



Technical Memorandum

Subject: Filtration Facility Land Use Application Pipeline Drawings **A.2 C Civil**

PWB Project #s: W02229

Date: January 10, 2023

To: Dan Hogan, P.E., Project Manager
Portland Water Bureau

From: Brad Phelps, P.E., Project Manager
Jacobs



EXPIRES: 12/31/2024

Jacobs

The drawings attached to this technical memorandum (TM) were prepared in support of the City of Portland Water Bureau’s Bull Run Facility Pipelines land use applications in Multnomah County. These drawings were prepared under the direction of a registered professional engineer. These drawings reflect the current status of the Facility Pipelines design, which is approximately 60% complete as of the date of this TM and are considered preliminary and are not for final construction. The drawings are subject to change have been prepared and compiled for the specific purpose of addressing conformance of the project to Multnomah County land use requirements as expressed in the Multnomah County Code.

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

Table 1. Civil Engineering Drawings		
Drawing Number	Drawing Name	Description
LU-000	COVER SHEET	COVER SHEET
LU-503	FINISHED WATER INTERTIE STORMWATER AND UTILITY PLAN	FINISHED WATER INTERTIE STORMWATER AND UTILITY PLAN
LU-504	FINISHED WATER INTERTIE GRADING AND DRAINAGE PLAN	FINISHED WATER INTERTIE GRADING AND DRAINAGE PLAN
LU-505	FINISHED WATER INTERTIE STORMWATER PLAN AND PROFILE	FINISHED WATER INTERTIE STORMWATER PLAN AND PROFILE
LU-506	FINISHED WATER INTERTIE STORMWATER DETAILS	FINISHED WATER INTERTIE STORMWATER DETAILS



Portland Water Bureau

Bull Run Filtration Pipelines Project

LAND USE APPLICATION
APPENDIX A.2
C. CIVIL PLANS

SHEET NUMBER	SHEET NAME	DESCRIPTION
FINISHED WATER INTERTIE CIVIL PLANS		
1	LU-000	COVERSHEET
2	LU-503	FINISHED WATER INTERTIE STORMWATER AND UTILITY PLAN
3	LU-504	FINISHED WATER INTERTIE GRADING PLAN
4	LU-505	FINISHED WATER INTERTIE STORMWATER PLAN AND PROFILE
5	LU-506	FINISHED WATER INTERTIE STORMWATER DETAILS

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No	Date	Description	Appd
Revision			
Survey			

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Designed By	TWL	Program Mgr	XXX
Drawn By	AP	Const Mgr	XXX
Checked By	SDA	Const Supvr	XXX
Project Mgr	XXX	Date	6/30/22

WARNING
0 1"
If this bar does not measure 1" then the drawing is not to scale



Date

Date



**Bull Run Filtration Pipelines
LAND USE APPLICATION
APPENDIX A.2
C. CIVIL PLANS
COVERSHEET**

SAP Project No	W02563
1/4 Section	
Sheet No	LU-000

CONSTRUCTION NOTES

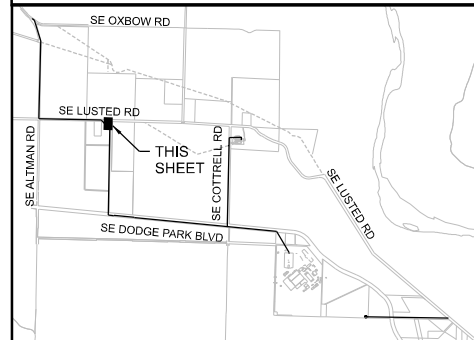
- CONSTRUCT 48" MAINTENANCE HOLE.
- CONSTRUCT BEEHIVE INLET PER COP STD DRG P-309.

LEGEND

- ASPHALT
- GRAVEL
- CONCRETE
- CONVEYANCE SWALE
- DITCH
- STORM DRAINAGE PIPE
- STORM DRAINAGE CULVERT
- SEC ZONE
- P/L PROPERTY LINE
- R/W RIGHT-OF-WAY
- EL EXISTING EASEMENT LINE
- PE PROPOSED EASEMENT LINE
- X PROPOSED FENCE
- BASIN EMERGENCY OVERFLOW
- STORMWATER MANHOLE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- CONIFEROUS TREE
- DECIDUOUS TREE

GENERAL SHEET NOTES

- STORMWATER EXISTING NURSERY FIELD DRAINAGE TILES TO BE INTERCEPTED AND BYPASSED AROUND FWI SITE TO EXISTING CATCH BASIN AT NORTHEAST CORNER.
NEW ELECTRICAL BUILDING ROOF DRAIN DOWNSPOUTS TO BE PIPED TO ADJACENT NEW STORMWATER SWALE.
NEW STORMWATER BASIN AT NORTH SIDE OF SITE TO CAPTURE POST-DEVELOPMENT RUN-OFF TO MEET WATER QUALITY AND WATER QUANTITY REQUIREMENTS.
- DOMESTIC WATER
NEW DOMESTIC WATER SERVICE SUPPLIED BY PLEASANT HOME WATER DISTRICT TO SERVE NEW FIRE HYDRANT, SITE IRRIGATION, AND WASH-DOWN HOSE BIBS.
- SANITARY SEWER
NO SANITARY SEWER OR SEPTIC SERVICE IS REQUIRED.
- GAS
NO GAS SERVICE IS REQUIRED.

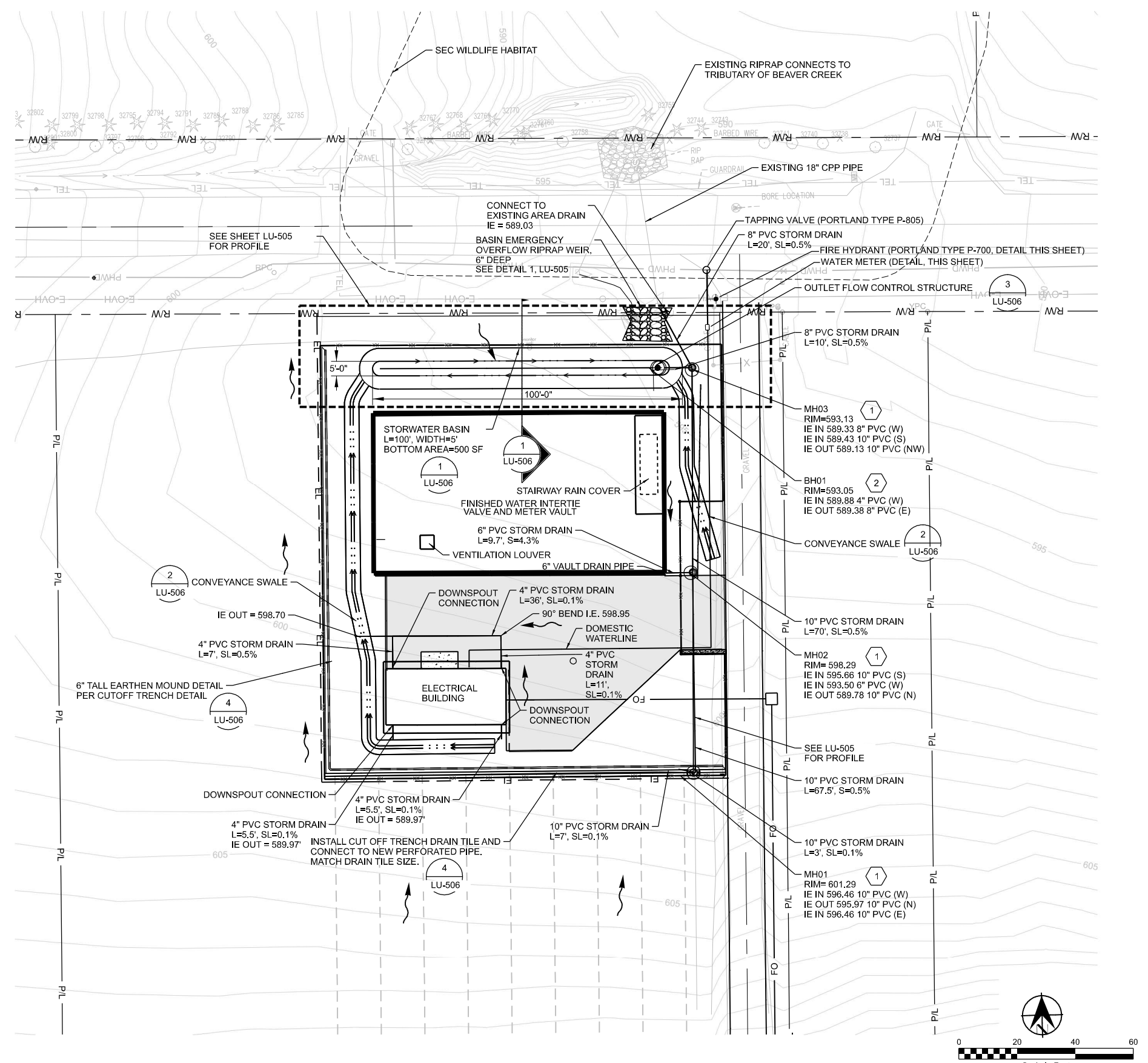
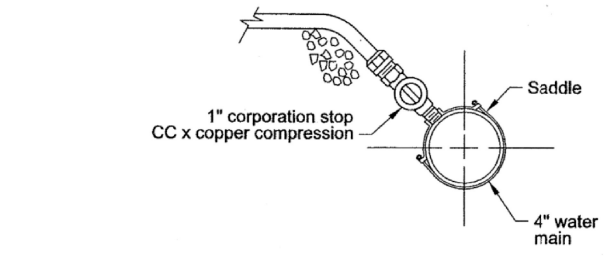
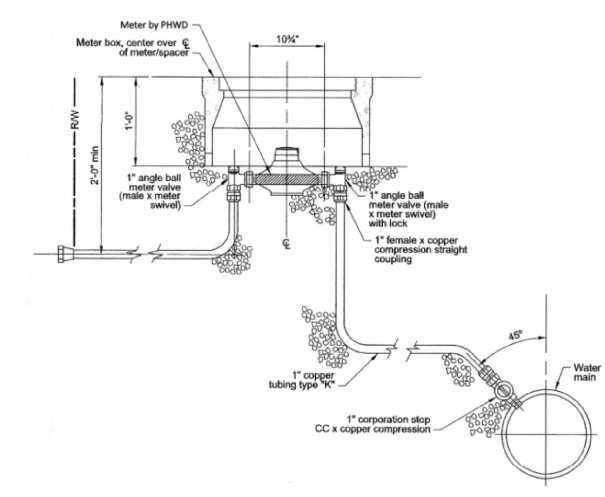
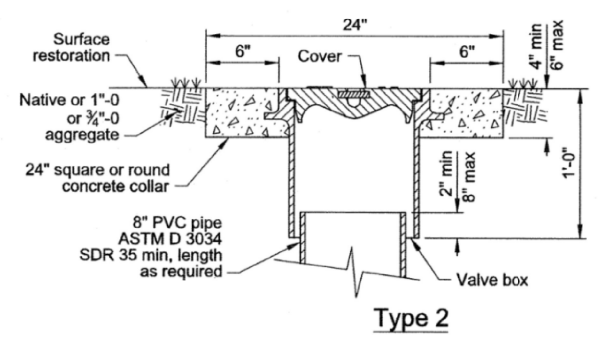
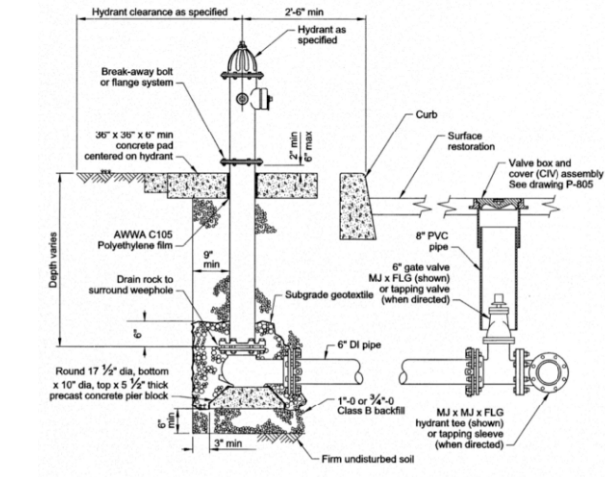


KEYPLAN

CONFIDENTIAL

Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
STORMWATER AND UTILITY PLAN

SAP Project No
W02563
1/4 Section
3866
Sheet No
LU-503



No	Date	Description	Appd

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Designed By	Program Mgr	
Drawn By	Const Mgr	
Checked By	Const Supvr	
Project Mgr	Date	12/22/22

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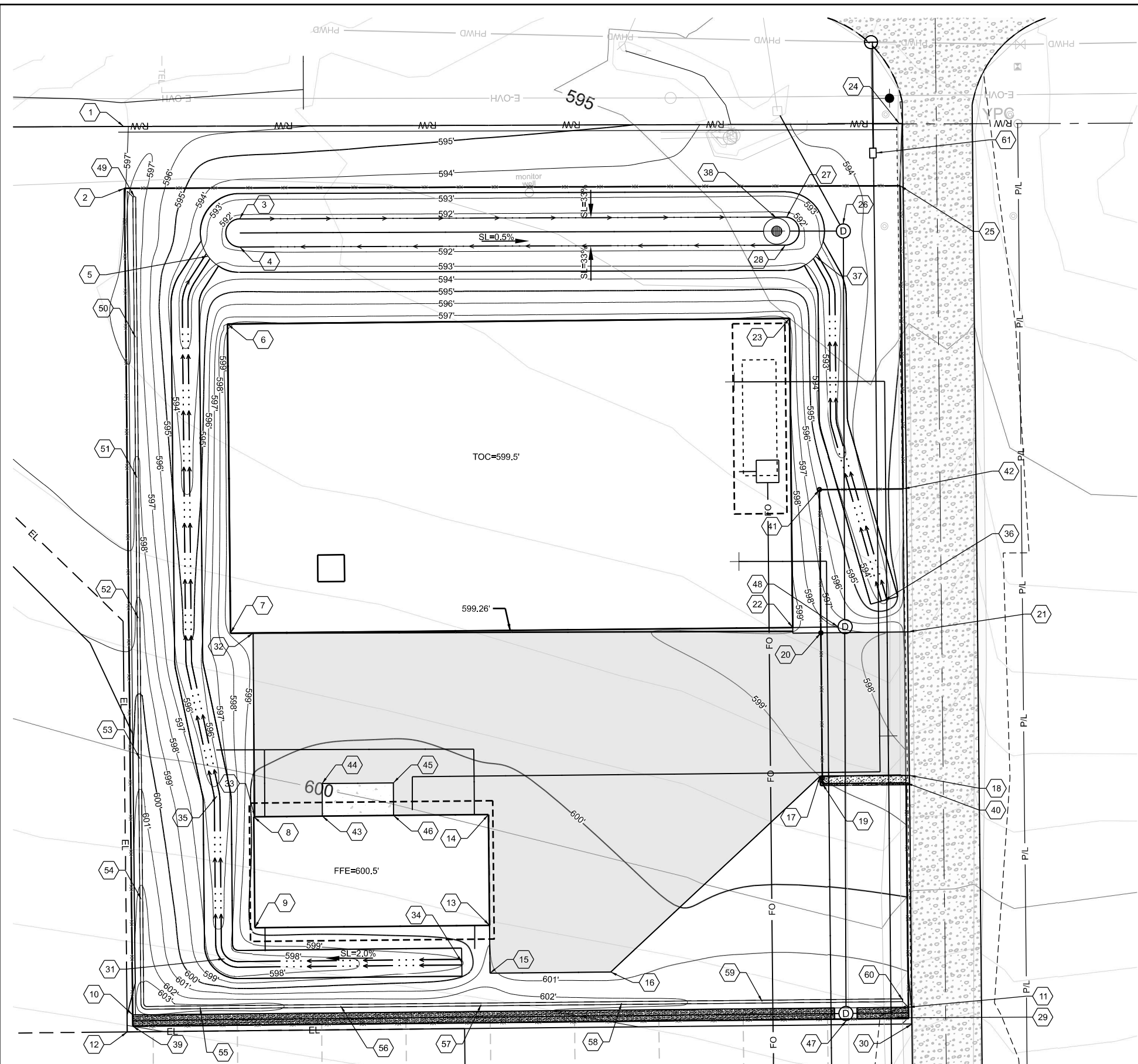
PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

XXX XXX _____ Date _____
XXX XXX _____ Date _____

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LEGEND

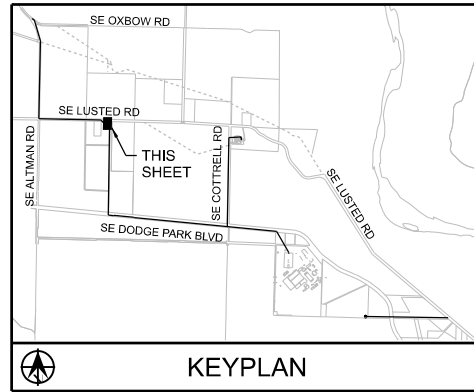
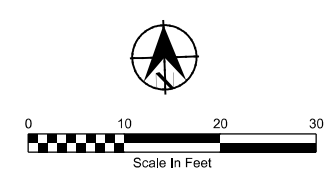
- ASPHALT
- GRAVEL
- CONCRETE
- CONVEYANCE SWALE
- DITCH
- STORM DRAINAGE PIPE
- STORM DRAINAGE CULVERT
- SEC ZONE
- P/L PROPERTY LINE
- R/W RIGHT-OF-WAY
- EL EXISTING EASEMENT LINE
- PE PROPOSED EASEMENT LINE
- PROPOSED FENCE
- BASIN EMERGENCY OVERFLOW
- STORMWATER MANHOLE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- CONIFEROUS TREE
- DECIDUOUS TREE

LAYOUT COORDINATES

POINT NUMBER	ELEVATION	DESCRIPTION
1	597.03	NW SITE CORNER
2	597.01	PERIMETER FENCE- NW CORNER
3	591.74	BIORETENTION BASIN
4	591.74	BIORETENTION BASIN
5	592.38	END OF CONVEYANCE SWALE
6	599.50	INTERTIE IE NW CORNER
7	599.50	INTERTIE IE SW CORNER
8	600.30	EDGE OF BUILDING
9	600.50	EDGE OF BUILDING
10	602.87	CUTOFF TRENCH DRAIN
11	601.53	CUTOFF TRENCH DRAIN
12	603.08	SW SITE CORNER
13	603.50	EDGE OF BUILDING
14	600.30	EDGE OF BUILDING
15	601.72	EDGE OF ASPHALT
16	600.50	EDGE ASPHALT
17	599.00	EDGE OF ASPHALT
18	598.77	EDGE OF ASPHALT
19	599.04	FENCE GATE POST
20	598.47	FENCE GATE POST
21	598.59	EDGE OF ASPHALT
22	599.50	INTERTIE IE SE CORNER
23	599.50	INTERTIE IE NE CORNER
24	594.31	NE SITE CORNER
25	594.56	PERIMETER FENCE-NE CORNER
26	593.59	MANHOLE
27	591.74	BIORETENTION BASIN
28	591.74	BIORETENTION BASIN
29	601.78	PERIMETER FENCE-SE CORNER
30	602.00	SE SITE CORNER
31	597.10	CONVEYANCE SWALE
32	599.00	EDGE OF ASPHALT
33	600.30	EDGE OF ASPHALT
34	598.71	START OF CONVEYANCE SWALE
35	596.01	CONVEYANCE SWALE
36	593.46	START OF CONVEYANCE SWALE
37	592.38	END OF CONVEYANCE SWALE
38	591.55	BASIN EMERGENCY OVERFLOW
39	603.00	PERIMETER FENCE- SW CORNER
40	598.42	PERIMETER FENCE- CORNER
41	595.89	PERIMETER FENCE- CORNER
42	595.66	PERIMETER FENCE- CORNER
43	600.30	EDGE OF ASPHALT
44	600.35	EDGE OF ASPHALT
45	600.35	EDGE OF ASPHALT
46	600.30	EDGE OF ASPHALT
47	601.21	MANHOLE
48	597.50	MANHOLE
49	597.49	TOP OF BERM
50	597.45	TOP OF BERM
51	598.10	TOP OF BERM
52	599.21	TOP OF BERM
53	600.67	TOP OF BERM
54	602.14	TOP OF BERM
55	603.21	TOP OF BERM
56	602.86	TOP OF BERM
57	602.51	TOP OF BERM
58	602.16	TOP OF BERM
59	601.81	TOP OF BERM
60	601.89	TOP OF BERM
61	594.45	WATER METER

1 GRADING NOTES

- CONTRACTOR SHALL REVIEW GEOTECHNICAL REPORT AND ENSURE SOIL RECOMMENDATIONS ARE MET.
- CONTRACTOR SHALL MAINTAIN POSITIVE TOWARD ALL DRAINAGE STRUCTURES.



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No	Date	Description	Appd

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Designed By	Program Mgr	XXX
Drawn By	Const Mgr	XXX
Checked By	Const Supvr	XXX
Project Mgr	Date	12/22/22

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PORTLAND WATER BUREAU

FROM FOREST TO FAUCET

XXX XXX _____ Date _____

XXX XXX _____ Date _____

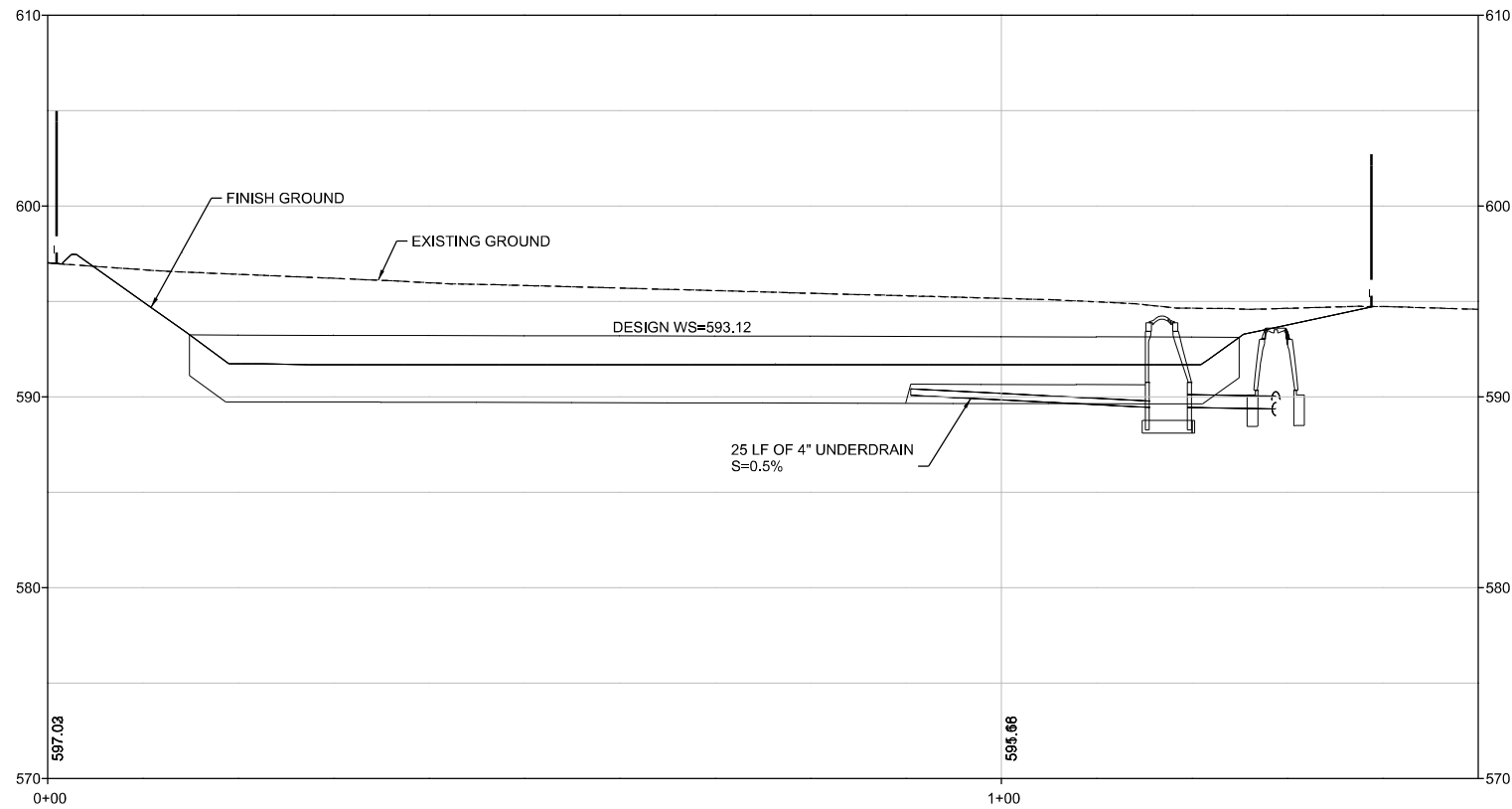


Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
GRADING PLAN

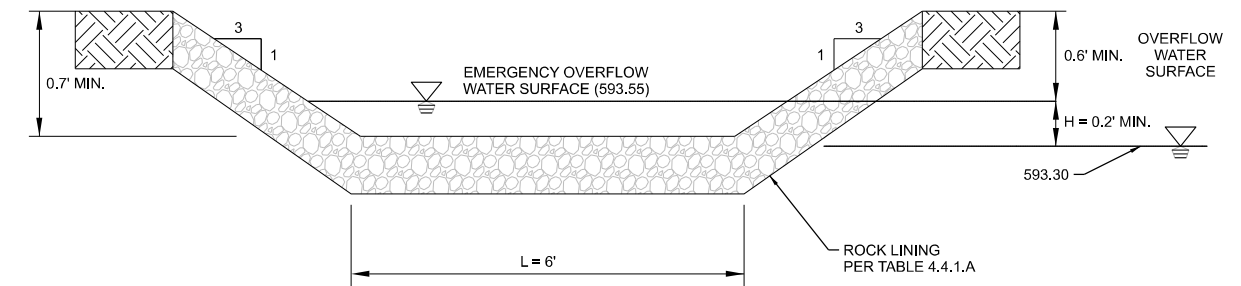
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1/4 Section	3866
Sheet No	LU-504

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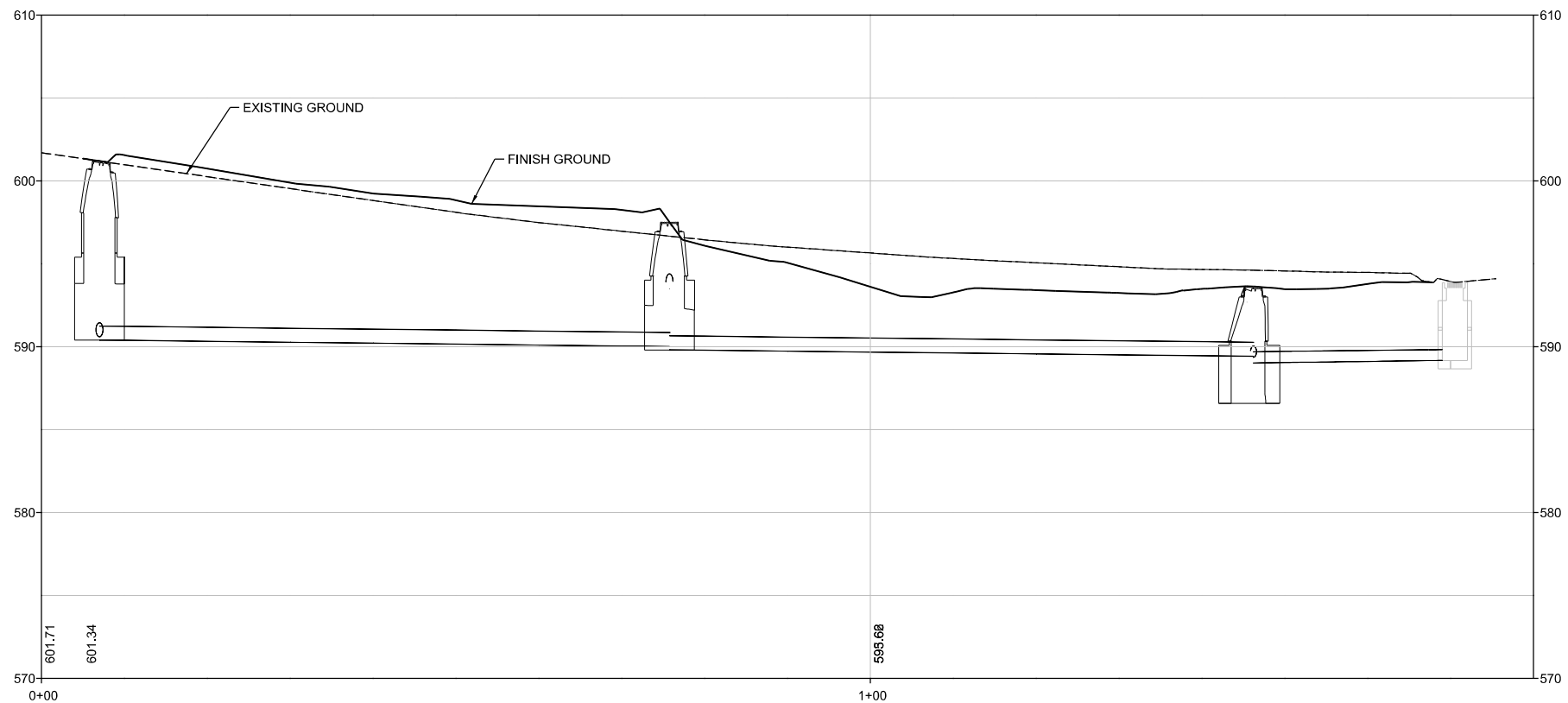
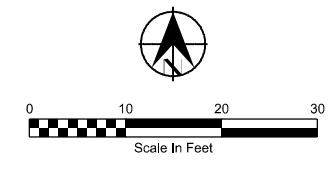
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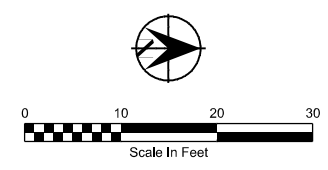
FWI STORM BASIN PROFILE
1V:2H



BASIN EMERGENCY OVERFLOW DETAIL
1 LU-505 NTS



FWI STORM MAIN PROFILE
1V:2H



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Checked By	Const Supvr
Project Mgr	Date
	12/22/22

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Date

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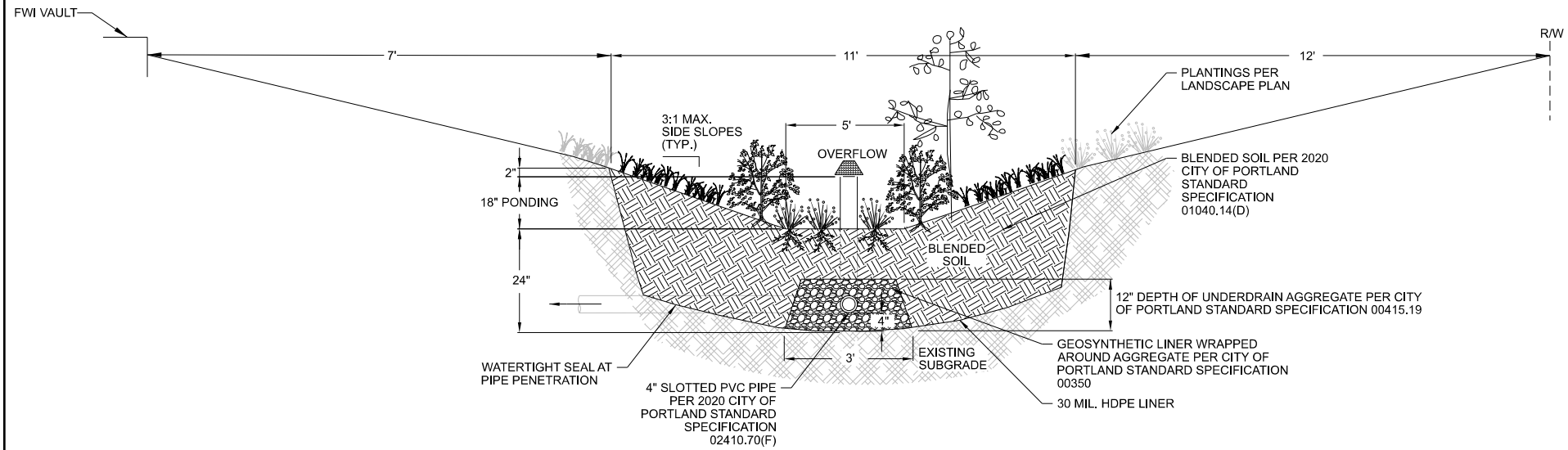


**Bull Run Filtration Pipelines
FINISHED WATER INTERTIE**

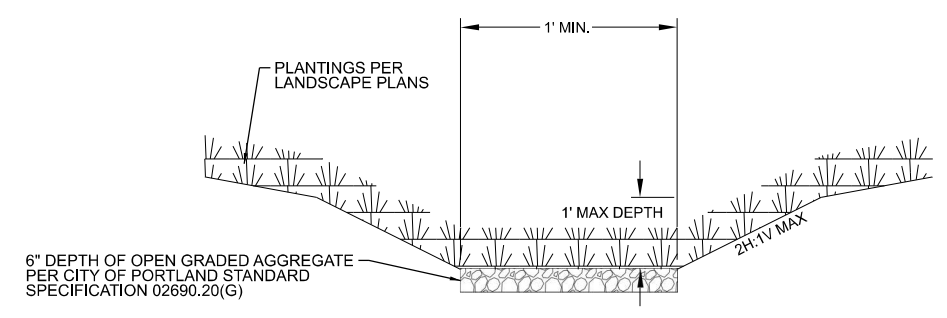
STORMWATER
PLAN AND PROFILE

CONFIDENTIAL

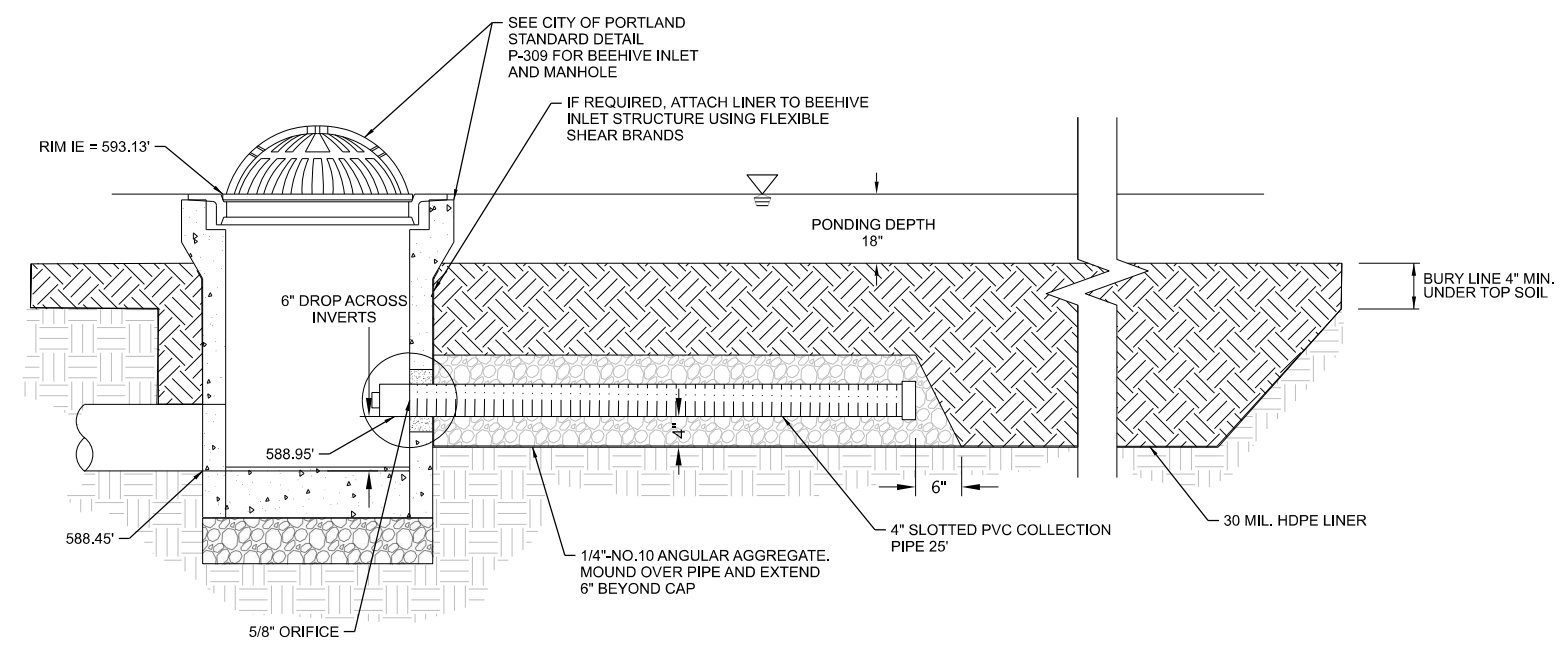
SAP Project No	W02563
1/4 Section	3866
Sheet No	LU-505



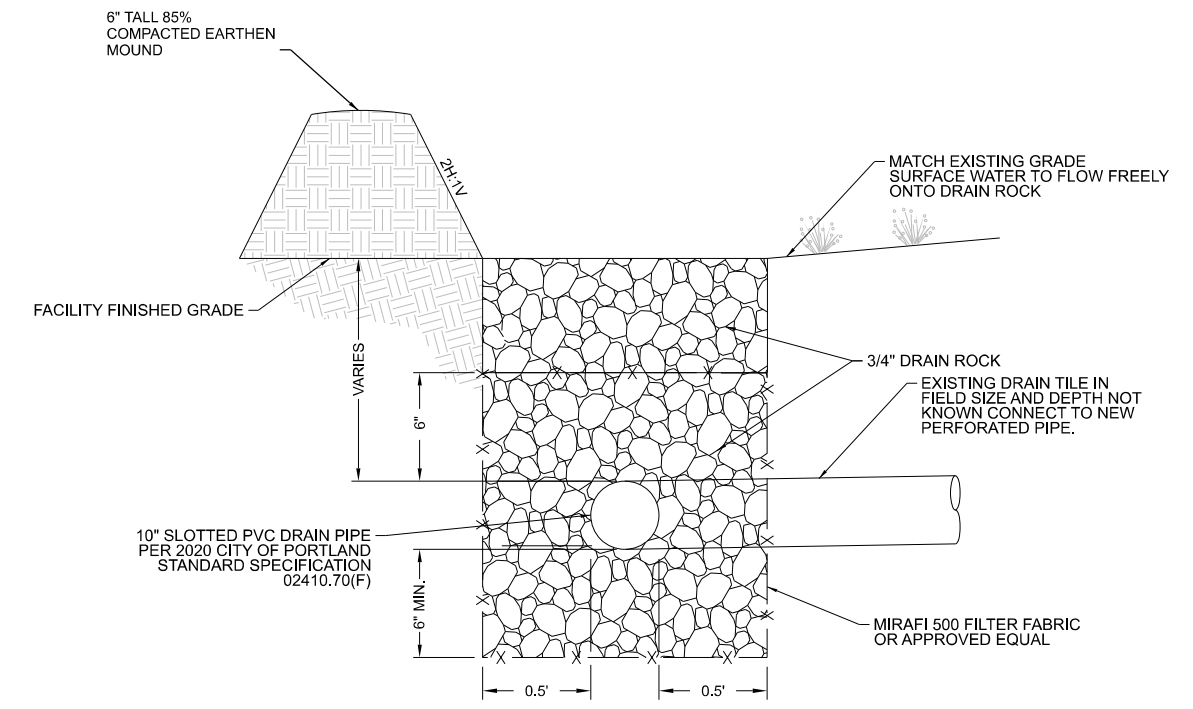
1 LINED BIORETENTION BASIN WITH UNDERDRAIN SECTION
LU-506 NTS



2 CONVEYANCE SWALE
LU-506 NTS



3 SECTION A-A FLOW CONTROL STRUCTURE
LU-506 NTS



4 CUT OFF TRENCH
LU-506 NTS

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CONSTRUCTION

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Date

Date

Date



Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
STORMWATER DETAILS

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SAP Project No. W02563
1/4 Section 3866
Sheet No. LU-506