

Facility Pipelines

Technical Memorandum

Subject: Filtration Facility Land Use Application Pipeline Drawings **A.2 A Site Plans**

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. Site Plan Drawings					
Drawing Number Drawing Name		Description			
LU-000	COVER SHEET	COVER SHEET			
LU-001	KEY MAP	KEY MAP OF SHEETS			
LU-002	ZONING MAP	ZONING MAP			
LU-100	RAW WATER PIPELINE EXISTING CONDITIONS GRID 1, GRID 2, GRID 3	RAW WATER PIPELINE EXISTING CONDITIONS			
LU-102	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 4, GRID 5	FINISHED WATER PIPELINE EXISTING CONDITIONS AT DODGE PARK			
LU-103	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 6, GRID 7	FINISHED WATER PIPELINE EXISTING CONDITIONS AT DODGE PARK			
LU-104	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 8, GRID 9	FINISHED WATER PIPELINE EXISTING CONDITIONS AT INTERTIE			
LU-105	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 10, GRID 11	FINISHED WATER PIPELINE EXISTING CONDITIONS AT LUSTED AND ALTMAN			
LU-106	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 12, GRID 13	FINISHED WATER PIPELINE EXISTING CONDITIONS AT ALTMAN			
LU-107	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 14, GRID 15	FINISHED WATER PIPELINE EXISTING CONDITIONS AT COTTRELL			
LU-108	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 16	FINISHED WATER PIPELINE EXISTING CONDITIONS EAST OF LUSTED HILL TREATMENT FACILITY			
LU-200	RAW WATER PIPELINE PROPOSED CONDITIONS GRID 1, GRID 2, GRID 3	RAW WATER PIPELINE PROPOSED CONDITIONS			
LU-201	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 4, GRID 5	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT DODGE PARK			

Table 1. Site Plan Drawings				
Drawing Number	Drawing Name	Description		
LU-202	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 6, GRID 7	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT DODGE PARK		
LU-203	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 8, GRID 9	PROPOSED CONDITIONS FINISHED WATER PIPELINE PROPOSED CONDITIONS AT INTERTIF		
LU-204	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 10, GRID 11	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT LUSTED AND ALTMAN		
LU-205	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 12, GRID 13	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT ALTMAN		
LU-206	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 14, GRID 15	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT COTTRELL		
LU-207	LU-207 FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 16 FINISHED WATER PIPELINE PROPOSED CONDITIONS EAST LUSTED HILL TREATMENT FACILITY			
LU-208	FINISHED WTER PIPELINE TYPICAL APPURTENANCE	FINISHED WTER PIPELINE TYPICAL APPURTENANCE CROSS SECTIONS		
LU-500	FINISHED WATER INTERTIE CIVIL SITE PLAN	FINISHED WATER INTERTIE CIVIL SITE PLAN		
LU-501	FINISHED WATER INTERTIE LANDSCAPE PLAN	FINISHED WATER INTERTIE LANDSCAPE PLAN		
LU-502	FINISHED WATER INTERTIE VISUALIZATIONS	FINISHED WATER INTERTIE VISUALIZATIONS		



Portland Water Bureau

Bull Run Filtration Pipelines Project

LAND USE APPLICATION
APPENDIX A.2
A. SITE PLANS

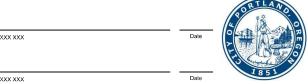
SHEET NUMBER	SHEET NAME	DESCRIPTION			
OHEET HOMBEN	PIPELINES				
1	LU-000	COVERSHEET			
2	LU-001	KEY PLAN			
3	LU-002	ZONING MAP			
4	LU-100	RAW WATER PIPELINE EXISTING CONDITIONS GRID 1, GRID 2, GRID 3			
5	LU-102	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 4, GRID 5			
6	LU-103	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 6, GRID 7			
7	LU-104	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 8, GRID 9			
8	LU-105	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 10, GRID 11			
9	LU-106	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 12, GRID 13			
10	LU-107	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 15, GRID 15			
11	LU-108	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 16			
12	LU-200	RAW WATER PIPELINE PROPOSED CONDITIONS GRID 1, GRID 2, GRID 3			
13	LU-201	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 4, GRID 5			
14	LU-202	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 6, GRID 7			
15	LU-203	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 8, GRID 9			
16	LU-204	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 10, GRID 11			
17	LU-205	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 12, GRID 13			
18	LU-206	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 15, GRID 15			
19	LU-207	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 16			
FINISHED WATER INTERTIE					
20	LU-500	FINISHED WATER INTERTIE CIVIL SITE PLAN			
21	LU-501	FINISHED WATER INTERTIE LANDSCAPE PLAN			
22	LU-502	FINISHED WATER INTERTIE VISUALIZATIONS			

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CONSTRUCTION	Checked By	SDA	Const Supvr	š
	Project Mgr	×	Date	







Bull Run Filtration Pipelines

LAND USE APPLICATION

APPENDIX A.2

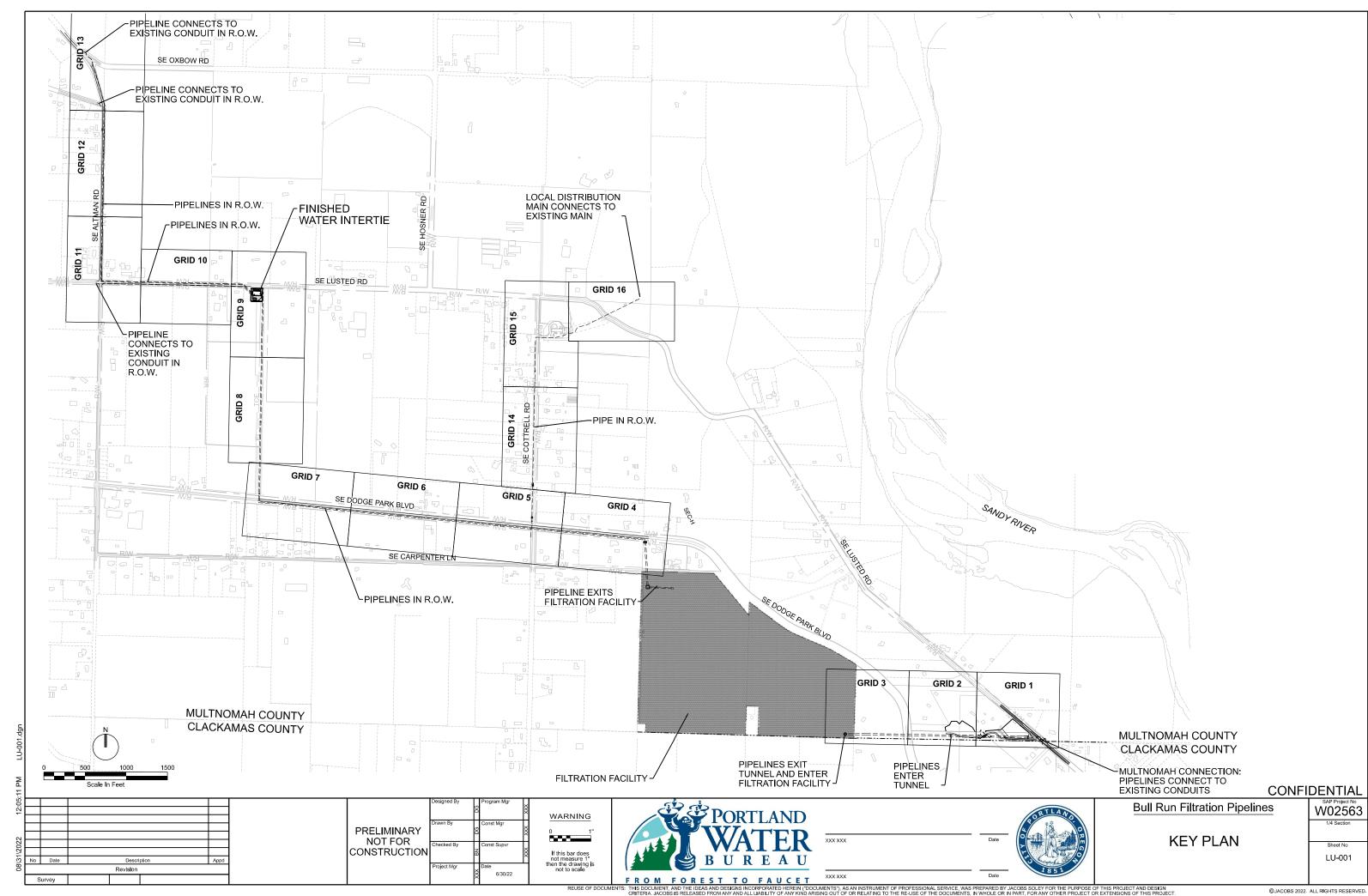
A. SITE PLANS

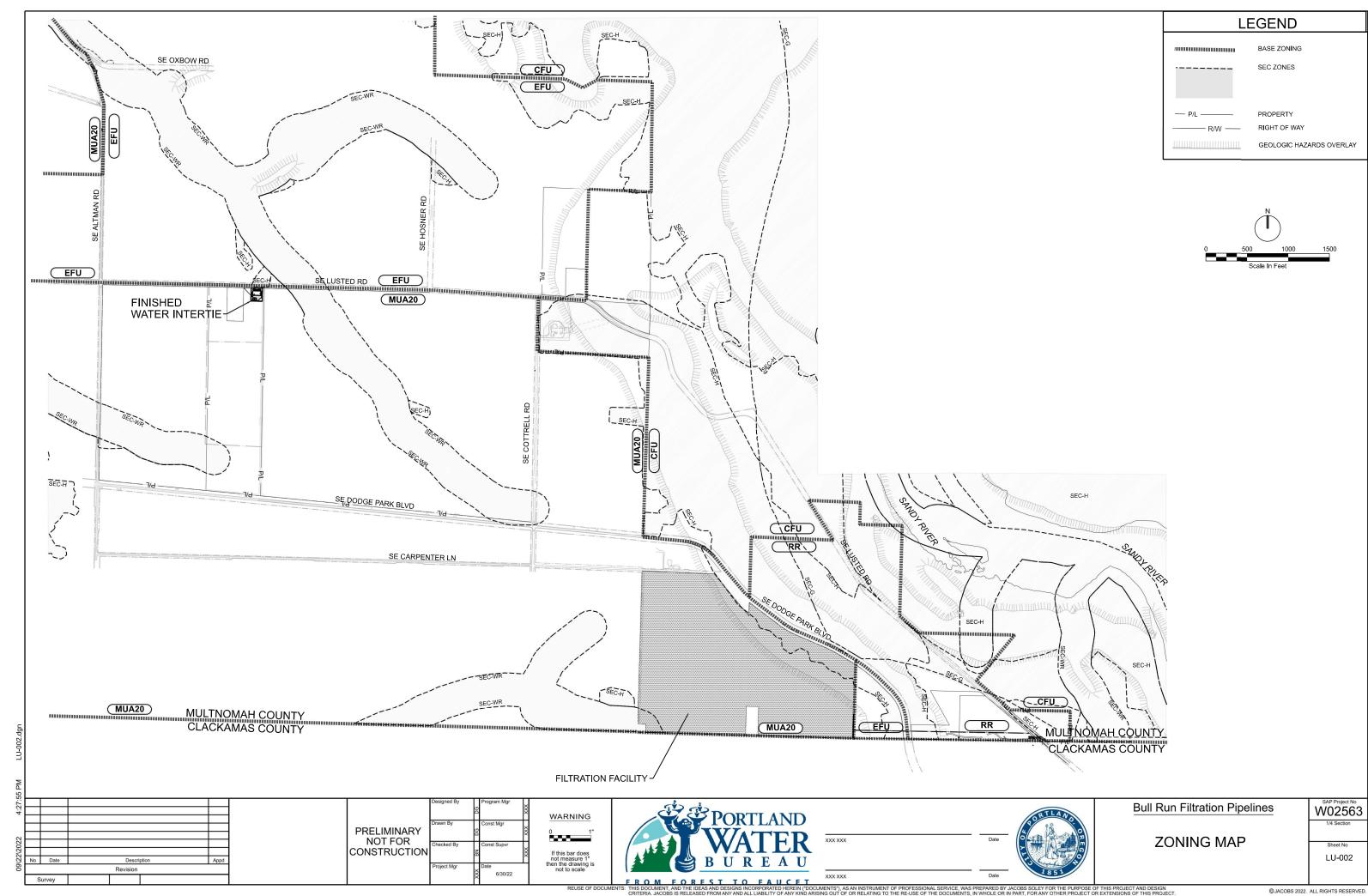
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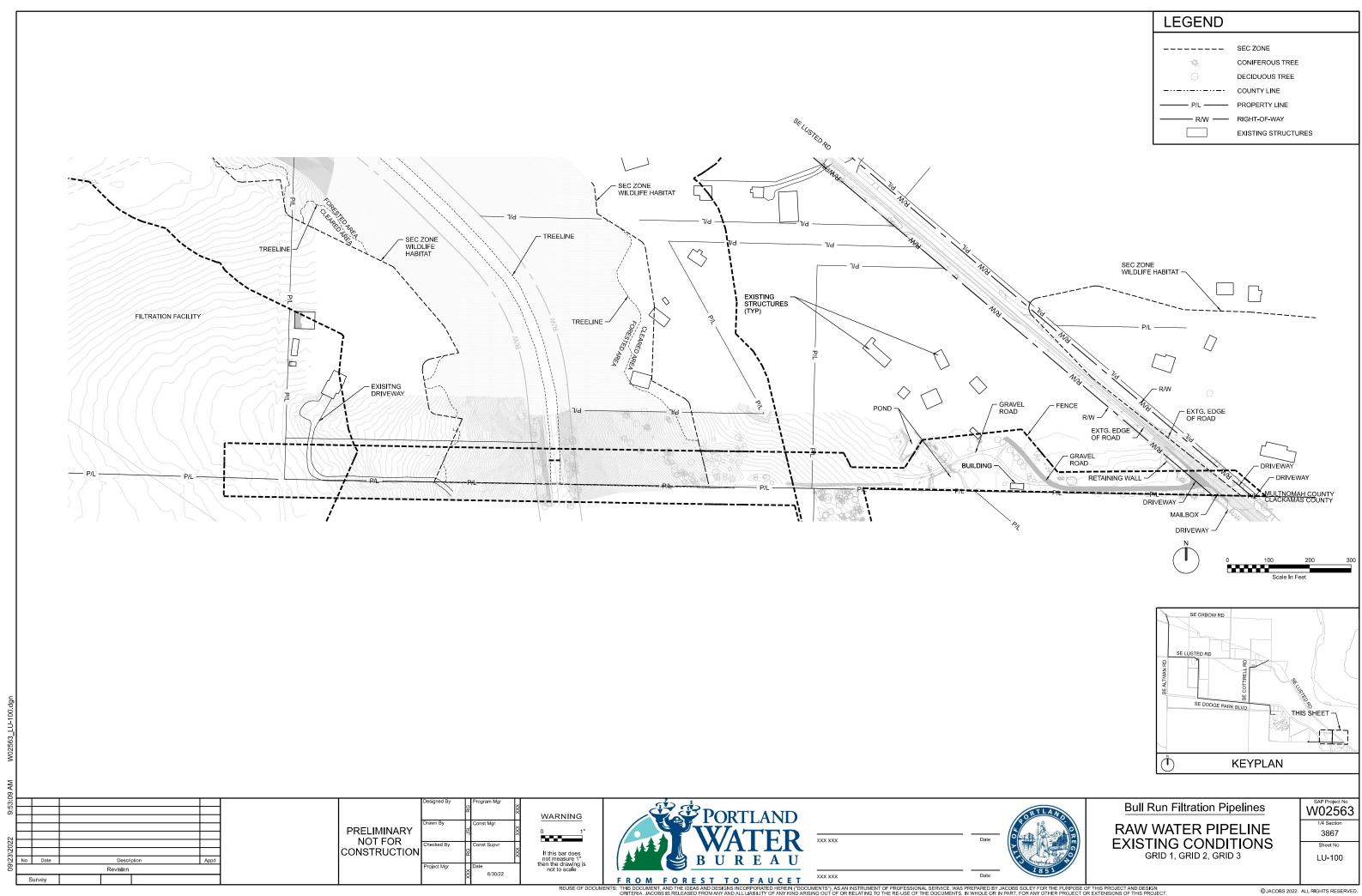
SAP Project No
W02563

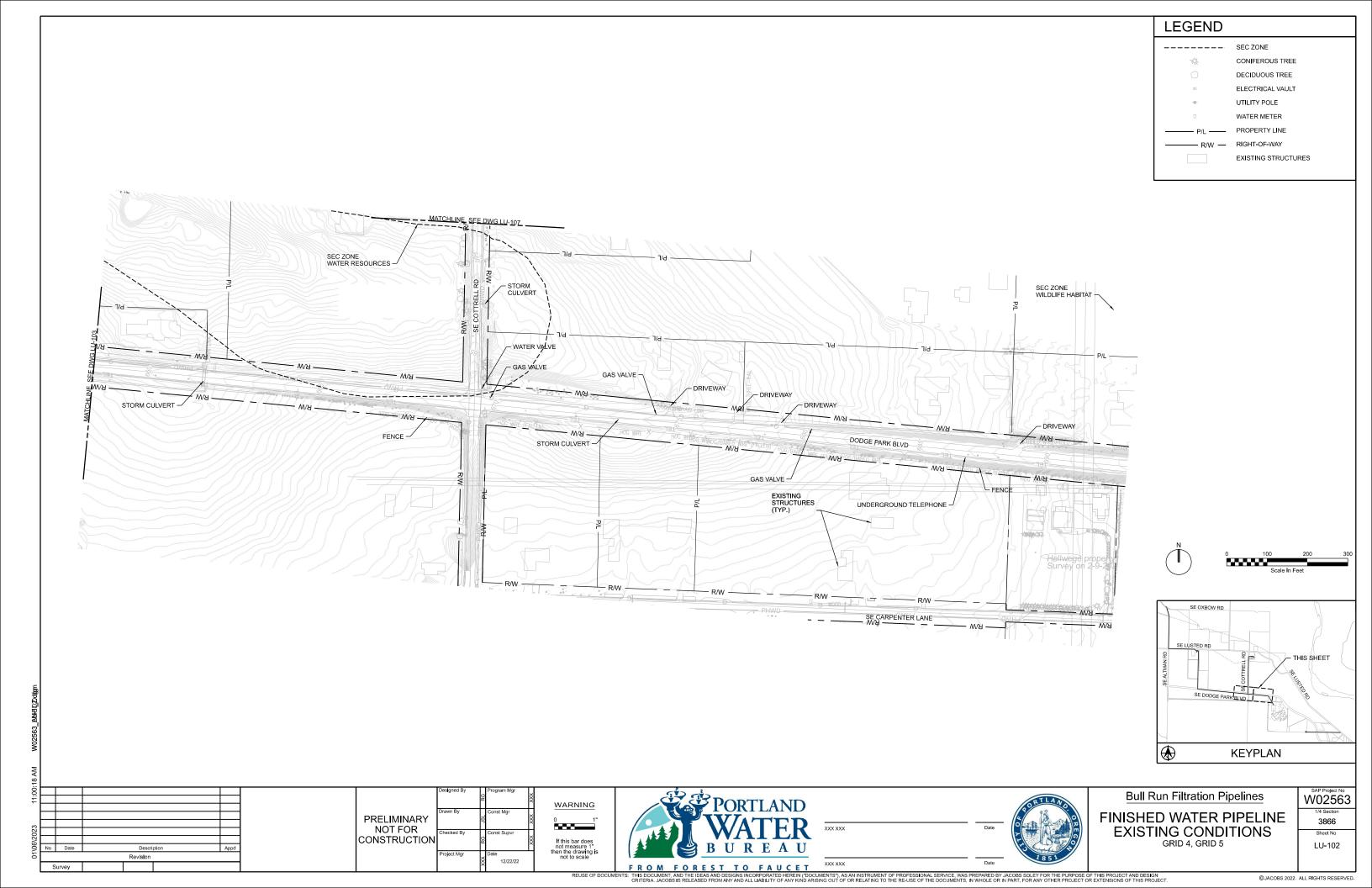
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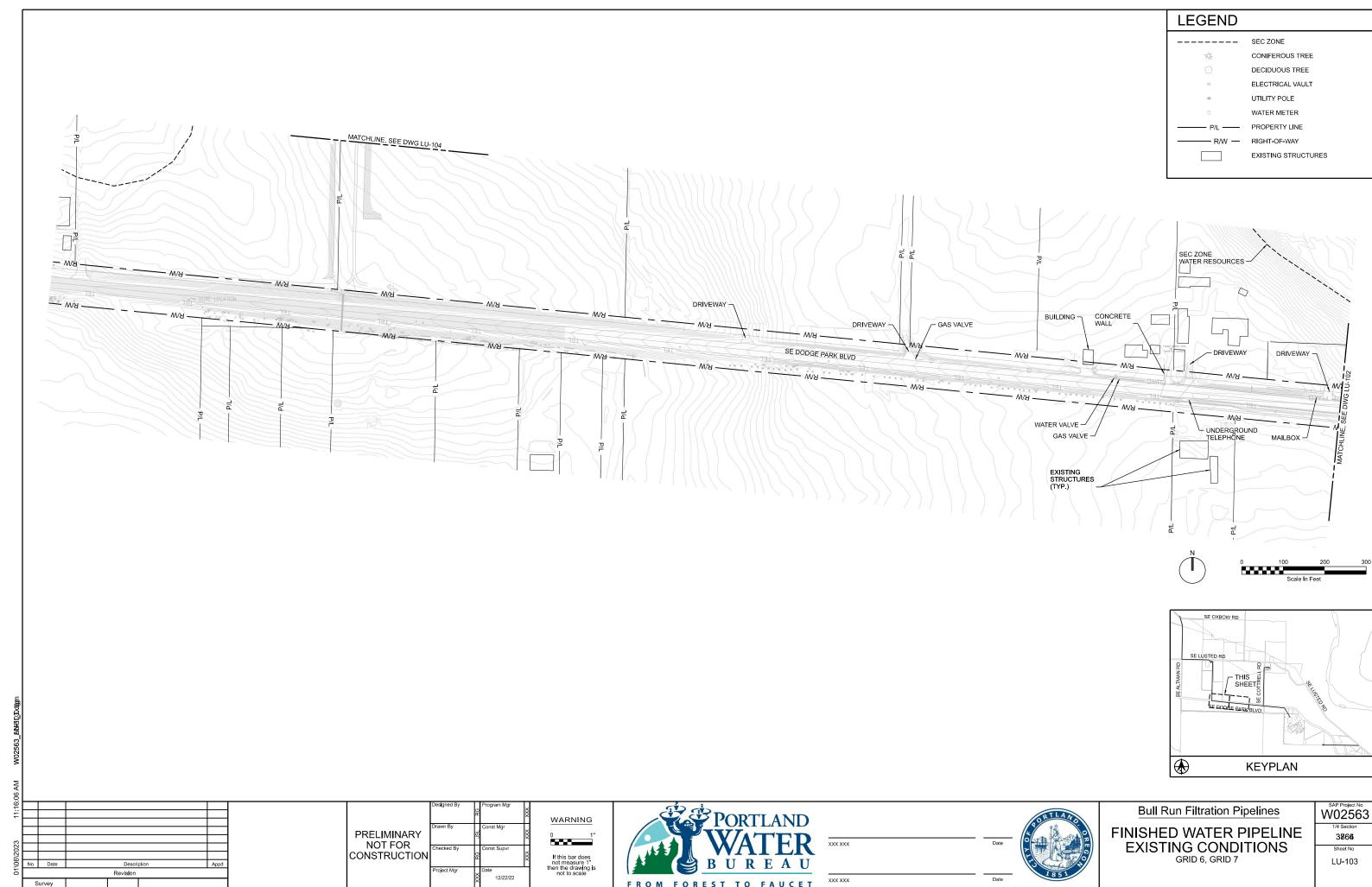
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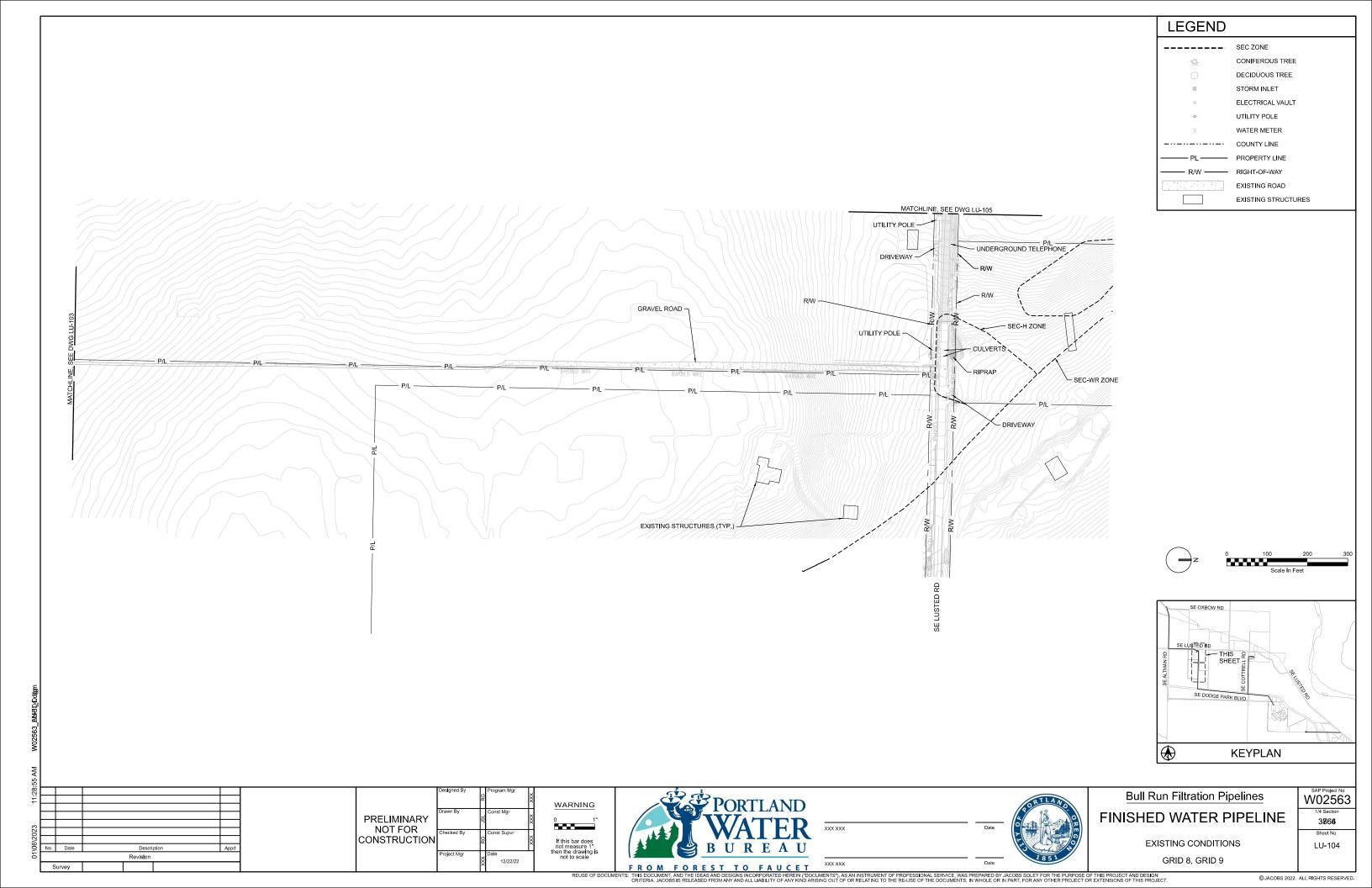


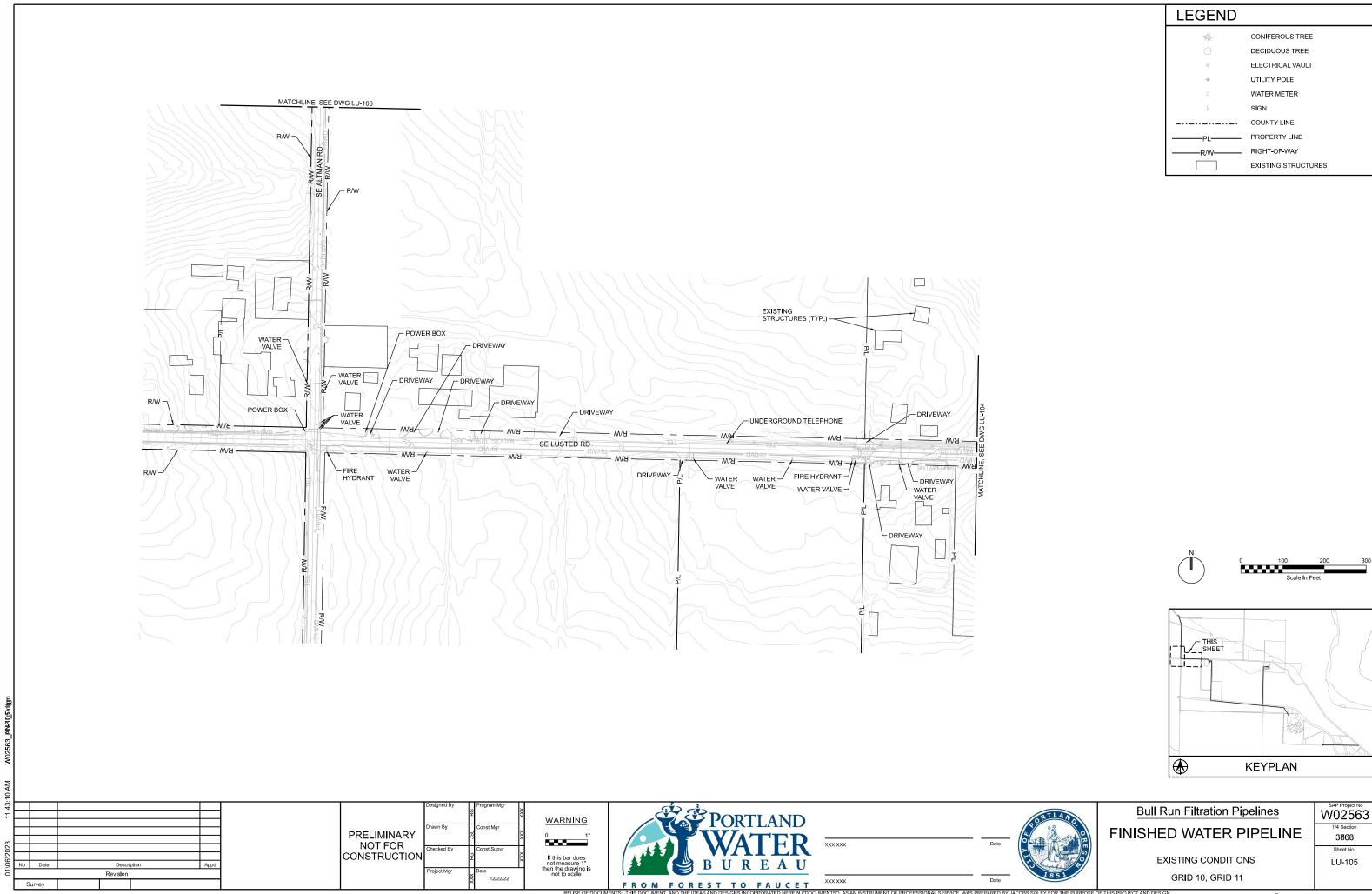


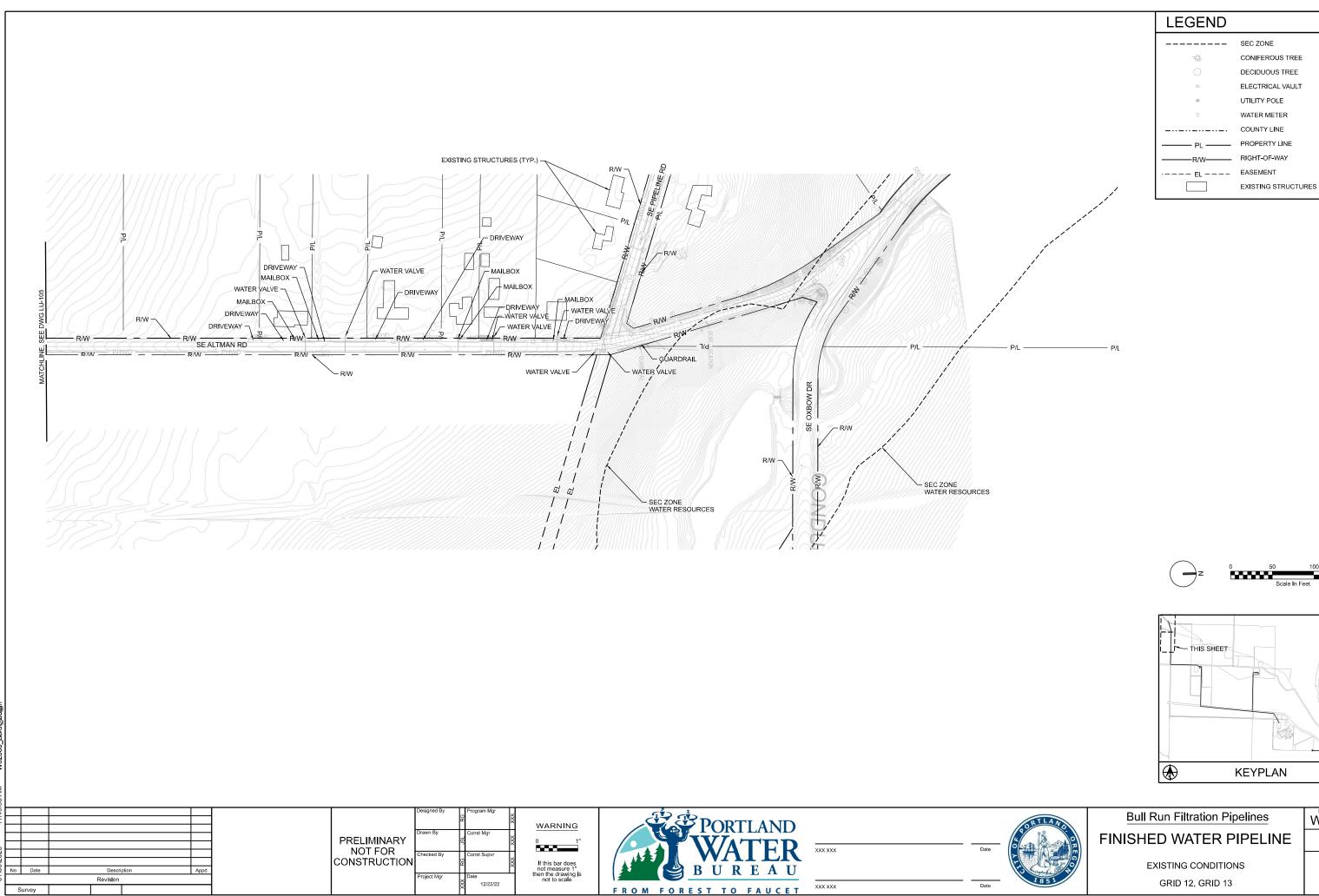








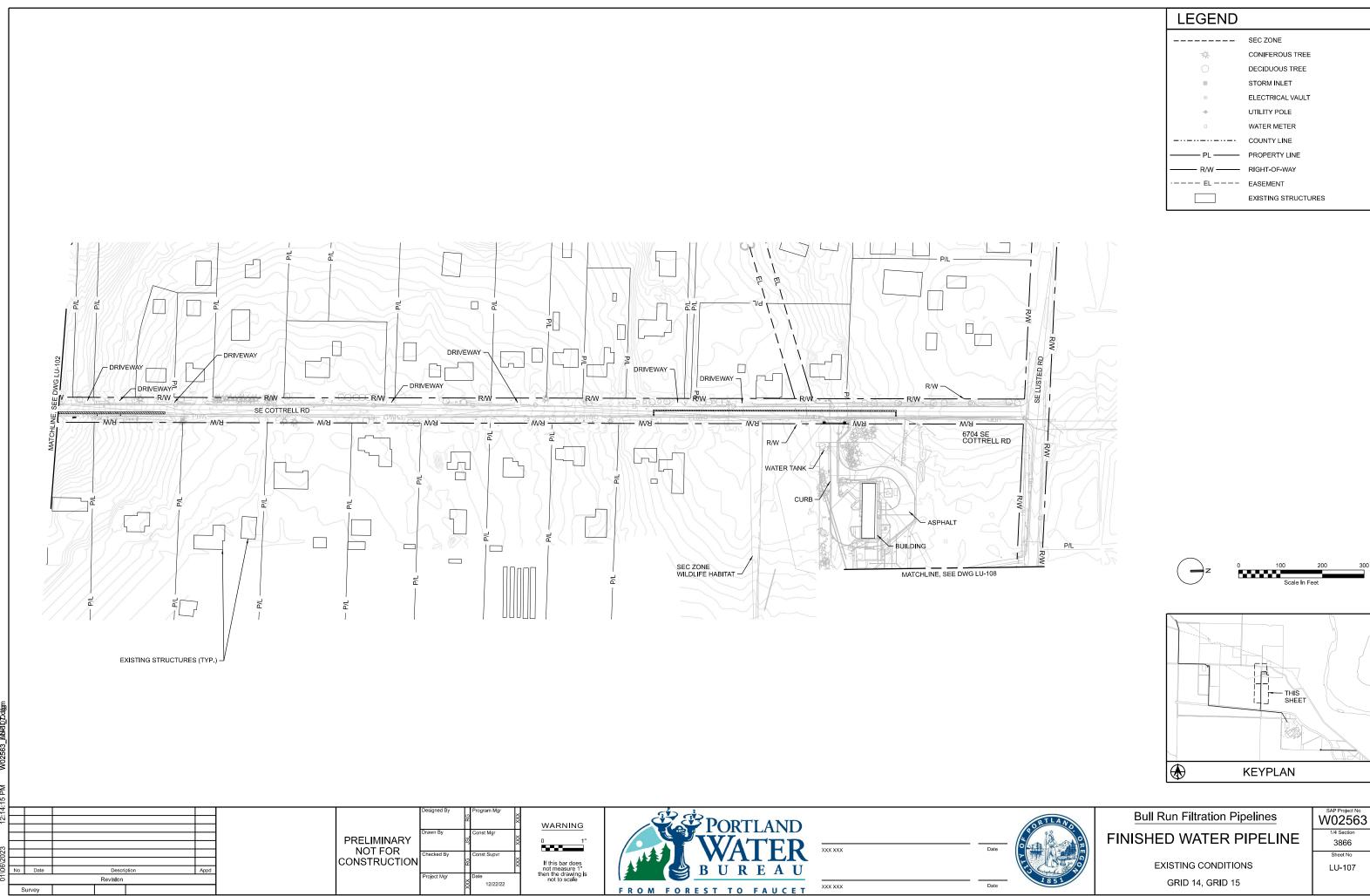


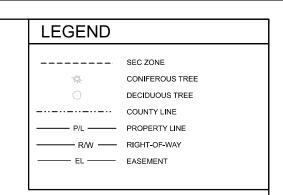


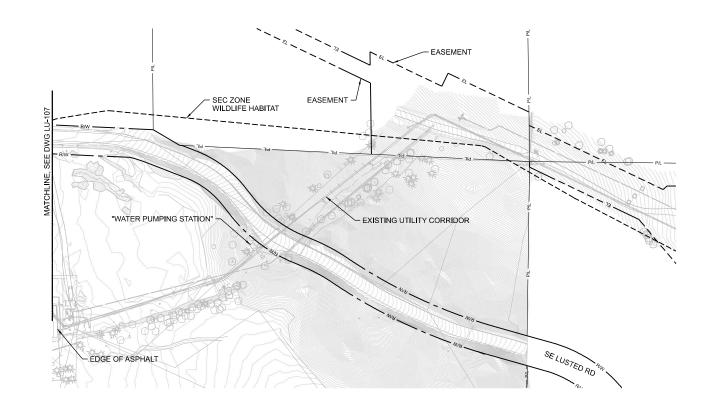
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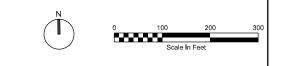
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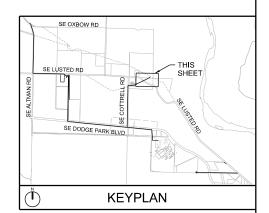
LU-106











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	Designed By	RG	Program Mgr	×	
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	Project Mgr	XXX	Date 6/30/22	1	



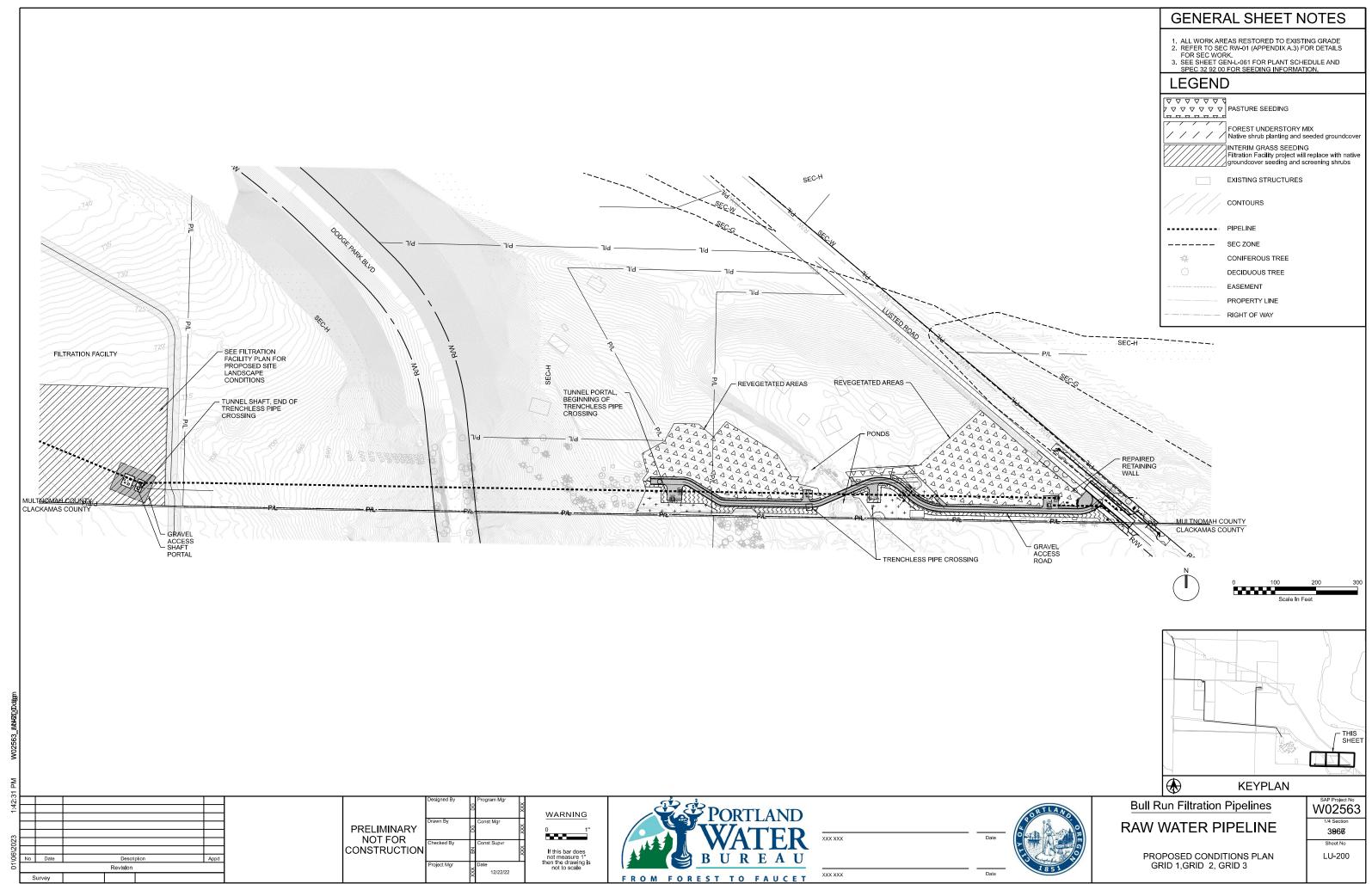


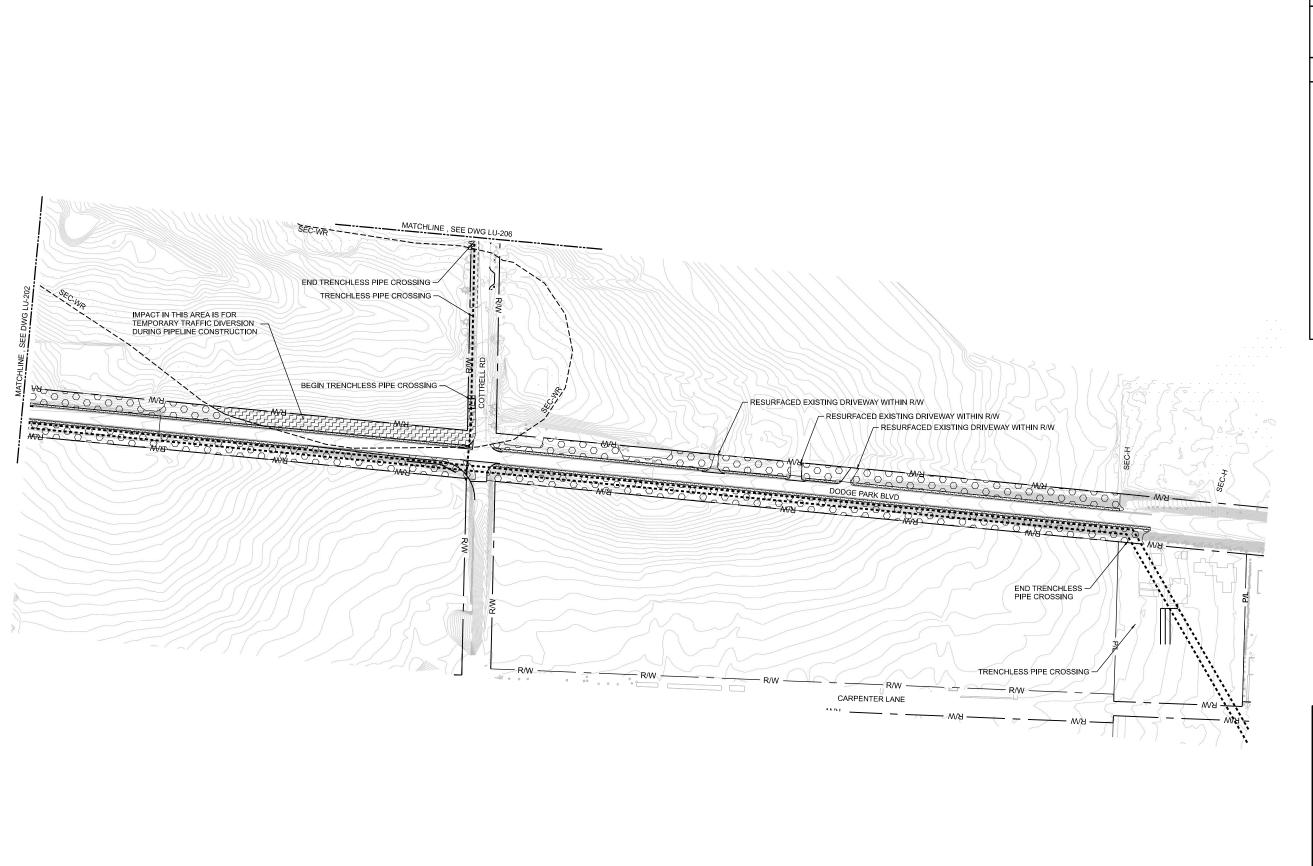
xxxxxx	Date
XXX XXX	Date 1851

Bull Run Filtration Pipelines	_
INISHED WATER PIPELINE	

EXISTING CONDITIONS GRID 16

SAP Project No W02563
1/4 Section
3765
Sheet No
LU-108





WARNING

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

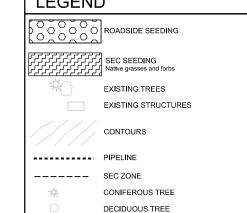
PRELIMINARY

NOT FOR CONSTRUCTION

GENERAL SHEET NOTES

- ALL WORK AREAS RESTORED TO EXISTING GRADE
 REFER TO SEC RW-01 (APPENDIX A.3) FOR DETAILS
 FOR SEC WORK.
 SEE SHEET GEN-L-061 FOR PLANT SCHEDULE AND
 SPEC 32 92 00 FOR SEEDING INFORMATION.

LEGEND

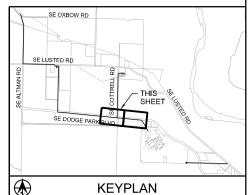


EASEMENT

PROPERTY LINE

RIGHT OF WAY





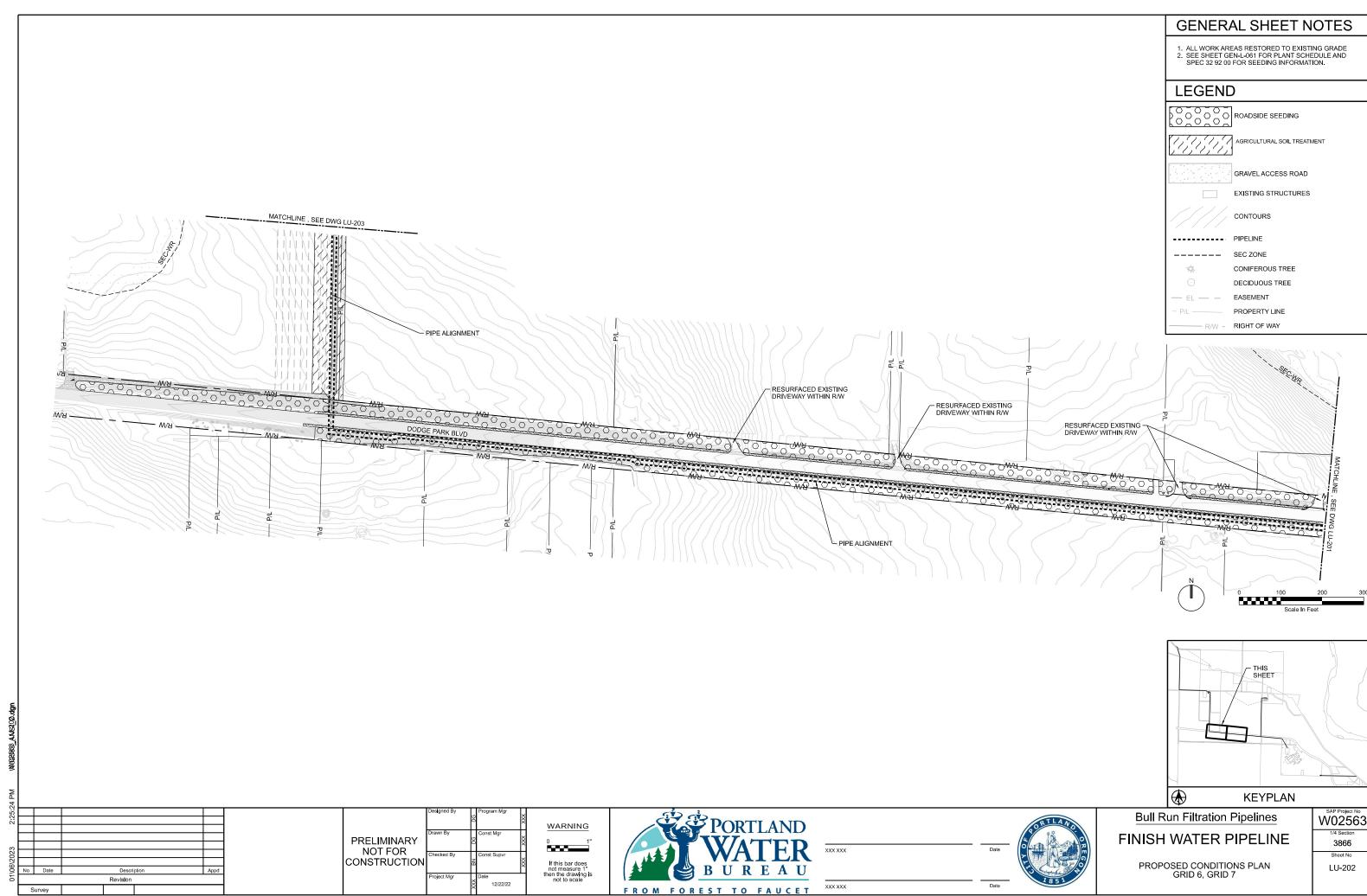
Bull Run Filtration Pipelines FINISH WATER PIPELINE

PROPOSED CONDITIONS PLAN GRID 4, GRID 5

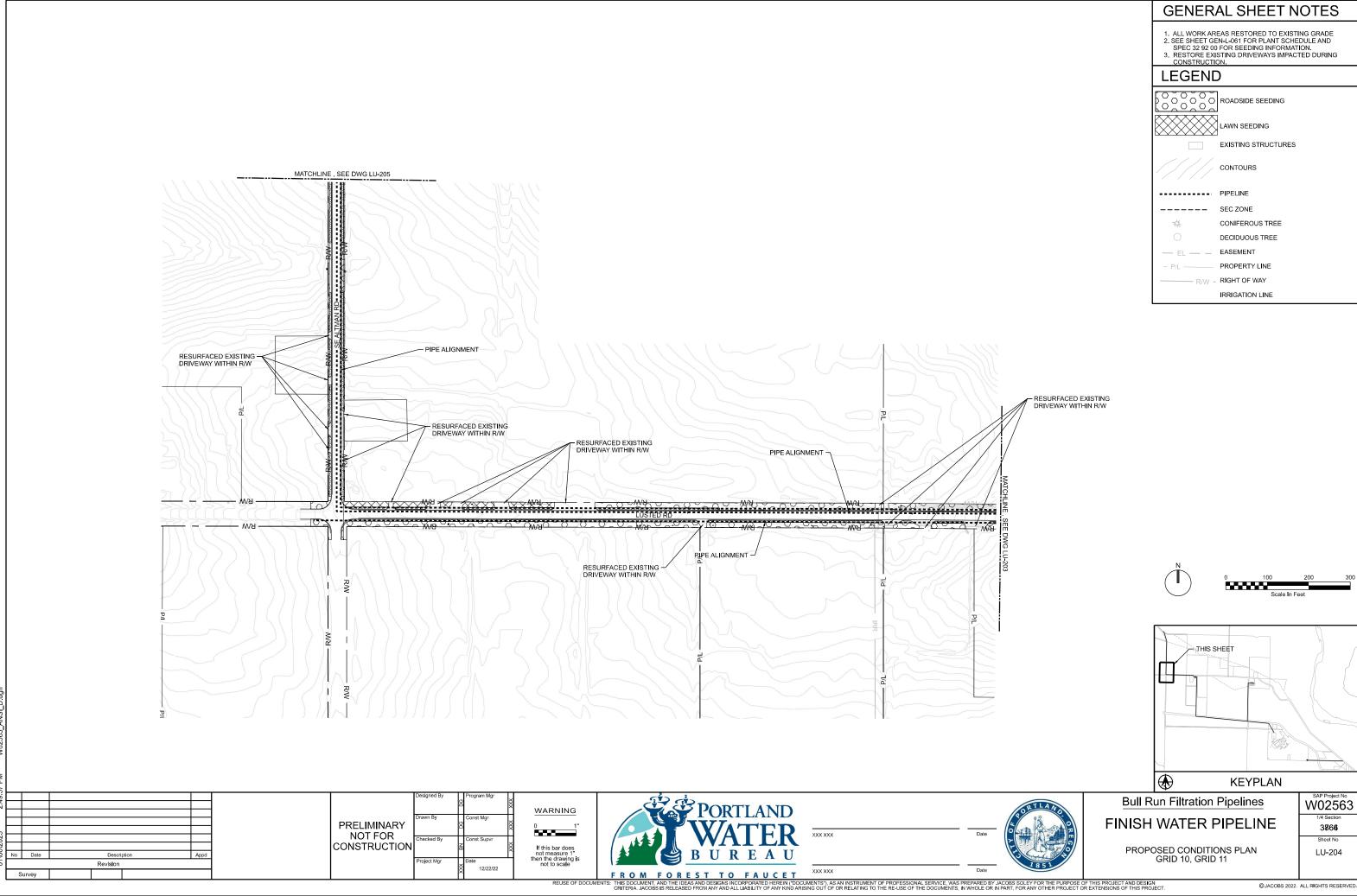
W02563 3866 LU-201

PORTLAND

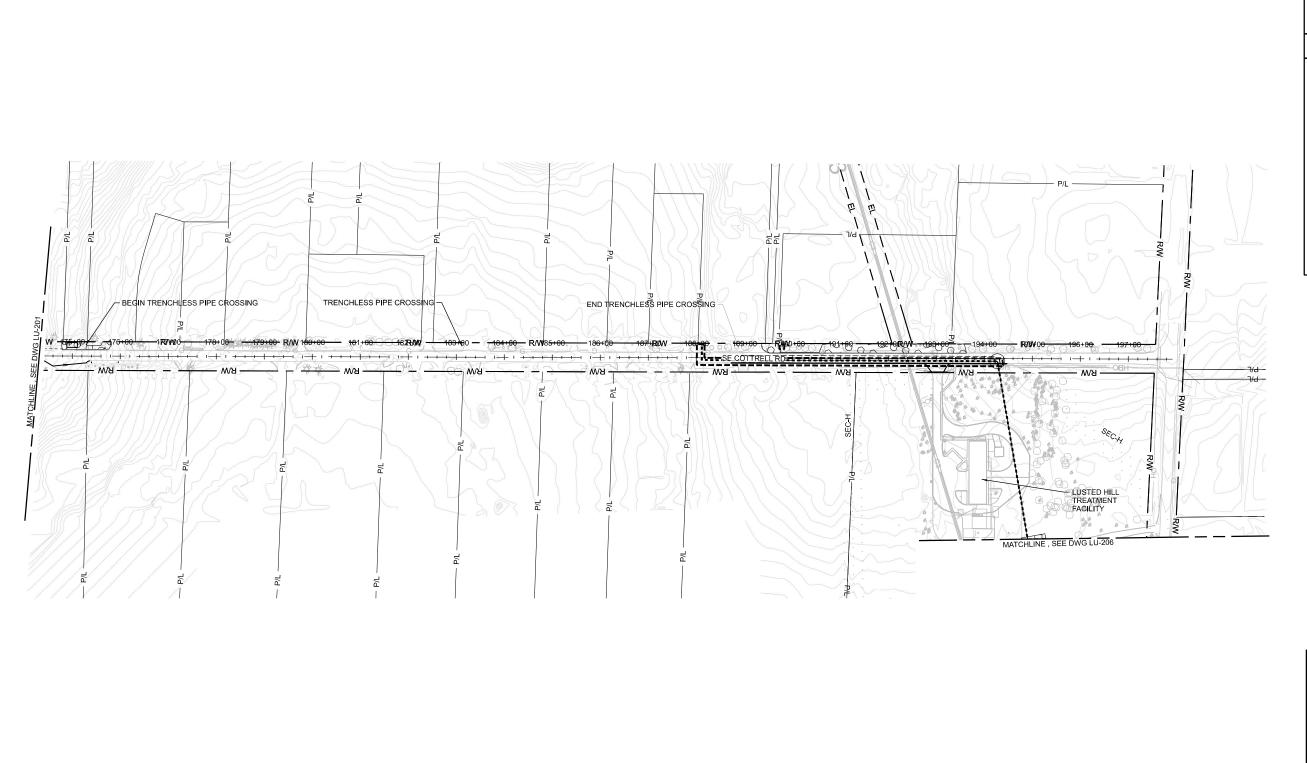
BUREAU



GENERAL SHEET NOTES ALL WORK AREAS RESTORED TO EXISTING GRADE SEE SHEET GEN-L-061 FOR PLANT SCHEDULE AND SPEC 32 92 00 FOR SEEDING INFORMATION. RESTORE EXISTING DRIVEWAYS IMPACTED DURING CONSTRUCTION. LEGEND ROADSIDE SEEDING AGRICULTURAL SOIL TREATMENT GRAVEL ACCESS ROAD EXISTING STRUCTURES CONTOURS ----- PIPELINE SEC ZONE CONIFEROUS TREE DECIDUOUS TREE EASEMENT PROPERTY LINE RIGHT OF WAY IRRIGATION LINE —XX — PROPOSED FENCE MATCHLINE , SEE DWG LU-204 RESURFACE EXISTING DRIVEWAY WITHIN R/W PIPE ALIGNMENT TEMPORARY EASEMENT SEE SHEET LU-501 FOR INTERTIE LANDSCAPE PLAN PERMANENT EASEMENT - PIPE ALIGNMENT - RESURFACED FARM ROAD PIPE ALIGNMENT SEC-WR KEYPLAN W02563 PORTLAND **Bull Run Filtration Pipelines** WARNING FINISH WATER PIPELINE PRELIMINARY 3866 NOT FOR CONSTRUCTION If this bar does not measure 1" then the drawing is not to scale PROPOSED CONDITIONS PLAN GRID 8, GRID 9 LU-203 BUREAU Date FROM FOREST TO FAUCET THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LIABILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT. © JACOBS 2022. ALL RIGHTS RESERVED.



GENERAL SHEET NOTES ALL WORK AREAS RESTORED TO EXISTING GRADE REFER TO SEC LH-01 (APPENDIX A.3) FOR DETAILS SEC WORK. SEE SHEET GEN-L-061 FOR LANDSCAPE PLANT SCHEDULE AND SPEC 32 92 00 FOR SEEDING INFORMATION RESTORE EXISTING DRIVEWAYS IMPACTED DURING CONSTRUCTION **LEGEND** OOOO ROADSIDE SEEDING EXISTING STRUCTURES CONTOURS PIPELINE ---- SEC ZONE CONIFEROUS TREE DECIDUOUS TREE EASEMENT PROPERTY LINE RIGHT OF WAY RESTORE EXISTING -DRIVEWAY WITHIN R/W RW S RW SE ALTMAN RD RESTORE EXISTING -DRIVEWAY WITHIN R/W PIPE ALIGNMENT -SAP Project No W02563 **Bull Run Filtration Pipelines** WARNING FINISH WATER PIPELINE PRELIMINARY 3866 NOT FOR CONSTRUCTION If this bar does not measure 1" then the drawing is not to scale PROPOSED CONDITIONS PLAN GRID 12, GRID 13 LU-205 BUREAU Date FROM FORESTIED FAUCET THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LIABILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT. © JACOBS 2022. ALL RIGHTS RESERVED.



WARNING

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PRELIMINARY

NOT FOR CONSTRUCTION

GENERAL SHEET NOTES

- ALL WORK AREAS RESTORED TO EXISTING GRADE
 REFER TO SEC LH-01 (APPENDIX A.3) FOR DETAILS
 SEC WORK.
 S. SEE SHEET GEN-L-061 FOR LANDSCAPE PLANT SCHEDULE
 AND SPEC 32 92 00 FOR SEEDING INFORMATION

LEGEND

ROADSIDE SEEDING

EXISTING STRUCTURES

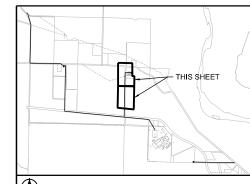
PIPELINE

SEC ZONE CONIFEROUS TREE

DECIDUOUS TREE

— EL — — EASEMENT --- PROPERTY LINE

R/W - RIGHT OF WAY



Bull Run Filtration Pipelines

FINISH WATER PIPELINE

PROPOSED CONDITIONS PLAN GRID 14, GRID 15

W02563 3666 LU-206

FROM FOREST TO FAUCET THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LIABILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT.

PORTLAND

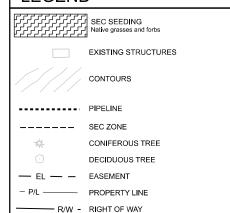
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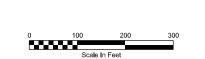
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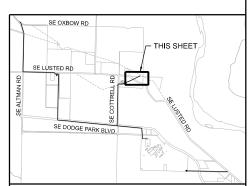
GENERAL SHEET NOTES

- ALL WORK AREAS RESTORED TO EXISTING GRADE
 REFER TO SEC LH-01 (APPENDIX A.3) FOR DETAILS
 SEC WORK.
 SEE SHEET GEN-L-061 FOR LANDSCAPE PLANT SCHEDULE
 AND SPEC 32 92 00 FOR SEEDING INFORMATION

LEGEND







KEY PLAN

Bull Run Filtration Pipelines FINISH WATER PIPELINE

PROPOSED CONDITIONS PLAN GRID 16

W02563

LU-207

TRENCHLESS PIPE CROSSING

BEGIN TRENCHLESS PIPE CROSSING

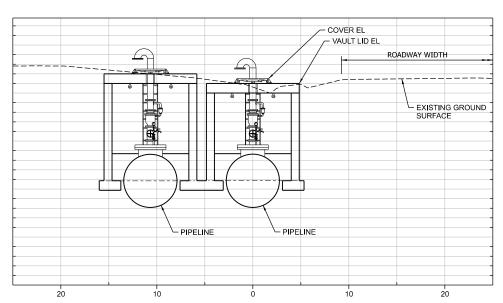
If this bar does not measure 1" then the drawing is not to scale

PRELIMINARY NOT FOR CONSTRUCTION PORTLAND BUREAU

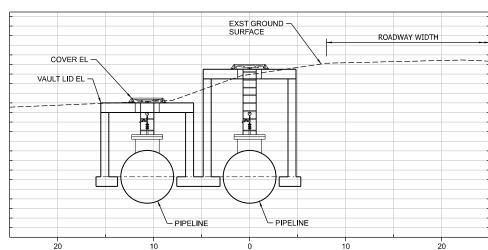
← EASEMENT 🖣

ND TRENCHLESS PIPE CROSSING - EASEMENT

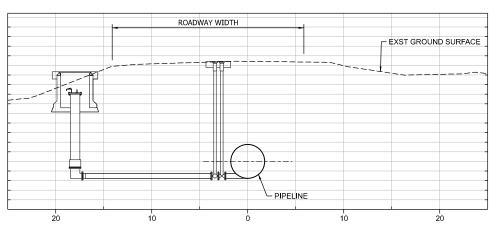
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THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN
CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LUBBILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT.



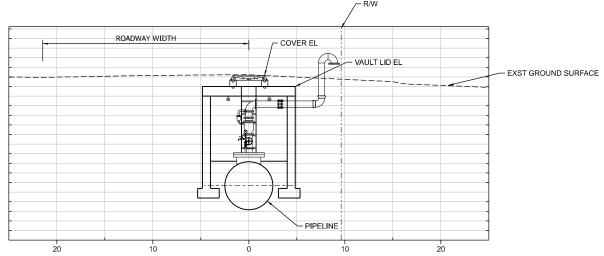
1 TYPICAL APPURTENANCE DETAIL - STANDARD AIR VALVE



(2) TYPICAL APPURTENANCE DETAIL - ACCESSWAY



TYPICAL APPURTENANCE DETAIL - DRAIN



TYPICAL APPURTENANCE DETAIL - OFFSET AIR VALVE

No Date Description Appd

Revision

Survey

Jacobs

WARNING

0 1"

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



XXX XXX

Bull Run Filtration Pipelines

FINISHED WATER INTERTIE
TYPICAL APPURTENANCE
CROSS SECTIONS

CONFIDENTIAL

SAP Project No W02563

RTIE NCE Sheet No LU-208

- SEC WILDLIFE HABITAT TAP EXISTING PHWD WATER MAIN FOR NEW EXISTING CULVERT AND OUTFALL HYDRANT AND WATER SERVICE TO FWI SITE SE LUSTED RD SE LUSTED RD FIRE HYDRANT EXISTING WATERLINE 5/8' WATER METER BEEHIVE -REMOVE AND REPLACE EXISTING DRIVEWAY WITHII EXISTING R/W AREA DRAIN -STAIRWAY RAIN COVER FINISHED WATER INTERTIE VALVE AND METER VAULT (55'X100') - VENTILATION LOUVER - 30' SITE GATE - CONCRETE LANDING PERMANENT FENCE _____ - ACCESS ROAD **ELECTRICAL BUILDING** EASEMENT -CUTOFF TREM CONDUIT EASEMENT EXISTING DRAIN TILES (TYP) -WARNING PRELIMINARY NOT FOR CONSTRUCTION If this bar does not measure 1" then the drawing is not to scale BUREAU Date THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LIABILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT.

GENERAL SHEET NOTES

- SEE ARCHITECTURAL SHEETS FOR INTERTIE VAULT
- DETAILS

 2. SEE LANDSCAPE SHEETS FOR PLANTED YARD AREAS

△ CONSTRUCTION NOTES

1. SHEET KEYNOTES APPLY TO SPECIFIC DRAWING ELEMENTS ON THE SHEET THEY ARE LOCATED.

LEGEND

ACP FULL DEPTH RECONSTRUCTION MATCH COUNTY STANDARD SECTION OR MATCH EXISTING, WHICHEVER IS GREATER

Do 0 00 V CONCRETE

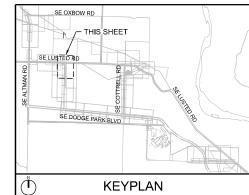
STORM DRAINAGE CULVERT

SEC ZONE CONIFEROUS TREE

DECIDUOUS TREE

PROPOSED EASEMENT

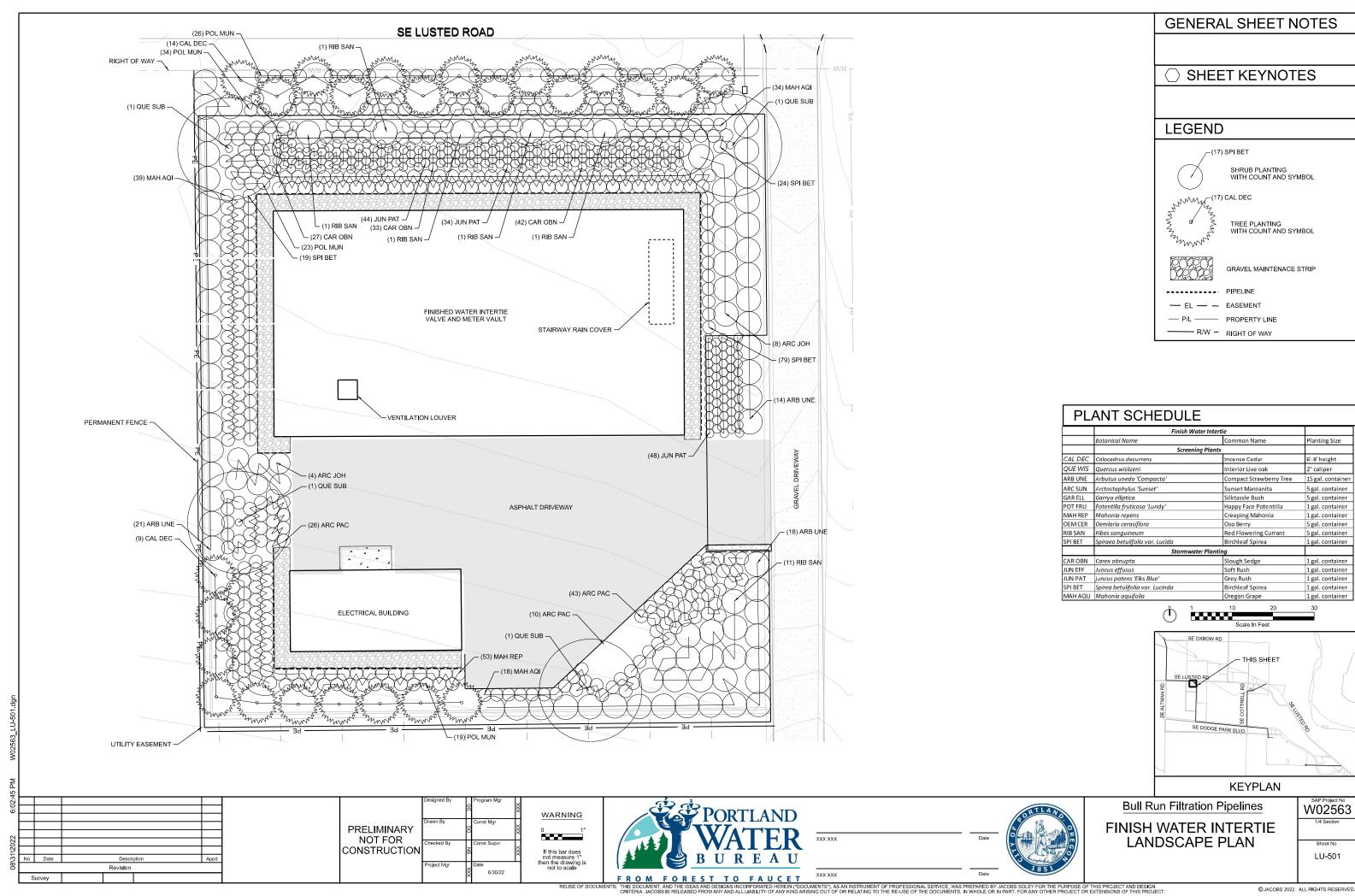
— TEMP CONSTRUCTION EASEMENT



Bull Run Filtration Pipelines FINISHED WATER INTERTIE

SITE PLAN

SAP Project No W02563 3866 LU-500





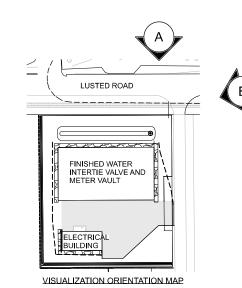
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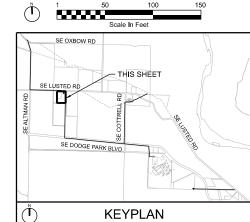


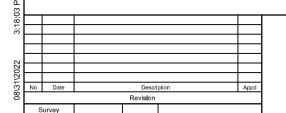
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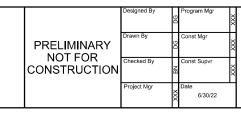


VISUALIZATION C













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xxx xxx	Date	
	Date	1851

Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
VISUALIZATIONS

SAP Project No
W02563

1/4 Section

Sheet No
LU-502