

### **Land Use Planning Division** Multnomah 1600 SE 190th Ave, Ste 116

Portland OR 97233

Ph: 503-988-3043 Fax: 503-988-3389

https://multco.us/landuse/

## PRE-**APPLICATION FORM**

Property Address SE Carpenter Lane (across from 35319 SE Carpenter Lane). Gresham, OR	
Alternative Account #(s) R994220980, R994220820 (See attached for add'l acct #s)	
Map, Tax Lot(s) 1S4E22 -00400, 1S4E22D-00100 (See attached for add'l map/tax lots)	Paid: 4-Mar-2022 14:17:33 PST Method: CC Fees: PA \$1,146.00
Meeting Contact(s)	NF \$241.00 Total: \$1,387.00
Applicant's Name Bonita Oswald	
Mailing Address 400 SW 6th Avenue, Suite 300	For Staff Use
City Portland State OR Zip Code 97204 Phone # 503-865-6039	CASE NUMBER
Fax 503-823-4500 e-mail Bonita.Oswald@portlandoregon.gov	PA-2022-15566
Applicant's Signature	DATE SUBMITTED
PROPERTY OWNER(S) ☑ OR CONTRACT PURCHASER(S) □	03/04/2022
Name Portland Water Bureau (See attached for add'l owners)	RECEIVED BY
Mailing Address 1120 SW 5TH AVE #405	LE/HK
City Portland State OR Zip Code 97204 Phone # 503-865-6039	☐ Compliance Related
Fax 503-823-4500 e-mail Bonita.Oswald@portlandoregon.gov	✓ Potential  Transportation Impact
GENERAL DESCRIPTION OF PROPOSAL (REQUIRED) Please provide a brief description of your project.	☐ Inside Troutdale NSA
Portland Water Bureau proposes to build a drinking water filtration facility and communications tower located	(Invite to meeting)
on SE Carpenter Lane with raw and finished water pipelines connecting to the existing Bull Run conduit system (see attached project description).	✓ Adjacent Washington/ Clackamas/Columbia County
When scheduling the meeting you will need to provide the following information:  • A scaled tentative plan that shows the following:	4/28/2022 @ 9:00 AM Date & Time of
All property lines,	Pre-App Meeting

ZONING

MUA-20

**Zoning District** 

SEC-wr, SEC-h, GH **Zoning Overlay** 

Rev. 03/2020 Application Pre App

The street serving the property & the location of the existing or

On a separate piece of paper, please provide a **thorough description** of your

• Location and use of all proposed buildings or additions.

A scaled **floor plan** showing how the use will occur in the building

• Location and use of all existing buildings and structures on the property,

proposed driveway(s), and

project.

## Portland Water Bureau Bull Run Filtration Project

## **Pre-app Property Information**

Property Address	Owner	Acct number	Map, Tax Lots	Mailing Address
Filtration Site				
SE Carpenter Lane	CITY OF PORTLAND	R994220980	1S4E22D - 00400	1120 SW 5TH AVE #405, PORTLAND, OR 97204
SE Carpenter Lane	CITY OF PORTLAND	R994220820	1S4E22D - 00100	1120 SW 5TH AVE #405, PORTLAND, OR 97204
Pipelines				
35227 SE CARPENTER LN		R994220850	1S4E22DB -00300	35227 SE CARPENTER LN, GRESHAM, OR 97080
36910 SE LUSTED RD		R649716640	1S4E23C - 01400	36910 SE LUSTED RD, BORING, OR 97009
36910 SE LUSTED RD		R649716620	1S4E23C - 01500	36910 SE LUSTED RD, BORING, OR 97009
36322 SE DODGE PARK BLVD		R238000610	1S4E23C - 02200	PO BOX 666, BORING, OR 97009
33304 SE LUSTED RD		R994210630	1S4E21A - 00900	29722 SE DIVISION ST, TROUTDALE, OR 97060
6704 SE COTTRELL RD	CITY OF PORTLAND	R994220300	1S4E22BA -00200	1120 SW 5TH AVE #405, PORTLAND, OR 97204
SE LUSTED RD	CITY OF PORTLAND	R994221120	1S4E22BA -00100	1120 SW 5TH AVE #405, PORTLAND, OR 97204
34747 SE LUSTED RD		R994150140	1S4E15C - 00801	7420 SW HUNZIKER ST #A, TIGARD, OR 97223

## Pre-application Request for Portland Water Bureau Bull Run Filtration Project

#### Contents

Project Summary	1
Project Need & Design Parameters	2
Filtration Facility Design & Operational Characteristics	4
Pipeline & Intertie Design and Operational Characteristics	6
Pipelines	6
Finished Water Intertie	7
Appurtenances	7
Lusted Road Distribution Main	8
Attached Drawings	8
Specific Questions for Multnomah County Staff	8

#### **Project Summary**

The Portland Water Bureau (Water Bureau) requests a pre-application conference for the Bull Run Filtration Project (the project). The project is located primarily in Multnomah County, as shown on Figure 1.

Proposed project features in Multnomah County include the following public water utility facilities and appurtenances, each shown on Figure 1:

- The 135 million gallon per day (mgd) drinking water filtration facility and a communications tower, located on a 94-acre site in the Multnomah County Multiple Use Agriculture (MUA-20) zone and served by SE Carpenter Lane and an emergency access road in Clackamas County;
- Two raw water pipelines in Multnomah County that extend approximately 0.4 miles from the
  proposed Multnomah Connection to existing conduits in SE Lusted Road just north of the county
  line to the filtration facility, through areas zoned Rural Residential (RR) and Exclusive Farm Use
  (EFU);
- Two finished water pipelines that extend approximately 1.3 miles in the MUA-20 zone from the filtration facility to the finished water intertie, entirely in the existing SE Dodge Park Boulevard right-of-way and subsequently along an easement between SE Dodge Park Boulevard and the finished water intertie at SE Lusted Road;
- The finished water intertie located on SE Lusted Road east of SE Altman Road in an area zoned MUA-20;
- Three pipelines located entirely in existing county right-of-way through areas zoned MUA-20 and EFU, that extend from the intertie various distances to connect with existing conduits: one at SE Altman Road and Lusted Road, one at SE Altman Road and Pipeline Road, and one at SE Altman Road and Oxbow Drive; and

A separate local distribution main connection from the new pipelines in SE Dodge Park
Boulevard to the existing main adjacent to the Lusted Hill Treatment Facility on SE Cottrell Road
to supply existing local water customers and four wholesale water districts. The main travels
within the Cottrell Road right-of-way in the MUA-20 zone then crosses the Lusted Hill Water
Bureau property in the Commercial Forest Use (CFU) zone and connects to the existing main in
an adjacent easement.

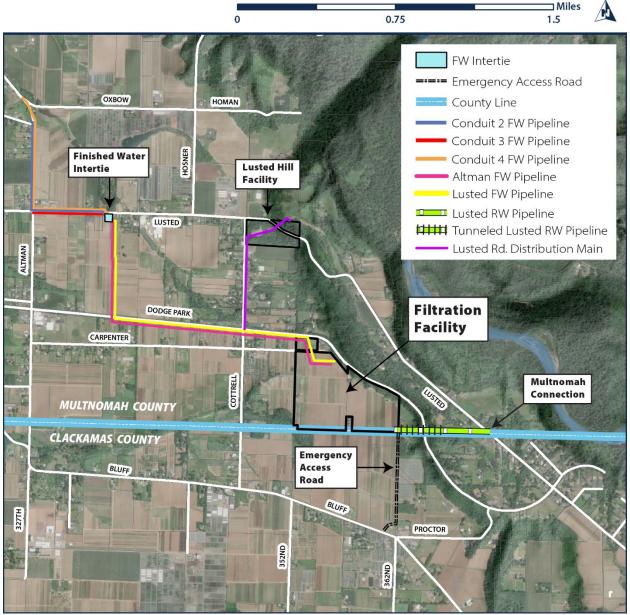


Figure 1. Bull Run Filtration Project Overview Map

#### **Project Need & Design Parameters**

The project will meet federal drinking water treatment requirements to protect public health under the U.S. Environmental Protection Agency's (EPA's) Long-Term 2 Enhanced Surface Water Treatment Rule

(LT2). On December 18, 2017, the Oregon Health Authority-Drinking Water Services (OHA) and the Water Bureau signed a bilateral compliance agreement that laid out a schedule for the project.

The project is necessary to provide clean and reliable drinking water to everyone connected to Portland's water system, including Pleasant Home Water District, Lusted Water District, and other wholesale customers serving local residents and businesses. The project is designed to meet Water Bureau level of service goals related to production capacity and water quality, and to withstand environmental events such as earthquakes, landslides, large storms, volcanic events, and fires in the watershed.



Figure 2. Generalized zoning and anticipated land use reviews

#### Filtration Facility Design & Operational Characteristics<sup>1</sup>

The Water Bureau proposes to build a quiet, odorless, and unobtrusive facility designed to filter 135 mgd of drinking water to meet regional domestic water needs. As shown in Figure 3, the proposed facility includes filtration equipment and buildings for operations, staff support areas, chemical storage, and additional structures for mechanical and other equipment. These structures are designed to be low profile with design features (e.g., materials, roofs, forms) taking cues from local farm and residential buildings in the area. They will meet all MUA-20 development standards including height limits and yard setbacks.

The overflow basin, clear well, and parking and circulation areas will be constructed at or below grade adjacent to above-ground structures. A communications tower is proposed to the northeast of the facility with partial screening provided by a grove of trees. The facility will generally be screened from public rights-of-way as illustrated in Figures 4 and 5 below. Figure 6 provides a bird's eye view of the facility, showing screening and low-profile design features. The facility will be staffed by 26 full time employees, with a maximum of 18 working any individual shift. The facility will see a maximum of 16 delivery trucks and 9 solids haul-off trucks entering and exiting the site during a 5-day work week. Combined, this amounts to a maximum of 5 trucks entering and exiting the site per day.



Figure 3. Filtration facility site with planted buffers and stormwater facilities

<sup>&</sup>lt;sup>1</sup> Between now and the final land use application, the Water Bureau will be engaged in a value engineering process which, along with input from project contractors, will inform project scope decisions that control costs while meeting performance and reliability goals. Some portions of the project may be designed and proposed as part of this land use process although included in later potential phases of the development, and these portions will be identified in the land use application.

A security fence will be installed around the critical infrastructure components with a secondary fence to separate the entry area from the main process area. The security fencing will be set back from the property line and screened with landscaping. The east side of the site, outside the secured area, will be reserved for a potential future open space use, such as agriculture.



Figure 4. Filtration facility main entry seen from SE Carpenter Lane

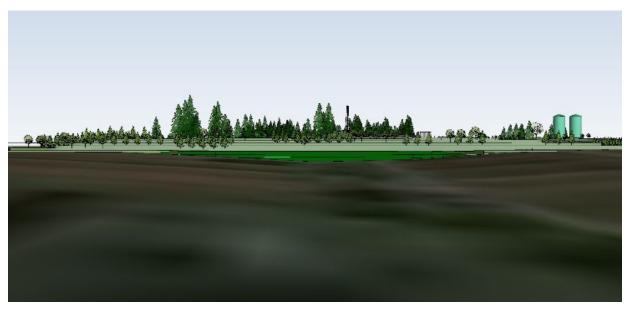


Figure 5. Filtration facility viewed from west



Figure 6. Bird's eye view from the north

#### Pipeline & Intertie Design and Operational Characteristics

#### **Pipelines**

As a part of the project, two new raw water pipelines will intersect the existing Bull Run conduits in Lusted Road just north of the county line and redirect the flow to the new filtration facility. The series of finished water pipelines will then transmit water from the filtration facility and reconnect to the existing conduits near SE Altman Road, maintaining gravity flow of filtered water to serve Portland-area customers.

The three conduits currently in operation were installed between the early 1910s and mid-1950s. These conduits are referred to as Conduit 2 (C2), Conduit 3 (C3), and Conduit 4 (C4) in order from oldest to newest. Following completion of this project, about 2.7 linear miles of the existing conduits will be replaced with the new raw and finished water pipelines, which will be designed to current seismic standards.

The pipelines work consists of four primary elements (Figure 1):

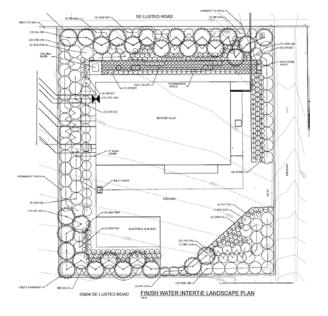
- Two raw water pipelines (Lusted Raw Water Pipeline)
- One raw water tunnel and shaft system (Raw Water Tunnel)
- One finished water flow-control intertie facility (Finished Water Intertie)
- Two finished water pipelines from the filtration facility to the finished water intertie and three finished water pipelines from the intertie that connect to the three existing conduits near SE Altman Road (Conduit 2, 3, and 4)

#### Finished Water Intertie

The intertie is located on the south side of SE Lusted Road, approximately a quarter mile east of SE Altman Road. The intertie site avoids impacts on the EFU-zoned land and SEC environmental areas to the north of the road. The intertie is designed as a below-grade concrete vault that connects two parallel pipelines with valves and interconnections to three pipelines that serve the existing downstream conduits. A small electrical building will house the necessary electrical and control panels for the intertie. The plan includes an access drive, security fence, and a landscape buffer. The proposed landscape screening and site plans are shown in Figures 7 and 8. The intertie provides reliability and system redundancy for the finished water system.



Figure 7. Finished water intertie overview – rendering of view looking east



#### <u>Appurtenances</u>

Pipeline appurtenances include air valves, drains, and access ways that function and look like existing Water Bureau

Figure 8. Intertie site plan with landscape buffers

infrastructure in the project area. They will be located at-grade or low to the ground along the pipeline route (examples of existing appurtenances are shown in Figures 9 and 10). Combination air valves are typically installed at high points along a pipeline in an underground vault with a 6- to 12-inch diameter "vent pipe" extending up to 30 inches above ground. Drains are typically installed at low points along the pipeline. Above-ground features for drains are limited to a pair of valve cans and an access lid installed above a small vault; these features are generally at grade. Access ways are at grade and are installed along pipelines approximately every 2,000 feet for maintenance purposes. Air vents are inspected monthly and drains annually; inspection using accessways occurs only once every 15 to 20 years.



Figure 9. Example of existing air vent and access vault (left) within the SE Lusted Road right-of-way



Figure 10. Existing drain in SE Lusted Road right-of-way

#### Lusted Road Distribution Main

A local distribution main will connect new pipelines in SE Dodge Park Boulevard to the existing Lusted Road distribution main in an easement adjacent to the Lusted Hill Treatment Facility to supply existing local water customers and four wholesale water districts. The main will be installed below ground using a combination of trenchless and open cut construction methods.

#### **Attached Drawings**

- 1. Overview Plan
- 2. Filtration Facility Site Plan
- 3. View looking SE
- 4. View looking SE-birdseye
- 5. Perspective looking SE
- 6. Administration Building
- 7. Maintenance Building
- 8. Admin & Maint Floor Plans
- 9. Finished Water Intertie Site Plan
- 10. Finished Water Intertie Elevations

#### Specific Questions for Multnomah County Staff

- 1. Please confirm that the off-street parking requirements for the same use classification at Lusted Hill will be used for the filtration project. At Lusted Hill (T3-2012-2648), the Hearings Officer determined that, while the project is not a manufacturing use, the use is not specifically listed under MCC 39.6590(F) and manufacturing is most similar in terms of parking requirements because the use is mostly mechanical and storage buildings with accessory office. Therefore, the Hearings Officer required compliance with the parking standard in MCC 39.6590 (E)(I).
- 2. Please confirm our understanding that the entire project is located outside of the big game winter habitat area defined by the Oregon Department of Fish and Wildlife.
- 3. Provided as Figure 11 are the proposed intersections for the project Transportation Impact Study. We have included intersections based on input from our transportation engineer as well as public comments. Please confirm if there are any additional intersections that the County would like to have included in the Transportation Impact Study.

- 4. Pipelines will either be located in public rights-of-way or easements across private land in MUA-20 and EFU. Please confirm that base zone setback and landscape standards do not apply to below-ground facilities or structures less than 30 inches tall.
- 5. Please confirm the anticipated land use reviews identified in Figure 2. In addition to what is shown in Figure 2, we anticipate Geologic Hazard review and, where the proposed pipelines are in the EFU portion of the right-of-way, that these are an allowed use under MCC 39.4220(G), given that no buildings will be impacted and no new land parcels will be created.
- 6. Please confirm that the applicable policies of the Comprehensive Plan for the same use classification at Lusted Hill (T3-2019-11784) will be applicable to the filtration project components.
- 7. Please confirm that design review is not required for below-ground or at-grade (for example, an access cover) facilities of the project.
- 8. Please confirm that our proposed Conditional Use study area shown in Figure 12 is reasonable. This area is designed to be large enough to include all roads/intersections studied in the Transportation Impact Study and to ensure that nursery crop land and related wholesale operations are considered in the various impact analyses.

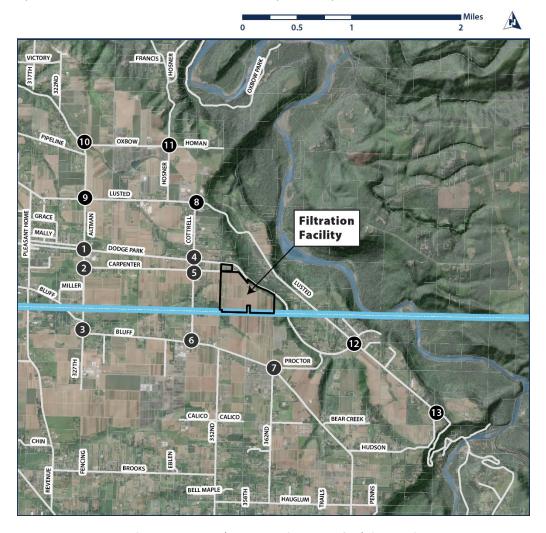


Figure 11. Proposed Transportation Impact Study intersections

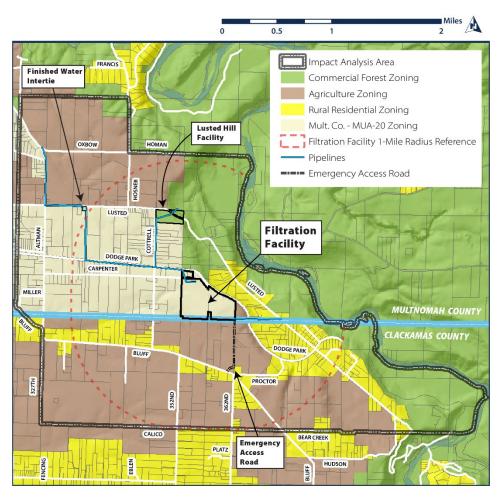
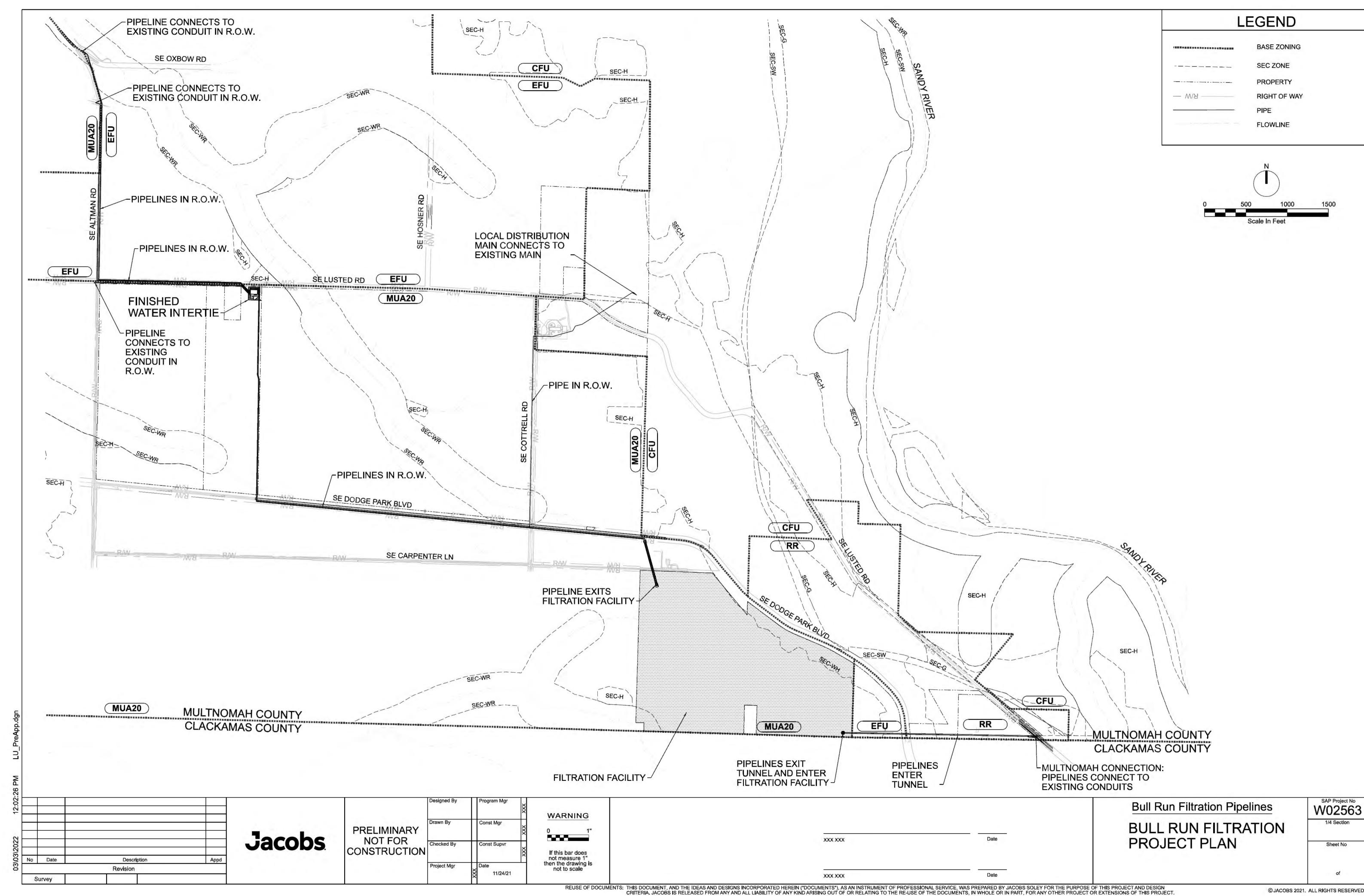
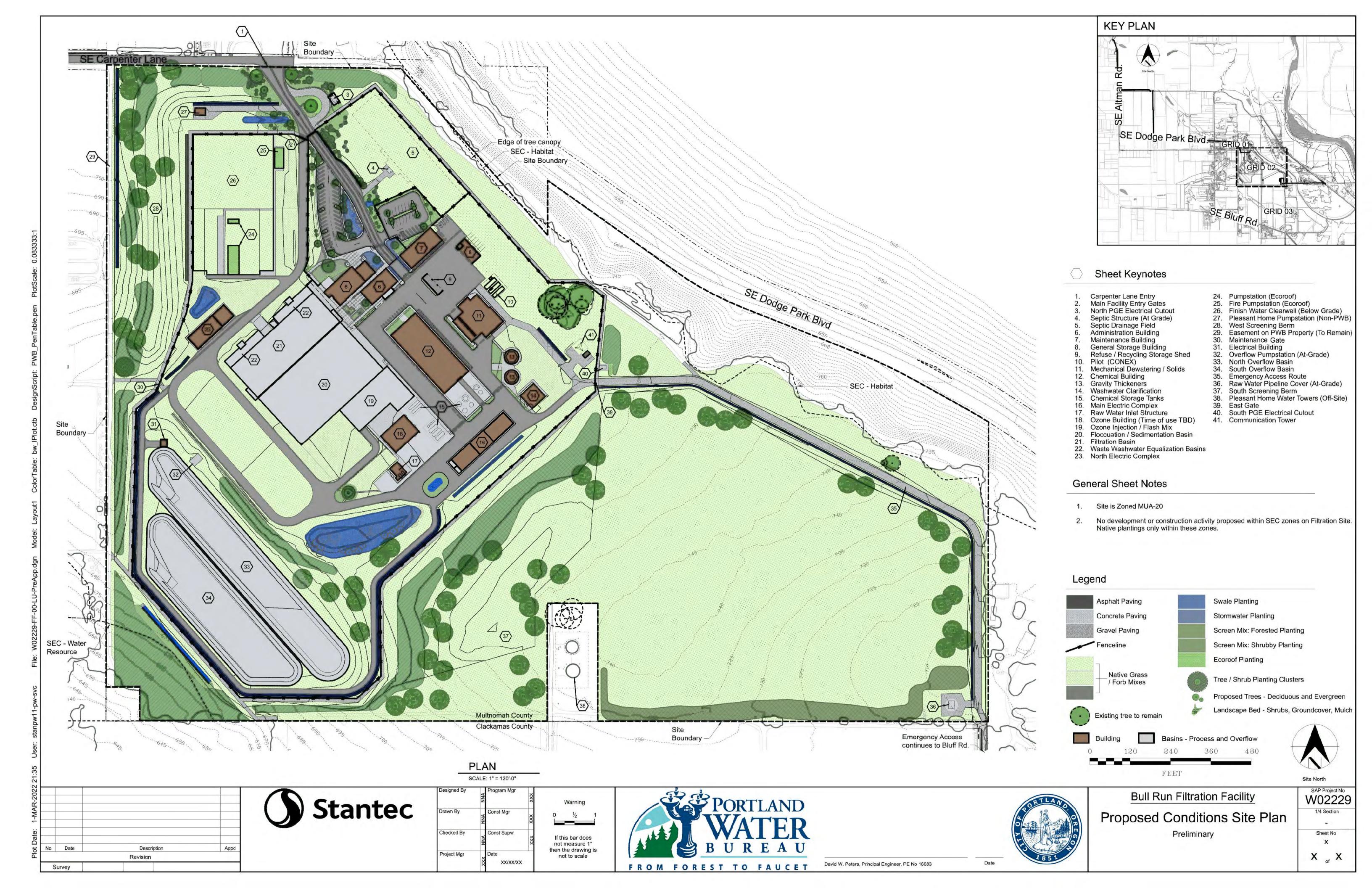
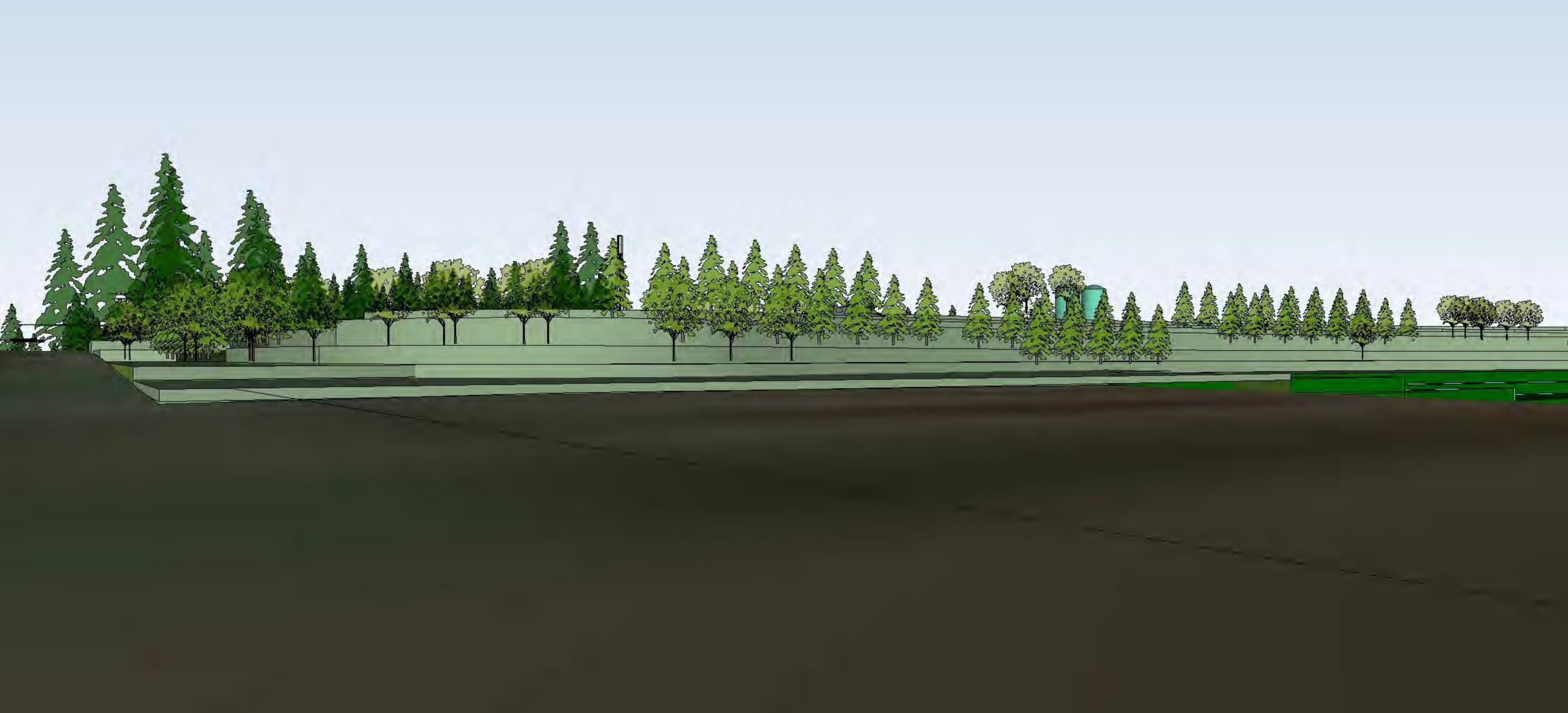


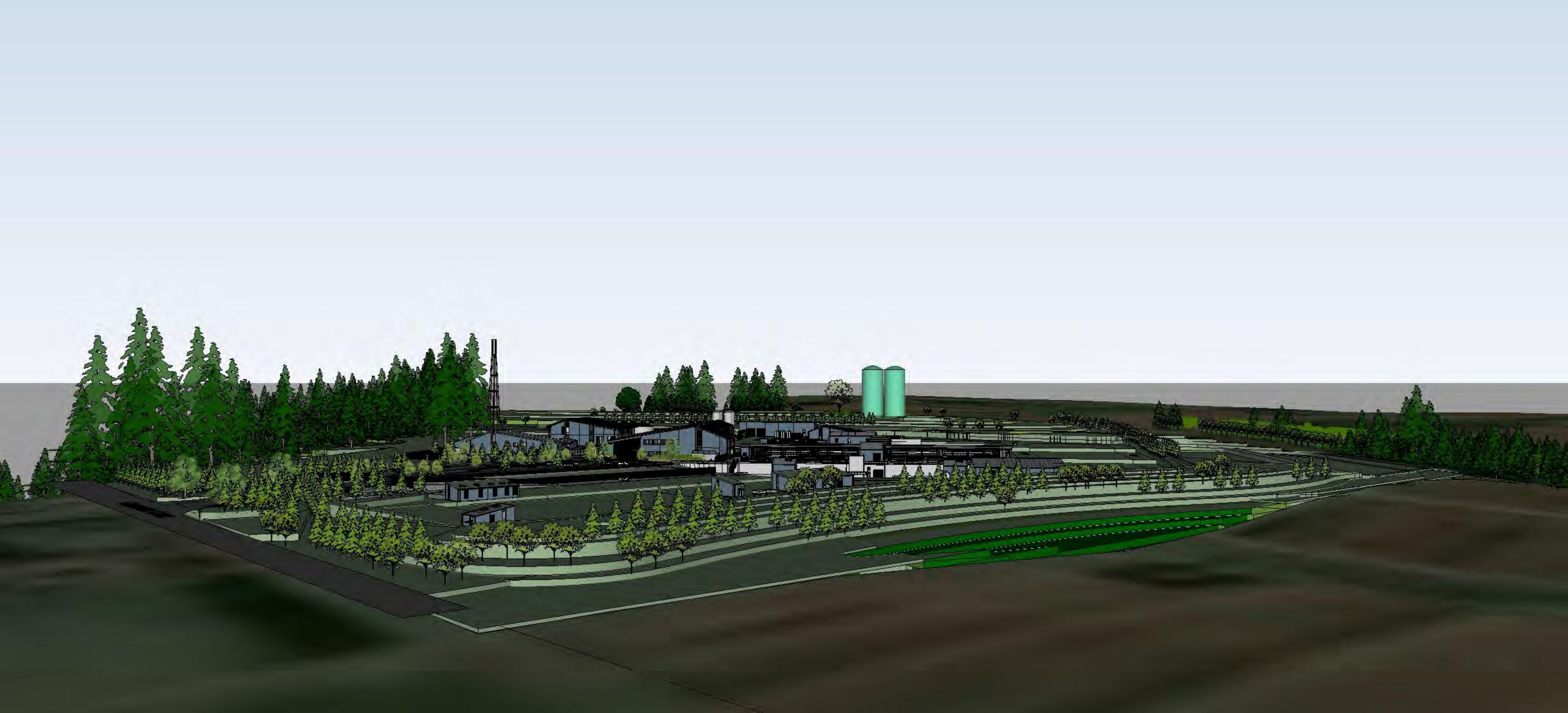
Figure 12. Proposed Conditional Use study area

We look forward to your written summary of the pre-application conference and your feedback on the requirements, approval standards, fees, and other information related to the project. Thank you for your time and attention to this matter.





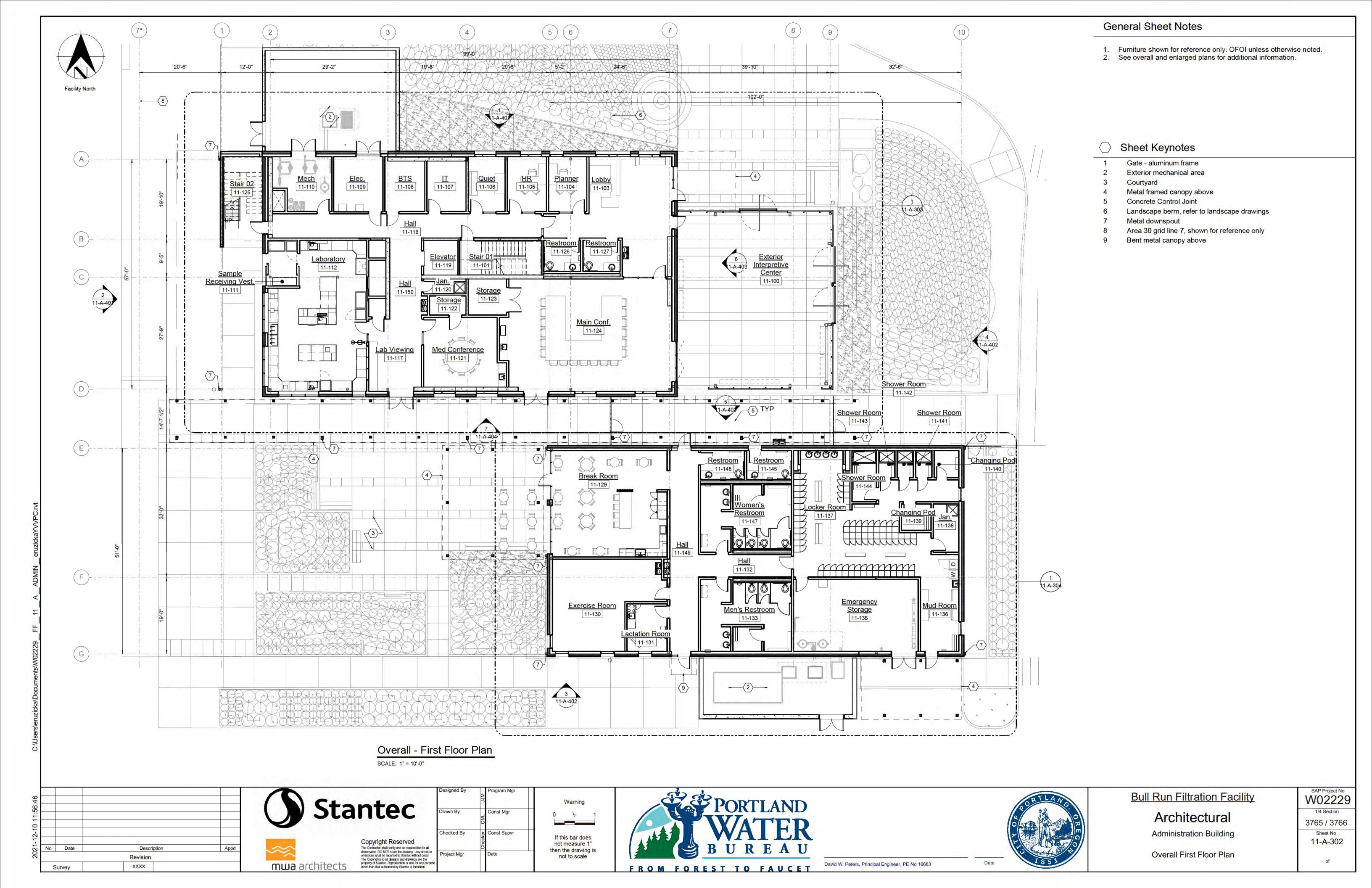




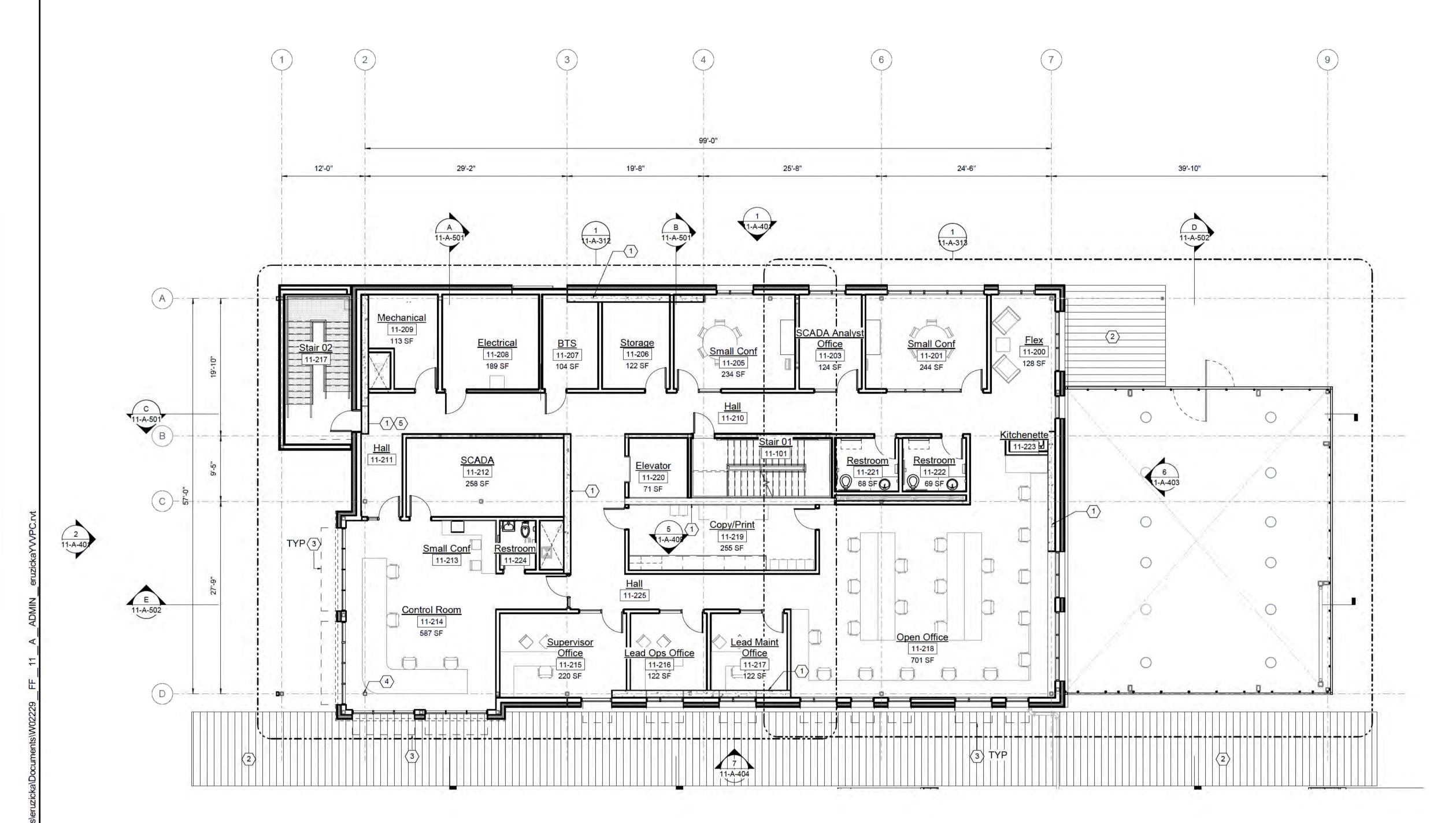










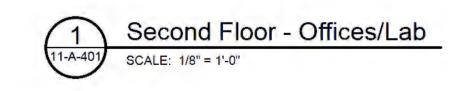


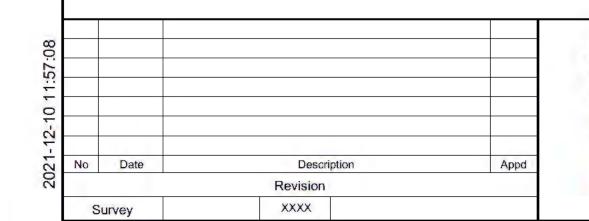
## General Sheet Notes

- Furniture shown for reference only. OFOI unless otherwise noted.
   See overall and enlarged plans for additional information.

# Sheet Keynotes

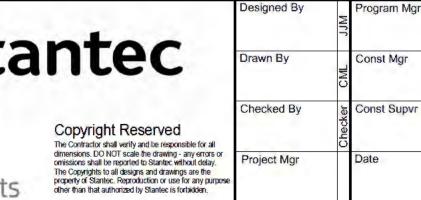
- Concrete shear wall see structural drawings
- Metal framed canopy below
- Fixed aluminum storefront sunshade above
- Steel post see structural drawings
- Recessed aluminum walk off grate LEED complaint

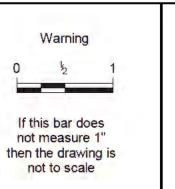






mwa architects









**Bull Run Filtration Facility** 

# Architectural

Administration Building

Second Floor Plan - Offices/Lab

SAP Project No W02229 1/4 Section 3765 / 3766 Sheet No 11-A-305

Sheet Keynotes

Jib Crane

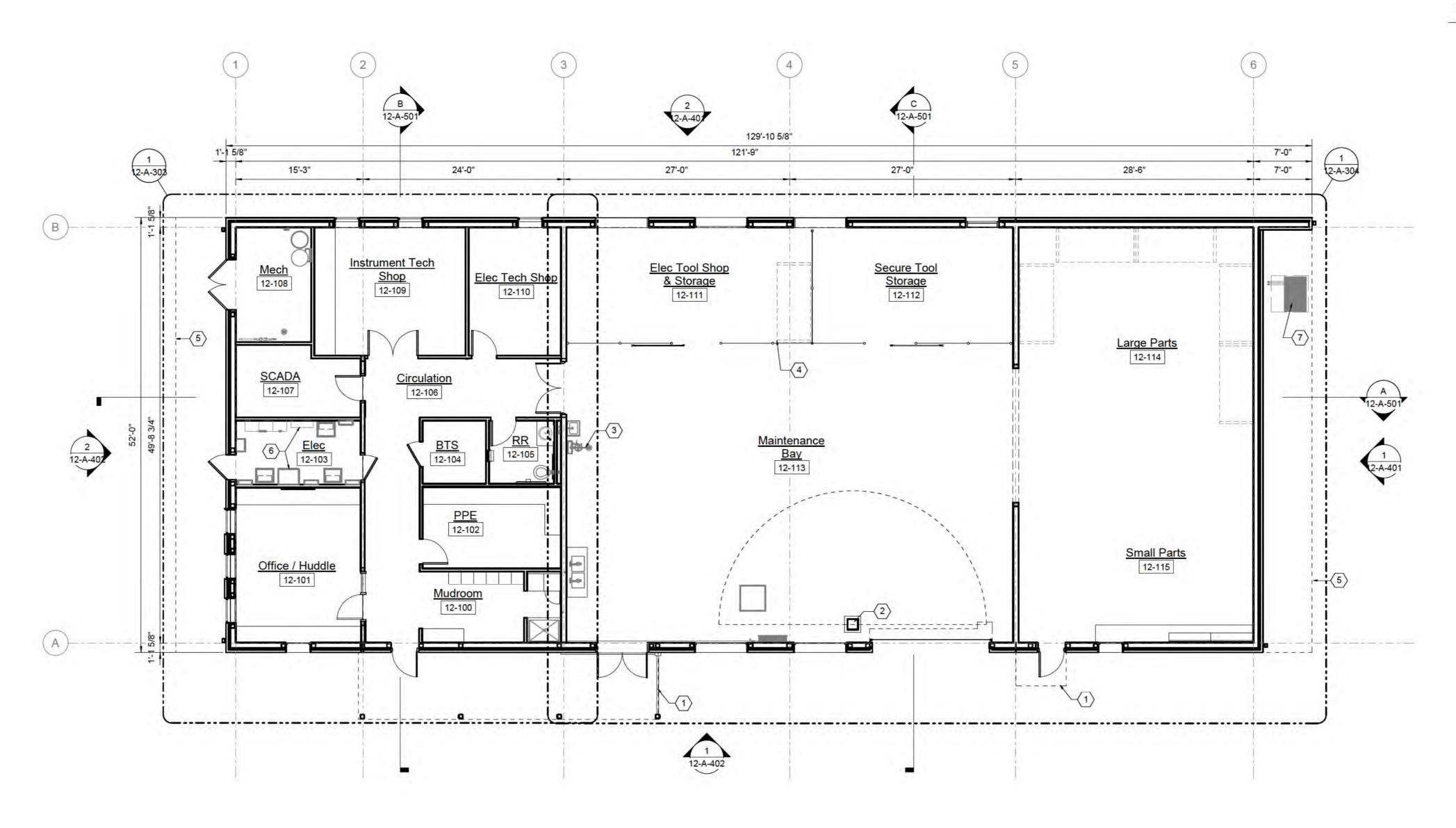
Bent metal canopy

Roof Overhead

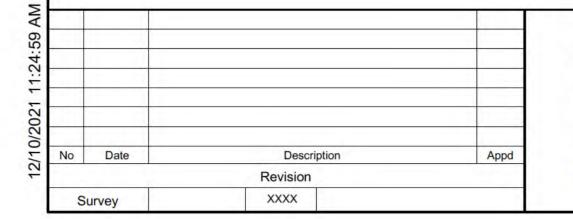
Electrical Equipment

**HVAC** Equipment

Emergency Eyewash Shower Chainlink Fence and Gate

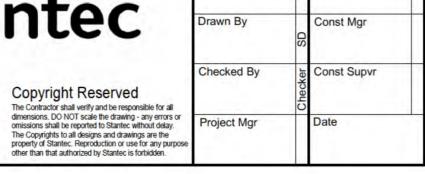


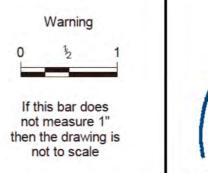
Level 1 - Floor Plan SCALE: 1/8" = 1'-0"













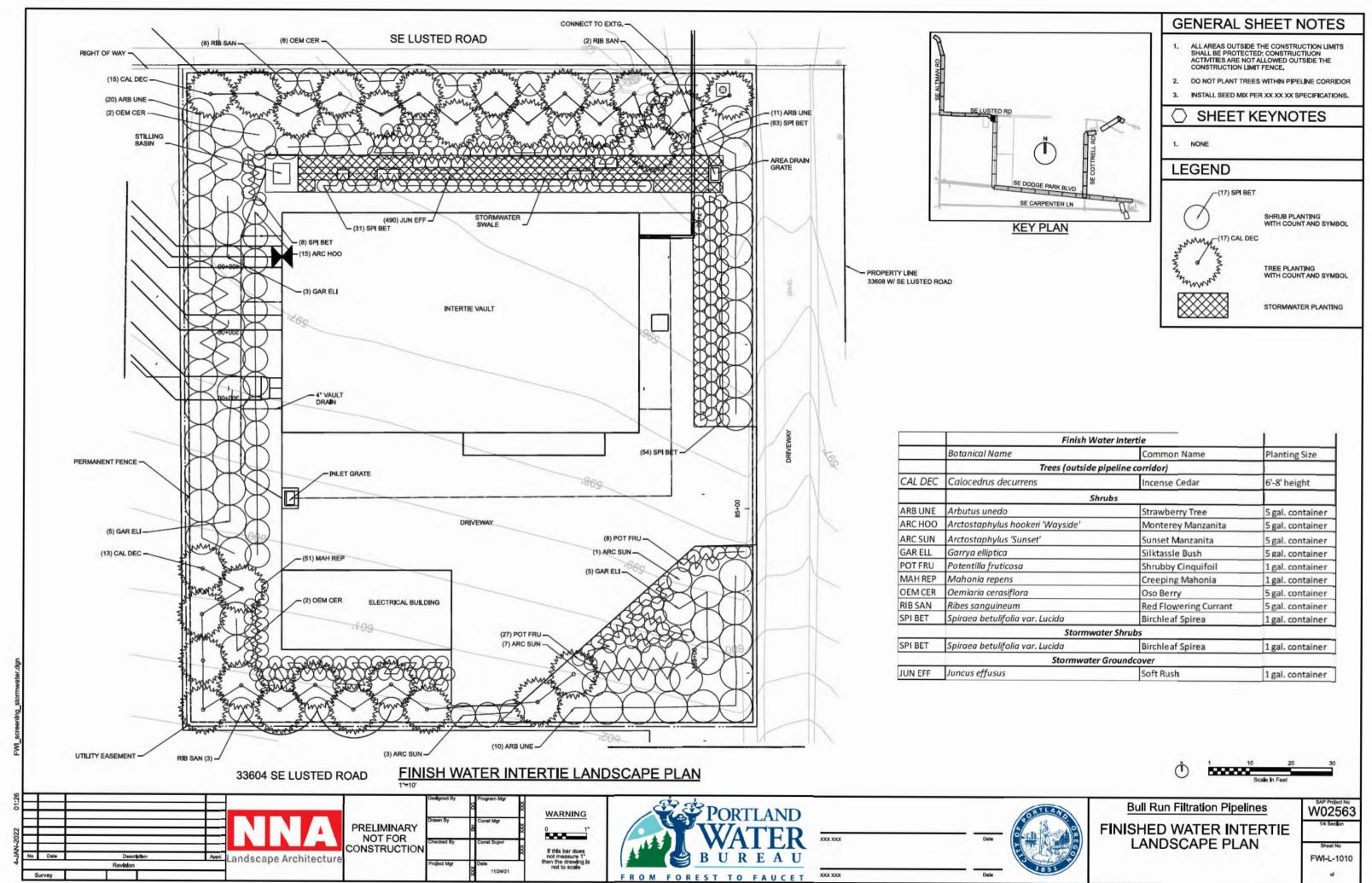




Architectural Maintenance Building

First Floor Plan

SAP Project No W02229 1/4 Section 3765 / 3766 Sheet No 12-A-302



WARNING

If this bar does not measure 1" then the drawing is not to scale

SOUTH ELEVATION

1/4°=1°-0°

**PRELIMINARY** 

NOT FOR CONSTRUCTION

**Jacobs** 



# **COLOR LEGEND**

**KEYNOTES** 

01. 6° BLACK HIGH LETTERS - TO READ, °CONTROL ROOM". 02. 6" BLACK HIGH LETTERS - TO READ, "GENERATOR ROOM",

03. SURFACE MOUNTED LIGHT SCONCE - SEE ELECTRICAL. 04. ELECTRICALL PANELS - SEE ELECTRICAL.



BASIS OF DESIGN: STANDING SEAM METAL ROOF BERRIDGE MANUFACTURING, CO. STANDARD COLOR: BRISTOL BLUE FINISH: KYNAR 500



BASIS OF DESIGN:
METAL SIDING
BERRIDGE MANUFACTURING, CO,
STANDARD COLOR: CITYSCAPE
FINISH; KYNAR 500

BASIS OF DESIGN: COMPLEMENTARY TO METAL SIDING BY BERRIDGE MANUFACTURING CO.

W02563

**Bull Run Filtration Pipelines** FINISHED WATER INTERTIE

**ARCHITECTURAL** 

**EXTERIOR ELEVATIONS** 

FWE-A-2001

BUREAU

PORTLAND

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