



## Technical Memorandum

**Subject:** Filtration Facility Civil Engineering Plans

**PWB Project #s:** W02229

**Date:** September 23, 2022

**To:** Lyda Hakes, P.E., Project Manager  
Portland Water Bureau

**From:** Mark Graham, P.E., Project Manager  
Stantec

**Prepared by:** Rafael Gaeta, P.E.  
Emerio Design



in association with  
  
and other firms

**Reviewed by:** Mark Graham, P.E.  
Stantec



EXPIRES: 6/30/2023

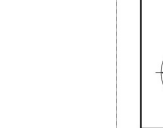
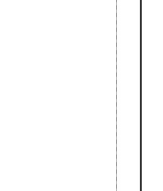
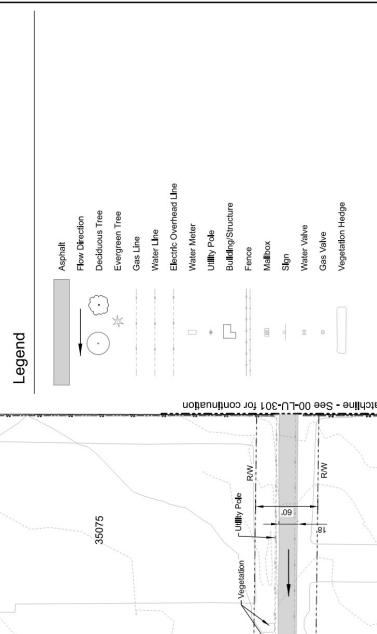
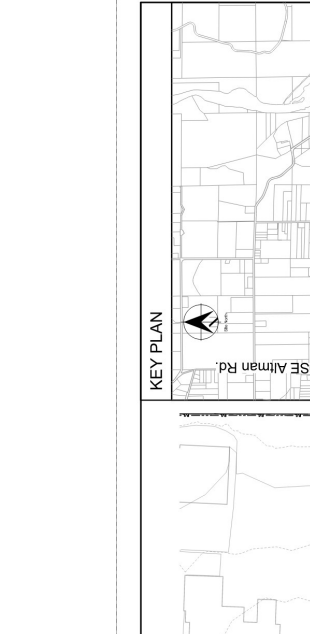
The set of drawings attached to this technical memorandum (TM) were prepared in support of the City of Portland Water Bureau’s Bull Run Treatment Facilities’ land use applications in Multnomah County. These drawings reflect the current status of the Filtration Facility design, which is approximately 90% complete as of the date of this TM. The drawings have been prepared and compiled for the specific purpose of addressing conformance to Multnomah County land use requirements as expressed in the Multnomah County Code.

The contents of this set of drawings are listed in the tables below.

Table 1. Civil Engineering Drawings (Off-Site Improvements)	
Drawing Number	Drawing Name
00-LU-201	Existing Conditions
00-LU-202	Proposed Conditions
00-LU-203	Stormwater Management Plan
00-LU-204	Grading Plan
00-LU-205	Utility Plan

## **Attachment A: Civil Engineering Plans (Off-Site Improvements)**

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Program Mgr	JG	4/50
Drawn By	SLB	5/1
Checked By	CS	8/23
Project Mgr	CS	09/02/22



Revised	Description
C	09/02/22 Second Intermediate Design and BOE Review - 90% Submittal
B	07/22/22 Intermediate Design - 60% Submittal
A	07/20/21 Final Design - 30% Submittal
	2/20/21 Final Design - 30% Submittal

Designed By  
 Drawn By  
 Checked By  
 Project Mgr

Program Mgr  
 Drawn By  
 Checked By  
 Project Mgr

8/23/22

09/02/22

SE Dodge Park Blvd  
 SE Cottrell Rd

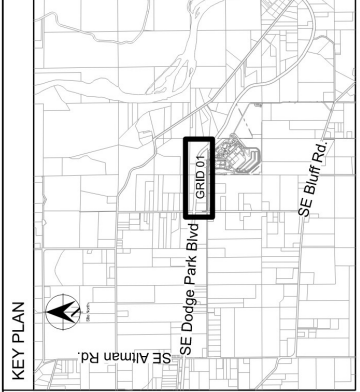
SE Dodge Park Blvd  
 SE Bluff Rd

SE Carpenter Ln

SE Carpenter Ln

SE Dodge Park Blvd  
 SE Bluff Rd

SE Dodge Park Blvd  
 SE Bluff Rd



**General Sheet Notes**

1. See Sheet 00-LU-106 for Roadway Typical Sections.

**Legend**

- Flow Direction
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Gas Line
- Existing Water Line
- Existing Electric Overhead Line
- Existing Water Meter
- Existing Utility Pole
- Existing Building/Structure
- Existing Fence
- Existing Mailbox
- Existing Sign
- Existing Water Valve
- Existing Gas Valve
- Existing Vegetation Hedge
- Existing Vegetation Edge
- Asphalt
- Gravel
- Concrete
- Ditch
- Storm Maintenance Hole
- Ditch Inlet
- Gravel Riprap



OREGON  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 3765  
 STATE OF OREGON

SHEET PROJECT NO. W022229  
 SHEET NO. 00-LU-202  
 PROPOSED CONDITIONS  
 CARPENTER LANE



Warning  
 0 1/2 1  
 If this bar does not measure 1" then this drawing is not to scale

Program Mgr. [Name]  
 Drawn By. [Name]  
 Checked By. [Name]  
 Project Mgr. [Name]

Date 09/02/22



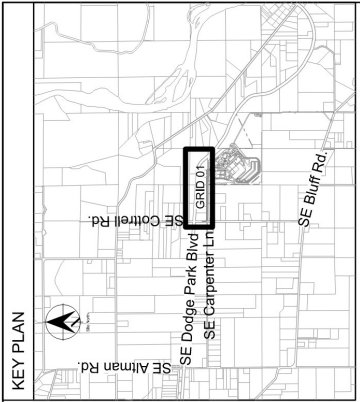
No.	Date	Description
1	09/02/22	Revisions



Matchline - See 00-LU-302 for continuation



David W. Peavey, Engineering Manager, PE No. 16583

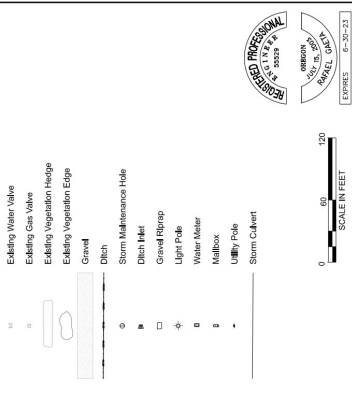
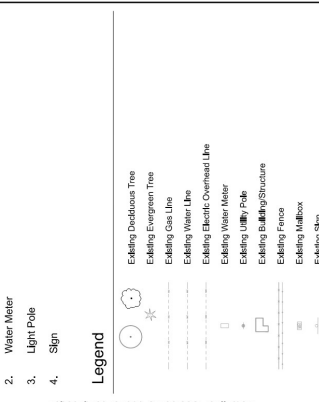


**General Sheet Notes**

- All existing utilities to remain in place and protected during construction.

**Sheet Keynotes**

- Utility Pole
- Water Meter
- Light Pole
- Sign



**Stantec**

Program Mgr: [Name] 4/20  
 Drawn By: [Name] 5/18  
 Checked By: [Name] 6/08  
 Project Mgr: [Name] 09/02/22

Warning  
 0 1/2 1  
 If this bar does not measure 1" then the drawing is not to scale.



**Bull Run Filtration Facility**

Civil  
 Utility Plan  
 Carpenter Lane



DATE: 12-SEP-2022 19:01  
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 COLOR: 00-LU-203  
 PLOTSCALE: 0.0833331

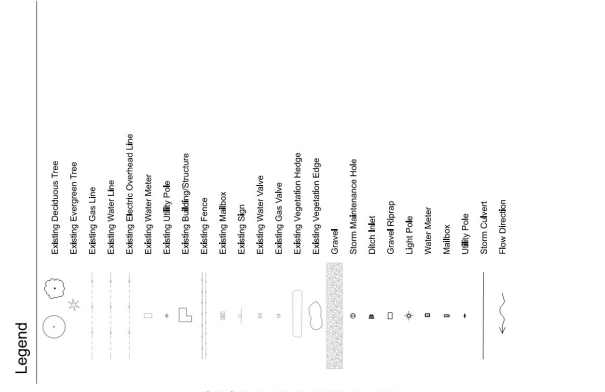
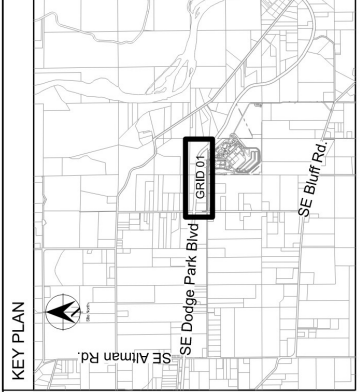
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 COLOR: 00-LU-203  
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 FILE: W02229\_FF\_00-LU-203.dgn  
 MODE: 00-LU-203  
 COLOR: 00-LU-203  
 PLOTSCALE: 0.0833331



- Legend**
- Existing Deciduous Tree
  - Existing Evergreen Tree
  - Existing Gas Line
  - Existing Water Line
  - Existing Electric Overhead Line
  - Existing Water Meter
  - Existing Utility Pole
  - Existing Building/Structure
  - Existing Fence
  - Existing Mailbox
  - Existing Sign
  - Existing Water Valve
  - Existing Gas Valve
  - Existing Vegetation Hedge
  - Existing Vegetation Edge
  - Gravel
  - Storm Maintenance Hole
  - Ditch Inlet
  - Gravel Riprap
  - Light Pole
  - Water Meter
  - Mailbox
  - Utility Pole
  - Storm Culvert
  - Flow Direction

**KEY PLAN**

SE Dodge Park Blvd  
SE Bluff Rd  
GRID DOT



DATE: 12-SEP-2022 19:00  
USER: stamp1t-w-svc  
FILE: W02229\_FF\_00-LU-204.dgn  
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COLOR: 02-C-204  
PLOTSCALE: 0.0833331



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MODE: 02-C-204  
COLOR: 02-C-204  
PLOTSCALE: 0.0833331



- Legend**
- Existing Deciduous Tree
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  - Storm Culvert
  - Flow Direction

**KEY PLAN**

SE Dodge Park Blvd  
SE Bluff Rd  
GRID DOT



DATE: 12-SEP-2022 19:00  
USER: stamp1t-w-svc  
FILE: W02229\_FF\_00-LU-204.dgn  
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**Stantec**

No.	Date	Description	Revision
1	09/02/22	7800 SE Cottrell Rd	

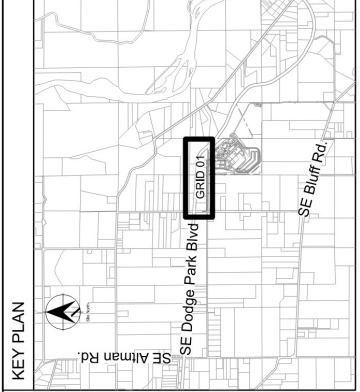
**Portland Water Bureau**  
FROM FOREST TO FAUCET

Program Mgr: [Name]  
Design Mgr: [Name]  
Check Mgr: [Name]  
Project Mgr: [Name]

Date: 09/02/22

**Bull Run Filtration Facility**  
Civil  
Grading Plan  
Carpenter Lane

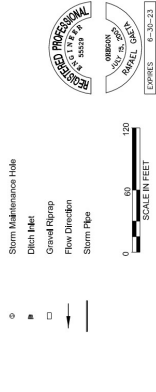
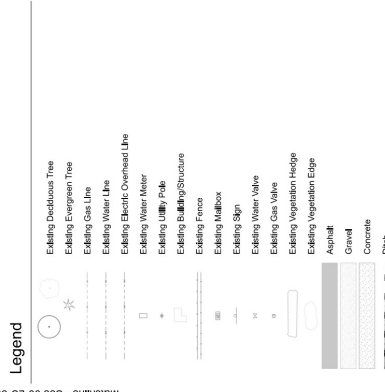
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PLOTSCALE: 0.0833331



**General Sheet Notes**

1. Refer to Filtration Facility Stormwater Report (Appendix H.1) for stormwater calculations and sizing.

- Sheet Keynotes**
1. 12" PVC Culvert
  2. Drainage Ditch per C-169 detail GEN-C-923
  3. Typical Grassy Swale per detail C-168/GEN-C-923
  4. 12" PVC Storm Pipe
  5. Storm Maintenance Hole
  6. Ditch Inlet



SE Dodge Park Blvd  
SE Bluff Rd  
SE Altman Rd  
GRID 0101



**Stantec**

**PORTLAND WATER BUREAU**  
FROM FOREST TO FAUCET

**Bull Run Filtration Facility**  
Civil  
Stormwater Management Plan  
Carpenter Lane

Wasting  
0 1/2 1  
If this bar does not measure 1" then the drawing is not to scale.

Designed By: [Blank]  
Drawn By: [Blank]  
Checked By: [Blank]  
Project Mgr: [Blank]

Program Mgr	Date
[Blank]	09/02/22