

Facility Pipelines

Technical Memorandum

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

PWB Project #s: W02229

Date: September 23, 2022

To: Dan Hogan, P.E., Project Manager

Portland Water Bureau

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

Jacobs



Jacobs

A.2 a Site Plans Exhibit A.19

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	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT INTERTIE			
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	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 16	FINISHED WATER PIPELINE PROPOSED CONDITIONS EAST OF LUSTED HILL TREATMENT FACILITY			
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			



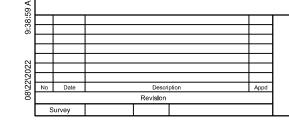
Portland Water Bureau

Bull Run Filtration Pipelines Project

LAND USE APPLICATION APPENDIX A.2 A. SITE PLANS

SHEET NUMBER	SHEET NAME	DESCRIPTION		
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		

Exhibit A.19.a



PRELIMINARY
NOT FOR
CONSTRUCTION

Designed By
Program Mgr
Const Mgr
Const Mgr
Checked By
Const Supvr
Checked By
Project Mgr
Date
8 6/30/22

WARNING

0 1"

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



Date Date

Bull Run Filtration Pipelines

LAND USE APPLICATION

APPENDIX A.2

A. SITE PLANS

COVERSHEET

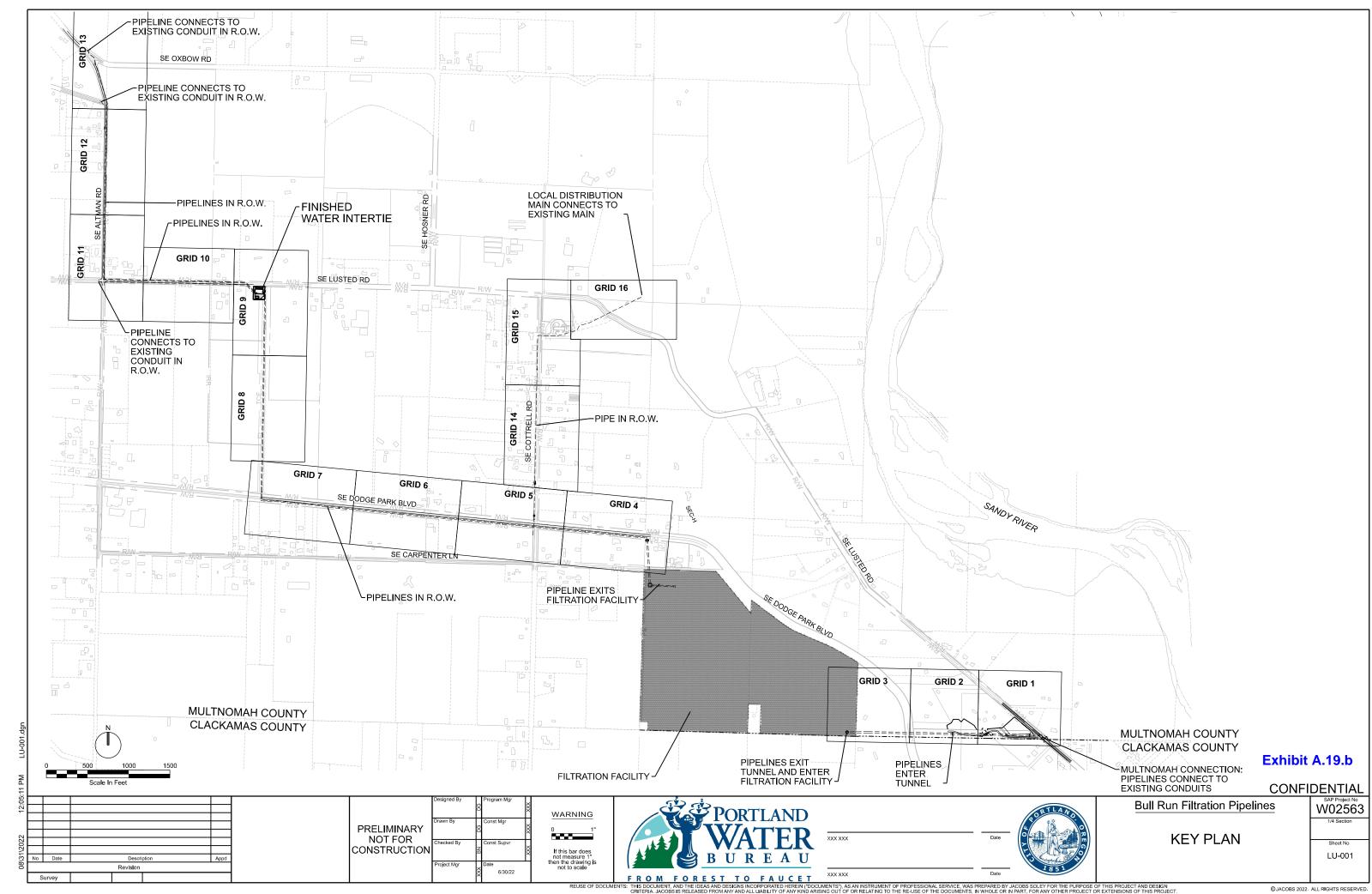
SAP Project No
W02563

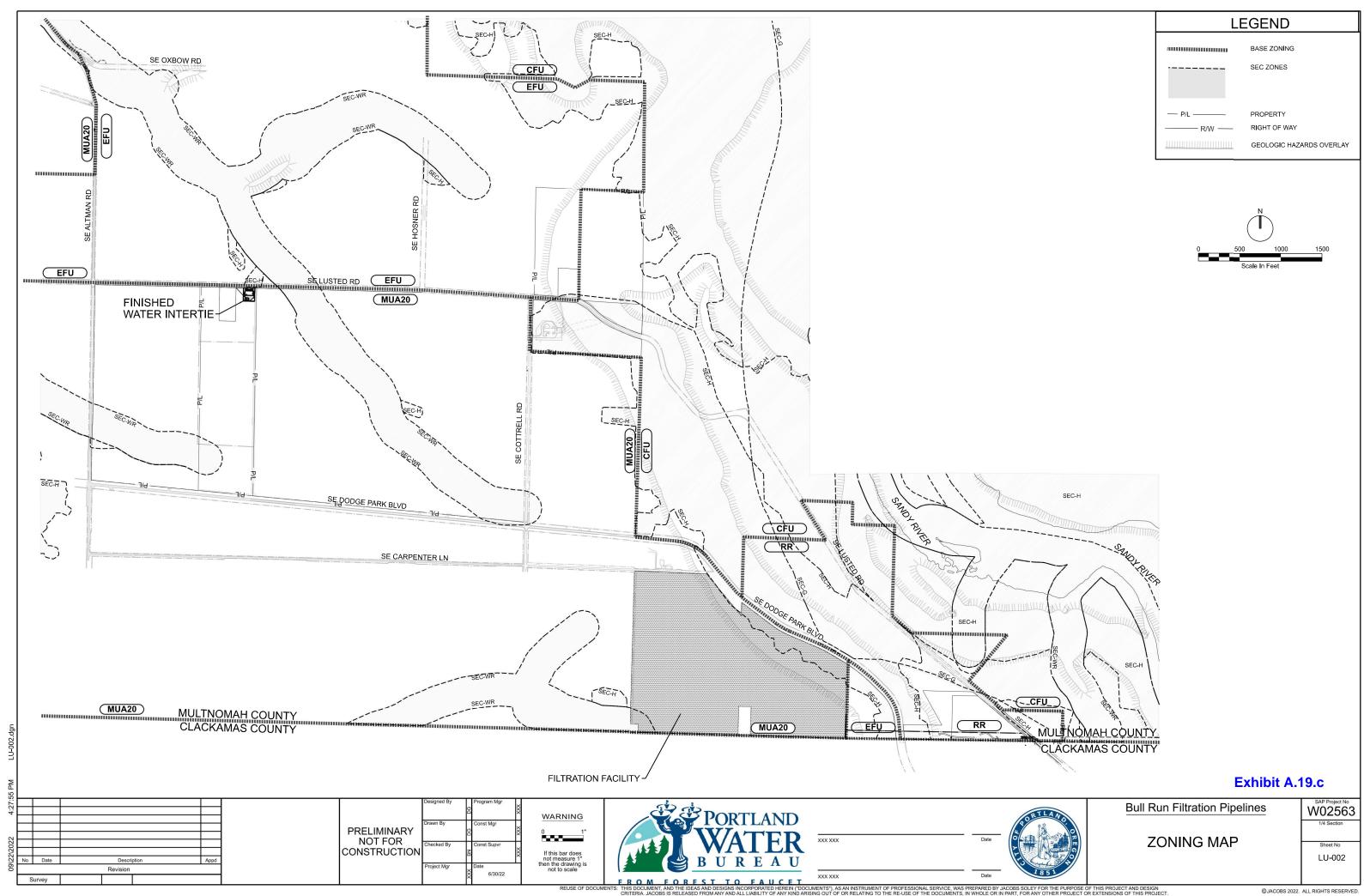
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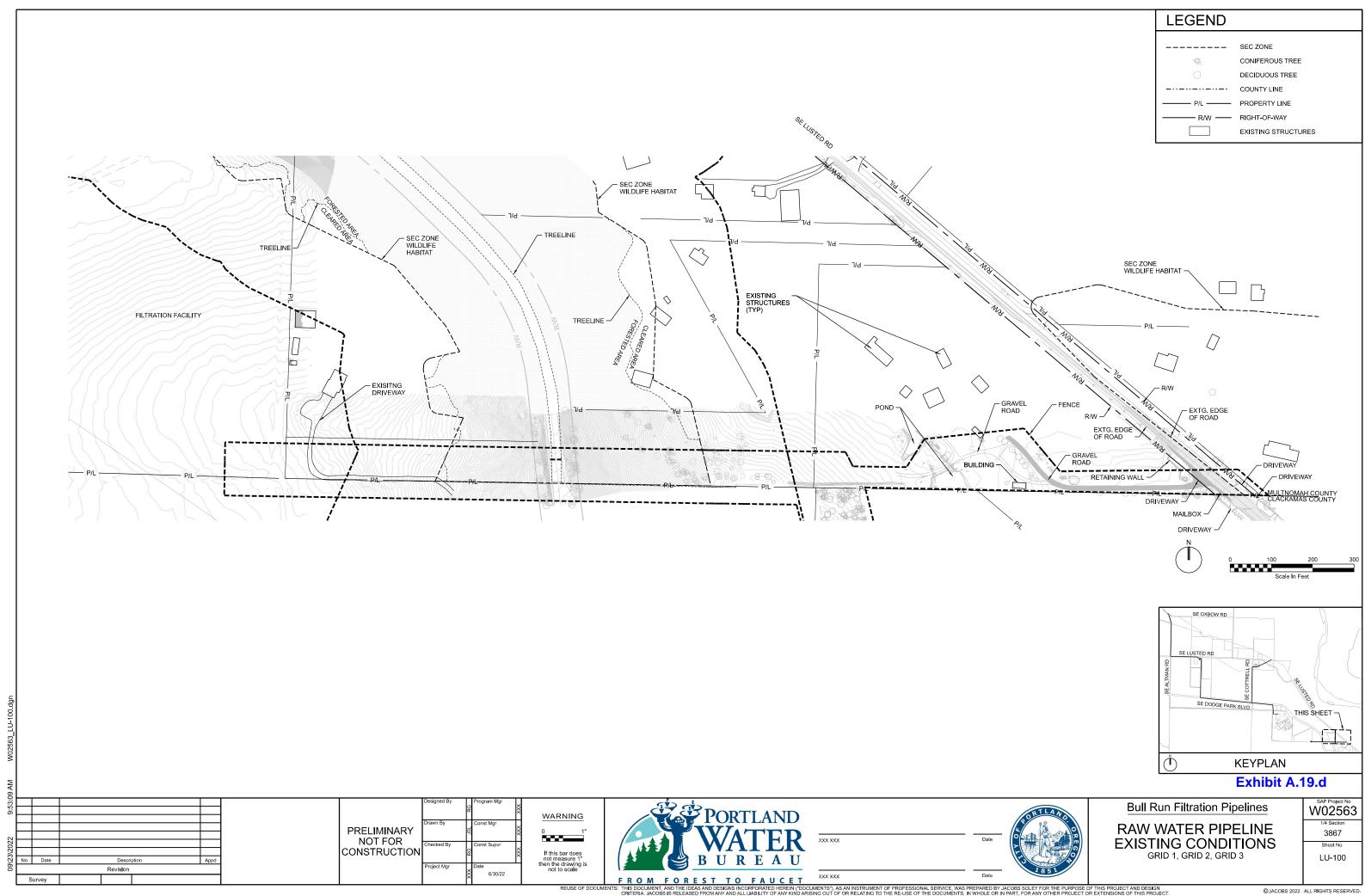
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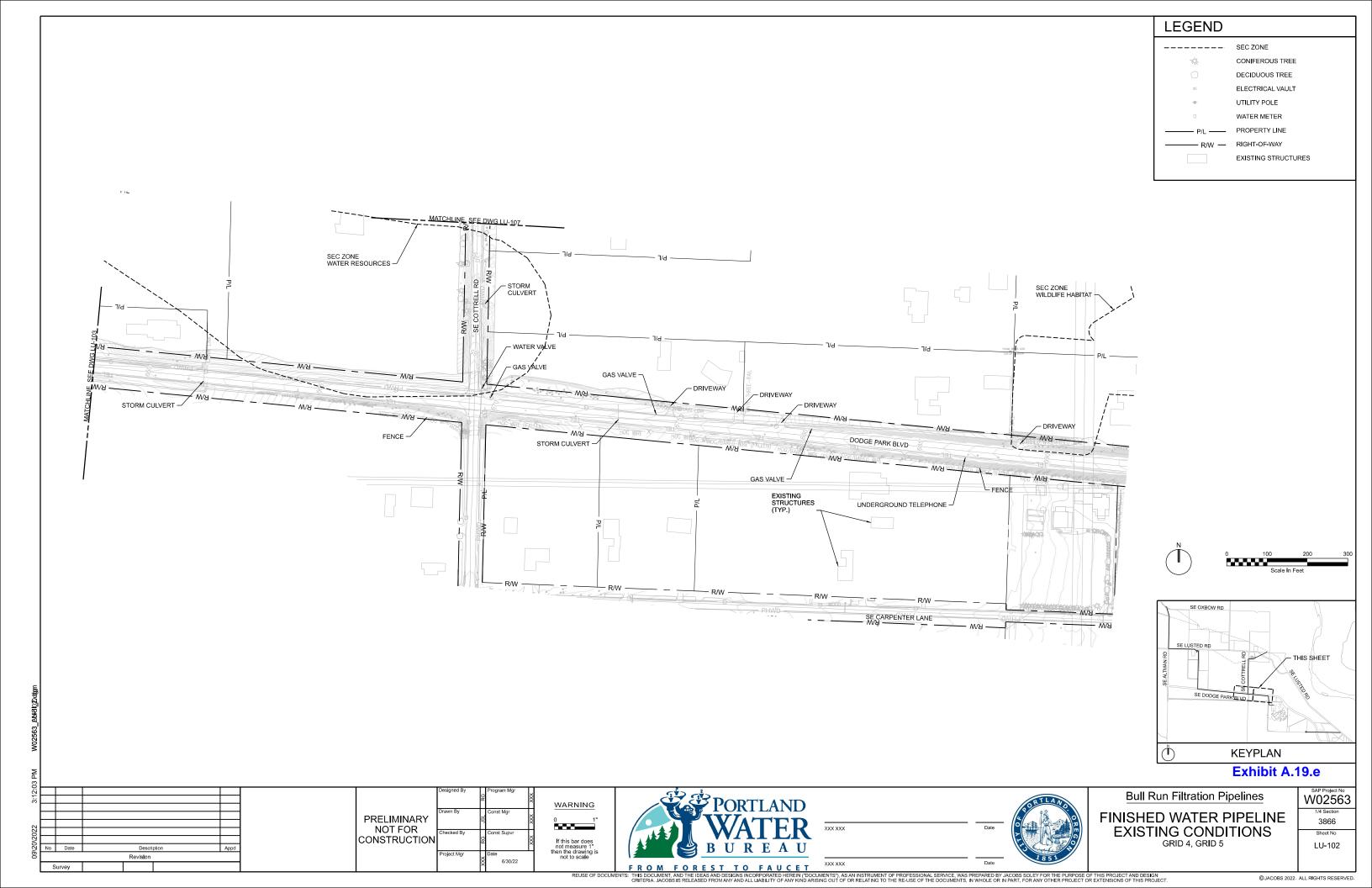
LU-000

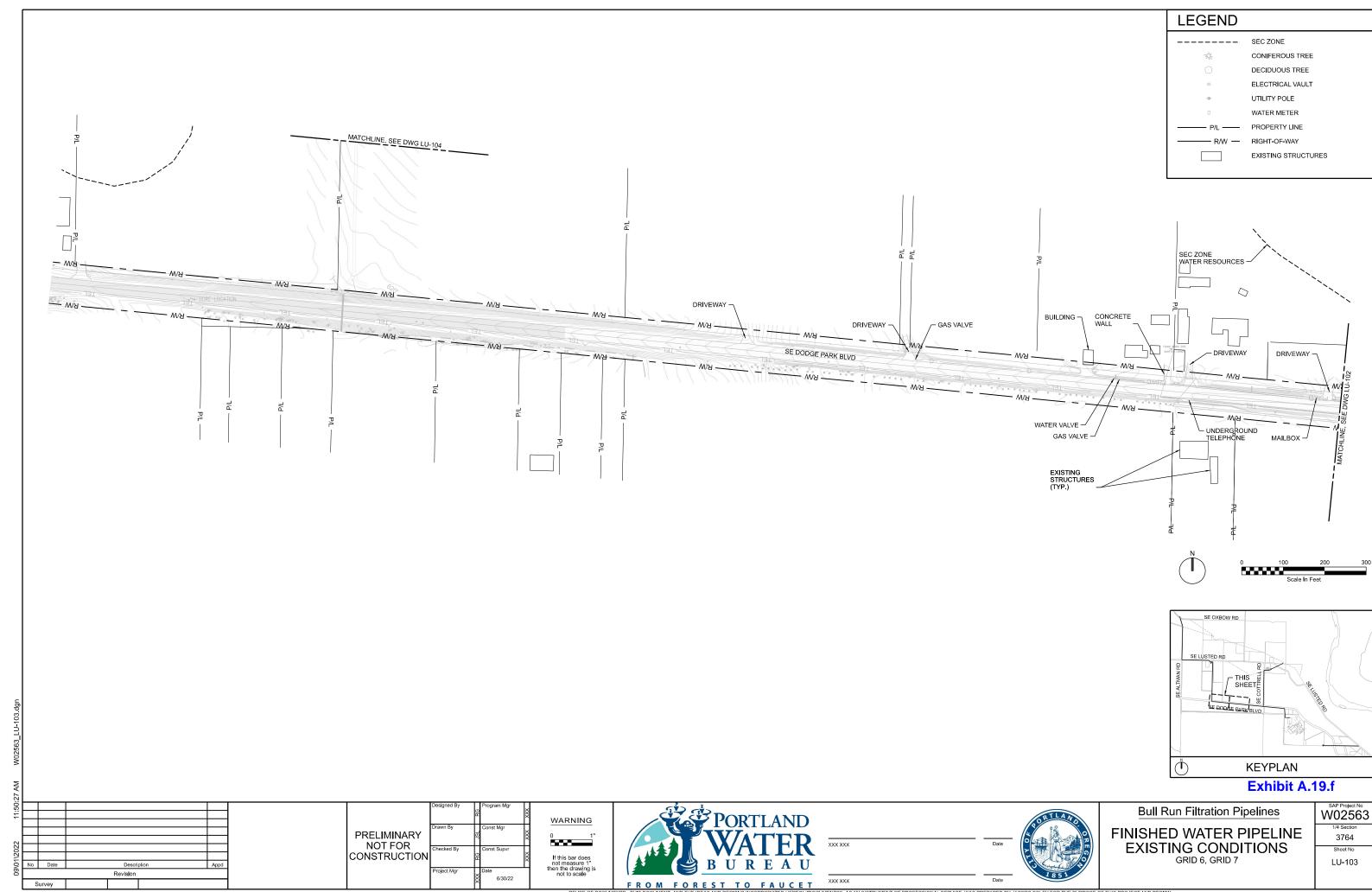
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESCRIPTIONS OF THE PURPOSE OF THIS PROJECT AND DESCRIPTION OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THE REJUST OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THE

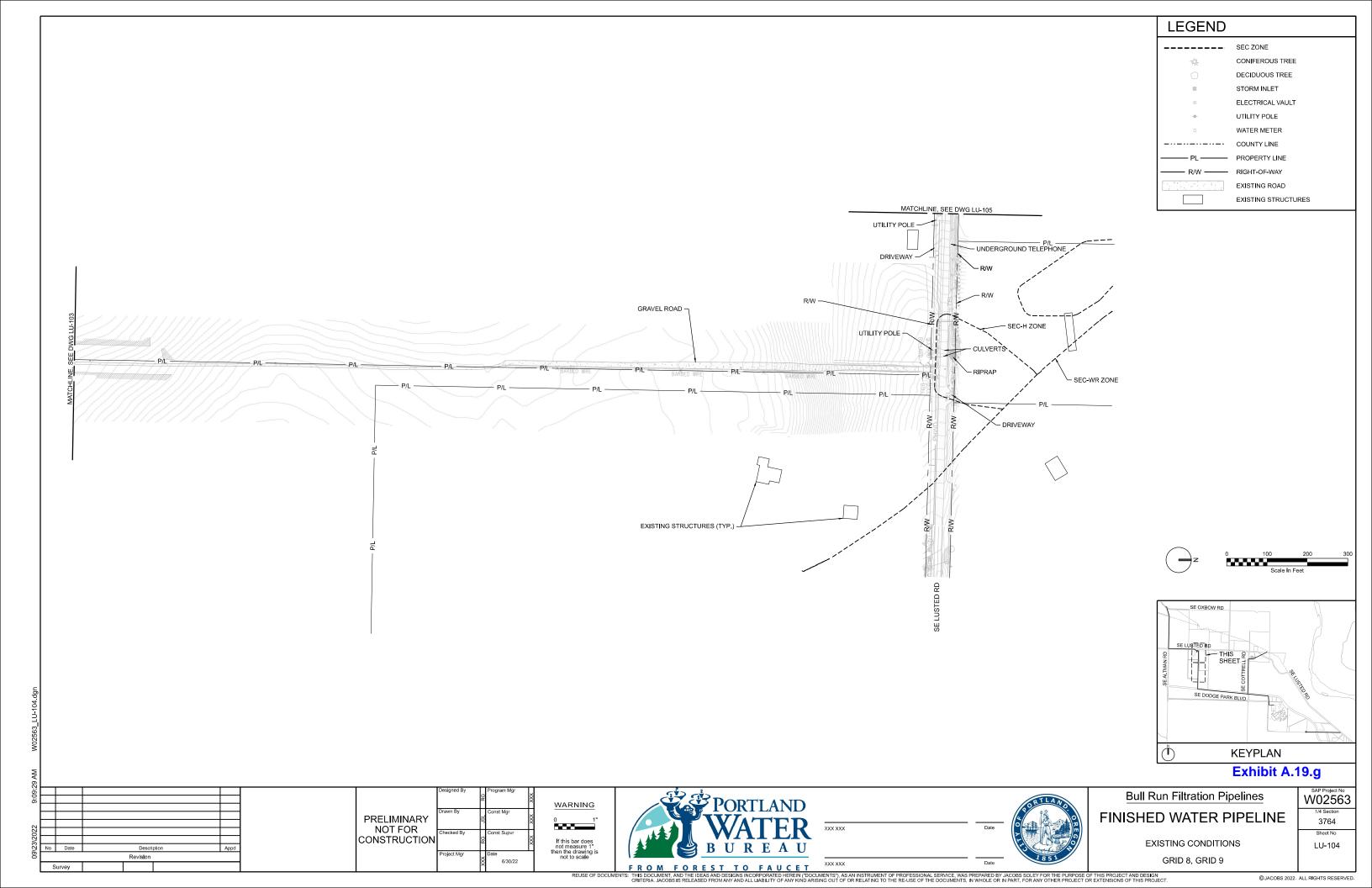


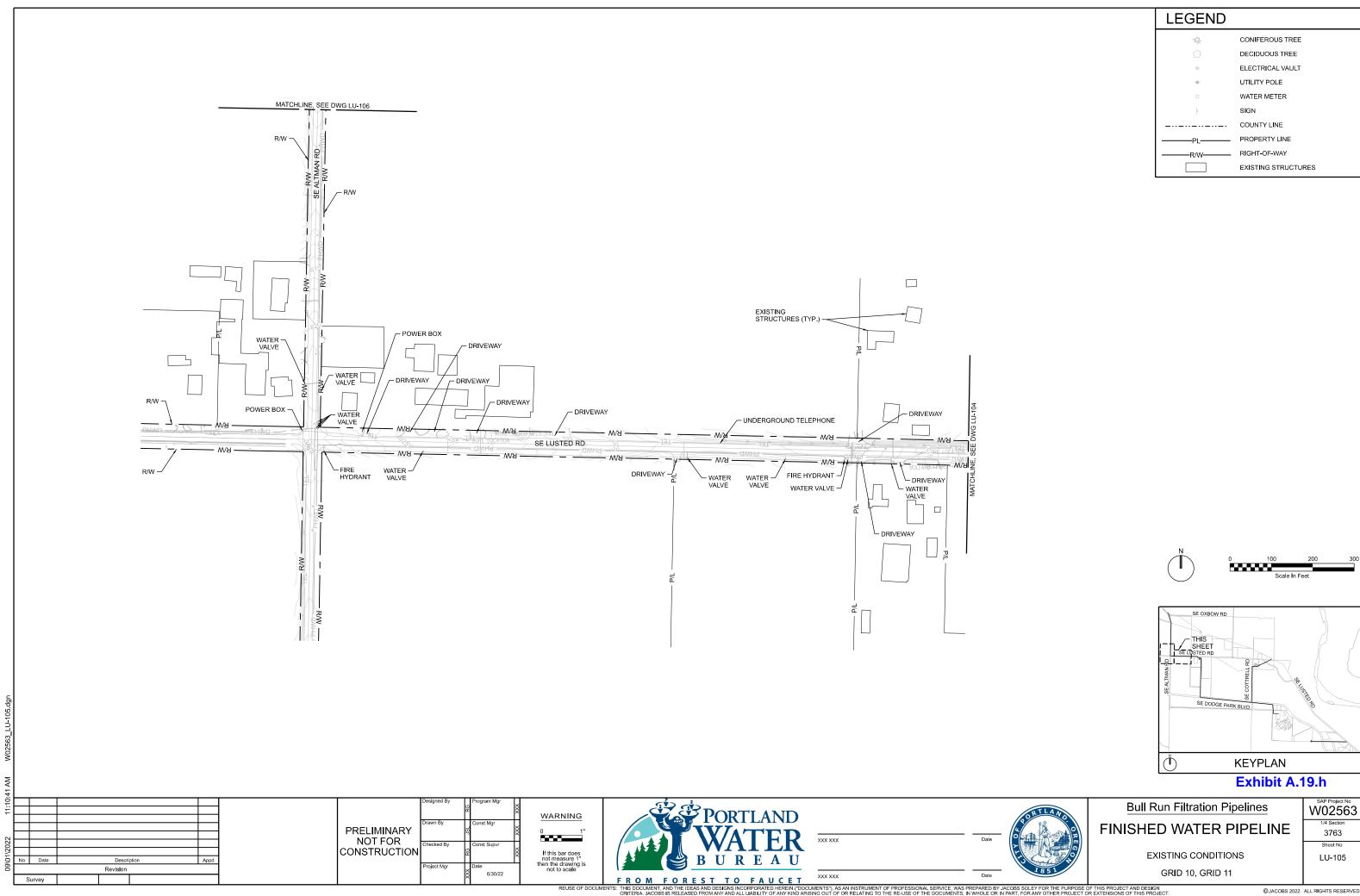


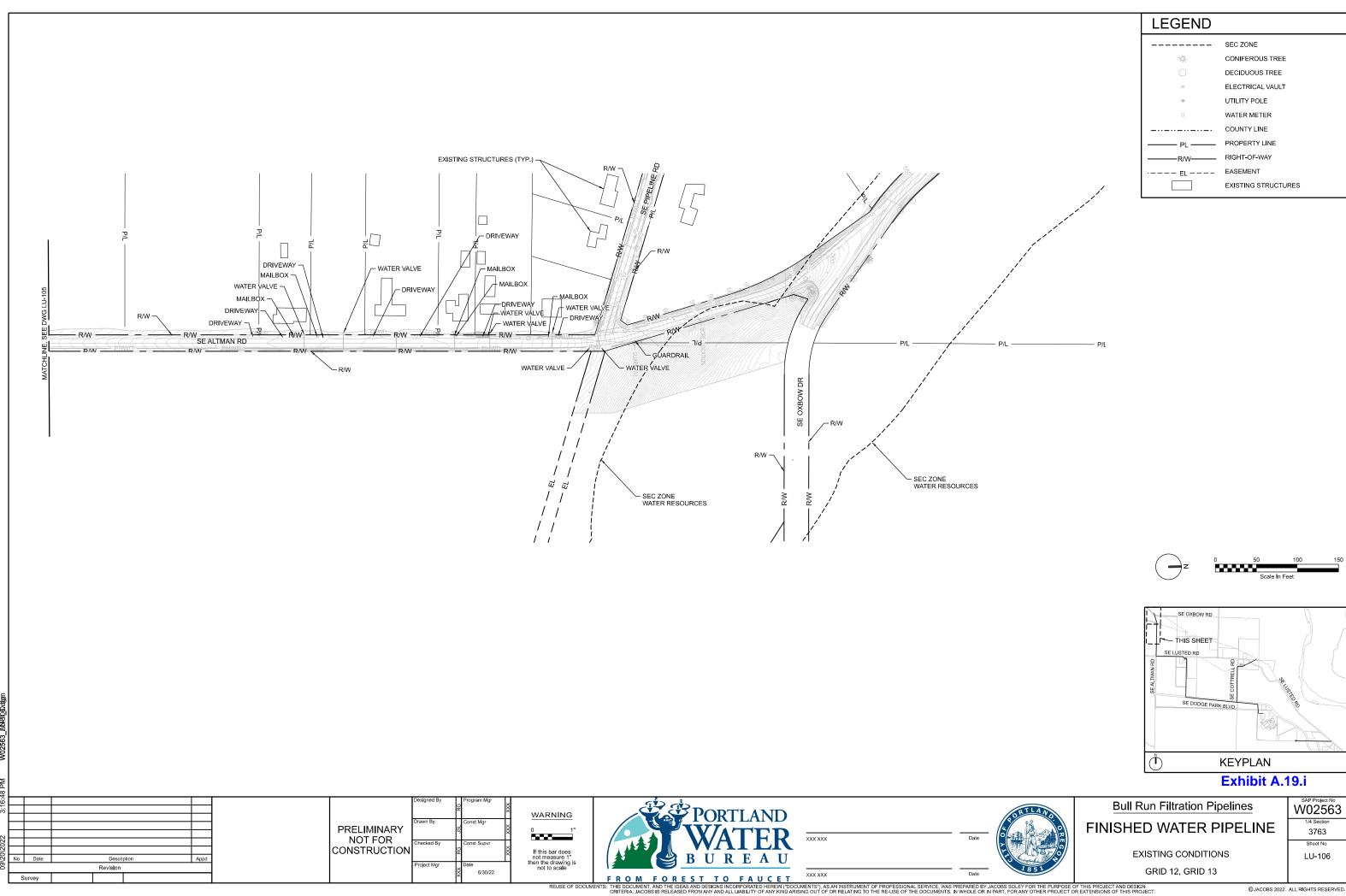


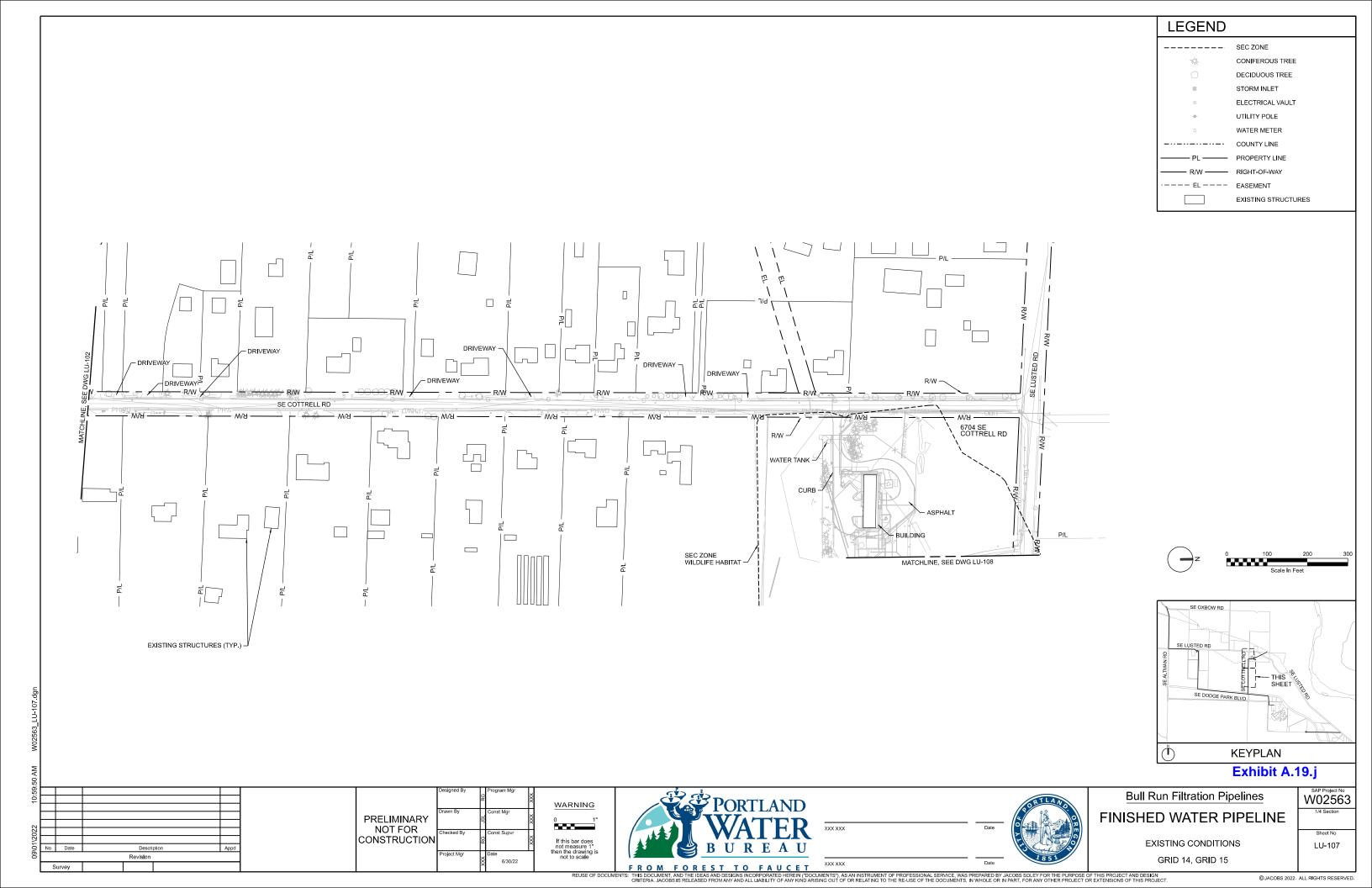


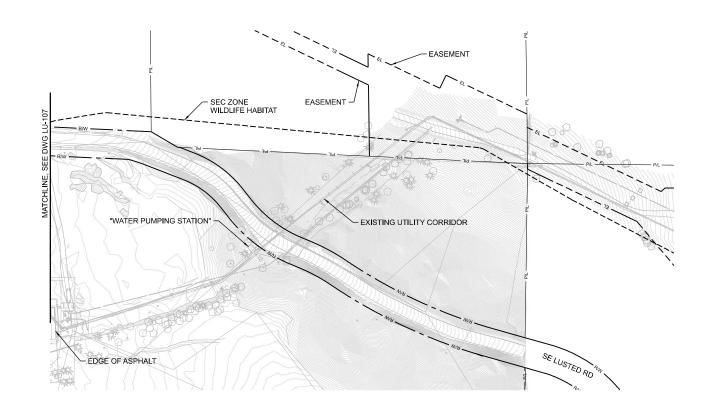












PRELIMINARY NOT FOR CONSTRUCTION



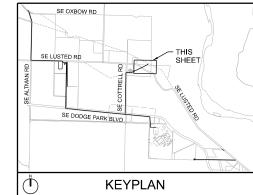


Exhibit A.19.k

PORTLAND BUREAU

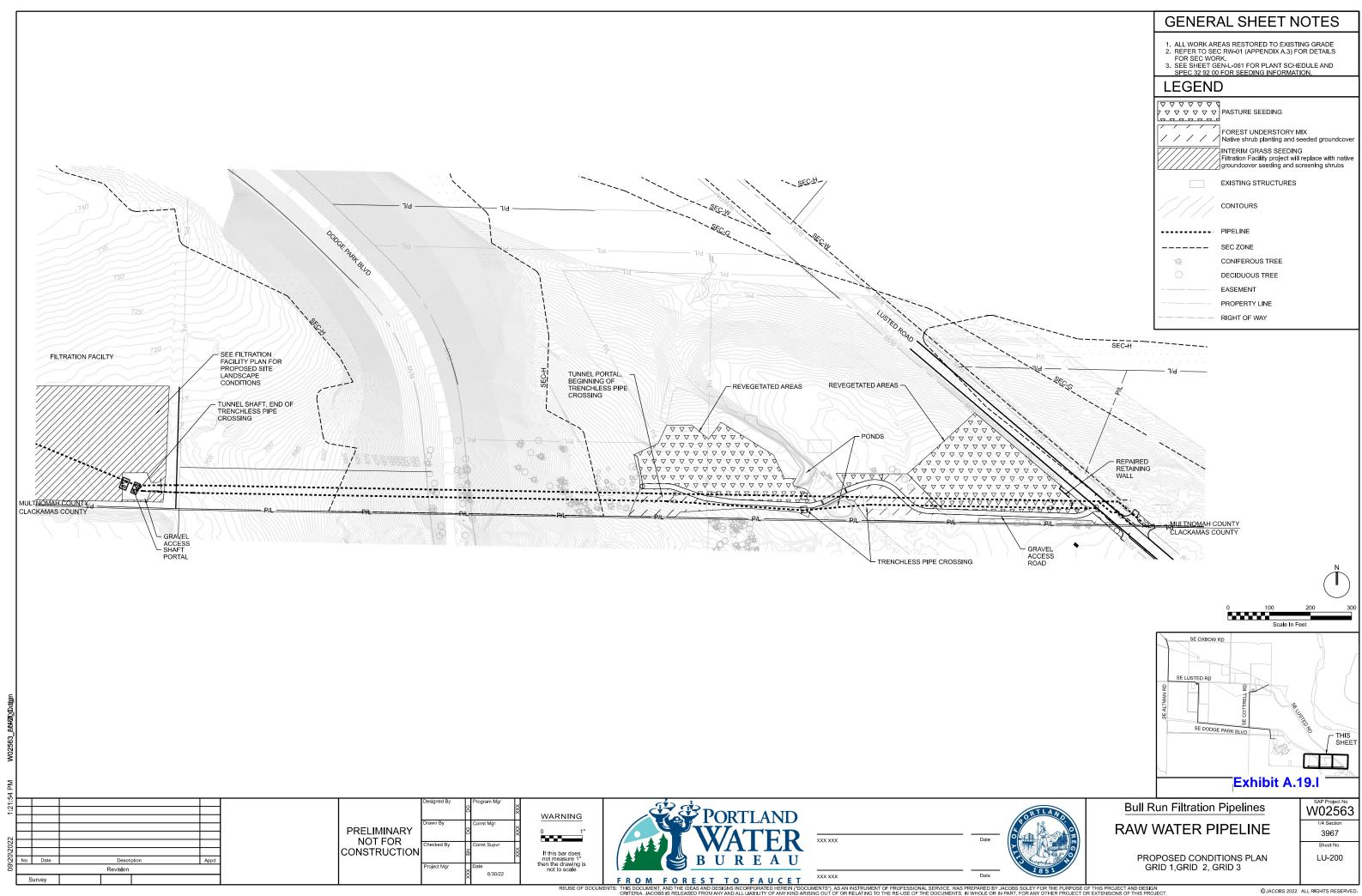
Bull Run Filtration Pipelines FINISHED WATER PIPELINE

EXISTING CONDITIONS GRID 16

SAP Project No W02563 3765 LU-108

ET

IN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLEY FOR THE PURPOSE OF THIS PROJECT AND DESIGN
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MATCHLINE , SEE DWG LU-206 END TRENCHLESS PIPE CROSSING -TRENCHLESS PIPE CROSSING BEGIN TRENCHLESS PIPE CROSSING - RESURFACED EXISTING DRIVEWAY WITHIN R/W - RESURFACED EXISTING DRIVEWAY WITHIN R/W RESURFACED EXISTING DRIVEWAY WITHIN R/W END TRENCHLESS — PIPE CROSSING TRENCHLESS PIPE CROSSING -CARPENTER LANE PORTLAND WARNING PRELIMINARY NOT FOR

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

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

ROADSIDE SEEDING

Native grasses and forbs

EXISTING TREES EXISTING STRUCTURES

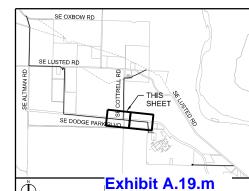
CONTOURS

----- PIPELINE SEC ZONE

> CONIFEROUS TREE DECIDUOUS TREE

EASEMENT

PROPERTY LINE RIGHT OF WAY



Bull Run Filtration Pipelines FINISH WATER PIPELINE

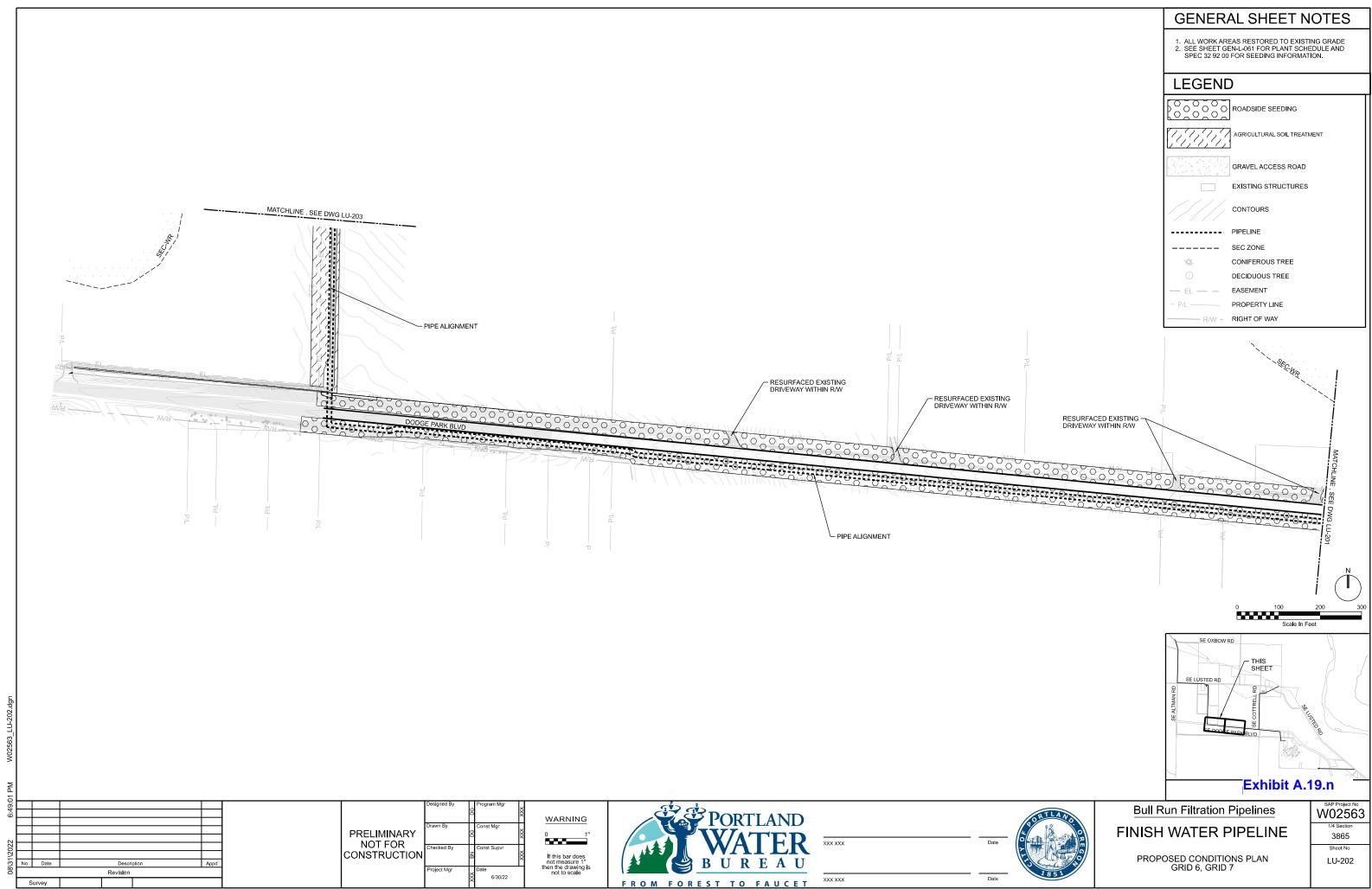
PROPOSED CONDITIONS PLAN GRID 4, GRID 5

BUREAU

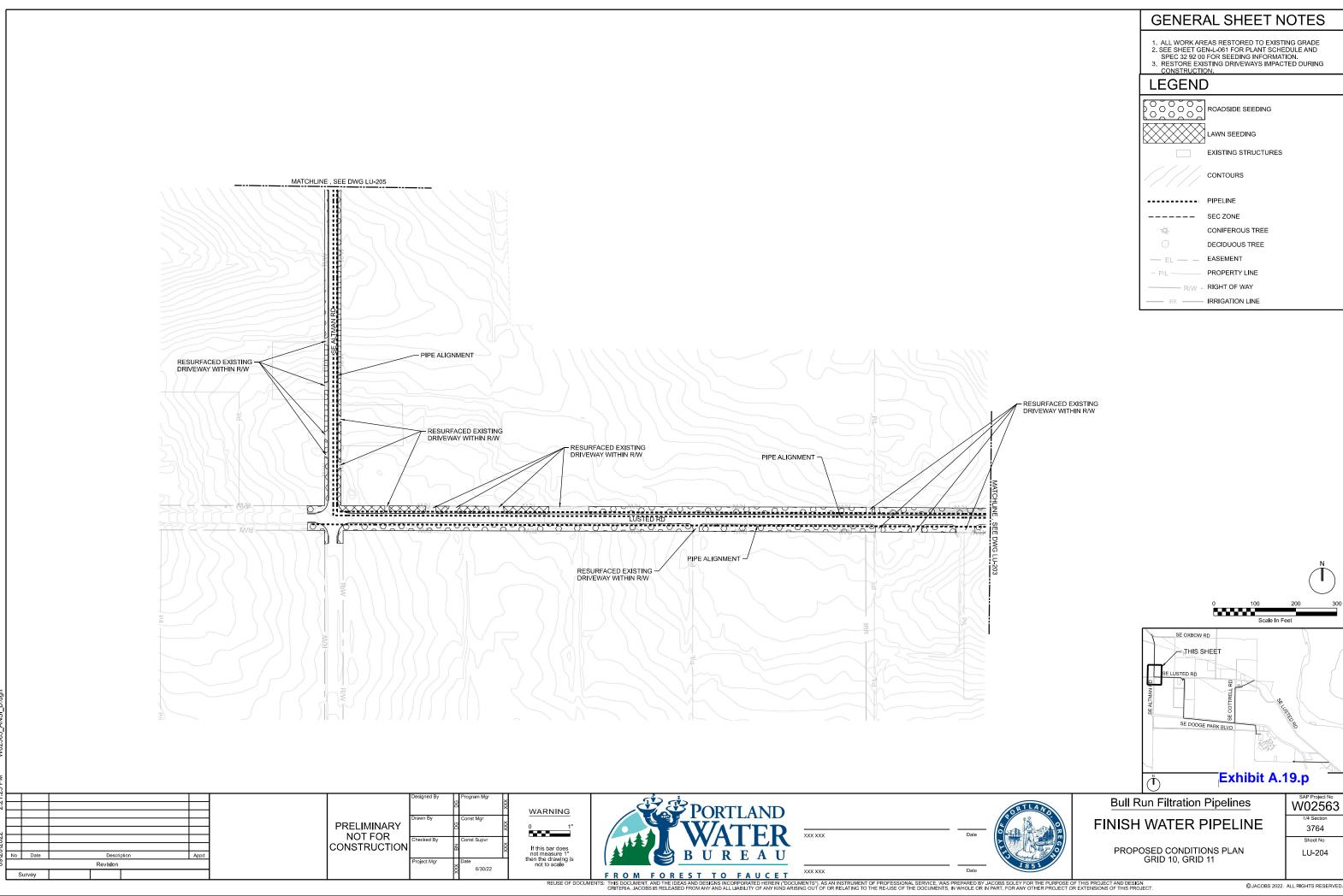
W02563

3865

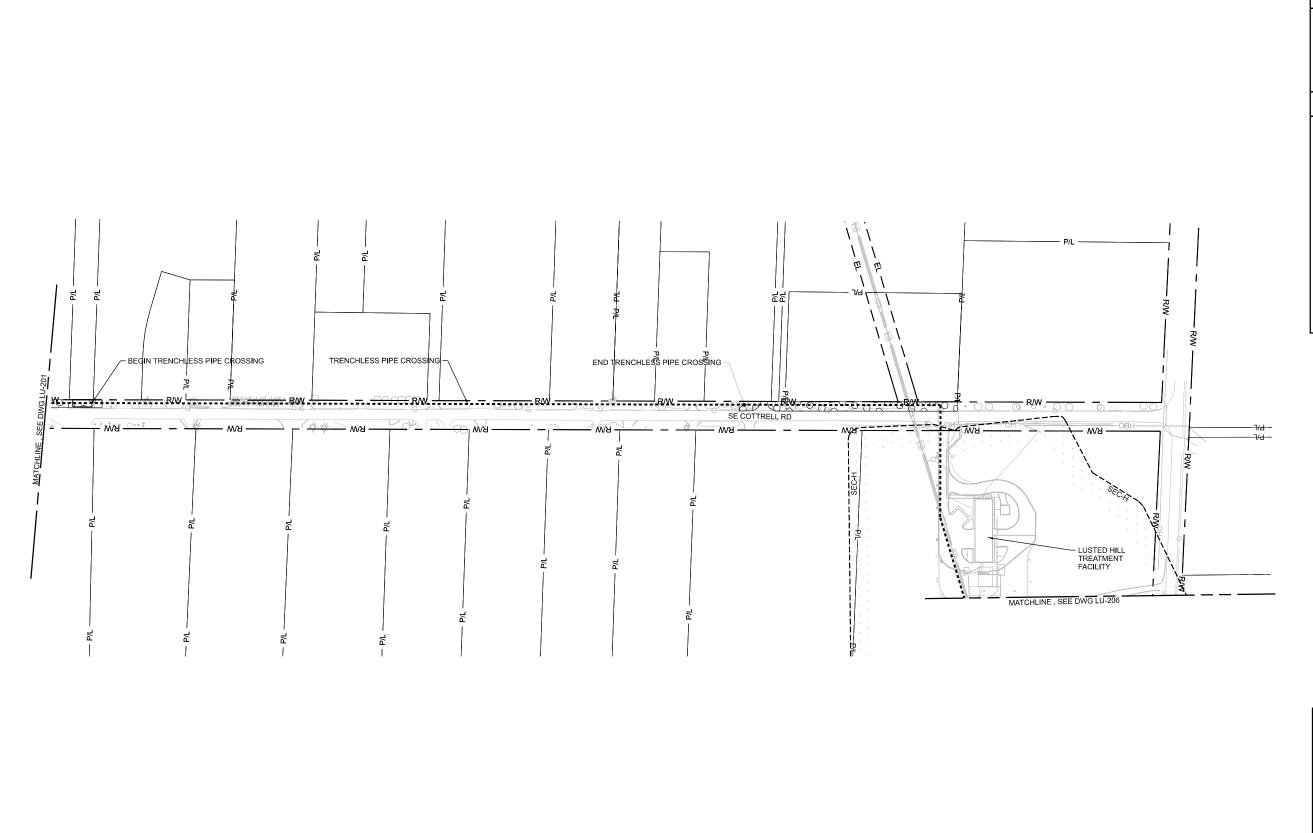
LU-201



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 SE OXBOW RD SEC-WR Exhibit A.19.o **Bull Run Filtration Pipelines** PORTLAND W02563 WARNING FINISH WATER PIPELINE PRELIMINARY 3764 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 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. ©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** O O O ROADSIDE SEEDING EXISTING STRUCTURES CONTOURS ---- PIPELINE ---- SEC ZONE CONIFEROUS TREE DECIDUOUS TREE EASEMENT PROPERTY LINE RIGHT OF WAY RESTORE EXISTING -DRIVEWAY WITHIN R/W PIPE ALIGNMENT RESTORE EXISTING -DRIVEWAY WITHIN R/W PIPE ALIGNMENT SE DODGE PARK BLVD Exhibit A.19.q SAP Project No W02563 **Bull Run Filtration Pipelines** PORTLAND FINISH WATER PIPELINE PRELIMINARY 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 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 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. © JACOBS 2022. ALL RIGHTS RESERVED.



WARNING

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

PRELIMINARY

NOT FOR CONSTRUCTION

GENERAL SHEET NOTES

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 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

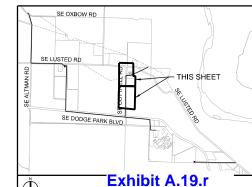
PIPELINE SEC ZONE

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 3664 LU-206

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 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.

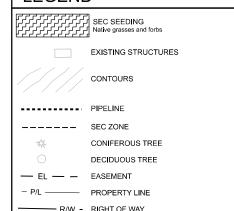
PORTLAND

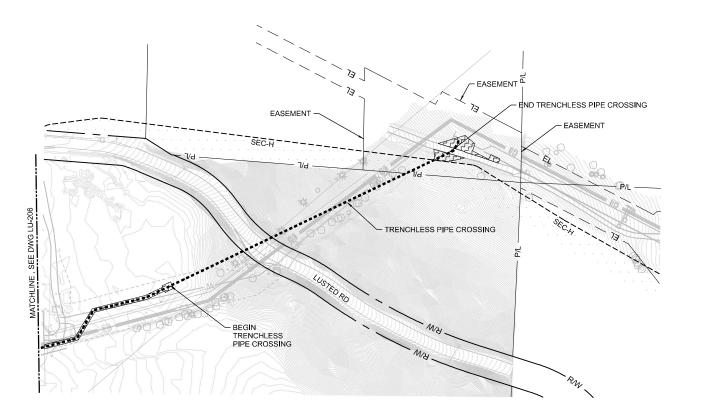
BUREAU

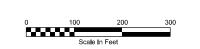
GENERAL SHEET NOTES

- 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









Bull Run Filtration Pipelines FINISH WATER PIPELINE

PROPOSED CONDITIONS PLAN GRID 16

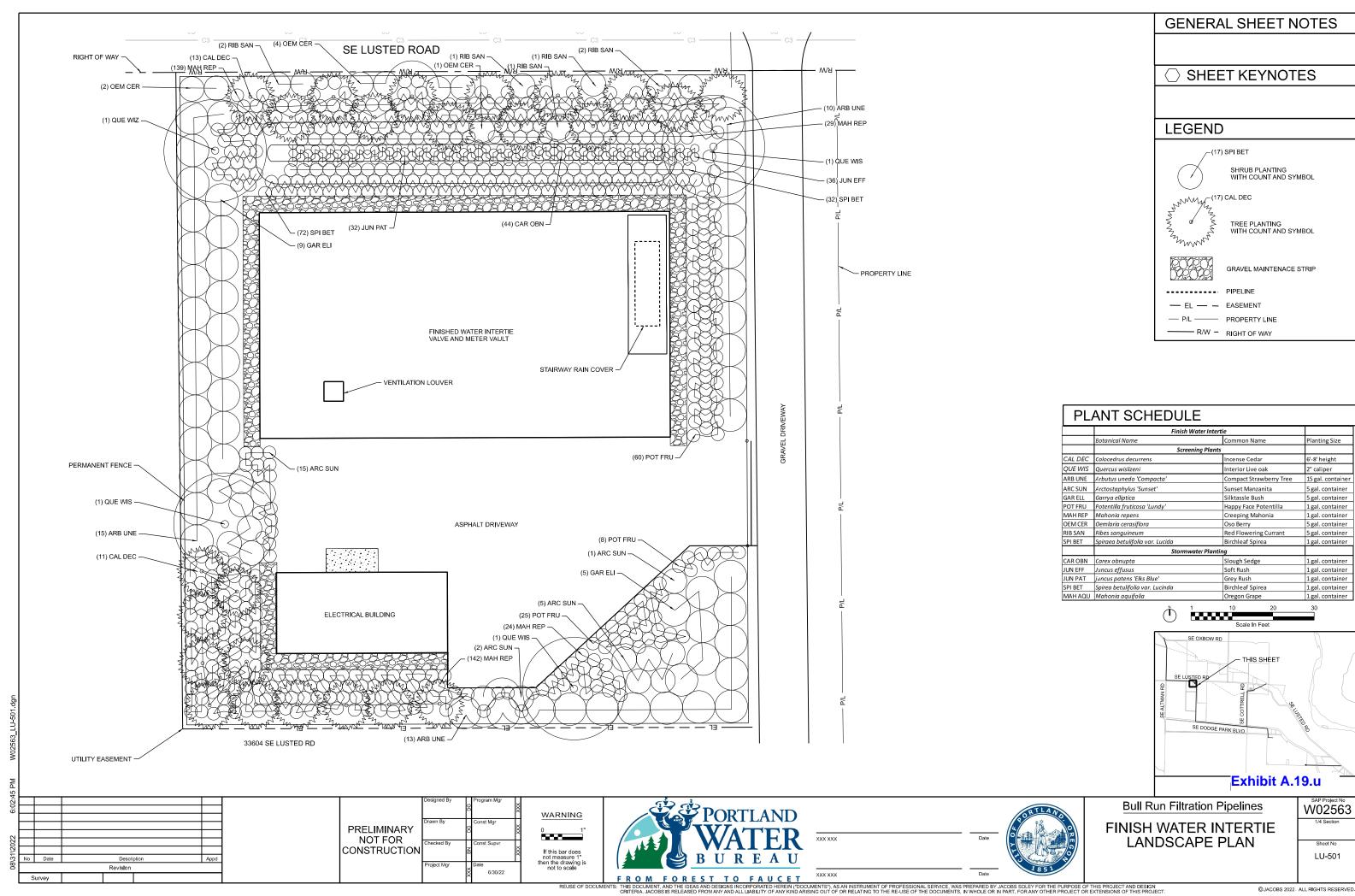
SAP Project No W02563

LU-207

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

PRELIMINARY NOT FOR CONSTRUCTION PORTLAND BUREAU

GENERAL SHEET NOTES SEE ARCHITECTURAL SHEETS FOR INTERTIE VAULT DETAILS SEE LANDSCAPE SHEETS FOR PLANTED YARD AREAS - SEC WILDLIFE HABITAT △ CONSTRUCTION NOTES TAP EXISTING PHWD WATER MAIN FOR NEW HYDRANT AND WATER SERVICE TO FWI SITE 1. SHEET KEYNOTES APPLY TO SPECIFIC DRAWING ELEMENTS ON THE SHEET THEY ARE LOCATED. EXISTING CULVERT AND OUTFALL SE LUSTED RD SE LUSTED RD **LEGEND** FIRE HYDRANT ACP FULL DEPTH RECONSTRUCTION MATCH COUNTY STANDARD SECTION OR MATCH EXISTING, WHICHEVER IS GREATER EXISTING WATERLINE 5/8' WATER METER - STORMWATER BASIN Do 0 00 V CONCRETE REMOVE AND REPLACE EXISTING DRIVEWAY WITHI EXISTING R/W STORM DRAINAGE CULVERT CONIFEROUS TREE DECIDUOUS TREE STAIRWAY RAIN COVER FINISHED WATER INTERTIE VALVE AND METER VAULT (55'X100') - VENTILATION LOUVER PROPOSED EASEMENT — TEMP CONSTRUCTION EASEMENT - 30' SITE GATE - CONCRETE LANDING PERMANENT FENCE - ACCESS ROAD ELECTRICAL BUILDING EASEMENT -SE OXBOW RD CUTOFF TRENCH CONDUIT EXISTING DRAIN TILES (TYP) -SE DODGE PARK BLVD **KEYPLAN** Exhibit A.19.t W02563 **Bull Run Filtration Pipelines** WARNING FINISHED WATER INTERTIE PRELIMINARY 3765 NOT FOR CONSTRUCTION If this bar does not measure 1" then the drawing is not to scale SITE PLAN LU-500 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 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. ©JACOBS 2022. ALL RIGHTS RESERVED.





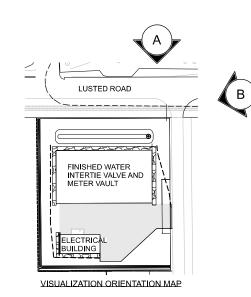
VISUALIZATION A

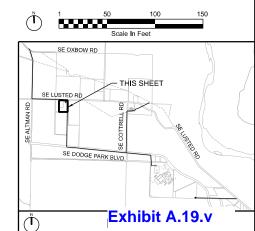


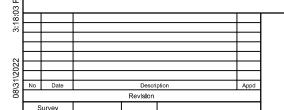
VISUALIZATION B



VISUALIZATION C







	Designed By	DG	Program Mgr	>
PRELIMINARY NOT FOR	Drawn By	DG	Const Mgr	>>
CONSTRUCTION	Checked By	BN	Const Supvr	<i>></i>
	Project Mgr	×	Date 6/30/22	





		PORTLAND
xxx xxx	Date	REG A CO
	Date	1851

Bull Run Filtration Pipelines FINISHED WATER INTERTIE VISUALIZATIONS

SAP Project No W02563 LU-502