUAL [MARCH 2008]. CATCH BASIN AND STORM DRAIN INLET PROTECTION SHALL BE INSTALLED PER DETAIL DRAWINGS 4.3-B AND 4.3-G.

STORMWATER NARRATIVE:

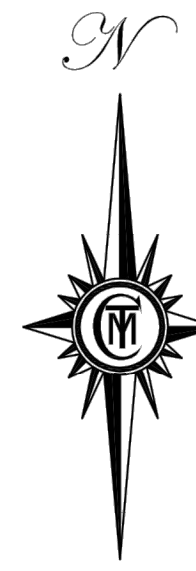
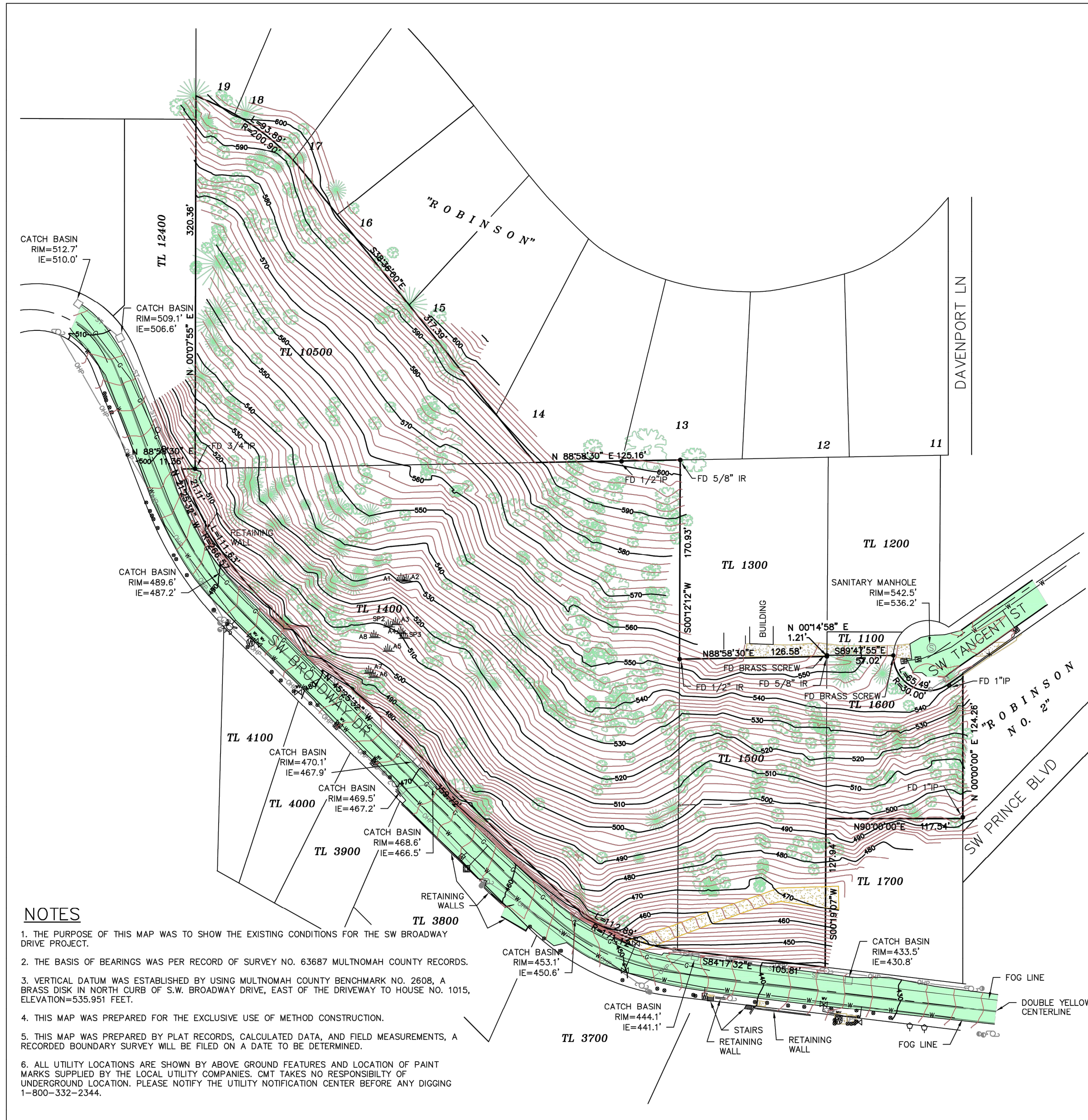
ALL EXISTING AND NEW IMPERVIOUS AREAS OF PUBLIC STORMWATER WILL CONTINUE TO FLOW INTO PUBLIC CATCH BASINS AND ROADSIDE DITCHES THAT ARE CONNECTED TO THE COMBINED SEWER.

PROPOSED LEGEND: A table listing symbols for STREET TREE AND TREE WELL, CONCRETE, TREE PROTECTION FENCE, TREE REMOVAL, ORANGE CONSTRUCTION FENCE, SEDIMENT CONTROL WATTLES, CURB & GUTTER, SANITARY SEWER PIPE, SANITARY SEWER MANHOLE, SANITARY SEWER CLEANOUT, STORM PIPE, STORM CATCH BASIN, STORM MANHOLE, STORM CLEANOUT, WATER PIPE, WATER BEND, WATER VALVE, WATER METER, FIRE HYDRANT, GAS LINE, GAS METER, OVERHEAD ELECTRICAL LINE, UNDERGROUND ELECTRICAL LINE, POWER POLE, STREET LIGHT, and SIGNS.

EXISTING CONDITIONS LEGEND: A table listing symbols for EXISTING BUSH/SHRUB, EXISTING DECIDUOUS TREE, EXISTING CONIFEROUS TREE, EXISTING POWER POLE, EXISTING OVERHEAD ELECTRICAL LINE, EXISTING UNDERGROUND ELECTRICAL LINE, EXISTING FIRE HYDRANT, EXISTING VAULT, EXISTING WATER METER, EXISTING WATER VALVE, EXISTING WATER LINE, EXISTING STORM CATCH BASIN, EXISTING STORM LINE, EXISTING COMBINED SEWER MANHOLE, EXISTING COMBINED SEWER LINE, EXISTING GAS LINE, EXISTING FENCE, FOUND MONUMENTS, LOCAL BENCHMARK ESTABLISHED, EXISTING GRAVEL, EXISTING CONCRETE, EXISTING ASPHALT, EXISTING WETLAND.

Project summary and approvals section. Includes: DESIGNED BY: CJD, DATE APPROVED, APPROVALS (BES, PBOT, CITY), BUREAU OF ENVIRONMENTAL SERVICES (NICK FISH, WILLIAM F. RYAN, P.E.), BUREAU OF TRANSPORTATION (CHLOE EUDALY, STEVE TOWNSEN, P.E.), WDY Structural-Civil Engineers (6443 SW Beaverlton-Hillsdale Hwy, suite 210 Portland, OR 97221), PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE, NOTES & ABBREVIATIONS, SHEET NO. C02 OF 15.

FILE: 17240\_SHT-02.DWG, 02/9/2019 10:54:53 AM - NGUYEN



SCALE 1" = 60'

**LEGEND**

- EXISTING BUSH/SHRUB
- EXISTING DECIDUOUS TREE W/ TREE TAG NUMBER
- EXISTING CONIFEROUS TREE W/ TREE TAG NUMBER
- EXISTING TELEPHONE POLE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING OVERHEAD POWER LINES
- EXISTING FIRE HYDRANT
- EXISTING VAULT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING UNDERGROUND WATER
- EXISTING CONCRETE CULVERT
- EXISTING SANITARY MANHOLE
- EXISTING FENCE
- FOUND MONUMENTS
- EXISTING GUARD RAIL POST
- EXISTING GRAVEL
- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING WETLAND

**NOTES**

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE EXISTING CONDITIONS FOR THE SW BROADWAY DRIVE PROJECT.
2. THE BASIS OF BEARINGS WAS PER RECORD OF SURVEY NO. 63687 MULTNOMAH COUNTY RECORDS.
3. VERTICAL DATUM WAS ESTABLISHED BY USING MULTNOMAH COUNTY BENCHMARK NO. 2608, A BRASS DISK IN NORTH CURB OF S.W. BROADWAY DRIVE, EAST OF THE DRIVEWAY TO HOUSE NO. 1015, ELEVATION=535.951 FEET.
4. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF METHOD CONSTRUCTION.
5. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED ON A DATE TO BE DETERMINED.
6. ALL UTILITY LOCATIONS ARE SHOWN BY ABOVE GROUND FEATURES AND LOCATION OF PAINT MARKS SUPPLIED BY THE LOCAL UTILITY COMPANIES. CMT TAKES NO RESPONSIBILITY OF UNDERGROUND LOCATION. PLEASE NOTIFY THE UTILITY NOTIFICATION CENTER BEFORE ANY DIGGING 1-800-332-2344.

REGISTERED PROFESSIONAL LAND SURVEYOR

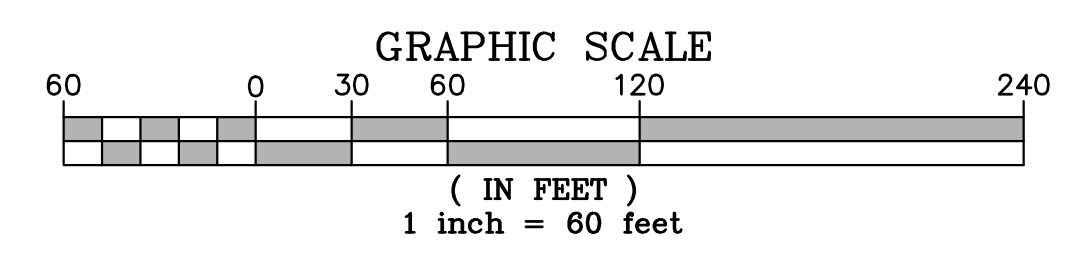
OREGON  
JULY 12, 2005  
SHAUN P. FIDLER  
50333

EXPIRES DECEMBER 31, 2019

**EXISTING CONDITIONS**

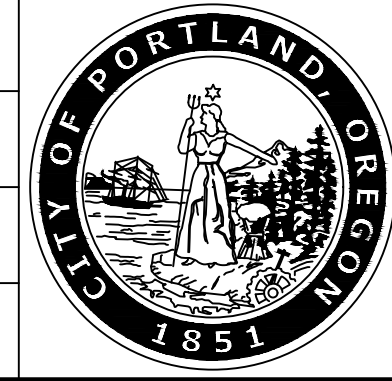
<b>SW BROADWAY DRIVE</b>	
NE 1/4 SEC. 9	
T 1 S., R 1 E., W.M.	
CITY OF PORTLAND	
MULTNOMAH COUNTY, OREGON	
AUGUST 1, 2019	
DRAWN: DMR (REV) CHECKED: SPF	
SCALE 1"=60' ACCOUNT # 240-012	
Y:\240-012\DWG\240012BASE	
<b>CMT SURVEYING AND CONSULTING</b>	
9136 SE ST HELENS ST, SUITE J	
PO BOX 3251	
CLACKAMAS, OR 97015	
PHONE (503) 850-4672 FAX (503) 850-4590	

**1 EXISTING CONDITIONS**  
C03 SCALE: 1" = 60'-0"



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DESIGNED BY	CJD	DATE APPROVED	
CONSTRUCTED BY		CAD BY	SECTION ENGR
PROJECT COMPLETED		CHECKED BY	BES REVIEWER
MAP CORRECTED BY	RTN	CHECKED BY	BES REVIEWER
CHECKED BY	CJD		PBOT REVIEWER
NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			



**BUREAU OF ENVIRONMENTAL SERVICES**  
NICK FISH COMMISSIONER  
WILLIAM F. RYAN, P.E. CHIEF ENGINEER

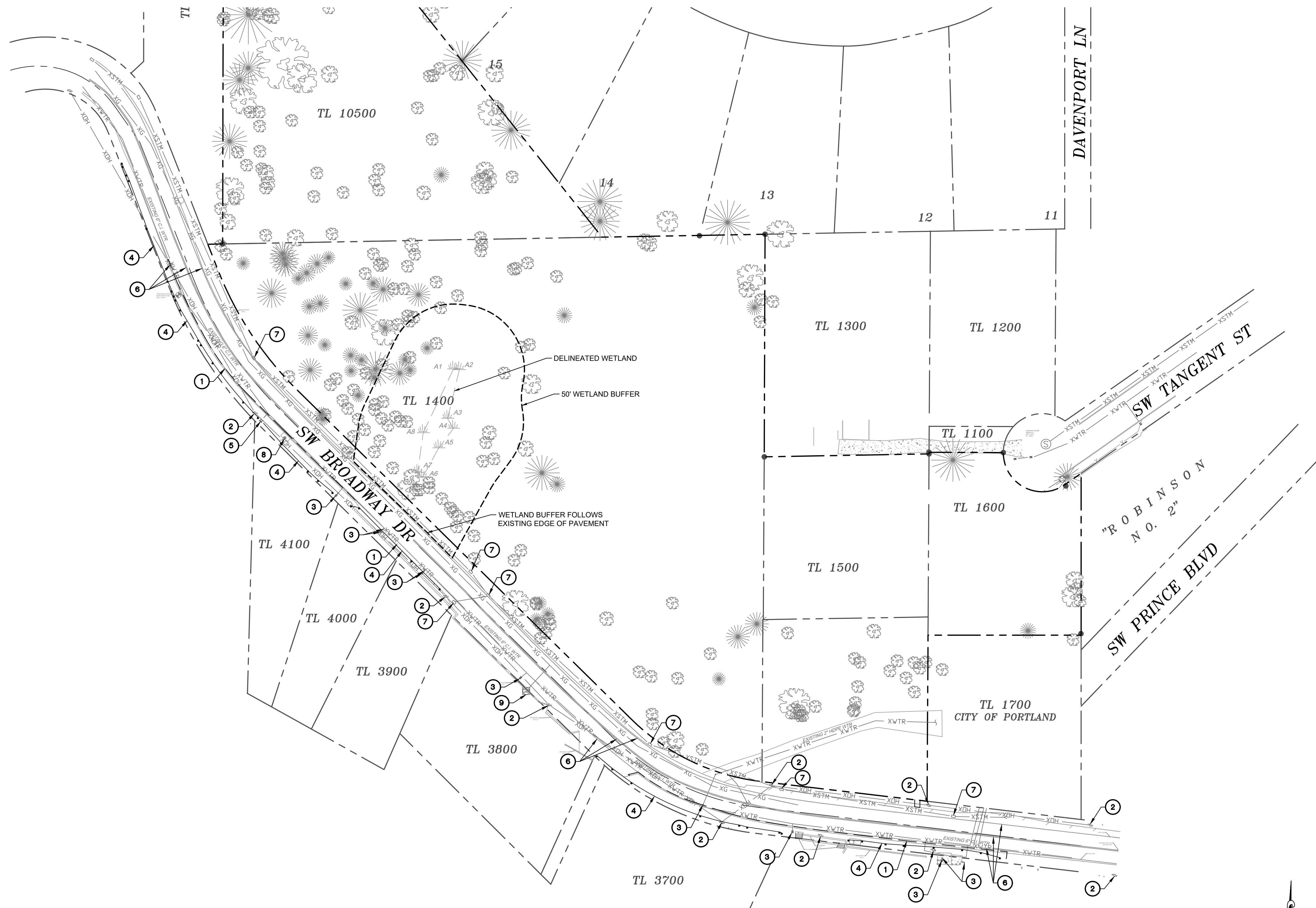
**BUREAU OF TRANSPORTATION**  
CHLOE EUDALY COMMISSIONER  
STEVE TOWNSEN, P.E. CITY ENGINEER

**WDY** Structural-Civil Engineers  
6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
ph:503.203.8111 fx:503.203.8122 www.wdyj.com

**PRELIMINARY NOT FOR CONSTRUCTION**  
09/20/19

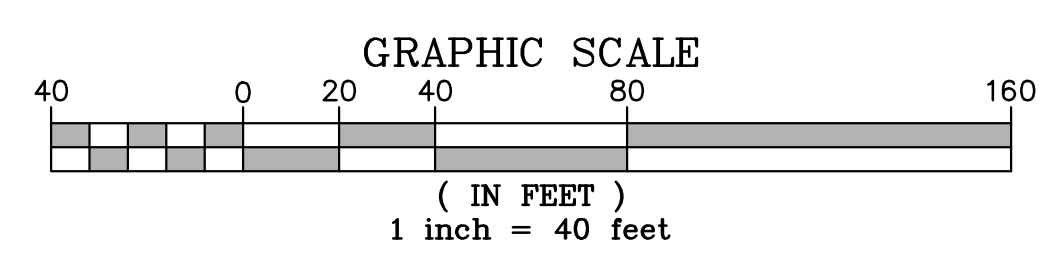
**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**  
EXISTING CONDITIONS

BES JOB NO. EP566  
PBOT JOB NO. TB0100  
SHEET NO. C03  
3 OF 15



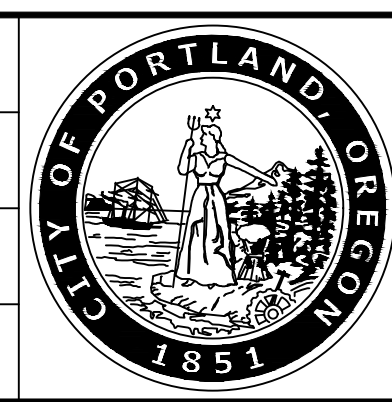
KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
1	SAWCUT 1'-0" FROM EDGE OF EXISTING PAVEMENT OR AS SHOWN OR TO REMOVE PAVEMENT FOR NEW WORK. SEE DETAILS P-506 AND P-518 FOR REPAIR PAVEMENT AND RESURFACING INFORMATION, TYP.
2	PROTECT EXISTING POWER POLE TO REMAIN (TYP).
3	EXISTING WATER METER BOX AND WATER VALVE TO BE RESET TO FINISH PAVEMENT. SEE PLAN AND PROFILE SHEETS FOR MORE INFO. CONTACT PWB FOR NEW TRAFFIC RATED METER BOX TO REPLACE CAST IRON.
4	PROTECT EXISTING GUARDRAIL TO REMAIN, TYP.
5	PROTECT EXISTING FIRE HYDRANT TO REMAIN.
6	EXISTING PAINT STRIPE FOR FOG LINES AND DOUBLE YELLOW CENTER LINE TO REMAIN, TYP.
7	PROTECT EXISTING STM CB TO REMAIN.
8	EXISTING WTR VAULT MANHOLE TO BE RESET TO FINISH PAVEMENT, SEE PLAN AND PROFILE SHEETS FOR MORE INFO.
9	PROTECT EXISTING GAS SERVICE AND VALVE TO REMAIN.

**1**  
**C04** **DEMOLITION PLAN**  
SCALE: 1" = 40'-0"



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 FILE: 17240\_SHT-04.DWG C04 9/20/2019 9:29:43 PM - DESLAURIERS  
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 ANS 11/16/2017 10:06:27 AM

NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			

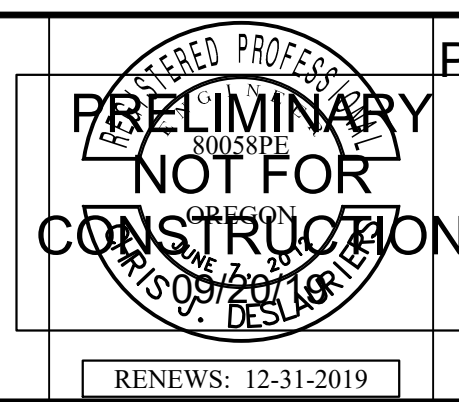


DESIGNED BY		DATE APPROVED	
CONSTRUCTED BY	CJD	SECTION ENGR	
PROJECT COMPLETED	CAD BY	BES REVIEWER	
MAP CORRECTED BY	RTN	PBOT REVIEWER	
CHECKED BY	CJD		

APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

BUREAU OF ENVIRONMENTAL SERVICES		BUREAU OF TRANSPORTATION	
NICK FISH	COMMISSIONER	CHLOE EUDALY	COMMISSIONER
WILLIAM F. RYAN, P.E.	CHIEF ENGINEER	STEVE TOWNSEN, P.E.	CITY ENGINEER

**WDY** Structural-Civil Engineers  
 6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
 ph:503.203.8111 fx:503.203.8122 www.wdyi.com



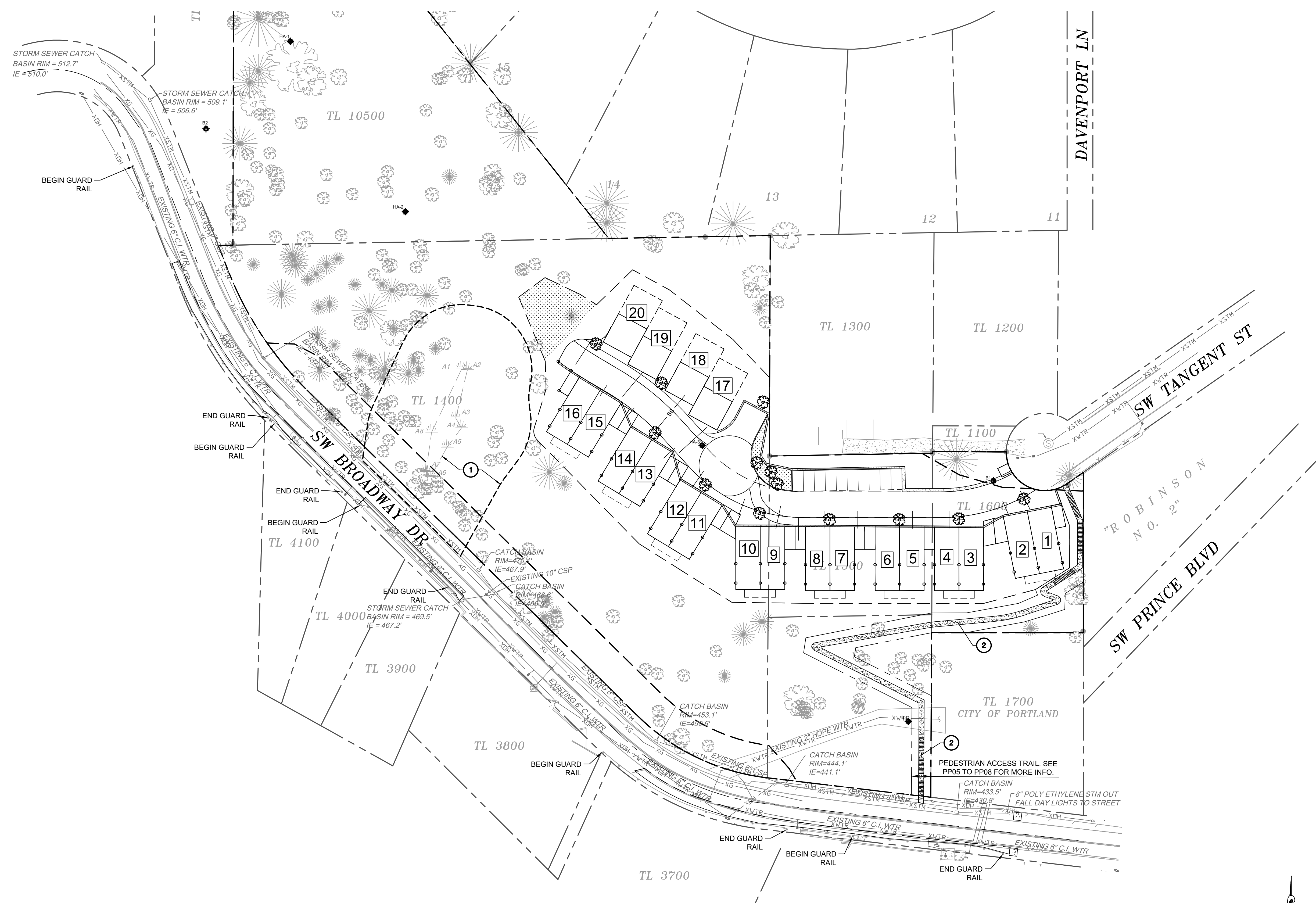
PUBLIC IMPROVEMENTS FOR  
**SW BROADWAY DRIVE**  
 DEMOLITION PLAN

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	C04
	4 OF 15

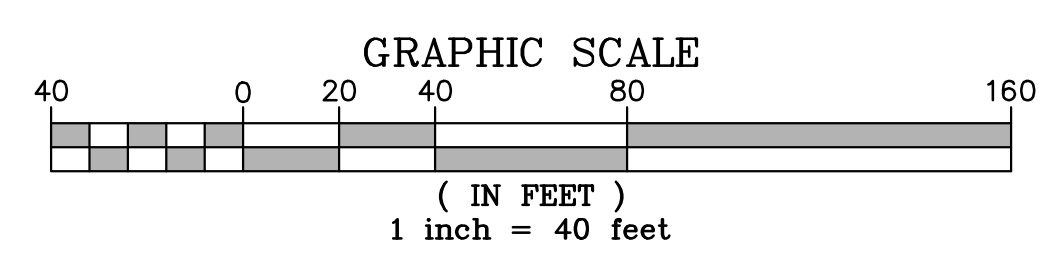
RENEWS: 12-31-2019



KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
①	EXISTING DELINEATED WETLAND AND 50 FOOT BUFFER.
②	PEDESTRIAN TRAIL SHALL BE CONSTRUCTED TO TRAIL STANDARDS, TYP. DETAILS OF MATERIAL AND DESIGN TO BE PROVIDED AT 60% DD PHASE.

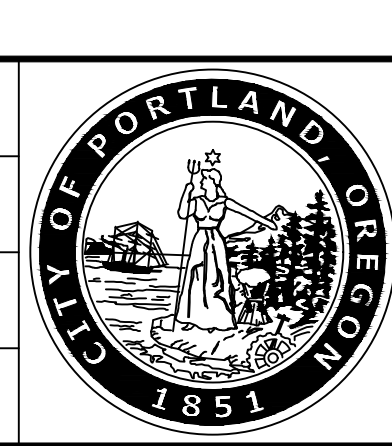


**1 OVERALL SITE PLAN**  
**C05** SCALE: 1" = 40'-0"



FILE: 17240\_SHT-04A.DWG C05 9/20/2019 9:29:08 PM - DESLAURIERS  
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NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			

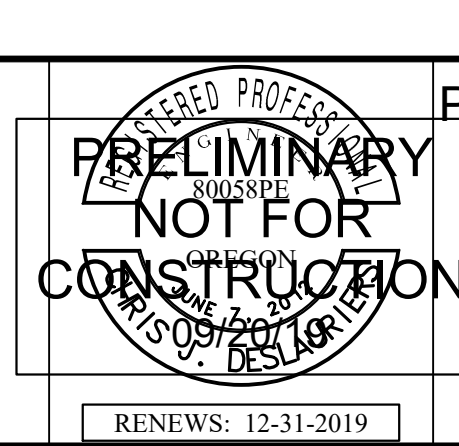


DESIGNED BY		DATE APPROVED	
CONSTRUCTED BY	CJD	DESIGNED BY	CJD
PROJECT COMPLETED	CAD BY	SECTION ENGR	RTN
MAP CORRECTED BY	CHECKED BY	BES REVIEWER	CJD
CHECKED BY	CJD	PBOT REVIEWER	

APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

BUREAU OF ENVIRONMENTAL SERVICES		BUREAU OF TRANSPORTATION	
NICK FISH	COMMISSIONER	CHLOE EUDALY	COMMISSIONER
WILLIAM F. RYAN, P.E.	CHIEF ENGINEER	STEVE TOWNSEN, P.E.	CITY ENGINEER

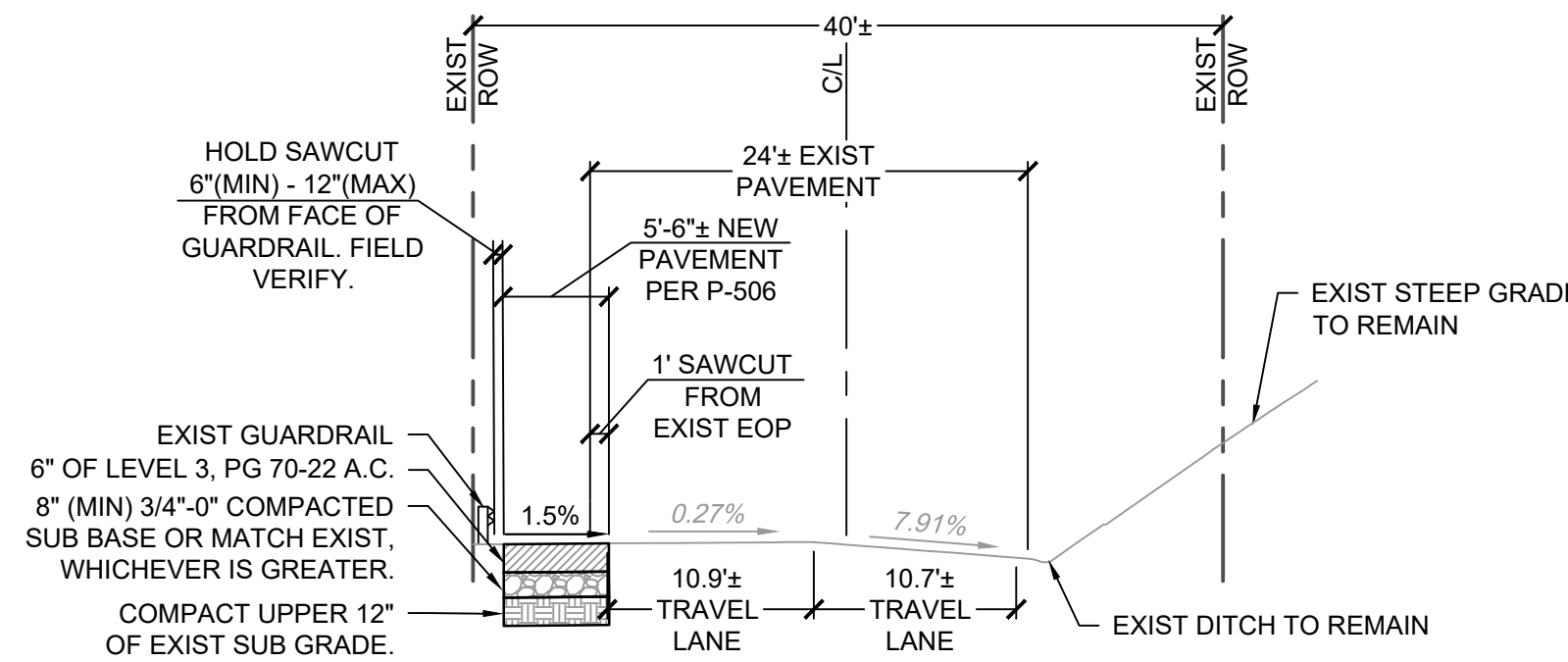
**WDY** Structural-Civil Engineers  
 6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
 ph:503.203.8111 fx:503.203.8122 www.wdyj.com



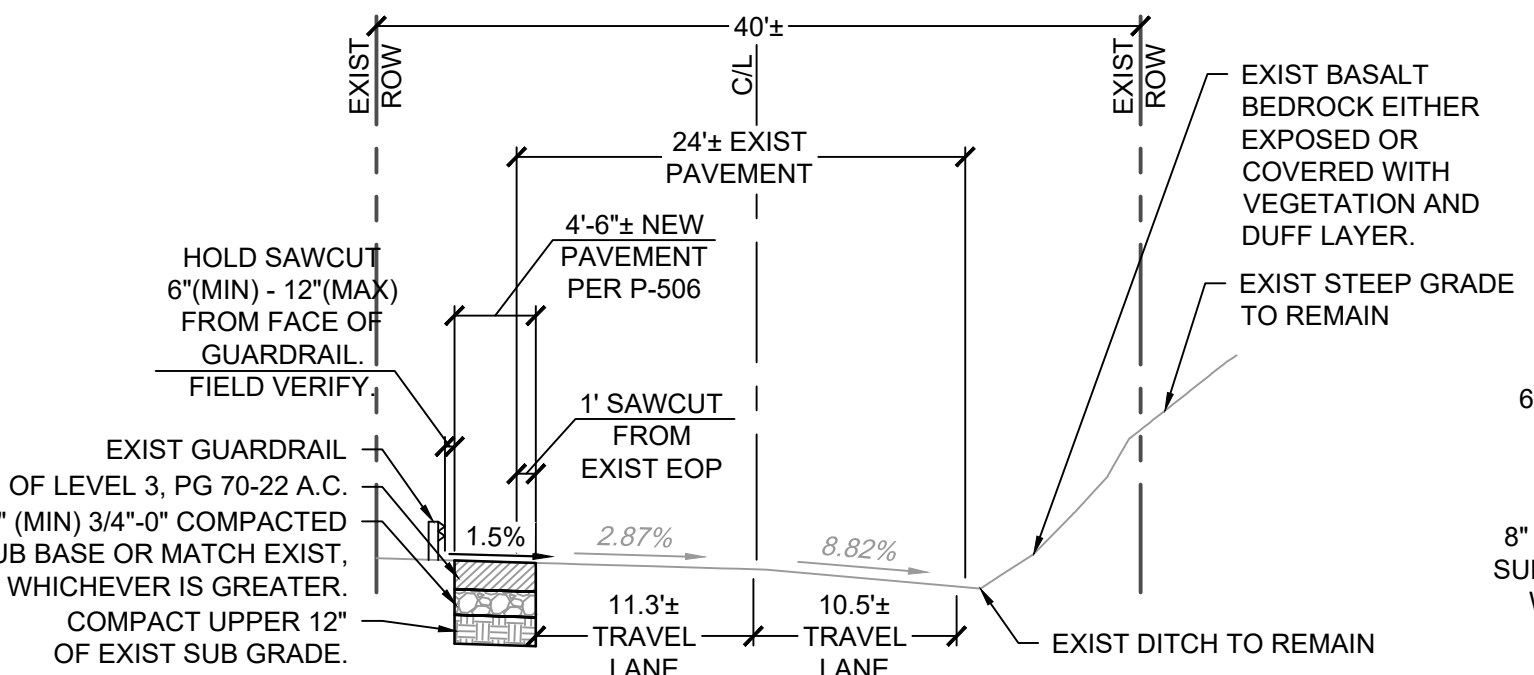
PUBLIC IMPROVEMENTS FOR  
**SW BROADWAY DRIVE**  
 OVERALL SITE PLAN

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	C05
	5 OF 15

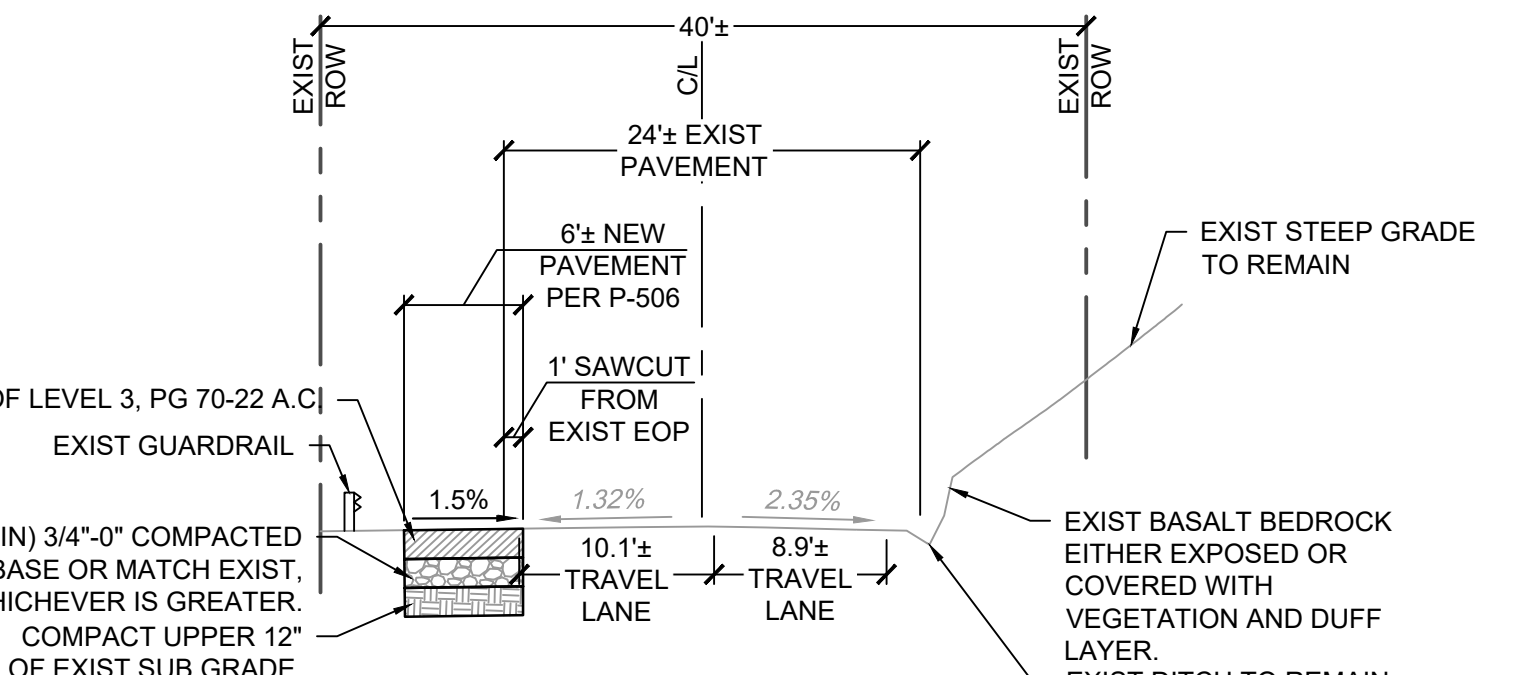
RENEWS: 12-31-2019



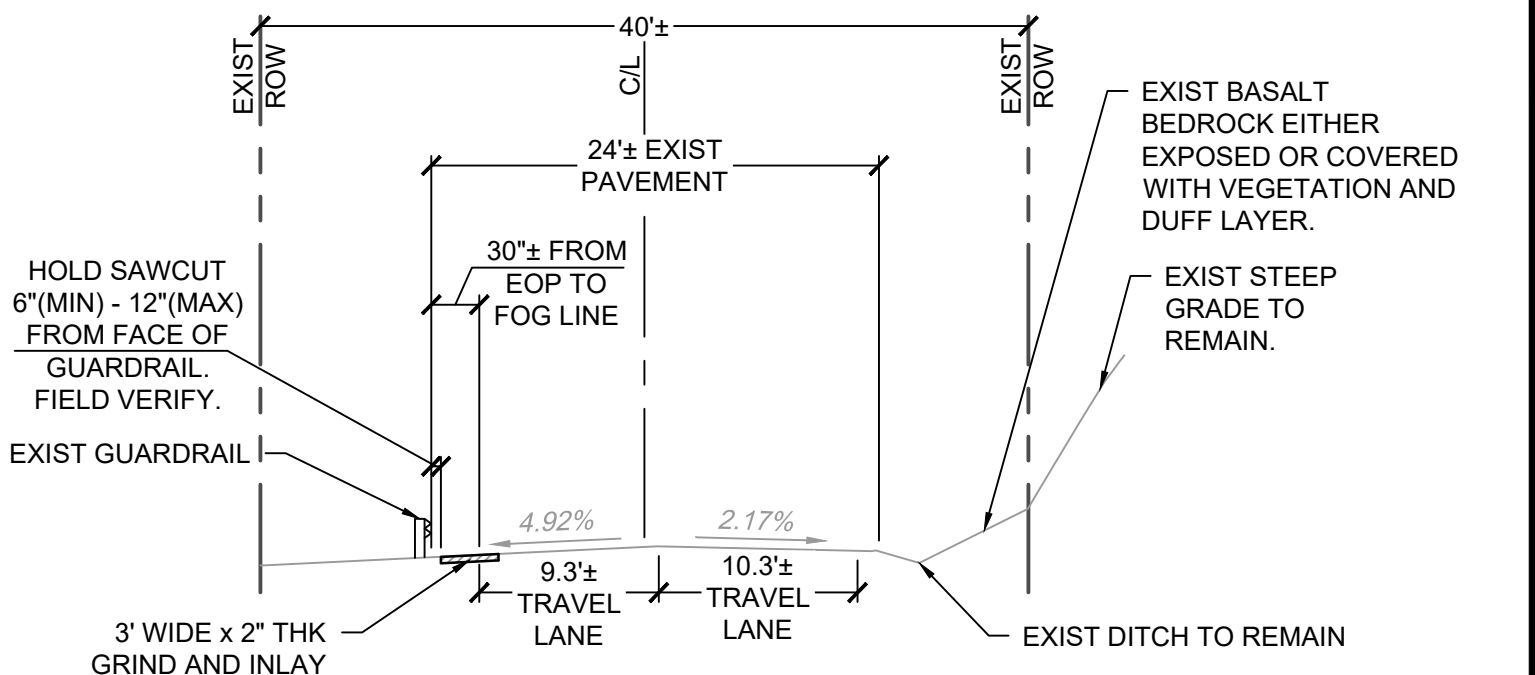
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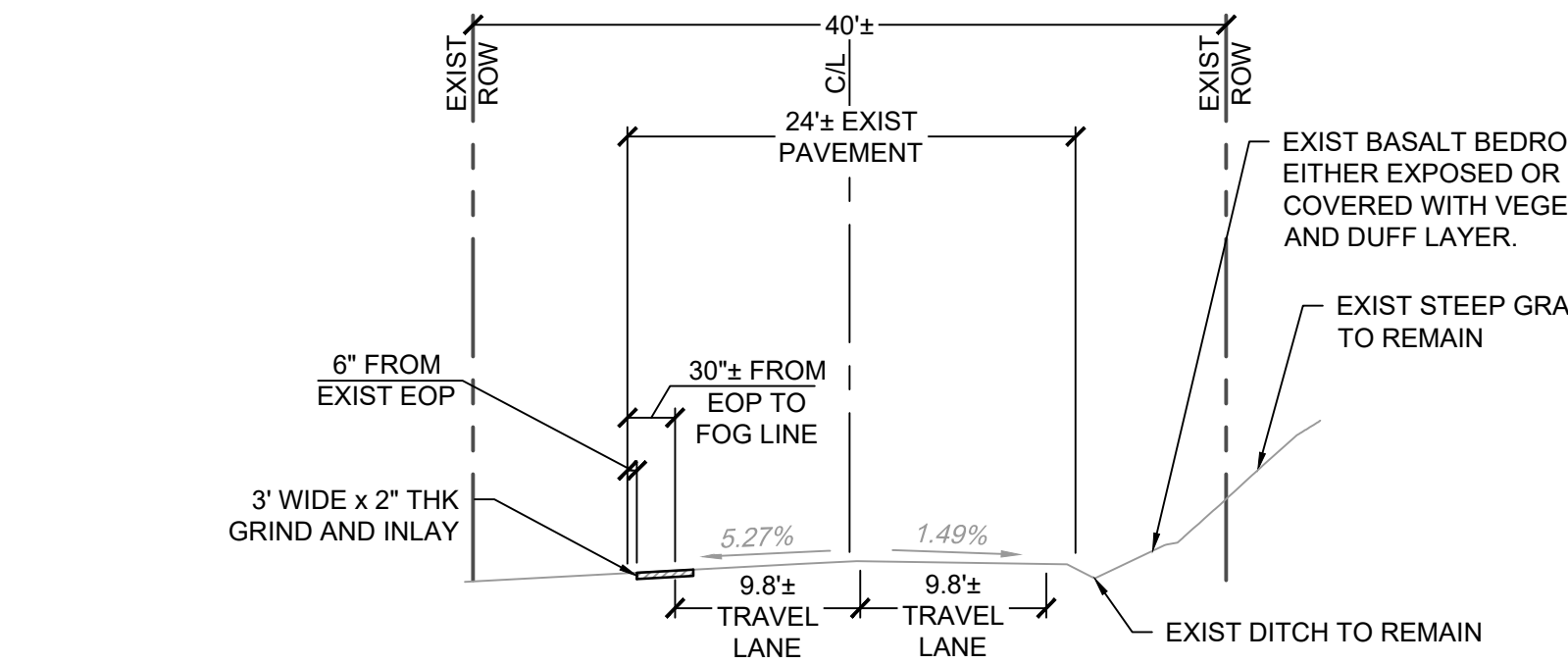
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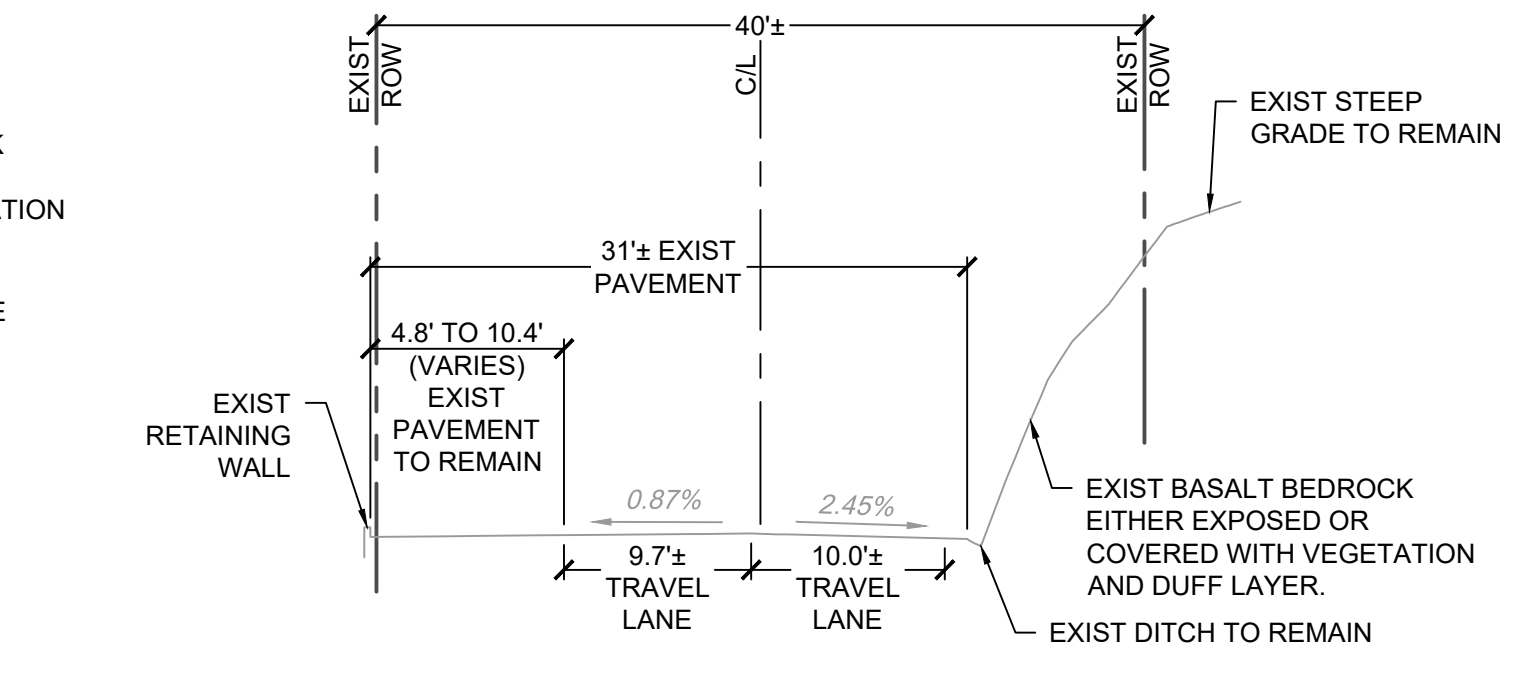
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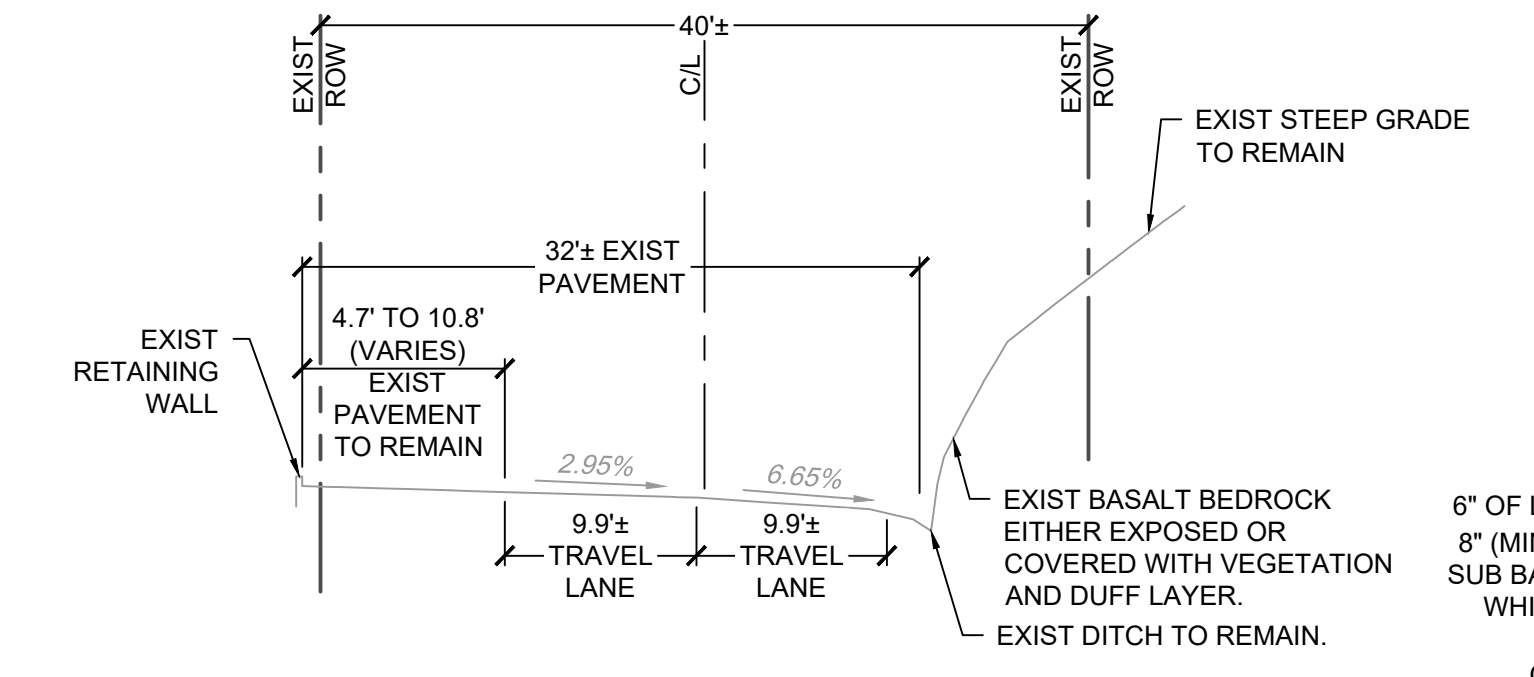
**4 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.



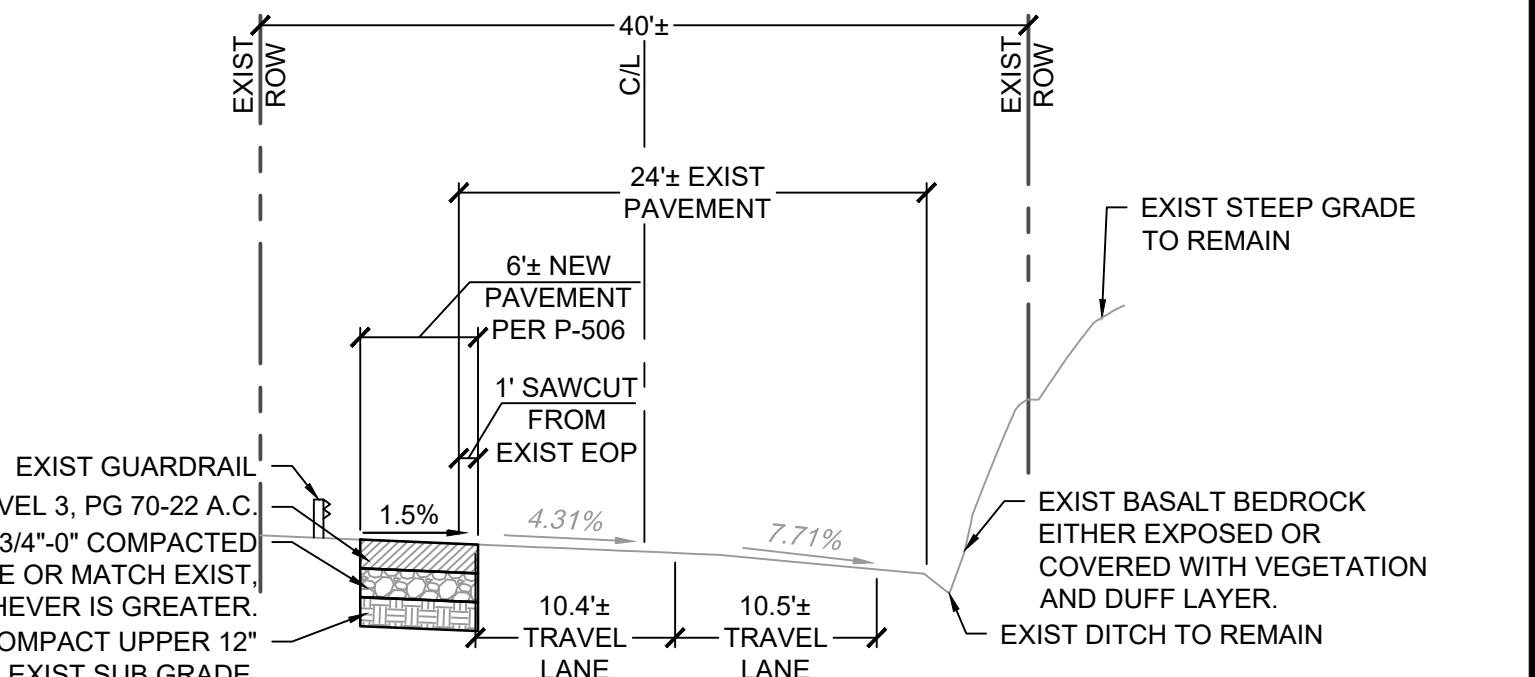
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CX01 N.T.S.



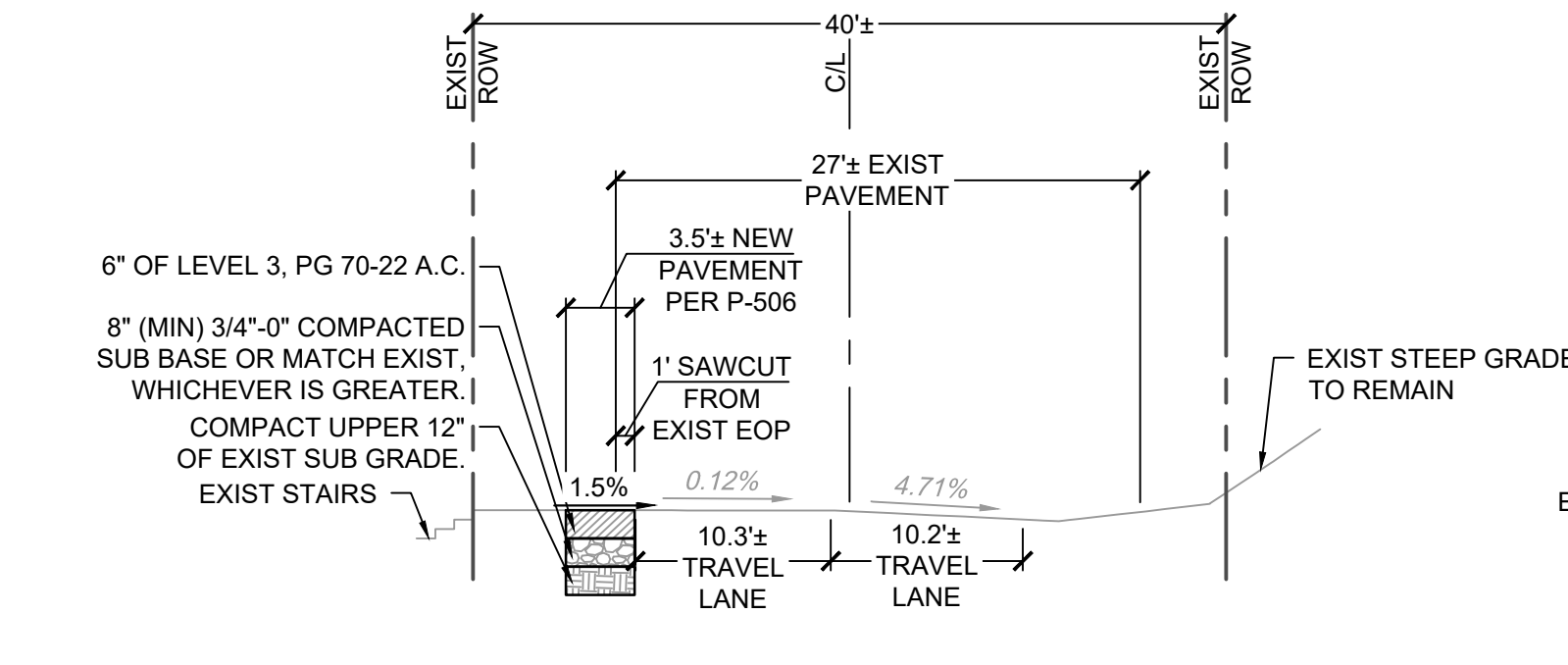
**6 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
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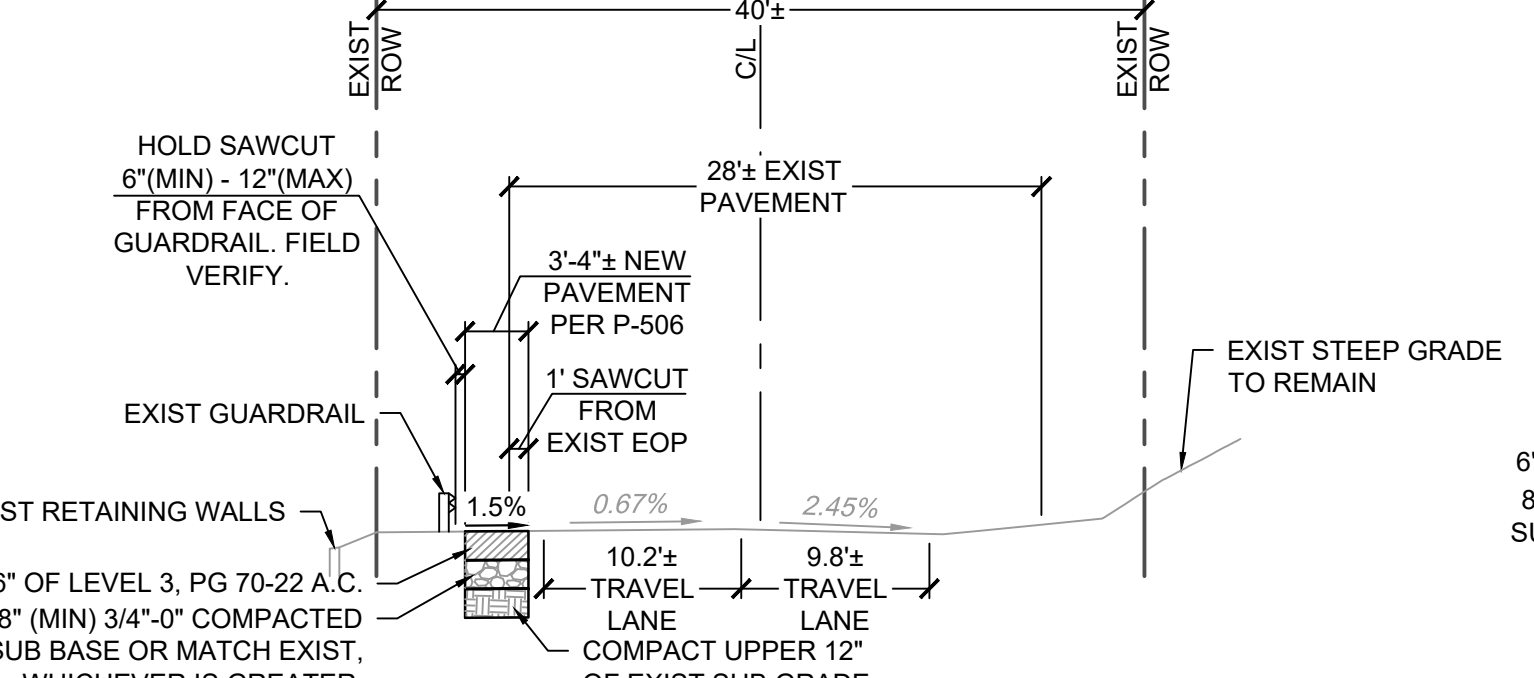
**7 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.



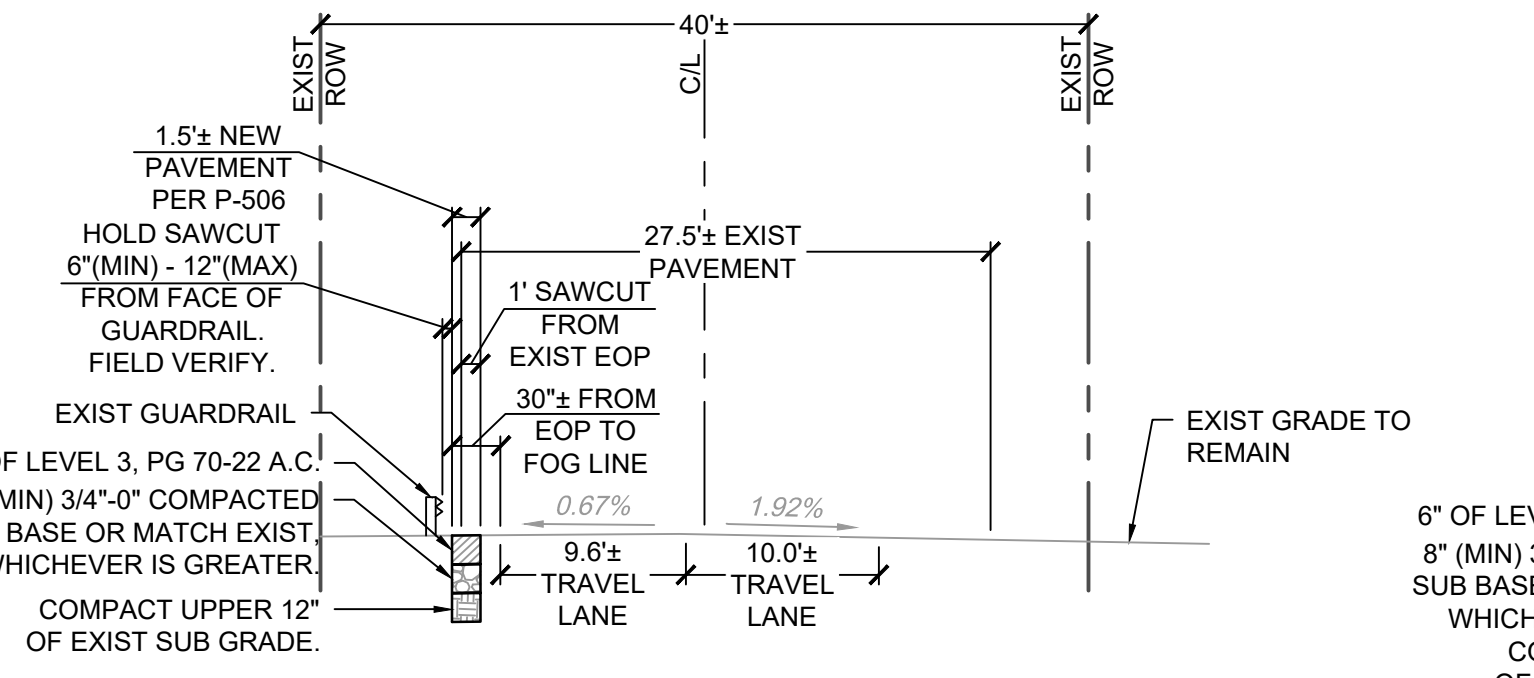
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CX01 N.T.S.



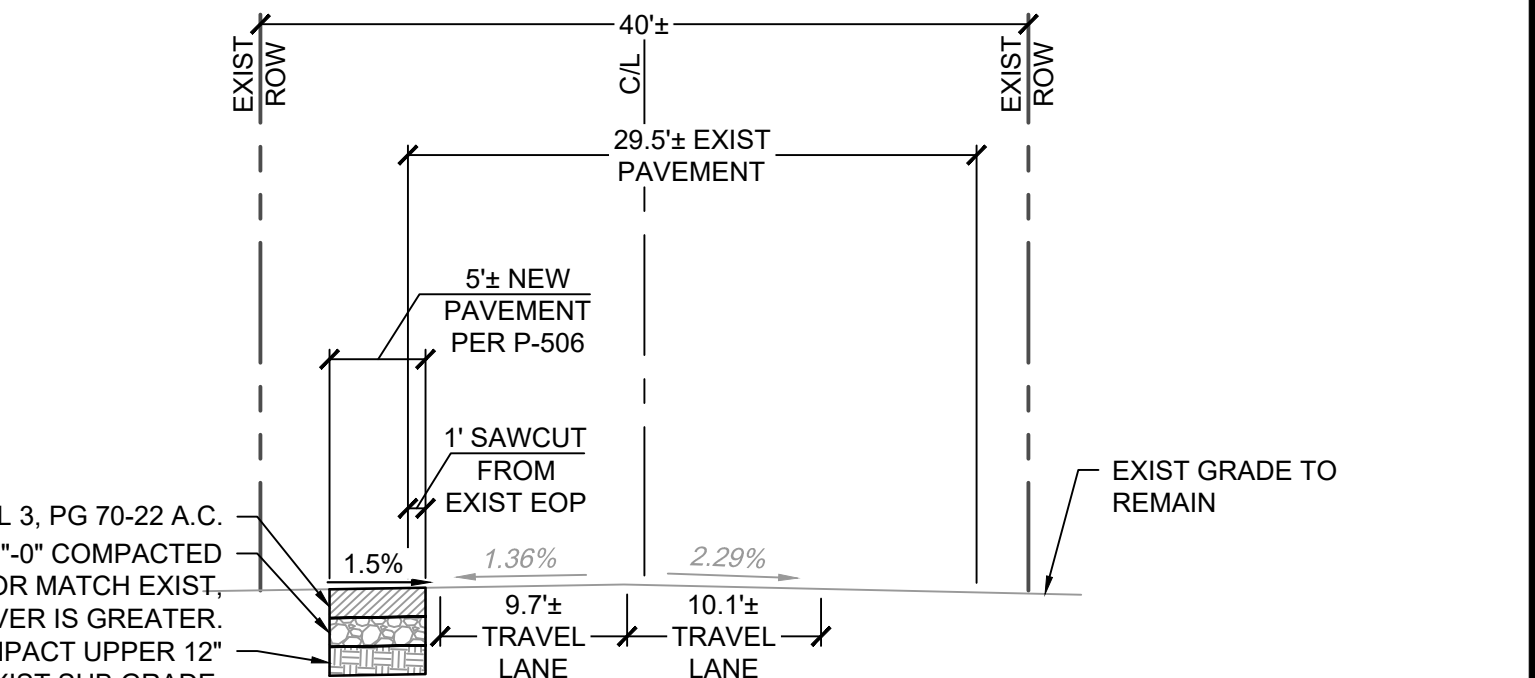
**9 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.



**10 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.



**11 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.



**12 SW BROADWAY DRIVE TYPICAL PROPOSED CROSS SECTION**  
CX01 N.T.S.

FILE: 17240\_SHT-05.DWG CX01 9/20/2019 9:28:43 PM - DESLAURIERS  
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NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			

DESIGNED BY	CJD	DATE APPROVED	
PROJECT COMPLETED	CAD BY	SECTION ENGR	
MAP CORRECTED BY	RTN	BES REVIEWER	
CHECKED BY	CJD	PBOT REVIEWER	



APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**

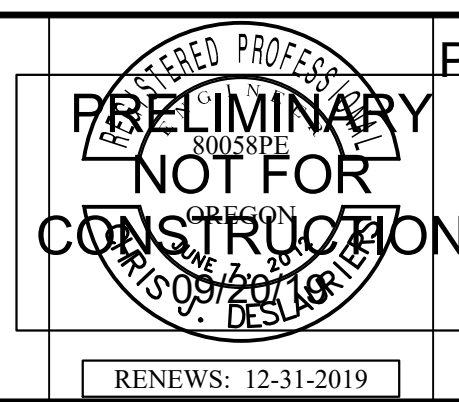
NICK FISH      COMMISSIONER  
 WILLIAM F. RYAN, P.E.      CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**

CHLOE EUDALY      COMMISSIONER  
 STEVE TOWNSEN, P.E.      CITY ENGINEER

**WDY** Structural · Civil Engineers

6443 SW Beaverlton-Hillsdale Hwy, suite 210 Portland, OR 97221  
 ph:503.203.8111 fx:503.203.8122 www.wdyj.com

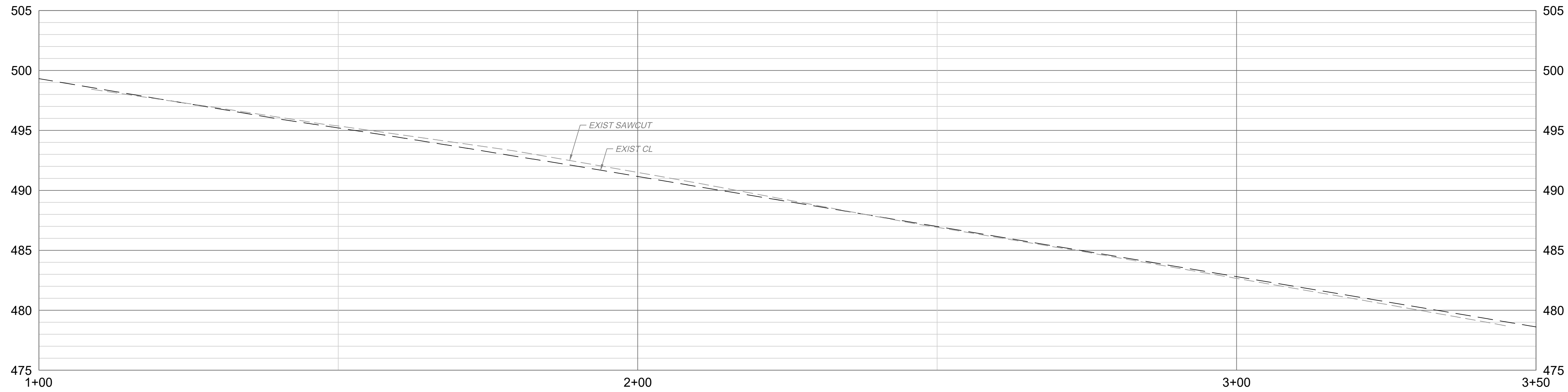


**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

ROADWAY SECTIONS

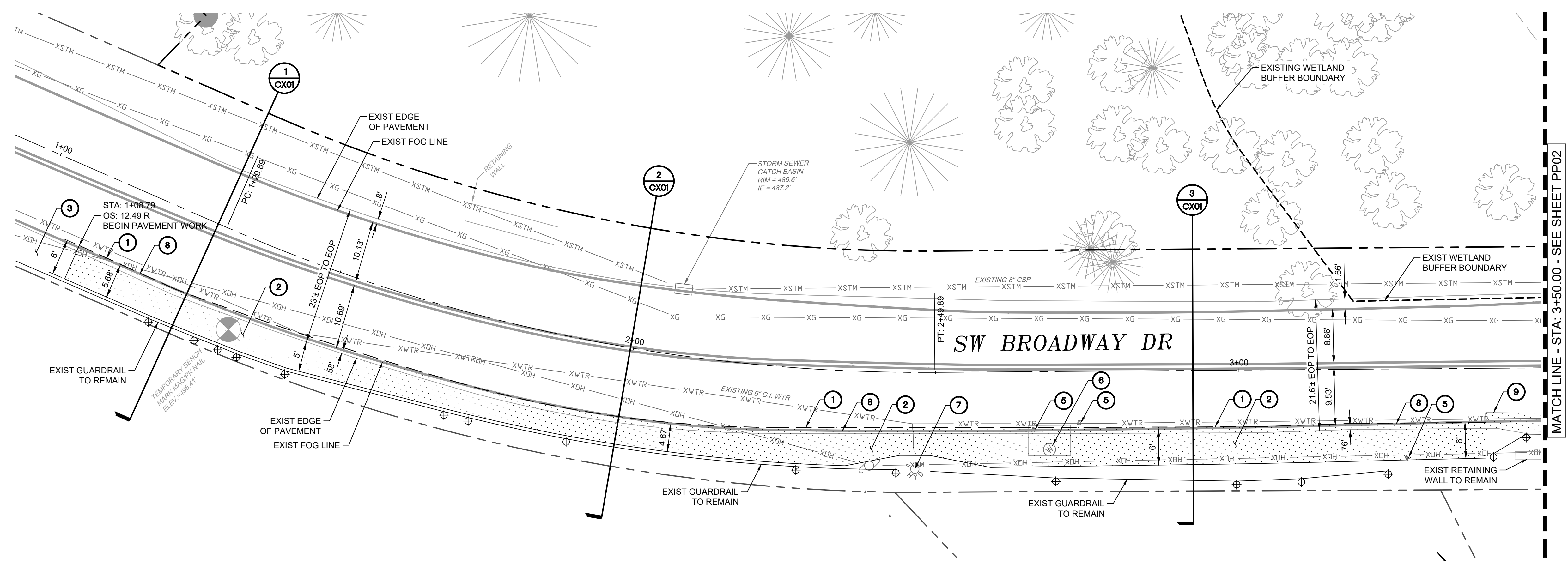
BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	CX01
	6 OF 15

RENEWS: 12-31-2019

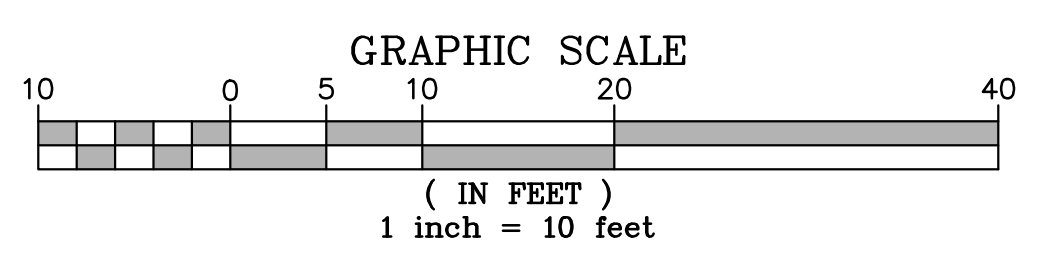


KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
1	SAWCUT PER CITY STD DWG P-506.
2	INSTALL NEW PAVEMENT PER CITY SPECS AND SEE TYPICAL ROADWAY CROSS SECTIONS ON SHEET CX01.
3	PROTECT EXISTING IMPROVEMENTS TO REMAIN.
4	RESET WATER METER BOXES TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
5	RESET WATER VALVE COVERS TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
6	RESET MH RIM TO FINISH GRADE.
7	PROTECT EXISTING FIRE HYDRANT TO REMAIN.
8	REPLACE FOG LINE WHERE REMOVED, TYP.
9	3' WIDE (MIN) GRIND AND INLAY ALONG GUARDRAIL TO REPAIR ROUGH PAVEMENT. SEE 4/CX01 AND 5/CX01 FOR MORE INFO.

NOTES TO CONTRACTOR FOR WORK NEAR CAST IRON WATER LINE:	
1.	THE CONTRACTOR SHALL MAINTAIN A MINIMUM 5' HORIZONTAL CLEARANCE FROM CAST IRON LINES WITH LESS THAN 24" OF COVER (AFTER EXCAVATION) WITH ALL CONSTRUCTION AND MATERIAL HANDLING EQUIPMENT.
2.	ALL BASE ROCK WILL BE PLACED BY DUMPING, SPREADING AND/OR PUSHING THE MATERIAL FROM THE BASE ROCK SURFACE WHEN IN AN AREA 5' FROM CENTERLINE OF C.I. PIPE WITH LESS THAN 24" OF COVER.
3.	VIBRATORY COMPACTION WILL NOT BE ALLOWED OVER C.I. PIPE WITH LESS THAN 24" OF COVER.
4.	HAND COMPACT BASE MATERIAL NEAR WATER SERVICE LINES, VALVES, BLOW OFFS AND OTHER WATER MAIN APPURTENANCES WHEN EXPOSED DURING EXCAVATION.

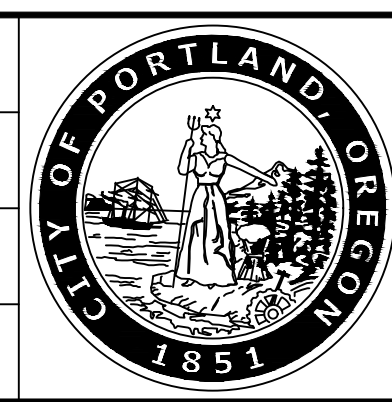


**1 PLAN & PROFILE**  
PP01 SCALE: 1" = 10'-0"



FILE: 17240\_SHT-08.DWG PP01 9/20/2019 11:00:48 AM - NGUYEN

DESIGNED BY CJD		DATE APPROVED	
PROJECT COMPLETED		SECTION ENGR	
MAP CORRECTED BY RTN		BES REVIEWER	
CHECKED BY CJD		PBOT REVIEWER	
NO. DATE DESCRIPTION APPD.			
REVISIONS			
FINAL MAP DATA			

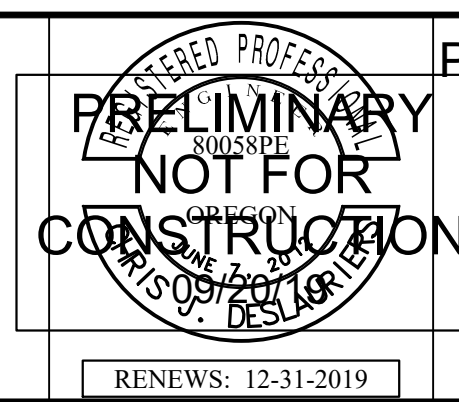


APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**  
NICK FISH COMMISSIONER  
WILLIAM F. RYAN, P.E. CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**  
CHLOE EUDALY COMMISSIONER  
STEVE TOWNSEN, P.E. CITY ENGINEER

**WDY** Structural-Civil Engineers  
6443 SW Beaveron-Hillsdale Hwy, suite 210 Portland, OR 97221  
ph.503.203.8111 fx.503.203.8122 www.wdyj.com



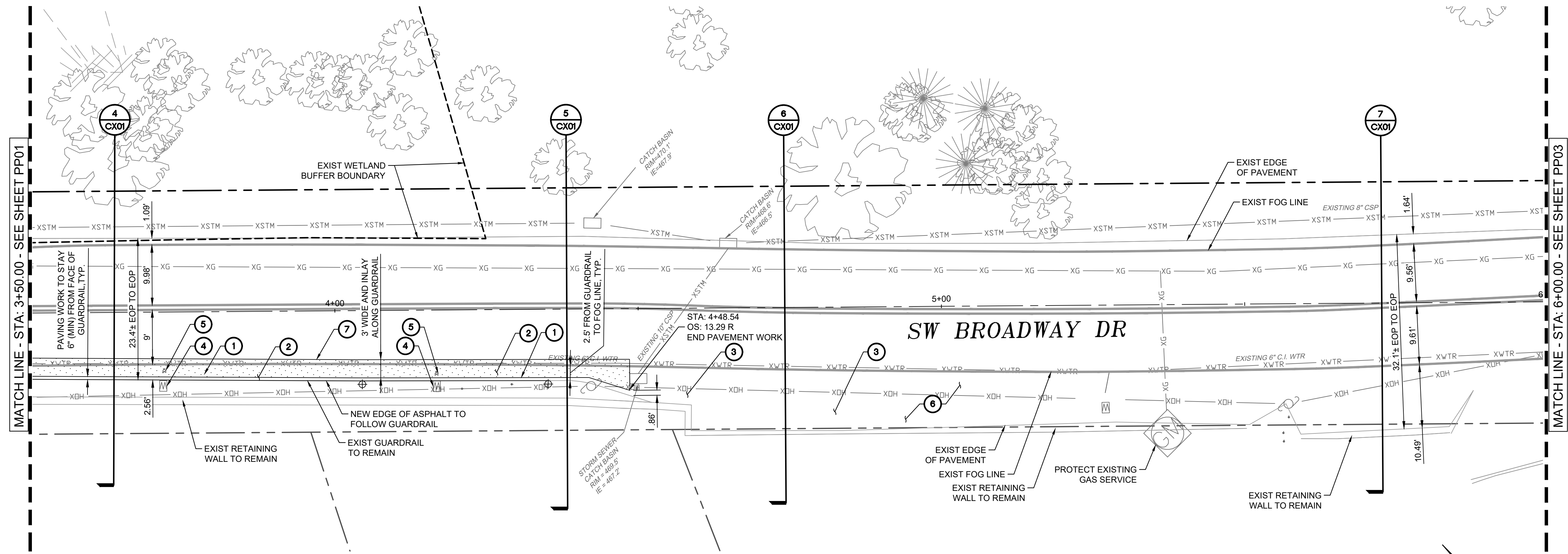
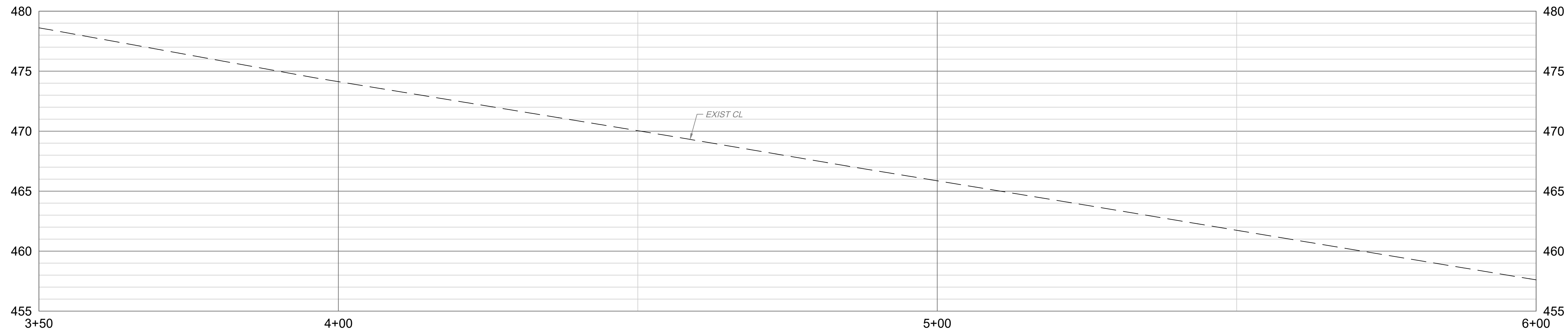
**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**  
PLAN & PROFILE

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	PP01
	7 OF 15

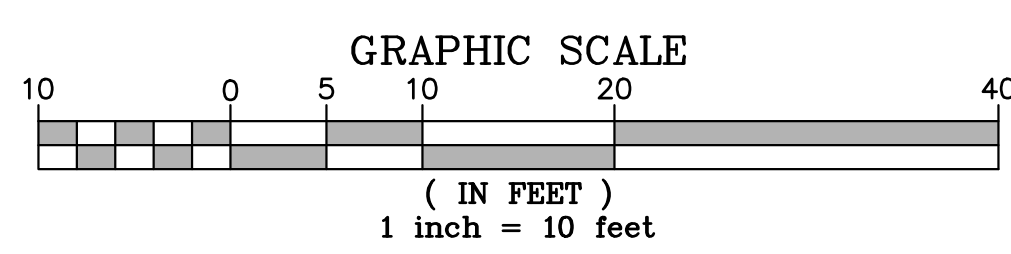
RENEWS: 12-31-2019

KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
①	SAWCUT PER CITY STD DWG P-506.
②	INSTALL NEW PAVEMENT PER CITY SPECS AND SEE TYPICAL ROADWAY CROSS SECTIONS ON SHEET CX01.
③	PROTECT EXISTING IMPROVEMENTS TO REMAIN.
④	RESET WATER METER BOXES TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
⑤	RESET WATER VALVE COVERS TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
⑥	EXIST PAVEMENT TO REMAIN. EXISTING IS WIDER THAN 6'.
⑦	3' WIDE (MIN) GRIND AND INLAY ALONG GUARDRAIL TO REPAIR ROUGH PAVEMENT. SEE 4/CX01 AND 5/CX01 FOR MORE INFO.

NOTES TO CONTRACTOR FOR WORK NEAR CAST IRON WATER LINE:	
1.	THE CONTRACTOR SHALL MAINTAIN A MINIMUM 5' HORIZONTAL CLEARANCE FROM CAST IRON LINES WITH LESS THAN 24" OF COVER (AFTER EXCAVATION) WITH ALL CONSTRUCTION AND MATERIAL HANDLING EQUIPMENT.
2.	ALL BASE ROCK WILL BE PLACED BY DUMPING, SPREADING AND/OR PUSHING THE MATERIAL FROM THE BASE ROCK SURFACE WHEN IN AN AREA 5' FROM CENTERLINE OF C.I. PIPE WITH LESS THAN 24" OF COVER.
3.	VIBRATORY COMPACTION WILL NOT BE ALLOWED OVER C.I. PIPE WITH LESS THAN 24" OF COVER.
4.	HAND COMPACT BASE MATERIAL NEAR WATER SERVICE LINES, VALVES, BLOW OFFS AND OTHER WATER MAIN APPURTENANCES WHEN EXPOSED DURING EXCAVATION.



**1 PLAN & PROFILE**  
PP02 SCALE: 1" = 10'-0"

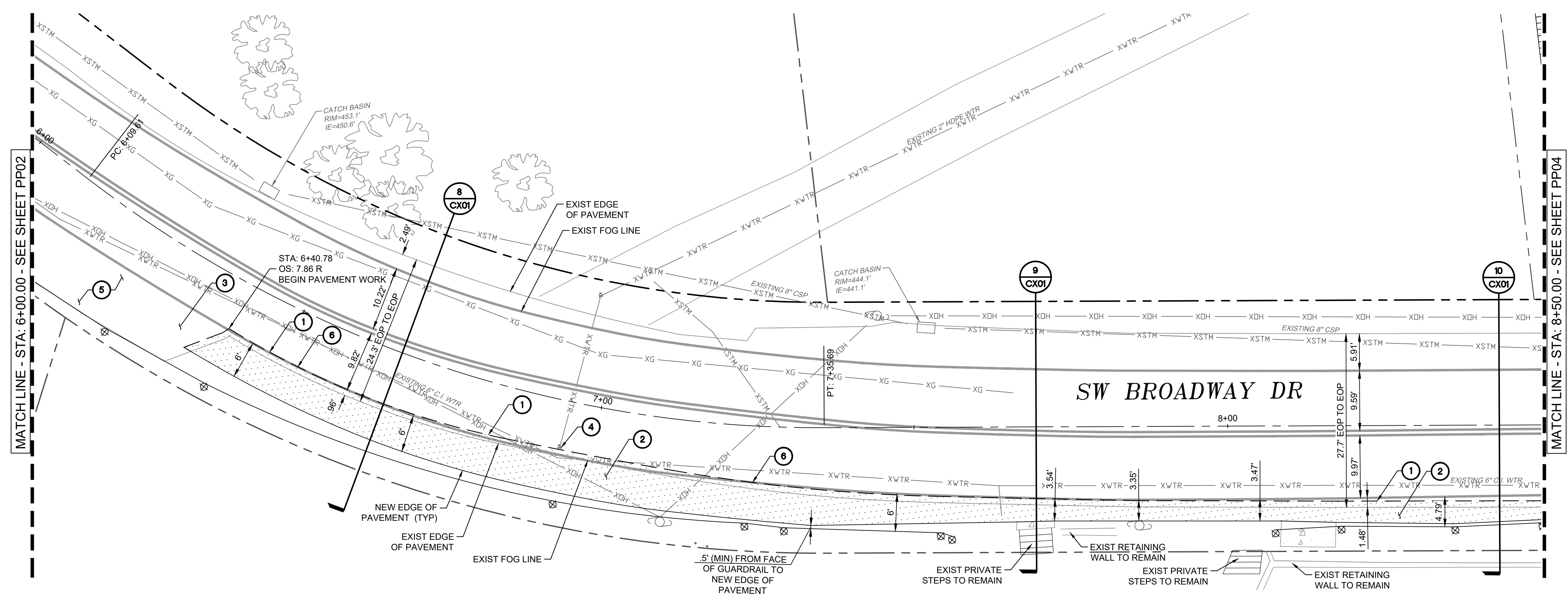
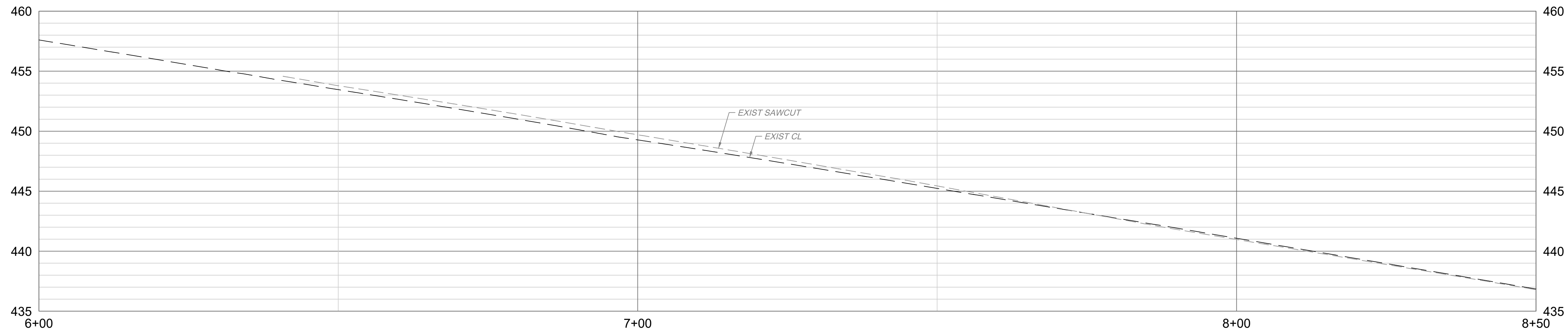


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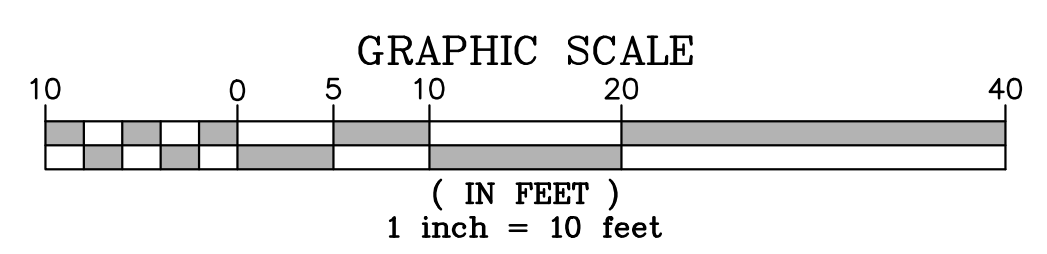
DESIGNED BY: CJD DATE APPROVED: _____ SECTION ENGR: _____			<b>APPROVALS:</b> BES CHIEF ENGINEER: _____ REG. PROF. ENGR. 16301PE PBOT PRINCIPAL ENGINEER: _____ REG. PROF. ENGR. 75155PE PBOT CITY ENGINEER: _____ REG. PROF. ENGR. 51538PE		<b>BUREAU OF ENVIRONMENTAL SERVICES</b> NICK FISH, COMMISSIONER WILLIAM F. RYAN, P.E., CHIEF ENGINEER		<b>BUREAU OF TRANSPORTATION</b> CHLOE EUDALY, COMMISSIONER STEVE TOWNSEN, P.E., CITY ENGINEER		Structural-Civil Engineers 6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221 ph:503.203.8111 fx:503.203.8122 www.wdyi.com				<b>PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE</b> PLAN & PROFILE		BES JOB NO. EP566 PBOT JOB NO. TB0100 SHEET NO. PP02 8 OF 15	
CONSTRUCTED BY: _____ PROJECT COMPLETED: _____ MAP CORRECTED BY: _____ CHECKED BY: CJD			CHECKED BY: CJD BES REVIEWER: _____ PBOT REVIEWER: _____		REVISIONS		FINAL MAP DATA		RENEWS: 12-31-2019		PRELIMINARY NOT FOR CONSTRUCTION		RENEWS: 12-31-2019		RENEWS: 12-31-2019	

KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
①	SAWCUT PER CITY STD DWG P-506.
②	INSTALL NEW PAVEMENT PER CITY SPECS AND SEE TYPICAL ROADWAY CROSS SECTIONS ON SHEET CX01.
③	PROTECT EXISTING IMPROVEMENTS TO REMAIN.
④	RESET WATER VALVE COVERS TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
⑤	EXIST PAVEMENT TO REMAIN. EXISTING IS WIDER THAN 6'.
⑥	REPLACE FOG LINE WHERE REMOVED.

NOTES TO CONTRACTOR FOR WORK NEAR CAST IRON WATER LINE:	
1.	THE CONTRACTOR SHALL MAINTAIN A MINIMUM 5' HORIZONTAL CLEARANCE FROM CAST IRON LINES WITH LESS THAN 24" OF COVER (AFTER EXCAVATION) WITH ALL CONSTRUCTION AND MATERIAL HANDLING EQUIPMENT.
2.	ALL BASE ROCK WILL BE PLACED BY DUMPING, SPREADING AND/OR PUSHING THE MATERIAL FROM THE BASE ROCK SURFACE WHEN IN AN AREA 5' FROM CENTERLINE OF C.I. PIPE WITH LESS THAN 24" OF COVER.
3.	VIBRATORY COMPACTION WILL NOT BE ALLOWED OVER C.I. PIPE WITH LESS THAN 24" OF COVER.
4.	HAND COMPACT BASE MATERIAL NEAR WATER SERVICE LINES, VALVES, BLOW OFFS AND OTHER WATER MAIN APPURTENANCES WHEN EXPOSED DURING EXCAVATION.



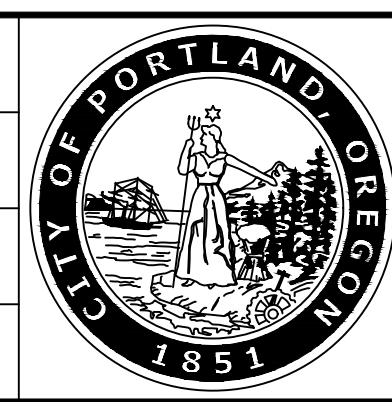
**1 PLAN & PROFILE**  
PP03 SCALE: 1" = 10'-0"



FILE: 17240\_SHT-10.DWG PP03 9/20/2019 11:01:23 AM - NGUYEN

NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			

CONSTRUCTED BY	CJD	DATE APPROVED	
PROJECT COMPLETED	CAD BY RTN	SECTION ENGR	
MAP CORRECTED BY	CHECKED BY CJD	BES REVIEWER	
CHECKED BY		PBOT REVIEWER	

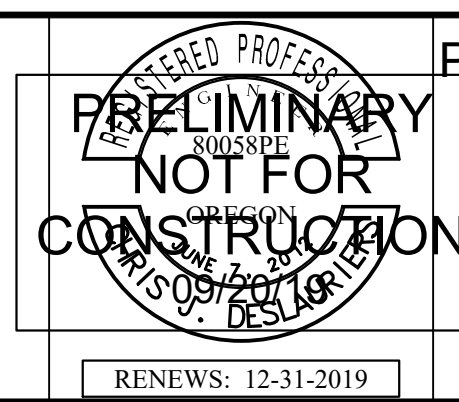


APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

BUREAU OF ENVIRONMENTAL SERVICES	
NICK FISH	COMMISSIONER
WILLIAM F. RYAN, P.E.	CHIEF ENGINEER

BUREAU OF TRANSPORTATION	
CHLOE EUDALY	COMMISSIONER
STEVE TOWNSEN, P.E.	CITY ENGINEER

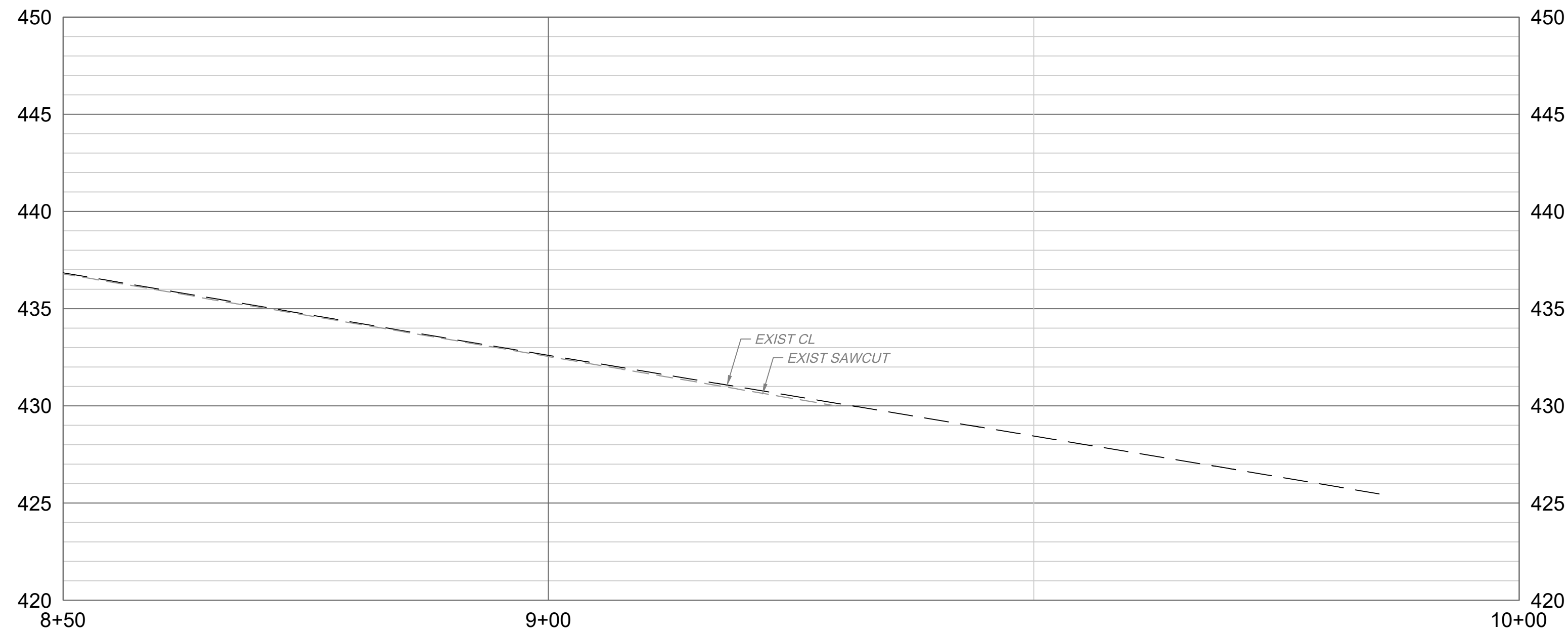
**WDY** Structural-Civil Engineers  
6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
ph:503.203.8111 fx:503.203.8122 www.wdyj.com



PUBLIC IMPROVEMENTS FOR  
**SW BROADWAY DRIVE**  
PLAN & PROFILE

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	PP03
	9 OF 15

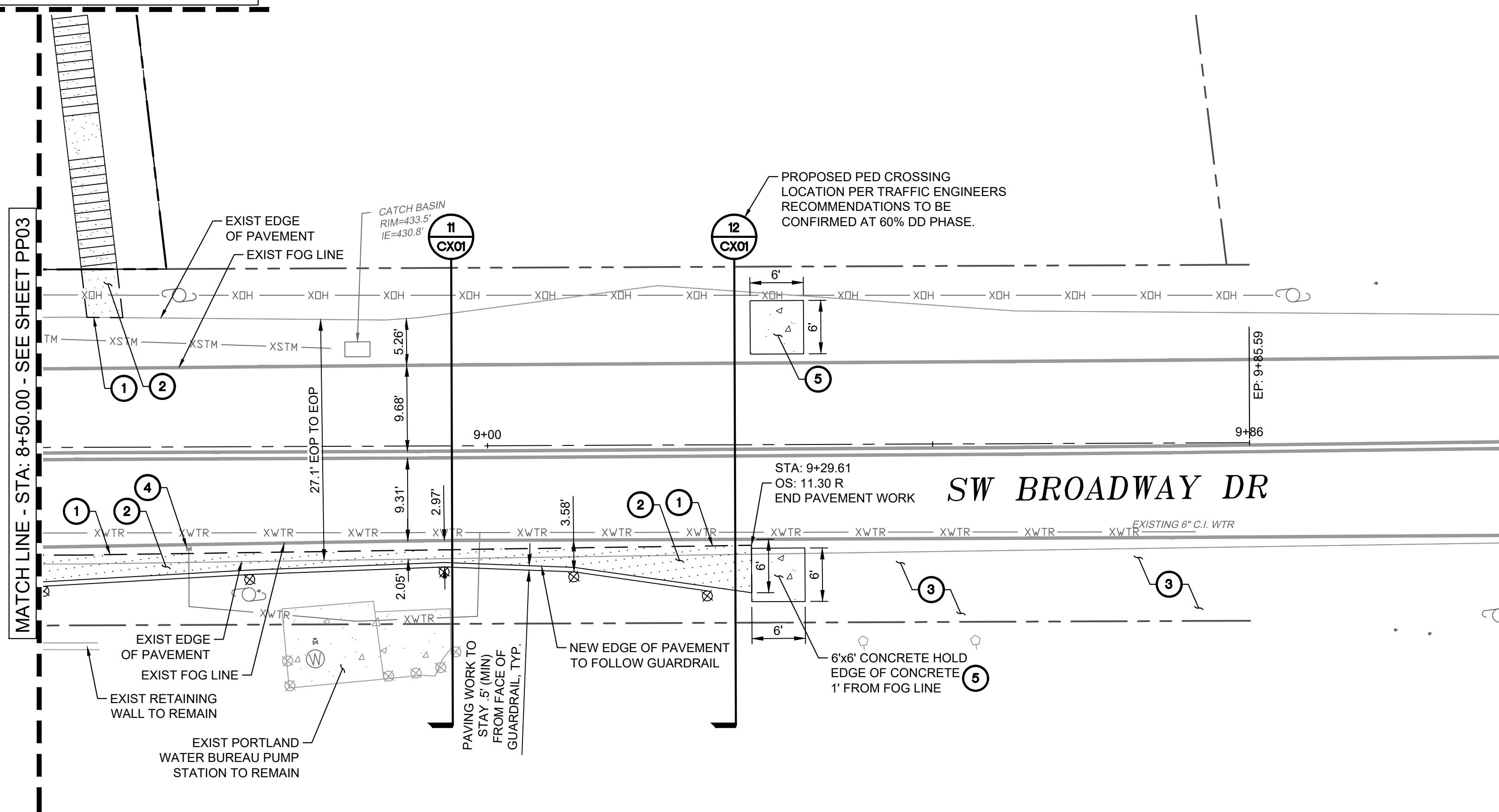
RENEWS: 12-31-2019



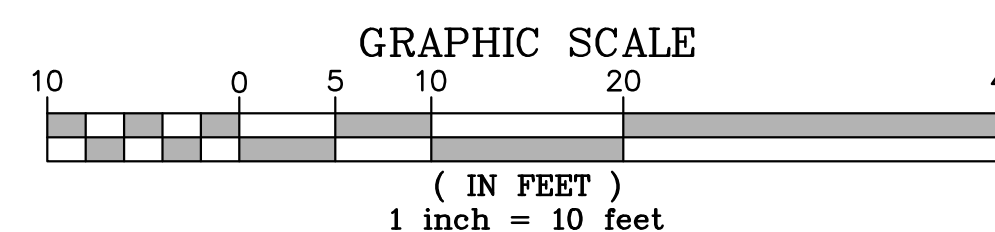
KEYNOTES FOR THIS SHEET	
MARK	DESCRIPTION
①	SAWCUT PER CITY STD DWG P-506.
②	INSTALL NEW PAVEMENT PER CITY SPECS AND SEE TYPICAL ROADWAY CROSS SECTIONS ON SHEET CX01.
③	PROTECT EXISTING IMPROVEMENTS TO REMAIN.
④	RESET WATER VALVE COVERS TO MATCH FINISH GRADE, TYP. FIELD VERIFY.
⑤	SAWCUT AND REMOVE 6"x6" PAVEMENT AND REPLACE WITH 6" THICK CONCRETE AT PROPOSED PED CROSSING.

NOTES TO CONTRACTOR FOR WORK NEAR CAST IRON WATER LINE:	
1.	THE CONTRACTOR SHALL MAINTAIN A MINIMUM 5' HORIZONTAL CLEARANCE FROM CAST IRON LINES WITH LESS THAN 24" OF COVER (AFTER EXCAVATION) WITH ALL CONSTRUCTION AND MATERIAL HANDLING EQUIPMENT.
2.	ALL BASE ROCK WILL BE PLACED BY DUMPING, SPREADING AND/OR PUSHING THE MATERIAL FROM THE BASE ROCK SURFACE WHEN IN AN AREA 5' FROM CENTERLINE OF C.I. PIPE WITH LESS THAN 24" OF COVER.
3.	VIBRATORY COMPACTION WILL NOT BE ALLOWED OVER C.I. PIPE WITH LESS THAN 24" OF COVER.
4.	HAND COMPACT BASE MATERIAL NEAR WATER SERVICE LINES, VALVES, BLOW OFFS AND OTHER WATER MAIN APPURTENANCES WHEN EXPOSED DURING EXCAVATION.

MATCH LINE - SEE SHEET PP05



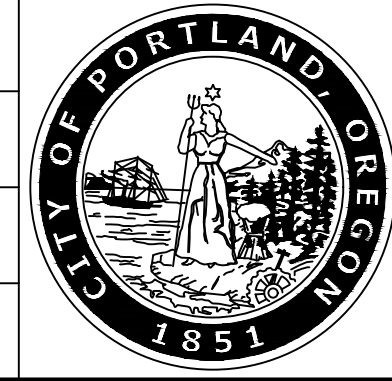
**1 PLAN & PROFILE**  
SCALE: 1" = 10'-0"



FILE: 17240\_SHT-11.DWG PP04\_9/20/2019 11:01:54 AM - NGUYEN

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DESIGNED BY CJD	DATE APPROVED
CAD BY RTN	SECTION ENGR
CHECKED BY CJD	BES REVIEWER
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE



APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**

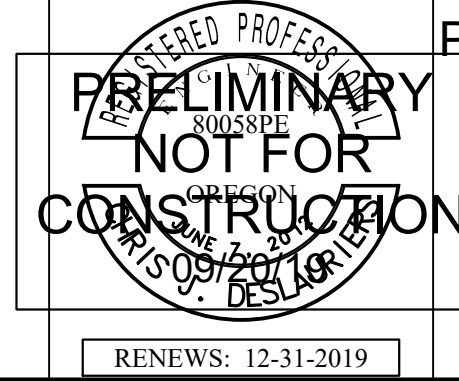
NICK FISH      COMMISSIONER  
WILLIAM F. RYAN, P.E.      CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**

CHLOE EUDALY      COMMISSIONER  
STEVE TOWNSEN, P.E.      CITY ENGINEER

**WDY** Structural-Civil Engineers

6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221  
ph:503.203.8111 fx:503.203.8122 www.wdyi.com



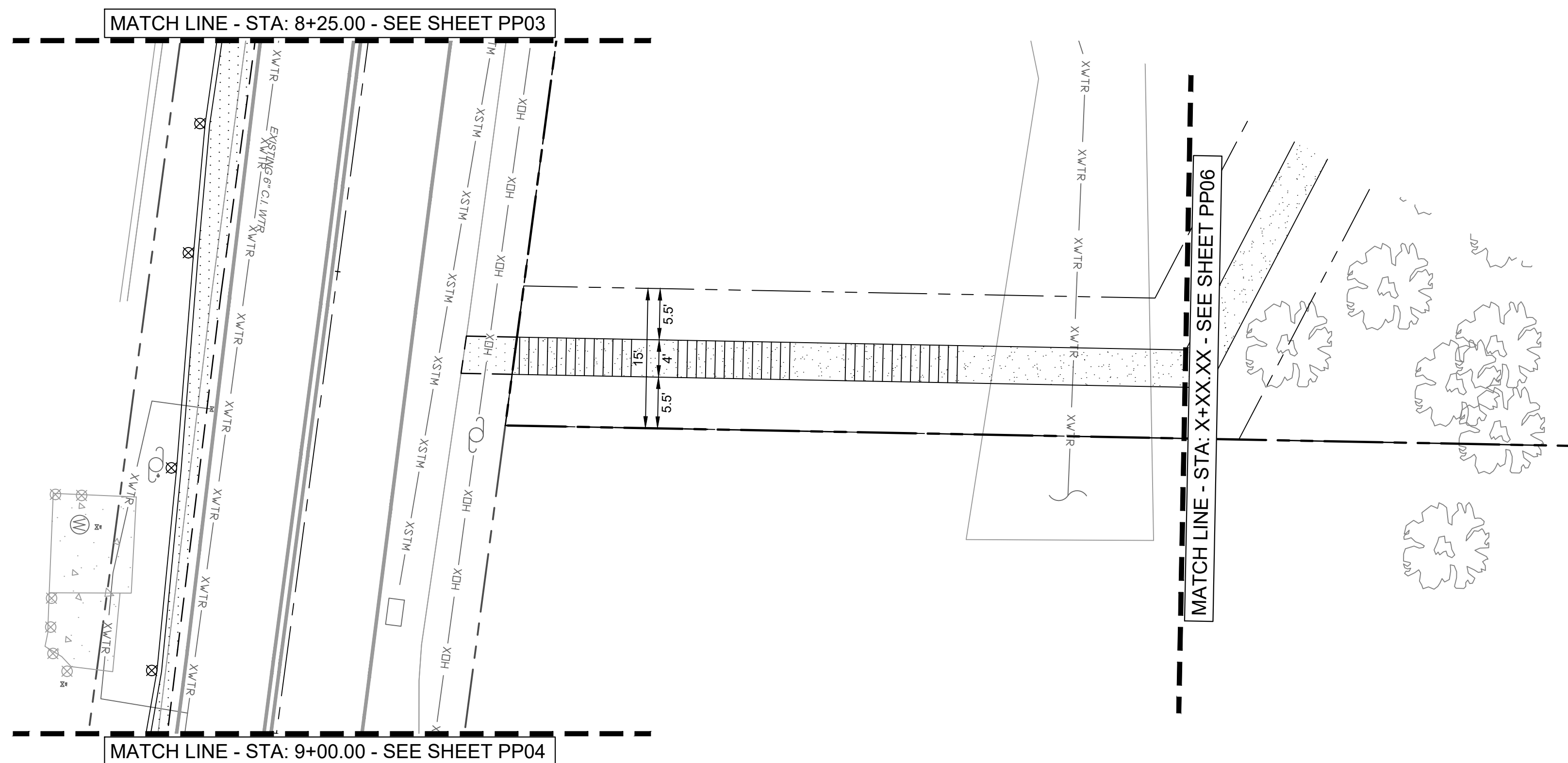
**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

PLAN & PROFILE

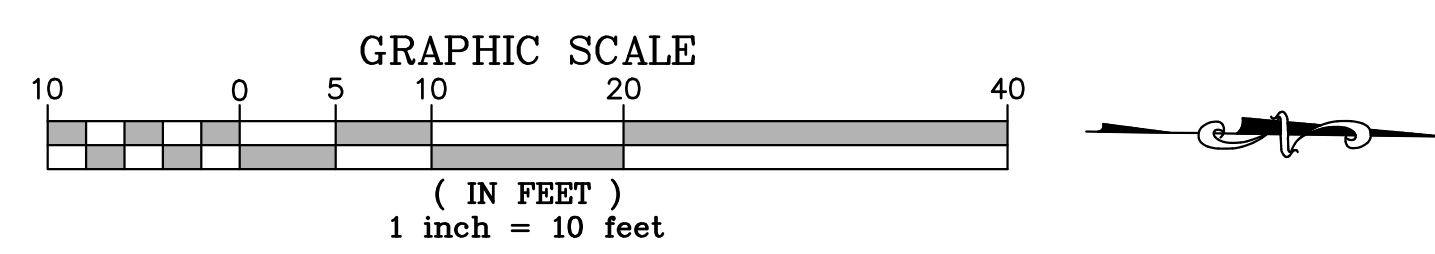
BES JOB NO. EP566  
PBOT JOB NO. TB0100  
SHEET NO. PP04  
10 OF 15

RENEWS: 12-31-2019

KEYNOTES FOR THIS SHEET	
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②	x
③	x
④	x



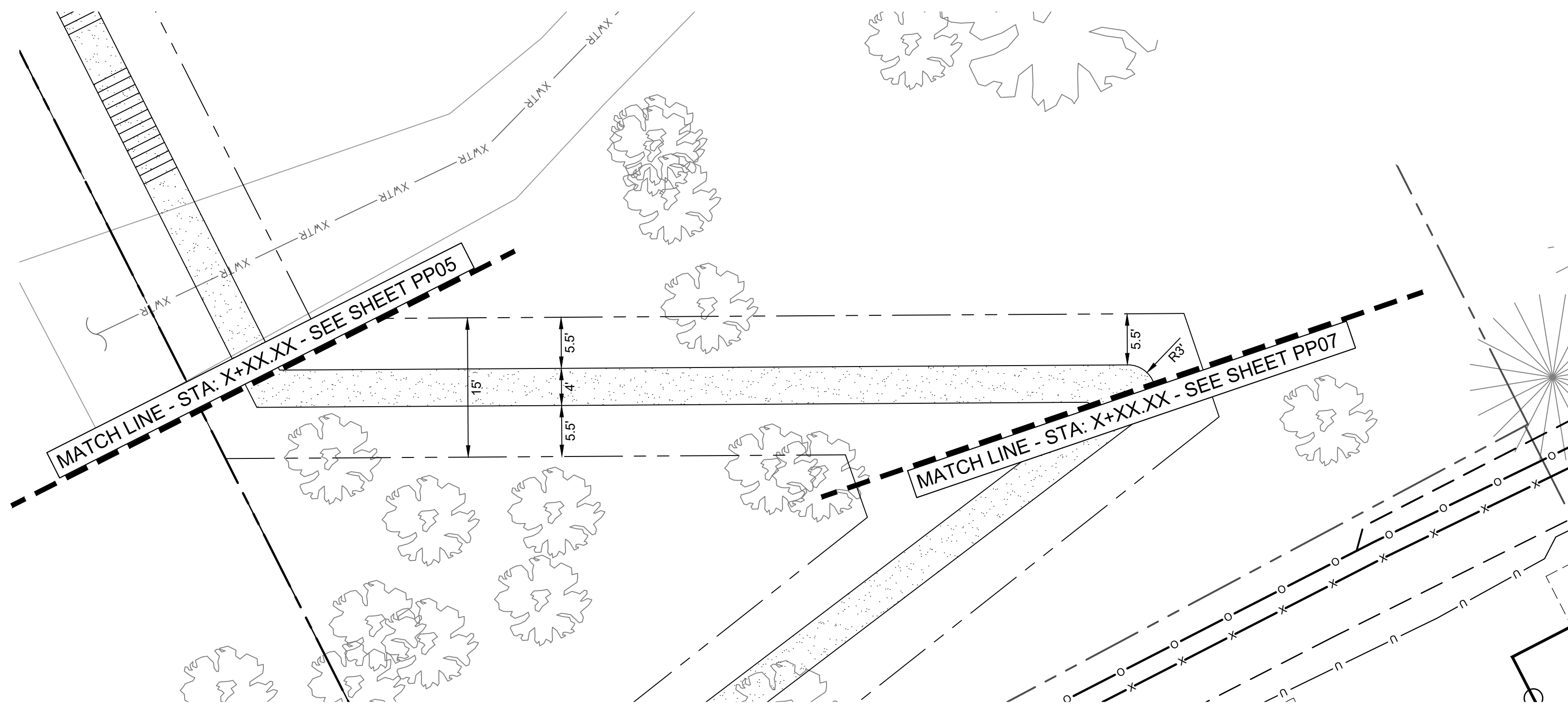
**1** PEDESTRIAN PLAN & PROFILE  
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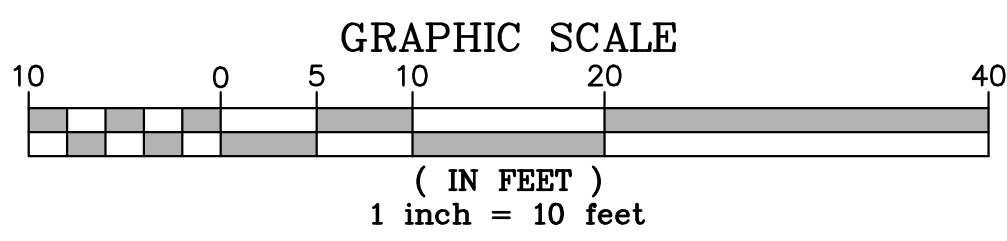
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DESIGNED BY: CJD DATE APPROVED:			APPROVALS:		BUREAU OF ENVIRONMENTAL SERVICES NICK FISH, COMMISSIONER WILLIAM F. RYAN, P.E., CHIEF ENGINEER	BUREAU OF TRANSPORTATION CHLOE EUDALY, COMMISSIONER STEVE TOWNSEN, P.E., CITY ENGINEER			PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE PEDESTRIAN PLAN & PROFILE	BES JOB NO. EP566 PBOT JOB NO. TB0100 SHEET NO. PP05 11 OF 15	
CONSTRUCTED BY: CJD PROJECT COMPLETED:			BES CHIEF ENGINEER REG. PROF. ENGR. 16301PE PBOT PRINCIPAL ENGINEER REG. PROF. ENGR. 75155PE PBOT CITY ENGINEER REG. PROF. ENGR. 51538PE								6443 SW Beaverton-Hillsdale Hwy, suite 210 Portland, OR 97221 ph:503.203.8111 fx:503.203.8122 www.wdyi.com
MAP CORRECTED BY: RTN CHECKED BY: CJD		CAD BY: RTN SECTION ENGR:	DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:		
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REVISIONS		FINAL MAP DATA		DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:		DESIGNED BY: CJD DATE APPROVED:	

KEYNOTES FOR THIS SHEET	
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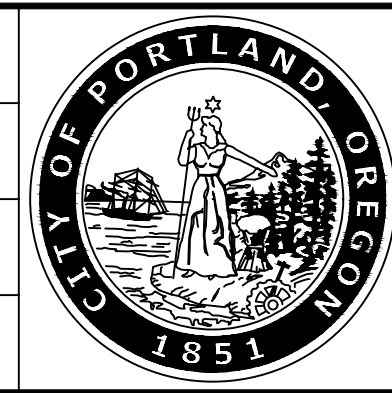
**1** PEDESTRIAN PLAN & PROFILE  
**PP06** SCALE: 1" = 10'-0"



FILE: 17240\_SHT-11B.DWG PP06 9/20/2019 10:57:07 AM NGUYEN

NO.	DATE	DESCRIPTION	APPD.
REVISIONS			

CONSTRUCTED BY	CJD	DATE APPROVED	
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CHECKED BY	CJD	PBOT REVIEWER	
FINAL MAP DATA			

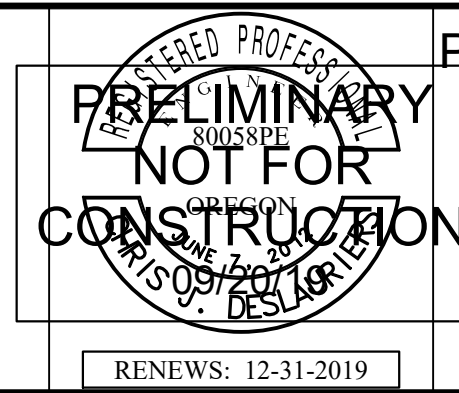


APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

BUREAU OF ENVIRONMENTAL SERVICES	
NICK FISH	COMMISSIONER
WILLIAM F. RYAN, P.E.	CHIEF ENGINEER

BUREAU OF TRANSPORTATION	
CHLOE EUDALY	COMMISSIONER
STEVE TOWNSEN, P.E.	CITY ENGINEER

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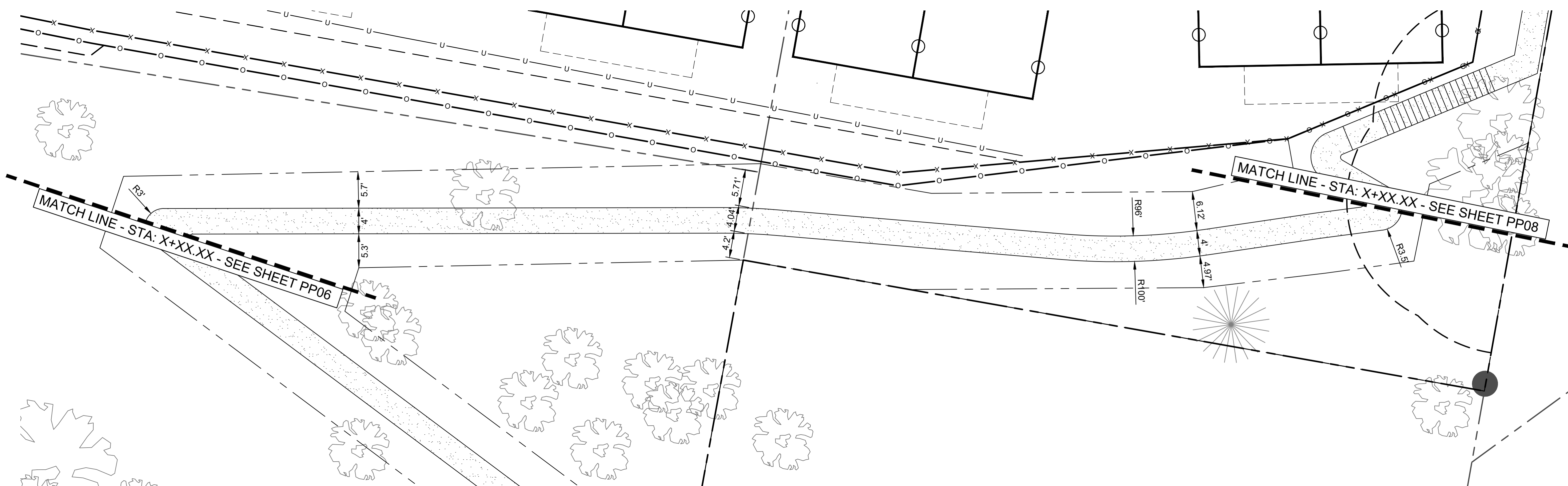
PUBLIC IMPROVEMENTS FOR  
**SW BROADWAY DRIVE**  
 PEDESTRIAN  
 PLAN & PROFILE

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	PP06
	12 OF 15

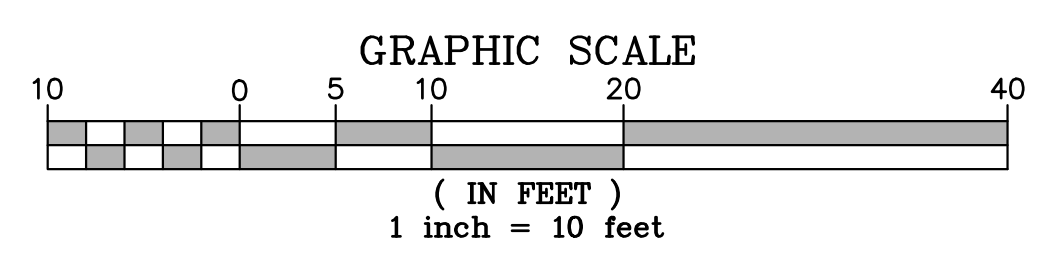
RENEWS: 12-31-2019



KEYNOTES FOR THIS SHEET	
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③	x
④	x



**1** PEDESTRIAN PLAN & PROFILE  
**PP07** SCALE: 1" = 10'-0"



FILE: 17240\_SHT-11.CWG PP07 9/20/2019 10:57:21 AM - NGUYEN

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NO.	DATE	DESCRIPTION	APPD.
REVISIONS			
FINAL MAP DATA			



**APPROVALS:**

BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**

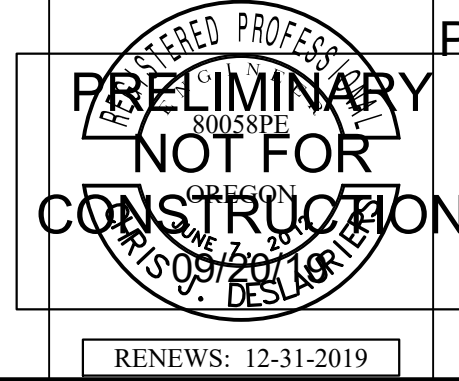
NICK FISH      COMMISSIONER  
WILLIAM F. RYAN, P.E.      CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**

CHLOE EUDALY      COMMISSIONER  
STEVE TOWNSEN, P.E.      CITY ENGINEER

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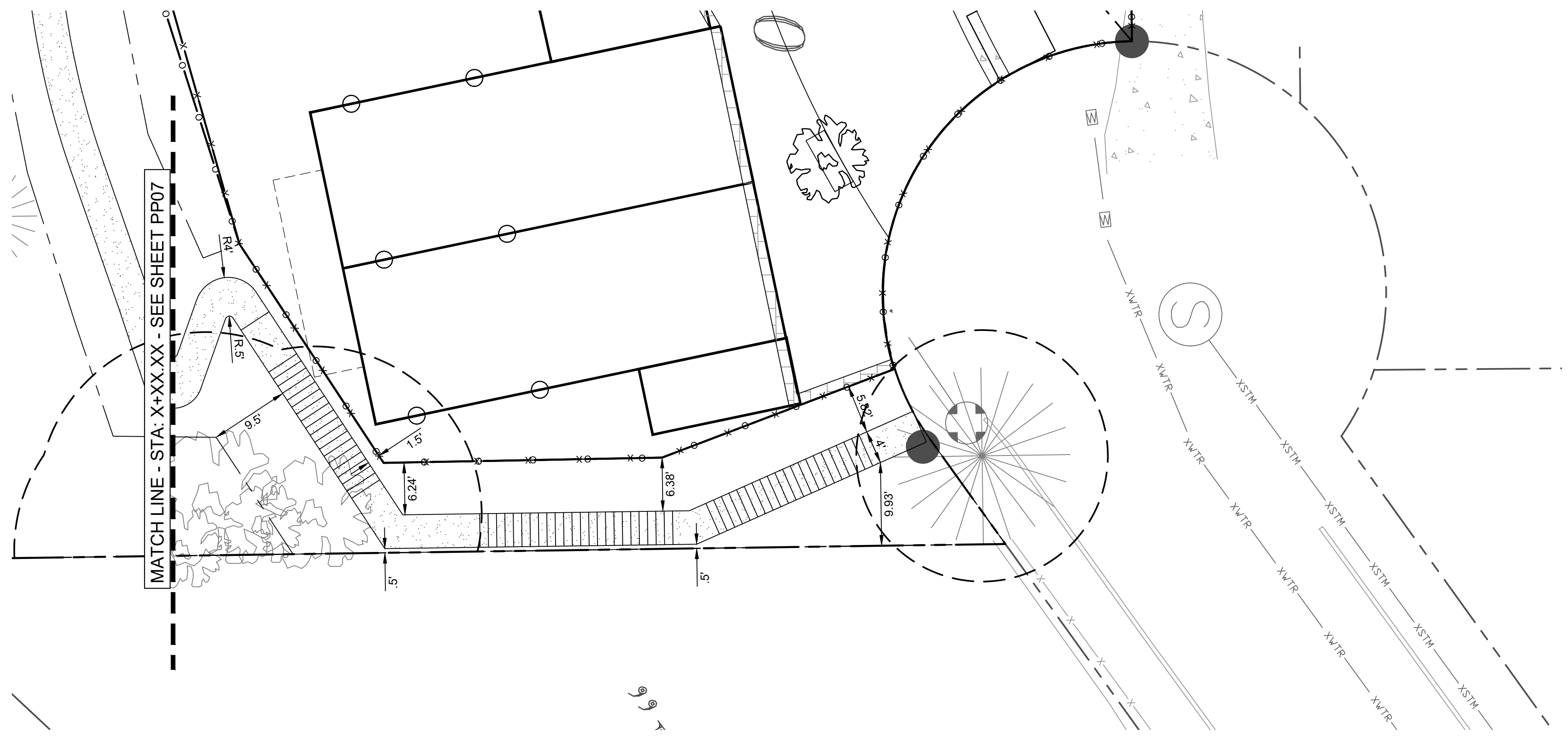
**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

PEDESTRIAN PLAN & PROFILE

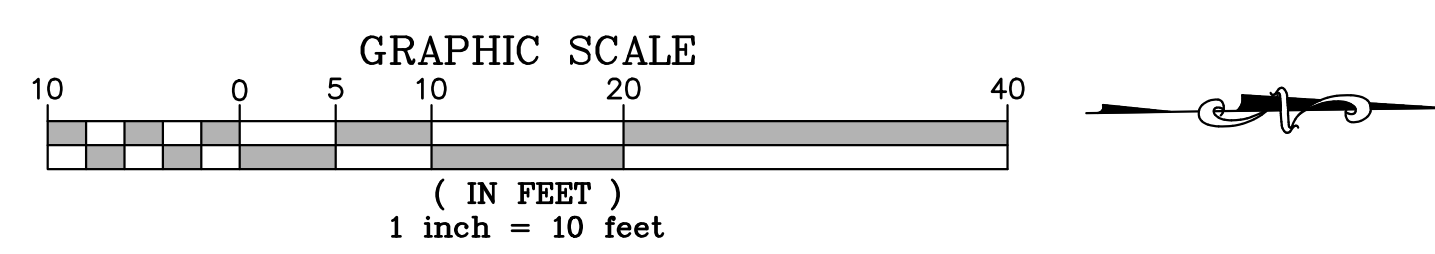
BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	PP07
	13 OF 15

RENEWS: 12-31-2019

KEYNOTES FOR THIS SHEET	
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②	x
③	x
④	x



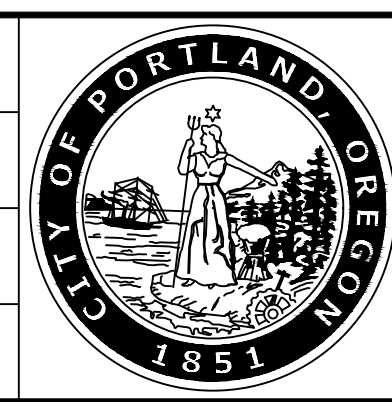
**1** PEDESTRIAN PLAN & PROFILE  
 PP08 SCALE: 1" = 10'-0"



FILE: 17240\_SHT-11.DWG PP08 9/20/2019 10:57:34 AM - NGUYEN

NO.	DATE	DESCRIPTION	APPD.
REVISIONS			

CONSTRUCTED BY	CJD	DATE APPROVED	
PROJECT COMPLETED		SECTION ENGR	
MAP CORRECTED BY	RTN	BES REVIEWER	
CHECKED BY	CJD	PBOT REVIEWER	
FINAL MAP DATA			



APPROVALS:	
BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**

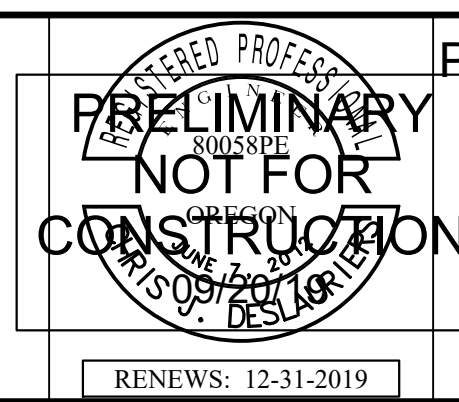
NICK FISH COMMISSIONER  
 WILLIAM F. RYAN, P.E. CHIEF ENGINEER

**BUREAU OF TRANSPORTATION**

CHLOE EUDALY COMMISSIONER  
 STEVE TOWNSEN, P.E. CITY ENGINEER

**WDY** Structural-Civil Engineers

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**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

PEDESTRIAN PLAN & PROFILE

BES JOB NO.	EP566
PBOT JOB NO.	TB0100
SHEET NO.	PP08
	14 OF 15

RENEWS: 12-31-2019

FILE: 17240\_SHT-13.DWG DT01 9/20/2019 10:57:46 AM - NGUYEN

**4" WHITE BROKEN LINE**  
**4" YELLOW BROKEN LINE**  
**YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE**  
**TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**  
**TWO 4" WHITE DOTTED LINES**  
**ON STREET PARKING-LOADING DETAIL (YELLOW)**

**4" YELLOW BI-DIRECTIONAL TYPE REFLECTOR**  
**4" WHITE MONO-DIRECTIONAL TYPE REFLECTOR**  
**3" YELLOW SURFACE MOUNTED REFLECTOR MARKERS WITH REACTIVE SPRING BASE**  
**4" YELLOW BI-DIRECTIONAL TYPE REFLECTOR**  
**4" WHITE MONO-DIRECTIONAL TYPE REFLECTOR**

**YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE**  
**YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE**  
**WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE**  
**NO-PASS LEFT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**  
**NO-PASS RIGHT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**

**TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**  
**TRAFFIC ISLAND PAVEMENT MARKINGS**  
**CURB EXTENSION DETAIL**  
**TWO WAY LEFT TURN ISLAND PAVEMENT MARKINGS AT ISLAND**  
**MIDBLOCK CURB EXTENSION PAVEMENT MARKINGS**

**TWO 4" WHITE DOTTED LINES**  
**TWO 4" YELLOW DOTTED LINES**  
**ON STREET PARKING DETAIL (WHITE)**  
**PARKING SYMBOL (WHITE)**

**LEGEND**  
 → DIRECTION OF TRAFFIC, INCREASING STATIONING OR THRU TRAFFIC SIDE  
 — LANE LINE DIMENSIONS ARE SHOWN ON THE STRIPING PLANS.  
 ■ MONO-DIRECTIONAL CRYSTAL WHITE MARKER REFLECTS WHITE TO THE LEFT IN THIS SYMBOL.  
 □ BI-DIRECTIONAL YELLOW MARKER REFLECTS YELLOW BOTH LEFT AND RIGHT IN THIS SYMBOL.  
 XX PBOT REFERENCE MARKER  
 XX ODOT REFERENCE MARKER

**GENERAL NOTES:**  
 1. SURFACE MOUNTED RAISED PAVEMENT MARKERS (RPM) UNLESS OTHERWISE SPECIFIED.  
 2. YELLOW PAINT IN CURB EXTENSION DETAILS MAY BE REPLACED BY NO PARKING SIGNS.

**PBOT PORTLAND BUREAU OF TRANSPORTATION**  
*Steve Townsen*  
 City Engineer  
 Standard Drawing Title  
**PAVEMENT MARKINGS STANDARD DETAIL BLOCKS**  
 Effective Date: 11-01-2018  
 Calc. Book No.: n/a  
 Std. Drg. Report Date: 11-01-2018  
 Standard Drawing No. **P-434**

**TYPICAL PAVEMENT REPAIR**  
 (SEE NOTES 8,9,12)

**TYPICAL CURB AND GUTTER**  
**TYPICAL STANDARD CURB**

**ALTERNATE PAVEMENT REPAIR (LOCAL STREETS ONLY)**

**NOTES:**  
 1. LOCAL STREETS ARE DEFINED AS RESIDENTIAL STREETS WITH NO LANE MARKINGS AND NOT A TRANSIT BUS ROUTE. BUSY STREETS ARE DEFINED AS ALL OTHER.  
 2. APPLIES TO PARTIAL STREET IMPROVEMENTS WHERE NEW CURB IS BEING CONSTRUCTED OR WHERE EXISTING CURBS ARE BEING RECONSTRUCTED.  
 3. SAWCUTS OVER 1 FOOT SHALL BE WIDENED TO 3 FEET MINIMUM.  
 4. SAWCUT 1 FOOT MINIMUM FROM EDGE OF EXISTING PAVEMENT WHEN NEW CURB IS BEING CONSTRUCTED.  
 5. SAWCUT DIMENSION MEASURED FROM FACE OF STANDARD CURB OR FACE OF GUTTER PAN FOR COMBINATION CURB AND GUTTER.  
 6. SEE STD. DRG. P-540 AND P-544 FOR CURB AND CURB DETAILS.  
 7. MATCH EXISTING STREET CROSS SLOPE UP TO 6% MAX.  
 8. PAVEMENT REPAIR ADJACENT TO COMMERCIAL DRIVEWAYS SHALL BE 3 FEET MIN.  
 9. PAVEMENT REPAIR ADJACENT TO BIKE LANES SHALL EXTEND TO THE FULL WIDTH OF THE BIKE LANE.  
 10. REPLACE PAVEMENT MARKINGS EITHER REMOVED, DAMAGED, OR COVERED BY SAND SEAL TACK.  
 11. USE LEVEL 2 PG 64-22 ON ALL LOCAL AC STREETS. USE LEVEL 3 PG 70-22 ON ALL OTHER AC STREETS.  
 12. PAVEMENT REPAIR ON BUSY STREETS SHALL EXTEND TO THE NEAREST LANE LINE OR CENTER OF TRAVEL LANE.

**PBOT PORTLAND BUREAU OF TRANSPORTATION**  
*Steve Townsen*  
 City Engineer  
 Standard Drawing Title  
**ASPHALT CONCRETE PAVEMENT REPAIR ADJACENT TO CURB**  
 Effective Date: 02-26-2018  
 Calc. Book No.: 506  
 Std. Drg. Report Date: \_\_\_\_\_  
 Standard Drawing No. **P-506**

**METHOD "A"**  
**METHOD "B"**  
**ALTERNATE "A"**

**PLAN SQUARE CUT**  
**PLAN CIRCULAR CUT**

**GENERAL NOTES FOR ALL DETAILS:**  
 1. Cover manhole with building paper and construct asphalt concrete base course and wearing courses.  
 2. Saw cut square or circular excavation around manhole 12" min. from manhole frame.  
 3. Raise manhole cover and frame and adjust to match finish grade by installing concrete manhole adjustment rings and leveling mortar, as shown.  
 4. Backfill with 4000 psi, minimum Portland Cement Concrete.  
 5. Protect from traffic loading.  
 6. Apply tack coat to edges of existing pavement before installing patch.  
 7. Sand seal all joints.  
 8. See P-171 thru P-182 for manhole covers and frames.  
 9. Use epoxy for synthetic grade rings.  
 10. Do not overcut beyond what is needed to achieve full depth cut.

**PBOT PORTLAND BUREAU OF TRANSPORTATION**  
*Steve Townsen*  
 City Engineer  
 Standard Drawing Title  
**MANHOLE FRAME ADJUSTMENT**  
 Effective Date: 01-01-2017  
 Calc. Book No.: -  
 Baseline Report Date: -  
 Standard Drawing No. **P-507**

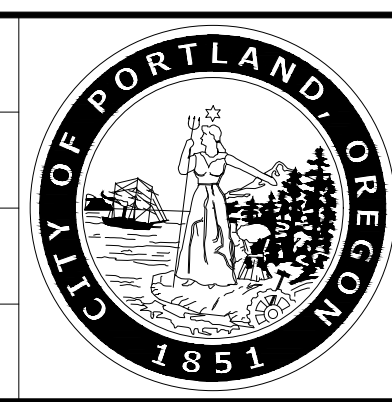
**LOCAL STREETS**  
**BUSY STREETS**

**NOTES:**  
 1. LOCAL STREETS ARE DEFINED AS RESIDENTIAL STREETS WITH NO LANE MARKINGS AND NOT ON A TRANSIT BUS ROUTE. BUSY STREETS ARE DEFINED AS ALL OTHER STREETS.  
 2. PLACE FINAL AC LIFT ONLY AFTER PCC IS AT 70% OF MIX STRENGTH.  
 3. PROTECT NEW PAVEMENT FROM TRAFFIC UNTIL FINAL LIFT IS PLACED AND ASPHALT IS 160°F OR COOLER.  
 4. NEW PCC BASE PAVEMENT SHALL BE CLASS 4000, WITH 1.5" MINIMAL MAX. SIZE OF AGGREGATE. NEW AC FINAL LIFT SHALL BE LEVEL 3, PG 70-22 ASPHALT CONCRETE.  
 5. FOR BUSY STREETS RESTORE PAVEMENT AND BASE TO MATCH EXISTING WITHIN THE FOLLOWING TOLERANCES:  
 MIN. 3" ASPHALT CONCRETE, ON 8" PCC PAVEMENT, ON 8" AGGREGATE BASE ROCK  
 MAX. 6" ASPHALT CONCRETE ON 12" PCC PAVEMENT, ON 8" AGGREGATE BASE ROCK  
 6. SAWCUT A MIN. 6" OVERLAP T-CUT, MEASURED FROM EDGE OF TRENCH, AND DOWN THROUGH THE BASE MATERIAL. SEE STD. DRG. NO. P-505 FOR T-CUT DETAILS.  
 7. SAND SEAL ALL JOINTS.

**PBOT PORTLAND BUREAU OF TRANSPORTATION**  
*Steve Townsen*  
 City Engineer  
 Standard Drawing Title  
**TRENCH RESURFACING ASPHALT OVER PCC PAVEMENT**  
 Effective Date: 02-26-2018  
 Calc. Book No.: 516  
 Std. Drg. Report Date: \_\_\_\_\_  
 Standard Drawing No. **P-516**

NO.	DATE	DESCRIPTION	APPD.

CONSTRUCTED BY	CJD	DATE APPROVED	
PROJECT COMPLETED	CAD BY	SECTION ENGR	
MAP CORRECTED BY	RTN	BES REVIEWER	
CHECKED BY	CJD	PBOT REVIEWER	
CHECKED BY			



**APPROVALS:**

BES CHIEF ENGINEER	REG. PROF. ENGR. 16301PE
PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

**BUREAU OF ENVIRONMENTAL SERVICES**

NICK FISH  
 WILLIAM F. RYAN, P.E.

COMMISSIONER  
 CHIEF ENGINEER

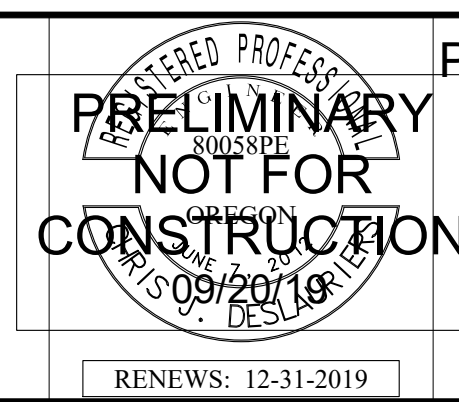
**BUREAU OF TRANSPORTATION**

CHLOE EUDALY  
 STEVE TOWNSEN, P.E.

COMMISSIONER  
 CITY ENGINEER

**WDY** Structural-Civil Engineers

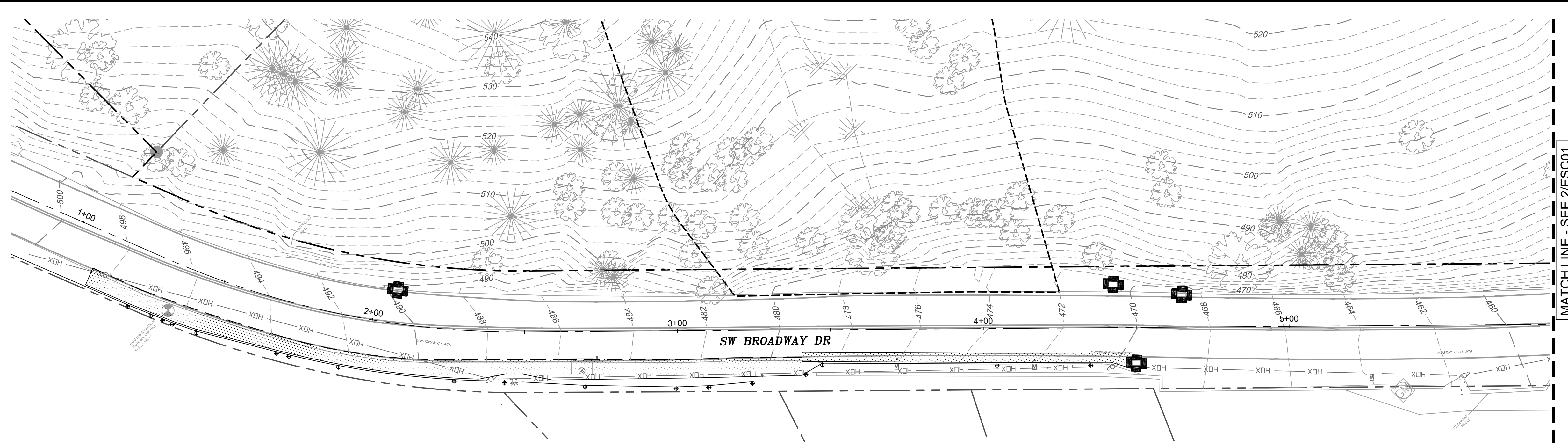
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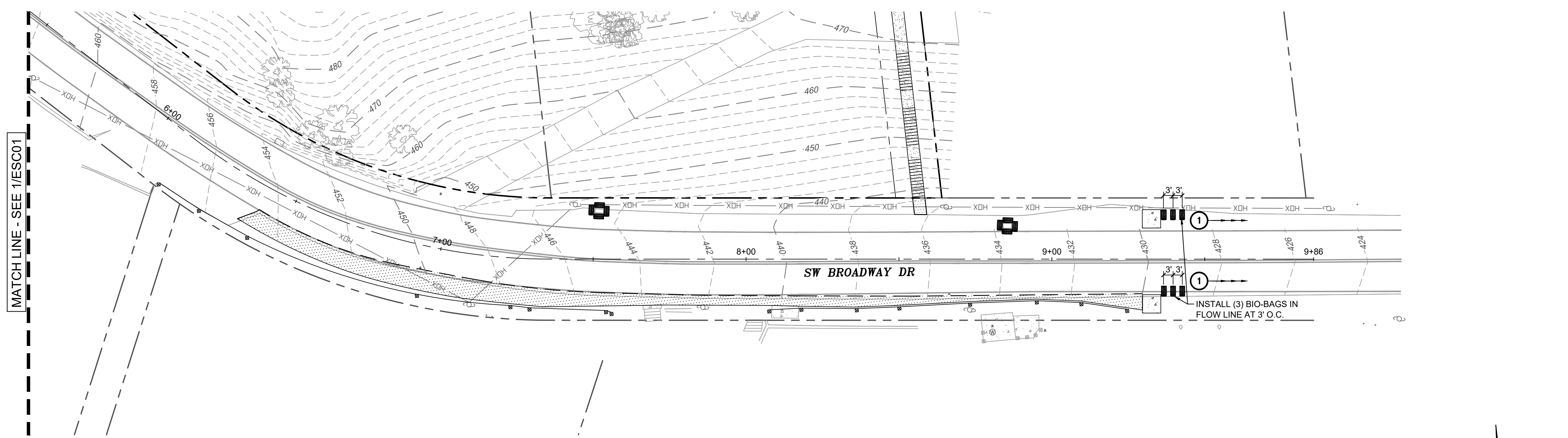
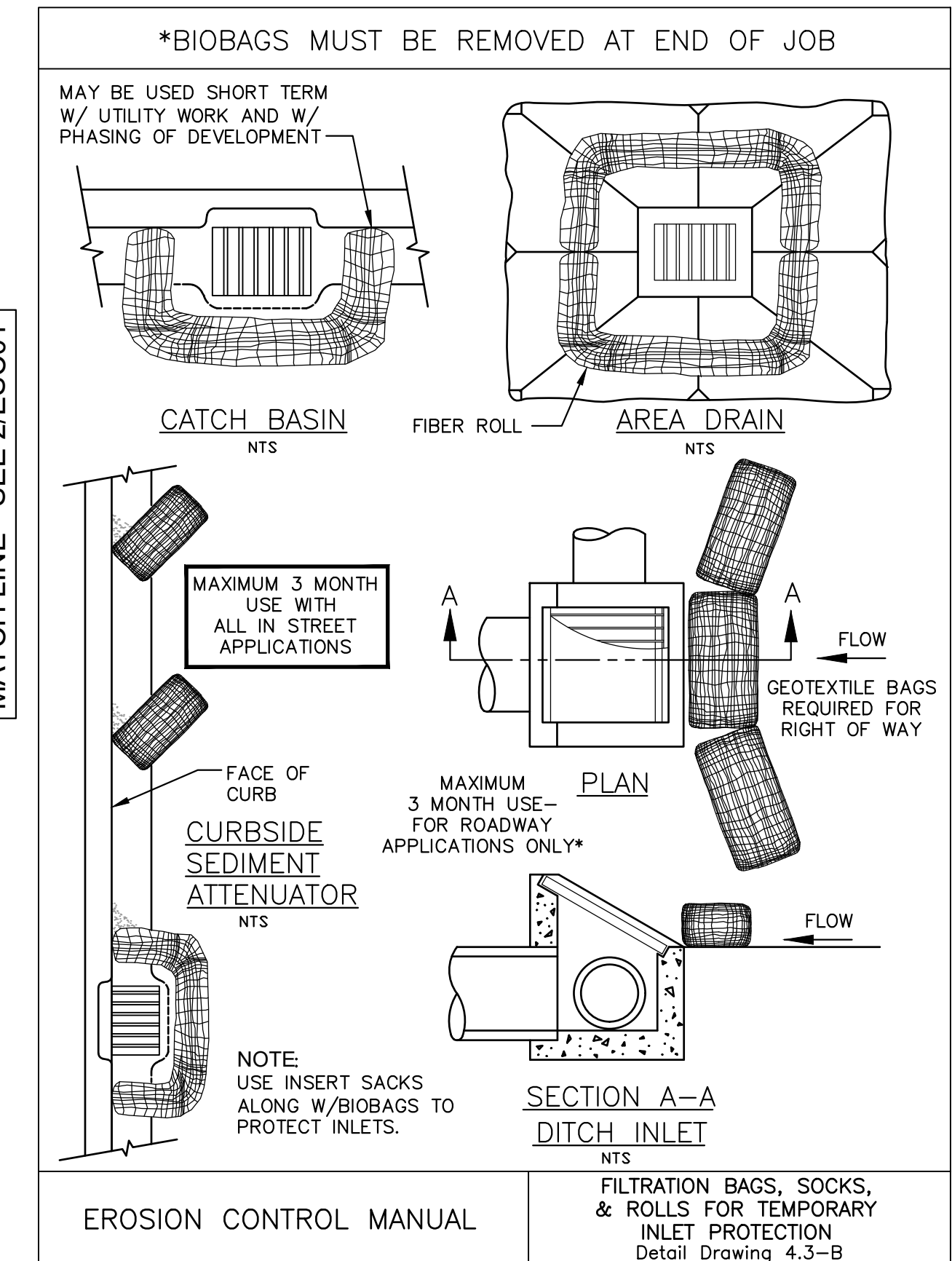
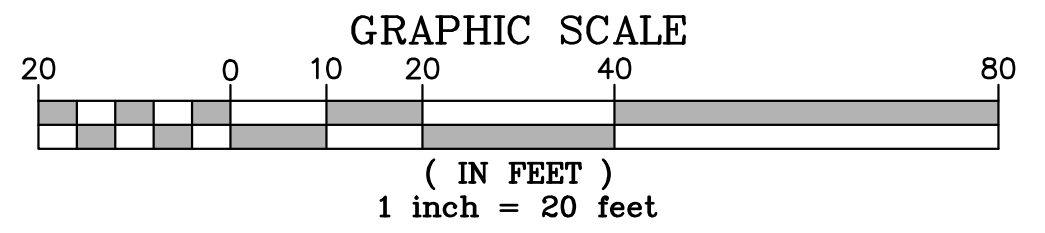
**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

STANDARD DETAILS

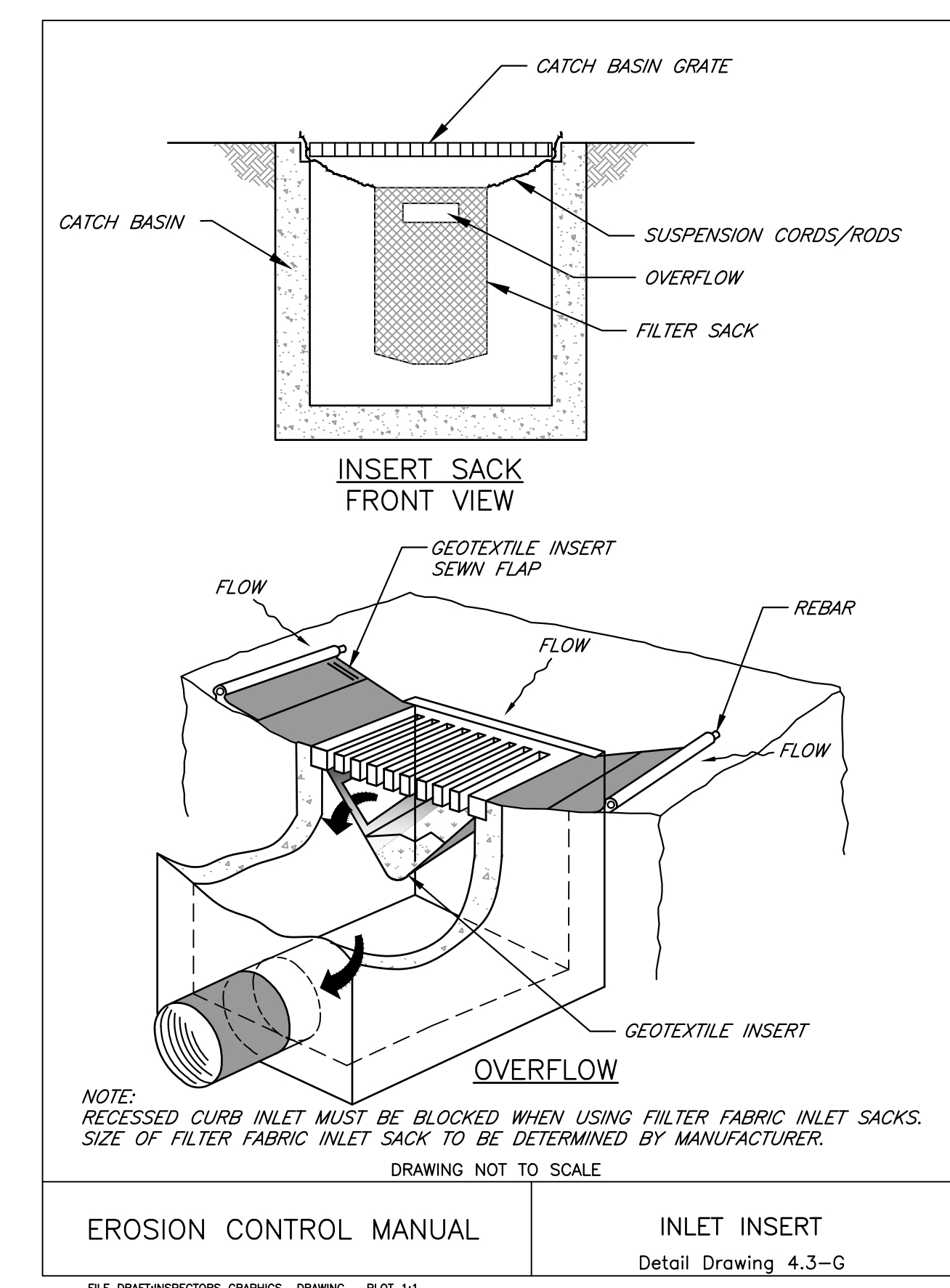
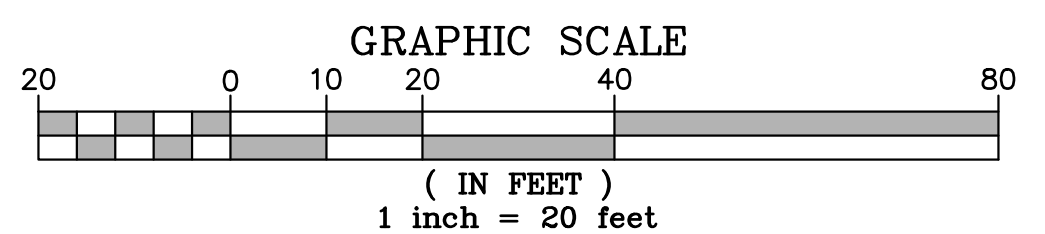
BES JOB NO. EP566  
 PBOT JOB NO. TB0100  
 SHEET NO. DT01  
 15 OF 15



**1 EROSION & SEDIMENT CONTROL PLAN**  
 ESC01 SCALE: 1" = 20'-0"



**2 EROSION & SEDIMENT CONTROL PLAN**  
 ESC01 SCALE: 1" = 20'-0"



**KEYNOTES FOR THIS SHEET**

MARK	DESCRIPTION
1	PROVIDE BIO-BAG AND SILT SACK PROTECTION AT CATCH BASINS ALONG SW BROADWAY DR AND FIRST DOWN STREAM CATCH BASIN PER DETAILS 4.3-B AND 4.3-G ON THIS SHEET.

FILE: 17240\_SHT-14.DWG ESC01 9/20/2019 10:58:07 AM - NGUYEN

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PROJECT COMPLETED		SECTION ENGR	
MAP CORRECTED BY RTN		BES REVIEWER	
CHECKED BY CJD		PBOT REVIEWER	
NO. DATE DESCRIPTION APPD.			
REVISIONS			
FINAL MAP DATA			



**APPROVALS:**

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PBOT PRINCIPAL ENGINEER	REG. PROF. ENGR. 75155PE
PBOT CITY ENGINEER	REG. PROF. ENGR. 51538PE

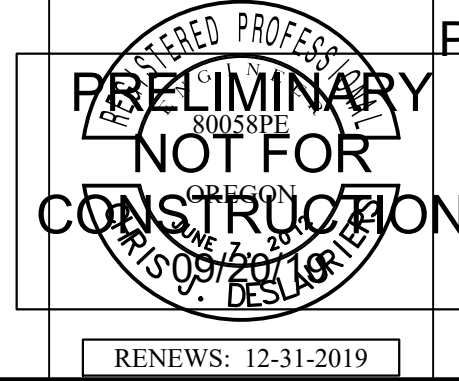
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**PUBLIC IMPROVEMENTS FOR SW BROADWAY DRIVE**

**EROSION & SEDIMENT CONTROL PLAN**

BES JOB NO. EP566  
 PBOT JOB NO. TB0100  
 SHEET NO. ESC01  
 1 OF 1

RENEWS: 12-31-2019