

## **DETERMINATION OF NON-SIGNIFICANCE**

PROPONENT: Scott Nicholson, MG2 Architects
LOCATION OF PROPOSAL: 12385 Northup Way
<b>DESCRIPTION OF PROPOSAL:</b> Master Development Plan (MDP), Design Review and Critical Areas Land Use Permit approval for a two-phase development on a site located in the Bel-Red Office Residential (BR-OR) district. The proposed MDP will combine a 5.57-acre lot (Parcel A) with a contiguous 1.44-acre lot (Parcel B) into a 7.01-acre project limit (site) to facilitate the maximum development density for a new 4-story internally serviced self-storage building and site improvements. Phase 1 of the MDP will include the demolition of three existing single-story self-storage buildings and a covered RV parking area to construct the new self-storage building on Parcel A. Phase 2 will consist of the renovation and re-branding of the existing rental office on Parcel B. The proposal includes 8,958 SF of planting to mitigate for impacts to 8,928 SF of on-site combined critical area buffers and setbacks from the West Tributary of Kelsey Creek (a Type-F stream) and associated Category III wetland located off site.
FILE NUMBERS: 19-126040-LP,19-128994-LD & 19-130369-LO PLANNER: Mark Brennan, 425-452-2973
The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.
There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appearance be filed in the City Clerk's office by 5:00 p.m. on  This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on 10/22/2020  This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on
This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.
Elizabeth Stead October 8, 2020 Environmental Coordinator Elizabeth Stead, Land Use Director

## OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov
- ☐ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov

  Army Corps of Engineers
- Attorney General <a href="mailto:ecyolyef@atg.wa.gov">ecyolyef@atg.wa.gov</a>
- Muckleshoot Indian Tribe glen.stamant@muckleshoot.nsn.us.; Fisheries.fileroom@muckleshoot.nsn.us



Proposal Name and Address Public Storage, 12385 Northup Way

**Proposal Description**: Master Development Plan (MDP), Design Review and Critical Areas Land Use

Permit approval for a two-phase development on a site located in the Bel-Red Office Residential (BR-OR) district. The proposed MDP will combine a 5.57-acre lot (Parcel A) with a contiguous 1.44-acre lot (Parcel B) into a 7.01-acre project limit (site) to facilitate the maximum development density for a new 4-story internally serviced self-storage building and site improvements. Phase 1 of the MDP will include the demolition of three existing single-story self-storage buildings and a covered RV parking area to construct the new self-storage building on Parcel A. Phase 2 will consist of the renovation and rebranding of the existing rental office on Parcel B. The proposal includes 8,958 SF of planting to mitigate for impacts to 8,928 SF of on-site combined critical area buffers and setbacks from the West Tributary of Kelsey Creek (a Type-F

stream) and associated Category III wetland located off site.

File Numbers: 19-126040-LP Master Development Plan (MDP)

19-128994-LD Design Review (ADR)

19-130369-LO Critical Area Land Use Permit (CALUP)

Applicant: Scott Nicholson, MG2 Architects

**Planner:** Mark C. Brennan, Associate Planner

Decisions Included: Process II: Combined Master Development Plan, Design Review and Critical

Areas Land Use Permit

State Environmental Policy Act (SEPA) Threshold Determination:

**Determination of Non-significance** 

BV: Elizabeth Stead

Elizabeth Stead, Environmental Coordinator Development Services Department

Director's Decision: Approval with Conditions

Michael Brennan, Director

**Development Services Department** 

By: Elizabeth Stead

Elizabeth Stead, Land Use Director

	19-126040-LP	19-128994-LD	19-130369-LO
Application Date:	October 4, 2019	November 12, 2019	November 22, 2019
Notice of Application	November 7, 2019	December 19, 2019	January 9, 2020
Minimum Comment Period	November 21, 2019	January 6, 2020	January 23, 2020
Public Meeting:	November 19, 2019		
Notice of Decision	October 8, 2020		
Appeal Deadline	October 22, 2020		

Information on how to appeal a proposal can be found by calling (425) 452-6864 or by visiting (<a href="https://bellevuewa.gov/city-government/departments/development/zoning-and-land-use/public-notices-and-participation/participating-in-a-land-use-decision.">https://bellevuewa.gov/city-government/departments/development/zoning-and-land-use/public-notices-and-participation/participating-in-a-land-use-decision.</a>
Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. To file an appeal, please e-mail to: <a href="https://cityclerk@bellevuewa.gov">cityclerk@bellevuewa.gov</a> and cc <a href="https://environmentalegov</a> dec <a href="https://environmentalegov</a> and cc <a href="https://environmentalegov</a> dec <a href="https://environmentalegov</a> and cc <a href="ht

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## **ATTACHMENTS:**

- A. Project Drawings
- B. SEPA Environmental Checklist
- C. Geotechnical Report, Critical Areas Report and Detailed Mitigation Plan
- D. Traffic Study
- E. Certificate of Concurrency

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## I. REQUEST, PROPOSAL DESCRIPTION & REVIEW PROCESS

#### A. Request

Public Storage (the applicant) requests a Master Development Plan (MDP) approval, a Design Review approval, a Critical Areas Land Use Permit (CALUP) approval and a Threshold Determination under the State Environmental Policy Act (SEPA) for the following:

1. Master Development Plan (MDP) approval to combine Parcel A (south parcel), a 242,809 SF (5.57-acre) lot with Parcel B (north parcel), an abutting 62,90 SF (1.44-acre) lot to the north into a single 305,716 SF (7.01-acre) project limit (site) to utilize unused FAR on the north parcel for the construction of a proposed new internally serviced 4-story mini self-storage building and associated site improvements on the south parcel. The combined lots will be referred to as the "site" in this report. The proposed site is located to the southwest of the intersection of Northup Way and 124<sup>th</sup> Avenue NE in the Bel-Red Office Residential (BR-OR) district. The south parcel is accessed from 124<sup>th</sup> Avenue NE, while the north parcel is accessed from Northup Way.

Both existing parcels are owned by the applicant and are currently developed with mini self-storage uses. The south parcel includes seven 1-story and one 2-story self-storage buildings and a covered recreational vehicle (RV) storage area. The north parcel includes a site storage rental office building.

The proposed MDP will include two phases as described below:

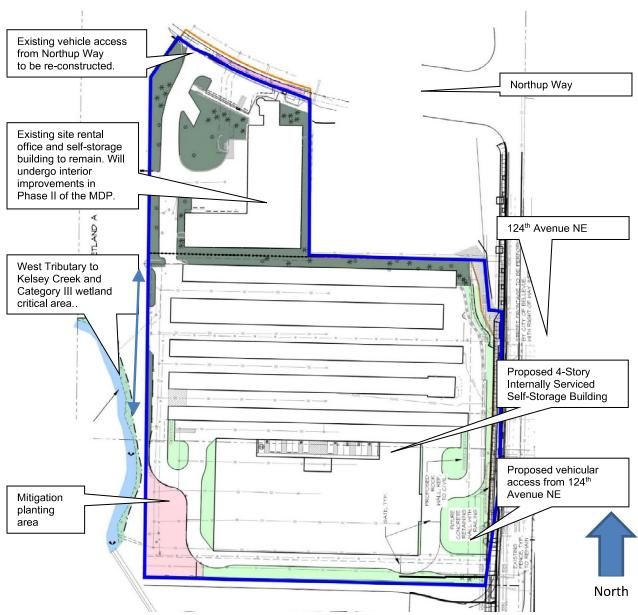
- Phase 1 of the MDP will include the demolition of three existing 1-story self-storage buildings and covered RV parking area on the south parcel to construct the new 4-story internally serviced self-storage building and associated site improvements.
- Phase 2 of the MDP will consist of the renovation and re-branding of the existing rental office on the north parcel.
- Design Review Approval (ADR) approval for a proposed new 185,900 GSF 4-story internally serviced self-storage building on the south parcel of the site and associated site improvements. and street frontage improvements on both lots, and
- 3. Critical Areas Land Use Permit (CALUP) to allow the disturbance of on-site stream critical area buffer, wetland critical area buffers and critical areas setbacks for the removal of existing impervious surface area and the construction of the new self-storage building and adjoining site improvements. The proposed development will impact a total of 8,928 SF of onsite combined stream and wetland critical area buffers and setbacks from the West Tributary of Kelsey Creek (a Type-F stream) and an associated Category III wetland. To mitigate for these impacts the applicant proposes 8,958 SF of native planting in the area. The new planting area will be located at the southwest corner of the site on previously paved (impervious surface) area. The impacts and mitigation require a CALUP with a critical areas report subject to performance standards and criteria described in Section III.XX of this report.

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## **B.** Proposal Description

## 1. Site Design

Figure 1: Site Plan



#### a. Site Access

The combined site will be accessed from Northup Way and 124<sup>th</sup> Avenue NE as follows:

• **124**<sup>th</sup> **Avenue NE** (south parcel): Vehicle access from 124<sup>th</sup> Avenue NE will be provided by a new driveway to be located at the southeast corner of the site, after the future capital improvement project (CIP) to the 124<sup>th</sup> Avenue NE right-of-way is finished. In the

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interim, the site will continue to be accessed from an existing driveway along 124<sup>th</sup> Avenue that will remain in use until the capital improvement project begins. Once the CIP is underway, access to the new and existing self-storage buildings will be provided from the driveway along Northup Way by an existing interior connecting road.

 Northup Way (north parcel): Vehicle access to the site will continue to be provided from Northup Way by a re-constructed and widened driveway in the same location as the existing driveway.

Refer to Transportation Review commentary in Section VII of this report for a more detailed description of the 124<sup>th</sup> Avenue NE CIP project and the re-constructed driveway along Northup Way.

#### b. Parking and Loading

Parking: There are 14 existing parking stalls adjacent to the existing site rental building located along Northup Way. One of these stalls will be modified to accommodate an ADA accessible stall and accessible path to the existing site office building. 14 new parking stalls will be provided to the north of the new self-storage building, resulting in a total of 28 parking stalls on site. The applicant has submitted documentation demonstrating that the parking proposed will meet be adequate to accommodate the proposed use, which is unspecified in the Land Use Code but per LUC 20.20.590.F.2, can be approved through the submittal of documentation as provided above. Refer to parking analysis by LSA, dated XXXXX in Attachment D of this report.

#### Loading:

The new self-storage building is not anticipated to substantially increase the small volume of trash and recycling materials currently generated by the existing development. An existing loading area adjacent to the site rental office building along Northup Way will continue to function as the location at which trash and recycling will be picked up. Refer to Conditions of Approval regarding Provisions for Loading and Building and Site Plans - Transportation in Sections XI.A & C of this report.

#### c. Landscaping

Existing landscaping on the site consists of trees, shrubs and associated plantings located along existing site boundaries with adjoining development, along 124<sup>th</sup> Avenue NE and between the two existing parcels to be combined under the proposed MDP. The site contains 41 significant trees (predominantly coniferous) with a combined total of approximately 462 diameter inches. No trees are proposed to be removed with the proposal, with the exception of three deciduous trees located in the Northup Way right-of-way that will be removed and replaced with new streets trees per the required street frontage improvements. In addition to the new mitigation planting area at the site's southwest corner, new interior property line planting will be added along the site's boundary with the King County Metro East Base property to the south, and along the site's boundary with the 124<sup>th</sup> Avenue NE ROW to the east. This landscaping will include the planting of numerous coniferous trees (Douglas Fir and Western Red Cedar) to screen the

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site from adjacent Metro site to the south and along 124<sup>th</sup>.

Existing perimeter landscaping with the abutting BR-R district to the west of the existing north parcel will be augmented with new trees, as will existing interior property line landscaping with the West Coast Self Storage property to the northeast of the site. New arterial street-frontage landscaping will be planted along Northup Way and along 124<sup>th</sup> Avenue NE after the completion of the future Capital Improvement Project through payment of a fee-in-lieu of construction of the street-frontage landscaping. Refer to Condition of Approval regarding Payment of Fee in Lieu of 124<sup>th</sup> Avenue NE Frontage Improvements in Section XI.C of this report.

#### 2. Building Design

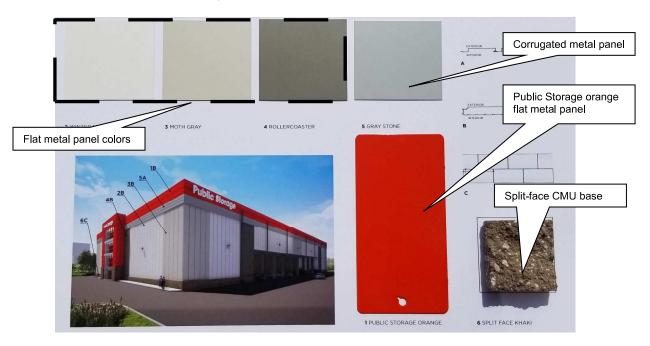
The proposed self-storage building will be clad with a base of split-face concrete masonry units (CMU) and a combination of flat and corrugated metal panels above. The building's façade along 124<sup>th</sup> Avenue NE will include an area of transparent glass set within a "bay window" form that will be off-set from the adjoining façade around it by approximately 3 FT. The use of the proposed materials and colors will modulate the building's large façade areas. In particular, the use of corrugated panels near the top of the building will provide pattern and texture and complement the flat panels used on the building facades below. The Public Storage standard/corporate orange panel color will be used as an accent at the building's top and on the offset bay along 124<sup>th</sup> Avenue, adding interest to the muted gray and white panel colors used elsewhere. Refer to Conditions of Approval regarding Design Review Modifications, Exterior Lights, Mechanical Equipment and Screening and Project Sign Design Package in Section XI.A, C & D of this report.

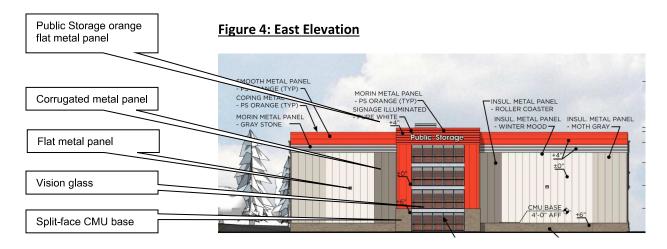


Figure 2: Birds-eye View from 124th Avenue NE

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Figure 3: Colors & Materials





**Figure 5: North Elevation** 



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**Figure 6: West Elevation** 



**Figure 7: South Elevation** 



## C. Review Process

Master Development Plan (MDP), Design Review (ADR) and Critical Areas Land Use Permit (CALUP) permits are Process II applications (LUC 20.35.200) with an administrative decision made by the Director of Development Services. The SEPA Threshold Determination of Nonsignificance is also a Process II decision made by the Land Use Environmental Coordinator. Appeals of Process II decisions are heard by the Hearing Examiner. A description of each permit type is included below.

- Master Development Plan (MDP): A Master Development Plan application is a Process II application (LUC 20.35.200) with an administrative decision made by the Director of Development Services (LUC 20.30V). Refer to Conditions of Approval regarding Modifications to Master Development Plan and Recording of Master Development Plan in Section XI.A & D of this report.
- 2. Design Review (ADR): The ADR application is the City's mechanism to ensure that site development and structures comply with the MDP and LUC regulations regarding structure design and compatibility with surrounding uses. It also ensures that building development is of high design quality
- 3. Critical Areas Land Use Permit (CALUP): A Critical Areas Land Permit (CALUP) is the mechanism by which the City may approve limited use and disturbance of a critical area or critical area buffer. The provisions of LUC 20.25H establish the uses and activities that may

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> be allowed in a critical area or critical area buffer. The provisions of LUC 20.30P establish the requirements for a Critical Areas Land Permit. Refer to Conditions of approval for impacts associated with Critical Areas land use permit in Section XI of this report

#### LAND USE CONTEXT, SITE DESCRIPTION, CRITICAL AREAS AND ZONING II.

#### A. Land Use Context

The site abuts property previously developed with an existing self-storage building (West Coast Self-Storage) located at the intersection of Northup Way and 124th Avenue NE. The site is bounded by Northup Way to the north (west of the existing self-storage property) and by 124th Avenue NE to the east (south of the existing self-storage property). Property to the east of 124th Avenue NE is developed with existing self-storage buildings owned by Public Storage. To the west, the site abuts a school bus maintenance facility for the Bellevue School District (BSD) and to its south, the King County Metro Transit east base bus parking area. Metro property also abuts the site along its south property boundary. The Metro property contains stream and wetland critical areas associated with the West Tributary of Kelsey Creek, which is located near the site's west boundary and, as shown on Figure 3, above, wetland and stream buffer area that extends into the site.

Multi-tenant office building Northup Way Parcel B (north parcel) 124th Avenue NE Parcel B (north Multi-tenant parcel) access office building (to be reconstructed) Bellevue School West Coast Self-District Bus Storage Maintenance Facility Multi-tenant Parcel A (south office and retail parcel) buildings (3) West Tributary Kelsey Creek & Parcel A access Category III to be re-located wetland to the south Existing (3) selfstorage buildings Public Storage and covered property boat/RV storage area to be removed. King County Metro Transit East Base and access road

North

Figure 8: Site Context

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## **B.** Site Description

The site is predominantly covered by impervious surface area consisting of existing buildings and pavement. The site's topography slopes from an elevation of 192 FT along Northup Way to an elevation of 140 FT along the west boundary of the existing south parcel before sloping up to an elevation of 145 FT at the site's south boundary. In addition to the critical area buffer and setback area described below, the site also includes 2,388 SF of steep slope critical area and buffer located along the north edge of the south parcel, which will not be touched nor impacted by the proposed development.

#### C. Critical Areas:

#### **Critical Areas Functions & Values**

## a. Streams and Riparian Areas

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between streams and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi- canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established the near-term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs

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to support stream baseflows. Surface water that flows into riparian areas as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

#### b. Wetlands

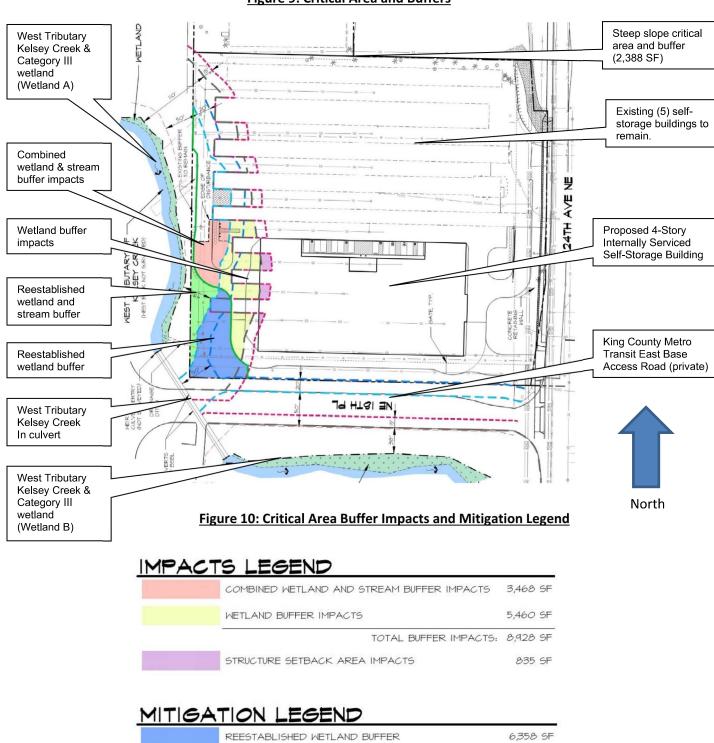
Wetlands provide important functions and values for both the human and biological environment—these functions include flood control, water quality improvement, and nutrient production. These "functions and values" to both the environment and the citizens of Bellevue depend on their size and location within a basin, as well as their diversity and quality. While Bellevue's wetlands provide various beneficial functions, not all wetlands perform all functions, nor do they perform all functions equally well (Novitski et al., 1995). However, the combined effect of functional processes of wetlands within basins provides benefits to both natural and human environments. For example, wetlands provide significant stormwater control, even if they are degraded and comprise only a small percentage of area within a basin.

## c. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provides a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

**Figure 9: Critical Area and Buffers** 



REESTABLISHED WETLAND AND STREAM BUFFER

TOTAL REESTABLISHED BUFFER AREA: 8,958 SF

2,600 SF

## D. Zoning

A site zoning map is provided below. The site is within in the Bel-Red Office Residential (BR-OR) land use district.



Figure 10: Zoning Map

## III. CONSISTENCY WITH LAND USE CODE/ZONING REQUIREMENTS

## A. General Provisions of the Land Use Code

#### 1. Use

Uses are regulated by LUC 20.10.440 (Use Charts) and LUC 20.25D (Bel-Red Overlay District). The proposed self-storage building is a permitted uses within the BR-OR land use district.

## 2. Dimensional Requirements

The dimensional and area requirements that apply in the BR-OR district are listed below and the proposal is evaluated for consistency.

Item	Required	Proposed	Comments
Land Use Designation LUC 20.25D.020	BR-OR (Bel-Red Office Residential Land Use District)	BR-OR	
Project Limit	No minimum indicated	305,715 SF Parcel A (242,808 SF + Parcel B (62.907 SF)	

**Table 1: Dimensional Requirements** 

Building Height LUC 20.25D.080.A	70 FT	46 FT	Meets Land Use Code (LUC) requirement.
Floor Area Ratio: LUC 20.25D.080.A LUC 20.25H.045	Base/Maximum 1.0 = 302,880 GFA	0.99 = 299,977 GFA	Meets LUC requirement. Refer to <u>Table 2: FAR</u> below.
Front, Rear & Side Setbacks LUC 20.25D.080.A	Front, rear & side yards: 0 FT	Front (from 124 <sup>th</sup> Avenue NE): varies, minimum approx. 105 FT Rear (south) approx. 40 FT Side (west): varies, minimum approx. 99 FT	Meets LUC requirements.
Maximum Impervious Surface Area/Lot Coverage LUC 20.25D.080.A (footnote 6) & LUC 20.20.460.F	75% = 229,286 SF	82% = 250,686 SF	Meets LUC requirement. Refer to discussion of Impervious Surface Area following this table
Parking LUC 20.25D.120 & LUC 20.20.590	Unspecified Use	28 (14 existing to remain + 14 new)	Meets LUC requirement. Refer to discussion of Parking following this table.
Loading Area LUC 20.20.590.K.4.b	One 10 FT-wide by 55 FT-long dedicated loading space	10 FT-wide by 30 FT- long loading areas will be provided	Meets LUC requirement per LUC 20.20.590.K.4.b.ii for reduced loading stall length.
Mechanical Screening: LUC 20.20.525	Exposed mechanical equipment on roof to be screened by a solid, non-reflective visual barrier.	Exposed mechanical equipment on roof to be screened by solid, non-reflective corrugated metal panels.	Meets LUC requirement.
Refuse & Recycling LUC 20.20.725	Refuse and recycling collection area to be provided.	Refuse and recycling collection will continue to be provided adjacent to the existing site rental/office building on Northup Way.	Meets LUC requirement.

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Landscaping			As conditioned, meets LUC
LUC 20.25D.110			requirements.
Arterial Street Frontage Landscaping:	Arterial Street Frontage  • 6-FT wide sidewalk  • 5-FT wide planting strip  • Street trees: Minimum 2 ½" caliper @ 30 FT on center max.	Northup Way:  • 8-FT wide sidewalk  • 5-FT wide planting strip  • Street trees: Minimum 2 ½" caliper @ approx. 30 FT on	Northup Way:  Designated street tree (Fraxinus pennsylvanica 'Summit Ash' has been found to be prone to disease and will be replaced with (A. rubrum) 'October Glory'.
		center.  124 <sup>th</sup> Avenue NE: Applicant will pay a fee in lieu of constructing arterial street-frontage improvements after the completion of the future 124 <sup>th</sup> Avenue NE CIP upgrades.	124 <sup>th</sup> Avenue NE Refer to Transportation Review commentary in Section VI of this report for more information regarding the future 124 <sup>th</sup> Avenue NE CIP upgrades. The species of street trees to be provided along 124 <sup>th</sup> Avenue NE has not been finalized.
Perimeter Landscaping:	20 FT-wide landscape buffer with BR-R district to the west.  • Trees provided at 20 FT on-center.  • Evergreen shrubs at 3 FT on center.  • Ground cover provided as	Existing mature trees and associated landscaping in this buffer to be left undisturbed and augmented with 13 new coniferous trees.	Refer to Conditions of Approval regarding Payment of Fee in
Interior Property Line	necessary  10 FT-wide landscape buffer  • Trees provided at 30 FT on-center.  • Shrubs and groundcover at on center.	New 20 FT-wide landscape buffer along south (interior) property line will be provided. New coniferous trees to	Lieu of 124 <sup>th</sup> Avenue NE Frontage Improvements, Equipment Boxes, Final Landscape and Irrigation Plans, Street Trees and Right-of- Way/Streetscape Landscaping, Streetscape Irrigation (Right-of- Way and Site), Landscape

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Ground cover	be provided to	Installation Assurance Device,
provided as	augment existing	Landscape Maintenance
necessary	mature landscaping	Assurance Device and
	to be left	Maintenance Agreement with
	undisturbed.	the City of Bellevue in Section
		XI.B,C & D of this report.

## **Impervious Surface Area**

The proposed site (305,715 SF) includes 87% (265,973 SF) of existing impervious surface area, which exceeds the 75% maximum allowed after critical areas and critical area buffers are subtracted from the total site area in the BR-OR District per LUC 20.25D.080.A. Footnote (6). The proposal (new self-storage building and associated site development) will reduce impervious surfaces on site to 82% (250,686 SF). Per LUC 20.20.40.F, existing impervious surfaces will not be considered non-conforming as long as proposed changes to existing impervious surfaces do not add additional area. Therefore, the proposal meets the impervious surface requirement and improves the existing condition by reducing the overall amount of impervious surface.

## Parking:

For the total 299,978 GFA proposed (refer to Table 2 below) 28 parking spaces will be provided, consisting of 14 existing spaces and 14 new spaces at the proposed building, resulting in a ratio of 0.086 (0.09) parking spaces per 1,000 GFA. This ratio is consistent with the average for similar Public Storage facilities as described in the parking analysis by LSA in **Attachment D** of this report.

#### B. Floor Area Ratio (FAR):

As described in Section I of this report, the applicant proposes to combine two contiguous existing parcels (Parcel A and Parcel B) in the Bel-Red Office Residential (BR-OR) district into a single project limit to maximize available FAR for the new self-storage building on Parcel A by harvesting unused FAR on Parcel B as described below:

- **Parcel A** has a gross site area of 242,808 SF and is currently developed with eight existing self-storage buildings totaling 83,162 GFA (Gross Floor Area). Three buildings with a combined area of 23,252 GFA will be removed, leaving five buildings totaling 59,910 GFA to remain. Parcel A includes 28,809 SF of critical area and critical area buffer. As calculated below, Parcel A has a maximum allowable FAR of **239,999 SF**, which allows for a maximum of 180,089 SF of additional FAR (239,999 SF 59,910 SF = 180,089 SF).
  - o (Buildable area x Max FAR)+(Critical area x Max FAR x Development Factor)  $[(214,719 \text{ SF} \times 1.0) + (28,089 \text{ SF} \times 1.0 \times 0.9) = 239,999 \text{ SF}]$
- Parcel B (existing) has an area of 62,907 SF and is currently developed with a 56,299 GFA building to remain. No change to the existing FAR on Parcel B are proposed. As calculated below, the parcel has a maximum allowable FAR of 62,881 SF.FAR that the applicant proposes to be utilize to achieve the desired development potential for the new self-storage building on Parcel A. 62,881 56,299 = 6,582 GFA to be utilized for the desired FAR for the new self-storage building.

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o (Buildable area x Max FAR)+(Critical area x Max FAR x Development Factor) [ $(61,617 \text{ SF} \times 1.0) + (1,290 \text{ SF} \times 1.0 \times 0.98) = 62,881 \text{ SF}$ ]

## Table 2: FAR

	Parcel A	Parcel B	
Existing Parcel Area (Gross Area)	242,808 SF	62,907 SF	
Proposed Project Limit: Parcel A +	305,715 SF		
Parcel B (Gross Site Area)	[242,808 SF (Parcel A) + 62,907 SF (Parcel B) = 305,715 SF]		
Critical Area (as indicated on	28,089 SF	1,290 SF	
Boundary & Topographic Survey)	(1,098 SF steep slope and	(steep slope and buffer)	
	buffer+ 26,991 SF stream and		
	wetland buffer = 28,089 SF)		
<b>Combined Critical Area</b>	29,3	79 SF	
	(28,089 + 1,29	0 = 29,379 SF)	
Net Parcel Area (Buildable Area for	214,719 SF	61,617 SF	
FAR (Parcel Area (Gross) – Critical	(242,808 SF – 28,089 SF =	(62,907 SF – 1,290 SF =	
Area)	214,719 SF)	61,617 SF)	
Net Combined Area (Buildable	276,3	36 SF	
Area) for FAR	(214,719 SF + 61,6	17 SF = 276,336 SF)	
<b>Maximum Development Potential</b>	239,999 SF	62,881 SF	
Floor Area Ratio (FAR). (see above)			
<b>Maximum Development Potential</b>	302,880 SF		
Floor Area Ratio (FAR) Combined	(239,999 SF + 62,881 SF = 302,880 SF]		
Existing GFA	83,162 SF	56,299 SF	
Existing GFA Combined	139,4	61 SF	
	(83,162 SF + 56,299 SF = 139,461 SF)		
Existing GFA to be removed	23,252 SF		
Existing GFA to Remain	59,910 SF	56,299 SF	
	(83,162 SF – 23,252 SF =		
	59,910 SF)		
<b>Combined Existing GFA to Remain</b>	116,2		
	(59,910 + 56,29	99 = 116,209 SF]	
Proposed New GFA (4-story self-	183,7	68 SF	
storage building)			
Total Proposed GFA	299,977 SF		
	(116,209 SF + 183,768 SF = 299,977 SF)		
Proposed FAR	.99		
	(299,977 / 302,880 = .99)		
Excess FAR Available	2,903 SF		
	(302,880 SF - 299,977 SF = 2,903 SF)		
Net Change in Site Development	160,516 SF		
	(299,977 SF – 139,461 SF = 160.516 SF)		

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# Refer to Condition of Approval regarding Recording of Master Development Plan in Section XI.D of this report.

#### C. Critical Areas Requirements LUC 20.25H

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area or critical area buffer. The critical areas report is intended to provide flexibility for sites where the expected critical area functions and values are not present due to degraded conditions or other unique site characteristics, or for proposals providing unique design or protection of critical area functions and values not anticipated by this part. The scope and complexity of information required in a critical areas report will vary, depending on the scope and complexity and magnitude of impact on critical areas and critical area buffers associated with the proposed development. Generally, the critical areas report must demonstrate that the proposal with the requested modifications leads to equivalent or better protection of critical area functions and values than would result from the application of the standard requirements. Where the proposal involves restoration of degraded conditions in exchange for a reduction in regulated critical area buffer on a site, the critical areas report must demonstrate a net increase in certain critical area functions.

The site includes steep slope critical area and buffer along a portion of the existing north boundary of Parcel as it abuts Parcel B. The site also includes both stream and wetland buffer areas associated with the West Tributary of Kelsey Creek (a Type-F stream) and Category III wetland (Wetland A) to the west of the site. No impacts to the steep slope and buffer are proposed. Impacts to the stream and wetland buffers will be mitigated as described in below.

- Consistency with LUC 20.25H.080 and 20.25H.100-perfmance standards
   Development on sites with a Type S or F stream, wetlands, or associated critical area
   buffer shall incorporate the following performance standards in design of the
   development, as applicable.
  - a. Lights shall be directed away from the stream and wetland critical area buffers. Finding: Minimal new (security) lighting will be proposed for the west façade of the new self-storage building. The security lighting will be comprised of two fixtures designed with cut-offs to direct light away, to the extent feasible, from the stream and wetland critical area buffers. Refer to Condition of Approval regarding Shielded Lights in Section XI.C of this report.
  - b. Activity that generates noise such as parking lots, generators and residential uses shall be located away from the stream and wetland critical area buffers, or any noise shall be minimized through use of design and insulation techniques.
    Finding: Parking for the new self-storage building will be located along the north side of the building, away from the stream and wetland buffer area. No exterior generators or residential uses are proposed.

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c. Toxic runoff from new impervious area shall be routed away from the stream and wetland critical area buffers.

**Finding:** No toxic run-off will be generated from new impervious surfaces. All water run-off will be treated prior to discharge from the site. **Refer to Utilities Department commentary in Section VI.C of this report below.** 

- d. Treated water may be allowed to enter the stream and wetland critical area buffers. Finding: Treated water will enter the stream and wetland critical area buffers associated with the West Tributary of Kelsey Creek and Category III wetland buffers. Refer to Utilities Department commentary in Section VI.C of this report below.
- e. The outer edge of the stream and wetland critical area buffers shall be planted with dense vegetation to limit pet or human use.
  Finding: The plans submitted indicate that 8,958 SF of native vegetation will be planted within previously paved stream and wetland buffer, including dense vegetation along the outer edge of the planting area to limit potential use by human or pets. Refer to Conditions of Approval regarding Clearing and Grading Permit Required, Final Mitigation Plan, Final Mitigation Plan Performance Standards and Maintenance and Monitoring, Maintenance and Monitoring Surety and Maintenance and Monitoring Reports in Section XI.B & D of this report.
- f. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream and wetland critical area buffers shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

  Finding: No use of pesticides, insecticides and fertilizers is expected within 150 feet of the edge of the stream/wetland critical area buffer. Any applications would be conducted in accordance with the City of Bellevue's "Environmental Best Management Practices." Refer to Conditions of Approval regarding Pesticides, Insecticides and Fertilizers in Section XI.B of this report.
- 2. Consistency with Critical Areas Report LUC 20.25.230

As described in the <u>Critical Areas Report and Detailed Mitigation Plan</u> by Talasaea Consultants and shown on Figure 9 in Section II of this report above, the construction of the proposed new self-storage building and associated site improvements will require the removal of 8,928 SF of existing impervious surface area that is within overlapping stream and wetland critical area buffers and structure setbacks from the West Tributary and Category III Wetland A to the west and southwest of the site. These existing buffers and setback areas have been degraded due to previous development of the site (the construction of existing impervious surface area) and as a result their expected functions and values do not exist.

The report indicates the project will impact overlapping stream and wetland buffer and structure setback on site as indicated and as illustrated on Figure 9 below. The applicant will

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plant 8,958 SF of native vegetation within existing critical area buffers on site as mitigation, which is expected to provide the necessary net increase of critical area and buffer functions.

#### IV. RESPONSE TO APPLICABLE DESIGN GUIDELINES

Per LUC 20.25D.150, each development within a Bel-Red land use district must comply with the provisions of the following Bel-Red Subarea Design Guidelines

## **Character and Site Guidelines**

- 1. Integrate the Natural Environment
- 2. Promote Architectural Compatibility
- 3. Establish and Strengthen Gateways
- 4. Protect and Enhance Surface Water Resources
- 5. Integrate Art

**Response:** The Public Storage project will improve the site's integration within the existing natural environment through the provision of additional landscaping, including the 8,958 SF of planting area at the site's southwest corner to mitigate for impacts to existing critical area buffers and setbacks as described above. The new building will promote architectural compatibility with nearby existing self-storage buildings; particularly the West Coast Self-Storage Building to the northeast of the site.

## **Pedestrian Emphasis Guidelines**

- 1. Define the Pedestrian Environment
- 2. Enhance the Pedestrian System
- 3. Protect Pedestrians from the Elements
- 4. Create a Variety of Successful Outdoor Spaces
- 5. Provide Places for Stopping and Viewing

**Response:** The Public Storage project will enhance the current pedestrian system through the provision of new 8 FT-wide public sidewalk and new 5 FT-wide planting strip along Northup Way. This will improve the existing conditions by separating vehicular traffic from pedestrians with new landscaping, and removing existing tree wells, which intermittently reduced the existing clear pedestrian path to 4 FT. Along 124<sup>th</sup> Avenue NE, the applicant will pay a fee-in-lieu for construction of a new 8 FT-wide sidewalk and 5-FT-wide planting strip that will be installed at the completion of the future CIP. Through the CIP, a new public sidewalk and planting strip will be added to the 124<sup>th</sup> Avenue NE right-of-way where none currently exists.

## **Architectural Guidelines**

- 1. Encourage High Quality Materials
- 2. Provide Interesting Building Massing
- 3. Create Attractive Building Silhouettes and Rooflines
- 4. Foster Attractive Rooftops
- 5. Promote Welcoming Residential Entries
- 6. Promote Visually Interesting Upper Floor Residential Windows

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**Response:** As shown on the exterior elevations and materials board in Section III of this report, the new Public Storage building will be clad with a high-quality materials palette consisting of a split-face concrete masonry unit (CMU) base with metal siding, in both flat and corrugated profiles above. The building's façade along 124<sup>th</sup> Avenue NE will feature a large expanse of windows that provide transparency into the building and which are organized into a "bay" that sits outward from the façade to provide modulation. The use of corrugated profile metal siding will add texture and visual interest along the building's roofline.

#### **Lighting Guidelines**

- 1. Orient Lighting toward Sidewalks and Public Spaces
- 2. Integrate Building Lighting

**Response:** The proposal will incorporate lighting fixtures necessary for customer access and site security. All exterior lighting proposed must be dimmable and incorporate cut off shields to decrease light pollution off the site, and is the minimum required for safety and security throughout the development. **Refer to the Condition of Approval regarding Exterior Lights in Section XI.C of this report.** 

#### V. PUBLIC NOTICE AND COMMENT

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Application Date:	October 4, 2019	November 12, 2019	November 22, 2019
Public Notice (500 feet):	November 7, 2019	December 19, 2019	January 9, 2020
Minimum Comment Period	November 21, 2019	January 6, 2020	January 23, 2020
Public Meeting:	December 19, 2019		

The permits associated with the project were publicly noticed in the City's Weekly Permit Bulletin and Seattle Times as indicated above, with notice mailed to property owners within 500 feet of the project site. Public information signs were installed on the site the same day. A public meeting was held at the City of Bellevue on December 19, 2019. No members of the public attended the meeting. As of this writing, six written comments have been received regarding the proposal, and there are three parties of record besides the applicant.

Below are the comments received by the City regarding this proposal:

Comment 1: "Metro is concerned about the effect this construction will have on the hundreds of buses that go in and out of East Base and Bellevue Base on 124 Ave NE. Please include a request that the contractor work with Construction Coordination to maintain access to the 124 SE roadway at all times so that all buses entering and leaving can do so in a timely manner"

Response: Prior to the start of any construction activity the applicant will reach out to King County Metro Transit via the contact information provided to discuss potential impacts.

Comment 2: "If the construction project will impact Northup Way, this will be a problem! With part of 124<sup>th</sup> Av NE already under Construction Metro cannot afford another project to start until 124<sup>th</sup> Av NE is at least 80 % percent complete. Metro has nowhere to send our buses. Looking at the diagram it's hard to see how this will impact traffic flow on Northup Way & 124<sup>th</sup> Av NE

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roadway. Metro will need more information to determine how this construction would impact traffic flow."

**Response:** Refer to applicant response to Comment 1 above.

Comments 3 & 4: "For any project updates or changes, please contact Metro staff Luka Ukrainczyk LUkrainczyk@kingcounty.gov, Terrie Kennedy Terrie.Kennedy@kingcounty.gov, Kenneth Johnston Kenneth.Johnston@kingcounty.gov, Jeff Garland; Jeff.Garland@kingcounty.gov; Construction.Coord@kingcounty.gov, plansreview@kingcounty.gov, and Liz Gotterer at Liz.Gotterer@kingcounty.gov.

Refer to: <a href="https://www.kingcounty.gov/transportation/kcdot/MetroTransit/Construction.aspx">https://www.kingcounty.gov/transportation/kcdot/MetroTransit/Construction.aspx</a> for more information."

**Response:** Refer to applicant response to Comment 1 above.

Comment 5: "The Critical Areas Report and Conceptual Mitigation Plan (Talasea November 2019) describes the West Tributary of Kelsey Creek as a Type N (non-fish-bearing water). We disagree. The West Tributary of Kelsey Creek should be treated as a Type F (potential fish-bearing water) as it meets the physical criteria for a potential fish-bearing water. The stream classification was determined in two previous City of Bellevue technical reports; one for the 124<sup>th</sup> Avenue Widening Project and the other for the 120<sup>th</sup> Avenue NE widening (Stages 3A, B, C, D) project. The stream was determined to be Type F in this reports (see attached). Further, the City of Bellevue planned to replace the culvert on 124<sup>th</sup> Ave NE and make it fish passable which would only logically occur if the stream was a Type-F stream. Based on this information, the project needs to be reevaluated considering potential impacts to the West Tributary of Kelsey Creek as a Type F and not a Type N stream. We believe this would affect both the project stream buffer impact analysis and mitigation requirements."

**Response:** The response letter of February 3, 2020 by Talasaea Consultants, Inc. to the Muckleshoot Tribe indicated: "The Tribe's assessment is accurate that West Tributary of Kelsey Creek is a Type-F stream at this location and calling this a Type-N stream was an erroneous statement. However, Bellevue Land Use Code Chapter 20.25H.075.C.1 notes that West Tributary Kelsey Basin — Open Stream. Regardless of type, open stream segments of the West Tributary on developed and undeveloped sites shall have a stream critical area buffer of 50 feet, measured from the top-of-bank FT."

Comment 6: "Based on review of the State Environmental Policy Act (SEPA) checklist associated with this project, the Department of Ecology (Ecology) has the following comment: If construction/developmental work is to include de-watering, be advised that the neighboring property located at 1975 124<sup>th</sup> Avenue NE is a cleanup site (Metro Transit East Base, Cleanup Site #7067", Department of Ecology ISIS database) with an active groundwater plume. Groundwater at the Metro Transit East Base flows toward the subject property of this SEPA review.

**Response:** The letter including this information has been passed on to the applicant and they have forwarded it to the project team

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## VI. TECHNICAL REVIEW

## A. Transportation Review

#### Site Access and Loading

The project site is located on the west side of 124<sup>th</sup> Avenue NE south of Northup Way. The project includes two adjacent parcels: 12385 Northup Way, and 2001 124<sup>th</sup> Avenue NE. The site currently contains 8 existing self-storage buildings and a site rental office building. Site access is provided from 124<sup>th</sup> Avenue NE and Northup Way via two existing driveways. A roughly 25-footwide commercial driveway provides access between the two parcels.

In the vicinity of this project, Northup Way is a five-lane road classified as a minor arterial, and 124<sup>th</sup> Avenue NE is a four-lane road classified as a major arterial. The site is bordered by the King County Metro Bus base to the west and south, commercial buildings across 124<sup>th</sup> Avenue NE and a self-storage building to the immediate northeast of the site. This development will replace three existing self-storage buildings and a covered RV storage area with a four-story self-storage building containing 183,768 square feet (GFA) of self-storage space which is a net site increase of 160,516 square feet. There is currently an 8-foot-wide sidewalk along the Northup Way frontage, and no sidewalk with curb and gutter along the 124<sup>th</sup> Avenue NE frontage.

There is a future CIP planned to reconstruct 124<sup>th</sup> Avenue NE from NE 8<sup>th</sup> Street to Northup Way. This CIP project plans to raise the grade of 124<sup>th</sup> Avenue NE significantly, widen 124<sup>th</sup> Avenue NE to five lanes, and construct an 8-foot-wide sidewalk and 5-foot-wide planter strip with and a large retaining wall along the Public Storage frontage.

Vehicular access to the proposed project will be provided via the reconstructed 38-foot-wide driveway on Northup Way, and a new minimum 30-foot-wide driveway off of 124<sup>th</sup> Avenue NE, replacing the existing driveway. Construction of the Public Storage development is expected to be completed before the start of construction of the 124<sup>th</sup> Avenue NE CIP project. The final location of the 124<sup>th</sup> Avenue driveway cannot be constructed by the applicant until the CIP project is completed due to the grade change of the 124<sup>th</sup> Avenue NE profile. A future driveway approach connection on the private property side will be constructed on the south side of the 124<sup>th</sup> Avenue NE frontage that will tie into the future 124<sup>th</sup> Avenue NE profile. The existing driveway on 124<sup>th</sup> Avenue NE will be maintained by this development in the interim condition until construction begins on the CIP project. From the time construction begins on the CIP project until the project is completed, the Public Storage site will gain access through the driveway on Northup Way. At the time 124<sup>th</sup> Avenue NE is constructed to the final elevation, the CIP project will construct the driveway approach in the new driveway location near the southeast corner of the site.

Pedestrian access to the site will be provided by a new 8-foot-wide sidewalk along Northup Way and 124<sup>th</sup> Avenue NE.

Loading, drop-off/pick-up, and garbage pickup will take place on site in the designated loading areas. Truck turning movement exhibits were submitted for review demonstrating that a

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garbage truck, fire truck, and an SU-40 can maneuver through the through the site. All loading, delivery, garbage and recycling services must be contained within the project site. No portion of the city right of way may be used for these services.

The driveway entrance on Northup Way will continue to be limited to right-in/right-out vehicle access only. There is an existing c-curb in Northup Way that prevents left turns in and out of the site. The future driveway entrance on 124<sup>th</sup> Avenue NE will be full access. Refer to Conditions of Approval regarding Provisions for Loading and Vehicular Access Restrictions in section XI.A of this report.

#### **Street Frontage Improvements**

In order to provide safe pedestrian and vehicular access in the vicinity of the site, and to provide infrastructure improvements with a consistent and attractive appearance, the construction of street frontage improvements is required as a condition of development approval. The design of the improvements must conform to the requirements of the Americans with Disabilities Act, the Transportation Development Code (BCC 14.60), and the provisions of the Transportation Department Design Manual.

The project site is located on the west side of 124<sup>th</sup> Avenue NE, just south of Northup Way. The site currently contains 9 existing self-storage buildings and a covered RV storage area, gaining access to 124<sup>th</sup> Avenue NE and Northup Way via two existing driveways. In the vicinity of this project, Northup Way is a five-lane road classified as a minor arterial, and 124<sup>th</sup> Avenue NE is a four-lane road classified as a major arterial. The site is bordered by the King County Metro Bus base to the west and south, commercial buildings to the west, and a storage building to the east. This development will replace three of the existing self-storage buildings and the covered RV storage area with a four-story self-storage building containing 183,768 square feet of self-storage space, which is a net increase of 160,516 square feet. There is currently an 8-foot-wide sidewalk along the Northup Way frontage, and no sidewalk with curb and gutter along the 124<sup>th</sup> Avenue NE frontage.

Frontage improvements will be required along Northup Way and 124<sup>th</sup> Avenue NE. There is a future CIP planned to reconstruct 124<sup>th</sup> Avenue NE from NE 8<sup>th</sup> Street to Northup Way. This CIP project plans to raise the grade of 124<sup>th</sup> Avenue NE significantly, widen 124<sup>th</sup> Avenue NE to five lanes, and construct an 8-foot wide sidewalk and 5-foot wide planter strip with and a large retaining wall along the Public Storage frontage. Due to the rise of the road profile by the CIP project, it is not feasible for the Public Storage development to construct the required 124<sup>th</sup> Avenue NE frontage improvements to match the final elevation of the future road. The Public Storage development will not be required to construct frontage improvements along 124<sup>th</sup> Avenue NE at the time of construction. The developer must pay a fee in lieu to the city equal to the cost of constructing the 124<sup>th</sup> Avenue frontage improvements. This includes the cost of constructing the sidewalk, planter strip, driveway approach, curb and gutter, and any private fence on the public retaining wall.

Frontage improvements required by the developer include:

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## 1. 124<sup>h</sup> Avenue NE

- a. Pay a fee in lieu of constructing frontage improvements equal to the cost of installing the 8-foot-wide sidewalk, 5-foot-wide planter strip, minimum 30-foot-wide driveway approach, any private fence required for site security, and curb & gutter.
- b. Coordinate any construction on 124<sup>th</sup> Avenue NE with the City's CIP contractor.

#### 2. Northup Way

- a. Install a minimum 8-foot-wide sidewalk, minimum 5-foot-wide planter strip, retaining wall, pedestrian safety railing, and new curb and gutter along the project frontage.
- b. Install reconstructed 38-foot-wide driveway approach.
- c. Street lighting along the frontage is required to meet City of Bellevue standards.

Refer to Conditions of Approval regarding Civil Engineering Plans – Transportation, Building and Site Plans – Transportation, Payment of Fee In Lieu of 124<sup>th</sup> Avenue NE Frontage Improvements and Street Frontage Improvements and Pavement Restoration in section XI.B, C & D of this report.

- A combined street tree and street light plan is required for review and approval prior to completion of engineering and landscape plans. The goal is to provide the optimum number of street trees while not compromising the light and safety provided by streetlights. Street trees and streetlights must be shown on the same plan sheet with the proper separation (generally 25 feet apart) and the proper spacing from driveways (ten feet from Point A in standard drawing SW-140-1 or equivalent).
- 2. The Americans with Disabilities Act (ADA) requires that sidewalk cross slopes not exceed two percent. The sidewalk cross slope may be less than two percent only if the sidewalk has a longitudinal slope sufficient to provide adequate drainage. Bellevue's standard for curb height is six inches, except where curb ramps are needed. The engineering plans must comply with these requirements, and must show adequate details, including spot elevations, to confirm compliance. New curb and sidewalk shall be constructed in compliance with these requirements. Building elevations shall be consistent with the required curb and sidewalk elevations. Spot elevations must be included in the building plans in a manner that proves that building elevations are designed to correspond to the sidewalk elevations shown in the engineering plans, especially at entrances and other key points. Curb and sidewalk elevations will not be revised to fit the building, and city inspectors may require spot surveys during construction in order to confirm the required elevations.

ADA also requires provision of a safe travel path for visually handicapped pedestrians. Potential tripping hazards are not allowed in the main pathway. Any planter boxes installed in the sidewalk to improve pedestrian sight distance at driveways must be designed to reduce the tripping potential and must not extend more than two feet into the public sidewalk. Traffic signal controller boxes and streetlight contactor cabinets must be located so as not to interfere with the main pedestrian path. Buildings shall be designed so that doors do not swing out into the pedestrian path. Installation of colored or textured bands to

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guide pedestrians in the direction of travel is advisable, subject to the requirements for non-standard sidewalk features. ADA-compliant curb ramps shall be installed where needed, consistent with City and WSDOT standard drawings. If such standards cannot be met, then deviation from standards must be justified on a Design Justification Form to be filed with the Transportation Department.

- 3. The new landscaping planter strip within the sidewalk along Northup Way shall be irrigated with a private metered water source. Electrical connections for lighting in planter strips may be allowed, if installed in compliance with the electrical code and subjected to an electrical inspection. Irrigation devices and electrical components shall not create a tripping hazard in the sidewalk. Installation of the proposed planter shall include a spray irrigation system, soil preparation, root barrier and plantings. Root barrier and soil preparation are described in Standard Drawings SW-120-1 and SW-130-1. Landscaping in the right-of-way shall be maintained by the abutting property owner(s) unless maintenance has been accepted by the city.
- 4. The driveway on Northup Way shall have an approach width of 38 feet, and the driveway approach on 124<sup>th</sup> Avenue shall have an approach width of at least 30 feet as defined in standard drawing SW-170-1 or equivalent. The driveway apron design shall be consistent with standard drawing SW-140-1 or equivalent.
- 5. To the extent feasible, no new utility vaults that serve only one development will be allowed within a public sidewalk. Vaults serving a broader public purpose may be located within a public sidewalk. To the extent feasible, no utility vaults may be located within the primary walking path in any sidewalk.
- 6. No fixed objects, including fire hydrants, trees, and streetlight poles, are allowed within ten feet of a driveway edge, defined as Point A in standard drawing SW-170-1 or equivalent. Fixed objects are defined as anything with breakaway characteristics greater than a four-inch by four-inch wooden post.

#### **Right-of-Way and Easements**

The applicant shall provide sidewalk and utility easements to the City as needed to encompass the full required width of any sidewalks and retaining walls located outside the city right of way fronting this site.

The street frontage improvements constructed by the applicant on Northup Way and 124<sup>th</sup> Avenue NE will move the back of the public sidewalk behind the right-of-way line and will require new easements to accommodate the public improvements. No additional right-of-way will be required on either frontage. On Northup Way and 124<sup>th</sup> Avenue NE, the applicant will be required to provide a sidewalk, utilities, and wall easement to the back of the new retaining wall. The applicant will also be required to provide wall maintenance easements for a minimum of 5 feet behind the retaining walls on 124<sup>th</sup> Avenue NE and NE Northup Way to provide city staff sufficient space to maintain these walls. **Refer to Conditions of Approval regarding Existing** 

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## <u>Easements, Sidewalk/Utility/Retaining Wall Easements and Retaining Wall Maintenance</u> <u>Easement in Section XI.B of this report.</u>

#### **Use of the Right of Way During Construction**

Applicants often request use of the right of way and of pedestrian easements for materials storage, construction trailers, hauling routes, fencing, barricades, loading and unloading and other temporary uses as well as for construction of utilities and street improvements. A Right of Way Use Permit for such activities must be acquired prior to issuance of any construction permit including demolition permit. Sidewalks may not be closed except as specifically allowed by a Right of Way Use Permit. Refer to Condition of Approval regarding Right-of-Way Use Permit in Section XI.B of this report.

#### **Pavement Restoration**

The City of Bellevue has established the Trench Restoration Program to provide developers with guidance as to the extent of resurfacing required when a street has been damaged by trenching or other activities. Under the Trench Restoration Program, every street in the City of Bellevue has been examined and placed in one of three categories based on the street's condition and the period of time since it has last been resurfaced. These three categories are, "No Street Cuts Permitted," "Overlay Required," and "Standard Trench Restoration." Each category has different trench restoration requirements associated with it. Damage to the street can be mitigated by placing an asphalt overlay well beyond the limits of the trench walls to produce a more durable surface without the unsightly piecemeal look that often comes with small strip patching.

Near the development site, Northup Way is classified as Grind and Overlay required. Should street cuts prove unavoidable or if the street surface is damaged in the construction process, a half-street or full-street (depending on the extent of street cuts or damage) grind and overlay will be required for a minimum of 50 feet.

Near the development site, 124<sup>th</sup> Avenue NE is classified as Standard Trench Restoration required. Any street cuts will require pavement restoration per standard drawing RC-190-1.

Refer to Condition of Approval regarding Pavement Restoration in Section XI.D of this report.

#### **B.** Utilities Review

The development proposed for this application has been reviewed on a conceptual basis and can be feasibly constructed under current utility codes and standards without requesting modifications or deviations from them. Major changes to the design or information submitted under this permit may cause delay in approval of future construction permits. It is the applicant's responsibility to verify the accuracy all field information and data gathered for the utility design and feasibility of this project. Refer to Condition of Approval regarding Utilities Conceptual Approval in Section XI.A of this report.

## C. Clearing and Grading

Clearing and Grading Permit Required: Approval of the Critical Areas Land Use Permit and the Design Review Applications does not constitute an approval of any construction permit. An application for a clearing and grading permit must be submitted and approved before

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construction can begin. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval and all geotechnical recommendations included in the Geotechnical Exploration and Analysis. Refer to Conditions of Approval regarding Clearing and Grading Permit Required, Geotechnical Review: Geotechnical Inspection and Rainy Season Restrictions in Section XI.B of this report

#### D. Fire

The Bellevue Fire Department Prevention Division has reviewed the submittal in accordance with the 2015 International Fire Code, 2015 International Building Code, City of Bellevue requirements, and good fire protection practices. This review was based upon, and limited to, the information presented on drawings and/or materials received in our office. The Fire Department can approve the application, subject to the following conditions. <a href="Refer to Conditions of Approval regarding Automatic Standpipe System">Refer to Conditions of Approval regarding Automatic Standpipe System</a>, Emergency Responder Radio System and Key-Box Access System in Section XI.C of this report.

#### E. Building

Approved. There are no Building Division conditions applicable to this stage of the design process. A complete review for compliance with applicable building codes will occur under the Building permit application(s).

## VII. STATE ENVIRONMENTAL POLICY ACT (SEPA)

Environmental review is required for the proposal under the State Environmental Policy Act (SEPA), Chapter 43.21C RCW and Washington Administrative Code (WAC) 197-11, and the City's Environmental Procedures Code, Chapter 22.02 of the Bellevue City Code (BCC). Taken together, the A) Environmental Checklist in **Attachment B** of this report, together with B) information provided below and C) in the remainder of this report, and D) and in the official project file, adequately disclose expected environmental impacts associated with the Master Development Plan and Design Review approval. The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under SEPA.

Adverse impacts which are less than significant are subject to City Codes or Standards, which are intended to mitigate those impacts. In cases where the City has adopted development regulations to systematically avoid or mitigate adverse impacts, those standards and regulations, where applicable, will normally constitute adequate mitigation of the impacts. Where such impacts and regulatory items correspond, further documentation is not necessary. Where impacts and regulations do not correspond, or where unanticipated impacts are not mitigated by existing regulations, BCC 22.02.140 provides substantive authority to mitigate impacts disclosed through the environmental review process.

A discussion of the impacts associated with the project is noted below, together with any specific conditions of approval. These impacts will be mitigated to less than significant through exercise of Code authority as well as through project-specific Conditions of Approval contained in Section XII of this report.

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## A. Land Use/Environmental Health/Noise

#### 1. Construction Vehicle Pollution:

To mitigate for air pollution generated by construction vehicles while transporting materials to and from the site, all construction vehicles will be required to cover their loads per the requirements of the Revised Code of Washington (RCW) 46.61.655. Refer to Condition of Approval regarding Air Pollution from Construction Vehicles and Equipment in Section XI.A this report.

2. <u>Construction Noise</u>: While construction noise and increased vehicle trips are expected during the construction period, the Bellevue Noise Control Ordinance, BCC 9.18, regulates hours of construction-related noise emanating from the site. The Ordinance provides for an exemption from the noise restrictions for the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. on Saturdays which are not legal holidays. Therefore, no specific measures to reduce noise during this period are proposed. <u>Refer to Condition of Approval regarding Construction Hours in Section XI.A of this report.</u>

#### B. Transportation

## **Long Term Impacts and Mitigation**

The City has prepared a traffic forecasting model for the 2030 horizon year to assess cumulative impacts that may result from growth and development during that period. This modeling analysis is based on a projected land use scenario and improvements to the transportation system that would occur during this time period.

Under the level of service standard detailed in the Transportation Code, the City is divided into 14 Mobility Management Areas (MMAs), each with an area average standard and a congestion management standard. The traffic modeling shows that all of the MMAs would meet both standards. This project proposes to add a net increase 160,516 sf of storage space in MMA 12. This level of development is within the assumptions of the City's traffic modeling and does not require additional mitigation.

In addition, traffic impact fees are used by the City to fund street improvement projects to alleviate traffic congestion caused by the cumulative impacts of development throughout the City. Payment of the transportation impact fee, as required by Chapter 22.16 BCC, contributes to the financing of transportation improvement projects in the current adopted Transportation Facilities Plan, and is considered to be adequate mitigation of long-term traffic impacts. Fee payment is required at the time of building permit issuance. Impact fees are subject to change and the fee schedule in effect at the time of building permit issuance will apply. Refer to Condition of Approval regarding Transportation Impact Fee in Section XI.C of this report.

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## Mid-Range Impacts and Mitigation

Project impacts anticipated to occur in the next six years are assessed through a concurrency analysis. The Traffic Standards Code (BCC 14.10) requires that development proposals generating 30 or more new p.m. peak hour trips undergo a traffic impact analysis to determine if the concurrency requirements of the State Growth Management Act are maintained.

The Public Storage 124<sup>th</sup> West development will generate approximately 26 new p.m. peak hour trips. A conservative estimate of 43 new p.m. peak hour trips was used in the traffic analysis for this project. That number was used to check for concurrency. City staff distributed and then assigned project-generated trips to the street network using the City's EMME-2 travel forecasting model with the current Capital Investment Program network. By adding the expected project-generated trips to the traffic volumes in the model, the area average levels of service were determined. To create a baseline condition for comparison, the levels of service were also determined using traffic volumes without the project-generated trips. In this project analysis, four system intersections received 20 or more p.m. peak hour trips.

Neither the maximum area-average levels of service nor the congestion allowances would be exceeded as a result of traffic generated from this proposal. Therefore, the proposed development passes the concurrency test. The concurrency test results are included in the Transportation Department file for this development. A concurrency determination is issued on the date of issuance of the land use decision. This project complies with the Traffic Standards Code and is receiving a Certificate of Concurrency in **Attachment E** of this report.

The rules of concurrency reservation are outlined in the Traffic Standards Code Director's Rules. The concurrency determination is reserved to this project at the land use decision date. The concurrency reservation expires one year from the land use decision date unless a complete building permit application is filed (BCC 14.10.040.F).

#### **Short Term Operational Impacts and Mitigation**

City staff directed the applicant's traffic consultant, TENW, to analyze the short-term operational impacts of this proposal in order to recommend mitigation if necessary. The project trips were calculated, and concurrency was determined at that time for use to complete the TIA. After the concurrency model was run, the building plan was modified to reduce the total building area which resulted in a reduced trip generation below 30 p.m. peak hour trips. The analysis in the TIA used the higher conservative estimate to determine system impacts.

The analysis reviewed the operations of the system intersections impacted by this development, which include:

- 1. Northup Way and 124th Avenue NE.
- 2. Site access and 124th Avenue NE.
- 3. Site access and Northup Way.

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All intersections remained at acceptable LOS levels with the proposed transportation infrastructure improvements. These improvements include frontage improvements along Northup Way NE and 124<sup>th</sup> Avenue NE adjacent to the proposed development.

To improve pedestrian connectivity and as part of the project's required frontage improvements, the project will construct a 8-foot-wide a sidewalk and 5-foot-wide planter strip along the Northup Way frontage, and pay a fee in lieu to the 124<sup>th</sup> Avenue NE CIP project to construct an 8-foot-wide sidewalk and 5-foot-wide planter strip along the 124<sup>th</sup> Avenue NE frontage.

#### C. Utilities

#### **Surface Water**

The site is located within the West Tributary Drainage Basin. Storm water from the site currently drains to the southwest through private property and is conveyed via private and public storm drainage pipes and eventually discharges to Lake Washington. The development will be required to mitigate for minimum requirements 1-9 from the Washington State Department of Ecology Stormwater Management Manual for Western Washington. The site currently outfalls directly to West Tributary stream with associated wetland directly downstream and will continue to use the existing outfall meeting minimum requirement 4. The development will be required to maintain the current wetland hydroperiod to comply with minimum requirement 8. Minimum requirement 7 will not be implemented unless it is needed to meet minimum requirement 8. The site will trigger water quality treatment, minimum requirement 6 and has proposed a facility can be constructed to meet the requirement. The remainder of the minimum requirements will be met with submittal of construction permits.

#### Water & Sewer

Domestic water for the site proposes to connect domestic water for the site from an existing 12" water main located in 124<sup>th</sup> Ave NE. A private fire line will be connected off the existing 12" water main on the south side of the site and will connect northeast to an existing water main on the west edge of the property. A section of existing water main will be removed on the south side of the site and had been determined by the Utility Department to no longer be needed. There is adequate capacity in the system to serve the development. Domestic sewer for the site is available from a sewer main located in 124<sup>th</sup> Ave NE. There is adequate capacity in the system to serve the development.

## VIII. CHANGES TO THE PROPOSAL DUE TO STAFF REVIEW

#### A. Master Development Plan

1. Submittal Critical Areas Land Use Permit to modify critical area and/or critical area buffer on site for approval of proposed self-storage building and associated site development.

#### B. Design Review

- 1. Provided arterial street-frontage landscaping along Northup Way
- 2. Provided further modulation to reduce extent of flat metal panel siding on building.
- 3. Simplified materials color palette for building.

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#### C. Critical Area Land Use Permit

- 1. Revised the West Tributary of Kelsey Creek to Type-F water
- 2. Modified wetland/stream buffers to exclude footprint of existing structures on site prior to August 1, 2006.
- Revised Critical Areas Report to address specific criteria and provide narrative to demonstrate how the proposal meets applicable performance and decision criteria in LUC 20.25H
- 4. Provided mitigation planting at a 1:1 ratio for stream and wetland critical area buffer impacted by the proposed self-storage building and associated site development per LUC 20.25H.105.C.3.

#### IX. DECISION CRITERIA

## A. Master Plan Development Plan (MDP)

1. 20.30V.130 - Phasing Plan:

A phasing plan for installation of site improvements, landscaping and amenities necessary to support each phase of development must be approved as part of the Master Development Plan.

Finding: The applicant has proposed a phasing plan as described in Section I of this report.

- 2. Per Land Use Code 20.30V.150, the Director may approve or approve with modifications an application for a Master Development Plan if:
  - a. The proposed Master Development Plan is consistent with the Comprehensive Plan. Finding: The proposal is located in the Bel-Red Subarea and zoned BR-OR. The existing self-storage use is permitted outright in the BR-OR district. The proposed MDP will be consistent with the Comprehensive Plan and Bel-Red Subarea policies, as described below.
    - Policy UD-3: Encourage a variety of site and building designs which are compatible and consistent with surrounding development.
       Finding: The proposed MDP will meet this objective by creating a site and generalized building design that will be compatible and consistent with existing self-storage development in the surrounding vicinity.
    - Policy UD-55: Exemplify the Pacific Northwest character through the use of appropriate plants in new landscaping

**Finding:** The proposed MDP will meet this objective through the use of native plantings in site perimeter landscaped areas, including the area of mitigation planting for the proposed modifications to stream and wetland critical area buffers and stream structure setback as described in the Critical Area Report and Detailed Mitigation Plan in Attachment C of this report.

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b. The Master Development Plan complies with the applicable requirements of the Bellevue City Code; and

**Finding:** As shown in Section III, the proposed MDP will comply with all applicable development regulations of the Bellevue City Code.

- c. The proposed Master Development Plan addresses all applicable standards, guidelines or criteria of this Code in a manner which fulfills their purpose and intent; and Finding: As conditioned, the proposed MDP will comply with the applicable requirements of the Bellevue City Code. Refer to Section III, Consistency with Land Use Code/Zoning Requirements for a full discussion regarding MDP consistency with the Land Use Code, and Section IV regarding how the proposed MDP will meet Bel Red Design Guidelines.
- d. The Master Development Plan depicts features of and relationships and connectivity between required site features for the underlying Land Use District.
  Finding: The associated Design Review includes landscaping and frontage improvements that are consistent with the underlying land use district.

## B. Design Review Decision Criteria (LD)

Per LUC 20.30F.145, the Director may approve or approve with modifications an application for a Design Review application if:

1. The proposal is consistent with the Comprehensive Plan; and

**Finding:** As conditioned, the proposal will be consistent with the Comprehensive Plan and Bel-Red Subarea Plan. Staff has reviewed the policies which apply to the project and has determined that applicable policies will be implemented through the application of City Codes and the adopted Design Guidelines identified in the Bel-Red chapter of the Land Use Code. The proposal is consistent with the Comprehensive Plan, including the following applicable goals and policies of the Bel-Red Subarea Plan:

#### Bel-Red Subarea Vision:

- Environmental improvements: Redevelopment of the corridor will provide opportunities for major environmental enhancements, including improving riparian corridors, adding trees and green spaces, and providing a more environmentally sensitive approach to managing storm water and other natural resources.
   Finding: The project will improve the West Tributary Kelsey Creek riparian corridor through new stream and wetland buffer planting area as described in the Critical Area Report and Mitigation Plan in Attachment C of this report.
- Policy S-BR-19: Encourage the use of building materials that are of high quality and durability, are appropriate for the area climate, and that have a sense of permanence.

**Finding:** As described in Section I of this report, the proposed building materials, including the CMU base, vision glass and metal panel siding will be durable and appropriate for the area's climate.

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2. The proposal complies with the applicable requirements of this Code; and Finding: As conditioned, the proposal will comply with all applicable requirements of the Land Use Code. Refer to discussion Section III.B for Consistency with Land Use Code/Zoning

Requirements and Section III.C for discussion regarding compliance with Critical Area requirements.

requirements.

3. The proposal addresses all applicable design guidelines or criteria of this Code in a manner which fulfills their purpose and intent; and

**Finding:** As conditioned, the proposal complies with applicable requirements of the Land Use Code. Refer to Section I for discussions on the overall site and building design, and Section IV for discussions on Bel-Red Design Guidelines.

4. The proposal is compatible with and responds to the existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity; and

*Finding:* As conditioned, the project meets this criterion.

5. The proposal will be served by adequate public facilities including streets, fire protection and utilities; and

**Finding:** All urban level public utilities/infrastructure are available to the site or will be constructed/installed as part of this development. All applicable City departments have reviewed the proposal and required associated conditions as necessary. Refer to Section VI of this report for technical review.

6. The proposal is consistent with any required Master **Development** Plan approved pursuant to Part 20.30V LUC or other applicable code section.

*Finding:* As conditioned, the proposal will be consistent with the associated Master Development Plan and with the Critical Areas Land Use Permit in LUC 20.25H.

- C. Critical Areas Decision Criteria (LO)
  - Critical Areas Report Decision Criteria- Proposals to Reduce Regulated Critical Area Buffer LUC 20.25H.255:

The Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

a. The proposal includes plans for restoration of degraded critical area or critical area buffer function which demonstrate a net gain in overall critical area or critical area buffer functions.

Finding: The Critical Areas Report and Detailed Mitigation Plan (Critical Areas Report) submitted by Talasaea Consultants identifies that critical area stream and wetland buffers are in a degraded condition due to the presence of existing buildings and paved areas (site improvements). Due to the presence of these improvements, stream and wetland buffer functions are degraded and limited. The applicant proposes to reestablish 8,958 SF of wetland and stream buffer enhancement by planting native stream and wetland buffer vegetation at the southwest corner of the site. The

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installation of the proposed vegetation will demonstrate a net gain in overall critical area buffer functions. Refer to Attachment C of this report.

- b. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;
  - **Finding:** The proposal will not directly impact the critical area stream and wetland adjacent to the site. The West Tributary is an important fish bearing stream in the Kelsey Basin. Removing impervious surface and restoring the area with native vegetation will enhance the existing degraded conditions and improve overall function in the riparian and wetland environments. The improved functions will directly improve ecosystem quality for wildlife and overall stormwater functions. The proposal will restore 8,958 SF of degraded stream and wetland buffer, which will demonstrate a net gain of important functions to the critical area buffer.
- c. The proposal includes a net gain in storm water quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;

**Finding:** As discussed above, the proposed removal of existing impervious surface area and installation of native vegetation mitigation planting will improve stormwater treatment and quality. All planting will be required to be consistent with the City's Critical Areas Handbook and Environmental Best Management Practices for use of pesticides, insecticides, and fertilizers. **Refer to the Condition of Approval regarding Pesticides, Insecticides, and Fertilizers in Section XI.B of this report.** 

d. Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;

**Finding:** Mitigation planting will be required as indicated in Attachment B. Initial installation of the mitigation planting will be field verified by the City of Bellevue. Following field verification, the applicant, via Talasaea Consultants, Inc. will monitor the mitigation planting for five years, and will be required to provide annual reports containing photographic documentation. Refer to the Conditions of Approval regarding Final Mitigation Plan, Monitoring Reports and Maintenance and Monitoring Surety in Section XI.B & D of this report.

e. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers offsite.

**Finding:** The modifications and proposed mitigation planting will not be detrimental to the functions and values of critical area and critical area buffer off-site. The proposed self-storage building and associated paved areas will only impact the existing critical area stream and wetland buffer at the southwest corner of the site but will have no direct impact to the stream and associated wetland area off-site. The proposed mitigation planting will increase stream and wetland buffer functions and values over

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the existing conditions. The proposal complies with the applicable performance standards for streams and wetland as discussed in Section III of this report.

f. The resulting development is compatible with other uses and development in the same land use district.

**Finding:** The development of the proposed self-storage building within the BR-OR district is permitted via the Land Use Code and will be compatible with existing self-storage developments in the district.

# 2. Critical Area Land Use Permit Decision Criteria

Per LUC 20.30P.140, the Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

- a. The proposal obtains all other permits required by the Land Use Code; Finding: The applicant will be required to obtain a clearing and grading permit, a construction permit and all ancillary permits for the project. The clearing and grading permit must be consistent with and reference this approval. Refer to the Condition of Approval regarding Utilities Conceptual Approval and Clearing and Grading Permit in Sections XI.A & B of this report.
- b. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

**Finding:** The project will utilize, to the maximum extent possible, the best available construction techniques to have the least impact on the critical area stream and wetland buffer. The proposal will locate the new self-storage building within existing impervious surface area rather than disturbing additional wetland buffer area containing existing vegetation. The impervious surface area removed will be replaced with native species that are stream and wetland appropriate.

c. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and;

*Finding:* As discussed in Section III of this report, performance standards will be met.

d. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

Finding: The proposed activity will not affect public services or facilities.

e. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210;

Finding: A mitigation plan is provided in the Critical Areas Report in Attachment B. Maintenance and monitoring will be required for five years. Refer to the Conditions of Approval regarding Clearing and Grading Permit, Final Mitigation Plan, Final Mitigation Plan Performance Standards and Maintenance and Monitoring in Section XI.B of this report.

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f. The proposal complies with other applicable requirements of this code.
Finding: As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

# X. DECISION

After conducting the various administrative reviews associated with the proposal, including applicable Land Use Code consistency, City Code, SEPA and standard compliance reviews, the Director does hereby **APPROVE WITH CONDITIONS** the subject proposal.

Note- Expiration of Approval of Critical Areas Land Use Permit: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a clearing and grading permit or other necessary development permits within one year of the effective date of the approval.

# XI. CONDITIONS OF APPROVAL

The following conditions are imposed on the applicant under the authority referenced:

# A. GENERAL CONDITIONS:

# 1. Compliance with Bellevue City Codes and Ordinances

Compliance with all applicable Bellevue City Codes and Ordinances including but not limited to the following is required:

Clearing and Grading Code - BCC 23.76	Savina Uzunow,	425-452-7860
Bellevue Development Standards	Ian Nisbet,	425-452-4851
Transportation Code - BCC 14.60	Ian Nisbet,	425-452-4851
Trans. Improvement Program - BCC.22.16	lan Nisbet,	425-452-4851
Right-of-Way Use Permit - BCC 14.30	Tim Stever,	425-452-4294
Bellevue Utilities Code - BCC Title 24	Mark Dewey,	425-452-6179
Construction Codes - BCC Title 23	Chuck Miller,	425-452-7243
Code - BCC Title 20	Mark C. Brennan,	425-452-2973
Sign Code - BCC Title 22B	Mark C. Brennan,	425-452-2973
Noise Control - BCC 9.18	Mark C. Brennan,	425-452-2973
Uniform Fire Code - BCC 23.11	Bill Lehner	425-452-2925
	Glen Albright	425-452-4270
Parks Department	Tom Kuykendall,	425-452-7924
	Merryn Hearn	425-452-4100

# 2. Construction Hours

Noise related to construction is allowed from 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturday. Exceptions to the construction noise hours limitation contained in the Noise Control Code MAY be granted pursuant to 9.18.020C.1 when necessary to accommodate construction which cannot be undertaken during exempt hours. Prolonged exposure to noise created by extended hour construction activity would likely have a significant impact on the surrounding residents. In order to minimize detriment to nearby residential uses, the contractor shall not rely on City issuance of a

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blanket exemption from the Noise Control Code during the construction period. Allowances for short term work outside of normal construction hours shall be limited and will be reviewed on a case by case basis to verify necessity and ensure appropriate noise mitigation is utilized to protect surrounding uses and properties. Requests for exemption from the Noise Control Code must be submitted in writing two weeks prior to the scheduled onset of extended hour construction activity. Such request shall include a noise analysis prepared by a noise consultant, including recommendations for achieving the noise limitations of the Noise Ordinance for new residential construction.

AUTHORITY: Bellevue City Code 9.18.040

REVIEWER: Mark C. Brennan, Land Use Division

# 3. Modification to the Master Development Plan (MDP)

Any modification to this approval shall be processed as either a 1) New Master Development Plan OR 2) as a Land Use Exemption to the Master Development Plan in this approval. The applicant shall demonstrate compliance with the Land Use Code in effect at the time of issuance of this report. Any modification of the MDP must be reviewed for consistency with the design intent as stated in this report. Conditions of Approval run for the life of the project. Any subsequent modifications, once approved by either of the processes stated above, shall be recorded with the King County Division Recorder's Office or its successor agency.

AUTHORITY: LUC 20.30V.160, 180 and 190
REVIEWER: Mark C. Brennan, Land Use Division

# 4. Design Review Modifications

Any modification to this approval shall be processed as either 1) a new Design Review decision, or 2) an addition or revision to this issued land use approval, processed as a Land Use Exemption. The applicant shall demonstrate compliance with the Land Use Code in effect at the time of issuance of this report. Any modification of the project design must be reviewed for consistency with the design intent as stated in this report. Conditions of Approval run for the life of the project.

AUTHORITY: LUC 20.30F.175

REVIEWER: Mark C. Brennan, Land Use Division

# 5. Provisions for Loading

The property owner shall provide an off-street loading space which can access a public street. This must include an off-street location for garbage pick-up, which must be acceptable to the garbage hauler. On-street loading and unloading will not be permitted.

AUTHORITY: LUC 20.20.590.K.4; BCC 14.60.180

REVIEWER: Mark C. Brennan, Land Use Division, Ian Nisbet, Transportation

(425) 452-4851

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# 6. Vehicular Access Restrictions

Access to this site from Northup Way will continue to be restricted to right-turn-in and right-turn-out only. This will be achieved through maintaining the existing c-curb on Northup Way and providing signage as specified in the final civil engineering plans for the development.

AUTHORITY: BCC 14.60.150

REVIEWER: Ian Nisbet (425) 452-4851

# 7. Air Pollution from Construction Vehicles and Equipment

Construction vehicles and heavy construction equipment shall emit the least amount of air pollution as possible. While on city streets, all construction vehicles shall meet the requirements of the Revised Code of Washington 46.61.655 for covered loads.

AUTHORITY: State Environmental Policy Act, Bellevue City Code, 23.76, Revised

Code of Washington 46.61.655

REVIEWER: Mark C. Brennan, Land Use Division

# 8. Utilities Conceptual Approval

Utility Department approval of the design review application is based on the final conceptual design submitted with this application. Small changes to the site layout may be required to accommodate the utilities after utility engineering is approved. The water, sewer, and storm drainage systems shall be designed per the current City of Bellevue Utility Codes and Utility Engineering Standards. Utilities Department design review, plan approval, and field inspection is performed under the Utility Developer Extension Agreement (DEA) and Utilities Permit Processes. A water, sewer and storm Developer Extension Agreement will be required for the project. The Utility Developer Extension Agreement is required to be approved, constructed and accepted by the Utility Department prior to granting Temporary Certificate of Occupancy for the new building. Public and private easements for water, sewer and storm water facilities will be required where applicable. An easement relinguishment is required to be completed prior to building permit approval.

AUTHORITY: BCC 24.02, 24.04, 24.06

REVIEWER: Mark Dewey, Utilities Department

# **B. PRIOR TO CLEARING AND GRADING PERMIT:**

The following conditions are imposed to ensure compliance with the relevant decision criteria and Code requirements and to mitigate adverse environmental impacts not addressed through applicable Code provisions. These conditions must be complied with on plans submitted with the <u>Clearing & Grading or Demolition permit application</u>:

9. Clearing and Grading Permit Required: Approval of the Critical Areas Land Use Permit and the Design Review Applications does not constitute an approval of any construction permit. An application for a clearing and grading permit must be submitted and approved before construction can begin. Plans submitted as part of any permit application shall be consistent

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with the activity permitted under this approval and all geotechnical recommendations included in the Geotechnical Exploration and Analysis.

AUTHORITY: Land Use Code 20.30P.140, Clearing & Grading Code 23.76.035

REVIEWER: Savina Uzunow, Development Services Department, Clearing & Grading

Section

**10. Geotechnical Review:** The project geotechnical engineer must review the final construction plans, including all retaining walls and foundation designs. A letter from the geotechnical engineer stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

AUTHORITY: Clearing & Grading Code 23.76.050

REVIEWER: Savina Uzunow, Development Services Department, Clearing & Grading

Section

**11. Geotechnical Inspection:** The project geotechnical engineer must provide geotechnical inspection during project construction, including retaining walls, subgrades for foundations and footings, and any unusual seepage, slope, or subgrade conditions.

AUTHORITY: Clearing & Grading Code 23.76.050, Clearing & Grading Code 23.76.160
REVIEWER: Savina Uzunow, Development Services Department, Clearing & Grading

Section

**12. Rainy Season Restrictions**: Due to critical area proximity, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

AUTHORITY: Bellevue City Code 23.76.093.A,

REVIEWER: Savina Uzunow, Development Services Department, Clearing & Grading

Section

# 13. Right-of-Way Use Permit

Prior to issuance of any construction or clearing and grading permit, the applicant shall secure applicable right-of-way use permits from the City's Transportation Department, which may include:

- a) Designated truck hauling routes.
- b) Truck loading/unloading activities.
- c) Location of construction fences.
- d) Hours of construction and hauling.
- e) Requirements for leasing of right of way or pedestrian easements.

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- f) Provisions for street sweeping, excavation and construction.
- g) Location of construction signing and pedestrian detour routes.
- h) All other construction activities as they affect the public street system.

In addition, the applicant shall submit for review and approval a plan for providing pedestrian access during construction of this project. Access shall be provided at all times during the construction process, except when specific construction activities such as shoring, foundation work, and construction of frontage improvements prevent access. General materials storage and contractor convenience are not reasons for preventing access.

The applicant shall secure sufficient off-street parking for construction workers before the issuance of a clearing and grading, building, a foundation or demolition permit.

AUTHORITY: BCC 11.70 & 14.30

REVIEWER: Tim Stever (425) 452-4294

# 14. Civil Engineering Plans - Transportation

Civil engineering plans produced by a qualified engineer must be approved by the Transportation Department prior to issuance of the clearing and grading permit. The design of all street frontage improvements and driveway accesses must be in conformance with the requirements of the Americans with Disabilities Act, the Transportation Development Code, the provisions of the Transportation Department Design Manual, and specific requirements stated elsewhere in this document.

All relevant standard drawings from the Transportation Department Design Manual shall be copied exactly into the final engineering plans. Requirements for the engineering plans include, but are not limited to:

- a) Traffic signs and markings.
- b) Curb, gutter, sidewalk, and driveway approach design. The engineering plans shall be the controlling document on the design of these features; architectural and landscape plans must conform to the engineering plans as needed.
- c) Curb ramps, crosswalk revisions, and crosswalk equipment such as pushbuttons.
- d) Sight distance. Show the required sight triangles and include any sight obstructions, including those off-site. Sight distance triangles must be shown at all driveway locations and must consider all fixed objects and mature landscape vegetation. Vertical as well as horizontal line of sight must be considered when checking for sight distance.
- e) Landings on sloping approaches are not to exceed a 7% slope for a distance of 30 feet approaching the back edge of sidewalk. Driveway grade must be designed to prevent vehicles from bottoming out due to abrupt changes in grade.
- f) Location of fixed objects in the sidewalk or near the driveway approach.
- g) Trench restoration within any right of way or access easement.
- h) Retaining walls supporting public infrastructure.

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Specific requirements are detailed below.

Frontage improvements required by the developer include:

# 1. 124<sup>h</sup> Avenue NE

- a. Pay a fee in lieu of constructing frontage improvements equal to the cost of installing the 8-foot-wide sidewalk, 5-foot-wide planter strip, minimum 30-foot-wide driveway approach, any private fence required for site security, and curb & gutter.
- b. Coordinate any construction on 124<sup>th</sup> Avenue NE with the City's CIP contractor.

# 2. Northup Way

- a. Install a minimum 8-foot-wide sidewalk, minimum 5-foot-wide planter strip, retaining wall, pedestrian safety railing, and new curb and gutter along the project frontage.
- b. Install reconstructed 38-foot-wide driveway approach.
- c. Street lighting along the frontage is required to meet City of Bellevue standards.

Construction of all street and street frontage improvements must be completed prior to closing the clear and grade permit and right of way use permit for this project. A Design Justification Form must be provided to the Transportation Department for any aspect of any pedestrian route adjacent to or across any street that cannot feasibly be made to comply with ADA standards. Design Justification Forms must be provided prior to approval of the clear and grade plans for any deviations from standards that are known in advance. Forms provided in advance may need to be updated prior to project completion. For any deviations from standards that are not known in advance, Forms must be provided prior to project completion.

AUTHORITY: BCC 14.60; Transportation Department Design Manual; Americans with

Disabilities Act

REVIEWER: Ian Nisbet (425) 452-4851

# 15. Sidewalk/Utility/Retaining Wall Easements

The applicant shall provide sidewalk, utility, and wall easements to the City such that sidewalks and retaining walls outside of the City right of way along the property frontage are located within an easement area.

On 124<sup>th</sup> Avenue NE, the applicant is required to provide a sidewalk, utilities, and retaining wall easement to accommodate the required frontage improvements to be installed by the CIP project.

Northup Way will require a sidewalk, utilities, and retaining wall easement to accommodate the new frontage improvements and retaining wall.

AUTHORITY: BCC 14.60.100

REVIEWER: Ian Nisbet (425) 452-4851

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# 16. Retaining Wall Maintenance Easements

The applicant shall provide retaining wall maintenance easements to the City such that 5 feet behind retaining walls outside of the City right of way along the property frontage are located within an easement area sufficient for maintenance of the wall.

A minimum 5-foot-wide retaining wall maintenance easement will be required behind any retaining wall supporting the public sidewalk along the Northup Way and 124<sup>th</sup> Avenue NE frontages.

AUTHORITY: BCC 14.60.100

REVIEWER:: lan Nisbet (425) 452-4851

# 17. Final Landscape and Irrigation Plans

- a. General: Final Landscape and Irrigation Plans shall be submitted with the Clearing and Grading Permit application for review by the Land Use Division, the Parks Department, and the Utilities Department. Also see Condition of Approval regarding the streetscape irrigation (right-of-way and site) below.
- b. Any significant modification of these plans will require additional review and approval.
- c. Final Landscape and Irrigation Plans approved under the Clearing and Grading Permit shall be included in the building permit set for reference only. Each sheet shall be labeled "FOR REFERENCE ONLY – REFER TO CLEARING AND GRADING PERMIT NUMBER XX-XXXXXX-GD FOR APPROVED LANDSCAPE AND IRRIGATION PLANS".

AUTHORITY: Land Use Code 20.25D.110

REVIEWER: Mark C. Brennan, Land Use Division

## 18. Final Mitigation Plan:

A Final Mitigation Plan is required to be submitted and approved with a Clearing & Grading Permit. The Final Mitigation Plan shall be consistent with the mitigation plan approved in this permit (See Attachment \*). The Final Mitigation Plan shall show planting locations, plant species, plant quantities and size of plant material.

AUTHORITY: Land Use Code 20.25H.220

REVIEWER: Mark C. Brennan, Land Use Division

# **19. Final Mitigation Plan Performance Standards:**

The Final Mitigation Plan shall include performance standards to measure the successful establishment of the mitigation plantings. The following performance standards are acceptable and shall be included on the final mitigation plans:

**Year 1** (from date of plant installation)

- 100% survival of all installed plants and/or replanting in following dormant season to re-establish 100%
- Maximum 10% coverage of invasive plants in planting area

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Year 2 (from date of plant installation)

- At least 90% survival of all installed material
- Maximum 10% coverage of invasive plants in planting area

# Year 3, 4, & 5 (from date of plant installation)

- At least 85% survival of all installed material
- Maximum 10% coverage of invasive plants in planting area

AUTHORITY: Land Use Code 20.25H.220

REVIEWER: Mark C. Brennan, Land Use Division

# 20. Maintenance and Monitoring

The Maintenance and Monitoring plan and performance standards in the critical areas report (Attachment C) is required to be included with the project plans submitted under a construction permit. Monitoring is required for five years. A copy of the annual monitoring report is required to be provided to the Environmental Planning Manager for the Land Use Department.

AUTHORITY: Land Use Code 20.30P.140; 20.25H.220 REVIEWER: Mark C. Brennan, Land Use Division

# 21. Street Trees and Right-of-Way/Streetscape Landscaping

- a. Planting shall be done according to the Parks Department Best Management Practices and Design Standards in place at the time of construction.
- b. <u>Prior to ordering</u>, confirm cultivars of all street trees with City of Bellevue Parks Department. Contacts are:
  - Tom Kuykendall, <u>tkuykendall@bellevuewa.gov</u>, 425-452-7924, or
  - Merryn Hearn, MHearn@Bellevuewa.gov, 425-452-4100
- c. A Parks Department representative shall be on-site to inspect street trees **prior to planting** *AND* **at the time of planting** to observe the installation. Contact Parks Department Resource Management at (425) 452-6855 or the Parks Department contacts listed above at least 24 hours before planting to schedule the inspection.

AUTHORITY: LUC 20.25D.110

REVIEWERS: Reviewer, Parks Department &

Mark C. Brennan, Land Use Division

# 22. Pesticides, Insecticides, and Fertilizers:

The applicant must submit as part of the required construction permit information that shows conformance to the use of pesticides, insecticides, and fertilizers found in the City of Bellevue's "Environmental Best Management Practices".

AUTHORITY: Land Use Code 20.25H.080 and LUC 20.25H.100

REVIEWER: Mark C. Brennan, Land Use Division

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# 23. Streetscape Irrigation (Right-of-Way and Site)

- a. The irrigation system for all street trees and landscaping within the right-of-way shall be on a separate water meter and controller that can be accessed 24 hours a day by the City of Bellevue. Include automatic operation and rain sensors to override the automatic cycle if needed. Coordinate the exact location and design with the Parks Department prior to irrigation installation.
- b. No drip irrigation will be allowed within any City right-of-way.
- c. Schedule 40 irrigation pipe is required.
- d. There shall be minimum 4-inch diameter sleeve under all new sidewalks and driveways.
- e. If the irrigated area exceeds 500 square feet, then the landscape irrigation budgeting section of the Water Code applies.
- f. Parks Department Contacts:
  - Tom Kuykendall, tkuykendall@bellevuewa.gov or (425) 452-7925; or
  - Merryn Hearn, <u>MHearn@Bellevuewa.gov</u> or (425) 452-4100

AUTHORITY: Bellevue City Code Land Use Code REVIEWER: Reviewer, Parks Department and

Mark C. Brennan, Land Use Division

# C. PRIOR TO BUILDING PERMIT:

The following conditions are required by City Code. Unless otherwise specified below, these conditions must be complied with on plans submitted with the <u>Building Permit application</u>:

# 24. Automatic Standpipe System

Per the 2015 International Fire Code (IFC) the building shall be protected by an automatic standpipe system.

AUTHORITY: IFC 905

REVIEWER: Glen Albright, Bellevue Fire Department Fire Prevention Division

# 25. Emergency Responder Radio System

Per the 2015 International Fire Code (IFC) the building shall have an Emergency Responder Radio System.

AUTHORITY: IFC 510

REVIEWER: Glen Albright, Bellevue Fire Department Fire Prevention Division

# 26. Key-Box Access System

A key-box access system shall be provided in accordance with the International Fire Code. The location and type shall be approved by the Fire Department.

AUTHORITY: IFC

REVIEWER: Glen Albright, Bellevue Fire Department Fire Prevention Division

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# 27. Transportation Impact Fee

Payment of the traffic impact fee will be required at the time of building permit issuance. If multiple building permits will be issued, the impact fee will be tied to the primary aboveground permit. Impact fees are subject to change and the fee schedule in effect at the time of building permit issuance will apply.

AUTHORITY: Bellevue City Code 22.16 REVIEWER: Ian Nisbet (425) 452-4851

# 28. Building and Site Plans - Transportation

The building grade and elevations shall be consistent with the curb and sidewalk grade shown in the approved civil engineering plans. During construction, city inspectors may require additional survey work at any time in order to confirm proper elevations. Building plans, landscaping plans, and architectural site plans must accommodate on-site traffic markings and signs and driveway design as specified in the engineering plans. Building plans, landscaping plans, and architectural site plans must comply with vehicle and pedestrian sight distance requirements, as shown on the engineering plans.

AUTHORITY: BCC 14.60.060; 110; 120; 150; 180; 181; 190; 240; 241

REVIEWER: Ian Nisbet (425) 452-4851

# 29. Existing Easements

Any utility easements contained on this site which are affected by this development must be identified. Any negative impact that this development has on those easements must be mitigated or easements relinquished.

AUTHORITY: BCC 14.60.100

REVIEWER: Tim Stever (425) 452-4294

# 30. Payment of Fee in Lieu of 124th Avenue NE Frontage Improvements

The applicant shall pay a fee to the city in the amount equal to the cost of construction of the required street and frontage improvements along 124<sup>th</sup> Avenue NE. These improvements include the sidewalk, planter strip, curb & gutter, and any private fence to be installed along the 124<sup>th</sup> Avenue NE frontage.

AUTHORITY: BCC 14.60.110

REVIEWER: Ian Nisbet (425) 452-4851

# 31. Equipment Boxes

Power, telephone, traffic control, or other equipment shall not be located in above ground cabinets in sidewalk areas. Such equipment shall be located in underground vaults or in a building or substantially screened per the approval of the Development Services Department and the Transportation Department.

AUTHORITY: Land Use Code 20.20.650

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REVIEWER: Mark C. Brennan, Land Use Division

# 32. Exterior Lighting

In order to mitigate for potential impacts to critical areas and associated buffers, any light source emitting from the project shall be dimmable and utilize cut-off shields. Lighting details shall be included in the building permit application.

AUTHORITY: Land Use Code 20.20.522

REVIEWER: Mark C. Brennan, Land Use Division

# 33. Mechanical Equipment and Screening

- Show the location of each piece of mechanical equipment, including communication equipment such as satellite dishes, and demonstrate that screening is provided so that these items are not visible from adjacent streets, public sidewalks, or the surrounding buildings, AND
- b. No mechanical equipment (including power, telephone, traffic control, etc.) shall be located in above ground cabinets in sidewalk areas within pedestrian pathways and walkways, including the public right-of-way. Such equipment shall be located in underground vaults, in the building, or substantially screened per the approval of Land Use/DSD. No new utility vaults that serve only one development will be allowed within a public sidewalk. Vaults serving a broader public purpose may be located within a public sidewalk.

AUTHORITY: Land Use Code 20.20.650

REVIEWER: Mark C. Brennan, Land Use Division

D. PRIOR TO ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY: The following conditions are required by City Code and supported by City Policy. The conditions shall be complied with prior to issuance of any Certificate of Occupancy:

# 34. Street Frontage Improvements

All street frontage improvements and other required transportation elements, including street light and traffic signal revisions, must be constructed by the applicant and accepted by the Transportation Department inspector. All existing street light and traffic signal apparatus affected by this development, including traffic controllers, pedestrian signal poles, traffic signal poles, and power sources, must be relocated as necessary. Existing overhead lines must be relocated underground. All required improvements must be constructed as per the approved plans or as per direction of the Transportation Department inspector. Bonding or other types of assurance devices will not be accepted in lieu of construction, unless the City requires a delay.

AUTHORITY: BCC 14.60; Comprehensive Plan Policy UT-39; Transportation

Department Design Manual Sections; and Transportation Department

Design Manual Standard Drawings.

REVIEWER: Ian Nisbet (425) 452-4851

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## 35. Pavement Restoration

Pavement restoration associated with street frontage improvements or to repair damaged street surfaces shall be provided as follows:

Near the development site, Northup Way is classified as Grind and Overlay required. Should street cuts prove unavoidable or if the street surface is damaged in the construction process, a half-street or full-street (depending on the extent of street cuts or damage) grind and overlay will be required for a minimum of 50 feet.

Near the development site, 124<sup>th</sup> Avenue NE is classified as Standard Trench Restoration required. Any street cuts will require pavement restoration per standard drawing RC-190-1.

AUTHORITY: BCC 14.60. 250; Design Manual Design Standard #23

REVIEWER: Tim Stever (425) 452-4294

# 36. Maintenance and Monitoring Surety:

A 5-year financial surety is required to be submitted to ensure the mitigation planting successfully establishes. A monitoring/ maintenance assurance device that is equal to 20% of the cost of plants, installation, and the cost of monitoring is required to be held for a period of five years from the date of successful installation. A cost estimate is required to be provided with the Clearing & Grading permit and the financial surety is required to be posted prior to issuance of the Clearing & Grading permit. Release of the surety after the 5-year monitoring period is contingent upon a final inspection of the planting by Land Use Staff that finds the maintenance and monitoring plan was successful and the mitigation meets performance standards.

AUTHORITY: Land Use Code 20.20.650

REVIEWER: Mark C. Brennan, Land Use Division

# 37. Maintenance and Monitoring Reports:

The mitigation planting is required to be maintained and monitored for five years to ensure the plants successfully establish. Annual monitoring reports are required to be submitted to document the plants are meeting approved performance standards. Photos from selected photo points shall be included in the monitoring reports to document the planting. Land Use inspection is required by Land Use staff to end the plant monitoring period.

Reporting shall be submitted no later than December 31<sup>st</sup> of each monitoring year and shall include a site plan and photos from photo points established at the time of Land Use inspection. Reports shall be submitted to Mark Brennan or Heidi Bedwell by the above listed date and can be emailed to MCBrennan@bellevuewa.gov or mailed directly to:

Environmental Planning Manager Development Services Department City of Bellevue PO Box 90012 Bellevue, WA 98009-9012 12385 Northup Way Public Storage Combined Staff Report 19-126040-LP, 19-128994-LD, 19-130369-LO Page **49** of **50** 

AUTHORITY: Land Use Code 20.30P.140, 20.25H.220 REVIEWER: Mark C. Brennan, Land Use Division

## 38. Landscape Installation Assurance Device

All site landscaping shall be 100% complete per the plan approved by the City prior to TCO. Alternatively, the following may be submitted: 1) a red-marked plan identifying which landscape areas are incomplete; 2) an estimate for the total cost to complete these areas; and 3) an executed surety device (Assignment of Savings, Letter of Credit, or Bond) dedicated to the City for 150% of the estimated cost to complete these areas per the approved Landscape Plan. The assurance device will be released upon complete installation and inspection approval.

AUTHORITY: Land Use Code 20.40.490

REVIEWER: Mark C. Brennan, Land Use Division

# 39. Landscape Maintenance Assurance Device

The applicant shall file with the Development Services Department an executed landscape maintenance assurance device (Assignment of Savings, Letter of Credit, or Bond) for a one-year period equivalent to 20% of the cost of labor and materials for all of the required landscaping. The assurance device will be released upon completion of the five-year monitoring period.

AUTHORITY: Land Use Code 20.25H.100 and LUC 20.40.490

REVIEWER: Mark C. Brennan, Land Use Division

# 40. Maintenance Agreement with the City of Bellevue

After one-year, the landscape (not including the mitigation landscaping required per the Critical Areas Land Use Permit) shall be inspected by Land Use and the Parks Department. Prior to the release of the Landscape Maintenance Assurance Device, the applicant and the City of Bellevue shall enter into an agreement to determine future maintenance responsibilities for the streetscape and streetscape plantings.

AUTHORITY: Land Use Code 20.20.520.K and 20.40.490 REVIEWER: Mark C. Brennan, Land Use Division

# 41. Project Sign Design Package

The applicant shall submit a complete sign design package for the development for City review and approval prior to the issuance of any occupancy permits for the building. The design package shall include the conceptual design of all building signage. The signs shall be consistent with the Bellevue City Code Section 22B.10 and the designs shall be an integral part of the overall architectural design. Signs at or near the street shall be scaled to the pedestrian environment.

AUTHORITY: Bellevue City Code 22B.10

REVIEWER: Mark C. Brennan, Land Use Division

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# 42. Recording of Master Development Plan

The MDP is binding on and runs with the land. The applicant shall revise the Floor Area Ratio (FAR) Sheet to use the City of Bellevue definition for Square Feet, Gross in the calculations for existing and new development on the site and record the plans (as revised above) and conditions of the approved MDP with the King County Recorder's Office.

AUTHORITY: LUC 20.3V.180

REVIEWER: Mark C. Brennan, Land Use Division

# ATTACHMENT A PROJECT DRAWINGS

## **MG2** Corporation

1101 Second Ave, Ste 100 Seattle, WA 98101 206 962 6500 MG2.com

October 4, 2019

Scott Nicholson
Associate
MG2
1101 Second Ave. #100
Seattle, WA 98101

Re: City of Bellevue - Development Services

450 110th Ave NE P.O. Box 90012 Bellevue, WA 98009

Project: Public Storage - 12385 NORTHUP WAY, BELLEVUE, WA

Subject: Pre-Development Services MDP Application - Written Narrative

Dear City of Bellevue - Development Services:

The 7.01 acre site, consisting of two parcels, is located along the west side of 124<sup>th</sup> Ave NE, lies just 0.1 mile south of Northup Way, and is currently owned and operated by Public Storage as a mini-storage facility. Public Storage currently operates three such properties near the intersection of 124<sup>th</sup> and Northup, and another along Bel-Red Rd, approximately a mile from the site in question. There are two other mini-storage facilities, not operated by Public Storage, adjacent to, or within a half mile of the site.

The area along 124<sup>th</sup>, between Northup Way and Bellevue-Redmond Rd, has long supported a broad range of industrial, light industrial, food and beverage production and distribution, transit, and other office, retail and commercial businesses. The proposed use and design is in alignment and support of both historical uses, as well as the City of Bellevue's future development intention for the area.

The property lies within the City's Bel-Red zoning overlay, and is currently zoned as Bel-Red Office/Residential (BR-OR). The proposed development of the property is a by-right use. Prior discussions with the City of Bellevue have established that Public Storage will be able to transfer Floor-Area Ratio (FAR) from their adjoining parcel at 12385 Northup Way to facilitate the density of development that is desired on this property. The two properties are contiguous along the south edge of the northern parcel. Zoning designations for adjacent parcels are BR-OR, as well as BR-R (Bel-Red Residential). Current adjacent uses include self-storage, food production, and transit facilities.

Existing structures on the 5.57 acre southern parcel consist of seven (7) single-story, and one (1) two-story, row-type mini-storage buildings. In addition, there is a portion of the site currently dedicated to covered boat and RV storage.



The proposed design improves overall density on the site, in alignment of the City's long term goal. The combined properties are proposed to be developed in two phases, to allow for continuous operation of the existing business, and to minimize the disruption to existing customers. In Phase 1, the three southernmost single-story structures on the south parcel, as well as the covered RV parking, would be replaced with a single, four-story internally-serviced mini-storage building, with a covered loading area provided by the overhanging third and fourth floor plates. Phase 2 would consist of renovation and rebranding of the current Rental Office, located on the northern parcel. The proposed Phase 1 building has an enclosed footprint of 45,123 sf (first and second floors), with floor plates at the third and fourth levels having 49,647 sf each, for a total area of 189,540 sf. The Phase 2 work would not increase or decrease the current footprint/area of that building. The floor area for the new building, in combination with the 106,800 sf of existing/remaining floor area across both parcels, totals 296,340 sf, and is within the maximum allowable building area for the combined properties.

The material palette used in the proposed design complies with the City of Bellevue's Bel-Red Subarea Design Guidelines, and provides a durable, low-maintenance facility for the owner, as well as a significant upgrade in aesthetics for the neighborhood. With an earth-toned CMU base, smooth insulated metal wall paneling in a four-color scheme, and localized expanses of accent glazing, the design incorporates regionally-appropriate materials, varied and modulated facades, and well-represents the quality and character of the site's architectural context. Wall paneling colors are a combination of earth tones, with accent areas in Public Storage's trademark PS-Orange color. The extension of the third and fourth floor plates beyond the footprint of the first and second floors provides a covered loading area, and helps to break up the scale of the façade.

Signage for the proposed buildings are minimal in size, relative to both building size and frontage. The signage sizes for each building, and for the site in total, comply with the City of Bellevue's requirements. Building signage is proposed to be primarily within the horizontal orange accent band, and has been located to allow visibility from the street, taking into account existing mature landscaping and large evergreen trees that screen much of the building street facades from the primary intersection of 124<sup>th</sup> and Northup. As the ministorage business model is less pedestrian-oriented than others along Bel-Red and Northup frontages, both color and signage placement play an important role in visibility and wayfinding.

Should you require any additional information regarding this matter, please contact me at 206.962.6590. Thank you.

Sincerely,

Scott Nicholson

/ Nichalou

Associate

SN/sn

c: MG2

PERSPECTIVE VIEW



TO BELLEVIE BY 30/30/2020

PUBLIC STORAGE
PS #08186

12385 NORTHUP WAY,
BELLEVUE, WA, 98005

BIRD'S EYE VIEW

# **PUBLIC STORAGE #08193**

# ADR/MDP

# 12385 NORTHUP WAY & 2001 124TH AVE NE **BELLEVUE, WA 98005**

SW 1/4 OF NE 1/4 OF SECTION 28, TOWNSHIP 25 NORTH, RANGE 5 EAST, W.M.

#### CONSULTANTS

NAVIX ENGINEERING 11400 SE 8TH STREET, SUITE 345 RELEVUE, WA 98004

ARCHITECT: MG2 1101 SECOND AVE, SUITE 100 SEATILE, WA 98101 (206) 962-6521 CONTACT: SCOTT NICHOLSON

LANDSCAPE ARCHITECT:
TALASAEA
15020 BEAR CREEK ROAD NE
WOODNVILLE, WA, 98077
CONTACT: ANN OLSEN
(425) 861-7550

SURVEYOR:
LANKTREE LAND SURVEYING, INC.
421 B STREET
AUBURN, WA 98092
(253) 397-4924
CONTACT: TREVOR S. LANKTREE, PLS

#### APPLICANT

PUBLIC STORAGE 2009 MINOR AVE. EAST SEATTLE, WA 98102-3513

#### REQUIRED PERMITS

THESE CONSTRUCTION PLANS ARE IN SUPPORT OF THE FOLLOWING CITY OF BELLEVUE PERMITS:

WASTER DEVELOPMENT PLAN (LP) NASTER DEVELOPMENT PLA DESIGN REVIEW (LD) UTILITY EXTENSION (UE) CLEARING & GRADING (GD) DEMOLITION (BE) RIGHT-OF-WAY (TN)

**EXISTING LEGEND** SURVEY MONUMENT (AS NOTED)

> FOUND REBAR/CAP (AS NOTED) FOUND LEAD/TACK SET MAGNAIL/WASHER CORNER (AS NOTED)

BENGHARK
LUMINARE (LUM.)
YARD LIGHT
ORNAMENTAL LIGHT
TRAFFIC SIGNAL LIGHTS
POWER METER
POWER FUEL
JUNCTION BOX (AS NOTED)
TELEPHONE MANHOLE
CATCH BASIN (CB)
STORM MANHOLE (SOMH)
SANTARY SEMP MANHOLE (SA

#### UTILITIES

STORMWATER/MATER/SANITARY SEWER: CITY OF BELLEVUE — UTILITIES DEPT. 450 110TH AVE NE BELLEVUE, WA 98004 CONTACT: MARK DEWEY

ELECTRICAL/NATURAL GAS:

#### FIRE DEPARTMENT

CITY OF BELLEWE - BELLEVUE FIRE 450 110TH AVE NE BELLEVUE, WA 98004 (425) 452-6892 CONTACT: DEREK LANDIS

#### BUILDING

OTY OF BELLEVUE - DEVELOPMENT SERVICES
450 TIOTH AVE NE
BELLEVUE, WA 98004
(425) 452-6800
CONTACT: JAKE HESSELGESSER/LAUREN ECK

PLANNING

TRANSPORTATION

CITY OF BELLEVUE — TRANSPORTATION E 450 110TH AVE NE BELLEVUE, WA 98004 (425) 452-880 CONTACT: MOLLY JOHNSON/IAN NISBET

# **CLEARING AND GRADING**

CLEANOUT (AS NOTED)

CLEMOUT (AS NOTED)

OAS WETER
OAS VALVE
WATER VALVE (WY)
FAUCE TOPOCHOMETOOMFDC)
WATER TOPOCHOMETOOMFDC)
WATER MARINE
WATER MARINE
WATER
W

OTY OF BELLEVUE - DEVELOPMENT SERVICES 450 110TH AVE NE BELLEVUE, WA 98004 (425) 452-6800 CONTACT: SAVINA UZUNOW

#### PROJECT DATA

= 305,715 SF (± 7.02 ACRES) = TPN 282505-9005 AND 282505-9236 = COMMERCIAL / SELF STORAGE = COMMERCIAL / SELF STORAGE

#### DATUM/BASIS OF BEARINGS

BASS OF BEARING— MADRAINSRS 2011) PEP CITY OF BELLEVIE.

BASS OF BEARING FOR THIS PROCECT IS A LINE BETWEEN A FOUND 1/2" BRASS PIN WITH
PUNCH MARK DOWN 25' IN CASE 4 THE SOUTH FORCIA. OF NE 24TH STREET MO, KNOWN AS
C.O.B. 0056 MICH 2" IN WITH 2" BRASS DISK WITH X, DOWN CA'N CASE IN ON-PAMP TO
SOO. BEARING EFECIN THESE POINTS WAS TAKEN AS NORTH BEST/33" WENT.

ALSO THE NORTH LINE OF THE NW1/4 OF SECTION 28-T25N-R05E, W.M.

BASIS OF YERTICAL DATUM NAVDB8
HELD THE PUBLISHED ELEVATION OF A FOUND 1/2" BRASS PIN WITH PUNCH DOWN 1.7" AND
KNOWN AS C.O.B. Y.663. ELEVATION TAKEN AS 163,749".

#### GENERAL NOTES (NAVIX)

SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE PROJECT SPECIFICATIONS, THE CITY OF BELLEVILE STANDARD SPECIFICATIONS, AND THE A.P.W.A. STANDARDS WHICH ARE HERBEY REFERENCED AS PROT OF THESE PLANS.

GUARD RAIL/CABLE FENCE WATER LINE

MATER UNE.

STEAM LINE

UNDERGROUND TELL LINE

OVERHEAD POWER LINE

STORM LINE

SEWER LINE

ROCKERY KEYSTONE WALL DECIDIOUS TREE

0 TREE DRIPLINE GRAVEL/SAND (AS NOTED) ASPHALT

REFERENCE SURVEYS

COTTONWOOD

#### LEGAL DESCRIPTION

EXCUMENCE AT THE INTERESCENCE OF THE SQUIMENT VANCEN OF COUNTY ROAD NO. 833 AND EXCHANGE OF THE COUNTY AND THE STATE OF SCENIC AS A DECORAGE OF SCHOOL ROAD EXCHANGE OF FINIS COUNTY, MASSINGTOR, THE STATE OF THE STATE OF THE SCHOOL SQUIMENT, VANCE SO IN SCHOOL THE THE SCHOOL SQUIMENT, VANCE SON LESS THE TAY THE SCHOOL SQUIMENT OF SCHOOL SCHOOL

WHO'S IS 1011 FEEL SOUTH OF THE MAINTENANCE AND ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT OF SECONDARY OF SECONDARY OF SECONDARY OF SAME SUBCOVISION, 548 FEET; THE SAME SAME ASSESSMENT ASSESSMENT

EXCEPT THE EAST 30 FEET AND THAT PORTION THEREOF CONVEYED TO THE CITY OF BELLEVIE FOR 124TH AVAILE. BY DEED RECORDED UNDER RECORDING NO. 7708220870;

AND EXCEPT THAT PORTION THEREOF CONDEMNED BY THE STATE OF WASHINGTON IN KING COUNTY
SUPERIOR COURT CAUSE NO. 721388 FOR SR 520, NORTHRUP INTERCHANGE TO JUNCTION SR 529.

LOT 1, CITY OF BELLEVUE SHORT PLAT NO. FSP-98-3906, ACCORDING TO THE SHORT PLAT RECORDED JULY 14, 1998 UNDER RECORDING NUMBER 9807149002, IN KING COUNTY, WASHINGTON;

EXCEPT THAT PORTION THEREOF CONVEYED TO THE CITY OF BELLEVUE, A WASHINGTON MUNICIPAL CORPORATION IN CERTAIN DEED RECORDED DECEMBER 16, 2004 UNDER RECORDING NO. 2004/12/8002441

#### SURVEYOR NOTES

FLOOD\_INFORMATION
ALL PARCIAS ARE LOCATED ENTIRELY IN ZONE "X" — AREAS DETERMINED TO BE OUTSIDE
SOO—YEAR FLOODPLAIN PER FEMA PANEL NUMBER SJOSSCOJSBF, DATED MAY 16, 2015

REFERENCE GIS DATA
GI) GIS MAP PROVIDED OR DOWNLOADED ON 2/28/2015 AND 9/22/2017 FROM CITY OF BELLEVIE
UITUILES DEPARTMENT GIS.
G2) GIS MAP PROVIDED OR DOWNLOADED ON 2/18/2015 FROM PUGET SOUND ENERGY.

GIS DATA.

3. THERE ARE A TOTAL OF 58 PARKING SPACES, 57 REQULAR AND 1 HANDICAP.

4. WEILAND FLAGS AND ORDINARY HICHMATER MARKS ARE PER TALASAEA CONSULTANTS, INC., PROJECT 1539, DATED 29 APRIL 2015, AND FIELD LOCATED IN FEBRUARY 2015.

#### SHEET INDEX

et number	SHEET TITLE
00	COVER SHEET
10	FLOOR AREA RATIO (FAR) PLAN
10	T.E.S.C. (CSWPPP) PLAN
00	SITE PLAN B
10	SITE PLAN
11	SITE PLAN
20	SIGHT DISTANCE PLAN

SITE CIRCULATION PLAN STORM DRAINAGE PLAN

DRIVEWAY PROFILES LITHITY PLAN

SITE DATA					
	EXISTING		PROPOSED		MAX ALLOWED
	AREA (AC)	*	AREA (AC)	*	×
TOTAL PROPERTY AREA	7.02	100.00	7.02	100.00	-
PERVIOUS AREA	0.83	11.82	1.22	17.38	-
WETLAND BUFFER AREA	0.64	9.12	0.23	3.28	
STEEP SLOPE AND BUFFER AREA	0.05	0.71	0.05	0.71	
HARD SURFACE AREA	5.55	86.99	5.57	82.03	N/A*
IMPERVIOUS AREA	5.55	86.99	5.57	82.03	N/A*

\*PER CITY OF BELLEVIE LAND USE CODE 20.20.460F, EXISTING IMPERVIOUS SURFACE ON SITE EXEMPTED FROM THE MAXIMUM 75% ALLOWABLE PER BEL-RED DIMENSIONAL STANDARDS

MG2

NAVIX

ш G

STORA

**PUBLIC** 

12385 NORTHUP WAY BELLEVUE, WA 98005

JWT

COVER SHEET

08186

SITE DATA

PARCEL DATA:

TPN #2825059005 = 62,907 SF (1.44 AC)
TPN #2825059236 = 242,808 SF (5.57 AC)
TOTAL = 305,715 SF (7.01 AC)



FAR (FLOOR AREA RATIO) CALCULATION

CRITICAL AREA AND BUFFERS = 30,345 SF BUILDABLE AREA = 275,370 SF

(BUILDABLE AREA x MAX FAR) + (CRITICAL AREA x MAX FAR x DEVELOPMENT FACTOR) (275,370 x 1.0) + (30,345 x 1.0 x .90)

= 302,681 SF MAXIMUM DEVELOPMENT POTENTIAL

EXISTING BUILDING DATA

EXISTING DOIEDING DATA			
BUILDING #	BUILDING GROSS SQUARE FEET (GSF)	EXTERIOR WALL AREA (GSF)	BUILDING GROSS FLOOR AREA (GFA)
EX. BLDG A	57,901 GSF	1,602 GSF	56,299 GFA
EX. BLDG B	10,049 GSF	572 GSF	9,477 GFA
EX. BLDG C	14,398 GSF	584 GSF	13,814 GFA
EX. BLDG D	10,746 GSF	610 GSF	10,136 GFA
EX. BLDG E	10,731 GSF	603 GSF	10,128 GFA
EX. BLDG F	17,588 GSF	1,233 GSF	16,355 GFA
EX. BLDG G (DEMO)	8,524 GSF	539 GSF	7,985 GFA
EX. BLDG H (DEMO)	7,594 GSF	536 GSF	7,058 GFA
EX. BLDG I (DEMO)	8,825 GSF	616 GSF	8,209 GFA
TOTAL	146,356 GSF	6,895 GSF	139,461 GFA
EX. TO BE DEMOLISHED	24,943 GSF	1,692 GSF	23,251 GFA
EX. TO REMAIN	121,413 GSF	5,203 GSF	116,210 GFA
MAX PROPOSED BUILDING ALLOWED		186,471 GFA	

PROPOSED	BUILDING	DATA

I NOT GOLD BOILDING DATA		
BUILDING #	BUILDING GROSS FLOOR AREA (GFA)	
EX. BLDG A	56,299 GFA	
EX. BLDG B	9,477 GFA	
EX. BLDG C	13,814 GFA	
EX. BLDG D	10,136 GFA	
EX. BLDG E	10,128 GFA	
EX. BLDG F	16,355 GFA	
TOTAL EX. TO REMAIN	116,210 GFA	
PROPOSED	183,768 GFA	
BUILDING	(SEE CALCULATIONS)	
TOTAL BUILDING AREA	299,978 GFA	
TOTAL REMAINING FOR FUTURE DEVEOPMENT	2,703 GFA	

PROPOSED BUILDING CALCULATIONS		
TOTAL GSF	189,540 GSF	
EXTERIOR WALL AREA (GSF)	3,600 GSF	
STAIRWAYS	1,464 GSF	
ELEVATOR	708 GSF	
TOTAL GFA	183,768 GFA	

PARKING DATA

TPN #2825059005:

EX. STANDARD STALLS = 13
EX. ADA STALL = 1
TOTAL EX. STALLS = 14

TPN #2825059236:

PROP. STANDARD STALLS = 10
PROP. ADA STALLS = 2
PROP. LARGE STALLS = 2
TOTAL PROP. STALLS = 14

GRAND TOTAL STALLS = 28
PARKING RATIO = 0.093 STALLS/1,000 SF
(PARKING RATIO BASED ON 299,978 SF)

NOTE: PER PUBLIC STORAGE PARKING STUDY, THE REQUIRED PARKING DEMAND FOR SELF STORAGE IS 0.090 STALLS/1000 SF









PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

THE STATE OF THE S

FLOOR AREA RATIO (FAR) PLAN

08186

09.30.19 C0.10



#### LEGEND

--- TEMPORARY CHAIN LINK FENCE

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#### SEQUENCE OF CONSTRUCTION

- HOLD A PRE-CONSTRUCTION MEETING WITH THE CITY OF BELLEVUE AND OBTAIN REMAINING REQUIRED PERMITS.
- 2. A COPY OF AN APPROVED CONSTRUCTION STORMWATER PERMIT ISSUED BY WASHINGTON STATE DEPARTMENT OF ECOLOGY MUST BE SUBMITTED TO THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS REQUIRED TO HAVE A COPY OF THE SWPPP ON SITE AT ALL TIMES.
- ALL NECESSARY CONSTRUCTION SIGNAGE MUST BE IN PLACE PRIOR TO START OF CONSTRUCTION.
- 4. ESTABLISH LIMITS OF DISTURBANCE.

- 9. PREPARE STORAGE/STAGING AREA, IF NEEDED.
- 10. SCHEDULE AN EROSION CONTROL INSPECTION WITH THE CITY OF BELLEVUE.
- RELOCATE EROSION CONTROL MEASURES AS NECESSARY AS SITE CONDITIONS CHANGE.
- START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
- INSTALL INLET PROTECTION ON ALL NEW STORM DRAINAGE STRUCTURES.
- 14. INSTALL ALL REMAINING ABOVE GROUND FEATURES.
- 14. PAVE SITE.
- COMPLETE SITE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.

ALL EXISTING PERIMETER AND INTERIOR TREES TO REMAIN

CONTRACTOR IS RESPONSIBLE FOR UPDATING THE T.E.S.C. PLAN AND MEASURES AS NECESSARY AS THE SITE CONDITIONS CHANGE OR AS DIRECTED BY THE INSPECTOR.

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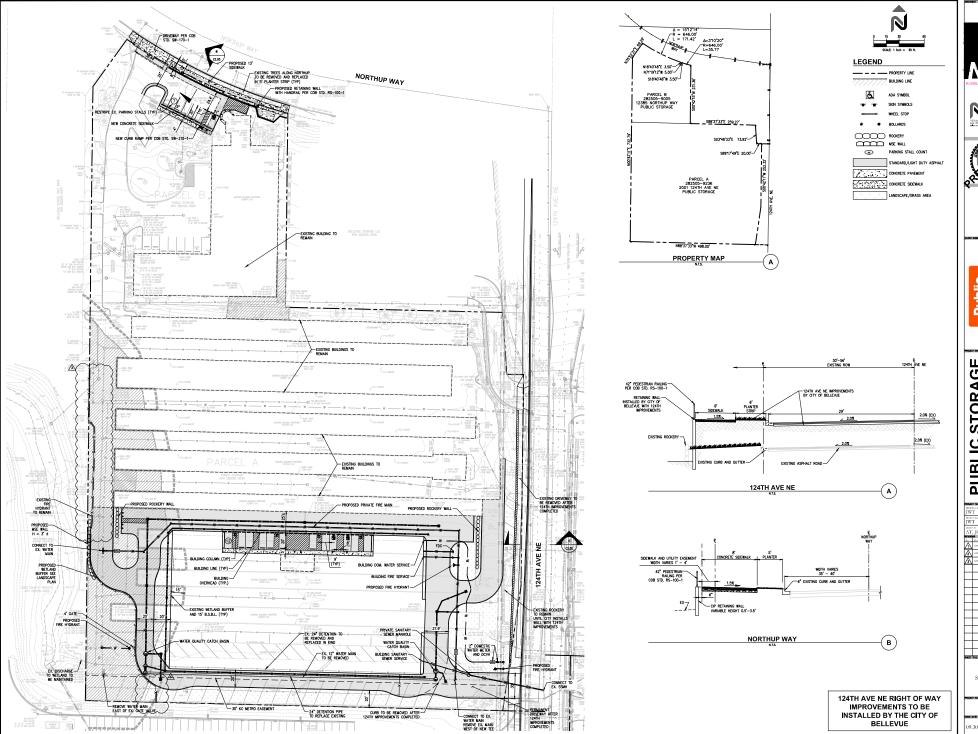
STORAGE 12385 NORTHUP WAY BELLEVUE, WA 98005

**PUBLIC** 

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T.E.S.C. (CSWPPP) PLAN

08186



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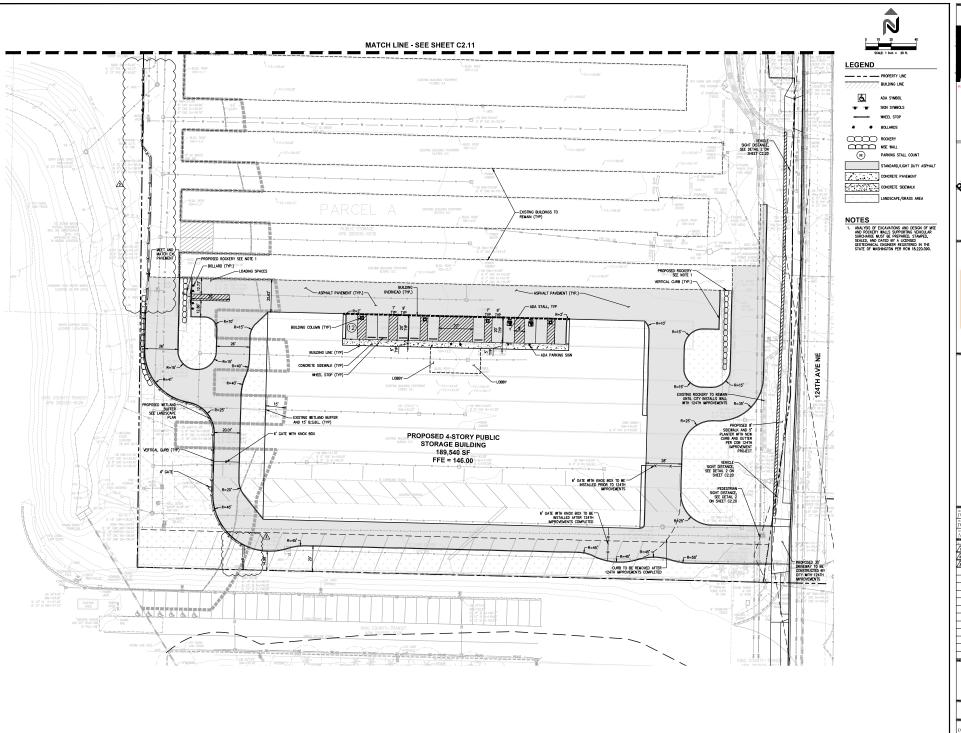
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**PUBLIC** 

AT IKG KYG

SITE PLAN B

08186



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JBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

PUBLIC 8 JWT AT, JKG, KYG

SITE PLAN

08186

#### LEGEND

- - PROPERTY LINE BUILDING LINE

SIGN SYMBOLS

WHEEL STOP BOLLARDS

MSE WALL × PARKING STALL COUNT

CONCRETE PAVEMENT CONCRETE SIDEWALK

#### NOTES

NAVX STELLOWL 1535 AV 60 AVEN. IN 100 AV 60 AVEN. IN 150 AV 60 AV 60

MG2



PUBLIC STORAGE
PS #08186 12385 NORTHUP WAY BELLEVUE, WA 98005

PROCESS NO. AT, JKG, KYG

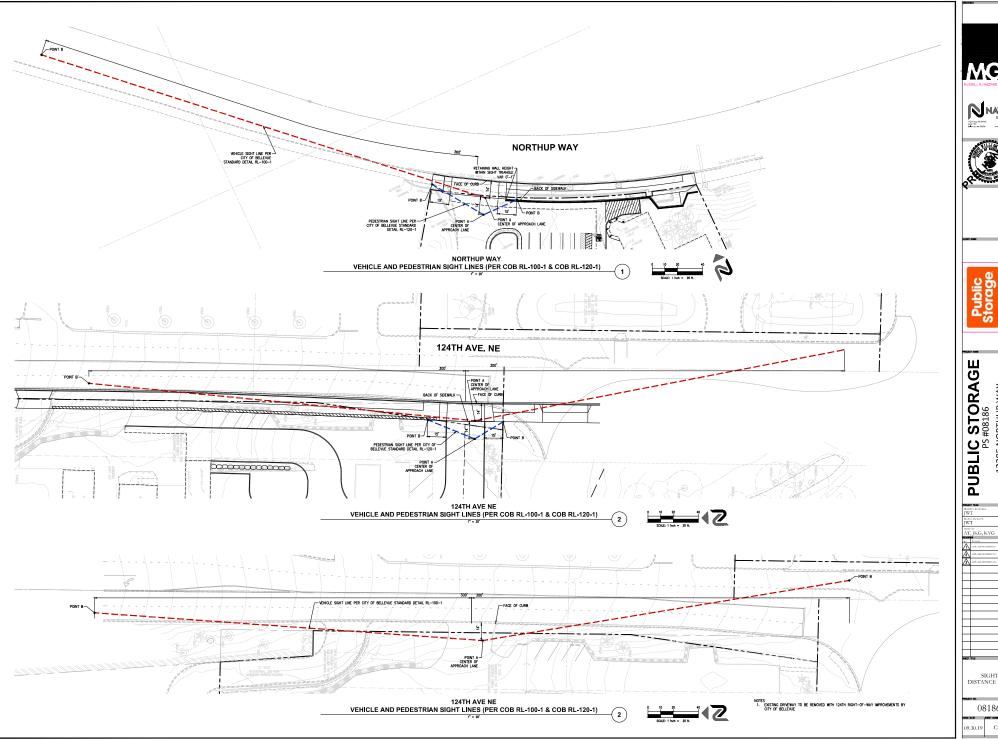
SITE PLAN

08186

09.30.19

MATCHLINE- SEE C2.10

124TH AVE NE RIGHT OF WAY IMPROVEMENTS TO BE INSTALLED BY THE CITY OF BELLEVUE





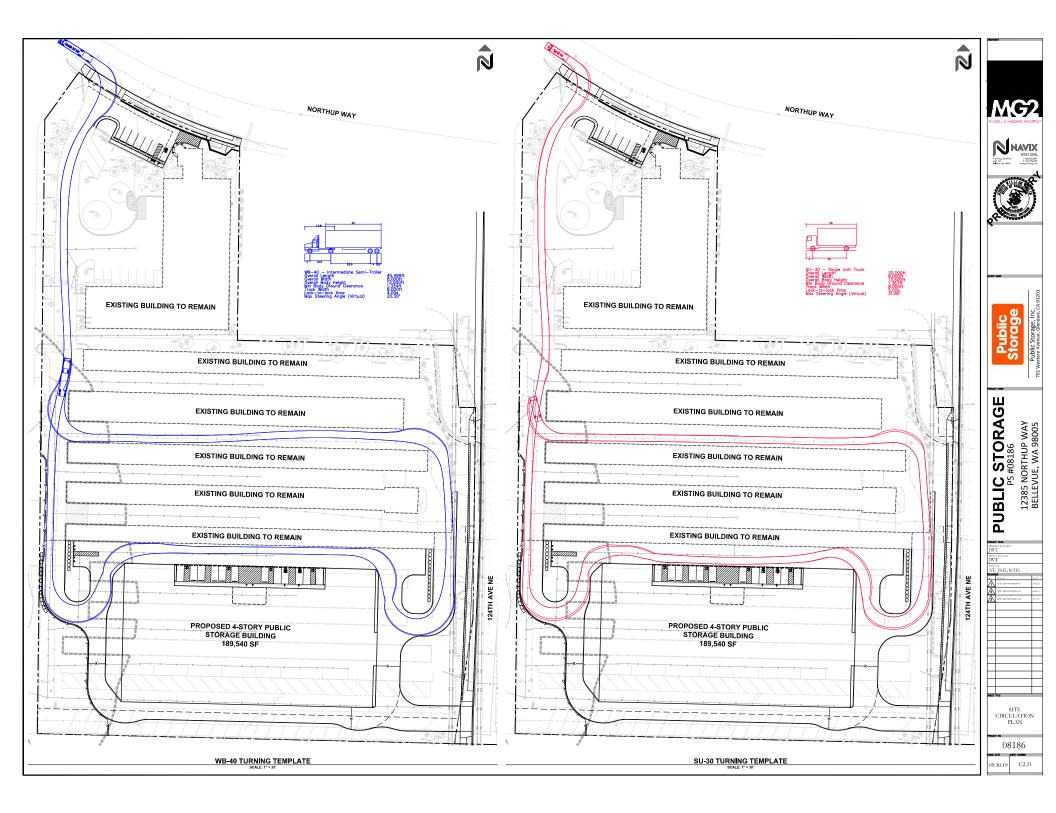


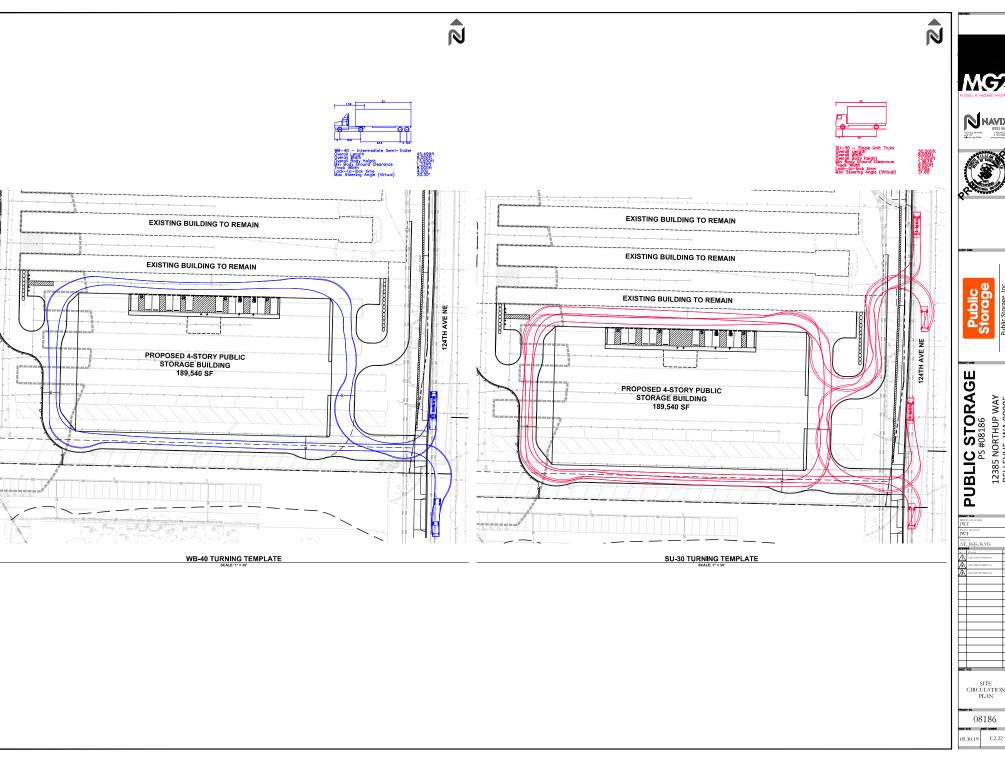


PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

08186

09,30,19 C2.20









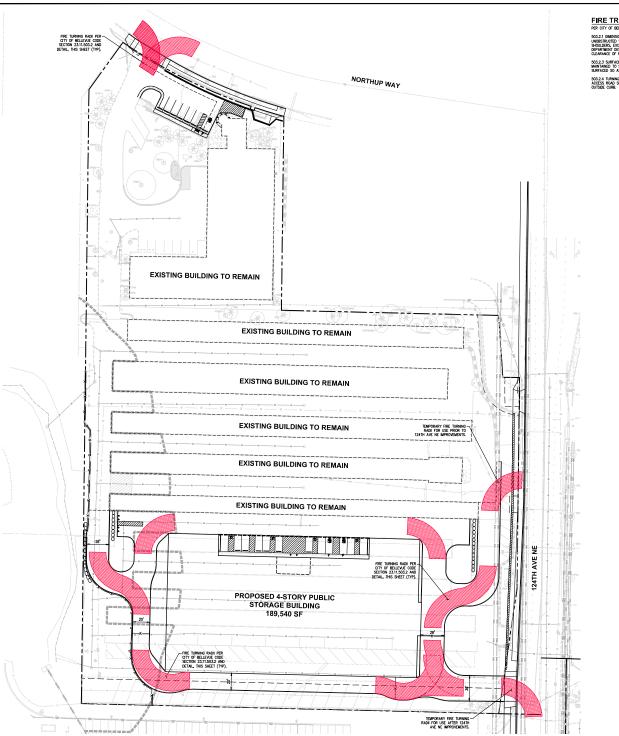


PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

AT, JKG, KYG

SITE CIRCULATION PLAN

08186



FIRE TRUCK ACCESS:

PER CITY OF BELLEVUE CODE SECTION 23.11.503.2:

503.2.1 DIMENSIONS. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNDBSTRUCTED WIDTH OF NOT LESS THAM 20 FEET (6,006 MM), EXCLUSIVE OF SHOULDERS, EXCEPT AS MODIFIED IN THE CITY OF BELLEVUE TRANSPORTATION DEPARTMENT DESIGN STANDARDS AND MANUAL, AND AN UNDBSTRUCTED VERTIC

503.2.3 SURFACE, FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE SUPPAGED SO AS TO PROVIDE ALL MEATHER DRIVING CAPABILITIES.

503.2.4 TURNING RADIUS. THE REQUIRED TURNING RADIUS OF A FIRE APPARATU ACCESS ROAD SHALL BE 28 FEET MINIMUM INSIDE CURB AND 48 FEET MINIMUM





FUSSELL IN HAZZARD, ARCHITECT







PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

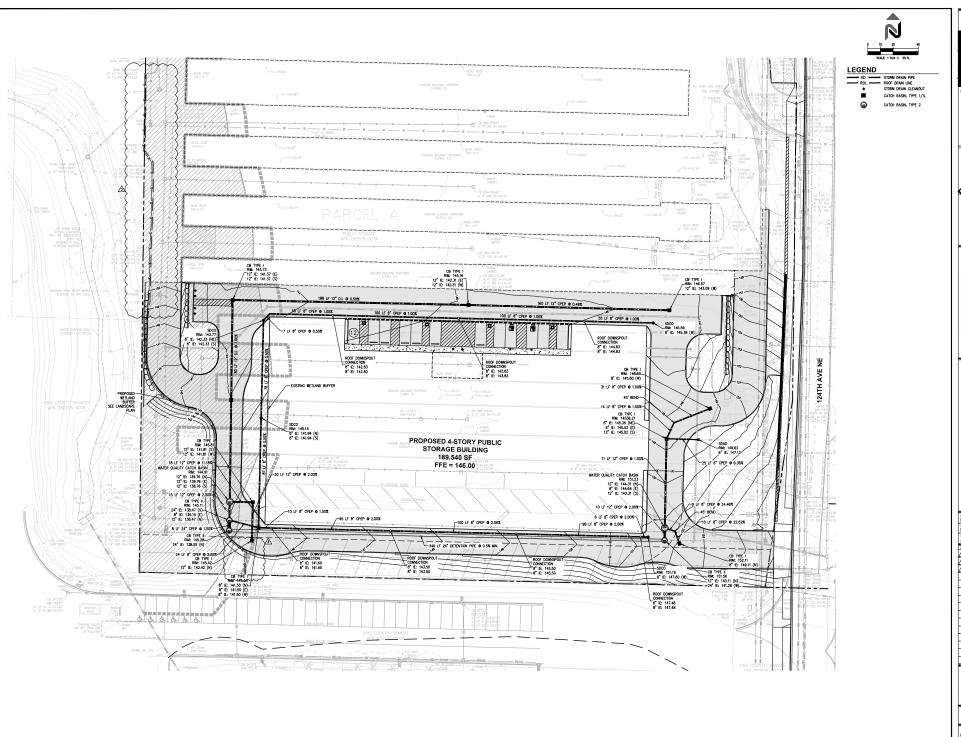
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FIRE TRUCK MANEUVERING PLAN

08186

09.30.19 C2.23



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NAVX STELLOWL 1535 AV 60 AVEN. IN 100 AV 60 AVEN. IN 150 AV 60 AV 60



PUBLIC STORAGE
PS #08186 12385 NORTHUP WAY BELLEVUE, WA 98005

PROFESSION OF STREET

AT, JKG, KYG

STATE

AT, JKG, KYG

STATE

ACR, MEP OF SHARETELL

ACR, MER PRINTERLY

A

STORM DRAINAGE PLAN

08186



| NAVIX | 150 to 40 mm; | 150 to 40 mm; | 150 to 40 mm; | 150 to 50 mm; | 150



PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

JWT

GRADING PLAN

08186

INSTALLED BY THE CITY OF BELLEVUE



AMALYSIS OF EXCAVATIONS/DESIGN OF PROCKERY WALLS SUPPORTING VEHICULAR SURCHARGE MUST BE PREPARED/STAMPED/SZALED/DATED BY A LICENSED COTOTICHICAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON PER RCW 18.220.090.

MG2

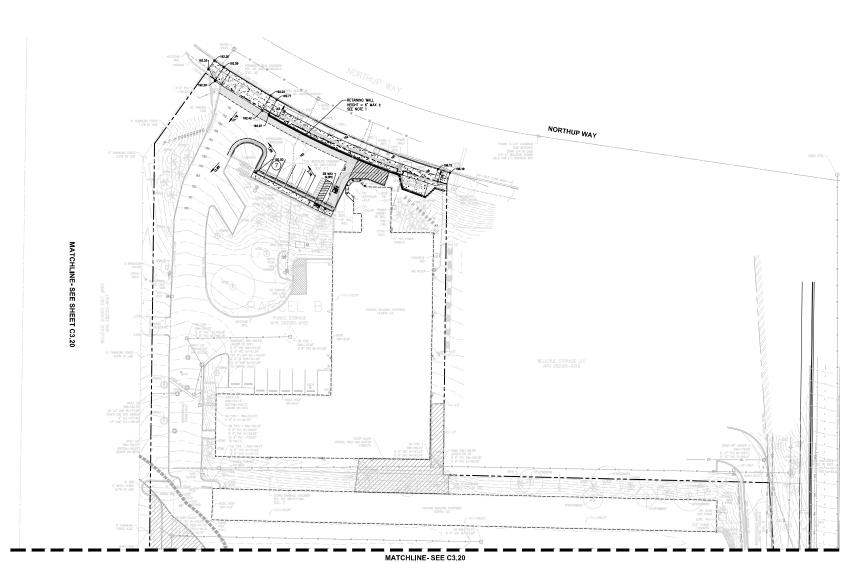


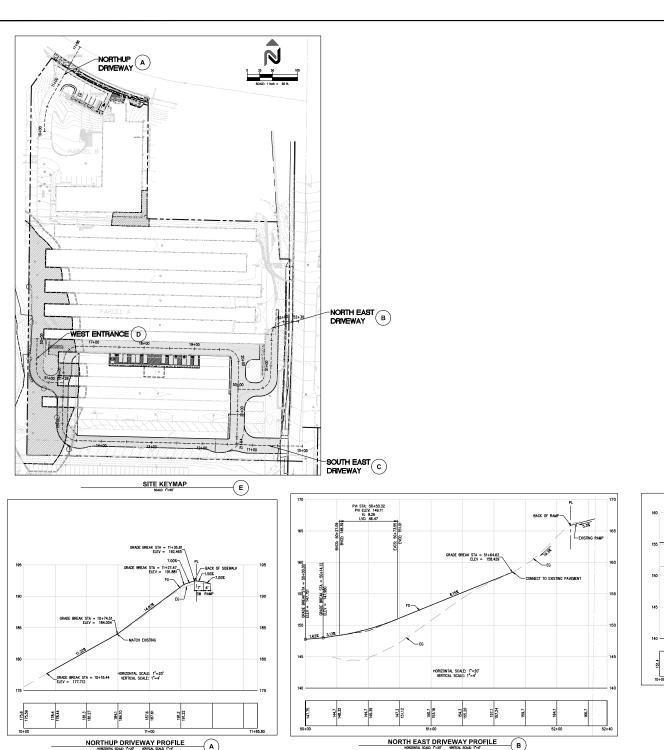
PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

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GRADING PLAN

08186

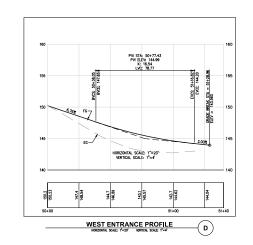


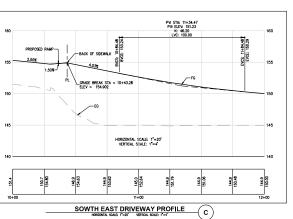


-(B)

NORTHUP DRIVEWAY PROFILE

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124TH AVE NE RIGHT OF WAY IMPROVEMENTS TO BE INSTALLED BY THE CITY OF BELLEVUE

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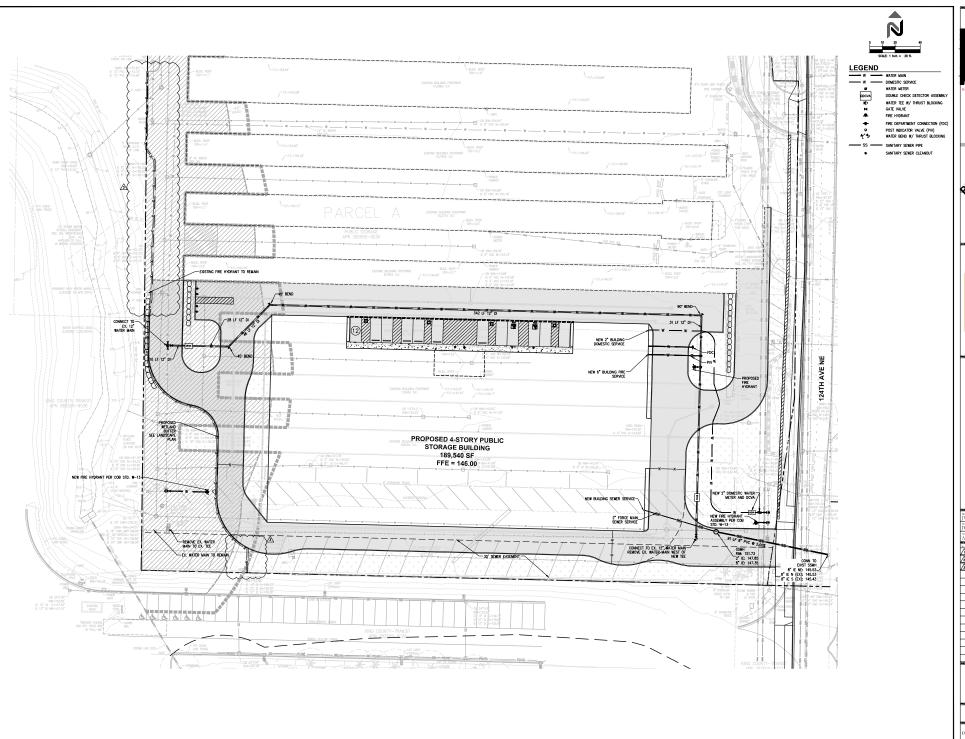




PUBLIC STORAGE PS # 188186 12385 NORTHUP WAY BELLEVUE, WA 98005

JWT DRIVEWAY PROFILES

08186



MG2

| NAVIX | 150 av fin ever | 15



PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

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AT, JKG, KYG

STATE

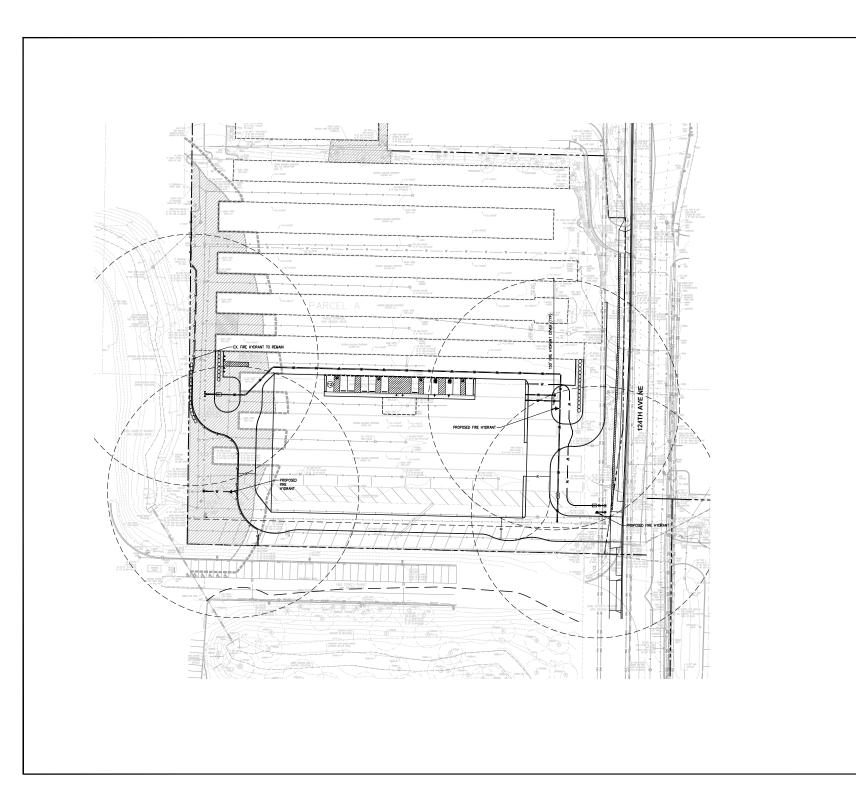
AT, JKG, KYG

STATE

ACOLOGY DISCONTINA

UTILITY PLAN

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LEGEND



- FIRE DEPARTMENT CONNECTION (FDC) POST INDICATOR VALVE (PIV)

MG2







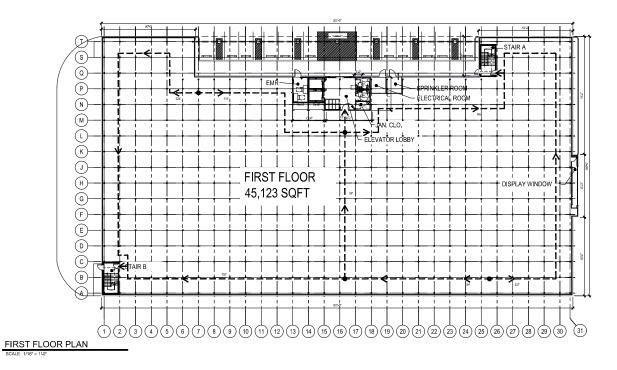


PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY
BELLEVUE, WA 98005

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FIRE PROTECTION PLAN

08186



STAIR A (s) (Q) (P)-(N)(M) L ELEVATOR LOBBY (K) ⇑ <u>J</u> SECOND FLOOR (H) DISPLAY WINDOW 45,123 SQFT (G)-Ŵ (F) (E)-(D)-(C) B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

SECOND FLOOR PLAN

MG2



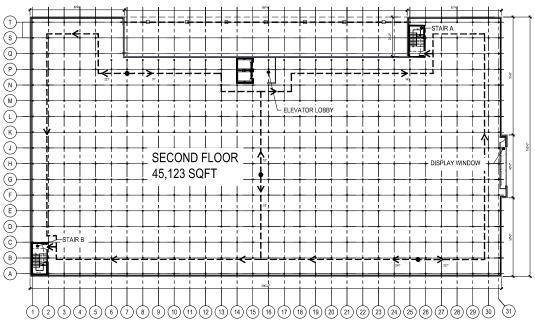


PUBLIC STORAGE PS #08186 12385 NORTHUP WAY, BELLEVUE, WA, 98005

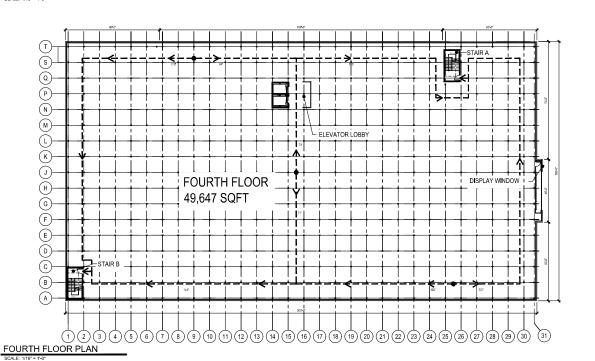
MATTHEW GOELZER GEOFFREY GRICE

FIRST AND SECOND FLOOR PLAN

10.30.19 1 OF 4



FIRST FLOOR PLAIN



IT IS THE RESPONSIBILITY OF THE DESIGN PROFESSIONAL TO REVIEW CONTENT FOR COMPLANCE OF ALL CODES, MALES, AND RECOLLATIONS & ADAPT TO SITE SPECIFIC CONCTIONS. EPARHOS ARE FOR REFERENCE CRLY.

MG2





PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY,
BELLEVUE, WA, 98005

MATTHEW GOELZER

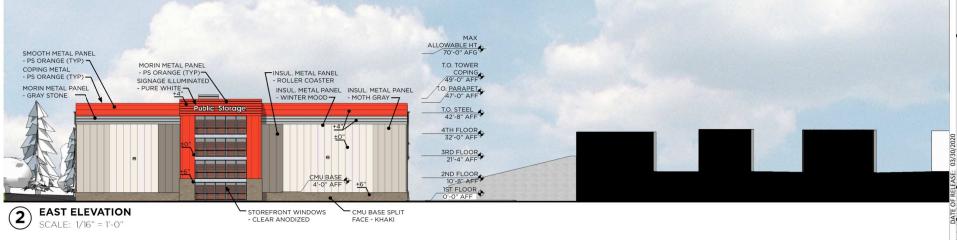
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THIRD AND FOURTH FLOOR PLAN

Q 10.30.19 2 OF 4





Public Storage, Inc.

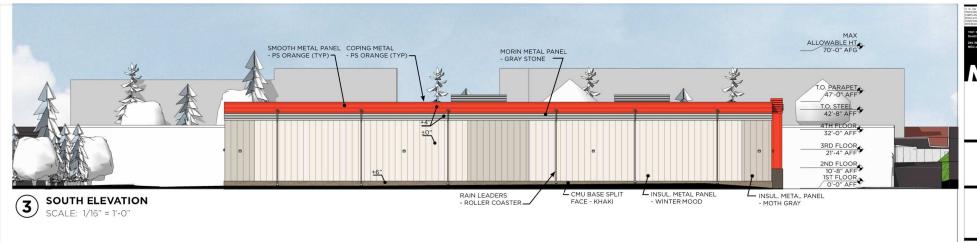
PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY,
BELLEVUE, WA, 98005

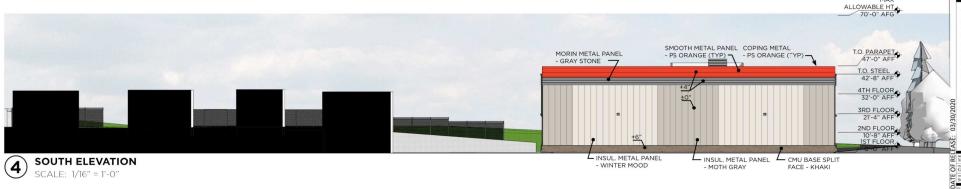
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BELLEVUE / NORTHUP WAY PS#08186

ELEVATIONS

03.30.20 SD2.01





Public Storage

PUBLIC STORAGE
PS #08186
12385 NORTHUP WAY,
BELLEVUE, WA, 98005

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NORTHUP WAY PS#08186

ELEVATIONS

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03.30.20 SD2.02



WATTHEW GOFLZER

C GEOFFREY CRICE

MATERIALS BOARD 03.30.20 SD3.02

23,109 SF (0.53 ACRES) 28,083 SF (0.61 ACRES)

8,958 SF (0.2) ACRES)

(1.38 ACRES)

702 SF

GENERAL REDEVELOPMENT LANDSCAPE

TOTAL OPEN SPACE

EXISTING LANDSCAPE

RIGHT OF WAY LANDSCAPE

CRITICAL AREA

- - PROPERTY LINE

EXISTING WETLAND

※ ◎

PROJECT LIMIT

- × ---- CHAIN LINK FENCE PROPOSED 2 RAIL WOOD FENCE

. \_\_\_ APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)

(NOT SURVEYED)

STREAM ORDINARY HIGH WATER MARK (OHWM)

EXISTING TREES (DECIDUOUS/CONIFER)



#### CONTACTS

PUBLIC STORAGE NAME: 2200 E MCFADDEN AVE SANTA ANA, CA 92705 PHONE: (TI4) 388-1262 X3158 BRYAN MIRANDA

CONTACT: EMAIL: SURVEYOR

NAME: LANKTREE LAND SURVEYING, INC. ADDRESS: 25510 74TH AVE 5 KENT WA 98032 PHONE: CONTACT: (253) 653-6423 XIOI TREVOR S. LANKTREE, PLS

TLANKTREE@LANKTREELAND.COM

ENGINEER

EMAIL:

NAVIX ENGINEERING II235 SE 6TH ST, SUITE I50 NAME: ADDRESS: BELLEVUE, WA 98004 PHONE: (425) 453-4501

CONTACT: JOE TAFLIN EMAIL: JOE@NAVIXEI LANDSCAPE ARCHITECT

NAME: TALASAEA CONSULTANTS, INC. ADDRESS: 15020 BEAR CREEK RD. NE WOODINVILLE, WA 980TT (425) 861-7550 EVA PARKER, PLA

SENIOR PROJECT MANAGER EPARKER@TALASAEA.COM

# SHEET INDEX

NUMBER SHEET TITLE PROPOSED SITE PLAN OVERVIEW & OPEN SPACE PLAN LI.O LH TREE PROTECTION PLAN L2.0 PERIMETER LANDSCAPE PLAN L3.0

PLANTING PLAN PLANTING PLAN LSI L3.2 PLANTING PLAN

PLANT SCHEDULE, DETAILS AND NOTES 1.33

L4.0 PLANTING SPECIFICATIONS STRUCTURAL SOIL SPECIFICATIONS & DETAIL L4.I

IRRIGATION SPECIFICATIONS IRI.O



#### **NOTES**



THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL UNITL APPROVED, THESE PLANS ARE: SUBJECT TO REVISION



SURVEY PROVIDED BY LANCTREE LAND SURVEYING INC. 295/0 141H AVE 5, KENT, IAA 49:032, (293) STEP PLAN FROOVDED BY NAVEL BROINERION, (1235 SE 61H 5T, SUITE ISO, BELLEWIE IVA 49:004, (425) 459-4501.
SOURCE DRAWING WAS MODIFIED BY TALASAEA CORSULTAINS FOR VISIAL BHANCEPIENT.

NOT FOR CONSTRUCTION

g. P ₩ OVERVIEW TORAGE TON PE PLAN SITE PLAN C PUBLIC STC WASHINGTG

PLAN

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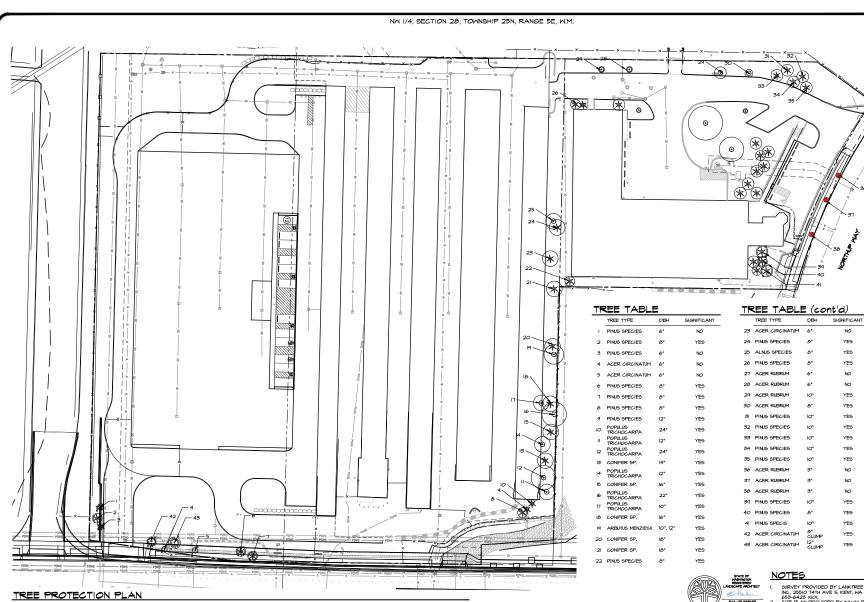
SAEA VTS, INC.

TALASS CONSULTANTS Ce & Environmental

A 레티Ո

LANDSCAPE PROPOSED S BELLEVUE F BELLEVUE, V

Date |Q-|5-20|4 Scale AS NOTED Designed EP Drawn EH Checked AO Approved BS Project # 1539B



PLAN LEGEND

@ <u>W</u> ※ ⊚

(8)

PROPERTY LINE

EXISTING TREES (DECIDIOUS/CONIFER) WITH FENCE PROTECTION EXISTING TREES (DECIDIOUS/CONIFER) NOT REQUIRING PROTECTION

EXISTING TREES TO BE REMOVED NOTE:
ALL TREES SURVEYED WITH EXCEPTION OF NORTHUP STREET
TRIES ARE DEING RETAINED.
SOINE TREES ARE NOT REGUIRING TREE PROTECTION BECAUSE
THERE IS TO BE NO ACTUAL DEVELOPMENT IN THEIR VICINITY

SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC. 28950 741H AVE 5, KENT, IAA 46,052, (285) SITE PLAN FROOVIDED BY NAVE BENEFIELDS, (125 SE 61H 5T, SUITE ISO, BELLEVUE, IAA 46,004, (425) 459-450.
SOURCE PRANKING WAS MODIFIED BY TALASAEA CORBULTAINS FOR VISUAL BHANKEPIENT.

YES

YE5

NO

YES

YES

YES

YES

YES

YES

YES

YE9

YE5

YES



THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL LIMIT APPROVED, THESE PLANS ARE: SUBJECT TO REVISION

NOT FOR CONSTRUCTION

TS, INC. TALASAE
CONSULTANTS, I
ce & Environmental Plan
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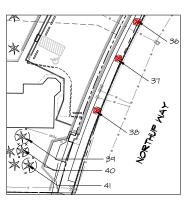
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LANDSCAPE 1 TREE PROTECT BELLEVUE PUE BELLEVUE, WA

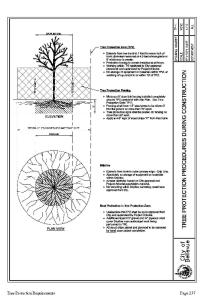
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Project #1539B



#### TREE PROTECTION PLAN





PLAN LEGEND - PROPERTY LINE

TREE TABLE TREE TYPE

PINUS SPECIES

4 ACER CIRCINATUM

38 ACER RUBRUM

39 PINUS SPECIES 40 PINUS SPECIES

41 PINUS SPECIES

42 AGER GIRGINATUM 8" CLUMP

43 ACER CIRCINATUM 12" CLUMP

DBI

GIGNIEIC ANT

NO YES

NO

YES

YES



EXISTING TREES (DECIDIOUS/CONIFER) WITH FENCE PROTECTION EXISTING TREES TO BE REMOVED

#### TREE PROTECTION NOTES TREE PRESERVATION NOTES:

- EACH TREE HILL HAVE A TREE PROTECTION ZONE COVERING AN AREA EQUIVALENT TO A RADIUS OF US FEET FOR EVERY INCH OF TREE SIZE
- (DIAMETER AT 4-6" HEIGHT), OR 6 FEET, PHICHEVER IS GREATER.
  STAKE AND/OR FLAG CLEARING LIMITS AND TREE PROTECTION TO BE VERIFIED AND APPROVED BY THE CITY'S CLEARING AND GRADING INSPECTION AT THE REGULARY PRECONSTRUCTION MEETING.
- INSPECTOR AT THE REQUIRED PRECONSTRUCTION MEETING.
  A 6 INCH LATER OF CLORES THE PROTECTED TREES, MILCH IS
  TO BE REPT 12 INCHES FROM THE TROOT SHALL OCCUR UNDER THE DIRECTION OF THE PROTECTED TREES, MILCH IS
  TO BE REPT 12 INCHES FROM THE TROOT.

  PRINING OF ENSITING LIMPS AND ROOT.

- FRUNING OF EXISTING LIMBG AND ROOTS SHALL OCCUR INDER THE DIRECTION OF THE PROJECT ARBORIST.

  TREE PROTECTION FENCING SHALL BE 6 FEET FIGHT CHAIN LINK MOUNTED ON THO INCUR DIAMETER METAL POSTS, DRIVEN INTO THE GROUND TO A
  DEPTH OF AT LEAST 2-FEET AT NO MORE THAN 10 FOOT SHACING.

  TREE PROJECTION FENCING WISE DE RECCIPED PROKEN TO ANY CLEARING, GRADING OR DIRECTION, AND MAY CHLY BE MOVED OR ADJUSTED

  TREE PROJECTION FENCING WISE DRIVEN TO THE CLEARING AND GRADING INSPECTOR AND THE PROJECT ARBORIST

  THAN 2 FEET FROM THE TRUNK OF ANY TREE.

  MOVABLE BRANERS OF CHAIN LINK FENCING SECURED TO CHENT BLOCKS MAY BE SUBSTITUTED FOR INSEC PECKING IF THE PROJECT ARBORIST

  AND CITY STAFF AGREET THAT THE FENCING HILL HAVE TO BE MOVED TO ACCOMPOSATE CERTAIN PHASES OF CONSTRUCTION, THE BUILDER MAY

  FET PROPAGET, ACCESS INTO THE PREFER PROTECTION TARE IS, APPROVABLE ARBORISTAND AND CITY AND CONSTRUCTION.
- IF TEMPORARY ACCESS INTO THE TREE PROTECTION ZONE IS APPROVED, AN ADDITIONAL 3 INCH LAYER OF GRAVEL AND 3/4 INCH PLYWOOD SHALL BE PLACED OVER THE CRITICAL ROOT ZONE.
- FENCING SHALL HAVE MOUNTED WARNING SIGNS PROMINENTLY DISPLAYED AT MAXIMUM 20 FOOT INTERVALS; SIGNS TO BE 8.5 X II INCHES AND CLEARLY STATE.

"WARNING - TREE PROTECTION ZONE - THIS FENCE SHALL NOT BE REMOVED AND ANY INJURY TO THIS OR THESE TREES IS SUBJECT TO PENALTY ACCORDING TO BCC 14.06.100"

#### DURING CONSTRUCTION:

- ENCROACHMENT INTO THE TREE PROTECTION ZONE IS PROHIBITED UNLESS IT IS FOR THE MAINTENANCE OF THE TREE.
- AVOID SPILLAGE OR DAMAGING MATERIALS INTO THE TREE PROTECTION ZONE.

  NO STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, PORTABLE TOILETS, STOCKPILING OF SOIL OR AGGREGATE IS PERMITTED.
- NO CUITING, BREAKING, SKINNING OR BRUISING OF ROOTS, BRANCHES OR TRUNKS WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE PROJECT ARBORDIST.
- NO DISCHARGING OF EXHAUST INTO FOLIAGE
- NO SECURING OF CABLES, CHAINS, OR ROPES TO TREE TRUNKS OR BRANCHES.
- NO TRENCHING, DIGGING, TUNNELING OR OTHERWISE EXCAVATING WITHIN THE CRITICAL ROOT ZONE OR TREE PROTECTION ZONES WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE PROJECT ARBORIST.
- PERIODICALLY INSPECT, AT 4 WEEK INTERVALS MINIMUM, TO ASSESS AND MONITOR THE EFFECTIVENESS OF THE TIRET PROTECTION MEASURES.

- WITH DAMPRED BRILLS.

  18. ROUTE PIPES OUTSIDE OF THE TREE PROTECTION ZONE OF A PROTECTED TREE TO AVOID CONFLICT WITH ROOTS, ARE TO BE PROTECTED

  19. ROUTE PIPES OUTSIDE OF THE TREE PROTECTION ZONE OF A PROTECTED TREE TO AVOID CONFLICT WITH ROOTS, HERRE IT IN THE PROTECTION ZONE

  REPORT PIPES OF TREMELES BORGE OR TIMBLE BRINGHTH HE TREE PROTECTION ZONE OF THE TREE. HE SOURIS WHERE IT IN LIKE PLACE HOW THE SOUR HE SOUL HAS PLACE HOW TO AVOID THE CONFLICT HE TREE PROTECTION ZONE HE TREE PROTECTION ZONE HILL HAVE A RETAINING HALL SYSTEM PESSISSED IN CONSULTATION

  ANY DAMAGE DUE TO CONSULTATION THE SHALL BE REPORTED TO THE PROJECT ARRORDEST AND CITY STITM PESSISSED IN CONSULTATION

  THE PROJECT ARRORDEST SHALL BE RESPONSIBLE FOR THE PROFECTION OF THE DESIGNATED TREES, SHOULD THE BUILDER FAIL TO POLICIA THE

  REPEDIAL. ACTION CAN BE TAKEN.

  THE PROJECT ARRORDEST SHALL BE RESPONSIBLE FOR THE PRESERVATION OF THE DESIGNATED TREES, SHOULD THE BUILDER FAIL TO POLICIA THE

  RESPONSIBILITION.

#### POST CONSTRUCTION:

- COMPLETE POST-CONSTRUCTION TREE MAINTENANCE, INCLUDING PRUNING, MULCHING, FERTILIZATION, IRRIGATION, AND SOIL AERATION WHERE NECESSARY.
- REMOVE, BY HAND, ALL SOIL AND ROOT PROTECTION MATERIAL SUCH AS WOOD CHIPS, GRAYEL AND PLYMOOD, PROVIDE FOR REMEDIATION OF COMPACTED SOIL BY METHODS SUCH AS AERATION OR VERTICAL MULCHING.
- APPLY AT LEAST I INCH OF WATER PER WEEK BY DEEP WATERING IN THE ABSENCE OF ADEQUATE RAINFALL FERTILIZE TREES WITH SLOW RELEASED PHOSPHORUS, POTASSIUM, CALCIUM, MAGNESIUM, AND OTHER MACRO- AND MICRO-NUTRIENTS AS INDICATED BY A SOIL TEST, BUT WAIT AT LEAST ONE YEAR TO APPLY ANY NITROGEN.
- FERTILIZE LIGHTLY WITH SLOW RELEASE NITROSEN AFTER I YEAR, AND THEN MAKE ANNUAL LIGHT NITROSEN APPLICATIONS FOR THE NEXT 3 TO 5 YEARS,
- INSTECT TREES ANNUALLY FOR AT LEAST 3 AND UP TO 5 YEARS AFTER CONSTRUCTION TO LOOK FOR CHANGES IN CONDITION AND SIGNS OF INSECTS OR DISEASE, AND TO DETERMINE MAINTENANCE NEEDS.
  REPOVOR TREES THAT ARE BADLY PARMAGED OR ARE IN INSERVERSIBLE DECLINE AS DETERMINED BY THE PROJECT ARBORIST AND CITY STAFF.
- CONTINUE TO PROTECT NOT ONLY THE LARGE, ESTABLISHED TREES ON THE SITE BUT ALSO THOSE NEWLY PLANTED IN THE LANDSCAPE AS PER LUC 20 20 520 K
- IO. PROVIDE ANNUAL INSPECTION REPORTS TO THE CITY.





#### NOTES

- SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 25510 14TH AVE 5, KENT, WA 48032, (253) 653-6423 XIO.
  SITE PLAN PROVIDED BY NAVIX ENGINEERING, II235 SE 6TH 5T, SUITE 150, BELLEVUE, WA 48004, (425) 455-4501.
- 453-4501. SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT. з.



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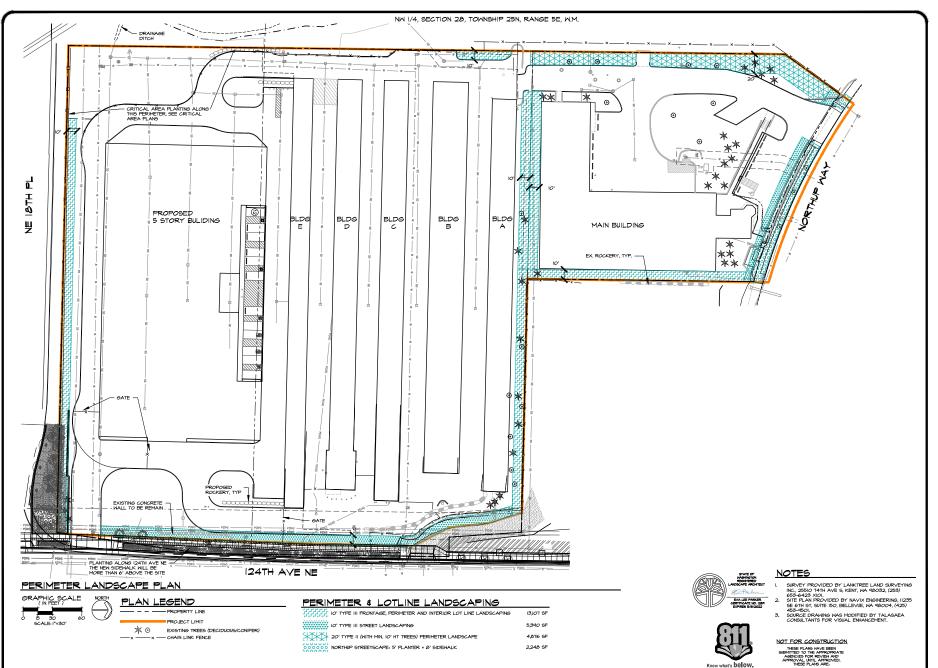
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Project # 1539B

TREE PROTECTION DETAIL



LANDSCAPE PLAN PERIMETER LANDSCAPE PLA BELLEVUE PUBLIC STORA BELLEVUE, MASHINGTON

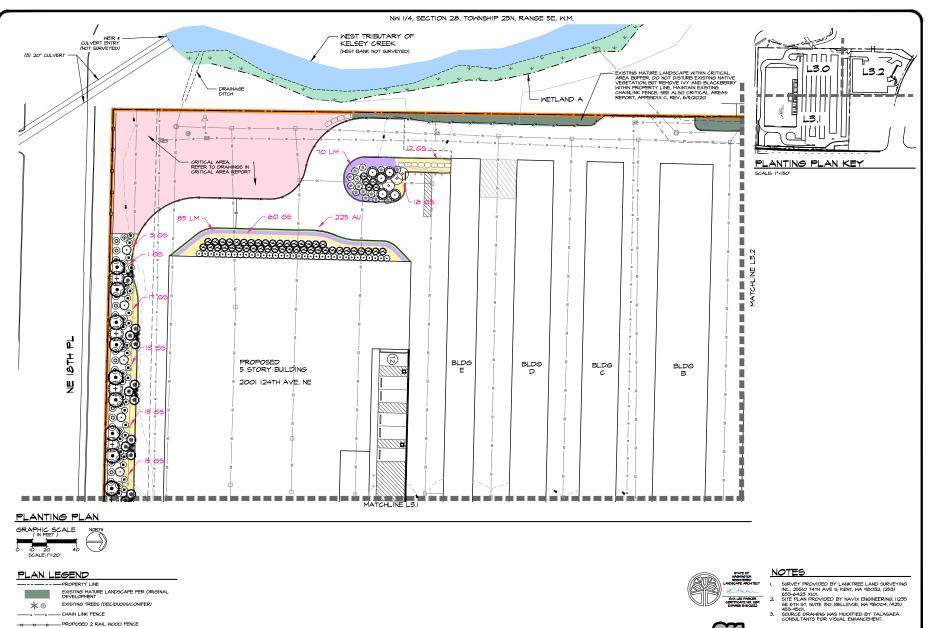
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SUBJECT TO REVISION



PROJECT LIMIT



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ANDSCAPE PLAN LANTING PLAN ELLEYUE PUBLIC STORA ELLEYUE, MASHINGTON

AEA TS, INC.

Date

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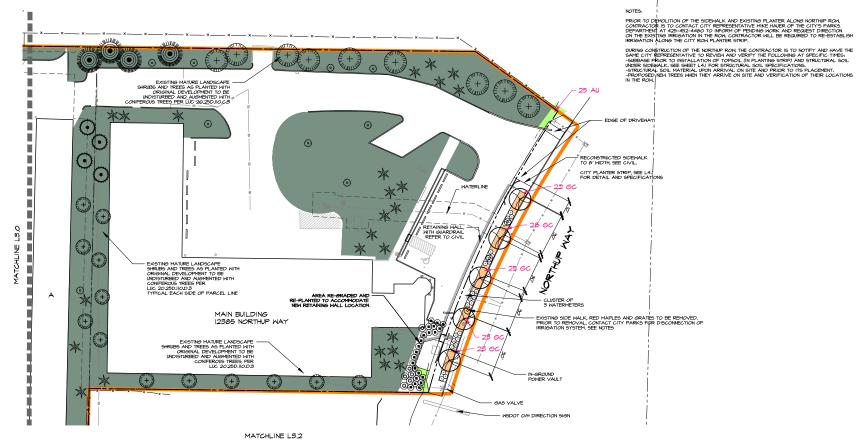
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Project # 1539B

Sheet # L3.2



PLANTING PLAN



#### PLAN LEGEND

PROPERTY LINE EXISTING MATURE LANDSCAPE PER ORIGINAL DEVELOPMENT EXISTING TREES (DECIDUOUS/CONIFER) × 0

-x -x - CHAINLINK FENCE PROJECT LIMIT

EXISTING A. RUBRUM TO BE REPLACED

PROPOSED A. RUBRUM X 'OCTOBER GLORY'





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GENERAL PLANT INSTALLATION NOTES

CORNUS KELSEYI

GERANIUM CINEREUM

ENT TREES AND/OR SHRIBES I HIGHER THAN DEPIT HE GROWN AT INSERTY.

FOR CONTINUES TREES AND/OR SHRIBES SCORE FOUR SIDES OF ROOTBALL THOS OF A LOTTER HE SHRIBES THE SHRIBES THE SHRIBES THE SHRIBES THE SHRIPES THE

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I GAL FULL & BUSHY

KELSEY DOGWOOD

HARDY GERANIUM

RATE. ALL FLATINGS AREAS FINAL MAYE A MINIMAL SHEAR DEPTH OF TOPSOL IF TOPSOL OF REPRESENTING THE AUDITOR CALLS IN THAT MAIN PLANTING AREAS, AS DETERMINED BY TALABASE CORRUNATIOS, CONCENTRATION OF THE TOPSOL IN PROPERTY OF THE TOPSOL OF THE TOPSOL IN PROPERTY OF THE TOPSOL IN PROPERTY OF THE TOPSOL IN PROPERTY OF THE TOPSOL IN THE TOP

NW 1/4, SECTION 28, TOWNSHIP 25N, RANGE 5E, W.M.

#### CITY PLANT LIST

LARGE TREES SYMBOL SCIENTIFIC NAME

ACER RUBRUM 'KARPICK' RED MAPLE

 PHYSOCARPUS CAPITATUS PACIFIC NINEBARK PSEUDOTSUGA MENZIESII DOUGLAS FIR

SMALL TREES/LARGE SHRUBS SYMBOL SCIENTIFIC NAME

COMMON NAME CRATAEGAS LAVIGATA ENGLISH HAWHTORN MYRICA CALIFORNICA PACIFIC WAX MYRTLE

RED FLOWERING RIBES SANGUINEUM

MASSING SHRUBS

SYMBOL SCIENTIFIC NAME COMMON NAME BERBERIS THUNBERGII
 'CRIMSON PIGMEY' JAPANESE BARBERRY CHAENOMELES JAPONICA ORANGE DELIGHT ORANGE FLOWERING

GAULTHERIA SHALLON V V V V V V V V GERANIUM CINERUM # HEMEROCALLIS 'STELLA D'ORO'

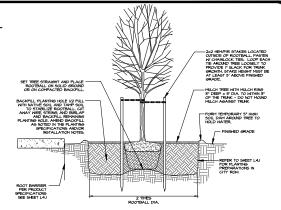
STELLA D'ORO DAYLILY → LONICERA PILEATA BOX HONEYSICKLE

® ROSA RUSOSA PINK PAVEMENT' PINK PAVEMENT RUGOSA ROSE ⊕ TAXUS X MEDIA

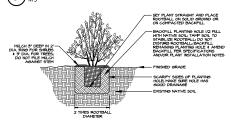
ANGLO-JAPANESE YEM

#### GROUNDGOVERS & PERENNIALS

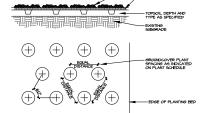
SYMBOL	SCIENTIFIC NAME	COMMON NAME
******	ARCTOSTAPHYLOS UVA-URSI "MASSACHUSSETTS"	KINNICKINNICK
	COTONEASTER DAMMERI 'LOWFAST'	BEARBERRY COTONEASTER



STREET TREE WITH ROOT BARRIER



CONTAINER STOCK PLANTING DETAIL



(3) GROUNDCOVER INSTALLATION DETAIL





#### NOTES

GROUNDCOVER PLANT MATERIAL; SEE PLANT SCHEDULE

3" DEPTH BARK MULCH

- SURVEY FROVIDED BY LANKTREE LAND SURVEYING INC., 25510 74TH AVE 5, KENT, IVA 98:052, (255) 655-6423 XIOI.
  SITE PLAN FROVIDED BY NAVIX ENGINEERING, II:235 SE 6TH 5T, SUITE ISO, BELLEVUE, IVA 98:004, (425) 453-4501.
- 453-4501. SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT.



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PART II GENERAL

- I.I SEGUENCING
- A, LANDSCAPE WORK THIS SECTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- I. PREPARATION OF SUB-BASE AS REQUIRED FOR GRASS AND PLANTING BEDS 2. FINISH GRADING OF TOPSOIL MATERIALS.
- 3, PREPARATION OF SOIL MIXTURES.
- 4. EXCAVATION AND BACKFILLING FOR TREES AND SHRUBS, 5. PLANTING OF TREES, SHRUBS AND GROUNDCOVERS.
- 6. MISCELLANEOUS LANDSCAPE WORK,
- QUALITY ASSURANCE: SUBCONTRACT LANDSCAPE WORK TO A SINGLE FIRM SPECIALIZING IN LANDSCAPE WORK.
- 1.2 SOURCE QUALITY CONTROL

- LE STANCE GUALITY CONTROL.

  A SENERAL, SHI LANDSCAPE MATERIALS WITH CERTIFICATES OF INSPECTION REQUIRED BY GOVERNING AUTHORITIES. COMPLY NITH RESULATIONS APPLICABLE TO LANDSCAPE MATERIALIS. OF DESTINABLE SUBMITT NON-AVAILABILITY TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL, WHEN AUTHORIZE, DAUDISTRUCT OF CONTRACT MOUNT HILL BE WHOSE, IF NECESSARY.

  2. ANALYSIS AND STANDARDS. PACKAGE STANDARD PRODUCTS WITH MANEACTINERS CERTIFIED ANALYSIS. FOR OTHER MATERIALS, PROVIDE ANALYSIS FOR OTHER MATERIALS, PROVIDE ANALYSIS FOR CHIEF MATERIALS, PROVIDE ANALYSIS FOR CHIEF MATERIALS, PROVIDE ANALYSIS FOR CHIEF MATERIALS, PROVIDE ANALYSIS AND STANDARD SENSOR SHANDARD FOR CHIEF OF THE ASSOCIATION OF OFFICIAL AGRICULTURE CHEMISTS, MERGURE PROPERCY.
- B. TOPSOIL. BEFORE DELIVERY OF ADDITIONAL TOPSOIL, FURNISH LANDSCAPE ARCHITECT WITH WRITTEN STATEMENT GIVING LOCATION OF PROPERTIES FROM WHICH TOPSOIL IS TO BE OBTAINED.
- CHAIT METERAL PROVIDE LAUNT HATERAL THAT PHENCH 10750L IS TO BE OBTAINED.

  C. PLAIT METERALLY PROVIDE LAUNT MATERIAL OF GUARNITH, SIGL, ERBUS, SPECIES AND VARIETY SHOWN AND SCIEDLED FOR LANDSCAPE HORK AND COMPLYING WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI SCOL, CARRENT BOTTOM, THAT DEPOLATION AND CONTRIBUTION OF METERAL PROVIDER AND PROVIDER AND CONTRIBUTION OF METERAL PROV
- DISHIGAREMENT.

  I. EXCEPT AS FOLLOWS, LABEL AT LEAST ONE TIREE AND ONE SHRIB OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAS BEARNIS LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.

  2. NOTIFY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION FOR QUALITY INSPECTION, LOCATION OF PLANT MATERIAL AND REVIEW OF PLANTINS TIME AND SCHEDUE, LANDSCAPE ARCHITECT RETAINS THE RIGHT TO RIGHTER INSPECT PLANT MATERIAL FOR SEZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS INJURIES AND LATENT DEFECTS, AND TO RELEET INSPACTS IN SECTION OF BALLS AND ROOT SYSTEMS, INSECTS INJURIES AND LATENT DEFECTS, AND TO RELECT INSAGISFACTIONS OF DEFECTIVE MATERIAL AT ANY TIME DURING PROOFESS OF NORK, REMOVE RELECTED TREES OR SHRIBS INSECTIONLY FROM PROJECTS STE
- D. TESTING: OBTAIN SOIL TEST TO DETERMINE PH AND LIME REQUIREMENTS PRIOR TO PLANTING
- E. MAINTENANCE INSTRUCTIONS: SUBMIT TYPEWRITTEN INSTRUCTIONS RECOMMENDING PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF LANDSCAPE WORK FOR ONE FULL YEAR. SUBMIT TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO EXPIRATION OF REQUIRED MAINTENANCE PERIOD(5).
- I.3 DELIVERY STORAGE AND HANDLING
- 13 DELIVERT SIGNERS AND FRAULING
  A TEEES AND SHRIBB, PROVIDE RESEALY DUS TREES AND CONTAINERIZED SHRIBS. DO NOT PRIME PRIOR TO DELIVERY INLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE RITEES OR SHRIBBS IN SIGH MANNER AS TO DAMAGE BARK, BERKE BRACKLES OR DESTROY INATURAL SHAPE, PROVIDE PROTECTIVE COVERING DIRING DELIVERY, DO NOT DROP BALLED AND BIRLAPPED STOCK DIRING DELIVERY.
- SILOR, DURING DELIVERY SKRIBS, AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT DWEDDATES. IT PLANTING DE DELAYED MORE THAN E HOLDER AFTER PELIVERY, SET PLANT METERIAL IN SHADE, PROTECT FROM HEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST BY COVERING HITH MLCH, BURLAP OR OTHER ACCEPTABLE MEMS OF RETAINING MOISTIES.
- 2.DO NOT REMOVE CONTAINER GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME
- I.4 JOB CONDITIONS
- A. PROCEED WITH AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF THE SITE BECOME AVAILABLE, WORKING WITHIN SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.
- I. <u>UTILITIES</u>, DETERMINE LOCATION OF INDERSPROAD UTILITIES AS REQUIRED BY LAM AND PERFORM MORK IN A MANNER WHICH MILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED, MAINTAIN GRADE STAKES SET BY OTHERS UTILITIES FOR THE METHOD BY PARTIES CONCERNED.
- EXCAVATION, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY LANDSCAPE ARCHITECT BEFORE
- 3. <u>PLANTING TIME</u>: PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH SPECIFIED MAINTENANCE PERIODS TO PROVIDE MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.
- 1.5 GENERAL SITE CONDITIONS
- LANDSCAPE CONTRACTOR SHALL GIVE LANDSCAPE ARCHITECT A MINIMAM OF TEN (IO) DAYS NOTICE PRIOR TO RITEMPTO TO PROCEED WITH CONSTRUCTION.

  B. CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, PERMIT CONDITIONS, ORDINANCES AND POLICIES OF THE GOVERNING JURISDICTION.
- C. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER RELATED OR REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION.
- D. A COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND PERMIT APPROVALS MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS AND SHALL REMAIN ON SITE UNTIL PROJECT COMPLETION.
- E. LANDSCAPE ARCHITECT SHALL BE ON SITE, AS NECESSARY, TO MONITOR CONSTRUCTION AND APPROVE MINOR REVISIONS TO THE PLAN.
- L6 TOPSOIL
- 16 TOPSOIL

  A ALL GRADING SHALL BE DONE PER THE APPROVED CIVIL SET AND SPECIFICATIONS, ALL PLANTING AREAS SHALL BE OVER-EXCAVATED 4" FOR PLACEMENT OF STOCKPILED TOPSOIL OR IMPORTED 3-HAY TOPSOIL (CEDAR GROVE OR EQUIA). TOPSOIL, IF A VIALL BE EXCAVATED FROM HEDEF-FREE AREAS ON THE SITE, SELECTED BY LANDSCAPE ARCHITECT, AND SHALL BE STOCKPILED PRIOR TO OTHER SITE WORK. LANDSCAPE ARCHITECT SHALL DETERMINE DEFIN OF POSSOLID TO STOCKPILE. DESERVE OF CONTROL. SELECTED OF CONTROL SELECTED
- 1.7 PROJECT WARRANTY
- AMARCHAT ALL PLANTING FOR A PERIOD OF CAE "PERA AFTER DATE OF FINAL ACCEPTANCE BY CHARGA AGAINST DEFECTS INCLINING DATAH AND INSANTIFACTORY ROOFILE RECKET FOR DEFECTS RESILTING PERION REGLECT BY CHARGA RUBE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS HIGH ARE BEYOND LAMPSCARE CONTRACTORS CONTROL.
- B. IMMEDIATELY REMOVE AND REPLACE TREES, SHRIBS OR OTHER PLANTS FORDS TO BE DEAD OR IN IMMEDIATE CONTROL DISTRICT MARRAINT PERIOD, REPLACE PLANT HATERIAL IN DOSIFIEL CONDITION DISTRICT MARRAINT PERIOD, INLESS, IN OFNION OF LANDSCAPE ARCHITECT, IT IS ADVISABLE TO EXTEND MARRAINT PERIOD FOR A FULL GROWING SHASON.
- AMMONINE FEBRUOR A DEL DESCRIPTO SAFETON DE ENTENDED MURRANTY PERIOD TO DETERMINE
  AND DETERMINE DE ENTENDE DE PROPERTIES DE L'OSÉES DE REPLACEMENTS DIE TO
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- PART 2: PRODUCTS AND MATERIALS
- 2.I TOPSOIL
- TOPSOIL THAT HAS BEEN STOCKFILED FOR REISE IN LANDSCAPE HORK SHALL BE FERTILE. FRIABLE, SANDY LOAM, SURFACE SOIL, FREE OF SISSOIL, CLAY, UMPAS, BURGH, MEEDS AND OTHER LITTER, AND FREE OF ROOTS, STIMPS, STORES LARGER THAN I'N ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARPHILL TO FLANT GEOCHIN.
- B. PROVIDE ADDITIONAL TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FORMS AT FROJECT SITE. DETRININ I DEPOIL ONLY FROM MATRIXALLY, MELL-DRAINED SITES WEERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 6°; DO NOT OBTAIN FROM BOOGS, MARSHES OR OTHER PETLAND AREAS.
- 2.2 SOIL AMENDMENTS
- A LIME. MATIRAL DOLOMITIC LIMESTONE CONTAINING NOT LESS THAN 85% OF TOTAL CARRONATES HITH A MINIMAM OF 50% MAGNESIM ACREOMATES, SECOND 50 THAT NOT LESS THAN 105% PAGES A 10-MESH SIEVE AND NOT LESS THAN 50% PAGES A 100-MESH SIEVE. RATE OF APPLICATION SUITED TO SOIL ACIDITY AND TITE OF PLANTING AS DETERMINED BY SOIL TESTING.
- B. ORGANIC MATTER: ORGANIC, WEED- AND DEBRIS-FREE COMPOST, CEDARGROVE OR EQUIVALENT. 2.3 MULCH
- A. BARK OR WOOD CHIP MULCH SHALL BE DERIVED FROM DOUGLAS FIR, PINE, OR HEMLOCK SPECIES. THE MULCH SHALL NOT CONTAIN RESIN, TANNIN, OR OTHER COMPOUNDS IN QUANTITIES THAT WOULD BE DETRIMENTAL. TO ANIMAL, PLANT LIFE, OR WATER QUALITY. SAMPUST SHALL NOT BE USED AS MULCH,
- B. MILCH SHALL BE MEDIUM-COARE GROUND HER GIRALITY, SAMDIST SHALL NOT BE USED AS MILCH.

  B. MILCH SHALL BE MEDIUM-COARES GROUND HITM AN APPROXIMATELY SHACH MINIS PARTICLE SIZE. FINE
  PARTICLES SHALL BE MINIMIZED SO THAT NOT MORE THAN 30%, BY LOOSE VOLUME, MILL PASS THROUGH A
  10 NO. 4 SIZE.
- 2.4 COMMERCIAL FERTILIZER
- D. FOR ALL PLANTING BEDS: PLANTINGS SHALL BE FERTILIZED WITH A SLOW-RELEASE GENERAL GRANLAR FERTILIZER (16-16-16), OR SLOW-RELEASE FERTILIZER TABLETS, WITH APPLICATION RATES AS SPECIFIED BY MANIFACTURES, FERTILIZER SHALL BE APPLICAD AFTER PLANTING PIT IS BACKFILLED (OR DURING BACKFILL IN THE CASE OF TABLETS), AND PRIOR TO APPLICATION OF MILCH. FERTILIZER SHALL NOT BE APPLIED ETHERN MOVEMER AND MARCH.
- 2.5 PLANT MATERIALS
- A <u>VERIFY QUANTITIES</u>. VERIFY PLANT LOCATIONS AND QUANTITIES OF PLANTS ON THE PLANT SCHEDULE HITH THOSE REPRESENTED ON THE PLAN, ACTUAL PLANT QUANTITIES SHOWN ON PLANTING PLANS TO PREVAIL OVER QUANTITIES SHOWN ON PLANT SCHEDULE IN THE EVENT OF A DISCREPANCY.
- BIGALITY: PROVIDE TANT MATERIAL OF SIZE, GENES SPECIES AND VARIETY SHOWN AND SCIEDLED FOR LADSCARE MORE AND CAPPYING HITH RECOMPRIDATIONS AND FEDILIBRAINST OF ANSI SCIOL CAPPRINT EDITION "AMERICAN STANDARD FOR INSCREYS STOCK". ALL PLANT MATERIALS TO BE LOCALLY GROWN (RESTERN MR, MESTERN OR, OR NESTERN BC), HEALTHY, BUSHY, AND IN VIGEORIOS GROWNS CONDITION, IF REPLACEMENT OF PLANT MATERIAL IS INSCRESSARY DIE TO CONSTRUCTION DAMAGE OR PLANT FAILINE INTIRNI ORE YEAR OF INSTALLATION, SIZE AND GOALLITY SHALL BE AN IDICATED ON THE PLANS.

#### 2.6 TEMPORARY IRRIGATION

- A TEMPORARY TO YEAR MARRANTEEL DEEP IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY LAMESCARE CONTRACTOR BYON COMBINION OF DISSOLID BY LACEBET AND FRONCE TO INSTALLATION OF PLANTINGS WITHIN THE LANDSCAPE AREA. ALL PLANTED AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES.
- B. PROVIDE WRITTEN VERIFICATION TO LANDSCAPE ARCHITECT THAT BACKFLOW PREVENTION PER CODE EXISTS ON THE LINE TO BE USED AS A POINT OF CONNECTION FOR THE IRRIGATION SYSTEM. IF VERIFICATION CANNOT BE MADE, PROVIDE BACKFLOW PREVENTION FER CODE AS A PART OF THE INSTALLATION.
- C. GENERAL CONTRACTOR SHALL PROVIDE SLEEVING, WATER AND ELECTRICITY FOR THE SYSTEM, LANDSCAPE CONTRACTOR SHALL PROVIDE ISOLATION VALVE AND CONNECTION TO WATER AND CONTROLLER.
- D. LANDSCAPE CONTRACTOR SHALL INSTALL SOIL MOISTURE PROBE CONNECTED TO IRRIGATION SYSTEM TO DETERMINE WHEN IRRIGATION IS NECESSARY DURING THE DRY SEASON. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- E, LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER FUNCTION AND CONNECTION OF THE IRRIGATION SYSTEMS, AND TO "WINTERIZE" INSTALLED IRRIGATION SYSTEM PRIOR TO OCTOBER 31ST.
- 2.7 MISCELLANEOUS LANDSCAPE MATERIALS
- A. <u>STAKES, DEADMEN AND GUYS.</u> PROVIDE STAKES AND DEADMEN OF SOUND NEW, PRESSURE TREATED HEM-FIR, FREE OF KNOT HOLES AND OTHER DEFECTS. SIZE AS FOLLOWS: STAKES: 2"X2"X8"-0", POINTED, STAINED DARK BROWN.
- STATISET LAWS RECURS.

  DEALERS AND STATES AND STATES OF A STATES AND STATES AND STATES AND STATES AND STATES.

  DEALERS AND STATES AND AND STATES AND STATES AND STATES AND STATES AND STATES.

  PROVIDE NOT LESS THAN 364 INCH DANGETER BLACK RUBBER OR PLASTIC HOSE, CUT TO REQUIRED LEST TO PROTECT TIREE TRANSE REPORT DANAGES AND STATES.
- C. LIGHTING: SEE DRAWINGS BY OTHERS FOR ALL OUTDOOR LIGHTING DETAILS.
- EXECUTION
- 3.I SOIL PREPARATION
- A COMDINATE THE MORK OF THIS SECTION WITH "IRRIGATION SYSTEM INSTALLATION".

  1. STAKE PROPOSED TIREE LOCATIONS AND SECURE LANDSCAPE ARCHITECTS ACCEPTANCE BEFORE START OF PLANTING MORK, "MAKE MINOR ADJUSTMENTS AS MAY BE REQUESTED.

  2. PREPARATION OF PLANTING AREAS, PRICAR TO PLANTING, TOPSOIL SHALL BE PLACED AND TILLED INTO THE SUBSPACED FERT HE TOPSOIL SECTION.

- THE SUBGRADE FIRE THE TOPSOIL SECTION.

  3. EXCLAVATION FOR TREES AND SARGES, EXCLAVATE PITS AND BEDS HITH VERTICAL SIDES AND HITH.

  IN BOTTOM AND SIDES OF ELANTING PIT.

  IN BOTTOM AND SIDES OF ELANTING PIT.

  FOR DALLED AND BUILLAFFEC (DRIP) TREES AND SHRUBS, MAKE EXCLAVATIONS AT LEAST TRUCK AS HIDE

  AS THE BALL DIAMETER AND EQUAL TO THE BALL DEPTH PLUS AN ALLOWANCE FOR SETTING OF BALL ON

  A "LLATER OF COMPACTED LIANTING SOIL MIXTURE.
- FOR CONTAINER GROWN STOCK, EXCAVATE AS SPECIFIED FOR BALLED AND BURLAPPED STOCK, ADJUSTED TO SIZE OF CONTAINER WIDTH AND DEPTH.
- A. TIMING: TO OCCUR BETWEEN NOVEMBER IST AND MARCH 3IST.
- B. INSERCIONS. NOTIFY LANDSCAFE ARCHITECT FROR TO FLANTING TO REVIEW GUALITY, PLACEMENT AND THINNS. 51 NEW EITE PROPOSED LOCATION OF ALL TESES AND SHIBBS HITH AN APPROVING CORDING SYSTEM FOR LARGE GROUPINGS OF SINGLE SHELD SPECIES, BONDARY HAY BE STACED. LANDSCAFE ARCHITECT TO REVIEW AND APPROVING LOCATIONS PRIGOR TO PLANTING OR RELOCATION PLANT MATERIAL.
- C. BLAITIME TIBLES AND SHIBBS. SET BALLED AND BIRL APPED (BINS) STOCK ON LAYER OF COMPACTED PLANTINES OLD INVIDUE, PLAND AND IN CENTER OF PIT AITH TO OF PIALL SLEEPINT, HERER THAN ADJACENT FINISHED LANDSCAPE (SHADES TO ACCOUNT FOR MUCH DEPTH. WITE AND REPOVE BURLAP PROOF SIDES OF PIALLS, RETAIN OR DOTTONS, HOR BASKETS, IF DEED, SHALL BE CUT ANANT REVAIL AND HORSE BASKETS, IF DEED, SHALD BE OUT ANANT REVAIL AND HORSE EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND EXPENDED.

- CORRECT ANY SETTLEMENT THAT MAY OCCUR
- I. SET CONTAINER GROWN STOCK AS SPECIFIED FOR BALLED AND BURLAPPED STOCK, EXCEPT FULLY REMOVE CONTAINER.
- 2. CREATE SAUCER IN BACKFILL AROUND TREES TO HELP RETAIN WATER. SAUCER AREA SHALL HAVE A DIAMETER OF AT LEAST 3 FEET.
- DEVICE LAND, SERIES ONLY TO REPORT BROKEN OR DAMAGED BRANCHES, OR AS DIRECTED BY LINESCARE ACCURATION. THE PRINCE SHALL FOLLOW STANDARD INSTITLLANDS, INFORMATION OF DIRECTED BY LINESCARE PROPRIES ANY PROVINCE OF SHALDS SHALL RETAIN A NATURAL CHARACTER. DO NOT LITTEE LEADERS, MY PROVINCE OF SHALDS SHALL RETAIN A NATURAL CHARACTER. DO NOT SHEAR SHRUBS WITH HAND OR POPERED LEDGES SHARDS.
- REMOVE AND REPLACE EXCESSIVELY PRINED OR MALFORMED STOCK RESULTING FROM IMPROPER PRINING.
- E. <u>APPLY ANTI-DESICCANT</u> USING POWER SPRAY TO PROVIDE AN ADEQUATE FILM OVER TRUNKS, BRANCHES, STEMS, TRUGS AND FOLIAGE.
- I. IF DECIDIOUS TREES OR SHRIBS ARE MOVED IN FULL-LEAF, SPRAY WITH ANTI-DESICCANT AT NURSERY BEFORE MOVING AND AGAIN 2 WEEKS AFTER PLANTING.
- . <u>QUY AND STAKE TREES</u> IMMEDIATELY AFTER PLANTING, WITH 2 STAKES PER DECIDIOUS TREE OR 3 DEADMEN PER EVERGREEN TREE. ORIENT STAKES TO RESIST THE FORCE OF THE WIND.
- G. PLANTING GROUNDCOVER, SPACE PLANTS AS SHOWN IN DETAIL.
- I, DIS IULIES LARGE BIOLISH TO ALLON FOR SPECIATING OF ROOTS AND BACKFILL HITH PLANTING SOIL.
  NORK SOIL ARROND ROOTS TO ELIMINATE ABPOCKETS AND LEAVE AS QUETT SALEES INDENTATION
  ARROND PLANTS TO HOLD HAITER. HAITER THORROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER
  CROWNS OF PLANTS HITH HEY SOILS.
- CRUMING OF PARIANS WITH PARIANS STATES SOLDS.

  2. MILCH AREAS BETHEEN GROUNDCOVER PLANTS TO A DEPTH OF 3°. TAPER MULCH TO BASE OF GROUNDCOVERS AND TAKE EXTRA CARE TO ENSURE GROUNDCOVERS ARE NOT BURIED WITH MULCH.
- H. MULCH ALL PLANTING BEDS: PROVIDE NOT LESS THAN A 3-INCH THICKNESS OF MULCH AND FINISH LEVEL MITH ADJACENT FINISHED GRADES AND PAVED SURFACES.
- 3.4 MAINTENANCE
- A. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING.
- B. MAINTAIN TREES, SHRUBS AND OTHER PLANTS UNTIL FINAL PROJECT ACCEPTANCE BY OWNER BUT IN NO CASE LESS THAN 90 DAYS AFTER SUBSTANTIAL COMPLETION OF THE PROJECT.
- C-MAINTAIN TREES, SHRUBES AND OTHER PLANTS BY MATERINS PRINNES, CLITYATING AND MEEDING AS REQUIRED FOR HEALTHY GROWTH. APPLY ANTI-DESICCANT AS SPECIFIED, RESTORE PLANTING SALCERS, TIGHTEN AND REPAIR STAKE AND GIT SUPPORTS AND RESET TREES AND SHRUBED TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBG FREE OF INSECTS AND DISECTION.
- 3.5 CLEANUP AND PROTECTION
- A. DURING LANDSCAPE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
- B. PROTECT L'AIDSCAPE MORK AND MATERIALS ROOM DANAGE DIE TO L'AIDSCAPE OPERATION, OPERATIONS OF OPERATIONS OF THE CONTRACTORS AND THAT EAST SAID TO THE CONTRACTORS AND THAT EAST SAID THE SAID SAID THE CONTRACTORS AND THAT SAID SAID THE SAID SAID. THE SAID SAID THAT SAID THAT THE SAID THAT SAID THAT THE SAID THAT SA
- 3.6 INSPECTION AND ACCEPTANCE
- A. WHEN LANDSCAPE WORK IS COMPLETED, INCLUDING MAINTENANCE, LANDSCAPE ARCHITECT WILL, UPON REQUEST, MAKE AN INSPECTION TO DETERMINE ACCEPTABILITY.
- B. LANDSCAPE WORK MAY BE INSPECTED FOR ACCEPTANCE IN PARTS ONLY IF AGREEABLE TO LANDSCAPE ARCHITECT, PROVIDED WORK OFFERED FOR INSPECTION IS COMPLETE, INCLUDING MAINTENANCE.
- C. WERE INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY LANDSCAPE ARCHITECT AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS PROMPTLY FROM PROJECT SITE.



#### NOTES

- I. SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 255(5 141H AVE 5, KEIN, IAA 96032, (253) STEPLAN PROVIDED BY IAAN VAN ENGINEERING. [1235 5E 61H 51, SUITE 150, BELLEVIE, IAA 96004, (425) 455-450.]

  5. SORGE GRANING WAS MODIFIED BY TALASAEA COMBUTANTS FOR VISIAL ENMACEMENT.



NOT FOR CONSTRUCTION THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE ASENCIES FOR REVIEW AND APPROVAL UNITL APPROVED, THESE PLANS ARE: SUBJECT TO REVISION

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<u>₹</u>20 LANDSCAPE PLAN PLANTING SPECIFICA-BELLEVUE PUBLIC S BELLEVUE, NASHING

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Project # 1534B

ASSESSATE, ASSESSATES FOR STRUCTURAL SOIL SHALL CONSIST OF CLEAN STONE THAT IS HIGHLY ANGLAR, STONE SIZE SHALLD BE I-VI-HUNGES TO 2-1/2-MUNGE CLEAR, WITH A DIMENSION ASPECT RATIO OF LEASHT TO HIGHEST OF III. HANIMM DIMENSION ASPECT RATIO OF 2.II. IS ALLOWED PROVIDED THE MAJORITY OF THE MATERIAL CONFORMS TO THE II. II. REQUIREMENT, ALL PIECES SHALL HAVE A NIMINAM OF 3 FRACTURED FACES,

AGGREGATE SHALL BE SOUND, HARD DURABLE, AND HIGHLY ANGULAR. AGGREGATES SHALL BE FREE FROM SALT, THIN ELCHGATED OR LAMINATED PARTICLES, ORGANIC MATERIAL, CLAY LUMPS, OR OTHER SUBSTANCES THAT WOULD ACT IN A DELETERICUM ANANER OR INTERFEE HITH VEGETATIVE GROWTH.

PRE-APPROVED MATERIALS-2-INCHES CLEAR CRUSHED, CADMAN

GROWING MEDIUM: SEE SOIL SPECIFICATIONS

PRE-APPROVED MATERIAL-SEE SOIL SPECIFICATIONS

SOIL STABILIZES, SOIL STABILIZER SHALL BE A NON-TOXIC ANOMIC LINEAR POLYMER FER 1965 SECTION 9-1450) CAPABLE OF BINDING THE SOIL PARTICLES TO THE AGREGATE DURING MINION AND FALCEMENT OF THE STRICTISMAL SOIL MIXTURE. CROSS-LINEED POLYMERS SHALL NOT BE PERMITTED, APPLICATION SHALL BE PER THE MANUFACTURER'S MRITTEN INSTRUCTIONS.

ROVED MATERIAL- @STABILIZERA FROM STABILIZER SOLUTIONS (602) 225-5900 \$1-(800)-336-2468 PHONE WWW.STABILIZERSOLUTIONS.COM

GEOTEXTILE FOR SEPARATIONS: GEOTEXTILE FOR THE SEPARATION BETWEEN THE STRUCTURAL SOIL AND CRUSH SURFACING TOP COURSE SHALL BE PER W65 SECTION 4-33 AND MEET THE PROPERTIES LISTED IN SECTION 4-33.2(1) TABLE 3.

WATER: PER WSS SECTION 9-25.2

AT LEAST 30 DAYS PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL PROVIDE A MIX DESIGN IN WRITING DESCRIBING THE PROPOSED MATERIAL PROPORTIONS, MIXING PROCEDURE, AND MATERIAL SOURCES.

MATERIAL PROPORTIONS. MIXES SHALL UTILIZED THE FOLLOWING BASE RATIO, HOWEVER, VARIATIONS OF THE PHYSICAL PROPERTIES OF THE MATERIAL CONFONENTS MAY REQUIRE ADJISTMENTS TO THE DESIGN TO BYSICE ADEQUATE STRUCTURAL MOY VOID 974-OE REQUIRE/BITS ARE MAINTAINED.

AGGREGATE	4 CY
GROWING MEDIUM	ICY
SOIL STABILIZER	4 LBS., PER MANUFACTURERS WRITTEN INSTRUCTIONS
WATER	46 GALLONS*

\*MATER SHALL BE ADJISTED AS REQUIRED TO ACHIEVE A TARGET MOISTURE CONTENT OF 20% BY WEIGHT BY WEIGHT OF THE GROWING MEDIUM COMPONENT.

\*\*NOTE THAT A VOLUME REDUCTION OF APPROXIMATELY 10% DUE TO THE MIXING PROCESS IS TYPICAL

MIXING PROCEDURE, STRUCTURAL SOIL SHALL BE MIXED IN BATCHES SUITABLE FOR THE CHOSEN EQUIPMENT, MIXING SHALL BE PERFORMED ON PAYED SURFACE AT THE SUPPLIER'S YARD AND A SUITABLE AREA FREE FROM FOREIGN MATERIAL OR MOISTURE MILL BE PROVIDED.

A TYPICAL MXING PROCEDURE HILL INVOLVE STARTING HITH HALF OF THE AGGREGATE, ADD HALF OF THE TOPSOIL, ADD ALL OF THE SOIL BINDER, ADD HALF OF THE ESTIMATED MATER, AND ADD THE OTHER HALF OF THE AGGREGATE, AND MIX THE MATERIAL AND THE AGGREGATE AND THE AGGREGATE HALF DOES NOT THE AGGREGATE AND DOES NOT PALL QUIT OF THE MATERIAL FOR DOES HALF HALF AGGREGATE, IF THIS OCCURS, THE BATCH OF MATERIAL AND THE TOPSOIL HILL HASH OFF THE AGGREGATE, IF THIS OCCURS,

THE FINISHED PRODUCT SHOULD CONSIST OF THE UNIFORMLY BLENDED MIXTURE, MIXING SHOULD BE DONE IN STEPS TO ENSURE HOMOGENEOUS DISTRIBUTION OF MATERIALS AND ADEQUATE MOSTURE CONTENT IS MAINTAINED THROUGHOUT THE WINNIS PROJECTS, THE MIXTURE SHALL EASILY SHEEP AND BEEAK DONN WITHOUT LUMPHINS. THE GROWNEN BEDWIN SHALL NOT BE OVERLY WET OR DRY DURING MIXING OPERATIONS, PERIODIC ADJISTMENT OF THE MATER CONTENT MAY BE REQUIRED TO MAINTAIN OFFINIM MOSTURE LEVEL.

#### DELIVERY STORAGE AND HANDLING

MIXED STRUCTURAL SOIL MUST BE PROTECTED FROM ABSORBING EXCESS WATER AND FROM EROSION AT ALL TIMES, DO NOT STORE OR TRANSPORT MATERIALS IMPROTECTED DURING RAINFALL EVENTS, DO NOT ALLOW EXCESS MATER TO ENTER THE SITE PRIOR TO COMPACTION OF THE STRUCTURAL SOIL MATERIAL.

DELIVERY OF THE STRUCTURAL SOIL TO THE JOB SITE SHALL OCCUR INMEDIATELY AFTER MIXING PROCEDURES ARE BE COMPLETE. EXTENDED STOKAGE OR STOCKPILLING OF STRUCTURAL SOIL IS NOT PERMITTED. THE PERMITTED FOR THE PERMITTED REPRESENTATION FOR PERMITTED FOR THE PERMIT

#### SITE PREPARATION AND INSTALL ATION

SITE PREPARATION AND INSTALLATION INSPECITED PRIOR TO DELIVERY AND INSTALLATION OF STRUCTURAL SOIL, CONFIRM THAT THE SIS-GRAVE IS AT THE PROPER BLEVATION AND COMPACTED AS REQUIRED, AND SIS-GRADE BLEVATIONS ARE WITHOUT AND SIS-GRADE BLEVATIONS ARE SISTEMATED. AND SISTEMATE AND SISTEMATION AND SISTEMATION AND SISTEMATION OF STRUCTURATION OF THE ADDRESS OF THE SISTEMATION SITE, THE AREA SHALL BE DRAINED AND INFECTION FOR TO INSTALLATION OF STRUCTURAL SOIL. SOIL SIGNAVIOR SITE, THE AREA SHALL BE DRAINED AND INSPECTION FROM TO INSTALLATION OF STRUCTURAL SOIL.

STRUCTURAL SOIL SHALL BE PLACED IN THE EXCAVATED TRENCH IN 6-INCH LIFTS, AND SPREAD WITH SUITABLE EQUIPMENT. THE STRUCTURAL SOIL SHALL BE COMPACTED BY A STATIC DRIM COMPACTOR EVIDENCED BY N INVITLEDING SUBBAGE. AFTER COMPACTION IS ACHIEVED, GEOTEXTLE FARRIC SHALL BE INSTITULED AS ARRIER SELD. THE CAUGHDED SURFACING TOP COURSE AND PAYEMENT, THE STRUCTURAL SOIL SHALL BE PROTECTED FROM YIBBATORY SOURCES WITH PRIAL STRUCTURE OF PAYEMENT IS IN FLACE, IN THE EVENT THAT THE STRUCTURAL SOIL IS NOT IMPEDIATELY PROTECTED FROM THE ELECTRIC STRUCTURE STRUCTURE AS OLD IS NOT IMPEDIATELY PROTECTED FROM THE ELECTRIC STRUCTURE STRUCTURE AND THE STRUCTURAL SOIL IS NOT IMPEDIATELY PROTECTED FROM THE ELECTRIC STRUCTURE STRUCTURE AND THE AND

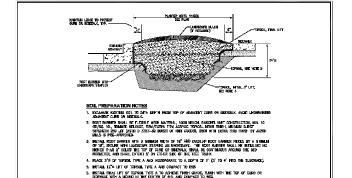
THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING WORK ACTIVITIES TO PROTECT STRUCTURAL SOIL DURING PLACEMENT,

AND INSTALLATION OF ELEMENTS DEPENDENT ON THE STRUCTURAL SOIL SHOULD COMMENCE IMMEDIATELY AFTER MATERIAL HAS BEEN PLACED.

SOIL CELL SYSTEMS

SOLL CALL SYSTEMS (LE. SLYA CELL, STATACELL) ARE THE PREPENSIED METHOD FOR PROVIDING A DOUBLY THATING SUNFAMENT HER SITE CONTINUES CONTRAIN SOLL VALUES AVAILABLE TO THESE, THESE SYSTEMS HOUSE ARRANGING HODILAR PLASTIC/PIERROLAGS STRUCTURES CAPABLE OF CONTAINED BY THESE SYSTEMS HAY BE CONTROL TOWARD MINIMAY SOLL VALUES REQUIREDENTS, PRODUCTS SHALL HER ALL OF THE FOLLOWING STANDARDS.

- A MINIMUM OF 90 PERCENT OF THE CELL PRODUCT IS VOID SPACE.
- VOID SPACE IS FILLED WITH AN APPROVED SOIL THAT MEETS STANDARDS AS DEFINED BY THIS CHAPTER. 5. PRODUCT IS DESIGNED TO BE COMPATIBLE WITH UNDERGROUND UTILITIES AND SHALL BE CAPABLE OF ALLOWING PASSAGE AND ACCESS TO DUCT BANKS AND PIPES WITHOUT COMPROMISING STRUCTURAL INTEGRITY OF THE CELL
- D. CELL SYSTEMS ARE CAPABLE OF SUPPORTING LOADS UP TO AND INCLUDING AASHTO H-20. E.PRODUCT IS INSTALLED TO MANUFACTURER SPECIFICATIONS.



SOIL PREPARATION FOR LANDSCAPE STRIPS

DRAMME NAMED THE 130-NOAE

SOIL PREPARATION FOR CITY ROW LANDSCAPE STRIPS

7. METALL 2"4: LANDSCAPE NULCH, FULL DEPTH IN THE CENTER AND FEATHERED AT THE EDGES TO RECCUSE FLUOR WITH CLASS OF SECREPAIN.





#### NOTES

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  5. SORGE GRANING WAS MODIFIED BY TALASAEA COMBUTANTS FOR VISIAL ENMACEMENT.

NOT FOR CONSTRUCTION

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NOTE, PERTAINS TO THE CONSTRUCTION OF THE CITY ROW SIDEWALKS ONLY

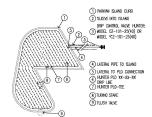
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SPECIFICATIC STORAGE IGTON LANDSCAPE PL STRUCTURAL SOIL BELLEVUE PUBL BELLEVUE, WASI

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IO-15-2019 AS NOTED

Project # 1534B



IRREGULAR ISLAND "A" IDIOMORY FRIGATION DETAIL NOT TO SCALE

MORES.

1. ARE DEFINED FLOW AND SPACES DISED ON FLANT AND SOL TITY.

2. REW SPRONG OF THE THINGS DESIGN OF HARM AND SOL TITY.

2. REW SPRONG OF THE THINGS DESIGN OF HARM AND SOL TITY.

3. NEXT THING DOWN OFF S AND WORLD IT OF ALL ETHING DULIES.

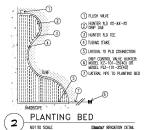
5. NEXT THING DOWN OFF S AND WORLD IT OF ALL ETHING DULIES.

GREATER AND A FT'S LIST SHAWARD LITTING, FET TO CHORD SHIPTLE HORR FRE THE PAPER AND.

5. NISHALL THEN WORLD AT "O'DM LITTINGS THE TO CHARM CONNECTIONS.

6. RINGLIGHT FLUER LITTINGS AND DIFFLE FREET TO HARM CONNECTIONS.

7. THE TOP BUT LEW OFFEREN GREATERS OFFER TO MICHAEL CONNECTIONS.



notes: 1. Size emitter flow and spacing based on plant and soil type. 2. Sow spacing of PLD being based on plant and soil type. 2. RIM SYDINGS OF PLU SIMES GREED ON PAPEL AND SILL PIPE.

3. SIME UNINSO DONE SIGNS' AN OWNER "OF PLU TIMES CULTES"

4. DIA NOT DESCRIP GLEEDY OF 5 195 WHEN TUBBLE, IT SIZE OF SIPE AND OSSIES VILLOUTIES.

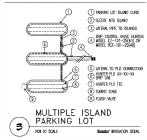
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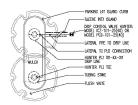
5. DIA NOTAL PLUST VILLOUTIES. ON THE CONTROL SIPE OF THE CONTROL OF SIPE AND OSSIES VILLOUTIES.

6. DIFFOUNDAY FULST MUTERA AND GREVIES PRIOS TO DESIRAD.

6. THE SIZE OF THE OFFI PROPECE OF DESTRUCTIONS OF THE CONTROL ON SIPE AND OSSIES.

7. TIST SIDE PLUS FOR PROPECE OF THE ORION TO COSTANIO.





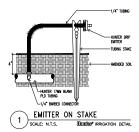
PARKING LOT ISLAND TWO TREES NOT TO SCALE Dimbor IRRIGATION DETAIL

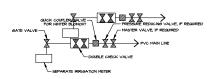
KOTES: I. Size emitter flow and spacing based on plant and soil type. I. Row spacing of pld tibing based on plant and soil type. 2. DIES SPAING OF PIO TIBERO ENSED ON FAMIT AND SOL 1974.

4. DI HOTO ENSED Y AND HOTO STAND HOTO STAND ON THE BOTH OF THE TIMEN GITTLETS.

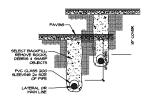
4. DI HOTO ENSED VELOCOTI OF 5 795 WHITH 1000MERS, TO SEZ OF EIRP AND OBENIES VELOCITIES.

5. DISCOURT HOM. SELECT AND OBENIES. TO SELECT SELE











#### IRRIGATION CONSTRUCTION NOTES

I. GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:

A. PROTECTION OF SITE, INCLUDING, LOCATING ALL EXISTING AND NEW INDERGROUND UTLITY LINES FRIOR TO ANY CONSTRUCTION, SAVING AND PROTECTING EXISTING TREES DESIGNATED TO REMAIN, REPARING ANY DAMAGE DAME TO UNERNO, SIDEMALS, FENCES, AND ANY OTHER DAMAGE CAMED AS A RESULT OF THIS CONTRACT.

B. INSTALLATION OF IIOV ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLIDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER OWNER AND COORDINATE WITH GENERAL CONTRACTOR.

C. INSTALLATION OF IRRIGATION/SERVICE METER AND STUB TO IRRIGATION POINT OF CONNECTION, PER UTILITY PLAN(S).

D. PROVISION OF STANDARD THREADED STUB-OUT WITH THREADED CAP ON DISCHARGE SIDE OF METER. STUB-OUT TO BE INSTALLED APPROXIMATELY IS INCHES BELOW FINISHED GRADE.

E. VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL DETERMINE STATIC PRESSURE AND SYSTEM DEMANDS.

F. INSTALLATION OF SLEEVING, AS NECESSARY.

2, LANDSCAPE CONTRACTOR TO DESIGN SYSTEM IN ACCORDANCE WITH LANDSCAPE PLANS.

3. ALL WORK PER LOCAL CODE AND INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.

4. ALL VALVES TO BE PLACED IN 'CARSON' (OR APPROVED EQUAL) VALVE

BOXES WITH BOLT-LOCK LIDS. SET BOXES FLUSH WITH FINISHED GRADES, IN PLANTING AREAS OUTSIDE OF LAWN AND PAVEMENT.

5. MAINLINE PIPE TO BE BURIED 16 INCHES AND LATERALS 12 INCHES BELOW FINISHED GRADE. NO ROCK OR DEBRISTO BE BACKFILLED OVER PIPE. PIPES FOR LATERAL LINES SHALL BE SIZED BY CONTRACTOR IN DECREASING DOWNSTREAM ORDER (PER PRODUCT DESIGN STANDARDS).

6. IRAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJIST IN FIELD AS NECESSARY FOR ADEQUATE COMPRACE. CORDINATE WITH FIELD AS NECESSARY FOR ADMINISTRATION OF THE POSITION OF THE PLANS AND COTSET AND ADJIACENT AND PARALLEL TO PLANTING AREAS, AND COTSET OF LOT LITLES AND FINE CLASSITY IN THESE AREAS ARE TO BE PLACED IN ADJIACENT PLANTING AREAS, AND COTSET OF LOT LITLES AND ADDITION OF THE POSITION OF THE PLANTING AREAS, AND COTSET OF LOT LITLES AND AND ADDITION OF THE PROJECT STATES.

1. PROVIDE OWNER WITH TWO (2) SETS OF AS-BUILT DRAWINGS AND OPERATORS MANUAL UPON COMPLETION. INSTRUCT OWNER AS TO PROPER WINTERIZATION OF IRRIGATION STEEM (BLOW OUT).

8. FAMILIARIZE FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.

9. NO TEMPORARY SPRINCLERS SHALL BE INSTALLED ADJACENT TO MALKS, STREET, AND/OR PAVEMENT, AS-BULL DRAWINGS OF DRIP RERIGIATION SYSTEM SHALL BE PREPARED IN FIELD BY CONTRACTOR, AS NECESSARY, AND DISCUSSED DURING CONSTRUCTION WITH LANDSCAPE ARCHITECT.

IO. ALL CONTROL WIRE SPLICES SHALL BE MADE AT VALVE BOXES WITH WATERTIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3676-78,

OR EQUAL.

II. EACH VALVE BOX TO CONTAIN A MINIMM OF ONE (I) SPARE ORANGE CONTROL WIRE FOX JACKETED WIRE. ROUTE ONE SPARE WIRE FROM THE CONTROLLER TO THE LAST VALVES OF EACH HAINLINE BRANCH. COMMON WIRE SHALL BE HAIT. SINSIE STRAND WIRE SHALL BE A MINIMM OF 14 GAUGE WITH SPARE WIRE TO BE ORANGE.

12. ALL ELECTRICAL EQUIPMENT SHALL BE U.L. TESTED AND APPROVED, AND SHALL BEAR THE U.L. LABEL.

I3, PROVIDE MANUAL SHUT-OFF VALVE TO LINES ENTERING RIGHT-OF-WAY WHEN ZONED.

14. CROSS CONSCITON PROTECTION INSPECTION REQUIRED. THE BACKFLOR PROTECTION SHALL BETT INTERFERENCE OF CONSTANT INSTALLATION. A PERSON HOLDING A CARRENT CERTIFICATE AS A BACKFLON TESTER SHALL PERSON HE TESTING. HE TEST REPORT SHALL BE SHAPETTED TO TESTER SHALL PERSON THE TESTING FOR SHALL PERSON THE TESTING THE SHALL BE SHAPETTED TO TESTING IN THE SCOPE OF MORK. CONFER IS RESPONSIBLE FOR ANNUAL INSPECTIONS.

15. CONTRACTOR SHALL PROVIDE SYSTEM WINTERIZATIONSPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED HITHIN 40 DAYS OF NOVEMBER I POR INTERIZATION, OR MAY IS POR SPRINGS SERVICE TO BE FERRICATED AS NEAR AS FRACTICAL TO THE ABOVE DATES, OR AS FREZZEMPREDIPTATION CONTINUOUS DETERMINE SERVICE MORE STATES.

I6. PROVIDE AUTOMATIC RAIN SHUT-OFF, AS APPROPRIATE, TO BE SELECTED BY OWNER.

IT. IRRIGATION CONTRACTOR TO PROVIDE A ONE YEAR WARRANTY AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP.

#### NOTES

- SURVEY PROVIDED BY LANCTREE LAND SURVEYING INC. 285(0 THIT AVE 5, KENT, IAA 49,072, (253) STEP PLAN PROVIDED BY NAVEL BENIEVERING, 1225 SE 6TH 5T, SUITE 150, BELLEVUE, IAA 49,004, (4,25) 435-49,01.
  SURCE DRAWING IMAS MODIFIED BY TALASAEA COMBULTAINS FOR VISIAL BHANCEPENT.





NOT FOR CONSTRUCTION THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL, UNTIL APPROVED, THESE PLANS ARE. SUBJECT TO REVISION

PRIOR TO DEVOLTION OF THE SUBPINAL MAD ENSITHE PLANTER ALONS NORTHUP ROAL CONTRACTOR. IS TO CONTRACT OF TREPRESENTATIVE NEW PROBLEM OF THE SUBPINAL OF THE SUBPINA

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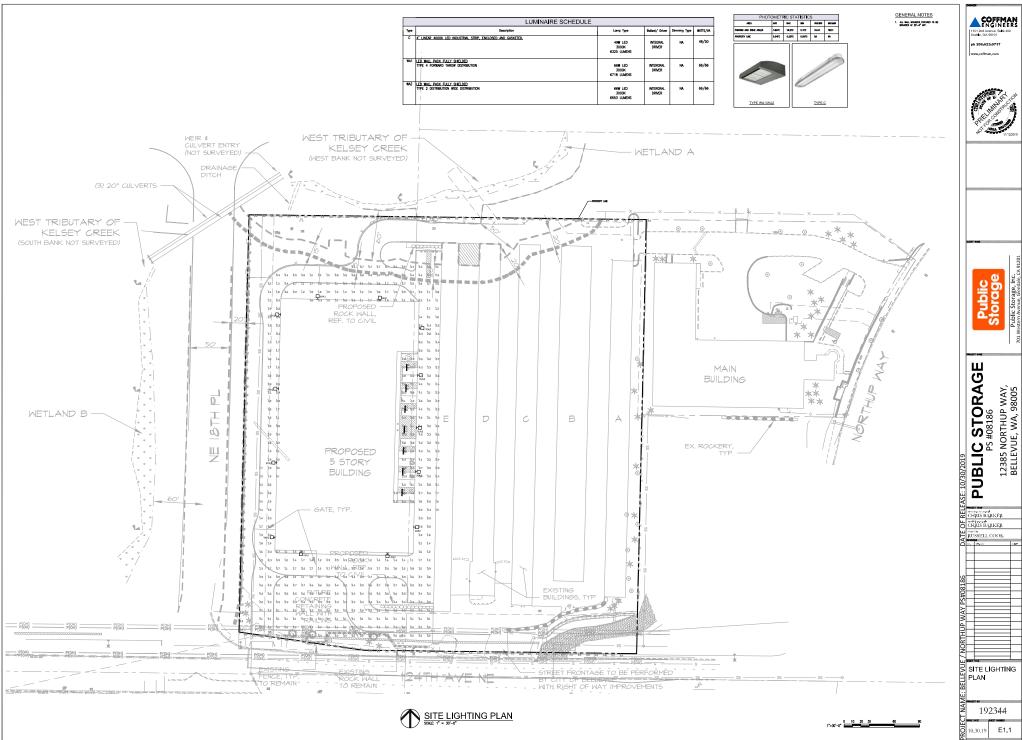
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위비 COMMENTS COMMENTS COMMENTS

IO-15-2019 AS NOTED Drawn FH.

Project # 1539B









E1.1

# ATTACHMENT B SEPA ENVIRONMENTAL CHECKLIST



# SEPA Environmental Checklist

The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

## Instructions

The checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully and to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions.

You may respond with "Not Applicable" or "Does Not Apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays. For assistance, see <u>SEPA Checklist Guidance</u> on the Washington State Department of Ecology website.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The city may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

# Background 12385 Nonthop WAY 12540818C.

1.	Name of proposed project, if applicable Public Storage 124th West
2.	Name of applicant Public Storage
3.	Contact person Bryan Miranda Phone 714-338-1262x3158
4.	Contact person address 2200 E. McFadden Avenue Santa Ana, CA 92705-4704
15.	Date this checklist was prepared 9/25/2019
6.	Agency requesting the checklist City of Bellevue

SEE PERPONSE TO QUESTION I. LOW PS	MIT
7. Proposed timing or schedule (including phasing, if applicable)	
Submit ADR/MDP Fall 2019. Obtain construction permits Fall 2020.  Construction may occur as soon as 2020-2021 or it may wait until the City's 124th improvements are complete in front of the project.  ADR: ADMINIS TRAFINE MAS PER DEVELOPMENT	h MAN
DESIGN REVIEW	
8. Do you have any plans for future additions, expansion or further activity related to o	or
connected with this proposal? If yes, explain.	
No.	
·	
9. List any environmental information you know about that has been prepared or will be	oe
prepared, that is directly related to this proposal.	
-Geotechnical Engineering Exploration and Analysis by Giles Engineering Assoc	iates
dated 3/1/18	
-Stormwater Drainage Report by Navix Engineering to be prepared for the ADR	and
UE permit submittals ANTICAL ANTA PERENT & MIJCA-PION PAN W	
TALKSXEX CONSULTANTS TO BE SUBMITTED FOR LO	PERM
10. Do you know whether applications are pending for governmental approvals of other	
proposals directly affecting the property covered by your proposal? If yes, explain.	
None known.	

11. List any government approvals or permits that will be needed for your proposal, if known.

City of Bellevue approvals and permits include Design Review w/ Master Development Plan review, SEPA Environmental Review, Demolition Permit, Clear and Grade Permit, Utility Extension Permit, Right-of-Way Permit, Fire Department Permit, and Building-related Permits.

12. Give a prier, complete description of your proposal, including the proposed uses and the
size of the project and site. There are several questions later in this checklist that ask you to
describe certain aspects of your proposal. You do not need to repeat those answers on this
page. (Lead agencies may modify this form to include additional specific information on
project description.) THE COMBUNATION OF 2 EXISTING PARCELS (4 + 12) WTO A SWIE
The proposed development consists of one new 4-story self-storage building with associated parking and utility improvements on a 7.02-acre site at 12385 Northup Way (Parcel B) and 2001 124th Ave NE (Parcel A) in Bellevue, Washington. Three existing buildings on Parcel A will be demolished as part of this redevelopment and four buildings will remain. The one existing building on Parcel B will remain.

\* AND A BOAT (RV COVERDED PARFING STRUCTURE

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and the section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project site is located at 2001 124th Avenue and 12385 Northup Way, south of Northup Way, within the City of Bellevue. The site consists of two tax parcels (282505-9236 and 282505-9005) totaling approximately 7.02 acres. The Public Land Survey System location of the project site is within Section 28 NE, Township 25 N, Range 05 E, Willamette Meridian.

# **Environmental Elements**

1.	Ge	neral description of the site:
	<b>7</b>	Flat
	<b>V</b>	Rolling
	V	Hilly
		Steep Slopes
		Mountainous
		Other
2.	W	nat is the steepest slope on the site (approximate percent slope)?

MOB 11-4.19

**Earth** 

3. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The site is underlain by recessional outwash deposits consisting of mostly stratified sands and gravel with minor silt and clay layers. No agricultural soils are contained on site.

4. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No, there are no prior reports or surface indications of unstable soils on or in the immediate vicinity of the site. A liquefaction analysis was performed by Giles Engineering Associates as part of their geotechnical investigation and it was determined that the on-site soils are not subject to liquefaction during seismic activity.

5. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate the source of the fill.

In order to construct the proposed facility with associated parking, landscaping, and utilities, approximately 25,000 CY of cut and approximately 3,000 CY of fill are proposed. Fill will be re-used if possible and any additional fill will be from WSDOT-approved sites.

6. Could erosion occur as a result of clearing, construction or use? If so, generally describe.

Some erosion typical to construction activity is anticipated. Potential erosion related to construction will be addressed by erosion and sediment control plans consistent with the 2019 City of Bellevue Storm and Surface Water Engineering Standards.

EROSIAN CONTROL PER CIENTING & CANDONICO INSPECTION + BCC 23.76

7. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? <u>Approximately 79% of the site.</u>

Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

To address short-term construction-related erosion, erosion and sediment control plans consistent with the 2019 City of Bellevue Storm and Surface Water Engineering Standards will be included in project plans, as required for City of Bellevue permit applications and approvals.

EROSION CONTROL PER CLEARING & GRACING INSPECTION &

## Air

1. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Short-term, temporary air emissions during construction from the equipment is expected. Long-term increases in vehicle exhaust typical of a self-storage facility are not anticipated to result in significant impacts to air quality. CONSTRUCTION DUST SUPPRESION MEADURES PER BCC 23.76

2. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

N/A. No off-site sources of emissions or odor are anticipated to affect the proposed redevelopment.

3. Proposed measures to reduce or control emissions or other impacts to air, if any.

None. Short-term impacts to air quality, such as an increase in suspended particulate levels, are anticipated during construction activity. Long-term increases in vehicle exhaust typical of a self-storage facility are not anticipated to result in significant impacts to air quality.

#### Water

- 1. Surface Water
  - a. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The West Tributary of Kelsey Creek extends along the west side of the project site on an adjacent parcel. The day-lighted portion of the stream terminates at its south end at a gate-controlled weir. At the weir, the stream is routed through pipes for approximately 180 feet prior to daylighting again offsite on the King County Metro Transit Property, south of an offsite from the project site. According to the City of Bellevue Kelsey Creek Basin Map, the West Tributary of Kelsey Creek is designate as a non-fish bearing, perennial stream. Wetland A is located offsite to the west of the project site. Wetland B is located offsite to the south of the project site.

b. Will the project require any work over, in or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, work is proposed adjacent to the above-referenced waters. Details will be provided in a Critical Areas Report and Mitigation Plan prepared by Talasaea Consultants. The existing wetland buffer onsite is all built-environment absent of vegetation. The project proposes to reduce the wetland buffer from 110' to a variable width and enhance all remaining buffer areas by removing the existing asphalt and buildings and planting native trees and shrubs.

Which provided in a Critical Area of the provided

from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.

N/A. No filling or dredging is proposed in wetlands or other surface waters.

d. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose and approximate quantities, if known.

N/A. No surface water withdrawals or diversions are proposed.

e. Does the proposal lie within a 100-year floodplain? No. If so, note the location on the site plan.

progreto Agarovar of MOP.

No.	e the type of waste and anticipated volume of discharge.
2. Ground Wa	ater
	undwater be withdrawn from a well for drinking water or other purposes? If so,
	eneral description of the well, proposed uses and approximate quantities
	wn from the well. Will water be discharged to groundwater? Give general
descrip	tion, purpose, and approximate quantities if known.
lands deten throug	oundwater will be withdrawn. Surface runoff from roof, pavement, and cape surfaces that does not infiltrate will be collected and routed through a tion facility. At a minimum, runoff from paved surfaces will also routed gh a GULD-approved water quality treatment facility. Stormwater will be arged to the municipal storm drainage system adjacent to the site.
b. Describ	e waste material that will be discharged into the ground from septic tanks or
	ources, if any (for example: Domestic sewage; industrial, containing the
	ng chemicals; agricultural; etc.). Describe the general size of the system, the
numbe	r of such systems, the number of houses to be served (if applicable), or the
numbe	r of animals or humans the system(s) are expected to serve.
	eptic systems will be used on site. All sewer discharge will be connected to ity sanitary sewer system.

- 3. Water Runoff (including stormwater)
  - a. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff will be generated by rainfall landing on the project site. All stormwater runoff from the site will be collected and discharged to the adjacent municipal storm drainage system. Prior to discharge, stormwater will be routed to a detention system and runoff from paved surfaces will be routed to a GULD-approved water quality treatment facility prior to discharge from the site. The municipal storm drainage system adjacent to the site drains to the West Tributary drainage basin.

b. Could waste materials enter ground or surface waters? If so, generally describe.

There is an unlikley possibility that minimal amounts of waste materials could enter ground or surface waters (e.g. small amounts of petroleum products, sediments, or concrete materials) from construction activities. Oils, fuels, or chemicals will not be discharged to surface waters or onto land where there is a potential for entry to the surface waters downstream. The contractor will be required to utilize BMPs during construction in accordance with City of Bellevue requirements to prevent and minimize the potential for waste materials leaving the site during construction.

c. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed project does not alter drainage patterns except that capture runoff will be temporarily detained, control-released, and routed through a GULD-approved water quality treatment system in accordance with 2019 City of Bellevue Storm and Surface Water Engineering Standards requirements.

Indicate any proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.

The proposed development will include stormwater infrastructure designed in accordance with 2019 City of Bellevue Storm and Surface Water Engineering Standards requirements. Exposed surfaces not covered by building or pavement will be compost-amended in accordance with stormwater code requirements. Flow control BMPs will be evaluated for use on site and implemented if feasible. A Construction Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project, including a Temporary Erosion and Sedimentation Control (TESC) plan, and the contractor will implement BMPs in accordance with the SWPPP and TESC plans and City of Bellevue Storm and Surface Water Engineering Standards requirements. PER UTILIFIES CODE 24.04 STURM & SURFICE WATE

Plant	5	
1.	Ch	eck the types of vegetation found on the site:
	Ø	deciduous tree: alder, maple, aspen, other trees are directly adjacent to the edge of the Site.
		evergreen tree: fir, cedar, pine, other
	abla	shrubs
	<b></b> ✓	grass
		pasture
		crop or grain
		orchards, vineyards or other permanent crops
		wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
		water plants: water lily eelgrass, milfoil, other
	7	other types of vegetation Himalayan blackberry
2	W	nat kind and amount of vegetation will be removed or altered?
		deciduous trees planted along the perimeter directly adjacent to the Site to the west.
~/		
3.		t any threatened and endangered species known to be on or near the site.
3.	TI	
<i>3.</i>	Pro	t any threatened and endangered species known to be on or near the site.  nere are no known threatened or endangered species known to be on or near the

5.	List all noxious weeds and invasive species known to be on or near the site.
	Himalayan blackberry occurs on the adjacent properties, but is generally absent from the Site due to presence of asphalt and buildings.
Anima	als
1./	List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:
	Birds: □hawk, □heron, □eagle, ☑songbirds, □other □
	Mammals: 🔲 deer, 🔲 bear, 🗖 elk, 🗖 beaver, 🗖 other
	Fish: □bass, □salmon, □trout, □herring, □shellfish, □other
2.	List any threatened and endangered species known to be on or near the site.
	There are no known threatened or endangered species known to be on or near the site.
3.	Is the site part of a migration route? If so, explain.
	Yes, the Site is within the path of the Pacific Flyway migratory route for birds.
	/
4.	Proposed measures to preserve or enhance wildlife, if any.
	Supplemental planting will provide a small area of habitat for birds or small mammals.
81	

5. List any invasive animal species known to be on or near the site.	
There are no known invasive animal species on or near the Site.	
Energy and Natural Resources	
<ol> <li>What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.</li> </ol>	121
Electricity will be used for heating and air conditioning using a high-efficiency VRF system.	
2. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.	
The proposed project has no solar shadow impact to the adjacent properties.	
3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.	
The VRF HVAC system is an extremely energy-efficient system that will be set operate at indoor temperatures of 55 degrees F for heating and 80 degrees F for cooling. Water heating is performed by electric point-of-use instantaneous heaters that have minimal standby losses. Lighting will be via LED fixtures throughout the building, and will be controlled via occupancy sensors to limit their runtime. Fixtures have been selected for their durability and extended life-cycle. Plumbing fixtures proposed are high efficiency and commercial grade, for durability and extended life cycle. The building envelope is proposed to be constructed of high-efficiency insulated metal panels, which reduce air infiltration and thermal loss.	

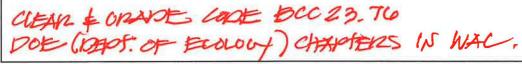
# **Environmental Health**

e there any environmental health hazards, including exposure to toxic chemicals, risk of and explosion, spill or hazardous waste, that could occur as a result of this proposal? If
one known.
Describe any known or possible contamination at the site from present or past uses.
None known.
Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
None known.
Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
No toxic or hazardous chemicals will be stored, used, or produced on site once the development is completed. During construction, fueling operations for equipment may occur.

d.	Describe special emergency services that might be required.			
	None known.			

e. Proposed measures to reduce or control environmental health hazards, if any.

No known environmental health hazards will be present on site. Tenant contracts contain terms that prohibit the storage of toxic or hazardous chemicals on site.



# 2. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic from the adjacent 124th and Northup rights of way are not anticipated to adversely affect the project. Construction noise from the surrounding 124th and Sound Transit projects will be present during allowable construction hours for the next few years.

b. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction noise will occur on a short-term basis. The project will generate vehicular noise from tenants utilizing the storage facilities during business hours, which are typically from 6am to 9pm.

NOISE CONTROL PER BCC 9, 18.

c. Proposed measures to reduce or control noise impacts, if any.

The contractor will comply with the City of Bellevue limitations on construction noise.

CONDITIONS OF APPROVAL TO USE NOISE SUPPRESSION TECHNIQUES THE NUCHOUT CONSTITUTION.

# Land and Shoreline Uses

	t is the current use of the site and adjacent properties? Will the proposal affect current uses on nearby or adjacent properties? If so, describe.
self	e current use of the site is a self-storage facility and the proposed use is a storage facility. The proposed project is not anticipated to affect current land uses nearby properties.
desc conv desig	the project site been used as working farmlands or working forest lands? If so, ribe. How much agricultural or forest land of long-term commercial significance will be verted to other uses as a result of the proposal, if any? If resource lands have not been gnated, how many acres in farmland or forest land tax status will be converted to non-torest use?
No.	æ. €
n	Vill the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?

3. Describe any structures on the site.

No.

There are 6 existing 1-story self-storage buildings and one 2-story storage building on Parcel A (2001 124th Ave NE), one covered parking area also on Parcel A, and there is one 2-story self storage building on Parcel B(2001 124th Ave NE).

4. Will any structures be demolished? If so, what?

Yes, the three southernmost buildings on Parcel A (2001 124th Ave NE) and the covered parking structure will be demolished. No structures will be demolished from Parcel B (2001 124th Ave NE).

- 5. What is the current zoning classification of the site? Bel-Red Office/Residential (BR-OR)
- 6. What is the current comprehensive plan designation of the site? Bel-Red Office/Residential (B
- 7. If applicable, what is the current shoreline master program designation of the site?

  Not applicable.
- 8. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The City of Bellevue GIS map indicates that Parcel A is designated as "Low to Moderate Liquefaction" hazard and Parcel B is listed as "Very Low Liquefaction" hazard. Several small areas on Parcel B are indicated as steep slopes. The wetlands to the south and west of the project and West Tributary are considered "environmentally sensitive" areas.

- 9. Approximately how many people would reside or work in the completed project? Approximately
- 10. Approximately how many people would the completed project displace? Approximately 3 pe
- 11. Proposed measures to avoid or reduce displacement impacts, if any.

No displacement is anticipated by the proposed project. There is no residential component to either the existing or proposed developments.

12. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The existing and proposed uses are the same so no change will occur in use. The project will submit for and obtain all required permits through the City of Bellevue.

MOP PENEW, ADR PENEW & LO PENEW.

	Not applicable.
ısi	ng
	Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
	None.
2.	Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
	None.
_	Proposed measures to reduce or control housing impacts, if any.
<b>3.</b>	
3.	None.
<b>خ.</b>	None.
3.	None.
3.	None.
3.	None.
ith	None.
-	
	etics

2/ What views in the immediate vicinity would be altered or obstructed?

The proposed 4-story building will not significantly alter or affect the views from the adjacent properties. THE WAND USE CODE POES NOT PROJECT

3. Proposed measures to reduce or control aesthetic impacts, if any

Total area of glazing is proposed to be well below the allowable wall-area ratio. Glazing is proposed to be concentrated at areas of branding accent or operational necessity. The overall building height is proposed to be roughly the same height as the existing bank of established, mature trees in the greenbelt to the west of the site, minimizing visual impact at the horizon. Building materials proposed are simple and durable, in pleasing earth tones. Wall surfaces are broken visually using modular applications of color, pattern and texture. Areas of stronger colors are limited to branding and way-finding elements, and street level applications of color are minimized.

# **Light and Glare**

1 What type of light or glare will the proposal produce? What time of day would it mainly occur?

Building materials have been chosen to minimize reflected glare to adjacent properties. Areas of internally-lighted glazing are minimized and located only at areas driven by the Owner's prototypical branding design and operational needs. Lighted display windows re proposed to be on daylight sensors to limit their operational hours. Rental Office lighting is only active during operational hours.

2.	Could light or glare from the finished project be a safety hazard or interfere with views?				
	No impact to safety or views from glare is anticipated.				

3. What existing off-site sources of light or glare may affect your proposal?

No impactful off-site light sources have been identified.

4. Proposed measures to reduce or control light and glare impacts, if any.

The use of exterior LED lighting fixtures with 1 to 3 foot-candles at walks, and 2 to 4 foot-candles at parking areas and gated entries are being proposed to limit the amount of offsite light pollution, as required by the AHJ. Exterior lighting fixtures will have shields, if/as required, to restrain lighting within the property lines.

# Recreation

1.	What designated and informa	l recreational	opportunities	are in the	immediate	vicinity
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Several City of Bellevue Parks are within 1/2 mile of the project site.

2.	Would the proposed	l project	displace	any existing	recreational	uses? If so,	describe.
----	--------------------	-----------	----------	--------------	--------------	--------------	-----------

No.

June 7, 2019

	Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.
	Not applicable.
listor	c and Cultural Preservation
	Are there any buildings, structures or sites located on or near the site that are over 45 years old listed in or eligible for listing in national, state or local preservation registers located on or near the site? If so, specifically describe.
	No.
	Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
	No visible evidence, landmarks, or other features were noted.
	Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
	No professional studies were conducted. However, the vast majority of the Site is disturbed with existing buildings and paved surface.

4. Proposed measures to avoid, minimize or compensate for loss, changes to and disturbance to resources. Please include plans for the above and any permits that may be required.

Given the top 4 feet of the Site were already disturbed with the construction of the existing buildings, this Project is unlikely to disturb additional areas of soil. BMPs will be in effect during construction in case of any incidental findings of cultural resources that would require a cultural resources specialist.

# LO- CRITICAL AREA LAND USE PENMIT TO BE REQUIRED TO MITHURE FOR DISTURBULCE TO CRITICAL AREA BUFFER. Transportation

1. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The project is served by 124th Ave NE and Northup Way.

2. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Bus stops are located nearby the 124th Ave NE and Northup Way intersection, serving bus routes 249 and 889.

3. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

There are 16 existing parking stalls on Parcel A, off Northup. These will all remain. There are 11 existing striped temporary parking stalls on the Parcel B site (2100 124th Ave NE). There are 46 covered and uncovered parking stalls for rent on Parcel B, and these will all be removed. The proposed development will provide approximately 14 stalls, providing a total of 30 parking stalls for the property.

4. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No. The City of Bellevue will construct frontage improvements with the City's 124th Ave NE roadway project, including planters and sidewalks.

	No.
6.	How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?
	The project will generate 249 net new weekday daily trips. Peak volumes are anticipated to occur between 1:15 pm and 2:15 pm. Truck trips are estimated to be 2 to 15 percent of the weekday traffic. Estimates based on the Institute of Transportation Engineers Trip Generation Manual, 10th Edition.
7.	Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.
	No.
8.	Proposed measures to reduce or control transportation impacts, if any.
	The project will utilize the existing driveway from Northup during the 124th Ave NE roadway project construction. After the 124th Ave NE roadway improvements project is completed, the subject site will use a new driveway access to 124th Ave NE at the southern end of the site, and will close the existing driveway off 124th Ave NE.

Public Service
1. Would the project result in an increased need for public services (for example: fire
protection, police protection, public transit, health care, schools, other)? If so, generally
describe.
No.
2. Proposed measures to reduce or control direct impacts on public services, if any.
Not applicable.
Utilities  1. Check the utilities governmently available at the site.
1. Check the utilities currently available at the site:
☑ Electricity
☑ natural gas
water
✓ refuse service
☑ telephone
🗷 sanitary sewer
septic system
other
2. Describe the utilities that are proposed for the project, the utility providing the service and
the general construction activities on the site or in the immediate vicinity which might be
needed.
The project will require water, sewer, storm drainage, power, telephone/internet, and
refuse service. The City will provide water, sewer, storm drainage. Republic Services will provide refuse service, and telephone/internet may be provided by several
providers.

#### Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature	Joe Taflin	Dynah sypie to Jun 1960 (DE C-MS Script Learning day Co-Naux Crysteering, Chapter Egin — Dair 2019 03771.379 to 5 feet	
Name of signee			
Position and Agency/	Organization Principal / N	Navix Engineering	
Date Submitted 9/27/	2019		



# Non-project Action SEPA Checklist

#### Supplement to Environmental Checklist

These questions pertain to land use actions that do not involve building and construction projects, but rather pertain to policy changes, such as code amendments and rezone actions.

Because the questions are very general, it may be helpful to read them in conjunction with the Environmental Checklist. When answering these questions, be aware of the extent to which the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented.

Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The proposed project will not increase discharge to water as the proposed drainage discharge volume will approximately match existing drainage discharge. There could be a slight reduction as the proposed project increases pervious area, which could result in less runoff from the site by allowing more infiltration to occur. The proposed project will result in more net new daily vehicle trips but the impact to air emissions is anticipated to be negligible. No storage or release of toxic or hazardous substances or noise would be expected from the completed project. Temporary noise and emissions will occur during the construction phase. The proposed project will use efficient mechanical and electrical systems.

Indicate proposed measures to avoid or reduce such increases.

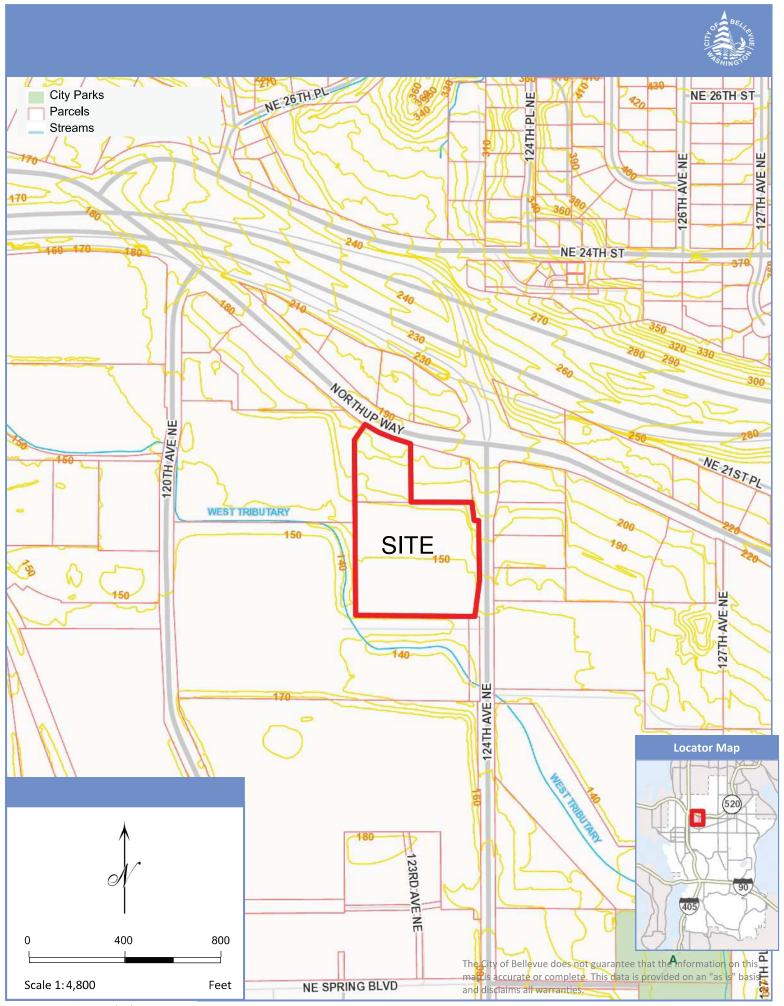
The contractor will implement BMPs during construction to minimize the risk of spills or offsite environmental issues resulting from construction activities. The completed project will utilize efficient mechanical and electrical systems.

2. How would the proposal be likely to affect plants, animals, fish or marine life?

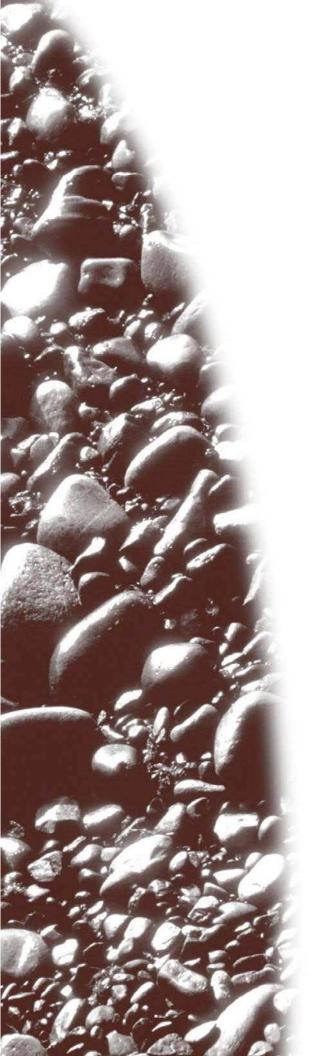
No adverse effects are anticipated from the project to plants, animals, fish, or marine life.

Indicate proposed measures to protect or conserve plants, animals, fish or marine life. The developed project will include more landscaped areas with native plantings and trees. Water quality from runoff leaving the site should improve over existing conditions, since new pavement surfaces will route stormwater runoff through water quality treatment systems prior to discharge from the site. How would the proposal be likely to deplete energy or natural resources? The project is not anticipated to deplete energy or natural resources. Indicate proposed measures to protect or conserve energy and natural resources. Efficient mechanical and electrical systems will be utilized in the proposed project. 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains or prime farmlands? Discharges to wetlands will be managed on site to comply with flow control and water quality treatment requirements in accordance with City of Bellevue stormwater code. Therefore, the runoff discharged from the site should improved compared to existing conditions. Indicate proposed measures to protect such resources or to avoid or reduce impacts. The proposed project will comply with City of Bellevue code requirements. 5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans? The proposed project will not affect land and shoreline use.

	Indicate proposed measures to avoid or reduce shoreline and land use impacts.  Not applicable.
6.~	How would the proposal be likely to increase demands on transportation or public service and utilities?
	The project is not anticipated to have a significant impact on transportation or public services and utilities.
1	Indicate proposed measures to reduce or respond to such demand(s).
/	Indicate proposed measures to reduce or respond to such demand(s).  None.
7.	



# ATTACHMENT C GEOTECHNICAL REPORT, CRITICAL AREAS REPORT AND DETAILED MITIGATION PLAN



# Geotechnical Engineering Exploration and Analysis

Proposed New Public Storage Building SWC Northrup Way & 124<sup>th</sup> Avenue NE Bellevue, Washington

#### **Prepared For:**

Public Storage, Inc. Glendale, California

March 30, 2015 Project No. 2G-1502008







# GILES ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- · Atlanta, GA
- · Baltimore/Wash. DC
- · Dallas, TX
- Los Angeles, CA
- · Orlando, FL

• Milwaukee, WI

March 30, 2015

Public Storage, Inc. 701 Western Avenue Glendale, California 91201

Attention:

Mr. Mitch Johnson

Real Estate Acquisitions

Subject:

Geotechnical Engineering Exploration and Analysis

Proposed New Public Storage Building SWC of Northup Way & 124<sup>th</sup> Avenue NE

Bellevue, Washington Project No. 2G-1502008

Dear Mr. Johnson:

In accordance with your request and authorization, a *Geotechnical Engineering Exploration and Analysis* report has been prepared for the above subject site. Conclusions and recommendations developed from the exploration and analysis are discussed in the accompanying report.

We appreciate the opportunity to be of service on this project. If we may be of additional assistance, should geotechnical related problems occur, please do not hesitate to call at any time.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Edgar L. Gatus

Assistant Branch Manager

Robert R. Russell, P.E.

Regional Director

Distribution:

Public Storage, Inc.

Attn.: Mr. Mitch Johnson (3 US Mail, email: mjohnson@publicstorage.com)

Attn.: Mr. Phil Williams (email: <a href="mailto:pwilliams@publicstorage.com">pwilliams@publicstorage.com</a>)
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G/Data/Gentechnical/2018/3G-1502008 Public Storage Bellovic WA/Gentechnical Report (3-30-13)

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#### **GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS**

PROPOSED NEW PUBLIC STORAGE BUILDING SWC NORTHRUP WAY &124<sup>TH</sup> AVENUE NE BELLEVUE, WASHINGTON PROJECT NO. 2G-1502008

#### **1.0 EXECUTIVE SUMMARY OUTLINE**

The executive summary is provided solely for purposes of overview. Any party who relies on this report must read the full report. The executive summary omits a number of details, any one of which could be crucial to the proper application of this report.

#### **Subsurface Conditions**

- Fill and possible fill materials were encountered within all of our exploratory borings to depths
  ranging from approximately 2 to 10 feet below existing grade. The fill/possible fill materials were
  noted to be generally moist, loose to dense silty fine to coarse sand with some gravel and variable
  clay content and silty to clayey sand. The deeper fills were encountered close to an existing storm
  drain and may be associated with the backfill within this utility.
- Based on a review of the Geologic Map of the Kirkland Quadrangle, it appears that the site is underlain by glacial outwash deposits. This condition was generally confirmed during our subsurface exploration within the subject site. Native soils encountered beneath the fill and possible fill consisted generally of moist to wet, loose to dense sand, silty to clayey fine to coarse sand with some gravel, a very stiff silt and a fine sand. Possible cobbles and/or boulders were present in deeper soils.
- Groundwater was encountered at depths ranging from about 8 to 15 feet below grade within four of the test borings.

#### **Site Development**

- Site preparation will include demolition and removal of existing buildings along with removal of vegetation and debris within the proposed new building and site improvement areas.
- Over-excavation of the existing soils to depths of 3 feet below planned footings and the floor slab and 3 feet below grade is recommended within the building pad area. All fill placed at the site should be compacted to at least 90 percent of the soil's maximum dry density, per ASTM D-1557.
- Following site clearing and lowering of site grades where necessary, the subgrades within the new
  pavement areas should be proofrolled in the presence of the geotechnical engineer with
  appropriate rubber-tire mounted heavy construction equipment or a loaded truck to detect
  loose/soft yielding soil which should be removed to a stable subgrade or compacted in-place if
  feasible.
- Site Class D is recommended for seismic design considerations.
- Due to the presence of dense to very dense soils at depth, the site is not considered to be susceptible to soil liquefaction during a seismic event.

#### **New Building Foundation**

- Continuous strip footing foundation system is recommended for support of the perimeter bearing walls, which is supported on the newly placed structural compacted fill and designed for a maximum net allowable soil bearing pressure of 3,000 psf.
- Suitable bearing soil is anticipated to exist at nominal depth below existing grade following completion of the recommended site grading.

Perimeter strip footings are recommended to be reinforced with at least 4 No. 4 bars (2 top and 2 bottom) for added rigidity.

#### **New Floor Slab**

- The first floor slab may be designed by elastic procedures using a Modulus of Subgrade Reaction (kv<sub>i</sub>) of 150 pci and a maximum net, allowable soil bearing pressure of 2,500 psf to support the interior bearing walls.
- The floor slab should be underlain by a minimum 4 inch thick drainage layer and vapor retarder.

#### **Pavement**

- Asphaltic Concrete: 3 inches of asphaltic concrete underlain by 4 or 6 inches of base course in parking stall and drive lane areas, respectively.
- Portland Cement Concrete: 6 inches in thickness in high stress areas such as entrance/exit aprons lane and in trash enclosure loading zone with a 4 inch granular base.

#### 2.0 SCOPE OF SERVICES

This report provides the results of the *Geotechnical Engineering Exploration and Analysis* that Giles Engineering Associates, Inc. ("Giles") conducted regarding the proposed development. The *Geotechnical Engineering Exploration and Analysis* included several separate, but related, service areas referenced hereafter as the Geotechnical Subsurface Exploration Program, Geotechnical Laboratory Services, and Geotechnical Engineering Services. The scope of each service area was narrow and limited, as directed by our client and in consideration of the proposed project. The scope of each service area is briefly explained later.

Geotechnical engineering recommendations for design and construction of the foundations, floor slabs, and below-grade walls for the proposed structure are provided in this report. Site preparation recommendations are also given; however, those recommendations are only preliminary since the means and methods of site preparation will depend on factors that were unknown when this report was prepared. Those factors include, but are not limited to, the weather before and during construction, subsurface conditions that are exposed during construction, and finalized details of the proposed development. Environmental consulting was beyond our authorized scope of services for this project.

#### 3.0 SITES AND PROJECT DESCRIPTION

#### 3.1 Site Description

The subject site is currently an existing Public Storage facility located adjacent to the southwest corner of Northrup Way and 124<sup>th</sup> Avenue NE in the city of Bellevue, King County, Washington. The site contains numerous single story storage buildings, an office building and asphalt paved parking and drive lane areas. Based on a visual examination, the existing asphalt pavements were estimated to be in fair condition. The roughly rectangular shaped subject lot is bordered on the north by Northrup



Way, on the east by 124<sup>th</sup> Avenue NE, and commercial/light industrial buildings to the south and west. The subject property is situated at approximately latitude 47.6279° North, longitude 122.1763° West. The area of the new building is currently developed with two single-story storage buildings and a carport structure.

Based on a review of the ALTA Survey prepared by Lanktree Land Surveying, Inc., elevations within the site range from approximately El. 145 feet along the southerly property line to El. 155 feet along the northerly property line. The site drains by sheet flow to the south.

#### 3.2 Proposed Project Description

Based on information provided, we understand that a new three story storage building is proposed within the southerly portion of the site. Two of the existing single-story storage buildings and the existing carport structure are to be removed to allow construction of the new building. New limited parking lot and drive lanes and landscape areas are also anticipated. We anticipate that the new building will be supported by a perimeter load-bearing wall and interior load bearing walls. Interior load bearing walls are typically spaced at about 10 feet on-center often supported by the floor slab. The maximum combined live and dead load supported by the bearing walls is estimated to be about 3 and 4 kips per lineal foot (klf) for perimeter and interior walls, respectively. Column footings (if used) are anticipated to have a maximum axial load of 75 kips. The live load supported by the ground floor slab is anticipated to be a maximum of 125 pounds per square foot (psf).

Other planned site improvements include concrete walkways and new pavements.

Preliminary project information did not indicate the planned finished floor elevation for the proposed new structure. However, during our subsurface exploration the test boring elevations (within the proposed new building area) were determined to be approximately at El. 142 to 145, based on the ALTA/ACSM Land Title Survey prepared by Lanktree Land Surveying, Inc. Based on these existing site grades, a finished floor at approximate El. 144 has been assumed for the geotechnical analysis. Therefore, site grading is anticipated to consist of minor grading (cut and fill less than about 2 feet) to establish the necessary planned finish grade elevations, exclusive of site preparation and over-excavation requirements necessary to create a stable site suited for the proposed development.

It is anticipated that parking stalls and drive lanes will be constructed at the subject site. Parking stall pavements areas are expected to be subjected to passenger vehicle traffic only. The drive lanes are anticipated to be subjected to a daily traffic loading of 1 to 2 heavy trucks per day (5 Equivalent Single/Axle Loads) and pavement design is based on a 20 year pavement design life.

#### 4.0 SUBSURFACE EXPLORATION

#### 4.1 Subsurface Exploration

Our subsurface exploration consisted of the drilling of eight (8) test borings (B-1 through B-8) at the approximate locations requested to depths ranging from approximately 15.5 to 33 feet below existing ground surface. The deepest test boring (B-4), which was planned to be extended to a depth of 50 feet, was terminated at a depth of 33 feet due to auger refusal on very dense soils and/or cobbles or boulders. The approximate test boring locations are shown in the Test Boring Location Plan (Figure 1).

The Test Boring Location Plan and Test Boring Logs (Records of Subsurface Exploration) are enclosed in Appendix A. Field and laboratory test procedures and results are enclosed in Appendix B and C, respectively. The terms and symbols used on the Test Boring Logs are defined on the General Notes in Appendix D.

Where deemed appropriate, standard split-spoon tests (SS), also called Standard Penetration Test (SPT), were performed at selected depth intervals in accordance with the American Society for Testing Materials (ASTM) Standard Procedure D 1586. This method consists of mechanically driving an unlined standard split-barrel sampler 18 inches into the soil with successive 30-inch drops of the 140-pound automatic trip hammer. Blow counts for each 6-inch driving increment were recorded on the exploration logs. The number of blows required to drive the standard split-spoon sampler for the last 12 of the 18 inches was identified as the uncorrected standard penetration resistance (N). Disturbed soil samples from the unlined standard split-spoon samplers were placed in plastic containers and transported to our laboratory for testing.

#### 4.2 Subsurface Conditions

The subsurface conditions as subsequently described have been simplified somewhat for ease of report interpretation. A more detailed description of the subsurface conditions at the test boring locations is provided by the logs of the test borings enclosed in Appendix B of this report.

#### **Existing Pavement**

Existing asphalt pavement, ranging from approximately  $3\frac{1}{2}$  to  $6-\frac{1}{2}$  inches thick, was encountered at the surface of the test boring locations. No apparent aggregate base was observed beneath the asphalt pavement. Based on our visual examination, the pavements appeared to be in fair condition.

#### Fill & Possible Fill Soil

Fill and possible fill materials were encountered beneath the asphalt pavement within all of our exploratory borings to depths of approximately 2 to 10 feet below existing grade. The fill/possible fill materials were noted to be generally moist to very moist, loose to dense in relative density silty fine to coarse sand with some gravel and variable clay content and silty to clayey sand. The deeper fills were encountered close to an existing storm drain and may be associated with the storm drain backfill.



#### Native Soil

Based on a review of the *Geologic Map of the Kirkland, Washington Quadrangle* (1983), it appears that the site is underlain by recessional outwash deposits derived from the receding Vashon glacier. The soils within this unit are mostly stratified sands and gravels with minor silt and clay layers. This condition was generally confirmed during our subsurface exploration at the site. Native soils encountered beneath the fill and possible fill soils consisted generally of moist to very moist, loose to very dense sand, silty to clayey fine to coarse sand with some gravel, very stiff silt and fine sand. Possible cobbles and/or boulders were present in deeper soils.

#### Groundwater

Groundwater was encountered within four of the test borings drilled for the subsurface investigation at depths ranging from about 8 to 15 feet below grade. Fluctuations of the groundwater table, localized zones of perched water, and rise in soil moisture content should be anticipated during and after the rainy season. Irrigation of landscape areas on or adjacent to the site can also cause fluctuations of local or shallow perched groundwater levels.

#### **5.0 LABORATORY TESTING**

Several laboratory tests were performed on selected samples considered representative of those encountered in order to evaluate the engineering properties of on-site soils underlying the site. The following are brief description of our laboratory test results.

#### In Situ Moisture

Tests were performed on select samples from the test borings to determine the subsoil's natural moisture contents in accordance with Test Method ASTM 2216-05. The results of these tests are included in the Test Boring Logs enclosed in Appendix A.

#### Sieve Analysis

Sieve Analysis including Passing No. 200 Sieve were performed on selected samples from various depths within Test Borings B-2, B-4 and B-5 to assist in soil classification. These tests were performed in accordance with Test Method ASTM D 1140-00 (Reapproved 2006). The result of the Passing No. 200 tests are presented in Test Boing Logs, Appendix A.



#### Soluble Sulfate Analysis and Soil Corrosivity

A representative sample of the near surface soils which may contact shallow buried utilities and structural concrete was performed to determine the corrosion potential for buried ferrous metal conduits and the concentrations present of water soluble sulfate which could result in chemical attack of cement. The following table presents the results of our laboratory testing.

Parameter	B-2 @ 2 feet
рН	7.25
Chloride	43 ppm
Sulfate	0.060%
Resistivity	7,300 ohm-cm

The chloride content of near-surface soils was determined for a select sample with results of this test indicating that tested on-site soils have a Low exposure to chloride.

The results of the soil pH test, indicated the tested soils are slightly alkaline, an, based on the laboratory resistivity test, the tested soils were found to be *mildly corrosive* when in contact with ferrous materials. These test results have been evaluated in accordance with criteria established by the Cast Iron Pipe Research Association, Ductile Iron Pipe Research Association, the American Concrete Institute and the National Association of Corrosion Engineers.

Corrosivity testing also included determination of the concentrations of water-soluble sulfates present in the tested soil sample. Our laboratory test data indicated that the tested near surface soils contain approximately 0.060 percent of water soluble sulfates. A negligible exposure to sulfate can be expected for concrete placed in contact with the on-site soils. No special sulfate resistant cement is considered necessary for concrete which will be in contact with the tested on-site soils.

#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

Conditions imposed by the proposed development have been evaluated on the basis of the assumed floor elevation and engineering characteristics of the subsurface materials encountered during our subsurface investigation and their anticipated behavior both during and after construction. Conclusions and recommendations presented for the design of building foundations, building floor slab, and parking lot pavement, along with site preparation recommendations and construction considerations are discussed in the following sections of this report.

#### 6.1 <u>Seismic Design Considerations</u>

#### Seismic Design

The site may be subject to seismic activity. The proposed structure should be designed in accordance with the current version of the 2012 International Building Code (IBC) and applicable local codes. Based upon the encountered subsurface soils and the geologic mapping, a Site Class D is recommended for design.

Within the International Code Council's 2012 International Building Code (IBC), the five-percent damped design spectral response accelerations at short periods,  $S_{DS}$ , and at 1-second period,  $S_{D1}$ , are used to determine the seismic design base shear. These parameters, which are a function of the site's seismicity and soil, are also used as parts of triggers for other code requirements. The following values are determined by using USGS Design Maps. The location used for the site is latitude  $47.6279^{\circ}$  north, longitude  $122.1763^{\circ}$  west.

IBC 2012, Earthquake Loads				
Site Class Definition (Table 1613.5.2)	D			
Mapped Spectral Response Acceleration Parameter, S <sub>s</sub> (Figure 1613.3.1(1) for 0.2 second)	1.294			
Mapped Spectral Response Acceleration Parameter, S <sub>1</sub> (Figure 1613.3.1(2) for 1.0 second)	0.497			
Site Coefficient, F <sub>a</sub> (Table 1613.3.3 (1) 0.2-second short period)	1.0			
Site Coefficient, F <sub>v</sub> (Table 1613.3.3 (2) 1-second period)	1.503			
Adjusted Maximum Considered Earthquake Spectral Response Acceleration Parameter, S <sub>MS</sub> (Eq. 16-37)	1.294			
Adjusted Maximum Considered Earthquake Spectral Response Acceleration Parameter, S <sub>M1</sub> (Eq. 16-38)	0.747			
Design Spectral Response Acceleration Parameter, S <sub>DS</sub> (Eq. 16-39)	0.863			
Design Spectral Response Acceleration Parameter, S <sub>D1</sub> (Eq. 16-40)	0.498			

#### Liquefaction

According to the *Liquefaction Susceptibility Map prepared by King County Flood Control District*, the site is mapped as possessing a low to moderate liquefaction susceptibility. Based on this designation, an assessment of the liquefaction potential was performed.

One deep test boring (B-4) was planned to be drilled at the site to a depth of 50 feet. However, the test boring was terminated at a depth of approximately 33 feet within very dense fine to coarse sands with gravel and possible cobbles and/or boulders. Groundwater was encountered at a depth of about 8 to 15 feet below grade within four of the test borings.



To assess the potential for soil liquefaction and the resulting seismic-induced settlement, a liquefaction analysis was performed. For this analysis we utilized the soil profile identified in Test Boring B-4, an assumed water table at a depth of 8 feet and a site acceleration of  $0.523g~(PGA_M)$  obtained from the USGS website. The analysis was performed using the computer software program LiquifyPro. The results of this analysis indicate that the site soils are not subject to soil liquefaction upon application of the seismic earthquake. Some minor dry settlement is estimated for that portion of the soil profile above the assumed water table of 8 feet. For the analysis performed, the dry settlement during seismic activity is estimated to be approximately  $\frac{1}{4}$  inch.

#### 6.2 Site Development Recommendations

The recommendations for site development as subsequently described are based upon the conditions encountered at the test boring locations and the results of our laboratory testing and liquefaction analysis. Moist to very moist soil conditions were encountered within some of the near surface soils during our subsurface exploration. It is expected that similar conditions are likely to be encountered during grading operations. Grading operations may require significant provisions for drying of the site soils prior to compaction. In addition, due to the presence of moist to very moist soil at the proposed remedial grading depths, the loads imposed by heavy rubber-tired equipment during grading may induce localized pumping of the subgrade that will require stabilization prior to fill placement. The grading contractor should therefore include contingencies for air-drying of excessively moist soil, as well as the stabilization of the excavation bottoms in their bids. Imported granular soils or chemical modification of the soils may be required for excavation stabilization or replacement of the site soils if the soils cannot be effectively air-dried due to space, time constraints or weather.

The following recommendations for site development have been based upon the assumed floor elevation and new foundation bearing grades, the conditions encountered at the test boring locations and the time of year in which the exploration was performed.

#### Site Clearing

Clearing operations for the proposed development will include demolition and removal of the existing buildings and pavements within the new building and pavement areas. Demolition should include removal of all foundations, floor slabs and any below-grade construction. Clearing should also include the removal of any vegetation and debris within the proposed site development area. Trees and large shrubs to be removed should be grubbed out to include their stumps and major root systems.

Existing pavement within areas of proposed new development should be removed or processed to a maximum 3-inch size and stockpiled for use as compacted fill or stabilizing material for the new development. Processed asphalt may be used as fill, sub-base course material, or subgrade stabilization material beyond the building perimeter. Processed concrete may be used as fill, sub-base course material, or subgrade stabilization material both within and outside of the building perimeter. Due to the moisture sensitivity of the on-site soils, the pavement is recommended to remain in-place as long as possible to help protect the subgrade from construction traffic disturbance. All soils disturbed by the demolition of the existing improvements should be removed to a suitable subgrade, as determined by the project geotechnical engineer.

Should any unusual soil conditions or subsurface structures be encountered during demolition operations, they should be brought to the immediate attention of the project geotechnical consultant for corrective recommendations.

#### **Existing Utilities**

All existing utilities should be located. Utilities that will be preserved are recommended to be relocated outside the building area. Utilities that are not reused should be capped off and removed or properly abandoned in-place in accordance with local codes and ordinances. The excavations made for removed utilities that are in the influence zone of new construction are recommended to be backfilled with structural compacted fill. Underground utilities, which are to be reused or abandoned in-place, are recommended to be evaluated by the structural engineer and utility backfill is recommended to be evaluated by the geotechnical engineer, to determine their potential effect on the new development. If any existing utilities are to be preserved, grading operations must be carefully performed so as not to disturb or damage the existing utility.

#### **Building Pad Preparation**

Due to the presence of relatively low strength existing fill/possible fill and the expected soil disturbance during demolition of the existing buildings, we recommend that the soils within the building pad area be over-excavated to a depth of at least 3 feet below the bottom of the planned footings and floor slab and at least 3 feet below existing grade, whichever is deeper. The lateral extent of this recommendation should include the area within a perimeter of at least 5 feet beyond the building perimeter. The bearing suitability of the subgrade at the base of the over-excavation in the areas of foundation influence should be evaluated by the geotechnical engineer using the criteria established in the <a href="Foundation\_Recommendations">Foundation\_Recommendations</a> section of this report. If unsuitable materials are encountered, additional removals may be needed, as determined by the geotechnical engineer at the time of site grading. Following documentation from the geotechnical engineer that the soils are suitable for building support, the soils exposed at the base of the over-excavation area should be compacted in-place to at least 90 percent of the soil's maximum dry density, per ASTM D-1557. The excavation may then be backfilled with structural fill placed and compacted as described later in this report.

#### Proofroll and Compact Subgrade

Following site clearing and lowering of site grades where necessary, the subgrades within the proposed new pavement areas should be proofrolled in the presence of the geotechnical engineer with appropriate rubber-tire mounted heavy construction equipment or a loaded truck to detect loose/soft yielding soil which should be removed to a stable subgrade or compacted in-place if feasible. Following proofrolling and completion of any necessary over-excavation, the subgrades should be scarified to a minimum depth of 6 inches, moisture conditioned and recompacted to at least 90 percent of the Modified Proctor (ASTM D1557-00) maximum density. Low areas and excavations may then be backfilled in lifts with suitable low expansive (PI<15) structural compacted fill. The



selection, placement and compaction of structural fill should be performed in accordance with the project specifications. The Guide Specifications included in Appendix D (Modified Proctor) of this report are recommended to be used as an aid in developing the project specifications. The floor slab and pavement subgrades may need to be recompacted prior to slab and pavement construction due to weather and equipment traffic effects on the previously compacted soil.

#### Dry Weather/Conditions Grading

Site preparation and grading activities conducted during dry, fair weather conditions, are not expected to require over-excavation or undercutting due to unstable soil conditions, provided the subgrade is initially in stable condition and construction traffic does not disturb the near surface soil. However, as noted in the <u>Building Pad Preparation</u> section of this report, some soil over-excavation is recommended due to the presence of relatively low strength soils.

#### Wet Weather/Conditions Construction

Subgrade stability problems should be expected if site development and grading activities are conducted during wet weather. If subgrade stability problems are encountered, undercutting on the order of 8 to 12 inches or more should be expected to be necessary (potentially after each rain event) to achieve a stable subgrade. The estimated depth of over-excavation is based upon the moisture sensitivity of the soils and the anticipated effect of wet weather grading. Alternatively, subgrade stability may be achieved by chemical modification of the soils through the addition of hydrated lime or Portland cement (depending upon soil type and testing soils sensitivity to modification) followed by proper compaction or through placement of a coarse aggregate working mat. If over-excavation or specialized subgrade stabilization techniques are required, the actual depth of over-excavation or stabilization method should be determined by a representative of the geotechnical engineer to provide the appropriate recommendations based on field evaluation and testing.

#### Reuse of On-site Soil

On-site material may be reused as structural compacted fill, during favorable weather conditions, within the proposed building and pavement area provided they do not contain oversized materials (+3 inches) and significant quantities of organic matter or other deleterious materials. However, the use of a select import fill may be desired/needed during cool and moist climatic conditions to achieve a soil moisture content suitable to achieve the required degree of compaction.

Care should be used in controlling the moisture content of the soils to achieve proper compaction for load bearing and pavement support. Some drying of overly moist soil should be expected. All subgrade soil compaction as well as the selection, placement and compaction of new fill soils should be performed in accordance with the project specifications under engineering controlled conditions.



#### Import Structural Fill

The soils imported to the site for use as structural fill should consist of low expansive (PI<15) soils with not more than 12 percent passing the No. 200 sieve (silt and clay size). Material designated for import should be submitted to the project geotechnical engineer no less than three working days for evaluation. In addition to expansion criteria, soils imported to the site should exhibit adequate shear strength characteristics for the recommended allowable soil bearing pressure and pavement support characteristics, as well as low soluble sulfate content and corrosivity.

#### Subgrade Protection

The near surface soils that are expected to comprise the subgrade are sensitive to water. Unstable soil conditions may develop if the soils are exposed to moisture increases or are disturbed (rutted) by construction traffic. The site should be graded to prevent water from ponding within construction areas and/or flowing into excavations. Accumulated water must be removed immediately along with any unstable soil. Foundation concrete should be placed and excavations backfilled as soon as possible to protect the bearing grade. The degree of subgrade instability and associated remedial construction is dependent, in part, upon precautions taken by the contractor to protect the subgrade during site development.

Silt fences or other appropriate erosion control devices should be installed in accordance with local, state and federal requirements at the perimeter of the development areas to control sediment from erosion. Since silt fences or other erosion control measures are temporary structures, careful and continuous monitoring and periodic maintenance to remove accumulated soil and/or replacement should be anticipated.

#### Fill Placement

All structural fill should be placed in 8-inch-thick maximum loose lifts; moisture conditioned and then compacted in place to at least 90 percent (95% for upper 12 inches of pavement subgrade) of the Modified Proctor maximum density in accordance with the project specifications. A representative of the geotechnical engineer should be present on-site during grading operations to verify proper placement and compaction of all fill, as well as to verify compliance with the other geotechnical recommendations presented herein.

#### 6.3 Construction Considerations

#### **Construction Dewatering**

Groundwater was encountered at depths ranging from about 8 to 15 feet below grade within four of the test borings drilled at the site and is anticipated to exist below depths of excavations typical for the proposed development. In the event shallower perched water conditions develop, filtered sump pumps placed in pits in the bottoms of excavations are expected to be suitable if dewatering becomes necessary. A more elaborate dewatering system may be needed if deep excavations, extending several feet below the water table, are proposed.



#### Soil Excavation

Some slope stability problems maybe encountered in steep, unbraced excavations considering the low-cohesive nature of the subsoils. Slope stability problems should be anticipated for steep unbraced excavations.

All excavations must be performed in accordance with OSHA requirements, which is the responsibility of the contractor. Shallow excavations may be adequately sloped for bank stability while deeper excavations or excavations where adequate back sloping cannot be performed may require some form of external support such as shoring or bracing. Due to the presence of some dense soils, deep excavations for utilities may require the use of specialized excavation equipment or techniques.

#### 6.4 Foundation Recommendations

#### **Building Foundation System**

Upon completion of the recommended building pad preparation the proposed structure may be supported by a shallow foundation system consisting of a continuous strip footing for support of the perimeter walls with a thickened slab for support of interior walls. If needed, isolated column footing pads are also suitable. Strip footings that will support the perimeter and interior bearing walls and isolated column footing pads (if needed) may be designed for a maximum, net, allowable soil-bearing pressure of 3,000 pounds per square foot (psf). Minimum footing widths are recommended to be 16 inches for walls and 24 inches for any column footing pad. The maximum allowable bearing pressure is recommended to be 2,500 psf for a monolithically constructed foundation and floor slab (thickened slab) used to support load bearing interior walls. These allowable soil bearing pressures may be increased by ½ for short term wind and/or seismic loads.

#### Reinforcing

Perimeter strip footing pads are recommended to be longitudinally reinforced with at least 4 No. 4 bars (2 top and 2 bottom) for increase rigidity due to the presence of some marginal strength soil that will remain in-place following completion of site grading. This minimum recommended steel reinforcement is not intended to be used in lieu of that needed for structural purposes but is recommended due to geotechnical conditions at the site. The interior combined foundation/floor slab system may be designed as a Mat on Elastic Foundation based on a Modulus of Subgrade Reaction  $(K_{vi})$  of 150 pci. The design of the foundations and the determination of the steel reinforcing should be performed by a qualified structural engineer.

#### Lateral Load Resistance

Lateral load resistance will be developed by a combination of friction acting at the base of foundations and slabs and the passive earth pressure developed by footings below grade. Passive pressure and friction may be used in combination, without reduction, in determining the total resistance to lateral loads. A one-third increase in the passive pressure value may be used for short duration wind or seismic loads.



A coefficient of friction of granular 0.38 may be used with dead load forces for footings placed on newly placed compacted fill soil or competent native soil. An allowable passive earth pressure of 275 psf per foot of footing depth (pcf) below the lowest adjacent grade may be used for the sides of footings placed against newly placed structural fill. The maximum recommended allowable passive pressure is 2,000 psf.

#### Bearing Material Criteria

Structural fill placed and compacted under engineering controlled conditions continuous from a suitable existing soil subgrade are considered to be suitable for direct foundation support. Soil suitable to serve as the subgrade for foundation support should exhibit at least a firm relative density (average N value of at least 10) for non-cohesive soils and a stiff comparative consistency (average unconfined compressive strength of 1.5 tons per square foot) for cohesive soils for the recommended allowable soil bearing pressure. For design and construction estimating purposes, suitable bearing soils are expected to be encountered at nominal bearing depths following completion of the recommended site grading.

Soils suitable as the structural fill subgrade (and indirect foundation support), at a depth of at least 3 feet below the bottom of the footings and floor slab, should possess at least a loose relative density (N-value equal to or greater than 6) for granular soils or a medium stiff comparative consistency (average unconfined compressive strength of 0.75 tsf) for cohesive soils.

Evaluation of the foundation subgrade should be performed using appropriate bearing capacity testing methods and in-situ testing equipment such as dynamic or static cone penetrometers depending upon the material and should typically include testing to a depth of 3 feet below the foundation bearing grade. The actual depth of evaluation may be revised at the discretion of the geotechnical engineer. If unsuitable bearing soils are encountered, they should be recompacted in-place if feasible, or excavated to a suitable bearing soil subgrade and to a lateral extent as defined by Item No. 3 of the enclosed Guide Specifications, with the excavation backfilled with structural compacted fill to develop a uniform bearing grade.

#### Foundation Embedment

We recommend that exterior foundations extend at least 18 inches below the adjacent exterior grade or to the minimum embedment requirement by the local agency. Interior footings may be supported at nominal depth below the floor, provided the interior space is continually heated. All footings must be protected against weather and water damage during and after construction, and must be supported within suitable bearing materials.

#### **Estimated Foundation Movement**

Post-construction total and differential settlement of a shallow foundation system designed and constructed in accordance with the recommendations provided in this report are estimated to be less than ¾ and ¼ inch, respectively, for static conditions and interior footings 10 feet on-center. The estimated differential movement is anticipated to result in an angular distortion of less than 0.002 inches per inch on the basis of a minimum clear span of 10 feet. The maximum estimated total and differential movement is considered within tolerable limits for the proposed structure provided it is properly considered in the structural design.

#### 6.5 Floor Slab Recommendations

#### **Subgrade**

The floor slab subgrade should be prepared in accordance with the appropriate recommendations presented in the <u>Site Development Recommendations</u> section of this report. Foundation, utility trenches and other below-slab excavations should be backfilled with structural compacted fill in accordance with the project specifications.

#### Design

The ground floor of the proposed structure may be designed and constructed as load-bearing slab-on-grade in which the slab includes thickened areas below the interior walls for support. The at-grade floor may be designed as a "Mat on Elastic Foundation" using a Modulus of Subgrade Reaction (kv<sub>i</sub>) of 150 pounds per cubic inch (pci) where the slab provides structural support for the interior load bearing walls. The design of the slab may also be based upon an allowable soil bearing pressure of 2,500 psf for distribution of structural loads. The design of the slab is recommended to be performed by the project structural engineer to ensure proper reinforcing and thickness.

A minimum 4-inch thick layer of compacted granular material is recommended below the slab. A synthetic sheet should be placed immediately below the floor slab to serve as a vapor barrier to protect moisture sensitive floor coverings (i.e. tile, etc) and where moisture passing through the slab presents a problem. If materials underlying the synthetic sheet contain sharp, angular particles, a cushion layer of sand approximately 2 inches thick or a geotextile should be provided to protect it from puncture. An additional layer of sand may be provided between the slab and vapor barrier to promote proper curing. In addition, the vapor barrier sheets should be evaluated for holes and/or punctures and the edges overlapped and taped prior to placement. If used, the sand layers may be used as a substitute for the 4-inch thick granular layer. Proper curing techniques are recommended to be used to reduce the potential for excessive shrinkage cracking.

#### **Estimated Settlement**

With proper site preparation and construction monitoring, the total and differential settlements of a load bearing slab-on-grade, are estimated to be less than  $\frac{3}{4}$  and  $\frac{1}{4}$  inches across a 10 foot span, respectively. Therefore, settlements are on the order of the estimates for the building perimeter foundation where the slab and perimeter footings are combining as one structural foundation unit.

#### 6.6 Pavement Recommendations

The following recommendations for the new pavement are intended for vehicular traffic associated with the new building development and are not intended for use throughout the existing facility.

#### Subgrades for New Pavement

Following completion of the recommended subgrade preparation procedures, the pavement subgrade soils are expected to consist of silty sand with some gravel. The anticipated subgrade soils are classified as good to excellent subgrade materials with estimated CBR values ranging from 10 to 20 when properly prepared based on the Unified Soil Classification System designation of SM. An estimated CBR value of 10 has been used in the preparation of the pavement design based on the silty sand soils. It should, however, be recognized that the City of Bellevue/King County may require a specific CBR value test to verify the use of the following design. It is recommended that this testing be conducted following completion of rough grading in the proposed pavement areas so that the CBR value test results are indicative of the actual pavement subgrade soils. Alternatively, a minimum code pavement section may be required if a specific CBR value test is not performed. To use this CBR value, all fill added to the pavement subgrade must have pavement support characteristics at least equivalent to the existing soils, and must be placed and compacted in accordance with the project specifications.

#### Asphalt Pavements

The following table represents the recommended thicknesses for new asphaltic concrete pavement with the appropriate state highway specifications so that the proper materials and construction procedures are used. Considering the high quality of the subgrade soils, a full depth pavement section is considered the most economical. However, local codes may require specific testing to determine the soil support characteristics and/or minimum pavement section thicknesses. A parking stall pavement section has also been presented. However, if truck traffic cannot be excluded from the parking stalls, the drive lane pavement section should be used or a reduced service life (premature failure) may occur.

ASPHALT PAVEMENTS								
Materials	Thickness	(inches)	Washington DOT Standard					
	Parking Stalls	Drive Lanes	Specifications					
Asphaltic Concrete Surface Course (b)	1	1	Section 5-04 (a)					
Asphaltic Concrete Binder Course (b)	2	2	Section 5-04 (a)					
Aggregate Base Course	4	6	Section 4-04 (Base Course)					

NOTES:

(a) Compaction to density between 95 and 100 percent of the 50-Blow Marshall Density

(b) The surface and binder course may be combined as a single layer placed in one lift if similar materials are utilized.

Pavement recommendations are based upon design parameters for a twenty-year design period and assume proper drainage and construction observation and testing. It is, therefore, recommended that the geotechnical engineer observes and tests subgrade preparation, and that the subgrade be evaluated immediately before pavement construction. Pavement rehabilitation at 7- to 8-year intervals should be expected to achieve a twenty-year service life.

#### Concrete Pavement

Portland cement concrete pavement is recommended for areas of new pavement that will be subjected to channelized traffic, large loads or intense vehicular stresses such as the drive-thru lane, trash enclosure loading zone and the entrance/exit aprons. In such areas, a 6-inch thick, properly reinforced concrete pavement is recommended. The concrete pavement is recommended to be underlain by a 4-inch compacted coarse granular base placed on a properly prepared subgrade. The use of concrete pavement is also recommended within the entrance/exit aprons to the parking lot and the drive-thru lane. Minimum reinforcement within concrete pavements is recommended to consist of heavy welded wire fabric (6 X 6-W2.9 X W2.9 WWF), placed at mid-slab height. The materials and construction procedures should be in accordance with the Washington DOT Standard Specifications Section 5-05 for concrete and Section 4-04 for base course.

#### **General Considerations**

Pavement designs are based on AASHTO design parameters. It is, therefore, recommended that a representative of the geotechnical engineer observes and test subgrade preparation, and that the subgrade be evaluated immediately before pavement construction. These designs are also based on a routine pavement maintenance program and significant asphaltic concrete pavement rehabilitation after about 8 to 10 years to obtain the anticipated pavement service life.



#### Basis of Report

This report has been based on the project description given earlier in this report. *Giles* must be notified if any part of the project description is not accurate so that this report can be amended, if needed. This report is based on the assumption that the proposed development will be designed and constructed according to the codes that govern construction at the site.

The conclusions and recommendations in this report are based on estimated subsurface conditions as shown on the *Records of Subsurface Exploration*. Giles must be notified if the subsurface conditions that are encountered during construction of the proposed development differ from those shown on the *Records of Subsurface Exploration* because this report will likely need to be revised. General comments and limitations of this report are given in the appendix.

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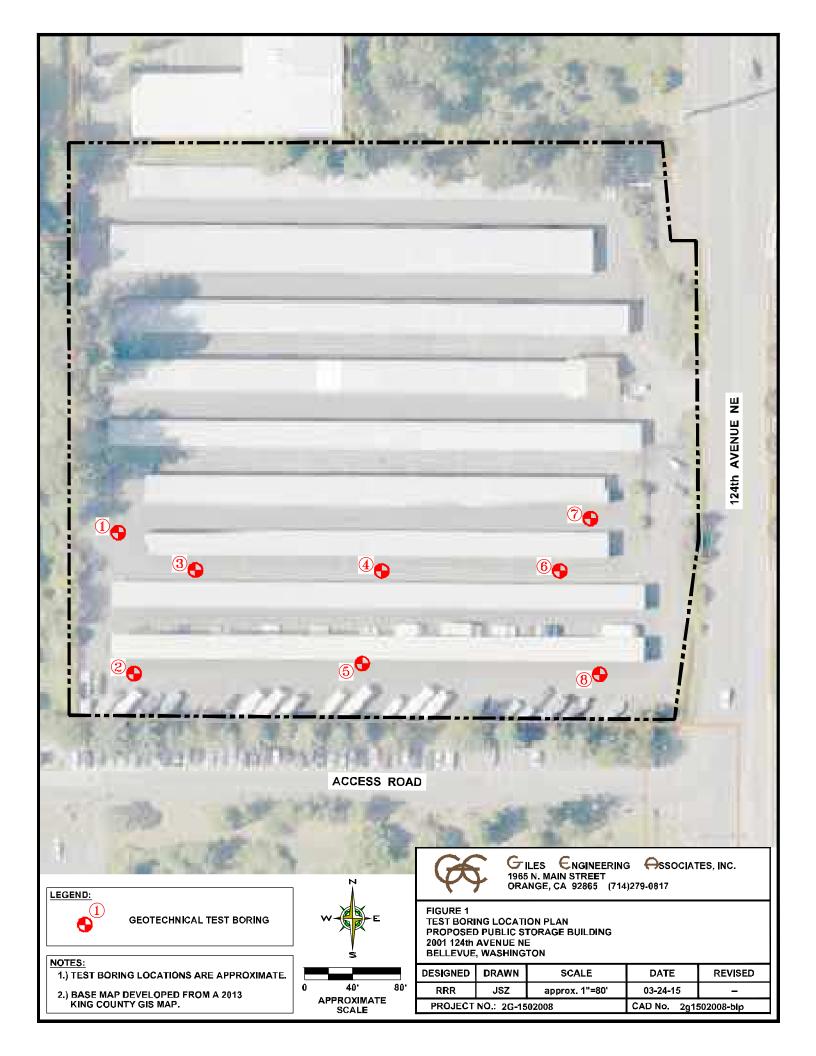
#### **APPENDIX A**

#### FIGURES AND TEST BORING LOGS

The Test Boring Location Plan contained herein was prepared based upon information supplied by *Giles'* client, or others, along with *Giles'* field measurements and observations. The diagram is presented for conceptual purposes only and is intended to assist the reader in report interpretation.

The Test Boring Logs and related information enclosed herein depict the subsurface (soil and water) conditions encountered at the specific boring locations on the date that the exploration was performed. Subsurface conditions may differ between boring locations and within areas of the site that were not explored with test borings. The subsurface conditions may also change at the boring locations over the passage of time.





BORING NO. & LOCATION:	PROJECT:	
B-1	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~144.3'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Egar Catus	GILES PROJECT NUMBER: 2G-1502008	



# GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	գ <sub>ր</sub> (tsf)	q <sub>s</sub> (tsf)	W (%)	PID	NOTES
Approximately 6 inches thick asphaltic concrete									
Dark Brown Silty fine to coarse Sand, some Clay and Gravel - Moist (Fill)	_ _ _	1 SS	41				9		
Light Gray Silty fine to medium Sand - Moist (Possible Fill)	_								
Gray Silt, trace of fine Sand, little Clay - Moist  (Native)	5 <del>-</del>	2 \$\$	14				19		
Light Gray Silty fine Sand, some Gravel - Moist	- - 10 <del>-</del> -	3 SS	31				11		
- - - -	15 <del>-</del>	4 SS	37						
Gray Silt with lenses of Silty Sand - Very Moist	20 <del>-</del>	5 <b>SS</b>	42						

Boring terminated at 21.5 feet. No groundwater encountered.

		WATER OBSERVATION DATA	REMARKS
7	Z	WATER ENCOUNTERED DURING DRILLING: None	SS = Standard Penetration Test
7	<u>v</u>	WATER LEVEL AFTER REMOVAL:	
333	3335	CAVE DEPTH AFTER REMOVAL:	
	₹_	WATER LEVEL AFTER HOURS:	
		CAVE DEPTH AFTER HOURS:	

BORING NO. & LOCATION:	PROJECT:	
B-2	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~143.5'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Gatus	CILES PRO IECT NI IMBER: 2G-1502008	



# GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	գ <sub>ր</sub> (tsf)	q <sub>s</sub> ( <b>tsf</b> )	w (%)	PID	NOTES
Approximately 3.5 inches thick asphaltic concrete	_								
Light Brown to Gray Silty fine to medium Sand, trace of Clay - Very Moist (Fill)	_	1 \$\$	8				14		P <sub>200</sub> =25%
Brown and Gray Silty fine Sand, trace of Clay - Very Moist (Possible Fill)	5 <del>-</del>	2 \$\$	6				18		
	_								
Light Gray Silty to Clayey fine Sand - Moist  (Native)	10 <del>-</del>	3 SS	8				9		
_	_ _								
Gray fine Sand with thin lenses of Clay and Silt - Very Moist	15 <del>-</del> -	4 SS	54						
(Possible Cobbles and/or Boulders)	_ _								
	20-	5 <b>SS</b>	60						

Boring terminated at 21 feet. No groundwater encountered.

	WATER OBSERVATION DATA	REMARKS
$\bar{\Delta}$	WATER ENCOUNTERED DURING DRILLING: None	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
3333333	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

BORING NO. & LOCATION:	PROJECT:	
B-3	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~142.0'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Gatus	CILES PRO IECT NI IMBER: 2G-1502008	



#### GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	զ <sub>ր</sub> (tsf)	q <sub>s</sub>	W (%)	PID	NOTES
_Approximately 6 inches thick asphaltic concrete		1,750		, ,	, ,	, ,	, ,		
Gray Silty fine to coarse Sand, little Gravel, some thin lenses of Sandy Clay - Very Moist	_								
(Fill)	_	1 \$\$	13				25		
Brown to Gray Silty fine Sand, little fine Gravel, trace of Clay - Moist (Native)	_								
-	5-	2 SS	21				12		
-	_								
_									
_									
- -	10-								
_	10	3 <b>SS</b>	29				16		
_	_								
-	_								
-	_								
Light Gray fine Sandy Silt with Clay - Moist	15-	4 SS	30						
Eight Gray fine Sandy Silt With Clay - Moist	_	100	30						
Bluish Gray Silt, little fine Sand, trace of Clay - Moist	- -								
_ (Possible Cobbles and/or Boulders)	_								
	20-	5 <b>SS</b>	50/5"						

Boring terminated at 21 feet. Perched water encountered at 8 feet.

	WATER OBSERVATION DATA	REMARKS
$\bar{\Delta}$	WATER ENCOUNTERED DURING DRILLING: 8	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
3333333	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

BORING NO. & LOCATION:	PROJECT:	
B-4	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~143.0′	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Catus	CILES PRO IECT NI IMBER: 2G-1502008	



#### GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	գ <sub>ս</sub> ( <b>tsf)</b>	գ <sub>ր</sub> ( <b>tsf</b> )	q <sub>s</sub> ( <b>tsf</b> )	w (%)	PID	NOTES
Approximately 6 inches thick asphatlic concrete with no base noted	_								
Black Silty fine to coarse Sand, little Gravel - Very Moist (Fill)	_	1 SS	29				19		
Light Gray fine Sandy Silt, some Clay - Moist (Native)	5 <del>-</del>	2 SS	11				12		P <sub>200</sub> =46%
Mottled Light Gray to Light Yellowish Brown fine Sandy Silt to Silty fine Sand, some Clay - Very Moist	_ _ _								
Gray fine Sand Silt, little to trace Clay - Moist	10 <del>-</del> - - -	3 SS	20				7		P <sub>200</sub> =52%
Bluish Gray fine Sandy Silt, little Clay - Very Moist	- 15 <del>-</del> - - -	4 SS	48				17		
Gray Clay, little fine Sand - Wet (Possible Cobbles and/or Boulders)	20 <del>-</del> -	5 <b>SS</b>	50/5"				15		P <sub>200</sub> =49%
Gray fine to coarse Sand with Gravel, some lenses of Silty Sand - Very Moist	25 <del>-</del> - - - -	6 SS	50/5"						P <sub>200</sub> =9%
(Possible Cobbles and/or Boulders)	30 <del>-</del>	7 SS	50/4"						

Boring terminated at 33 feet due to refusal on very dense soils or cobbles/boulders.

No groundwater encountered.

	WATER OBSERVATION DATA	REMARKS
$\overline{\Delta}$	WATER ENCOUNTERED DURING DRILLING: None	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
********	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

BORING NO. & LOCATION:	PROJECT:	
B-5	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~144.0'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Gatus	GILES PROJECT NUMBER: 2G-1502008	



# GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	գ <sub>ր</sub> (tsf)	q <sub>s</sub> (tsf)	W (%)	PID	NOTES
Approximately 6.5 inches thick asphaltic concrete	[ _	,,							
Dark Brown Silty fine to coarse Sand, some Gravel - Very Moist (Fill)	_	1 SS	22				11		
Light Gray Silty fine to coarse Sand, little Clay - Very Moist (Possible Fill)	_								
Dark Brown Silty Clay, trace to little fine Sand - Very Moist (Native)	5 <del>-</del> -	2 \$\$	5		2.0				P <sub>200</sub> =64%
	_								
Gray Silt, little fine Sand, some Clay - Moist	10-	3 SS	15		2.5		18		
	_								
_	_								
Dark Gray Silty fine to coarse Sand, some	15-	4 SS	26						
Gravel, little Clay - Very Moist	_								
_	_								
_	20 <del>-</del>	5 <b>SS</b>	68						

Boring terminated at 21.5 feet. No groundwater encountered.

	WATER OBSERVATION DATA	REMARKS
$\bar{\Delta}$	WATER ENCOUNTERED DURING DRILLING: None	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
333333	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

BORING NO. & LOCATION:	PROJECT:	
B-6	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~144.0'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Gatus	GILES PROJECT NUMBER: 2G-1502008	



# GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	զ <sub>ր</sub> (tsf)	q <sub>s</sub> (tsf)	W (%)	PID	NOTES
Approximately 6 inches thick asphaltic concrete  Dark Brown Silty fine to coarse Sand, little fine  Gravel - Very Moist (Fill)  Gray Silty fine to medium Sand, trace of Clay -  Very Moist (Possible Native)		1 SS	13				18		
Bluish Gray Silty Clay, trace of fine Sand - Very Moist (Native)	5 <del>-</del> -	2 \$\$	14		3.0		21		
Gray fiine Sandy Silt, some Clay - Moist to Very  Moist		3 SS	29		4.5+		16		
Gray Sand and Gravel with Silt and Clay - Wet	- 15 <del>-</del> -	4 SS	42						
(Possible Cobbles and/or Boulders)	20-	5 <b>SS</b>	50/5"						

Boring terminated at 21 feet.

Perched water encountered at 11 feet.

	WATER OBSERVATION DATA	REMARKS
$\bar{\Delta}$	WATER ENCOUNTERED DURING DRILLING: 11	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
333333	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

### RECORD OF SUBSURFACE EXPLORATION

BORING NO. & LOCATION:	PROJECT:	
B-7	Proposed Public Storage Building	
SURFACE ELEVATION:	PROJECT LOCATION:	
~145.0'	SWC Northup Way and 124th Avenue NE	(
COMPLETION DATE:		
3/12/15	Bellevue, WA	
FIELD REPRESENTATIVE:		
Edgar Gatus	GILES PROJECT NUMBER: 2G-1502008	



#### GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	զ <sub>ր</sub> (tsf)	q <sub>s</sub> (tsf)	₩ (%)	PID	NOTES
Approximately 5 inches asphaltic concrete									
<ul> <li>Dark Brown Silty fine to coarse Sand, some</li> <li>Gravel - Moist (Fill)</li> </ul>	_								
	_	1 SS	33				12		
Light Gray Silty fine to coarse Sand, some _ Gravel - Moist (Native)	_								
_	5 <b>-</b>	2 SS	21				12		
	_								
	_								
	-								
Gray Silty fine to coarse Sand and Gravel,  possible Cobbles - Wet	- 10 <del>-</del>	3 SS	54						
	_								
Gray Sand and Gravel, little Silt - Wet	_								
(Possible Cobbles and/or Boulders)	15 <del>-</del>	4 SS	50/4"						

Boring terminated at 15.5 feet. Perched water encountered at 10 feet.

	WATER OBSERVATION DATA	REMARKS
$\bar{\Delta}$	WATER ENCOUNTERED DURING DRILLING: 10	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
333333	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

### RECORD OF SUBSURFACE EXPLORATION

BORING NO. & LOCATION:	PROJECT:
B-8	Proposed Public Storage Building
SURFACE ELEVATION:	PROJECT LOCATION:
~144.4'	SWC Northup Way and 124th Avenue NE
COMPLETION DATE:	
3/12/15	Bellevue, WA
FIELD REPRESENTATIVE:	
Edgar Gatus	GILES PROJECT NUMBER: 2G-1502008



# GILES ENGINEERING ASSOCIATES, INC.

Milwaukee Atlanta Dallas Wasington, D.C. Los Angeles Orlando

MATERIAL DESCRIPTION	Feet Below Surface	Sample No. & Type	N	q <sub>u</sub> (tsf)	զ <sub>թ</sub> ( <b>tsf)</b>	q <sub>s</sub> (tsf)	W (%)	PID	NOTES
Approximately 4 inches thick asphaltic concrete									
Dark Brown Silty to Clayey fine to medium Sand - Moist (Fill)	_								
= - (VIOISE (1 III)	_	1 SS	8		3.5		24		
Olive Gray fine Sandy Clay, some Silt - Very  Moist (Possible Native)	_								
_	5-	2 \$\$	10				25		
Gray Silty fine to medium Sand, little Clay - Very Moist (Native)	_ _								
	-								
Gray fine Sandy Silt, little Clay - Very Moist	10 <del>-</del> -	3 SS	16				17		
	_								
Light Gray Clayey fine to coarse Sand, some  Gravel - Wet	<sup>▽</sup> 15 <del>−</del> - -	4 SS	51						
_	_								
(Possible Cobbles and/or Boulders)	20-	5 <b>SS</b>	50/4"						

Boring terminated at 21 feet. Perched water encountered at 15 feet.

	WATER OBSERVATION DATA	REMARKS
$\nabla$	WATER ENCOUNTERED DURING DRILLING: 15	SS = Standard Penetration Test
Ā	WATER LEVEL AFTER REMOVAL:	
*********	CAVE DEPTH AFTER REMOVAL:	
<b>T</b>	WATER LEVEL AFTER HOURS:	
	CAVE DEPTH AFTER HOURS:	

#### **APPENDIX B**

#### FIELD PROCEDURES

The field operations were conducted in general accordance with the procedures recommended by the American Society for Testing and Materials (ASTM) designation D 420 entitled "Standard Guide for Sampling Rock and Rock" and/or other relevant specifications. Soil samples were preserved and transported to *Giles'* laboratory in general accordance with the procedures recommended by ASTM designation D 4220 entitled "Standard Practice for Preserving and Transporting Soil Samples." Brief descriptions of the sampling, testing and field procedures commonly performed by *Giles* are provided herein.



#### GENERAL FIELD PROCEDURES

#### **Test Boring Elevations**

The ground surface elevations reported on the Test Boring Logs are referenced to the assumed benchmark shown on the Boring Location Plan (Figure 1). Unless otherwise noted, the elevations were determined with a conventional hand-level and are accurate to within about 1 foot.

#### **Test Boring Locations**

The test borings were located on-site based on the existing site features and/or apparent property lines. Dimensions illustrating the approximate boring locations are reported on the Boring Location Plan (Figure 1).

#### Water Level Measurement

The water levels reported on the Test Boring Logs represent the depth of "free" water encountered during drilling and/or after the drilling tools were removed from the borehole. Water levels measured within a granular (sand and gravel) soil profile are typically indicative of the water table elevation. It is usually not possible to accurately identify the water table elevation with cohesive (clayey) soils, since the rate of seepage is slow. The water table elevation within cohesive soils must therefore be determined over a period of time with groundwater observation wells.

It must be recognized that the water table may fluctuate seasonally and during periods of heavy precipitation. Depending on the subsurface conditions, water may also become perched above the water table, especially during wet periods.

#### Borehole Backfilling Procedures

Each borehole was backfilled upon completion of the field operations. If potential contamination was encountered, and/or if required by state or local regulations, boreholes were backfilled with an "impervious" material (such as bentonite slurry). Borings that penetrated pavements, sidewalks, etc. were "capped" with Portland Cement concrete, asphaltic concrete, or a similar surface material. It must, however, be recognized that the backfill material may settle, and the surface cap may subside, over a period of time. Further backfilling and/or re-surfacing by *Giles'* client or the property owner may be required.



#### FIELD SAMPLING AND TESTING PROCEDURES

#### Auger Sampling (AU)

Soil samples are removed from the auger flights as an auger is withdrawn above the ground surface. Such samples are used to determine general soil types and identify approximate soil stratifications. Auger samples are highly disturbed and are therefore not typically used for geotechnical strength testing.

#### Split-Barrel Sampling (SS) – (ASTM D-1586)

A split-barrel sampler with a 2-inch outside diameter is driven into the subsoil with a 140-pound hammer free-falling a vertical distance of 30 inches. The summation of hammer-blows required to drive the sampler the final 12-inches of an 18-inch sample interval is defined as the "Standard Penetration Resistance" or N-value is an index of the relative density of granular soils and the comparative consistency of cohesive soils. A soil sample is collected from each SPT interval.

#### Shelby Tube Sampling (ST) – (ASTM D-1587)

A relatively undisturbed soil sample is collected by hydraulically advancing a thin-walled Shelby Tube sampler into a soil mass. Shelby Tubes have a sharp cutting edge and are commonly 2 to 5 inches in diameter.

#### Bulk Sample (BS)

A relatively large volume of soils is collected with a shovel or other manually-operated tool. The sample is typically transported to *Giles'* materials laboratory in a sealed bag or bucket.

#### Dynamic Cone Penetration Test (DC) – (ASTM STP 399)

This test is conducted by driving a 1.5-inch-diameter cone into the subsoil using a 15-pound steel ring (hammer), free-falling a vertical distance of 20 inches. The number of hammer-blows required to drive the cone 1¾ inches is an indication of the soil strength and density, and is defined as "N". The Dynamic Cone Penetration test is commonly conducted in hand auger borings, test pits and within excavated trenches.

- Continued -



#### Ring-Lined Barrel Sampling - (ASTM D 3550)

In this procedure, a ring-lined barrel sampler is used to collect soil samples for classification and laboratory testing. This method provides samples that fit directly into laboratory test instruments without additional handling/disturbance.

#### Sampling and Testing Procedures

The field testing and sampling operations were conducted in general accordance with the procedures recommended by the American Society for Testing and Materials (ASTM) and/or other relevant specifications. Results of the field testing (i.e. N-values) are reported on the Test Boring Logs. Explanations of the terms and symbols shown on the logs are provided on the appendix enclosure entitled "General Notes".



#### **APPENDIX C**

#### LABORATORY TESTING AND CLASSIFICATION

The laboratory testing was conducted under the supervision of a geotechnical engineer in accordance with the procedures recommended by the American Society for Testing and Materials (ASTM) and/or other relevant specifications. Brief descriptions of laboratory tests commonly performed by *Giles* are provided herein.



#### LABORATORY TESTING AND CLASSIFICATION

#### Photoionization Detector (PID)

In this procedure, soil samples are "scanned" in *Giles*' analytical laboratory using a Photoionization Detector (PID). The instrument is equipped with an 11.7 eV lamp calibrated to a Benzene Standard and is capable of detecting a minute concentration of **certain** Volatile Organic Compound (VOC) vapors, such as those commonly associated with petroleum products and some solvents. Results of the PID analysis are expressed in HNu (manufacturer's) units rather than actual concentration.

#### Moisture Content (w) (ASTM D 2216)

Moisture content is defined as the ratio of the weight of water contained within a soil sample to the weight of the dry solids within the sample. Moisture content is expressed as a percentage.

#### Unconfined Compressive Strength (qu) (ASTM D 2166)

An axial load is applied at a uniform rate to a cylindrical soil sample. The unconfined compressive strength is the maximum stress obtained or the stress when 15% axial strain is reached, whichever occurs first.

#### Calibrated Penetrometer Resistance (qp)

The small, cylindrical tip of a hand-held penetrometer is pressed into a soil sample to a prescribed depth to measure the soils capacity to resist penetration. This test is used to evaluate unconfined compressive strength.

#### Vane-Shear Strength (qs)

The blades of a vane are inserted into the flat surface of a soil sample and the vane is rotated until failure occurs. The maximum shear resistance measured immediately prior to failure is taken as the vane-shear strength.

#### Loss-on-Ignition (ASTM D 2974; Method C)

The Loss-on-Ignition (L.O.I.) test is used to determine the organic content of a soil sample. The procedure is conducted by heating a dry soil sample to 440°C in order to burn-off or "ash" organic matter present within the sample. The L.O.I. value is the ratio of the weight loss due to ignition compared to the initial weight of the dry sample. L.O.I. is expressed as a percentage.



#### Particle Size Distribution (ASTB D 421, D 422, and D 1140)

This test is performed to determine the distribution of specific particle sizes (diameters) within a soil sample. The distribution of coarse-grained soil particles (sand and gravel) is determined from a "sieve analysis," which is conducted by passing the sample through a series of nested sieves. The distribution of fine-grained soil particles (silt and clay) is determined from a "hydrometer analysis" which is based on the sedimentation of particles suspended in water.

#### Consolidation Test (ASTM D 2435)

In this procedure, a series of cumulative vertical loads are applied to a small, laterally confined soil sample. During each load increment, vertical compression (consolidation) of the sample is measured over a period of time. Results of this test are used to estimate settlement and time rate of settlement.

#### Classification of Samples

Each soil sample was visually-manually classified, based on texture and plasticity, in general accordance with the Unified Soil Classification System (ASTM D-2488-75). The classifications are reported on the Test Boring Logs.

#### Laboratory Testing

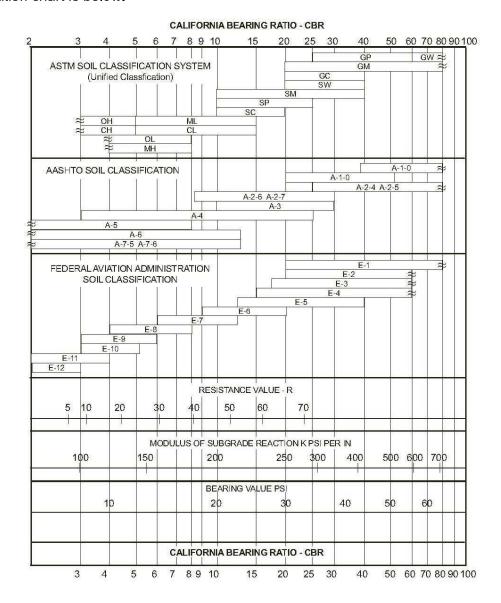
The laboratory testing operations were conducted in general accordance with the procedures recommended by the American Society for Testing and Materials (ASTM) and/or other relevant specifications. Results of the laboratory tests are provided on the Test Boring Logs or other appendix enclosures. Explanation of the terms and symbols used on the logs is provided on the appendix enclosure entitled "General Notes."



#### California Bearing Ratio (CBR) Test ASTM D-1833

The CBR test is used for evaluation of a soil subgrade for pavement design. The test consists of measuring the force required for a 3-square-inch cylindrical piston to penetrate 0.1 or 0.2 inch into a compacted soil sample. The result is expressed as a percent of force required to penetrate a standard compacted crushed stone.

Unless a CBR test has been specifically requested by the client, the CBR is estimated from published charts, based on soil classification and strength characteristics. A typical correlation chart is below.





#### **APPENDIX D**

#### **GENERAL INFORMATION**

#### **GENERAL COMMENTS**

The soil samples obtained during the subsurface exploration will be retained for a period of thirty days. If no instructions are received, they will be disposed of at that time.

This report has been prepared exclusively for the client in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. Copies of this report may be provided to contractor(s), with contract documents, to disclose information relative to this project. The report, however, has not been prepared to serve as the plans and specifications for actual construction without the appropriate interpretation by the project architect, structural engineer, and/or civil engineer. Reproduction and distribution of this report must be authorized by the client and *Giles*.

This report has been based on assumed conditions/characteristics of the proposed development where specific information was not available. It is recommended that the architect, civil engineer and structural engineer along with any other design professionals involved in this project carefully review these assumptions to ensure they are consistent with the actual planned development. When discrepancies exist, they should be brought to our attention to ensure they do not affect the conclusions and recommendations provided herein. The project plans and specifications may also be submitted to *Giles* for review to ensure that the geotechnical related conclusions and recommendations provided herein have been correctly interpreted.

The analysis of this site was based on a subsoil profile interpolated from a limited subsurface exploration. If the actual conditions encountered during construction vary from those indicated by the borings, *Giles* must be contacted immediately to determine if the conditions alter the recommendations contained herein.

The conclusions and recommendations presented in this report have been promulgated in accordance with generally accepted professional engineering practices in the field of geotechnical engineering. No other warranty is either expressed or implied.



#### GUIDE SPECIFICATIONS FOR SUBGRADE AND PREPARATION FOR FILL, FOUNDATION, FLOOR SLAB AND PAVEMENT SUPPORT; AND SELECTION, PLACEMENT AND COMPACTION OF FILL SOILS USING MODIFIED PROCTOR PROCEDURES

- Construction monitoring and testing of subgrades and grades for fill, foundation, floor slab and pavement; and fill selection, placement and compaction shall be performed by an experienced soils engineer and/or his representatives.
- 2. All compacted fill, subgrades, and grades shall be (a) underlain by suitable bearing material, (b) free of all organic frozen, or other deleterious material, and (c) observed, tested and approved by qualified engineering personnel representing an experienced soils engineer. Preparation of subgrades after stripping vegetation, organic or other unsuitable materials shall consist of (a) proofrolling to detect soft, wet, yielding soils or other unstable materials that must be undercut, (b) scarifying top 6 to 8 inches, (c) moisture conditioning the soils as required, and (d) recompaction to same minimum in-situ density required for similar material indicated under Item 5. Note: Compaction requirements for pavement subgrade are higher than other areas. Weather and construction equipment may damage compacted fill surface and reworking and retesting may be necessary for proper performance.
- 3. In overexcavation and fill areas, the compacted fill must extend (a) a minimum 1 foot lateral distance beyond the exterior edge of the foundation at bearing grade or pavement at subgrade and down to compacted fill subgrade on a maximum 0.5(H):1(v) slope, (b) 1 foot above footing grade outside the building, and (c) to floor subgrade inside the building. Fill shall be placed and compacted on a 5(H):1(V) slope or must be stepped or benched as required to flatten if not specifically approved by qualified personnel under the direction of an experienced soils engineer.
- 4. The compacted fill materials shall be free of deleterious, organic, or frozen matter, shall contain no chemicals that may result in the material being classified as "contaminated", and shall be low-expansive with a maximum Liquid Limit (ASTM D-423) and Plasticity Index (ASTM D-424) of 30 and 15, respectively, unless specifically tested and found to have low expansive properties and approved by an experienced soils engineer. The top 12 inches of compacted fill should have a maximum 3 inch particle diameter and all underlying compacted fill a maximum 6 inch diameter unless specifically approved by an experienced soils engineer. All fill material must be tested and approved under the direction of an experienced soils engineer prior to placement. If the fill is to provide non-frost susceptible characteristics, it must be classified as a clean GW, GP, SW or SP per Unified Soils Classification System (ASTM D-2487).
- 5. For structural fill depths less than 20 feet, the density of the structural compacted fill and scarified subgrade and grades shall not be less than 90 percent of the maximum dry density as determined by Modified Proctor (ASTM D-1557) with the exception of the top 12 inches of pavement subgrade which shall have a minimum in-situ density of 95 percent of maximum dry density, or 5 percent higher than underlying structural fill materials. Where the structural fill depth is greater than 20 feet, the portion below 20 feet should have a minimum in-place density of 95 percent of its maximum dry density or 5 percent higher than the top 20 feet. Cohesive soils shall not vary by more than -1 to +3 percent moisture content and granular soil ±3 percent from the optimum when placed and compacted or recompacted, unless specifically recommended/approved by the soils engineer observing the placement and compaction. Cohesive soils with moderate to high expansion potentials (PI>15) should, however, be placed, compacted and maintained prior to construction at a 3±1 percent moisture content above optimum moisture content to limit future heave. Fill shall be placed in layers with a maximum loose thickness of 8 inches for foundations and 10 inches for floor slabs and pavements, unless specifically approved by the soils engineer taking into consideration the type of materials and compaction equipment being used. The compaction equipment should consist of suitable mechanical equipment specifically designed for soil compaction. Bulldozers or similar tracked vehicles are typically not suitable for compaction.
- 6. Excavation, filing, subgrade grade preparation shall be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working platform. Springs or water seepage encountered during grade/foundation construction must be called to the soils engineer's attention immediately for possible construction procedure revision or inclusion of an underdrain system.
- Non-structural fill adjacent to structural fill should typically be placed in unison to provide lateral support. Backfill along walls must be placed and compacted with care to ensure excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls (i.e. basement walls and retaining walls) must be properly tested and approved by an experienced soils engineer with consideration for the lateral pressure used in the wall design.
- Wherever, in the opinion of the soils engineer or the Owner's Representatives, an unstable condition is being created either by cutting or filling, the work should not proceed into that area until an appropriate geotechnical exploration and analysis has been performed and the grading plan revised, if found necessary.



	Sultation			uscu	di ailiage				
Not suitable		Not suitable	Not suitable	ld not bc	Fair to poor	Very high		Not suitable	Pt
Not surtable	Not suitable	Not suitable	Very poor	Unstable, should not be used	No dramage, impervious	lligh	65-100	l'air to poor: sheepsfoot roller	011
Not suitable	y poor		ŗy	hair stability, may soften on expansion	No drainage, impervious	Very high	80-105	Fair to poor: sheepsloot roller	СН
Not suitable				,	Poor drainage, impervious	High	70-95	ber-	МН
Not suitable	Not suitable	Not suitable	Poor	n ld	Poor drainage, impervious	Medium to high	80-100	Fair to poor: sheepsfoot or rubber- tired roller	TO
Poor	Poor	Not suitable	Fair to poor	bility	No drainage, impervious	Medium	95-120	Good to fair: sheepsfoot or rubber- 95-120 tired roller	CL
Poor	Poor	Not su <b>itable</b>	Fair to poor	Poor stability, high density required	Poor drainage, impervious	Slight to medium	95-120	Good to poor: rubber-tired or sheepsfoot roller	ML
Excellent	Execlient	Fair to poor	Good to fair	nably	Poor drainage, impervious	Slight to medium	105-125	Good to fair: rubber-tired or sheepsfoot roller	SC
Poor to fair	Poor	Poor	Good to fair	Reasonably stable when dense	Poor drainage, impervious	Slight	110-125	Good: rubber-tired or sheepsfoot roller	SM
Poor to fair	Poor	Poor	Good to fair	Reasonably stable when dense	Good drainage, pervious	Almost none	100-120	Good: tractor, rubber-tired or vibratory roller	SP
Good	Fair to poor	Fair to poor	Good	Very stable	Good drainage, pervious	Almost none	110-130	Good: tractor, rubber-tired or vibratory roller	SW
Excellent	Excellent	Good to fair **	Good	Reasonably stable	Poor drainage, impervious	Slight	115-130	Good to fair: rubber-tired or sheepsfoot roller	GC
Poor to fair	Poor	Fair to poor	Excellent to good	Reasonably stable	Poor drainage, semipervious	Slight	120-135	Good: rubber-tired or light sheepsfoot roller	GM
	Poor	Poor to fair	Excellent to good	Reasonably stable	Good drainage, pervious	Almost none	115-125	Good: tractor, rubber-tired, steel wheel or vibratory roller	GP
Excellent	Fair to poor	Good	Excellent	Very stable	Good drainage, pervious	Almost none	125-135	Good: tractor, rubber-tired, steel wheel or vibratory roller	GW
as Temporary Pavement With ust Bituminous ve Treatment	Value as Temporary Pavement With Dust Palliative Treatme	Value as Base Course	Value as Subgrade When Not Subject to Frost	Value as an Embankment Material	Drainage and Permeability	Compressibility and Expansion	Max. Dry Density Standard Proctor (pcf)	Compaction Characteristics	Class
		OIL CONSTRUCTION *	SOIL CONS	M CLASSES FOR	TED SOIL SYSTE	CHARACTERISTICS AND RATINGS OF UNIFIED SOIL SYSTEM CLASSES FOR SO	TICS AND	CHARACTERIS	

<sup>&</sup>quot;The Unified Classification: Appendix A - Characteristics of Soil, Groups Pertaining to Roads and Airfields, and Appendix B - Characteristics of Soil Groups Pertaining to Embankments and Foundations," Technical Memorandum 357, U.S. Waterways Experiment Station, Vicksburg, 1953.

<sup>\*\*</sup> Not suitable if subject to frost.



#### UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487)

Ма	ajor Divis	ions	Gro Syml		Typical Names				Labo	ratory	Classi	ficatio	on Crit	teria		
ction is larger ize) Clean gravels (little or no fines)			G۷	٧	Well-graded gravels, gravel-sand mixtures, little or no fines			mbols <sup>b</sup>	C <sub>u</sub> =	D <sub>60</sub> gre	eater th	an 4; C	$c = \frac{(D_3)}{D_{10}}$	D <sub>60</sub> be	tween	1 and 3
ize)	fraction i e size)	Clean g (little fin	Gl	o	Poorly graded gravels, gravel-sand mixtrues, little or no fines	curve. ⁄e size), co		ng dual sy	N	ot mee	ting all	grada	tion re	quirem	ents fo	r GW
ls an No. 200 sieve s	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Gravels with fines (appreciable amount of fines)	GM <sup>a</sup>	d u	Silty gravels, gravel- sand-silt mixtures	Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-	ified as follows: GW, GP, SW, SP	GM, GC, SM, SC Bo <i>rderline</i> cases requiring dual symbols <sup>b</sup>	belo	terberg ow "A" lii less tha	ne or P.	·	mits pla area, at betv <i>borderl</i>	oove "A' veen 4	"line w and 7 a	ith P.I. ire
Coarse-grained soils naterial is larger thar	(More th	Grave (appreci	G	5	Clayey gravels, gravel- sand-clay mixtures	and grave on smalle	:lassified a GW, G	GM, G Border	abo	terberg ve "A" lin reater t	ne or P.I	1		of dual		
Coarse-gi material is	ion is e)	Clean sands (Little or no fines)	SV	V	Well-graded sands, gravelly sands, little or no fines	es of sand ines (fracti	grained soils are classified as follows: 5 percent:	rcent:	$C_u = \frac{D_{g0}}{D_{10}}$ greater tha			an 4; C <sub>a</sub>	$= \frac{(D_3)}{D_{10}}$	o)² CD <sub>60</sub> b∈	etween	1 and 3
than h Inds of coarse	Clean (Little fin	SF	>	Poorly graded sands, gravelly sands, little or no fines	oercentag ntage of fi	grained soi Less than 5 percent:	More than 12 percent: 5 to 12 percent:	1	Not mee	eting al	l grada	ition re	quirem	ents fo	r SW	
	Sands e than half of co maller than No.	Sands with fines (Appreciable amount of fines)	SMª	d u	Silty sands, sand-silt mixtures	Determine proding on perce	Less th	More the 5 to 12	belo	terberg ow "A" lii less tha	ne or P.I	¨	mits pla area, ak betv <i>borderl</i>	ove "A' veen 4	"line w a <mark>nd</mark> 7 a	ith P.I. Ire
	(More	Sand (Apprec	SC	-	Clayey sands, sand-clay mixtures	Depe		abo	terberg ve "A" lin reater t	ne or P.I			of dual			
size)	lays s than 50)				Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	60					Plastici∋	/ Chart				
No. 200 sieve	o. 200 sieve size) Sits and clays	Silts and clays (Liquid limit less than 50)		-	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays	50							CH	/		
d soils ller than l		(Liq	OI	L	Organic silts and organic silty clays of low plasticity	10										
Fine-grained soils (More than half material is smaller than No. 200	lays	Silts and clays (Liquid limit greater than 50)		Inorganic silts, mica- ceous or diatomaceous fine sandy or silty soils, elastic silts		Plasticity Index						"# jike	OH and	ј МН		
ո half ma	Silts and clays	imit great	CH	1	Inorganic clays of high plasticity, fat clays	20			CL							
(More than			Oł	1	Organic clays of medium to high plasticity, organic silts	10		CL-ML		ML a	nd OL					
		soils	Pt		Peat and other highly organic soils	00	10				Liquid	l Limit				100

<sup>&</sup>lt;sup>a</sup> Division of GM and SM groups into subdivisions of d and u are for roads and airfields only. Subdivision is based on Atterberg limits, suffix d used when L.L. is 28 or less and the P.I. is 6 or less; the suffix u is used when L.L. is greater than 28.

<sup>b</sup> Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group sympols. For example GW-GC, well-graded gravel-sand mixture with clay binder.

#### **GENERAL NOTES**

#### **SAMPLE IDENTIFICATION**

All samples are visually classified in general accordance with the Unified Soil Classification System (ASTM D-2487-75 or D-2488-75)

ST:

CS:

DC:

 $\Lambda U$ :

DB:

CB:

WS:

RB:

BS:

Note:

DESCRIPTIVE TERM (% BY DRY WEIGHT)	PARTICLE SIZE (DIAMETER)
DEAUNIE IIVE LEKWITZONI DNI WEJUHIT	CANTICLE MAE WITHOUT IENT

Trace:1-10%Boulders: 8 inch and largerLittle:11-20%Cobbles:3 inch to 8 inchSome:21-35%Gravel:coarse - ¾ to 3 inch

And/Adjective 36-50% fine No. 4 (4.76 mm) to 3/4 inch

Sand: coarse No. 4 (4.76 mm) to No. 10 (2.0 mm) medium No. 10 (2.0 mm) to No. 40 (0.42 mm)

Shelby Tube 3 inch O.D. (except where noted)

Depth intervals for sampling shown on Record of

recovery, but position where sampling initiated

Subsurface Exploration are not indicative of sample

fine No. 40 (0.42 mm) to No. 40 (0.42 mm) fine No. 40 (0.42 mm) to No. 200 (0.074 mm)

Silt: No. 200 (0.074 mm) and smaller (non-plastic)
Clay: No 200 (0.074 mm) and smaller (plastic)

3 inch O.D. California Ring Sampler Dynamic Cone Penetrometer per ASTM

Special Technical Publication No. 399

DRILLING AND SAMPLING SYMBOLS

Split-Spoon

Auger Sample

Diamond Bit

Wash Sample

Bulk Sample

Rock-Roller Bit

Carbide Bit

#### SOIL PROPERTY SYMBOLS

#### Dd: Dry Density (pcf) LL: Liquid Limit, percent PL: Plastic Limit, percent PI: Plasticity Index (LL-PL) LOI: Loss on Ignition, percent Specific Gravity Gs: Coefficient of Permeability K: Moisture content, percent w: Calibrated Penetrometer Resistance, tsf qp: Vane-Shear Strength, tsf qs: Unconfined Compressive Strength, tsf qu: Static Cone Penetrometer Resistance qc:

(correlated to Unconfined Compressive Strength, tsf)
PID: Results of vapor analysis conducted on representative

samples utilizing a Photoionization Detector calibrated

to a benzene standard. Results expressed in HNU-Units. (BDL=Below Detection Limit)

N: Penetration Resistance per 12 inch interval, or fraction thereof, for a standard 2 inch O.D. (1¾ inch I.D.) split spoon sampler driven with a 140 pound weight free-falling 30 inches. Performed in general accordance with Standard Penetration Test Specifications (ASTM D-1586). N in blows per foot equals sum of N-Values where plus sign (+) is shown.

No: Penetration Resistance per 1% inches of Dynamic Cone Penetrometer. Approximately equivalent to Standard Penetration Test N-Value in blows per foot.

Nr: Penetration Resistance per 12 inch interval, or fraction thereof, for California Ring Sampler driven with a 140 pound weight free-falling 30 inches per ASTM D-3550. Not equivalent to Standard Penetration Test N-Value.

#### SOIL STRENGTH CHARACTERISTICS

#### COHESIVE (CLAYEY) SOILS

#### NON-COHESIVE (GRANULAR) SOILS

		UNCONFINED		
COMPARATIVE CONSISTENCY	BLOWS PER FOOT (N)	COMPRESSIVE STRENGTH (TSF)	RELATIVE DENSITY	BLOWS PER FOOT (N)
Very Soft	0 - 2	0 - 0.25	Very Loose	0 - 4
Soft	3 - 4	0.25 - 0.50	Loose	5 - 10
Medium Stiff	5 <b>-</b> 8	0.50 - 1.00	Firm	11 - 30
Stiff	9 – 15	1.00 - 2.00	Dense	31 - 50
Very Stiff	16 - 30	2.00 - 4.00	Very Dense	51+
Hard	31+	4.00+	٠	
	DI	EGREE OF		

DEGREE OF PLASTICITY	PJ	DEGREE OF EXPANSIVE POTENTIAL	PΙ
None to Slight	0 - 4	Low	0 - 15
Slight	5 - 10	Medium	15 - 25
Medium	11 - 30	High	25+
High to Very High	31+		



# Important Information About Your Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

# **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one* — *not even you* — should apply the report for any purpose or project except the one originally contemplated.

#### **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

#### A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you.
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

 the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure.
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

#### **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

# Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

#### A Report's Recommendations Are Not Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

# A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

#### **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

## Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

#### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

#### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenviron-mental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures*. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else*.

#### **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction. operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.

#### Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



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# CRITICAL AREAS REPORT AND DETAILED MITIGATION PLAN

# NORTH BELLEVUE PUBLIC STORAGE FACILITY REDEVELOPMENT BELLEVUE, WASHINGTON

Prepared For: PUBLIC STORAGE

Prepared By: TALASAEA CONSULTANTS, INC.

1 November 2019 (Revised 27 July 2020)

# Critical Areas Report and Detailed Mitigation Plan North Bellevue Public Storage Facility Redevelopment Bellevue, Washington

Prepared For:
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1 November 2019 (Revised 27 July 2020)

#### **EXECUTIVE SUMMARY**

PROJECT NAME: North Bellevue Public Storage Facility Redevelopment

CLIENT: Bryan Miranda, Public Storage

SITE LOCATION: The Project Site is a redevelopment of one (1) King County Tax Parcel,

2825059236, located at 12385 Northup Way in Bellevue, Washington 98005. The redevelopment is a portion of the Site approximately 5.57 acres in size. The main entrance for Public Storage is located across 124th Avenue NE, east of the project area. The Public Land Survey System location is the NW ¼ of Section

28, T25N, R5E, Willamette Meridian.

PROJECT STAFF: David R. Teesdale, Senior Wetland Ecologist; Kellen Maloney, Ecologist; Aaron

Ellig, Ecologist.

FIELD SURVEY: Two (2) wetlands and one (1) stream were delineated off-site on 9 and 14 April

2015, and verified again on 15 August 2018.

<u>CRITICAL AREAS DETERMINATION</u>: The North Bellevue Public Storage Facility Site is located east of the West Tributary of Kelsey Creek. The Site is currently completely developed as a storage facility with eight (8) long and narrow storage container building units, one (1) covered parking unit, and an office building. The Site slopes downward to the south from Northup Way into the storage facility and west towards the off-site riparian corridor of the West Tributary of Kelsey Creek. There is a chain-link fence that separates the paved portion of the existing development from the riparian corridor. There are no wetlands or streams on the Site.

West Tributary of Kelsey Creek occurs offsite to the west and south of the Site with adjacent wetlands, Wetland A to the west and Wetland B to the south. Wetland A is a Category III riverine wetland with a Habitat Score of 5. The standard buffer for this wetland is 110 feet, with a 15-foot structure setback from the buffer. Wetland B is a Category III riverine wetland with a Habitat Score of 4. The standard buffer for this wetland is 60 feet, with a 15-foot structure setback from the buffer. The West Tributary of Kelsey Creek in this location is a Type Np water. The standard buffer for the creek is 50 feet, as measured from the top of the bank, with a 25-foot structure setback from the edge of the buffer.

<u>VEGETATION</u>: The Site is mostly devoid of native vegetation. The buffer on-site is mostly asphalt and concrete and developed with the storage facility. The existing off-site buffer is vegetated along the slope. Upland vegetation in this area consists of black cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), bitter cherry (*Prunus emarginata*), big-leaf maple (*Acer macrophyllum*), and Himalayan blackberry (*Rubus armeniacus*).

<u>SOILS</u>: Two soil units are mapped on the Site: Everett gravelly sandy loam (5 to 15 percent slopes) in the northeastern corner, and Seattle Muck in the southwestern two-thirds of the Site. However, given that the Site has been developed for several decades, the mapped soils are not an accurate reflection of current site conditions.

<u>HYDROLOGY</u>: Hydrology for the wetlands is provided, for the most part, by the hyporheic zone along the streambed for the West Tributary of Kelsey Creek. Hydrology for a small portion of the wetlands may also be provided by stormwater directed towards the stream and wetlands via on- and off-site culverts.

PROJECT DESCRIPTION: Public Storage purposes to redevelop the Site with a multi-story building within the existing developed footprint. Three (3) existing storage buildings will be removed to allow space for the new development. The proposed redevelopment will not extend any further into undeveloped portions of the Site, or extend past existing paved portions of the Site. The newly constructed building will be within the building setback of the West Tributary of Kelsey Creek. However, the area of development proposed within the building setback is less than the current existing structures. No critical area impacts are expected beyond existing conditions. Several paved areas will be recontoured or removed to accommodate new drive aisles. This will result in removing areas of existing paved asphalt that will be reestablished as buffer and replanted with native vegetation. The majority of the plantings will occur on the southern and western edges of the Site between the proposed building and

the off-site critical areas. The planting buffer will provide additional habitat function and buffer protection for Wetland A and the West Tributary of Kelsey Creek.

ASSESSMENT OF DEVELOPMENT IMPACTS: No direct wetland or stream impacts will occur as a result of the proposed development. Impacts are proposed to the already developed portions of the buffer that exceed what is typically allowable per code. However, given the non-conforming pre-existing condition of the buffers onsite, the proposed development will result in a more functional buffer than the existing condition. The proposed building is located mostly outside of the Wetland A buffer, though partially within the building setback. The existing asphalt parking lot will be removed from the southwest corner of the Site. This area will then be replanted with native wetland buffer vegetation.

<u>PROPOSED MITIGATION:</u> The project provides buffer reestablishment to compensate for the proposed impacts to the buffers. A large asphalt area will be removed and planted with a variety of native vegetation appropriate for wetland and stream buffers. A landscape strip along the southern property boundary will be planted and is located contiguous with the wetland/stream buffer. This will provide additional habitat and connectivity through this area beyond the limits of the critical areas themselves.

Perimeter fencing will be provided to protect the post-development critical areas from intrusions. Mitigation will follow established guidelines to reduce impacts. The proposed mitigation will result in a net gain in critical area functions and values compared to existing conditions. Long-term performance monitoring and maintenance will commence for five (5) years following mitigation construction completion.

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#### CHAPTER 1. INTRODUCTION

#### 1.1 Report Purpose

This report is the result of a critical areas investigation conducted for Public Storage located at 12385 Northup Way in Bellevue, Washington (**Figure 1**). The Public Storage property will be referred to as "Project Site," or "Site" hereinafter. The Site is currently developed and used as a public storage facility. The purpose of this report is to: 1) identify and describe critical areas located on or within 300 feet of the Project Site, including wetlands, streams, and habitat associated with species of local importance; 2) describe potential impacts to critical areas resulting from the proposed public storage facility redevelopment; and, 3) describe proposed mitigation if any are necessary for impacts to critical areas.

Information presented in this report will be utilized by the City of Bellevue Land Use Department to assist in the permitting of the proposed redevelopment. This report is designed to meet the requirements as stated in the Bellevue Land Use Code (BLUC) Part 20.25H Critical Areas Overlay District.

This report will provide and describe the following information:

- Project Location
- General Property Description;
- Methodology for Critical Areas Investigations;
- Results of Critical Areas Background Review and Field Investigation;
- Regulatory Review;
- Project Description;
- Assessment of Development Impacts;
- Proposed Mitigation;
- Construction Sequencing;
- Monitoring Plan; and
- Summary

#### 1.2 Statement of Accuracy

The information contained in this report was produced by trained professionals at Talasaea Consultants, Inc., and adheres to the protocols, guidelines, and generally accepted industry standards available at the time work was performed. The conclusions in this report are based on the results of analyses performed by Talasaea Consultants and represent our best professional judgment. To that extent, and within the limitations of project scope and budget, we believe the information provided herein is accurate and true to the best of our knowledge. Talasaea Consultants does not warrant any assumptions or conclusions not expressly made in this report, or based on information or analyses other than what is included herein.

#### CHAPTER 2. GENERAL PROPERTY DESCRIPTION AND LAND USE

#### 2.1 Site Location

The Project Site is a redevelopment of one King County Tax Parcel (2825059236), located at 12385 Northup Way in Bellevue, Washington 98005. The redevelopment is a portion of the Site approximately 5.57 acres in size. The main entrance for Public Storage is located across 124th Avenue NE, east of the Site. The Public Land Survey System location is the NW ¼ of Section 28, T25N, R5E, Willamette Meridian.

The Project Area is bordered on the north by parcel numbers 2825059005 and 2825059316, which are both currently developed. The office building and main entrance are bounded on the east by 124<sup>th</sup> Avenue NE, on the south by NE 18<sup>th</sup> Place, and on the west by the King County Transit Center and the Safeway Industrial Facility. The West Tributary of Kelsey Creek flows north to south along the west and south property boundaries.

#### 2.2 Site Description

The Site is currently used as a storage facility by Public Storage (**Figure 2**). The Site is almost entirely developed with impervious surfaces. The topography of the Site slopes downward from the north to the south. This same amount of elevation change occurs off-site to the west towards the riparian corridor of the West Tributary of Kelsey Creek. Gated security access to the Site is located along both 124<sup>th</sup> Avenue NE and Northup Way.

The Site is mostly devoid of vegetation, except for a relatively narrow (approximately 15-foot-wide) stretch of upland vegetation along the northwest property line near the driveway entrance. The main office building for Public Storage is located on an adjacent parcel along Northup Way with paved gated access to eight (8) closed compartment storage units, one (1) open-sided covered parking unit, and a line of uncovered parking stalls located along the south property boundary. The Site is completely enclosed within a chain-link fence. The fence separates the existing paved (developed) portion of the Site from the riparian corridor of the West Tributary of Kelsey Creek.

#### CHAPTER 3. METHODOLOGY

The critical areas analysis of the Site involved a two-part effort. The first part consisted of a preliminary assessment of the Site and the immediate surrounding area using existing published environmental information. This information includes:

- 1) Streams, wetland and soils information from resource agencies;
- 2) Critical Areas information from the City of Bellevue and King County; and
- 3) Relevant studies completed or ongoing in the vicinity of the Site.

The second part consisted of site investigations where direct observations and measurements of existing environmental conditions were made. Observations included plant communities, soils, hydrology, and riparian conditions. This information was used to help characterize the existing conditions at the Site and to define the limits of critical areas for regulatory purposes (see **Section 3.2 - Field Investigation** below).

#### 3.1 Background Data Reviewed

Background information from the following sources was reviewed prior to field investigations:

- U.S. Fish and Wildlife Service (USFWS), National Wetland Inventory (NWI), Wetlands Online Mapper (http://wetlandsfws.er.usgs.gov/wtlnds/launch.html);
- Natural Resources Conservation Service, Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/);
- Natural Resources Conservation Service, National Hydric Soils List by State (http://soils.usda.gov/use/hydric/lists/state.html);
- King County GIS Database (King County, 2019);
- Pacific States Marine Fisheries Commission (PSMFC) StreamNet (www.streamnet.org);
- Washington Department of Fish and Wildlife (WDFW) SalmonScape database, 2019 (www.wdfw.wa.gov/mapping/salmonscape/databases); and
- WDFW Priority Habitats and Species (PHS) Database on the Web (April 2019) (http://wdfw.wa.gov/mapping/phs/).

#### 3.2 Field Investigation

The site evaluation, wetland delineation, and the ordinary high water mark (OHWM) delineation for the West Tributary of Kelsey Creek were conducted on 9 and 14 April 2015 and again on 15 August 2018 to confirm existing conditions. The existing site conditions were evaluated and recorded based upon the guidance of the following documents:

- City of Bellevue Critical Areas Ordinance (§20.25H);
- U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation and Identification Manual: Western Mountains, Valleys, and Coast Region (U.S. Army Corps of Engineers 2010);
- Flora of the Pacific Northwest (Hitchcock and Cronquist 1973);
- National Wetland Plant List (Lichvar 2012);
- Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al. 1979);
- Washington State Department of Ecology, Washington State Wetland Rating System for Western Washington (Hruby 2014).

The wetland delineation used the routine methodology described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0* (Environmental Laboratory, 2010). The wetland rating and habitat scores were updated based on Ecology's table for adjusting rating scores. The OHWM for the West Tributary of Kelsey Creek was delineated using the methodology described in *Determining the Ordinary High Water Mark on Streams in Washington State* (Olson and Stockdale 2010). The wetland boundary and OHWM were marked in the field with wire flags, or by surveyor's tape on vegetation. The wetland was classified according to BLUC Part 20.25H (Critical Areas Overlay District).

Plant species were identified according to the taxonomy of Hitchcock and Cronquist (Hitchcock and Cronquist 1973). Taxonomic names were updated and plant wetland status was assigned according to North American Digital Flora: National Wetland Plant List, Version 2.4.0 (Lichvar, et al. 2012). Wetland classes were determined with the U.S. Fish and Wildlife Service's system of wetland classification (Cowardin, et al. 1979). Vegetation was considered hydrophytic if greater than 50% of the dominant plant species had a wetland indicator status of facultative or wetter (i.e., facultative, facultative wetland, or obligate wetland).

Wetland hydrology was determined based on the presence of hydrologic indicators listed in the Corps regional supplement. These indicators are separated into Primary Indicators and Secondary Indicators. To confirm the presence of wetland hydrology, one (1) Primary Indicator or two (2) Secondary Indicators must be demonstrated. Indicators of wetland hydrology may include, but are not necessarily limited to: drainage patterns, drift lines, sediment deposition, watermarks, stream gauge data and flood predictions, historic records, visual observation of saturated soils, and visual observation of inundation.

Soils on the Site were considered hydric if one or more of the hydric soil indicators listed in the Corps Regional Supplement are present. Indicators include the presence of organic soils, reduced, depleted, or gleyed soils, or redoximorphic features in association with reduced soils.

An evaluation of patterns of vegetation, soil, and hydrology was made along the interface of wetland and upland. **Appendix A** contains USACE wetland determination data forms prepared by Talasaea for representative locations in both upland and corresponding wetland areas. These data forms document the vegetation, soils, and hydrology information that aided in the wetland boundary determination.

#### CHAPTER 4. RESULTS

This section describes the results of background research and field investigation. For the purpose of this report, the term "vicinity" describes an area approximately 300 feet around the Site.

#### 4.1 Analysis of Existing Information

The following sources were reviewed for background information based on data compiled from resource agencies and local government.

#### 4.1.1 National Wetland Inventory

The Kirkland Quadrangle NWI map does not show any wetlands on the Site. The closest offsite wetland mapped is approximately 400 feet southeast of the Site. The mapped wetland is approximately four (4) acres in size and associated with the West Tributary of Kelsey Creek. It is categorized as a palustrine forested wetland that is seasonally flooded (PFOC). Another offsite PFOC wetland is mapped approximately 1,000 feet northwest of the Site.

#### 4.1.2 Natural Resources Conservation Service

The Natural Resources Conservation Service maps two (2) soil units on the Site (**Figure 3**). These soils are Everett gravelly sandy loam 5 to 15 percent slopes (EvC), and Seattle Muck (Sk). Approximately 33 percent of the northeast corner of the Site is mapped as Everett gravelly sandy loam urban land. The remaining 67 percent along the southwest end of the Site is mapped as Seattle Muck.

Everett gravelly sandy loam is a nearly level to undulating, somewhat excessively drained soil. It forms in gravelly glacial outwash under conifers. The surface is typically very dark brown gravelly sandy loam. The subsoil is dark yellowish-brown gravelly sandy loam. The National Technical Committee on Hydric Soils does not include the Everett series on its list of hydric soils.

Seattle Muck is made up of very poorly drained organic soils that formed in materials derived primarily from sedges. These soils are found in depressions and valleys on the glacial till plains and in river and stream valleys. The representative profile is a surface layer (approximately 11 inches) of black muck underlain by dark reddish-brown, black, very dark brown, and dark brown muck and peaty muck extending to 60 inches or more. Seattle Muck is listed as a hydric soil by the National Technical Committee on Hydric Soils. Approximately two-thirds of the southwest corner of the Site was mapped as this soil unit; most of the on-site area mapped as Seattle Muck is assumed to have been filled by previous land uses. The off-site portion, within the riparian wetland, exhibited the soil conditions identified by Seattle Muck.

#### 4.1.3 City of Bellevue Critical Areas Databases

The City of Bellevue Critical Areas GIS database only maps steep slopes on the Project Site. No other critical areas are shown on the Site. The map does indicate the West Tributary of Kelsey Creek which flows north to south along the west and south sides of the Site. Two wetlands are mapped off-site; both are greater than 500 feet from the Site. Both were shown on the NWI Wetland Inventory map as referenced above.

The City of Bellevue Kelsey Creek Basin map designates the West Tributary of Kelsey Creek to be a non-fish-bearing stream type north of Bel-Red Road (**Figure 4**).

#### 4.1.4 King County Critical Areas Databases

The King County Critical Areas GIS database maps the West Tributary of Kelsey Creek adjacent to the Site. No other critical areas are mapped within 300 feet of the Site according to the King County GIS database.

#### 4.1.5 WDFW Priority Habitats and Species Databases

The WDFW Priority Habitats and Species database identify the same two (2) wetlands as identified within the City of Bellevue GIS database and the NWI Wetlands online mapper; both are located greater than 500 feet from the Site. One of these wetlands is mapped approximately 1,000 feet northwest of the Site; the other wetland is mapped approximately 500 feet southeast of the Site. The map indicates the West Tributary of Kelsey Creek has an

occurrence/migration of resident coastal cutthroat trout (*Oncorhynchus clarki*). However, there are no details of the time, location, nor the person who documented such information. Resident coastal cutthroat trout are not Federally-listed nor are they a State-listed species.

#### 4.1.6 Pacific States Marine Fisheries Commission (PSMFC, StreamNet)

The StreamNet GIS database does not indicate any fish use for the West Tributary of Kelsey Creek, nor does the Site or area within 300 feet of the Site support any runs of either Federally-or State-listed species.

#### 4.1.7 WDFW SalmonScape

The WDFW SalmonScape GIS database indicates that the West Tributary of Kelsey Creek within 300 feet of the Site has a "modeled presence" of fall Chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kisutch*), winter steelhead (*Oncorhynchus mykiss*), and sockeye salmon (*Oncorhynchus nerka*). Chinook salmon are Federally-listed as threatened and State-listed as a Candidate species. Coho salmon are Federally-listed as a Species of Concern and are also a State-listed Candidate species. Steelhead are Federally-listed as threatened and State-listed as a Candidate species. The Puget Sound Evolutionarily Significant Unit (ESU) of sockeye salmon is not Federally-listed nor are they a State-listed species. The "modeled presence" indication infers that a stream might provide habitat or support populations of a specific fish species based on an analysis of stream gradient and width but does not necessarily indicate that the species is actually present.

#### 4.2 Analysis of Existing Conditions

Two (2) wetlands and the Ordinary High Water Mark (OHWM) of the West Tributary of Kelsey Creek were delineated during our site investigations (**Sheet W1.0**, **Appendix C**). The wetlands (Wetland A and Wetland B) were rated according to the Washington State Department of Ecology Wetland Rating System for Western Washington (Hruby 2014) and are discussed below. The wetland rating forms for both of the wetlands are in **Appendix B**. **Section 4.2.3** below contains the description for the reach of the West Tributary of Kelsey Creek adjacent to the Site.

#### 4.2.1 Wetland A

Wetland A is located off-site to the west and is associated with the West Tributary of Kelsey Creek (**Sheet W1.0**, **Appendix C**). Wetland A is a small, linear palustrine emergent, scrubshrub and forested wetland (PEM/PSS/PFO; (Hitchcock and Cronquist 1973)). Wetland A is approximately 4,680 SF. Wetland A receives some overbank flooding from the creek, as observed on both 9 and 14 April 2015. The forested vegetation includes black cottonwood (*Populus balsamifera*), and red alder (*Alnus rubra*). Scrub-shrub vegetation includes red-osier dogwood (*Cornus sericea*), and Himalayan blackberry (*Rubus armeniacus*) (**Photo 1**). Emergent vegetation includes lady fern (*Athyrium filix-femina*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). Native vegetation in the surrounding upland areas includes big leaf maple (*Acer macrophyllum*), bitter cherry (*Prunus emarginata*), and sword fern (*Polystichum munitum*). Non-native vegetation within the upland area includes Himalayan blackberry, bittersweet nightshade (*Solanum dulcamara*), English Ivy (*Hedera helix*), English Holly (*Ilex aquifolium*), and spurge laurel (*Daphne laureola*).



**Photo 1.** Wetland A. View is to the south along the West Tributary of Kelsey Creek. The Public Storage facility is located to the left of the photo (04-09-2015).

The northwest portion of Wetland A features a beaver dam (**Photo 2**). The southern terminus of Wetland A ends abruptly at a weir and the piped stream segment of the West Tributary of Kelsey Creek (described in **Section 4.2.3**).



**Photo 2.** Wetland A as it extends to the northwest, view is to the northwest. Red arrows point to beaver dams in the center of the photo (04-14-2015).

Soils within Wetland A were typically black organic muck to a depth greater than 20 inches. Hydrology for Wetland A is provided for the most part by the West Tributary of Kelsey Creek. A portion of the hydrology is provided by seepage from sloped areas to the east of the wetland. Hydrology for a portion of wetland adjacent to the Project Site is also supported in-part by surface run-off from off-site sources, including stormwater discharges via a culvert to the north of the wetland.

Wetland A was rated using the Washington State Wetland Rating System (Hruby 2014). The Total Score for Functions is 17, which satisfies the criteria for characterization as a Category III wetland. Per BLUC 20.25H.095 (D)(1)(a)(ii), Category III wetlands with a Habitat Score of 5-7 have a 110-foot standard buffer with a 15-foot structure setback. The existing vegetated portion of the buffer varies in width between 25 feet (at its closest approach along the west property boundary), to 100 feet between the wetland and the paved portion of the Site.

#### 4.2.2 Wetland B

Wetland B is located off-site to the south and is associated with the West Tributary of Kelsey Creek (**Sheet W1.0**, **Appendix C**). Wetland B is a small, linear palustrine scrub-shrub wetland, with palustrine forested components (PSS, PFO; Hitchcock and Cronquist 1973). The wetland is limited in size by the paved parking lot for the King County Metro Transit Center. The delineated portion of Wetland B is approximately 2,170 SF and the entire wetland area is approximately 17,800 SF, based on aerial image approximations. The wetland occurs along the riparian corridor and receives some overbank flooding from the West Tributary of Kelsey Creek, as observed on both 9 and 14 April 2015, and again on 15 August 2018. The scrub-shrub vegetation includes red alder, red-osier dogwood, and Himalayan blackberry. During the 2015 and 2018 site visits evidence of recent beaver activity was observed (**Photo 3**). Upland buffer vegetation includes a mowed grass lawn, big-leaf maple, flowering cherry, black cottonwood, and red alder.



**Photo 3.** Wetland B with evidence of recent beaver activity. View is to the south (04-14-2015).

Soils within Wetland B were typically a sandy loam fill with redoximorphic conditions within 10 inches below ground surface. Hydrology for Wetland B is provided for the most part by the West Tributary of Kelsey Creek. A portion of the hydrology for Wetland B is provided by precipitation and surface run-off from surrounding land uses.

Wetland B was rated using the Washington State Wetland Rating System (Hruby 2014). The Total Score for Functions is 17, which satisfies the criteria for characterization as a Category III wetland. Per BLUC 20.25H.095 (D)(1)(a)(ii), Category III wetlands with a Habitat Score of 3-4 have a 60-foot standard buffer with a 15-foot structure setback. The existing vegetated portion of the buffer is all located offsite and is approximately 50 feet of sloped, mown lawn, preceded by 50 feet of paved parking. Wetland B is more than 100-feet away from the Bellevue Public Storage Facility's south property boundary, measured from the chain-link fence.

#### 4.2.3 West Tributary of Kelsey Creek

The West Tributary of Kelsey Creek extends along the west property boundary of the Bellevue Public Storage Facility. Waters flow slowly throughout much of this portion of the stream due to existing beaver dams at the south and north ends near the Site. The day-lighted portion of the stream terminates at the south end at a gate-controlled weir. At the weir, the stream is routed within pipes for approximately 180 feet prior to daylighting again off-site on the King County Metro Transit Property, south of the Project Site. According to the City of Bellevue Kelsey Creek Basin Map, the West Tributary of Kelsey Creek is designated as a non-Fish-bearing, perennial (Np) stream type. Per BLUC 20.25H.075 (C)(1)(c), open segments of the West Tributary of Kelsey Creek (regardless of type), shall have a critical area standard buffer of 50 feet measured from the top of the bank with a 20-foot structure setback from the buffer. Additionally, per BLUC 20.25H.035(B), buffer setbacks on sites where primary structures are legally established prior to 1 August 2006 are allowed expansion into the critical area buffer only pursuant to the provisions of BLUC 20.25H.230. This code provision requires the applicant to demonstrate that the proposal will lead to equivalent or better protection of the critical areas values and functions.

#### CHAPTER 5. REGULATORY REVIEW

Critical areas on the Project site are subject to the regulations of the Bellevue Land Use Code (BLUC) Part 20.25H as recently updated in November 2018. This section contains standards and requirements for the protection of designated critical areas and defines permissible uses within the Critical Areas Overlay District. LUC 20.25H Section III establishes allowed alterations within the Critical Areas Overlay District. LUC 20.25H Section IV establishes standards and requirements for the protection of streams. Section V establishes standards and requirements for the protection of wetlands, and Section VIII establishes standards and requirements for the protection of habitat associated with species of local importance. Section XII of LUC 20.25H provides the purpose, submittal requirements, and reporting requirements for Critical Areas Reports for projects that may alter or impact critical areas or their buffers.

BLUC 20.25H.095(D)2.b states if a legally established right-of-way crosses a wetland critical area buffer, the edge of the right-of-way is the extent of the buffer granted the other side of the right-of-way provides insignificant biological and hydrological function. A two-land road and parking area that connects 124<sup>th</sup> Ave NE to the King County Metro East Base bisects the wetland buffer and separates the Project Site from the wetland. This code only applies to the southern edge of the Project Site.

Wetlands near the Project Site are also subject to Federal and State regulation under Sections 404 and 401 of the Clean Water Act, and other applicable State laws protecting Waters of the State. However, since the project does not propose any direct impacts to Waters of the U.S. or

Waters of the State, proposed critical areas impacts on the Project Site are only subject to regulation under applicable local codes, including BLUC Part 20.25H.

#### CHAPTER 6. PROPOSED PROJECT AND IMPACTS

#### 6.1 Project Description

Public Storage is planning to expand its facilities within an area of existing storage units by constructing a multi-story building (**Sheet W1.2** in **Appendix C**). The building will be located on the southern side of Parcel 2825059236. Three (3) existing rows of storage facilities will be removed to accommodate the proposed structure. All redevelopment will occur within the existing development footprint of the Site and no buffers that contain vegetation are proposed to be disturbed. The site plan will remove some of the existing built areas in the southwest corner of the Site and pull the new drive aisle away from the wetland and stream further.

Stormwater will be collected and treated on-site for discharge to West Tributary of Kelsey Creek at the same point where stormwater is currently released. Stormwater treatment will meet or exceed stormwater management requirements for the City of Bellevue. Currently, stormwater is not treated before entering the West Tributary of Kelsey Creek.

#### 6.2 Assessment of Development Impacts

No direct wetland or stream impacts will occur as a result of the proposed development. Impacts are proposed to the already developed portions of the buffer that exceed what is typically allowable per code. The Project proposes stream and wetland buffer modifications that do not meet the criteria of the BLUC and is requesting considering pursuant to BLUC 20.25H.095.D.2

Redevelopment of the property will occur within three (3) regulated areas: 1) Combined wetland and stream buffer area; 2) wetland buffer area outside of stream buffers; and 3) structure setback areas. Wetland and stream buffer impacts are limited primarily to asphalt repaving over existing, paved areas. Approximately 3,468 square feet (SF) of combined wetland and stream buffer impact and 5,460 SF of wetland buffer impact beyond the combined wetland and stream impact area are proposed. Total buffer impacts equal 8,928 SF. 835 SF of structure setback area impacts are also proposed.

The existing buffers onsite are all developed. The edge of development is effectively the parcel limits for this property. The site plan is replacing 3 existing buildings with one larger (taller) building and will be pulling some of the edges of development farther in from the parcel boundaries than what is currently present. While the northwest and west-central portions of the development will hold the existing development footprint, in the southwest corner the developed area will pull away from the parcel edge. This area is located within the wetland and stream buffers and will be reestablished to functional buffer. Given the non-conforming pre-existing condition of the buffers onsite, the proposed development will result in a more functional buffer than the existing condition. There will be no net loss of critical area functions and values as a result of the proposed development, and in fact, should be a gain of functions and values.

An approximately 8,958 square foot area is proposed to be reestablished as wetland and stream buffer. Specific locations of each species of native plant will be chosen with care as a number of existing, buried utilities existing in this general area where the buffer reestablishment is proposed. The buried utilities will limit the number and type of trees that can be proposed in this area, but dense plantings of native woody species will be used to minimize opportunities for invasive species to enter this area.

Stormwater release will use an existing discharge point and associated swale to the stream. The connection to the existing discharge pipe will happen within the Project Site, though and

outlet of the culvert and associated swale, as well as the stream itself, all occur on the adjacent property to the north.

#### **CHAPTER 7. PROPOSED MITIGATION**

#### 7.1 Agency Policies and Guidance

The proposed mitigation plan was designed in accordance with the policies and guidance provided in BLUC §20.25H. Pursuant to BLUC §20.25H.245, all proposed mitigation shall be based on best available science and shall demonstrate no net loss of critical areas functions and values.

#### 7.2 Mitigation Sequencing

Mitigation sequencing has been applied to the proposed project pursuant to BLUC §20.25H.215. The mitigation sequencing requirements are:

- Avoiding the adverse impact altogether by not taking a certain action or parts of an action;
- Minimizing adverse impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
- Rectify the adverse impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the adverse impact over time by preservation and maintenance operations; or,
- Compensating for the adverse impact by replacing, enhancing, or providing substitute resources or environments.

Avoiding Impacts: The proposed project has been designed to avoid impacts to critical areas to the maximum extent practicable, while still allowing for an economically viable development that meets all code requirements. The project will avoid all direct wetland and stream impacts. Buffer impacts are proposed, but only to the already developed portions of the buffer. The existing edge of development, where it occurs within the Bellevue standard buffers, will be maintained in some areas. Buffer reestablishment will occur in the remaining areas where existing paved asphalt will be removed and these areas reestablished with native species, resulting in a net increase of functional wetland/stream buffer as the onsite buffer is entirely developed.

<u>Minimizing Impacts:</u> The proposed project has been re-designed to minimize impacts to the buffer on site and to provide back as much buffer as possible, given the pre-existing non-conforming uses in the buffers on this site. Mitigation for these buffer impacts is described below.

#### 7.3 Mitigation Plan

The project proposes buffer reestablishment to improve the current condition of the Site. Mitigation will commence concurrently with development or directly following completion of the project. The Project will restore buffers where existing asphalt is removed as noted on **Sheet W2.0**, **Appendix C**. Existing primary structures will be removed from the designated buffer areas. Fully built-out paved areas of the Site will be removed and recontoured to accommodate new drive aisles. Once the asphalt is removed, the soils will be decompacted and reestablished with native topsoil ideal for restoration plantings.

Mitigation involves the reestablishment of buffer in two areas: 1) existing wetland buffer areas (6,358 SF), and 2) existing combined wetland and stream buffer areas (2,600 SF). The total area of mitigation on the Site from buffer reestablishment is 8,958 sf.

#### 7.4 Wetland/Stream Performance Standards

The project will implement the wetland and stream performance standards listed in **Table 1** on the next page during construction:

**Table 1. Summary of Proposed Mitigation Performance Standards.** 

Examples of Disturbances	Measures to Minimize Impacts
Lights	Street and security lighting will be placed so that illumination is directed away from the adjacent critical area buffers.
Noise	Planting of dense vegetation specified for mitigation of light-related impacts will also reduce impacts due to noise.
Toxic Runoff	Road and rooftop run-off will be collected and transferred to the project's on-site stormwater treatment facilities before being released.
Stormwater runoff	All road runoff will be detained and cleaned by the proposed stormwater system for the project.
Pets and Human Disturbances	Buffer areas will be permanently protected by fencing to help prevent human and pet intrusions into the buffer, and the buffer areas will be placed in a separate Natural Growth Protection Area (NGPA), per City requirements.

#### 7.4.1 Permanent Fencing and Signage

Permanent fencing and critical area signs shall be installed at the perimeter of all critical area buffers on the site. The fencing will be a rail style fence, split or 2-board type. Sign locations will be determined at a later date. The nature of the business will still require chain link fencing around the perimeter of the Site for security.

#### 7.5 Mitigation Design Elements

#### 7.5.1 Planting Plan

A variety of evergreen and deciduous native trees and shrubs species will be used to plant the mitigation areas (**Sheet W2.0** in **Appendix C**). A Plant List on **Sheet W2.0** provides a full list of proposed species. Plant materials will generally consist of a combination of balled-and-burlapped, bare-root, and container stock. Plant species were chosen for a variety of qualities, including: adaptation to specific water regimes, value to wildlife, value as a physical or visual barrier, pattern of growth (structural diversity), and aesthetic values. Native tree and shrub, species were chosen to increase both the structural and species diversity of the mitigation areas, thereby increasing the value of the mitigation areas to wildlife for food and cover. Planting will be planned to occur during the dormant season (late fall, winter, or early spring) to maximize the chance for successful plant establishment and survival.

#### 7.5.2 Temporary Irrigation System

An above-ground temporary irrigation system capable of full head-to-head coverage of all planted areas will be provided for the buffer re-establishment and creation areas. The temporary irrigation system shall either utilize controller and point of connection (POC) from the site irrigation system or shall include a separate POC and controller with a backflow prevention device per water jurisdiction inspection and approval. The system shall be zoned to provide optimal pressure and uniformity of coverage, as well as separation for areas of full sun or shade and slopes in excess of 5%.

The system shall be operational by 15 June (or at the time of planting) and winterized by 15 October. Irrigation shall be provided for the first 2 (2) years of the monitoring period. The irrigation system shall be programmed to provide 1/2" of water two (2) times per week (one cycle with two start times per week or every three days).

#### 7.6 Mitigation Goals, Objectives and Performance Standards

The primary goal of the proposed mitigation is to restore a portion of the wetland buffer to improve the functions and values lost through buffer reductions of pre-existing buffer impacts. The proposed mitigation will improve habitat and connectivity, while also providing increased protection for the wetland and stream system. To accomplish this, the proposed project will provide a total of 8,958 sf of mitigation.

Mitigation actions will be evaluated through the following objectives and performance standards. See **Chapter 9** for a full description of the monitoring methods that will be used to evaluate the approved performance standards. Mitigation monitoring will be performed by a qualified biologist.

Objective A: Create structural and plant species diversity in the mitigation areas.

<u>Performance Standard A1 (applies to all plant communities)</u>: At least 5 species of desirable native plants will be present during the monitoring period. Species may be comprised of both installed plants and naturally colonized vegetation.

<u>Performance Standard A2 (applies to all plant communities):</u> Percent survival of planted woody species must be at least 100% at the end of Year 1 (per contactor warranty), and at least 80% for each subsequent year of the monitoring period.

<u>Performance Standard A3:</u> In buffer areas, total percent aerial woody plant coverage must be at least 35% by Year 4 and 50% by Year 5. Woody coverage may be comprised of both planted and recolonized native species; however, to maintain species diversity, at no time shall a recolonized species (i.e., red alder) comprise more than 35% of the total woody coverage.

**Objective B**: Limit the amount of invasive and exotic species within these mitigation areas.

<u>Performance Standard B1:</u> After construction and following every monitoring event for a period of five years, exotic and invasive plant species will be maintained at levels below 15% total cover in these mitigation areas. These species include Scot's broom (Cytisus Scoparius), Himalayan blackberry (Rubus armeniacus), evergreen blackberry (Rubus laciniatus), reed canarygrass (Phalaris arundinacea), purple loosestrife (Lythrum Salicaria), field bindweed (Convolvulus arvensis), knotweed sp. (Polygonum), and creeping nightshade (Solanum dulcamara).

#### 7.7 Consistency with Applicable Regulations

Proposals for critical areas buffer modifications must be consistent with BLUC §20.25H.255(B) — Decision Criteria — Proposals to Reduce Regulated Critical Area Buffer, and BLUC §20.30P.140 — Critical Areas Land Use Permit — Decision Criteria. These code sections are responded to directly in the following two sections of this report (Sections 7.7.1 & 7.7.2).

# 7.7.1 BLUC §20.25H.255(B) – Decision Criteria – Proposals to Reduce Regulated Critical Area Buffer.

This code section has been provided verbatim in *italicized* text, with our comments provided in regular text on how this proposal meets each criterion.

The Director may approve, or approve with modifications, a proposal to reduce the regulated critical area buffer on a site where the applicant demonstrates:

1. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions:

As mentioned in Section 7.6, the proposed mitigation plan will improve habitat and connectivity functions, while also providing increased protection for the wetland and stream system, compared to the existing condition. In its current condition, the onsite portions of the Wetland A and West Tributary of Kelsey Creek buffer are developed with paved parking areas. The project does not propose to encroach into critical areas or their buffers beyond the existing condition of the Site. However, the proposed mitigation plan involves removing an 8,958 square-foot (SF) section of paved area from the existing wetland and stream buffer and replanting the area with a diversity of native trees, shrub, and groundcover species. This reestablished buffer area will then be protected by a chain-link fence to prevent human intrusion and be monitored for a period of five (5) years to ensure performance standards are met (Discussed in Chapter 9). In summary, this proposed mitigation will demonstrate a net gain in overall critical area buffer functions compared to existing conditions.

2. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;

We believe that the most important critical area buffer functions for the West Tributary Kelsey Creek and associated wetland systems are related to habitat. In the riparian ecosystem located along the West Tributary of Kelsey Creek corridor, very limited opportunities for habitat are available. Furthermore, the connectivity between these habitat patches is fragmented. The proposed mitigation plan calls for an increase in buffer area, which would provide additional habitat opportunities, including foraging habitat, shelter, protection, and the connection of this area to the riparian zone associated with the West Tributary of Kelsey Creek.

3. The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer:

A stormwater management system will be provided for the new project boundaries (disturbed areas). A detention system will be installed that essentially replaces the existing detention system on site. This system will capture and temporarily store runoff from roof areas. A water quality treatment system will be installed to treat runoff from new and replaced paved surfaces in accordance with the City of Bellevue stormwater code requirements. The treatment system will likely consist of small bioretention planters and a proprietary filter treatment system (e.g. Contech Stormfilter, Modular Wetlands, or equivalent).

Overall, stormwater runoff flow rates will match existing flow rates to the stream. Water quality will be improved because the existing site does not provide water quality treatment to runoff prior to discharge into the stream.

4. Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts.

As mentioned in Chapter 11 below, the applicant shall post a bond or other financial assurance device as required by the City to ensure that the mitigation plan is fully implemented, monitored, and maintained through the end of the required monitoring period. Financial guarantees shall meet the requirements of BLUC 20.40.490.

5. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site;

No detrimental modifications to the existing functions and values of critical areas and buffers are proposed as part of this project. The proposed performance standards listed in Chapter 7.6 will support the functions and values of the critical areas and buffers onsite, through actions including the removal of invasive species and the replacement of dead mitigation plantings.

6. The resulting development is compatible with other uses and development in the same land use district.

The Site is currently used as a public storage facility and the proposed project is an expansion of the existing facility. The Site is surrounded by other commercial developments and uses, including the King County bus station to the south.

#### 7.7.2 BLUC §20.30P.140 – Critical Areas Land Use Permit – Decision Criteria.

This code section has been provided verbatim in *italicized* text, with our comments provided in regular text on how this proposal meets each criterion.

The Director may approve or approve with modifications an application for a Critical Areas Land Use Permit if:

A. The proposal obtains all other permits required by the Land Use Code;

The proposed project is currently in the process of acquiring all other permits required by the LUC. See reports by others for more information on specific Land Use permitting.

- B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer:
  - See Civil plans for detailed methodology on best available construction, design, and development techniques near critical areas and their buffers.
- C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable;
  - See **Table 1** for specific Performance Standards to be utilized during construction.
- D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities;
  - See Civil plans for details concerning the servicing of the project by public facilities.
- E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an

approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan;

The mitigation plan is consistent with the requirements of LUC 20.25H.210, which states that the project proposal must be developed in accordance with the standards of LUC 20.25H.210 through 20.25H.225. The code between these two sections includes the requirement for mitigation sequencing (see Section 7.2 of this report) and mitigation and restoration plan requirements (see Section 7.1 of this report). No Vegetation Management Plan has been prepared for the Site, so exceptions to the requirements of LUC 20.25H.210 will not apply.

F. The proposal complies with other applicable requirements of this code.

This proposal complies with all other applicable requirements of this code.

#### **CHAPTER 8. CONSTRUCTION MANAGEMENT**

#### 8.1 Mitigation Construction Sequencing

The following provides the general sequence of activities anticipated to be necessary to complete this mitigation project. Some of these activities may be conducted concurrently as the project progresses.

- Conduct a site meeting between the Contractor, Talasaea Consultants, and the Owner's Representative to review the project plans, staging/stockpile areas, and material disposal areas.
- 2. Survey clearing limits and install silt fence and any other erosion and sedimentation control BMPs.
- 3. Remove existing asphalt surfaces per approved as-built design plans.
- 4. Clear and grub non-native/invasive vegetation from on-site buffer areas.
- 5. Decompact soils in cleared buffer areas.
- 6. Place topsoil in buffer re-establishment areas.
- 7. Mulch buffer re-establishment areas.
- 8. Complete site cleanup and install plant materials.
- 9. Install fence and critical area signs.

#### 8.2 Post-Construction Approval

Talasaea Consultants shall notify the City in writing when the mitigation planting is completed for a final site inspection and subsequent final approval. Once final approval is obtained in writing from the City, the monitoring period will begin.

#### 8.3 Post-Construction Assessment

Once construction is approved, a qualified wetland ecologist from Talasaea Consultants shall conduct a post-construction assessment. The purpose of this assessment will be to establish baseline conditions at Year 0 of the required monitoring period. A Baseline Assessment report including "as-built" drawings will be submitted to the City. The as-built plan set will identify and describe any changes in grading, planting, or other constructed features in relation to the original approved plan.

#### **CHAPTER 9. MONITORING PLAN**

#### 9.1 Monitoring Schedule

Performance monitoring of the mitigation areas will be conducted for a period of five years pursuant to BLUC §20.25H.220(D). Monitoring will be conducted according to the schedule presented in **Table 2** below. Monitoring will be performed by a qualified biologist or ecologist.

Table 2. Projected Schedule for Performance Monitoring

Year	Date	Maintenance Review	Performance Monitoring	Report Due to Agencies
BA <sup>1</sup>	Winter/Spring	Χ	X	Χ
4	Spring	Χ	X	
I	Fall	Х	X	Χ
2	Spring	X	X	
	Fall	X	X	Χ
3	Spring	Χ		
3	Fall	Χ	X	Χ
4	Spring	X		
4	Fall	X	X	Χ
5	Spring	Χ		
3	Fall	X	X	$X^2$

<sup>&</sup>lt;sup>1</sup> BA = Baseline Assessment following construction completion.

#### 9.2 Reports

Monitoring reports will include: 1) Project Overview, 2) Requirements, 3) Summary Data, 4) Maps and Plans, and 5) Conclusions. If the performance criteria are met, monitoring for the City will cease at the end of year five, unless objectives are met at an earlier date and the City accepts the mitigation project as successfully completed.

#### 9.2.1 Methods for Monitoring Vegetation Establishment

Vegetation monitoring methods may include counts; photo-points; random sampling; sampling plots, quadrats, or transects; stem density; visual inspection; and/or other methods deemed appropriate by the permitting agencies (City of Bellevue). Vegetation monitoring components shall include general appearance, health, mortality, colonization rates, percent cover, percent survival, volunteer plant species, and invasive weed cover.

Permanent vegetation sampling plots, quadrats, and/or transects will be established at selected locations to adequately sample and represent all the plant communities within the mitigation project areas. The number, exact size, and location of transects, sampling plots, and quadrats will be determined at the time of the baseline assessment.

Percent areal cover of woody vegetation (forested and/or scrub-shrub plant communities) will be evaluated using point-intercept sampling methodology. Using this methodology, a tape will be extended between two permanent markers at each end of an established transect. Trees and shrubs intercepted by the tape will be identified, and the intercept distance recorded. Percent cover by species will then be calculated by adding the intercept distances and expressing them as a total proportion of the tape length.

The established vegetation sampling locations will be monitored and compared to the baseline data during each performance monitoring event to aid in determining the success of plant establishment. Percent survival of shrubs and trees will be evaluated in a 10-foot-wide strip along each established transect. The species and location of all shrubs and trees within this

Obtain final approval from the City of Bellevue (presumes performance criteria are met).

area will be recorded at the time of the baseline assessment and will be evaluated during each monitoring event to determine percent survival.

#### 9.3 Photo Documentation

Locations will be established within the mitigation area from which panoramic photographs will be taken throughout the monitoring period. These photographs will document general appearance and relative changes within the plant community. A review of the photos over time will provide a semi-quantitative representation of the success of the planting plan. Vegetation sampling transect/plot/quadrat and photo-point locations will be shown on a map and submitted with the baseline assessment report and yearly performance monitoring reports.

#### 9.4 Wildlife

Birds, mammals, reptiles, amphibians, and invertebrates observed in the wetland and buffer areas (either by direct or indirect means) will be identified and recorded during scheduled monitoring events, and at any other times observations are made. Direct observations include actual sightings, while indirect observations include tracks, scat, nests, song, or other indicative signs. The kinds and locations of the habitat with the greatest use by each species will be noted, as will any breeding or nesting activities.

#### 9.5 Water Quality

Water quality will be assessed qualitatively; unless it is evident there is a serious problem. In such an event, water quality samples will be taken and analyzed in a laboratory for suspected parameters. Qualitative assessments of water quality include:

- Oil sheen or other surface films,
- Abnormal color or odor of water,
- Stressed or dead vegetation or aquatic fauna,
- Turbidity, and
- Absence of aquatic fauna.

#### 9.6 Site Stability

Observations will be made of the general stability of slopes and soils in the mitigation areas during each monitoring event. Any erosion of soils or slumping of slopes will be recorded and corrective measures will be taken.

#### CHAPTER 10. MAINTENANCE AND CONTINGENCY

Maintenance reviews will be performed according to the schedule presented in **Table 2** to address any conditions that could jeopardize the success of the mitigation area. Established performance standards for the project will be compared to the monitoring results to judge the success of the mitigation project. If there is a significant problem with achieving the performance standards, the bond-holder shall work with the City of Bellevue to develop a Contingency Plan. Contingency plans can include but are not limited to: additional plant installation; erosion control; and plant substitutions of type, size, quantity, and location. Such a Contingency Plan shall be submitted to the City by December 31 of any year when deficiencies are discovered. Contingency will include many of the items listed below and would be implemented if the performance standards are not met. Maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event, unless otherwise specifically indicated below.

M = Regular maintenance item; C = Contingency item

- During year one, replace all dead plant material. (M)
- Replace dead plants with the same species or a substitute species that meet the objectives of the mitigation plan, subject to the approval of the wetland biologist. (M)

- Re-plant area after the reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, poor soil, shade/sun conditions, wildlife damage, etc.). (C)
- Amend soil with topsoil or compost. (C)
- Remove/control weedy or exotic invasive plants (e.g., Scot's broom, reed canarygrass, Himalayan blackberry, purple loosestrife, Japanese knotweed, etc.) by manual or chemical means approved by the City. The use of herbicides or pesticides within the mitigation area would only be implemented if other measures failed or were considered unlikely to be successful and would require prior agency approval. All non-native vegetation must be removed and dumped off-site (M & C).
- Weed trees and shrubs to the dripline and maintain a 3' dia. mulch ring around trees and a 2' dia. ring around shrubs at a depth of three inches (M).
- Remove trash and other debris from the mitigation areas twice a year (M).
- Repair or replace damaged structures including: fence or signs (M).

#### **CHAPTER 11. FINANCIAL GUARANTEE**

The applicant shall post a bond or other financial assurance device as required by the City to ensure that the mitigation plan is fully implemented, monitored, and maintained through the end of the required monitoring period. Financial guarantees shall meet the requirements of BLUC 20.40.490. As stated in this section of the code, the amount of any required assurance device will be for 150% of the cost of improvements calculated at the end of the assurance period. For maintenance, the amount would cover at least 20% for replacement materials, as calculated on the last day of the performance period.

#### **CHAPTER 12. SUMMARY**

The Project Site is a redevelopment of one (1) King County Tax Parcel, 2825059236, located at 12385 Northup Way in Bellevue, Washington 98005. The redevelopment is a portion of the Site approximately 5.57 acres in size. The main entrance for Public Storage is located across 124th Avenue NE, east of the Site. The Public Land Survey System location is the NW ¼ of Section 28, T25N, R5E, Willamette Meridian. Two (2) wetlands and one (1) stream were delineated offsite on 9 and 14 April 2015 and verified on 15 August 2018.

The North Bellevue Public Storage Facility Site is located east of the West Tributary of Kelsey Creek. The Site is currently completely developed as a storage facility. There are no wetlands or streams on the Site. The West Tributary of Kelsey Creek extends along the west side of the Bellevue Public Storage Facility on an adjacent parcel. The West Tributary of Kelsey Creek is designated as a non-fish-bearing, perennial (Np) stream with a standard buffer of 50 feet measured from the top of the bank with a 25-foot structure setback.

Wetland A is a Category III wetland with a standard 110-foot buffer with a 15-foot structure setback from the buffer. The entire buffer on-site is fully built out with little to no vegetation present. Wetland B is a Category III wetland with a standard 60-foot buffer with a 15-foot structure setback from the buffer, none of which extends onto the site.

Public Storage purposes to redevelop the Site with a multi-story building within the existing developed footprint. Three (3) existing storage buildings will be removed to allow space for the new development. The proposed redevelopment will not extend any further into undeveloped portions of the Site, or extend past existing paved portions of the Site.

No direct wetland or stream impacts will occur as a result of the proposed development. The Project proposes stream and wetland buffer modifications that do not meet the criteria of the BLUC and is requesting considering pursuant to BLUC 20.25H.095.D.2. The existing buffers onsite are all developed. Given the non-conforming pre-existing condition of the buffers onsite,

the proposed development will result in a more functional buffer than the existing condition. There will be no net loss of critical area functions and values as a result of the proposed development, and in fact, should be a gain of functions and values.

The project provides 8,958 square feet of buffer reestablishment to compensate for the proposed impacts to the buffers. A large asphalt area will be removed and planted with a variety of native vegetation appropriate for wetland and stream buffers. A landscape strip along the southern property boundary will be planted and is located contiguous with the wetland/stream buffer. This will provide additional habitat and connectivity through this area beyond the limits of the critical areas themselves. Stormwater release will use an existing discharge point and associated swale to the stream. The connection to the existing discharge pipe will happen within the Project Site, though and outlet of the culvert and associated swale, as well as the stream itself, all occur on the adjacent property to the north.

Perimeter fencing will be provided to protect the post-development critical areas from intrusions. Mitigation will follow established guidelines to reduce impacts. The proposed mitigation will result in a net gain in critical area functions and values compared to existing conditions. Long-term performance monitoring and maintenance will commence for five (5) years following mitigation construction completion.

#### **CHAPTER 13. REFERENCES**

- City of Bellevue, 2019. *City of Bellevue Land Use Code Part 20.25, Special and Overlay Districts*. Accessed at: https://bellevue.municipal.codes/LUC/20.25H
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service, Department of the Interior. FWSOBS-70/31.
- Environmental Laboratory. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).

  Technical Report TR-10-3. U.S. Army Corps of Engineers Wetlands Regulatory Assistance Program, May 2010.
- Granger T., T.Hruby, A. McMillan, D. Peters, J. Rubey, D. Sheldon, S. Stanley, and E. Stockdale. April 2005. *Wetlands in Washington State-Volume 2: Guidance for Protecting and Managing Wetlands*. Washington State Department of Ecology. Publication #05-06-008. Olympia, WA.
- Hitchcock, C.L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. University of Washington Press.
- Hruby, T. 2014. Washington State Wetland Rating System for Western Washington 2014 Update. Washington State Department of Ecology Publication #14-06-029.
- King County iMAP. URL http://gismaps.kingcounty.gov/iMap/. Accessed 2019.
- Lichvar, R.W. 2012. The National Wetland Plant List. ERDC/CRREL TR-12-11. Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory. http://acwc.sdp.sirsi.net/client/search/asset:asset?t:ac=\$N/1012381
- National Resources Conservation Service. 1973 *Soil Survey for King County Area*. URL http://websoilsurvey.nrcs.usda.gov. Accessed April 9, 2015.
- Olson, P. and E. Stockdale. 2010. Determining the Ordinary High Water Mark on Streams in Washington State. Second Review Draft. Washington State Depeartment of Ecology, Shorelands & Environmental Assistance Program, Lacey, WA. Ecology Publication # 08-06-001.
- StreamNet. "StreamNet Mapper." StreamNet. http://map.streamnet.org/website/bluesnetmapper/viewer.htm (accessed 2019).
- Washington State Department of Fish and Wildlife. Priority Habitats and Species Database. www.wdfw.wa.gov/mapping/phs (accessed 2019).
- Washington State Department of Fish and Wildlife. SalmonScape. wdfw.wa.gov/mapping/salmonscape/index.html (Accessed 2019).
- Washington State Department of Natural Resources. 2009. *Natural Heritage Database*. URL www.dnr.wa.gov/researchscience/topics/naturalheritage/pages/amp\_nh.aspx. Accessed: 2019.
- U.S. Fish and Wildlife Service. *National Wetlands Inventory Map*. URL http://www.fws.gov.nwi. Accessed 2019.

#### **FIGURES**

Figure 1 – Vicinity Map & Directions

Figure 2 – Existing Conditions

Figure 3 – NRCS Map

Figure 4 – Kelsey Creek Drainage Map

#### DRIVING DIRECTIONS:

- I. FROM SEATTLE MERGE ONTO I-5 N VIA THE RAMP TO VANCOUVER BC
- 2. TAKE EXIST 168B FOR WA-520 TOWARD BELLEVUE/KIRKLAND
- 3. CONTINUE ONTO WA-520 E (TOLL ROAD)
- 4. TAKE THE EXIT TOWARD 124TH AVE NE
- 5. CONTINUE ONTO 124TH AVE NE
- 6. ARRIVE A DESTINATION ON THE RIGHT

PUBLIC STORAGE 12385 NORTHUP WAY BELLEVUE, WA 98005





Resource & Environmental Planning 15020 Bear Creek Road Northeast Woodinville, Washington 98077 Bus (425)861-7550 - Fax (425)861-7549 FIGURE #1

VICINITY MAP & DIRECTIONS PUBLIC STORAGE FACILITY BELLEVUE, WASHINGTON DESIGN DRAWN PROJECT
ABS/KM 1539B
SCALE
NTS
DATE
9-20-2018
REVISED

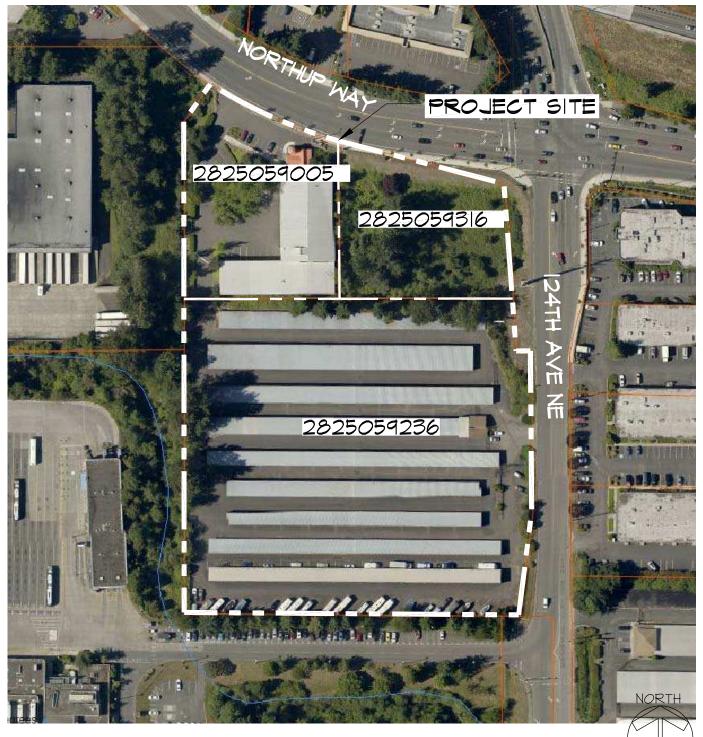


IMAGE SOURCE: KING COUNTY IMAP; HTTP://WWW5.KINGCOUNTY.GOV/IMAP/VIEWER.HTM?MAPSET=KCPROPERTY (ACCESSED 20 SEPTEMBER 2018)



Resource & Environmental Planning 15020 Bear Creek Road Northeast Woodinville, Washington 98077 Bus (425)861-7550 - Fax (425)861-7549

FIGURE #2

EXISTING CONDITIONS PUBLIC STORAGE FACILITY BELLEVUE, WASHINGTON

			1599
DESIGN	DRAWN	PROJECT	<u>-</u>
	ABS/KM	1539B	1500
SCALE			[ <del>]</del>
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REVISED			N

\TAL1579B\Plans\TAL1539-FIGURE.dwg



# LEGEND

TYPE DESCRIPTION, SLOPES

SK SEATTLE MUCK

EVC EVERETT GRAVELLY SANDY LOAM, 5 TO 15 PERCENT SLOPES

IMAGE SOURCE: SOIL SURVEY STAFF, NATURAL RESOURCES
CONSERVATION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE,
WEB SOIL SURVEY. AVAILABLE ONLINE AT
HTTP://WEBSOILSURVEY.NRCS.USDA.GOV/.
(ACCESSED 20 SEPTEMBER 2018)





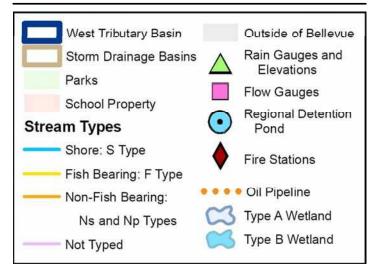
Resource & Environmental Planning 15020 Bear Creek Road Northeast Woodinville, Washington 98077 Bus (425)861-7550 - Fax (425)861-7549 FIGURE #3

NRCS MAP PUBLIC STORAGE FACILITY BELLEVUE, WASHINGTON DESIGN DRAWN PROJECT
ABS/KM 1539B

SCALE
NTS
DATE
9-20-20|8
REVISED



# LEGEND



SOURCE: HTTP://WWW.BELLEVUEWA.GOV/PDF/UTILITIES/27-WEST\_TRIBUTARY.PDF (ACCESSED 9/20/2018)





15020 Bear Creek Road Northeast Woodinville, Washington 98077 Bus (425)861-7550 - Fax (425)861-7549 FIGURE #4

KELSEY CREEK DRAINAGE MAP PUBLIC STORAGE FACILITY BELLEVUE, WASHINGTON

DRAWN DESIGN 1539B ABS/KM SCALE NTS DATE 9-20-2018 REVISED

#### **APPENDIX A**

Wetland Determination Data Forms Talasaea Consultants, 2018

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Public Storage Facility Redevelopment (Revised on 15 August 2018)	City/County: <u>Bellevue, King</u>				_ Sampling Date: 9 April 2015
Applicant/Owner: Public Storage				State: WA	_ Sampling Point: TP-1
Investigator(s): J.Martin/ K. Maloney					· -
Landform (hillslope, terrace, etc.): Riparian valley				·	
Subregion (LRR): A			•	•	
Soil Map Unit Name: <u>Seattle Muck</u>					
Are climatic / hydrologic conditions on the site typical for this					
•	•		,		,
Are Vegetation, Soil, or Hydrology sign Are Vegetation, Soil, or Hydrology natu				ormal Circumstances" pre ed, explain any answers	
SUMMARY OF FINDINGS – Attach site map					
	silowing	Sampin	ng point it	ocations, transects	, important leatures, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐		ls t	the Sampled	Area	
Hydric Soil Present?  Yes No   Wetland Hydrology Present?		wit	thin a Wetlan	nd? Yes⊠ l	No 🗌
Wetland Hydrology Present? Yes ⊠ No ☐  Remarks: Sampled Icoation meets all three of the required	l wetland na	rameters	and is therefo	ore wetland	
Tremarks. Sampled (coalloff freets all tillee of the required	i welland pa	lameters	and is thereit	ore wegand.	
VEGETATION – Use scientific names of plan	ts				
	Absolute	Dominar	nt Indicator	Dominance Test work	 (sheet:
Tree Stratum (Plot size: 30-ft)			Status	Number of Dominant S	
1. Alnus rubra	25	<u>Y</u>	FAC	That Are OBL, FACW,	
2. Prunus emarginata*	60	N	FACU	Total Number of Domir	nant
3. Populus balsamifera	40	<u>Y</u>	<u>FAC</u>	Species Across All Stra	
4.				Percent of Dominant S	pecies
Sapling/Shrub Stratum (Plot size: 10-ft)	125	= Total	Cover	That Are OBL, FACW,	
1. Rubus armeniacus	<u>15</u>	<b>Y</b>	FACU	Prevalence Index wo	rksheet:
2. Cornus sericea				Total % Cover of:	
3				-	x 1 = 0
4.	·			-	x 2 = <u>6</u>
5.				· ·	x 3 = 9
	25			FACU species 0	x 4 = <u>0</u>
Herb Stratum (Plot size: <u>5-ft</u> )				UPL species 0	x 5 = <u>0</u>
1. Equisetum telmateia	70	<u>Y</u>	FACW	Column Totals: 9	(A) <u>15</u> (B)
2	<u>50</u>	<u>Y</u>	<u>FACW</u>	Duranda na alla dan	. D/A 4.0
3. Athyrium filix-femina				Prevalence Index	
4				Hydrophytic Vegetati  Dominance Test is	
5.				☐ Dominance results ☐ Prevalence Index is	
6.		-			ptations <sup>1</sup> (Provide supporting
7.			<del></del>		s or on a separate sheet)
8	130	= Total	Cover	☐ Problematic Hydro	phytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: N/A)	130	- Total	Covei		
1					il and wetland hydrology must
2.				be present, unless dist	urbed or problematic.
	0	= Total	Cover	Hydrophytic	
% Bare Ground in Herb Stratum N/A % Cov	er of Biotic (	Crust N/A		Vegetation Present? Ye	es 🛭 No 🗌
Remarks: * not rooted within the wetland however provide					
hydrophytic vegetation.				4	

Depth	Matrix		~opui ili		ox Feature		J. 30111111	abacı	nce of indicators.)
(inches)	Color (moist)	%	Cold	or (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 2/1	100				_		organic	mucky/peaty (field tst - no finger stains)
6-18	10YR 2/2	100	_ =_			<u>-</u>	<u>-</u>	SiLo	
									_
	-								
	oncentration, D=D Indicators: (App						ed Sand G		<sup>2</sup> Location: PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol		iicabie to		Sandy Redox (		.eu.)			com Muck (A10)
	oipedon (A2)			Stripped Matrix					ed Parent Material (TF2)
	stic (A3)			Loamy Mucky		(except	MLRA 1))		/ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			oamy Gleyed			,		ther (Explain in Remarks
	d Below Dark Surfa	ace (A11)		Depleted Matrix	, ,				(
	ark Surface (A12)	, ,		Redox Dark Sι					
☐ Sandy N	lucky Mineral (S1)			Depleted Dark	Surface (F	7)		<sup>3</sup> Indio	cators of hydrophytic vegetation and
☐ Sandy G	Bleyed Matrix (S4)			Redox Depress	sions (F8)			W	etland hydrology must be present,
								ur	nless disturbed or problematic.
Restrictive	Layer (if present)	:							
Туре:									
Depth (in	iches):							Hydric S	Soil Present? Yes 🛛 No 🗌
HYDROLC	GY								
-	drology Indicator								
	cators (minimum o	t one requ	uired; ch			(50) (			econdary Indicators (2 or more required)
⊠ Surfac	e Water (A1)			☐ Water-St <b>4A, and 4B</b> )		/es (B9) (	except ML	RA 1, 2,	Water Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B))
☐ High W	/ater Table (A2)			☐ Salt Cru	, ,				Drainage Patterns (B10)
	tion (A3)			Aquatic Invertebrates (B13)					Dry-Season Water Table (C2)
	Marks (B1)								Saturation Visible on Aerial Imagery (C9
	ent Deposits (B2)						g Living Ro	oots (C3)	Geomorphic Position (D2)
	eposits (B3)			☐ Presence of Reduced Iron (C4)					Shallow Aquitard (D3)
	Mat or Crust (B4)			Recent			· ·	•	FAC-Neutral Test (D5)
	eposits (B5)			Stunted			D1)( <b>LRR A</b>	<b>A</b> )	Raised Ant Mounds (D6(LRR A)
□ Surface	e Soil Cracks (B6)				xplain in R	lemarks)			☐Frost-Heave Hummocks (D7)
☐ Inundat	tion Visible on Aeri	al Imager	y (B7)						
	ly Vegetated Conc	ave Surfa	ce (B8)						
Field Obser		·		5 " " 1					
	ter Present?	Yes ⊠	No 🗌	Depth (inche	•				
Water Table		Yes ⊠	No 🗌	Depth (inche	<i>'</i> —				
Saturation F (includes ca	resent? pillary fringe)	Yes 🗌	No 🛚	Depth (inche	es): <u>n/a</u>		Wetl	and Hydro	logy Present? Yes ⊠ No □
	ecorded Data (stream	am gauge	, monito	ring well, aerial	photos, pr	evious in	spections),	if available	:
	urface water is 4-ft	away We	st Tribut	ary of Kelsey (	Creek Sar	npled loca	ation meets	the require	ed parameter for presence of wetland
hydrology.									

#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Public Storage Facility Redevelopment		City/C	County	: <u>Bellevue,</u>	King	Sampling Date: 9 April 2015
Applicant/Owner: Public Storage					State: <u>WA</u>	Sampling Point: TP-2
Investigator(s): <u>J.Martin</u>			;	Section, To	ownship, Range: <u>NW ¼ 28</u>	, T25N, R5E
Landform (hillslope, terrace, etc.): Hill slope		Loca	al relie	f (concave,	convex, none): none	Slope (%): <u>5%</u>
Subregion (LRR): A	_ Lat:				Long: <u>47.62774</u>	Datum: <u>NAD 83</u>
Soil Map Unit Name: Seattle Muck						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			•	ormal Circumstances" pres	
Are Vegetation, Soil, or Hydrology natu					ed, explain any answers ir	
SUMMARY OF FINDINGS – Attach site map				•	•	·
	<u>_</u>			<u>, ,</u>	, , ,	,
Hydrophytic Vegetation Present? Yes ☐ No ☐ Hydric Soil Present? Yes ☐ No ☐ Yes ☐ No ☐ N			Is the	e Sampled	Area	
Wetland Hydrology Present? Yes ☐ No ☒			withi	n a Wetlan	nd? Yes □ N	o 🛛
Remarks: Sampled location does not meet all three of the	required we	tland	param	neters.		
<b>VEGETATION</b> – Use scientific names of plan	ts.					
T. 01 (DL) (DL)	Absolute			Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30-ft)  1. Acer macrophyllum	% Cover 20			FACU	Number of Dominant Sp That Are OBL, FACW, o	
2. Prunus emarginata					That Are Obl., FACW, 0	1 FAC. <u>U</u> (A)
3. Populus balsamifera	15				Total Number of Domina Species Across All Strat	
4.						
	95		otal Co		Percent of Dominant Sp	ecies or FAC: <u>0</u> (A/B)
Sapling/Shrub Stratum (Plot size: 10-ft)						
1. Rubus armeniacus					Prevalence Index work	
2. Polystichum munitum	<u>15</u>	<u>Y</u>		<u>FACU</u>		Multiply by:
3.						x 1 = <u>0</u>
4.		-				x = 0
5.	GE		otal Ca		•	x 3 = <u>3</u> x 4 = <u>16</u>
Herb Stratum (Plot size: N/A)	<u>65</u>	- 10	olai Co	over	*	$\times 5 = 0$
1.					Column Totals: 5	(A) <u>19</u> (B)
2.						
3.					Prevalence Index	
4.					Hydrophytic Vegetatio	
5					Dominance Test is >	
6.					☐ Prevalence Index is	
7						tations¹ (Provide supporting or on a separate sheet)
8.						hytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: N/A)	<u>N/A</u>	= To	otal Co	over		
1.						and wetland hydrology must
2.					be present, unless distu	rbed or problematic.
		= To	otal Co	over	Hydrophytic	
% Bare Ground in Herb Stratum N/A % Cove	er of Biotic (	Cruet	N/A		Vegetation   Present? Yes	s □ No ⊠
Remarks: Sampled location does not meet the required pa				of hydroph		<u> </u>
and a sequinou po			50	, 2, 5, 5, 1	, <u></u>	

Depth	Matrix	<u>«</u>	Color		Redox	Feature		_Loc <sup>2</sup>	Toyturo	Domarka
(inches)	Color (moist)	-	Color	(moist)		<u>%</u>	Type <sup>1</sup>	LOC	Texture	Remarks
<u>0-6</u>	10YR3/4	100	- =		=	-			SiLo	gravel and cobble
	-									
	-									
									-	
			-							<del>-</del>
	-									
<sup>1</sup> Type: C=C	oncentration, D=E	Depletion, R	M=Redu	ced Matrix	x, CS=	:Covered	d or Coat	ed Sand G	rains. <sup>2</sup>	Location: PL=Pore Lining, M=Matrix.
	Indicators: (App									ators for Problematic Hydric Soils³:
☐ Histosol	(A1)		☐ Sa	andy Red	ox (S5	)			□ 2	cm Muck (A10)
☐ Histic Ep	oipedon (A2)			ripped Ma						ed Parent Material (TF2)
☐ Black Hi				-	-		(except	MLRA 1))		ery Shallow Dark Surface (TF12)
	n Sulfide (A4)	(		amy Gley					☐ Ot	ther (Explain in Remarks
•	d Below Dark Surf	ace (A11)		pleted Ma		-				
	ark Surface (A12) lucky Mineral (S1)	١		edox Dark epleted Da		. ,	7)		<sup>3</sup> India	ators of hydrophytic vegetation and
-	Gleyed Matrix (S4)			edox Depi		•	')			etland hydrology must be present,
	,					()				lless disturbed or problematic.
Restrictive	Layer (if present	):								·
Type: Co	mpacted dirt and	roots								
	ches): <u>6"bgs</u>		_						Hvdric S	oil Present? Yes □ No ⊠
. ,	ampled location de	nes not me	et the rea	uired para	ametei	r for pres	sence of	hydric soil		<del></del>
	•		·	•		•		•		
HYDROLO	GY									
	drology Indicato	rs:								
_	cators (minimum o		red: ched	k all that	apply)				Se	condary Indicators (2 or more required)
	e Water (A1)	51 0110 10qui	100, 01100				'es (R9) (	except ML		☐ Water Stained Leaves (B9) (MLRA 1, 2,
Canao	o water (/w/)			4A, and		ioa Eoav	00 (20) (	oxoopt iii z	, 2,	4A, and 4B))
☐ High W	/ater Table (A2)			☐ Salt 0	Crust (	(B11)				☐ Drainage Patterns (B10)
☐ Satura	tion (A3)			☐ Aqua	atic Inv	ertebrat	es (B13)			☐ Dry-Season Water Table (C2)
☐ Water	Marks (B1)			☐ Hydr	ogen S	Sulfide C	dor (C1)			☐ Saturation Visible on Aerial Imagery (C9
☐ Sedime	ent Deposits (B2)			Oxidi	ized R	hizosph	eres alon	g Living Ro	oots (C3)	☐ Geomorphic Position (D2)
☐ Drift De	eposits (B3)			☐ Pres	ence c	of Reduc	ed Iron (	C4)		☐ Shallow Aquitard (D3)
☐ Algal M	fat or Crust (B4)			Rece	ent Iror	Reduc	tion in Til	led Soils (0	26)	☐ FAC-Neutral Test (D5)
	eposits (B5)			☐ Stunt	ted or	Stresse	d Plants (	D1)( <b>LRR</b>	<b>A</b> )	Raised Ant Mounds (D6(LRR A)
☐ Surface	e Soil Cracks (B6)	)		☐ Othe	r (Expl	lain in R	emarks)			☐Frost-Heave Hummocks (D7)
☐ Inundat	ion Visible on Aer	ial Imagery	(B7)							
☐ Sparse	y Vegetated Cond	cave Surfac	e (B8)							
Field Obser	vations:									
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (in	ches):					
Water Table	Present?	Yes 🗌	No 🛛	Depth (in	ches):					
Saturation P	resent?	Yes 🗌	No 🛛	Depth (in	ches):			Wet	land Hydrol	ogy Present? Yes ☐ No ⊠
	pillary fringe)				! 1 1				if a called a	
Describe Re	corded Data (stre	am gauge,	monitorir	ıg well, ae	eriai pr	iotos, pr	evious in	spections),	ıı avallable:	
D			1 ()					r	1.1.	
Remarks: Sa	ampled location do	oes not me	eet the re	quried pa	ıramete	er tor pre	esence of	wetland h	уаттооду.	

#### **APPENDIX B**

Wetland Rating Form
Washington State Department of Ecology Wetland Rating System for
Western Washington, 2014 Update
(Revised March 2020)

# **RATING SUMMARY – Western Washington**

Name of wetland (or ID #): TAL-1539 Wet	and A	Pate of site visit: $\frac{4/9/15}{9}$ and $\frac{8}{15}$
		sNo Date of training April 2015
HGM Class used for rating Riverine	Wetland has multip	le HGM classes?Y XN
NOTE: Form is not complete witho Source of base aerial photo/map		igures can be combined).
OVERALL WETLAND CATEGORY 17	(based on functions	or special characteristics)
1. Category of wetland based on Fl	JNCTIONS	
Category I – Total score	= 23 - 27	Coord for cook

# Category II – Total score = 23 - 27 Category II – Total score = 20 - 22 X Category III – Total score = 16 - 19 Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality		Hydrologic		Habitat					
					Circle	the ap	propi	riate ro	atings	
Site Potential	Н	M	L	Н	М	О	Н	M	L	
Landscape Potential	$oxtlue{oxtlue{\square}}$	М	L	Н	M	L	Н	M	Θ	
Value	$\Box$	М	L	Н	М		Н	M	L	TOTAL
Score Based on Ratings	8			4			5			17

#### Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L 7 = H,M,M 6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L,L,L

# 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CAT	EGORY
Estuarine	I	II
Wetland of High Conservation Value		I
Bog		I
Mature Forest		I
Old Growth Forest		I
Coastal Lagoon	I	II
Interdunal	I II	III IV
None of the above		

# **HGM Classification of Wetlands in Western Washington**

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1	Are the water levels in	n the entire unit	usually controlled	hy tidae aven	nt during floods?
Τ.	Ale the water levels h	n die endre dint	usually controlled	by dues exce	pt during noods:

NO- go to 2

**YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

# NO - Saltwater Tidal Fringe (Estuarine)

**YES - Freshwater Tidal Fringe** 

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO- go to 3

YES - The wetland class is Flats

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
  - \_\_The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
  - \_\_At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

- 4. Does the entire wetland unit **meet all** of the following criteria?
  - The wetland is on a slope (slope can be very gradual),
  - The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
  - XThe water leaves the wetland without being impounded.

NO - go to 5

**YES** – The wetland class is **Slope** 

**NOTE**: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

- 5. Does the entire wetland unit **meet all** of the following criteria?
  - The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
  - The overbank flooding occurs at least once every 2 years.

#### Wetland name or number A

NO - go to 6

**YES** – The wetland class is **Riverine** 

**NOTE**: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.* 

NO – go to 7

**YES** – The wetland class is **Depressional** 

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO- go to 8

**YES** – The wetland class is **Depressional** 

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

**NOTE**: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to		
being rated	use in rating		
Slope + Riverine	Riverine		
Slope + Depressional	Depressional		
Slope + Lake Fringe	Lake Fringe		
Depressional + Riverine along stream	Depressional		
within boundary of depression			
Depressional + Lake Fringe	Depressional		
Riverine + Lake Fringe	Riverine		
Salt Water Tidal Fringe and any other	Treat as		
class of freshwater wetland	ESTUARINE		

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

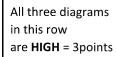
RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
R 1.0. Does the site have the potential to improve water quality?	<u>-</u>
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	0
Depressions cover $>$ $^3/_4$ area of wetland points = 8	
Depressions cover > ½ area of wetland points = 4	
Depressions present but cover < ½ area of wetland points = 2	
No depressions present points = 0	
R 1.2. Structure of plants in the wetland (areas with >90% cover at person height, <b>not</b> Cowardin classes)	6
Trees or shrubs $> \frac{2}{3}$ area of the wetland points = 8	
Trees or shrubs $> \frac{1}{3}$ area of the wetland points = 6	
Herbaceous plants (> 6 in high) > $^2/_3$ area of the wetland points = 6	
Herbaceous plants (> 6 in high) > $^{1}/_{3}$ area of the wetland points = 3	
Trees, shrubs, and ungrazed herbaceous $< \frac{1}{3}$ area of the wetland points = 0	
Total for R 1 Add the points in the boxes above	6
Rating of Site Potential If score is: 12-16 = H	the first page
R 2.0. Does the landscape have the potential to support the water quality function of the site?	_
R 2.1. Is the wetland within an incorporated city or within its UGA? Yes = $2  ext{No} = 0$	2
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area? Yes = 1 No = 0	1
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years? Yes = $1 \text{ No} = 0$	0
R 2.4. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1-R 2.4  Other sources Yes = 1 No = 0	0
Total for R 2 Add the points in the boxes above	4
Rating of Landscape Potential If score is: 3-6 = H1 or 2 = M0 = L Record the rating on t	he first page
R 3.0. Is the water quality improvement provided by the site valuable to society?	-
R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	1
Yes = 1 No = 0	
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?  Yes = 1 No = 0	1
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer	
YES if there is a TMDL for the drainage in which the unit is found)  Yes = 2 No = 0	2
Total for R 3 Add the points in the boxes above	4

Rating of Value | If score is: \( \sum\_{2-4} = H \) \_\_\_1 = M \_\_\_0 = L

Record the rating on the first page

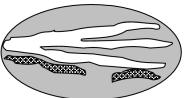
RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS				
Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosio	n			
R 4.0. Does the site have the potential to reduce flooding and erosion?				
R 4.1. Characteristics of the overbank storage the wetland provides:  Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).	4			
If the ratio is more than 20 points = 9  If the ratio is $10\text{-}20$ points = 6  If the ratio is $5\text{-}<10$ points = 4  If the ratio is $1\text{-}<5$ points = 2  If the ratio is $<1$ points = 1				
R 4.2. Characteristics of plants that slow down water velocities during floods: Treat large woody debris as forest or shrub. Choose the points appropriate for the best description (polygons need to have >90% cover at person height. These are NOT Cowardin classes).  Forest or shrub for $> 1/3$ area OR emergent plants $> 1/3$ area  points = 7  Forest or shrub for $> 1/3$ area OR emergent plants $> 1/3$ area  points = 4  Plants do not meet above criteria	0			
Total for R 4 Add the points in the boxes above	4			
Rating of Site Potential If score is: 12-16 = H 6-11 = M 20-5 = L Record the rating on the same of the score is: 12-16 = H 12-				
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?				
R 5.1. Is the stream or river adjacent to the wetland downcut? Yes = $0$ No = $1$	0			
R 5.2. Does the up-gradient watershed include a UGA or incorporated area? Yes = 1 No = 0	1			
R 5.3. Is the up-gradient stream or river controlled by dams?  Yes = 0 No = 1	0			
Total for R 5 Add the points in the boxes above	1			
Rating of Landscape Potential If score is:3 = H1 or 2 = M0 = L  Record the rating on t	he first page			
R 6.0. Are the hydrologic functions provided by the site valuable to society?				
R 6.1. Distance to the nearest areas downstream that have flooding problems?  Choose the description that best fits the site.  The sub-basin immediately down-gradient of the wetland has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)  Surface flooding problems are in a sub-basin farther down-gradient  No flooding problems anywhere downstream  points = 0	0			
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? $Yes = 2  No = 0$	0			
Total for R 6 Add the points in the boxes above	0			
Rating of Value If score is:2-4 = H1 = M \ \times 0 = L \ Record the rating on t	he first page			

#### These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold 2 of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 X Emergent 3 structures: points = 2 X Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 X\_Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover 2 more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 X Saturated only 1 type present: points = 0 X Permanently flowing stream or river in, or adjacent to, the wetland \_Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species 1 Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>. Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1< 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or 2 the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Moderate = 2 points Low = 1 point









H 1.5. Special habitat features:  Check the habitat features that are present in the wetland. The number of checks is the number of points.  X Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).  X Standing snags (dbh > 4 in) within the wetland  — Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)  X Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)  At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)  Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Add the points in the boxes above  10  Rating of Site Potential If score is:15-18 = H
X Large, downed, woody debris within the wetland ( > 4 in diameter and 6 ft long). X Standing snags (dbh > 4 in) within the wetland
X_Standing snags (dbh > 4 in) within the wetland  Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)  X_Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)  At least % a cof thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)  Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Add the points in the boxes above  10  Rating of Site Potential If score is:15-18 = H
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)  X
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)  X
X Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)  At least X ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)  Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Add the points in the boxes above  10  Rating of Site Potential If score is:15-18 = H
slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1
### At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)    Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)    Total for H 1
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)  Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Add the points in the boxes above  Rating of Site Potential If score is:15-18 = H
permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Add the points in the boxes above  Rating of Site Potential If score is:15-18 = H
Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)  Total for H 1  Rating of Site Potential If score is:15-18 = H
Total for H 1  Rating of Site Potential If score is:15-18 = H
Total for H 1  Rating of Site Potential If score is:15-18 = H
H 2.0. Does the landscape have the potential to support the habitat functions of the site?  H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =% [f total accessible habitat is:  > \frac{1}{3} (33.3%) of 1 km Polygon  20-33% of 1 km Polygon  10-19% of 1 km Polygon  > 10-9% of 1 km Polygon  All 2.2. Undisturbed habitat in 1 km Polygon around the wetland.  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =% [Undisturbed habitat > 50% of Polygon  Undisturbed habitat 10-50% and in 1-3 patches  Undisturbed habitat 10-50% and in 1-3 patches  Undisturbed habitat 10-50% and > 3 patches  Undisturbed ha
H 2.0. Does the landscape have the potential to support the habitat functions of the site?  H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =% [f total accessible habitat is:  > \frac{1}{3} (33.3%) of 1 km Polygon  20-33% of 1 km Polygon  10-19% of 1 km Polygon  > 10-9% of 1 km Polygon  All 2.2. Undisturbed habitat in 1 km Polygon around the wetland.  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =% [Undisturbed habitat > 50% of Polygon  Undisturbed habitat 10-50% and in 1-3 patches  Undisturbed habitat 10-50% and in 1-3 patches  Undisturbed habitat 10-50% and > 3 patches  Undisturbed ha
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =%   ftotal accessible habitat is:  > \frac{1}{3} (33.3%) of 1 km Polygon
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = %   ff total accessible habitat is:
If total accessible habitat is: $ > \frac{1}{3} (33.3\%) \text{ of } 1 \text{ km Polygon} $ points = 3 $ 20-33\% \text{ of } 1 \text{ km Polygon} $ points = 2 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ points = 1 $ < 10\% \text{ of } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ of } 1 \text{ km Polygon} $ around the wetland. $ 10-19\% \text{ collisturity bed habitat in } 1 \text{ km Polygon around the wetland.} $ points = 3 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ and in } 1-3 \text{ patches} $ points = 2 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ and in } 1-3 \text{ patches} $ points = 1 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ and } 3 \text{ patches} $ points = 1 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ and } 3 \text{ patches} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ and } 1 \text{ km Polygon} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 1 \text{ km Polygon: If } 1 \text{ km Polygon is high intensity land use} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity bed habitat } 10-50\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\% \text{ collisturity land use} $ points = 0 $ 10-19\%  collisturi$
> ¹/₃ (33.3%) of 1 km Polygon 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0  H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon  H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity Add the points in the boxes above  Total for H 2  Add the points in the boxes above  -2
20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0  H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =% Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon  H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = 0  Total for H 2  Add the points in the boxes above -2
10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0  H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon  H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (-2) ≤ 50% of 1 km Polygon is high intensity  Total for H 2  Add the points in the boxes above -2
< 10% of 1 km Polygonpoints = 0H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.0Calculate:% undisturbed habitat + [(% moderate and low intensity land uses)/2] =%Undisturbed habitat > 50% of Polygonpoints = 3Undisturbed habitat 10-50% and in 1-3 patchespoints = 2Undisturbed habitat 10-50% and > 3 patchespoints = 1Undisturbed habitat < 10% of 1 km Polygon
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.  Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = %  Undisturbed habitat > 50% of Polygon points = 3  Undisturbed habitat 10-50% and in 1-3 patches points = 2  Undisturbed habitat 10-50% and > 3 patches points = 1  Undisturbed habitat < 10% of 1 km Polygon points = 0  H 2.3. Land use intensity in 1 km Polygon: If points = (-2) ≤ 50% of 1 km Polygon is high intensity land use points = 0  Total for H 2 Add the points in the boxes above -2
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =%  Undisturbed habitat > 50% of Polygon points = 3  Undisturbed habitat 10-50% and in 1-3 patches points = 2  Undisturbed habitat 10-50% and > 3 patches points = 1  Undisturbed habitat < 10% of 1 km Polygon points = 0  H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (-2) ≤ 50% of 1 km Polygon is high intensity  Total for H 2 Add the points in the boxes above -2
Undisturbed habitat > 50% of Polygonpoints = 3Undisturbed habitat 10-50% and in 1-3 patchespoints = 2Undisturbed habitat 10-50% and > 3 patchespoints = 1Undisturbed habitat < 10% of 1 km Polygon
Undisturbed habitat 10-50% and in 1-3 patchespoints = 2Undisturbed habitat 10-50% and > 3 patchespoints = 1Undisturbed habitat < 10% of 1 km Polygon
Undisturbed habitat 10-50% and > 3 patchespoints = 1Undisturbed habitat < 10% of 1 km Polygon
Undisturbed habitat < 10% of 1 km Polygon points = 0  H 2.3. Land use intensity in 1 km Polygon: If
H 2.3. Land use intensity in 1 km Polygon: If  > 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity  Total for H 2  Add the points in the boxes above  -2  Add the points in the boxes above
> 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity  Total for H 2  Add the points in the boxes above  -2
$\leq$ 50% of 1 km Polygon is high intensity points = 0  Total for H 2 Add the points in the boxes above -2
Total for H 2 Add the points in the boxes above -2
Rating of Landscape Potential If score is: $4-6 = H$ $1-3 = M$ $\times < 1 = L$ Record the rating on the first page
H 3.0. Is the habitat provided by the site valuable to society?
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score</i>
that applies to the wetland being rated.
Site meets ANY of the following criteria: points = 2
It has 3 or more priority habitats within 100 m (see next page)
It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
It is mapped as a location for an individual WDFW priority species
It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a
Shoreline Master Plan, or in a watershed plan
Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1
Site does not meet any of the criteria above points = 0  Rating of Value   If score is:2 = H

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

# **WDFW Priority Habitats**

<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <a href="http://wdfw.wa.gov/publications/00165/wdfw00165.pdf">http://wdfw.wa.gov/publications/00165/wdfw00165.pdf</a> or access the list from here: <a href="http://wdfw.wa.gov/conservation/phs/list/">http://wdfw.wa.gov/conservation/phs/list/</a>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: *NOTE:* This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).*
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

# **RATING SUMMARY – Western Washington**

Name of wetland (or ID #): TAL-1539 Wetla	and B Date of site visit: 4/9/15 and 8/15/18
Rated by Jennifer Marriott	Trained by Ecology?XYesNo Date of training April 2015
HGM Class used for rating Riverine	Wetland has multiple HGM classes?Y XN
NOTE: Form is not complete without Source of base aerial photo/map	ut the figures requested (figures can be combined).
OVERALL WETLAND CATEGORY 17	(based on functions X or special characteristics)
1. Category of wetland based on FU	INCTIONS
Category I – Total score	= 23 - 27 Score for each

	_ <b>Category I</b> — Fotal score = 23 - 27
	_Category II - Total score = 20 - 22
<u>X</u>	_Category III – Total score = 16 - 19
	Category IV — Total score = 9 - 15

FUNCTION		nprov ter Q	ing uality	Н	ydrol	ogic		Habit	at	
	Circle the appropriate ratings									
Site Potential	Н	M	L	Н	M	L	Н	M	L	
Landscape Potential	$oxtlue{oxtlue{\square}}$	М	L	Н	M	L	Н	М		
Value	Œ	М	L	Н	М		Н	M	L	TOTAL
Score Based on										
Ratings	8			5			5			18

# Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H 8 = H,H,M 7 = H,H,L 7 = H,M,M 6 = H,M,L 6 = M,M,M 5 = H,L,L 5 = M,M,L 4 = M,L,L 3 = L,L,L

# 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY	
Estuarine	I	II
Wetland of High Conservation Value		I
Bog		I
Mature Forest		I
Old Growth Forest		I
Coastal Lagoon	I	II
Interdunal		III IV
None of the above		

# **HGM Classification of Wetlands in Western Washington**

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1.	Are the water	levels in the	entire unit u	sually control	lled by tides	except durin	g floods?
	THE CHE WALLE		circii e airie a	budily colleror	nea by tracb	checpt durin	5 HOOGS

NO- go to 2

**YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

# NO - Saltwater Tidal Fringe (Estuarine)

**YES - Freshwater Tidal Fringe** 

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO- go to 3

YES - The wetland class is Flats

 $\overline{lf}$  your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
  - \_\_The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
  - \_\_At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

**YES** – The wetland class is **Lake Fringe** (Lacustrine Fringe)

- 4. Does the entire wetland unit **meet all** of the following criteria?
  - The wetland is on a slope (slope can be very gradual),
  - The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
  - XThe water leaves the wetland without being impounded.

NO - go to 5

**YES** - The wetland class is **Slope** 

**NOTE**: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

- 5. Does the entire wetland unit **meet all** of the following criteria?
  - The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
  - The overbank flooding occurs at least once every 2 years.

Wetland name or number B

NO – go to 6

**YES** – The wetland class is **Riverine** 

**NOTE**: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.* 

NO – go to 7

**YES** – The wetland class is **Depressional** 

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO- go to 8

**YES** – The wetland class is **Depressional** 

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

**NOTE**: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
R 1.0. Does the site have the potential to improve water quality?	
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	0
Depressions cover $>$ $^3/_4$ area of wetland points = 8	
Depressions cover > ½ area of wetland points = 4	
Depressions present but cover < ½ area of wetland points = 2	
No depressions present points = 0	
R 1.2. Structure of plants in the wetland (areas with >90% cover at person height, <b>not</b> Cowardin classes)	6
Trees or shrubs $> \frac{2}{3}$ area of the wetland points = 8	
Trees or shrubs $> \frac{1}{3}$ area of the wetland points = 6	
Herbaceous plants (> 6 in high) > $^2/_3$ area of the wetland points = 6	
Herbaceous plants (> 6 in high) > $^{1}/_{3}$ area of the wetland points = 3	
Trees, shrubs, and ungrazed herbaceous $< \frac{1}{3}$ area of the wetland points = 0	
Total for R 1 Add the points in the boxes above	6
Rating of Site Potential If score is: 12-16 = H	he first page
R 2.0. Does the landscape have the potential to support the water quality function of the site?	-
R 2.1. Is the wetland within an incorporated city or within its UGA? Yes = $2  ext{No} = 0$	2
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area? Yes = 1 No = 0	1
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years? Yes = $1 \text{ No} = 0$	0
R 2.4. ls > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1-R 2.4 Other sources Yes = $1 \text{ No} = 0$	0
Total for R 2 Add the points in the boxes above	4
Rating of Landscape Potential If score is: 3-6 = H1 or 2 = M0 = L Record the rating on the score is:	he first page
R 3.0. Is the water quality improvement provided by the site valuable to society?	-
R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	1
Yes = 1 No = 0	
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?  Yes = 1 No = 0	1
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer	2
YES if there is a TMDL for the drainage in which the unit is found)  Yes = 2 No = 0  Add the points in the boxes above	4
Total for R 3  Add the points in the boxes above  Rating of Value If score is: 2-4 = H1 = M0 = L  Record the rating on to	l l
nating of value if score is. 12-4-111-1910-1	ne just page

Rating of Value | If score is: 2-4 = H \_\_\_1 = M \_\_\_0 = L

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	
Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosio	n
R 4.0. Does the site have the potential to reduce flooding and erosion?	
R 4.1. Characteristics of the overbank storage the wetland provides:	4
Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the	
stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).	
If the ratio is more than 20 points = 9	
If the ratio is 10-20 points = 6	
If the ratio is 5-<10 points = 4	
If the ratio is 1-<5 points = 2	
If the ratio is < 1 points = 1	
R 4.2. Characteristics of plants that slow down water velocities during floods: <i>Treat large woody debris as forest or shrub. Choose the points appropriate for the best description (polygons need to have &gt;90% cover at person height. These are <u>NOT Cowardin</u> classes).</i>	7
Forest or shrub for $> \frac{1}{3}$ area OR emergent plants $> \frac{2}{3}$ area points = 7	
Forest or shrub for $> \frac{1}{10}$ area OR emergent plants $> \frac{1}{3}$ area points = 4	
Plants do not meet above criteria points = 0	4.4
Total for R 4 Add the points in the boxes above	11
Rating of Site Potential If score is: 12-16 = H	he first page
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
R 5.1. Is the stream or river adjacent to the wetland downcut?  Yes = 0 No = 1	0
R 5.2. Does the up-gradient watershed include a UGA or incorporated area? Yes = 1 No = 0	1
R 5.3. Is the up-gradient stream or river controlled by dams? Yes = $0 \text{ No} = 1$	0
Total for R 5 Add the points in the boxes above	1
Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L  Record the rating on to	he first page
R 6.0. Are the hydrologic functions provided by the site valuable to society?	
R 6.1. Distance to the nearest areas downstream that have flooding problems?  Choose the description that best fits the site.	0
The sub-basin immediately down-gradient of the wetland has flooding problems that result in damage to	
human or natural resources (e.g., houses or salmon redds) points = 2	
Surface flooding problems are in a sub-basin farther down-gradient points = 1	
No flooding problems anywhere downstream points = 0	
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2  No = 0	0
Total for R 6 Add the points in the boxes above	0
Rating of Value If score is:2-4 = H1 = M \ \times 0 = L \ Record the rating on the	

#### These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the 2 Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 \_Emergent 3 structures: points = 2 X Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 X Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: X \_\_The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods 2 Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 X \_Saturated only 1 type present: points = 0 X Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species 1 Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>. Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 H 1.4. Interspersion of habitats 2 Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

H 1.5. Special habitat features:	2
Check the habitat features that are present in the wetland. The number of checks is the number of points.	
$\frac{X}{X}$ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).	
Standing snags (dbh > 4 in) within the wetland	
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m)	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)  X Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree	
X Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered	
where wood is exposed)	
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are	
permanently or seasonally inundated (structures for egg-laying by amphibians)	
Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of	
strata)	
Total for H 1 Add the points in the boxes above	9
Rating of Site Potential If score is:15-18 = H	the first page
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).	0
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =%	
If total accessible habitat is:	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	
20-33% of 1 km Polygon points = 2	
10-19% of 1 km Polygon points = 1	
< 10% of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	0
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] =%	
Undisturbed habitat > 50% of Polygon points = 3	
Undisturbed habitat 10-50% and in 1-3 patches points = 2	
Undisturbed habitat 10-50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3. Land use intensity in 1 km Polygon: If	-2
> 50% of 1 km Polygon is high intensity land use points = (- 2)	
≤ 50% of 1 km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	-2
Rating of Landscape Potential If score is:4-6 = H1-3 = M<1 = L	he first page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	1
that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
<ul> <li>— It has 3 or more priority habitats within 100 m (see next page)</li> </ul>	
<ul> <li>It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</li> </ul>	
It is mapped as a location for an individual WDFW priority species	
— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources	
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a	
Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1	
Site does not meet any of the criteria above points = 0  Rating of Value If score is:2 = H	the first nage
Tracing of value if score is2 - ifv - i	ine jiisi puye

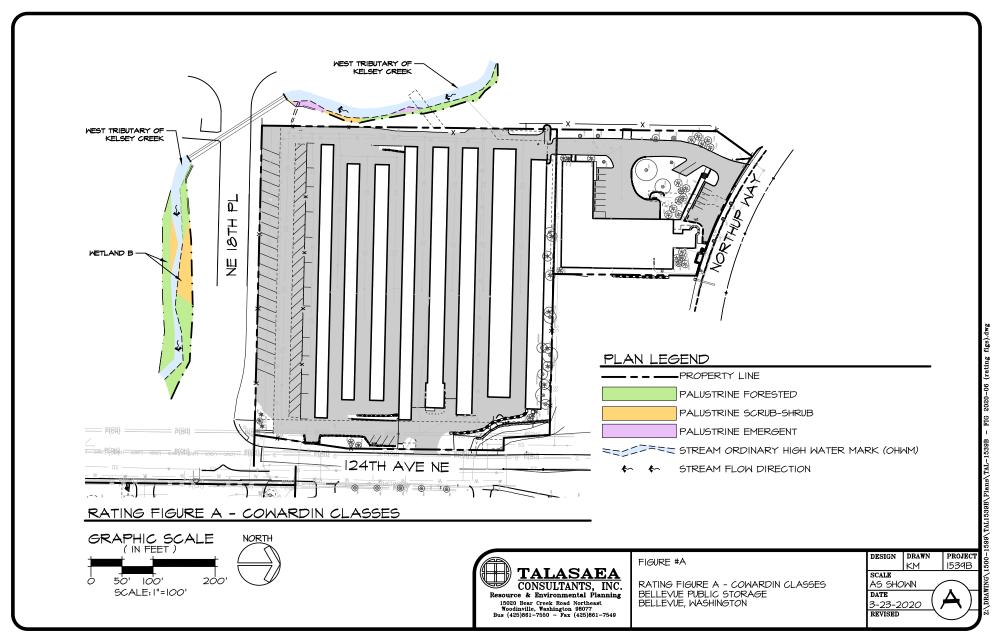
# **WDFW Priority Habitats**

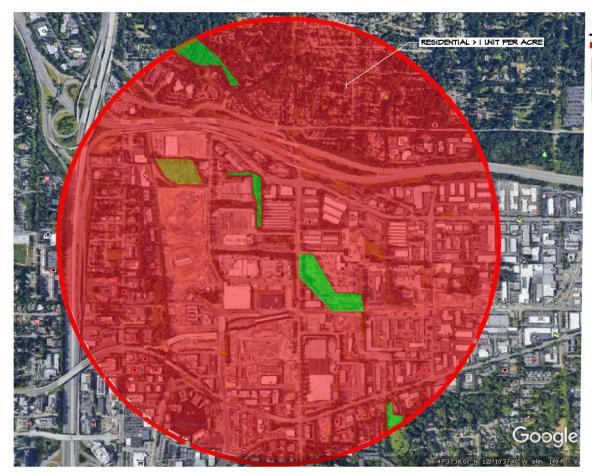
<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <a href="http://wdfw.wa.gov/publications/00165/wdfw00165.pdf">http://wdfw.wa.gov/publications/00165/wdfw00165.pdf</a> or access the list from here: <a href="http://wdfw.wa.gov/conservation/phs/list/">http://wdfw.wa.gov/conservation/phs/list/</a>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: *NOTE:* This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page*).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.





## PLAN LEGEND

I-KILOMETER POLYGON SURROUNDING WETLANDS

HIGH-INTENSITY LAND USE

MODERATE INTENSITY LAND USE

UNDISTURBED HABITAT

RATING FIGURE B - HABITAT MAP



15020 Bear Creek Road Northeast Woodinville, Washington 98077 Bus (425)861-7550 - Fax (425)861-7549

FIGURE #B

HABITAT MAP BELLEVUE PUBLIC STORAGE BELLEVUE, WASHINGTON

PROJECT 1534B DESIGN SCALE NTS DATE 3-23-2020 REVISED

## **APPENDIX C**

Full-Size Plan Sheets (24" by 36") Talasaea Consultants, 2020

Sheet W1.0 - Existing Conditions Plan

Sheet W2.0 - Proposed Site Plan, Impacts & Mitigation Plan

Sheet W3.0 - Detailed Planting Plan and Plant Schedule

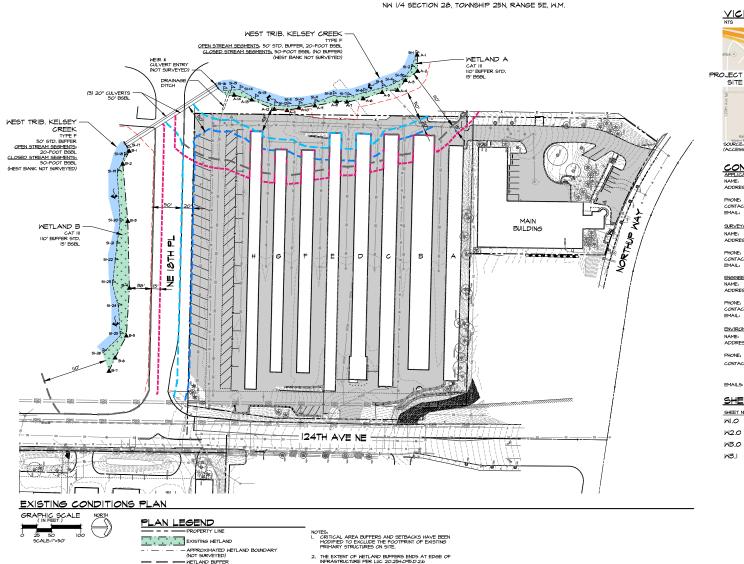
**Sheet W3.1 – Planting Specifications** 

**FELTING TURES** MITIONATION Ü

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Project #1539B

Sheet # MLO



SURVEYOR LANKTREE LAND SURVEYING, INC. NAME

ADDRESS: 255IO 74TH AVE S KENT, WA 98032 PHONE (253) 653-6423 xIOI CONTACT: TREVOR S. LANKTREE, PLS EMAIL tlanktree@lanktreeland.com

PUBLIC STORAGE 2200 E MCFADDEN AVE

bmiranda@publicstorage.com

SANTA ANA, GA 92705

(114) 338-1262 x3158 BRYAN MIRANDA

ENGINEER

EMAILS:

SITE

NAME: ADDRESS:

PHONE: CONTACT:

EMAIL:

NAVIX ENGINEERING II235 SE 6TH ST, SUITE I50 BELLEVUE, WA 48004 NAME: ADDRESS: PHONE: CONTACT: (425) 453-4501 JOE TAFLIN EMAIL: joe@navixena.com

ENVIRONMENTAL CONSULTANT

ADDRESS: 15020 BEAR CREEK RD. NE MOODINVILLE, WA 98077 HOODINVILLE, MA 980TT (425) 861-7550 ANN OLSEN, RLA, SENIOR PROJECT MANAGER KELLEN MALONEY, MPIT, WETLAND ECOLOGIST ACISENSTOLAGOEOLOM; KMaloney®Talasaea.com; CONTACT:

TALASAEA CONSULTANTS, INC.

#### SHEET INDEX

SHEET NUMBER	SHEET TITLE
WI.0	EXISTING CONDITIONS PLAN
W2.0	PROPOSED SITE PLAN, IMPACTS & MITIGATION
W3.0	DETAILED PLANTING PLAN & PLANT SCHEDULE
M3.I	PLANTING SPECIFICATIONS

(WETLAND) METLAND FLAG LOCATION

STREAM ORDINARY HIGH WATER MARK (OHAM) ~**>** STREAM FLOW DIRECTION

TOP OF BANK STREAM BUFFER /======= BUILDING SETBACK LINE (STREAM) STREAM OHAM FLAG LOCATION

- EXISTING CONTOUR EXISTING TREES WITH DRIP LINES LIC. 20 29H0/5/D.25

MERE A LEGALY ESTABLISHED RIGHT-OF-HAY
MERE A LEGALY ESTABLISHED RIGHT-OF-HAY
MERE A LEGALY ESTABLISHED RIGHT-OF-HAY
MERASTRUCTURE OF A LINEAR KNUTZE CROSSES A
METLAND CRITICAL AREA BIFFER, THE EDGE OF THE
MEROVED RIGHT-OF-HAY SHALL BE THE EXTENT OF
BIFFER ON THE OTHER DIDE OF THE RIGHT-OF-HAY
PROVIDES IN SHORM INCANT BIOLOGICAL OR
HYDROLOGICAL RIGHTON IN RELATION TO THE
PORTION OF THE BIFFER AD-MOST TO THE
PORTION OF THE BIFFER A

#### NOTES

- SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 25510 74TH AVE S, KENT, WA 48032, (253) 653-6423 xIOI. SITE PLAN PROVIDED BY NAVIX BITINEERING, II235 SE 6TH ST, SUITE ISO, PELLEVUE, WA

- 11239 SE 67H 5T, SUITE ISO, BELLEVIE, MA 480-04, (427) 453-450.1 SOURCE DRAWING IMAG MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENNANCEMENT. THIS FLAN IS AN ATTACHMENT TO THE CRITICAL AREAS REPORT PREPARED BY TALASAEA CONSULTANTS IN OCTOBER 2014.



Call before you dig.

MITIGATION PLAN AREAS DETAILED MI SITE PLAN, IMPACTS & PUBLIC STORAGE I, WASHINGTON CRITICAL A PROPOSED 8 BELLEVUE R BELLEVUE

SAEA VTS, INC.

ALA

EXISTING WETLAND BUFFER EXISTING BUILDING SETBACK LINE (METLAND) STREAM ORDINARY HIGH WATER MARK (OHWM) **~**≯ STREAM FLOW DIRECTION

EXISTING STREAM BUFFER EXISTING BUILDING SETBACK LINE (STREAM) POST-CONSTRUCTION CRITICAL AREA BUFFER EXISTING CONTOUR

¥ 0 EXISTING TREES

THE EXTENT OF WETLAND BUFFERS ENDS AT EDGE OF INFRASTRUCTURE PER LUC 20.25H.045.D.2.b

LIC 20 29HOSD 25 ABJUSTED RIGHT OF HAY, MERE A LEGALLY ESTAN OR OTHER BINDA. MERE A LEGALLY ESTAN OR OTHER BINDA. MERCATION OR OTHER BINDA. METANDA OTHER BINDA OTHER BINDA. METANDA OTHER BINDA OTHER BI

COMBINED WETLAND AND STREAM BUFFER IMPACTS	3,468 SF
WETLAND BUFFER IMPACTS	5,460 SF
TOTAL BUFFER IMPACTS:	8,928 SF
STRUCTURE SETBACK AREA IMPACTS	835 SF

#### MITIGATION LEGEND

TOTAL REESTABLISHED BUFFER AREA:	8,958 SF
REESTABLISHED WETLAND AND STREAM BUFFER	2,600 SF
REESTABLISHED WETLAND BUFFER	6,358 SF

#### NOTES.

- QTES

  SIRVEY FROVIDED BY LAIKTREE LAND
  SURVEYING INC., 22910 TATH ANE 9, KENT, WA
  60032, (2293) 635-6423 xid.
  SITE FLAN PROVIDED BY NAVIX ENTIRERING,
  1020-24, 643, 1032-650, on ELEVAC, WA
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Checked AC
Approved B5

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#### DETAILED PLANTING PLAN AND PLANT SCHEDULE

# GRAPHIC SCALE NORTH

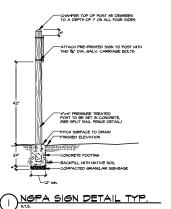
#### PLAN LEGEND

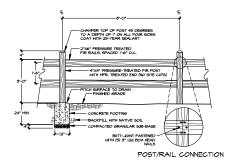
EXISTING METLAND \_\_\_\_\_APPROXIMATED WETLAND BOUNDARY
(NOT SURVEYED) STREAM ORDINARY HIGH WATER MARK (OHUM) **~\$** STREAM FLOW DIRECTION CHAIN LINK FENCE (SEE CIVIL PLANS)

NGPA SIGN AREAS ENCUMBERED BY UTILITIES (NO TREES WITHIN 5-FT OF UTILITIES)

#### PLANTING DENSITY TABLE

	TIBBETT'S CREEK WETLAND		
	REQUIRED DESIGNED		
AREA ENCUMBERED BY UTILITIES	4,49	⊃ 9F	
TREE PLANTING AREA	4,468 SF		
TOTAL PLANTED AREA	8,958 SF		
TREES 4' O.C.	54	54	
SHRUBS 6' O.C.	251	251	
GROUNDCOVER 2' O.C.	2,240	2,240	





NOTES.

I. PERCE TO ALIGN WITH LAND GRADIENT.

2. TREAT WITH CLEAR PRESERVATIVE UPON COMPLETION OF INSTALLATION.

ALI PASTEMERS SHALL BE GALVANIZED STEEL.

OPEN 2-BOARD FENCE DETAIL

#### PLANT SCHEDULE

TREES	
CAMPO	

INLLS			ML				
SYMBOL	SCIENTIFIC NAME	COMMON NAME	STATUS	QTY	SPACING	SIZE (MIN.)	NOTES
(*)	CORYLUS CORNUTA	WESTERN HAZELNUT	FACU	3	AS SHOWN	4-5' HT.	SINGLE TRUNK, WELL BRANCHED
$\bigcirc$ ( $\triangleright$ )	FRANGULA (RHAMNUS) PURSHIANA	CASCARA	FAC	8	9° 0.6.	4-5' HT.	SINGLE TRUNK, WELL BRANCHED
	PRUNUS EMARGINATA	BITTERCHERRY	FACU	8	9° 0.C.	5-6' HT.	SINGLE TRUNK, WELL BRANCHED
+	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	FACU	17	9' O.C.	4-5' HT.	B&B, FULL & BUSHY
P + 3	SORBUS SITCHENSIS	SITKA MOUNTAIN ASH	FAC	7	9° 0.6.	4-5' HT.	SINGLE TRUNK, WELL BRANCHED
	THUJA PLICATA	WESTERN RED CEDAR	FAC	11	9° O.C.	4-5' HT.	B&B, FULL & BUSHY
400	-	то	TAL TREES:	54	-		

		TOTAL LARG	SE SHRUBS:	43			
◉	SAMBUCUS RACEMOSA	RED ELDERBERRY	FACU	7	5' O.C.	24" HT.	MULTI-CANE (3 MIN.)
€	OEMLERIA GERASIFORMIS	INDIAN PLUM	FAU	34	5' O.C.	24" HT.	MULTI-CANE (3 MIN.)
0	HOLODISCUS DISCOLOR	OCEAN SPRAY	FACU	16	5' O.C.	24" HT.	MULTI-CANE (3 MIN.)
•	CORNUS SERICEA	RED OSIER DOGWOOD	FAC	27	AS SHOWN	24" HT.	MULTI-CANE (3 MIN.)
$\odot$	ACER CIRCINATUM	VINE MAPLE	FAC	9	9' O.C.	4' HT.	SINGLE TRUNK, WELL BRANCHED
SYMBOL	SCIENTIFIC NAME	COMMON NAME	ML STATUS	atr	SPACING	SIZE (MIN.)	NOTES

#### MASSING SHRUBS

LARGE SHRUBS

		TOTAL MASSIN	IG GHIRITING.	158			
$\ominus$	SYMPHORICARPOS ALBUS	COMMON SNOWBERRY	FACU	54	4' O.C.	I GAL.	MULTI-CANE (3 MIN.)
•	RUBUS PARVIFLORUS	THIMBLEBERRY	FACU	51	4' O.C.	I GAL.	FULL & BUSHY
0	ROSA NUTKANA	NOOTKA ROSE	FAC	53	4' O.C.	I GAL.	MULTI-CANE (3 MIN.)
SYMBOL	SCIENTIFIC NAME	COMMON NAME	STATUS	atr	SPACING	SIZE (MIN.)	NOTES

#### GROUND COVER

SYMBOL	SCIENTIFIC NAME	COMMON NAME	ML STATUS	atr	SPACING	SIZE (MIN.)	NOTES
NO SYMBOL	ARGTOSTAPHYLOS* UVA-URSI	KINNICKINNICK	FACU	1,916	24" O.C.	4" POT	FULL & BUSHY
NO SYMBOL	GAULTHERIA SHALLON®	SALAL	FACU	162	36" O.C.	I GAL.	FULL & BUSHY
NO SYMBOL	POLYSTICHUM MUNITUM®	SWORD FERN	FACU	162	36" O.C.	I GAL.	FULL & BUSHY

TOTAL GROUNDCOVERS: 2,240

<u>GROUNDCOVER DISTRIBUTION.</u>

1. SIX OF EITHER THE SWORD FERN OR SALAL IS TO BE PLANTED AROUND THE BASE OF EACH TREE.

2. KINNICKNINGK IS TO BE EVENLY DISTRIBUTED THROUGHOUT SHRUB PLANTINGS AND IN BARE AREAS

#### GENERAL PLANT INSTALLATION NOTES

- PLANT TREES AND/OR SHRUBS I" HIGHER THAN DEPTH GROWN AT NURSERY,
- FOR CONTAINER TREES AND/OR SHRUBS, SCORE FOUR SIDES OF ROOTBALL PRIOR TO PLANTING, BUTTERFLY ROOTBALL IF ROOT CIRCLING IS EVIDENT.
- STACE DECLOSION AND ENERGED TREES A FEET AND OVER IN RESIDENT HITH ORE (I) STACE THE TREE STACE THESE STACE DECLOSION AND ENERGE AND ARE STACE AT THE OUTRE ESSEE OF THE SCOTTO OR SOOTBALL IN LIKE HITH THE PREVAILING HIND. STACES SHALL BE LOSSELY ATTACHED ISSNO CHAIN-LOCK TREE TIES TO ALLOH FOR SOME TRIAN MOVIMENT.
- TREE STAKES TO BE VERTICAL, PARALLEL, EVEN-TOPPED, UNSCARRED AND DRIVEN INTO UNDISTURBED SUBGRADE, REMOVE AFTER ONE YEAR.
- APIEC ONE TEAK.

  APIEC ONE TEAK

  APIEC ON THE MEDITAL PROPRIATION, THEN PROVIDE MANUAL WATERING OR A TEMPORARY IRRIGATION STSTEM (IF
  SPECIFIED IN THE FLANTING SPECIFICATIONS) TO PREVENT PLANT MORTALITY AND INSIGHT PROVIDE PLANTE ESTABLISHMENT,
  FLANTS SHALL RECIEVE A HANNING OF PROPRIATELY ONE NACE OF HATER EVERY INSIGHT DISTABLES OF SEASON
  (GENERALLY JUE DITH OCTOBER SHI, OR EARLIES OR LATER IF CONDITIONS MARRANT) FOR THE FIRST SEASON AFTER
  FLANTING. RIRSANTON AMOUNTS WAY TEACH TO REVIEWED THE PROPRIED FOR THE FIRST SEASON AFTER
  FLANTING. RIRSANTON AMOUNTS WAY TEACH THE RIRSANTON FOR THE CHIEF OF THE PROPRIED OF HET, DEVELOPED THE PROPRIED OF THE PLANTING.

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  THE MEDITAL PROPRIED THE PROPRIED OF THE PROPRIED OF THE PROPRIED OF THE PROPRIED OF THE PLANTING THE PROPRIED OF THE PLANTING THE PLA
- FERTILIZE ALL TREES AND SHRUBS WITH A SLOW-RELEASE GENERAL PURPOSE GRANULAR FERTILIZER OR SLOW-RELEASE TABLETS AT MANUFACTURER'S SPECIFIED RATE.

#### NOTES

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- II239 SE 67H 5T, SUITE ISO, BELLEVIE, WA 480-04, (423) 453-450. SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENNANCEMENT. THIS PLAN IS AN ATTACHMENT TO THE CRITICAL AREAS REPORT PREPARED BY TALASAEA CONSULTANTS IN OCTOBER 2019.



#### I.I SEQUENCING

#### A. GENERAL CONSTRUCTION

- I. CONTRACTOR SHALL GIVE THE PROJECT BIOLOGIST OR ECOLOGIST A MINIMUM OF TEN (IO) DAYS NOTICE PRIOR TO COMMENCING CONSTRUCTION.
- NOTICE PRICE TO COMMENCE COMMENCE UNTIL THERE IS A MEETING BETWEEN THE CLIENT, THE PROJECT BIOLOGIST OR ECOLOGIST, THE GIBBERAL, CLEARING, AND/OR EARTHWORK CONTRACTORS, AND THE LANDSCAPE CONTRACTOR. THE APPROVED PLANS AND SPECIFICATIONS SHALL BE REVISIOED TO DISIDE THAT ALL PARTIES INVOLVED INDERSTAND THE INTERNIT AND THE SPECIFIC DETAILS RELATED TO THE CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE
- 3. LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED PROM AVAILABLE RECORDS AND SHOULD BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO, (I) INDEPENDENTLY YERIPY THE ACCURACY OF UTILITY LOCATIONS, AND (2) DISCOYER AND AVOID ANY UTILITIES WITHIN THE MITIGATION AREA(S) THAT ARE NOT SHOWN, BUT WHICH MAY BE AFFECTED BY IMPLEMENTATION OF THE PLAN SICH AREA(S) ARE TO BE CLEARLY MARKED FIELD. THE PROJECT BIOLOGIST OR ECOLORIST SHALL RESOLVE ANY CONFLICTS WITH THE APPROVED GRADING FLAN PRIOR TO START OF CONSTRUCTION.
- 4. A COPY OF THE APPROVED PLANS MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS AND SHALL REMAIN ON SITE UNTIL PROJECT COMPLETION.
- CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH ALL AGENCY STANDARDS, RULES, CODES, PERMIT CONDITIONS, AND/OR OTHER APPLICABLE ORDINANCES AND POLICIES.
- 6. THE PROJECT OWNER/APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER RELATED OR REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION.
- A QUALIFIED METLAND CONSULTANT SHALL BE ON SITE, AS NECESSARY, TO MONITOR CONSTRUCTION AND APPROVE MINOR REVISIONS TO THE PLAN.
- 8. DURING CONSTRUCTION, THE CONTRACTOR MUST USE MATERIALS AND CONSTRUCTION METHODS THAT PREVENT TOXIC SUBSTANCES AND OTHER POLLUTANTS FROM ENTERING MITIGATION AREAS OR OTHER NATURAL WATERS OF THE STATE.
- II. PREVENTATIVE MEASURES SHALL BE USED TO PROTECT EXISTING STORM DRAINAGE SYSTEMS, EXISTING UTILITIES, AND ROADS,
- IO. PROVIDE SEDIMENT AND EROSION CONTROLS AROUND THE PROJECT AREA PRIOR TO SOIL
  DISTURBANCE FROM CONSTRUCTION ACTIVITY.
- B. MTIGATION CONSTRUCTION THE FOLLOWING PROVIDES THE GENERAL SEQUENCE OF ACTIVITIES MATICIPATED TO BE INECESSARY TO COMPLETE THE FLANTING PORTION OF THE MITIGATION PROJECT, SOME OF THESE ACTIVITIES MAY BE CONDUCTED CONJURRENTLY AS THE PROJECT PROCESSING.
- PACONCIDED.

  1. CONDUCT A SITE MEETING BETHERN THE CONTRACTOR, THE FROJECT BIOLOGIST OR ECOLOGIST, AND THE OWNERS SERVESENTATIVE TO REVIEW THE PROJECT PLANS, STAGING/STOCKPILE AREAS, AND MATRIAL DISPOSAL AREAS, AS INDICATED ON INTIGATION PLANS,

  2. PLANT TREES AND SHRJES AS INDICATED ON INTIGATION PLANS,
- 3. MULCH INSTALLED PLANTS AND TREES.
- 4.INSTALL TEMPORARY IRRIGATION SYSTEM AND PROGRAM FOR 0.5 INCHES OF WATER EVERY 3
- 5. INSTALL FENCING AND CRITICAL AREA PROTECTION SIGNS.

- I.2 SUBMITTALS A PRODUCT DATA: FURNISH THE FOLLOWING WITH EACH PLANT MATERIAL DELIVERY:
- I. INVOICES INDICATING SIZES AND VARIETY OF PLANT MATERIAL.
- 2. CERTIFICATES OF INSPECTION REQUIRED BY STATE AND FEDERAL AGENCIES.

#### B. QUALITY CONTROL SUBMITTALS:

- MEET THE SPECIFIED REQUIREMENTS SHALL BE PARNISHED FOR THE FOLLOWING, PLANTS, TOPSOIL, PERTILIZER, AND ORGANIC MILCH. CERTIFIED COPIES OF THE MATERIAL CERTIFICATES SHALL INCLIDE THE FOLLOWING. PRIOR TO DELIVERY OF MATERIALS, CERTIFICATES OF COMPLIANCE ATTESTING THAT MATERIALS MEET THE SPECIFIED REQUIREMENTS SHALL BE FURNISHED FOR THE FOLLOWING: PLANTS, TOPSOIL,
- a.PLANT MATERIALS: BOTANICAL NAME, COMMON NAME, SIZE, QUANTITY BY SPECIES, AND
- SIMPORTED TOPSOIL: PARTICLE SIZE, PH, ORGANIC MATTER CONTENT, TEXTURAL CLASG, SOLUBLE SALTS, CHEMICAL AND MECHANICAL ANALYSES.
- c.FERTILIZER; CHEMICAL ANALYSIS AND PERCENT COMPOSITION. dIMPORTED MULCHI COMPOSITION AND SOURCE.

A <u>SIZE AND GRADING STANDARDS</u>, SHALL CONFORM TO THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE

#### 14 QUALITY ASSURANCE

- A <u>MORKER'S QUALIFICATIONS</u>. THE PERSONS PERFORMING THE FLANTING AND THEIR SUPERVISOR(S) SHALL BE PERSONALLY EXPERIENCED WITH PLANTING AND CARING FOR PLANT MATERIAL, AND SHALL HAVE BEEN RESULAST, PERPLOTED BY A COMPANY ENGAGED IN PLANTING AND CARING FOR PLANT MATERIAL FOR A MINIMUM OF 2 YEARS.
- B. PLANT MATERIAL. ALL PLANT MATERIALS SHALL BE LOCALLY GROWN OR REGIONALLY ACCLIMATIZED TO THE PACIFIC NORTHWEST.

#### I.5 DELIVERY, INSPECTION, STORAGE AND HANDLING

- A <u>DELIVERY.</u> A DELIVERY SCHEDULE SHALL BE PROVIDED AT LEAST to CALENDAR DAYS PRIOR TO THE FIRST DAY OF DELIVERY. FLANT MATERIALS SHALL BE DELIVERED TO THE JOB SITE NOT MORE THAN T MORKING DAYS PRIOR TO THEIR RESPECTIVE FLANTING DATES.
- BERZITICHOLOGINO DEL NEWY, FLANT MATERIAL SHALL BE PROTECTED DURING PELINERY TO PREVENT DESCARIOR AND DAMAGE TO THE BRANCES, TRIAN ROOT 915TEM OR EARTH BALL BEAUCHES SHALL BE PROTECTED BY TYRE-III. EXPOSED BRANCHES SHALL BE COVERED DURING TRANSPORT.
- C. <u>FERTILIZER</u>, FERTILIZER SHALL BE DELIVERED IN MANUFACTURER'S STANDARD SIZED BASS SHO! MEIGHT, ANALYSIS, AND MANUFACTURER'S NUMB. STOKE INDER A MATERPROOF COVER OR IN A DRY PLACE AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
- D. <u>INSPECTION</u>, ALL PLANT MATERIALS SHALL BE INSPECTED UPON ARRIVAL AT THE JOB SITE BY THE OWNER'S REPRESENTATIVE FOR CONFORMITY TO TYPE AND QUANTITY WITH REGARD TO THEIR
- E. MILCH: A MILCH SAMPLE SHALL BE INSPECTED BY THE PROJECT BIOLOGIST OR ECOLOGIST PRIOR TO THE MILCH BEING DELIVERED TO THE SITE.

#### F. STORAGE

- SIGRAGES I. PANT HATERIAL NOT NOTALLED ON THE DAY OF ARRIVAL AT THE SITE SHALL BE STORED AND PROTECTED IN DESIGNATED AREAS, BLAITS STORED ON THE PROJECT SITE SHALL BE REQUESTED FROM THE ACCORDING TO HEALTH SECONDS, MOST BLAITS OF CONTAINED A PROVIDE SITE SHALL BE REQUESTED FROM THE PROJECT BY CONTAINED AND SHALL BE REPORTED FROM THE STATE OF THE STATE SHALL BE REED-TH. CUTTINGS AND PROSENT FROM THE PROVIDE FROM TOTAL OF ALL THES AND SHALL BE RED-TH. WITH MOST SOLL OR OTHER REALATING MATERIAL, ALL PLANT MATERIAL, STORED ON-ATTE SHALL BE WITHERD A STATE.
- 2. STORAGE OF OTHER MATERIALS SHALL BE IN DESIGNATED AREAS.

#### I.6 SCHEDULING

- A <u>LAUTING EASON</u>. INSTALL MOODY PLANTS BETWEEN COTOBER I AND FEBRUARY IS WHENEVER THE TEMPERATURE IS ABOVE 32 DEGREES F AND THE SOIL IS IN A MORKABLE CONDITION, UNLESS OTHERWISE APPROVED IN WRITING, CUTTINGS SHALL ONLY BE USED IF PLANTING OCCURS BETWEEN DECEMBER IST AND APPLL IST.
- B. <u>PLANT INSTALLATION</u>. EXCEPT FOR CONTAINER-GROWN PLANT MATERIAL, THE MAXIMUM TIME BETWEEN THE DIGGING AND INSTALLATION OF PLANT MATERIAL. SHALL BE 21 DAYS. THE MAXIMUM THE BETWEEN PLANT INSTALLATION ARE MUCH PLACEMENT SHALL BE 12 FOURS.

- A. MARRANTY PERIOD. THE CONTRACTOR-PROVIDED WARRANTY SHALL EXTEND FOR A PERIOD OF ONE YEAR FROM THE DATE OF PHYSICAL COMPLETION, PHYSICAL COMPLETION FOR THE WORK OF THIS SECTION IS THE DATE WEN ALL GRADING, PLANTING, IRRIGATION, AND RELATED MORK HAS BEEN COMPLETED AND IS ACCEPTED BY THE OWNER'S REPRESENTATIVE, THE PROJECT BIOLOGIST OR ECOLOGIST, AND APPLICABLE AGENCIES.
- B WARRANTY TERMS. CONTRACTOR'S WARRANTY SHALL INCLUDE REPLACEMENT OF PLANTS DIF TO MORTALITY (SAME SIZE AND SPECIES SHOWN ON THE DRAWINGS). PLANTS REPLACED UNDER THIS WARRANTY SHALL BE WARRANTED FOR AN ADDITIONAL YEAR AFTER REPLACEMENT.
- C. EXCEPTIONS. LOSS DUE TO EXCESSIVELY SEVERE CLIMATOLOGICAL CONTINUES (SUBSTANTIATED BY IO-YEAR RECORDED MEATHER CHARTS), OR CASES OF NEGLECT BY OWNER, OR CASES OF

A. GENERAL, ALL PLANT MATERIAL WILL CONFORM TO THE VARIETIES SPECIFIED OR SHOWN IN THE PLANT LIST(S) INDICATED ON THE MITIGATION PLANS AND BE TIBLE TO BOTANICAL NAME AS LISTED IN. HITCHCOCK, CL., AND A. CROKAUST, 1175, PLOPA OF THE PACIFIC INCRITHERS. INVIRENTY OF

#### B. SHRUBS AND TREES.

- SABERS AND TRAINS.

  THE PROJECT BIOLOGIST OR ECOLOGIST SHALL EXAMINE PLANT MATERIAL PRIOR TO PLANTING, ANY MATERIAL INFORMATION FOR EXAMINED SHED PROJECT SHOULD BE IMPEDIATELY REPOLYED PROOF THE STEEL AND REPLACED HAIR LIKE MATERIAL HAIR THEST THE REQUIRED SHADARDS, PLANTING SHALL PEST THE REQUIRED SHADARDS, PLANTING SHALL PEST THE REQUIRED SHADARDS, PLANTING SHALL PASS THE REPOLY SHADARDS AND SHADARDS AN
- CENTRAL SHALL BE ARREST OF THE SHALL BE ARRES

- SHRUBS SHALL HAVE A MINIMUM OF THREE STEMS AND SHALL BE A MINIMUM HEIGHT OF IS INCHES TRIES AND SHRUBS SHALL HAVE DEVELOPED ROOT AND BRANCH SYSTEMS, DO NOT PRIME BRANCHES BEYORE DELIVERY.
- 8. PLANTS SHALL BE FREE OF SPLITS AND CHECKS, BARK ABRASIONS, AND DISFIGURING KNOTS 9. FOR DECIDIOUS PLANTS, BUDS SHALL BE INTACT AND REASONABLY CLOSED AT TIME OF
- O. BALLED AND BURLAPPED PLANTS SHALL HOLD A NATURAL BALL MANUFACTURED ROOT BALLS ARE UNACCEPTABLE.
- I, PLANTS SHALL CONFORM TO SIZES INDICATED ON THE PLANT SCHEDULE. PLANTS MAY BE LARGER THAN THE MINIMUM SIZES SPECIFIED.
- C. <u>NOXICUS SPECIES</u>, ALL PLANT STOCK AND OTHER RE-YESETATION MATERIALS SHALL BE FREE FROM THE SEED OR OTHER PLANT COMPONENTS OF ANY NOXICUS OR INVASIVE SPECIES, AS IDENTIFIED BY THE KINS COUNTY NOXICUS MEED CONTROL BOARD,
- D. <u>SUBSTITUTIONS</u>, SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST AND 20VAL FROM THE OWNER'S REPRESENTATIVE THE PROJECT BIOLOGIST OR ECOLOGIST, AND APPROVAL FROM THE O APPLICABLE AGENCIES.

- 22 TLANING SOL.

  A TERSOL: IF SUTABLE STOCKPILED NATIVE TOPSOL IS NOT AVAILABLE FOR MITIGATION PLANTINGS, TOPSOL SHALL BE OBTABED FROM CUTSING SOURCES, STOCKPILED OR PROPRIED TOPSOL SHALL BE PERTILE PRIANE, SHAPE LAND YEAR SHAPE SOL REPORTS OF SUBSOL, CLAY LIMPS, SINGH, REEDS, ROCTS, STIMPS, STORES LANGER THAN I INCH IN ANY DIMERSION, LITTER, OR ANY OTHER EXTRACTION OR TOXY.
- B. ORGANIC CONTENT: IMPORTED TOPSOIL SHALL CONSIST OF ORGANIC MATERIALS AMENDED AS ECESSARY TO PRODUCE A BULK ORGANIC CONTENT OF AT LEAST 10 PERCENT AND NOT GREATER THAN 20 PERCENT, AS DETERMINED BY AASHTO-T-194.
- C. COMPOST: COMPOST SHALL MEET THE DEFINITION FOR COMPOSTED MATERIALS AS DEFINED BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY.
- D. SOIL AMENDMENTS:
- D. SOLL AMERICANIS.

  DA FISHTILIZER (ANTHER) SHALL BE RETITUED HITH IS COMPELIDED STREAM.

  PARTICULAR CONTROLLANDS WITH ANY CONTROLLAND AS SECRETION DO PROMOTIVES.

  FISHTILIZER SHALL BE APPELID AFTER FLATTING PT 16 INJURY LLD THOUGH TO APPLICATION OF PLUCY PRETITUEZES SHALL DE RAPFILID DETEND NO PROMOTIVES HAND DE ROME PLUCY DE PRETITUEZE SHALL DE LAPFILIZE SHALL DE LAPFILID DETEND NO PROMOTIVES HAND DE MASCAL DO PROMOTIVE SHALL DE APPLIED HITH NETLAND ASSAL SHALL SHALL PROMOTIVES SHOWN OF THE ADMINISTRATION OF THE PROMOTIVES IN SHAPE CONTROLLANDS HAND ASSAL SHALL BE APPLIED HITHIN PLETAMOR ASSAL.

#### 2.3 MULCH

- . BARK OR MOODCHIP MILCH SHALL BIE DERIVED FROM DOUBLAS FIR, PINE, OR HEMLOCK SPECIES. THE MILCH SHALL NOT CONTAIN RESIN, TANINI, OR OTHER COMPOLIDS IN QUANTITIES THAT MULD DETRIMENTAL TO ANIMAL, PLANT LIFE, OR HAVER GUALLT'S SHAUL NOT BE USED AS MILCH.
- B. MILCH SHALL BE MEDIUM-COARSE GROUND WITH AN APPROXIMATELY 3-INCH MINUS PARTICLE SIZE. FINE PARTICLES SHALL BE MINIMIZED SO THAT NOT MORE THAN 30%, BY LOOSE VOLLME, NILL PASS THROUGH A US NO. 4 SEVEN.

#### 2.4 MISCELLANFOUS MATERIALS

- A. <u>STAKES, DEADMEN AND BUT STAKES,</u> SOUND, DURABLE, WESTERN RED CEDAR, OR OTHER APPROVED WOOD, FREE OF INSECT OR FUNGUS INFESTATION.
- B. CHAIN-LOCK TREE TIES: V-INCH WIDE, PLASTIC.

- A. PLANTING AREA CONDITIONS: CONTRACTOR SHALL VERIFY THAT PLANT INSTALLATION CONDITIONS ENAMEM AREA\_COMMINES. CONTRACTOR SHALL VERIFY THAT PLANT INSTALLATION COMMINE ARE SUITABLE SHANNIN THE PROJECT FAREAS. ANY INDAFFACTORY CONTRINES SHALL BE CORRECTED FROM TO SHAN OF HOME, HER LOCATIONS DETERMINED THAT OF LANT REGIONS OF HER LOCATION OF THE PROPERTY OF THE PROPERTY OF THE PROJECT OF THE PROPERTY OF THE PROJECT OF HER LOCATION OF THE PROJECT OF HOME AND THE PROPERTY OF THE PROJECT OF HOME AND THE PROPERTY OF THE PROJECT OF
- B. PLANTING IN INDISTRIBED, DAYS SEASOE A REAS. PLANTS INSTALLED IN INDISTRIBED AREAS SHALL BE INTERRATED WITH EXISTING NATIVE VERETATION AND PLANTED IN A RANDOM, NATIRALISTIC PATTERN, PRIOR TO INSTALLATION OF PLANTINGS, ALL CONSTRUCTION DEBRIS, TRAGH, AND INDIVIDUALITY BINASIVE PLANT MATERIAL SHALL BE REVOYED FROM THE PROJECT AREA. IN KOR-KANIVE INVASIVE FLAM MEDIAL SHALL BE REPOVED FROM HE PROJECT AREA. IN NON-GRADED AREAS, TREES AND SHRUBS SHALL BE INT PLANTED AS SHOWN IN TYPICAL PLANTING DETAILS, PLANTING PITS SHALL BE BACKFILLED WITH A 50/50 MIXTURE OF IMPORTED, WEED-FREE TOPSOIL AND THE SOIL FROM THE FLANTING PIT.
- C. PLANTING IN GRADED AREAS, IN GRADED PLANTING AREAS PLANTS SHALL BE INSTALLED IN NEWLY PLACED TOPSOIL.
- D. <u>SOIL DECOMPACTIONS CARIFICATION.</u> SOILS IN GRADED/DISTURBED AREAS THAT ARE COMPAC AND INSUITABLE FOR PROPER PLANT GROWTH SHALL BE DECOMPACTED AND/OR SCARIFIED TO MINIMAM DEPTH OF 64 <u>PSIOR</u> TO TOPSOIL INSTALLATION.

#### 32 PLANTING

- A. B.AMI LAVOUT, PROPOSED LOCATIONS OF TREES AND SHRIBS SHALL BE STAKED AND IDENTIFIED NITH AN APPROVED CODING SYSTEM OR BY PLACEMENT OF THE ACTUAL PLANT MATERIAL. FOR LARGE GROUPINGS OF A SINGLE SPECIES OF SHRIB, LANDSCAPE CONTRACTOR MAY STAKE THE PLANTING BOUNDARIES.
- B. OBTAIN LAYOUT APPROVAL FROM THE PROJECT BIOLOGIST OR ECOLOGIST PRIOR TO EXCAVATION
- C. PLANTING PIT DIMENSIONS
- A PIT DEPTH NOT TO EXCEED THE ROOT BALL OR CONTAINER DEPTH.

  4. PIT HOTH MEASURED AT THE SECOND SURFACE, 2 TIMES THE HIDTH OF THE ROOT BALL OR CONTAINER, AS INDICATED IN TYPICAL PLANTING DETAILS.
- a.BARE-ROOT PLANTS: DIAMETER EQUAL TO THE WIDTH OF THE ROOT SPREAD

#### SETTING PLANTS

- I BALLED PLANTS, SET PLANTS IN POSITION AND BACKFILL I/2 DEPTH OF BALL, COMPLETELY REMOVE CASE AND TRIME FROM PLANT AND PLLI BIRLAP DOWN AS FAR AS POSSIBLE. COMPLETE BACKFILL AND SETTLE WITH MATER, ROOT COLLAR SHALL REMAIN I INCH ABOVE
- 2. BARE-ROOT PLANTS, PRINE BRUISED OR BROKEN ROOTS, SET PLANT IN POSITION AND PLACE INTERPRETARY PLANTING SOIL AROUND ROOTS, USE CARE TO AVOID BRUISING OR BREAKING ROOTS WHEN PRIMING SOIL. SETTLE WITH WATERS.
- WHEN FIRMING SOIL SETTLE WITH MATEK.

  SPREMERTER FLANTING. SHRUB AND TREE STOCK SHALL BE PLANTED IN HAND-DUG HOLES

  ACCORDING TO PLANTING DETAILS SHOWN ON THE MITIGATION PLANS, SHRUB AND TREE ROC

  BALLS SHALL BE SET SO THAT ROOT COLLARS ARE I NCH ABOVE ADJACHIT GRADE. ALL

  BACKFILL SHALL BE GENTLY TAMPED IN PLACE.
- 4. SURFACE FINISH, FORM A SAUCER AS INDICATED ON TYPICAL PLANTING DETAILS, OR AS DIRECTED, GRADE SOIL TO FORM A BASIN ON THE LONER SIDE OF SLOPE PLANTINGS TO AND RETAIN WATER
- 5. IN FORESTED AREAS, CONTRACTOR SHALL LOOSELY TIE A 2 FOOT PIECE OF BIODESRADABLE ING TO THE TOP PORTION OF ALL PLANTED VEGETATION, BUT NOT ON A CENTRAL LEADER TO FACILITATE POST-CONSTRUCTION PERFORMANCE AND MAINTENANCE REVIEW BY THE PROJECT BIOLOGIST OR ECOLOGIST AND REGULATORY AGENCIES.
- ACTUAL PLANT SYMBOL QUANTITIES SHOWN ON THE PLANS SHALL PREVAIL OVER QUANTITIES SHOWN ON THE PLANT SCHEDULE IN THE EVENT OF A DISCREPANCY.

#### E. MULCHING:

- SECURION OF THE PROPERTY AND ALL HONORD PAPER AREA. SPECIALLY PLACED OF THE PAPER AND ALL HONORD PAPER AREA. SPECIAL PLACED OF THE PAPER AREA. SPECIAL PLACED OF THE PAPER AREA. SPECIAL PLACED OF THE HARM SPECIAL PLACED OF THE PAREA. SPECIAL PRINCIPLE AND A 24-HARM PAPER A HARM DEEP HALM SPECIAL PRINCIPLE PAREA PRINCIPLE PAREA. PLACED OF THE PAREA PAREA
- 2 WATER PLANTS THOROUGHLY AFTER MULCHING. P. PRINING. PRINE IMMEDIATELY AFTER PLANTING ONLY AS DIRECTED BY THE PROJECT BIOLOGIST OR
- ONTEL STATES AND TIES, STATE DECIDIOUS AND EVEROREEN TREES 4 PEET OR OVER IN HEIGHT WITH CAR (I) STAKE PER TREE, STAKE TREES INHEDIATELY AFTER PLANTING. PLACE STAKE AT THE OUTER EDGE OF THE ROOTS OR BALL, IN LINE WITH THE PREVAILING WIND, AND AT A 10 DEGREE ANGLE PROMISE THE TREE TRANS. LOOSELT ATTACH STAKE TO TREE USING CHARLOCK TIES, TREE

#### INSTALLING TEMPORARY IRRIGATION

- <u>ISSTALL ING TEMPORARY INSIGNATION</u>
  1. GERBRAL REGINERATION, CONTRACTOR SHALL PROVIDE AN ABOVE-GROUND TEMPORARY INRIGATION SYSTEM CAPABLE OF IPLL HEAD-TO-HEAD COVERAGE OF ALL PLANTED PROJECT AREAS. THE TEMPORARY INRIGATION SYSTEM SHALL INTERMITTIEZ CONTROLLER AND POINT OF CONNECTION PROCI FROM THE SHE INRIGATION SYSTEM OR SHALL INCLIDE A SEPARATE FOR AN CONTROLLER WITH A BACKFLON PREVIOUND SYSTEM OR SHALL INCLIDE A SEPARATE FOR AN CONTROLLER WITH A BACKFLON PREVIOUND SYSTEM OF THE NATE. A PROSIDIOTION INSPECTION AND CONTROLLER WITH A BLOCKET ON THE VERTICAL TRUTCH FIRST WATER LIBERACTION INSPECTION AND CONTROLLER WITH A BLOCKET ON THE VERTICAL TRUTCH AND CONTROLLER AND THE VERTICAL OF SEPARATION BETWEEN ARREST OF THE U.S. ON MOS WHICH AND FOR SUCHED IN BLOCKET OF THE VERTICAL PROPERTY OF THE VERTICAL PROPER
- THE PERFORMANCE MONITORINE PERIOD.

  2. STISTED CEREMAND PARTISHAD, ELECTRONIC VALVES SHALL BET THE SAME MANEACTRISER AS THOSE VED FOR THE STITE PRICATOR OF SHALL BET AND REFO PER SERVED OF ELOCATION. THE STISTED HAS TO CACCIONADOR. THE STISTED HAS TO CACCIONADOR. THE STISTED HAS TO CACCIONADOR. THE STISTED HAS THE STALED PRICATOR OF THE STISTED HAS SHALL BE VED ACCIONADOR. THE STISTED HAD SHALL BE INSTALLED REPORT OF CACCIONADOR. THE STISTED HAD SHALL BE ACCIONADOR. THE STISTED HAS THE SHALL BE CACCIONADOR. THE STISTED HAS THE SHALL BE CALVED A CACCIONADOR. THE STISTED HAS THE CACCIONADOR. THE STISTED HAS THE STISTED HAS THE CACCIONADOR. THE STISTED HAS THE STIRLED HAS THE CACCIONADOR. THE STISTED HAS THE STIRLED HAS THE CACCIONADOR. THE STIRLED HAS THE ST
- SECOND PROVIDE THE PROVIDE MATCHED PRECIFICATION RATES FOR EACH ZONE
  SECOND REPORT REPORT AND THE PROVIDE SECOND REPORT OF THE PROJECT SECOND REPORT OF THE PROJE

- 4. MATER AND POWER SUPPLY FOR SYSTEM. THE OWNER SHALL PROVIDE WATER AND ELECTRICITY FOR THE SYSTEM.
- AS-BUILT DRAWING. A CHART DESCRIBING THE LOCATION OF ALL INSTALLED OR OPEN ZONES AND CORRESPONDING CONTROLLER NUMBERS SHALL BE PROVIDED BY THE CONTRACTOR AND PLACED INSIDE THE CONTROLLER AND GIVEN TO THE CONNER'S REPRESENTATIVE.
- MACAD HOUSE HE CONTROLLER AND GYEN TO HE OWNERS REPRESENTATIVE AS AND ADMINISTRATION OF THE REPRESENTATION STATES AND HORSELF AND HORSELF AND HORSELF ACTION AND HORSELF ACTION AND HORSELF AND HORSELF ACTIVATION AND HISTORICATION FOR THE FIRST YEAR AND IMPEDIATE REPAIR OF THE SYSTEM FIT IS OBSERVED TO BE MALFACTIONING.
- CRITICAL AREAS FENCE AND SIGNS: INSTALL CRITICAL AREAS FENCE AND CRITICAL AREAS SIGNS

#### C. RESTORE EXISTING NATURAL OR LANDSCAPED AREAS.

- . EXISTING NATURAL OR LANDSCAPED AREAS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, UNLESS IMPROVEMENTS OR MODIFICATIONS ARE SPECIFIED FOR THOSE AREAS.
- SPECIFIED FOR THOSE AREAS.

  2. CONTRACTOR SHALL EXERCISE CARE TO PREVENT INJERY TO THE TRIMS, ROOTS, OR BRANCHES OF MAY TREES OR SHARBS THAT ARE TO REHAIN, ANY LIVING, NOOTY FLANT THAT IS DAMAGED DIRING CONSTRUCTION SHALL BE TREATED WHITH A SCHOOL OF CAREAS OF OCCURRENCE, AND THE PROJECT BIOLOGIST OR ECCLOSIST SHALL BE NOTIFIED IMPEDIATELY OF THE INCEDENT, DAMAGED TREATED THAT LIVING EVENT, CUTTING BOXICES REACHES, BROKEN ROOTS, AND DAMAGED TIREE BACK, INJERD PLANTS SHALL BE THOROGIST, HATERDED AND ADDITIONAL HEASINESS SHALL BE TAKEN AS APPROXIMENT OR DATE OF THE SHARPS.
- SHALL BE TAKEN, AS APPROPRIATE, TO AD IN IN PLATF SWKYNAL.

  IELM. NEETEGINE AS APPROVAL. THE CONTRACTOR SHALL NOTIFY THE FINDLECT BIOLOGIST OR

  ECOLOGIST IN RETURN A LIBERAT THE NOATS HIGHOR TO THE REQUESTED DATE OF A PROJECTED BY

  THE PROJECT BIOLOGIST OR ECOLOGIST AND SIGNATURE TO THE CONTRACTOR FOR CONTRICTED BY

  THE PROJECT BIOLOGIST OR ECOLOGIST AND SIGNATURE TO THE CONTRACTOR FOR CONTRICTED

  AFTER RINCH LIST TIRSH HAVE BEEN COMPLETED, THE PROJECT BIOLOGIST OR ECOLOGIST SWALL

  REVIEW IN THE PROJECT AMAIN FOR THAN ACCEPTIANCE OF EARL WINED-BESTAND, IF PRACELLIST

  TIRSH SEQURE FLAMT REPLACEMENT, AND THE INPECTION OCCURS OUTSIDE OF A SWITABLE

  THE STATE OF THE PROJECT OF THE STATE OF THE PROJECT OF THE SWALL AND THE SWALL FRAME HISTORY OF THE SWALL FRAME HISTORY OF
- PLANTING SEASON, PLANTS SHALL BE RETLACED DIRAGO THE REXT PLANTING SEASON.

  A <u>A SHALL FLAN</u> ACONTRACTOR IS REPOSSIBLE FOR VERPING BE AND LOCATION AND QUANTITIES ON THE PLANT SCHEDULE HITH THOSE REPRESENTED AS STYDOLO ON THE MITIGATION PLANS. CONTRACTOR SHALL REPR A CONTRELET SET OF PRINTS AT THE JUDG SHED DURING CORRISTACTION FOR THE PREPOSE OF RECORDING IN-THE-FIELD CHANNESS OR MODIFICATIONS TO THE APPROVED PLANS. THIS INFORMATION SHALL BUT AND THE APPROVED PLANS. THIS INFORMATION SHALL BUT PLANT THE SHEET SHALL PROMISED AND EXCESSIONS.

MODE, THESE HANTENANCE SPECIFICATIONS APPLY TO THE ONE-YEAR CONTRACTOR MARRANTY PERIOD OILY, IF THIS INTEGRATOR PROJECT REQUIRES LONG-TERN PERFORMANCE MONITORING, AS DETERMINED BY THE GOVERNING, ASSOCIATION AND MODELLINES ASSOCIATION AND MODELLINES ASSOCIATED WITH THE GOVERNING ASSOCIATION AND MODELLINES ASSOCIATION WITH CONTRACT AND ASSOCIATION AND MODELLINES ASSOCIATION WITH THE REPORT ASSOCIATION HIT THE PROPERMANCE MONITORING STANDARDS ARE INCLIDED IN THE HITHORITOR ASSOCIATION ASSOCIATION

- A <u>SEVIER OF MAINTENANCE REQUIREMENTS.</u> CONTRACTOR SHALL REVIEW LANDSCAPE MAINTENANCE RECOMMENDATIONS WITH A QUALIFIED METLAND BIOLOGIST IRON THE PROJECT BIOLOGIST OF ECOLOGIST WHO IS FAMILIAR WITH THE STATED SCALE, AND OBJECTIVES OF THE PROJECT FLAN.
- B. MAINTENANCE ACTIVITIES. CONTRACTOR SHALL MAINTAIN TREES AND SHRIBS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE IN ORDER TO MAINTAIN HEALTHY GROWTH AND HABITAT DUPRESTLY, MAINTAINENANCE ACTIVITIES SHALL INCLUDE, BUT ARE NOT LIMITED TO. (A) REPLACING PLANTS DUE TO MORTALITY, (B) TIGHTENING AND REPAIRING TREE STAKES, (C)
  RESETTING PLANTS TO PROPER GRADES AND UPRIGHT POSITIONS, AND (D) CORRECTING DRAINAGE
  PROPLEMS AS PEOURED.

#### G. IRRIGATION:

- IS SYSTEM MANTENANCE AND REPARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACTIVATINS, INITIENZING, MAINTAINING, AND CONTINUALLY VERIFYING THE ADEQUATE OPERATION OF THE TEMPORARY IRRIGATION SYSTEM FOR THE FIRST SECONING SEASON FOLLOWING INSTALLATION. TEMPORARY PROBATION SYSTEM FOR THE FIRST SERVINGS SEASON FOLLOWING INSTALLATION SYSTEM PRINCIPLO (INCLIDING BLEEDINGO VALVE AND CONTROLLER PRINCIPLOM SHALL BE INSPECTED FOR OPERATION ARD FILL COMPANSE OF ALL PLANTED AREAS DERING EACH WANTENAMES WITH, THE SYSTEM SHALL BE REPARKED PREPARTALY IF FORD TO BE DAMAGED OR MALENCHANNO, SYSTEM SHALL BE PROGRESSIVED AND MAINTAINED TO PROVIDE APPROXIMATELY. IN NOTIFY FAIRER SHAPET THESE DATA.
- D. <u>STAKE AND THE REMOVAL.</u> CONTRACTOR SHALL REMOVE TREE STAKES AND THES ONE YEAR AFTER INSTALLATION, INLESS RECEIVING WRITTEN FERMISSION FROM THE PROJECT BIOLOGIST OR ECOLOGIST TO DELAY REMOVAL OF STAKES AND THES
- E. <u>BROSION AND DRAINAGE.</u> CONTRACTOR SHALL CORRECT EROSION AND DRAINAGE PROBLEMS AS BEQUIRED.
- F. IRRIGATION SYSTEM REMOVAL. CONTRACTOR SHALL REMOVE IRRIGATION SYSTEM APPROXIMATELY 5 YEARS AFTER PLANTING, OR AS APPROVED BY THE PROJECT BIOLOGIST OR ECOLOGIST.
- 6. PM. MAINTENANCE INSECTION AND APPROVAL, INFO COMPLETION OF THE MESTAPPARAMENT OF THE

#### NOTES

Know what's below.

- SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 25510 74TH AVE 5, KENT, WA 48/032, (253) 653-6423 xIOI. SITE PLAN PROVIDED BY NAVIX BITINEERING, II235 SE 6TH ST, SUITE ISO, BELLEVUE, WA
- 11259 SE OFF ST, SUITE 190, DELLEVILE, M 48004, (425) 453-4501, SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT. THIS PLAN IS AN ATTACHMENT TO THE CRITICAL AREAS REPORT PREPARED BY TALASAEA CONSULTANTS IN OCTOBER 2014.

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Project #1539B

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COMMENTS
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23,109 SF (0.53 ACRES) 28,083 SF (0.61 ACRES)

8,958 SF (0.2) ACRES)

(1.38 ACRES)

702 SF

GENERAL REDEVELOPMENT LANDSCAPE

TOTAL OPEN SPACE

EXISTING LANDSCAPE

RIGHT OF WAY LANDSCAPE

CRITICAL AREA

- - PROPERTY LINE

EXISTING WETLAND

※ ◎

PROJECT LIMIT

- × ---- CHAIN LINK FENCE PROPOSED 2 RAIL WOOD FENCE

. \_\_\_ APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)

(NOT SURVEYED)

STREAM ORDINARY HIGH WATER MARK (OHWM)

EXISTING TREES (DECIDUOUS/CONIFER)



#### CONTACTS

PUBLIC STORAGE NAME: 2200 E MCFADDEN AVE SANTA ANA, CA 92705 PHONE: (TI4) 388-1262 X3158 BRYAN MIRANDA

CONTACT: EMAIL: SURVEYOR

NAME: LANKTREE LAND SURVEYING, INC. ADDRESS: 25510 74TH AVE 5 KENT WA 98032 PHONE: CONTACT: (253) 653-6423 XIOI TREVOR S. LANKTREE, PLS

TLANKTREE@LANKTREELAND.COM

ENGINEER

EMAIL:

NAVIX ENGINEERING II235 SE 6TH ST, SUITE I50 NAME: ADDRESS: BELLEVUE, WA 98004 PHONE: (425) 453-4501

CONTACT: JOE TAFLIN EMAIL: JOE@NAVIXEI LANDSCAPE ARCHITECT

NAME: TALASAEA CONSULTANTS, INC. ADDRESS: 15020 BEAR CREEK RD. NE WOODINVILLE, WA 980TT (425) 861-7550 EVA PARKER, PLA

SENIOR PROJECT MANAGER EPARKER@TALASAEA.COM

## SHEET INDEX

NUMBER SHEET TITLE PROPOSED SITE PLAN OVERVIEW & OPEN SPACE PLAN LI.O LH TREE PROTECTION PLAN L2.0 PERIMETER LANDSCAPE PLAN L3.0

PLANTING PLAN PLANTING PLAN LSI L3.2 PLANTING PLAN

PLANT SCHEDULE, DETAILS AND NOTES 1.33

L4.0 PLANTING SPECIFICATIONS STRUCTURAL SOIL SPECIFICATIONS & DETAIL L4.I

IRRIGATION SPECIFICATIONS IRI.O



#### **NOTES**



THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL UNITL APPROVED, THESE PLANS ARE: SUBJECT TO REVISION



SURVEY PROVIDED BY LANCTREE LAND SURVEYING INC. 295/0 141H AVE 5, KENT, IAA 49:032, (293) STEP PLAN FROOVDED BY NAVEL BROINERION, (1235 SE 61H 5T, SUITE ISO, BELLEWIE IVA 49:004, (425) 459-4501.
SOURCE DRAWING WAS MODIFIED BY TALASAEA CORSULTAINS FOR VISIAL BHANCEPIENT.

NOT FOR CONSTRUCTION

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PLAN

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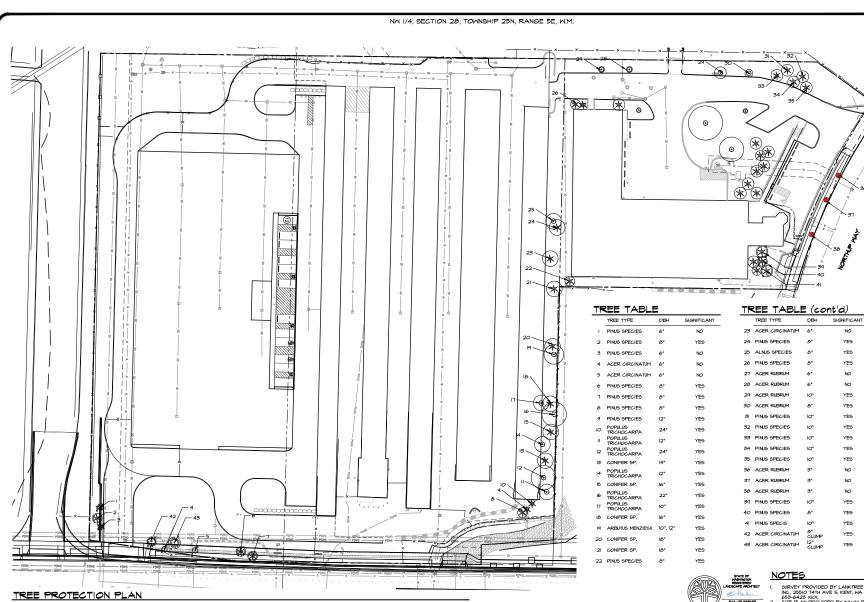
SAEA VTS, INC.

TALASS CONSULTANTS Ce & Environmental

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LANDSCAPE PROPOSED S BELLEVUE F BELLEVUE, V

Date |Q-|5-20|4 Scale AS NOTED Designed EP Drawn EH Checked AO Approved BS Project # 1539B



PLAN LEGEND

@ <u>W</u> ※ ⊚

(8)

PROPERTY LINE

EXISTING TREES (DECIDIOUS/CONIFER) WITH FENCE PROTECTION EXISTING TREES (DECIDIOUS/CONIFER) NOT REQUIRING PROTECTION

EXISTING TREES TO BE REMOVED NOTE:
ALL TREES SURVEYED WITH EXCEPTION OF NORTHUP STREET
TRIES ARE DEING RETAINED.
SOINE TREES ARE NOT REGUIRING TREE PROTECTION BECAUSE
THERE IS TO BE NO ACTUAL DEVELOPMENT IN THEIR VICINITY

SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC. 28950 741H AVE 5, KENT, IAA 46,052, (285) SITE PLAN FROOVIDED BY NAVE BENEFIELDS, (125 SE 61H 5T, SUITE ISO, BELLEVUE, IAA 46,004, (425) 459-450.
SOURCE PRANKING WAS MODIFIED BY TALASAEA CORBULTAINS FOR VISUAL BHANKEPIENT.

YES

YE5

NO

YES

YES

YES

YES

YES

YES

YES

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YES



THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL LIMIT APPROVED, THESE PLANS ARE: SUBJECT TO REVISION

NOT FOR CONSTRUCTION

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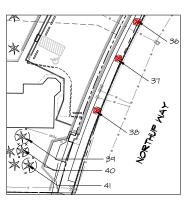
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LANDSCAPE 1 TREE PROTECT BELLEVUE PUE BELLEVUE, WA

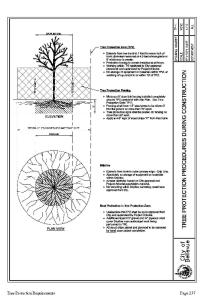
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Project #1539B



#### TREE PROTECTION PLAN





PLAN LEGEND - PROPERTY LINE

TREE TABLE TREE TYPE

PINUS SPECIES

4 ACER CIRCINATUM

38 ACER RUBRUM

39 PINUS SPECIES 40 PINUS SPECIES

41 PINUS SPECIES

42 AGER GIRGINATUM 8" CLUMP

43 ACER CIRCINATUM 12" CLUMP

DBI

GIGNIEIC ANT

NO YES

NO

YES

YES



EXISTING TREES (DECIDIOUS/CONIFER) WITH FENCE PROTECTION EXISTING TREES TO BE REMOVED

#### TREE PROTECTION NOTES TREE PRESERVATION NOTES:

- EACH TREE HILL HAVE A TREE PROTECTION ZONE COVERING AN AREA EQUIVALENT TO A RADIUS OF US FEET FOR EVERY INCH OF TREE SIZE
- (DIAMETER AT 4-6" HEIGHT), OR 6 FEET, PHICHEVER IS GREATER.
  STAKE AND/OR FLAG CLEARING LIMITS AND TREE PROTECTION TO BE VERIFIED AND APPROVED BY THE CITY'S CLEARING AND GRADING INSPECTION AT THE REGULIERS PRECONSTRUCTION MEETING.
- INSPECTOR AT THE REQUIRED PRECONSTRUCTION MEETING.
  A 6 INCH LATER OF CLORES THE PROTECTED TREES, MILCH IS
  TO BE REPT 12 INCHES FROM THE TROOT SHALL OCCUR UNDER THE DIRECTION OF THE PROTECTED TREES, MILCH IS
  TO BE REPT 12 INCHES FROM THE TIRROT.

  PRINING OF ENSITING LIMPS AND ROUS.

- FRUNING OF EXISTING LIMBG AND ROOTS SHALL OCCUR INDER THE DIRECTION OF THE PROJECT ARBORIST.

  TREE PROTECTION FENCING SHALL BE 6 FEET FIGHT CHAIN LINK MOUNTED ON THO INCUR DIAMETER METAL POSTS, DRIVEN INTO THE GROUND TO A
  DEPTH OF AT LEAST 2-FEET AT NO MORE THAN 10 FOOT SHACING.

  TREE PROJECTION FENCING WISE DE RECCIPED PROKEN TO ANY CLEARING, GRADING OR DIRECTION, AND MAY CHLY BE MOVED OR ADJUSTED

  TREE PROJECTION FENCING WISE DRIVEN TO THE CLEARING AND GRADING INSPECTOR AND THE PROJECT ARBORIST

  THAN 2 FEET FROM THE TRUNK OF ANY TREE.

  MOVABLE BRANERS OF CHAIN LINK FENCING SECURED TO CHENT BLOCKS MAY BE SUBSTITUTED FOR INSEC PECKING IF THE PROJECT ARBORIST

  AND CITY STAFF AGREET THAT THE FENCING HILL HAVE TO BE MOVED TO ACCOMPOSATE CERTAIN PHASES OF CONSTRUCTION, THE BUILDER MAY

  FET PROPAGET, ACCESS INTO THE PREFER PROTECTION TARE IS, APPROVABLE ARBORISTAND AND CITY AND CONSTRUCTION.
- IF TEMPORARY ACCESS INTO THE TREE PROTECTION ZONE IS APPROVED, AN ADDITIONAL 3 INCH LAYER OF GRAVEL AND 3/4 INCH PLYWOOD SHALL BE PLACED OVER THE CRITICAL ROOT ZONE.
- FENCING SHALL HAVE MOUNTED WARNING SIGNS PROMINENTLY DISPLAYED AT MAXIMUM 20 FOOT INTERVALS; SIGNS TO BE 8.5 X II INCHES AND CLEARLY STATE.

"WARNING - TREE PROTECTION ZONE - THIS FENCE SHALL NOT BE REMOVED AND ANY INJURY TO THIS OR THESE TREES IS SUBJECT TO PENALTY ACCORDING TO BCC 14.06.100"

#### DURING CONSTRUCTION:

- ENCROACHMENT INTO THE TREE PROTECTION ZONE IS PROHIBITED UNLESS IT IS FOR THE MAINTENANCE OF THE TREE.
- AVOID SPILLAGE OR DAMAGING MATERIALS INTO THE TREE PROTECTION ZONE.

  NO STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, PORTABLE TOILETS, STOCKPILING OF SOIL OR AGGREGATE IS PERMITTED.
- NO CUITING, BREAKING, SKINNING OR BRUISING OF ROOTS, BRANCHES OR TRUNKS WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE PROJECT ARBORNIST.
- NO DISCHARGING OF EXHAUST INTO FOLIAGE
- NO SECURING OF CABLES, CHAINS, OR ROPES TO TREE TRUNKS OR BRANCHES.
- NO TRENCHING, DIGGING, TUNNELING OR OTHERWISE EXCAVATING WITHIN THE CRITICAL ROOT ZONE OR TREE PROTECTION ZONES WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE PROJECT ARBORIST.
- PERIODICALLY INSPECT, AT 4 WEEK INTERVALS MINIMUM, TO ASSESS AND MONITOR THE EFFECTIVENESS OF THE TIRET PROTECTION MEASURES.

- 4. PERIODICALLY INSPECT, AT 4 MEER, INTERVALS MINANN, TO ASSESS AND MONITOR THE FIFTECT WHESE OF THE TREE PROTECTION MEAGURES.

  ID PROM BUY OF MAY TO BUY OF SEPTIMENTS, WONITOR TREES FOR GIABLE OF DOUGHT STRESS, LAY DRIP IRRIGATION OR SOAKER HOSE AND REMARKE FOR AN INVARIANCE OF HOUSE SHEET STAYS DERIVE FERIODS OF DOUGHT STRESS, LAY DRIP IRRIGATION OR SOAKER HOSE AND REMARKED OF DOUGHT STRESS, LAY DRIP REMARKED AND AND CONTROL OF THE PROTECTION FOR THE CRITICAL ROOT ZONES SHALL BE FERROWED BY HAND OR COMPRESSED AIR, MACHINE TREDICHING SHALL NOT BE FERROWED AND THE CRITICAL ROOT ZONES SHALL BE FERROWED BY HAND OR COMPRESSED AIR, MACHINE TREDICHING SHALL NOT BE FERROWED AND THE SHALL BE SHALL BE FERROWED AND THE SHALL BE FERROWED AND THE SHALL BE SHALL BE FERROWED AND THE SHALL BEFORE THE SHALL BE FERROWED AND THE SHALL BEFORE THE SHALL BE FERROWED AND THE SHALL BEFORE THE BUY AND THE SHALL BEFORE THE SHALL BEFORE THE BUY AND THE SHALL BEFORE THE AND THE SHALL BEFORE THE BUY AND THE BUY AND THE SHALL BEFORE THE BUY AND THE SHALL BEFORE THE BUY A
- WITH DAMPRED BRILLS.

  18. ROUTE PIPES OUTSIDE OF THE TREE PROTECTION ZONE OF A PROTECTED TREE TO AVOID CONFLICT WITH ROOTS, ARE TO BE PROTECTED

  19. ROUTE PIPES OUTSIDE OF THE TREE PROTECTION ZONE OF A PROTECTED TREE TO AVOID CONFLICT WITH ROOTS, HERRE IT IN THE PROTECTION ZONE

  REPORT PIPES OF TREMELES BORGE OR TIMBLE BRINGHTH HE TREE PROTECTION ZONE OF THE TREE. HE SOURIS WHEN ALL TAKE PLACE NOT LESS

  OF THE TREE PROTECTION ZONE.

  14. ALL GRADE CHANGES ADJUGACHT TO THE TREE PROTECTION ZONE OF A SIGNIFICANT TREE SHALL BE SUPERVISED BY THE PROJECT ARRORDIST.

  CUTS OR PLLIS OF SOUL THAT ARE ADJUGACHT TO THE TREE PROTECTION ZONE WILL HAVE A RETAINING WALL SYSTEM DESIGNED IN CONSULTATION.

  ANY DAMAGE DUE TO CONSULTATION THE SHALL BE REPORTED TO THE PROJECT ARRORDIST AND CITY STITM DESIGNED IN CONSULTATION THE PROJECT ARRORDIST AND CITY STITM DESIGNED ON THAT REPORTS.

  THE PROJECT ARRORDIST SHALL BE RESPONSIBLE FOR THE PROSECTION OF THE DESIGNATED TREES, SHOULD THE BUILDER FAIL TO FOLLOW THE

  PROJECT ARRORDIST SHALL BE RESPONSIBLE FOR THE PRESERVATION OF THE DESIGNATED TREES, SHOULD THE BUILDER FAIL TO FOLLOW THE

  PROJECT ARRORDIST SHALL BE RESPONSIBLE FOR THE PRESERVATION OF THE DESIGNATED TREES, SHOULD THE BUILDER FAIL TO FOLLOW THE

  PROJECT OWNS THE MATTER THE MATTER TO CITY STAFF AS AN

  POST CONSTRUCTION.

#### POST CONSTRUCTION:

- COMPLETE POST-CONSTRUCTION TREE MAINTENANCE, INCLUDING PRUNING, MULCHING, FERTILIZATION, IRRIGATION, AND SOIL AERATION WHERE NECESSARY.
- REMOVE, BY HAND, ALL SOIL AND ROOT PROTECTION MATERIAL SUCH AS WOOD CHIPS, GRAYEL AND PLYMOOD, PROVIDE FOR REMEDIATION OF COMPACTED SOIL BY METHODS SUCH AS AERATION OR VERTICAL MULCHING.
- APPLY AT LEAST I INCH OF WATER PER WEEK BY DEEP WATERING IN THE ABSENCE OF ADEQUATE RAINFALL FERTILIZE TREES WITH SLOW RELEASED PHOSPHORUS, POTASSIUM, CALCIUM, MAGNESIUM, AND OTHER MACRO- AND MICRO-NUTRIENTS AS INDICATED BY A SOIL TEST, BUT WAIT AT LEAST ONE YEAR TO APPLY ANY NITROGEN.
- FERTILIZE LIGHTLY WITH SLOW RELEASE NITROSEN AFTER I YEAR, AND THEN MAKE ANNUAL LIGHT NITROSEN APPLICATIONS FOR THE NEXT 3 TO 5 YEARS,
- INSTECT TREES ANNUALLY FOR AT LEAST 3 AND UP TO 5 YEARS AFTER CONSTRUCTION TO LOOK FOR CHANGES IN CONDITION AND SIGNS OF INSECTS OR DISEASE, AND TO DETERMINE MAINTENANCE NEEDS.
  REPOVOR TREES THAT ARE BADLY PARMAGED OR ARE IN INSERVERSIBLE DECLINE AS DETERMINED BY THE PROJECT ARBORIST AND CITY STAFF.
- CONTINUE TO PROTECT NOT ONLY THE LARGE, ESTABLISHED TREES ON THE SITE BUT ALSO THOSE NEWLY PLANTED IN THE LANDSCAPE AS PER LUC 20 20 520 K
- IO. PROVIDE ANNUAL INSPECTION REPORTS TO THE CITY.





#### NOTES

- SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 255(0 1411 AVE 5, KENT, WA 48032, (253) 653-6423 XIO.
  SITE PLAN PROVIDED BY NAVIX ENGINEERING, II235 SE 611 51, SUITE ISO, BELLEVUE, WA 48004, (425) 453-450.
- 453-4501. SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT. з.



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NOT FOR CONSTRUCTION THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE ASENCIES FOR REVIEW AND APPROVAL UNTIL APPROVED, THESE PLANS ARE: SUBJECT TO REVISION

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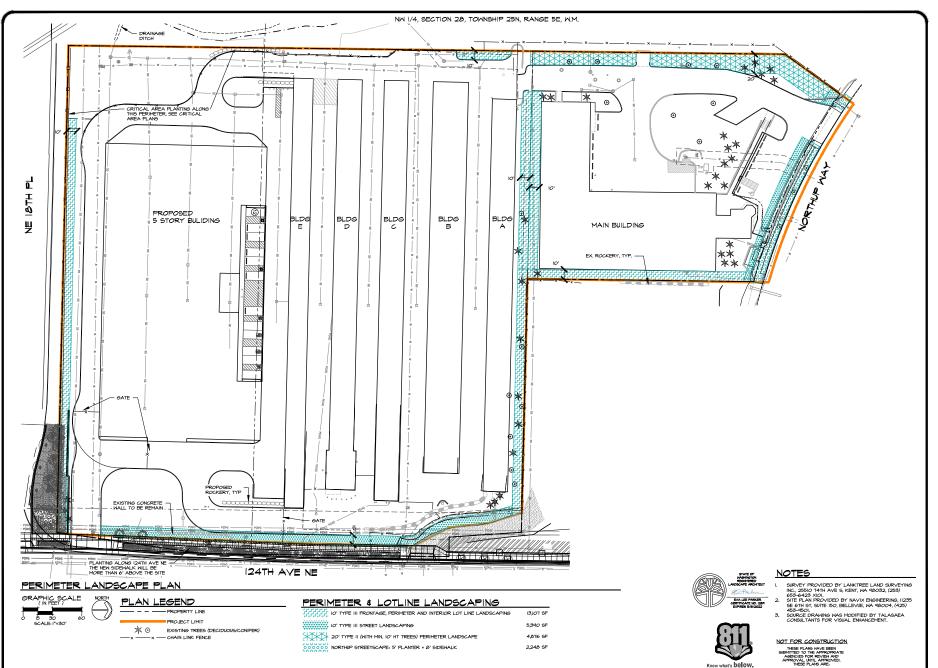
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TREE PROTECTION DETAIL



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Resource & Environmental Planning
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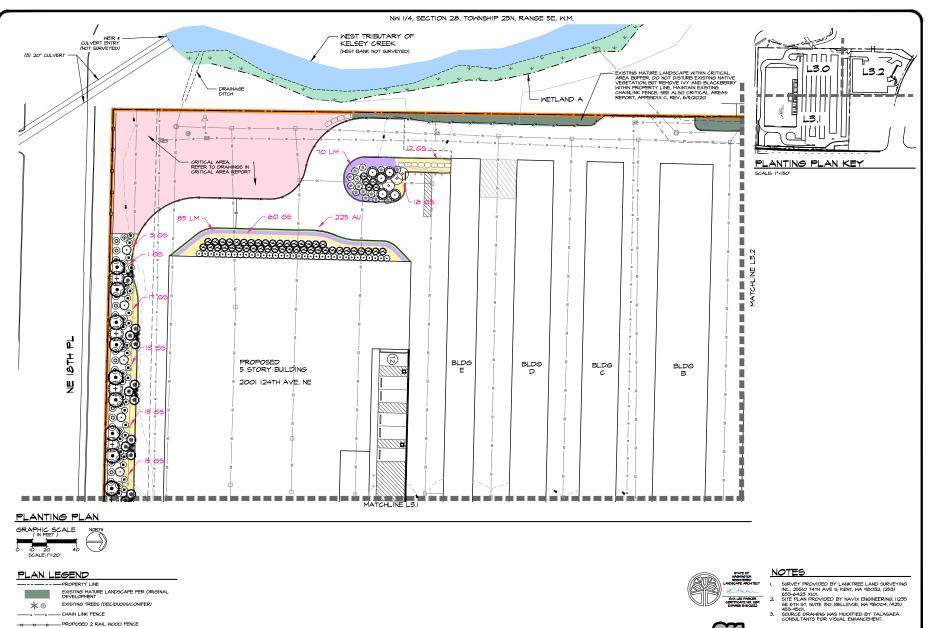
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Project # 1539B

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SUBJECT TO REVISION



PROJECT LIMIT



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CONSULTANTS, INC.
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Project #1539B

ANDSCAPE PLAN LANTING PLAN ELLEYUE PUBLIC STORA ELLEYUE, MASHINGTON

AEA TS, INC.

Date

Date

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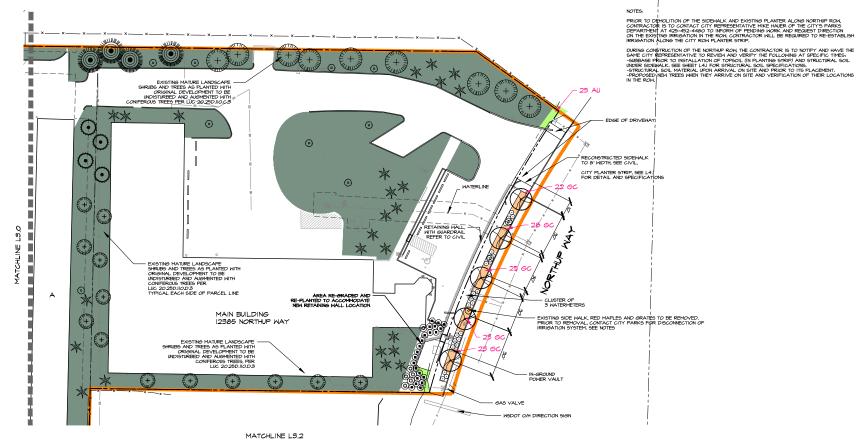
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Date |Q-|5-20|4 Scale AS NOTED Designed EP Drawn EH Checked AO Approved BS

Project # 1539B

Sheet # L3.2



PLANTING PLAN



#### PLAN LEGEND

PROPERTY LINE EXISTING MATURE LANDSCAPE PER ORIGINAL DEVELOPMENT EXISTING TREES (DECIDUOUS/CONIFER) × 0

-x -x - CHAINLINK FENCE PROJECT LIMIT

EXISTING A. RUBRUM TO BE REPLACED

PROPOSED A. RUBRUM X 'OCTOBER GLORY'





NOTES SURVEY PROVIDED BY LANCTREE LAND SURVEYING INC., 2950-74TH AVE 5, KENT, IAA 49:032, (293) STEF FLAN PROVIDED BY NAVIS RENINEERING, (1235-85 mt 9-7, 39) SEE BY THE SURVEY RENINEERING, (1235-85), SOURCE DRAWING MODIFIED BY TALASAEA CORSULTANTS FOR YISIAL SHANACEMENT.

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NOT FOR CONSTRUCTION THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL UNITL APPROVED, THESE PLANS ARE:



Know what's below. Call before you dig.

#### GENERAL PLANT INSTALLATION NOTES

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GERANIUM CINEREUM

ENT TREES ADJORS SHRIBES I HIGHER THAN DEPIT HE GROWN AT INSERTY.

FOR CONTINUES TREES ADJORD SHRIBES SCORE FOUR SIDES OF ROOTBALL THOSE OF PLANTINGS BUTTEREY. ROOT DALL IF ROOT CHACLING IS EXCIDENT FOR CONTINUES TREES ADJORD SHRIBES AND SHRIBES AND STAKES AT THE RESIDES AND SHRIBES AND STAKES AT THE RESIDES AND SHRIBES AND SHRIBES AND SHRIPES AND SHRI

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KELSEY DOGWOOD

HARDY GERANIUM

- RATE. ALL FLATINGS AREAS FINAL MAYE A MINIMAL SHEAR DEPTH OF TOPSOL IF TOPSOL OF REPRESENTING THE AUDITOR CALLS IN THAT MAIN PLANTING AREAS, AS DETERMINED BY TALABASE CONDUCTION, TOPSOL SHALL DEPTH OF TOPSOL IN PROPERTY OF THE PROPERTY OF THE AUDITOR OF THE TOPSOL SHALL DEPTH OF THE TOPSOL SHALL DE

#### NW 1/4, SECTION 28, TOWNSHIP 25N, RANGE 5E, W.M.

#### CITY PLANT LIST

LARGE TREES

SYMBOL SCIENTIFIC NAME ACER RUBRUM 'KARPICK' RED MAPLE

 PHYSOCARPUS CAPITATUS PACIFIC NINEBARK PSEUDOTSUGA MENZIESII DOUGLAS FIR

SMALL TREES/LARGE SHRUBS

SYMBOL SCIENTIFIC NAME COMMON NAME CRATAEGAS LAVIGATA ENGLISH HAWHTORN

MYRICA CALIFORNICA PACIFIC WAX MYRTLE

RED FLOWERING RIBES SANGUINEUM

#### MASSING SHRUBS

SYMBOL SCIENTIFIC NAME COMMON NAME BERBERIS THUNBERGII
 'CRIMSON PIGMEY' JAPANESE BARBERRY CHAENOMELES JAPONICA ORANGE DELIGHT' ORANGE FLOWERING GAULTHERIA SHALLON

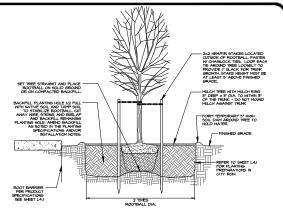
V V V V V V V V GERANIUM CINERUM # HEMEROCALLIS 'STELLA D'ORO' STELLA D'ORO DAYLILY

> → LONICERA PILEATA BOX HONEYSICKLE

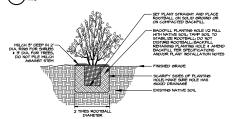
® ROSA RUSOSA PINK PAVEMENT' PINK PAVEMENT RUGOSA ROSE ⊕ TAXUS X MEDIA ANGLO-JAPANESE YEM

#### GROUNDGOVERS & PERENNIALS

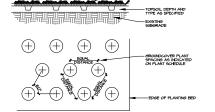
0140014	000 1 1100	
SYMBOL	SCIENTIFIC NAME	COMMON NAME
******	ARCTOSTAPHYLOS UVA-URSI "MASSACHUSSETTS"	KINNICKINNICK
	COTONEASTER DAMMERI 'LOWFAST'	BEARBERRY COTONEASTER



STREET TREE WITH ROOT BARRIER



CONTAINER STOCK PLANTING DETAIL



(3) GROUNDCOVER INSTALLATION DETAIL



#### NOTES

GROUNDCOVER PLANT MATERIAL; SEE PLANT SCHEDULE

3" DEPTH BARK MULCH

- SURVEY FROVIDED BY LANKTREE LAND SURVEYING INC., 25510 74TH AVE 5, KENT, IVA 98:052, (255) 655-6423 XIOI.
  SITE PLAN FROVIDED BY NAVIX ENGINEERING, II:235 SE 6TH 5T, SUITE ISO, BELLEVUE, IVA 98:004, (425) 453-4501.
- 453-4501. SOURCE DRAWING WAS MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT.



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Project #1539B

PART II GENERAL

- I.I SEGUENCING
- A, LANDSCAPE WORK THIS SECTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- I. PREPARATION OF SUB-BASE AS REQUIRED FOR GRASS AND PLANTING BEDS 2. FINISH GRADING OF TOPSOIL MATERIALS.
- 3, PREPARATION OF SOIL MIXTURES.
- 4. EXCAVATION AND BACKFILLING FOR TREES AND SHRUBS, 5. PLANTING OF TREES, SHRUBS AND GROUNDCOVERS.
- 6. MISCELLANEOUS LANDSCAPE WORK,
- QUALITY ASSURANCE: SUBCONTRACT LANDSCAPE WORK TO A SINGLE FIRM SPECIALIZING IN LANDSCAPE WORK.
- 1.2 SOURCE QUALITY CONTROL

- LE STANCE GUALITY CONTROL.

  A SENERAL, SHI LANDSCAPE MATERIALS WITH CERTIFICATES OF INSPECTION REQUIRED BY GOVERNING AUTHORITIES. COMPLY NITH RESULATIONS APPLICABLE TO LANDSCAPE MATERIALIS. OF DESTINABLE SUBMITT NON-MAKINE SUBMITTIONS. IF SPECIFIED LANDSCAPE MATERIAL IS NOT DOSTINABLE SUBMITT NON-MAKINEDILITY TO LANDSCAPE ARCHITECT, TOSETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL, HEND AUTHORIZE, DAUSTHERD OF CONTRACT MOUNT MILL BE MODE, IF NECESARY.

  2. ANALYSIS AND STANDARDS. PACKAGE STANDARD PRODUCTS WITH MANEACTINERS CERTIFIED ANALYSIS. FOR OTHER MATERIALS, PROVIDE ANALYSIS FOR CHIEF MATERIALS, PROVIDE ANALYSIS FOR CHIEF MATERIALS, PROVIDE ANALYSIS AND STANDARDS ESTANDARD SAND STANDARD PRODUCTS WITH MANEACTINERS CERTIFIED ANALYSIS. FOR OTHER MATERIALS, PROVIDE ANALYSIS FOR CONTROL WITH METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ASSICULTURE CHEMISTS, MERGUNG PAPELOGALE.
- B. TOPSOIL. BEFORE DELIVERY OF ADDITIONAL TOPSOIL, FURNISH LANDSCAPE ARCHITECT WITH WRITTEN STATEMENT GIVING LOCATION OF PROPERTIES FROM WHICH TOPSOIL IS TO BE OBTAINED.
- CHAIT METERAL PROVIDE LAUNT HATERAL THAT PHENCH 10750L IS TO BE OBTAINED.

  C. PLAIT METERALLY PROVIDE LAUNT MATERIAL OF GUARNITH, SIGL, ERBUS, SPECIES AND VARIETY SHOWN AND SCIEDLED FOR LANDSCAPE HORK AND COMPLYING WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI SCOL, CARRENT BOTTOM, THAT DEPOLATION AND CONTRIBUTION OF METERAL PROVIDER AND PROVIDER AND CONTRIBUTION OF METERAL PROV
- DISHIGAREMENT.

  I. EXCEPT AS FOLLOWS, LABEL AT LEAST ONE TIREE AND ONE SHRIB OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAS BEARNIS LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.

  2. NOTIFY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION FOR QUALITY INSPECTION, LOCATION OF PLANT MATERIAL AND REVIEW OF PLANTINS TIME AND SCHEDUE, LANDSCAPE ARCHITECT RETAINS THE RIGHT TO RIGHTER INSPECT PLANT MATERIAL FOR SEZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS INJURIES AND LATENT DEFECTS, AND TO RELEET INSPACTS INJURIES AND LATENT DEFECTS, AND TO RELECT INJURIES AND LATENT DEFECTS, AND TO RELECT INJURIES AND LATENT THE RIGHT.
- D. TESTING: OBTAIN SOIL TEST TO DETERMINE PH AND LIME REQUIREMENTS PRIOR TO PLANTING
- E. MAINTENANCE INSTRUCTIONS: SUBMIT TYPEWRITTEN INSTRUCTIONS RECOMMENDING PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF LANDSCAPE WORK FOR ONE FULL YEAR. SUBMIT TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO EXPIRATION OF REQUIRED MAINTENANCE PERIOD(S).
- I.3 DELIVERY STORAGE AND HANDLING
- 13 DELIVERT SIGNERS PROVIDE RESEALY DUS TREES AND CONTAINERIZED SHRIBS. DO NOT PRIME PRIOR TO DELIVERY INLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE RITEES OR SHRIBS IN SIGH MANRE AS TO DAMAGE BARK, BERKE BRACKLES OR DESTROY INATURAL SHAPE. PROVIDE PROTECTIVE COVERING DIRING DELIVERY. DO NOT DROP BALLED AND BIRLAPPED STOCK DIRING DELIVERY.
- SILOR, DURING DELIVERY SKRIBS, AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT DISTRIBUTION OF THE PLANTING TO PER ATTO PROPERTIES OF THE PER LIVERY, SET PLANT MATERIAL IN SHADE, PROTECT FROM HEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST BY COVERING HITH MLCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTIES.
- 2.DO NOT REMOVE CONTAINER GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME
- I.4 JOB CONDITIONS
- A. PROCEED WITH AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF THE SITE BECOME AVAILABLE, WORKING WITHIN SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.
- I. <u>UTILITIES</u>, DETERMINE LOCATION OF INDERSPROAD UTILITIES AS REQUIRED BY LAM AND PERFORM MORK IN A MANNER WHICH MILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED, MAINTAIN GRADE STAKES SET BY OTHERS UTILITIES FOR THE MEDICAL STAKES SET BY OTHERS CONCERNED.
- 2. EXCAVATION, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY LANDSCAPE ARCHITECT BEFORE
- 3. <u>PLANTING TIME</u>: PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH SPECIFIED MAINTENANCE PERIODS TO PROVIDE MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.
- 1.5 GENERAL SITE CONDITIONS
- LANDSCAPE CONTRACTOR SHALL GIVE LANDSCAPE ARCHITECT A MINIMAM OF TEN (IO) DAYS NOTICE PRIOR TO RITEMPTO TO PROCEED WITH CONSTRUCTION.

  B. CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, PERMIT CONDITIONS, ORDINANCES AND POLICIES OF THE GOVERNING JURISDICTION.
- C. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER RELATED OR REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION.
- D. A COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND PERMIT APPROVALS MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS AND SHALL REMAIN ON SITE UNTIL PROJECT COMPLETION.
- E. LANDSCAPE ARCHITECT SHALL BE ON SITE, AS NECESSARY, TO MONITOR CONSTRUCTION AND APPROVE MINOR REVISIONS TO THE PLAN.
- L6 TOPSOIL
- 16 TOPSOIL

  A ALL GRADING SHALL BE DONE PER THE APPROVED CIVIL SET AND SPECIFICATIONS, ALL PLANTING AREAS SHALL BE OVER-EXCAVATED 4" FOR PLACEMENT OF STOCKPILED TOPSOIL OR IMPORTED 3-HAY TOPSOIL (CEDAR GROVE OR EQUIA). TOPSOIL, IF A VIALL BE EXCAVATED FROM HEDEF-FREE AREAS ON THE SITE, SELECTED BY LANDSCAPE ARCHITECT, AND SHALL BE STOCKPILED PRIOR TO OTHER SITE WORK. LANDSCAPE ARCHITECT SHALL DETERMINE DEFIN OF POSSOLID TO STOCKPILE. DESERVE OF CONTROL. SELECTED OF CONTROL OF STOCKPILE DESERVE. OF CONTROL SET INSTANCES OF THE SITE STOCKPILED TOPSOIL SHALL BE SCREENED THROUGH A! "NE-SHE PRIOR TO PLACEMENT IN PLANTING BEDS.

  B. IN ALL IN-GROUND LANDSCAPE BEDS OVER-EXCAVATE 4" BELOW INNISED ELEVATION SHOWN ON PLANS FOR PLACEMENT OF 4" OF SUBGRADE PRIOR TO PLANTING. INSTALL AREA DRAINS HERE LANDSCAPE CONTRACTOR DEPOSITIONS OF THE SITE SHALL DESCRIBED TOPSOIL SHALL BE TOPSOIL SHALL BE STOCKPILED ORDER OF THE SITE SHOWN ON PLANS FOR PLACEMENT OF 4" OF SUBGRADE PRIOR TO PLANTING. INSTALL AREA DRAINS HERE LANDSCAPE CONTRACTOR DEPOSITIONS OF THE SITE SHANDES OF THE SITE SHANDES
- 1.7 PROJECT WARRANTY
- AMARONATY ALL PLANTING FOR A PERIOD OF CAE YEAR AFTER DATE OF FINAL ACCEPTANCE BY CHARLA ACADITY CAECHAING BY CHARLA ACADITY DEPOTANCE BY CHARLA ACADITY DEPOTANCE BY CHARLA ACADITY DEPOTANCE AND FROM REGLECT BY CHARLA AR
- B. IMMEDIATELY REMOVE AND REPLACE TREES, SHRIBS OR OTHER PLANTS FORDS TO BE DEAD OR IN IMMEDIATE CONTROL DISTRICT MARRAINT PERIOD, REPLACE PLANT HATERIAL IN DOSIFIEL CONDITION DISTRICT MARRAINT PERIOD, INLESS, IN OFNION OF LANDSCAPE ARCHITECT, IT IS ADVISABLE TO EXTEND MARRAINT PERIOD FOR A FULL GROWING SHASON.
- AMMONINE FEBRUOR A DEL DESCRIPTO SAFETON DE ENTENDED MURRANTY PERIOD TO DETERMINE 
  AND THE MEDICAL PROPERTY OF THE MANY PROPERTY OF THE MEDICAL PROPERTY OF THE MANY PROPERTY OF THE MANY OF THAT WHICH 
  MILLER REGURED AT END OF MARRANTY FERRIOD, EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO 
  PAULIZE TO COMPLY NITH SECRETIES REGURENENTS.

- PART 2: PRODUCTS AND MATERIALS
- 2.I TOPSOIL
- TOPSOIL THAT HAS BEEN STOCKFILED FOR REISE IN LANDSCAPE HORK SHALL BE FERTILE. FRIABLE, SANDY LOANS, SWENGE SOIL, FREE OF SISSOIL, CLAY, UMPAS, BRIGH, NEEDS AND OTHER LITTER, AND FREE OF ROOTS, STIMPS, STORES LARGER THAN I'N ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARPHILL TO FLANT GEOCHIN.
- B. PROVIDE ADDITIONAL TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FORMS AT FROJECT SITE. DETRININ I DEPOIL ONLY FROM MATRIXALLY, MELL-DRAINED SITES WEERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 6°; DO NOT OBTAIN FROM BOOGS, MARSHES OR OTHER PETLAND AREAS.
- 2.2 SOIL AMENDMENTS
- A LIME. MATIRAL DOLOMITIC LIMESTONE CONTAINING NOT LESS THAN 85% OF TOTAL CARRONATES HITH A MINIMAM OF 50% MAGNESIM ACREOMATES, SECOND 50 THAT NOT LESS THAN 105% PAGES A 10-MESH SIEVE AND NOT LESS THAN 50% PAGES A 100-MESH SIEVE. RATE OF APPLICATION SUITED TO SOIL ACIDITY AND TITE OF PLANTING AS DETERMINED BY SOIL TESTING.
- B. ORGANIC MATTER: ORGANIC, WEED- AND DEBRIS-FREE COMPOST, CEDARGROVE OR EQUIVALENT. 2.3 MULCH
- A. BARK OR WOOD CHIP MULCH SHALL BE DERIVED FROM DOUGLAS FIR, PINE, OR HEMLOCK SPECIES. THE MULCH SHALL NOT CONTAIN RESIN, TANNIN, OR OTHER COMPOUNDS IN QUANTITIES THAT WOULD BE DETRIMENTAL. TO ANIMAL, PLANT LIFE, OR WATER QUALITY. SAMPUST SHALL NOT BE USED AS MULCH,
- B. MILCH SHALL BE MEDIUM-COARE GROUND HER GIRALITY, SAMDIST SHALL NOT BE USED AS MILCH.

  B. MILCH SHALL BE MEDIUM-COARES GROUND HITM AN APPROXIMATELY SHACH MINIS PARTICLE SIZE. FINE
  PARTICLES SHALL BE MINIMIZED SO THAT NOT MORE THAN 30%, BY LOOSE VOLUME, MILL PASS THROUGH A
  10 NO. 4 SIZE.
- 2.4 COMMERCIAL FERTILIZER
- D. FOR ALL PLANTING BEDS: PLANTINGS SHALL BE FERTILIZED WITH A SLOW-RELEASE GENERAL GRANLAR FERTILIZER (16-16-16), OR SLOW-RELEASE FERTILIZER TABLETS, WITH APPLICATION RATES AS SPECIFIED BY MANIFACTURES, FERTILIZER SHALL BE APPLICAD AFTER PLANTING PIT IS BACKFILLED (OR DURING BACKFILL IN THE CASE OF TABLETS), AND PRIOR TO APPLICATION OF MILCH. FERTILIZER SHALL NOT BE APPLIED ETHERN MOVEMER AND MARCH.
- 2.5 PLANT MATERIALS
- A <u>VERIFY QUANTITIES</u>. VERIFY PLANT LOCATIONS AND QUANTITIES OF PLANTS ON THE PLANT SCHEDULE HITH THOSE REPRESENTED ON THE PLAN, ACTUAL PLANT QUANTITIES SHOWN ON PLANTING PLANS TO PREVAIL OVER QUANTITIES SHOWN ON PLANT SCHEDULE IN THE EVENT OF A DISCREPANCY.
- BIGALITY: PROVIDE TAME MATERIAL OF SIZE, GEMS, SECURE AND AVERTY SHOWN AND SCIEDLED FOR A MODERNEY MORE AND CAPITY INSERT HE FORMED ATOMS AND REGISTERSHEET OF ANSI SCIED. CAPITY EDITION "AMERICAN STANDARD FOR INSERSEY STOCK." ALL PLANT MATERIALS TO BE LOCALLY GROWN (RESTERN MR, MESTERN MR, MES

#### 2.6 TEMPORARY IRRIGATION

- A TEMPORARY TO YEAR MARRANTEEL DEEP IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY LAMESCARE CONTRACTOR BYON COMBINION OF DISSOLID BY LACEBET AND FRONCE TO INSTALLATION OF PLANTINGS WITHIN THE LANDSCAPE AREA. ALL PLANTED AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL INEL PLANTINGS IN THE LANDSCAPED BROWN STATES AREAS SHALL RECEIVE ADEQUATE DRIP COVERAGE TO ALL THE PLANTINGS AND THE ADMINISTRATION OF THE PLANTING AND THE PLAN
- B. PROVIDE WRITTEN VERIFICATION TO LANDSCAPE ARCHITECT THAT BACKFLOW PREVENTION PER CODE EXISTS ON THE LINE TO BE USED AS A POINT OF CONNECTION FOR THE IRRIGATION SYSTEM. IF VERIFICATION CANNOT BE MADE, PROVIDE BACKFLOW PREVENTION FER CODE AS A PART OF THE INSTALLATION.
- C. GENERAL CONTRACTOR SHALL PROVIDE SLEEVING, WATER AND ELECTRICITY FOR THE SYSTEM, LANDSCAPE CONTRACTOR SHALL PROVIDE ISOLATION VALVE AND CONNECTION TO WATER AND CONTROLLER.
- D. LANDSCAPE CONTRACTOR SHALL INSTALL SOIL MOISTURE PROBE CONNECTED TO IRRIGATION SYSTEM TO DETERMINE WHEN IRRIGATION IS NECESSARY DURING THE DRY SEASON. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- E, LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER FUNCTION AND CONNECTION OF THE IRRIGATION SYSTEMS, AND TO "WINTERIZE" INSTALLED IRRIGATION SYSTEM PRIOR TO OCTOBER 31ST.
- 2.7 MISCELLANEOUS LANDSCAPE MATERIALS
- A. <u>STAKES, DEADMEN AND GUYS.</u> PROVIDE STAKES AND DEADMEN OF SOUND NEW, PRESSURE TREATED HEM-FIR, FREE OF KNOT HOLES AND OTHER DEFECTS. SIZE AS FOLLOWS: STAKES: 2"X2"X8"-0", POINTED, STAINED DARK BROWN.
- STATISET LAWS RECURS.

  DEALERS AND STATES AND STATES AND STATES AND STATES AND STATES AND STATES AND STATES.

  DEALERS AND STATES AND AND STATES AND STATES AND STATES AND STATES AND STATES.

  PROVIDE NOT LESS THAN 364 INCH DANGETER BLACK RUBBER OR PLASTIC HOSE, CUT TO REQUIRED LEST TO PROTECT TIREE TRANSE REPORT DANAGETS AND STATES.
- C. LIGHTING: SEE DRAWINGS BY OTHERS FOR ALL OUTDOOR LIGHTING DETAILS.
- EXECUTION
- 3.I SOIL PREPARATION
- A COMDINATE THE MORK OF THIS SECTION WITH "IRRIGATION SYSTEM INSTALLATION".

  1. STAKE PROPOSED TIREE LOCATIONS AND SECURE LANDSCAPE ARCHITECTS ACCEPTANCE BEFORE START OF PLANTING MORK, "MAKE MINOR ADJUSTMENTS AS MAY BE REQUESTED.

  2. PREPARATION OF PLANTING AREAS, PRICAR TO PLANTING, TOPSOIL SHALL BE PLACED AND TILLED INTO THE SUBSPACED FERT HE TOPSOIL SECTION.
- THE SUBGRADE FIRE THE TOPSOIL SECTION.

  3. EXCLAVATION FOR TREES AND SARGES, EXCLAVATE PITS AND BEDS HITH VERTICAL SIDES AND HITH.

  IN BOTTOM AND SIDES OF ELANTING PIT.

  IN BOTTOM AND SIDES OF ELANTING PIT.

  FOR DALLED AND BUILLAFFEC (DRIP) TREES AND SHRUBS, MAKE EXCLAVATIONS AT LEAST TRUCK AS HIDE

  AS THE BALL DIAMETER AND EQUAL TO THE BALL DEPTH PLUS AN ALLOWANCE FOR SETTING OF BALL ON

  A "LLATER OF COMPACTED LIANTING SOIL MIXTURE.
- FOR CONTAINER GROWN STOCK, EXCAVATE AS SPECIFIED FOR BALLED AND BURLAPPED STOCK, ADJUSTED TO SIZE OF CONTAINER WIDTH AND DEPTH.
- A. TIMING: TO OCCUR BETWEEN NOVEMBER IST AND MARCH 3IST.
- B. INSERCIONS. NOTIFY LANDSCAFE ARCHITECT FROR TO FLANTING TO REVIEW GUALITY, PLACEMENT AND THINNS. 51 NEW EITE PROPOSED LOCATION OF ALL TESES AND SHIBBS HITH AN APPROVING CORDING SYSTEM FOR LARGE GROUPINGS OF SINGLE SHELD SPECIES, BONDARY HAY BE STACED. LANDSCAFE ARCHITECT TO REVIEW AND APPROVING LOCATIONS PRIGOR TO PLANTING OR RELOCATION PLATT MATERIAL.
- C. BLAITIME TIBLES AND SHIBBS. SET BALLED AND BIRL APPED (BINS) STOCK ON LAYER OF COMPACTED PLANTINES OLD INVIDUE, PLAND AND IN CENTER OF PIT AITH TO OF PIALL SLEEPINT, HERER THAN ADJACENT FINISHED LANDSCAPE (SHADES TO ACCOUNT FOR MUCH DEPTH. WITE AND REPOVE BURLAP PROOF SIDES OF PIALLS, RETAIN OR DOTTONS, HOR BASKETS, IF DEED, SHALL BE CUT ANANT REVAIL AND HORSE BASKETS, IF DEED, SHALD BE OUT ANANT REVAIL AND HORSE EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS, PLACE FERTILIZED HILLS BACKFILLS, WATER AFFER BACKING FIALL LAYER OF BACKFILL AND

- CORRECT ANY SETTLEMENT THAT MAY OCCUR
- I. SET CONTAINER GROWN STOCK AS SPECIFIED FOR BALLED AND BURLAPPED STOCK, EXCEPT FULLY REMOVE CONTAINER.
- 2. CREATE SAUCER IN BACKFILL AROUND TREES TO HELP RETAIN WATER. SAUCER AREA SHALL HAVE A DIAMETER OF AT LEAST 3 FEET.
- DEVICE LAND, SERIES ONLY TO REPORT BROKEN OR DAMAGED BRANCHES, OR AS DIRECTED BY LINESCARE ACCURATION. THE PRINCE SHALL FOLLOW STANDARD INSTITLLANDS, INFORMATION OF DIRECTED BY LINESCARE PROPRIES ANY PROVINCE OF SHALDS SHALL RETAIN A NATURAL CHARACTER. DO NOT LITTEE LEADERS, MY PROVINCE OF SHALDS SHALL RETAIN A NATURAL CHARACTER. DO NOT SHEAR SHRUBS WITH HAND OR POPERED LEDGES SHARDS.
- REMOVE AND REPLACE EXCESSIVELY PRINED OR MALFORMED STOCK RESULTING FROM IMPROPER PRINING.
- E. <u>APPLY ANTI-DESICCANT</u> USING POWER SPRAY TO PROVIDE AN ADEQUATE FILM OVER TRUNKS, BRANCHES, STEMS, TRUGS AND FOLIAGE.
- I. IF DECIDIOUS TREES OR SHRIBS ARE MOVED IN FULL-LEAF, SPRAY WITH ANTI-DESICCANT AT NURSERY BEFORE MOVING AND AGAIN 2 WEEKS AFTER PLANTING.
- . <u>QUY AND STAKE TREES</u> IMMEDIATELY AFTER PLANTING, WITH 2 STAKES PER DECIDIOUS TREE OR 3 DEADMEN PER EVERGREEN TREE. ORIENT STAKES TO RESIST THE FORCE OF THE WIND.
- G. PLANTING GROUNDCOVER, SPACE PLANTS AS SHOWN IN DETAIL.
- I, DIS IULIES LARGE BIOLISH TO ALLON FOR SPECIATING OF ROOTS AND BACKFILL HITH PLANTING SOIL.
  NORK SOIL ARROND ROOTS TO ELIMINATE ABPOCKETS AND LEAVE AS QUETT SALEES INDENTATION
  ARROND PLANTS TO HOLD HAITER. HAITER THORROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER
  CROWNS OF PLANTS HITH HEY SOILS.
- CRUMING OF PARIANS WITH PARIANS STATES SOLDS.

  2. MILCH AREAS BETHEEN GROUNDCOVER PLANTS TO A DEPTH OF 3°. TAPER MULCH TO BASE OF GROUNDCOVERS AND TAKE EXTRA CARE TO ENSURE GROUNDCOVERS ARE NOT BURIED WITH MULCH.
- H. MULCH ALL PLANTING BEDS: PROVIDE NOT LESS THAN A 3-INCH THICKNESS OF MULCH AND FINISH LEVEL MITH ADJACENT FINISHED GRADES AND PAVED SURFACES.
- 3.4 MAINTENANCE
- A. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING.
- B. MAINTAIN TREES, SHRUBS AND OTHER PLANTS UNTIL FINAL PROJECT ACCEPTANCE BY OWNER BUT IN NO CASE LESS THAN 90 DAYS AFTER SUBSTANTIAL COMPLETION OF THE PROJECT.
- C-MAINTAIN TREES, SHRUBES AND OTHER PLANTS BY MATERINS PRINNES, CLITATATING AND MEEDING AS REQUIRED FOR HEALTHY GROWTH. APPLY ANTI-DESICCANT AS SPECIFIED, RESTORE PLANTING SALCERS, TIGHTEN AND REPAIR STAKE AND GIT SUPPORTS AND RESET TREES AND SHRUBED TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBG FREE OF INSECTS AND DISECTION.
- 3.5 CLEANUP AND PROTECTION
- A. DURING LANDSCAPE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
- B. PROTECT L'ANDSCAPE MORK AND MATERIALS RROM DAMAGE DIE TO L'ANDSCAPE OPERATION, OPERATIONS OF OTHER CONTRACTORS AND THAT BEAD SAN DIESPASSES. NATIONAIN PROTECTION DIRING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED L'ANDSCAPE MORK AS DIRECTED.
- 3.6 INSPECTION AND ACCEPTANCE
- A. WHEN LANDSCAPE WORK IS COMPLETED, INCLUDING MAINTENANCE, LANDSCAPE ARCHITECT WILL, UPON REQUEST, MAKE AN INSPECTION TO DETERMINE ACCEPTABILITY.
- B. LANDSCAPE WORK MAY BE INSPECTED FOR ACCEPTANCE IN PARTS ONLY IF AGREEABLE TO LANDSCAPE ARCHITECT, PROVIDED WORK OFFERED FOR INSPECTION IS COMPLETE, INCLUDING MAINTENANCE.
- C. WERE INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY LANDSCAPE ARCHITECT AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS PROMPTLY FROM PROJECT SITE.



NOTES

- I. SURVEY PROVIDED BY LANKTREE LAND SURVEYING INC., 255(5 141H AVE 5, KEIN, IAA 96032, (253) 1. STEP, IAA 96034, (263) 1. STEP, IAA 96004, (473) 1.

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Project # 1534B

ASSESSATE, ASSESSATES FOR STRUCTURAL SOIL SHALL CONSIST OF CLEAN STONE THAT IS HIGHLY ANGLAR, STONE SIZE SHALLD BE I-VI-HUNES TO 2-1/2-MUNES CLEAR, WITH A DIMENSION ASPECT RATIO OF LEASHT TO HEIGHT OF III. HANIMM DIMENSION ASPECT RATIO OF 2.II. IS ALLOWED PROVIDED THE MAJORITY OF THE MATERIAL CONFORMS TO THE II.I. REQUIREMENT, ALL PIECES SHALL HAVE A NIMINAM OF 3 FRACTURED FACES,

AGGREGATE SHALL BE SOUND, HARD DURABLE, AND HIGHLY ANGULAR. AGGREGATES SHALL BE FREE FROM SALT, THIN ELCHGATED OR LAMINATED PARTICLES, ORGANIC MATERIAL, CLAY LUMPS, OR OTHER SUBSTANCES THAT WOULD ACT IN A DELETERICUM ANANER OR INTERFEE HITH VEGETATIVE GROWTH.

PRE-APPROVED MATERIALS-2-INCHES CLEAR CRUSHED, CADMAN

GROWING MEDIUM: SEE SOIL SPECIFICATIONS

PRE-APPROVED MATERIAL-SEE SOIL SPECIFICATIONS

SOIL STABILIZES, SOIL STABILIZER SHALL BE A NON-TOXIC ANOMIC LINEAR POLYMER FER 1965 SECTION 9-1450) CAPABLE OF BINDING THE SOIL PARTICLES TO THE AGREGATE DURING MINION AND FALCEMENT OF THE STRICTISMAL SOIL MIXTURE. CROSS-LINEED POLYMERS SHALL NOT BE PERMITTED, APPLICATION SHALL BE PER THE MANUFACTURER'S MRITTEN RETRICTIONS.

ROVED MATERIAL- @STABILIZERA FROM STABILIZER SOLUTIONS (602) 225-5900 \$1-(800)-336-2468 PHONE WWW.STABILIZERSOLUTIONS.COM

GEOTEXTILE FOR SEPARATIONS: GEOTEXTILE FOR THE SEPARATION BETWEEN THE STRUCTURAL SOIL AND CRUSH SURFACING TOP COURSE SHALL BE PER W65 SECTION 4-33 AND MEET THE PROPERTIES LISTED IN SECTION 4-33.2(1) TABLE 3.

WATER: PER WSS SECTION 9-25.2

AT LEAST 30 DAYS PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL PROVIDE A MIX DESIGN IN WRITING DESCRIBING THE PROPOSED MATERIAL PROPORTIONS, MIXING PROCEDURE, AND MATERIAL SOURCES.

MATERIAL PROPORTIONS. MIXES SHALL UTILIZED THE FOLLOWING BASE RATIO, HOWEVER, VARIATIONS OF THE PHYSICAL PROPERTIES OF THE MATERIAL CONFONENTS MAY REQUIRE ADJISTMENTS TO THE DESIGN TO BYSICE ADEQUATE STRUCTURAL MOY VOID 974-OE REQUIRE/BITS ARE MAINTAINED.

AGGREGATE	4 CY
GROWING MEDIUM	ICY
SOIL STABILIZER	4 LBS., PER MANUFACTURERS WRITTEN INSTRUCTIONS
WATER	46 GALLONS*

\*MATER SHALL BE ADJISTED AS REQUIRED TO ACHIEVE A TARGET MOISTURE CONTENT OF 20% BY WEIGHT BY WEIGHT OF THE GROWING MEDIUM COMPONENT.

\*\*NOTE THAT A VOLUME REDUCTION OF APPROXIMATELY 10% DUE TO THE MIXING PROCESS IS TYPICAL

MIXING PROCEDURE, STRUCTURAL SOIL SHALL BE MIXED IN BATCHES SUITABLE FOR THE CHOSEN EQUIPMENT, MIXING SHALL BE PERFORMED ON PAYED SURFACE AT THE SUPPLIER'S YARD AND A SUITABLE AREA FREE FROM FOREIGN MATERIAL OR MOISTURE MILL BE PROVIDED.

A TYPICAL MXING PROCEDURE HILL INVOLVE STARTING HITH HALF OF THE ASGREGATE, ADD HALF OF THE TOPSOIL, ADD ALL OF THE SOIL BINDER, ADD HALF OF THE ESTIMATED MATER, AND ADD THE OTHER HALF OF THE ASGREGATE, AND MIX THE MATERIAL AND THE ASSERTING ADD THE ASSERTING ADD

THE FINISHED PRODUCT SHOULD CONSIST OF THE UNFORMLY BLENDED MIXTURE, MIXING SHOULD BE DONE IN STEPS TO ENSURE HOMOGENEOUS DISTRIBUTION OF MATERIALS AND ADEQUATE MOSTURE CONTENT IS MAINTAINED THROUGHOUT THE WINNIS PROJECTS, THE MIXTURE SHALL EASILY SHEEP AND BEEAK DONN WITHOUT LUMPHINS. THE GROWNEN BEDWIN SHALL NOT BE OVERLY WET OR DRY DURING MIXING OPERATIONS, PERIODIC ADJISTMENT OF THE MATER CONTENT MAY BE REQUIRED TO MAINTAIN OFFINIM MOSTURE LEVELY.

#### DELIVERY STORAGE AND HANDLING

MIXED STRUCTURAL SOIL MUST BE PROTECTED FROM ABSORBING EXCESS WATER AND FROM EROSION AT ALL TIMES, DO NOT STORE OR TRANSPORT MATERIALS IMPROTECTED DURING RAINFALL EVENTS, DO NOT ALLOW EXCESS MATER TO ENTER THE SITE PRIOR TO COMPACTION OF THE STRUCTURAL SOIL MATERIAL.

DELIVERY OF THE STRUCTURAL SOIL TO THE JOB SITE SHALL OCCUR INMEDIATELY AFTER MIXING PROCEDURES ARE BE COMPLETE. EXTENDED STOKAGE OR STOCKPILLING OF STRUCTURAL SOIL IS NOT PERMITTED. THE PERMITTED FOR THE PERMITTED REPRESENTATION FOR PERMITTED FOR THE PERMIT

#### SITE PREPARATION AND INSTALL ATION

SITE PREPARATION AND INSTALLATION INSPECITED PRIOR TO DELIVERY AND INSTALLATION OF STRUCTURAL SOIL, CONFIRM THAT THE SIS-GRAVE IS AT THE PROPER BLEVATION AND COMPACTED AS REQUIRED, AND SIS-GRADE BLEVATIONS ARE WITHOUT AND SIS-GRADE BLEVATIONS ARE SISTEMATED. AND SISTEMATION SISTEMATION SISTEMATION SISTEMATION SISTEMATION SISTEMATION SITE, THE AREA SHALL BE DRAINED AND INSPECTION FROM TO INSTALLATION OF STRUCTURAL SOIL.

STRUCTURAL SOIL SHALL BE PLACED IN THE EXCAVATED TRENCH IN 6-INCH LIFTS, AND SPREAD WITH SUITABLE EQUIPMENT. THE STRUCTURAL SOIL SHALL BE COMPACTED BY A STATIC DRIM COMPACTOR EVIDENCED BY N INVITLEDING SUBBAGE. AFTER COMPACTION IS ACHIEVED, GEOTEXTLE FARRIC SHALL BE INSTITULED AS ARRIER SELD. THE CARBIERD SHALP BE INSTITULED AS ARRIER SELD. THE CARBIERD SHALP SHALL BE PROTECTED FROM YIBBATORY SCROCES WITH SUBSTRUCTURED IN FLACE IN THE STRUCTURAL SOIL SHALL BE PROTECTED FROM THE STRUCTURAL SOIL IS NOT INMEDIATELY PROTECTED FROM THE ELECTRIC PROTECTED FROM THE ELECTRIC SHALL PROVIDE TEMPORARY PROTECTION WITH PLASTIC, PLYCODO, OR CHIEF SUBSTRUCTURE SHALP ARRIVED AND SHAPPING SHAPPI

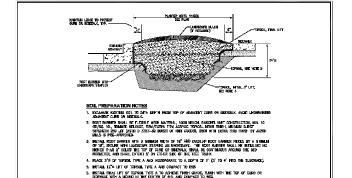
THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING WORK ACTIVITIES TO PROTECT STRUCTURAL SOIL DURING PLACEMENT,

AND INSTALLATION OF ELEMENTS DEPENDENT ON THE STRUCTURAL SOIL SHOULD COMMENCE IMMEDIATELY AFTER MATERIAL HAS BEEN PLACED.

SOIL CELL SYSTEMS

SOLL CALL SYSTEMS (LE. SLYA CELL, STATACELL) ARE THE PREPENSIED METHOD FOR PROVIDING A DOUBLY THATING SUNFAMENT HER SITE CONTINUES COMPANIA DOLL VOLUMES AVAILABLE TO THESE, THESE SYSTEMS HOUSE ARRANGING HODILAR PLASTIC/PIERROLAGS STRUCTURES CAPABLE OF CONTAINED BY THESE SYSTEMS HAY BE CONTED TOWARD MINIMAY SOLL VOLUME REQUIREMENTS, PRODUCTS SHALL HER TALL OF THE FOLLOWING STANDARDS.

- A MINIMUM OF 90 PERCENT OF THE CELL PRODUCT IS VOID SPACE.
- VOID SPACE IS FILLED WITH AN APPROVED SOIL THAT MEETS STANDARDS AS DEFINED BY THIS CHAPTER. 5. PRODUCT IS DESIGNED TO BE COMPATIBLE WITH UNDERGROUND UTILITIES AND SHALL BE CAPABLE OF ALLOWING PASSAGE AND ACCESS TO DUCT BANKS AND PIPES WITHOUT COMPROMISING STRUCTURAL INTEGRITY OF THE CELL
- D. CELL SYSTEMS ARE CAPABLE OF SUPPORTING LOADS UP TO AND INCLUDING AASHTO H-20. E.PRODUCT IS INSTALLED TO MANUFACTURER SPECIFICATIONS.



SOIL PREPARATION FOR LANDSCAPE STRIPS

DRAMME NAMED THE 130-NOAE

SOIL PREPARATION FOR CITY ROW LANDSCAPE STRIPS

7. METALL 2"4: LANDSCAPE NULCH, FULL DEPTH IN THE CENTER AND FEATHERED AT THE EDGES TO RECCUSE FLUOR WITH CLASS OF SECREPAIN.





#### NOTES

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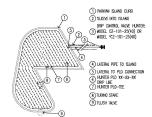
NOTE, PERTAINS TO THE CONSTRUCTION OF THE CITY ROW SIDEWALKS ONLY

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SPECIFICATIC STORAGE IGTON LANDSCAPE PL STRUCTURAL SOIL BELLEVUE PUBL BELLEVUE, WASI

IO-15-2019 AS NOTED

Project # 1539B



IRREGULAR ISLAND "A" IDIOMORY FRIGATION DETAIL NOT TO SCALE

MORES.

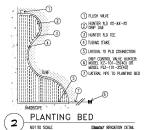
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2. ROW SPONIC OF THE THINKS DESIGN OF HARM AND SOULTH'S.

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2. ROW SPONIC OF THE THINKS DESIGN OF THE SOURTH SOULTH'S.

CONTROLLED SOURTH SO



notes: 1. Size emitter flow and spacing based on plant and soil type. 2. Sow spacing of PLD being based on plant and soil type. 2. RIM SYDINGS OF PLU SIMES GREED ON PAPEL AND SILL PIPE.

3. SIME UNINGS OND REGYST 2 AND OWNER! OF PALL TIMES CULTEST

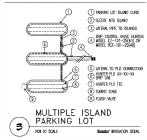
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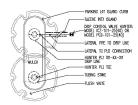
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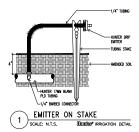
PARKING LOT ISLAND TWO TREES NOT TO SCALE Dimbor IRRIGATION DETAIL

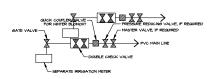
KOTES: I. Size emitter flow and spacing based on plant and soil type. I. Row spacing of pld tibing based on plant and soil type. 2. DIES SPAING OF PIO TIBERO ENSED ON FAMIT AND SOL 1978.

4. DI HOTO ENSED Y AND HOTO STAND HOTO STAND ON THE BOTH OF THE TIMEN GITTLETS.

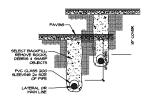
4. DI HOTO ENSED VELOCOTI OF 5 79% WHITH 1000MERS, TO SEZ OF EIRP AND OBENIES VELOCITIES.

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#### IRRIGATION CONSTRUCTION NOTES

I. GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:

A. PROTECTION OF SITE, INCLUDING, LOCATING ALL EXISTING AND NEW INDERGROUND UTLITY LINES FRIOR TO ANY CONSTRUCTION, SAVING AND PROTECTING EXISTING TREES DESIGNATED TO REMAIN, REPARING ANY DAMAGE DAME TO UNERNO, SIDEMALS, FENCES, AND ANY OTHER DAMAGE CAMED AS A RESULT OF THIS CONTRACT.

B. INSTALLATION OF IIOV ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLIDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER OWNER AND COORDINATE WITH GENERAL CONTRACTOR.

C. INSTALLATION OF IRRIGATION/SERVICE METER AND STUB TO IRRIGATION POINT OF CONNECTION, PER UTILITY PLAN(S).

D. PROVISION OF STANDARD THREADED STUB-OUT WITH THREADED CAP ON DISCHARGE SIDE OF METER. STUB-OUT TO BE INSTALLED APPROXIMATELY IS INCHES BELOW FINISHED GRADE.

E. VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL DETERMINE STATIC PRESSURE AND SYSTEM DEMANDS.

F. INSTALLATION OF SLEEVING, AS NECESSARY.

2, LANDSCAPE CONTRACTOR TO DESIGN SYSTEM IN ACCORDANCE WITH LANDSCAPE PLANS.

3. ALL WORK PER LOCAL CODE AND INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.

4. ALL VALVES TO BE PLACED IN 'CARSON' (OR APPROVED EQUAL) VALVE

BOXES WITH BOLT-LOCK LIDS. SET BOXES FLUSH WITH FINISHED GRADES, IN PLANTING AREAS OUTSIDE OF LAWN AND PAVEMENT.

5. MAINLINE PIPE TO BE BURIED 16 INCHES AND LATERALS 12 INCHES BELOW FINISHED GRADE. NO ROCK OR DEBRISTO BE BACKFILLED OVER PIPE. PIPES FOR LATERAL LINES SHALL BE SIZED BY CONTRACTOR IN DECREASING DOWNSTREAM ORDER (PER PRODUCT DESIGN STANDARDS).

6. IRAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJIST IN FIELD AS NECESSARY FOR ADEQUATE COMPRACE. CORDINATE WITH FIELD AS NECESSARY FOR ADMINISTRATION OF THE POSITION OF THE PLANS AND COTSET AND ADJIACENT AND PARALLEL TO PLANTING AREAS, AND COTSET OF LOT LITLES AND FURSION OF LOT LITLES AND COTSET OF LOT LOT LITLES AND AND ADJIACENT PLANTING AREAS, AND COTSET OF LOT LOT LITLES AND AND ADJIACENT PLANTING AREAS, AND COTSET OF LOT LITLES AND AND ADJIACENT PLANTING AREAS, AND COTSET OF LOT LITLES AND AND ADJIACENT PLANTING AREAS, AND ADJIACENT PLANTING ADJIACENT PLANTING ADJIACENT PLANTING ADJIACENT PL

1. PROVIDE OWNER WITH TWO (2) SETS OF AS-BUILT DRAWINGS AND OPERATORS MANUAL UPON COMPLETION. INSTRUCT OWNER AS TO PROPER WINTERIZATION OF IRRIGATION STEEM (BLOW OUT).

8. FAMILIARIZE FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.

9. NO TEMPORARY SPRINCLERS SHALL BE INSTALLED ADJACENT TO MALKS, STREET, AND/OR PAVEMENT, AS-BULL DRAWINGS OF DRIP RERIGIATION SYSTEM SHALL BE PREPARED IN FIELD BY CONTRACTOR, AS NECESSARY, AND DISCUSSED DURING CONSTRUCTION WITH LANDSCAPE ARCHITECT.

IO. ALL CONTROL WIRE SPLICES SHALL BE MADE AT VALVE BOXES WITH WATERTIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3676-78,

OR EQUAL.

II. EACH VALVE BOX TO CONTAIN A MINIMM OF ONE (I) SPARE ORANGE CONTROL WIRE FOX JACKETED WIRE. ROUTE ONE SPARE WIRE FROM THE CONTROLLER TO THE LAST VALVES OF EACH HAINLINE BRANCH. COMMON WIRE SHALL BE HAIT. SINSIE STRAND WIRE SHALL BE A MINIMM OF 14 GAUGE WITH SPARE WIRE TO BE ORANGE.

12. ALL ELECTRICAL EQUIPMENT SHALL BE U.L. TESTED AND APPROVED, AND SHALL BEAR THE U.L. LABEL.

I3, PROVIDE MANUAL SHUT-OFF VALVE TO LINES ENTERING RIGHT-OF-WAY WHEN ZONED.

14. CROSS CONSCITON PROTECTION INSPECTION REQUIRED. THE BACKFLOR PROTECTION SHALL BETT INTERFERENCE OF CONSTANT INSTALLATION. A PERSON HOLDING A CARRENT CERTIFICATE AS A BACKFLON TESTER SHALL PERSON HE TESTING. HE TEST REPORT SHALL BE SHAPETTED TO TESTER SHALL PERSON THE TESTING FOR SHALL PERSON THE TESTING THE SHALL BE SHAPETTED TO TESTING IN THE SCOPE OF MORK. CONFER IS RESPONSIBLE FOR ANNUAL INSPECTIONS.

15. CONTRACTOR SHALL PROVIDE SYSTEM WINTERIZATIONSPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED HITHIN 40 DAYS OF NOVEMBER I POR INTERIZATION, OR MAY IS POR SPRINGS SERVICE TO BE FERRICATED AS NEAR AS FRACTICAL TO THE ABOVE DATES, OR AS FREZZEMPREDIPTATION CONTINUOUS DETERMINE SERVICE MORE STATES.

I6. PROVIDE AUTOMATIC RAIN SHUT-OFF, AS APPROPRIATE, TO BE SELECTED BY OWNER.

IT. IRRIGATION CONTRACTOR TO PROVIDE A ONE YEAR WARRANTY AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP.

#### NOTES

- SURVEY PROVIDED BY LANCTREE LAND SURVEYING INC. 285(0 THIT AVE 5, KENT, IAA 49,072, (253) STEP PLAN PROVIDED BY NAVEL BENIEVERING, 1225 SE 6TH 5T, SUITE 150, BELLEVUE, IAA 49,004, (4,25) 435-49,01.
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NOT FOR CONSTRUCTION THESE PLANS HAVE BEEN SUBMITTED TO THE APPROPRIATE AGENCIES FOR REVIEW AND APPROVAL, UNTIL APPROVED, THESE PLANS ARE. SUBJECT TO REVISION

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IO-15-2019 AS NOTED Drawn FH. Project # 1539B

# ATTACHMENT D TRAFFIC STUDY



BERKELEY
CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN ILUIS OBISPO

November 30, 2017

Brian Ulrich
Director, Site Acquisitions
Public Storage
2200 East McFadden Avenue
Santa Ana, CA 92705

Subject: 4088 East La Palma Avenue Parking Analysis

Dear Mr. Ulrich:

LSA is pleased to submit this analysis of parking for the expansion of the Public Storage location at 4088 East La Palma Avenue (project) in Anaheim. The proposed project will demolish the existing 67,939-square-foot (sf) single-story storage facility and construct a 398,640-gross-square-foot (gsf) storage facility within two climate-controlled buildings in two phases. Access to the site is provided through a driveway on the north side of the site that connects to La Palma Avenue. Figure 1 (attached) illustrates the project site plan. As shown on Figure 1, the project proposes to provide 50 passenger vehicle parking spaces and 2 truck loading spaces.

The off-street parking requirements in Anaheim are specified in Anaheim Municipal Code (AMC) Section 18.42.040. As shown in Table A, the AMC requirement for the project is 108 parking spaces. However, the site was designed based on the knowledge that Public Storage has gained over 45 years of operation. Further, the project is constructing multi-level indoor storage rather than traditional drive-up units. This parking study will (1) investigate the parking demand for self-storage facilities based on local and nationwide data, (2) establish parking demand for multi-level indoor storage, and (3) provide the findings necessary for a parking variance.

**Table A: Municipal Code Parking Requirements** 

		Projec	Project Parking Requirements			
Land Use	Parking Space Rates per Anaheim Municipal Code Section 18.42.040	Size	Unit	Required Parking Spaces		
Self-Storage Facilities	0.27 space per 1,000 square feet of building GFA or 5 spaces, whichever results in a greater number of spaces, plus adequate loading and unloading areas as required by the Planning Services Manager or his/her designee	398.640	TSF	108		
			Total	108		

GFA = gross floor area TSF = thousand square feet

## Parking Generation - Published Survey Data

The Institute of Transportation Engineers (ITE) *Parking Generation*,  $4^{th}$  Edition, provides information based on four decades of research. Survey data is provided for Land Use 151: Mini-Warehouse, which covers self-storage facilities. The fitted curve equation has a high coefficient of variation ( $R^2$ =0.86), which

indicates precision in the prediction of parking demand. LSA applied the ITE fitted curve equation and determined that the project's parking demand would be 32 vehicles based on ITE data.

### Parking Generation – Multi-Level Indoor Public Storage Surveys

In order to determine parking demand for multi-level indoor storage units, LSA had parking accumulation data collected (attached) at the following three Public Storage locations in or near Orange County:

Irvine: 16452 Construction Circle
 Orange: 1040 North Main Street
 Long Beach: 4295 Outer Traffic Circle

The location in Irvine is located near the Tustin Legacy and West Park (Irvine) residential neighborhoods. The facility has a three-story building with 171,000 sf of gross floor area with no drive-up units. Parking is provided in 27 spaces with no gate. Public Storage believes this facility to be the most similar to the proposed project given the type of facility and potential customer profile.

The location in Orange has a four-story building with 125,000 sf of gross floor area and drive-up units. Eight marked parking stalls and a loading area with unmarked space for six vehicles are located near the entrance to the multi-story building and before the gate. On-street parking is also convenient to the multi-story building. In addition to surveying parking demand in the off-street parking spaces, data collection included the observation of pedestrian destinations. Parking demand for the multi-level building was isolated by subtracting vehicles from the count if the driver's destination was observed to be the drive-up units. Similarly, vehicles were added to the count if a driver parked on street and was destined for the multi-level building.

The location in Long Beach has a four-story building with 92,000 sf of gross floor area and no drive-up units. Twelve parking spaces are provided with no gate. On-street parking is convenient to the site and the site is within walking distance of residential and non-residential land uses. As at the Orange site, parking surveys included the observation of driver destination. Parking demand for the self-storage facility was isolated by adding vehicles that parked on street for the self-storage use and subtracting vehicles that parked on site for another purpose.

Parking demand was surveyed every half hour at all three sites on a typical weekday and a non-holiday Saturday during operating hours. Table B displays the observed parking demand. At all three sites, the highest observed parking demand occurred on Saturday. Table C calculates the empirical parking rate based on the highest observed parking demand.

As Table C shows, the peak parking demand observed on the surveyed Saturday at the Orange site was much higher than those at the other two sites. On the surveyed Saturday, a total of 17 vehicles were observed parked for the multi-story building at noon. LSA performed a spot survey the following Saturday at noon and observed 9 vehicles. This would result in a rate of 0.07 spaces per 1,000 sf, which would be similar to the other two surveyed sites. However, LSA used the higher observed parking demand when calculating the average parking rate.

Table C shows that the average parking rate for the three surveyed self-storage facilities is 0.09 spaces per 1,000 sf. Applying this average parking rate to the proposed project yields a projected parking demand for 36 parking spaces.

**Table B: Self Storage Surveyed Parking Demand** 

	Irvine (1	71,000 sf)	Orange (	125,000 sf)	Long Beach (92,000 sf)	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
8:00 AM	_	1	_	4	_	0
8:30 AM	<del>-</del>	0	_	5	_	4
9:00 AM	_	0	_	7	_	4
9:30 AM	_	2	_	7	_	7
10:00 AM	4	3	5	9	0	5
10:30 AM	5	5	6	9	0	2
11:00 AM	3	5	4	12	3	2
11:30 AM	4	4	4	12	3	2
12:00 PM	3	5	5	17	3	6
12:30 PM	2	9	7	14	4	2
1:00 PM	2	2	8	13	5	3
1:30 PM	3	7	8	16	3	2
2:00 PM	2	8	9	7	2	3
2:30 PM	2	5	7	5	2	5
3:00 PM	3	3	9	6	4	6
3:30 PM	3	3	8	10	1	7
4:00 PM	3	6	9	7	3	2
4:30 PM	3	4	10	7	1	4
5:00 PM	4	8	10	6	3	2
5:30 PM	2	5	9	4	4	1
6:00 PM	1	5	6	4	2	1
6:30 PM	0	5	1	3	0	0
7:00 PM	1	3	4	1	1	0
7:30 PM	0	2	5	1	0	0
8:00 PM	0	0	4	2	0	0
8:30 PM	0	0	3	1	0	0
9:00 PM	0	0	1	1	0	0

Note: **Bolded text** indicates the highest observed parking demand for a site.

sf = square feet

**Table C: Self Storage Observed Parking Rates** 

		Parking Observation					
Location	Size	Peak	Parking Rate				
	Size	Demand	(spaces per 1,000 sf)				
Irvine	171,000 sf	9	0.05				
Orange	125,000 sf	17	0.14				
Long Beach	92,000 sf	7	0.08				
		Average	0.09				

sf = square feet

For both the nationwide survey data of self-storage facilities and the observed local data for multi-level self-storage, the anticipated future parking demand is less than the proposed parking supply of 50 passenger vehicles and 2 truck-loading spaces.

#### **Findings**

AMC Section 18.42.110 stipulates that the following findings are necessary for the City of Anaheim (City) Planning Commission or City Council to grant a variance from the AMC parking requirements. Based on LSA's evaluation of the project, LSA believes the following conditions exist.

That the variance, under the conditions imposed, if any, will not cause fewer off-street parking spaces to be provided for the proposed use than the number of such spaces necessary to accommodate all vehicles attributable to such use under the normal and reasonably foreseeable conditions of operation of such use.

The analysis presented in this letter identified that nationwide ITE parking rates would predict a maximum parking demand for 32 spaces and that local surveys of multi-level self-storage facilities would predict parking demand for 36 parking spaces. The project proposes parking for 50 passenger vehicles and 2 loading spaces for trucks, which would exceed the anticipated parking demand. Therefore, the project will not cause fewer off-street parking spaces to be provided for the proposed use than the number of spaces necessary to accommodate all parked vehicles attributable to the project.

That the variance, under the conditions imposed, if any, will not increase the demand and competition for parking spaces upon public streets in the immediate vicinity of the proposed use.

Parking is not permitted on public streets in the immediate vicinity of the project. The analysis presented in this letter identified that maximum parking demand is not anticipated to exceed the parking supply. Therefore, the project will not increase competition for parking spaces on public streets.

That the variance, under the conditions imposed, if any, will not increase the demand and competition for parking spaces upon adjacent property in the immediate vicinity of the proposed use (which property is not expressly provided as parking for such use under an agreement in compliance with subsection .030 of Section 18.42.050 [Non-Residential Uses-Shared Parking Arrangements]).

The analysis presented in this letter identified that the maximum parking demand is not anticipated to exceed the parking supply. Further, the purpose of trips to self-storage facilities is to deposit or retrieve items from storage. Parking spaces on adjacent properties are not convenient for this purpose.

Therefore, the proposed project is not anticipated to increase demand and competition for parking spaces on adjacent properties.

That the variance, under the conditions imposed, if any, will not increase traffic congestion within the off-street parking areas or lots provided for the proposed use.

The parking analysis identified anticipated peak parking demand for 36 parking spaces compared to a parking supply of 50 parking spaces. This would leave a buffer of 14 parking spaces (28 percent). Given the anticipated parking buffer, it is anticipated that inbound vehicles will be able to find an available parking space without circulating the site. Therefore, the proposed project is not expected to increase traffic congestion in the off-street parking areas for the proposed use.

That the variance, under the conditions imposed, if any, will not impede vehicular ingress or egress from adjacent properties upon the public streets in the immediate vicinity of the proposed use.

The parking analysis identified that sufficient parking would be supplied to accommodate the parking demand. Observations of other, local self-storage facilities showed frequent turnover of parking spaces. Some vehicles were parked for longer periods, but several vehicles occupied a space for a half hour or less. Based on ITE trip generation rates, the maximum inbound peak-hour volume would be 42 trips, which is less than one per minute. Based on the availability of parking spaces, turnover of parking spaces, and frequency of inbound trips, it is anticipated that inbound vehicles will be able to find an available parking space without forming a queue. Therefore, the project is not anticipated to impede vehicular ingress or egress from adjacent properties on the public streets.

#### Conclusion

LSA examined parking for the proposed expansion of the self-storage use at 4088 East La Palma Avenue. The project would construct two multi-level storage buildings with a total of 398,640 gsf, replacing the existing drive-up storage units. A total of 50 passenger vehicle and 2 truck loading spaces are proposed. Nationwide parking survey data published by ITE predict a demand for 32 parking spaces. Surveys of local, multi-level storage facilities predict a demand for 36 parking spaces. Both sets of data support the City of Anaheim's findings for a deviation from the AMC parking requirement.

Sincerely,

LSA Associates, Inc.

**Arthur Black** 

Associate/Transportation Planner

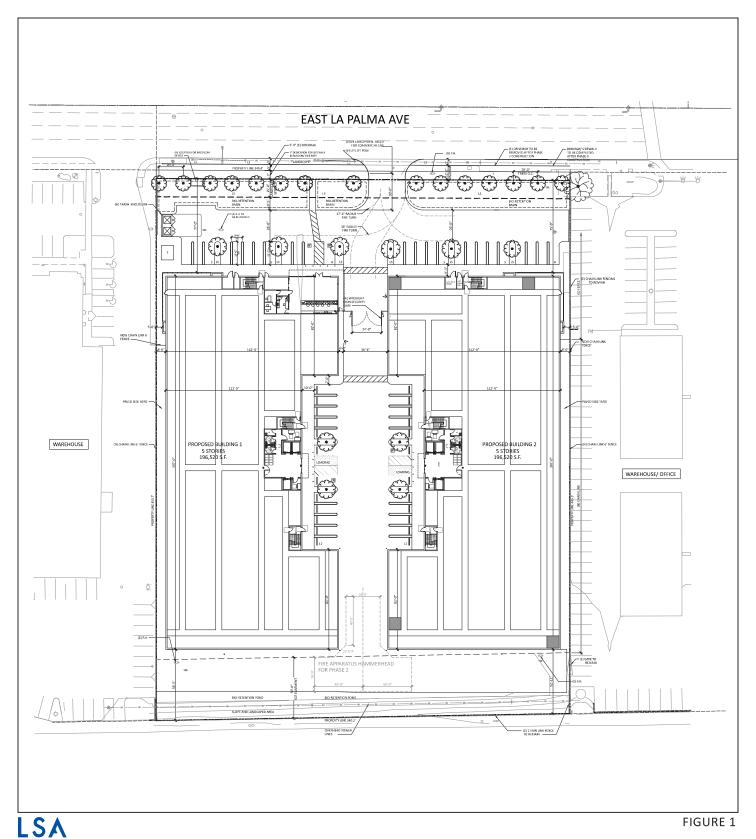
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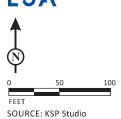
Attachments: A - Figure 1-Site Plan

B - Parking Data

## **ATTACHMENT A**

**FIGURE 1: SITE PLAN** 





4088 East La Palma Avenue Public Storage Site Plan

## **ATTACHMENT B**

## **PARKING DATA**

# **Parking Study**

**Location:** 16452 Construction Circle **Date:** 10/28/2017

City: Irvine Day: Saturday

Time	Regular	НС	HC Van	Clean Air Vehicle	Loading Zone	Grand Total	Occupancy Percentage
Inventory	22	1	1	3	2	29	
8:00 AM	1	0	0	0	0	1	3%
8:30 AM	0	0	0	0	0	0	0%
9:00 AM	0	0	0	0	0	0	0%
9:30 AM	2	0	0	0	0	2	<b>7</b> %
10:00 AM	3	0	0	0	0	3	10%
10:30 AM	4	0	0	0	1	5	17%
11:00 AM	4	0	0	0	1	5	17%
11:30 AM	4	0	0	0	0	4	14%
12:00 PM	5	0	0	0	0	5	17%
12:30 PM	8	0	0	0	1	9	31%
1:00 PM	2	0	0	0	0	2	<b>7</b> %
1:30 PM	5	0	0	0	2	7	24%
2:00 PM	6	0	0	0	2	8	28%
2:30 PM	5	0	0	0	0	5	17%
3:00 PM	3	0	0	0	0	3	10%
3:30 PM	2	0	0	0	1	3	10%
4:00 PM	5	0	0	0	1	6	21%
4:30 PM	4	0	0	0	0	4	14%
5:00 PM	5	0	1	0	2	8	28%
5:30 PM	4	0	0	0	1	5	17%
6:00 PM	3	0	1	0	1	5	17%
6:30 PM	3	0	1	0	1	5	17%
7:00 PM	3	0	0	0	0	3	10%
7:30 PM	2	0	0	0	0	2	7%
8:00 PM	0	0	0	0	0	0	0%
8:30 PM	0	0	0	0	0	0	0%
9:00 PM	0	0	0	0	0	0	0%
Totals	83	0	3	0	14	100	

# **Parking Study**

Location:16452 Construction CircleDate:11/2/2017City:IrvineDay:Thursday

Time	Regular	НС	HC Van	Clean Air Vehicle	Loading Zone	Grand Total	Occupancy Percentage
Inventory	22	1	1	3	2	29	
10:00 AM	3	0	1	0	0	4	14%
10:30 AM	3	0	1	0	1	5	17%
11:00 AM	3	0	0	0	0	3	10%
11:30 AM	2	0	0	0	2	4	14%
12:00 PM	3	0	0	0	0	3	10%
12:30 PM	2	0	0	0	0	2	7%
1:00 PM	2	0	0	0	0	2	<b>7</b> %
1:30 PM	3	0	0	0	0	3	10%
2:00 PM	2	0	0	0	0	2	7%
2:30 PM	1	0	0	0	1	2	7%
3:00 PM	2	0	0	0	1	3	10%
3:30 PM	2	0	0	0	1	3	10%
4:00 PM	2	0	0	0	1	3	10%
4:30 PM	2	0	0	0	1	3	10%
5:00 PM	3	0	0	0	1	4	14%
5:30 PM	1	0	0	0	1	2	7%
6:00 PM	1	0	0	0	0	1	3%
6:30 PM	0	0	0	0	0	0	0%
7:00 PM	1	0	0	0	0	1	3%
7:30 PM	0	0	0	0	0	0	0%
8:00 PM	0	0	0	0	0	0	0%
8:30 PM	0	0	0	0	0	0	0%
9:00 PM	0	0	0	0	0	0	0%
Totals	38	0	2	0	10	50	

# **Parking Study**

Location: 1040 N Main St
City: Orange
Date: 10/28/2017
Day: Saturday

Time	Regular (Marked)	Unmarked	НС	Illegal	Grand Total	Occupancy Percentage
Inventory	7	6	1		14	
8:00 AM	2	2	0	0	4	29%
8:30 AM	3	2	0	0	5	36%
9:00 AM	5	2	0	0	7	50%
9:30 AM	4	3	0	0	7	50%
10:00 AM	6	3	0	0	9	64%
10:30 AM	6	3	0	0	9	64%
11:00 AM	7	5	0	0	12	86%
11:30 AM	8	4	0	0	12	86%
12:00 PM	7	6	1	3	17	121%
12:30 PM	9	5	0	0	14	100%
1:00 PM	8	5	0	0	13	93%
1:30 PM	8	6	0	2	16	114%
2:00 PM	7	0	0	0	7	50%
2:30 PM	5	0	0	0	5	36%
3:00 PM	4	2	0	0	6	43%
3:30 PM	6	4	0	0	10	71%
4:00 PM	5	2	0	0	7	50%
4:30 PM	4	3	0	0	7	50%
5:00 PM	4	2	0	0	6	43%
5:30 PM	3	1	0	0	4	29%
6:00 PM	2	2	0	0	4	29%
6:30 PM	2	1	0	0	3	21%
7:00 PM	1	0	0	0	1	<b>7</b> %
7:30 PM	1	0	0	0	1	<b>7</b> %
8:00 PM	2	0	0	0	2	14%
8:30 PM	1	0	0	0	1	<b>7</b> %
9:00 PM	1	0	0	0	1	<b>7</b> %
Totals	121	63	1	5	190	_

# **Parking Study**

Location: 1040 N Main St
City: Orange
Date: 11/2/2017
Day: Thursday

Time	Regular (Marked)	Unmarked	НС	Illegal	Grand Total	Occupancy Percentage
Inventory	7	6	1		14	
10:00 AM	3	2	0	0	5	36%
10:30 AM	4	2	0	0	6	43%
11:00 AM	3	1	0	0	4	29%
11:30 AM	3	1	0	0	4	29%
12:00 PM	3	2	0	0	5	36%
12:30 PM	4	3	0	0	7	50%
1:00 PM	4	4	0	0	8	57%
1:30 PM	5	3	0	0	8	57%
2:00 PM	5	4	0	0	9	64%
2:30 PM	4	3	0	0	7	50%
3:00 PM	6	3	0	0	9	64%
3:30 PM	4	4	0	0	8	57%
4:00 PM	5	4	0	0	9	64%
4:30 PM	7	3	0	0	10	71%
5:00 PM	6	4	0	0	10	71%
5:30 PM	6	3	0	0	9	64%
6:00 PM	3	3	0	0	6	43%
6:30 PM	1	0	0	0	1	<b>7</b> %
7:00 PM	3	1	0	0	4	29%
7:30 PM	3	2	0	0	5	36%
8:00 PM	2	2	0	0	4	29%
8:30 PM	3	0	0	0	3	21%
9:00 PM	1	0	0	0	1	7%
Totals	88	54	0	0	142	

# **Parking Study**

Location: 4295 Outer Traffic Circle
City: Long Beach
Date: 10/28/2017
Day: Saturday

Time	Regular	HC Van Accessible	Grand Total	Occupancy Percentage
Inventory	12	1	13	
8:00 AM	0	0	0	0%
8:30 AM	4	0	4	31%
9:00 AM	4	0	4	31%
9:30 AM	7	0	7	54%
10:00 AM	5	0	5	38%
10:30 AM	2	0	2	15%
11:00 AM	2	0	2	15%
11:30 AM	2	0	2	15%
12:00 PM	6	0	6	46%
12:30 PM	2	0	2	15%
1:00 PM	3	0	3	23%
1:30 PM	2	0	2	15%
2:00 PM	3	0	3	23%
2:30 PM	5	0	5	38%
3:00 PM	6	0	6	46%
3:30 PM	7	0	7	54%
4:00 PM	2	0	2	15%
4:30 PM	4	0	4	31%
5:00 PM	2	0	2	15%
5:30 PM	1	0	1	8%
6:00 PM	1	0	1	8%
6:30 PM	0	0	0	0%
7:00 PM	0	0	0	0%
7:30 PM	0	0	0	0%
8:00 PM	0	0	0	0%
8:30 PM	0	0	0	0%
9:00 PM	0	0	0	0%
Totals	70	0	70	

# **Parking Study**

Location: 4295 Outer Traffic CircleDate: 11/2/2017City: Long BeachDay: Thursday

Time	Regular	HC Van Accessible	Grand Total	Occupancy Percentage
Inventory	13	1	14	
10:00 AM	0	0	0	0%
10:30 AM	0	0	0	0%
11:00 AM	3	0	3	21%
11:30 AM	3	0	3	21%
12:00 PM	3	0	3	21%
12:30 PM	4	0	4	29%
1:00 PM	5	0	5	36%
1:30 PM	3	0	3	21%
2:00 PM	2	0	2	14%
2:30 PM	2	0	2	14%
3:00 PM	4	0	4	29%
3:30 PM	1	0	1	<b>7</b> %
4:00 PM	3	0	3	21%
4:30 PM	1	0	1	<b>7</b> %
5:00 PM	3	0	3	21%
5:30 PM	4	0	4	29%
6:00 PM	2	0	2	14%
6:30 PM	0	0	0	0%
7:00 PM	1	0	1	<b>7</b> %
7:30 PM	0	0	0	0%
8:00 PM	0	0	0	0%
8:30 PM	0	0	0	0%
9:00 PM	0	0	0	0%
Totals	44	0	44	

# ATTACHMENT E CERTIFICATE OF CONCURRENCY

# CERTIFICATE OF CONCURRENCY

## Public Storage 124th West

This certificate documents the Transportation Department Director's decision that the development project at (12385 Northup Way) (File No. 19-126040-LD) complies with the requirements of the Traffic Standards Code (BCC 14.10). This decision reserves 43 net new p.m. peak hour trips to that project, subject to Process II appeal of either the concurrency determination or the Design Review decision. This reservation will expire one year from the land use decision date unless a complete building permit application is filed prior to that date (BCC 14.10.040F). At the time of a complete building permit application, the concurrency reservation will remain in effect for the life of that application (BCC 23.05.090H). Upon issuance of the building permit, concurrency is reserved for one year; the applicant may request up to two one-year extensions (BCC 23.05.100E).

Director, Transportation Department

10/8/2020

Date

Certificate No. 131