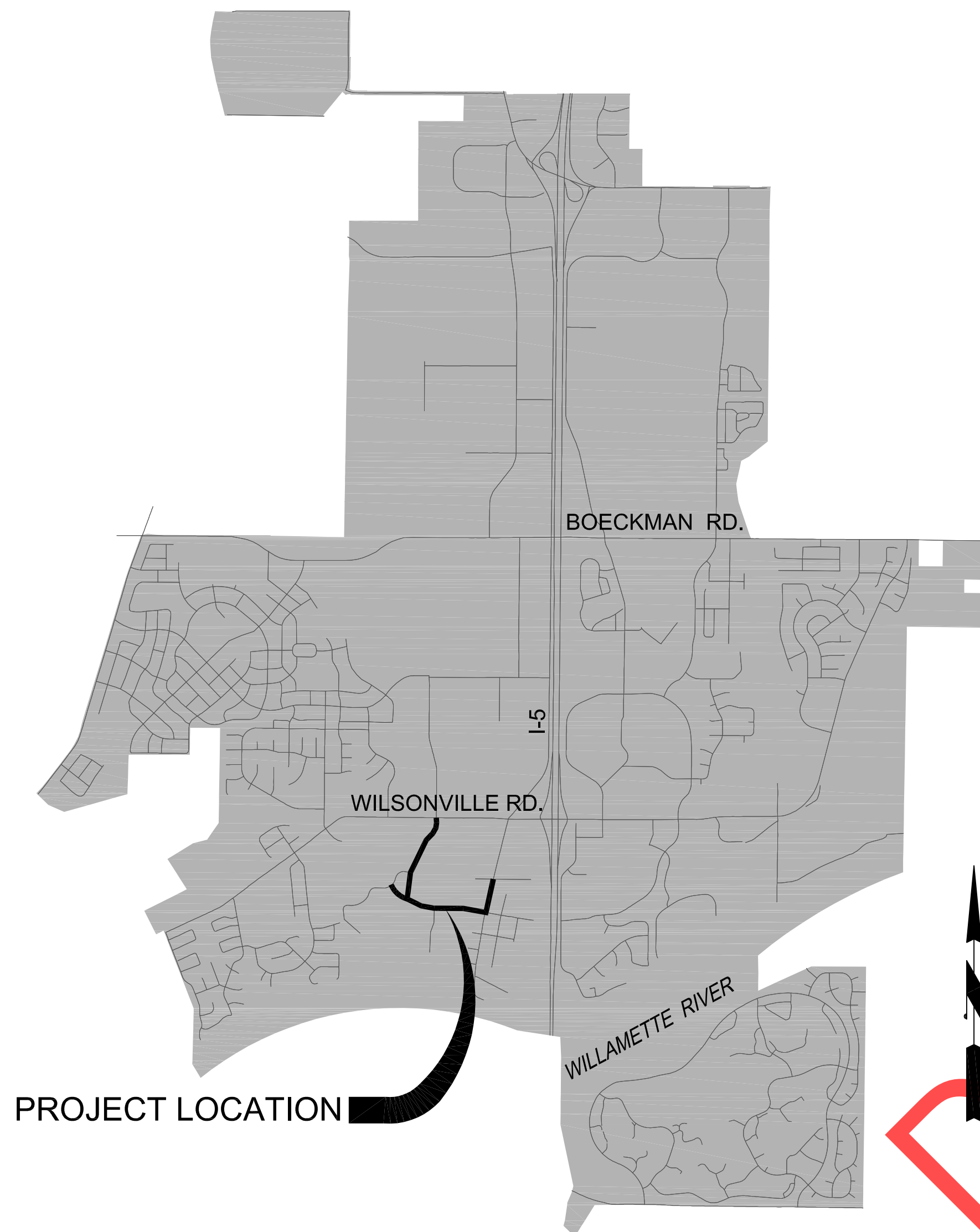


CITY OF WILSONVILLE, OREGON 5TH STREET TO KINSMAN ROAD EXTENSION

PROJECT #2017 02 001

CIP #4196



PROJECT LOCATION

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SW 5TH ST TO SW KINSMAN RD EXTENSION
COVER SHEET

CIP # 4196
PROJECT # 2017-02-001
G01
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ABBREVIATIONS

APPROX.	APPROXIMATE	EVER	EVERGREEN	N	NORTH, NORTHING	SE	SOUTH EAST
AVRV	AIR VACUUM RELEASE VALVE	EXIST., EX.	EXISTING	NE	NORTH EAST	SS	SANITARY SEWER
CL	CENTERLINE	FG	FINISHED GROUND	NW	NORTH WEST	ST, ST.	STREET
CLR	CLEARANCE	FLG	FLANGE	PT	POINT	STA	STATION
CO	CLEANOUT	FT	FOOT/FEET	PR	PRESSURE	STD	STANDARD
CONC.	CONCRETE	GRV	GRAVITY	PROP.	PROPOSED	SW	SOUTH WEST
CONST.	CONSTRUCT	IE	INVERT ELEVATION	PVC	POLYVINYL CHLORIDE	SDWK	SIDEWALK
DEC	DECIDUOUS	INST.	INSTALL	R	RADIUS, RIGHT OFFSET	TEMP.	TEMPORARY
D, DIA.	DIAMETER	L	LENGTH, LEFT OFFSET	RD	ROAD	TOC	TOP OF CURB
DIP	DUCTILE IRON PIPE	LAT	LATERAL	RIM	RIM ELEVATION	TWMP	TEMPORARY WATER MANAGEMENT PLAN
D.W.P.	DETECTABLE WARNING PATTERN	LF	LINEAR FEET	ROW	RIGHT OF WAY	TYP.	TYPICAL
E	EAST, EASTING	MH	MANHOLE	S	SOUTH, SLOPE	W	WEST
ELEV	ELEVATION	MIN.	MINIMUM	SD	STORM DRAINAGE	W.H.	WIRE HEIGHT
		MJ	MECHANICAL JOINT				

LEGEND

PROPOSED	EXISTING	
SANITARY MANHOLE	▲	SURVEY CONTROL
STORM MANHOLE	⊙	SANITARY MANHOLE
CURB INLET	⊙	STORM MANHOLE
DITCH INLET	⊙	CATCH BASIN
WATER VALVE	⊙	CURB INLET
AIR RELEASE VALVE	⊙	DITCH INLET
WATER FITTINGS	⊙	AREA/YARD DRAIN
FIRE HYDRANT	⊙	CLEAN OUT
BOLLARD	⊙	GAS VALVE
PEDESTRIAN LANE	⊙	GAS METER
BIKE LANE	⊙	WATER VALVE
BUS SHELTER	⊙	BLOW OFF VALVE
	⊙	FIRE HYDRANT
	⊙	POST INDICATOR VALVE
	⊙	WATER METER
	⊙	WATER VAULT
	⊙	IRRIGATION CONTROL VALVE
	⊙	COMMUNICATION VAULT
	⊙	COMMUNICATION RISER
	⊙	COMMUNICATION JUNCTION BOX
	⊙	COMMUNICATION MARKER SIGN
	⊙	ELECTRIC SUBSURFACE JUNCTION BOX
	⊙	POWER VAULT
	⊙	TRANSFORMER
	⊙	ELECTRIC METER
	⊙	ELECTRIC TOWER
	⊙	ELECTRIC RISER WITH OUTLET
	⊙	COBRA LIGHT POLE
	⊙	LIGHT POLE
	⊙	TRAFFIC SIGNAL CONTROL CABINET
	⊙	TRAFFIC JUCTION BOX
	⊙	UTILITY POLE
	⊙	SIGNAL POLE
	⊙	PEDESTRIAN SIGNAL POLE
	⊙	GUY ANCHOR
	⊙	BOLLARD
	⊙	SIGN
	⊙	FLAG POLE
	⊙	MAILBOX
	⊙	TEST PIT
	⊙	MONITORING WELL
	⊙	WETLAND FLAG
	⊙	SAMPLE PLOT
	⊙	BORE HOLE
	⊙	ORDINARY HIGH WATER
	⊙	BIKE LANE
	⊙	LINE CONTINUES
	⊙	SHRUB
	⊙	DECIDUOUS TREE
	⊙	EVERGREEN TREE
201	—	MINOR CONTOUR
205	—	MAJOR CONTOUR
SS	—	SANITARY LINE
SD	—	STORM LINE
G	—	GAS LINE
W	—	WATER LINE
P	—	POWER LINE
COM	—	COMMUNICATION LINE
---	---	LIMITS OF CONSTRUCTION
---	---	CURB
---	---	CURB & GUTTER
---	---	ROW/PROPERTY LINE
---	---	SAWCUT LINE
F	---	FILL LINE
C	---	CUT LINE
n	---	GUARDRAIL
UT	---	UTILITY TRENCH



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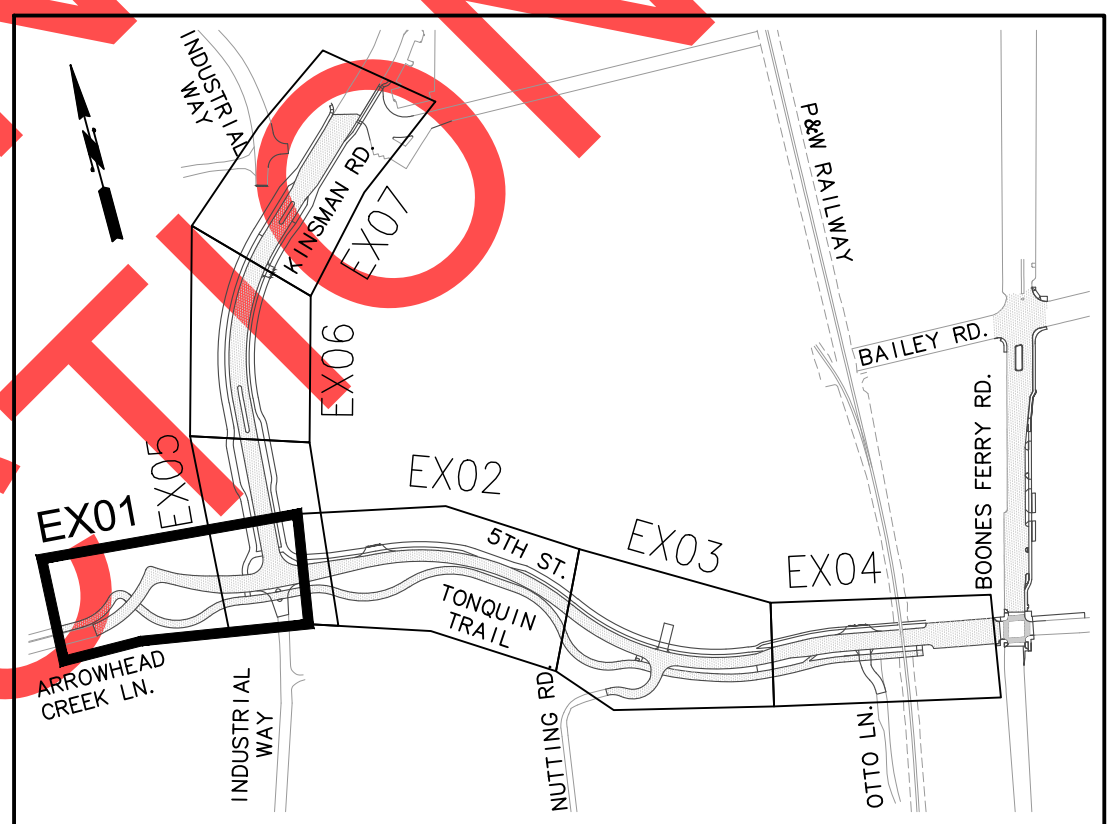
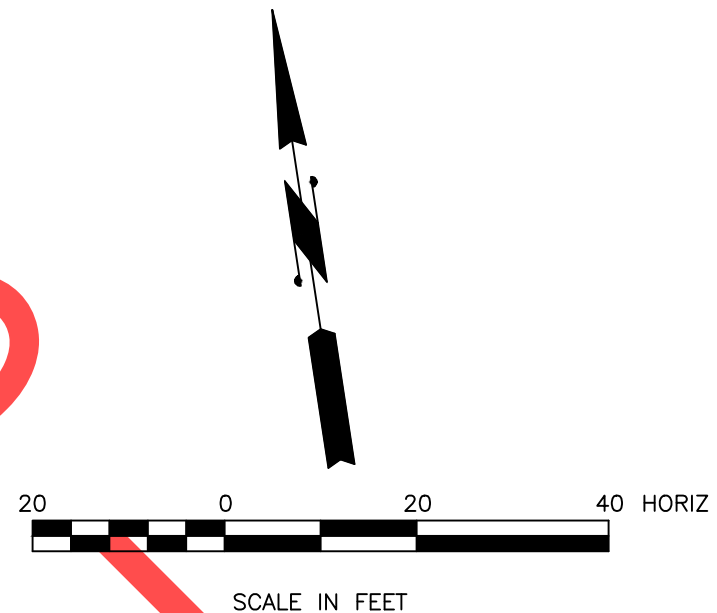
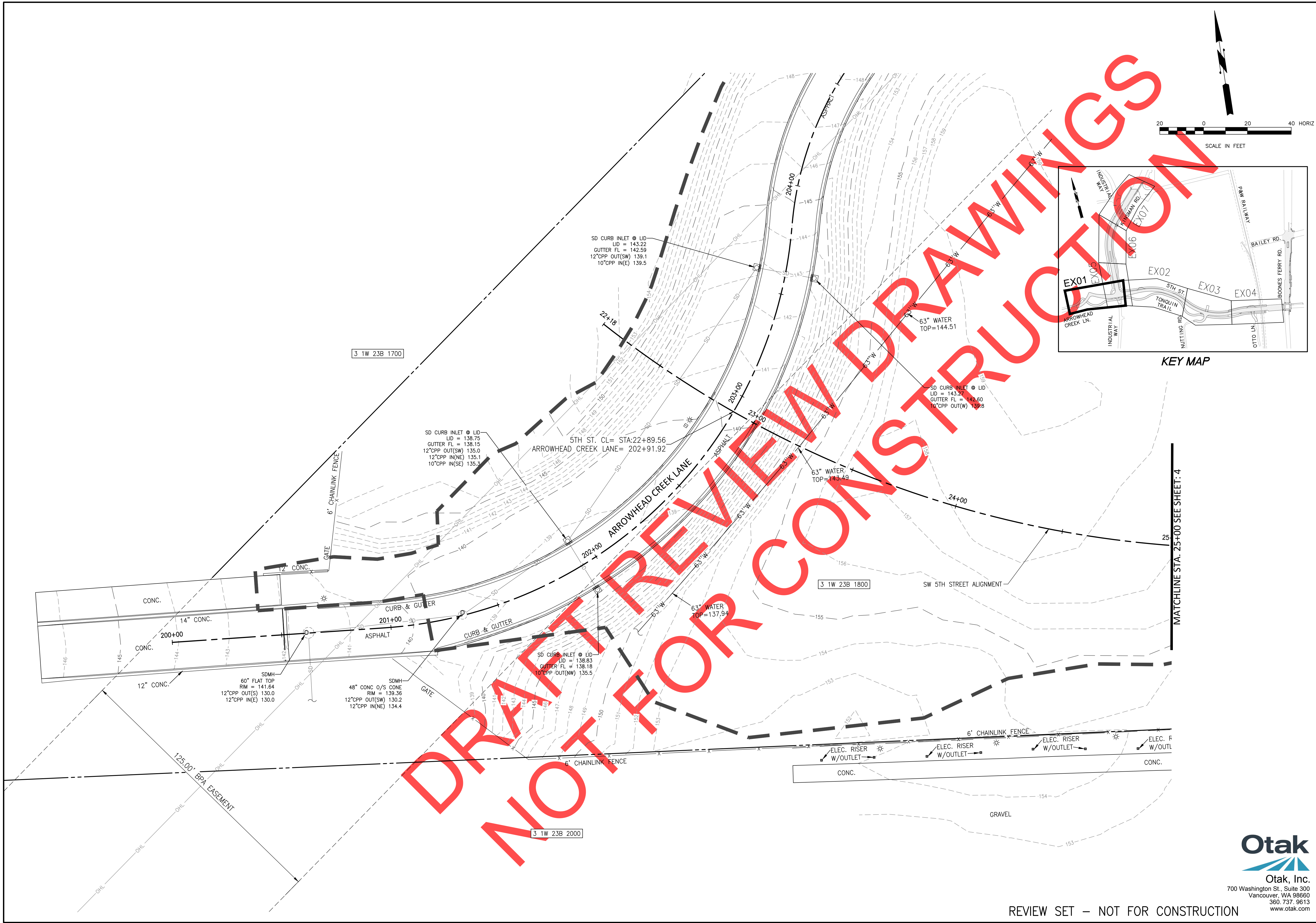
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 SHEET INDEX AND LEGEND

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KEY MAP

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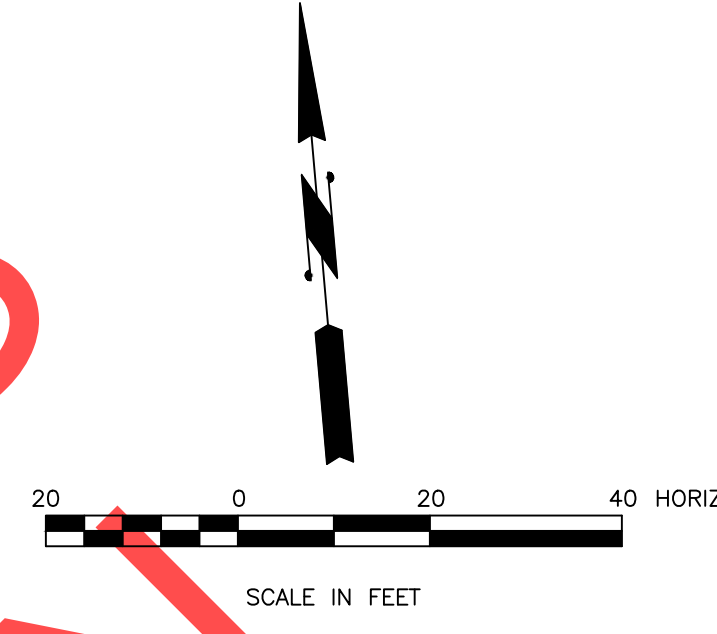
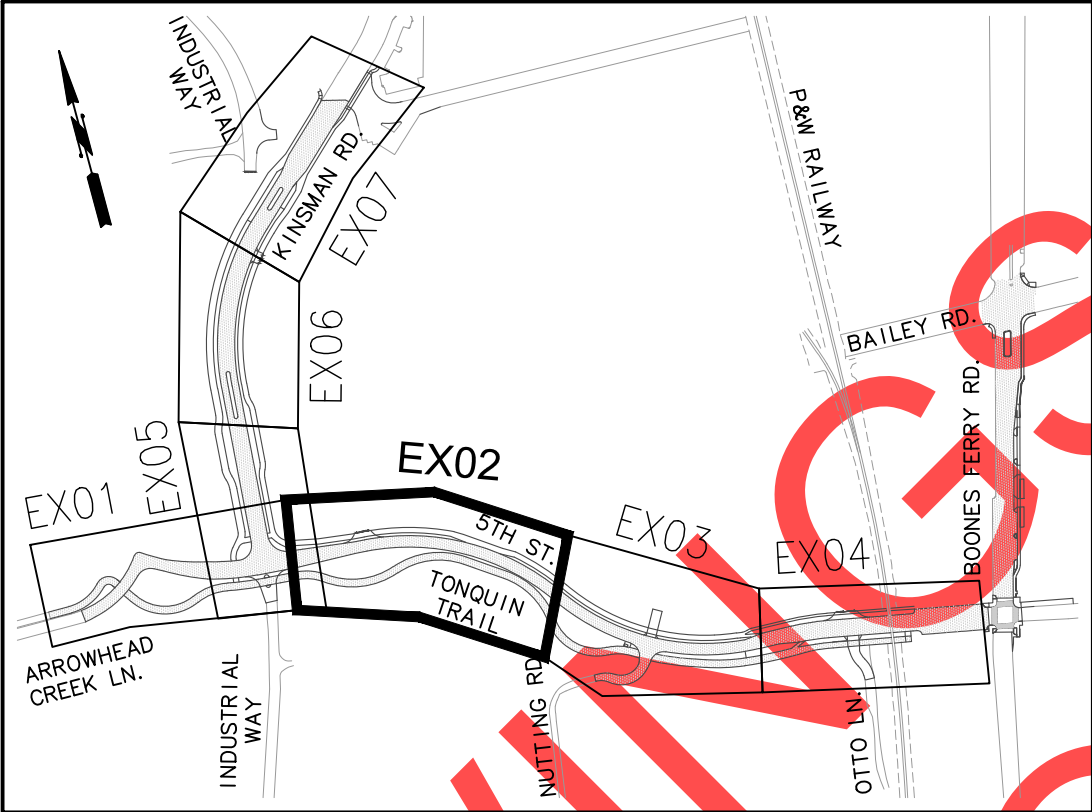
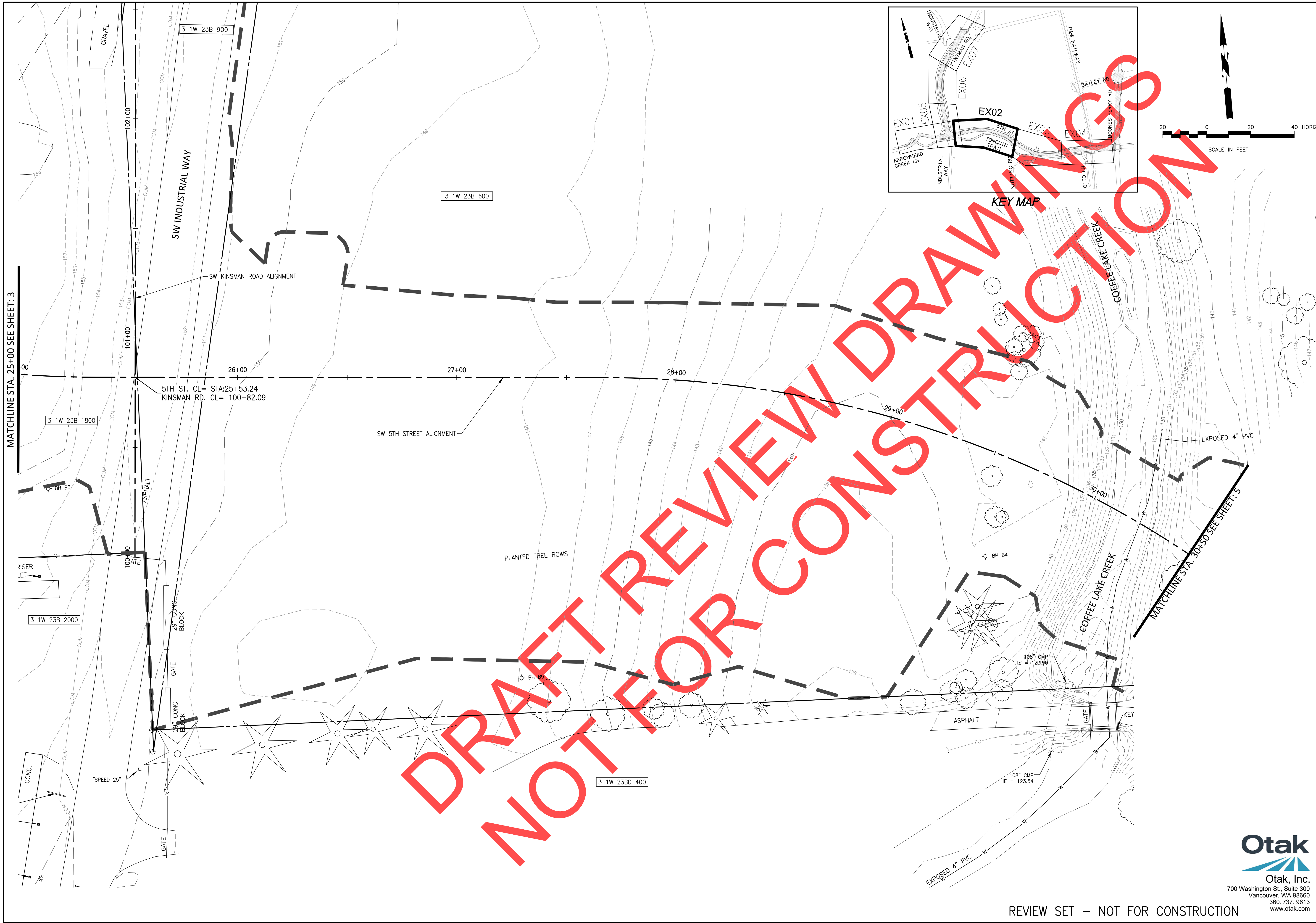
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SW 5TH ST TO SW KINSMAN RD EXTENSION
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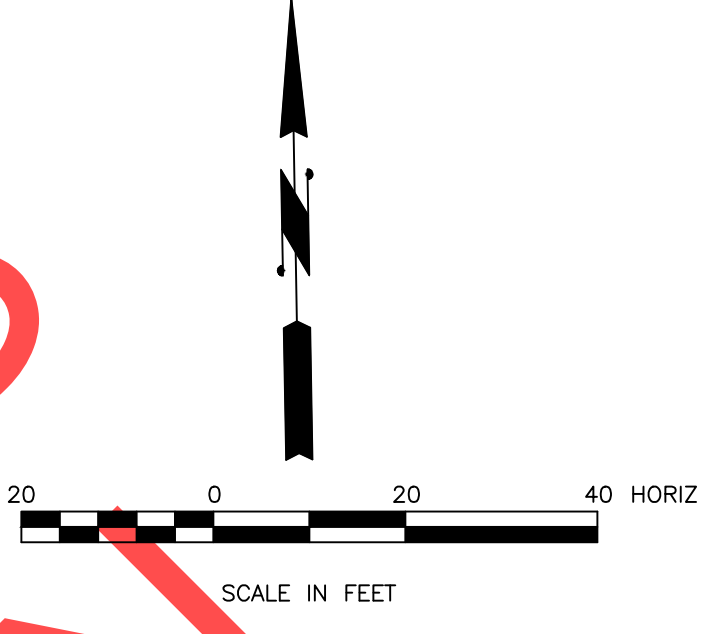
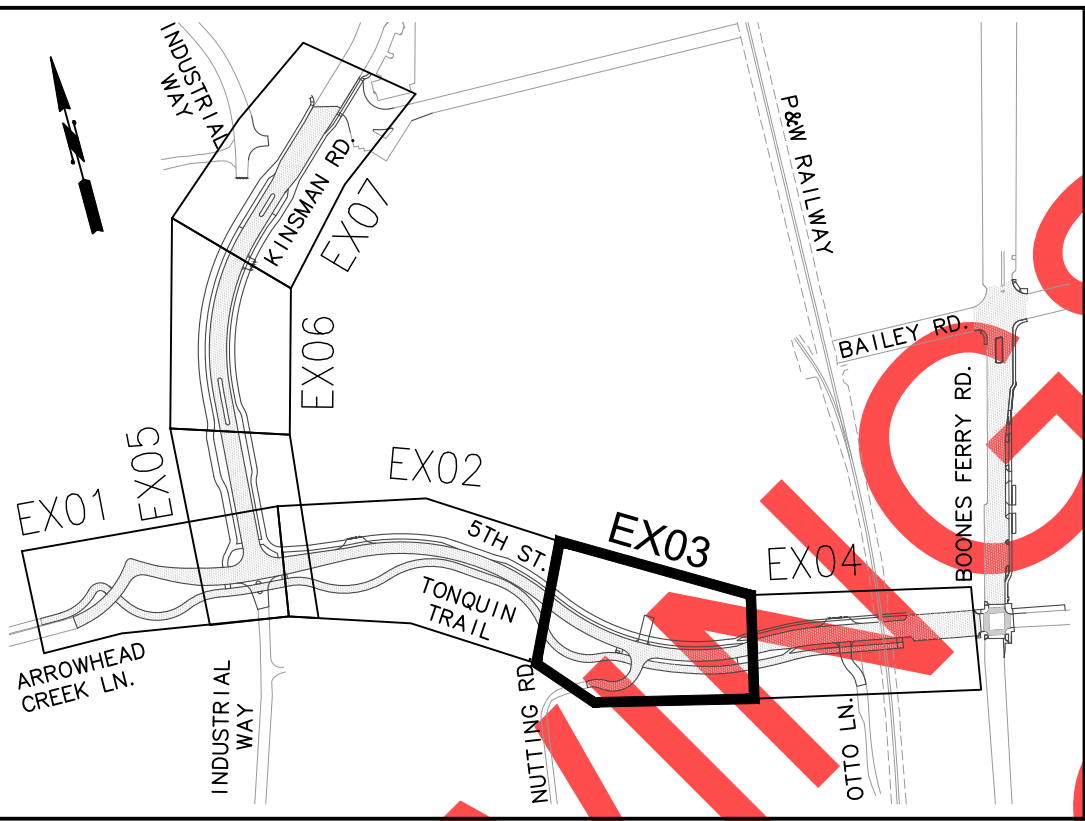
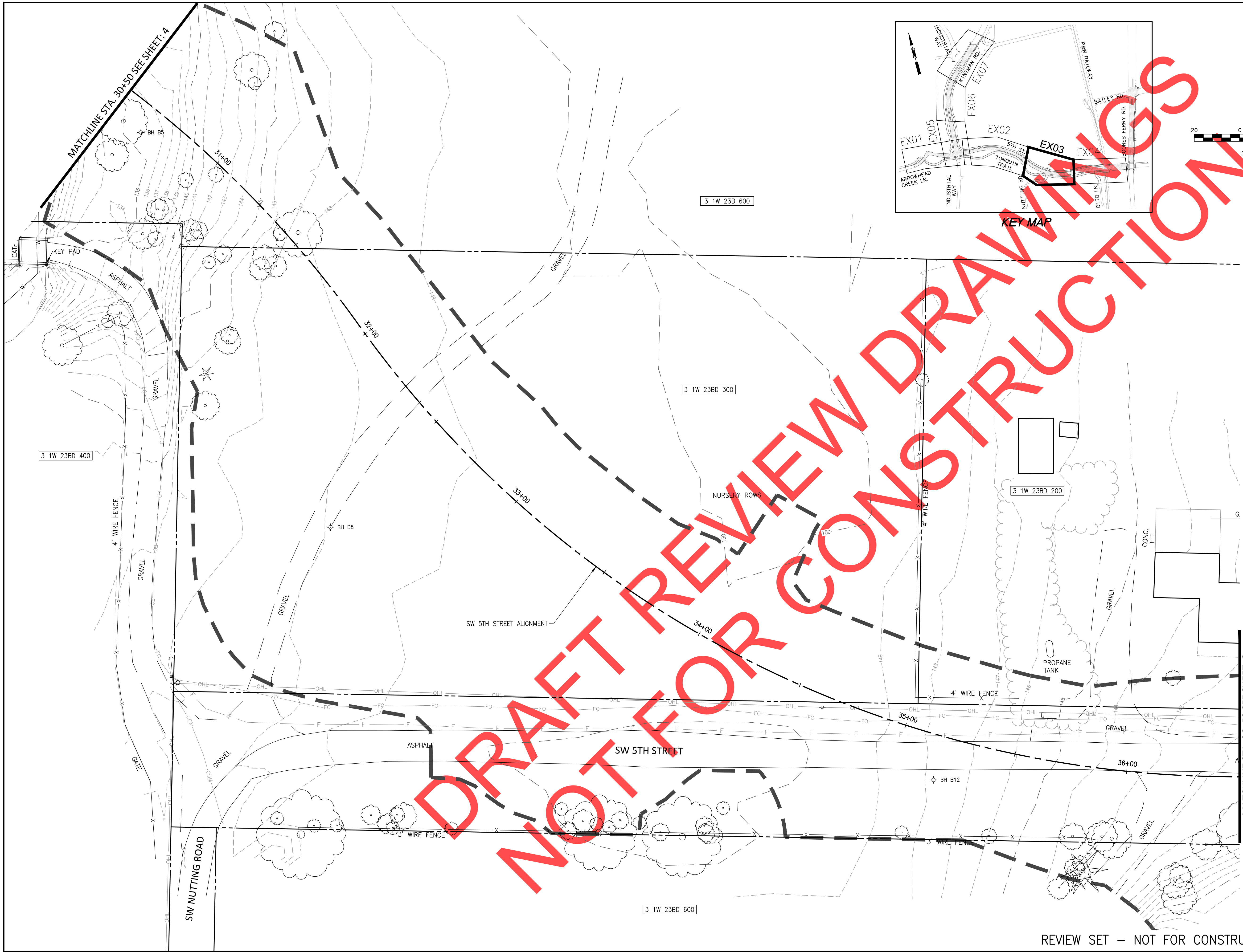
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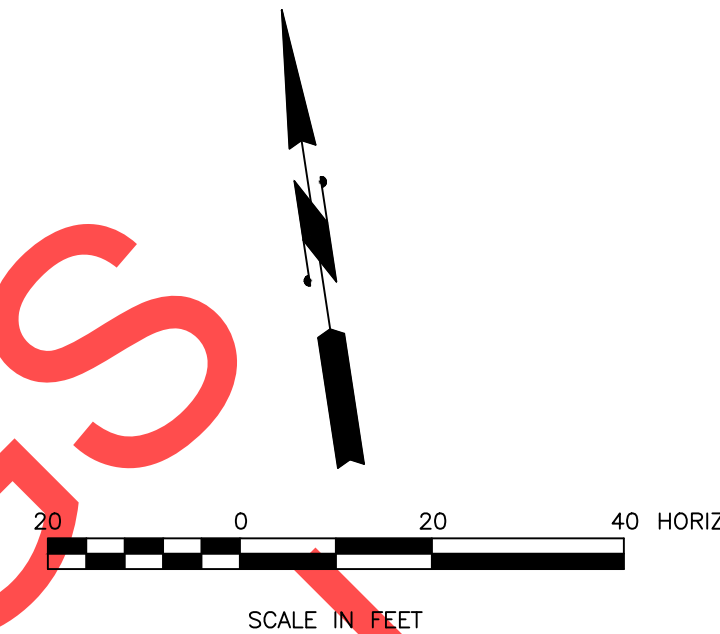
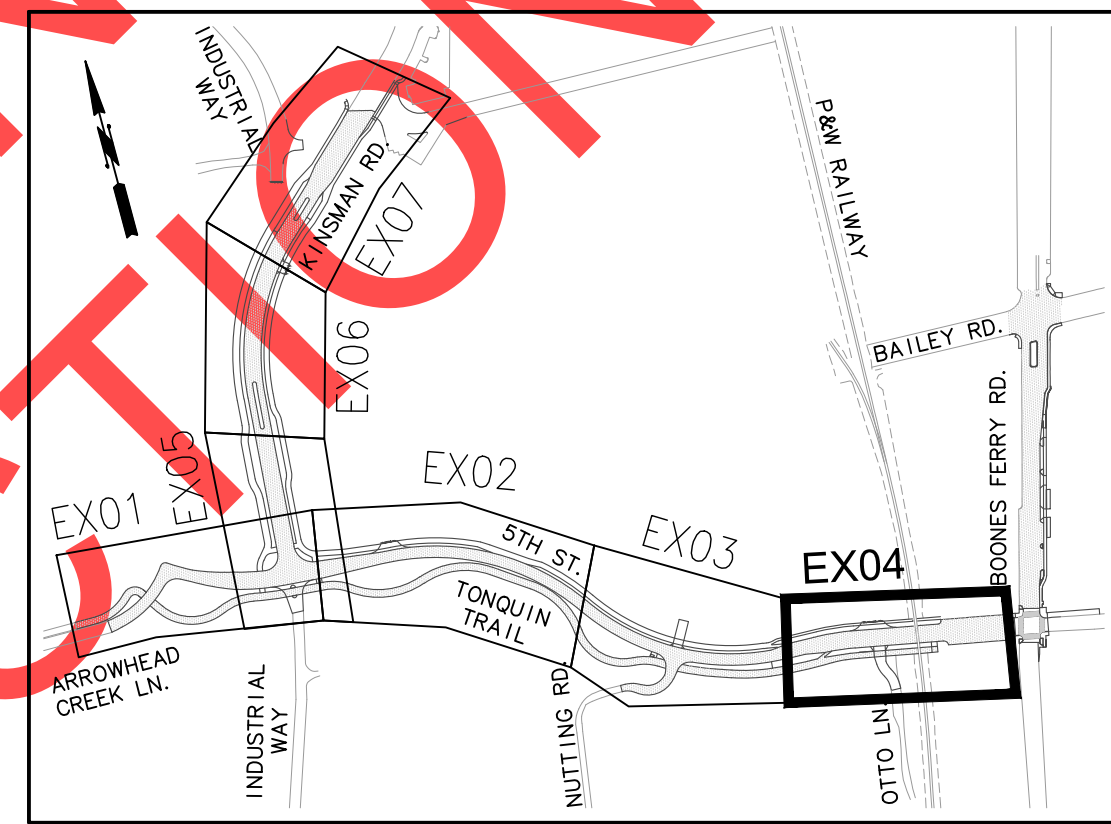
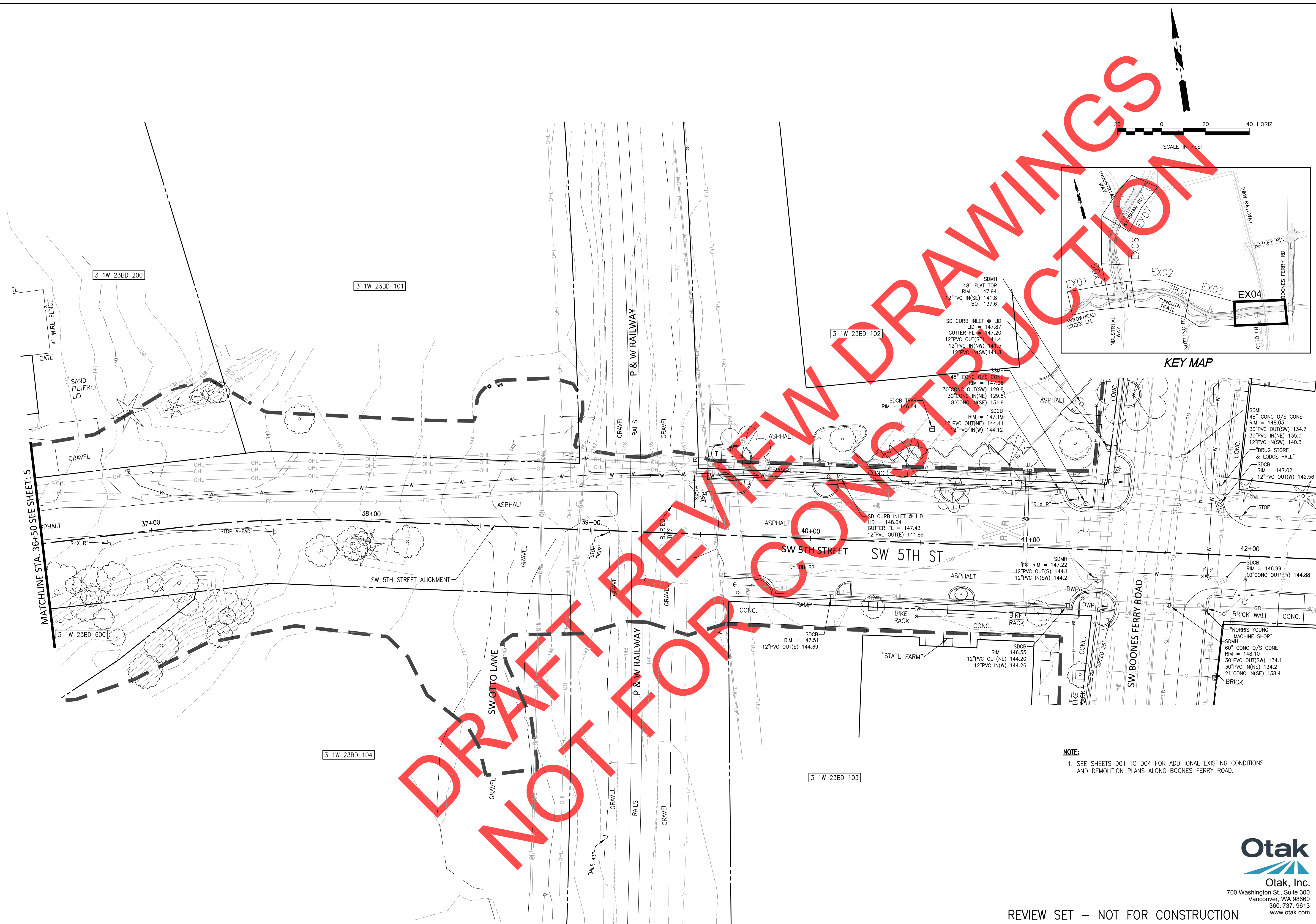
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 5TH ST - EXISTING CONDITIONS

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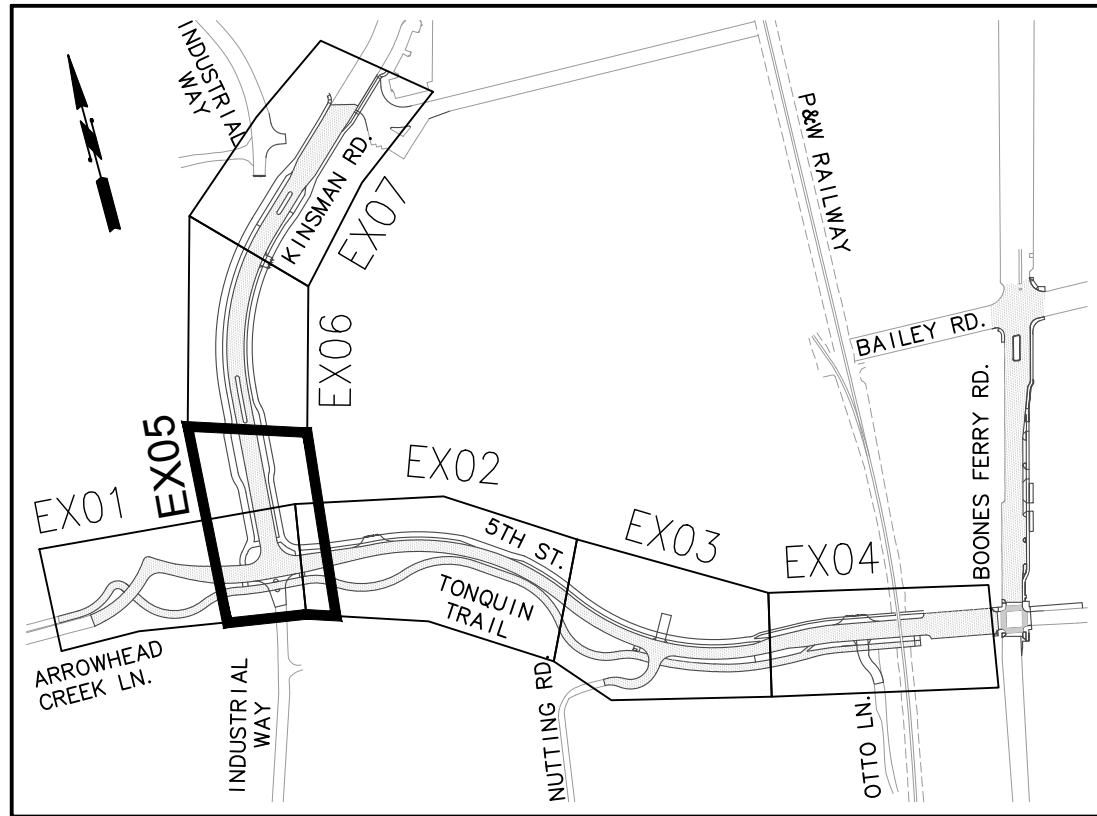
NOTE:
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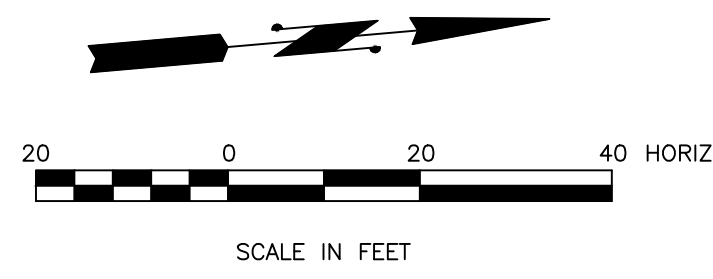
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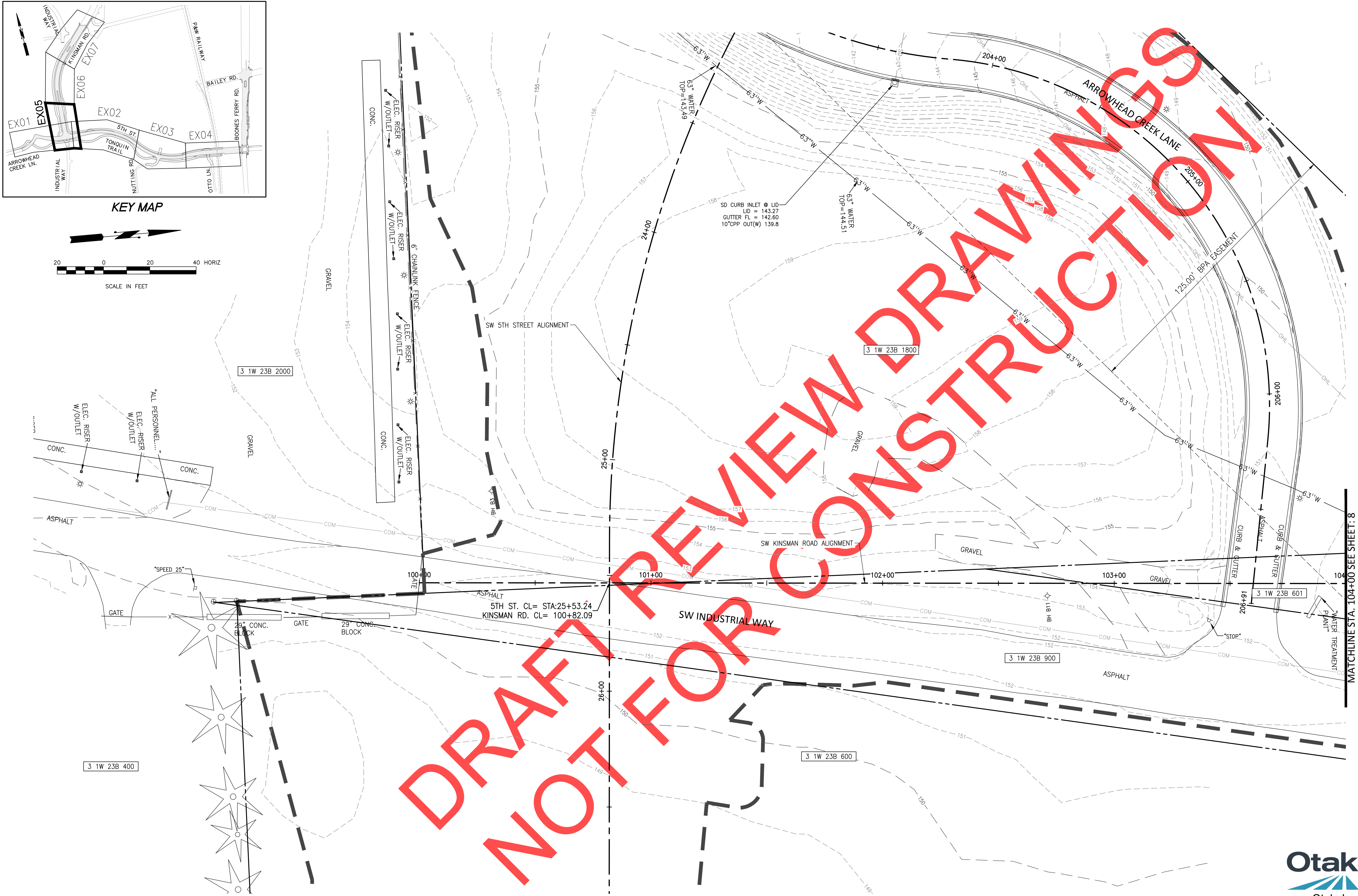
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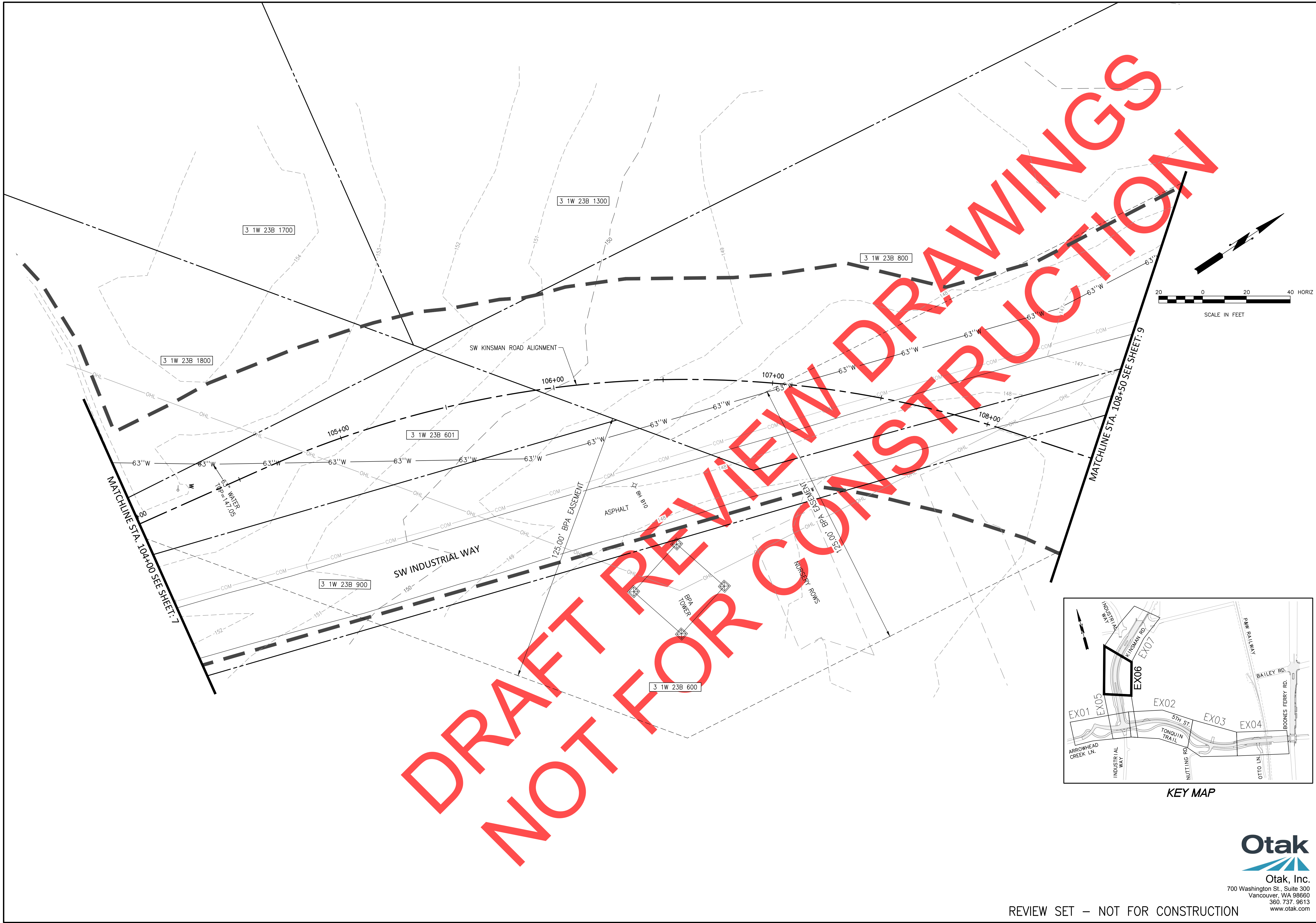
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 KINSMAN RD - EXISTING CONDITIONS

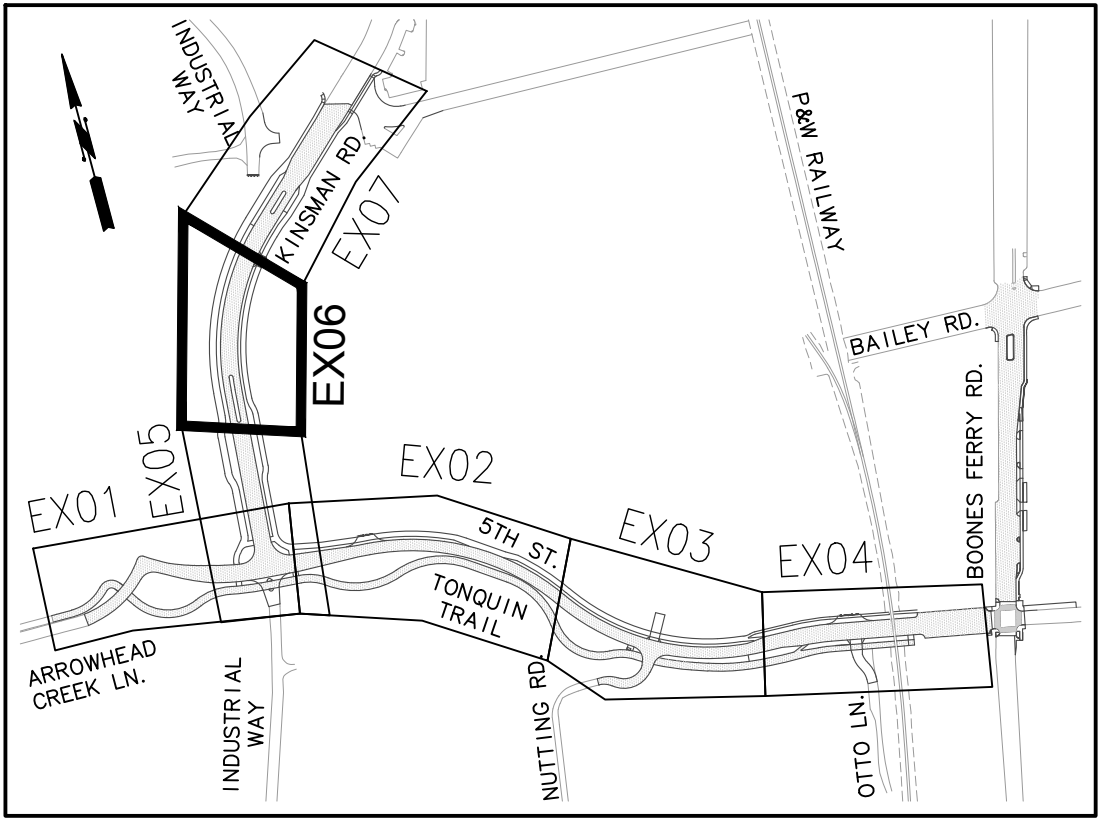
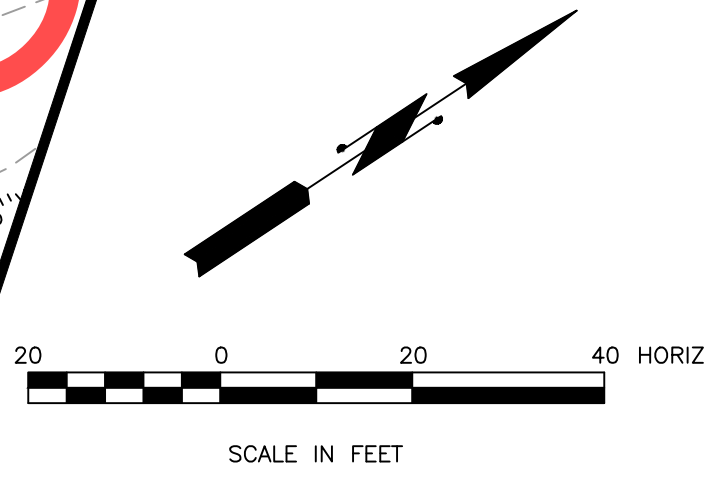
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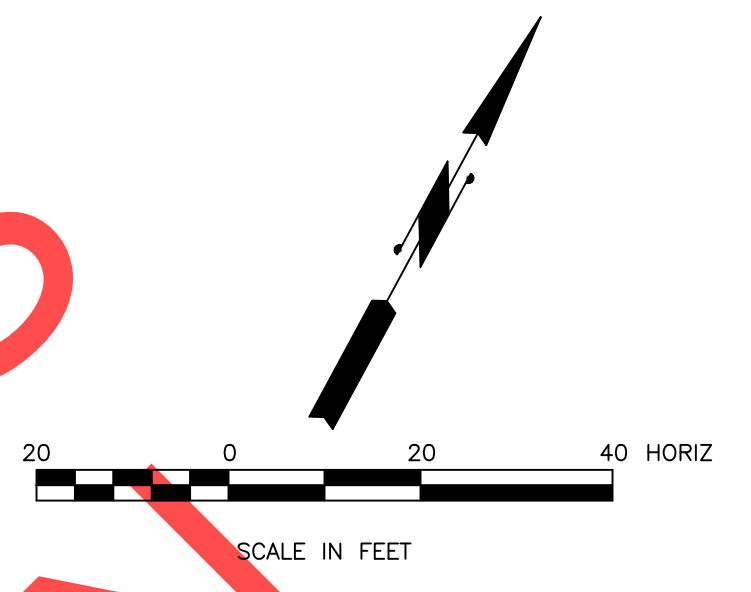
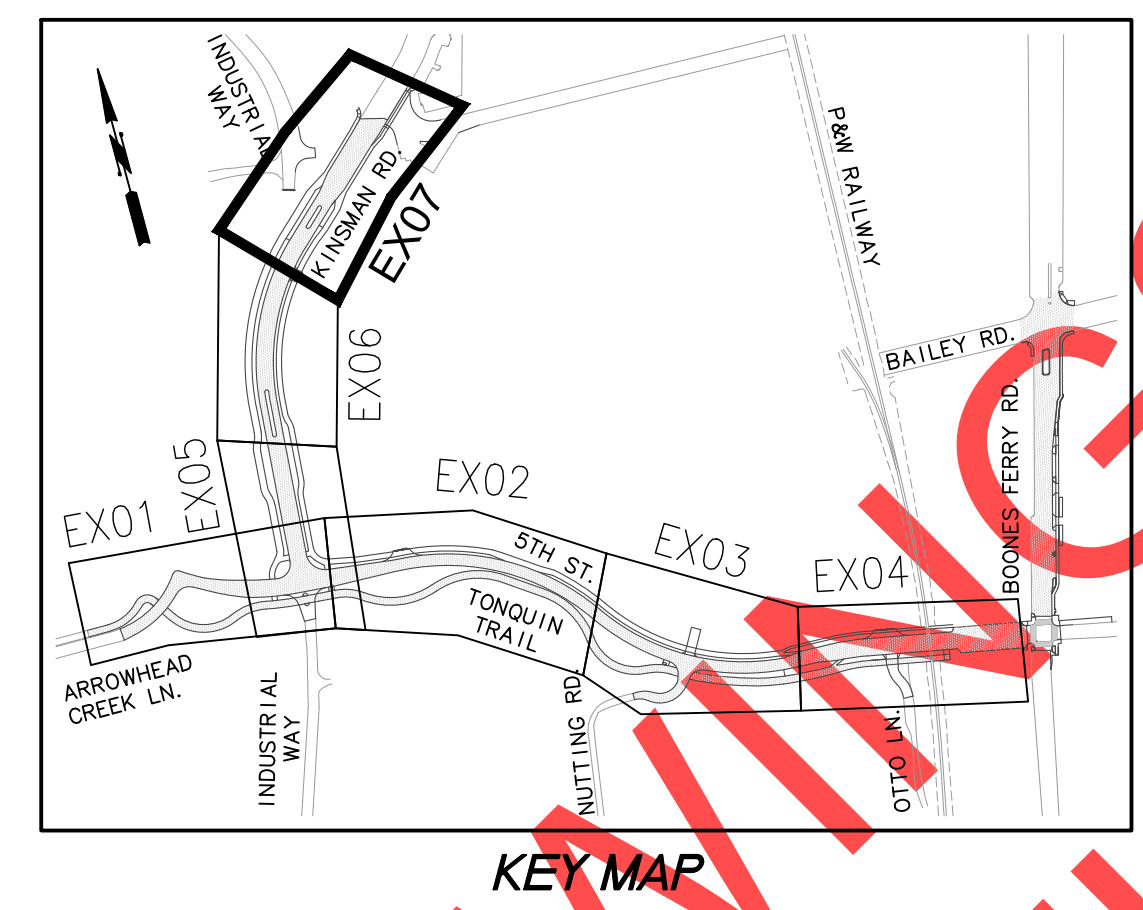
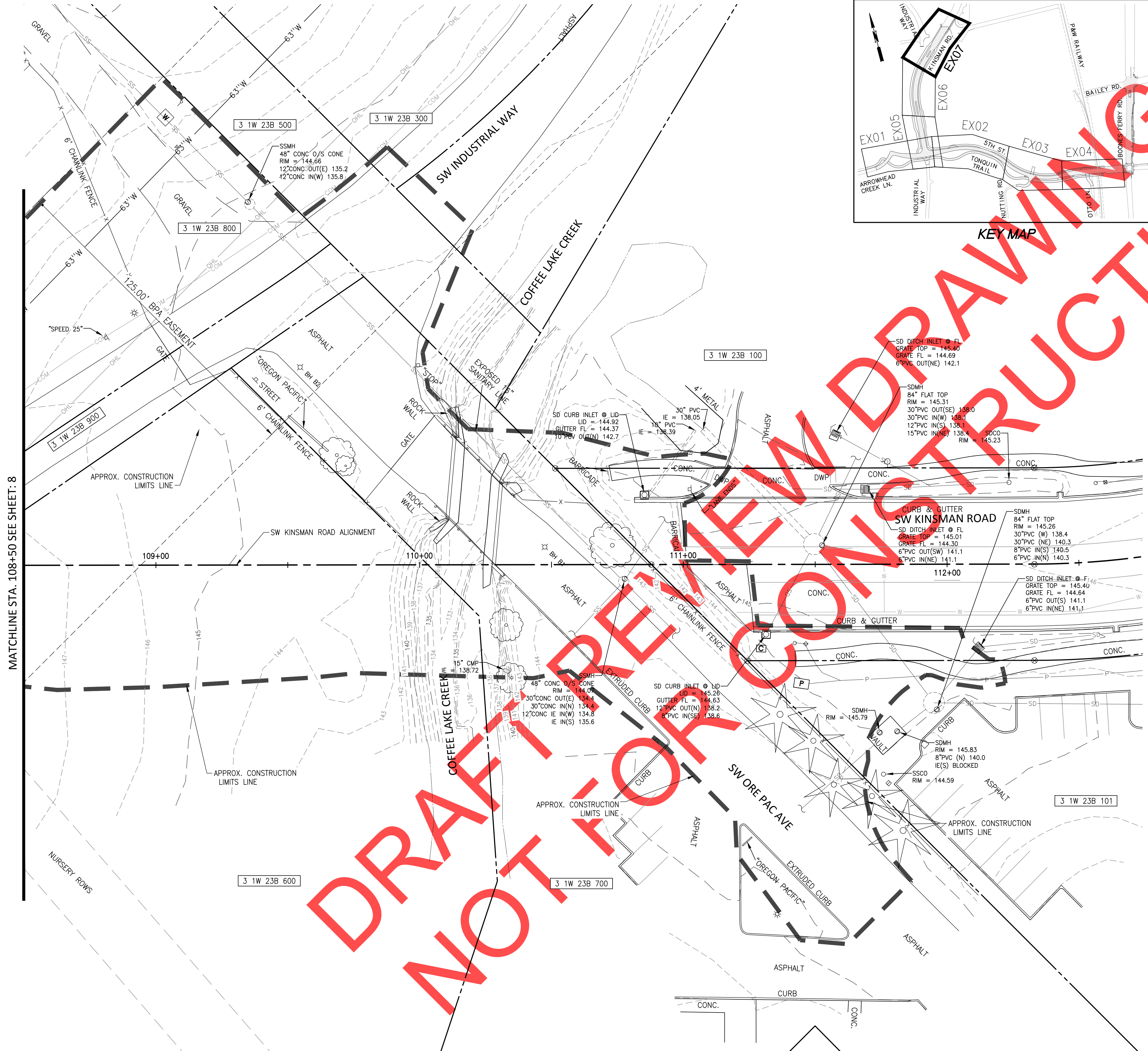
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KINSMAN RD - EXISTING CONDITIONS**

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MATCHLINE STA. 108+50 SEE SHEET: 8

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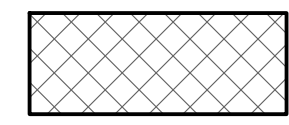



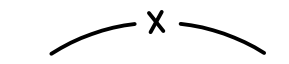
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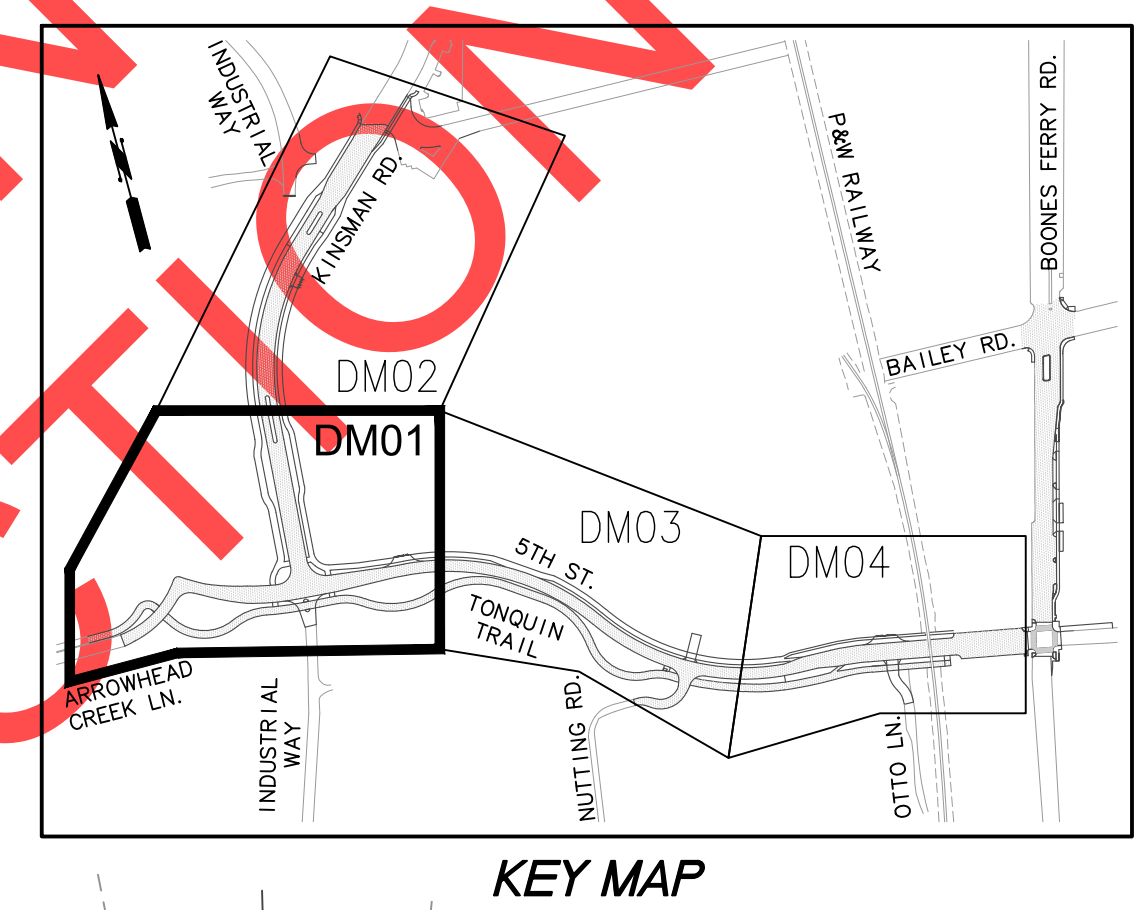
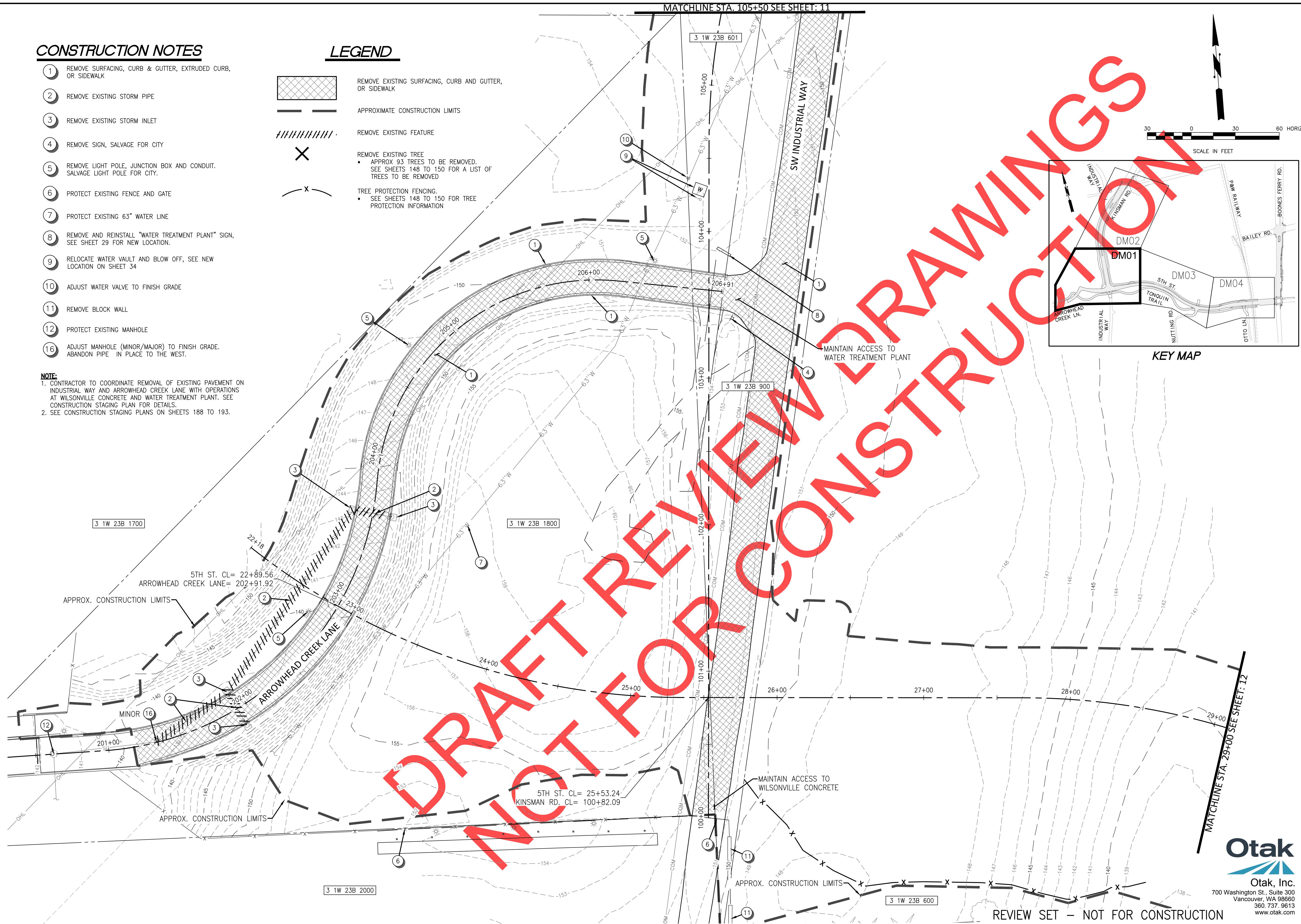
CONSTRUCTION NOTES

- 1 REMOVE SURFACING, CURB & GUTTER, EXTRUDED CURB, OR SIDEWALK
- 2 REMOVE EXISTING STORM PIPE
- 3 REMOVE EXISTING STORM INLET
- 4 REMOVE SIGN, SALVAGE FOR CITY
- 5 REMOVE LIGHT POLE, JUNCTION BOX AND CONDUIT. SALVAGE LIGHT POLE FOR CITY.
- 6 PROTECT EXISTING FENCE AND GATE
- 7 PROTECT EXISTING 63" WATER LINE
- 8 REMOVE AND REINSTALL "WATER TREATMENT PLANT" SIGN, SEE SHEET 29 FOR NEW LOCATION.
- 9 RELOCATE WATER VAULT AND BLOW OFF, SEE NEW LOCATION ON SHEET 34
- 10 ADJUST WATER VALVE TO FINISH GRADE
- 11 REMOVE BLOCK WALL
- 12 PROTECT EXISTING MANHOLE
- 16 ADJUST MANHOLE (MINOR/MAJOR) TO FINISH GRADE. ABANDON PIPE IN PLACE TO THE WEST.

NOTE:
 1. CONTRACTOR TO COORDINATE REMOVAL OF EXISTING PAVEMENT ON INDUSTRIAL WAY AND ARROWHEAD CREEK LANE WITH OPERATIONS AT WILSONVILLE CONCRETE AND WATER TREATMENT PLANT. SEE CONSTRUCTION STAGING PLAN FOR DETAILS.
 2. SEE CONSTRUCTION STAGING PLANS ON SHEETS 188 TO 193.

LEGEND

-  REMOVE EXISTING SURFACING, CURB AND GUTTER, OR SIDEWALK
-  APPROXIMATE CONSTRUCTION LIMITS
-  REMOVE EXISTING FEATURE
-  REMOVE EXISTING TREE
 - APPROX 93 TREES TO BE REMOVED. SEE SHEETS 148 TO 150 FOR A LIST OF TREES TO BE REMOVED
-  TREE PROTECTION FENCING.
 - SEE SHEETS 148 TO 150 FOR TREE PROTECTION INFORMATION



REVISIONS

PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960

Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/SL
 Drawn By: SLR
 Checked By: A.HENDY

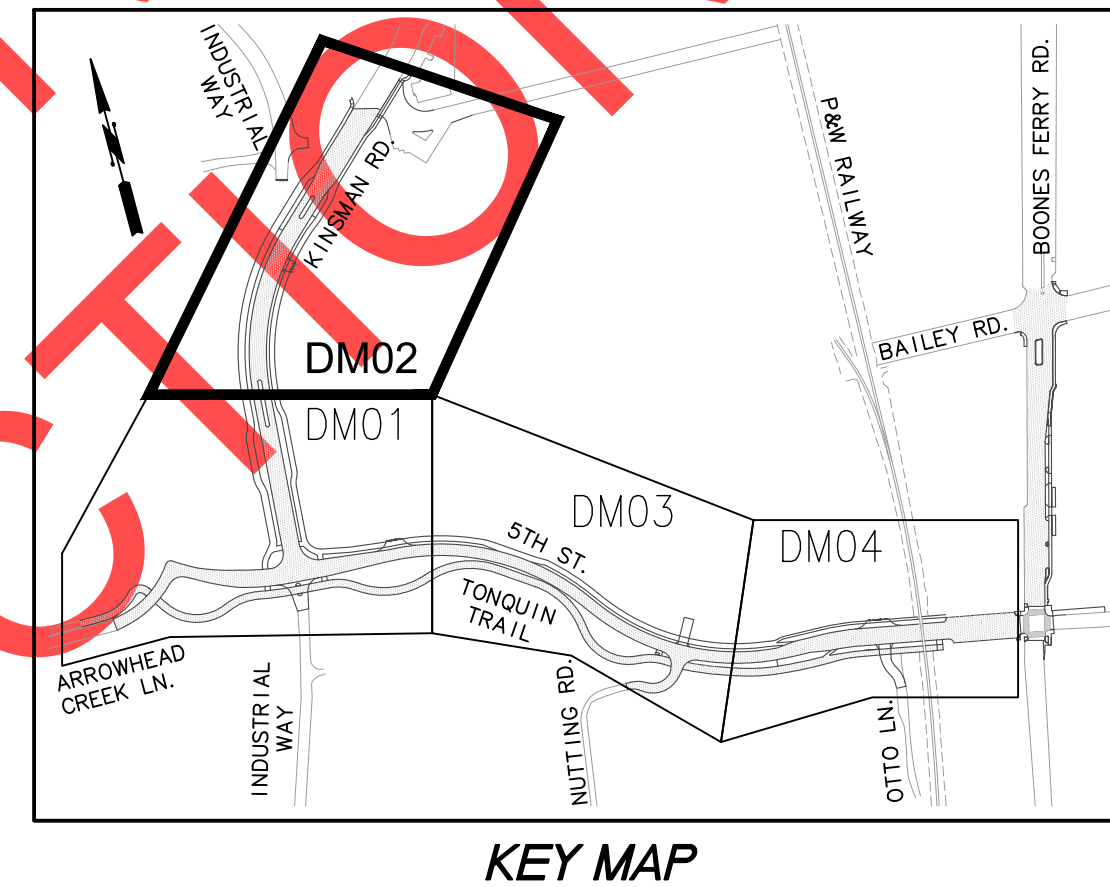
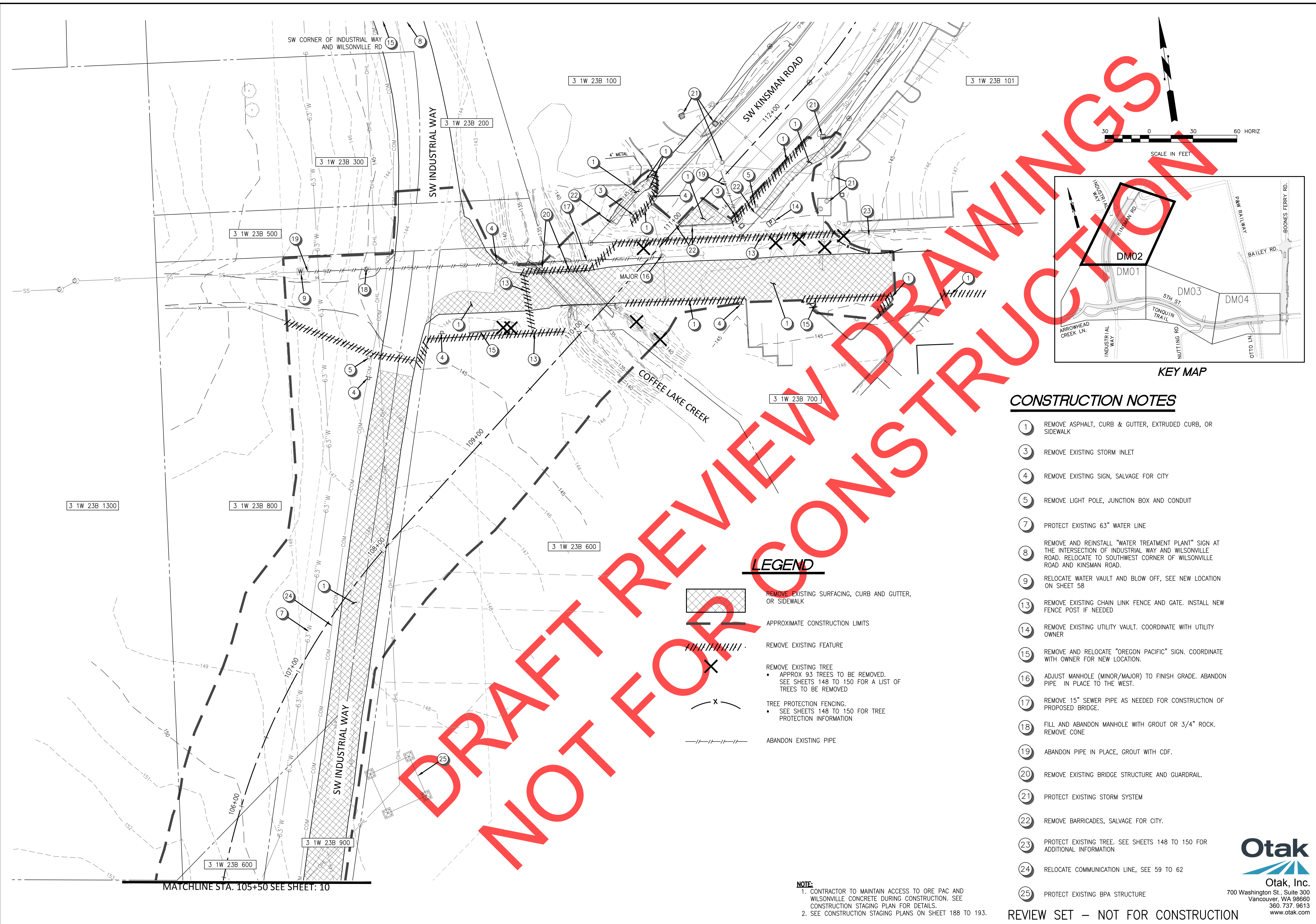
**SW 5TH ST TO SW KINSMAN RD EXTENSION
 DEMOLITION & TREE REMOVAL PLAN**

CIP# 4196
 PROJECT# 2017-02-001
 DM01
 10 of 211

Otak, Inc.
 700 Washington St., Suite 300
 Vancouver, WA 98660
 360.737.9613
 www.otak.com

DATE PLOTTED: Feb 01, 2019 - 9:40am
 CITY OF WILSONVILLE DRAWING FILE: V:\PROJECT\18200\18250\CADD\ACAD\Drawg\C18250DM01.dwg

REVIEW SET - NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 1 REMOVE ASPHALT, CURB & GUTTER, EXTRUDED CURB, OR SIDEWALK
- 3 REMOVE EXISTING STORM INLET
- 4 REMOVE EXISTING SIGN, SALVAGE FOR CITY
- 5 REMOVE LIGHT POLE, JUNCTION BOX AND CONDUIT
- 7 PROTECT EXISTING 63" WATER LINE
- 8 REMOVE AND REINSTALL "WATER TREATMENT PLANT" SIGN AT THE INTERSECTION OF INDUSTRIAL WAY AND WILSONVILLE ROAD. RELOCATE TO SOUTHWEST CORNER OF WILSONVILLE ROAD AND KINSMAN ROAD.
- 9 RELOCATE WATER VAULT AND BLOW OFF, SEE NEW LOCATION ON SHEET 58
- 13 REMOVE EXISTING CHAIN LINK FENCE AND GATE. INSTALL NEW FENCE POST IF NEEDED
- 14 REMOVE EXISTING UTILITY VAULT. COORDINATE WITH UTILITY OWNER
- 15 REMOVE AND RELOCATE "OREGON PACIFIC" SIGN. COORDINATE WITH OWNER FOR NEW LOCATION.
- 16 ADJUST MANHOLE (MINOR/MAJOR) TO FINISH GRADE. ABANDON PIPE IN PLACE TO THE WEST.
- 17 REMOVE 15" SEWER PIPE AS NEEDED FOR CONSTRUCTION OF PROPOSED BRIDGE.
- 18 FILL AND ABANDON MANHOLE WITH GROUT OR 3/4" ROCK. REMOVE CONE
- 19 ABANDON PIPE IN PLACE, GROUT WITH CDF.
- 20 REMOVE EXISTING BRIDGE STRUCTURE AND GUARDRAIL.
- 21 PROTECT EXISTING STORM SYSTEM
- 22 REMOVE BARRICADES, SALVAGE FOR CITY.
- 23 PROTECT EXISTING TREE. SEE SHEETS 148 TO 150 FOR ADDITIONAL INFORMATION
- 24 RELOCATE COMMUNICATION LINE, SEE 59 TO 62
- 25 PROTECT EXISTING BPA STRUCTURE

LEGEND

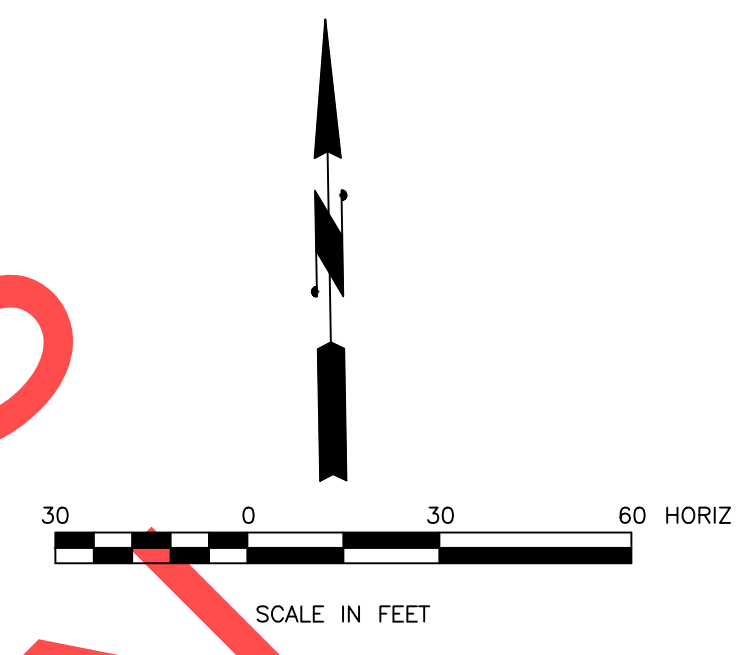
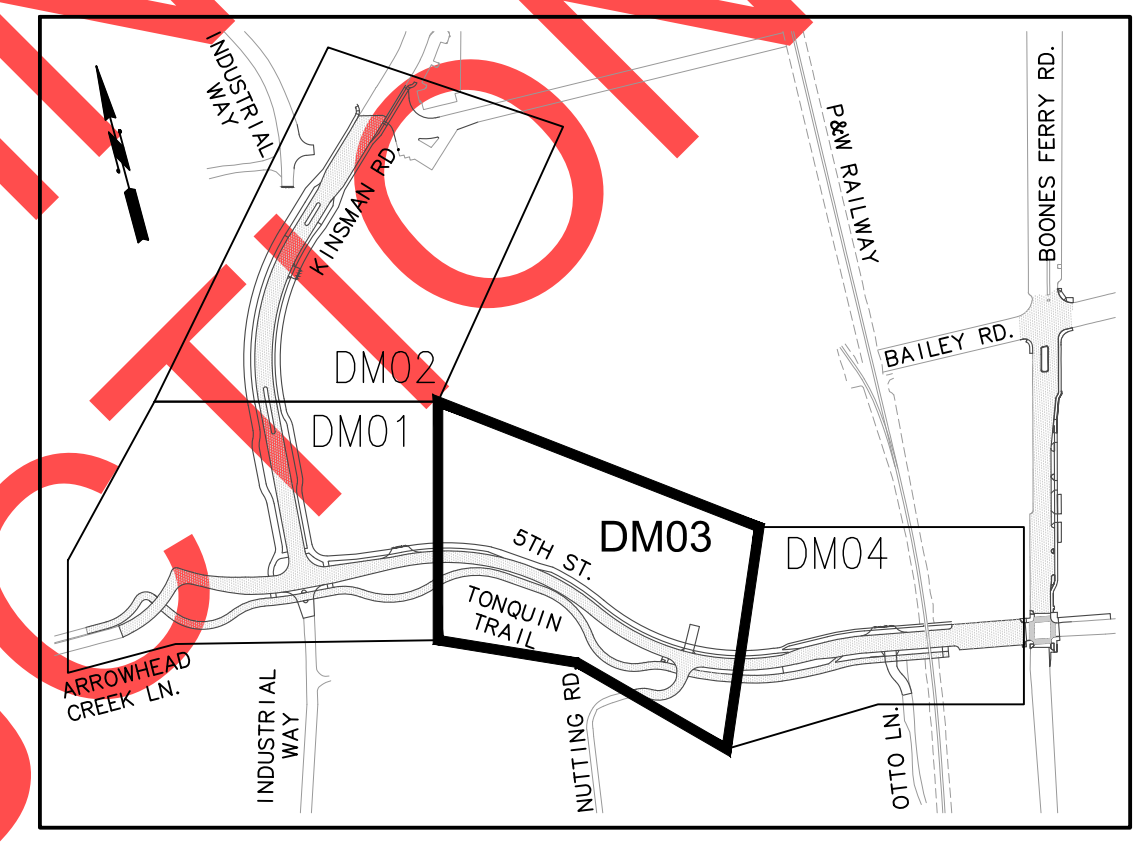
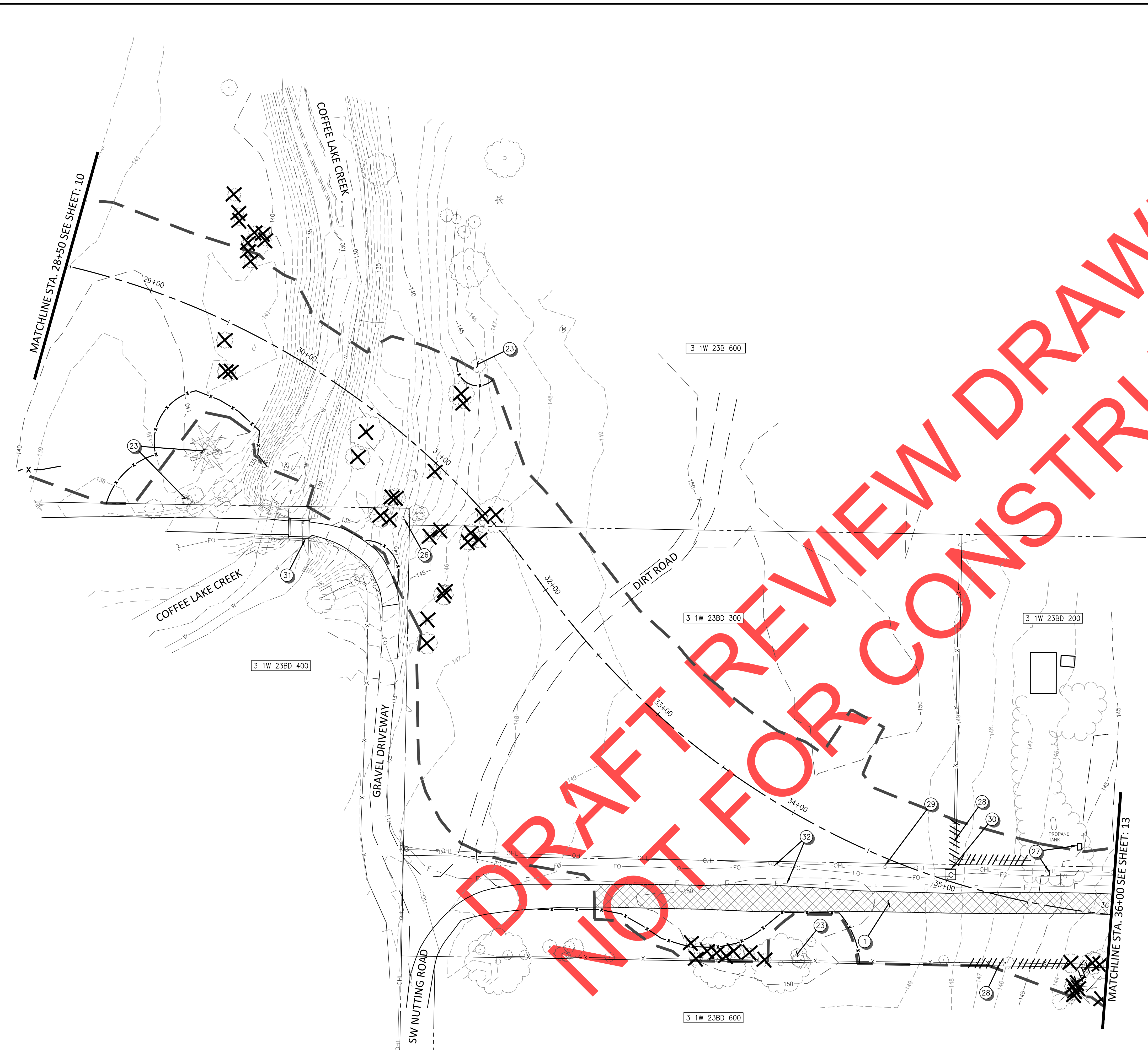
- REMOVE EXISTING SURFACING, CURB AND GUTTER, OR SIDEWALK
- APPROXIMATE CONSTRUCTION LIMITS
- REMOVE EXISTING FEATURE
- REMOVE EXISTING TREE
 - APPROX 93 TREES TO BE REMOVED. SEE SHEETS 148 TO 150 FOR A LIST OF TREES TO BE REMOVED
- TREE PROTECTION FENCING.
 - SEE SHEETS 148 TO 150 FOR TREE PROTECTION INFORMATION
- ABANDON EXISTING PIPE

NOTE:
 1. CONTRACTOR TO MAINTAIN ACCESS TO ORE PAC AND WILSONVILLE CONCRETE DURING CONSTRUCTION. SEE CONSTRUCTION STAGING PLAN FOR DETAILS.
 2. SEE CONSTRUCTION STAGING PLANS ON SHEET 188 TO 193.

REVIEW SET – NOT FOR CONSTRUCTION



<p style="font-size: 2em; color: red; opacity: 0.5; transform: rotate(-45deg);">DRAFT REVIEW ONLY NOT FOR CONSTRUCTION</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">REVISIONS</p> <hr/> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; font-size: 1.5em;">PRELIMINARY</p> <hr/> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">City of Wilsonville Engineering Department 29799 SW Town Center Loop E Wilsonville, OR 97070 Phone 503-682-4960</p> <hr/> <div style="text-align: center;"> </div> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.7em;">Date: 1 February 2019 Scale: AS SHOWN Designed By: PH/SL Drawn By: SLR Checked By: A.HENDY</p> <hr/> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; font-size: 1.2em;">SW 5TH ST TO SW KINSMAN RD EXTENSION DEMOLITION & TREE REMOVAL PLAN</p> <hr/> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">CIP# 4196 PROJECT# 2017-02-001 DM02 11 of 211</p>
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CONSTRUCTION NOTES

- 1 REMOVE SURFACING, CURB & GUTTER, EXTRUDED CURB, OR SIDEWALK
- 23 PROTECT EXISTING TREE. SEE SHEETS 148 TO 150 FOR ADDITIONAL INFORMATION
- 26 REMOVE ABANDONED UTILITY POLE, COORDINATE WITH UTILITY COMPANIES.
- 27 REMOVE MAILBOX AND TEMPORARY RELOCATE OUTSIDE WORK AREA NEAR DRIVEWAY.
- 28 REMOVE WIRE FENCING. INSTALL NEW FENCE POST IF NEEDED
- 29 REMOVE EXISTING UTILITY POLE, COORDINATE WITH UTILITY COMPANY
- 30 EXISTING COMMUNICATION UTILITY VAULT TO BE REMOVED BY OTHERS
- 31 PROTECT EXISTING CREEK CROSSING AND MAINTAIN ACCESS.
- 32 EXISTING FIBER AND FRONTIER LINES TO BE REMOVED BY OTHERS

NOTE:
 1. CONTRACTOR TO MAINTAIN ACCESS TO 5TH STREET / NUTTING ROAD AND PRIVATE DRIVEWAYS DURING CONSTRUCTION. SEE CONSTRUCTION STAGING PLAN FOR DETAILS.
 2. SEE CONSTRUCTION STAGING PLANS ON SHEETS 188 TO 193.

LEGEND

- REMOVE EXISTING SURFACING, CURB AND GUTTER, OR SIDEWALK
- APPROXIMATE CONSTRUCTION LIMITS
- REMOVE EXISTING FEATURE
- REMOVE EXISTING TREE
 - APPROX 93 TREES TO BE REMOVED. SEE SHEETS 148 TO 150 FOR A LIST OF TREES TO BE REMOVED
- TREE PROTECTION FENCING.
 - SEE SHEETS 148 TO 150 FOR TREE PROTECTION INFORMATION

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<p>City of Wilsonville Engineering Department 29799 SW Town Center Loop E Wilsonville, OR 97070 Phone 503-682-4960</p>	
<p>Date: 1 February 2019 Scale: AS SHOWN Designed By: PH/SL Drawn By: SLR Checked By: A.HENDY</p>	
<p>SW 5TH ST TO SW KINSMAN RD EXTENSION DEMOLITION & TREE REMOVAL PLAN</p>	
<p>CIP # 4196 PROJECT # 2017-02-001</p>	<p>DM03 12 of 211</p>



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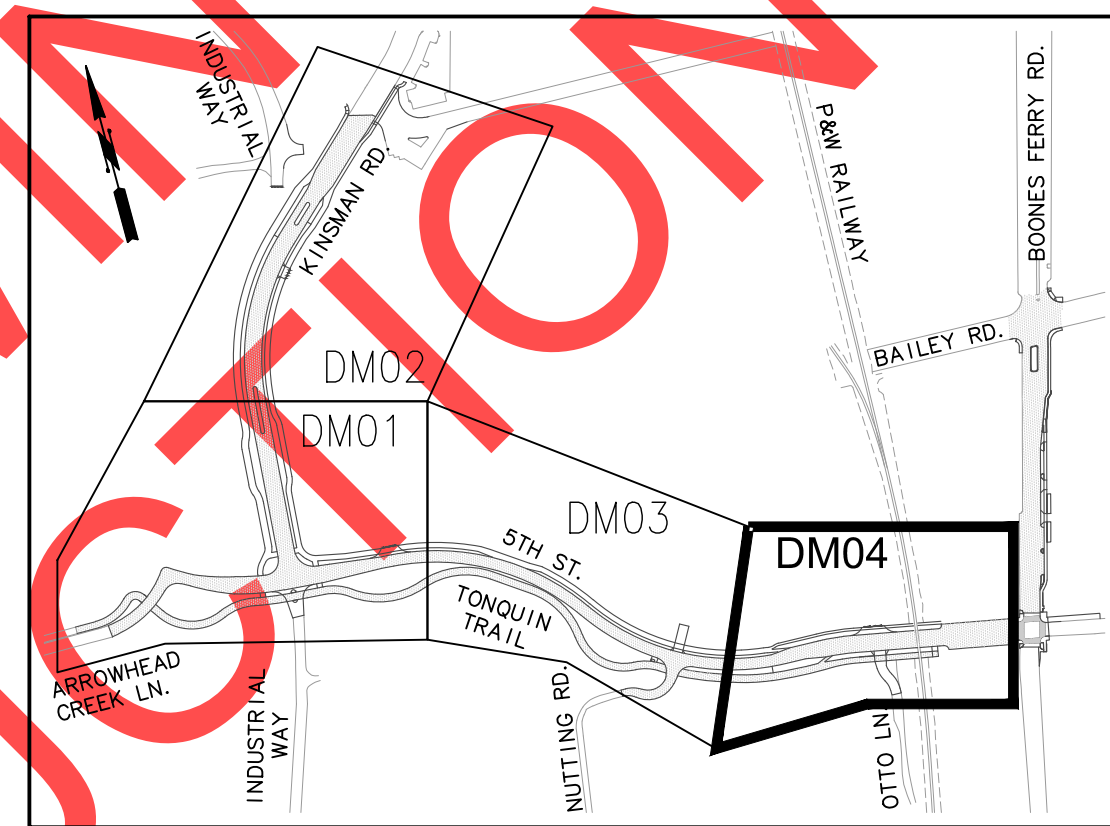
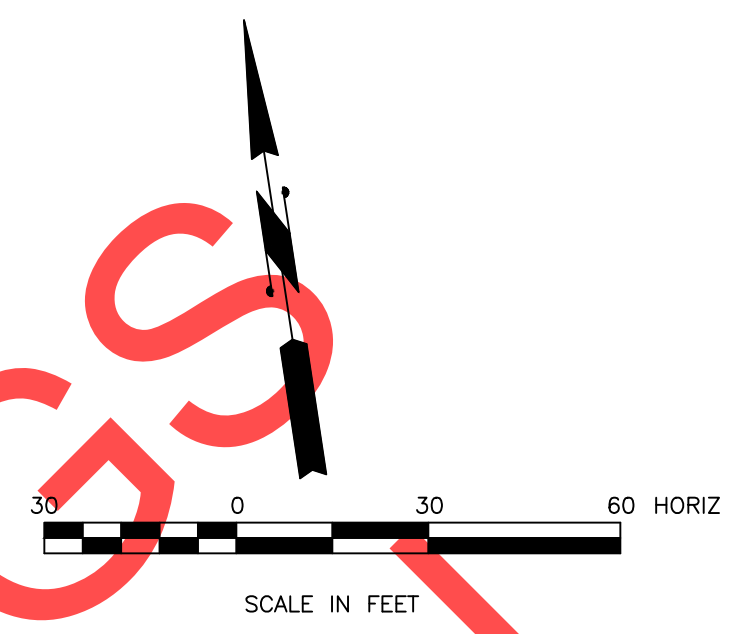
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Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



Date: 1 February 2019
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Drawn By: SLR
Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
DEMOLITION & TREE REMOVAL PLAN

CIP# 4196
PROJECT# 2017-02-001
DM04
13 of 211



KEY MAP

CONSTRUCTION NOTES

- 1 REMOVE SURFACING, CURB & GUTTER, EXTRUDED CURB, OR SIDEWALK
- 4 REMOVE EXISTING SIGN
- 10 ADJUST WATER VALVE TO FINISH GRADE
- 23 PROTECT EXISTING TREE. SEE SHEETS 148 TO 150 FOR ADDITIONAL INFORMATION
- 29 REMOVE EXISTING UTILITY POLE, COORDINATE WITH UTILITY COMPANY
- 33 RELOCATE WATER METER, SEE SHEET 53 FOR NEW LOCATION
- 34 EXISTING COMMUNICATION BOX TO BE REMOVED BY OTHERS
- 35 EXISTING COMMUNICATION MARKER SIGN TO BE REMOVED BY OTHERS
- 36 PROTECT UTILITY POLE
- 37 PROTECT COMMUNICATION RISER.
- 38 PROTECT CONCRETE CURB AND GUTTER
- 39 COLD PLANE PAVEMENT REMOVAL 2 INCH. CURB TO CURB

NOTE:
1. CONTRACTOR TO MAINTAIN ACCESS TO 5TH STREET AND PRIVATE DRIVEWAYS DURING CONSTRUCTION. SEE CONSTRUCTION STAGING PLAN FOR DETAILS.
2. SEE CONSTRUCTION STAGING PLANS ON SHEETS 188 TO 193.

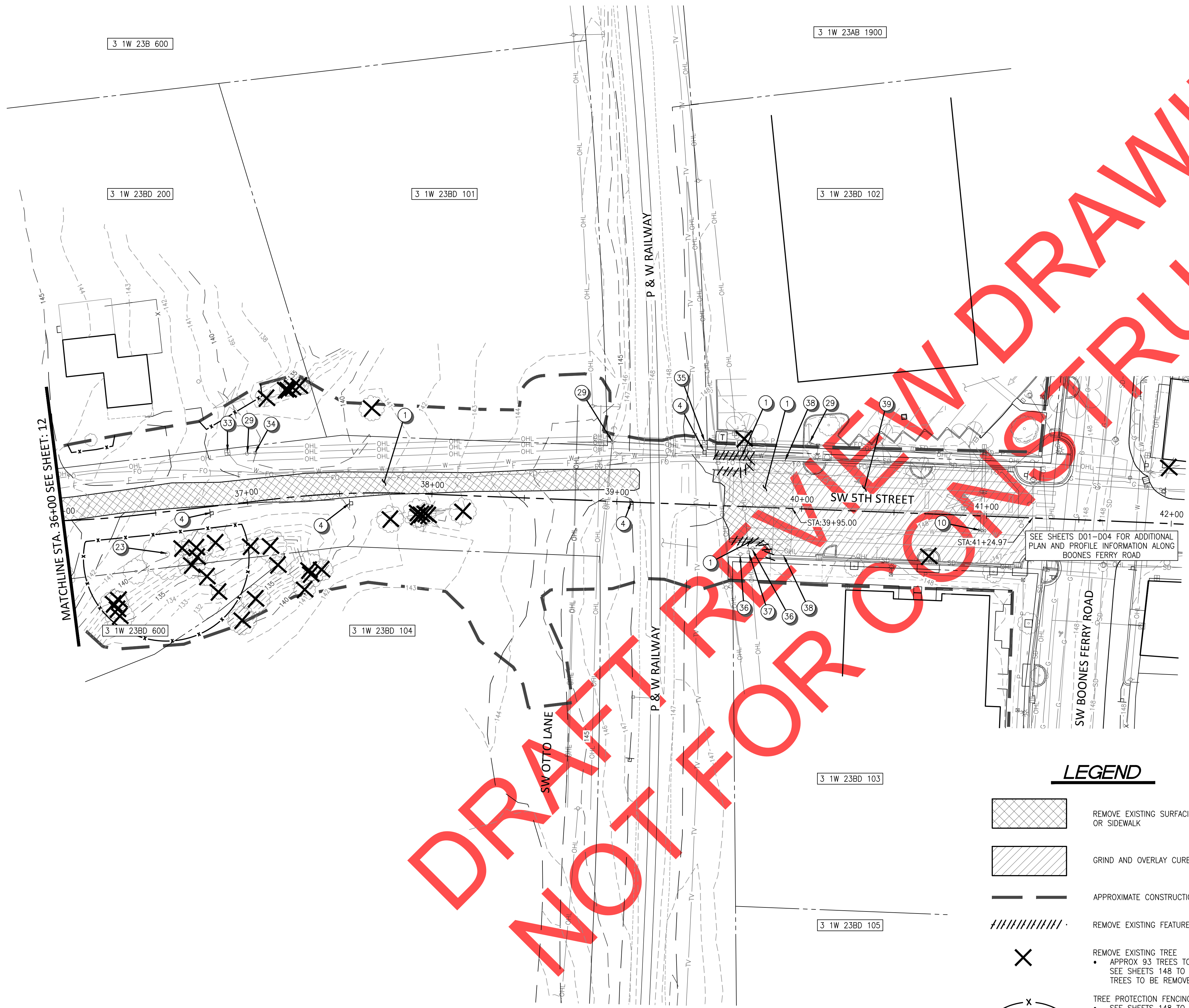
LEGEND

- REMOVE EXISTING SURFACING, CURB AND GUTTER, OR SIDEWALK
- GRIND AND OVERLAY CURB TO CURB
- APPROXIMATE CONSTRUCTION LIMITS
- REMOVE EXISTING FEATURE
- REMOVE EXISTING TREE
 - APPROX 93 TREES TO BE REMOVED. SEE SHEETS 148 TO 150 FOR A LIST OF TREES TO BE REMOVED
- TREE PROTECTION FENCING.
 - SEE SHEETS 148 TO 150 FOR TREE PROTECTION INFORMATION



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MATCHLINE STA. 36+00 SEE SHEET: 12

3 1W 23B 600

3 1W 23AB 1900

3 1W 23BD 200

3 1W 23BD 101

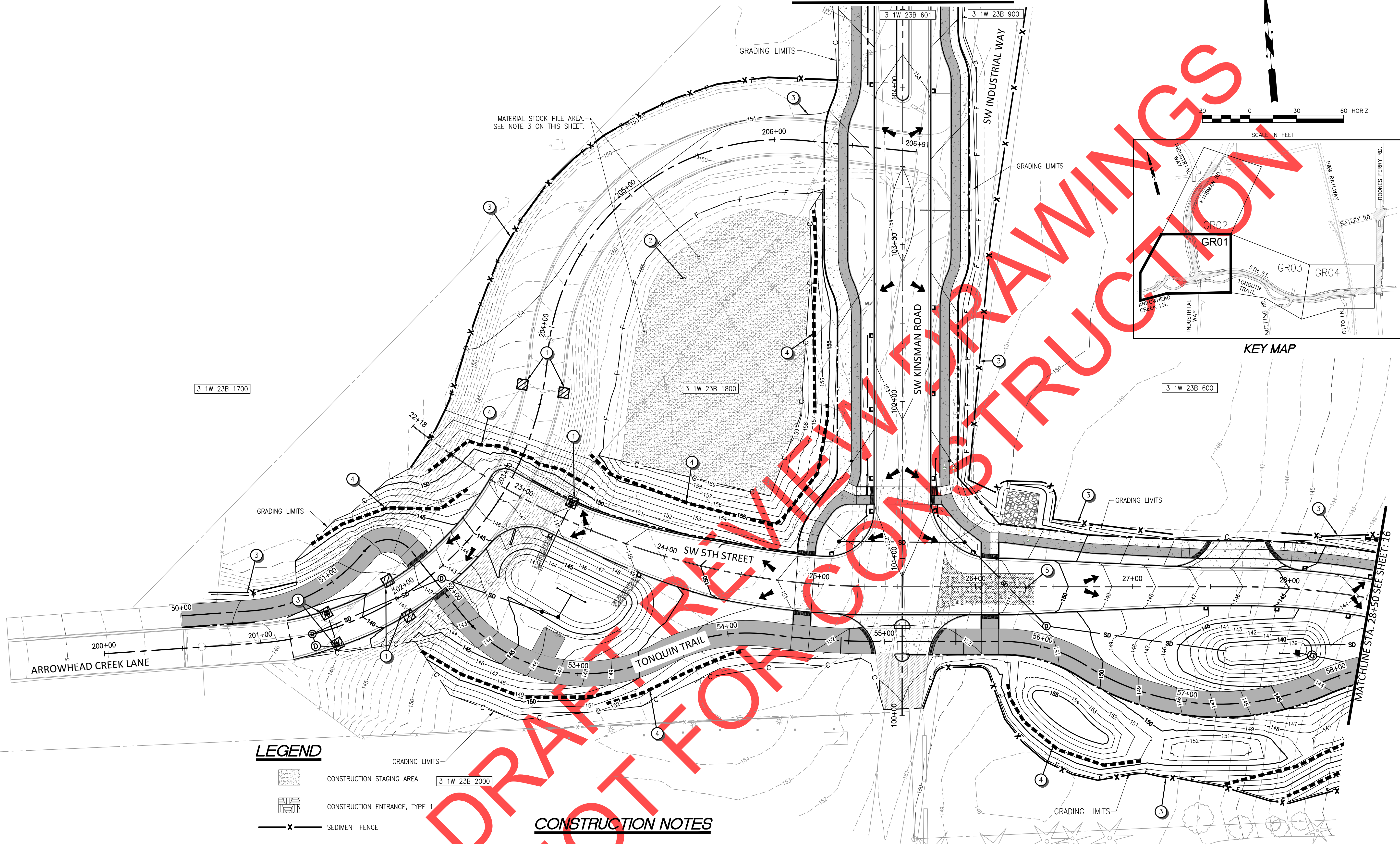
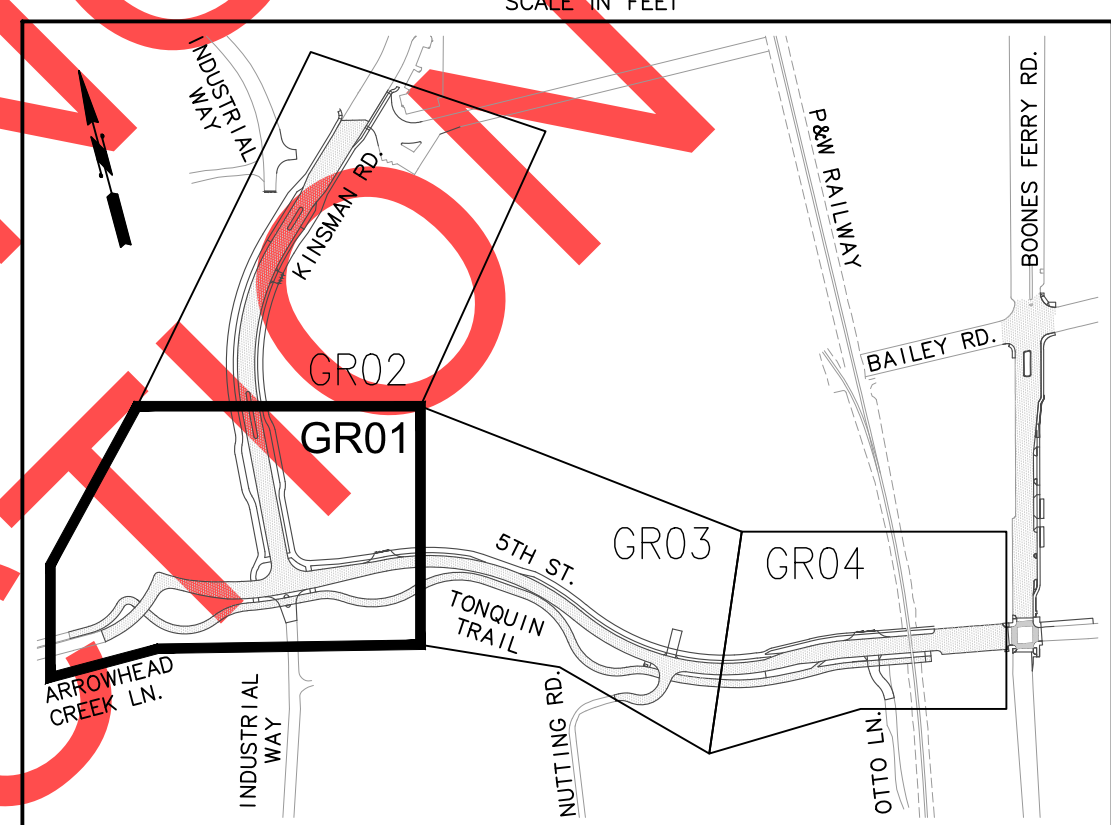
3 1W 23BD 102

3 1W 23BD 600

3 1W 23BD 104

3 1W 23BD 103

3 1W 23BD 105



LEGEND

- CONSTRUCTION STAGING AREA
- CONSTRUCTION ENTRANCE, TYPE 1
- SEDIMENT FENCE
- INLET PROTECTION, TYPE 5
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED GROUND FLOW
- WATTLES

CONSTRUCTION NOTES

1. INSTALL INLET PROTECTION, TYPE 5 PER CITY OF WILSONVILLE STD. NO. S-2127 ON SHEET 127.
2. CONSTRUCTION STAGING AREA
3. INSTALL SEDIMENT FENCE PER CITY OF WILSONVILLE STD. NO. S-2245 ON SHEET 128.
4. INSTALL WATTLES PER CLACKAMAS COUNTY STD. 4-27 ON SHEET 128.
5. INSTALL CONSTRUCTION ENTRANCE - TYPE 1 PER ODOT STD. RD1000

NOTE:

1. SEE LANDSCAPE SHEETS FOR SEEDING, MULCHING, AND LANDSCAPING.
2. FILL AREAS OUTSIDE THE ROAD SECTIONS REQUIRE "COMMON BORROW" AND EMBANKMENT COMPACTION.
3. MATERIAL FROM A NEARBY CONSTRUCTION SITE WILL BE STOCK PILED IN THE AREA SHOWN ON THE PLANS. CONTRACTOR IS TO USE THIS MATERIAL AS EMBANKMENT FOR THE SECTION OF ARROWHEAD CREEK LANE BEING REMOVED BETWEEN 5TH STREET AND KINSMAN ROAD.



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NO.	DATE	DESCRIPTION

PRELIMINARY

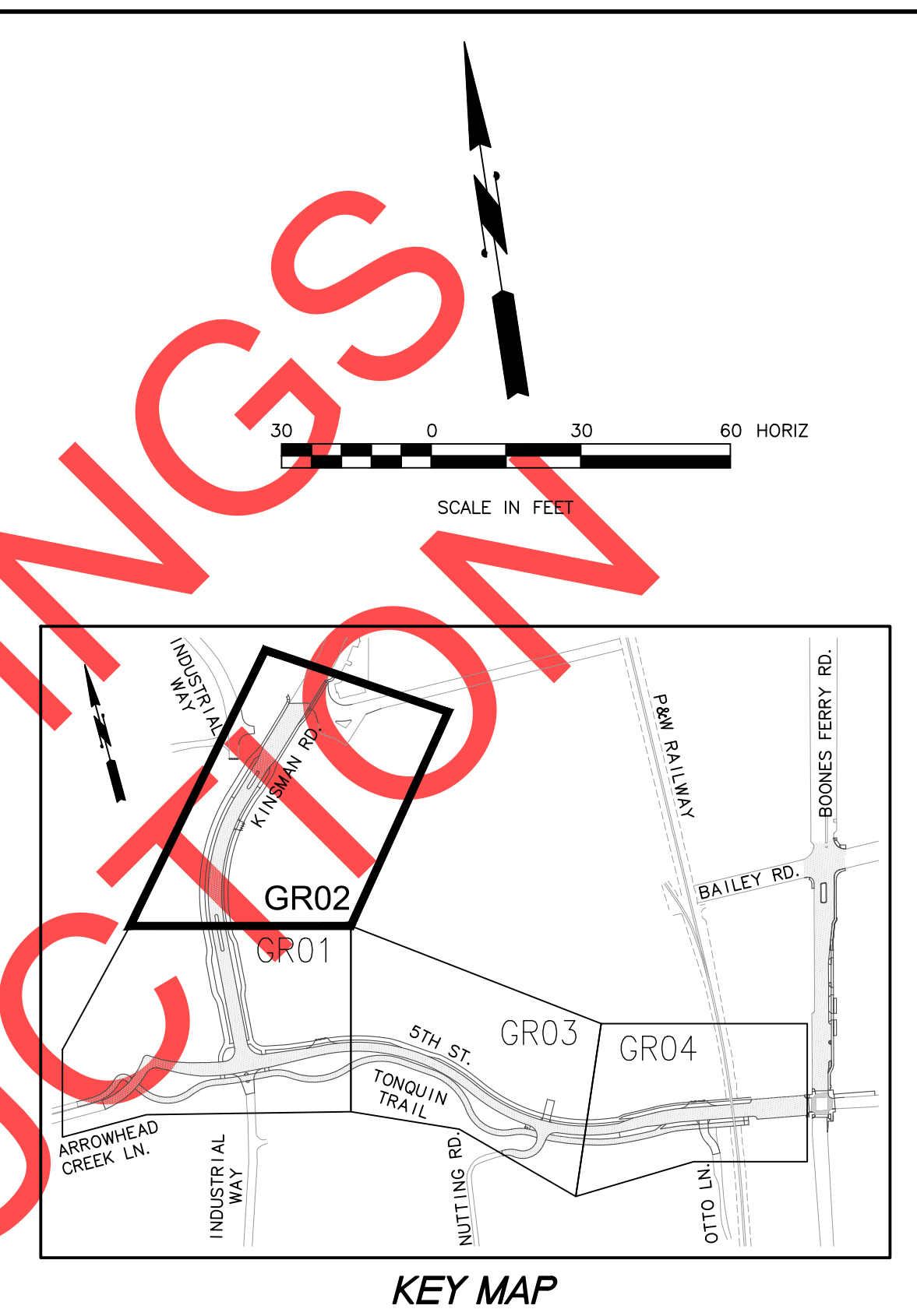
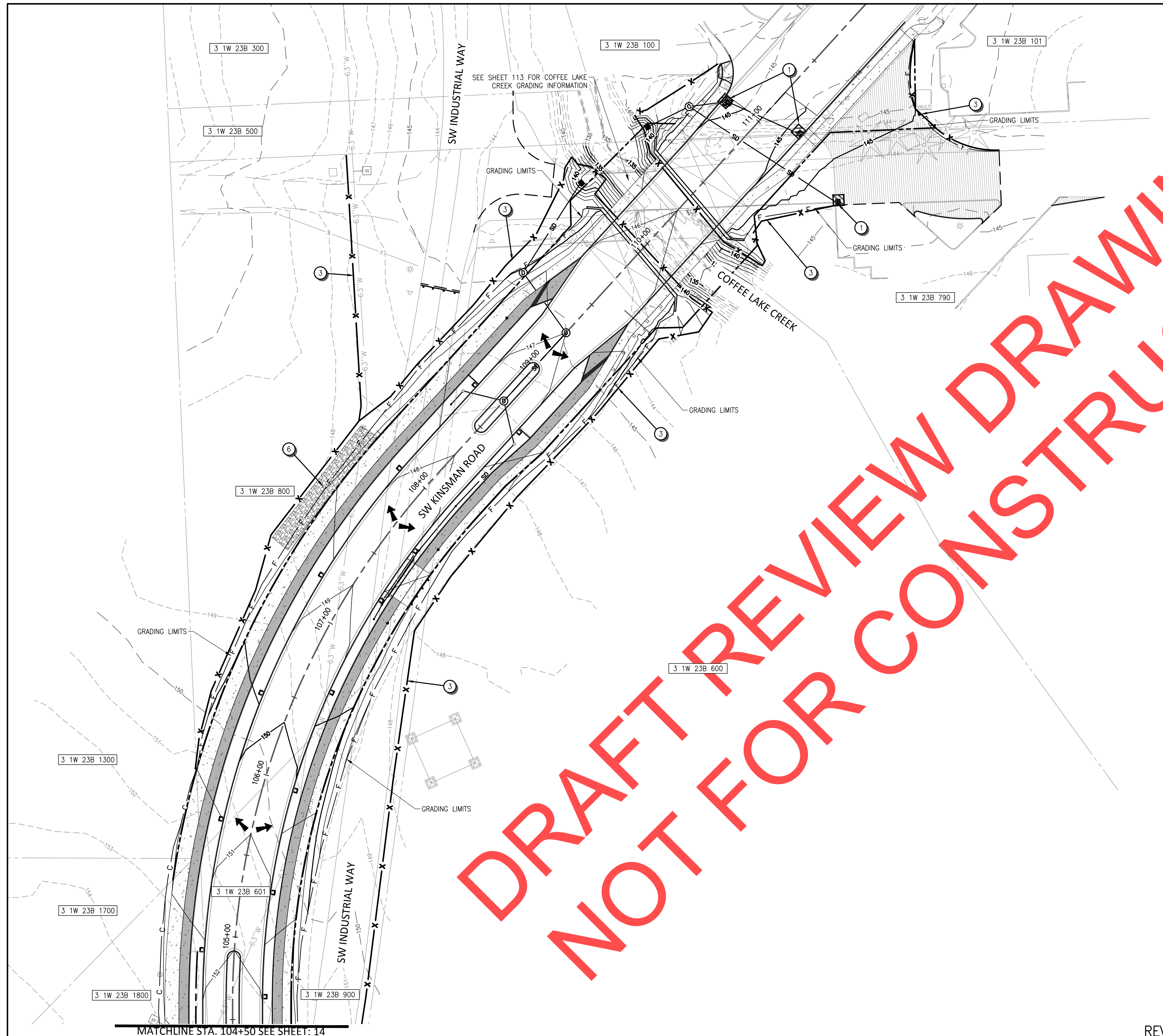
City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



Date	1 February 2019
Scale	AS SHOWN
Designed By	PH/SL
Drawn By	SLR
Checked By	A.HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 GRADING & EROSION CONTROL PLAN**

CIP#	4196
PROJECT#	2017-02-001
	GR01
	14 of 211



CONSTRUCTION NOTES

- ① INSTALL INLET PROTECTION, TYPE 5 PER CITY OF WILSONVILLE STD. NO. S-2127 ON SHEET 127.
- ③ INSTALL SEDIMENT FENCE PER CITY OF WILSONVILLE STD. NO. S-2245 ON SHEET 128.
- ⑥ INSTALL WHEEL WASH PER CITY OF WILSONVILLE STD. NO. S-2235 ON SHEET 129.

LEGEND

- WHEEL WASH
- SEDIMENT FENCE
- INLET PROTECTION, TYPE 5
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED GROUND FLOW

NOTE:
 1. SEE LANDSCAPE SHEETS FOR SEEDING, MULCHING, AND LANDSCAPING.
 2. FILL AREAS OUTSIDE THE ROAD SECTIONS REQUIRE "COMMON BORROW" AND EMBANKMENT COMPACTION

REVISIONS

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City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



Date: 1 February 2019
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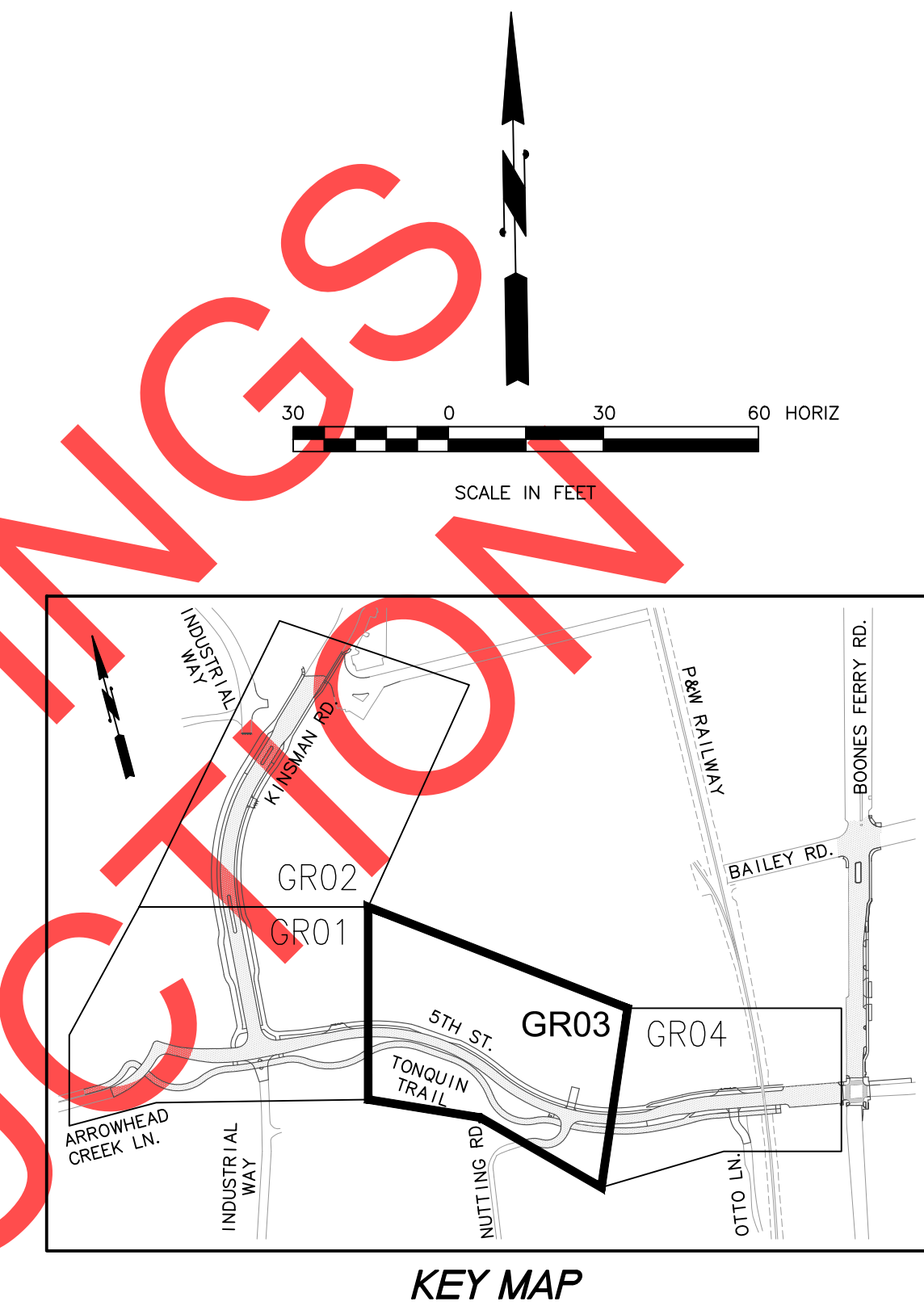
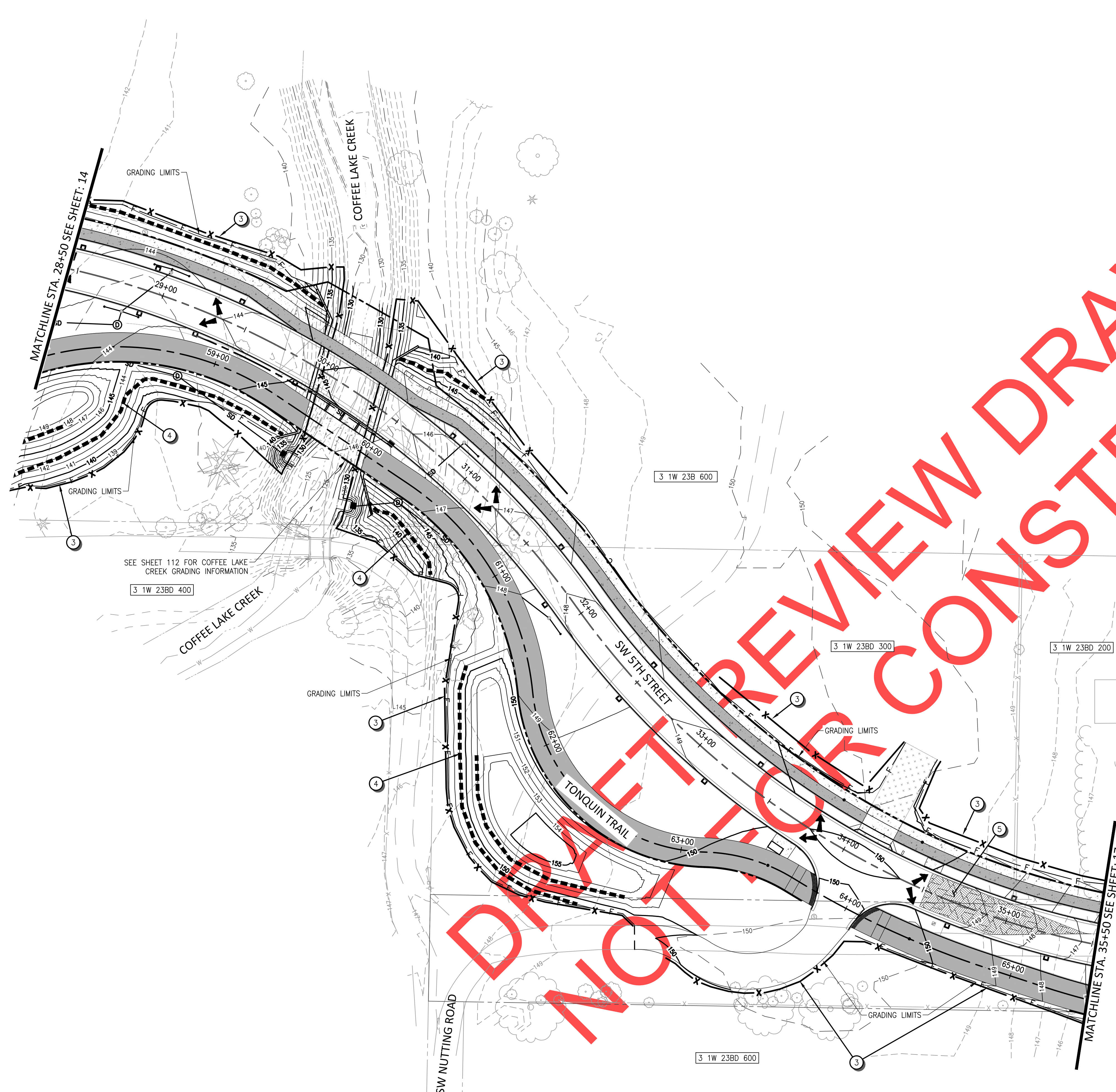
SW 5TH ST TO SW KINSMAN RD EXTENSION
 GRADING & EROSION CONTROL PLAN



CIP # 4196
 PROJECT # 2017-02-001
 15 of 211

REVIEW SET – NOT FOR CONSTRUCTION

MATCHLINE STA. 104+50 SEE SHEET: 14



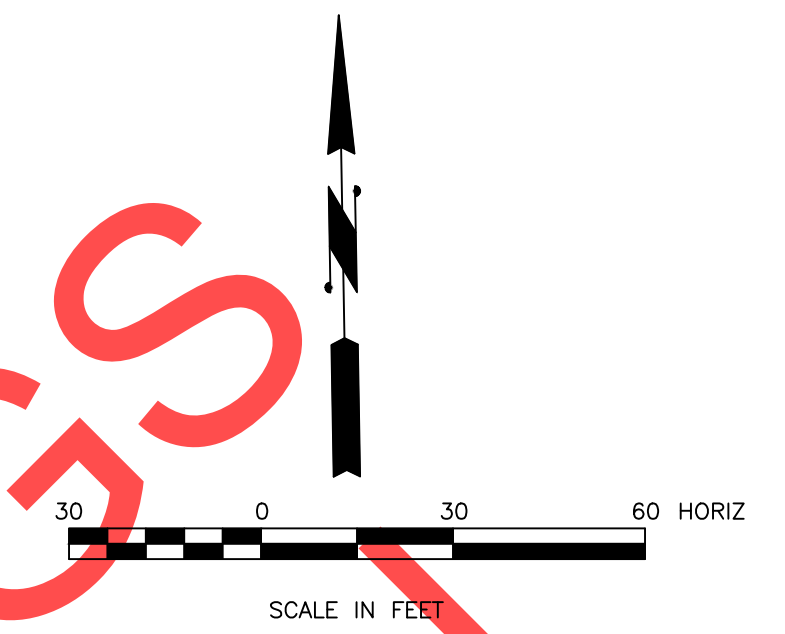
CONSTRUCTION NOTES

- ① INSTALL INLET PROTECTION, TYPE 5 PER CITY OF WILSONVILLE STD. NO. S-2127 ON SHEET 127.
- ③ INSTALL SEDIMENT FENCE PER CITY OF WILSONVILLE STD. NO. S-2245 ON SHEET 128.
- ④ INSTALL WATTLES PER CLACKAMAS COUNTY STD. 4-27 ON SHEET 128.
- ⑤ INSTALL CONSTRUCTION ENTRANCE - TYPE 1 PER ODOT STD. RD1000

LEGEND

- CONSTRUCTION ENTRANCE, TYPE 1
- SEDIMENT FENCE
- INLET PROTECTION, TYPE 5
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED GROUND FLOW
- WATTLES

NOTE:
 1. SEE LANDSCAPE SHEETS FOR SEEDING, MULCHING, AND LANDSCAPING.
 2. FILL AREAS OUTSIDE THE ROAD SECTIONS REQUIRE "COMMON BORROW" AND EMBANKMENT COMPACTION

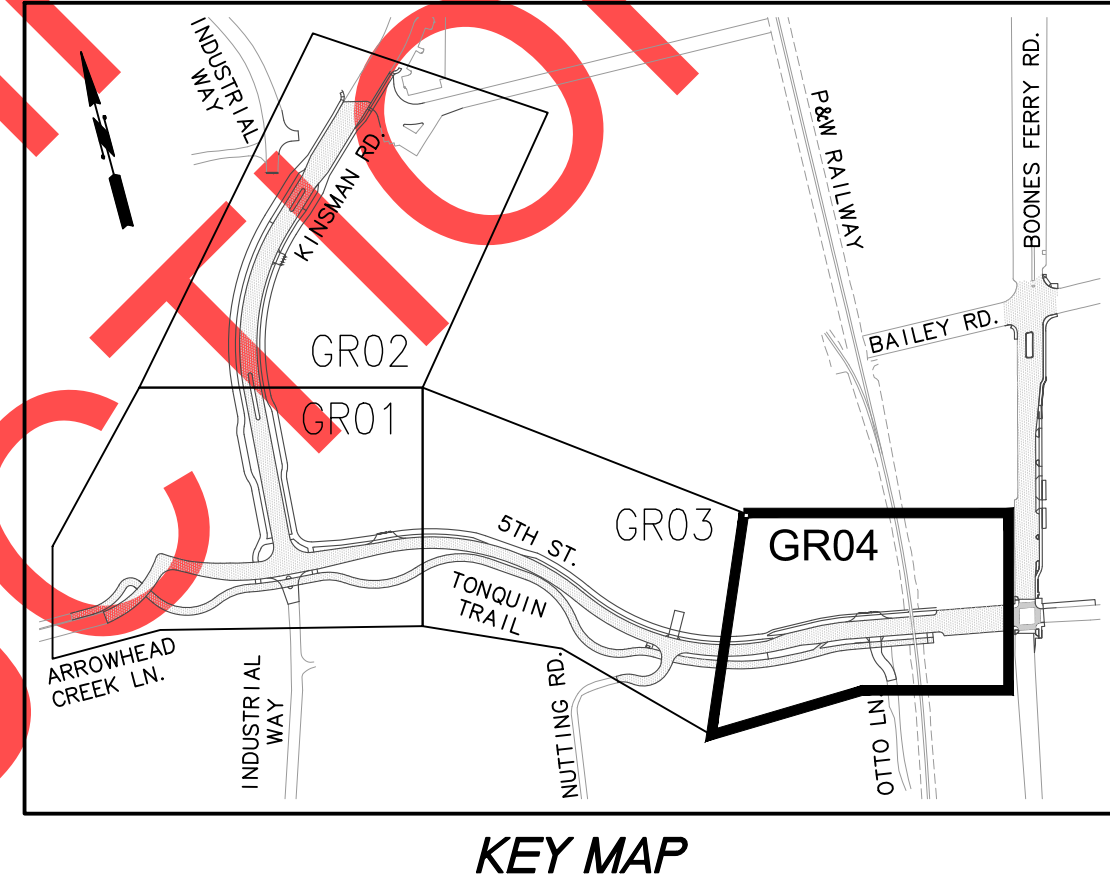
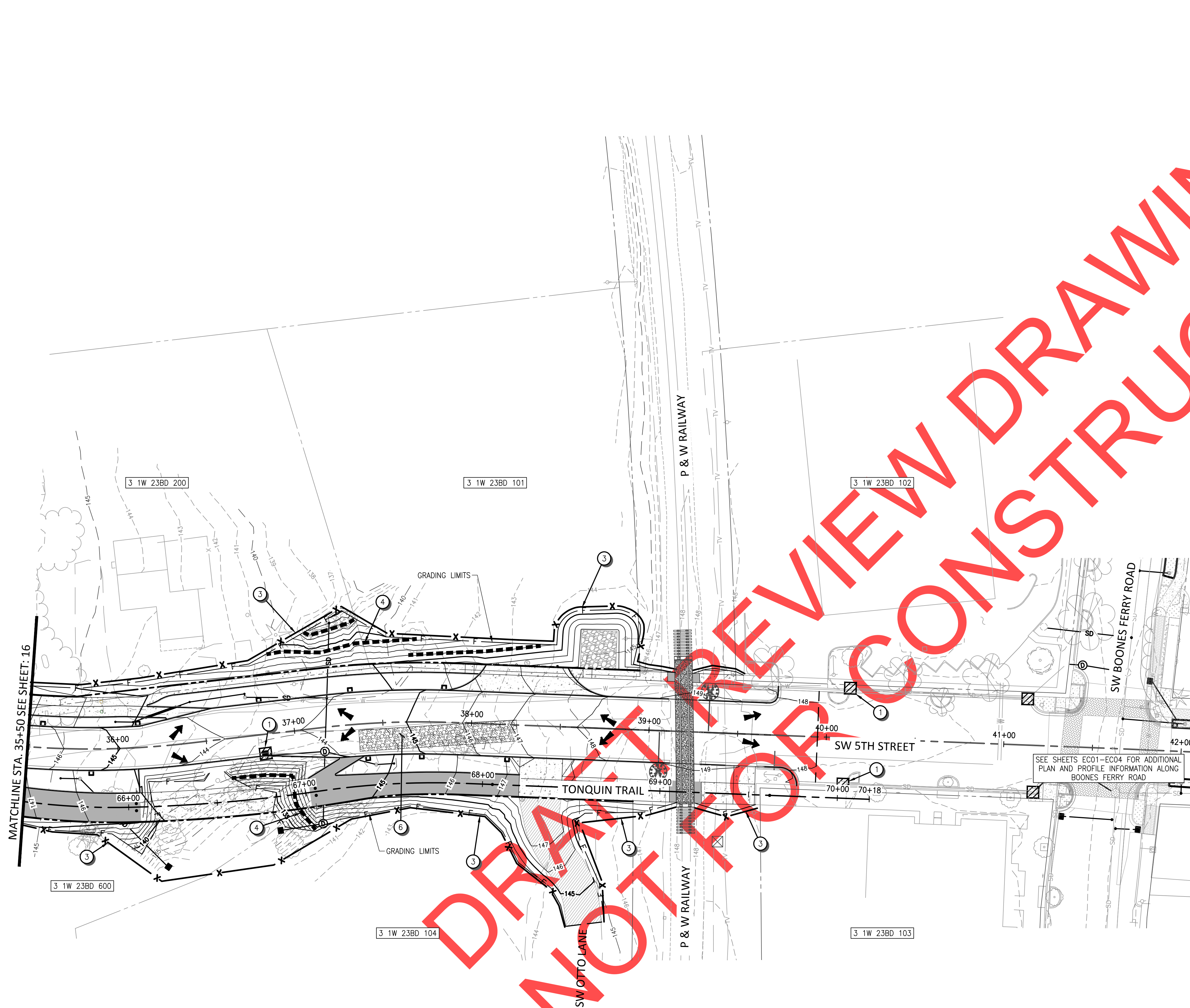


SEE SHEET 112 FOR COFFEE LAKE CREEK GRADING INFORMATION



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<p>REVISIONS</p>	<p>PRELIMINARY</p>
<p>City of Wilsonville Engineering Department 29799 SW Town Center Loop E Wilsonville, OR 97070 Phone 503-682-4960</p>	
<p>Date: 1 February 2019 Scale: AS SHOWN Designed By: PH/SL Drawn By: SLR Checked By: A.HENDY</p>	
<p>SW 5TH ST TO SW KINSMAN RD EXTENSION GRADING & EROSION CONTROL PLAN</p>	
<p>CIP # 4196 PROJECT # 2017-02-001 16 of 211</p>	<p>GR03</p>



CONSTRUCTION NOTES

- ① INSTALL INLET PROTECTION, TYPE 5 PER CITY OF WILSONVILLE STD. NO. S-2127 ON SHEET 127.
- ③ INSTALL SEDIMENT FENCE PER CITY OF WILSONVILLE STD. NO. S-2245 ON SHEET 128.
- ④ INSTALL WATTLES PER CLACKAMAS COUNTY STD. 4-27 ON SHEET 128.
- ⑥ INSTALL WHEEL WASH PER CITY OF WILSONVILLE STD. NO. S-2235 ON SHEET 129.

LEGEND

- WHEEL WASH
- SEDIMENT FENCE
- INLET PROTECTION, TYPE 5
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED GROUND FLOW
- WATTLES

NOTE:
 1. SEE LANDSCAPE SHEETS FOR SEEDING, MULCHING, AND LANDSCAPING.
 2. FILL AREAS OUTSIDE THE ROAD SECTIONS REQUIRE "COMMON BORROW" AND EMBANKMENT COMPACTION.



REVIEW SET – NOT FOR CONSTRUCTION

NO.	REVISIONS

PRELIMINARY

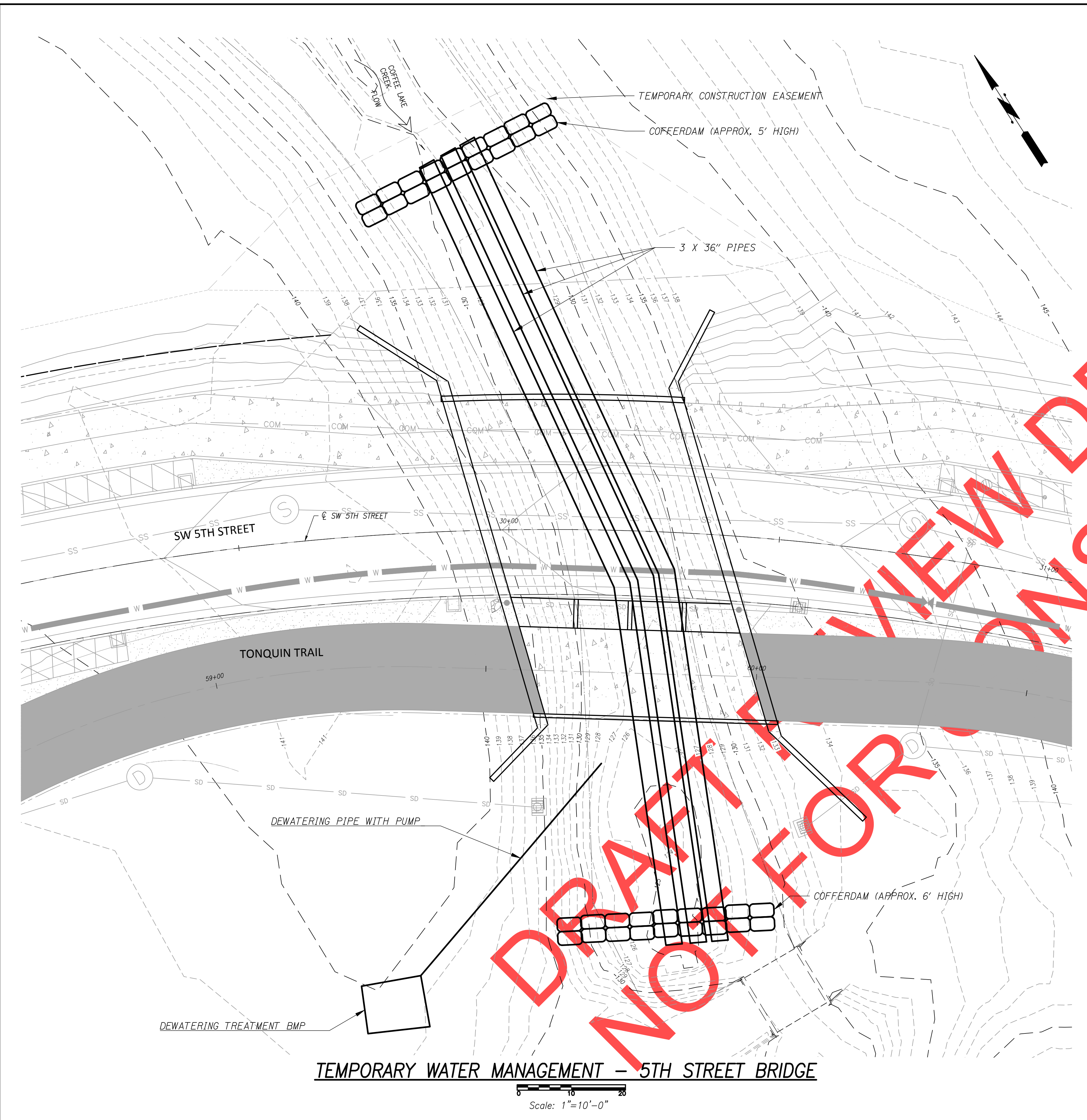
City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



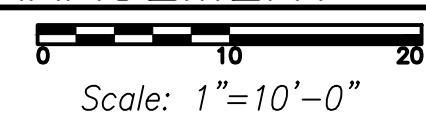
Date: 1 February 2019
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**SW 5TH ST TO SW KINSMAN RD EXTENSION
 GRADING & EROSION CONTROL PLAN**

CIP# 4196
 PROJECT# 2017-02-001
 GROUND
 17 of 211



TEMPORARY WATER MANAGEMENT - 5TH STREET BRIDGE

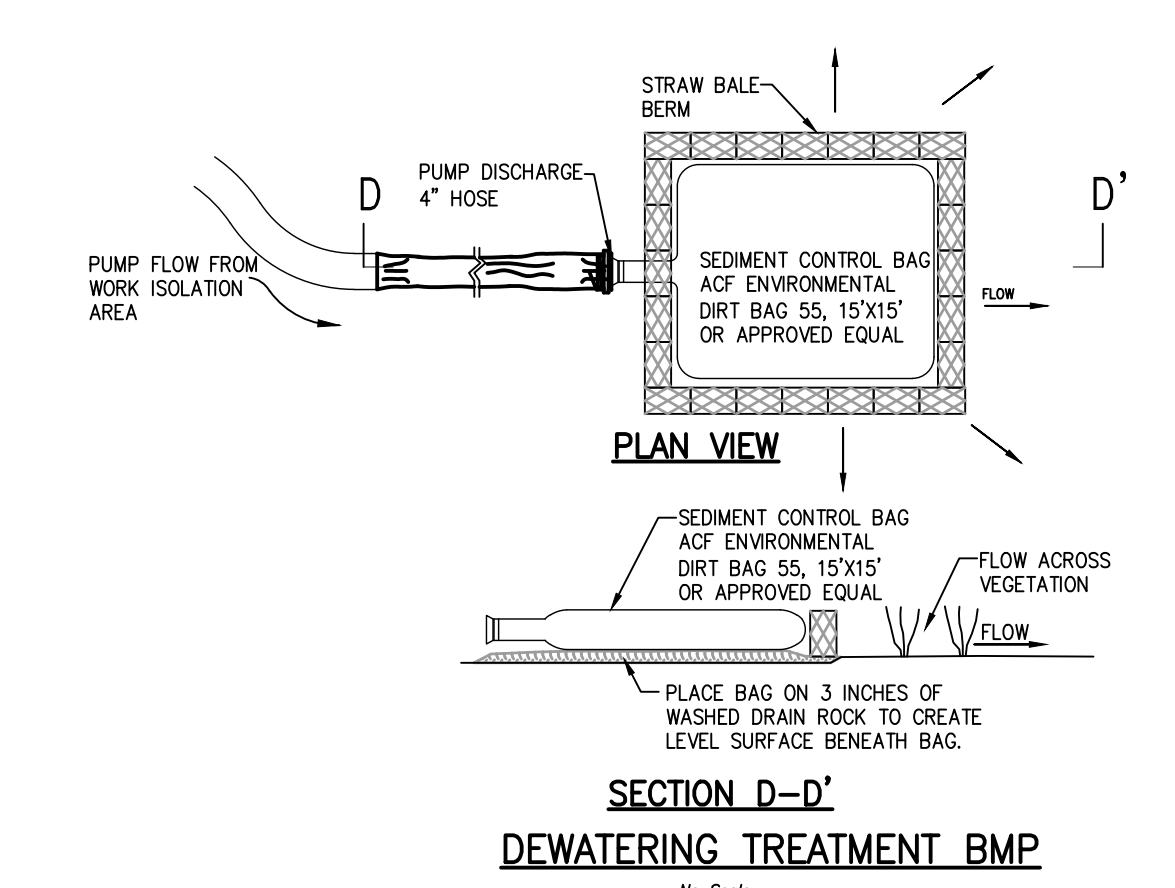
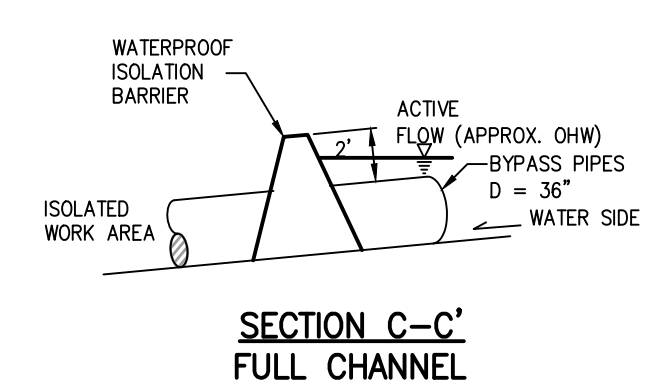
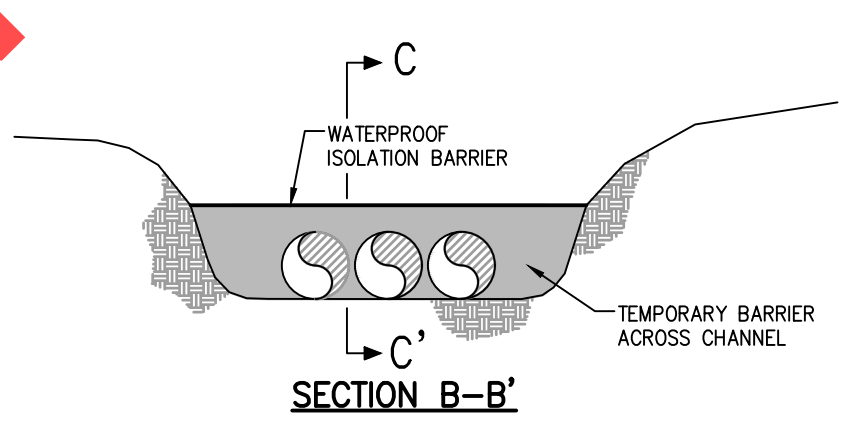
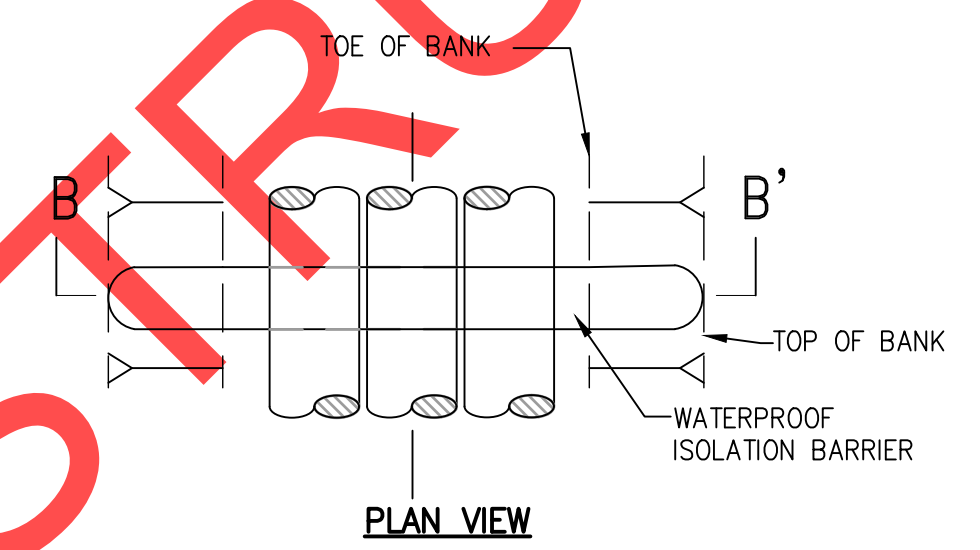


WORK AREA ISOLATION NOTES:

1. IN-WATER WORK WINDOW - JULY 15-OCTOBER 15. ANY WORK PERFORMED IN CREEK BELOW OHW MUST BE PERFORMED WITHIN THE IN-WATER WORK WINDOW.
2. CONTRACTOR TO PREPARE AND SUBMIT A TEMPORARY WATER MANAGEMENT PLAN AND IMPLEMENT THE WORK AREA ISOLATION APPROVED BY THE CITY.
3. RECOMMENDED SEQUENCE:
 - 3.1 INSTALL EROSION CONTROL BMP'S
 - 3.2 ISOLATE CHANNEL WORK AREA USING COFFERDAMS AND 3X36" PIPE AS SHOWN.
 - 3.3 PERFORM FISH SALVAGE
 - 3.4 DEWATER WORK ISOLATION AREA BY PUMPING WATER THROUGH A DEWATERING TREATMENT BMP. INTAKE MUST HAVE ODFW APPROVED FISH SCREEN.
 - 3.5 PERFORM CHANNEL WORK IN ISOLATED AREA
 - 3.6 IMPLEMENT BANK RECONSTRUCTION AND STABILIZATION MEASURES
 - 3.7 REMOVE WORK ISOLATION BARRIERS.
4. THE GRAVITY SYSTEM SHOWN IN THIS TEMPORARY WATER MANAGEMENT PLAN HAS CAPACITY TO CONVEY APPROXIMATELY 130 CFS TOTAL (THE ESTIMATED FLOW IN THE CREEK AT ORDINARY HIGH WATER LEVELS). THEREFORE CONTRACTOR SHALL BE PREPARED TO PUMP FLOWS GREATER THAN 130 CFS DOWNSTREAM.
5. PUMPING FROM UPSTREAM OF BARRIER TO DOWNSTREAM OF ISOLATED AREA MAY BE NEEDED TO MAINTAIN BYPASS SYSTEM, 1-FOOT OF FREEBOARD IS RECOMMENDED BETWEEN THE WATER SURFACE ELEVATION AND THE TOP OF THE COFFERDAMS.
6. SEE DETAILS ON THIS SHEET.
7. SEE SPECIAL PROVISIONS FOR ADDITIONAL TEMPORARY WATER MANAGEMENT INFORMATION.

DEWATERING NOTES:

1. WATER FROM THE DEWATERING PROCESS ORIGINATING WITHIN THE ISOLATED AREA SHALL BE ROUTED THROUGH A BMP (O/E/ FILTER BAG) BEFORE DISCHARGING TO A VEGETATED AREA AS APPROVED BY THE ENGINEER. SEE THIS SHEET FOR DETAILS.
2. PUMPING MAY BE REQUIRED FOR GROUNDWATER SEEPAGE REMOVAL INSIDE ISOLATION AREA.



NOTES - DEWATERING TREATMENT BMP:

1. INSTALL THE "DIRT BAG" BMP ON A MILD SLOPE SO INCOMING WATER FLOWS DOWNHILL THROUGH THE BAG.
2. THE "DIRT BAG" IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR PASS WATER AT A REASONABLE RATE. DISPOSE OF THE "DIRT BAG" WHEN FULL OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
3. FOR DISPOSAL, THE "DIRT BAG" MAY BE CUT OPEN AND THE CONTENTS SEEDED AFTER REMOVING VISIBLE FABRIC AS APPROVED BY THE OWNER'S REPRESENTATIVE.

REVISIONS

PRELIMINARY

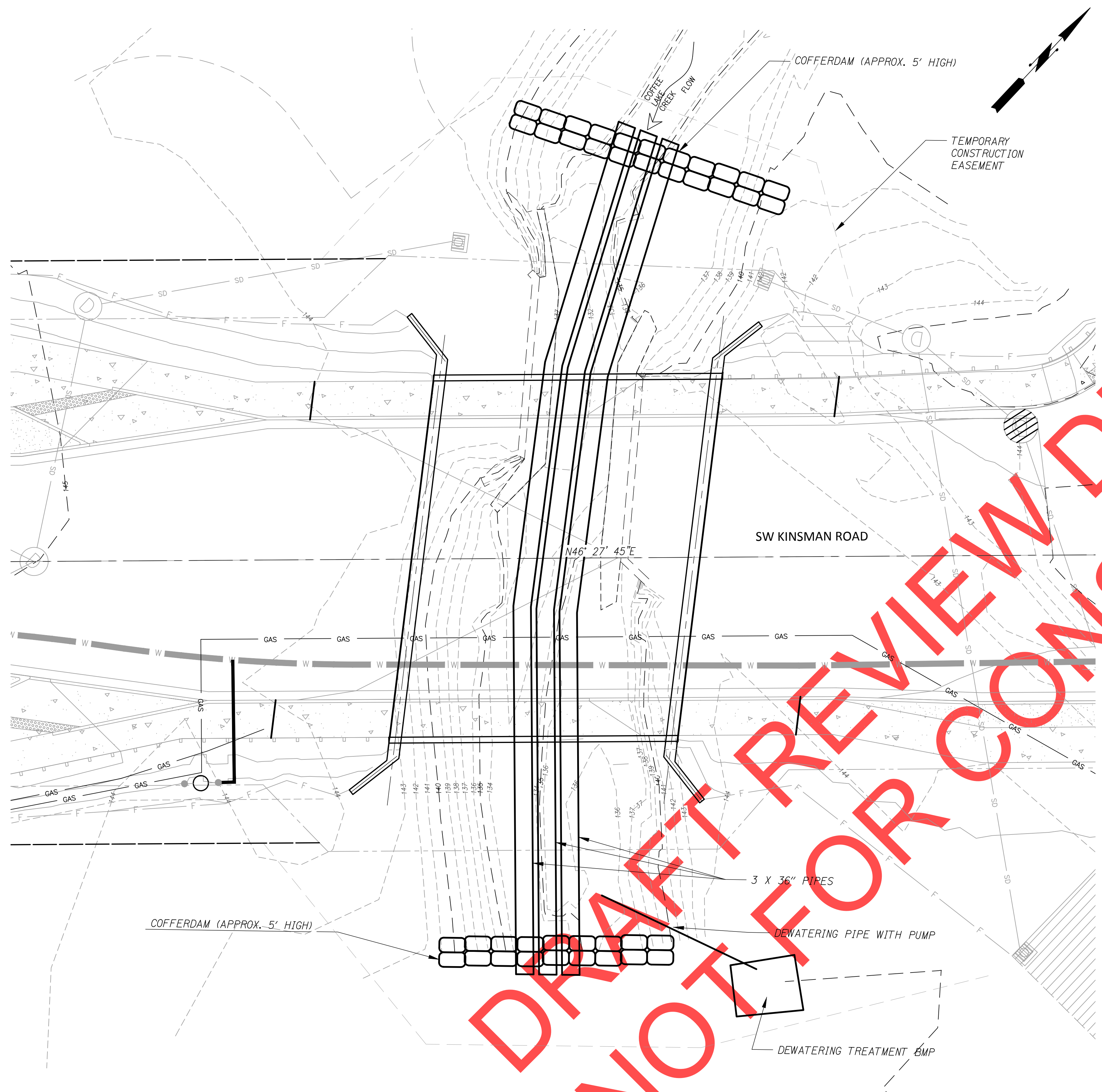
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By:
Drawn By: SLR
Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST BRIDGE - TWMP
AT COFFEE LAKE CREEK & 5TH ST**

CIP# 4196
PROJECT# 2017-02-001
TWMM01
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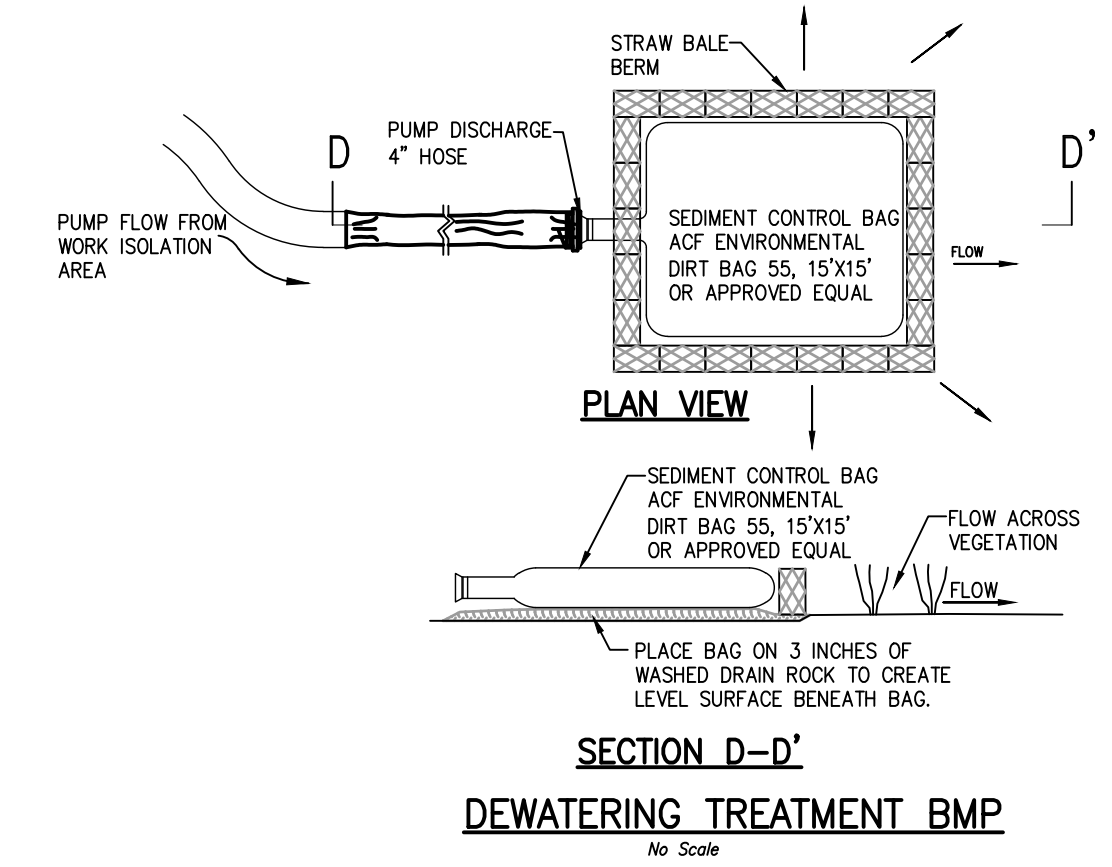
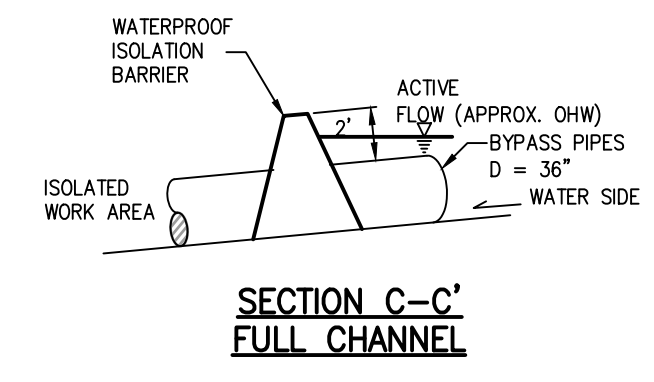
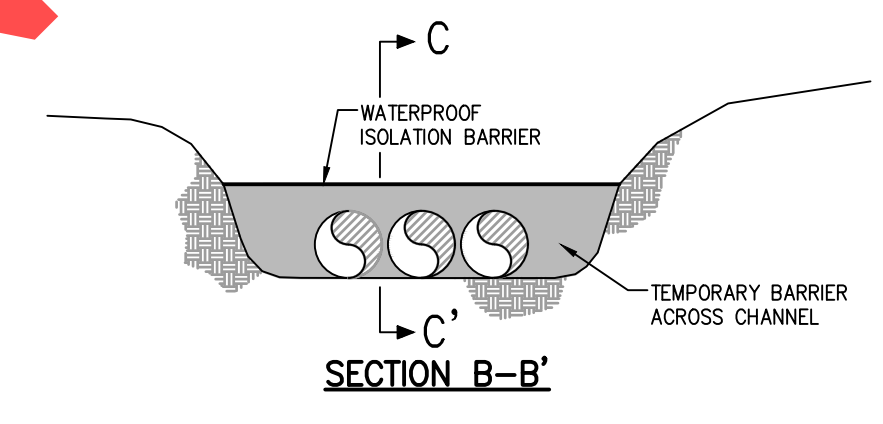
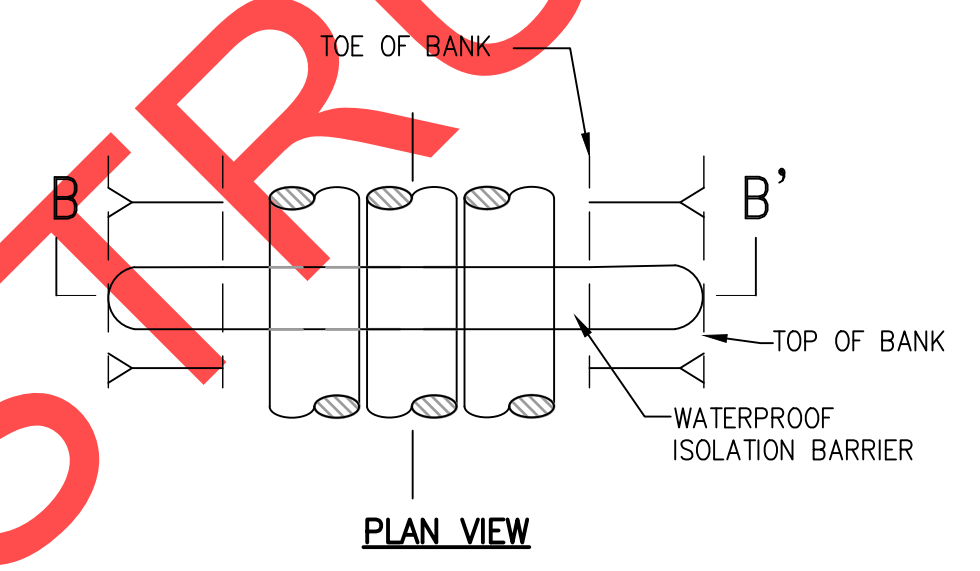


WORK AREA ISOLATION NOTES:

1. IN-WATER WORK WINDOW - JULY 15-OCTOBER 15. ANY WORK PERFORMED IN CREEK BELOW OHW MUST BE PERFORMED WITHIN THE IN-WATER WORK WINDOW.
2. CONTRACTOR TO PREPARE AND SUBMIT A TEMPORARY WATER MANAGEMENT PLAN AND IMPLEMENT THE WORK AREA ISOLATION APPROVED BY THE CITY.
3. RECOMMENDED SEQUENCE:
 - 3.1 INSTALL EROSION CONTROL BMP'S
 - 3.2 ISOLATE CHANNEL WORK AREA USING COFFERDAMS AND 3X36" PIPE AS SHOWN.
 - 3.3 PERFORM FISH SALVAGE
 - 3.4 DEWATER WORK ISOLATION AREA BY PUMPING WATER THROUGH A DEWATERING TREATMENT BMP. INTAKE MUST HAVE ODFW APPROVED FISH SCREEN.
 - 3.5 PERFORM CHANNEL WORK IN ISOLATED AREA
 - 3.6 IMPLEMENT BANK RECONSTRUCTION AND STABILIZATION MEASURES
 - 3.7 REMOVE WORK ISOLATION BARRIERS.
4. THE GRAVITY SYSTEM SHOWN IN THIS TEMPORARY WATER MANAGEMENT PLAN HAS CAPACITY TO CONVEY APPROXIMATELY 130 CFS TOTAL (THE ESTIMATED FLOW IN THE CREEK AT ORDINARY HIGH WATER LEVELS), THEREFORE CONTRACTOR SHALL BE PREPARED TO PUMP FLOWS GREATER THAN 130 CFS DOWNSTREAM.
5. PUMPING FROM UPSTREAM OF BARRIER TO DOWNSTREAM OF ISOLATED AREA MAY BE NEEDED TO MAINTAIN BYPASS SYSTEM, 1-FOOT OF FREEBOARD IS RECOMMENDED BETWEEN THE WATER SURFACE ELEVATION AND THE TOP OF THE COFFERDAMS.
6. SEE DETAILS ON THIS SHEET.
7. SEE SPECIAL PROVISIONS FOR ADDITIONAL TEMPORARY WATER MANAGEMENT INFORMATION.

DEWATERING NOTES:

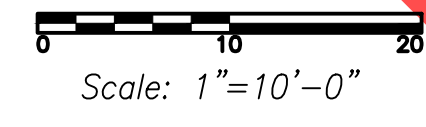
1. WATER FROM THE DEWATERING PROCESS ORIGINATING WITHIN THE ISOLATED AREA SHALL BE ROUTED THROUGH A BMP (O/E/ FILTER BAG) BEFORE DISCHARGING TO A VEGETATED AREA AS APPROVED BY THE ENGINEER. SEE THIS SHEET FOR DETAILS.
2. PUMPING MAY BE REQUIRED FOR GROUNDWATER SEEPAGE REMOVAL INSIDE ISOLATION AREA.



NOTES - DEWATERING TREATMENT BMP:

1. INSTALL THE "DIRT BAG" BMP ON A MILD SLOPE SO INCOMING WATER FLOWS DOWNHILL THROUGH THE BAG.
2. THE "DIRT BAG" IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR PASS WATER AT A REASONABLE RATE. DISPOSE OF THE "DIRT BAG" WHEN FULL OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
3. FOR DISPOSAL, THE "DIRT BAG" MAY BE CUT OPEN AND THE CONTENTS SEEDED AFTER REMOVING VISIBLE FABRIC AS APPROVED BY THE OWNER'S REPRESENTATIVE.

TEMPORARY WATER MANAGEMENT - KINSMAN ROAD BRIDGE



REVISIONS

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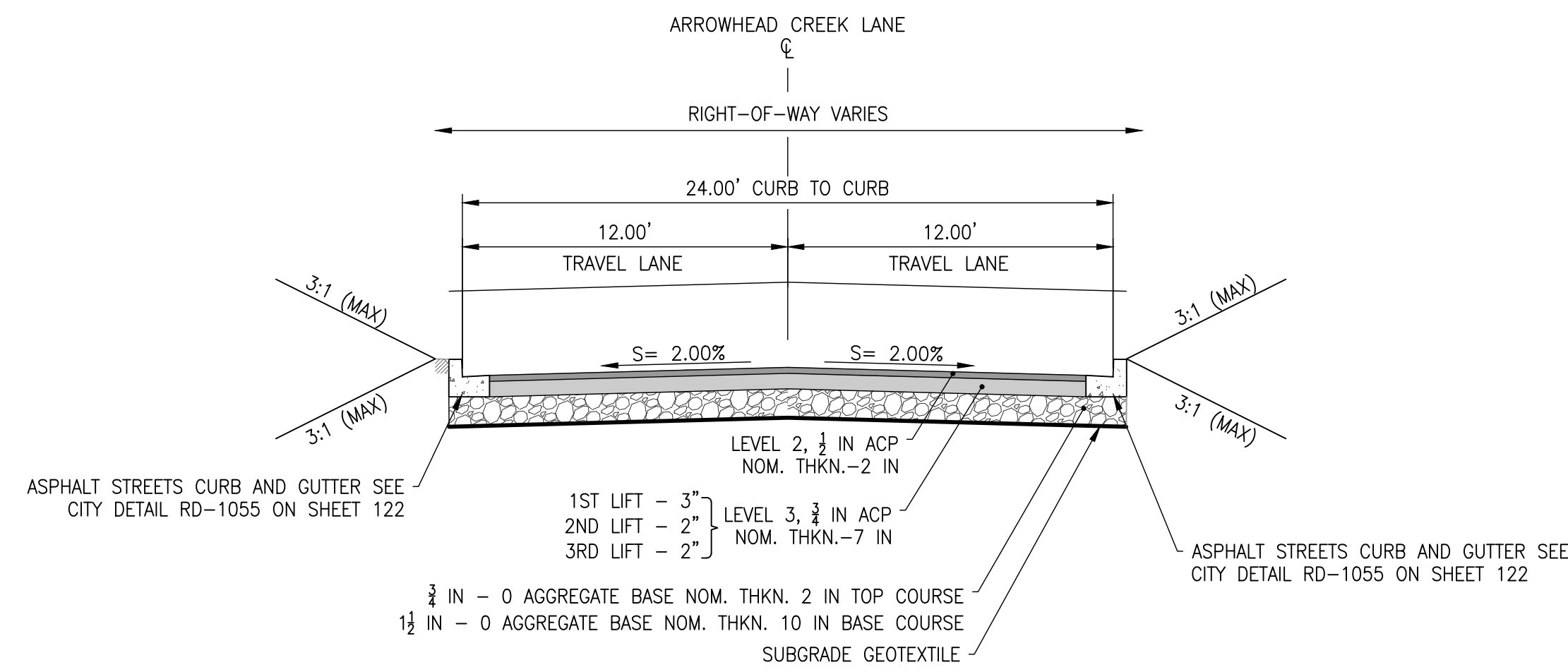
Date: 1 February 2019
Scale: AS SHOWN
Designed By:
Drawn By: SLR
Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN RD BRIDGE - TWMP
AT COFFEE LAKE CREEK & KINSMAN RD

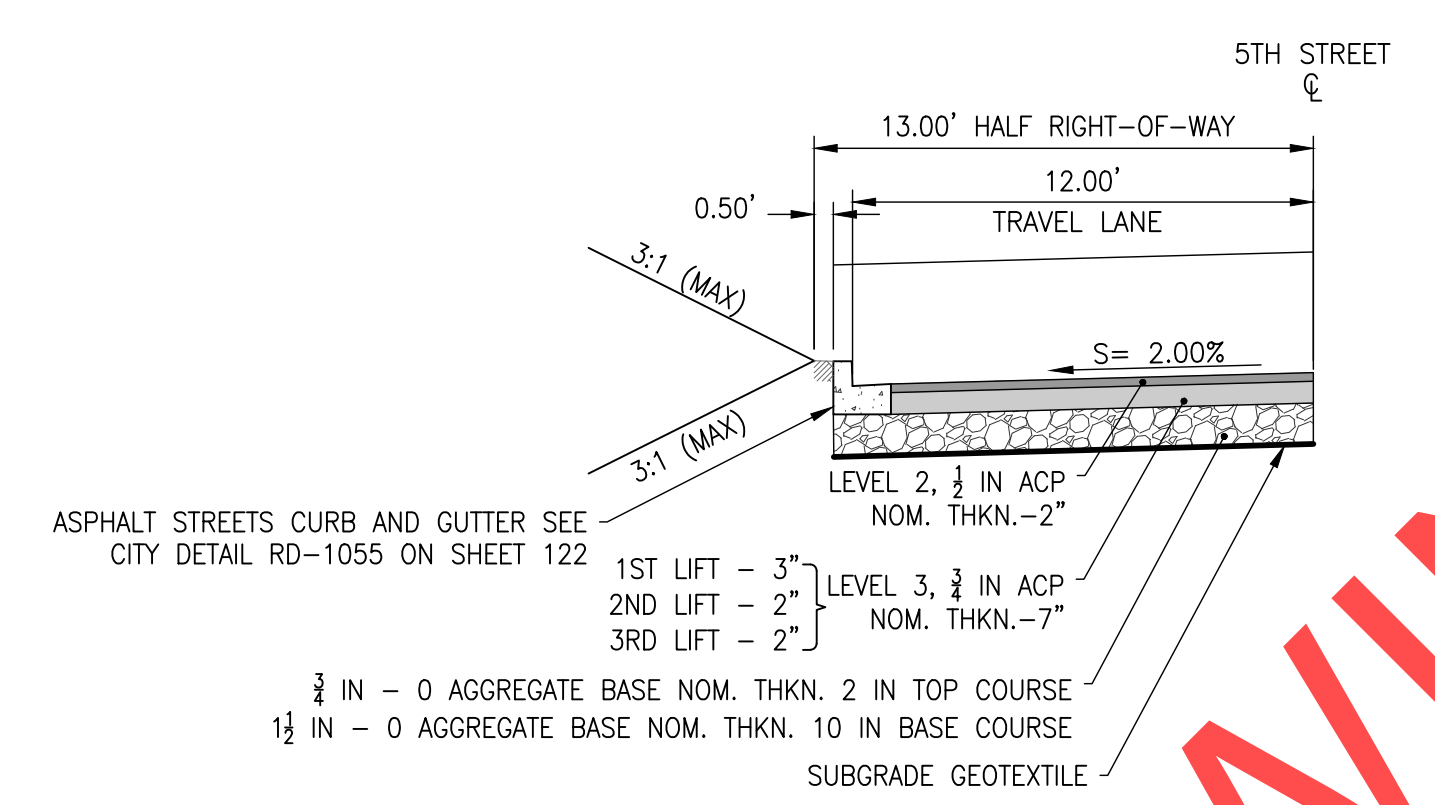


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PROJECT# 2017-02-001
TWM02
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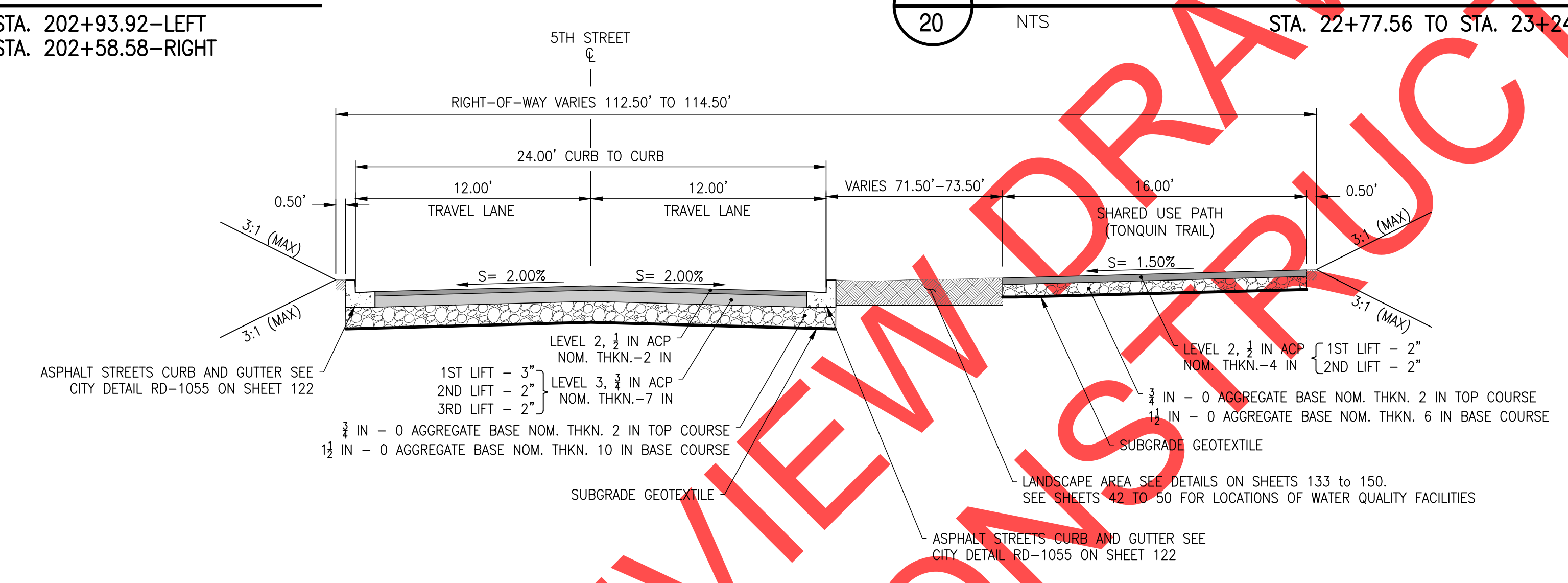
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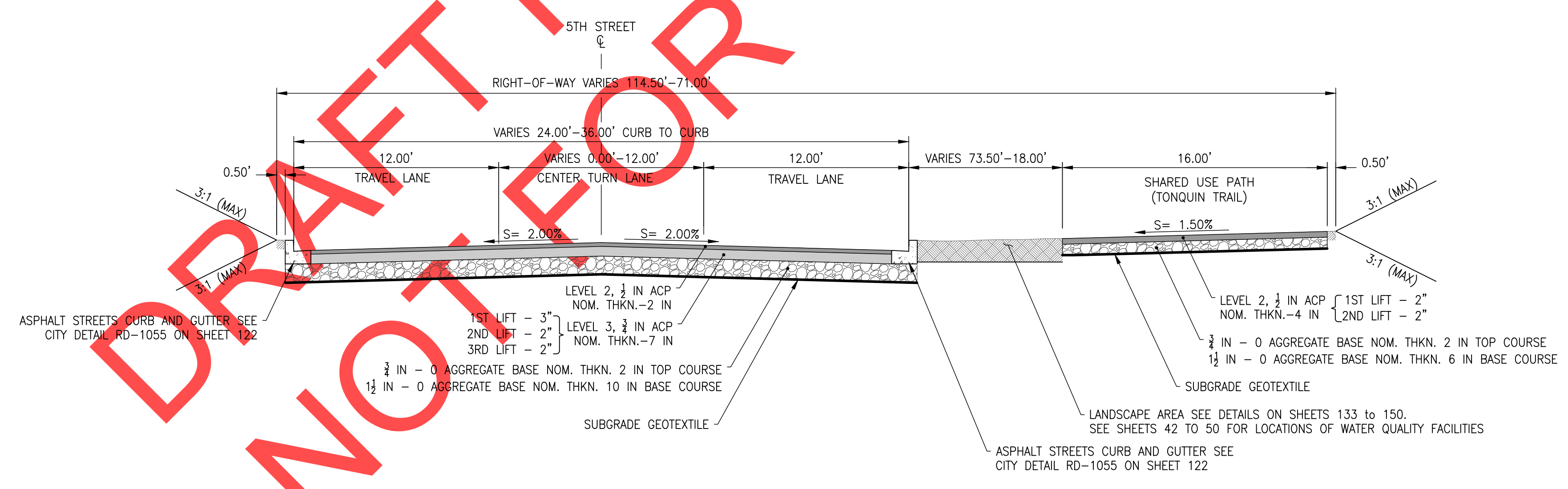
1
 20
ARROWHEAD CREEK LANE - TYPICAL SECTION
 NTS
 STA. 201+25.00 TO STA. 202+93.92-LEFT
 STA. 201+25.00 TO STA. 202+58.58-RIGHT



2
 20
SW 5TH STREET - TYPICAL SECTION
 NTS
 STA. 22+77.56 TO STA. 23+24.69



3
 20
SW 5TH STREET - TYPICAL SECTION
 NTS
 STA. 23+24.69 TO STA. 23+44.84



4
 20
SW 5TH STREET - TYPICAL SECTION
 NTS
 STA. 23+44.84 TO STA. 24+34.82

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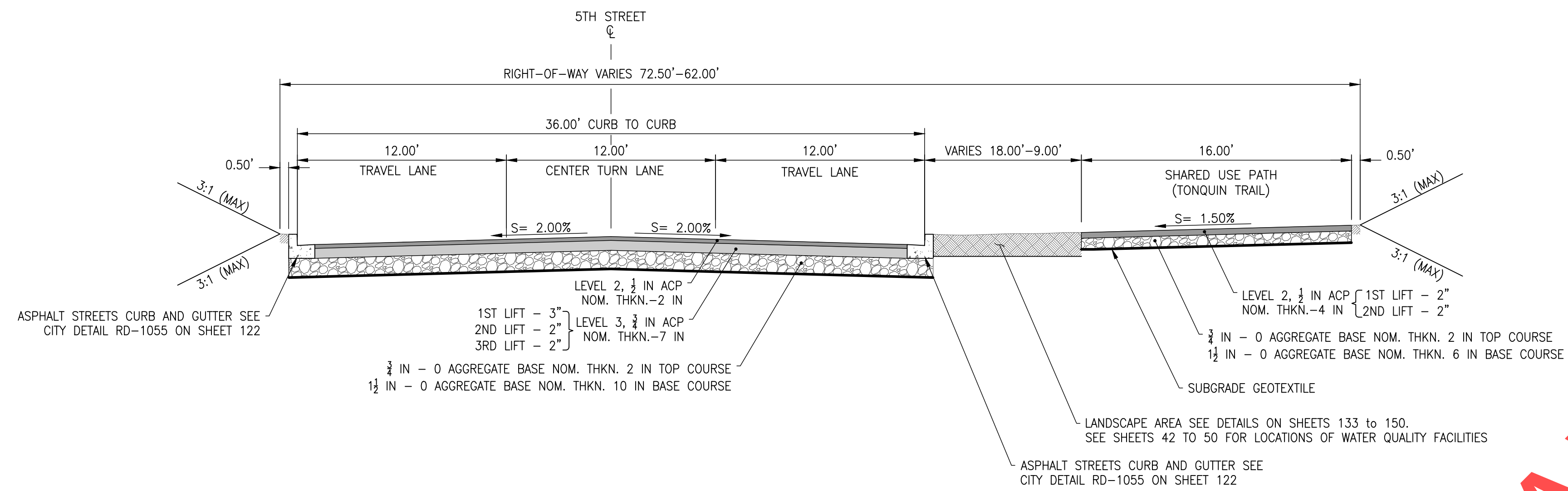
Date: 1 February 2019
 Scale: NTS
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 Drawn By: SLR
 Checked By: A.HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 ROADWAY TYPICAL SECTIONS**

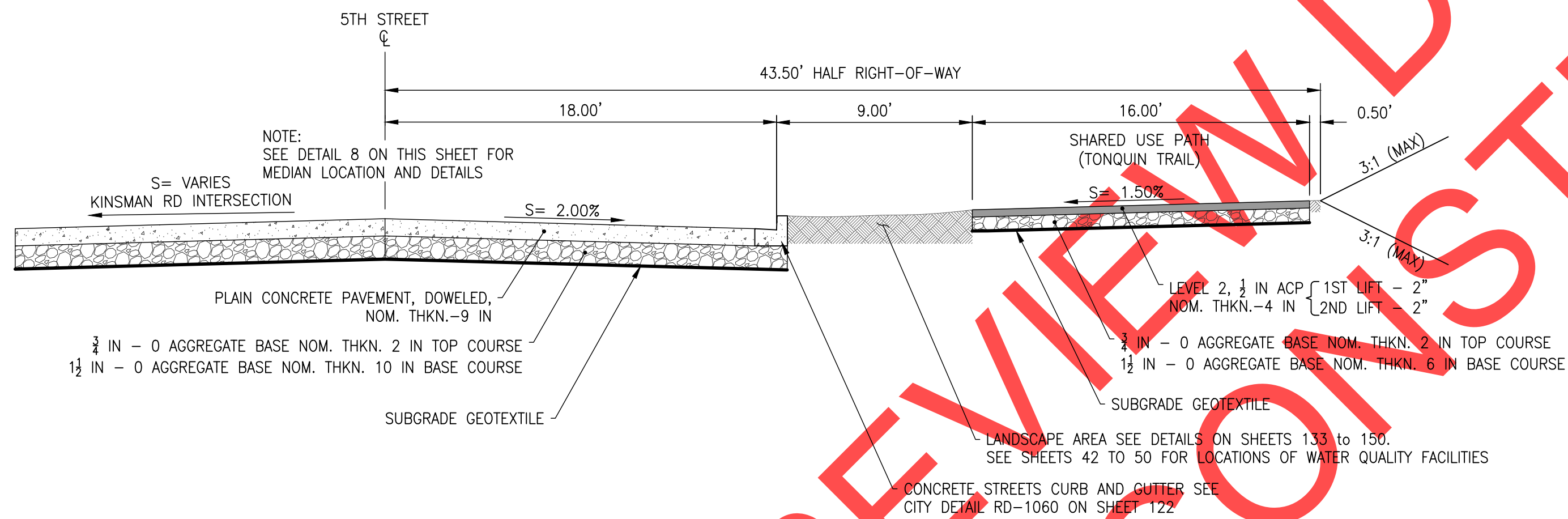
Otak
 Otak, Inc.
 700 Washington St., Suite 300
 Vancouver, WA 98660
 360.737.9613
 www.otak.com

CIP # 4196
 PROJECT # 2017-02-001
 TY01
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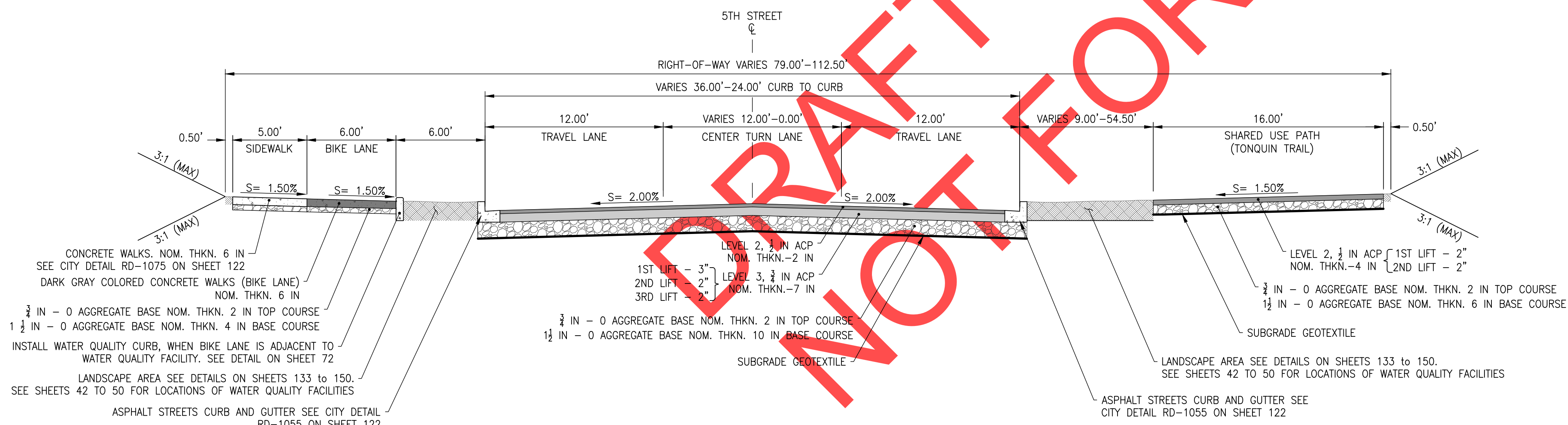
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5
21 SW 5TH STREET - TYPICAL SECTION
NTS STA. 24+34.82 TO STA. 24+85.37



6
21 SW 5TH STREET - TYPICAL SECTION
NTS STA. 24+85.37 TO STA. 26+14.74



7
21 SW 5TH STREET - TYPICAL SECTION
NTS STA. 26+14.74 TO STA. 27+44.82

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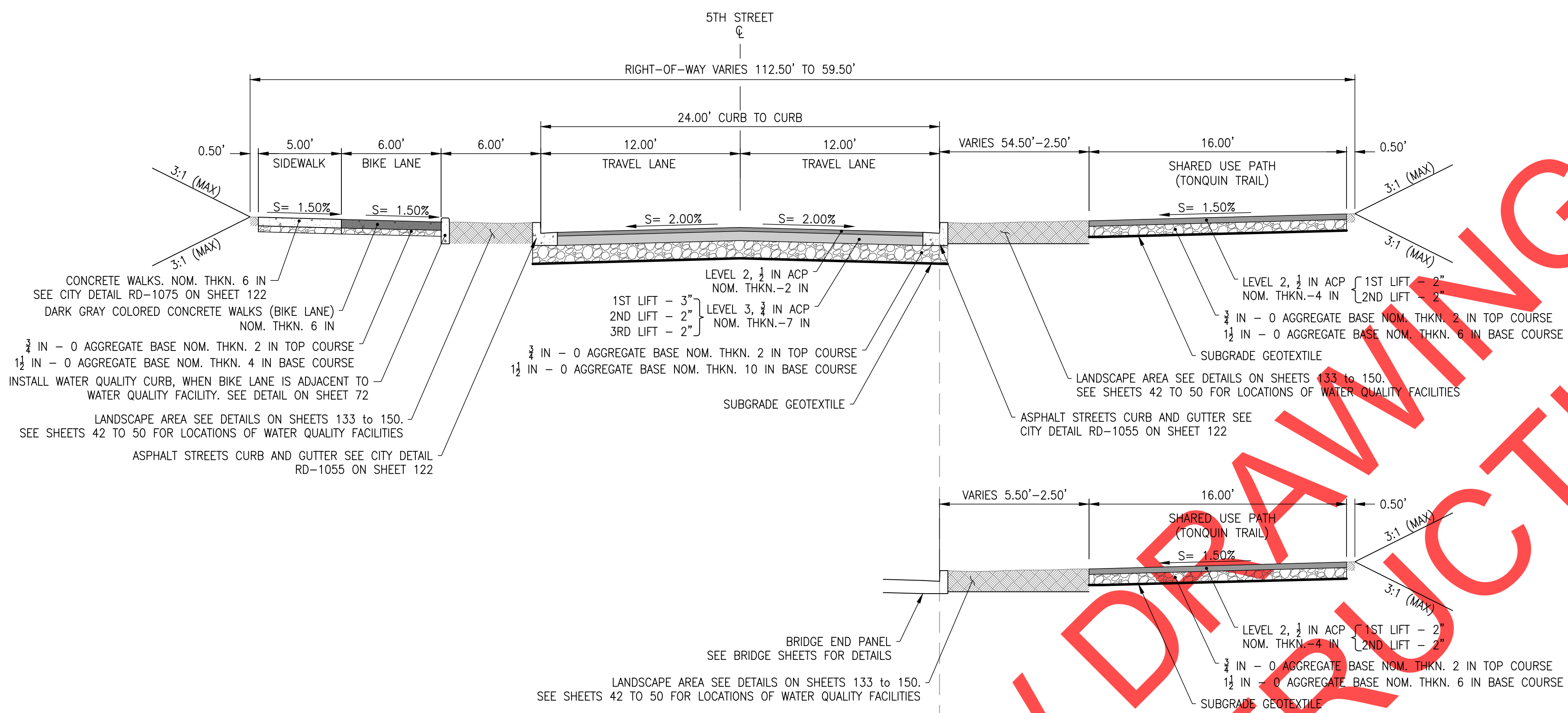
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Drawn By: SLR
Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY TYPICAL SECTIONS

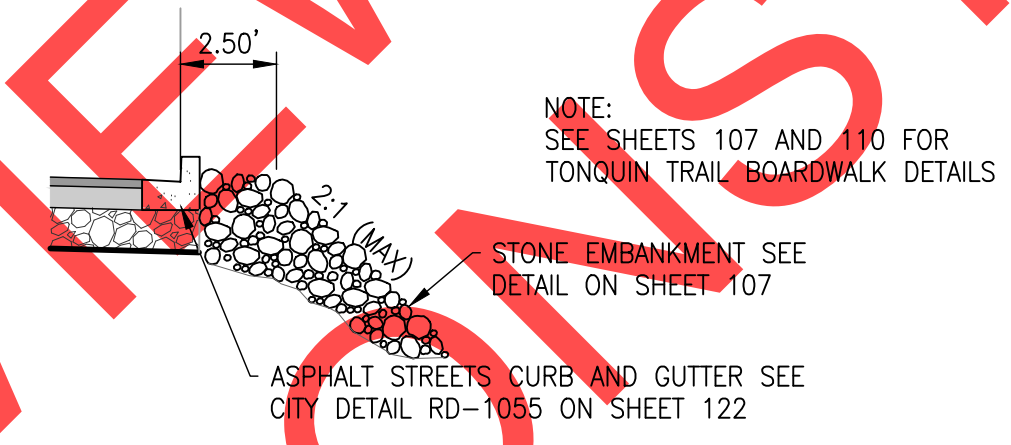


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2017-02-001
TY02
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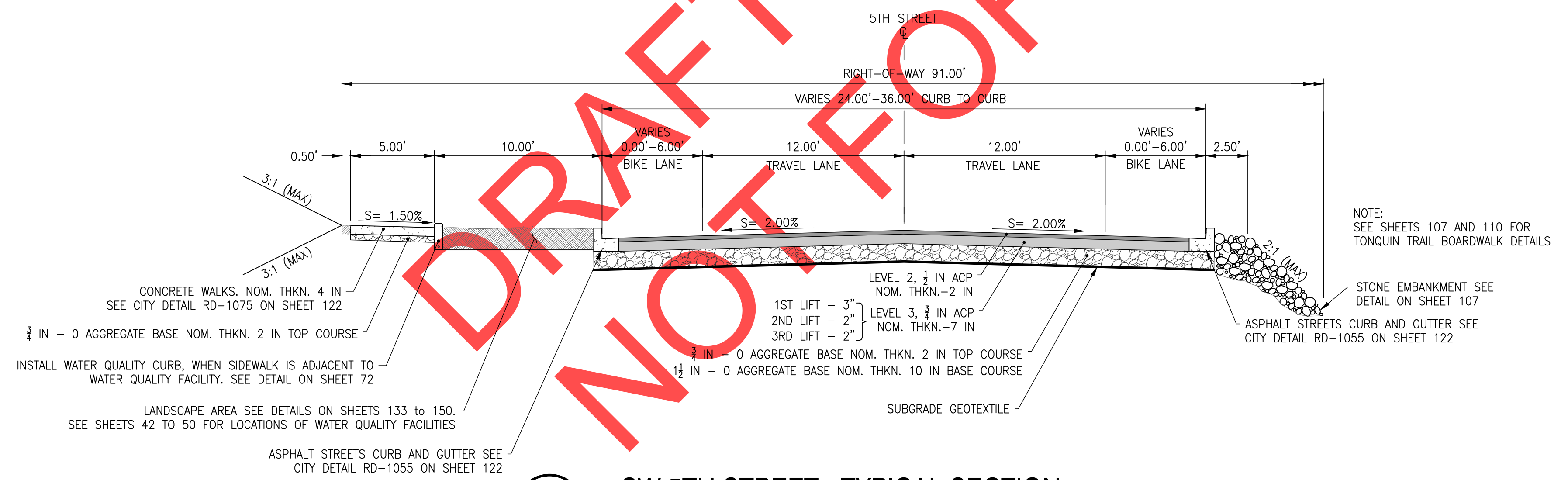


STA. 29+75.04 TO STA. 30+01.88 - RIGHT
 STA. 30+49.43 TO STA. 30+59.94 - RIGHT



STA. 36+11.04 TO STA. 36+82.82 - RIGHT

10
 22
 SW 5TH STREET - TYPICAL SECTION
 NTS
 STA. 27+44.82 TO STA. 30+01.88
 STA. 30+59.94 TO STA. 36+13.00 - LEFT
 STA. 30+49.43 TO STA. 36+82.82 - RIGHT



11
 22
 SW 5TH STREET - TYPICAL SECTION
 NTS
 STA. 36+13.00 TO STA. 36+55.00 - LEFT
 STA. 36+82.82 TO STA. 37+24.97 - RIGHT



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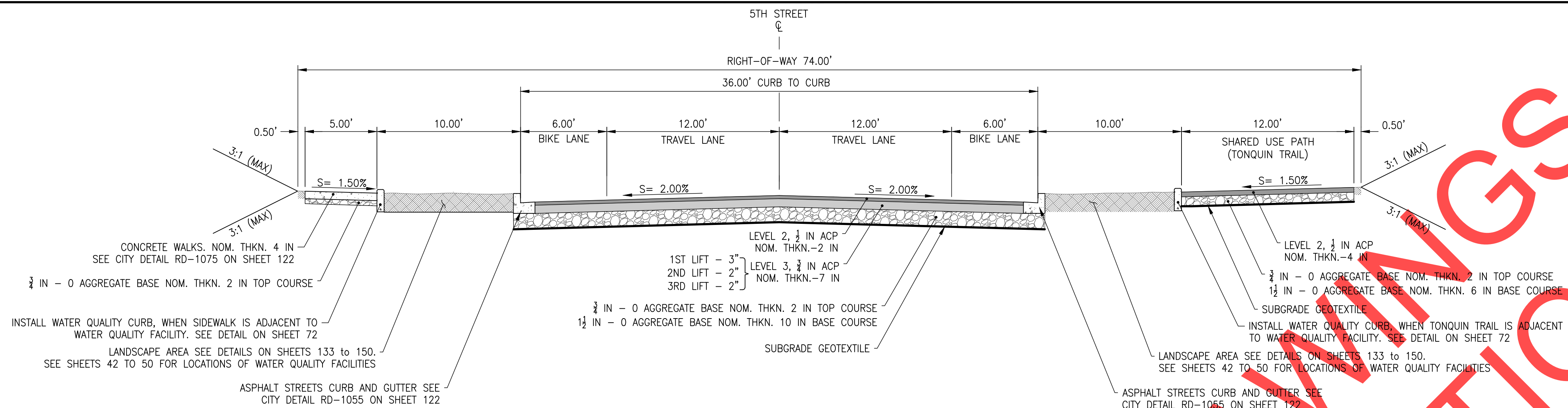
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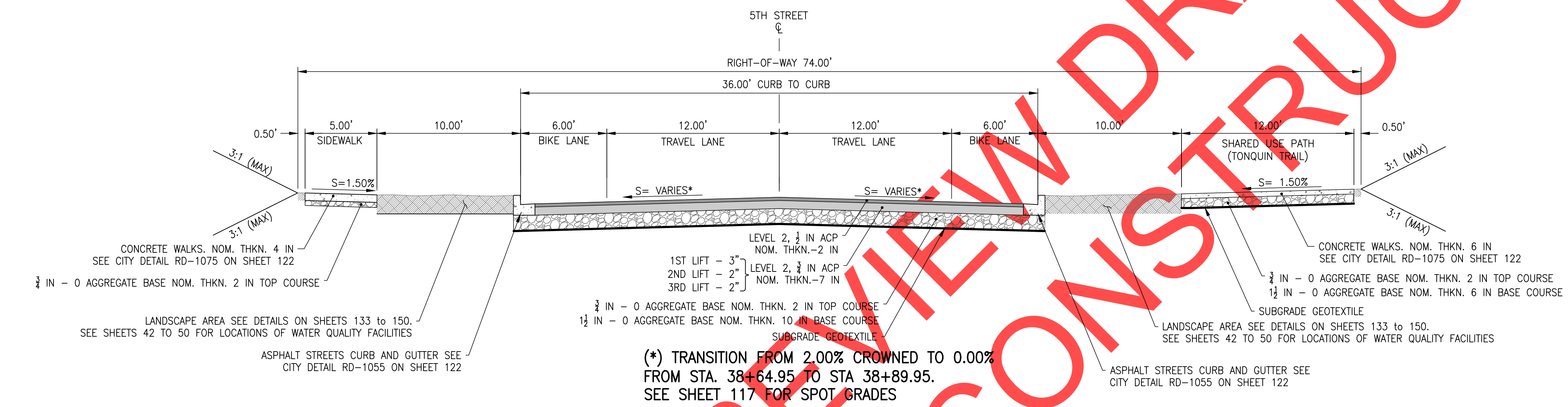
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Drawn By	SLR
Checked By	A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
 ROADWAY TYPICAL SECTIONS

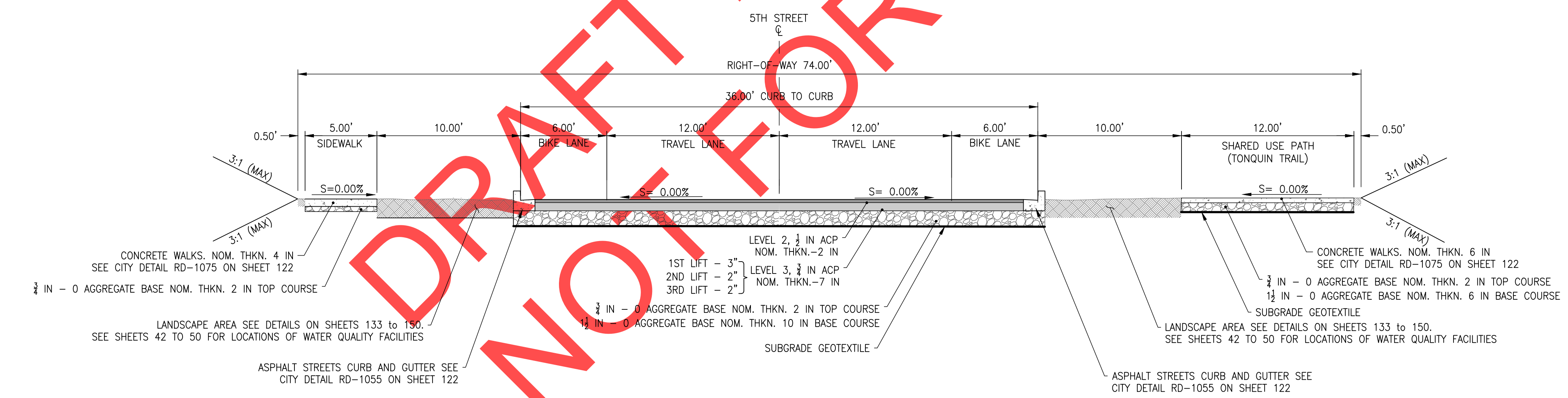
CIP #	4196
PROJECT #	2017-02-001
	TY03
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12
22 SW 5TH STREET - TYPICAL SECTION
NTS
STA. 36+55.00 TO STA. 38+50.09 - LEFT
STA. 37+24.97 TO STA. 38+50.09 - RIGHT



13
23 SW 5TH STREET - TYPICAL SECTION
NTS
STA. 38+50.09 TO STA. 38+89.95
(*) TRANSITION FROM 2.00% CROWNED TO 0.00% FROM STA. 38+64.95 TO STA 38+89.95. SEE SHEET 117 FOR SPOT GRADES



14
23 SW 5TH STREET - TYPICAL SECTION
NTS
STA. 38+89.95 TO STA. 39+15.09
RAILROAD TRACK C. STA. 38+19.95
STA. 39+25.17 TO STA. 39+49.95

NO.	DESCRIPTION

PRELIMINARY

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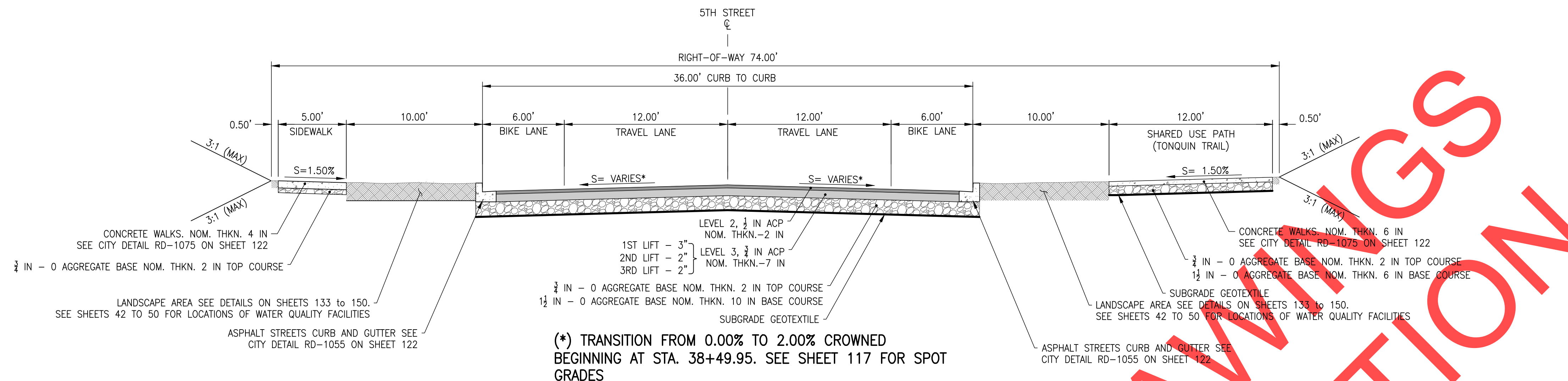
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Drawn By: SLR
Checked By: A.HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY TYPICAL SECTIONS**

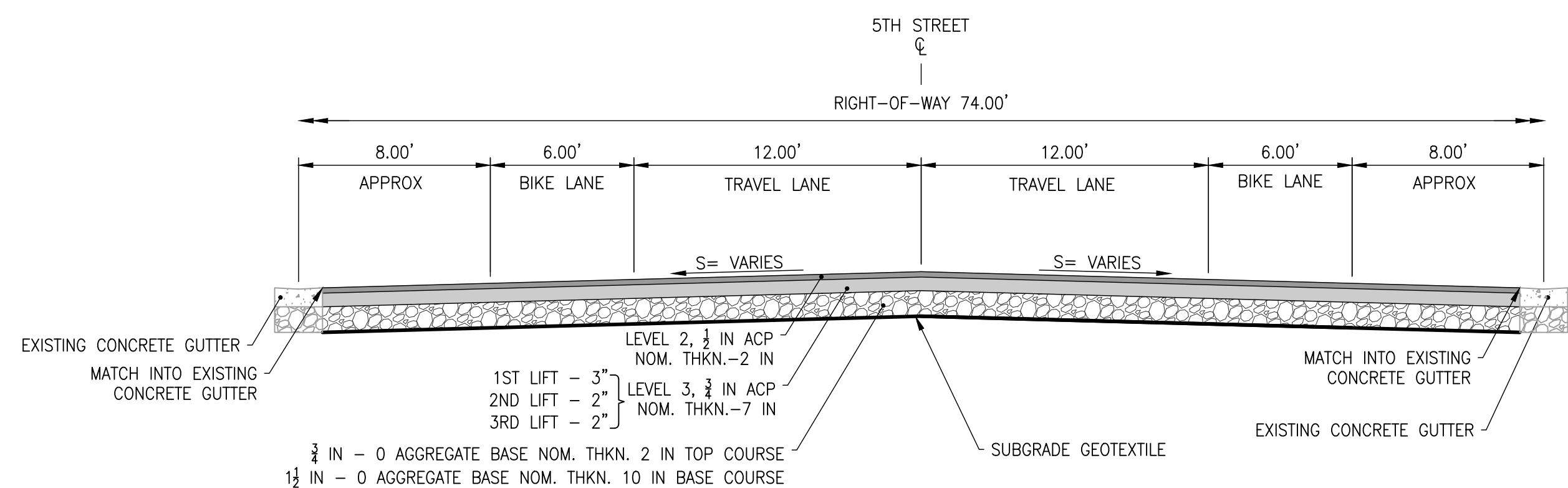
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Otak, Inc.
700 Washington St., Suite 300
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360.737.9613
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PROJECT # 2017-02-001
TY-04
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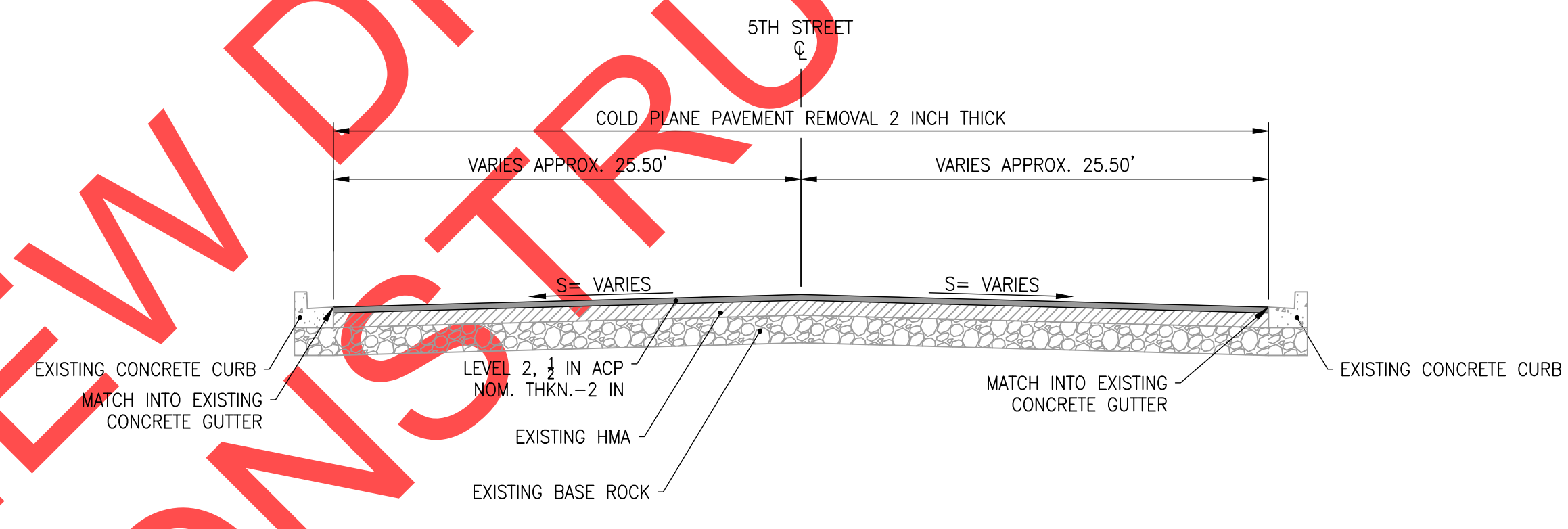
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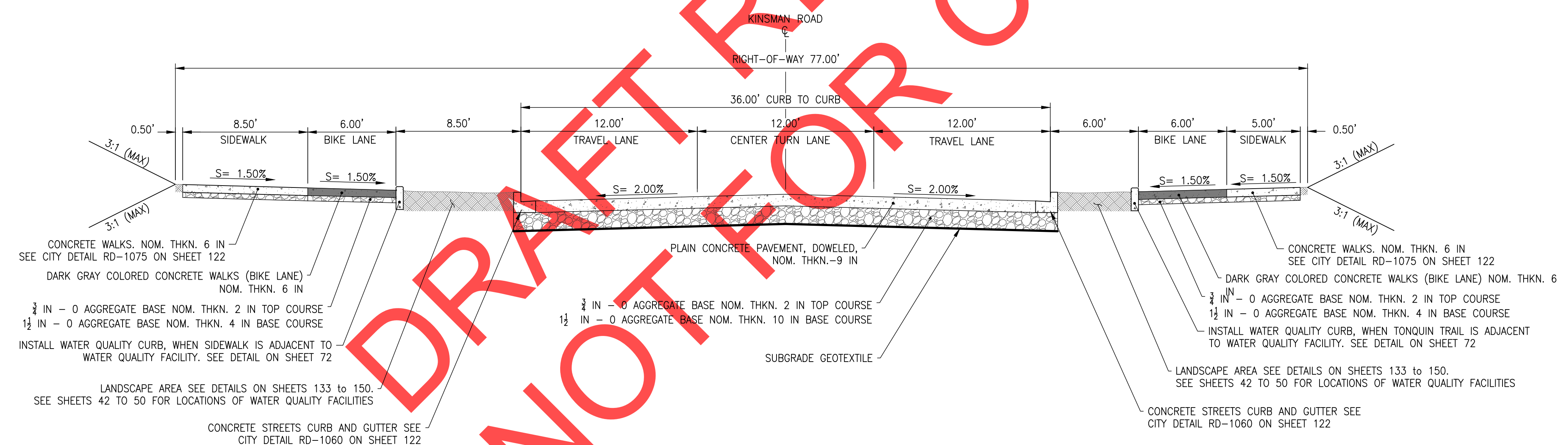
15
23
NTS
SW 5TH STREET - TYPICAL SECTION
STA. 38+49.95 TO STA. 39+71.93-LEFT
STA. 38+49.95 TO STA. 39+84.32-RIGHT



16
24
NTS
SW 5TH STREET - TYPICAL SECTION
STA. 39+71.93 TO STA. 39+95.00-LEFT
STA. 39+84.32 TO STA. 39+95.00-RIGHT



17
24
NTS
SW 5TH STREET - TYPICAL SECTION
STA. 39+95.00 TO STA. 41+24.97



18
24
NTS
SW KINSMAN ROAD - TYPICAL SECTION
STA. 101+31.14 TO STA. 102+65.10-LEFT
STA. 101+40.09 TO STA. 102+65.10-RIGHT

REVISIONS

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Engineering Department
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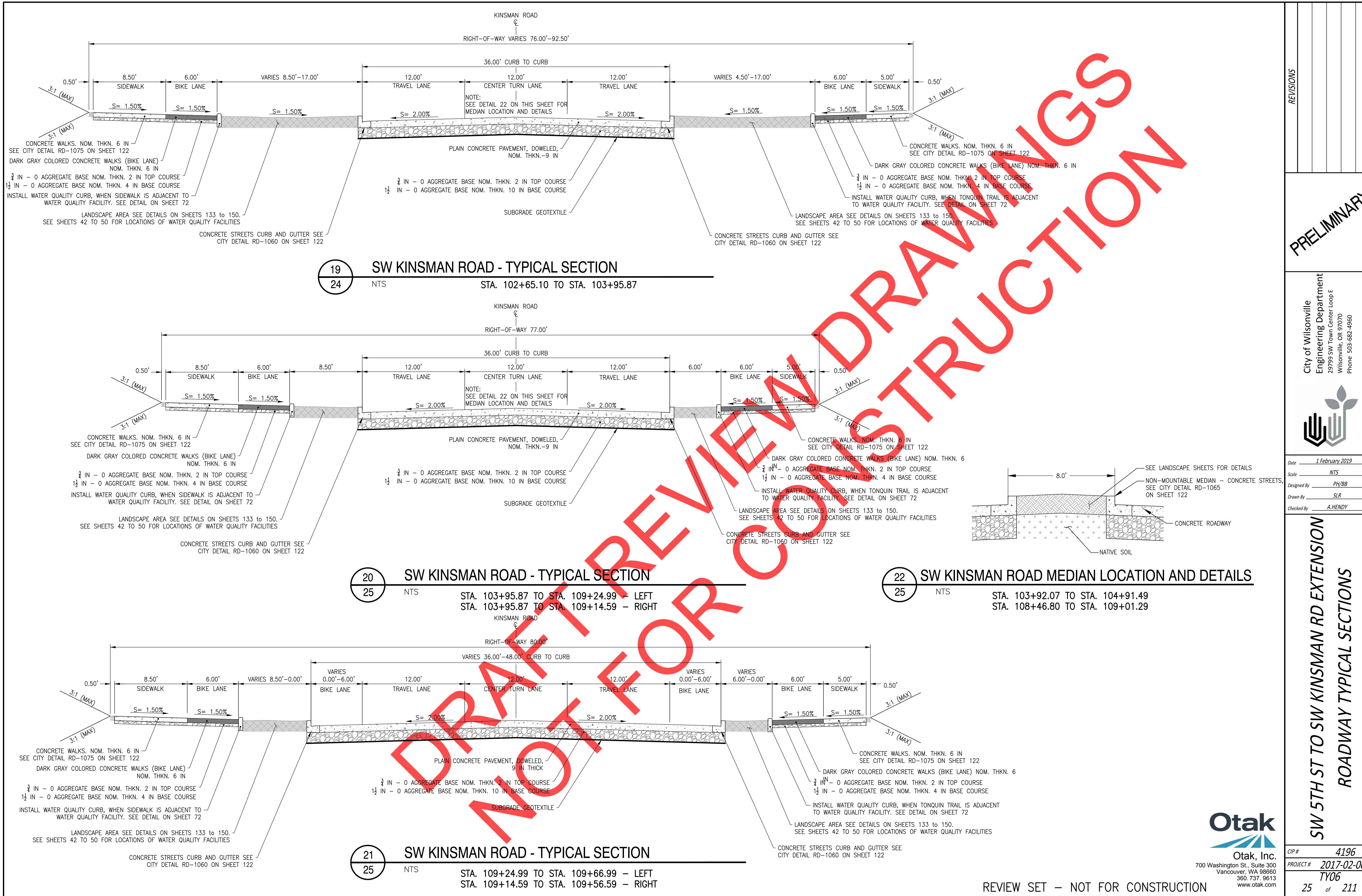
Date	1 February 2019
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**SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY TYPICAL SECTIONS**

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700 Washington St., Suite 300
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CIP #	4196
PROJECT #	2017-02-001
TY05	
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19 SW KINSMAN ROAD - TYPICAL SECTION
 24 NTS STA. 102+65.10 TO STA. 103+95.87

20 SW KINSMAN ROAD - TYPICAL SECTION
 25 NTS STA. 103+95.87 TO STA. 109+24.99 - LEFT
 STA. 103+95.87 TO STA. 109+14.59 - RIGHT

22 SW KINSMAN ROAD MEDIAN LOCATION AND DETAILS
 25 NTS STA. 103+92.07 TO STA. 104+91.49
 STA. 108+46.80 TO STA. 109+01.29

21 SW KINSMAN ROAD - TYPICAL SECTION
 25 NTS STA. 109+24.99 TO STA. 109+66.99 - LEFT
 STA. 109+14.59 TO STA. 109+56.59 - RIGHT

NO.	DESCRIPTION

PRELIMINARY

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 Engineering Department
 29759 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960

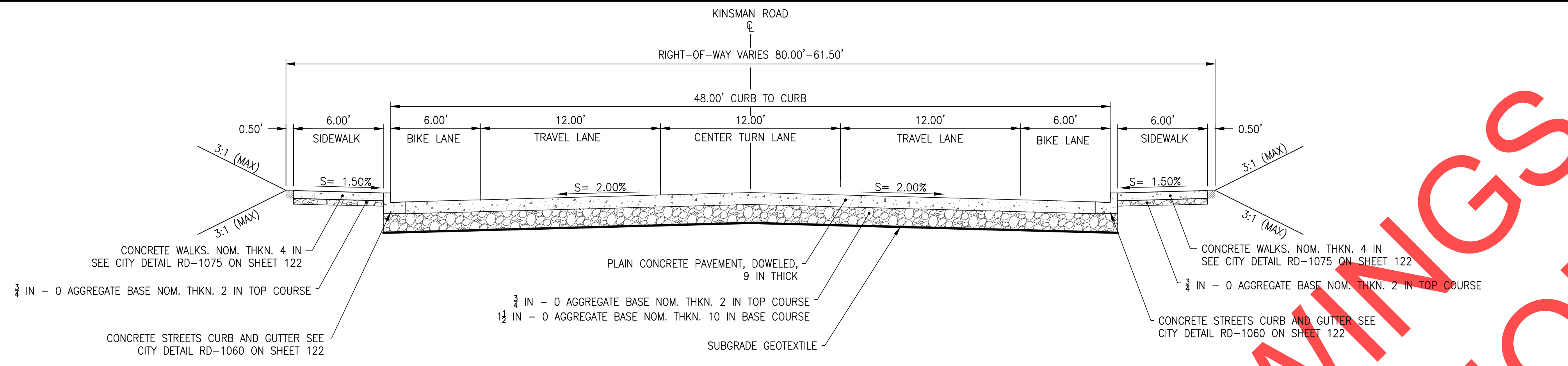


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 Checked By: A.HENDY

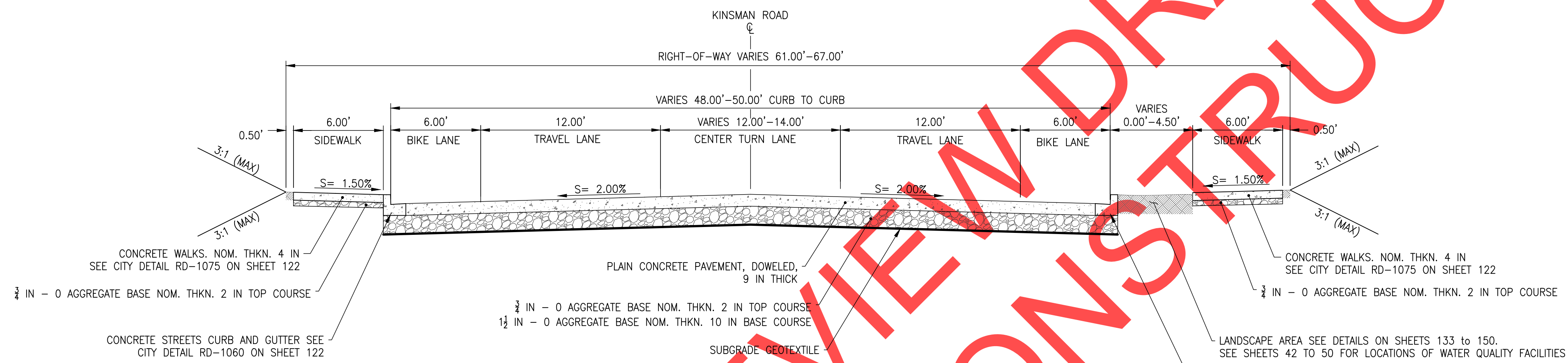
SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY TYPICAL SECTIONS



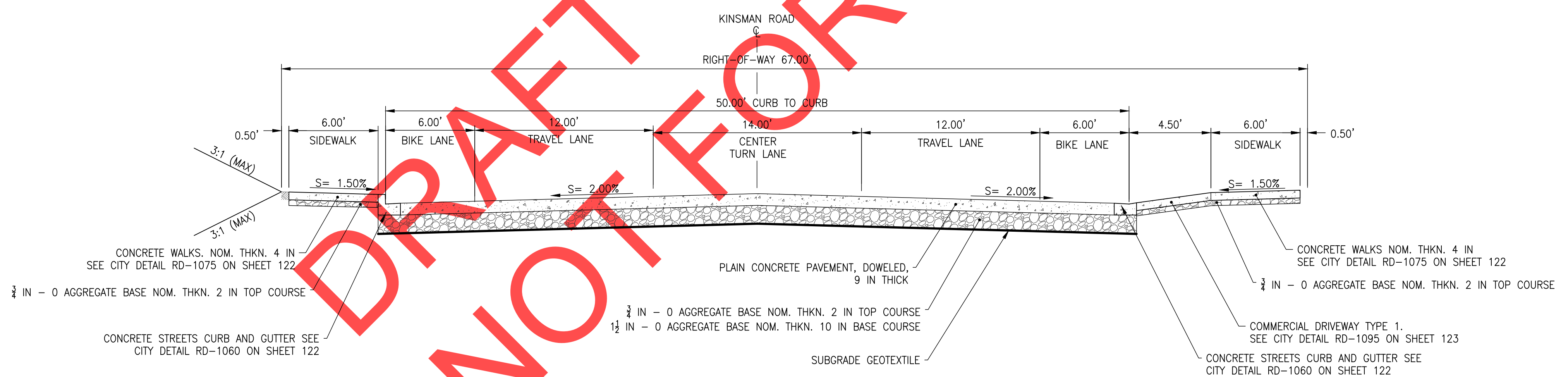
CIP# 4196
 PROJECT# 2017-02-001
 TY06
 25 of 211



23 SW KINSMAN ROAD - TYPICAL SECTION
 NTS STA. 109+66.99 TO STA. 109+71.39 - LEFT
 STA. 109+56.59 TO STA. 109+71.39 - RIGHT



24 SW KINSMAN ROAD - TYPICAL SECTION
 NTS STA. 110+64.22 TO STA. 110+89.22



25 SW KINSMAN ROAD - TYPICAL SECTION
 NTS STA. 110+89.22 TO STA. 111+01.54-LEFT
 STA. 110+89.22 TO STA. 111+26.62-RIGHT

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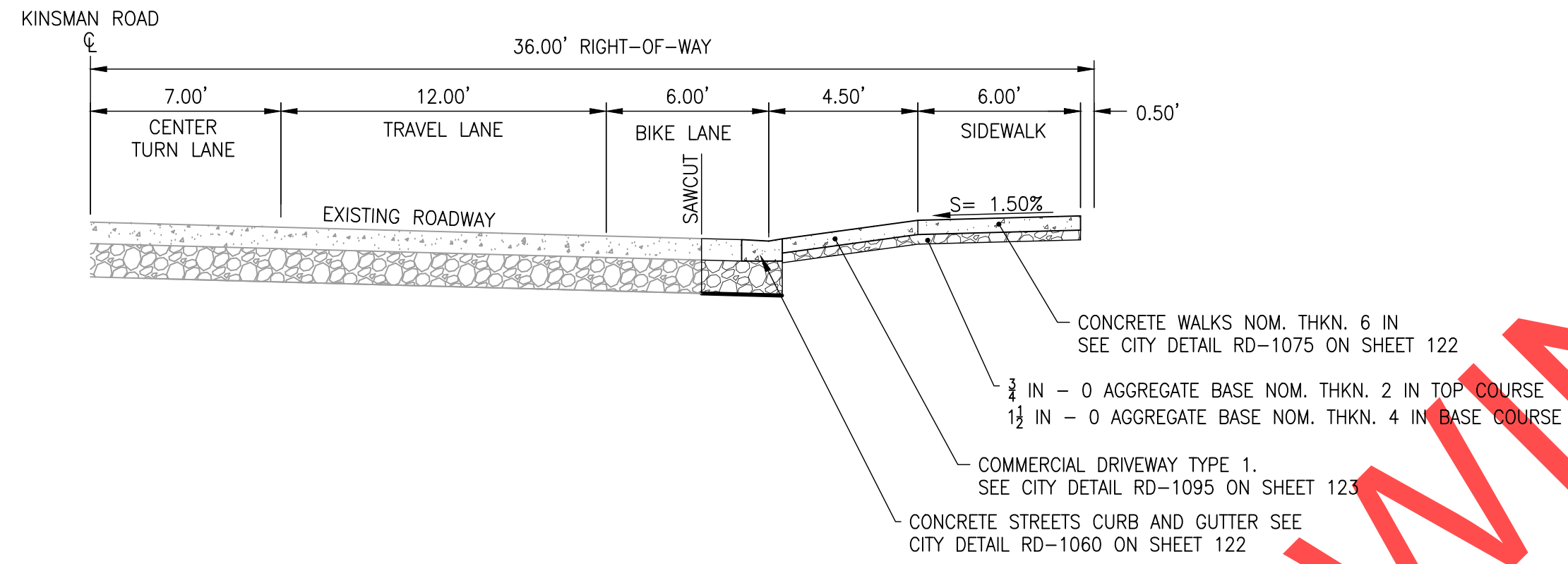
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 ROADWAY TYPICAL SECTIONS

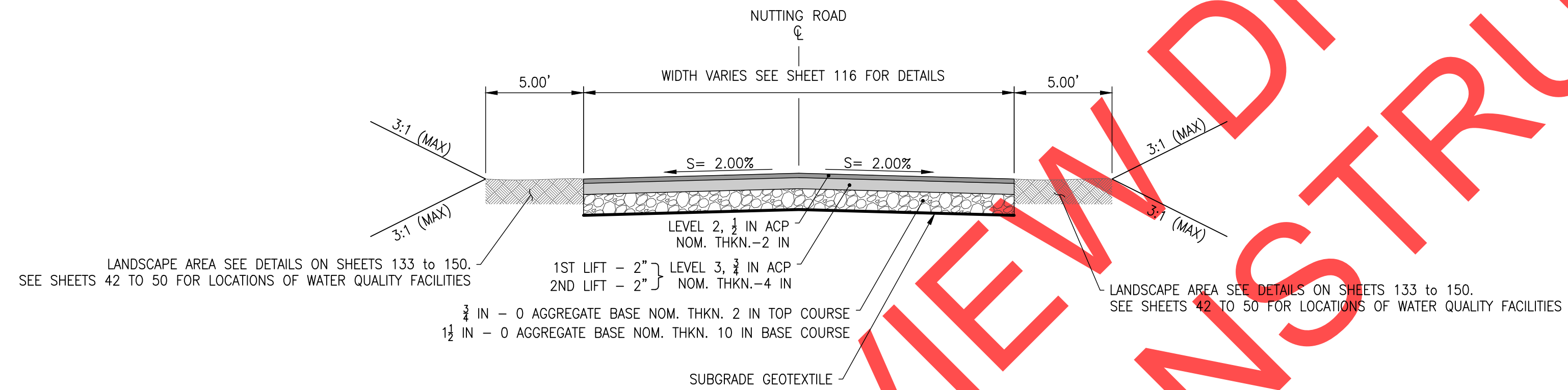
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PROJECT #	2017-02-001
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	26 of 211

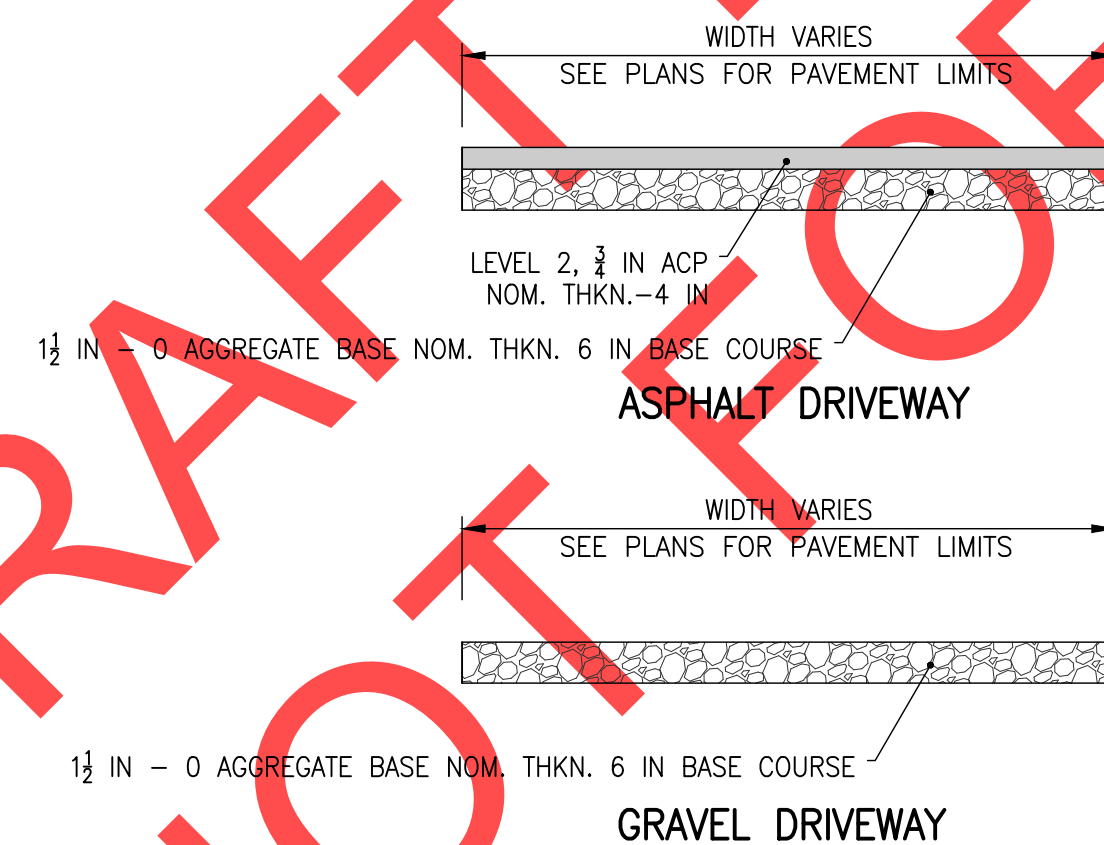
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26 SW KINSMAN ROAD - TYPICAL SECTION
 27 NTS STA. 111+26.62 TO STA. 112+04.14



27 SW NUTTING ROAD - TYPICAL SECTION
 27 NTS STA. 400+11.38 TO STA. 401+38.60



28 DRIVEWAYS (ASPHALT AND GRAVEL) - TYPICAL SECTIONS
 27 NTS

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 29799 SW Town Center Loop E
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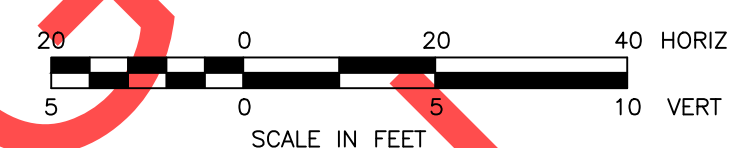
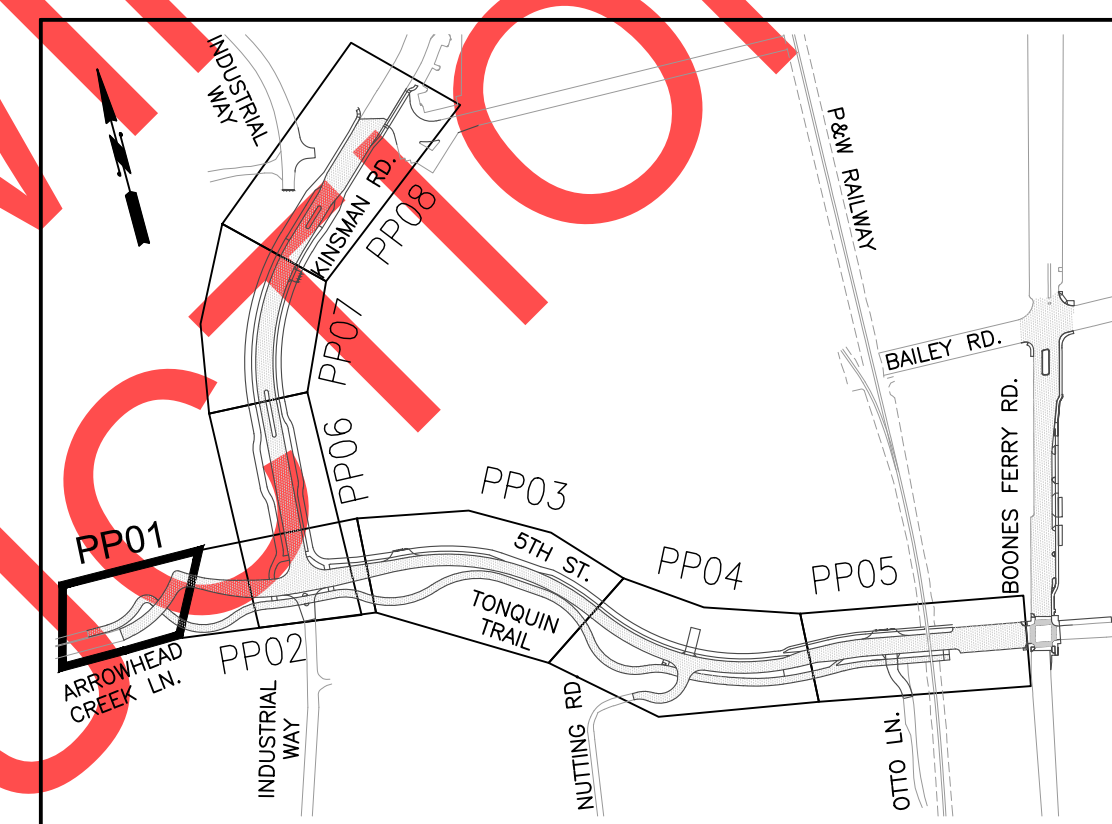
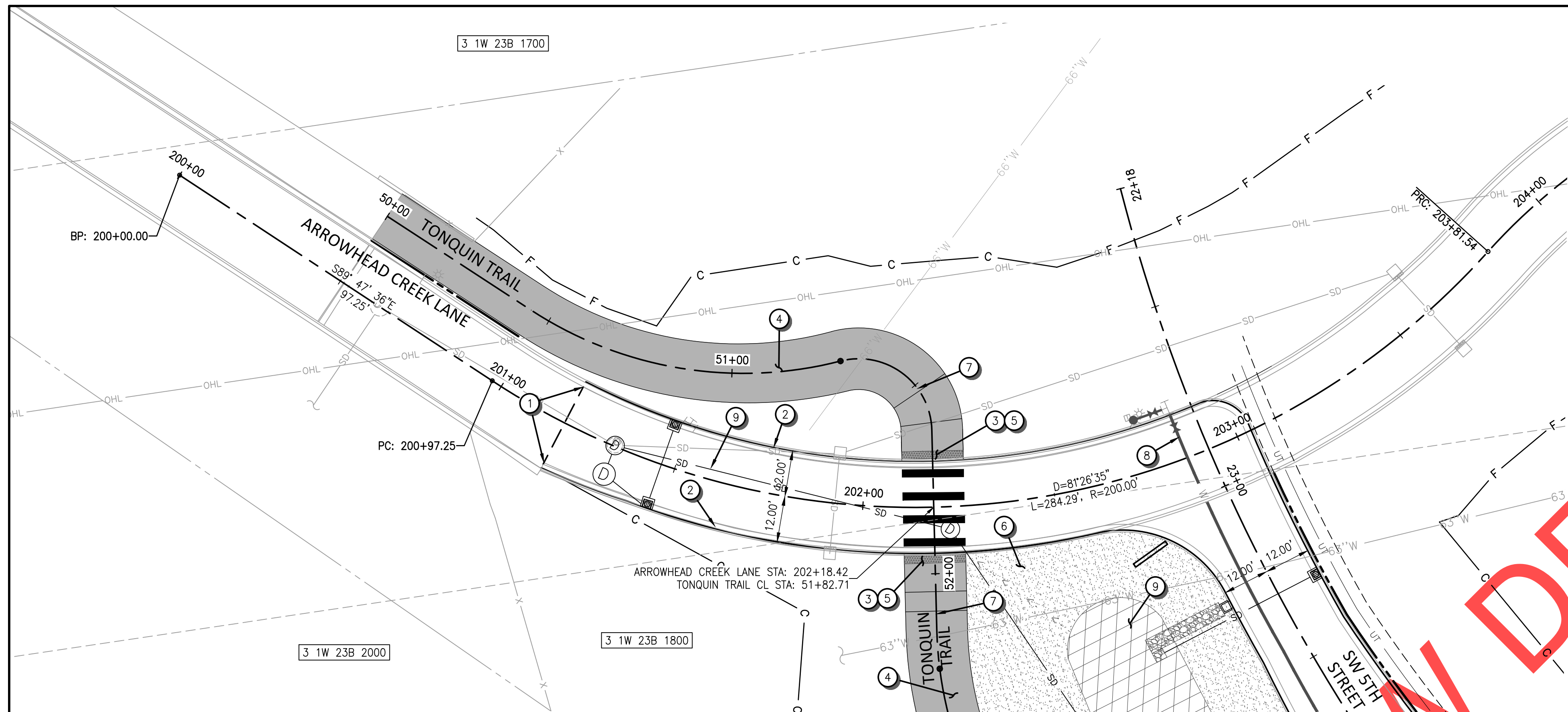
Date 1 February 2019
 Scale NTS
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 ROADWAY TYPICAL SECTIONS

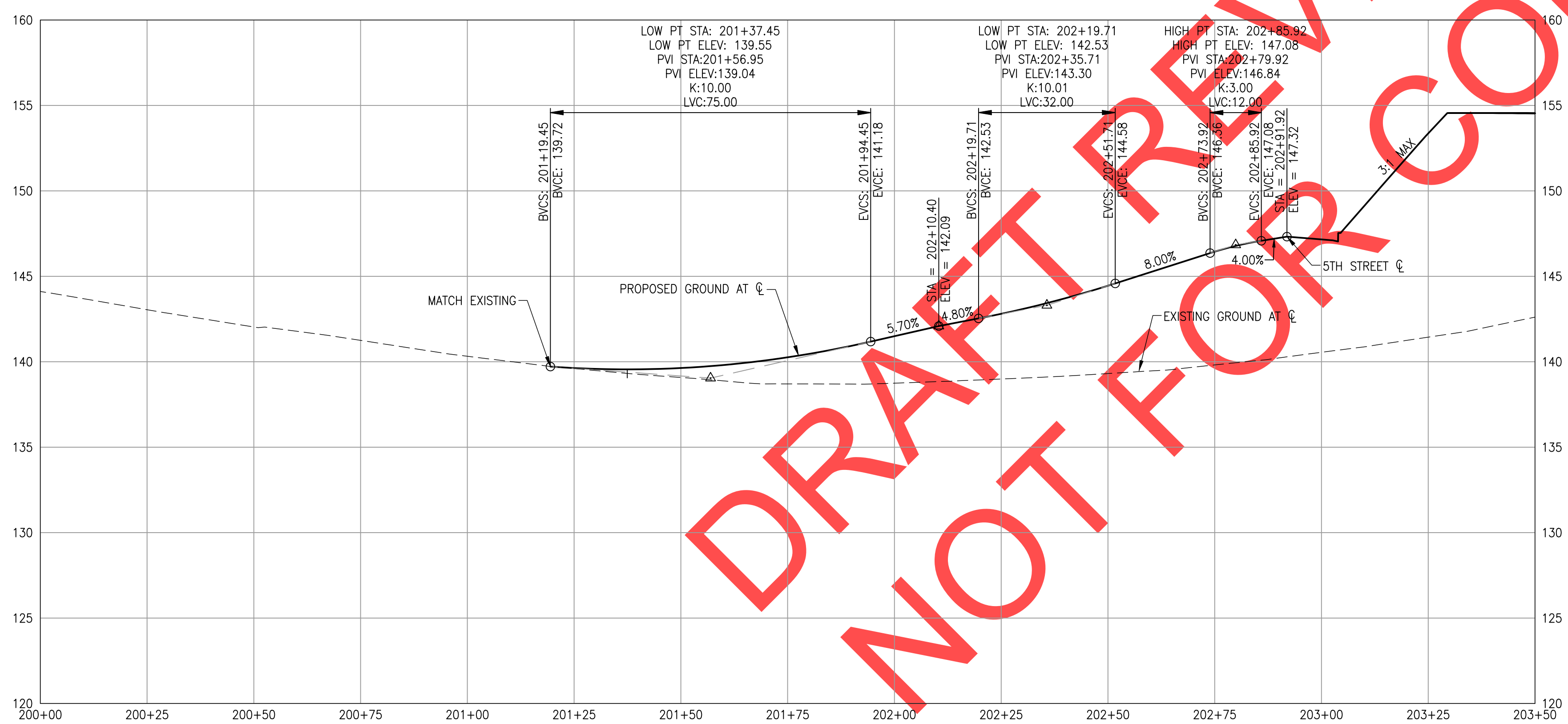


CIP # 4196
 PROJECT # 2017-02-001
 TY08
 27 of 211

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KEY MAP



CONSTRUCTION NOTES

- 1 SAWCUT AND MATCH EXISTING ASPHALT, CONCRETE CURB, AND/OR SIDEWALK.
- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122.
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 37 TO 36.
- 5 DIRECTIONAL ADA RAMP. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.

SURVEY MONUMENT NOTE:

INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



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NO.	DATE	DESCRIPTION

PRELIMINARY

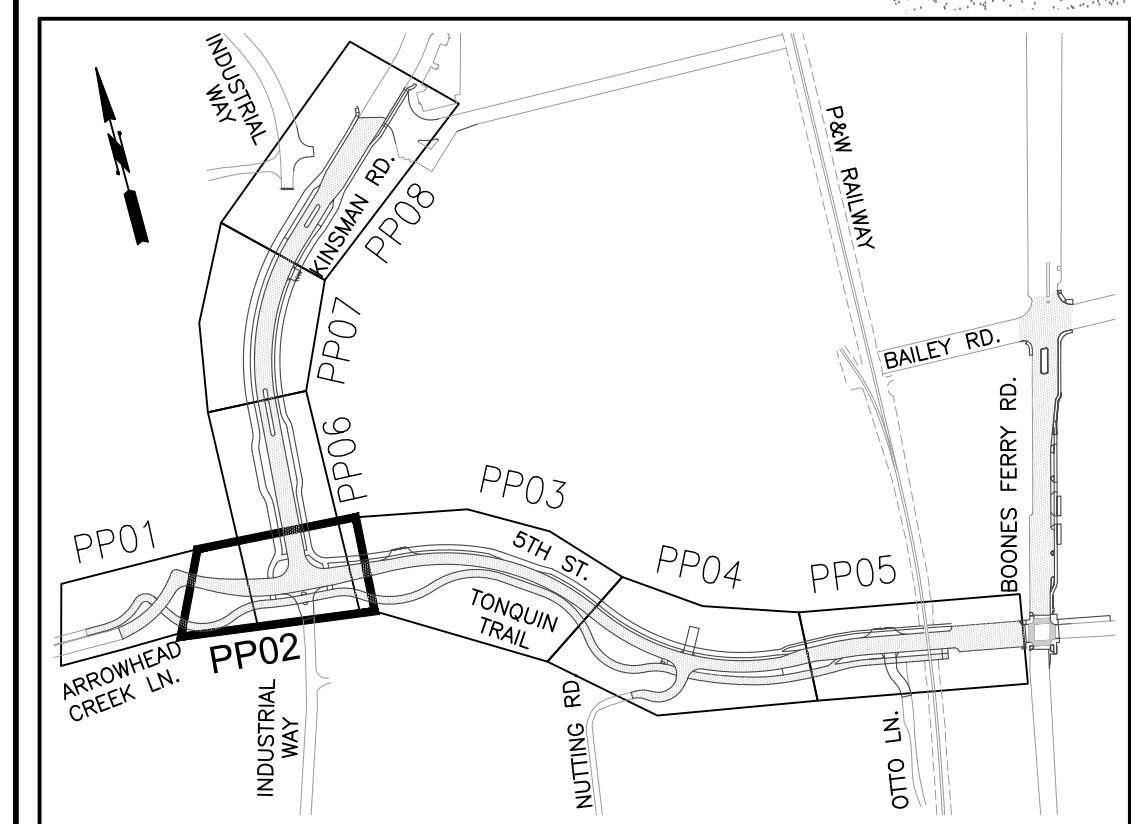
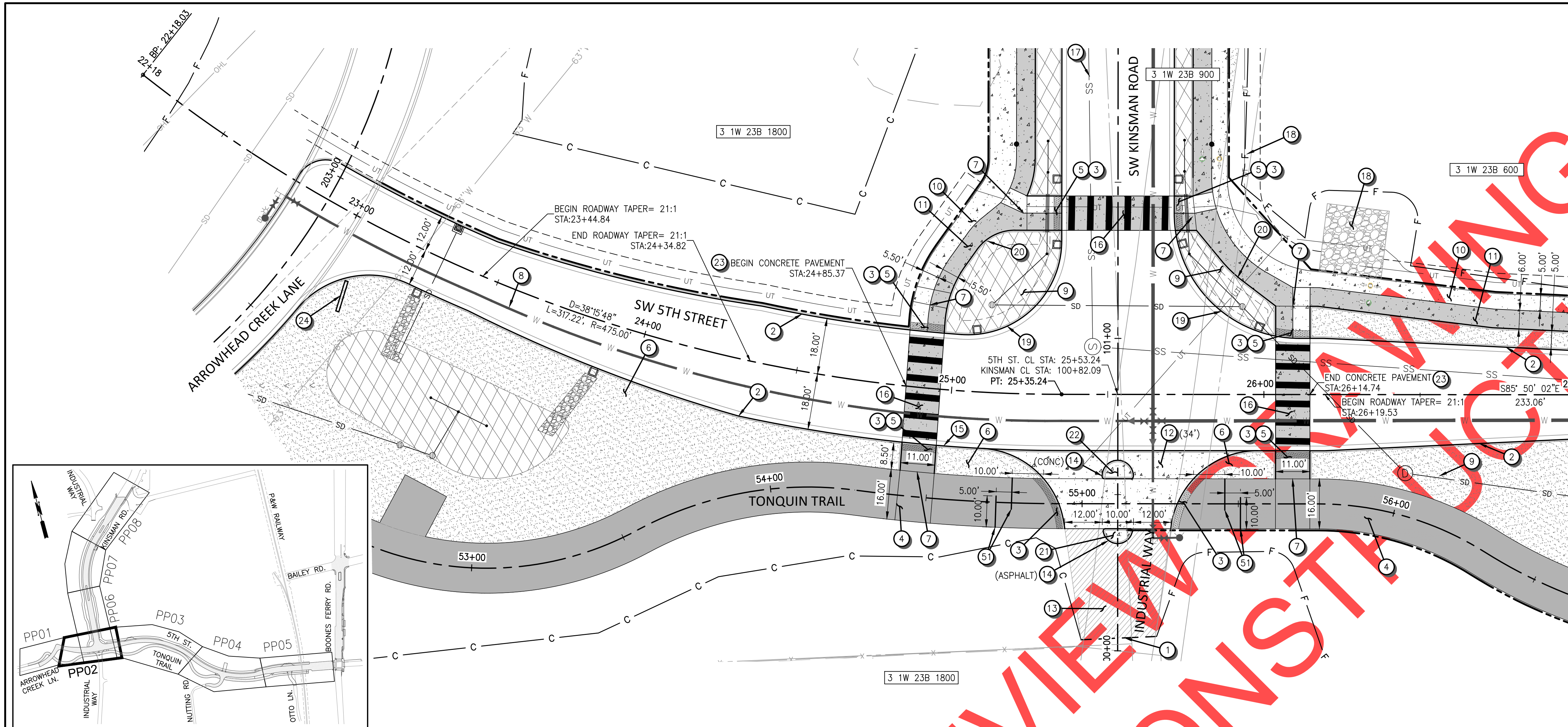
City of Wilsonville
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 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



Date: 1 February 2019
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 Drawn By: EID
 Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 ARROWHEAD CREEK LANE - ROADWAY
 PLAN AND PROFILE**

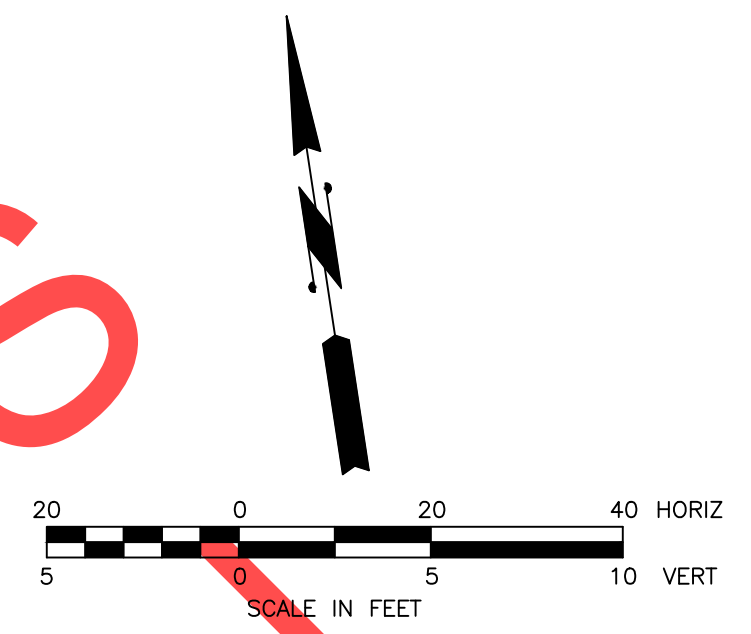
CIP #	4196
PROJECT #	2017-02-001
PP01	28 of 211



CONSTRUCTION NOTES

- 1 SAWCUT AND MATCH EXISTING ASPHALT, CONCRETE CURB, AND/OR SIDEWALK.
- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122.
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 37 TO 36.
- 5 DIRECTIONAL ADA RAMP. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 13 ASPHALT DRIVEWAY. SEE SPOT GRADE INFORMATION ON SHEETS 117 TO 121.
- 14 NON-MOUNTABLE MEDIAN CURB. SEE CITY DETAIL RD-1065 ON SHEET 122.
- 15 CONCRETE STREETS CURB & GUTTER. SEE CITY DETAIL RD-1060 ON SHEET 122.
- 16 DARK GRAY COLORED CONCRETE ROADWAY. SEE SIGNING AND STRIPING SHEETS FOR CROSSWALK STRIPING DETAILS.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 21 CONCRETE ISLAND, ASPHALT DRIVEWAY. SEE SHEET 119 FOR DETAILS.
- 22 CONCRETE ISLAND, CONCRETE DRIVEWAY. SEE SHEET 119 FOR DETAILS.
- 23 PCC TO AC PAVEMENT CONNECTION. SEE CITY DETAIL RD-1175 ON SHEET 124.
- 24 INSTALL "WATER TREATMENT PLANT" SIGN
- 51 OFFSET RAILS, H=42" L=10'. CONSTRUCT AND INSTALL PER ODOT PEDESTRIAN HANDRAIL (THREE RAIL) DETAIL RD770.

SURVEY MONUMENT NOTE:
 INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



REVISIONS

NO.	DESCRIPTION

PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



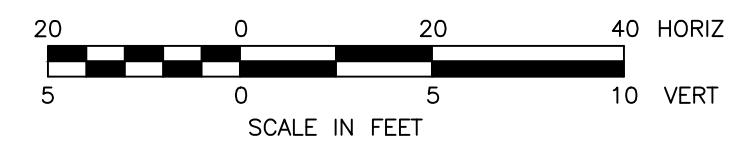
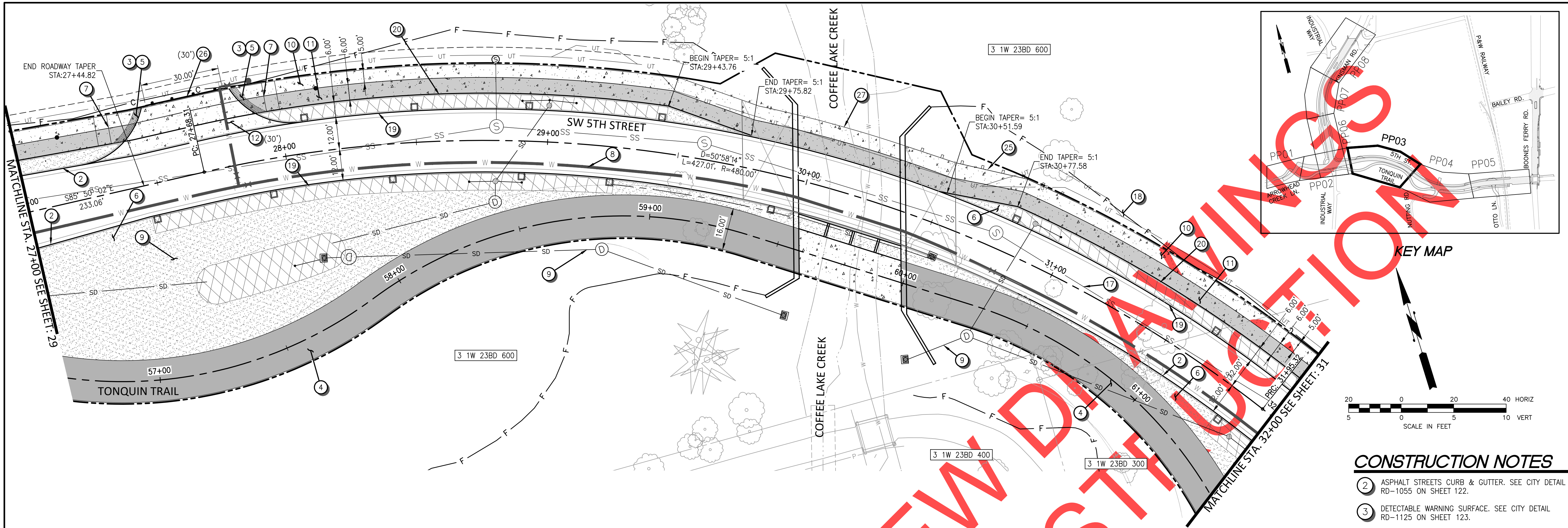
Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/BB
 Drawn By: EID
 Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH ST PLAN & PROFILE - ROADWAY
 PLAN AND PROFILE**



CIP # 4196
 PROJECT # 2017-02-001
 PP02
 29 of 211

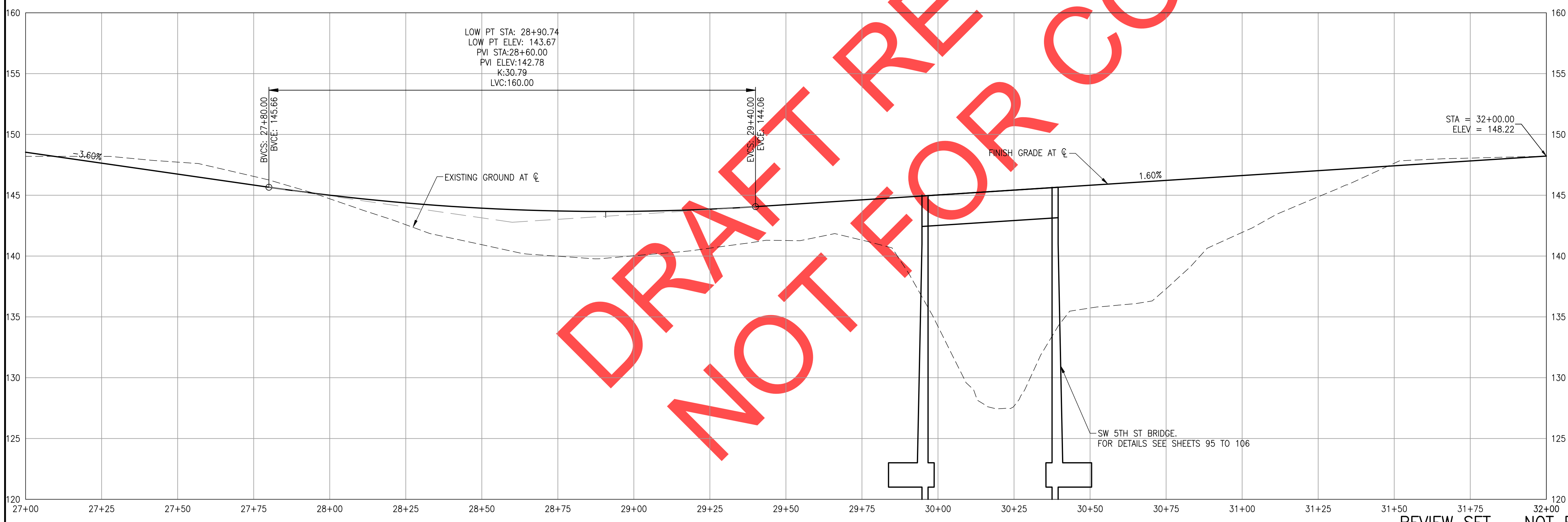
REVIEW SET - NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122.
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 37 TO 36.
- 5 DIRECTIONAL ADA RAMP. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 25 STA. 30+95.33 TO STA. 30+31.25
31" GUARDRAIL TRANSITION TO BRIDGE RAIL
31" GUARDRAIL - 12.5' (TYPE 3)
GUARDRAIL TERMINAL, NON-FLARED
TEST LEVEL 2. L= 38.29'
(SEE ODOT DETAILS RD400, RD415, RD420, RD440, RD441, & RD482)
- 26 STREET BARRICADE (TYPE III). LENGTH SHOWN ON PLANS. SEE CITY DETAIL RD-1220 ON SHEET 125
- 27 BRIDGE STRUCTURE, COFFEE LAKE CREEK (5TH STREET). SEE SHEETS 95 TO 106 FOR DETAILS.

SURVEY MONUMENT NOTE:
INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



REVIEW SET - NOT FOR CONSTRUCTION

REVISIONS

PRELIMINARY

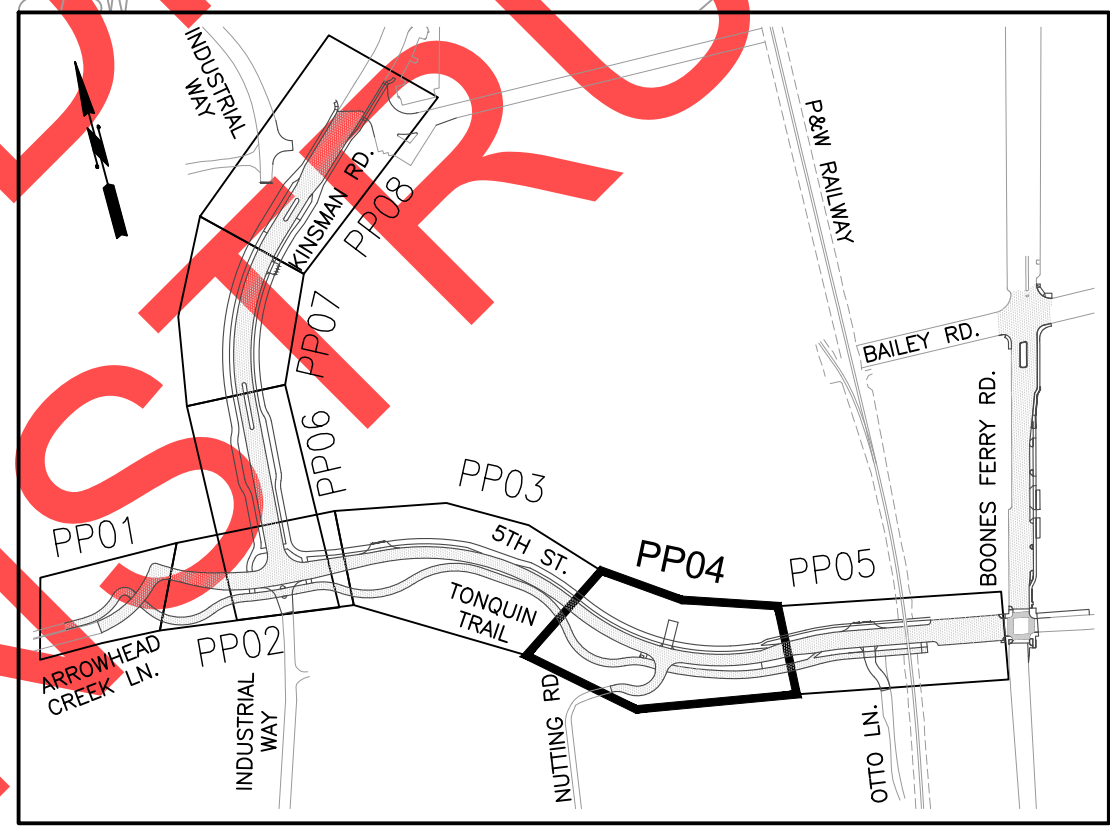
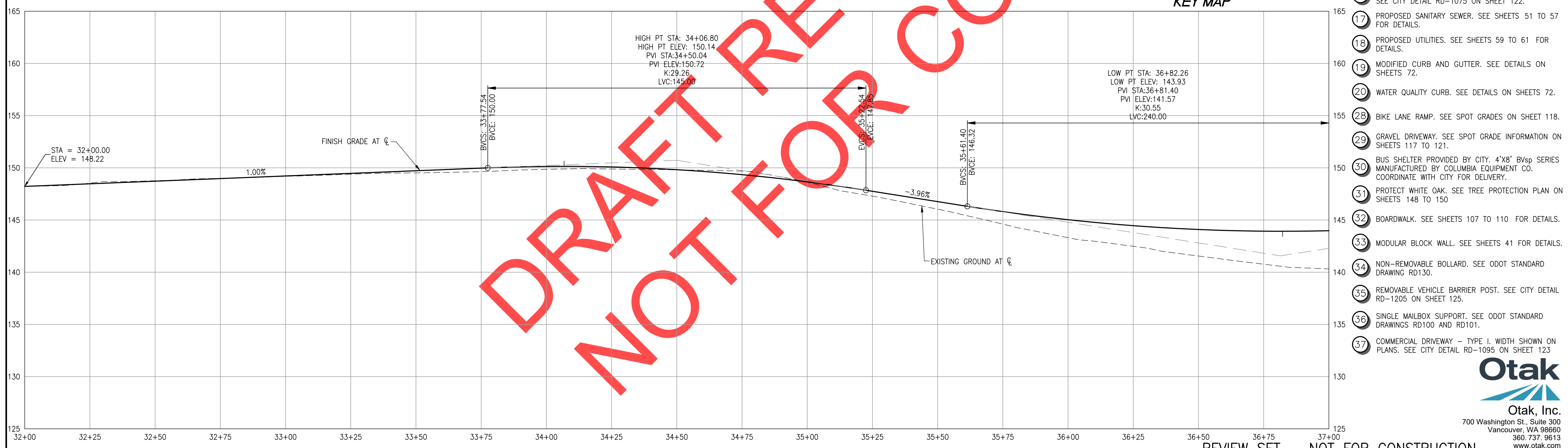
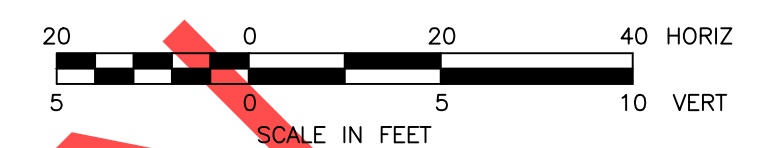
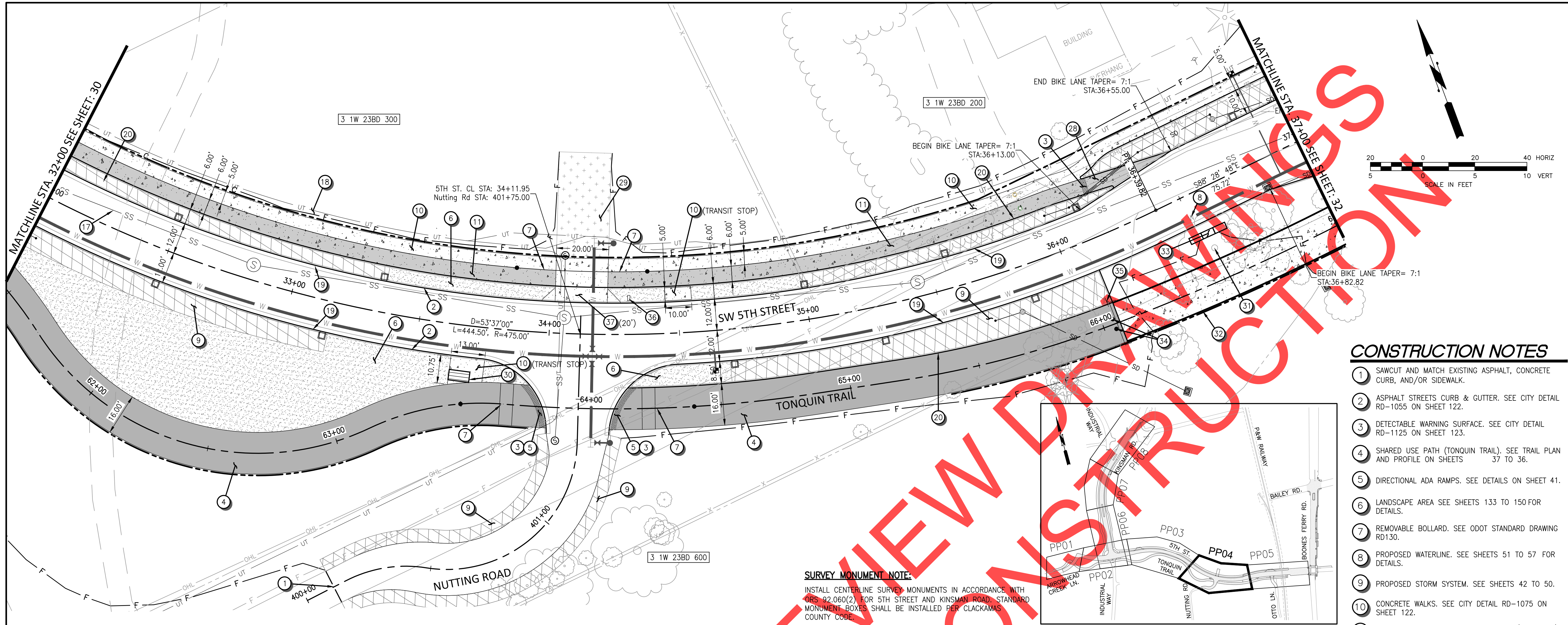
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



Date	1 February 2019
Scale	AS SHOWN
Designed By	PH/BB
Drawn By	EID
Checked By	A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST PLAN & PROFILE - ROADWAY
PLAN AND PROFILE

CIP #	4196
PROJECT #	2017-02-001
PP03	
30	of 211



SURVEY MONUMENT NOTE:
 INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.

CONSTRUCTION NOTES

- 1 SAWCUT AND MATCH EXISTING ASPHALT, CONCRETE CURB, AND/OR SIDEWALK.
- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122.
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 37 TO 36.
- 5 DIRECTIONAL ADA RAMPS. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 28 BIKE LANE RAMP. SEE SPOT GRADES ON SHEET 118.
- 29 GRAVEL DRIVEWAY. SEE SPOT GRADE INFORMATION ON SHEETS 117 TO 121.
- 30 BUS SHELTER PROVIDED BY CITY. 4'X8' BvSp SERIES MANUFACTURED BY COLUMBIA EQUIPMENT CO. COORDINATE WITH CITY FOR DELIVERY.
- 31 PROTECT WHITE OAK. SEE TREE PROTECTION PLAN ON SHEETS 148 TO 150
- 32 BOARDWALK. SEE SHEETS 107 TO 110 FOR DETAILS.
- 33 MODULAR BLOCK WALL. SEE SHEETS 41 FOR DETAILS.
- 34 NON-REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 35 REMOVABLE VEHICLE BARRIER POST. SEE CITY DETAIL RD-1205 ON SHEET 125.
- 36 SINGLE MAILBOX SUPPORT. SEE ODOT STANDARD DRAWINGS RD100 AND RD101.
- 37 COMMERCIAL DRIVEWAY - TYPE I. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1095 ON SHEET 123



REVISIONS

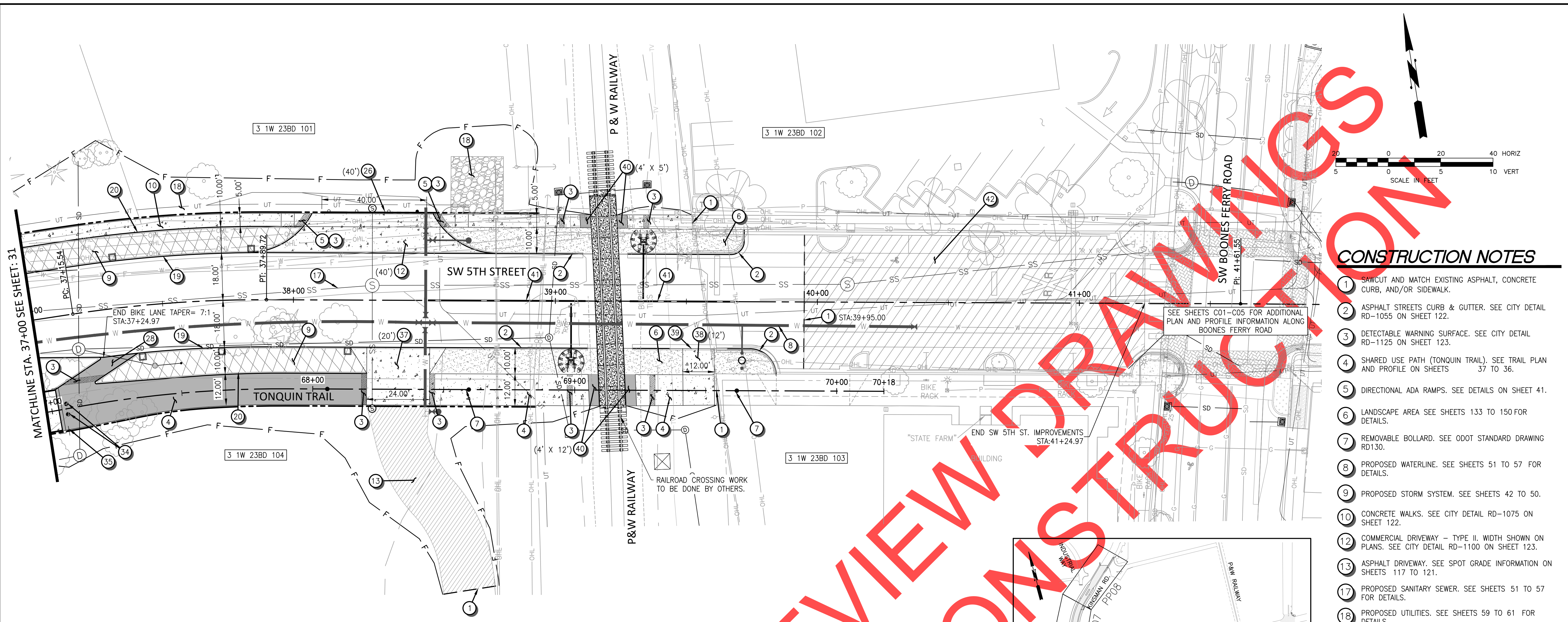
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City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960

Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/BB
 Drawn By: EID
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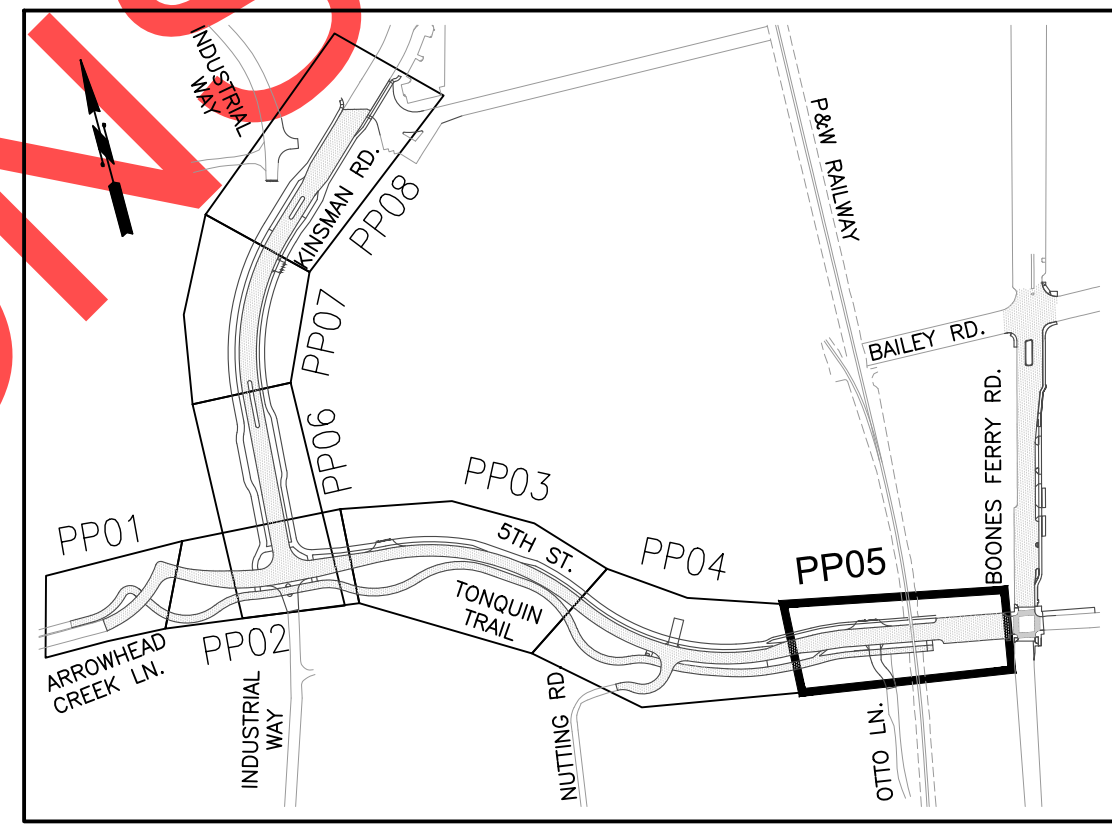
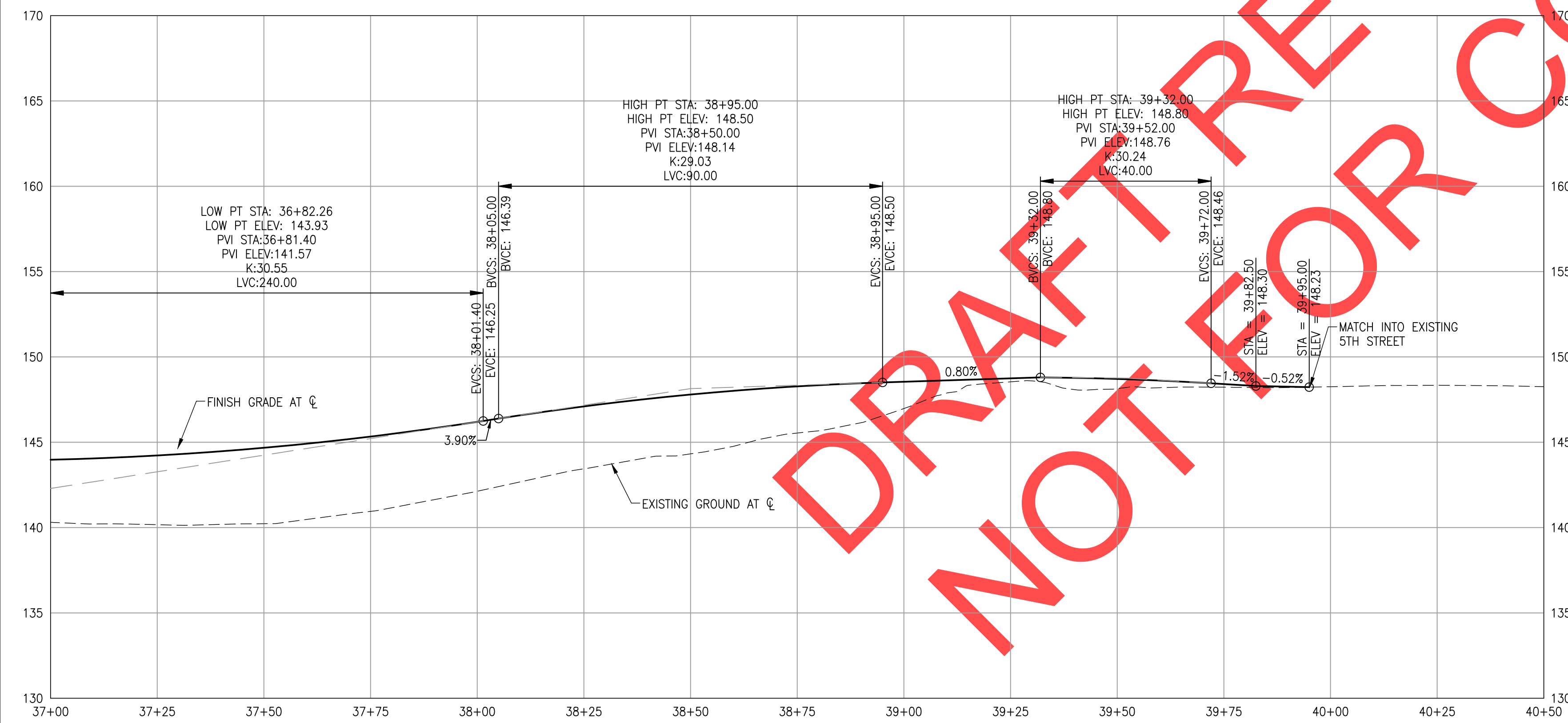
SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH ST PLAN & PROFILE - ROADWAY
 PLAN AND PROFILE

CIP# 4196
 PROJECT# 2017-02-001
 PP04
 31 of 211

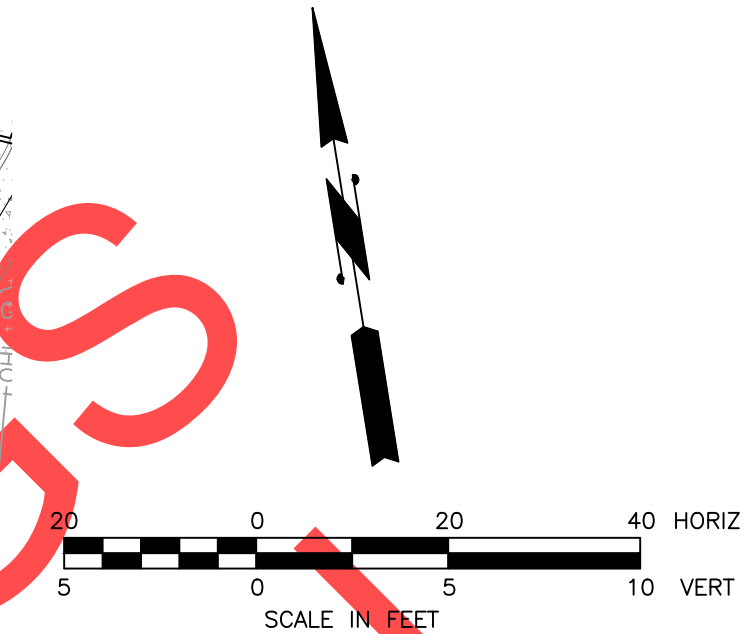


CONSTRUCTION NOTES

- 1 SAWCUT AND MATCH EXISTING ASPHALT, CONCRETE CURB, AND/OR SIDEWALK.
- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122.
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 37 TO 36.
- 5 DIRECTIONAL ADA RAMP. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 13 ASPHALT DRIVEWAY. SEE SPOT GRADE INFORMATION ON SHEETS 117 TO 121.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 26 STREET BARRICADE (TYPE III). LENGTH SHOWN ON PLANS. SEE CITY DETAIL RD-1220 ON SHEET 125.
- 28 BIKE LANE RAMP. SEE SPOT GRADES ON SHEET 118.
- 34 NON-REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 35 REMOVABLE VEHICLE BARRIER POST. SEE CITY DETAIL RD-1205 ON SHEET 125.
- 37 COMMERCIAL DRIVEWAY - TYPE I. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1095 ON SHEET 123.
- 38 ACCESS DRIVEWAY. SEE SHEET 117 FOR SPOT GRADES AND SHEET 40 FOR SIDEWALK SECTION AND DETAILS.
- 39 ASPHALT STREETS ROLLED CURB AND GUTTER. SEE DETAIL ON SHEET 40.
- 40 ASPHALT WALKS. LEVEL 2, 1/2 IN ACP NOM. THKN-6 IN. 3/4 IN-0 AGGREGATE BASE NOM. THKN. 2 IN TOP COURSE 1 1/2 IN-0 AGGREGATE BASE NOM. THKN. 4 IN BASE COURSE
- 41 CONCRETE TRAFFIC SEPARATOR. STA. 38+51.43 TO 39+11.43 STA. 39+28.46 TO 39+68.46 SEE CITY DETAIL RD-1070 ON SHEET 124
- 42 COLD PLANE PAVEMENT REMOVAL 2 IN. CURB TO CURB



SURVEY MONUMENT NOTE:
INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



REVISIONS

PRELIMINARY

City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

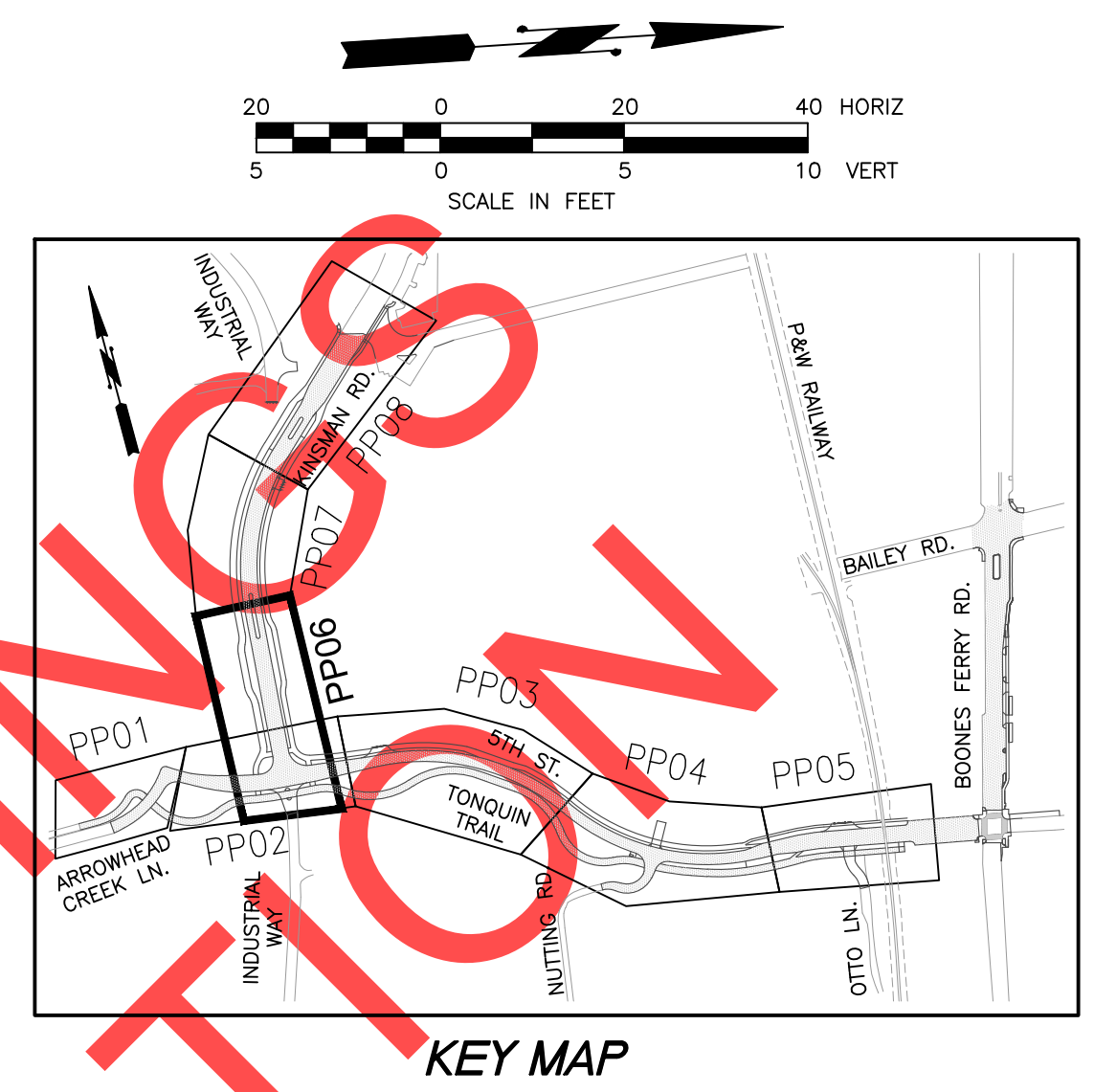
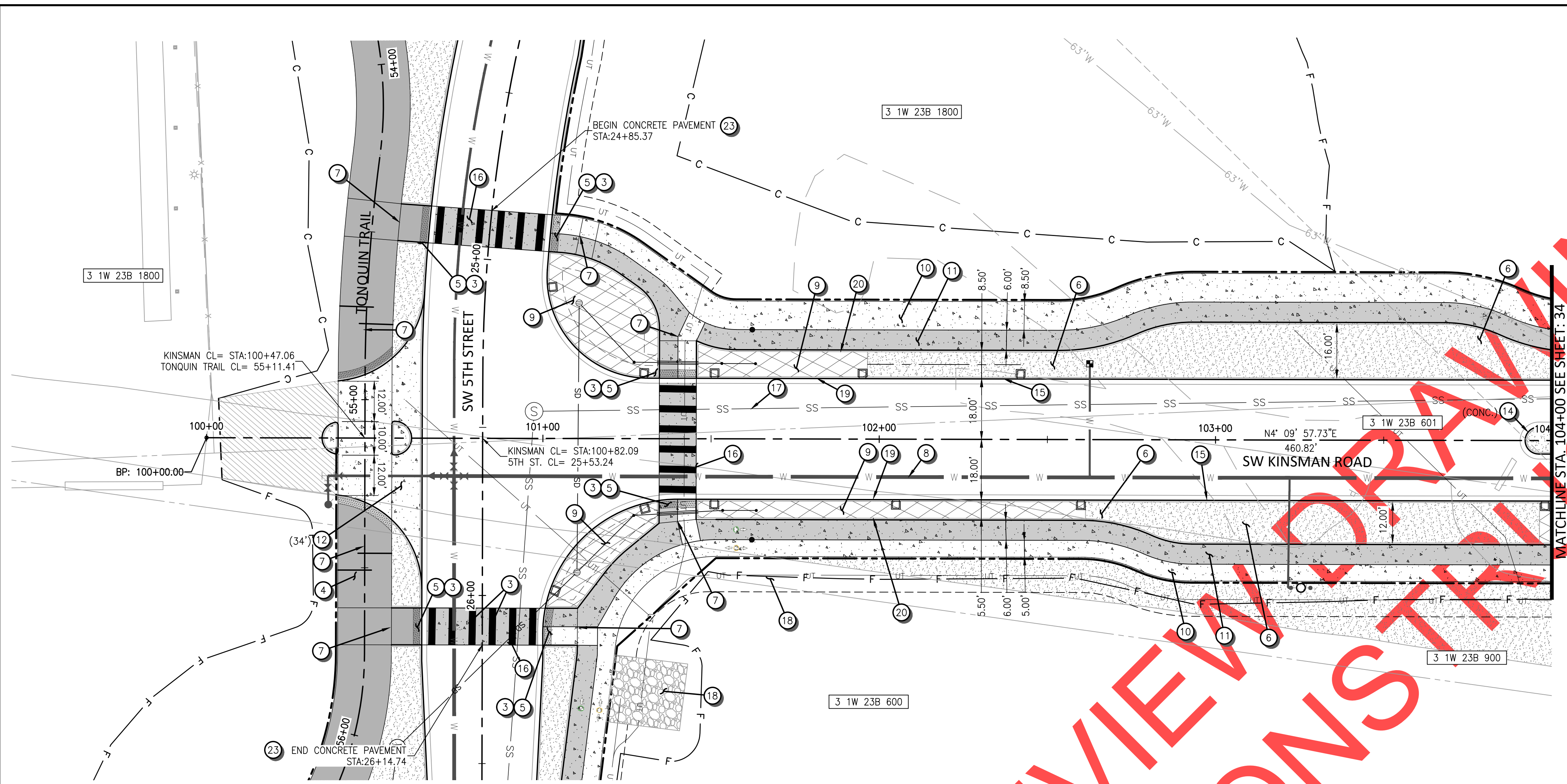
Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST PLAN & PROFILE - ROADWAY
PLAN AND PROFILE**

CIP # 4196
PROJECT # 2017-02-001
PP05
32 of 211



REVIEW SET - NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 4 SHARED USE PATH (TONQUIN TRAIL). SEE TRAIL PLAN AND PROFILE ON SHEETS 36 TO 39.
- 5 DIRECTIONAL ADA RAMPS. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 14 NON-MOUNTABLE MEDIAN CURB. SEE CITY DETAIL RD-1065 ON SHEET 122.
- 15 CONCRETE STREETS CURB & GUTTER. SEE CITY DETAIL RD-1060 ON SHEET 122.
- 16 DARK GARY COLORED CONCRETE ROADWAY. SEE SIGNING AND STRIPING SHEETS FOR CROSSWALK STRIPING DETAILS.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 23 PCC TO AC PAVEMENT CONNECTION, SEE CITY DETAIL RD-1175 ON SHEET 124

SURVEY MONUMENT NOTE:
 INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



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REVISIONS

PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



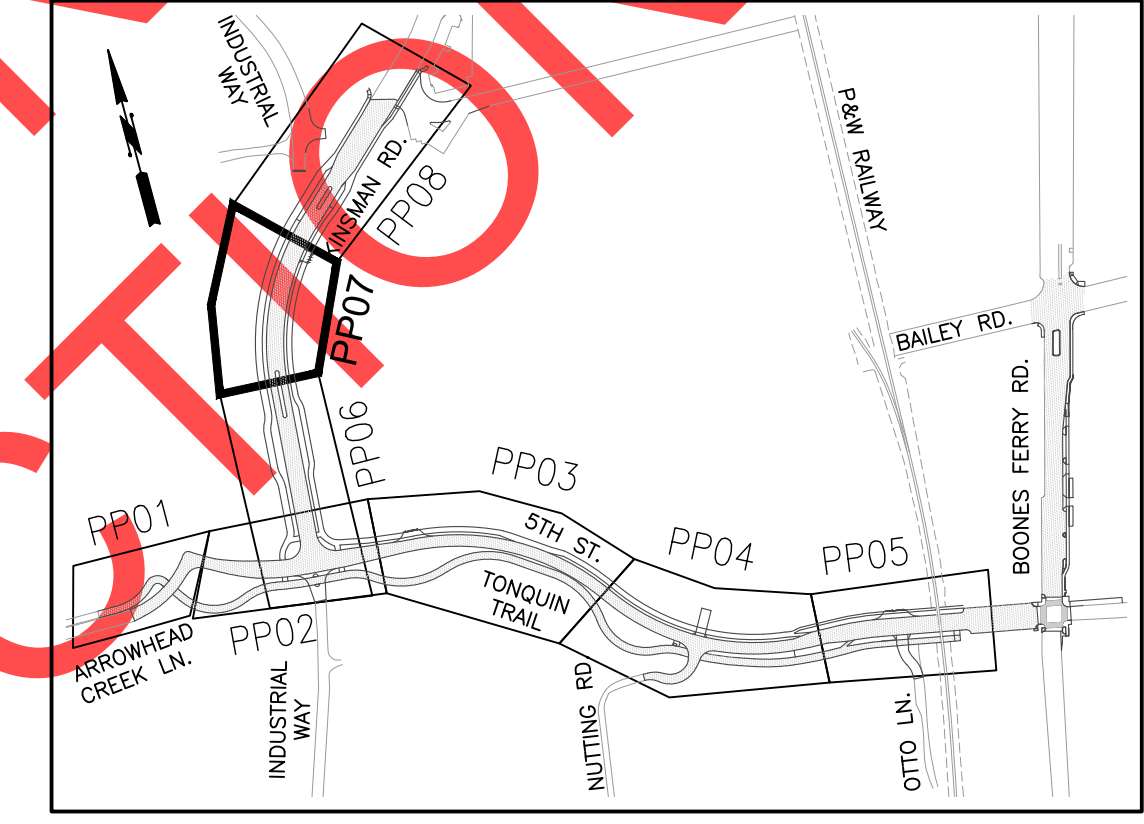
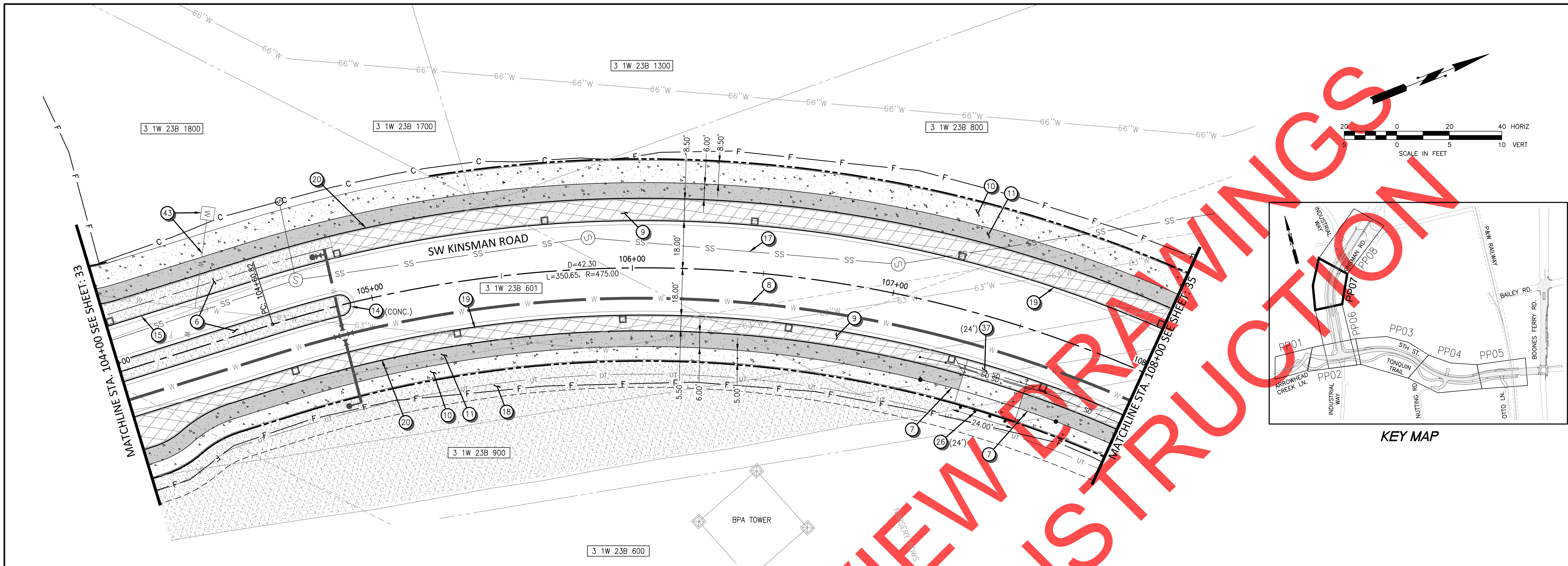
Date	1 February 2019
Scale	AS SHOWN
Designed By	PH/BB
Drawn By	EID
Checked By	A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 KINSMAN RD PLAN & PROFILE - ROADWAY
 PLAN AND PROFILE**

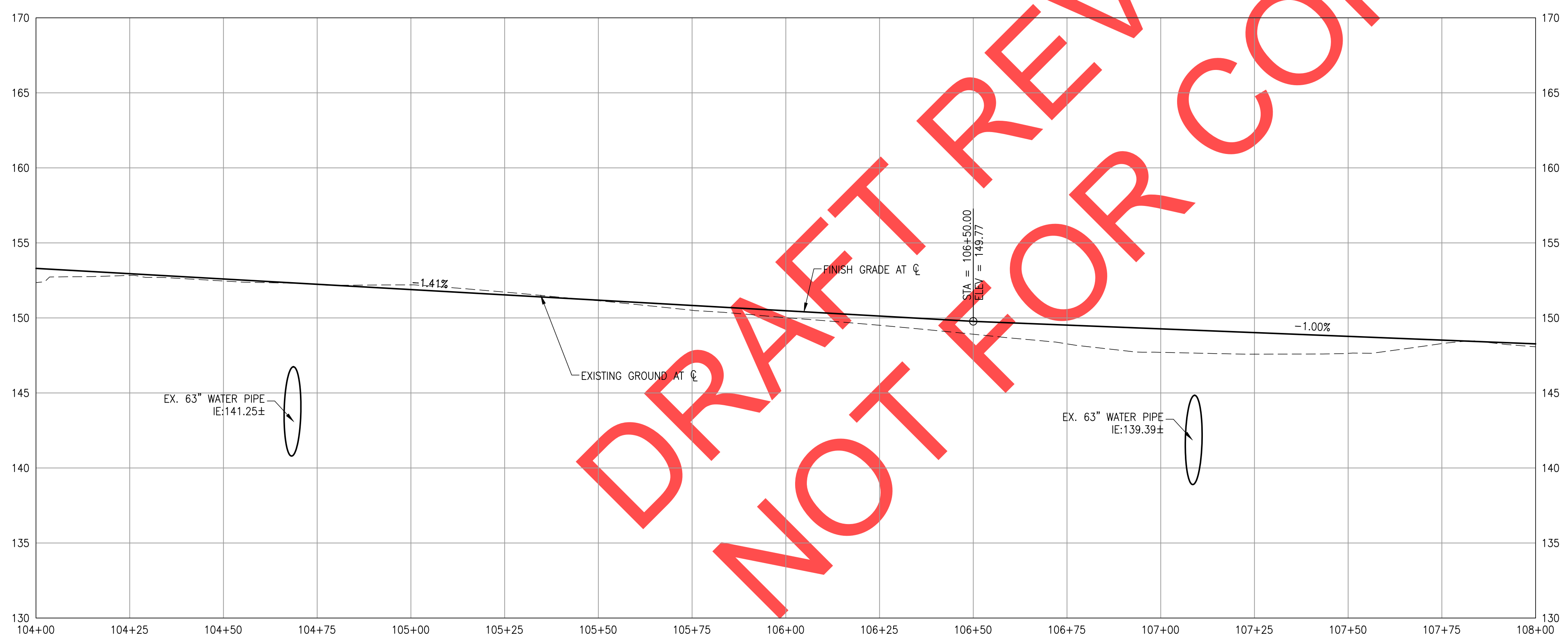


CIP #	4196
PROJECT #	2017-02-001
PP06	
33	of 211

REVIEW SET - NOT FOR CONSTRUCTION



KEY MAP



CONSTRUCTION NOTES

- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 14 NON-MOUNTABLE MEDIAN CURB. SEE CITY DETAIL RD-1065 ON SHEET 122.
- 15 CONCRETE STREETS CURB & GUTTER. SEE CITY DETAIL RD-1060 ON SHEET 122.
- 17 PROPOSED SANITARY SEWER. SEE SHEETS 51 TO 57 FOR DETAILS.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 26 STREET BARRICADE (TYPE III). LENGTH SHOWN ON PLANS. SEE CITY DETAIL RD-1220 ON SHEET 125
- 37 COMMERCIAL DRIVEWAY - TYPE I. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1095 ON SHEET 123
- 43 RELOCATE EXISTING WATER VAULT AND BLOWOFF

SURVEY MONUMENT NOTE:

INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



REVIEW SET - NOT FOR CONSTRUCTION

REVISIONS

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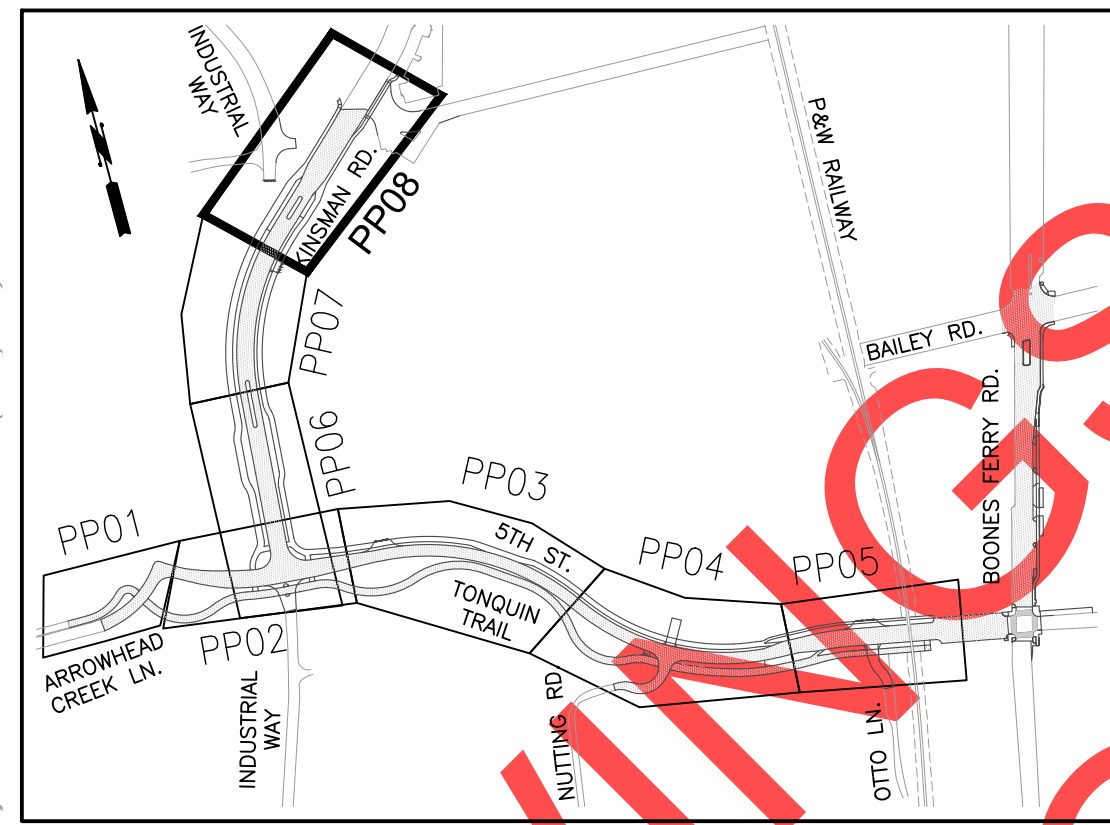
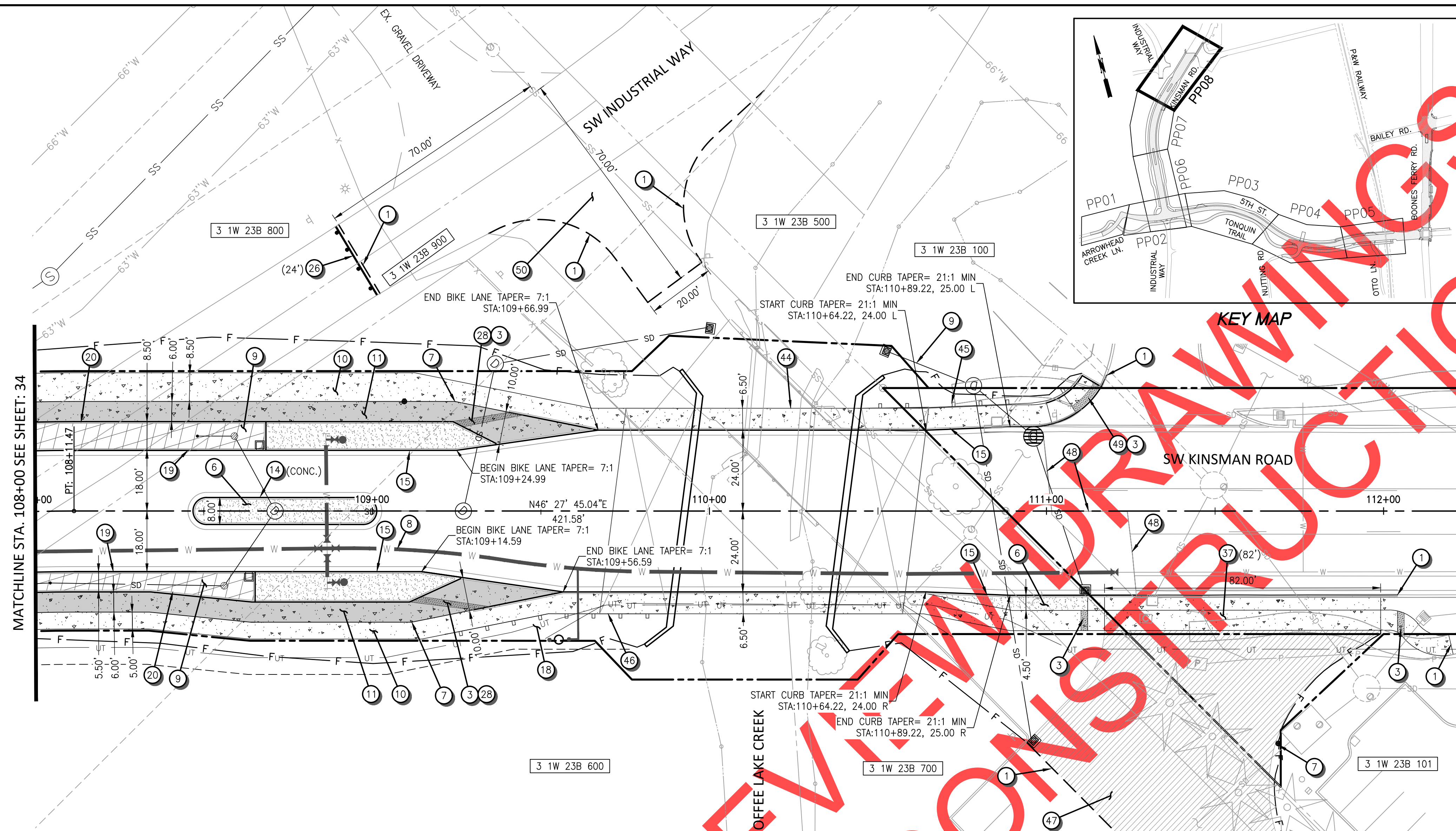
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



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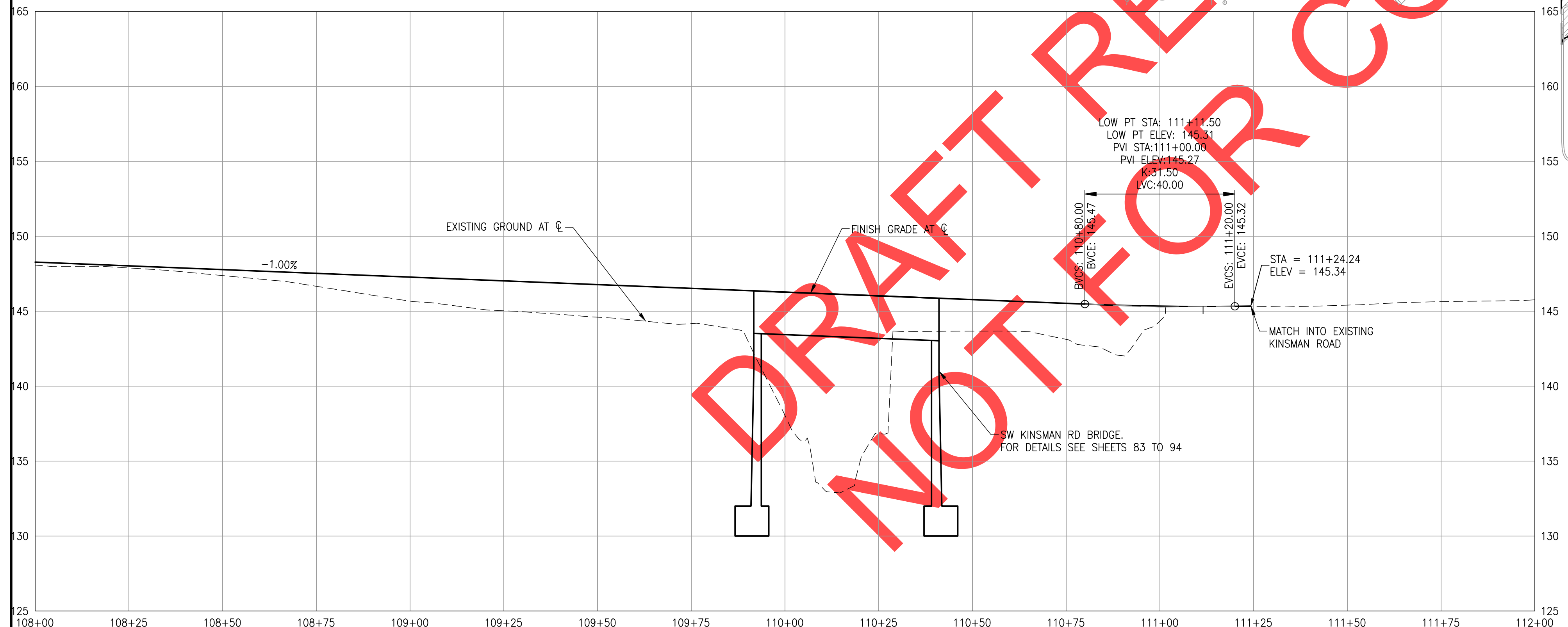
SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN RD PLAN & PROFILE - ROADWAY
PLAN AND PROFILE

CIP#	4196
PROJECT#	2017-02-001
PP07	
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CONSTRUCTION NOTES

- 1 SAWCUT AND MATCH EXISTING ASPHALT, CONCRETE CURB, AND/OR SIDEWALK.
- 2 ASPHALT STREETS CURB & GUTTER. SEE CITY DETAIL RD-1055 ON SHEET 122
- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 8 PROPOSED WATERLINE. SEE SHEETS 51 TO 57 FOR DETAILS.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 11 DARK GRAY COLORED CONCRETE WALKS (BIKE LANE). SEE CITY DETAIL RD-1075 ON SHEET 122.
- 14 NON-MOUNTABLE MEDIAN CURB. SEE CITY DETAIL RD-1065 ON SHEET 122.
- 15 CONCRETE STREETS CURB & GUTTER. SEE CITY DETAIL RD-1060 ON SHEET 122.
- 18 PROPOSED UTILITIES. SEE SHEETS 59 TO 61 FOR DETAILS.
- 19 MODIFIED CURB AND GUTTER. SEE DETAILS ON SHEETS 72.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 26 STREET BARRICADE (TYPE III). LENGTH SHOWN ON PLANS. SEE CITY DETAIL RD-1220 ON SHEET 125.
- 28 BIKE LANE RAMP. SEE SPOT GRADES ON SHEET 120.
- 37 COMMERCIAL DRIVEWAY - TYPE I. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1095 ON SHEET 123
- 44 BRIDGE STRUCTURE COFFEE LAKE CREEK (KINSMAN STREET). SEE SHEETS 83 TO 94 FOR DETAILS.
- 45 STA. 110+43.97 TO STA. 111+09.49
31" GUARDRAIL - 12.5' (TYPE 3)
GUARDRAIL TERMINAL, NON-FLARED
TEST LEVEL 2. L= 38.29'
SEE ODOT DETAILS RD400, RD415, RD420, RD440, RD441, & RD482)
- 46 STA. 109+21.42 TO STA. 109+87.72
GUARDRAIL TERMINAL, NON-FLARED
31" GUARDRAIL - 12.5' (TYPE 3)
31" GUARDRAIL TRANSITION TO BRIDGE RAIL
TEST LEVEL 2. L= 38.29'
SEE ODOT DETAILS RD400, RD415, RD420, RD440, RD441, & RD482)
- 47 ORE PAC ASPHALT DRIVEWAY. SEE SHEET 121 FOR DETAILS.
- 48 MATCH EXISTING CONCRETE PAVEMENT. SEE DETAIL RD-1180 ON SHEET 124.
- 49 PARALLEL SIDEWALK RAMP. SEE DETAIL RD-1120 ON SHEET 123.
- 50 CONSTRUCT HAMMERHEAD ALTERNATIVE #2, SEE CITY DETAIL RD-1050 ON SHEET 124



SURVEY MONUMENT NOTE:
INSTALL CENTERLINE SURVEY MONUMENTS IN ACCORDANCE WITH ORS 92.060(2) FOR 5TH STREET AND KINSMAN ROAD. STANDARD MONUMENT BOXES SHALL BE INSTALLED PER CLACKAMAS COUNTY CODE.



REVIEW SET - NOT FOR CONSTRUCTION

REVISIONS

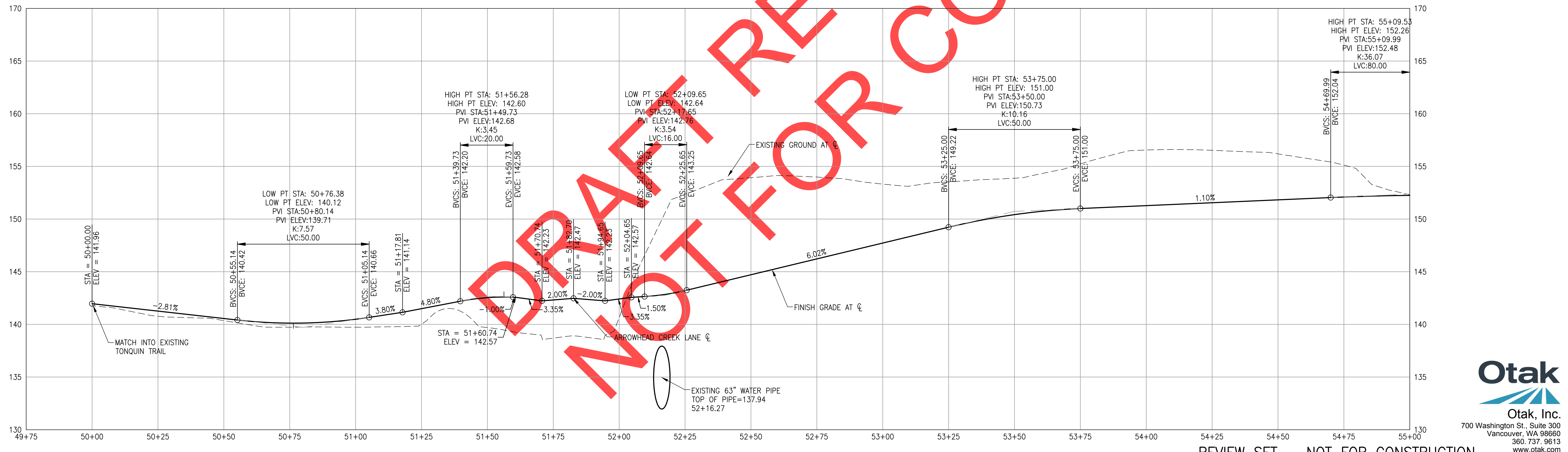
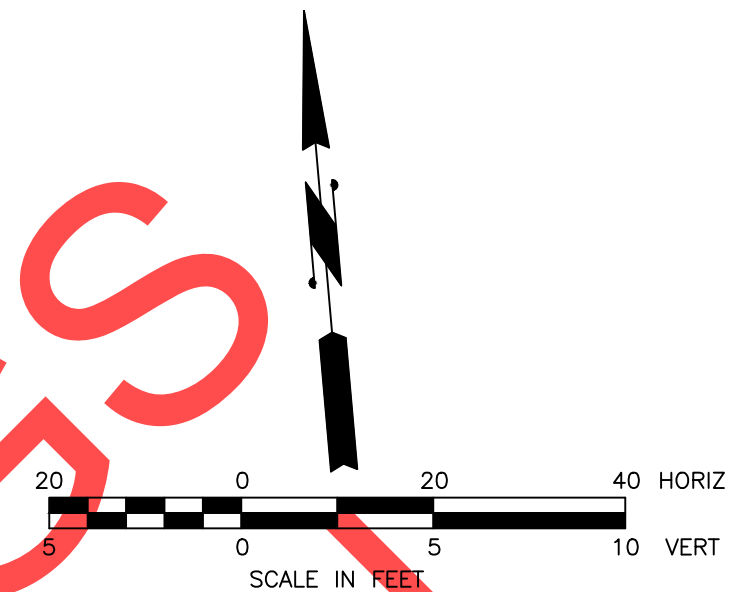
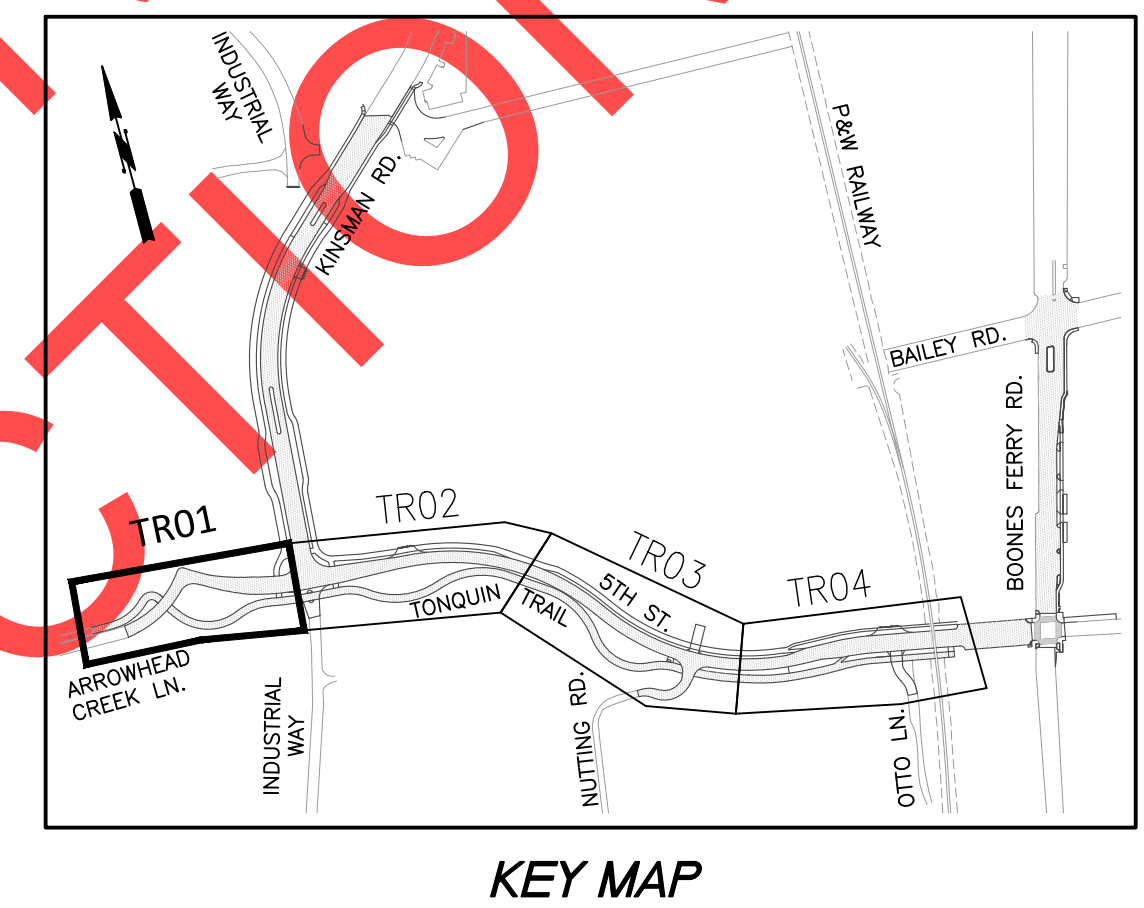
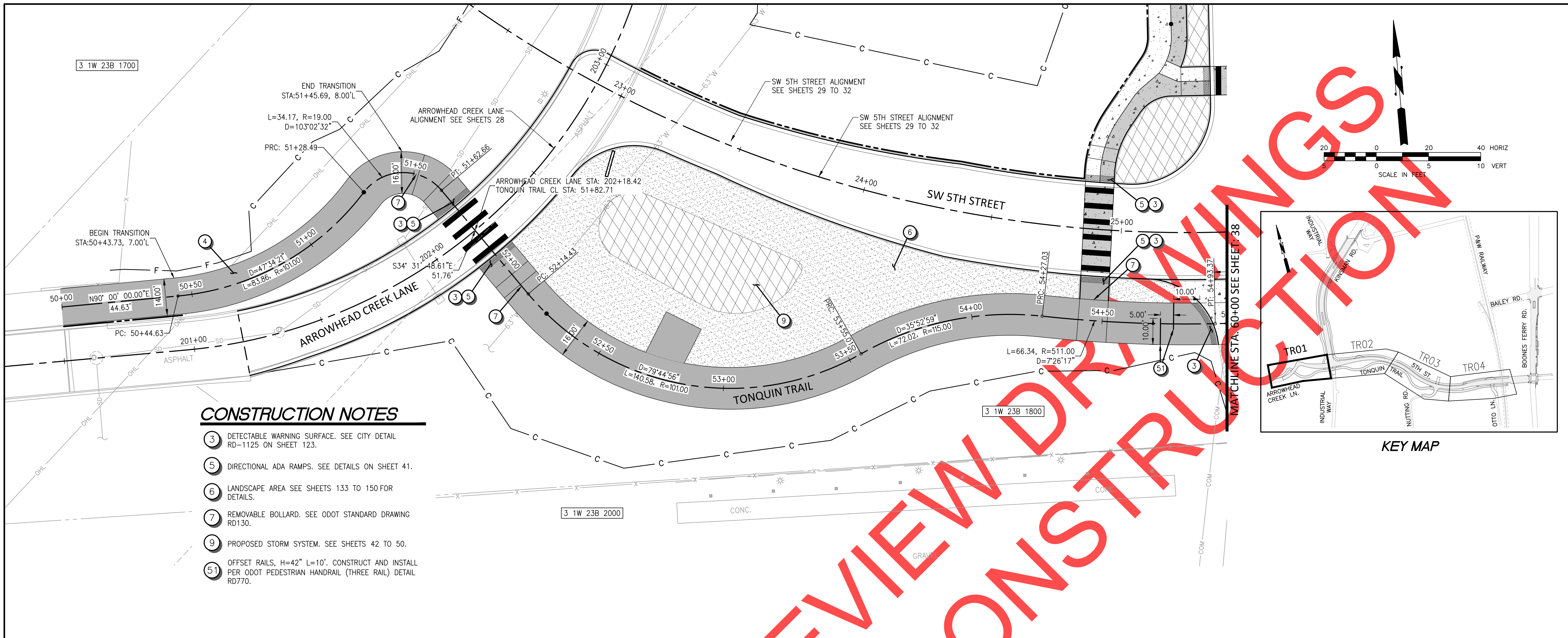
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City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN RD PLAN & PROFILE - ROADWAY
PLAN AND PROFILE

CIP# 4196
PROJECT# 2017-02-001
PP08
35 of 211



REVISIONS

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City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

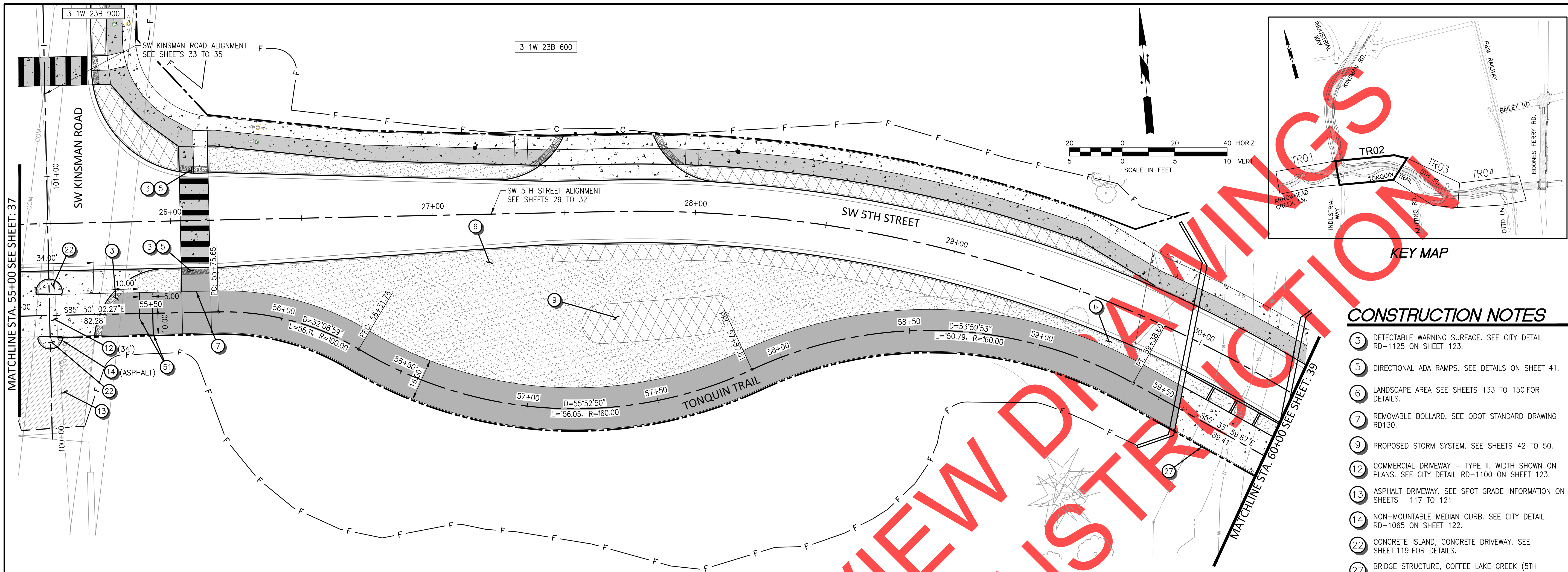
Date: 22 January 2019
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Designed By: PH/BB
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Checked By: A.HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
TONQUIN TRAIL PLAN AND PROFILE**

CIP# 4196
PROJECT# 2017-02-001
TRO1
36 of 211

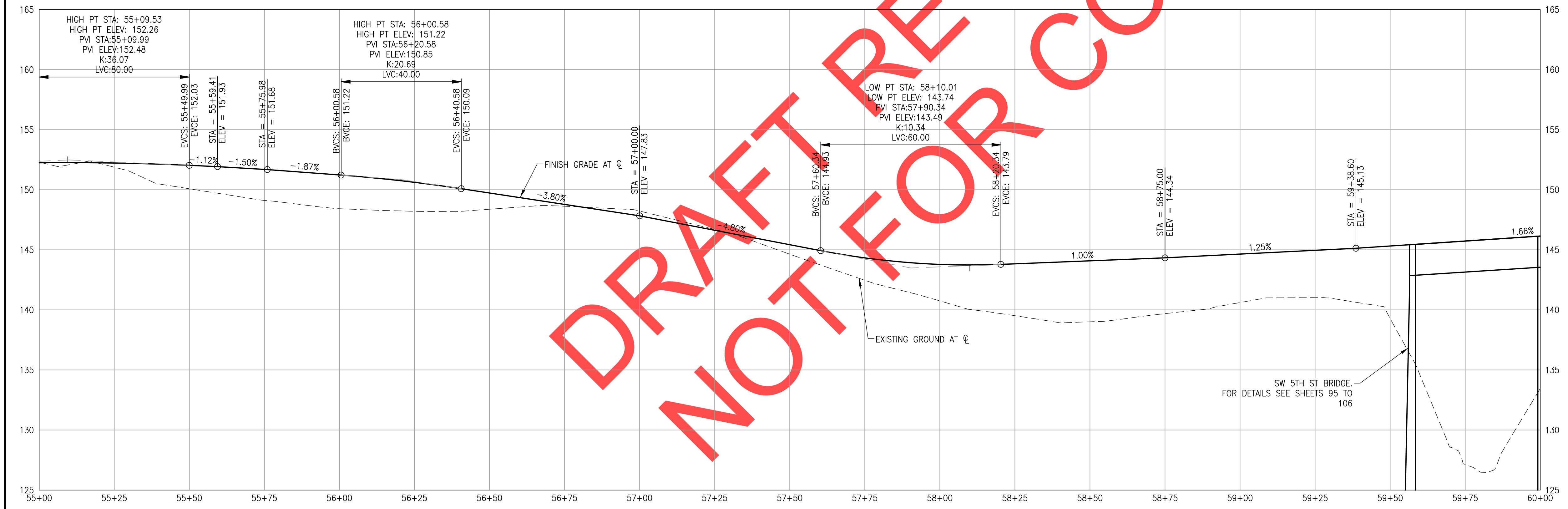


REVIEW SET - NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 5 DIRECTIONAL ADA RAMP. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 13 ASPHALT DRIVEWAY. SEE SPOT GRADE INFORMATION ON SHEETS 117 TO 121.
- 14 NON-MOUNTABLE MEDIAN CURB. SEE CITY DETAIL RD-1065 ON SHEET 122.
- 22 CONCRETE ISLAND, CONCRETE DRIVEWAY. SEE SHEET 119 FOR DETAILS.
- 27 BRIDGE STRUCTURE, COFFEE LAKE CREEK (5TH STREET). SEE SHEETS 95 TO 106 FOR DETAILS.
- 51 OFFSET RAILS, H=42" L=10'. CONSTRUCT AND INSTALL PER ODOT PEDESTRIAN HANDRAIL (THREE RAIL) DETAIL RD770.



REVIEW SET - NOT FOR CONSTRUCTION



REVISIONS

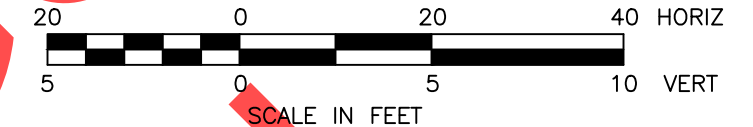
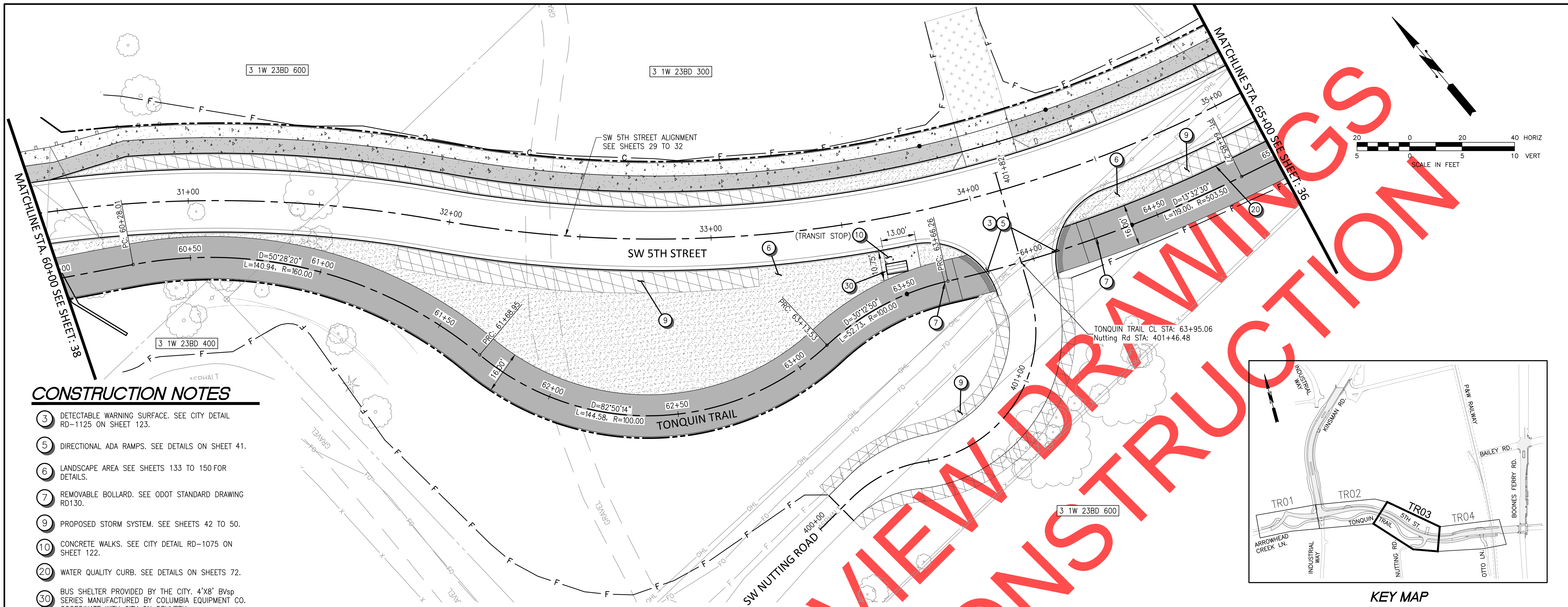
PRELIMINARY

City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 22 January 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

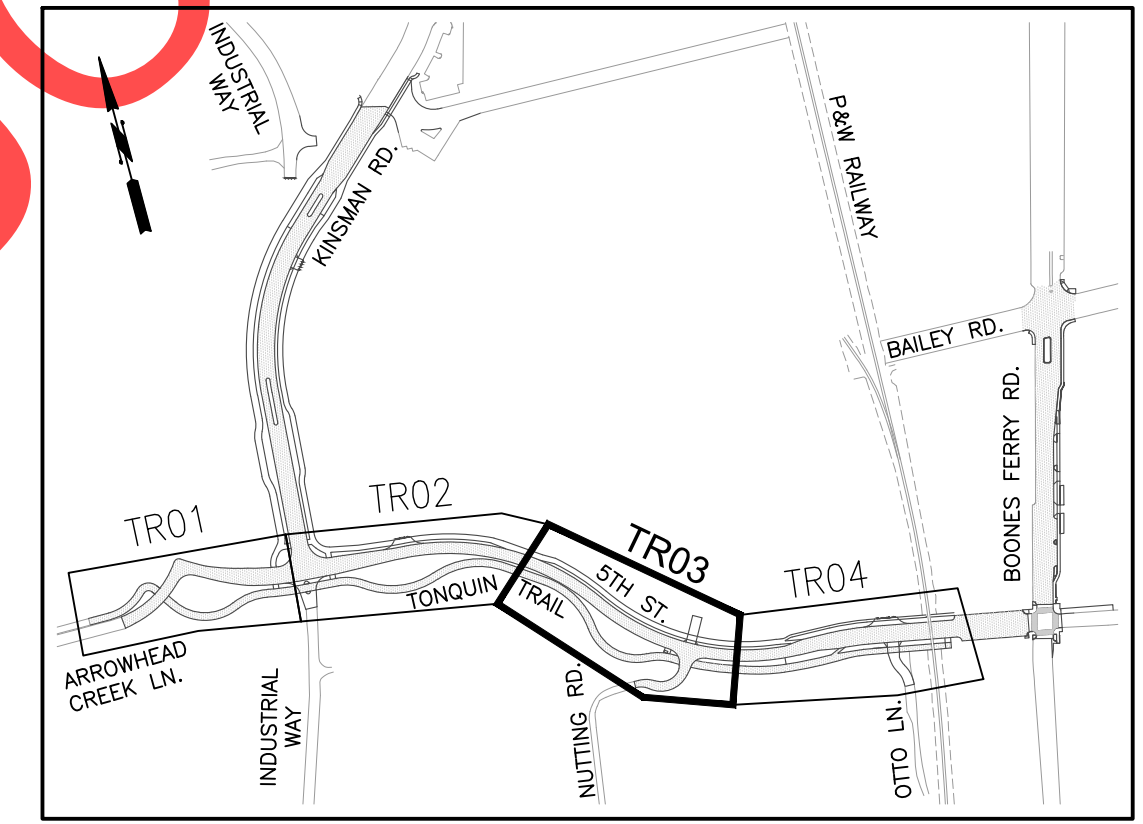
SW 5TH ST TO SW KINSMAN RD EXTENSION
TONQUIN TRAIL PLAN AND PROFILE

CIP # 4196
PROJECT # 2017-02-001
TR02
37 of 211



CONSTRUCTION NOTES

- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 5 DIRECTIONAL ADA RAMPS. SEE DETAILS ON SHEET 41.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 10 CONCRETE WALKS. SEE CITY DETAIL RD-1075 ON SHEET 122.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 30 BUS SHELTER PROVIDED BY THE CITY. 4'X8' BVSp SERIES MANUFACTURED BY COLUMBIA EQUIPMENT CO. COORDINATE WITH CITY ON DELIVERY.



REVISIONS

PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960

Date: 22 January 2019
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 TONQUIN TRAIL PLAN AND PROFILE

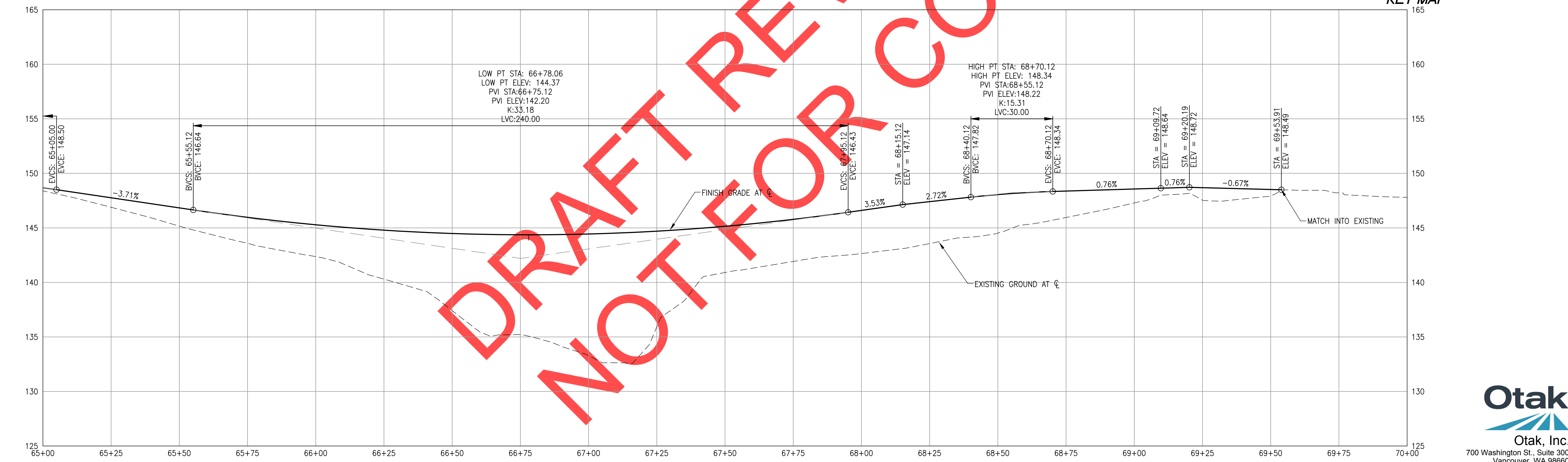
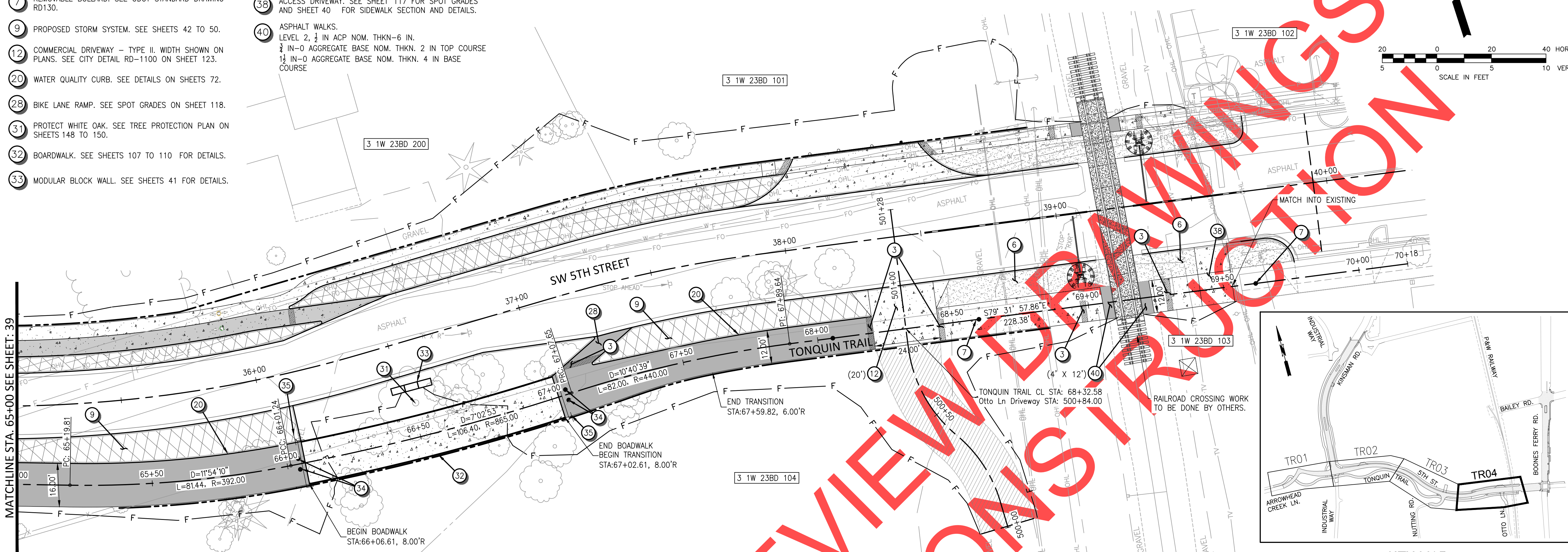
CIP # 4196
 PROJECT # 2017-02-001
 TR03
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DRAFT REVIEW DRAWINGS NOT FOR CONSTRUCTION

REVIEW SET - NOT FOR CONSTRUCTION

CONSTRUCTION NOTES

- 3 DETECTABLE WARNING SURFACE. SEE CITY DETAIL RD-1125 ON SHEET 123.
- 6 LANDSCAPE AREA SEE SHEETS 133 TO 150 FOR DETAILS.
- 7 REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 9 PROPOSED STORM SYSTEM. SEE SHEETS 42 TO 50.
- 12 COMMERCIAL DRIVEWAY - TYPE II. WIDTH SHOWN ON PLANS. SEE CITY DETAIL RD-1100 ON SHEET 123.
- 20 WATER QUALITY CURB. SEE DETAILS ON SHEETS 72.
- 28 BIKE LANE RAMP. SEE SPOT GRADES ON SHEET 118.
- 31 PROTECT WHITE OAK. SEE TREE PROTECTION PLAN ON SHEETS 148 TO 150.
- 32 BOARDWALK. SEE SHEETS 107 TO 110 FOR DETAILS.
- 33 MODULAR BLOCK WALL. SEE SHEETS 41 FOR DETAILS.
- 34 NON-REMOVABLE BOLLARD. SEE ODOT STANDARD DRAWING RD130.
- 35 REMOVABLE VEHICLE BARRIER POST. SEE CITY DETAIL RD-1205 ON SHEET 125.
- 38 ACCESS DRIVEWAY. SEE SHEET 117 FOR SPOT GRADES AND SHEET 40 FOR SIDEWALK SECTION AND DETAILS.
- 40 ASPHALT WALKS. LEVEL 2, 1/2 IN ACP NOM. THKN-6 IN. 1/2 IN-0 AGGREGATE BASE NOM. THKN. 2 IN TOP COURSE 1 1/2 IN-0 AGGREGATE BASE NOM. THKN. 4 IN BASE COURSE



KEY MAP



REVISIONS

PRELIMINARY

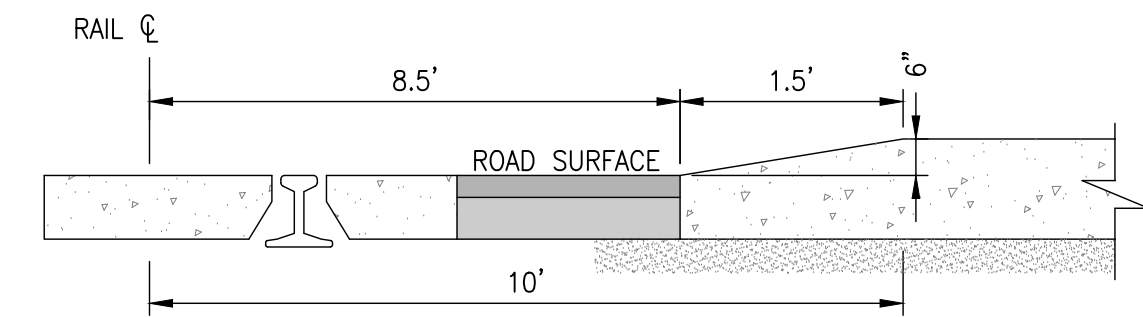
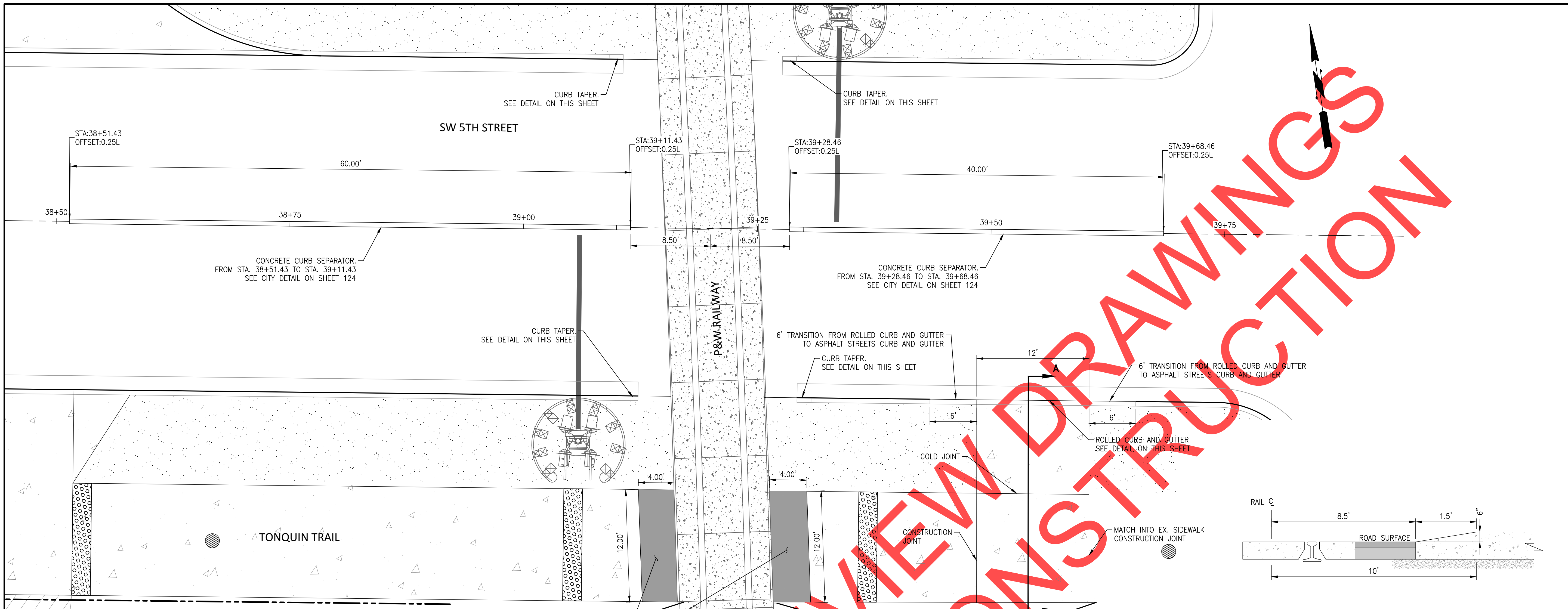
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

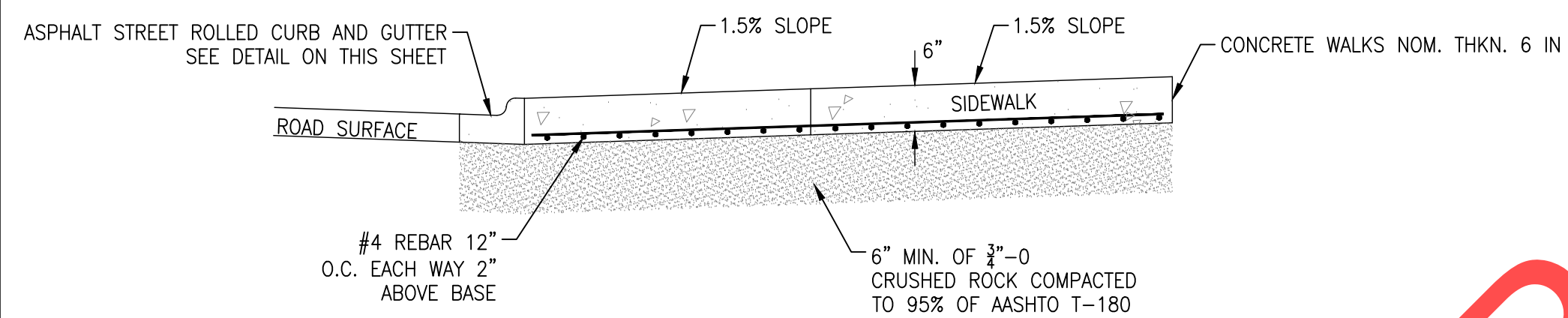
SW 5TH ST TO SW KINSMAN RD EXTENSION
TONQUIN TRAIL PLAN AND PROFILE

CIP# 4196
PROJECT# 2017-02-001
TR04
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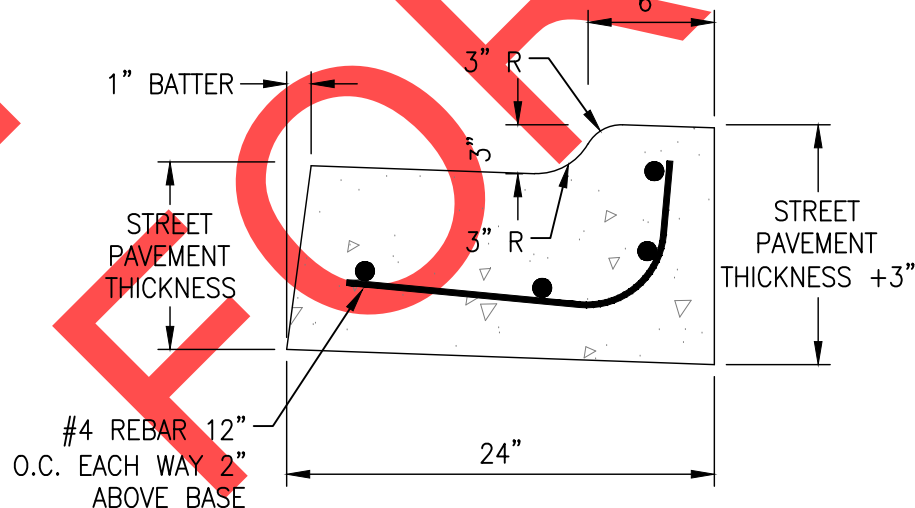
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CURB TAPER DETAIL
SCALE: N.T.S.

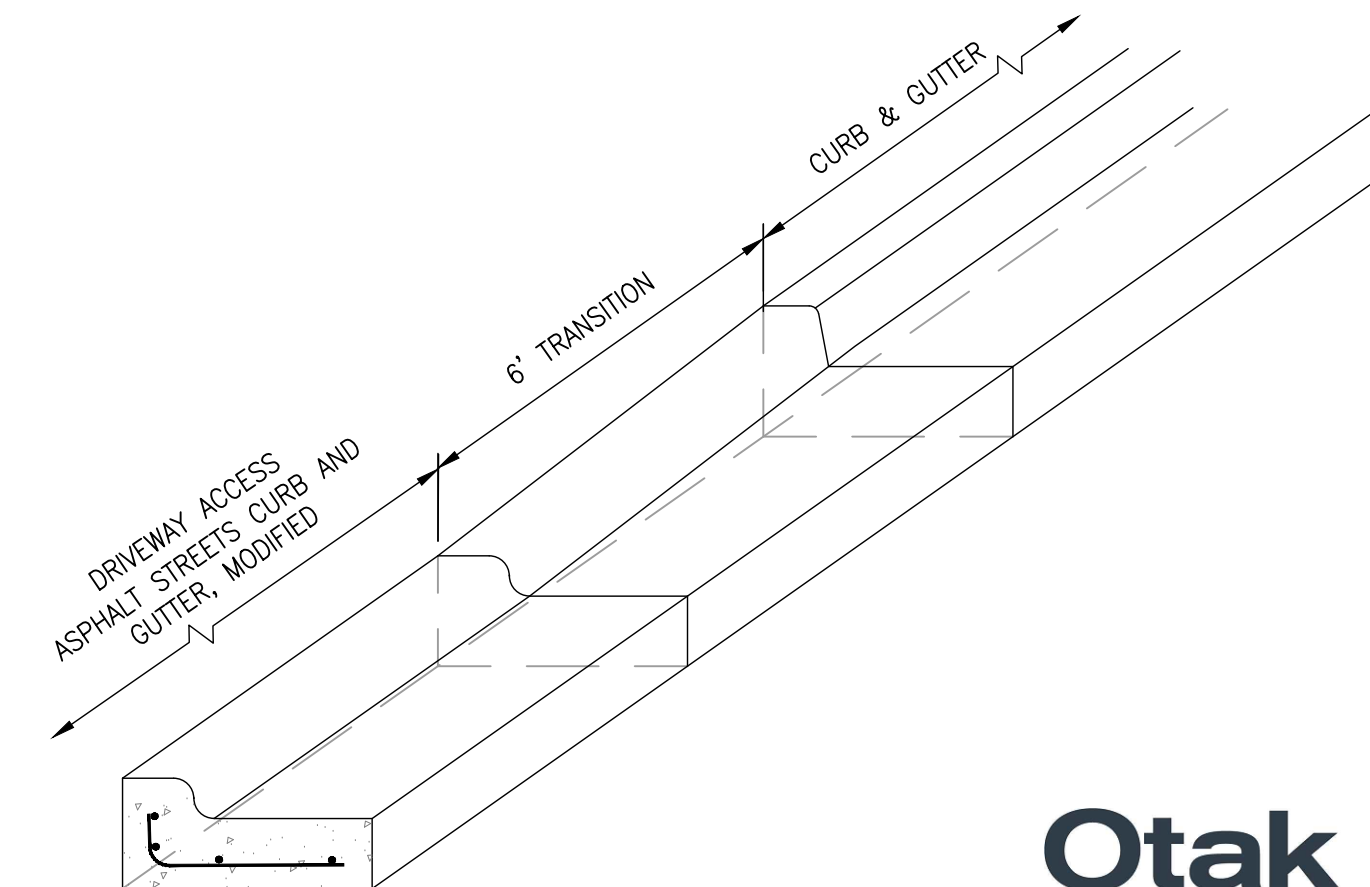


SECTION A-A



- NOTES:
- CONCRETE SHALL BE CLASS 4000 MIX, MINIMUM COMPRESSIVE STRENGTH OFF 4000 PSI AT 28 DAYS.
 - CONSTRUCTION JOINTS.
 - SPACING TO BE NOT MORE 12 FEET.
 - JOINTS SHALL BE HAND SAWCUT, WHEN WET, THROUGH ENTIRE WIDTH AND FULL DEPTH OF CURB AND GUTTER
 - BASE ROCK TO BE 3/4"-0 COMPACTED TO 95% OF AASHTO T-180 AND SHALL BE TO SUB GRADE, STREET STRUCTURE, OR 6" IN DEPTH, WHICHEVER IS GREATER.
 - BASE COURSE SHALL BE THOROUGHLY WATERED IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE WHEN THE MEASURED OR FORECASTED ASCENDING AIR TEMPERATURE IS 80 DEGREES OR GREATER.
 - GUTTER PAN SHALL HAVE A NORMAL SLOPE OF 6.7% DESIGN (1" FALL OVER THE 15" GUTTER PAN), 6.0% MINIMUM, 8.0% MAXIMUM.
 - GUTTER STAMPS ARE REQUIRED AT LOCATIONS OF ALL SERVICE AND CONDUIT CROSSINGS (SEC.201.2.24.D). MARKING SHALL BE SANDBLASTED INTO EXISTING CONCRETE.
 - SPACING OF 2" CONCRETE SUPPORT BLOCKS SHALL BE NO GREATER THAN 3" AND BLOCKS SHALL BE TIED TO #4 REBAR WITH WIRE.

ROLLED CURB AND GUTTER
SCALE: N.T.S.



CURB TRANSITION DETAIL
SCALE: N.T.S.
REVIEW SET - NOT FOR CONSTRUCTION

ACCESS DRIVEWAY PLAN DETAIL
SCALE: N.T.S.

NO.	DATE	DESCRIPTION

PRELIMINARY

City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
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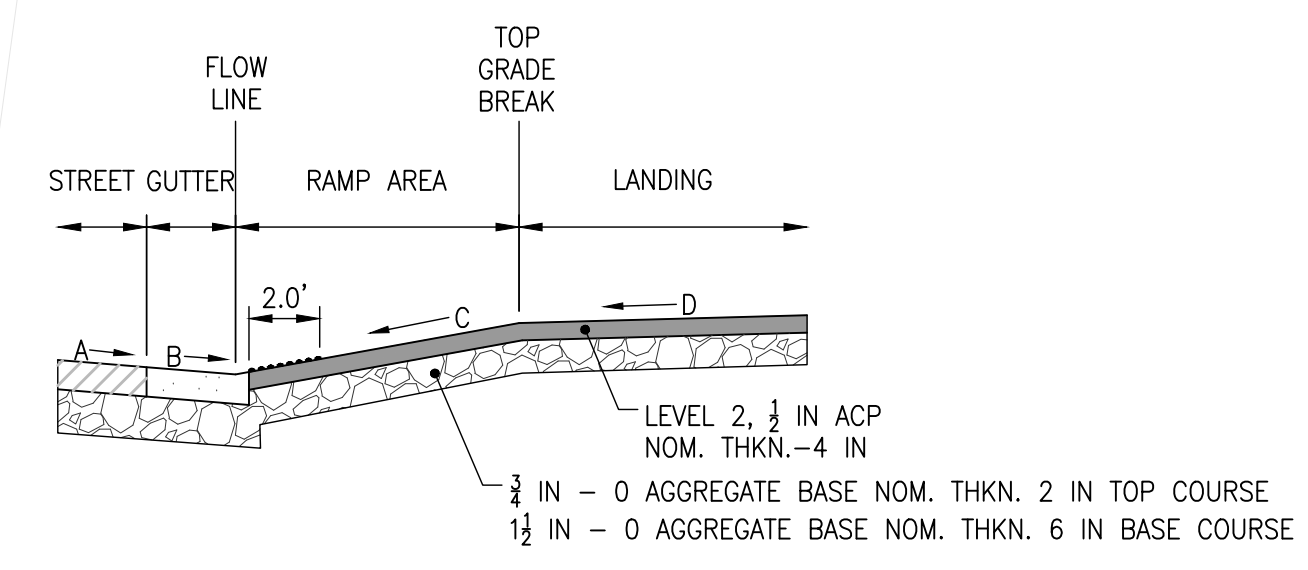
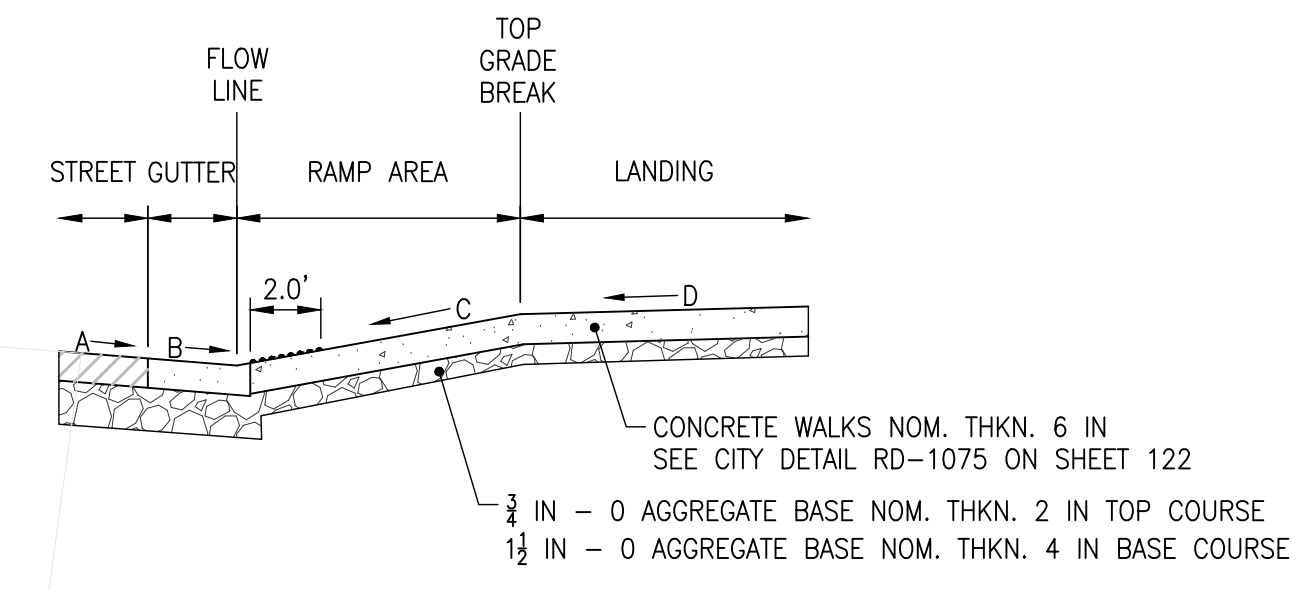
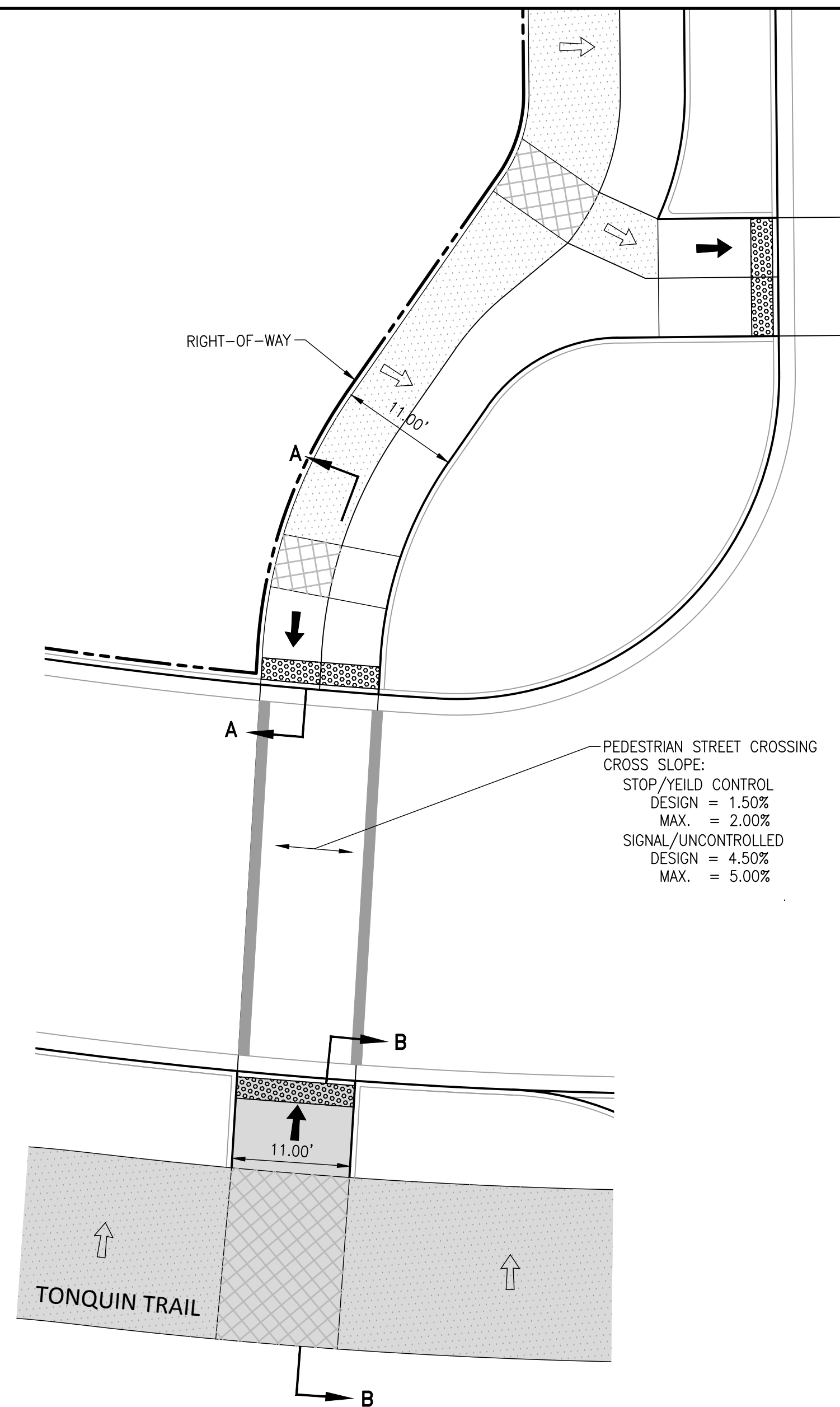


Date	1 February 2019
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Designed By	PH/SL
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Checked By	A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY NON-STANDARD DETAILS

Otak
Otak, Inc.
700 Washington St., Suite 300
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CIP #	4196
PROJECT #	2017-02-001
RD01	
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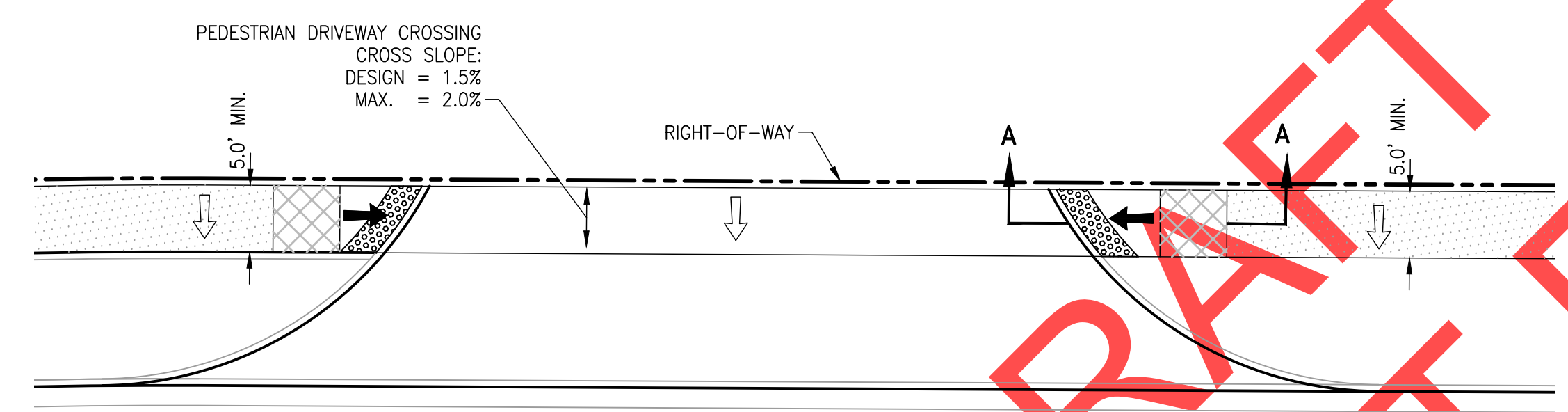


PEDESTRIAN STREET CROSSING
CROSS SLOPE:
STOP/YIELD CONTROL
DESIGN = 1.50%
MAX. = 2.00%
SIGNAL/UNCONTROLLED
DESIGN = 4.50%
MAX. = 5.00%

SLOPE	A	B*	C*	D
DESIGN	2.00%	2.00%	7.10%	1.50%
MAXIMUM	4.00%	5.00%	8.33%	2.00%

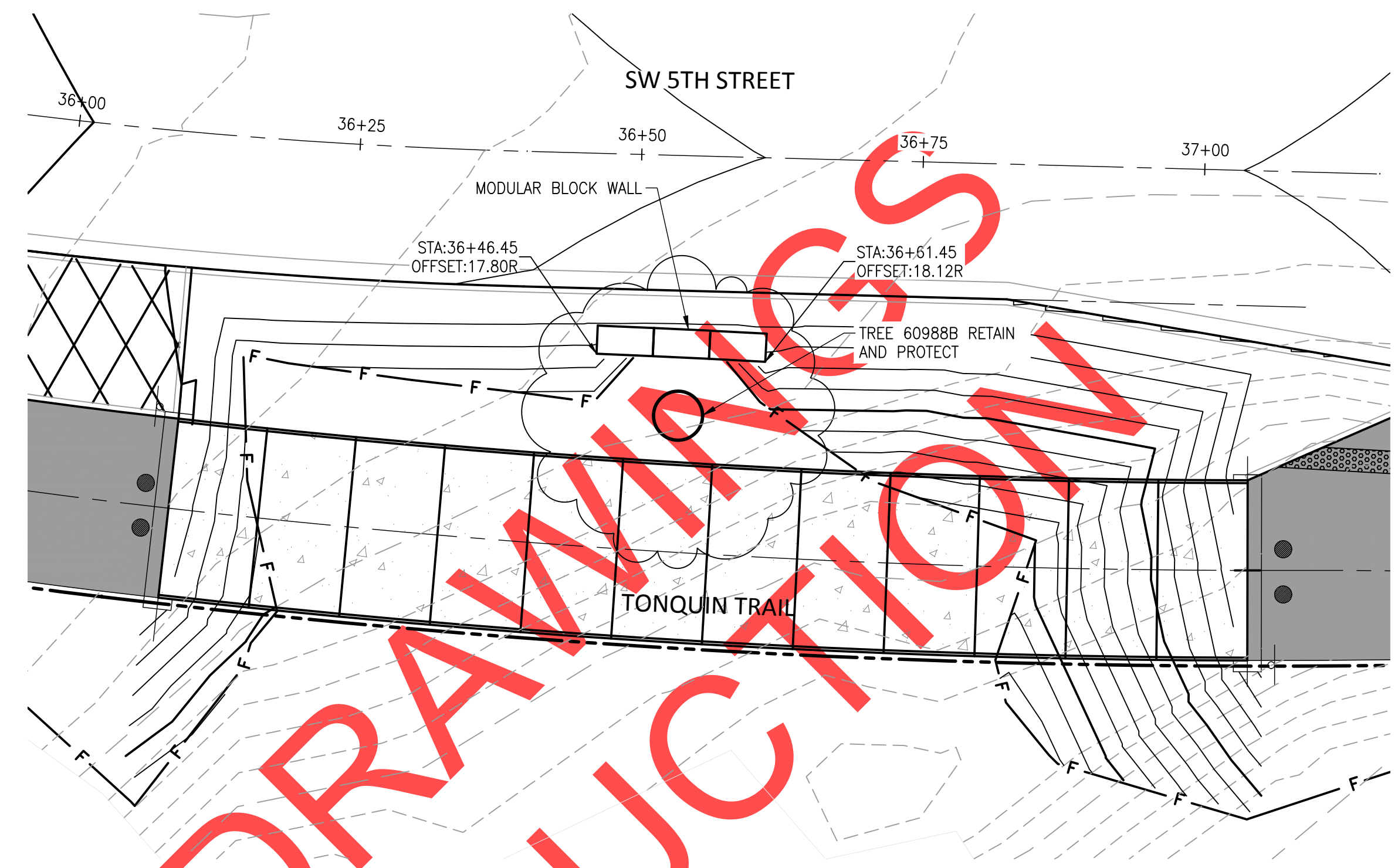
*THE ALGEBRAIC DIFFERENCE BETWEEN B & C SHALL NOT EXCEED 11.0%

- SLOPE: 1.50% DESIGN
2.00% MAX.
- SLOPE: 7.10% DESIGN
8.33% MAX.
- TRUNCATED DOME
DETECTABLE WARNING
SURFACE
- TURNING SPACE
SLOPE: 1.50% DESIGN
2.00% MAX.

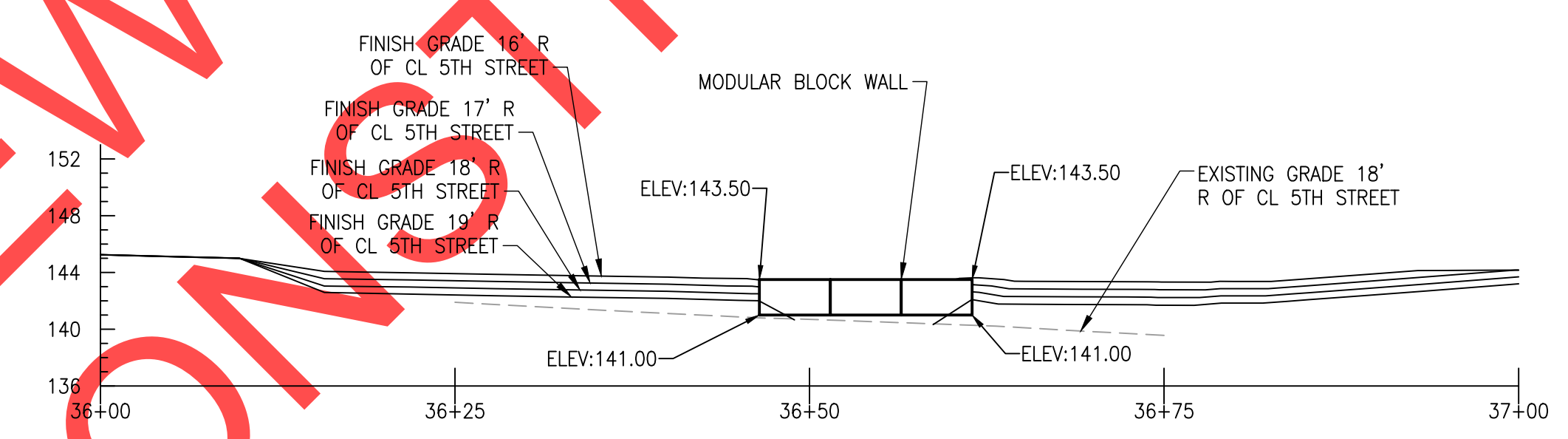


- GENERAL NOTES:
- SIDEWALK RAMP SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY" (PROWAG), JULY 2011 EDITION.
 - SIDEWALK RAMP SHALL BE LOCATED TO MINIMIZE OUT-OF-DIRECTION TRAVEL WHILE MAINTAINING PEDESTRIAN VISIBILITY AND MINIMIZING STREET CROSSING DISTANCES.
 - CONCRETE SHALL BE COMMERCIAL MIX, MIN. COMPRESSIVE STRENGTH OF 3300 PSI AT 28 DAYS.
 - ASPHALT SHALL BE LEVEL 2, 1/2" ACP.
 - TOP COURSE SHALL CONSIST OF 3/4"-0 CRUSHED ROCK COMPACTED TO 95% OF AASHTO T-180.
 - BASE COURSE SHALL CONSIST OF 1 1/2"-0 CRUSHED ROCK COMPACTED TO 95% OF AASHTO T-180.
 - BASE ROCK SHALL BE THOROUGHLY WATERED IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE.
 - TRUNCATED DOME DETECTABLE WARNING SURFACE SHALL BE INSTALLED THE FULL WIDTH OF THE RAMP AND CONSIST OF (BLACK) MASCO CAST-IN-TACT & CAST-IN-TACT III OR APPROVED EQUAL.
 - SIDEWALK RAMP SHALL HAVE A MINIMUM WIDTH OF 5 FEET. COMBINE SIDEWALK AND BICYCLE RAMP SHALL HAVE A MINIMUM WIDTH OF 11 FEET.

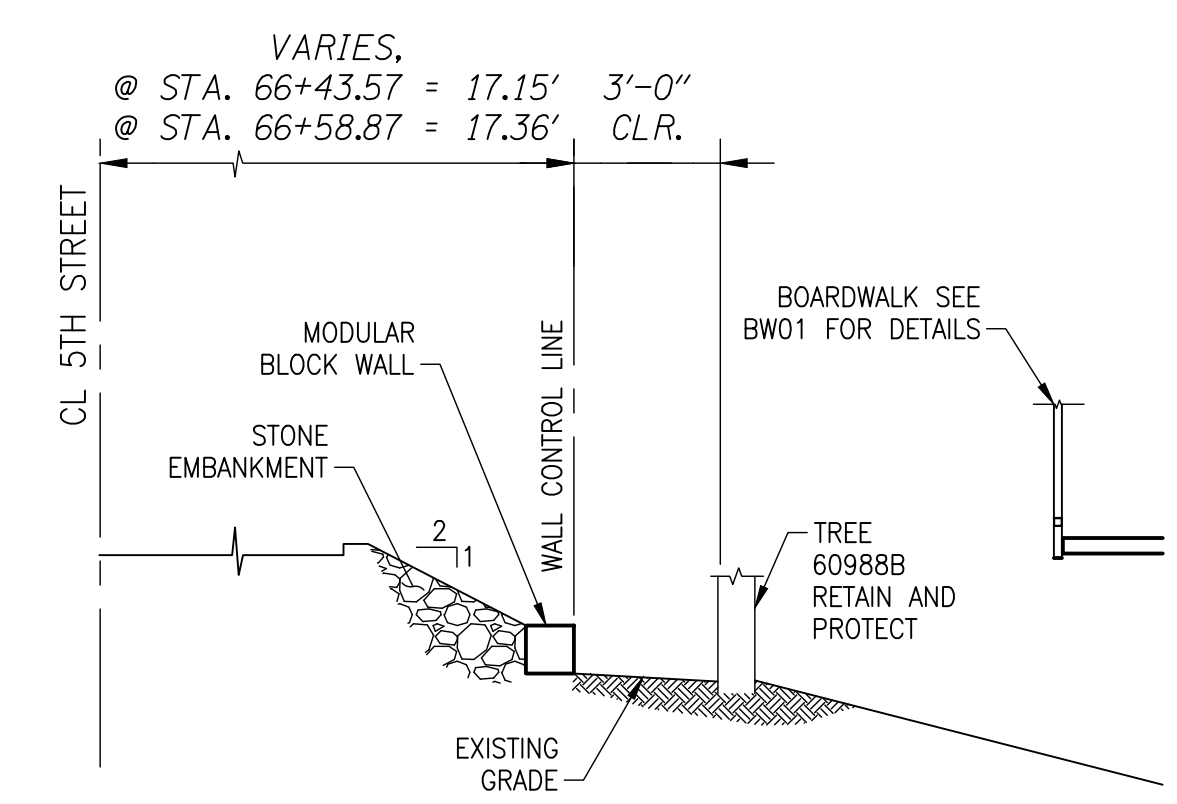
DIRECTIONAL CONCRETE/ASPHALT RAMP DETAIL
SCALE: N.T.S.



MODULAR BLOCK WALL PLAN
SCALE: 1"=10'



MODULAR BLOCK WALL ELEVATION
SCALE: 1"=10'



MODULAR BLOCK WALL SECTION
SCALE: N.T.S.

REVISIONS

NO.	DESCRIPTION

PRELIMINARY

City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



Date: 1 February 2019
Scale: N.T.S.
Designed By: PH/SL
Drawn By: SL
Checked By: A HENDY

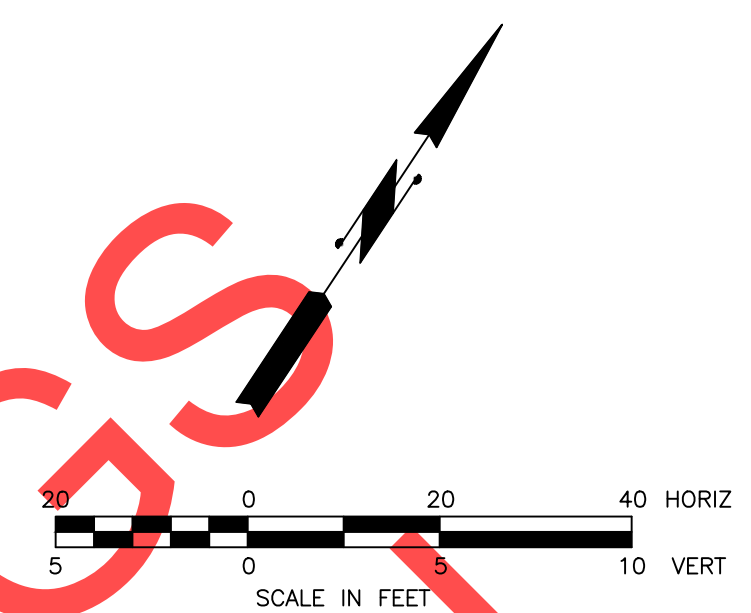
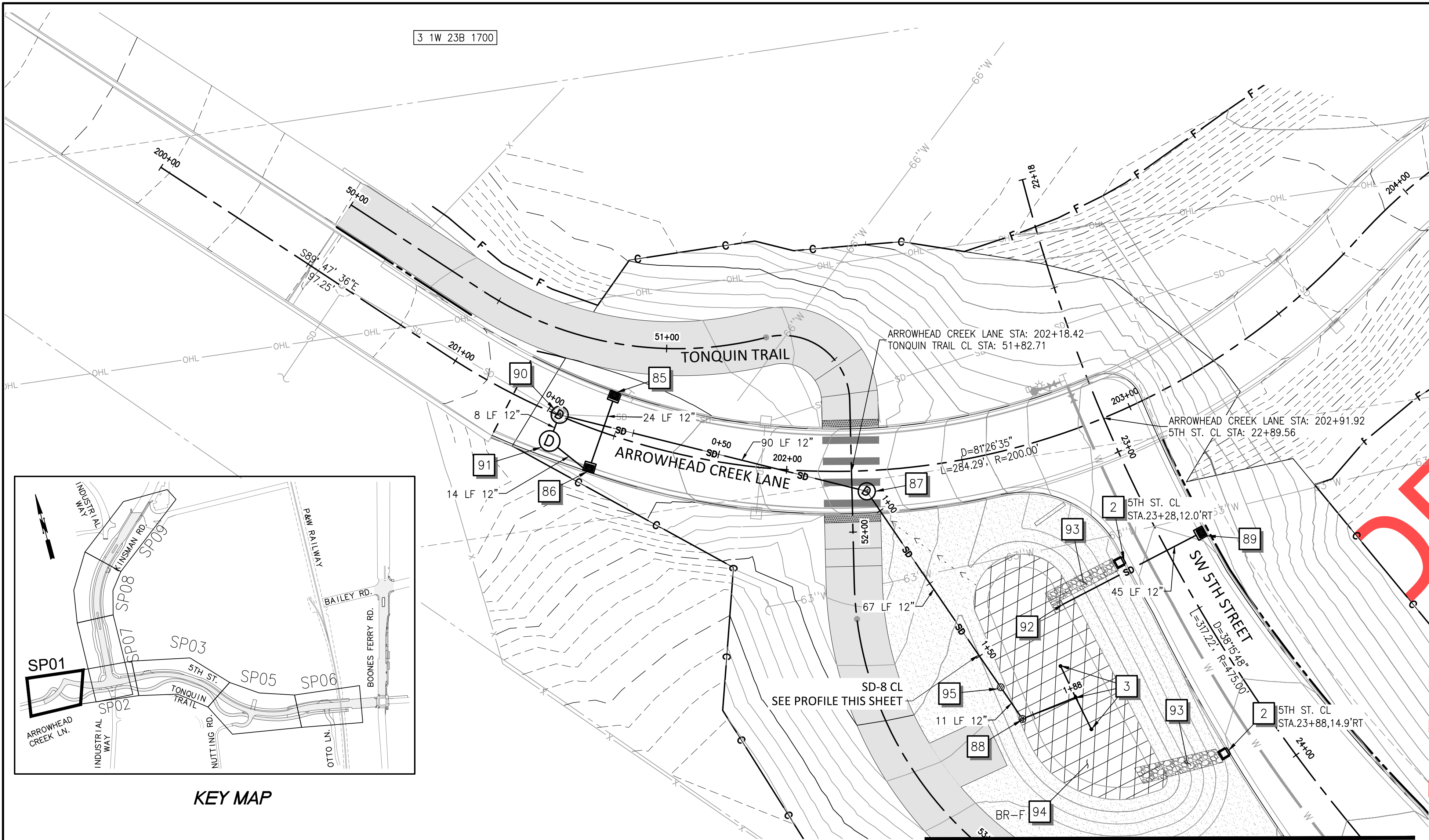
**SW 5TH ST TO SW KINSMAN RD EXTENSION
ROADWAY NON-STANDARD DETAILS**

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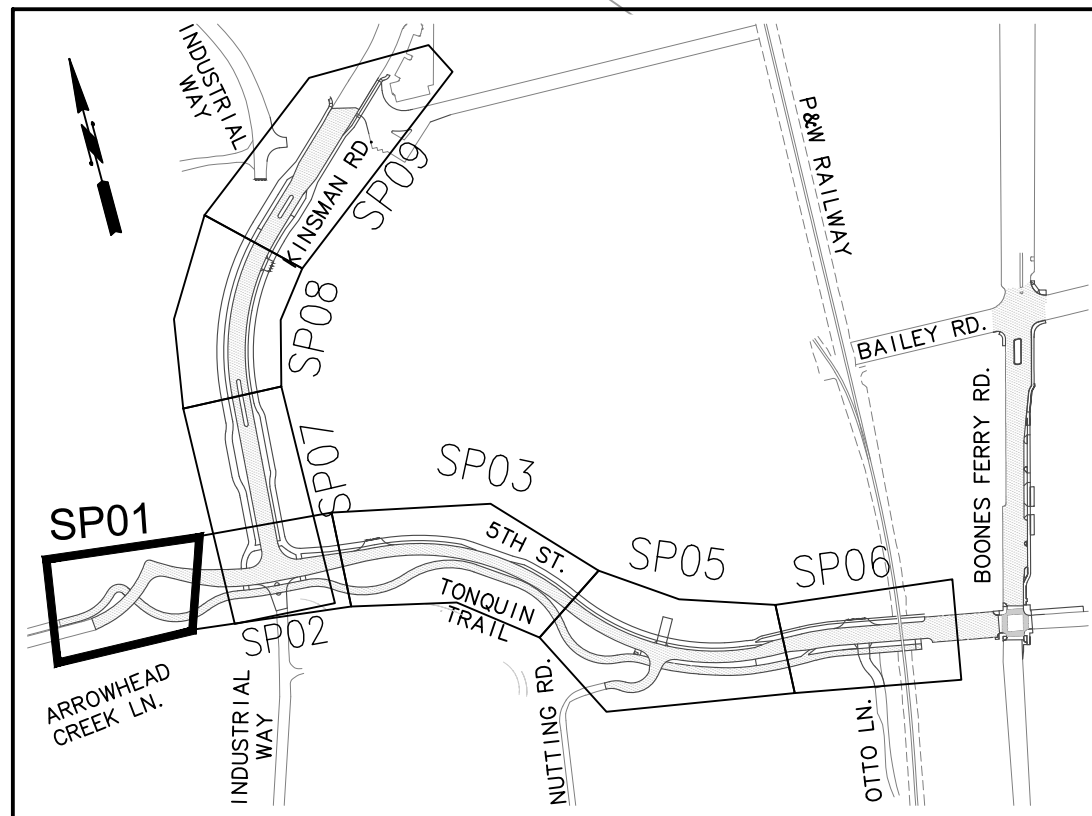
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3 1W 23B 1700



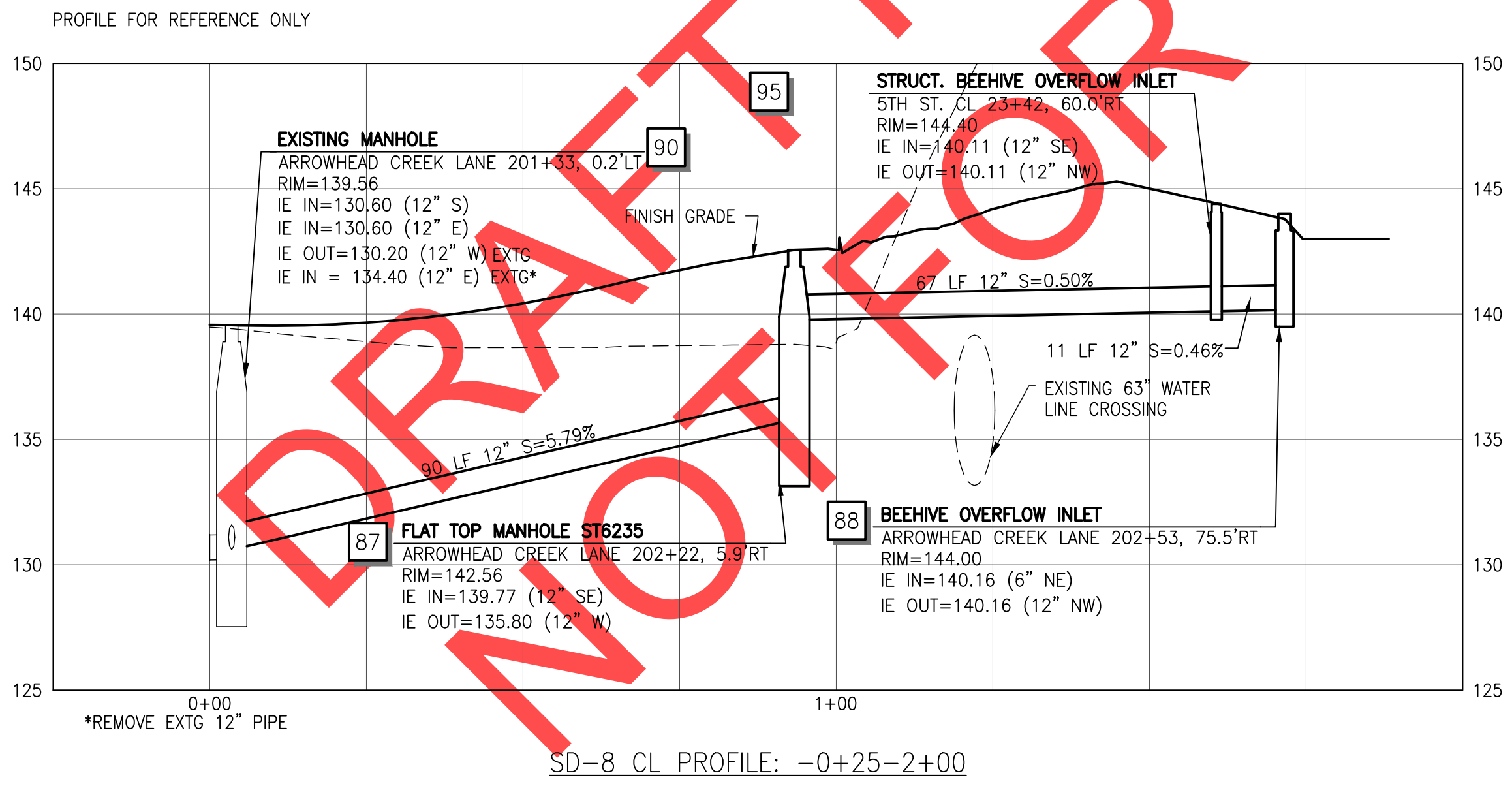
STORM NOTES

- 2 CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
- 3 INSTALL CLEANOUT (SEE DETAIL SHEET 73).
- 85 "ARROWHEAD CREEK LN." STA. 201+46, 12.0' LT CONSTRUCT INLET, TYPE G2 RIM = 139.29 IE OUT = 133.22 (12" S) (SEE DETAIL S-2095 ON SHEET 131)
- 86 "ARROWHEAD CREEK LN." STA. 201+46, 12.0' RT CONSTRUCT INLET, TYPE G2 RIM = 139.44 IE IN = 133.10 (12" N) IE OUT = 133.01 (12" W) INSTALL 12" STORM SEW PIPE - 24 LF 10 FT DEPTH (SEE DETAIL S-2095 ON SHEET 131)
- 87 "ARROWHEAD CREEK LN." STA. 202+22, 5.9' RT CONSTRUCT FLAT TOP MANHOLE ST6235 RIM = 142.56 INSTALL 12" STORM SEW PIPE - 67 LF 10 FT DEPTH (SEE DETAIL S-2030 ON SHEET 127)
- 88 "ARROWHEAD CREEK LN." STA. 202+53, 75.5' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 144.00 (SEE DETAILS ON SHEETS 66 AND 128)
- 89 "ARROWHEAD CREEK LN." STA. 201+46, 12.0' RT CONSTRUCT INLET, TYPE G2 RIM = 148.00 IE OUT = 143.55 (12" S) (SEE DETAIL S-2095 ON SHEET 131)
- 90 "ARROWHEAD CREEK LN." STA. 201+33, 0.2' LT EXISTING STORM MANHOLE RIM = 139.56 CONNECTION TO EXISTING STRUCTURE INSTALL 12" STORM SEW PIPE - 8 LF 5 FT DEPTH INSTALL 12" STORM SEW PIPE - 90 LF 10 FT DEPTH REMOVE EXISTING PIPE IN
- 91 "ARROWHEAD CREEK LN." STA. 201+34, 7.7' RT WATER QUALITY STRUCTURE SFMH-A1 (MANHOLE ST6234) RIM = 142.60 IE IN = 132.94 (12" E) IE OUT = 130.64 (12" N) INSTALL 12" STORM SEW PIPE - 14 LF 10 FT DEPTH (SEE DETAILS ON SHEET 71)
- 92 "ARROWHEAD CREEK LN." STA. 202+67, 46.4' RT CONSTRUCT RIPRAP OUTFALL PROTECTION INSTALL 12" STORM SEW PIPE - 45 LF 5 FT DEPTH (SEE DETAILS ON SHEET 72)
- 93 CONSTRUCT ROCK CHANNEL (SEE DETAIL ON SHEET 68).
- 94 CONSTRUCT RAINGARDEN (SEE DETAIL ON SHEET 66 AND 129).
- 95 "ARROWHEAD CREEK LN." STA. 202+49, 65.5' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 144.40 IE IN = 140.11 (12" SE) IE OUT = 140.11 (12" NW) INSTALL 12" STORM SEW PIPE - 11 LF 5 FT DEPTH (SEE DETAILS ON SHEETS 66 AND 128)



KEY MAP

MATCHLINE STA. 24+30 SEE SHEET: 43



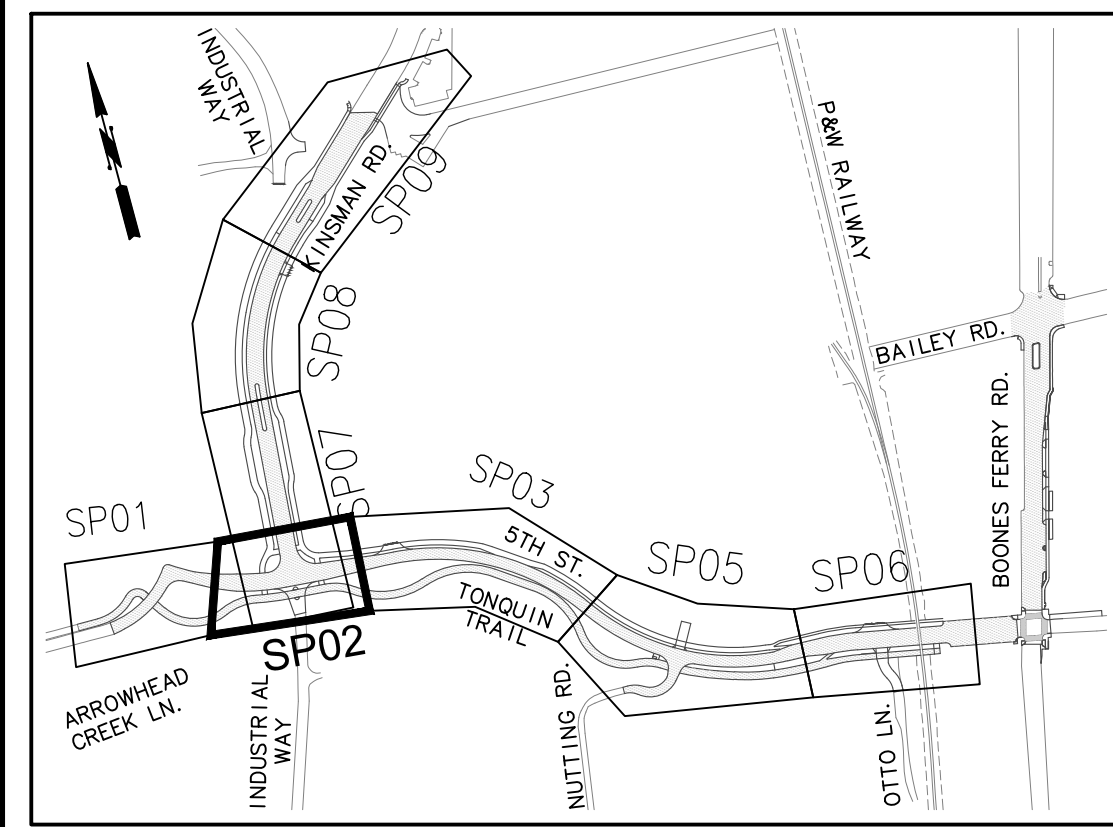
GENERAL NOTES

- 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

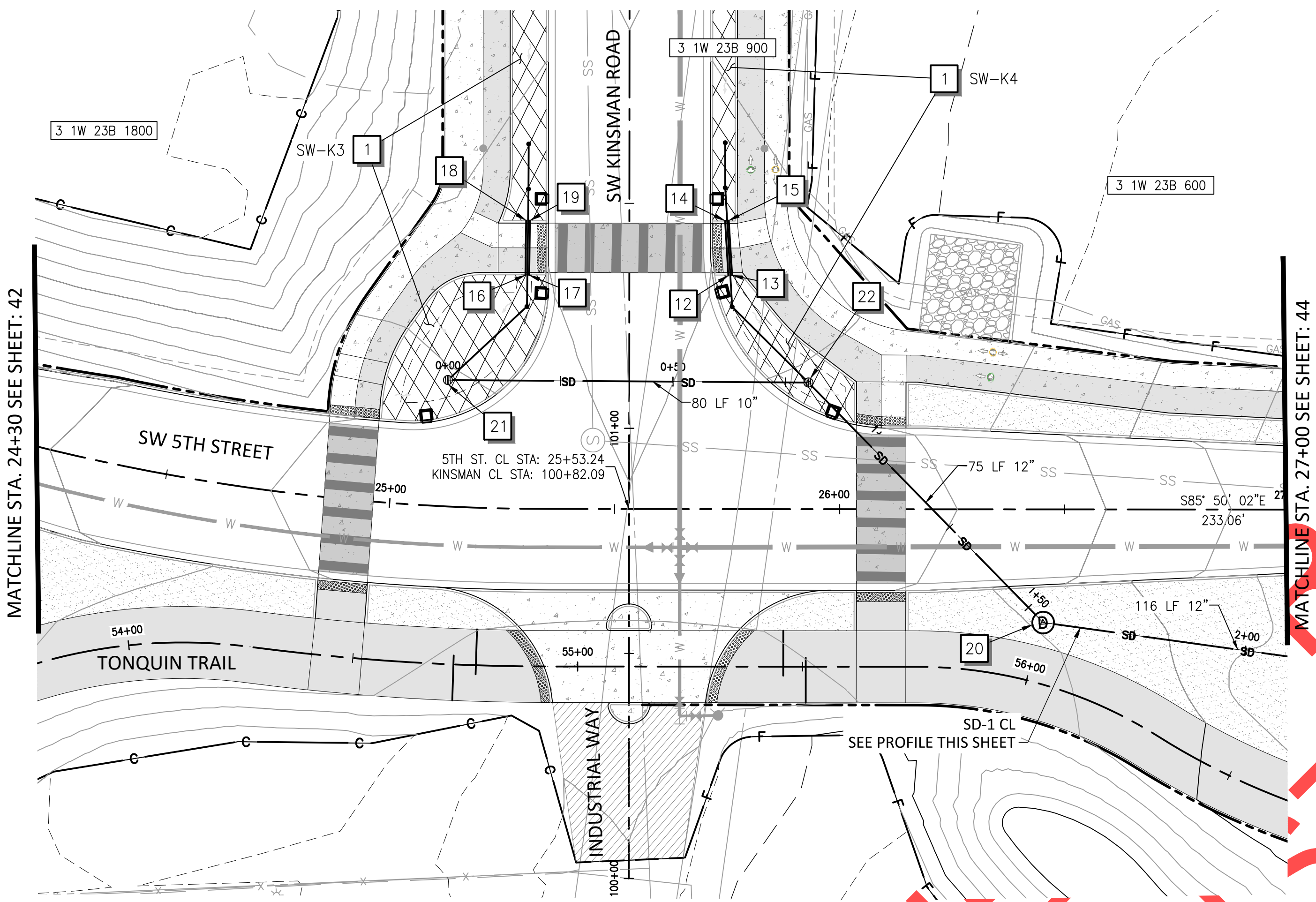


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REVISIONS	PRELIMINARY
City of Wilsonville Engineering Department 29799 SW Town Center Loop E Wilsonville, OR 97070 Phone 503-682-4960	
Date: 1 February 2019 Scale: AS SHOWN Designed By: PH/BB Drawn By: EID Checked By: A HENDY	
SW 5TH ST TO SW KINSMAN RD EXTENSION ARROWHEAD CREEK LANE PLAN AND PROFILE STORM	
CIP #	4196
PROJECT #	2017-02-001
SP01	
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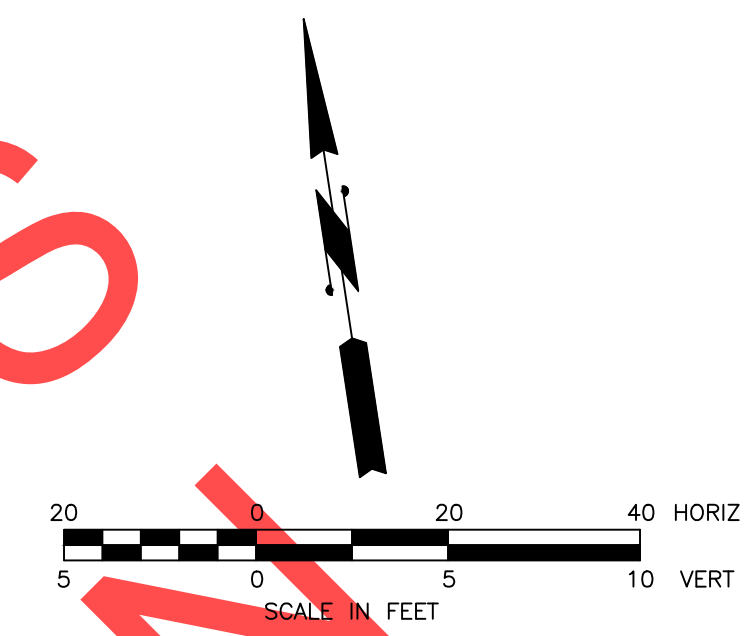


KEY MAP



MATCHLINE STA. 24+30 SEE SHEET: 42

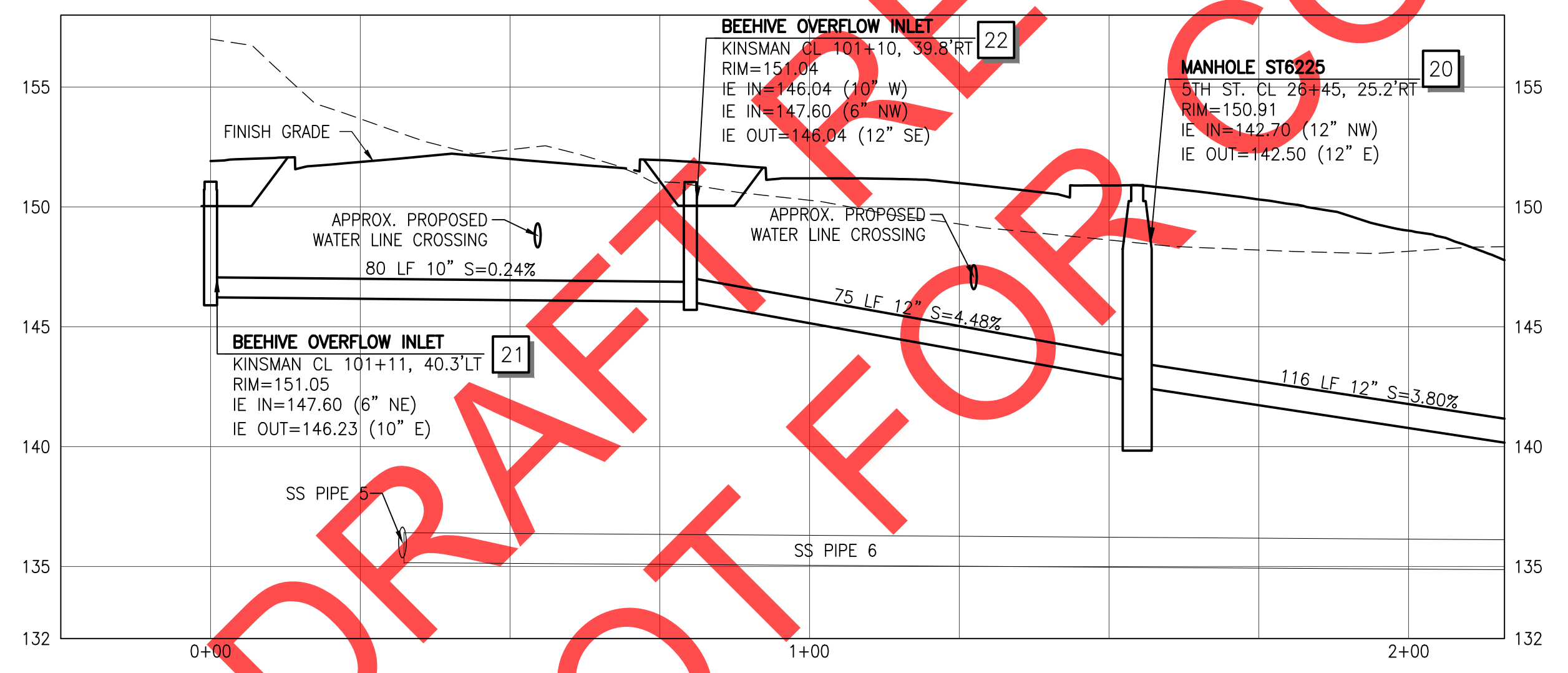
MATCHLINE STA. 27+00 SEE SHEET: 44



STORM NOTES

- 1 CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66, 74, AND 128)
- 12 "KINSMAN RD." STA. 101+34, 21.2' RT CONSTRUCT PIPE CROSSING IE IN = 150.62 (6" N) INSTALL 6" DI STORM SEWER PIPE - 12 LF 5' DEPTH (SEE DETAILS ON SHEET 72)
- 13 "KINSMAN RD." STA. 101+34, 23.0' RT CONSTRUCT PIPE CROSSING IE IN = 150.62 (6" N) INSTALL 6" DI STORM SEWER PIPE - 12 LF 5' DEPTH (SEE DETAILS ON SHEET 72)
- 14 "KINSMAN RD." STA. 101+34, 22.0' RT CONSTRUCT PIPE CROSSING IE OUT = 151.33 (6" S) (SEE DETAILS ON SHEET 72)
- 15 "KINSMAN RD." STA. 101+46, 22.1' RT CONSTRUCT PIPE CROSSING IE OUT = 151.33 (6" S) (SEE DETAILS ON SHEET 72)
- 16 "KINSMAN RD." STA. 101+34, 22.9' LT CONSTRUCT PIPE CROSSING IE OUT = 150.63 (6" N) INSTALL 6" DI STORM SEWER PIPE - 12 LF 5' DEPTH
- 17 "KINSMAN RD." STA. 101+34, 22.2' LT CONSTRUCT PIPE CROSSING IE IN = 150.63 (6" N) INSTALL 6" DI STORM SEWER PIPE - 12 LF 5' DEPTH
- 18 "KINSMAN RD." STA. 101+46, 23.0' LT CONSTRUCT PIPE CROSSING IE IN = 151.32 (6" S) (SEE DETAILS ON SHEET 72)
- 19 "KINSMAN RD." STA. 101+46, 22.1' LT CONSTRUCT PIPE CROSSING IE OUT = 151.32 (6" S) (SEE DETAILS ON SHEET 72)
- 20 "5TH STREET" STA. 26+45, 25.2' RT CONSTRUCT MANHOLE ST6225 INSTALL 12" STORM SEW PIPE - 75 LF 10' DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 21 "KINSMAN RD." STA. 101+10, 40.3 LT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 151.05 IE OUT = 146.04 (10" E) (SEE DETAILS ON SHEETS 66 AND 128)
- 22 "KINSMAN RD." STA. 101+10, 39.8 RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 151.04 INSTALL 10" STORM SEWER PIPE - 80 LF 10' DEPTH (SEE DETAILS ON SHEETS 66 AND 128)

PROFILE FOR REFERENCE ONLY



SD-1 CL PROFILE: -0+25-2+16

GENERAL NOTES

- 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

REVISIONS

PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
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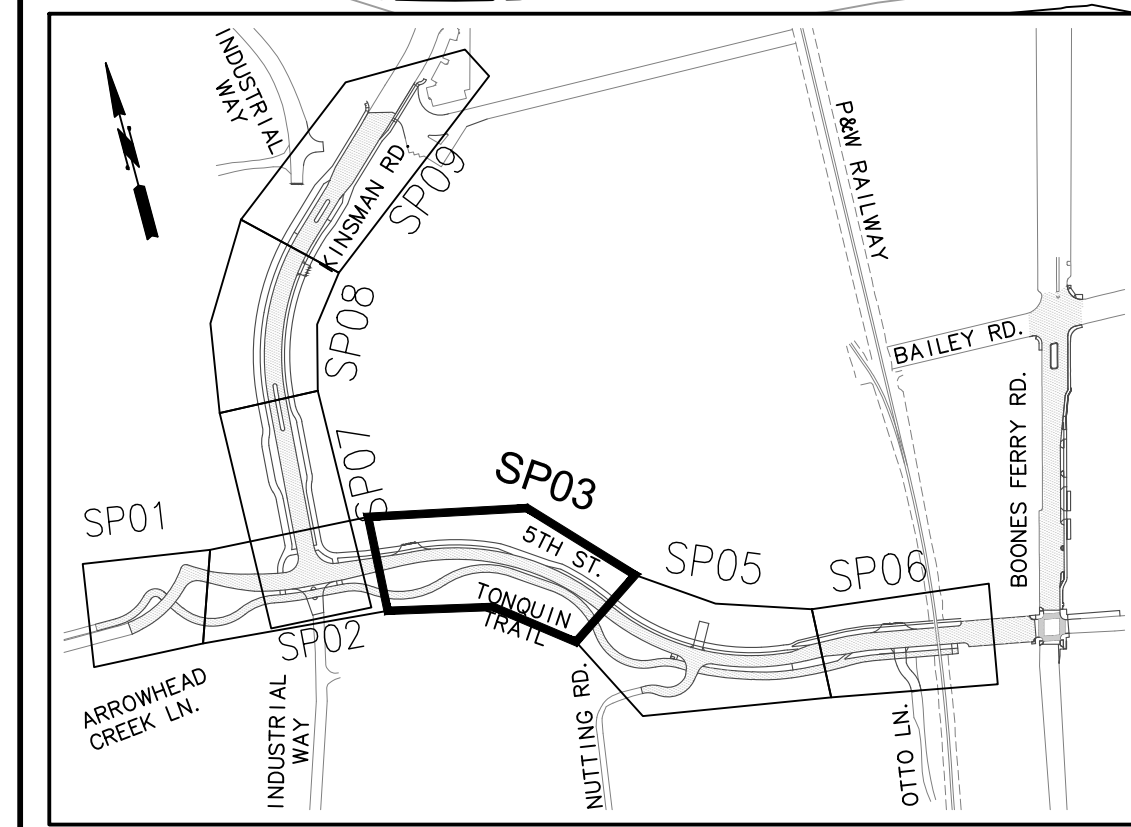
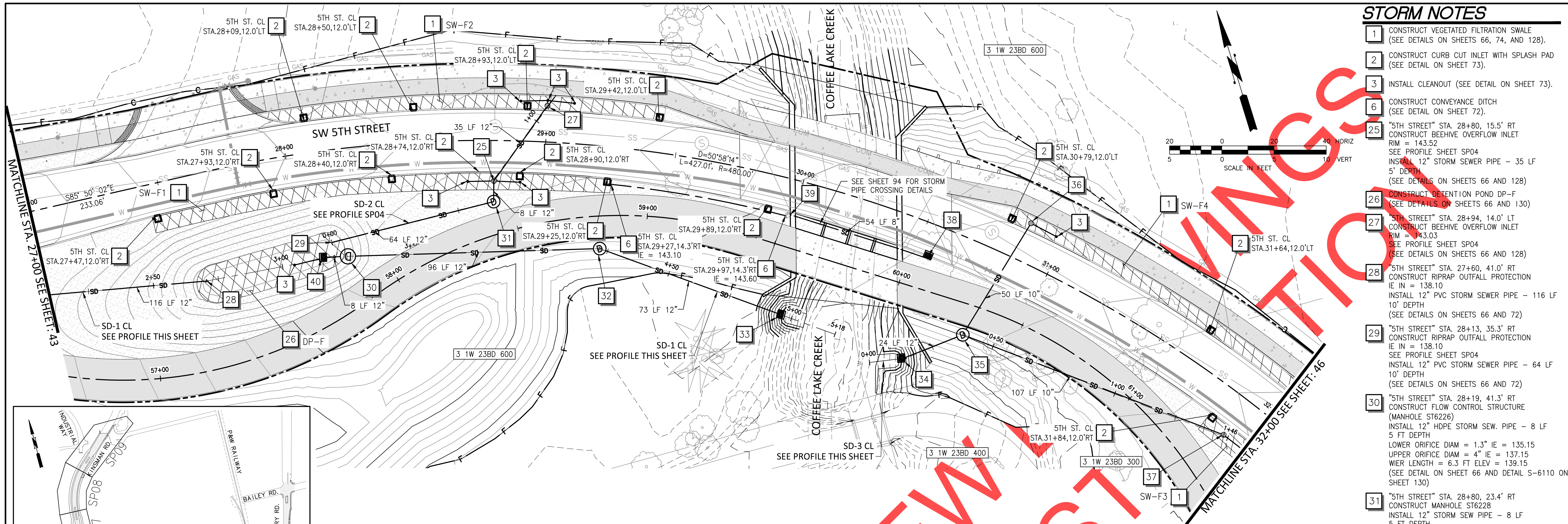
Date: 1 February 2019
 Scale: AS SHOWN
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 Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH STREET PLAN AND PROFILE STORM

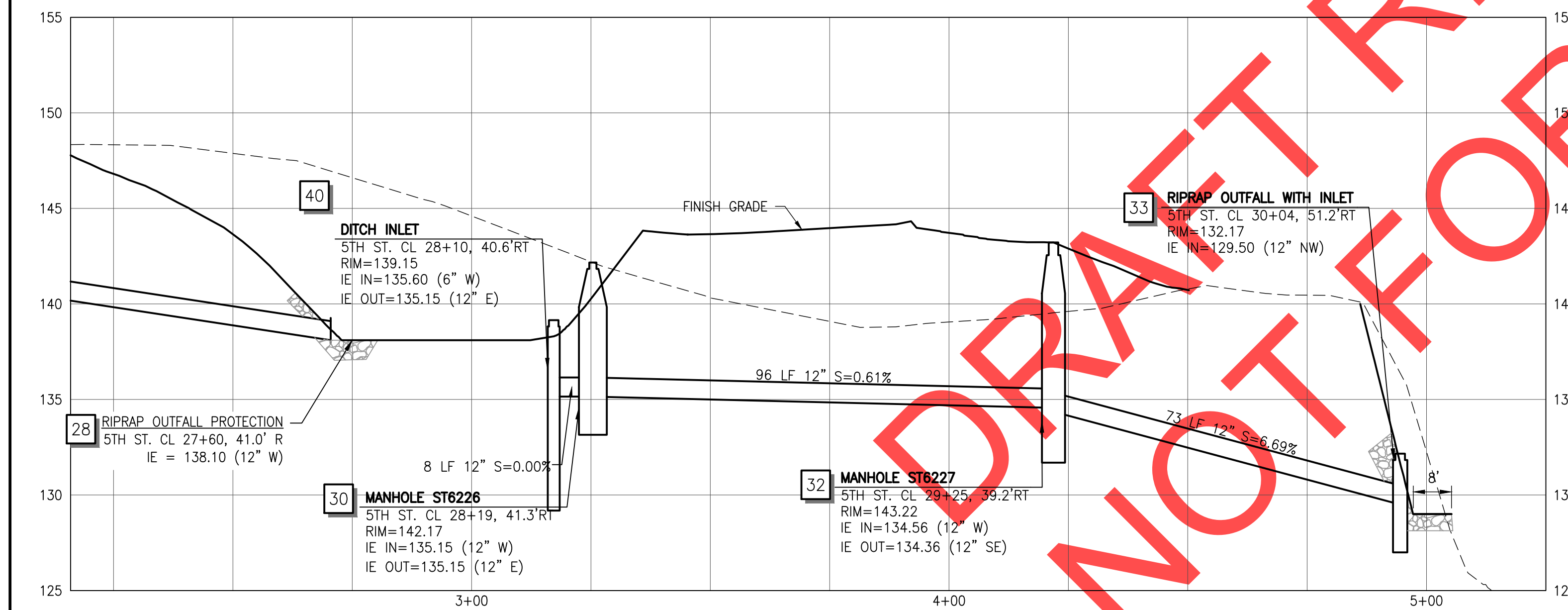


CIP # 4196
 PROJECT # 2017-02-001
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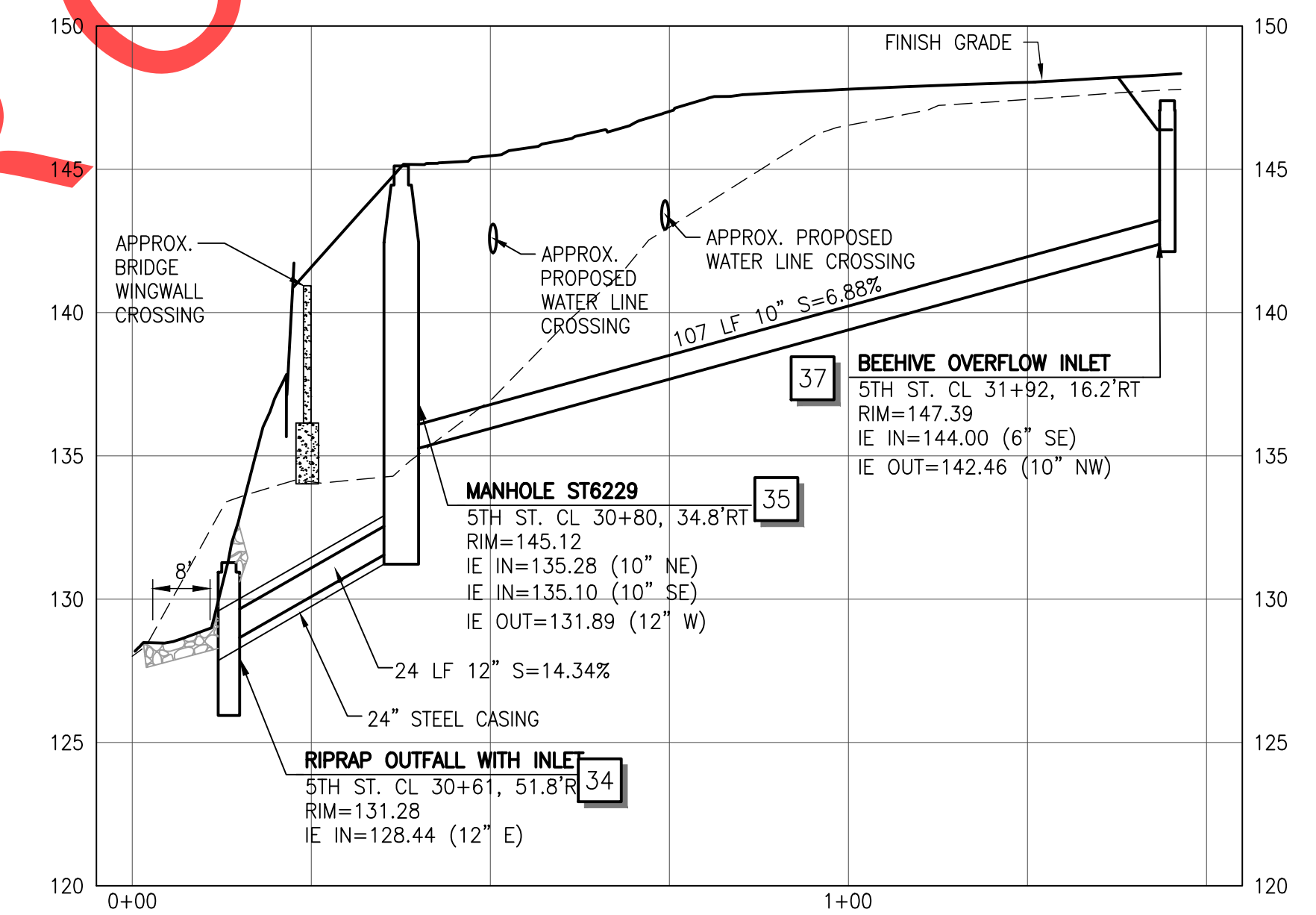
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KEY MAP



SD-1 CL PROFILE: 2+16-5+25



SD-3 CL PROFILE: -0+05-1+55

GENERAL NOTES

1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

STORM NOTES

1. CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAILS ON SHEETS 66, 74, AND 128).
2. CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
3. INSTALL CLEANOUT (SEE DETAIL ON SHEET 73).
6. CONSTRUCT CONVEYANCE DITCH (SEE DETAIL ON SHEET 72).
25. "5TH STREET" STA. 28+80, 15.5' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 143.52 SEE PROFILE SHEET SP04 INSTALL 12" STORM SEWER PIPE - 35 LF 5' DEPTH (SEE DETAILS ON SHEETS 66 AND 128)
26. CONSTRUCT DETENTION POND DP-F (SEE DETAILS ON SHEETS 66 AND 130)
27. "5TH STREET" STA. 28+94, 14.0' LT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 143.03 SEE PROFILE SHEET SP04 (SEE DETAILS ON SHEETS 66 AND 128)
28. "5TH STREET" STA. 27+60, 41.0' RT CONSTRUCT RIPRAP OUTFALL PROTECTION IE IN = 138.10 INSTALL 12" PVC STORM SEWER PIPE - 116 LF 10' DEPTH (SEE DETAILS ON SHEETS 66 AND 72)
29. "5TH STREET" STA. 28+13, 35.3' RT CONSTRUCT RIPRAP OUTFALL PROTECTION IE IN = 138.10 SEE PROFILE SHEET SP04 INSTALL 12" PVC STORM SEWER PIPE - 64 LF 10' DEPTH (SEE DETAILS ON SHEETS 66 AND 72)
30. "5TH STREET" STA. 28+19, 41.3' RT CONSTRUCT FLOW CONTROL STRUCTURE (MANHOLE ST6226) INSTALL 12" HDPE STORM SEW. PIPE - 8 LF 5 FT DEPTH LOWER ORIFICE DIAM = 1.3" IE = 135.15 UPPER ORIFICE DIAM = 4" IE = 137.15 WIER LENGTH = 6.3 FT ELEV = 139.15 (SEE DETAIL ON SHEET 66 AND DETAIL S-6110 ON SHEET 130)
31. "5TH STREET" STA. 28+80, 23.4' RT CONSTRUCT MANHOLE ST6228 INSTALL 12" STORM SEW PIPE - 8 LF 5 FT DEPTH (SEE DETAIL S-2005 ON SHEET 126)
32. "5TH STREET" STA. 29+25, 39.2' RT CONSTRUCT MANHOLE ST6227 INSTALL 12" STORM SEW. PIPE - 96 LF 10' DEPTH (SEE DETAIL S-2005 ON SHEET 126)
33. "5TH STREET" STA. 30+04, 51.2' RT CONST. RIPRAP OUTFALL PROTECTION WITH INLET IE IN = 129.50 INSTALL 12" STORM SEW PIPE - 73 LF 10' DEPTH (SEE DETAILS ON SHEET 69)
34. "5TH STREET" STA. 30+62, 51.8' RT CONST. RIPRAP OUTFALL PROTECTION WITH INLET IE IN = 128.00 INSTALL 12" STORM SEW PIPE - 24 LF 10' DEPTH INST. 24" STEEL CASING, 1/2" WALL THICKNESS-24LF (SEE DETAILS ON SHEET 69)
35. "5TH STREET" STA. 30+80, 34.8' RT CONSTRUCT MANHOLE ST6229 INSTALL 10" STORM SEW PIPE - 157 LF 10' DEPTH (SEE DETAIL S-2005 ON SHEET 126)
36. "5TH STREET" STA. 30+86, 14.9' LT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 145.74 IE IN = 142.25 (6" SE) IE OUT = 140.79 (10" SW) (SEE DETAILS ON SHEETS 66 AND 128)
37. "5TH STREET" STA. 31+85, 16.0' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 147.39 (SEE DETAILS ON SHEETS 66 AND 128)
38. "5TH STREET" STA. 30+55, 13.2' RT CONSTRUCT CURB INLET CATCH BASIN IE OUT = 144.12 (SEE DETAIL ON SHEET 128)
39. "5TH STREET" STA. 29+99, 13.5' RT INSTALL 10" DI STORM SEWER PIPE - 54 LF 5 FT DEPTH INSTALL ROCK OUTFALL PAD IE OUT = 143.40 (SEE DETAILS ON SHEETS 66 AND 72)
40. "5TH STREET" STA. 28+10, 40.6' RT CONSTRUCT DITCH INLET RIM = 140.77 (SEE DETAIL ST-6125 ON SHEET 131)

REVISIONS

PRELIMINARY

City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
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Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
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Drawn By: EID
Checked By: A HENDY

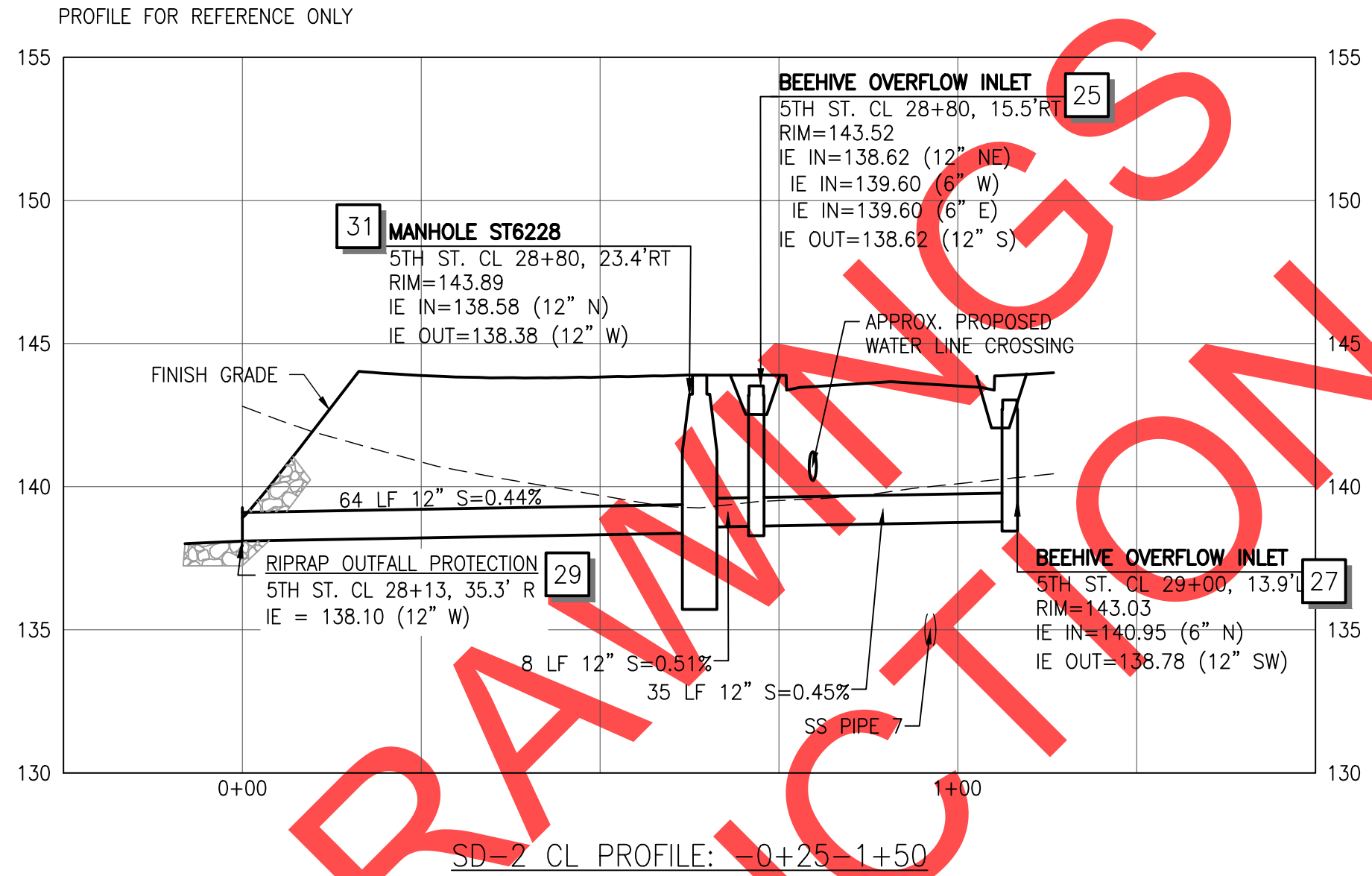
SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH STREET PLAN AND PROFILE STORM

CIP# 4196
PROJECT# 2017-02-001
SP03
44 of 211



REVIEW SET - NOT FOR CONSTRUCTION

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Phone 503-682-4960



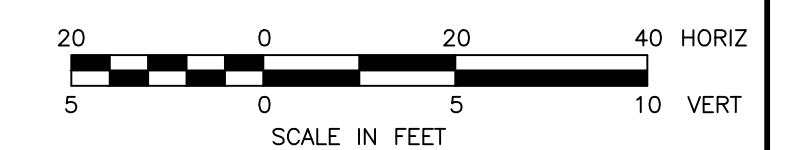
Date: 1 February 2019
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SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH STREET PLAN AND PROFILE STORM

CIP # 4196
PROJECT # 2017-02-001
SP04
45 of 211



REVIEW SET – NOT FOR CONSTRUCTION

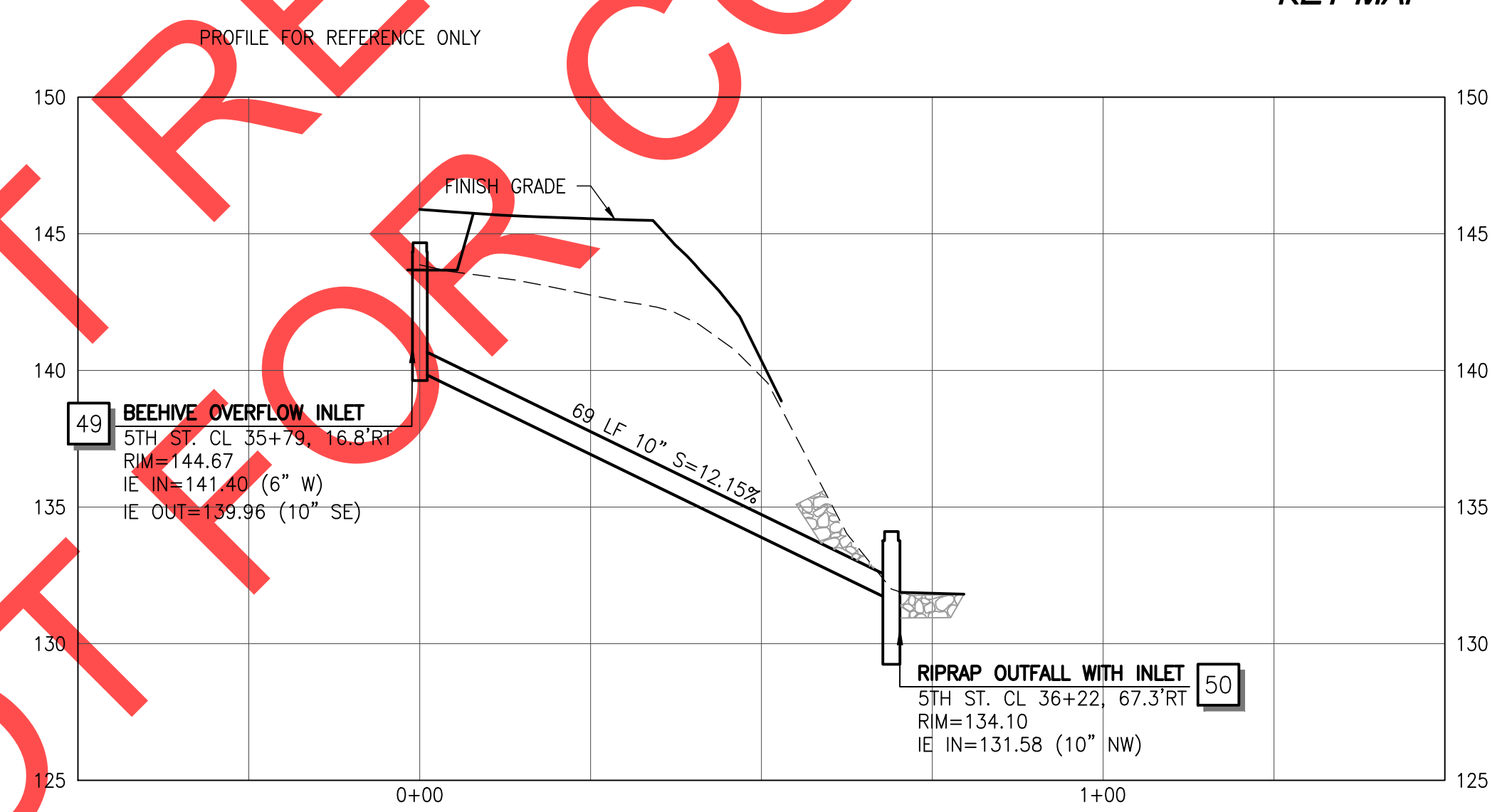
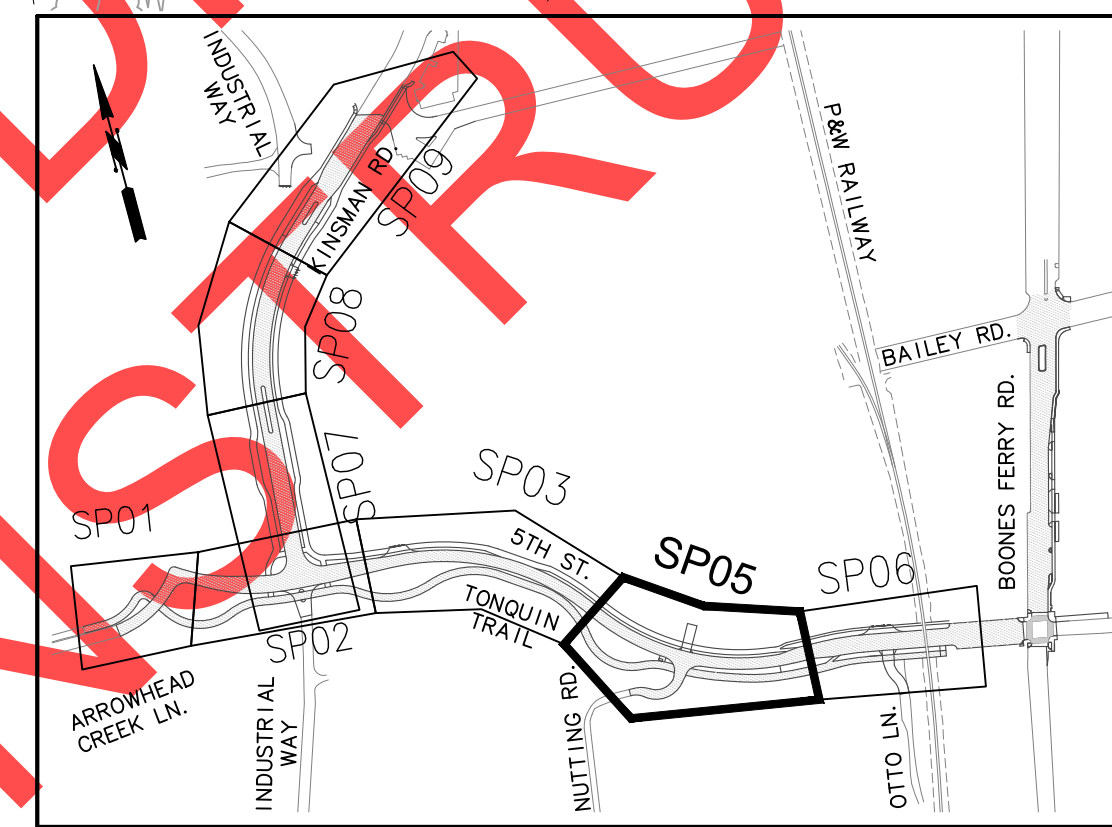


STORM NOTES

- 1 CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66 AND 128).
- 2 CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
- 3 INSTALL CLEANOUT (SEE DETAIL ON SHEET 73).
- 44 CONSTRUCT 5 FT WIDE VEGETATED FILTER STRIP (SEE DETAILS SHEETS 66 AND 126)
- 45 "5TH STREET" STA. 36+40, 21.6' LT CONSTRUCT PIPE CROSSING IE OUT = 142.64 (6" SW) INSTALL 6" DI STORM SEW PIPE - 21 LF 5' DEPTH (SEE DETAIL SHEET 72)
- 46 "5TH STREET" STA. 36+38, 21.3' LT CONSTRUCT PIPE CROSSING IE OUT = 142.64 (6" SW) INSTALL 6" DI STORM SEW PIPE - 21 LF 5' DEPTH (SEE DETAIL SHEET 72)
- 47 "5TH STREET" STA. 36+14, 16.3' LT CONSTRUCT PIPE CROSSING IE IN = 143.48 (6" NE) (SEE DETAILS ON SHEET 72)
- 48 "5TH STREET" STA. 36+17, 16.1' LT CONSTRUCT PIPE CROSSING IE IN = 143.48 (6" NE) (SEE DETAILS ON SHEET 72)
- 49 "5TH STREET" STA. 35+67, 16.4' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 144.67 (SEE SHEETS 66 AND 128 FOR DETAILS)
- 50 "5TH STREET" STA. 36+22, 67.3' RT CONSTRUCT RIPRAP OUTFALL PROTECTION WITH INLET IE IN = 131.58 INSTALL 10" STORM SEW PIPE - 69 LF (SEE SHEET 69 FOR DETAILS)
- 51 "5TH STREET" STA. 36+75, 22.0' LT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 143.29 IE IN = 139.90 (6" N) IE OUT = 138.45 (10" E) (SEE DETAILS ON SHEETS 66 AND 128)

GENERAL NOTES

1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS



SD-4 CL PROFILE: -0+50-1+50

REVISIONS

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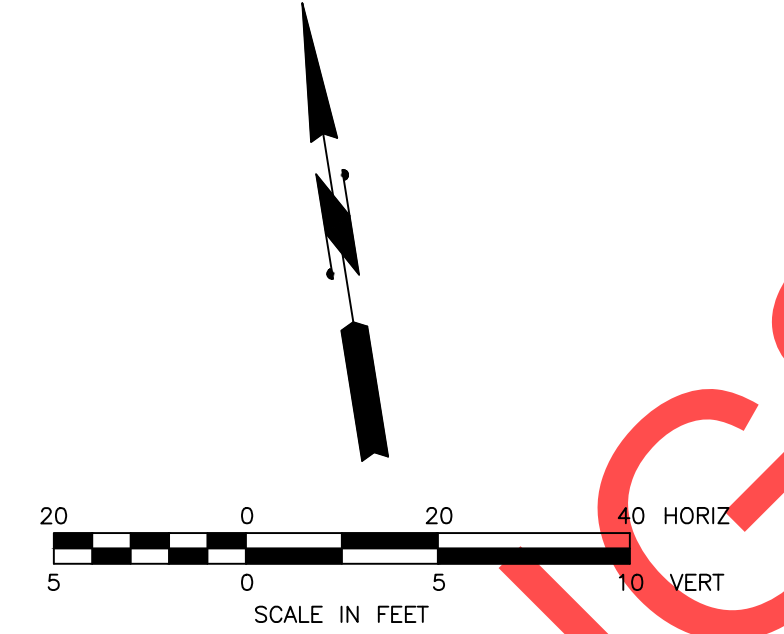
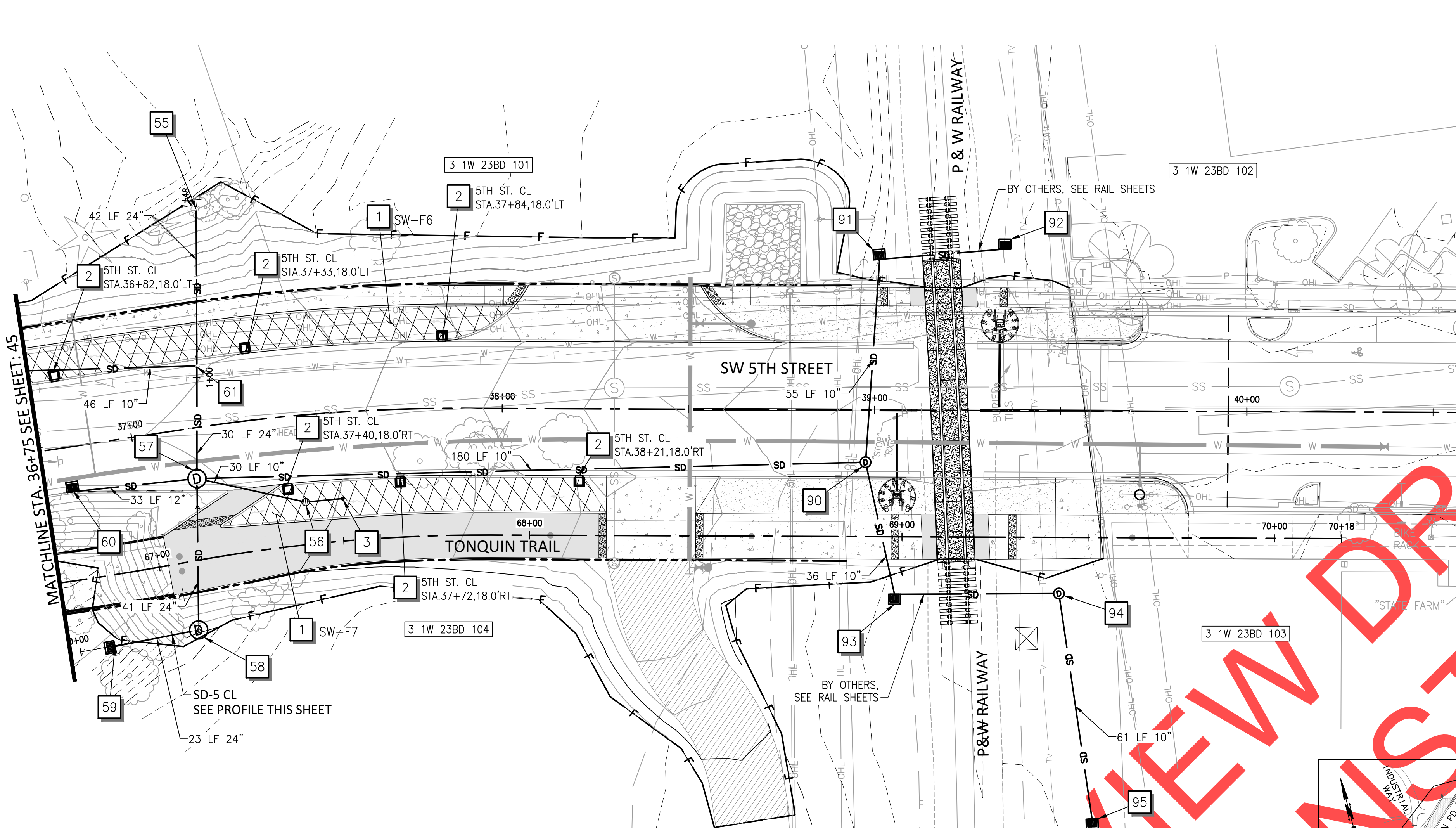
Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH STREET PLAN AND PROFILE STORM

CIP # 4196
PROJECT # 2017-02-001
SPO5
46 of 211



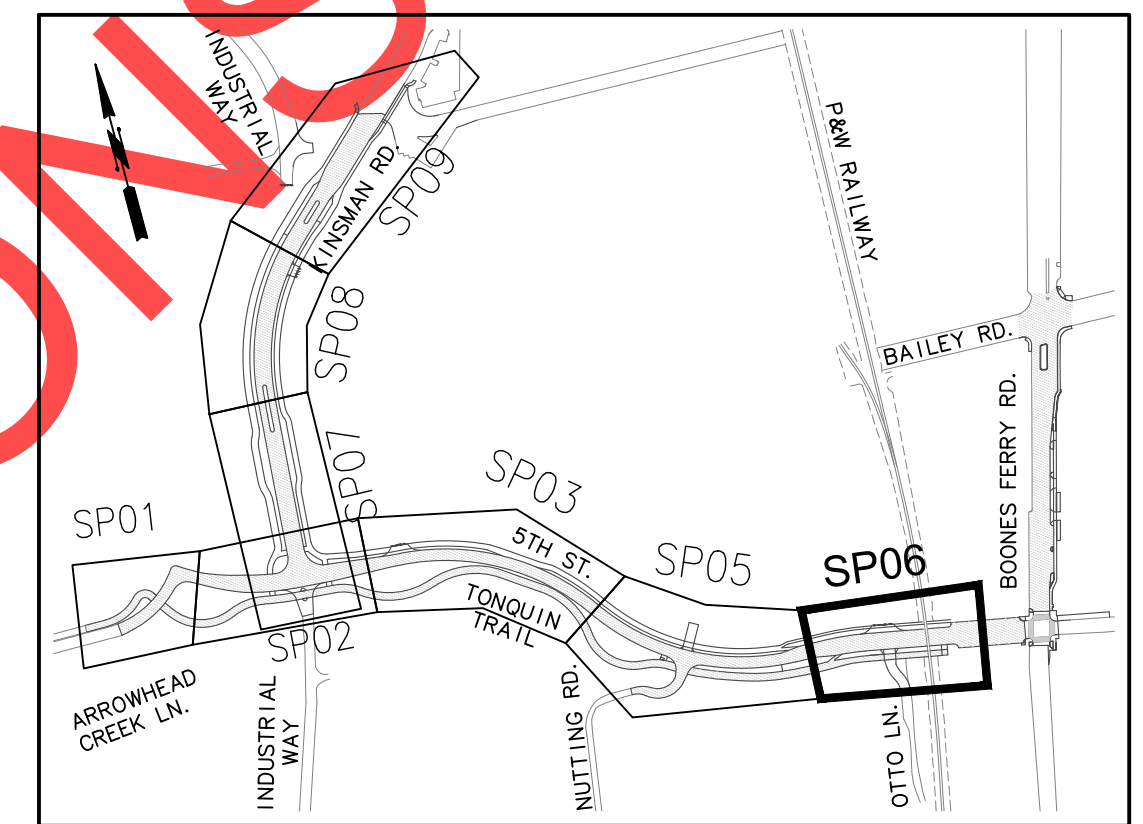
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GENERAL NOTES
 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

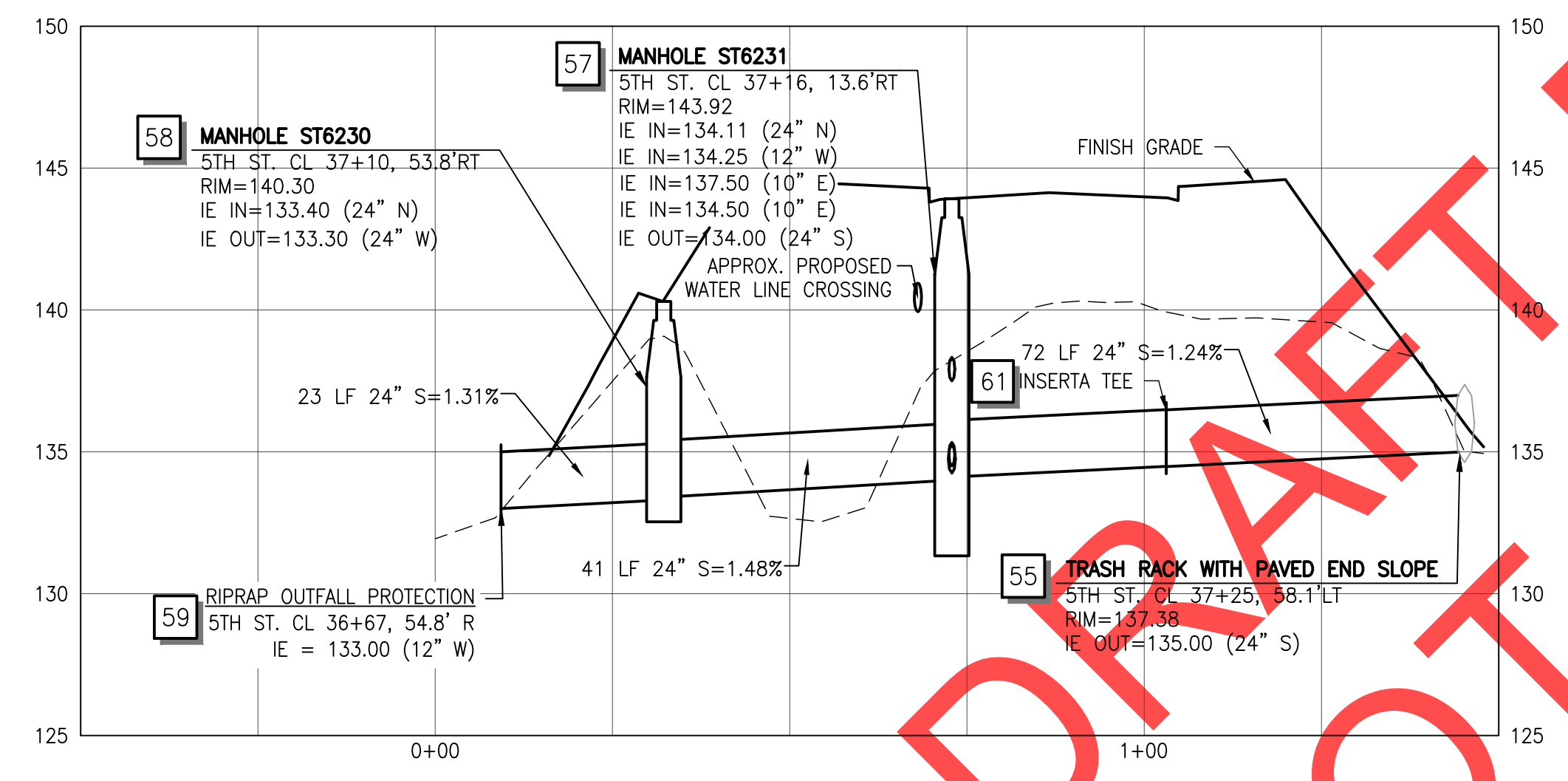
STORM NOTES

- 1 CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66 AND 128).
- 2 CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
- 3 INSTALL CLEANOUT (SEE DETAIL ON SHEET 73).
- 55 "5TH STREET" STA. 37+25, 58.1' LT CONSTRUCT TRASH RACK WITH PAVED END SLOPE IE OUT = 135.00 (24" S) (SEE DETAIL ON SHEET 82)
- 56 "5TH STREET" STA. 37+45, 23.3' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 143.91 IE IN = 140.60 (6" E) IE OUT = 140.40 (16" W) (SEE DETAILS ON SHEETS 66 AND 128)
- 57 "5TH STREET" STA. 37+16, 13.6' RT CONSTRUCT MANHOLE ST6231 INSTALL 10" STORM SEW. PIPE - 30 LF 5 FT DEPTH INSTALL 10" STORM SEW. PIPE - 180 LF 10 FOOT DEPTH INSTALL 12" STORM SEW. PIPE - 33 LF 5 FT DEPTH INSTALL 24" STORM SEW. PIPE - 30 LF 10 FT DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 58 "5TH STREET" STA. 37+10, 53.8' RT CONSTRUCT MANHOLE ST6230 INSTALL 24" STORM SEW. PIPE - 41 LF 10 FT DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 59 "5TH STREET" STA. 36+67, 54.8' RT CONSTRUCT RIPRAP OUTFALL PROTECTION INSTALL 24" STORM SEW. PIPE - 23 LF 10 FT DEPTH (SEE SHEET 72 FOR DETAILS)
- 60 "5TH STREET" STA. 36+82, 12.0' RT CONSTRUCT WATER QUALITY STRUCTURE SFCB-F1 RIM = 144.00 IE OUT = 139.80 (12" W) (SEE SHEETS 66 AND 70 FOR DETAILS)
- 61 "5TH STREET" STA. 37+16, 17.0' LT INSTALL PIPE TEES, 12" INSTALL 12" STORM SEW. PIPE - 46 LF 10 FT DEPTH (SEE DETAILS ON SHEET 129)
- 90 "5TH STREET" STA. 38+82, 14.0' R CONSTRUCT MANHOLE ST6225 RIM = 184.52 IE IN = 138.95 (10" N) IE IN = 138.65 (10" S) IE OUT = 138.55 (10" W) INSTALL 10" STORM SEW. PIPE - 92 LF 10 FT DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 91 "5TH STREET" STA. 39+01, 40.5' L CONSTRUCT DITCH INLET RIM = 144.00 IE IN = 139.50 IE OUT = 139.40 PIPE IN TO BE CONSTRUCTED BY OTHERS (SEE DETAIL ST-6125 ON SHEET 129)
- 92 "5TH STREET" STA. 39+35, 43.35' L CONSTRUCT DITCH INLET RIM = 144.00 IE OUT = 140.17 PIPE OUT TO BE CONSTRUCTED BY OTHERS (SEE DETAIL ST-6125 ON SHEET 129)
- 93 "5TH STREET" STA. 39+06, 49.4' R CONSTRUCT DITCH INLET RIM = 144.00 IE IN = 139.02 IE OUT = 138.92 PIPE IN TO BE CONSTRUCTED BY OTHERS (SEE DETAIL ST-6125 ON SHEET 129)
- 94 "5TH STREET" STA. 39+50, 49.1' R CONSTRUCT MANHOLE ST6226 RIM = 148.10 IE IN = 139.32 IE OUT = 139.32 INSTALL 10" STORM SEW. PIPE - 62 LF 10 FOOT DEPTH PIPE OUT TO BE CONSTRUCTED BY OTHERS (SEE DETAIL S-2005 ON SHEET 126)
- 95 "5TH STREET" STA. 39+59, 109.6' R CONSTRUCT DITCH INLET RIM = 143.55 IE OUT = 139.72 (SEE DETAIL ST-6125 ON SHEET 129)



KEY MAP

PROFILE FOR REFERENCE ONLY



SD-5 CL PROFILE: -0+50-1+50

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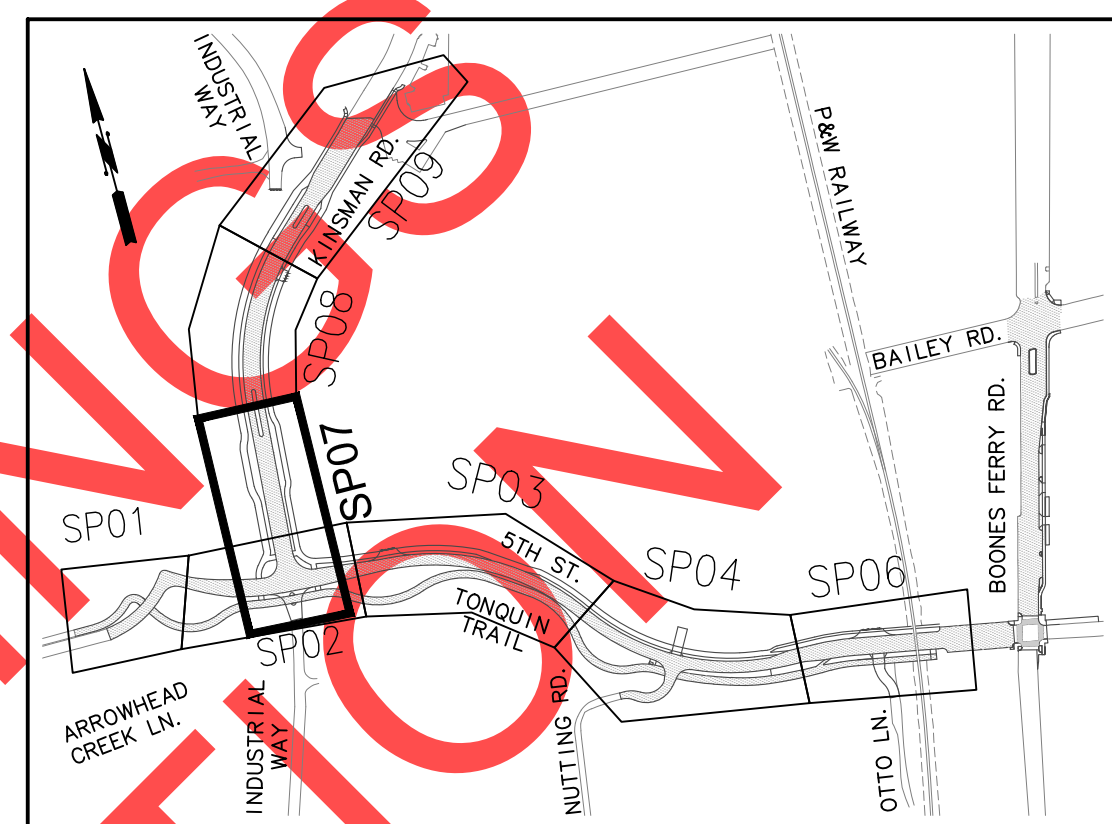
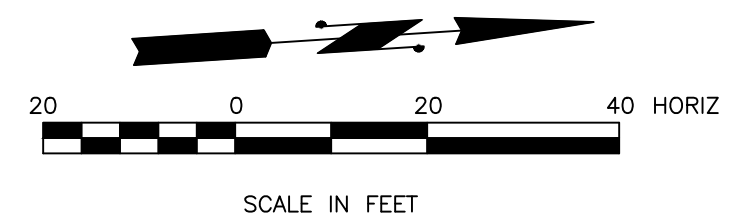
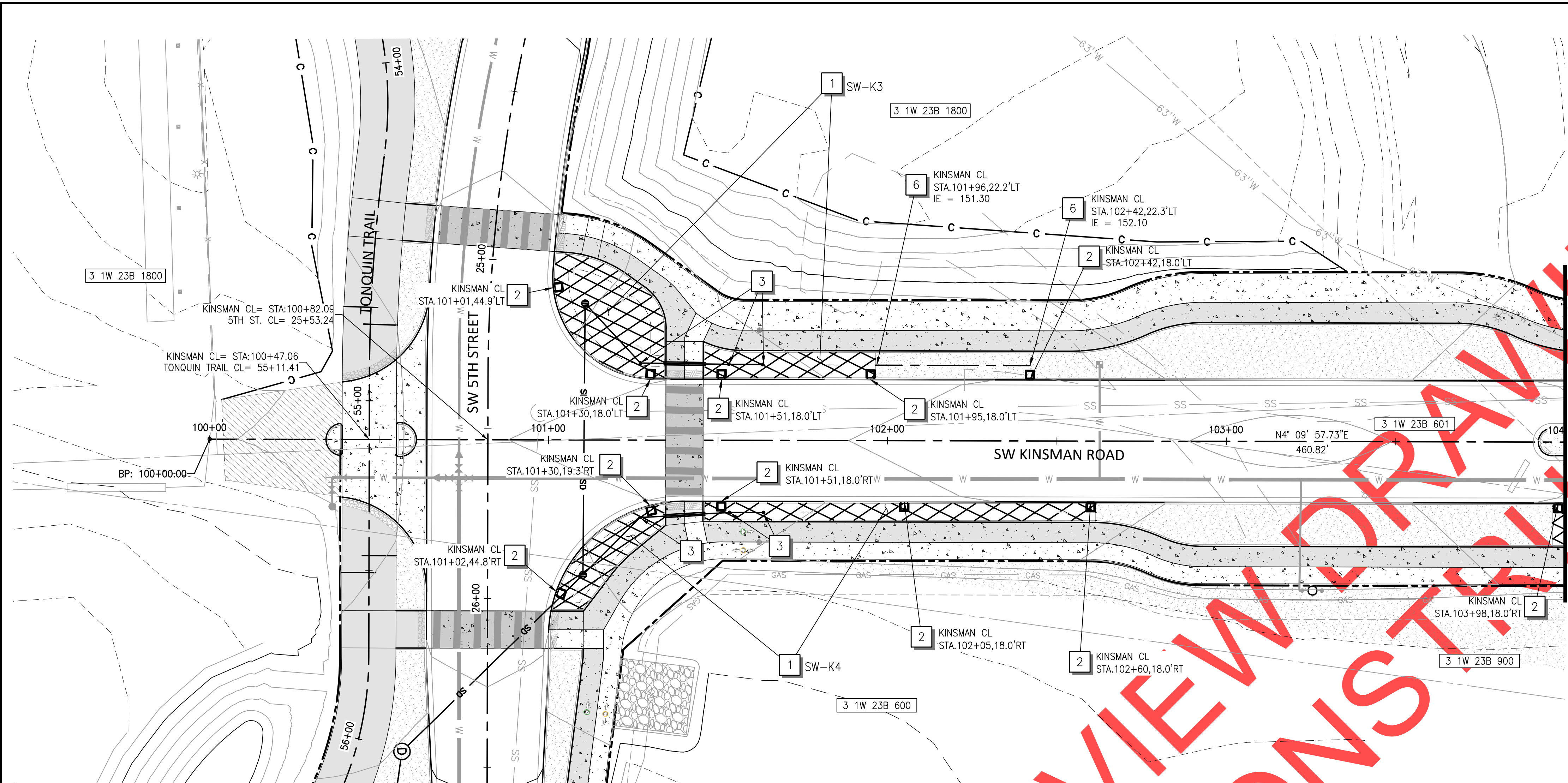
Date	1 February 2019
Scale	AS SHOWN
Designed By	PH/BB
Drawn By	EID
Checked By	A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH STREET PLAN AND PROFILE STORM

CIP #	4196
PROJECT #	2017-02-001
SP06	
47 of 211	



REVIEW SET - NOT FOR CONSTRUCTION



KEY MAP

STORM NOTES

- 1. CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66 AND 128).
- 2. CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
- 3. INSTALL CLEANOUT (SEE DETAIL SHEET 73).
- 6. CONSTRUCT CONVEYANCE DITCH (SEE DETAIL ON SHEET 72).

GENERAL NOTES

- 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

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NO.	REVISIONS

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Engineering Department
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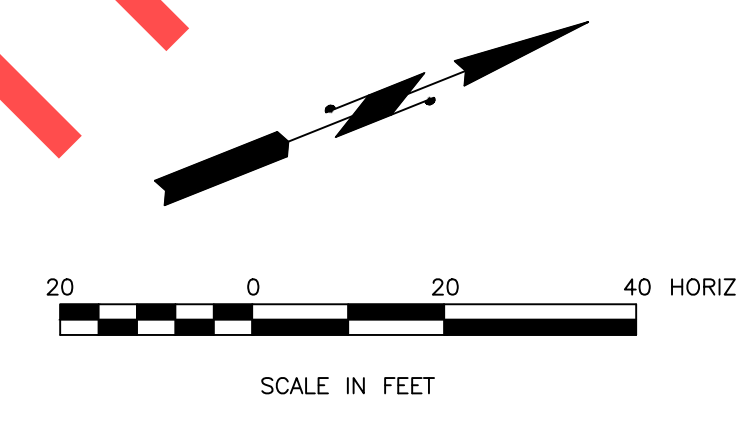
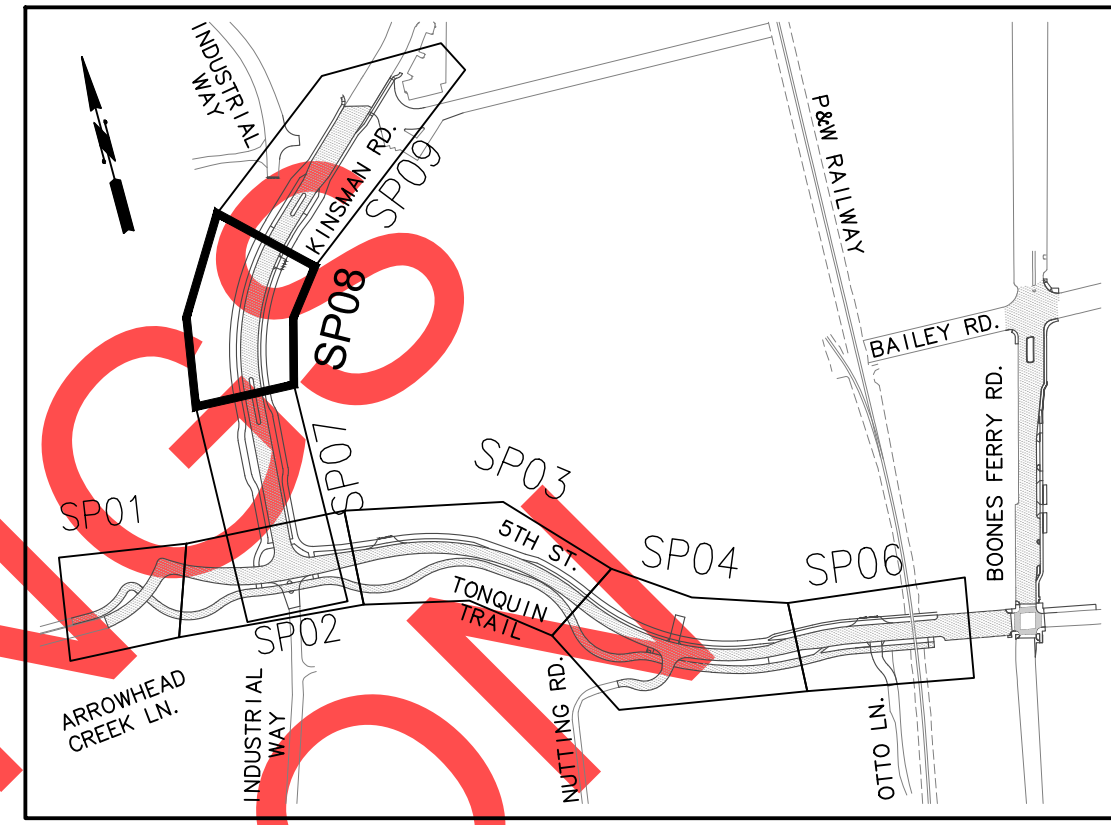
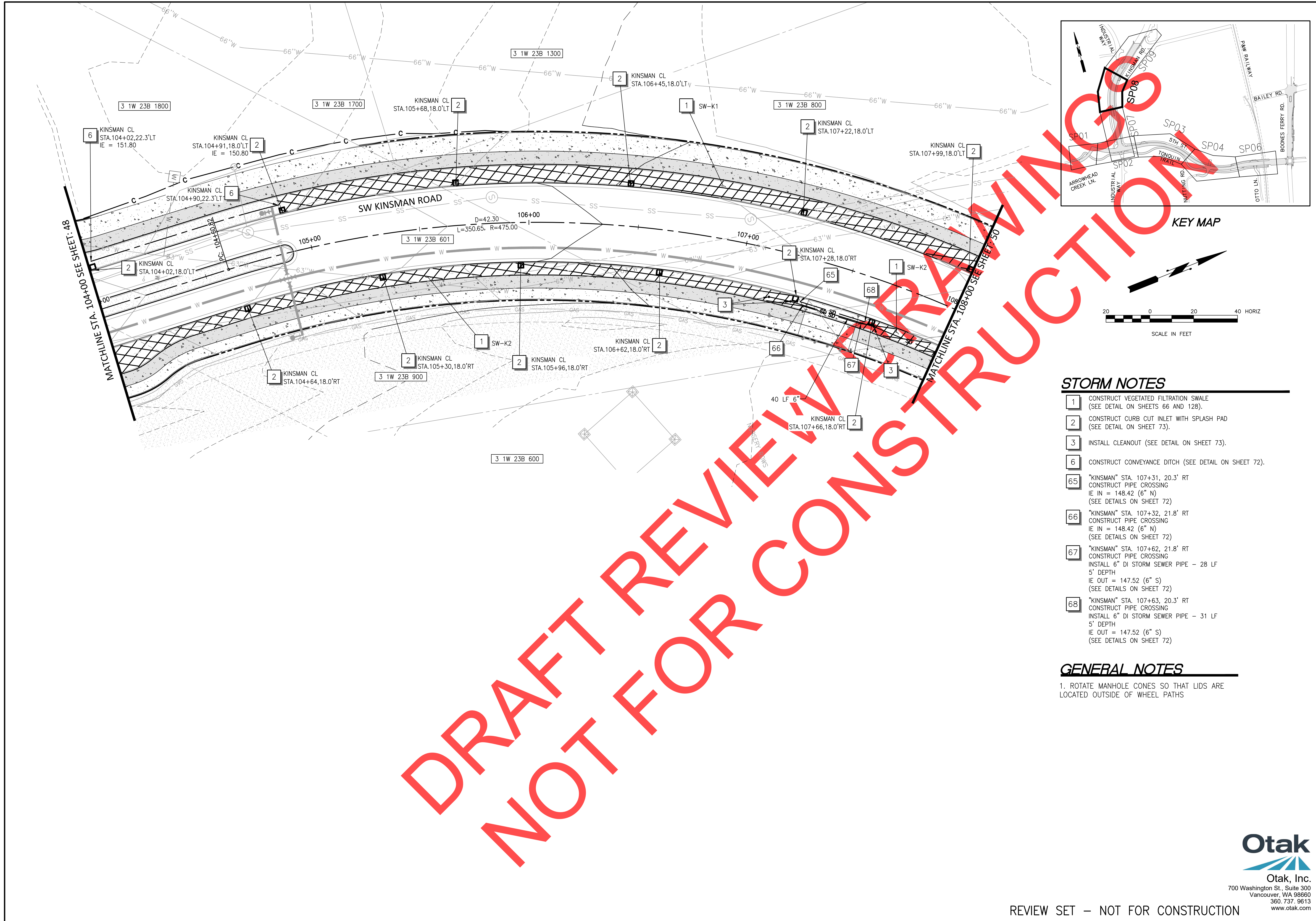
Date	1 February 2019
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Designed By	PH/BB
Drawn By	EID
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SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN ROAD PLAN AND PROFILE
STORM



CIP #	4196
PROJECT #	2017-02-001
	SP07
	48 of 211

REVIEW SET – NOT FOR CONSTRUCTION



STORM NOTES

- 1 CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66 AND 128).
- 2 CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAIL ON SHEET 73).
- 3 INSTALL CLEANOUT (SEE DETAIL ON SHEET 73).
- 6 CONSTRUCT CONVEYANCE DITCH (SEE DETAIL ON SHEET 72).
- 65 "KINSMAN" STA. 107+31, 20.3' RT
CONSTRUCT PIPE CROSSING
IE IN = 148.42 (6" N)
(SEE DETAILS ON SHEET 72)
- 66 "KINSMAN" STA. 107+32, 21.8' RT
CONSTRUCT PIPE CROSSING
IE IN = 148.42 (6" N)
(SEE DETAILS ON SHEET 72)
- 67 "KINSMAN" STA. 107+62, 21.8' RT
CONSTRUCT PIPE CROSSING
INSTALL 6" DI STORM SEWER PIPE - 28 LF
5' DEPTH
IE OUT = 147.52 (6" S)
(SEE DETAILS ON SHEET 72)
- 68 "KINSMAN" STA. 107+63, 20.3' RT
CONSTRUCT PIPE CROSSING
INSTALL 6" DI STORM SEWER PIPE - 31 LF
5' DEPTH
IE OUT = 147.52 (6" S)
(SEE DETAILS ON SHEET 72)

GENERAL NOTES

- 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS

NO.	REVISIONS

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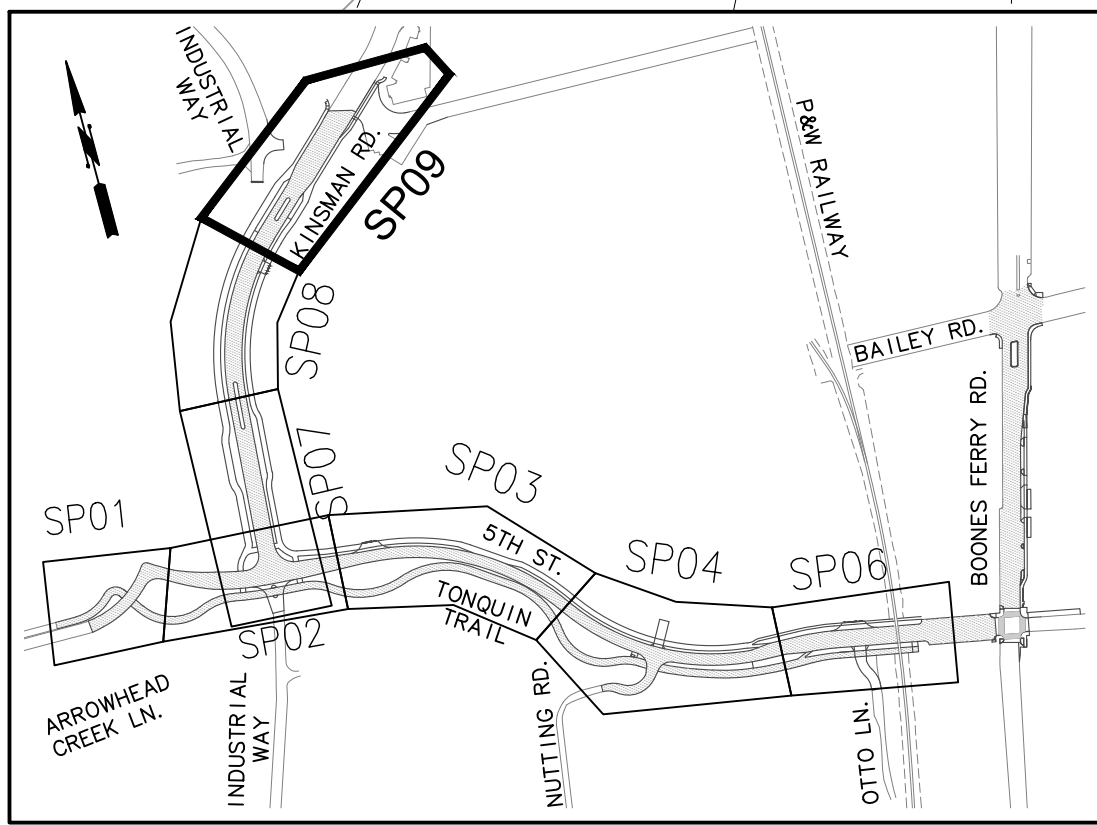
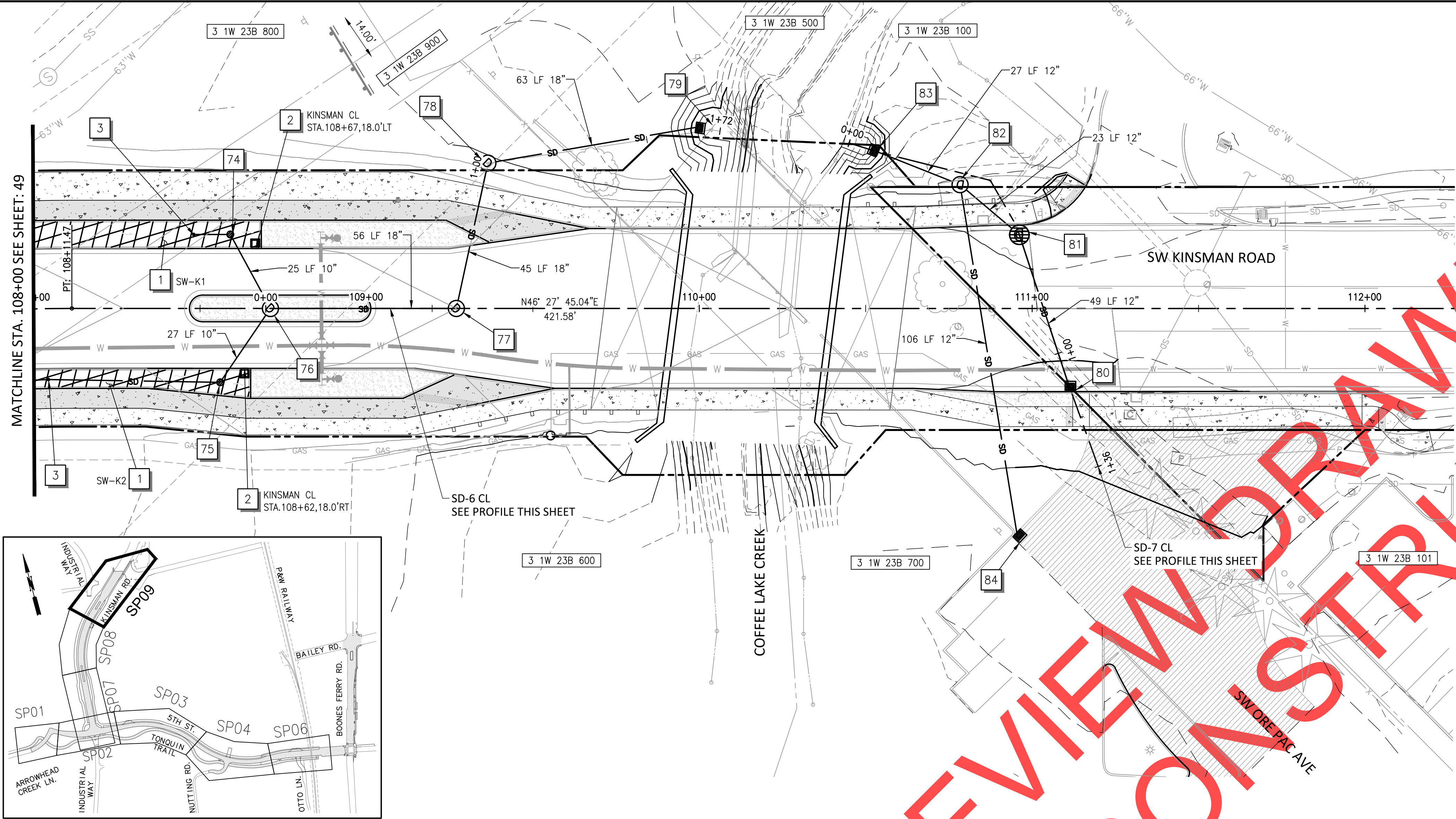
Date	1 February 2019
Scale	AS SHOWN
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**SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN ROAD PLAN AND PROFILE
STORM**



CIP #	4196
PROJECT #	2017-02-001
	SP08
	49 of 211

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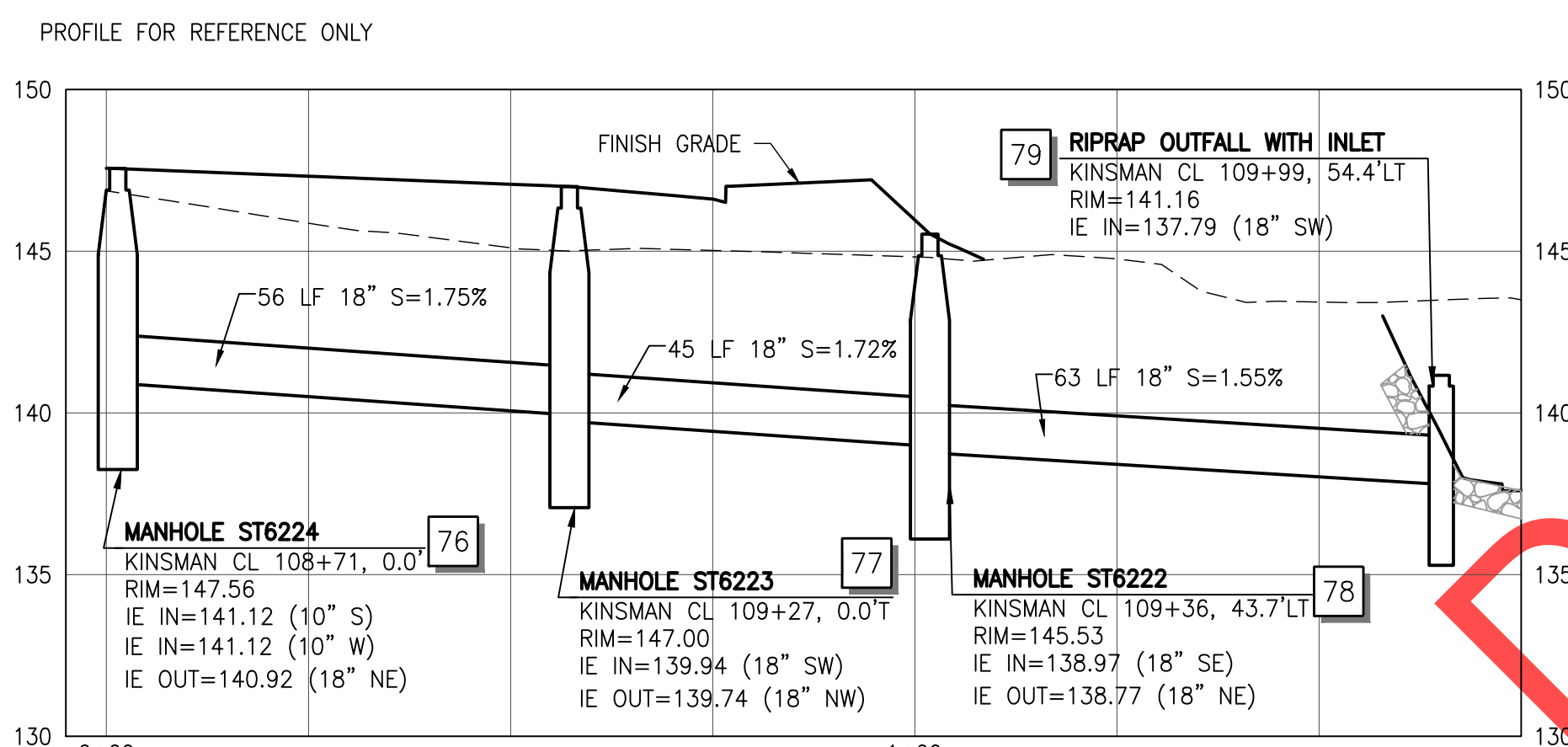


STORM NOTES

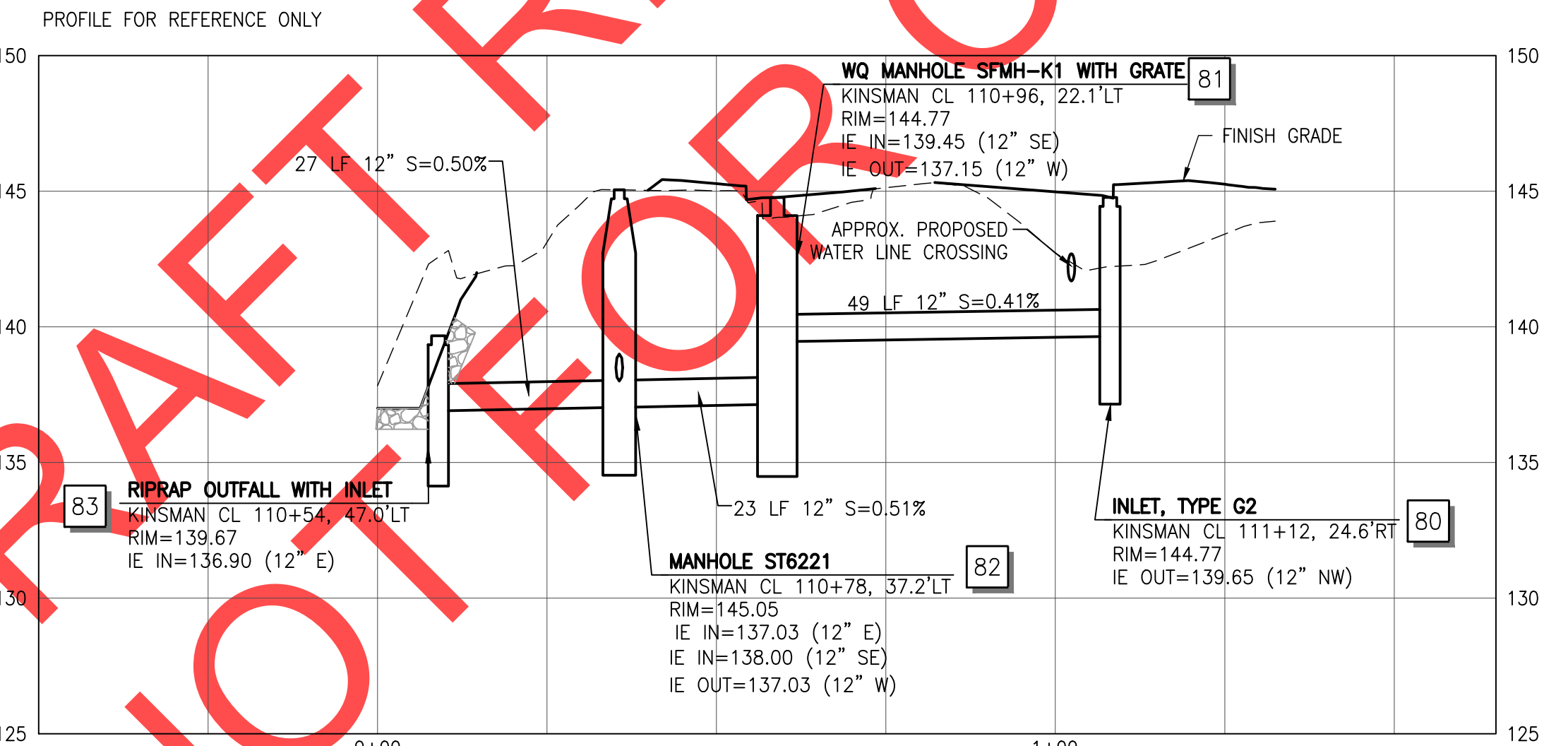
- 1 CONSTRUCT VEGETATED FILTRATION SWALE (SEE DETAIL ON SHEETS 66 AND 128).
- 2 CONSTRUCT CURB CUT INLET WITH SPLASH PAD (SEE DETAILS ON SHEET 73).
- 3 INSTALL CLEANOUT (SEE DETAILS ON SHEET 73).
- 74 "KINSMAN" STA. 108+65, 22.2' LT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 146.96 IE IN = 143.60 (6" SW) IE OUT = 143.00 (10" E) (SEE DETAILS ON SHEETS 66 AND 128)
- 75 "KINSMAN" STA. 108+62, 22.2' RT CONSTRUCT BEEHIVE OVERFLOW INLET RIM = 147.35 IE IN = 143.86 (6" SW) IE OUT = 142.04 (10" E) (SEE DETAILS ON SHEETS 66 AND 128)
- 76 "KINSMAN" STA. 108+71, 00.0' RT CONSTRUCT MANHOLE ST6224 INSTALL 10" STORM SEW. PIPE - 52 LF 10' DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 77 "KINSMAN" STA. 109+27, 0.00' RT CONSTRUCT MANHOLE ST6223 INSTALL 18" STORM SEWER PIPE - 56 LF 10' DEPTH (SEE DETAIL ON SHEET 126)
- 78 "KINSMAN" STA. 109+36, 43.7' LT CONSTRUCT MANHOLE ST6222 INSTALL 18" STORM SEWER PIPE - 45 LF 10' DEPTH (SEE DETAIL S-2005 ON SHEET 126)
- 79 "KINSMAN" STA. 110+04, 53.6' LT CONSTRUCT RIPRAP OUTFALL WITH INLET INSTALL 18" STORM SEWER PIPE - 63 LF 10' DEPTH (SEE DETAIL ON SHEET 69)
- 80 "KINSMAN" STA. 111+12, 24.6' RT CONSTRUCT INLET, TYPE G2 RIM = 144.77 (SEE DETAIL S-2095 ON SHEET 131)
- 81 "KINSMAN" STA. 110+95, 24.8' LT CONSTRUCT WATER QUALITY STRUCTURE SFMH-K1 (MANHOLE ST6224) INSTALL 12" STORM SEWER PIPE - 49 LF 5' DEPTH (SEE DETAIL S-2095 ON SHEET 71)
- 82 "KINSMAN" STA. 110+78, 37.2' LT CONSTRUCT MANHOLE ST6221 INSTALL 12" STORM SEWER PIPE - 23 LF 10' DEPTH INSTALL 12" STORM SEWER PIPE - 106 LF 5' DEPTH (SEE DETAILS ON SHEET 126)
- 83 "KINSMAN" STA. 110+54, 47.0' LT CONSTRUCT RIPRAP OUTFALL WITH INLET INSTALL 12" STORM SEWER PIPE - 27 LF 10' DEPTH (SEE DETAIL ON SHEET 69)
- 84 "KINSMAN" STA. 110+95, 67.3' RT CONSTRUCT WATER QUALITY STRUCTURE SFCB-K2 RIM = 144.08 IE OUT = 140.25 (12" N) (SEE DETAIL ON SHEET 69)

GENERAL NOTES

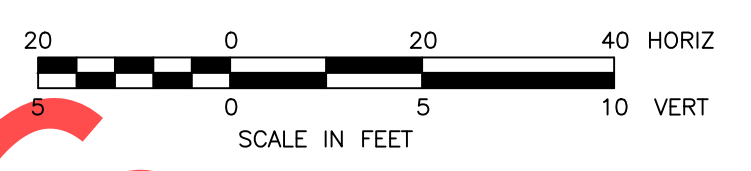
1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS



SD-6 CL PROFILE: -0+05-1+75



SD-7 CL PROFILE: -0+50-1+65



REVISIONS

PRELIMINARY

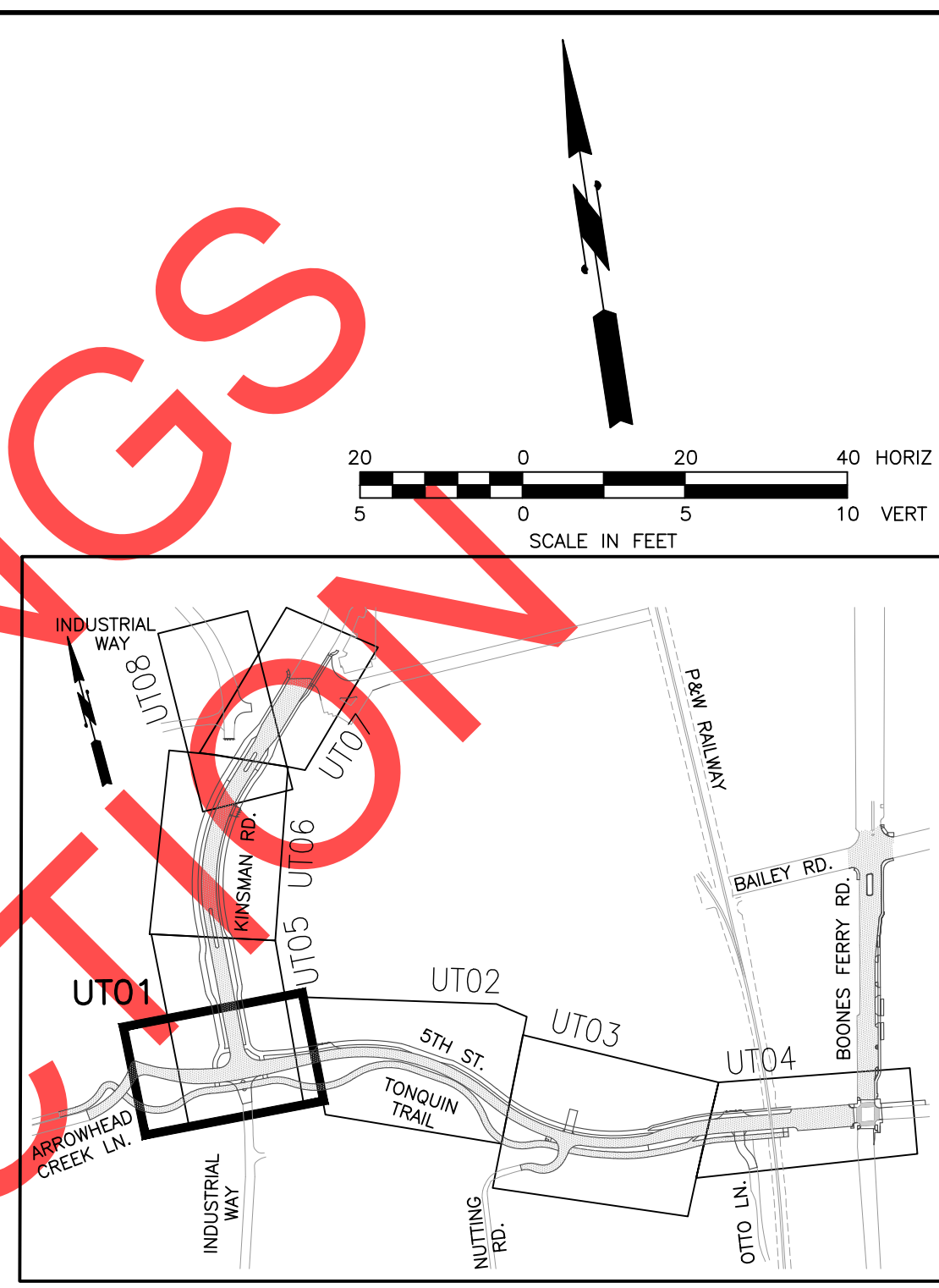
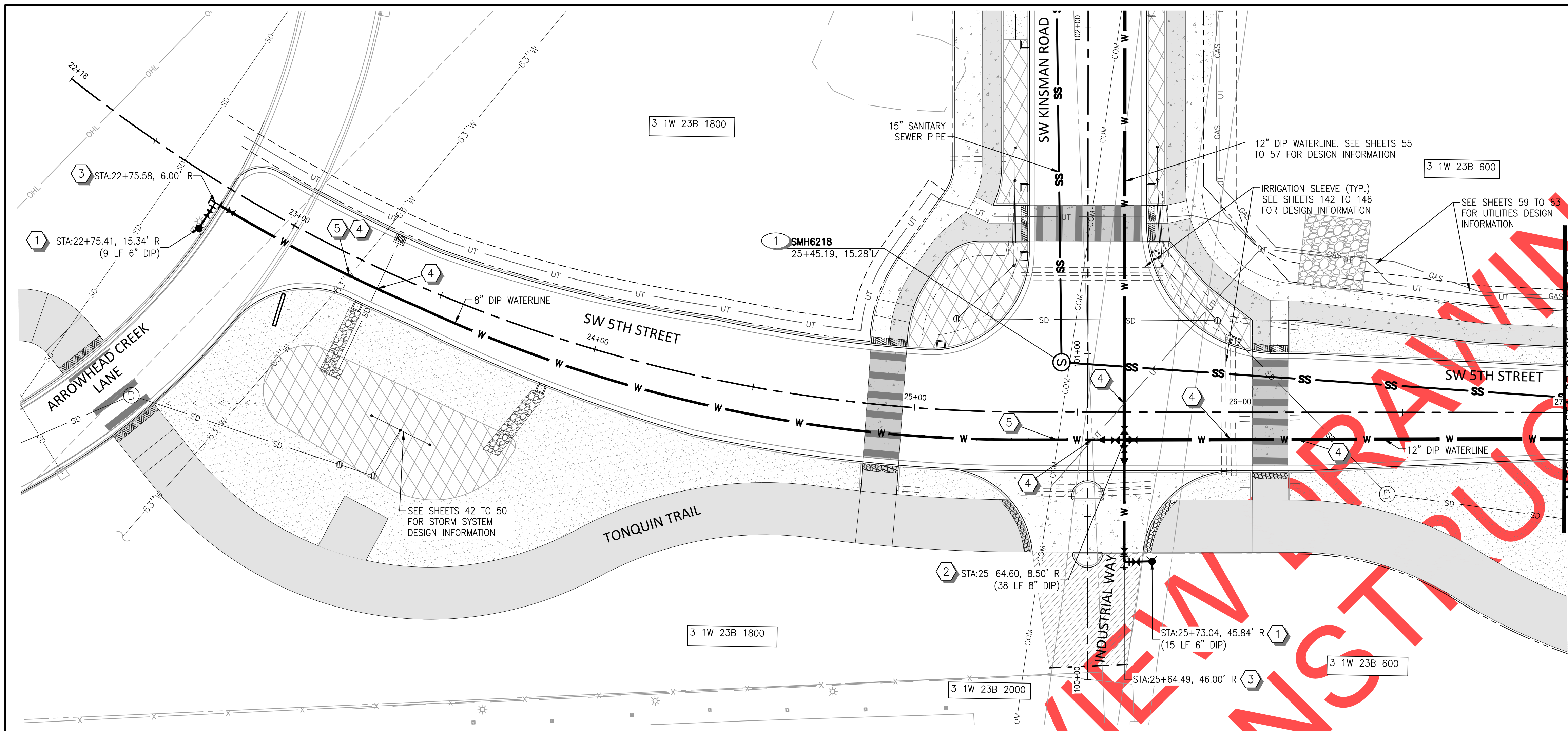
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
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Drawn By: EID
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SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN ROAD PLAN AND PROFILE
STORM

CIP # 4196
PROJECT # 2017-02-001
SPO9
50 of 211





KEY MAP

WATER NOTES

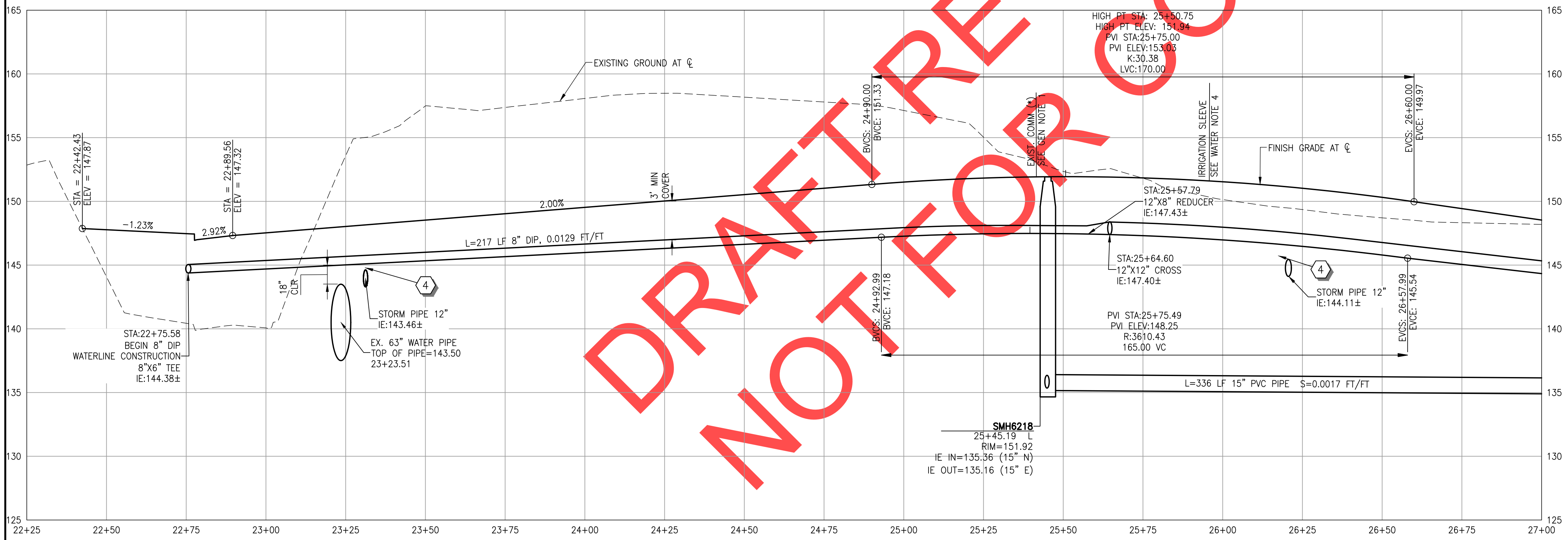
- 1 INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE STD. DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS.
- 2 INSTALL (1) DIP CROSS, 12"x12" (FLG), LENGTH OF PIPE TO THE SOUTH IN PARENTHESIS.
- 4 (4) 12" BUTTERFLY VALVE (FLG X MJ)
(2) 12"x8" DIP REDUCER (FLG) ON SOUTH AND WEST ARMS.
- 3 INSTALL (1) DIP TEE, 8"x6" (FLG)
(1) 8" GATE VALVE (FLG X MJ)
(1) 6" GATE VALVE (FLG X MJ)
(1) 8" BLIND FLG
- 4 UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- 5 PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.

SANITARY SEWER NOTES

- 1 INSTALL STANDARD MANHOLE, 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126.

GENERAL NOTES

- 1. ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
- 2. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
- 3. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVISIONS

PRELIMINARY

City of Wilsonville
Engineering Department
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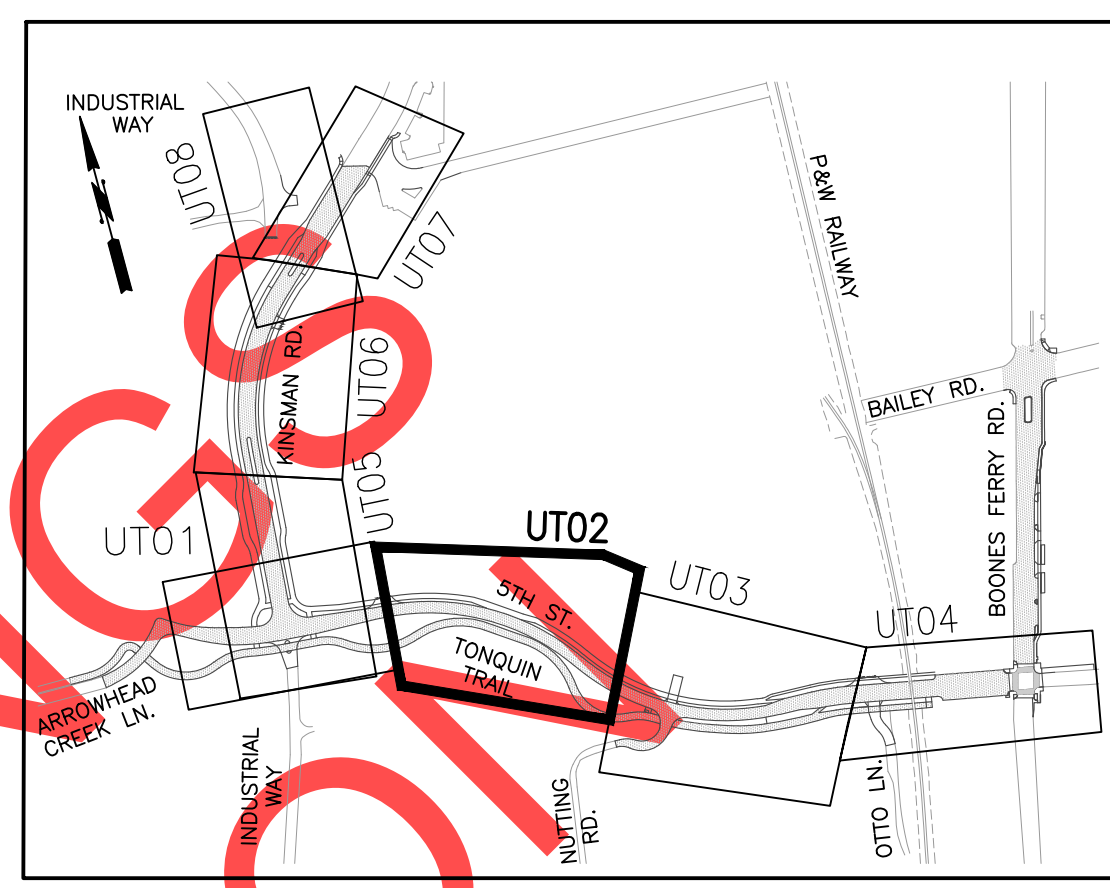
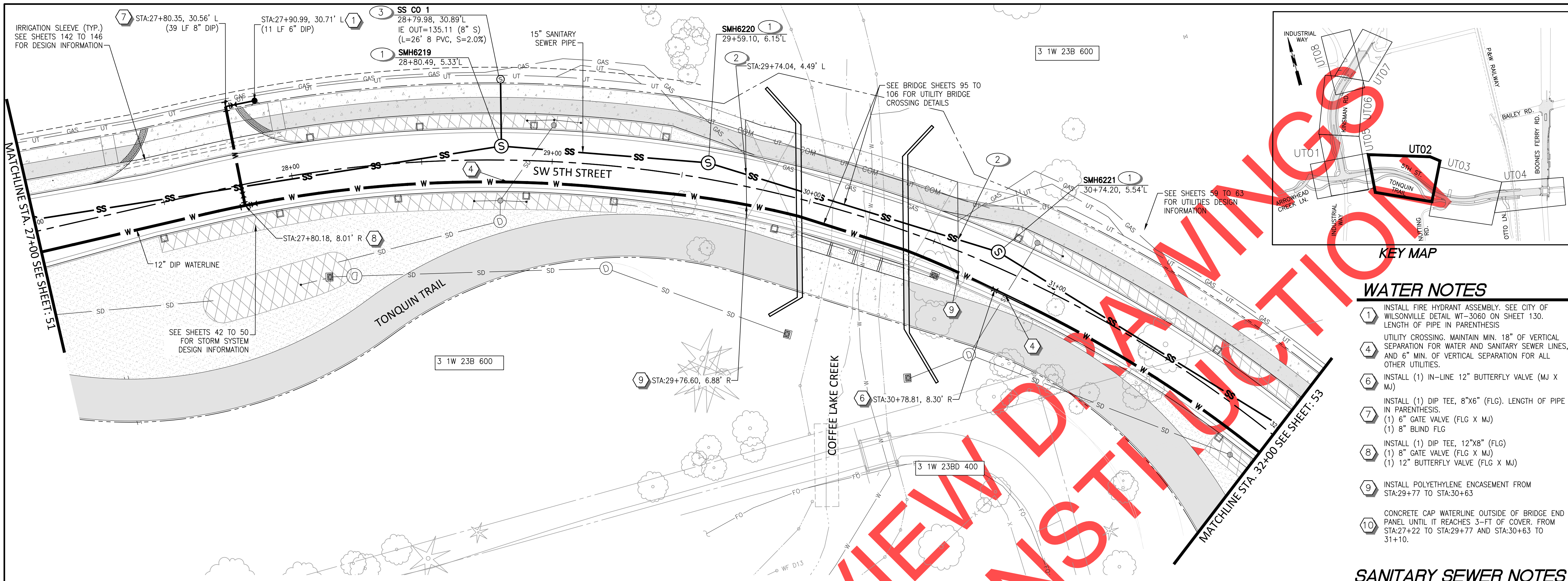
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**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST- SEWER AND WATER
PLAN AND PROFILE**

CIP# 4196
PROJECT# 2017-02-001
UT01
51 of 211



REVIEW SET - NOT FOR CONSTRUCTION



WATER NOTES

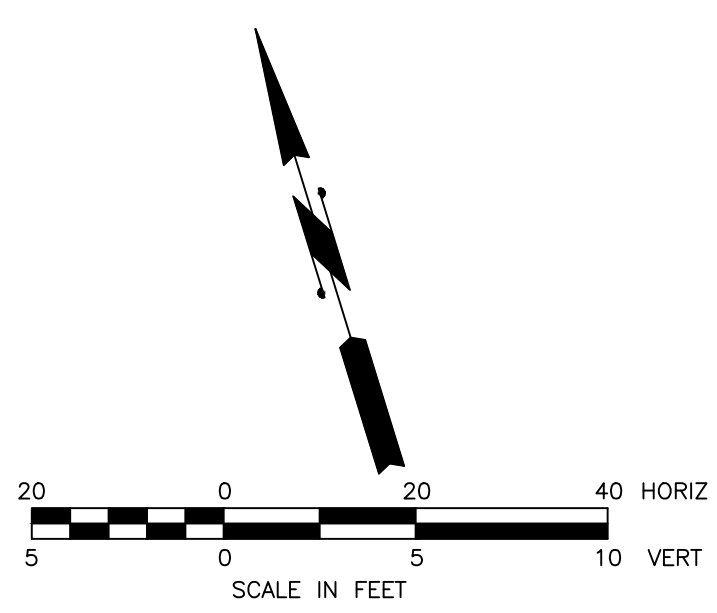
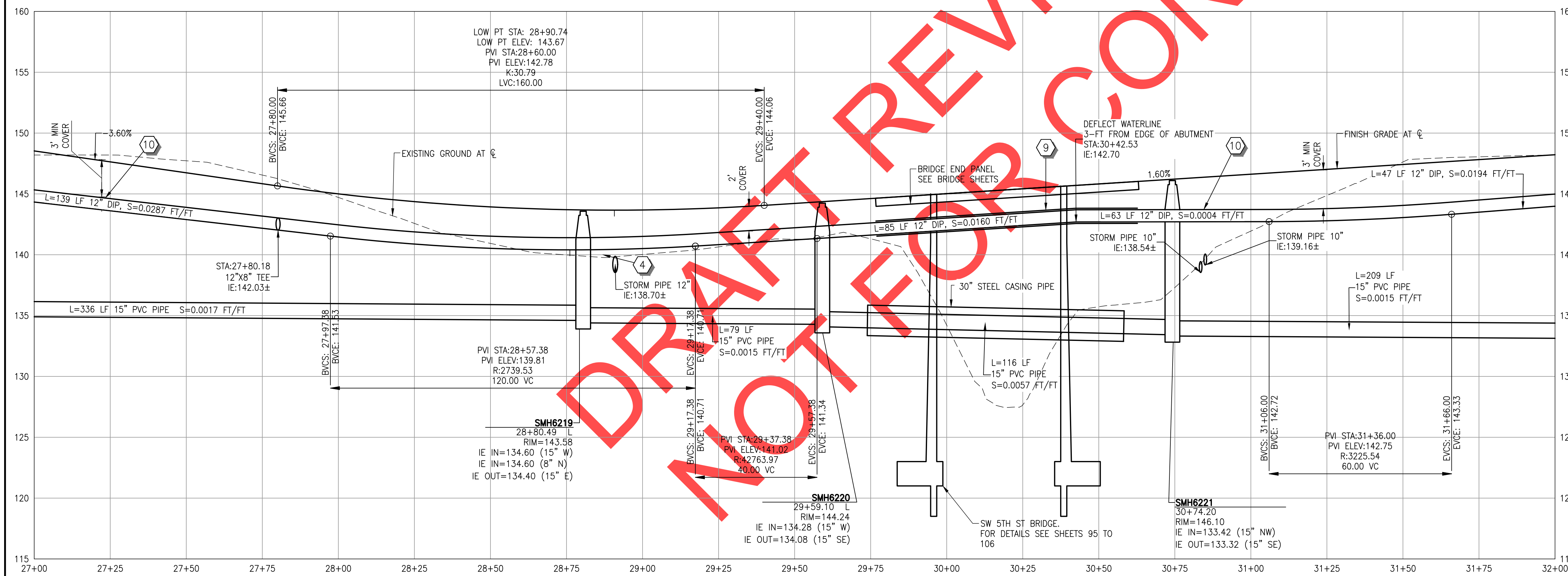
- 1 INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS
- 4 UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- 6 INSTALL (1) IN-LINE 12" BUTTERFLY VALVE (MJ X MJ)
- 7 INSTALL (1) DIP TEE, 8"x6" (FLG). LENGTH OF PIPE IN PARENTHESIS.
(1) 6" GATE VALVE (FLG X MJ)
(1) 8" BLIND FLG
- 8 INSTALL (1) DIP TEE, 12"x8" (FLG)
(1) 8" GATE VALVE (FLG X MJ)
(1) 12" BUTTERFLY VALVE (FLG X MJ)
- 9 INSTALL POLYETHYLENE ENCASUREMENT FROM STA:29+77 TO STA:30+63
- 10 CONCRETE CAP WATERLINE OUTSIDE OF BRIDGE END PANEL UNTIL IT REACHES 3'-FT OF COVER. FROM STA:27+22 TO STA:29+77 AND STA:30+63 TO 31+10.

SANITARY SEWER NOTES

- 1 INSTALL STANDARD MANHOLE, 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126
- 2 INSTALL 30" STEEL CASING FROM STA:29+74 TO STA:30+58. SEE PROFILE ON THIS SHEET
- 3 INSTALL STANDARD CLEANOUT. SEE CITY OF WILSONVILLE STD. DETAIL S-2180 ON SHEET 127. LENGTH OF PIPE IN PARENTHESIS.

GENERAL NOTES

- 1. ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
- 2. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
- 3. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVISIONS

PRELIMINARY

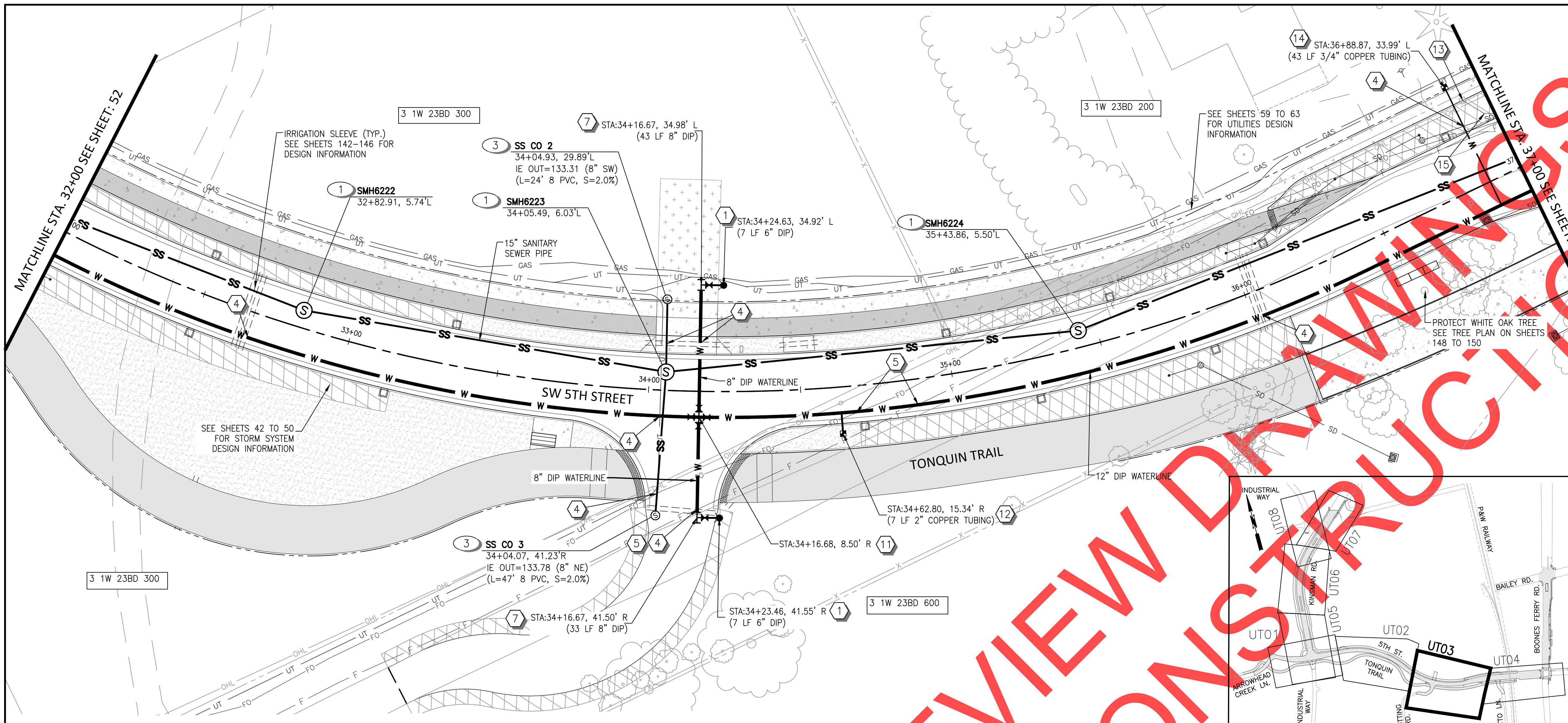
City of Wilsonville
Engineering Department
29759 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST - SEWER AND WATER
PLAN AND PROFILE**

CIP# 4196
PROJECT# 2017-02-001
UT02
52 of 211

REVIEW SET - NOT FOR CONSTRUCTION



WATER NOTES

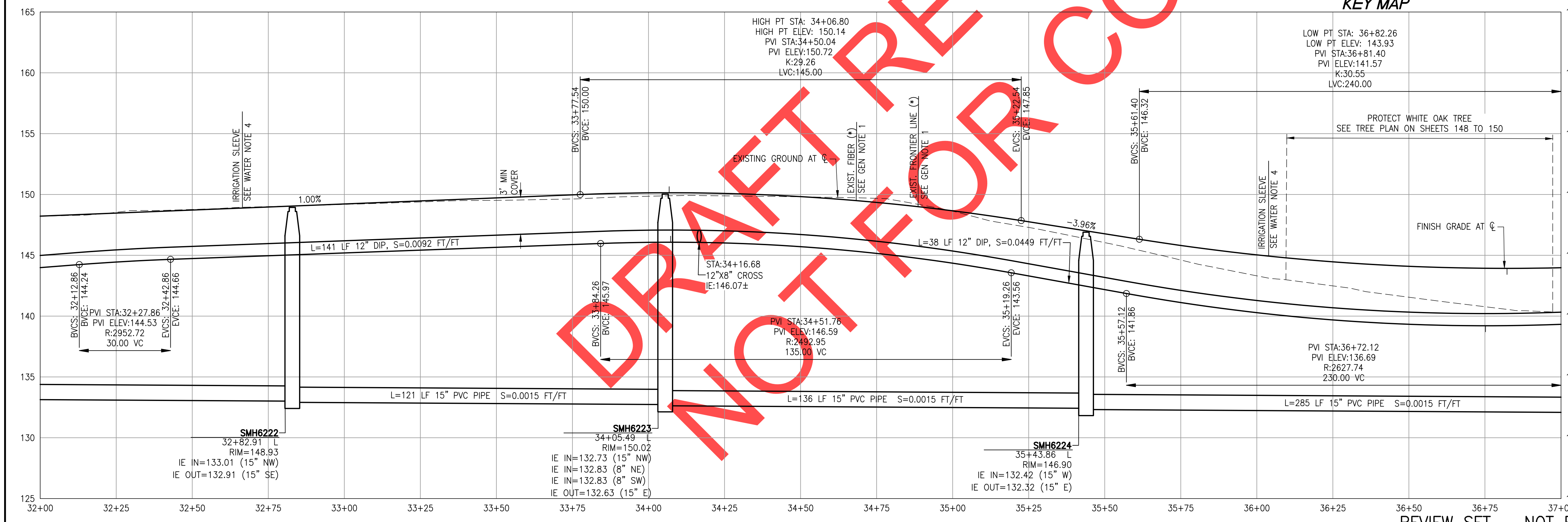
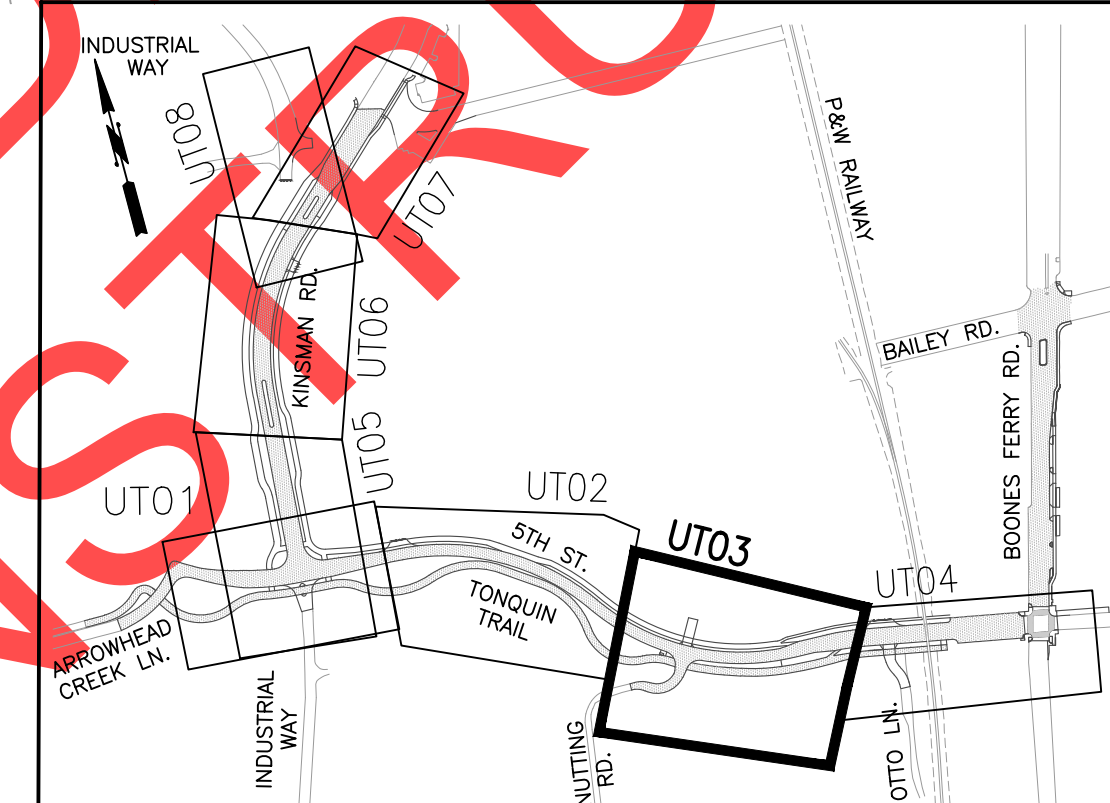
- 1 INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS
- 4 UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- 5 PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.
- 7 INSTALL (1) DIP TEE, 8"x6" (FLG). LENGTH OF PIPE IN PARENTHESIS.
(1) 6" GATE VALVE (FLG X MJ)
(1) 8" BLIND FLG
- 11 INSTALL (1) DIP CROSS, 12"x8" (FLG)
(2) 12" BUTTERFLY VALVE (FLG X MJ)
(2) 8" GATE VALE (FLG X MJ)
- 12 INSTALL 2" SINGLE SERVICE WITH 1 1/2" METER FOR IRRIGATION SYSTEM. SEE CITY OF WILSONVILLE DETAILS WT-3045 & WT-3050 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS.
- 13 RELOCATE 3/4" WATER METER ASSEMBLY AS SHOWN. NOTIFY AFFECTED CUSTOMER OF SERVICE INTERRUPTION AT LEAST 24 HOURS PRIOR TO SERVICE INTERRUPTION.
- 14 INSTALL 1" COPPER SERVICE LINE. LENGTH OF COPPER TUBING IN PARENTHESIS. CONTRACTOR TO VERIFY EXISTING METER SIZE AND CONTACT ENGINEER IF CONFLICT EXISTS. SEE CITY OF WILSONVILLE STD DETAIL WT-3030 & WT-3036 ON SHEET 132.
- 15 ABANDON WATERLINE AFTER NEW WATERLINE IS INSTALLED, TESTED, AND APPROVED BY THE CITY.

SANITARY SEWER NOTES

- 1 INSTALL STANDARD MANHOLE, 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126
- 3 INSTALL STANDARD CLEANOUT. SEE CITY OF WILSONVILLE STD. DETAIL S-2180 ON SHEET 127. LENGTH OF PIPE IN PARENTHESIS.

GENERAL NOTES

- 1. ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
- 2. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
- 3. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



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REVISIONS

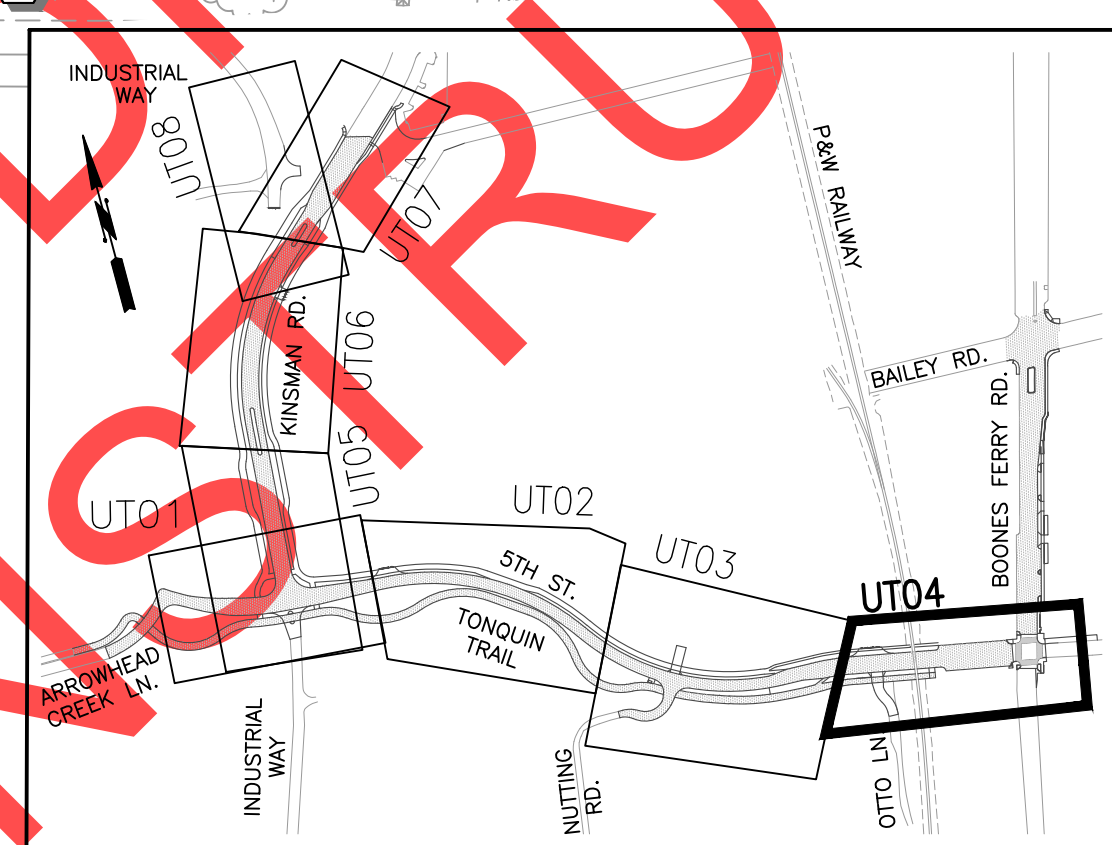
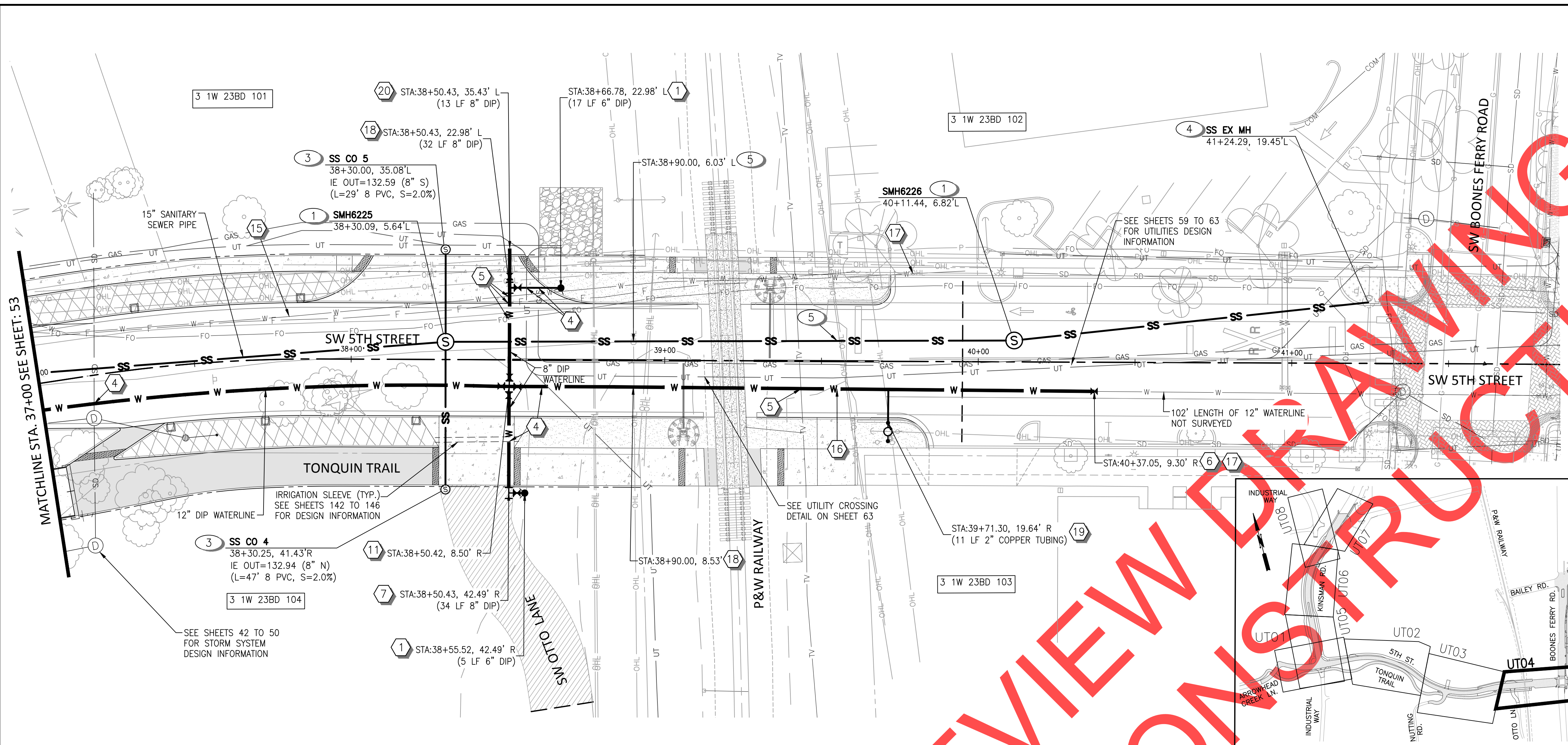
PRELIMINARY

City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
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Date: 1 February 2019
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 Drawn By: EID
 Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH ST - SEWER AND WATER
 PLAN AND PROFILE**

CIP# 4196
 PROJECT# 2017-02-001
 UTO3
 53 of 211



WATER NOTES

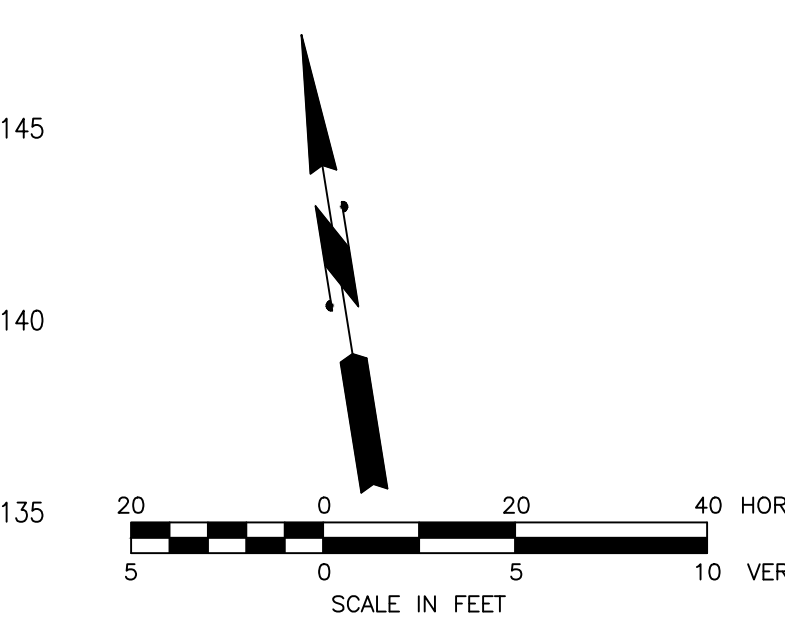
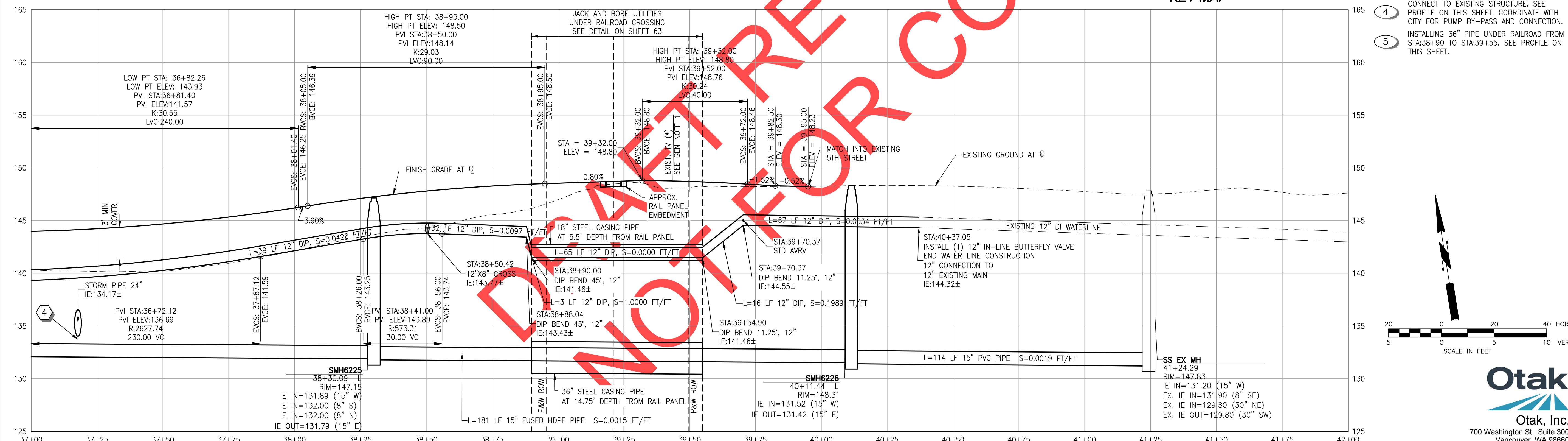
- INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS
- UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.
- INSTALL (1) 12" IN-LINE BUTTERFLY VALVE (MJ X MJ)
- INSTALL (1) DIP TEE, 8"x6" (FLG). LENGTH OF PIPE IN PARENTHESIS.
- (1) 8" GATE VALVE (FLG X MJ)
- (1) 8" BUND FLG
- INSTALL (1) DIP CROSS, 12"x8" (FLG)
- (2) 12" FLG X MJ BUTTERFLY VALVE
- (2) 8" FLG X MJ GATE VALVE
- ABANDON WATERLINE AFTER NEW WATERLINE IS INSTALLED, TESTED, AND APPROVED BY THE CITY.
- INSTALLING 18" PIPE UNDER RAILROAD FROM STA:38+90 TO STA:39+55. SEE PROFILE ON THIS SHEET.
- 12" CONNECTION TO 12" EXISTING MAIN LOCATION APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXISTING WATERLINE LOCATION & INVERT ELEVATION. CONTACT ENGINEER IF CONFLICT EXISTS.
- INSTALL (1) DIP TEE, 8"x6" (FLG). LENGTH OF PIPE IN PARENTHESIS.
- (1) 8" GATE VALVE (FLG X MJ)
- (1) 6" GATE VALVE (FLG X MJ)
- INSTALL (1) STANDARD AIR AND VACUUM RELEASE VALVE. SEE CITY OF WILSONVILLE STD. DETAIL WT-3090 ON SHEET 128. TAP 12" WATERLINE AT HIGH POINT, APPROX STA:39+70
- INSTALL (1) 8" MJ PLUG. LENGTH OF PIPE IN PARENTHESIS.

GENERAL NOTES

- ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
- ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
- PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.

SANITARY SEWER NOTES

- INSTALL STANDARD MANHOLE, 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126.
- INSTALL STANDARD CLEANOUT. SEE CITY OF WILSONVILLE STD. DETAIL S-2180 ON SHEET 127. LENGTH OF PIPE IN PARENTHESIS.
- CONNECT TO EXISTING STRUCTURE. SEE PROFILE ON THIS SHEET. COORDINATE WITH CITY FOR PUMP BY-PASS AND CONNECTION.
- INSTALLING 36" PIPE UNDER RAILROAD FROM STA:38+90 TO STA:39+55. SEE PROFILE ON THIS SHEET.



REVISIONS

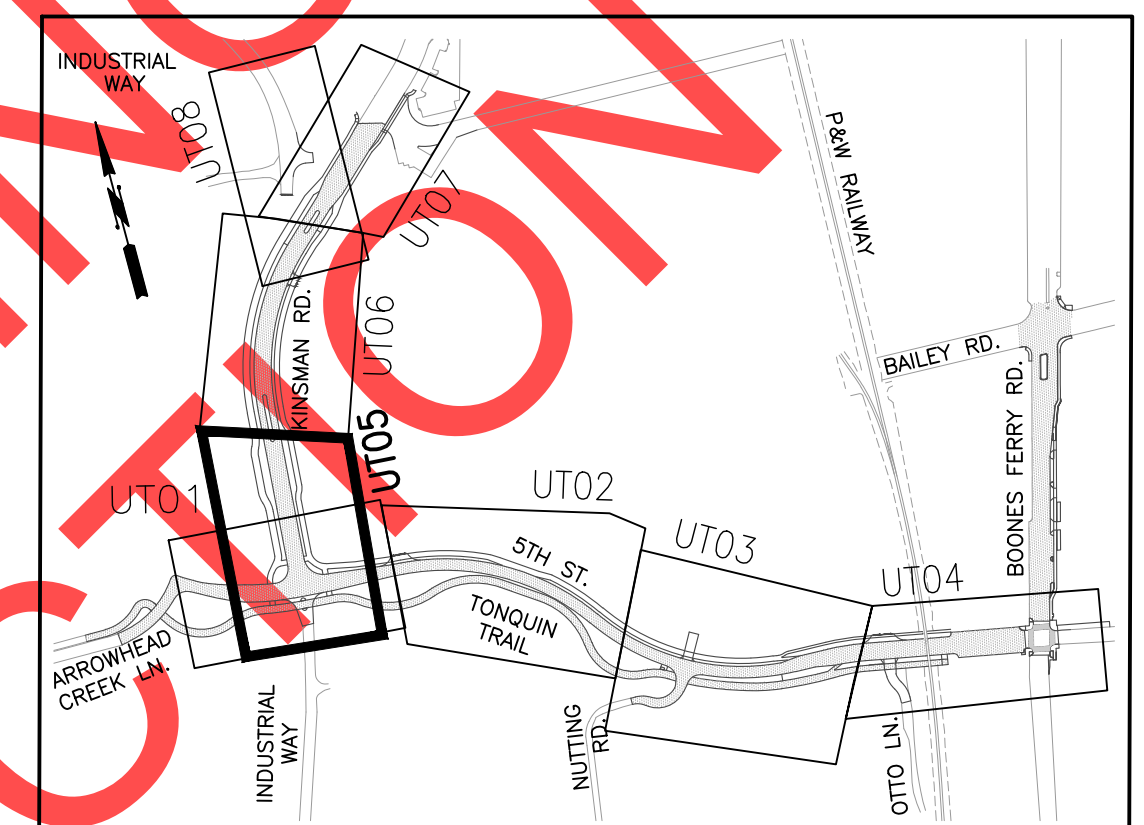
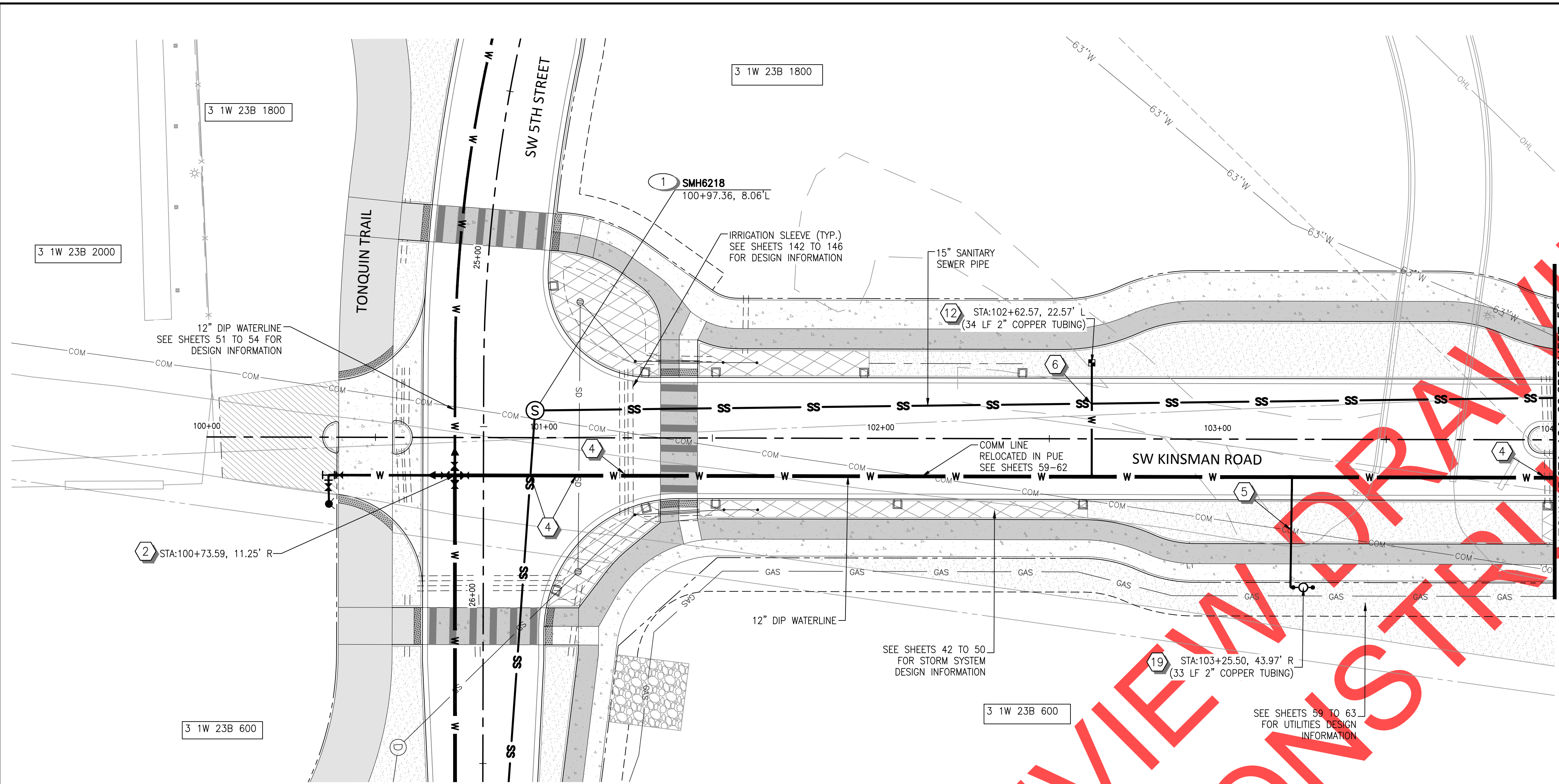
PRELIMINARY

City of Wilsonville
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29799 SW Town Center Loop E
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Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST - SEWER AND WATER
PLAN AND PROFILE**

CIP# 4196
PROJECT# 2017-02-001
UT04
54 of 211



KEY MAP

WATER NOTES

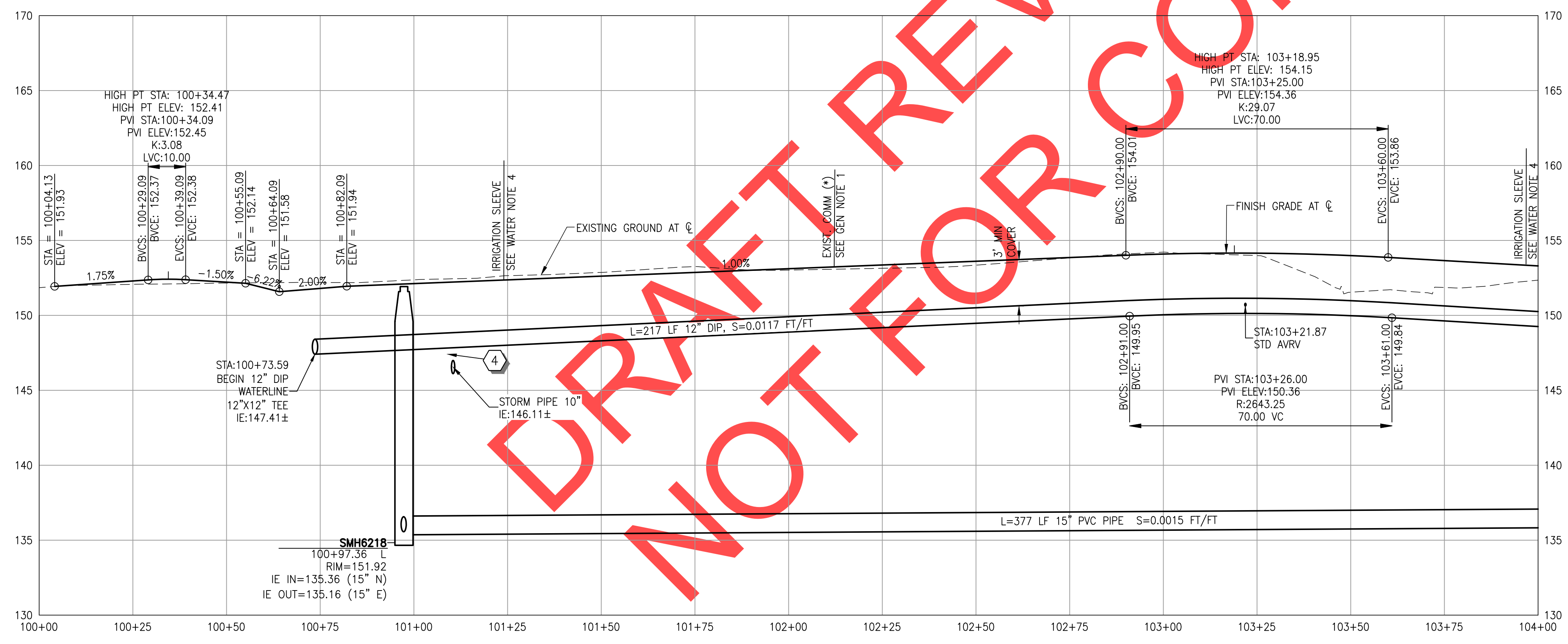
- (1) INSTALL (1) DIP CROSS, 12"x12" (FLG), LENGTH OF PIPE TO THE SOUTH IN PARENTHESIS.
- (4) 12" BUTTERFLY VALVE (FLG X M)
- (2) 12"x8" DIP REDUCER (FLG) ON SOUTH AND WEST ARMS.
- (4) UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- (5) PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.
- (12) INSTALL 2" SINGLE SERVICE WITH 1 1/2" METER FOR IRRIGATION SYSTEM. SEE CITY OF WILSONVILLE DETAILS WT-3045 & WT-3050 ON SHEET 130 . LENGTH OF PIPE IN PARENTHESIS
- (19) INSTALL (1) STANDARD AIR AND VACUUM RELEASE VALVE. SEE CITY OF WILSONVILLE STD. DETAIL WT-3090 ON SHEET 130. TAP 12" WATERLINE AT HIGH POINT, APPROX. STA:103+22.

SANITARY SEWER NOTES

- (1) INSTALL STANDARD MANHOLE, 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126.

GENERAL NOTES

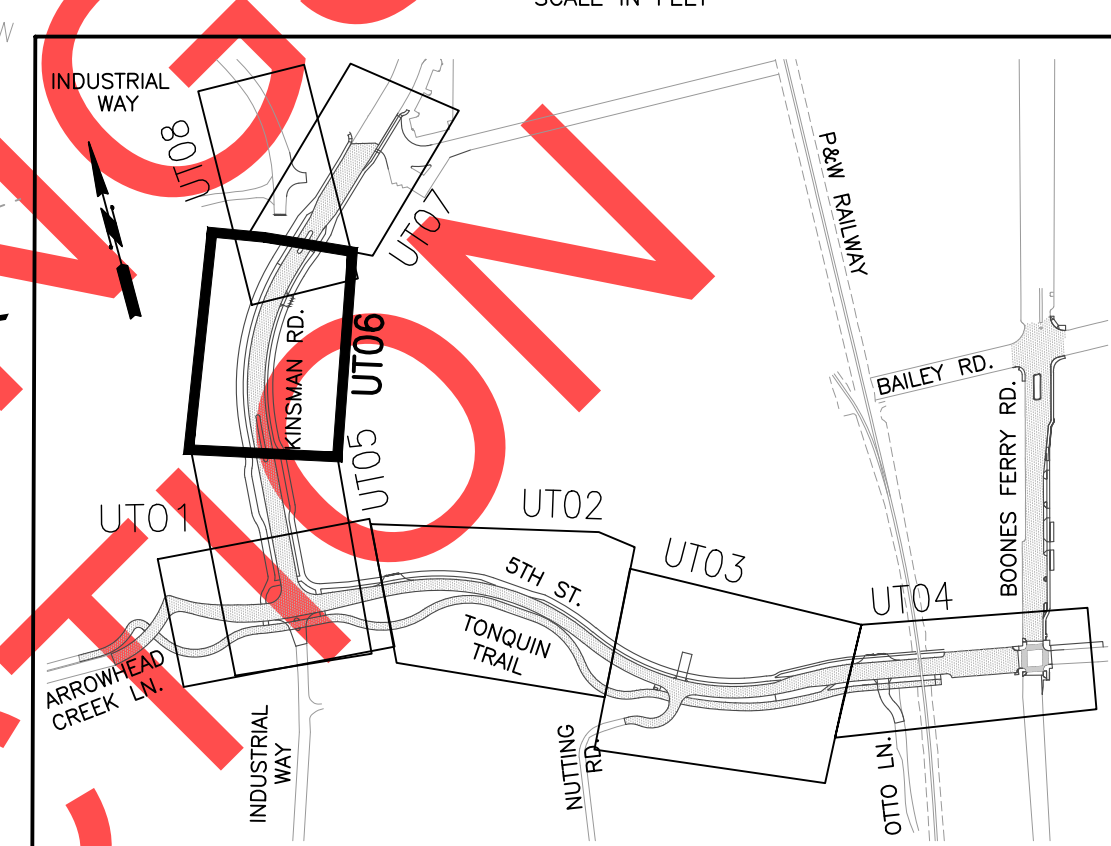
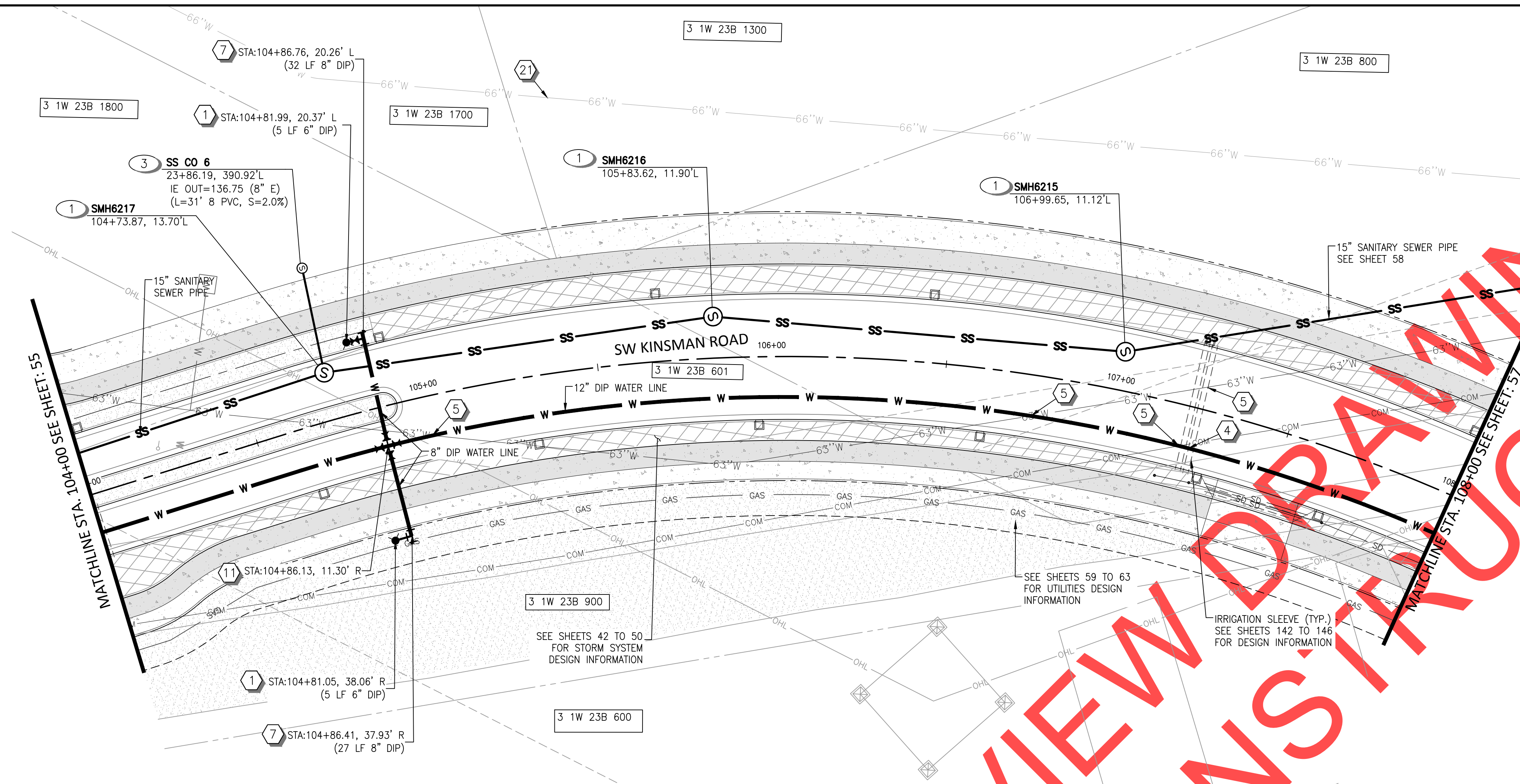
1. ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
2. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
3. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVIEW SET - NOT FOR CONSTRUCTION



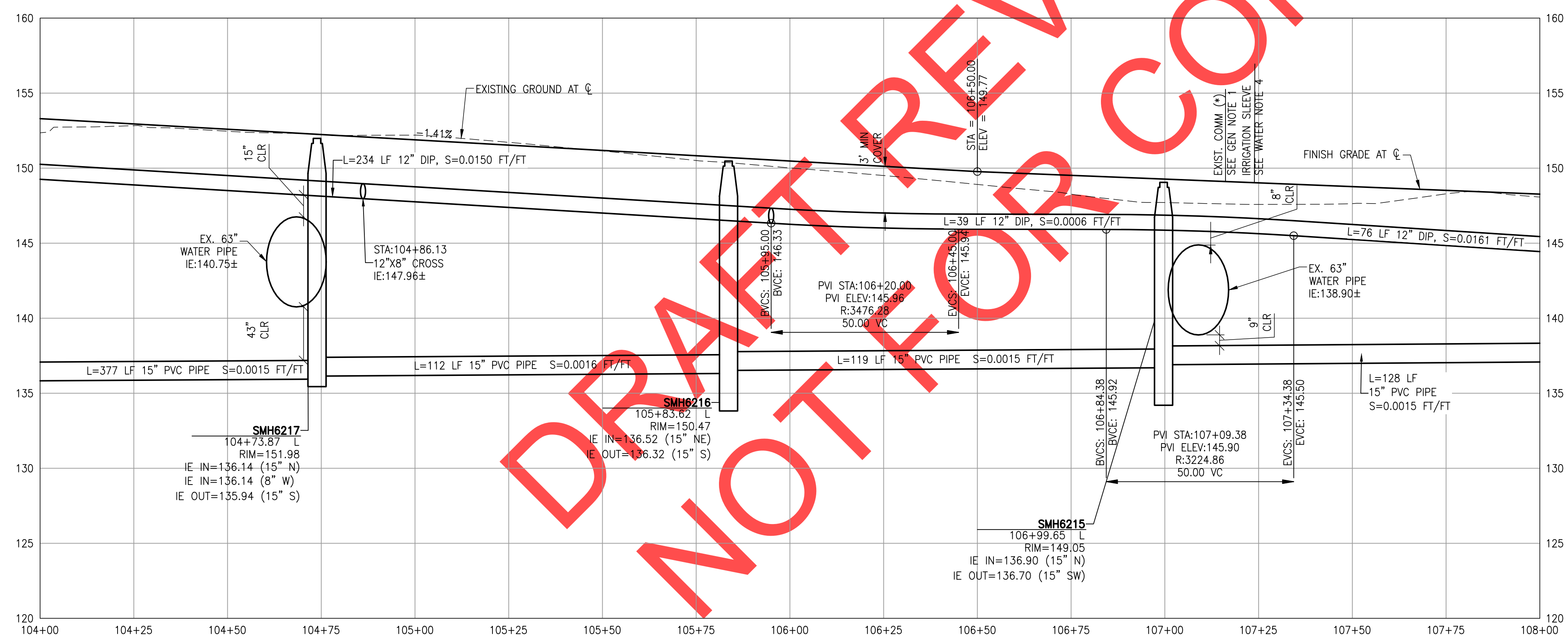
REVISIONS
 PRELIMINARY
 City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960
 Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/BB
 Drawn By: SLR
 Checked By: A.HENDY
 SW 5TH ST TO SW KINSMAN RD EXTENSION
 KINSMAN RD - SEWER AND WATER
 CIP# 4196
 PROJECT# 2017-02-001
 UT05
 55 of 211



- ### WATER NOTES
- 1 INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS
 - 4 UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
 - 5 PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.
 - 7 INSTALL (1) DIP TEE, 8"x6" (FLG) PIPE LENGTH IN PARENTHESIS.
(1) 6" GATE VALVE (FLG X MJ)
(1) 8" BLIND FLG
 - 11 INSTALL (1) DIP CROSS, 12"x8" (FLG)
(2) 12" BUTTERFLY VALVE (FLG X MJ)
(2) 8" GATE VALVE (FLG X MJ)
 - 21 66" WATER LINE. DESIGNED PERFORMED BY OTHERS.

- ### SANITARY SEWER NOTES
- 1 INSTALL STANDARD MANHOLE. 48". SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126.
 - 3 INSTALL STANDARD CLEANOUT. SEE CITY OF WILSONVILLE STD. DETAIL S-2180 ON SHEET 127. LENGTH OF PIPE IN PARENTHESIS.

- ### GENERAL NOTES
- ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
 - ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
 - PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVISIONS

PRELIMINARY

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Engineering Department
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Phone 503-682-4960

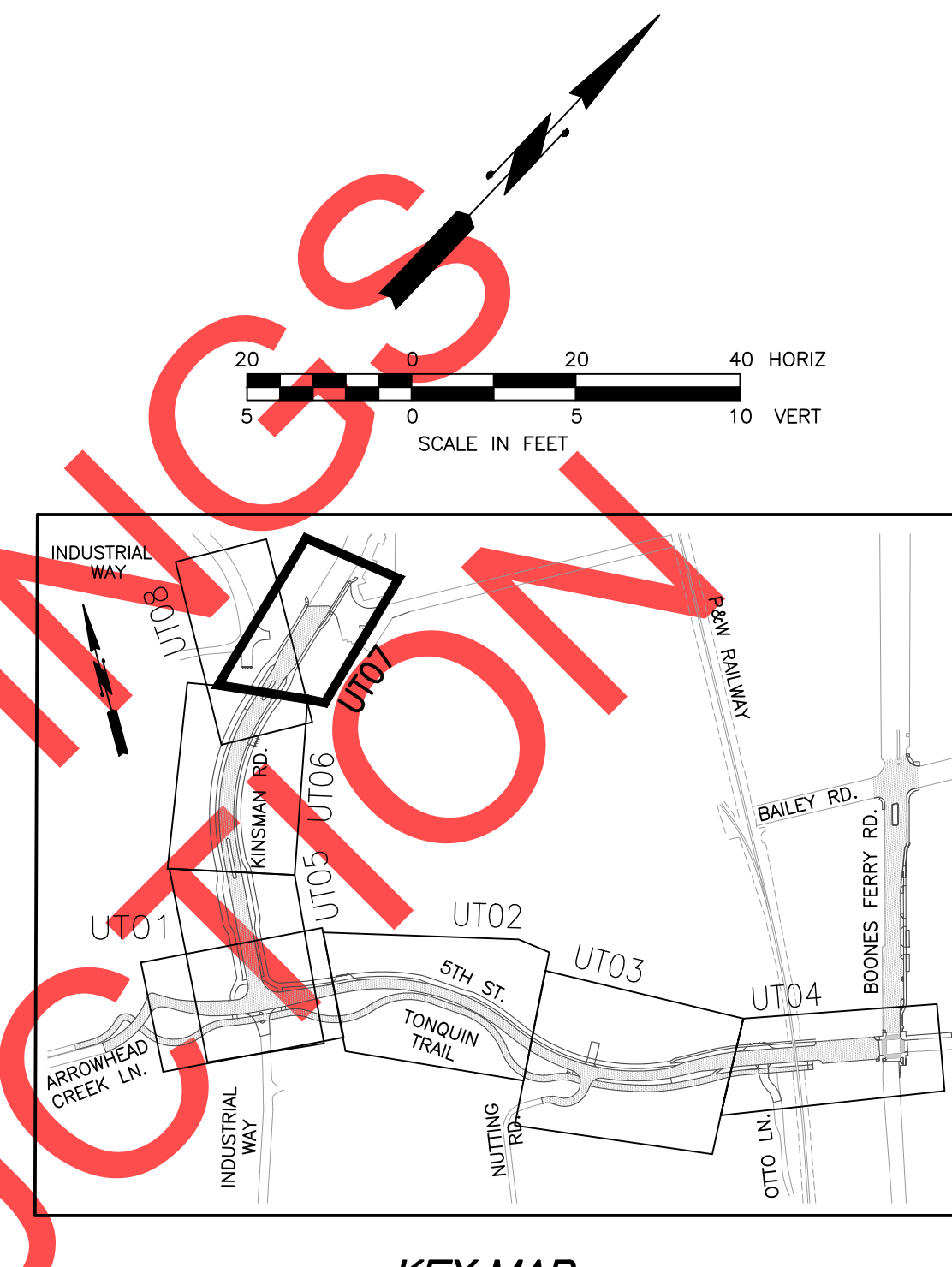
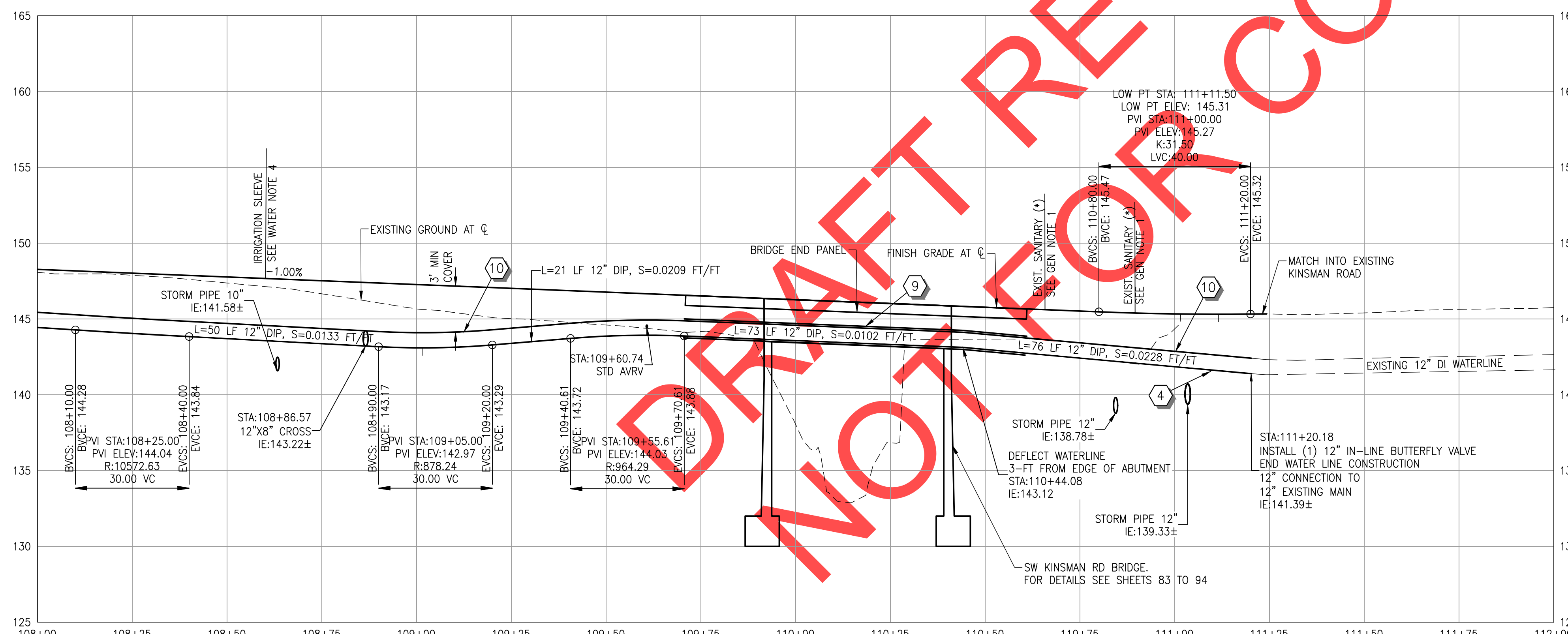
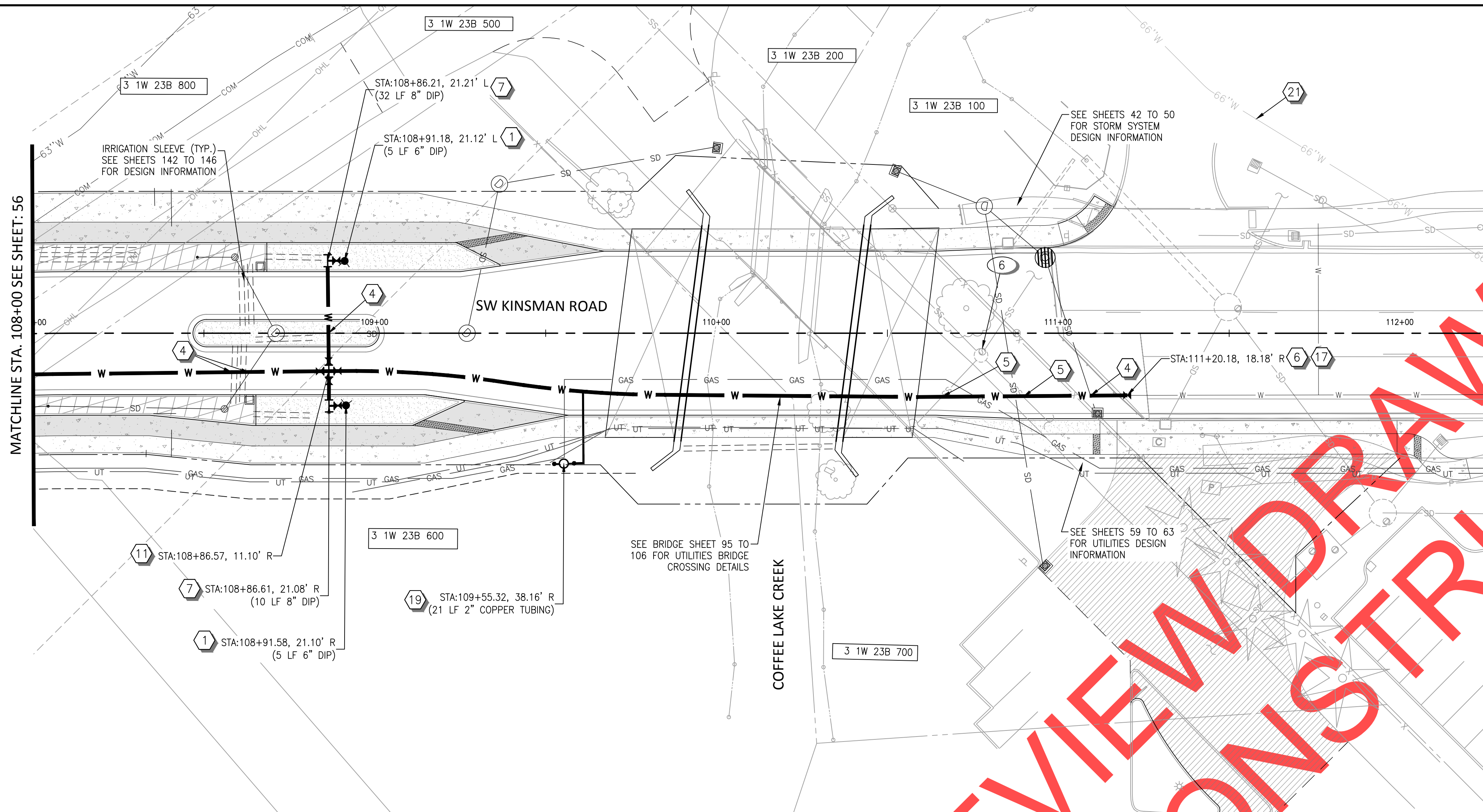
Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN RD - SEWER AND WATER**

CIP# 4196
PROJECT# 2017-02-001
UT06
56 of 211



REVIEW SET - NOT FOR CONSTRUCTION



WATER NOTES

- 1 INSTALL FIRE HYDRANT ASSEMBLY. SEE CITY OF WILSONVILLE DETAIL WT-3060 ON SHEET 130. LENGTH OF PIPE IN PARENTHESIS
- 4 UTILITY CROSSING. MAINTAIN MIN. 18" OF VERTICAL SEPARATION FOR WATER AND SANITARY SEWER LINES, AND 6" MIN. OF VERTICAL SEPARATION FOR ALL OTHER UTILITIES.
- 5 PROTECT EXISTING UTILITY DURING CONSTRUCTION. CONTACT ENGINEER IF CONFLICTS EXIST.
- 6 INSTALL (1) 12" IN-LINE BUTTERFLY VALVE (MJ X MJ)
- 7 INSTALL (1) DIP TEE, 8"x6" (FLG). LENGTH OF PIPE IN PARENTHESIS. (1) 6" GATE VALVE (FLG X MJ) (1) 8" BLIND FLG
- 9 INSTALL POLYETHYLENE ENCASEMENT FROM STA:109+71 TO STA:110+61
- 10 CONCRETE CAP WATERLINE OUTSIDE OF BRIDGE END PANEL UNTIL IT REACHES 3'-FT OF COVER. FROM STA:109+10 TO STA:109+71 AND STA:110+61 TO 111+20.
- 11 INSTALL (1) DIP CROSS, 12"x8" (FLG) (2) 12" BUTTERFLY VALVE (FLG X MJ) (2) 8" GATE VALVE (FLG X MJ)
- 17 12" CONNECTION TO 12" EXISTING MAIN LOCATION APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXISTING WATERLINE LOCATION & INVERT ELEVATION. CONTACT ENGINEER IF CONFLICT EXISTS.
- 19 INSTALL (1) STANDARD AIR AND VACUUM RELEASE VALVE. SEE CITY OF WILSONVILLE STD. DETAIL WT-3090 ON SHEET 130. TAP 12" WATERLINE AT HIGH POINT, APPROX. STA:109+61.
- 21 66" WATER LINE. DESIGNED PERFORMED BY OTHERS.

SANITARY SEWER NOTES

- 6 ADJUST MANHOLE TO FINISH GRADE, ABANDON PIPE TO THE WEST, FILL PIPE WITH GROUT, AND RE-CHANNEL MANHOLE.

GENERAL NOTES

1. ALL UTILITIES MARKED WITH AN ASTERISK (*) IN PROFILE HAVE AN UNKNOWN DEPTH. CONTRACTOR TO FIELD VERIFY AND PROTECT EXISTING UTILITIES CROSSING. NOTIFY ENGINEER IF CONFLICTS EXIST.
2. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
3. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVIEW SET - NOT FOR CONSTRUCTION

REVISIONS

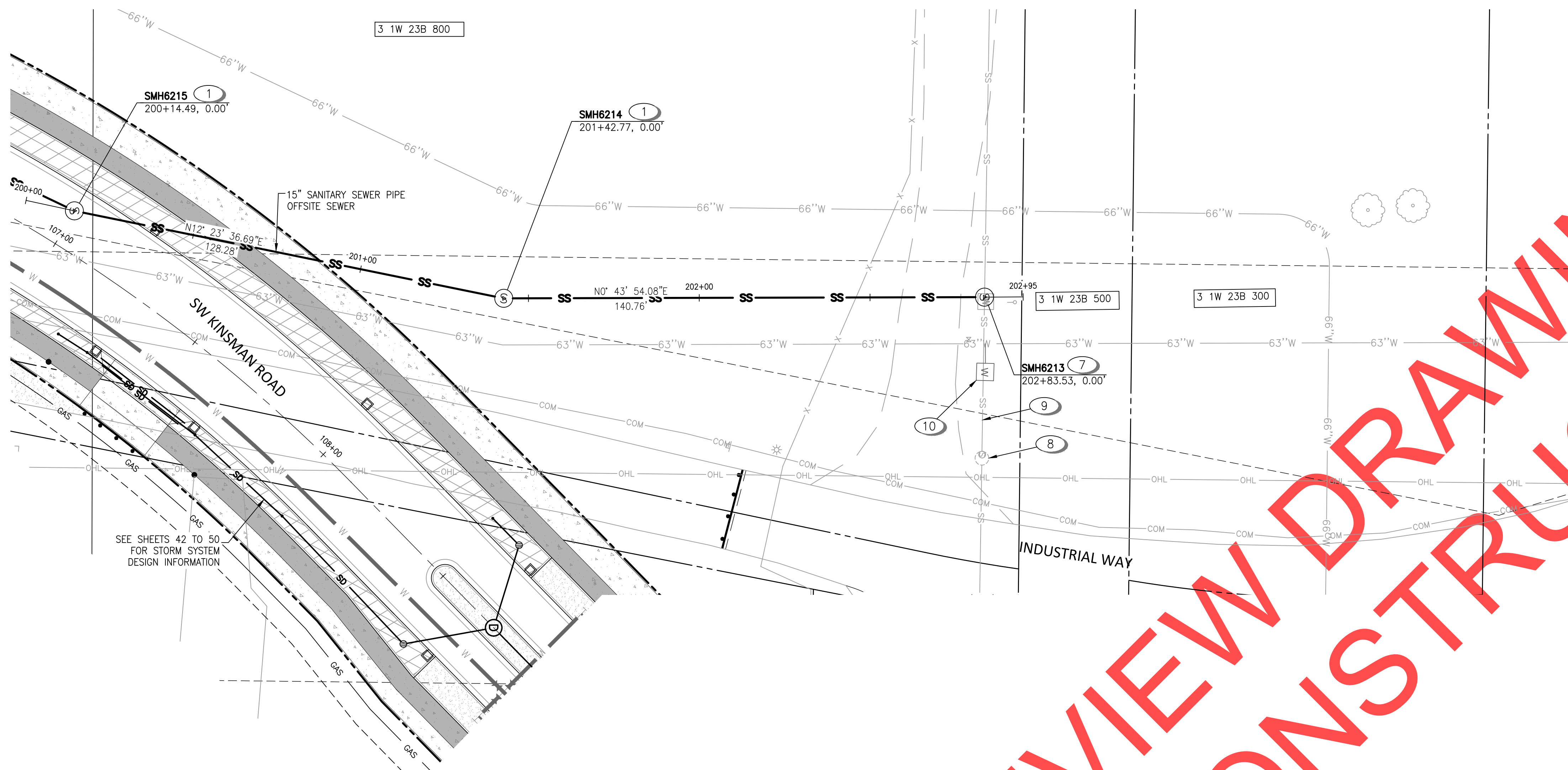
PRELIMINARY

City of Wilsonville
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29799 SW Town Center Loop E
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Date: 1 February 2019
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Checked By: A.HENDY

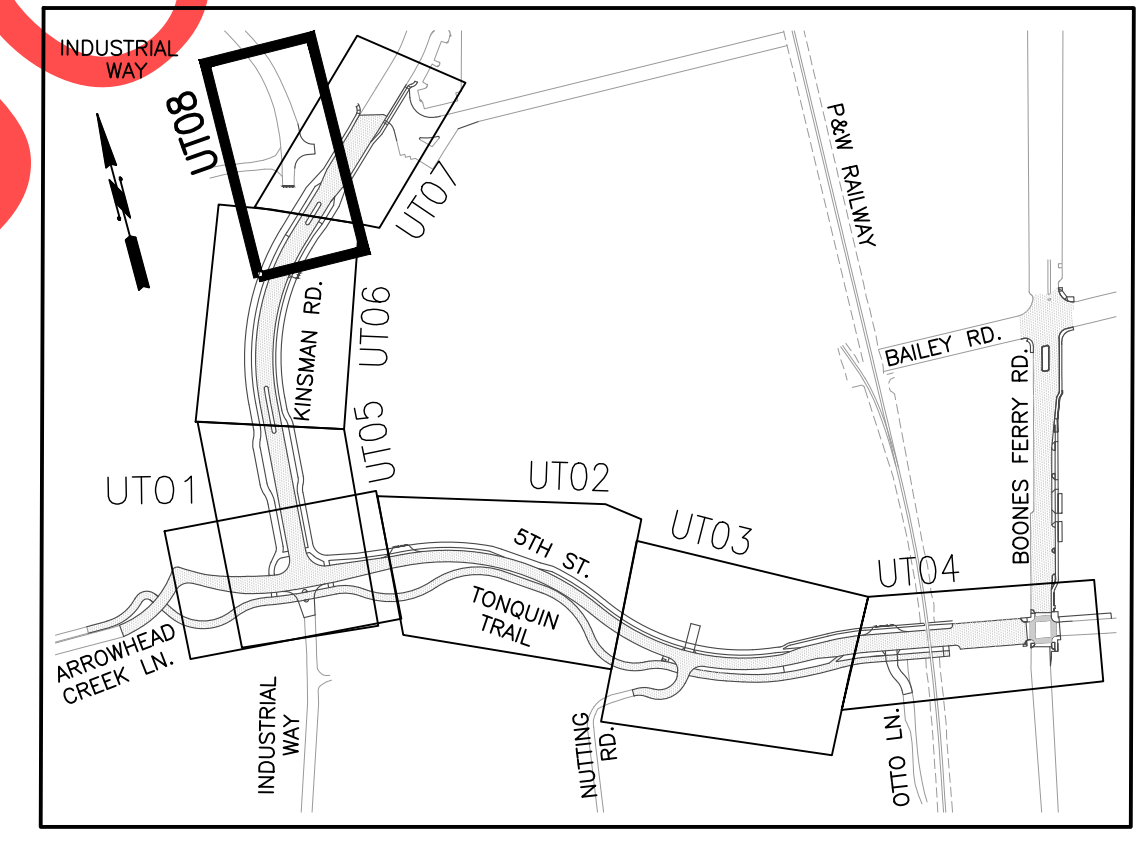
**SW 5TH ST TO SW KINSMAN RD EXTENSION
KINSMAN RD - SEWER AND WATER**

CIP# 4196
PROJECT# 2017-02-001
UT07
57 of 211



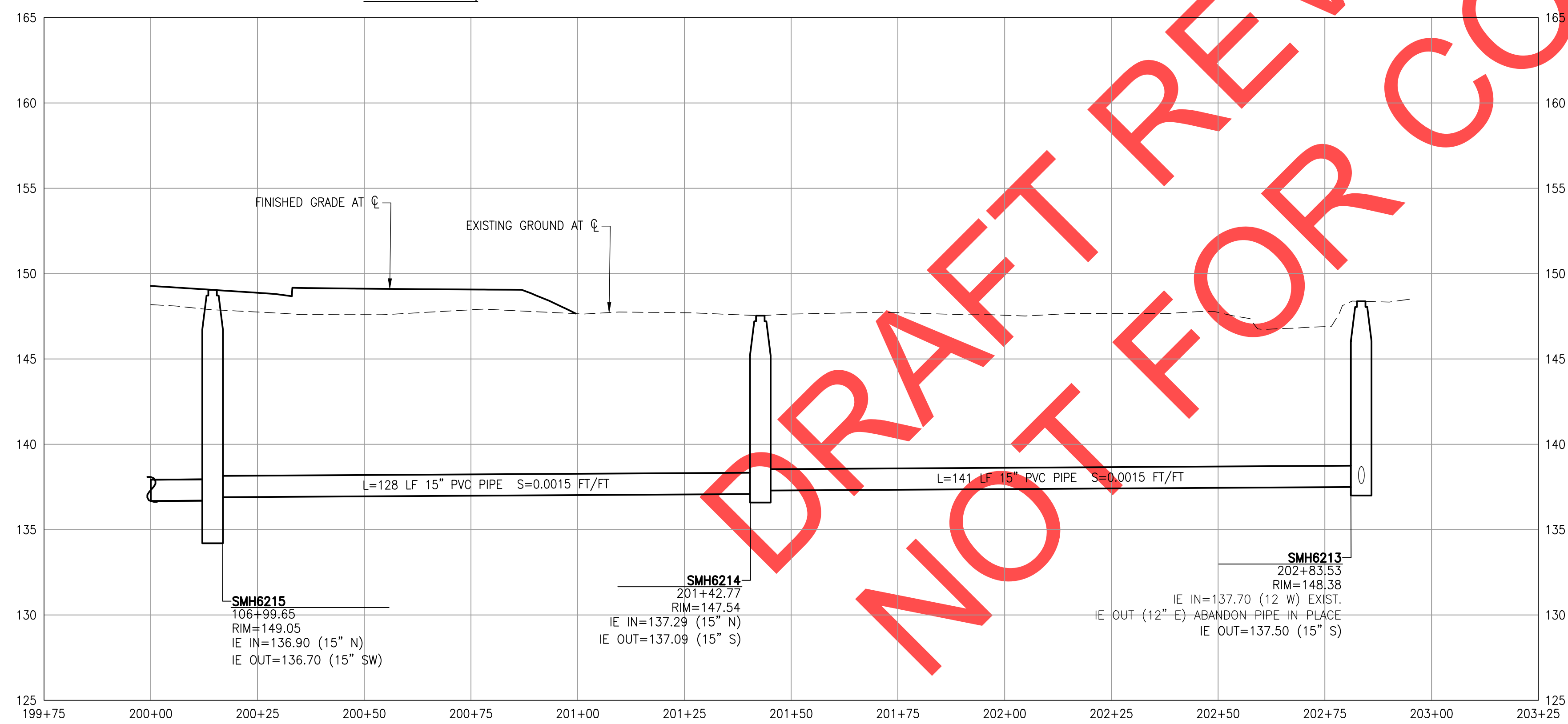
SANITARY SEWER NOTES

- 1 INSTALL STANDARD MANHOLE, 48" SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126.
- 7 INSTALL STANDARD MANHOLE, 48" OVER EXISTING SANITARY SEWER PIPE. SEE CITY OF WILSONVILLE STD. DETAIL S-2005 ON SHEET 126. COORDINATE WITH CITY PRIOR TO BREAKING LINE AND CONNECTING; ABANDON EAST LEG, CHANNEL BOTTOM.
- 8 FILLING ABANDONED MANHOLE WITH GROUT OR ¾"–0 ROCK, REMOVE CONE.
- 9 ABANDON PIPE IN PLACE, FILL WITH GROUT.
- 10 RELOCATE EXISTING WATER VAULT AND BLOWOFF.



GENERAL NOTES

- 1. ROTATE MANHOLE CONES SO THAT LIDS ARE LOCATED OUTSIDE OF WHEEL PATHS.
- 2. PLUG OPEN END OF WATERLINE WHEN NOT BEING WORKED ON.



REVISIONS

PRELIMINARY

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29799 SW Town Center Loop E
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Date: 1 February 2019
Scale: AS SHOWN
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Drawn By: EID
Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
OFFSITE SANITARY SEWER
PLAN AND PROFILE

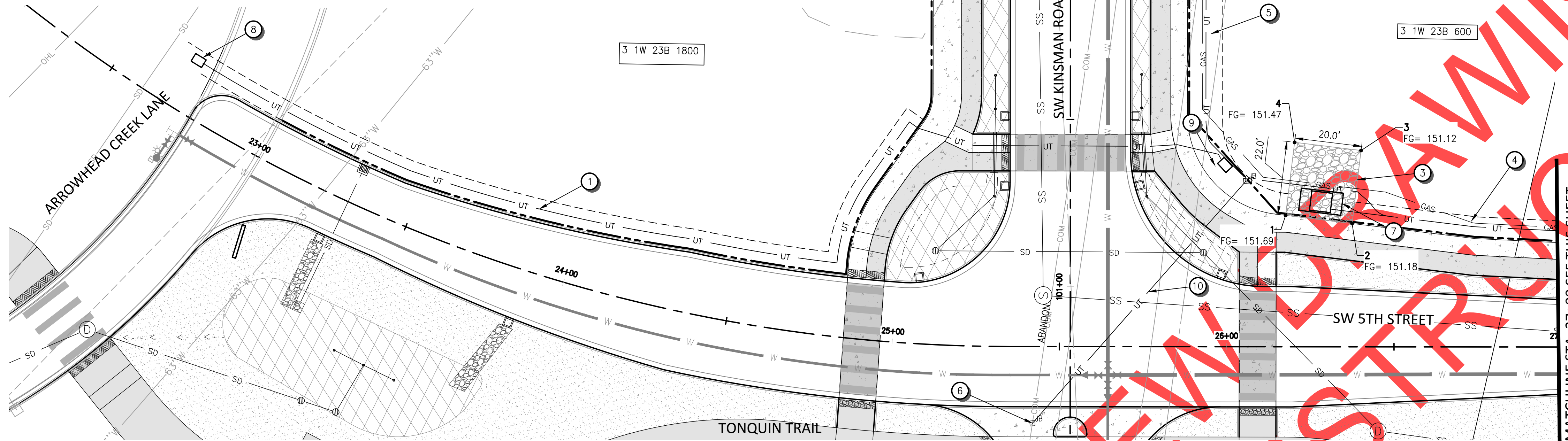
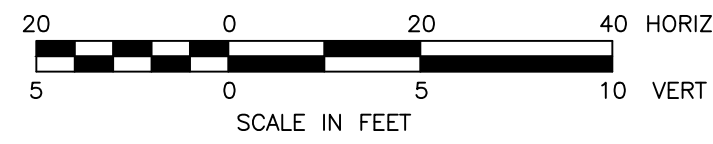
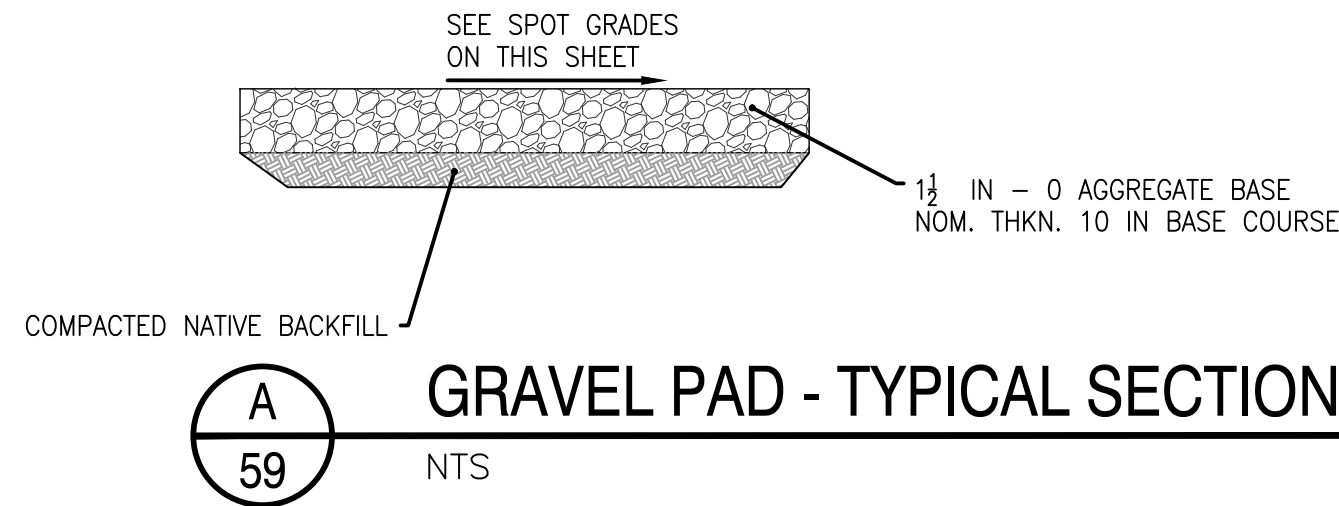
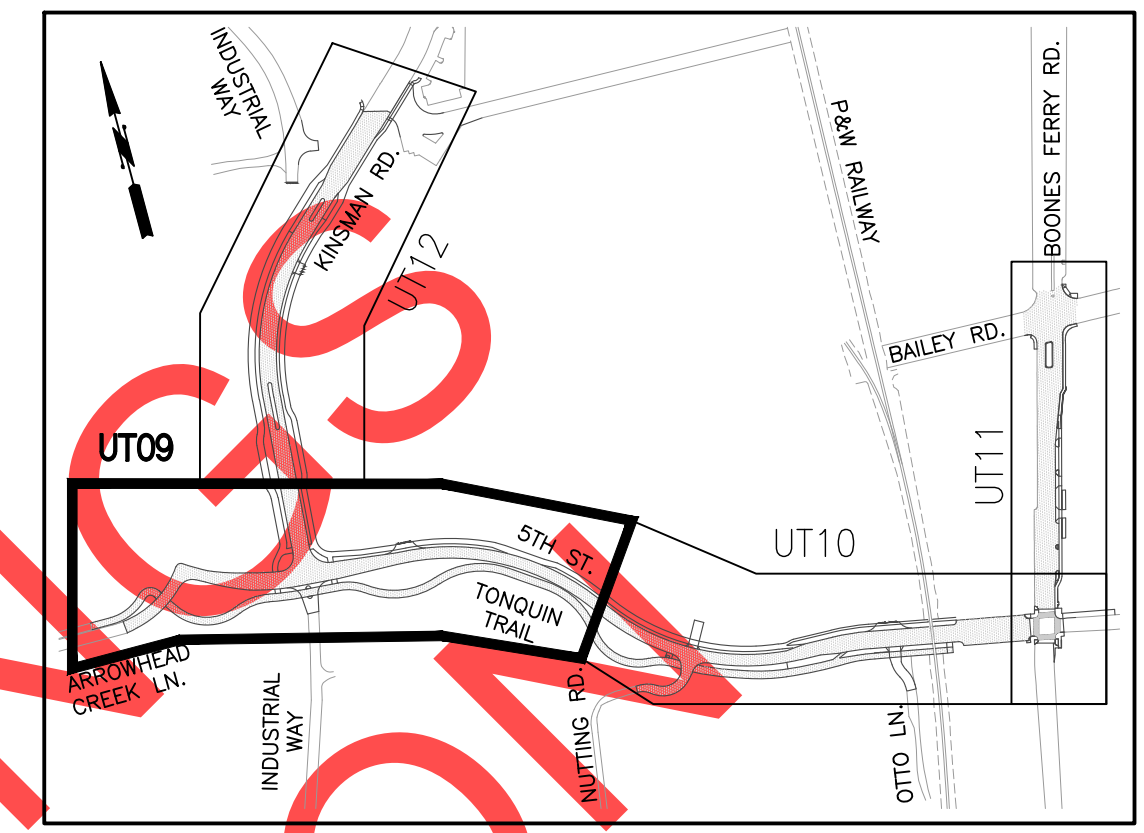


CIP # 4196
PROJECT # 2017-02-001
UT08
58 of 211

REVIEW SET – NOT FOR CONSTRUCTION

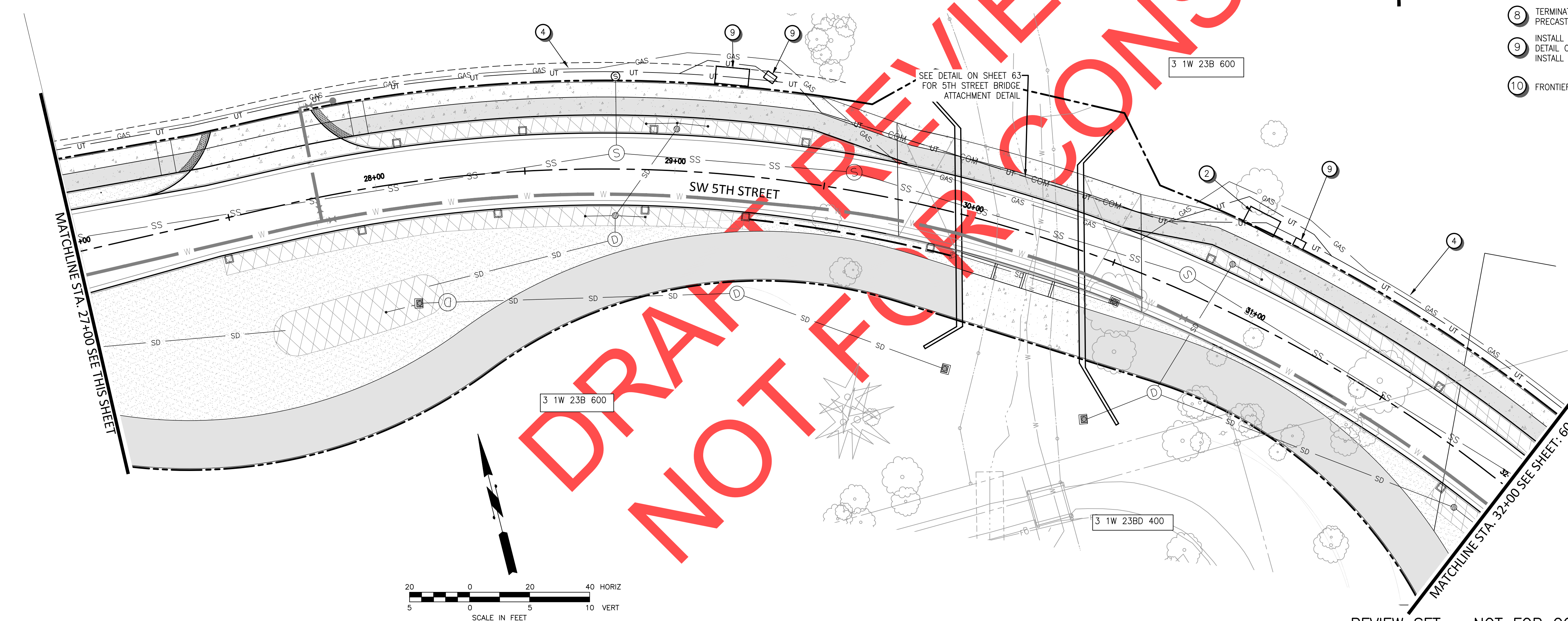
MATCHLINE STA. 102+50 SEE SHEET: 62

ELEVATION POINTS			
POINT #	NORTHING	EASTING	ELEVATION
1	603596.60	7616375.65	151.69
2	603592.74	7616395.27	151.18
3	603614.33	7616399.52	151.12
4	603618.19	7616379.89	151.47



CONSTRUCTION NOTES

- 1 CITY CONDUIT SEE SECTION E ON SHEET 63
- 2 INSTALL OLD CASTLE PRECAST 5106-LA VAULT. SEE DETAIL ON SHEET 130
- 3 INSTALL GRAVEL PAD FOR OLD CASTLE PRECAST 612-LA VAULT. SEE THIS SHEET FOR SPOT ELEVATIONS AND SECTION A
- 4 FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT, COMCAST CONDUIT & GAS LINE. SEE SECTION B ON SHEET 63
- 5 FRONTIER CONDUIT, CITY CONDUIT, COMCAST CONDUIT & GAS LINE. SEE SECTION D ON SHEET 63
- 6 CONNECT FRONTIER TO EXISTING AT NEW JUNCTION BOX, ABANDON TO THE NORTH
- 7 INSTALL OLD CASTLE PRECAST 612-LA VAULT. SEE DETAIL ON SHEET 130
- 8 TERMINATE CITY AT NEW OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL 130
- 9 INSTALL OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL ON SHEET 130 AND SECTION F ON SHEET 63. INSTALL CITY PROVIDED TAGS TO CITY VAULTS
- 10 FRONTIER CONDUIT SEE SECTION E ON SHEET 63



REVISIONS

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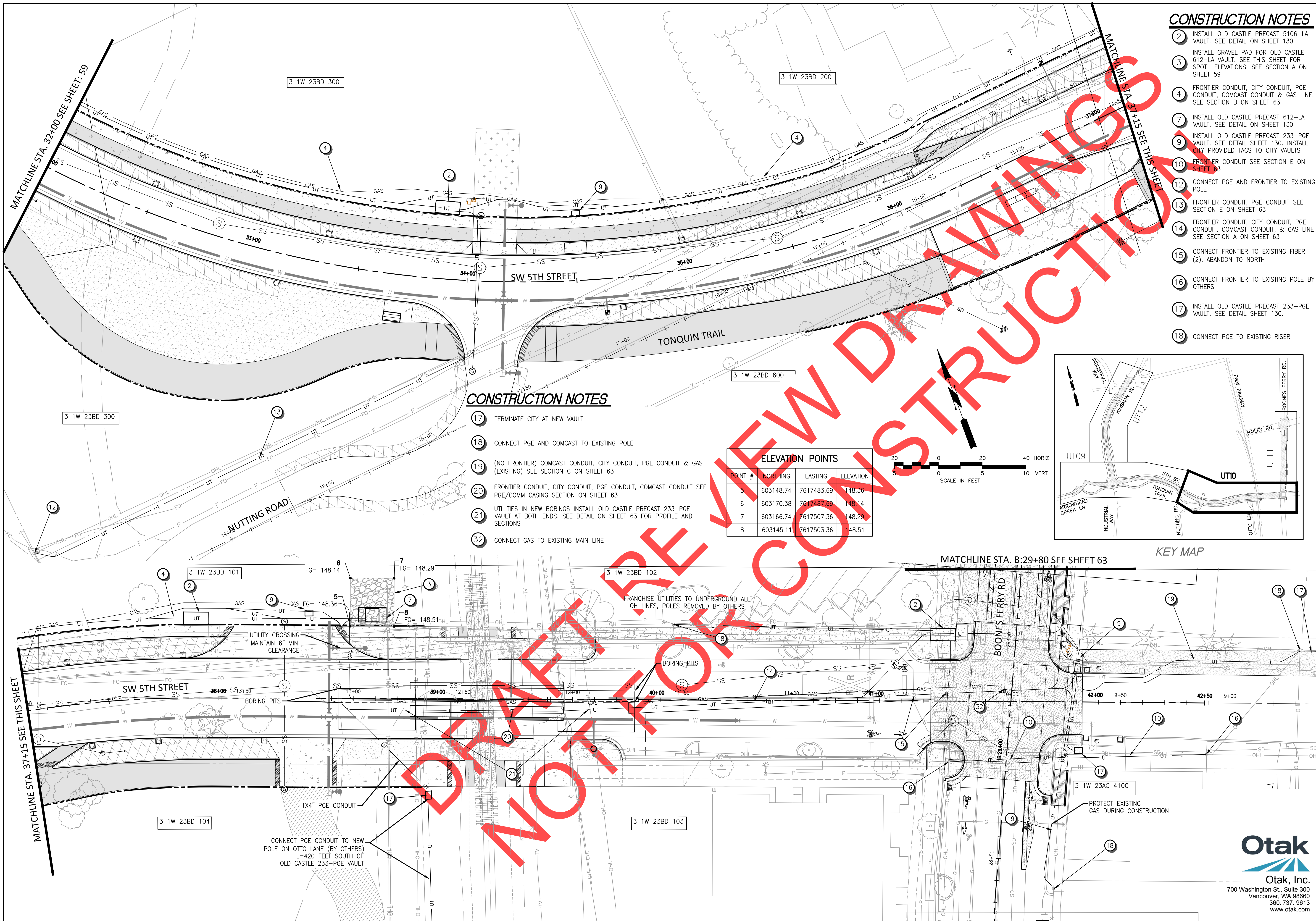
Date: 1 February 2019
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 5TH ST - UTILITY TRENCH

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 www.otak.com

CIP # 4196
 PROJECT # 2017-02-001
 UT09
 59 of 211

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CONSTRUCTION NOTES

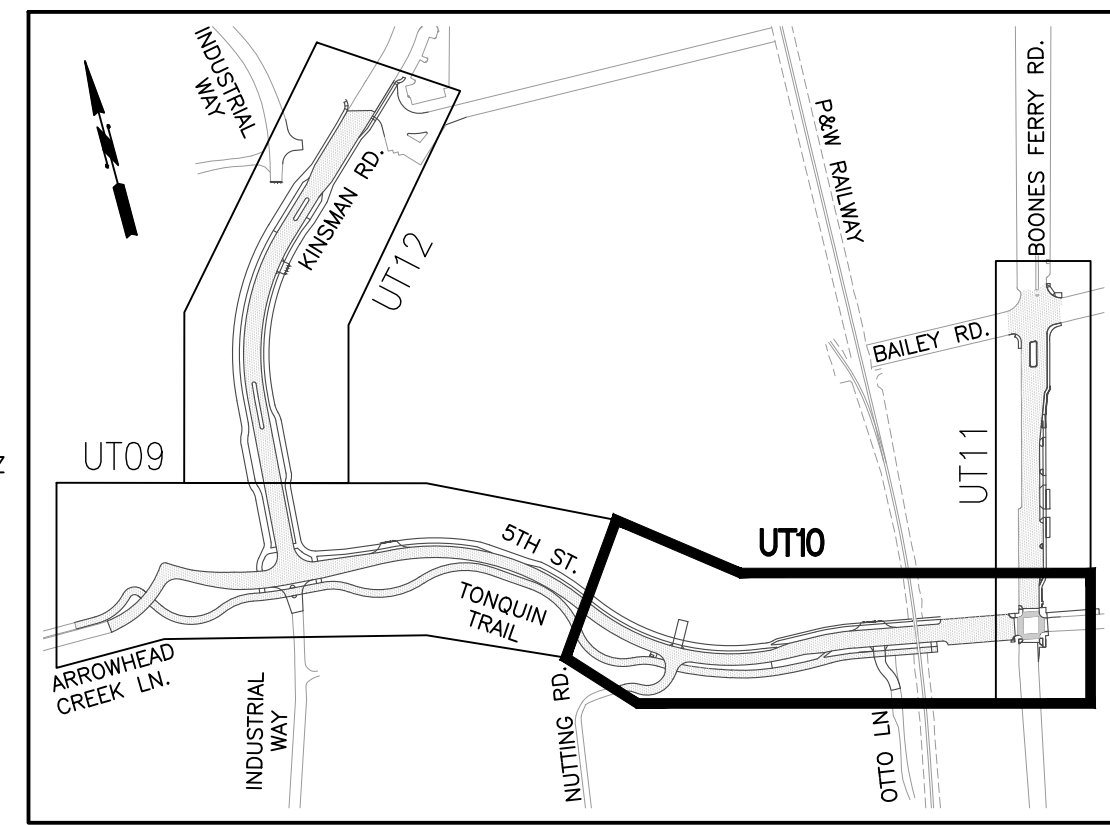
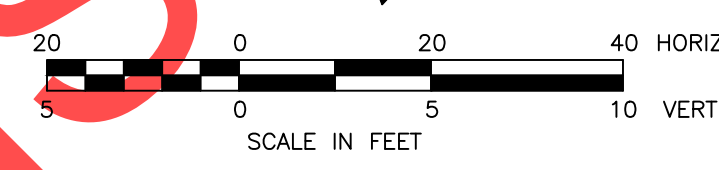
- 2 INSTALL OLD CASTLE PRECAST 5106-LA VAULT. SEE DETAIL ON SHEET 130
- 3 INSTALL GRAVEL PAD FOR OLD CASTLE 612-LA VAULT. SEE THIS SHEET FOR SPOT ELEVATIONS. SEE SECTION A ON SHEET 59
- 4 FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT, COMCAST CONDUIT & GAS LINE. SEE SECTION B ON SHEET 63
- 7 INSTALL OLD CASTLE PRECAST 612-LA VAULT. SEE DETAIL ON SHEET 130
- 9 INSTALL OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL SHEET 130. INSTALL CITY PROVIDED TAGS TO CITY VAULTS
- 10 FRONTIER CONDUIT SEE SECTION E ON SHEET 63
- 12 CONNECT PGE AND FRONTIER TO EXISTING POLE
- 13 FRONTIER CONDUIT, PGE CONDUIT SEE SECTION E ON SHEET 63
- 14 FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT, COMCAST CONDUIT, & GAS LINE SEE SECTION A ON SHEET 63
- 15 CONNECT FRONTIER TO EXISTING FIBER (2), ABANDON TO NORTH
- 16 CONNECT FRONTIER TO EXISTING POLE BY OTHERS
- 17 INSTALL OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL SHEET 130.
- 18 CONNECT PGE TO EXISTING RISER

CONSTRUCTION NOTES

- 17 TERMINATE CITY AT NEW VAULT
- 18 CONNECT PGE AND COMCAST TO EXISTING POLE
- 19 (NO FRONTIER) COMCAST CONDUIT, CITY CONDUIT, PGE CONDUIT & GAS (EXISTING) SEE SECTION C ON SHEET 63
- 20 FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT, COMCAST CONDUIT SEE PGE/COMM CASING SECTION ON SHEET 63
- 21 UTILITIES IN NEW BORINGS INSTALL OLD CASTLE PRECAST 233-PGE VAULT AT BOTH ENDS. SEE DETAIL ON SHEET 63 FOR PROFILE AND SECTIONS
- 32 CONNECT GAS TO EXISTING MAIN LINE

ELEVATION POINTS

POINT #	NORTHING	EASTING	ELEVATION
5	603148.74	7617483.69	148.36
6	603170.38	7617487.69	148.14
7	603166.74	7617507.36	148.29
8	603145.11	7617503.36	148.51



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Phone 503-682-4960

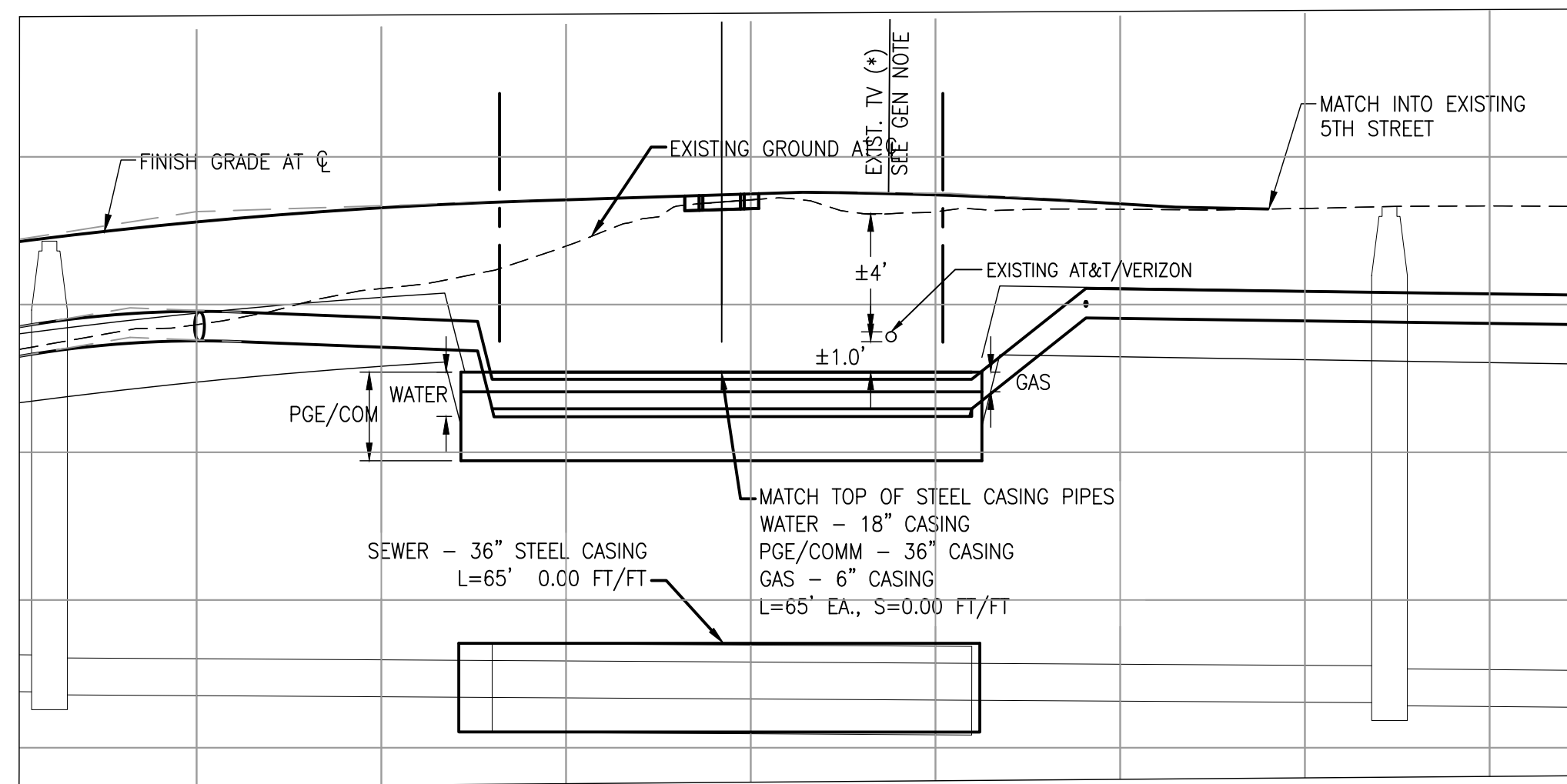
Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: EID
Checked By: A HENDY

**SW 5TH ST TO SW KINSMAN RD EXTENSION
5TH ST - UTILITY TRENCH**

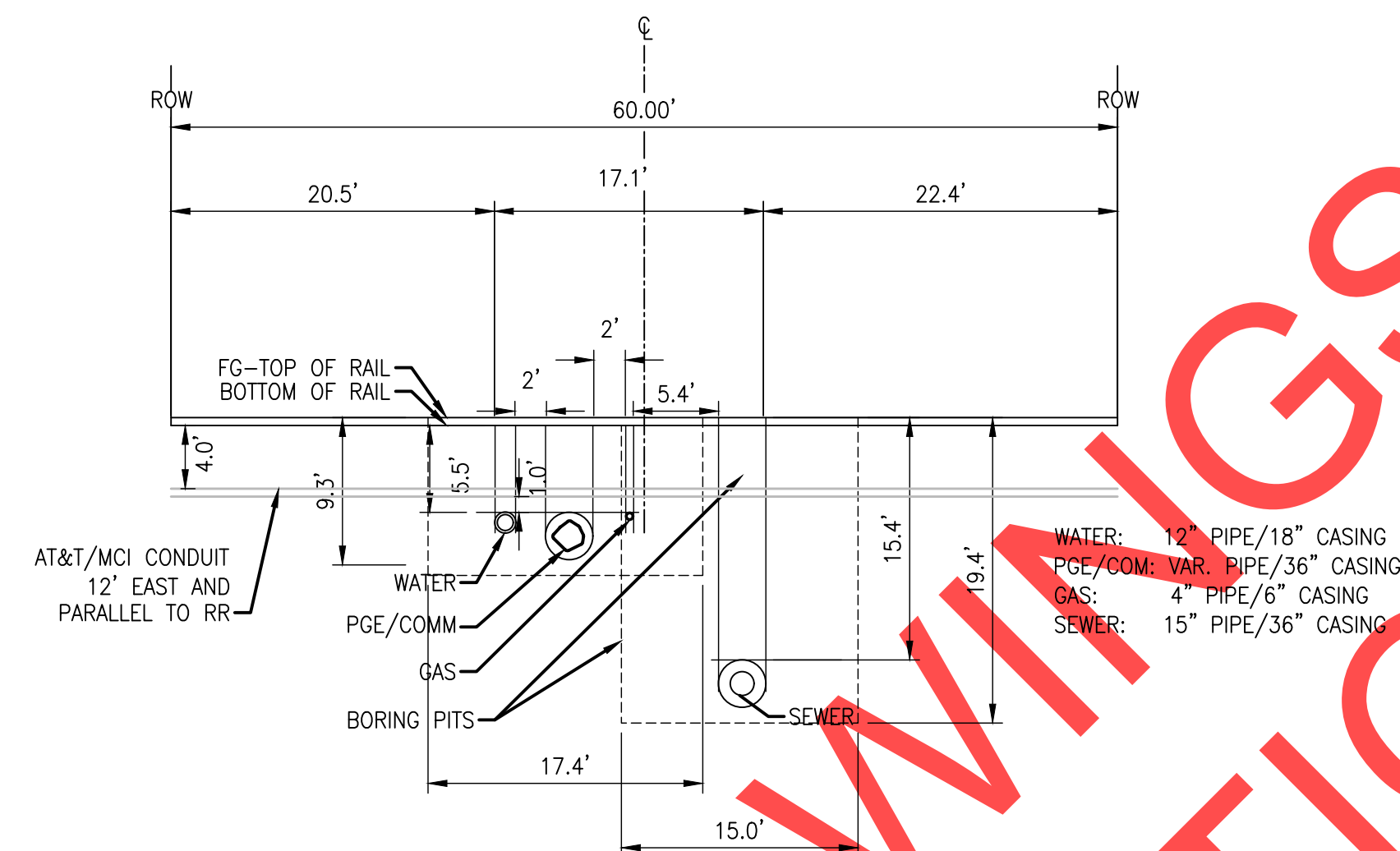
90% PLANS - NOT FOR CONSTRUCTION

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PROJECT # 2017-02-001
OT10
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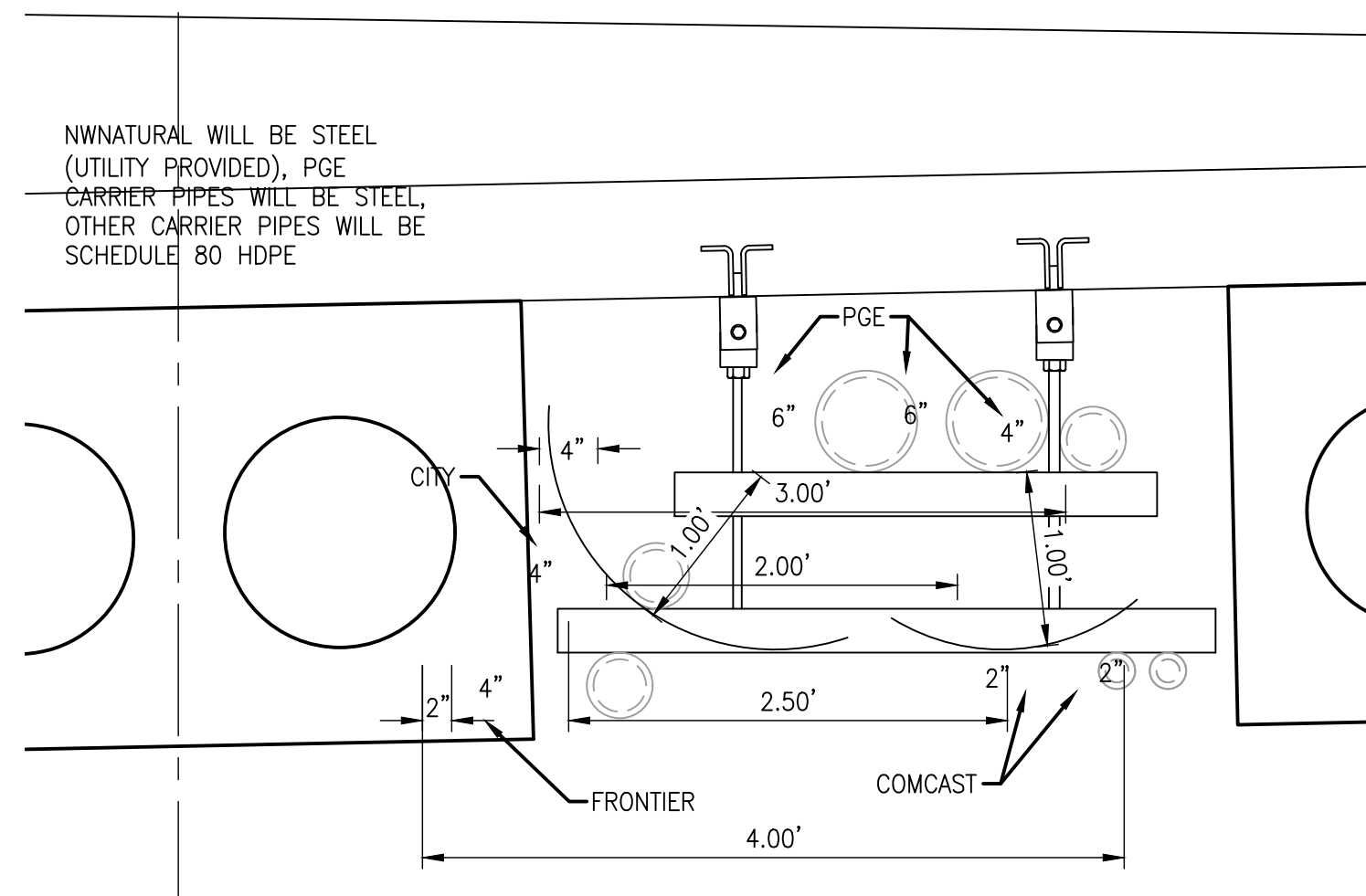




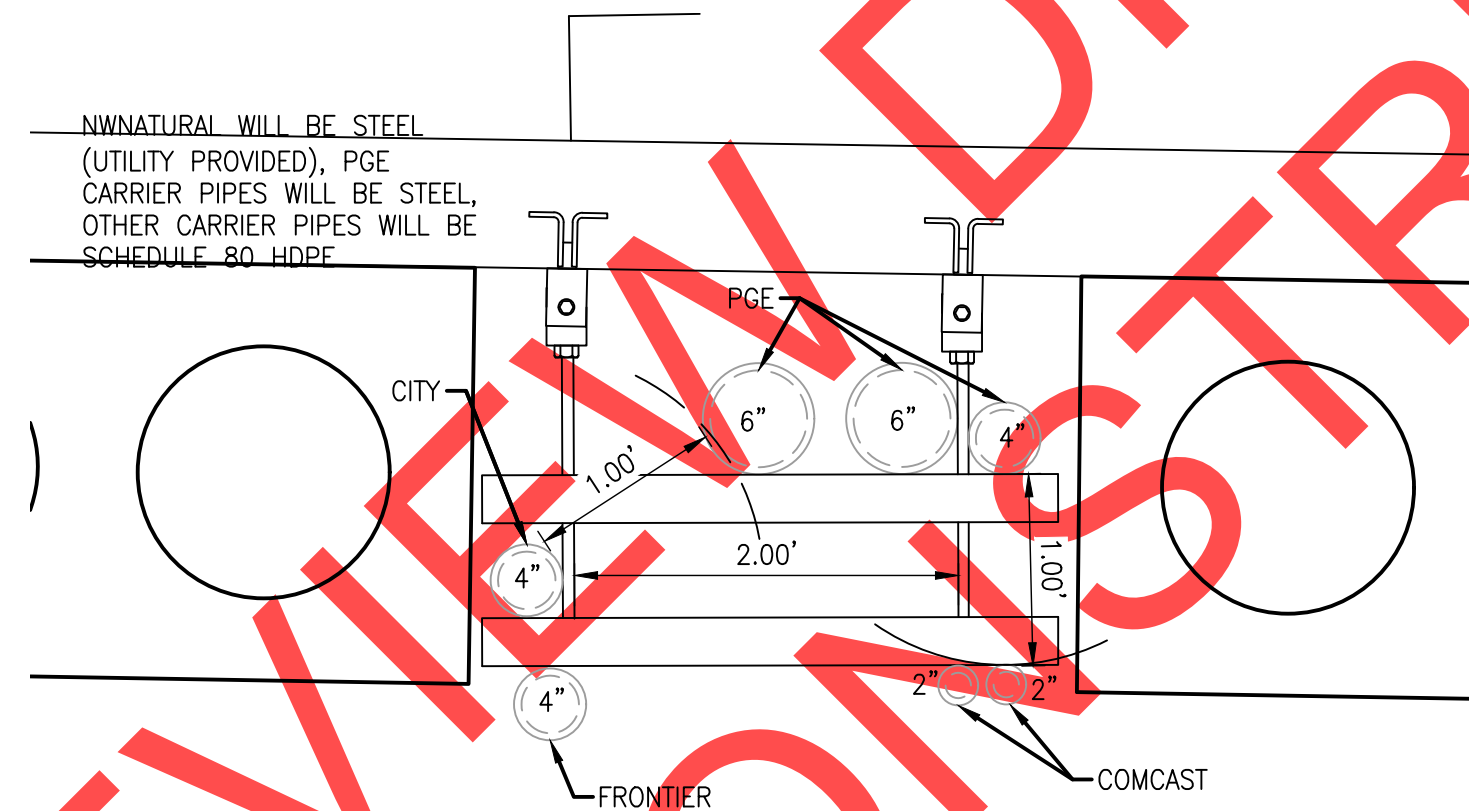
1 BORING PROFILE
61 1" = 10'



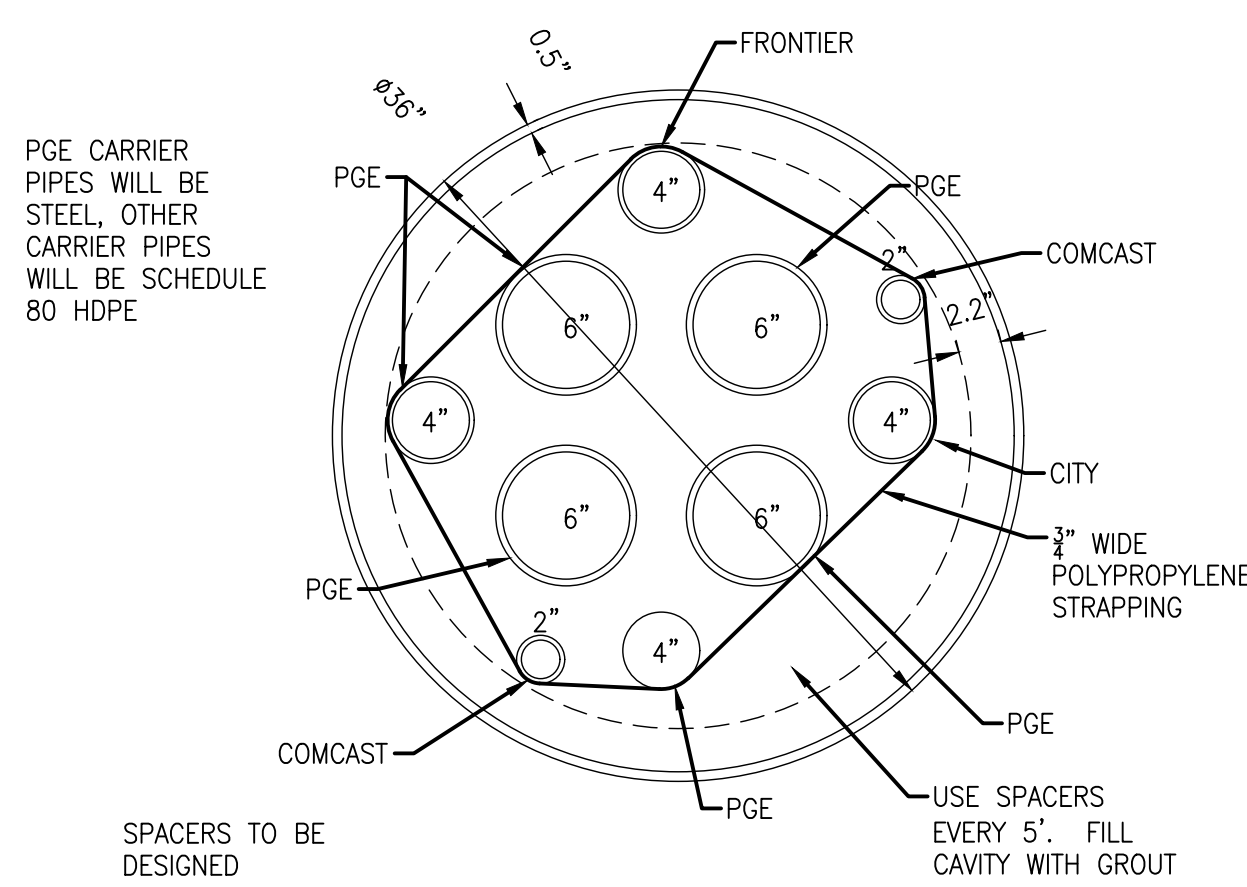
2 BORING SECTION
61 1" = 10'



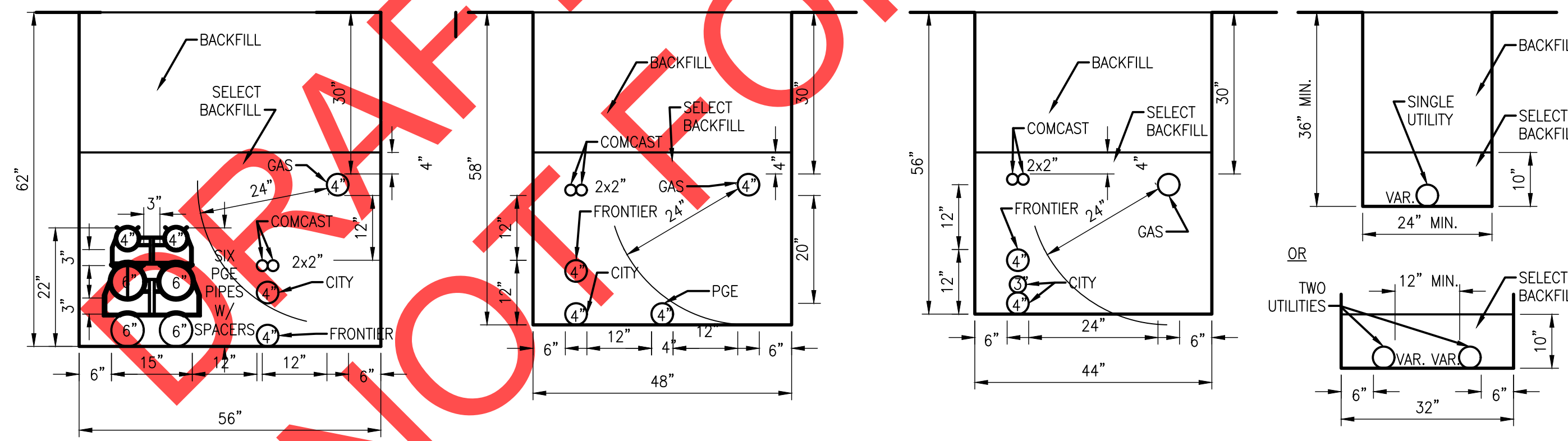
3 5TH ST BRIDGE SECTION
61 1" = 1'



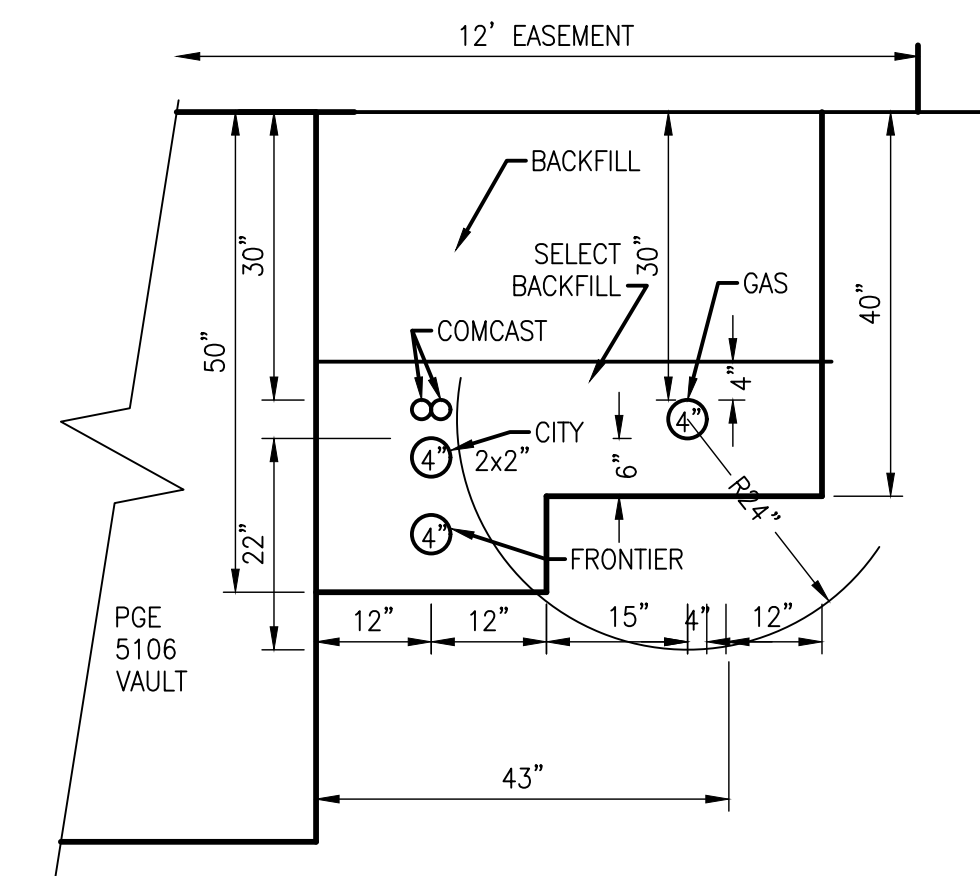
4 KINSMAN RD BRIDGE SECTION
61 1" = 1'



5 PGE/COMM CASING SECTION
61 1" = 10'



6 PGE/COMM TRENCH SECTIONS
61 1" = 20'



SECTION F



Otak, Inc.
700 Washington St., Suite 300
Vancouver, WA 98660
360.737.9613
www.otak.com

CIP # 4196
PROJECT # 2017-02-001
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Date 1 February 2019
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Checked By A HENDY

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SW 5TH ST TO SW KINSMAN RD EXTENSION
UTILITY BORING AND TRENCH DETAILS

REVIEW SET - NOT FOR CONSTRUCTION

CONSTRUCTION NOTES

- 1 CITY CONDUIT SEE SECTION E ON SHEET 63
- 2 INSTALL OLD CASTLE PRECAST 5106-LA VAULT. TERMINATE PGE. SEE DETAIL OF SHEET 130
- 5 FRONTIER CONDUIT, CITY CONDUIT, COMCAST CONDUIT & GAS LINE. SEE SECTION D ON SHEET 63
- 9 INSTALL OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL 130
- 22 CITY CONDUIT CONNECTION POINT AT BENCH
- 23 FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT, COMCAST CONDUIT, & GAS LINE SEE KINSMAN RD BRIDGE SECTION ON SHEET 63
- 24 CONNECT PGE TO EXISTING VAULT
- 25 (NO COMCAST) FRONTIER CONDUIT, CITY CONDUIT, & GAS LINE SEE SECTION D ON SHEET 63. DIRECTIONAL BORE FROM END OF CONSTRUCTION TO CONNECTION POINTS
- 26 CONNECT FRONTIER AT EXISTING VAULT
- 27 TERMINATE CITY AND COMCAST NEAR FRONTIER VAULT. CONNECT GAS TO EXISTING

REVISIONS

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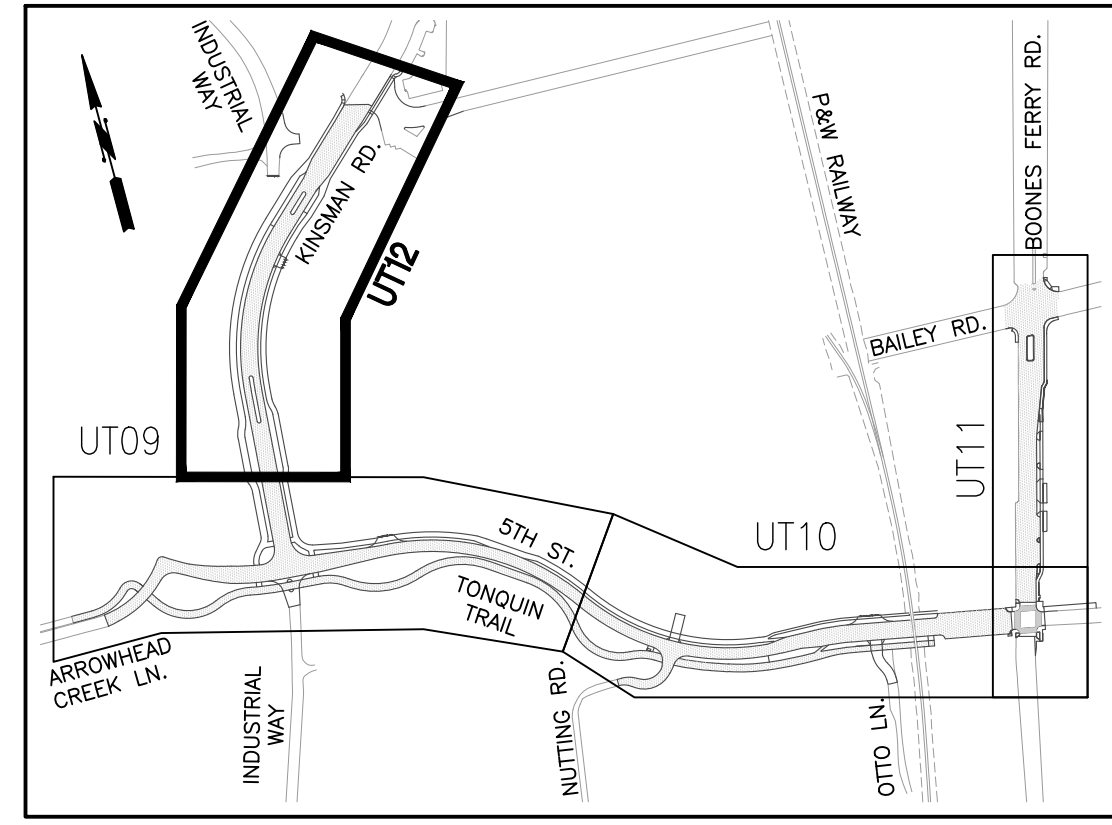
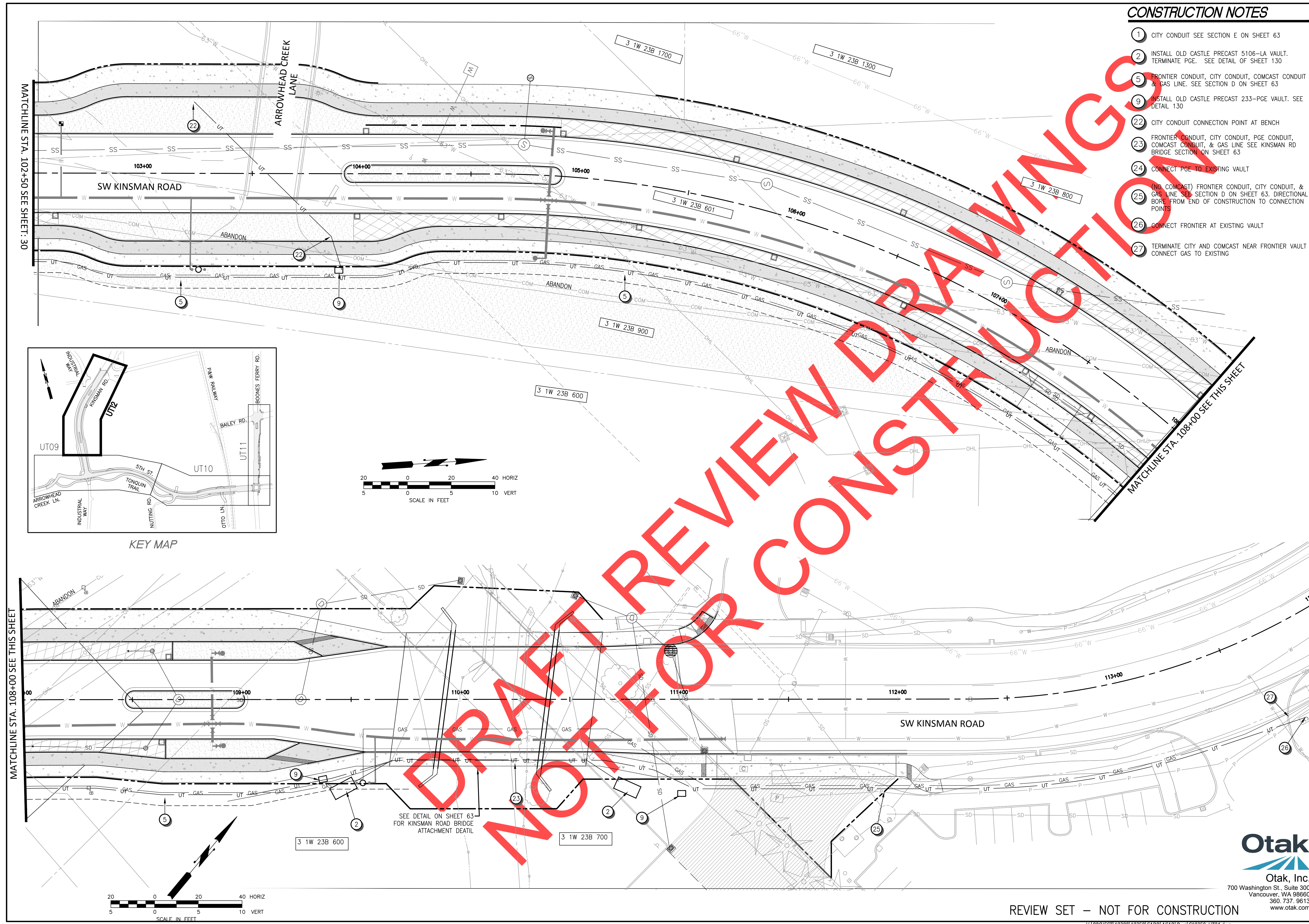
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 Wilsonville, OR 97070
 Phone 503-682-4960



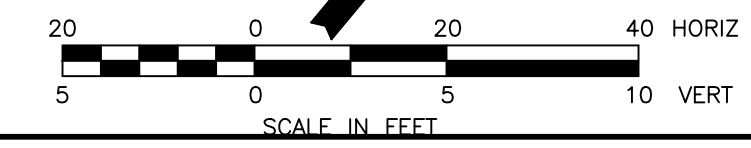
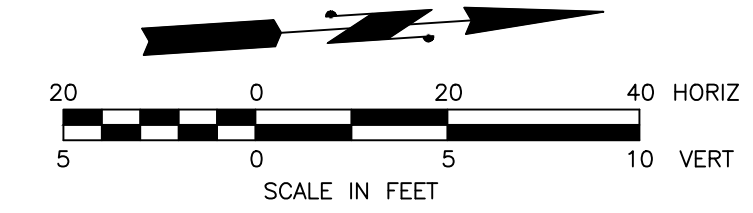
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 KINSMAN RD - UTILITY TRENCH

CIP # 4196
 PROJECT # 2017-02-001
 UT12
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KEY MAP



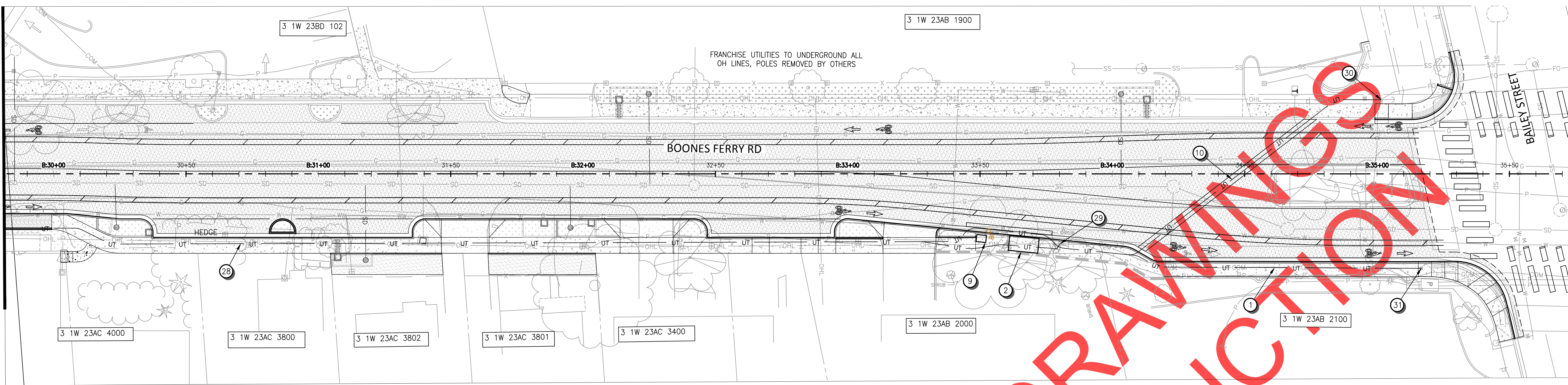
SEE DETAIL ON SHEET 63 FOR KINSMAN ROAD BRIDGE ATTACHMENT DETAIL

NOT FOR REVIEW OR CONSTRUCTION



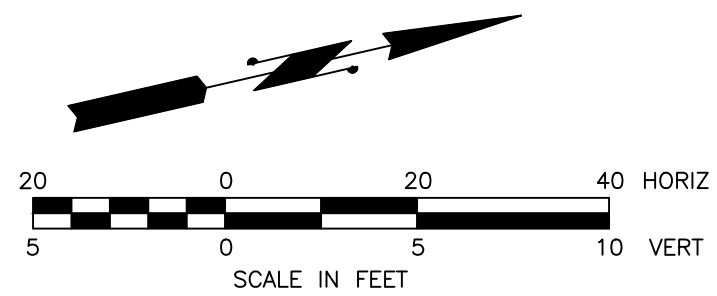
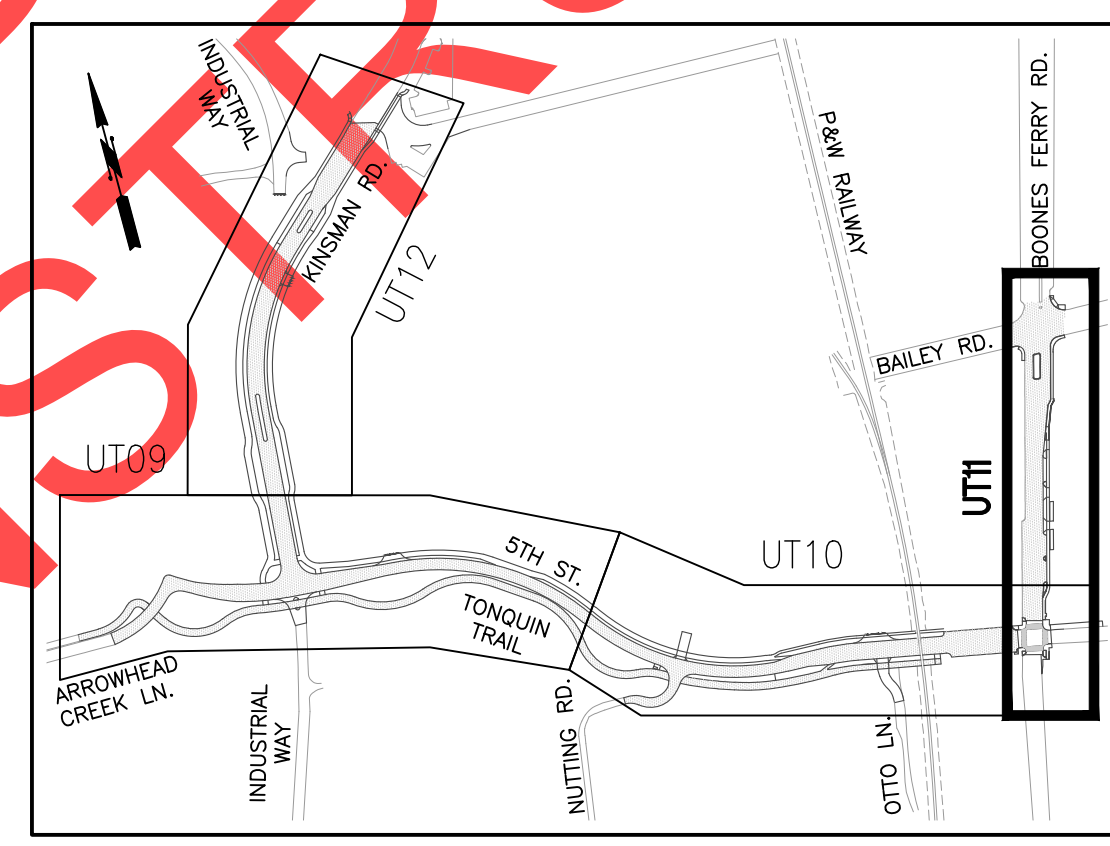
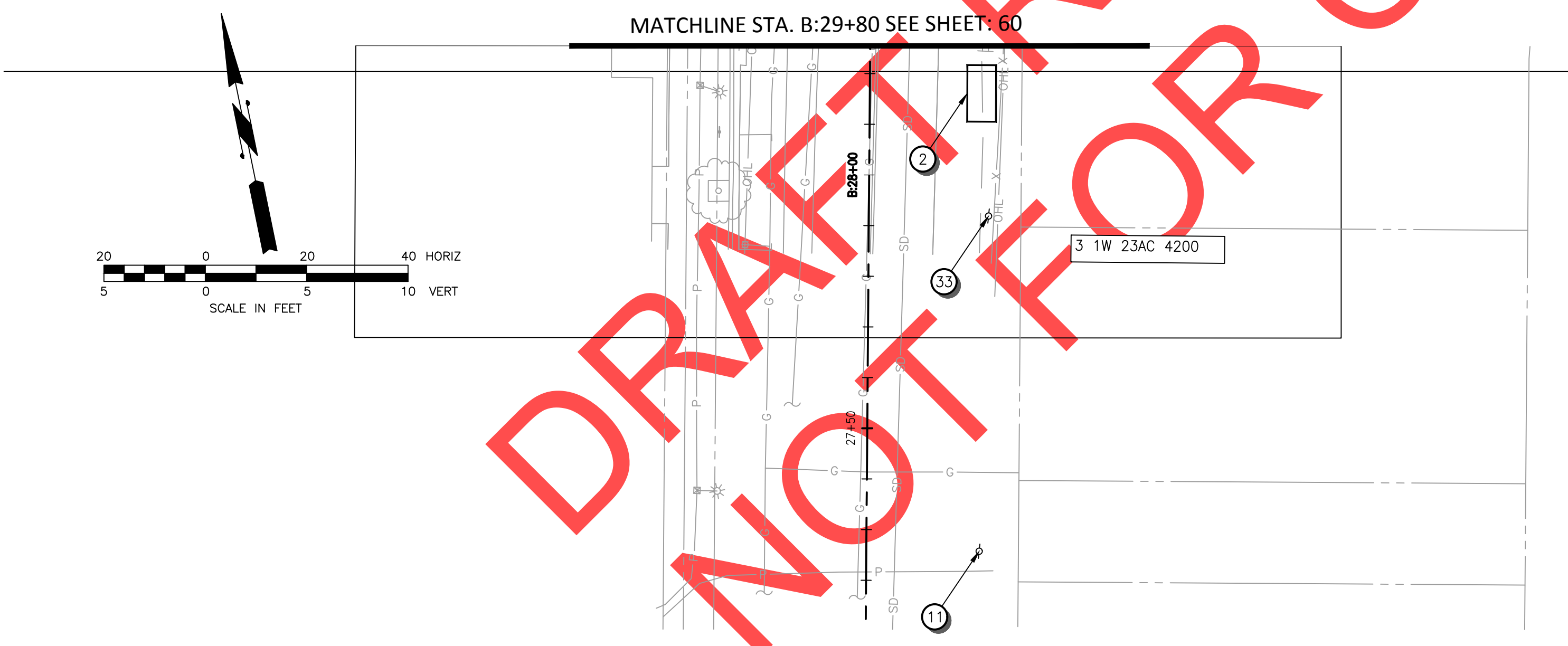
REVIEW SET - NOT FOR CONSTRUCTION

MATCHLINE STA. B:29+80 SEE SHEET: 60



CONSTRUCTION NOTES

- ① CITY CONDUIT SEE SECTION E ON SHEET 63
- ② INSTALL OLD CASTLE PRECAST 5106-LA VAULT. SEE DETAIL ON SHEET 130
- ⑨ INSTALL OLD CASTLE PRECAST 233-PGE VAULT. SEE DETAIL SHEET 130
- ⑩ FRONTIER CONDUIT SEE SECTION E ON SHEET 63
- ⑪ CONNECT PGE TO EXISTING POLE
- ⑳ (NO GAS) FRONTIER CONDUIT, CITY CONDUIT, PGE CONDUIT & COMCAST CONDUIT SEE SECTION ON SHEET 63
- ㉑ CONNECT PGE AND COMCAST TO EXISTING UNDERGROUND TO NORTH, REMOVE POLE
- ㉒ CONNECT FRONTIER TO EXISTING UNDERGROUND TO NORTH, REMOVE POLE, RUN CONDUIT ACROSS STREET TO CONNECT WITH NEW UTILITY TRENCH
- ㉓ CONNECT CITY TO EXISTING HANDHOLE
- ㉔ CONNECT TO NEW POLE POLE LOCATION TBD



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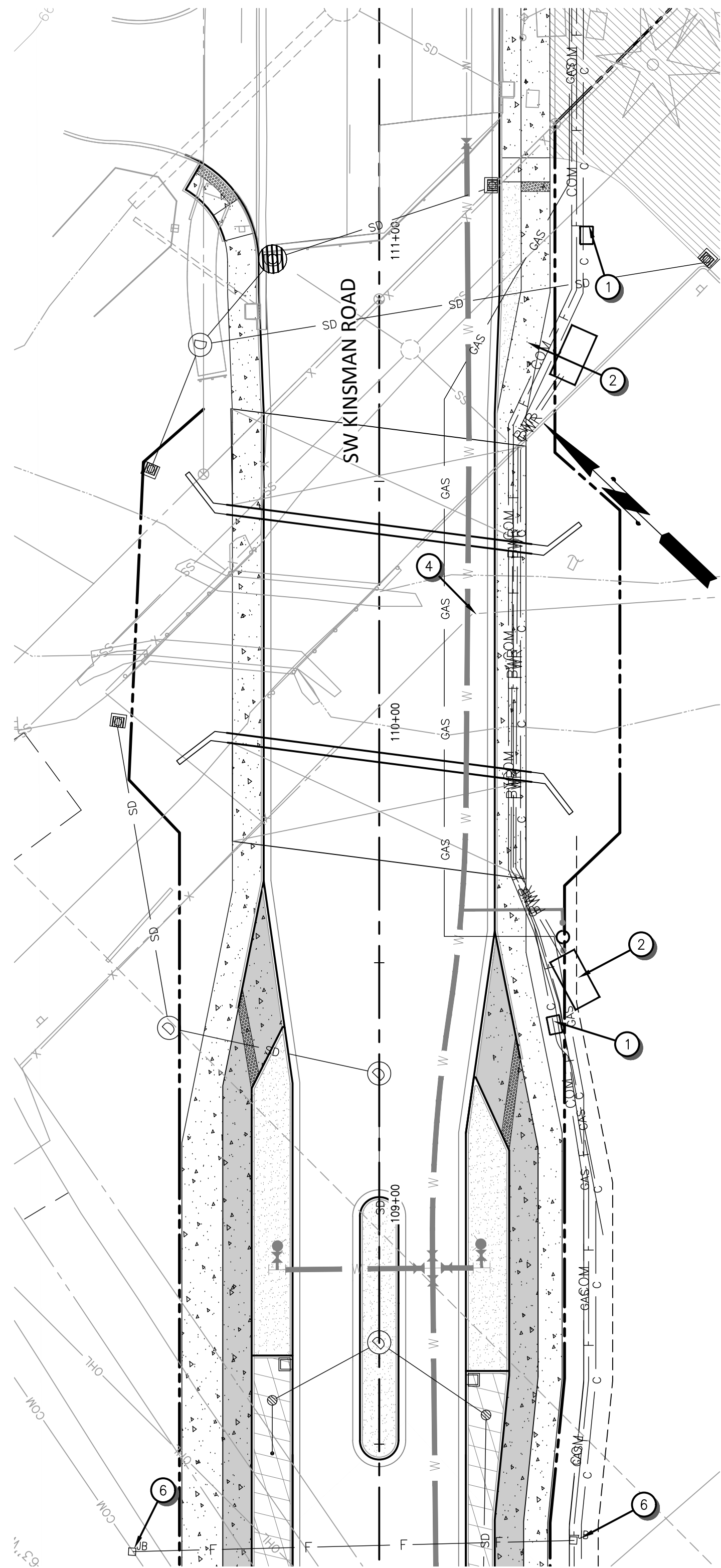
Date: 1 February 2019
 Scale: 20 SCALE
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 Drawn By: EID
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SW 5TH ST TO SW KINSMAN RD EXTENSION
 BOONES FERRY RD - UTILITY TRENCH

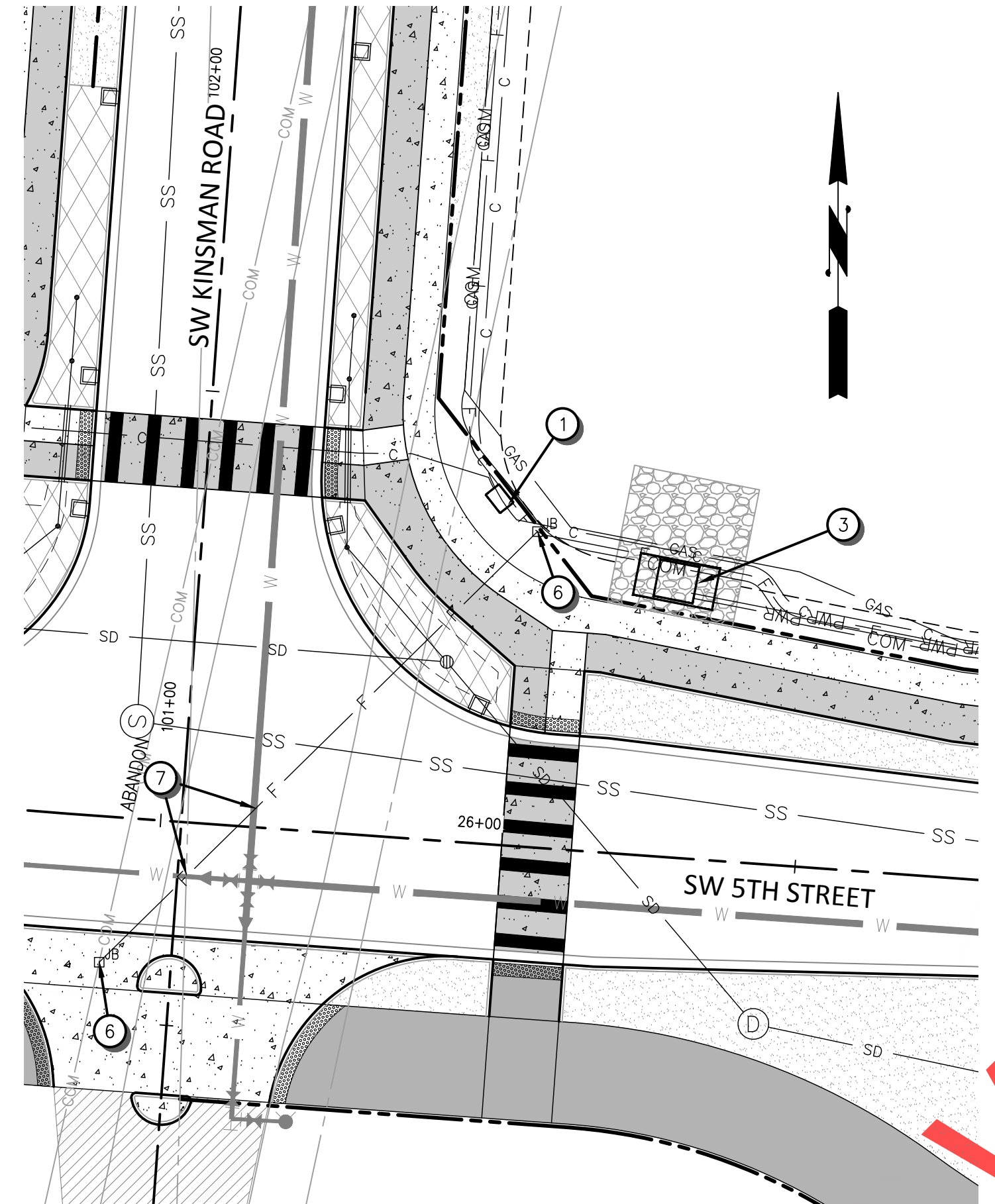
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 UT11
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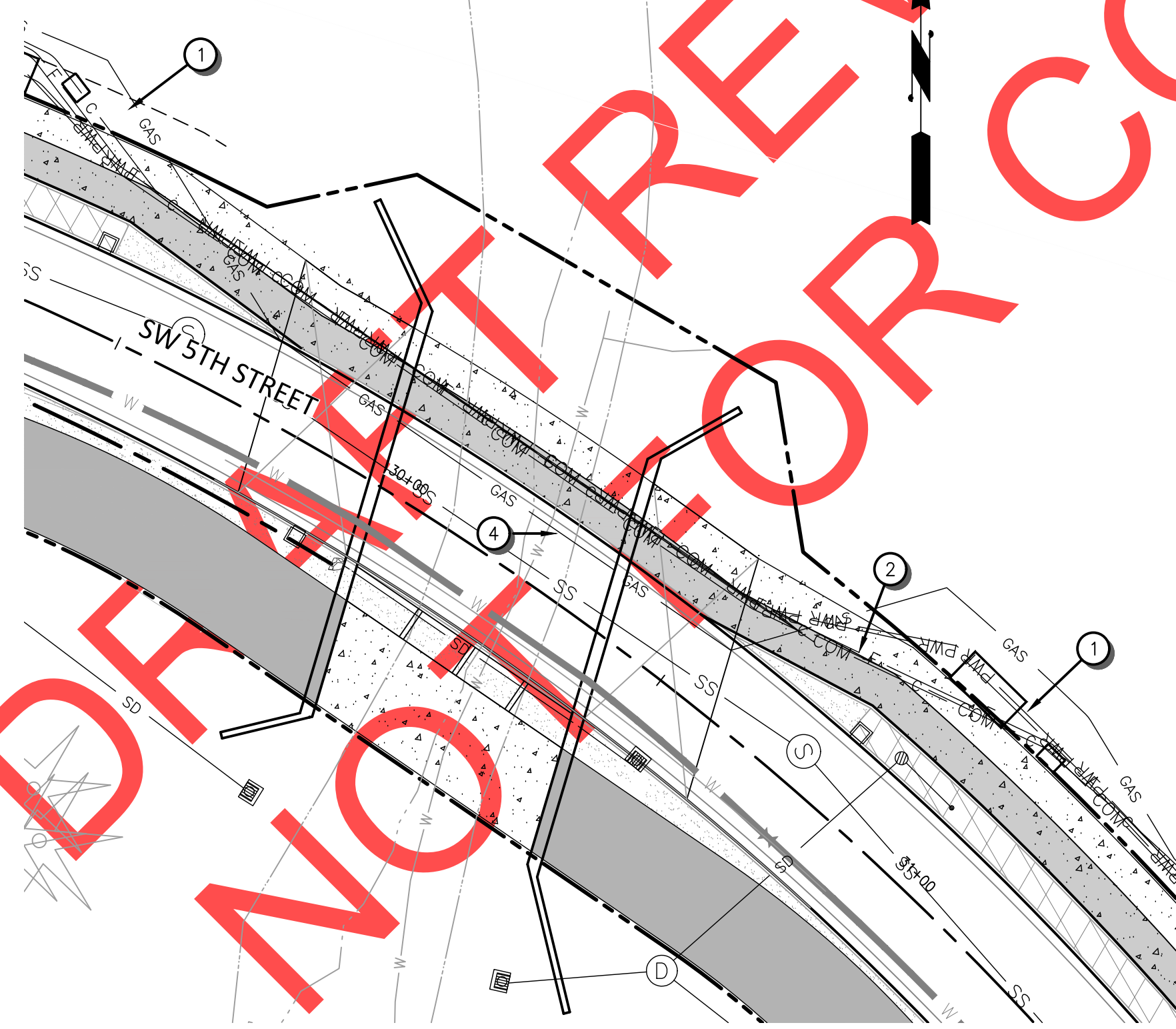
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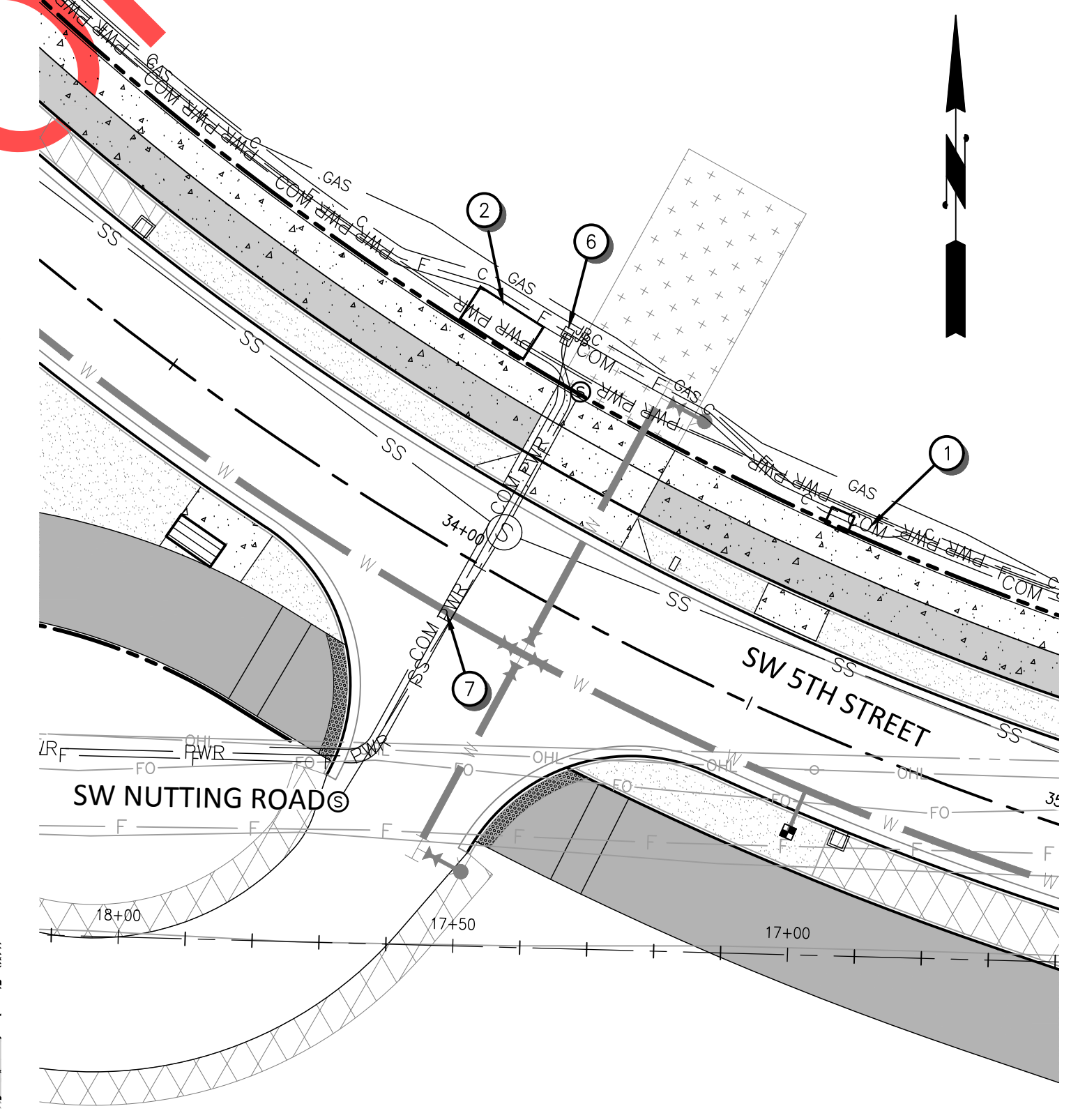
A
64
KINSMAN ROAD BRIDGE
SCALE: 1"=20'



B
64
5TH STREET AT KINSMAN ROAD
SCALE: 1"=20'



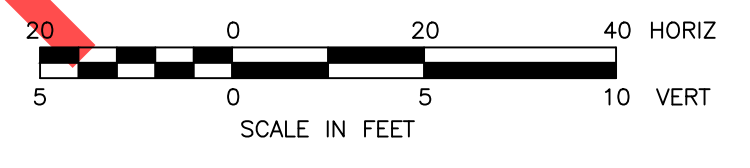
C
64
5TH STREET BRIDGE
SCALE: 1"=20'



D
64
NUTTING ROAD INTERSECTION
SCALE: 1"=20'

CONSTRUCTION NOTES

- 1 CITY VAULT
- 2 PGE VAULT
- 3 PGE SWITCH VAULT
- 4 ROUTE GAS CONDUIT INTO SECOND SPACE BETWEEN GIRDERS
- 5 COMCAST JUNCTION BOX
- 6 FRONTIER JUNCTION BOX
- 7 LOWER CONDUITS TO GO UNDER WATER LINE
- 8 CITY HANDHOLE



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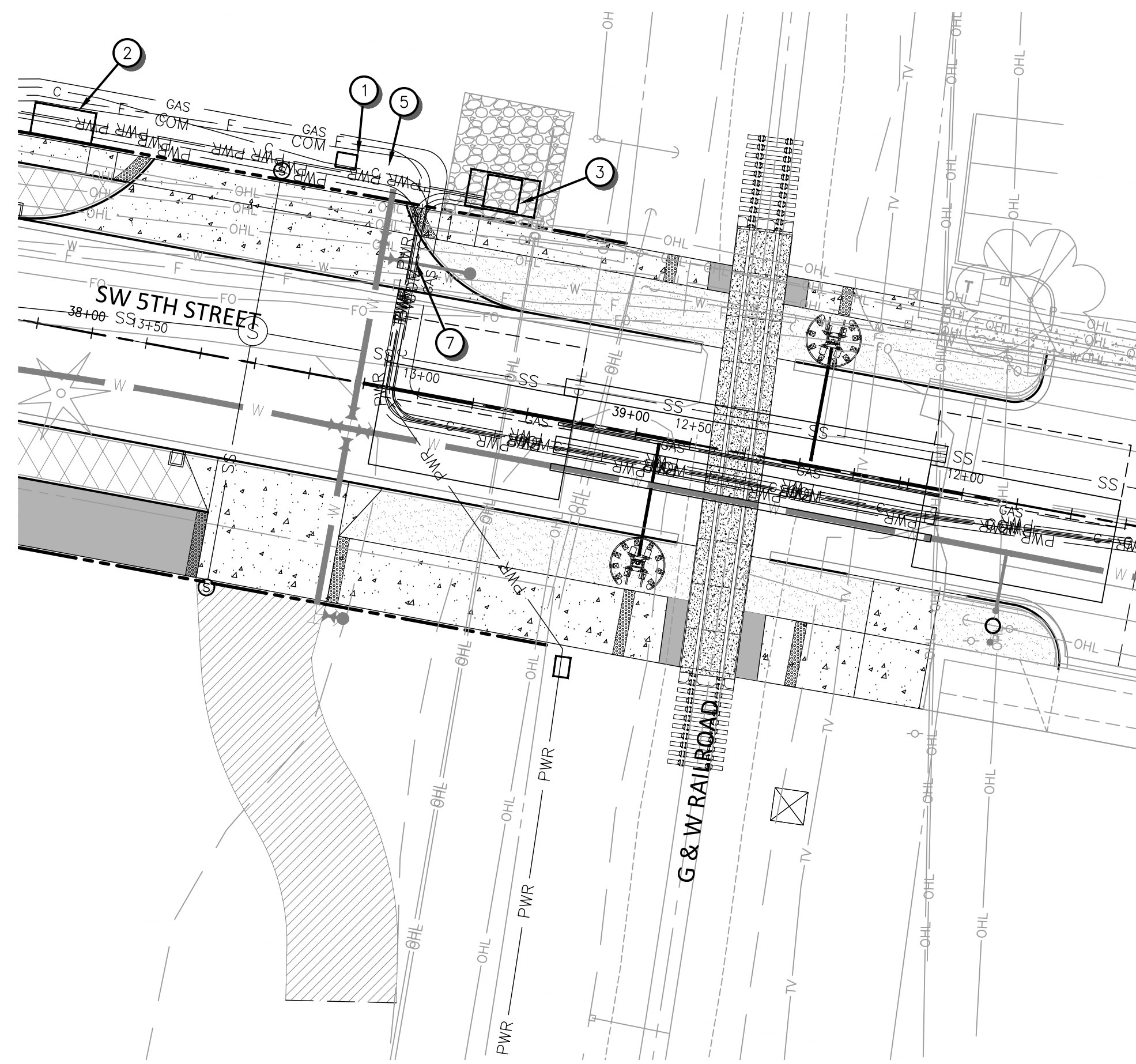


Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
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Checked By: A HENDY

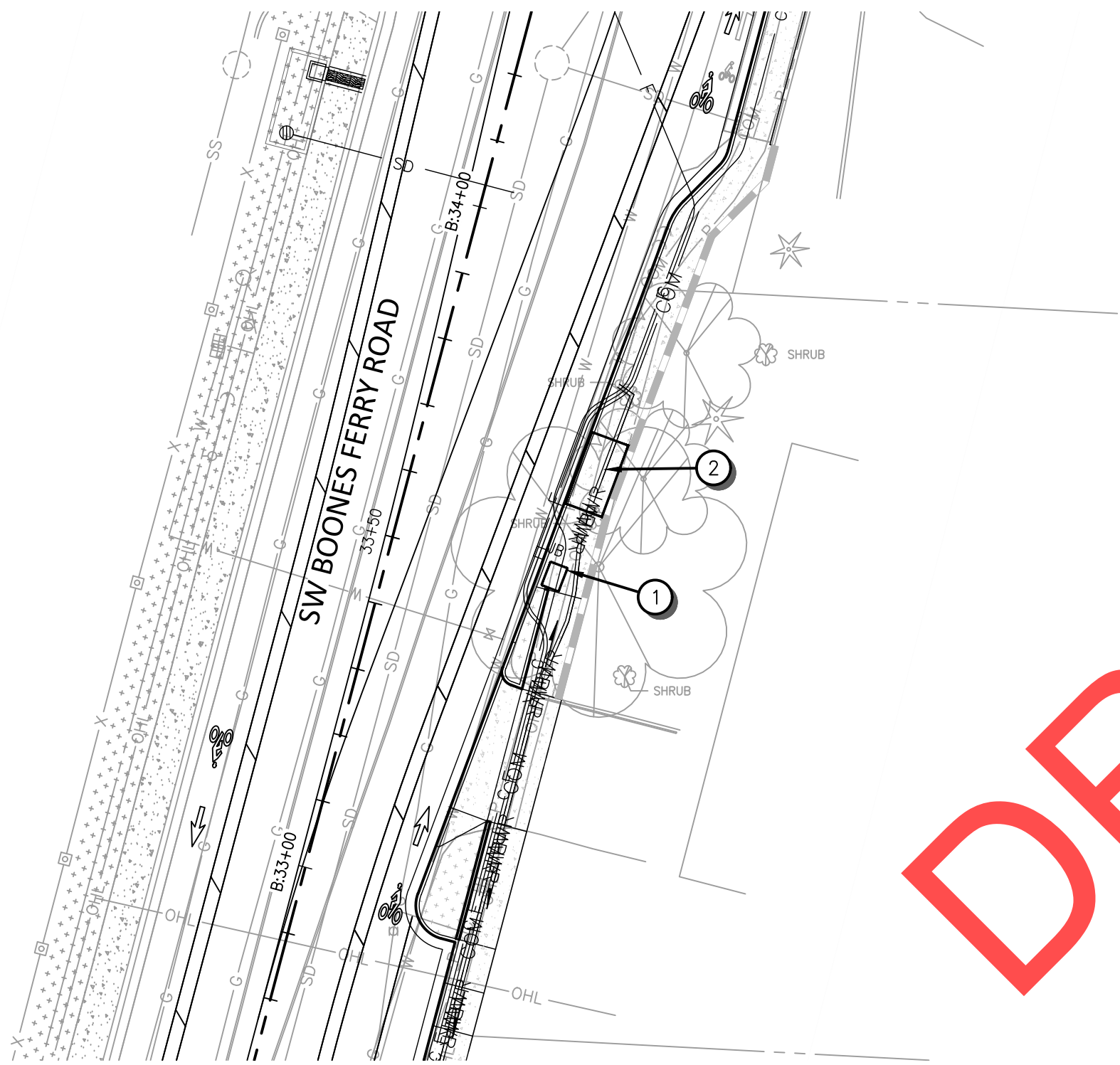
SW 5TH ST TO SW KINSMAN RD EXTENSION
UTILITY PLAN DETAILS



CIP # 4196
PROJECT # 2017-02-001
UT14
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A
65
RAILROAD CROSSING
SCALE: 1"=20'



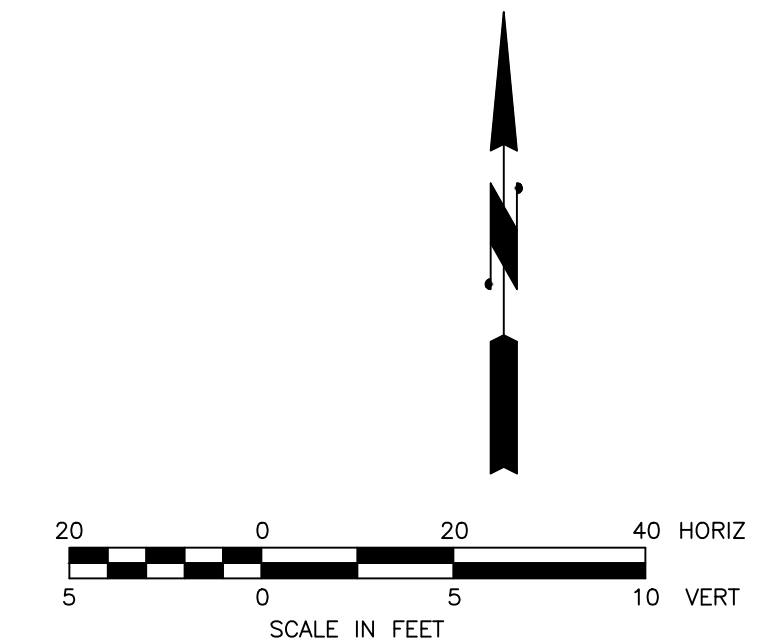
B
65
BOONES FERRY ROAD NEAR BAILEY STREET
SCALE: 1"=20'



C
65
5TH STREET AT BOONES FERRY ROAD
SCALE: 1"=20'

CONSTRUCTION NOTES

- 1 CITY VAULT
- 2 PGE VAULT
- 3 PGE SWITCH VAULT
- 4 ROUTE GAS CONDUIT INTO SECOND SPACE BETWEEN GIRDERS
- 5 COMCAST JUNCTION BOX
- 6 FRONTIER JUNCTION BOX
- 7 LOWER CONDUITS TO GO UNDER WATER LINE
- 8 CONNECT PGE TO EXISTING POLE



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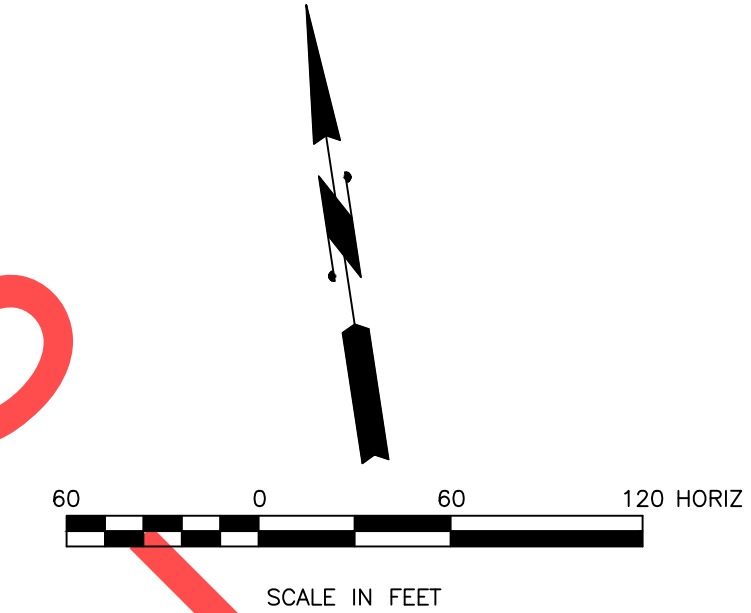
Date: 1 February 2019
Scale: AS SHOWN
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Drawn By: EID
Checked By: A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
UTILITY PLAN DETAILS

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STORM FACILITY TABLES
VEGETATED FILTRATION SWALES

SEE DETAILS ON SHEETS 69 THROUGH 75 AND 127 THROUGH 130

VEGETATED FACILITY ID	STAKING DATA (I.E. LOCATED AT CENTERLINE OF SWALE AT TOP OF GROWING MEDIUM/WATER QUALITY MIX)	WIDTH (FT)*	EXCAVATION (CY)	CLEANOUTS (EA)	CURB CUTS WITH SPLASH PADS (EA)	CHECK DAMS (EA)	WATER QUALITY MIX (CY)	DRAIN ROCK (TON)	MODIFIED CURB AND GUTTER (LF)	WATER QUALITY CURB (LF)	6" DRAIN PIPE (LF)	6" STORM SEWER PIPE (LF)	IMPERMEABLE LINER (SY)	SEPARATION LAYER (SY)	ROCK OUTFALL PAD (EA)	ROCK SPLASH PAD (EA)	BEEHIVE OVERFLOW INLET (EA)	ORIFICE DIAM (IN)
SW-K1	VEGETATED FILTRATION SWALE KINSMAN CL BEGIN STA. 108+67.9 R18.5' LT., I.E. = 145.89 KINSMAN CL END STA. 104+89.8 R18.5' LT., I.E. = 150.73	7.5	254	1	7	9	217	177	390	410	10	-	195	916	0	16	1	1.05
SW-K2	VEGETATED FILTRATION SWALE KINSMAN CL BEGIN STA. 108+64.7 R18.5' ELEV. = 146.26 KINSMAN CL END STA. 103+96.4 R18.5' ELEV. = 152.05	VARIES	205	4	8	13	165	140	420	462	97	40	210	797	2	19	1	0.95
SW-K3	VEGETATED FILTRATION SWALE KINSMAN CL BEGIN STA. 101+02.1 L55.1' ELEV. = 149.80 KINSMAN CL END STA. 101+96.5 L18.5' ELEV. = 151.29	VARIES	109	3	5	4	84	73	106	125	34	26	53	340	2	5	1	0.66
SW-K4	VEGETATED FILTRATION SWALE KINSMAN CL BEGIN STA. 101+01.4 R50.0' ELEV. = 149.89 KINSMAN CL END STA. 102+61.4 R18.5' ELEV. = 151.94	VARIES	87	3	5	7	66	58	164	176	34	26	56	324	2	7	1	0.61
SW-F1	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 27+92.8 L17.5' ELEV. = 142.44 5TH ST. CL LOW POINT STA. 28+94 L14.0' ELEV. = 142.03 5TH ST. CL END STA. 29+43.7 L12.5' ELEV. = 143.07	VARIES	67	3	4	4	54	46	139	178	20	-	70	261	-	7	1	0.66
SW-F2	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 27+45.0 R12.5' ELEV. = 142.21 5TH ST. CL LOW POINT STA. 28+80 R15.5' ELEV. = 142.07 5TH ST. CL END STA. 29+26.7 R12.5' ELEV. = 145.13	6	92	3	7	6	76	63	177	-	20	-	89	352	-	-	1	WEST ORIFICE: 0.64 EAST ORIFICE: 0.61
SW-F3	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 33+16.9 R12.5' ELEV. = 146.33 5TH ST. CL END STA. 31+82.2 R12.5' ELEV. = 147.72	7	95	1	3	5	82	66	137	-	10	-	69	337	-	-	1	0.76
SW-F4	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 30+77.6 L12.5' ELEV. = 144.66 5TH ST. CL END STA. 33+35.1 L12.5' ELEV. = 147.90	5	115	1	4	7	92	78	257	267	10	-	129	460	-	11	1	0.64
SW-F5	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 36+10.6 R12.5' ELEV. = 143.95 5TH ST. CL LOW POINT STA. 35+67 R16.4' ELEV. = 143.78 5TH ST. CL END STA. 34+68.4 R12.5' ELEV. = 147.39	VARIES	130	1	3	4	93	84	146	161	10	-	73	409	-	7	1	0.63
SW-F6	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 38+02.5 L27.5' ELEV. = 143.84 5TH ST. CL LOW POINT STA. 36+75 L22.0' ELEV. = 142.30 5TH ST. CL END STA. 34+98.9 L12.5' ELEV. = 146.93	VARIES	179	3	6	10	154	125	257	371	41	34	129	635	2	15	1	0.83
SW-F7	VEGETATED FILTRATION SWALE 5TH ST. CL BEGIN STA. 37+38.8 R18.5' ELEV. = 142.71 5TH ST. CL END STA. 38+22.1 R18.5' ELEV. = 145.21	VARIES	73	1	3	4	64	52	81	132	10	-	41	245	-	5	1	0.40

* THE WIDTH FOR SOME PLANTERS IS VARIABLE. VEGETATED FILTRATION SWALES SHALL FILL THE SPACE BETWEEN THE CURB AND SIDEWALK BY VARYING THE BOTTOM WIDTH. SIDE SLOPES SHALL BE MAXIMUM 3:1 PER DETAIL. MIN DEPTH SHALL BE 16" FROM GUTTER LINE TO TOP OF WATER QUALITY MEDIA. IN AREAS WHERE NO SIDEWALK IS PRESENT BEHIND THE SWALE, USE THE WIDTH PROVIDED.

WATER QUALITY STRUCTURES DETENTION POND

SFCB-F1	SEE DETAILS ON SHEET 70
SFMH-K1	SEE DETAILS ON SHEET 71
SFMH-A1	SEE DETAILS ON SHEET 71

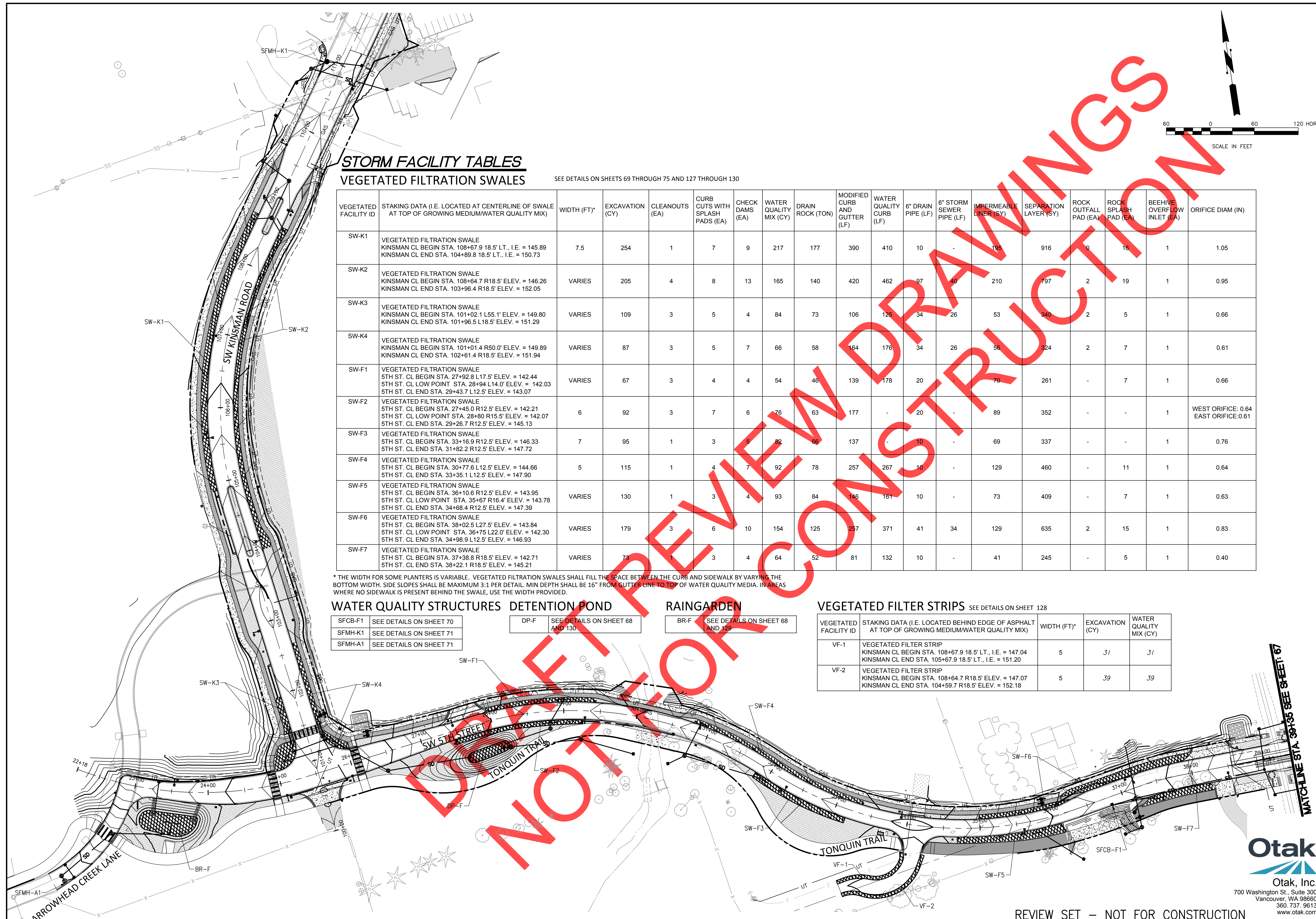
DP-F	SEE DETAILS ON SHEET 68 AND 130
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RAINGARDEN

BR-F	SEE DETAILS ON SHEET 68 AND 129
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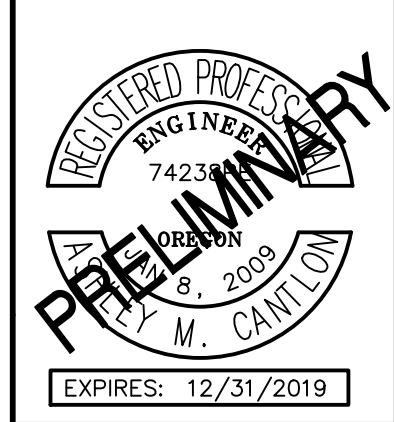
VEGETATED FILTER STRIPS SEE DETAILS ON SHEET 128

VEGETATED FACILITY ID	STAKING DATA (I.E. LOCATED BEHIND EDGE OF ASPHALT AT TOP OF GROWING MEDIUM/WATER QUALITY MIX)	WIDTH (FT)*	EXCAVATION (CY)	WATER QUALITY MIX (CY)
VF-1	VEGETATED FILTER STRIP KINSMAN CL BEGIN STA. 108+67.9 R18.5' LT., I.E. = 147.04 KINSMAN CL END STA. 105+67.9 R18.5' LT., I.E. = 151.20	5	31	31
VF-2	VEGETATED FILTER STRIP KINSMAN CL BEGIN STA. 108+64.7 R18.5' ELEV. = 147.07 KINSMAN CL END STA. 104+59.7 R18.5' ELEV. = 152.18	5	39	39



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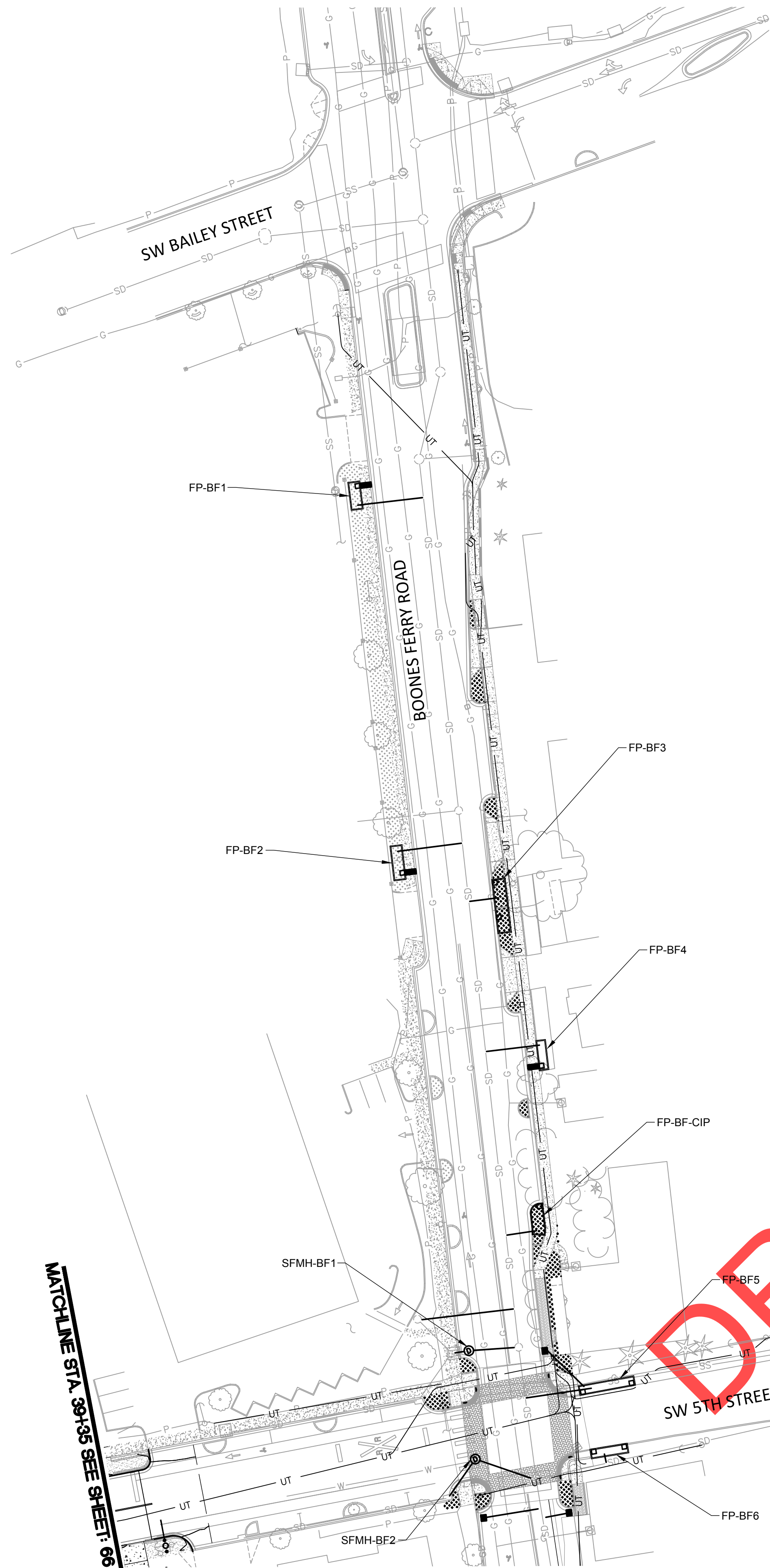
City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/BB
 Drawn By: SLR
 Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY INDEX PLAN

CIP # 4196
 PROJECT # 2017-02-001
 SF01
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STORM FACILITY TABLES

FILTRATION PLANTERS

FILTRATION PLANTER	STAKING DATA	WATER QUALITY MIX TOP ELEVATION	EXCAVATION (CY)	CLEANOUTS (EA)	CURB CUT WITH SPLASH PAD (EA)	WATER QUALITY MIX (CY)	DRAIN ROCK (TON)	MODIFIED CURB AND GUTTER (LF)	WATER QUALITY CURB (LF)	IMPERMEABLE LINER (SY)	SEPARATION LAYER (SY)	ROCK SPLASH PAD (EA)	6" DRAIN PIPE (FOOT)	BEEHIVE OVERFLOW INLET (EA)	ORIFICE DIAM (IN)
FP-BF-CIP	FILTRATION PLANTER BOONES CL BEGIN STA. 30+37.49 OFF: 24.00'R. BOONES CL END STA. 30+20.86 OFF: 23.23'R	147.03	14	1	1	5	7	20	24	10	26	2	10	1	0.42

SEE ADDITIONAL DETAILS ON SHEETS 69 THROUGH 73 AND 127 THROUGH 130.

PRECAST FILTRATION PLANTERS

STORMWATER FACILITY ID	DETAILS	STAKING DATA	WATER QUALITY MIX TOP ELEVATION (FT)	EXCAVATION (CY)	CURB CUTS WITH SPLASH PADS (EA)	CONCRETE CHANNEL WITH SPLASH PAD (EA)	PLANTER CURB (FOOT)	DRAIN PIPE (FOOT)	BEEHIVE OVERFLOW INLET (EA)	ORIFICE DIAM (IN)
FP-BF1	SHEET 76	BOONES CL BEGIN STA. 34+15.46 OFF: 26.57'L. BOONES CL END STA 34+00.97 OFF: 26.49'L.	147.87	15	-	1	38	10	1	0.36
FP-BF2	SHEET 77	BOONES CL BEGIN STA. 32+27.99 OFF: 26.50'L. BOONES CL END STA 32+10.01 OFF: 26.50'L.	147.19	18	-	1	45	10	1	0.42
FP-BF3	SHEET 78	BOONES CL BEGIN STA. 32+05.00 OFF: 17.00'R. BOONES CL END STA 31+76.99 OFF: 17.00'R.	147.53	39	2	-	66	10	1	0.66
FP-BF4	SHEET 80	BOONES CL BEGIN STA. 31+20.46 OFF: 30.00'R. BOONES CL END STA 31+04.97 OFF: 30.00'R.	147.47	13	-	1	37	10	1	0.31
FP-BF5	SHEET 81	BOONES CL BEGIN STA. 29+37.30 OFF: 31.59'R. BOONES CL END STA 29+39.25 OFF: 60.52'R.	146.18	27	2	-	64	10	1	0.47
FP-BF6	SHEET 82	BOONES CL BEGIN STA. 29+09.36 OFF: 33.44'R. BOONES CL END STA 29+10.25 OFF: 52.93'R.	146.07	16	2	-	45	10	1	0.38

SEE ADDITIONAL DETAILS ON SHEETS 69 THROUGH 82.

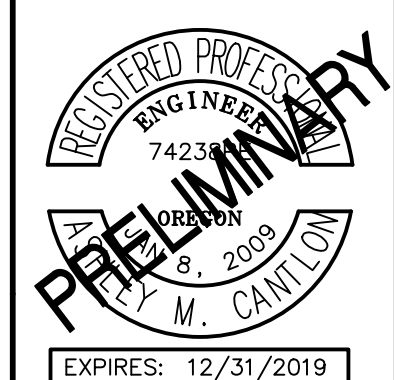
WATER QUALITY STRUCTURES

SFMH-BF1	SEE DETAILS ON SHEET 70
SFMH-BF2	SEE DETAILS ON SHEET 71

DRAFT REVIEW NOT FOR CONSTRUCTION



REVIEW SET – NOT FOR CONSTRUCTION



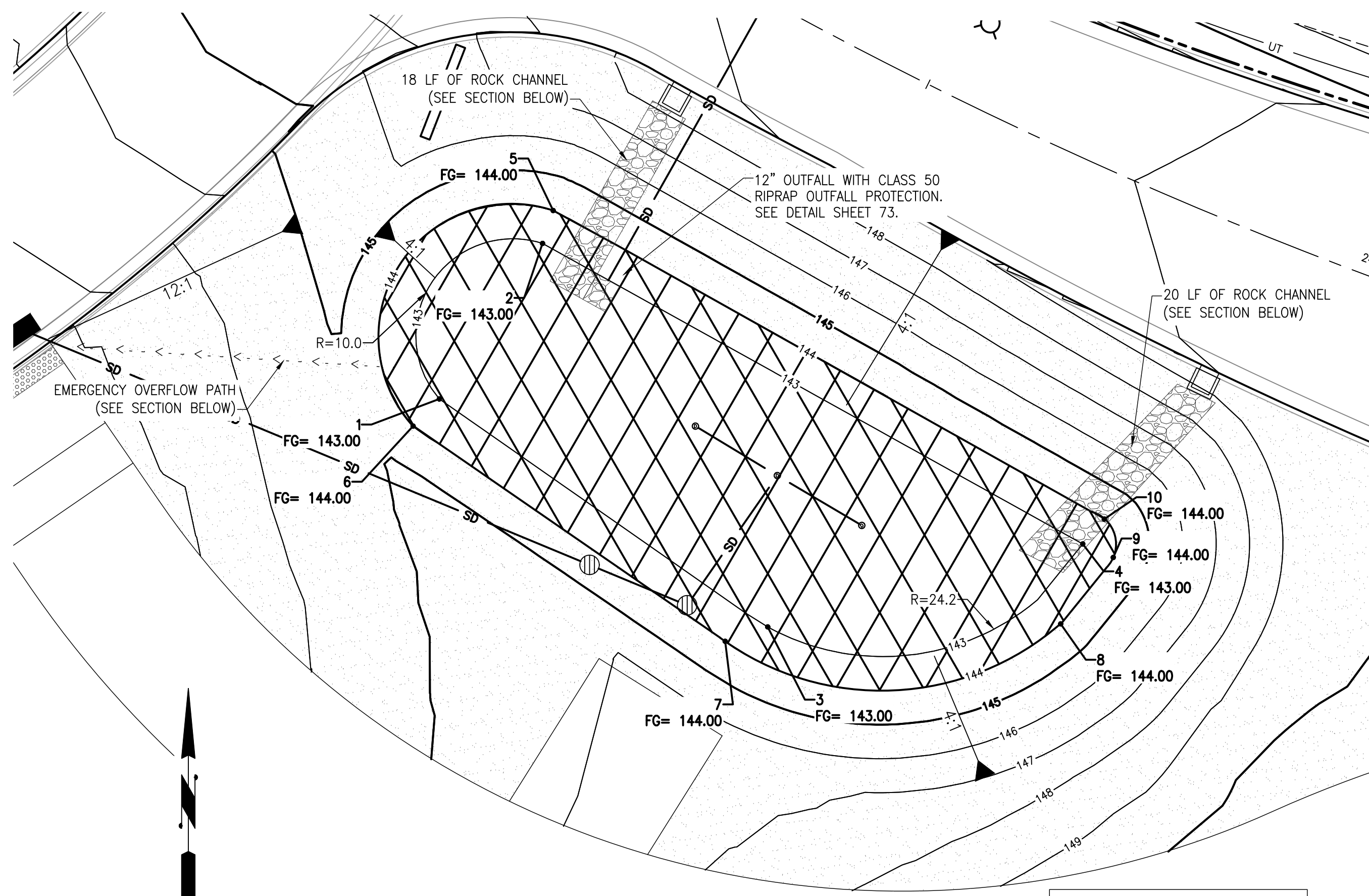
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

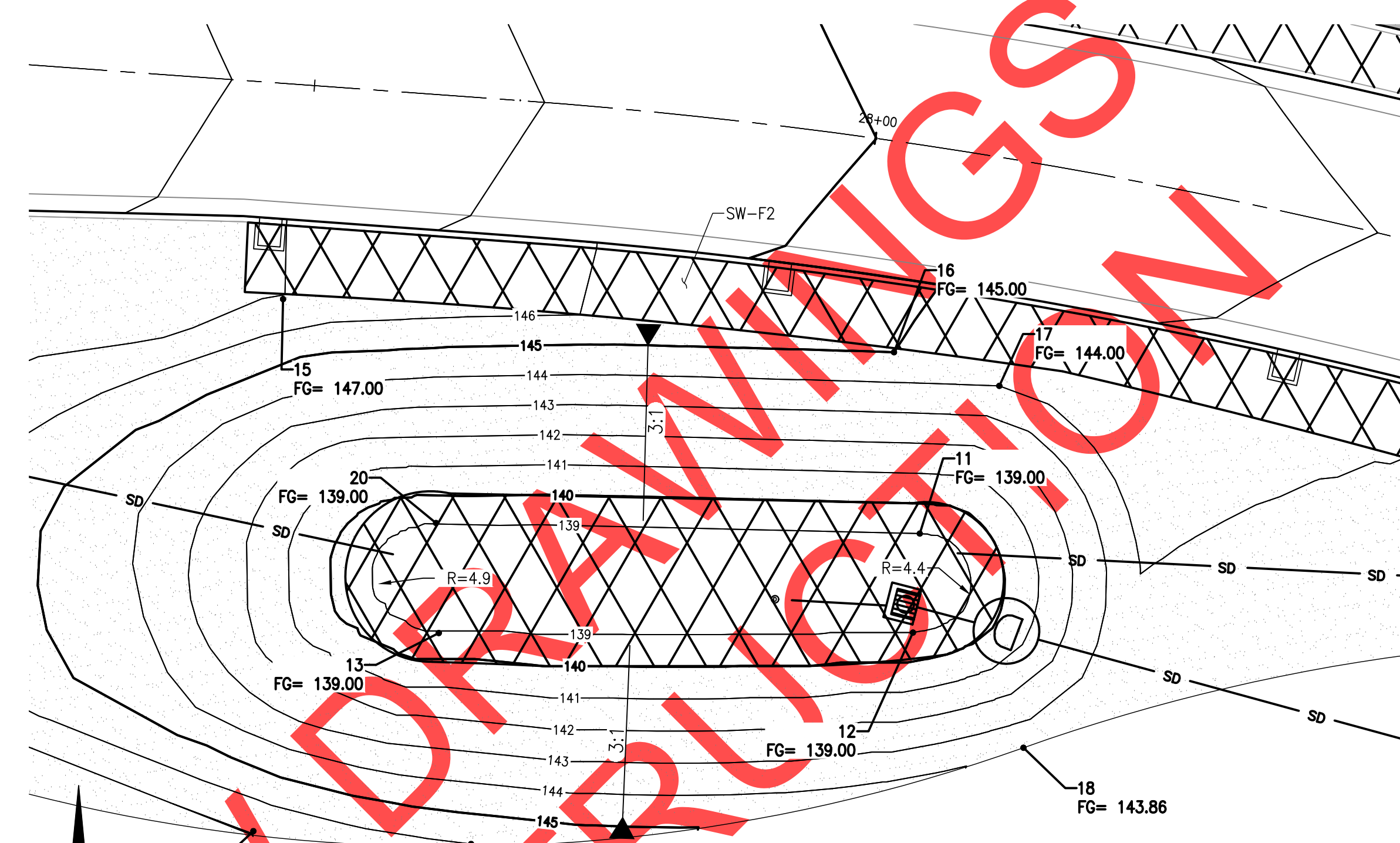
SW 5TH ST TO SW KINSMAN RD EXTENSION
BOONES FERRY FACILITY INDEX PLAN

CIP # 4196
PROJECT # 2017-02-001
SF02
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RAINGARDEN BR-F

NORTHING & EASTING		
POINT #	NORTHING	EASTING
1	603579.62	7616062.76
2	603595.66	7616073.40
3	603556.10	7616096.63
4	603564.66	7616129.12
5	603599.06	7616074.50
6	603576.82	7616060.06
7	603554.61	7616092.24
8	603556.41	7616126.84
9	603563.27	7616132.26
10	603567.23	7616131.34

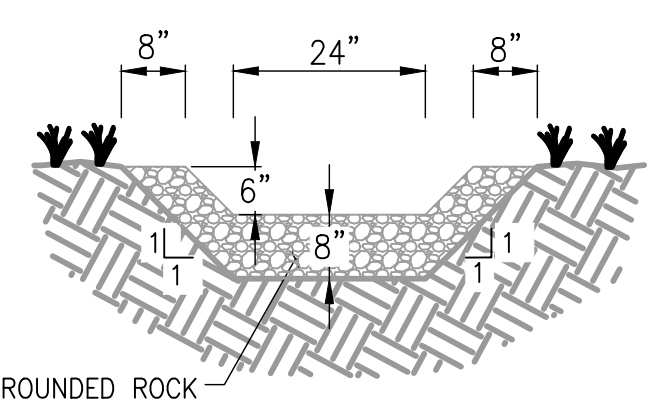


DETENTION POND DP-F

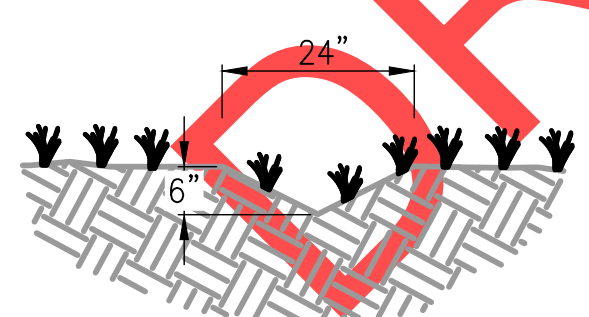
NORTHING & EASTING		
POINT #	NORTHING	EASTING
11	603508.06	7616558.56
12	603499.27	7616557.95
13	603499.23	7616515.88
14	603481.66	7616499.43
15	603528.86	7616502.06
16	603524.14	7616556.27
17	603521.16	7616565.62
18	603489.06	7616567.76
19	603480.51	7616518.75
20	603508.99	7616515.64

QUANTITY TABLES

FACILITY ID	EXCAVATION (CY)	CLEANOUTS (EA)	CURB CUTS WITH SPLASH PADS (EA)	WATER QUALITY MIX (CY)	DRAIN ROCK (TON)	6" DRAIN PIPE (LF)	SEPARATION LAYER (SY)	ROCK OUTFALL PAD (EA)	ROCK SPLASH PAD (EA)	RIPRAP CLASS 50 (CY)	4"-0 ROUNDED ROCK (CY)	BEEHIVE OVERFLOW INLET (EA)	ORIFICE DIAM (IN)
DP-F	89	1	-	67	88	10	255	-	-	2	-	-	SEE SHEET 44
RAIN GARDEN (BR-F)	182	3	2	117	170	36	365	2	-	2	4	2	0.88



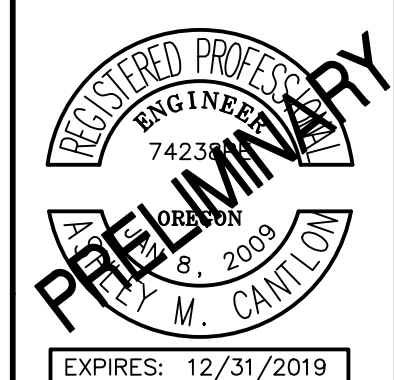
ROCK CHANNEL
N.T.S.



EMERGENCY OVERFLOW PATH
N.T.S.

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REVISIONS



City of Wilsonville
 Engineering Department
 29799 SW Town Center Loop E
 Wilsonville, OR 97070
 Phone 503-682-4960



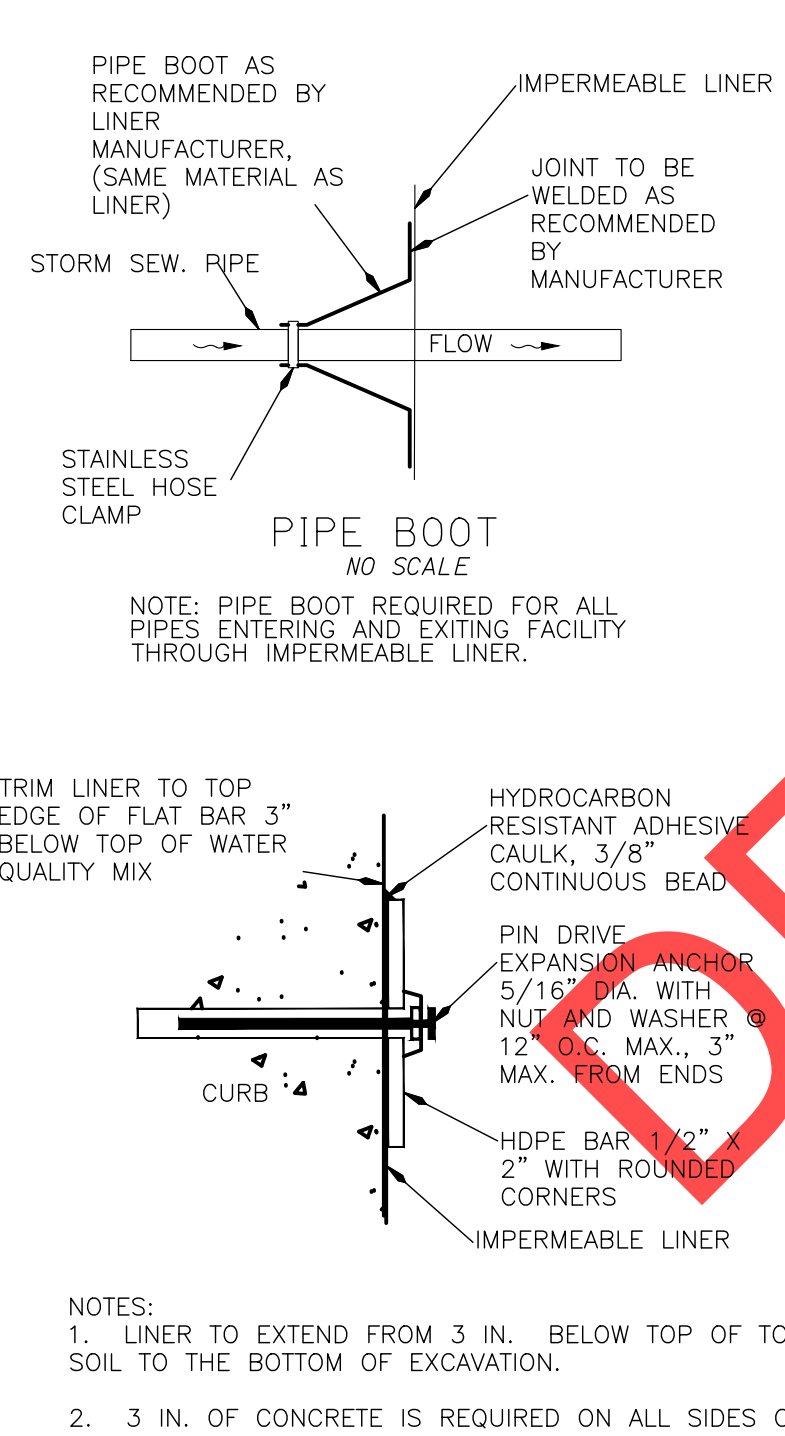
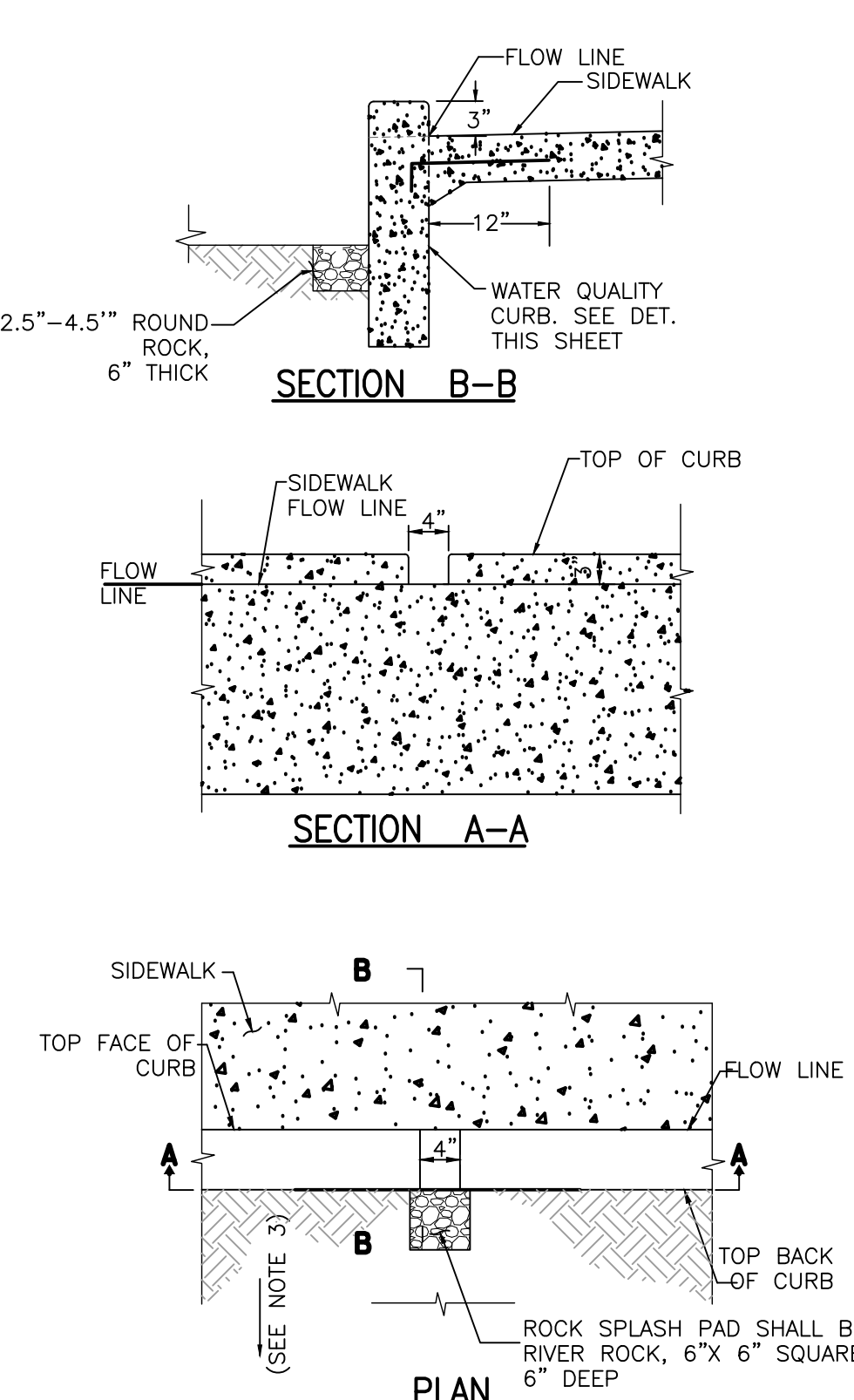
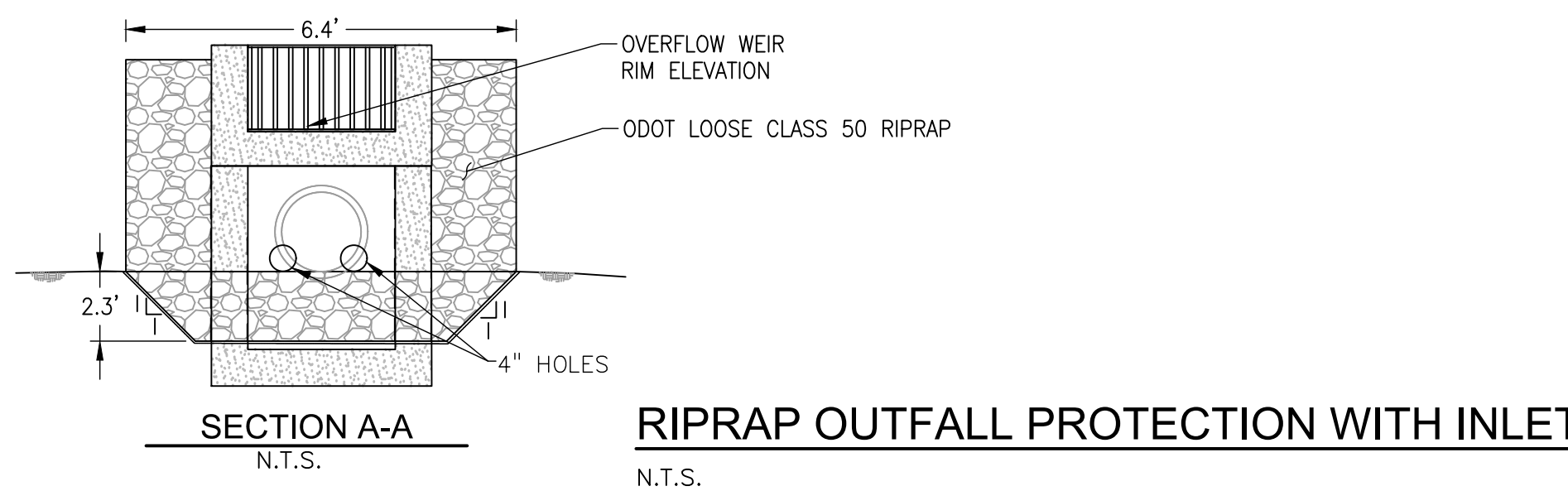
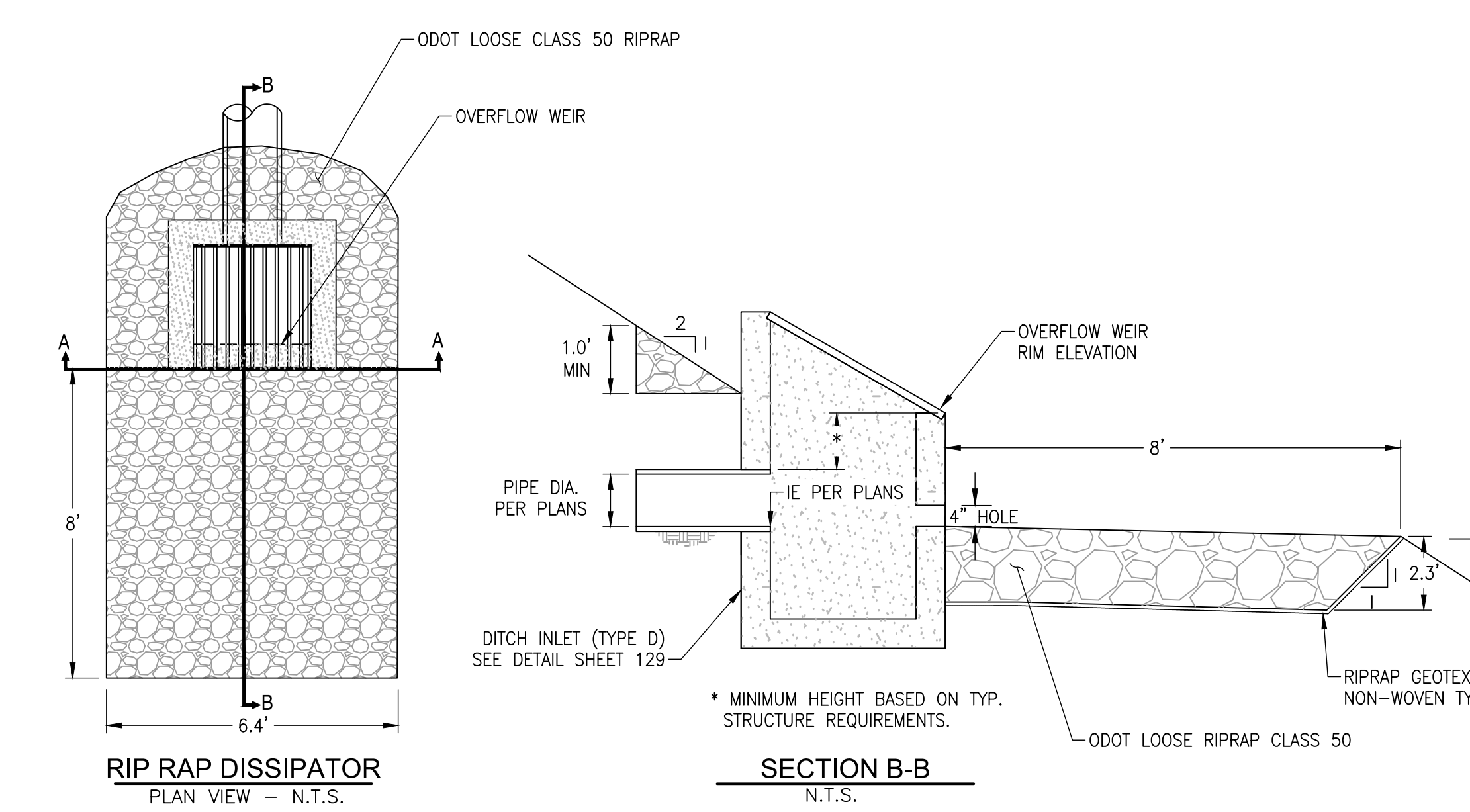
Date: 1 February 2019
 Scale: AS SHOWN
 Designed By: PH/BB
 Drawn By: SLR
 Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS



REVIEW SET - NOT FOR CONSTRUCTION

CIP # 4196
 PROJECT # 2017-02-001
 SF03
 68 of 211



2-CARTRIDGE DEEP CATCHBASIN STORMFILTER DATA

STRUCTURE ID	SFCB-K2
WATER QUALITY FLOW RATE (cfs)	0.04
PEAK FLOW RATE (cfs)	0.12
RETURN PERIOD OF PEAK FLOW (yrs)	25
CARTRIDGE FLOW RATE (gpm)	11.25
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX
RIM ELEVATION	144.08'

PIPE DATA:	1E	DIAMETER
INLET STUB	NA	
OUTLET STUB	140.25'	12"

CONFIGURATIONS

OUTLET: [Diagram showing outlet configurations]

INLET: [Diagram showing inlet configurations]

SLOPED LID	YES/NO
SOLID COVER	YES/NO

NOTES/SPECIAL REQUIREMENTS:

STORMFILTER STEEL CATCHBASIN DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 2-CARTRIDGE CATCHBASIN HAS A MAXIMUM OF TWO CARTRIDGES. SYSTEM IS SHOWN WITH A 27" CARTRIDGE, AND IS ALSO AVAILABLE WITH AN 18" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL. PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	10" DEEP
CARTRIDGE HEIGHT	27"	18"	10"
RECOMMENDED HYDRAULIC DROP (H)	3.05'	2.3'	3.3'
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf, 1.67* gpm/sf	1 gpm/sf, 1.67* gpm/sf	2 gpm/sf, 1.67* gpm/sf, 1 gpm/sf
CARTRIDGE FLOW RATE (gpm)	22.5, 18.75	11.25, 15	12.53, 7.5, 12, 12.53, 7.5
PEAK HYDRAULIC CAPACITY	1.0	1.0	1.8
INLET PERMANENT POOL LEVEL (A)	1'-0"	1'-0"	2'-0"
OVERALL STRUCTURE HEIGHT (B)	4'-9"	3'-9"	4'-9"

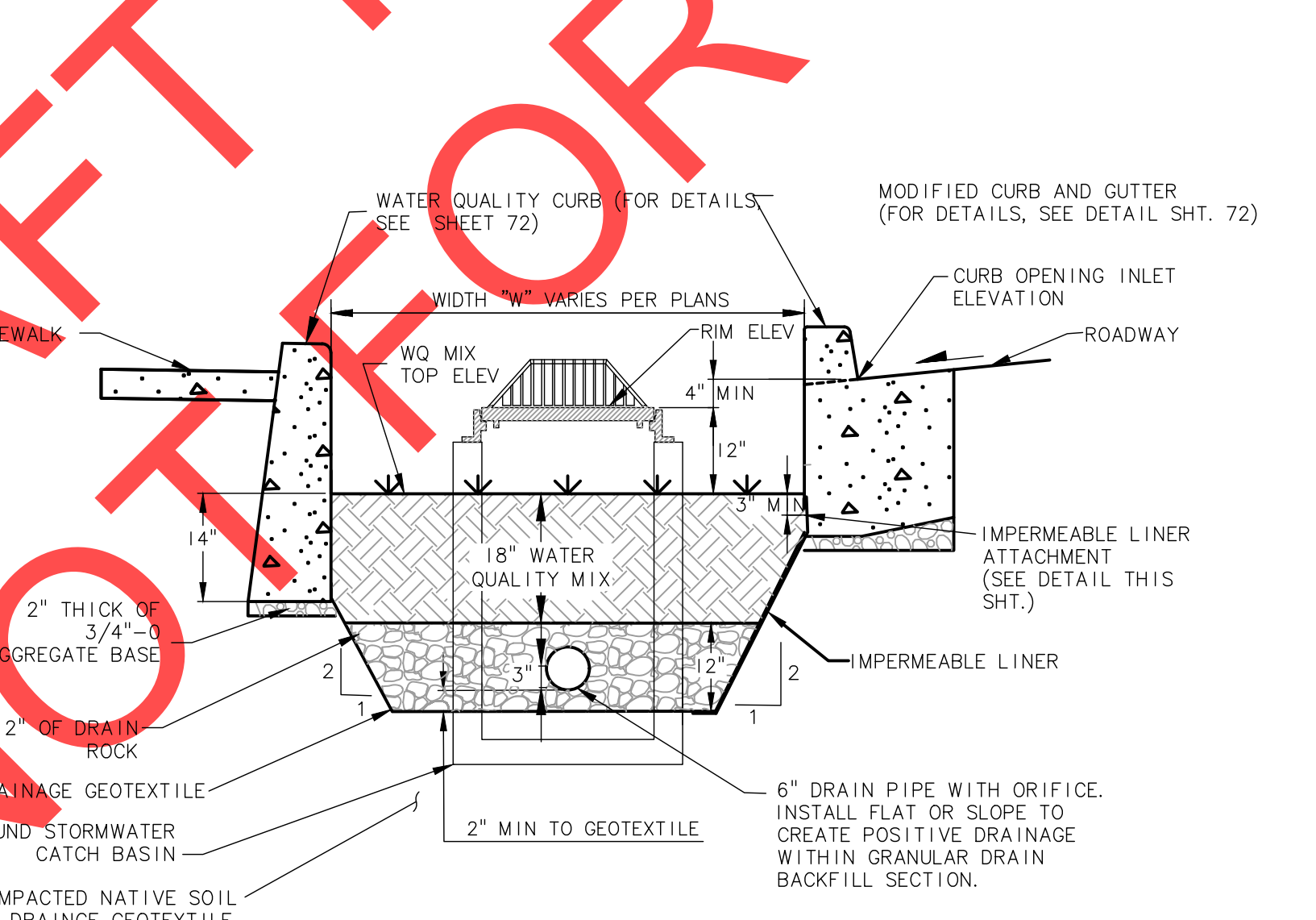
* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY.

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE: WWW.CONTECHS.COM
- STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
- MANUFACTURER TO APPLY A SURFACE BEAD WELD IN THE SHAPE OF THE LETTER "O" ABOVE THE OUTLET PIPE STUB ON THE EXTERIOR SURFACE OF THE STEEL SFCB.
- STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.
- STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M306 LOAD RATING. TO MEET HS20 LOAD RATING ON STRUCTURE, A CONCRETE COLLAR IS REQUIRED. WHEN REQUIRED, CONCRETE COLLAR WITH #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
- SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.



2-CARTRIDGE DEEP CATCHBASIN STORMFILTER DATA

STRUCTURE ID	SFCB-K2
WATER QUALITY FLOW RATE (cfs)	0.04
PEAK FLOW RATE (cfs)	0.12
RETURN PERIOD OF PEAK FLOW (yrs)	25
CARTRIDGE FLOW RATE (gpm)	11.25
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX
RIM ELEVATION	144.08'

PIPE DATA:	1E	DIAMETER
INLET STUB	NA	
OUTLET STUB	140.25'	12"

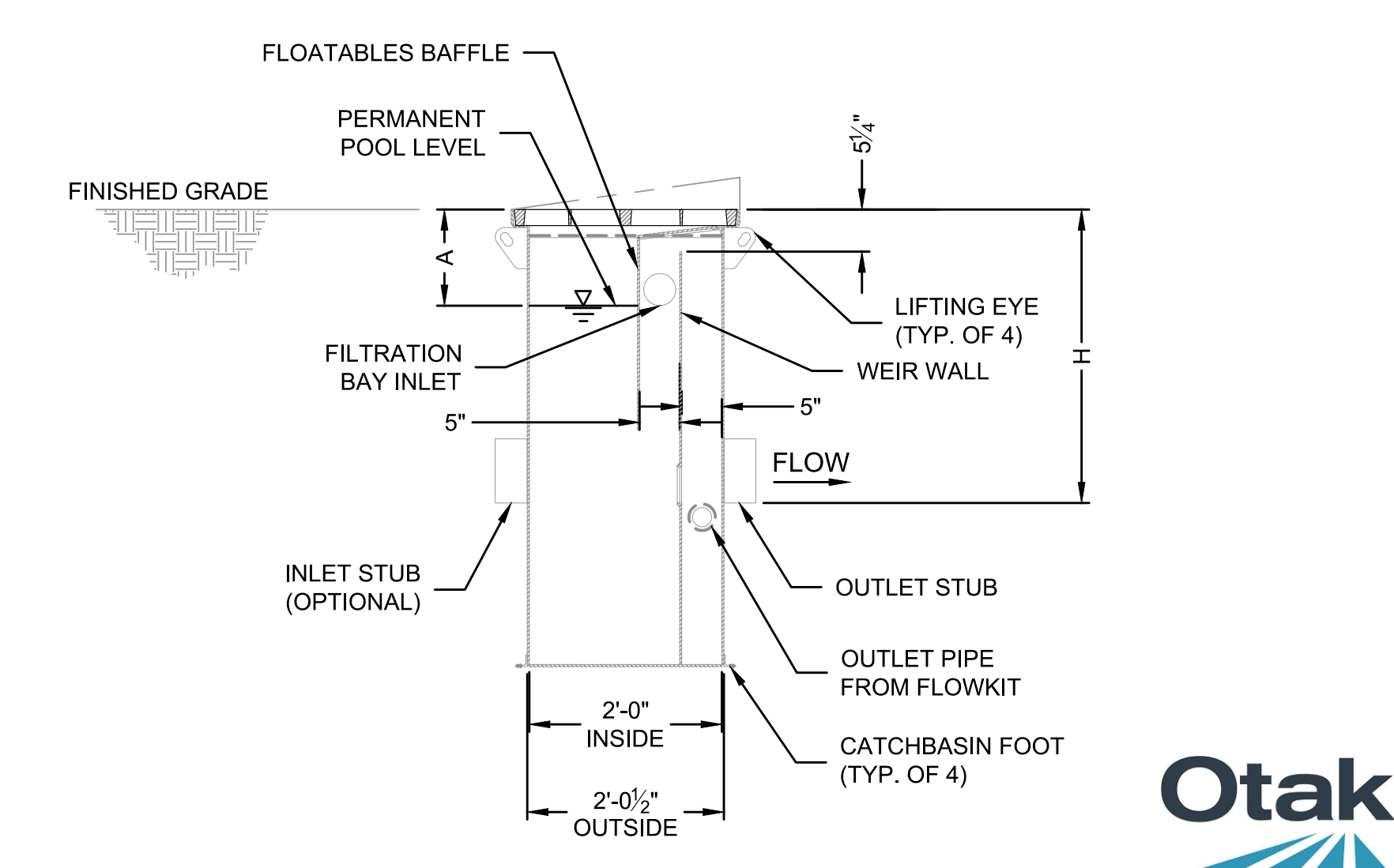
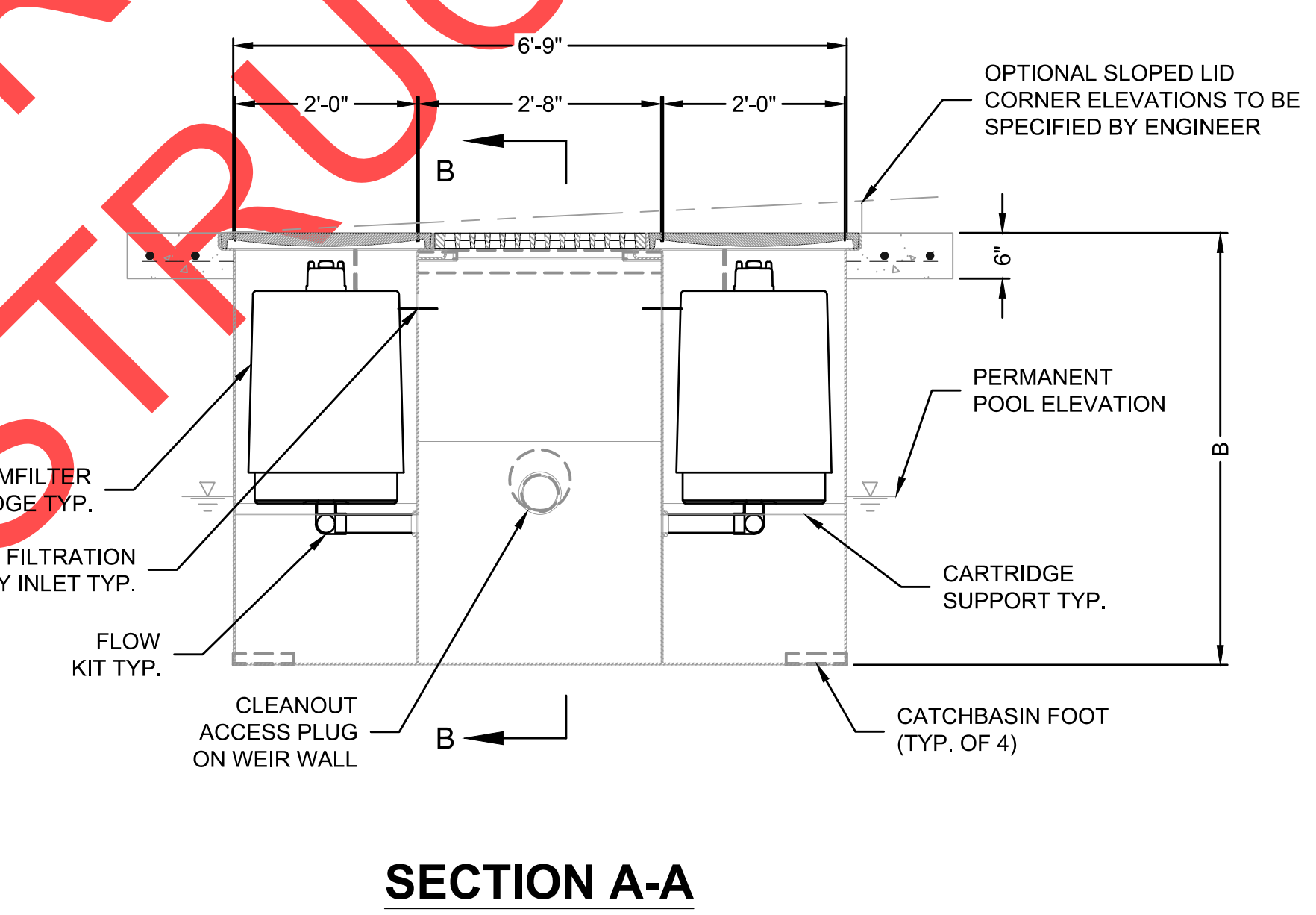
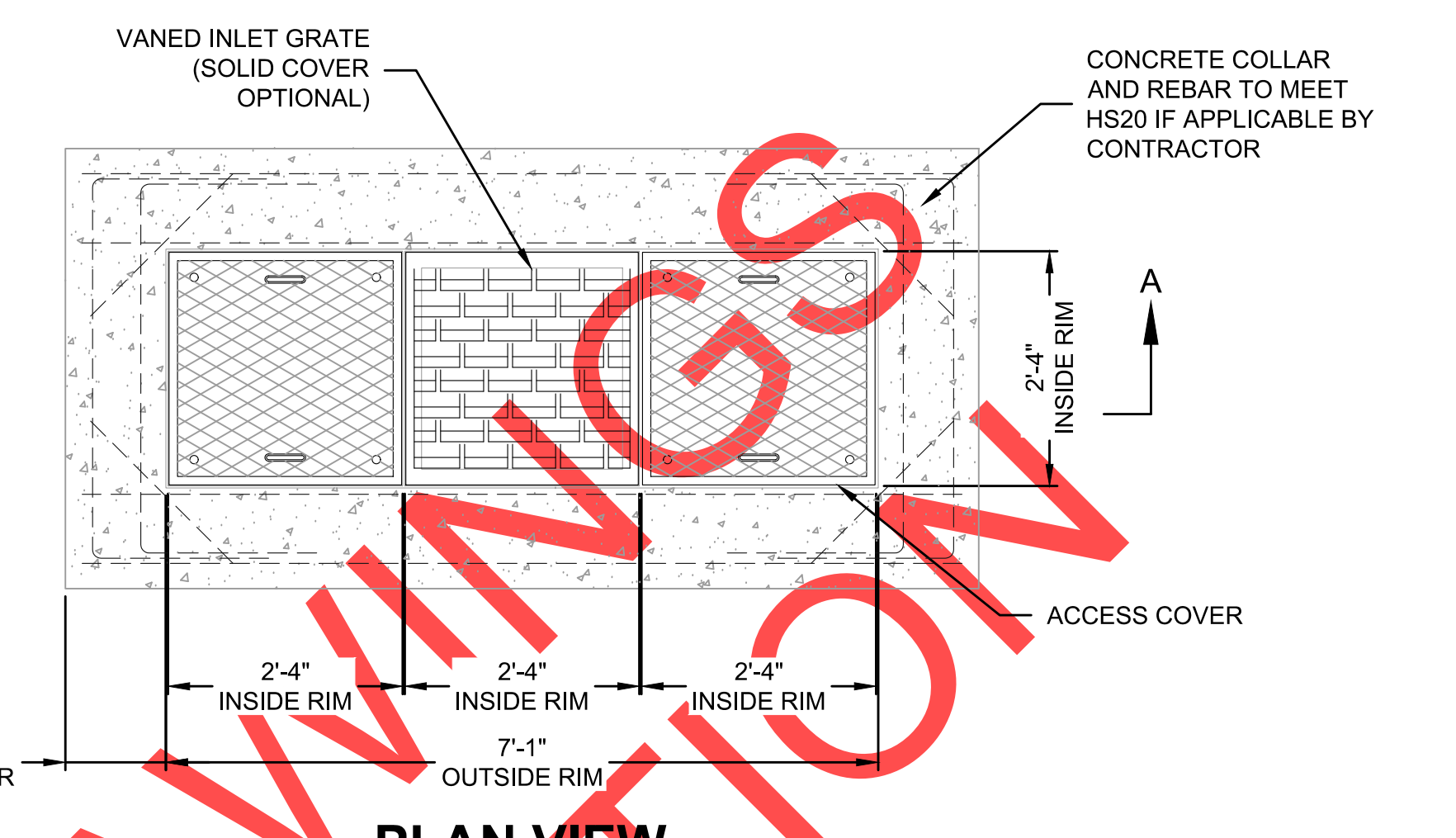
CONFIGURATIONS

OUTLET: [Diagram showing outlet configurations]

INLET: [Diagram showing inlet configurations]

SLOPED LID	YES/NO
SOLID COVER	YES/NO

NOTES/SPECIAL REQUIREMENTS:



SIDEWALK CURB OPENING WITH ROCK SPLASH PAD
N.T.S.

IMPERMEABLE LINER ATTACHMENT
N.T.S.

FILTRATION PLANTER SECTION (FP-BF-CIP)
N.T.S.

SECTION B-B

REVIEW SET - NOT FOR CONSTRUCTION

REVISIONS

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REGISTERED PROFESSIONAL ENGINEER
74233
M. CANNON
EXPIRES: 12/31/2019

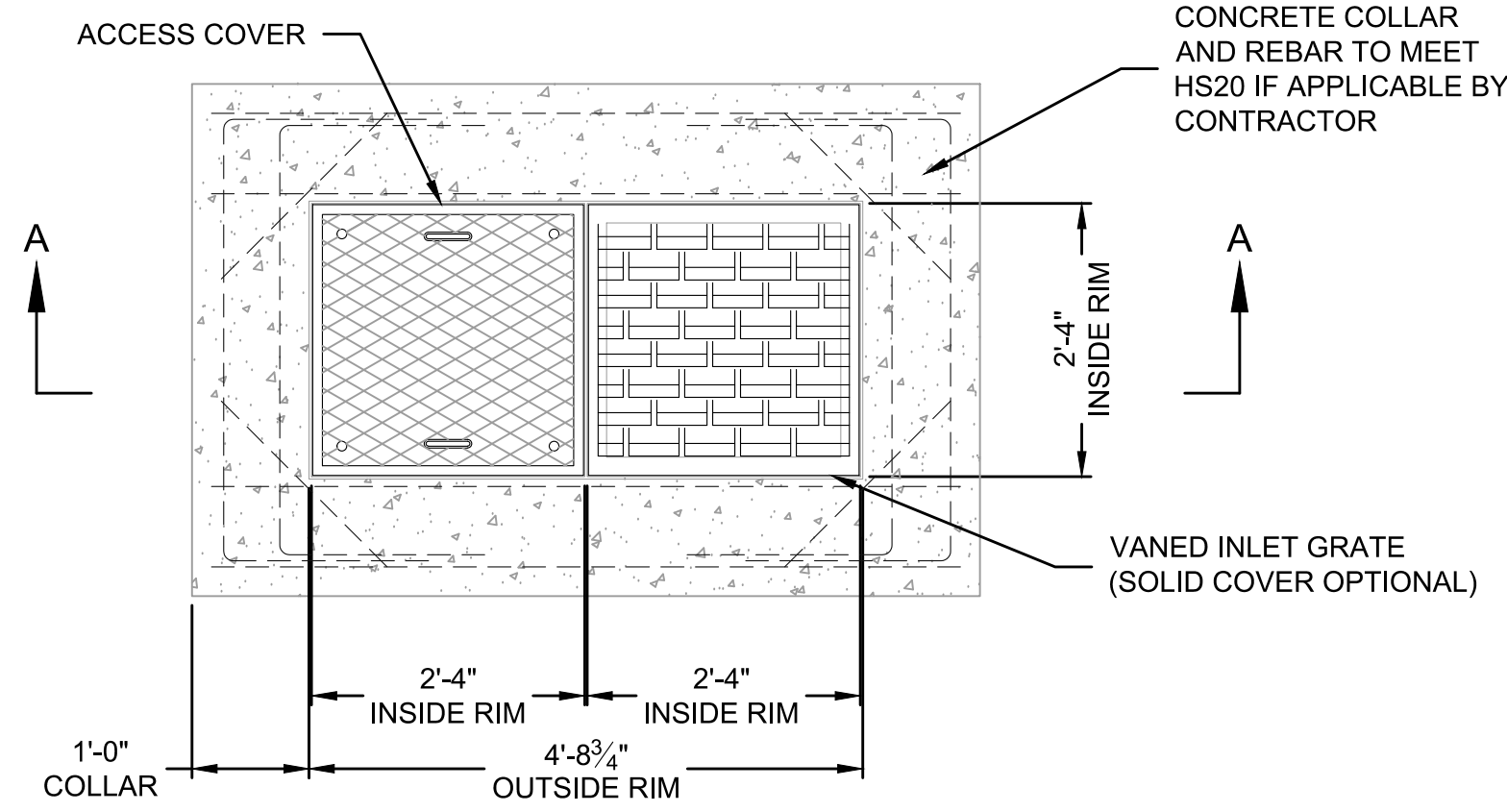
City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960

Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS

Otak, Inc.
700 Washington St., Suite 300
Vancouver, WA 98660
360.737.9613
www.otak.com

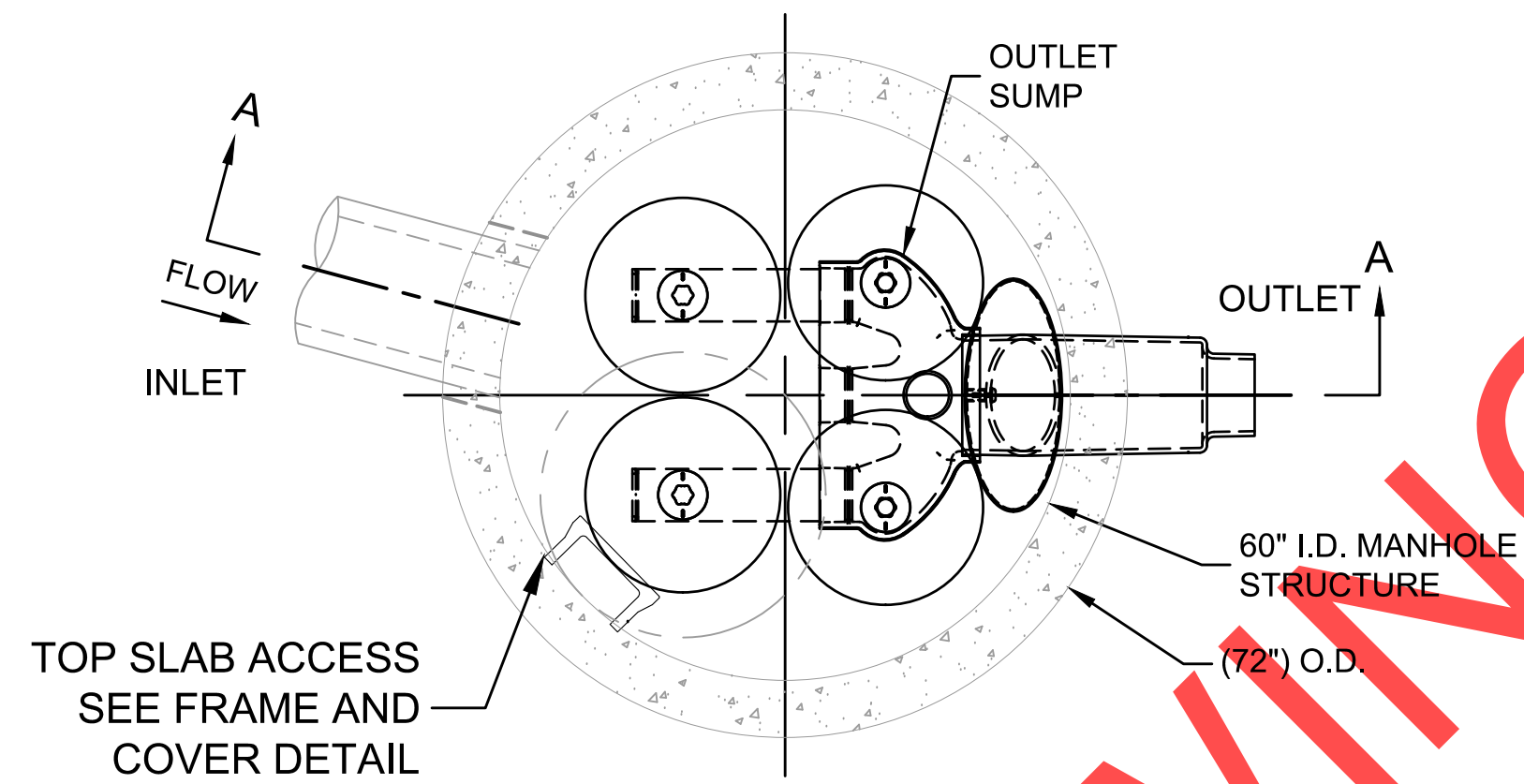
CIP# 4196
PROJECT# 2017-02-001
SF04
69 of 211



PLAN VIEW

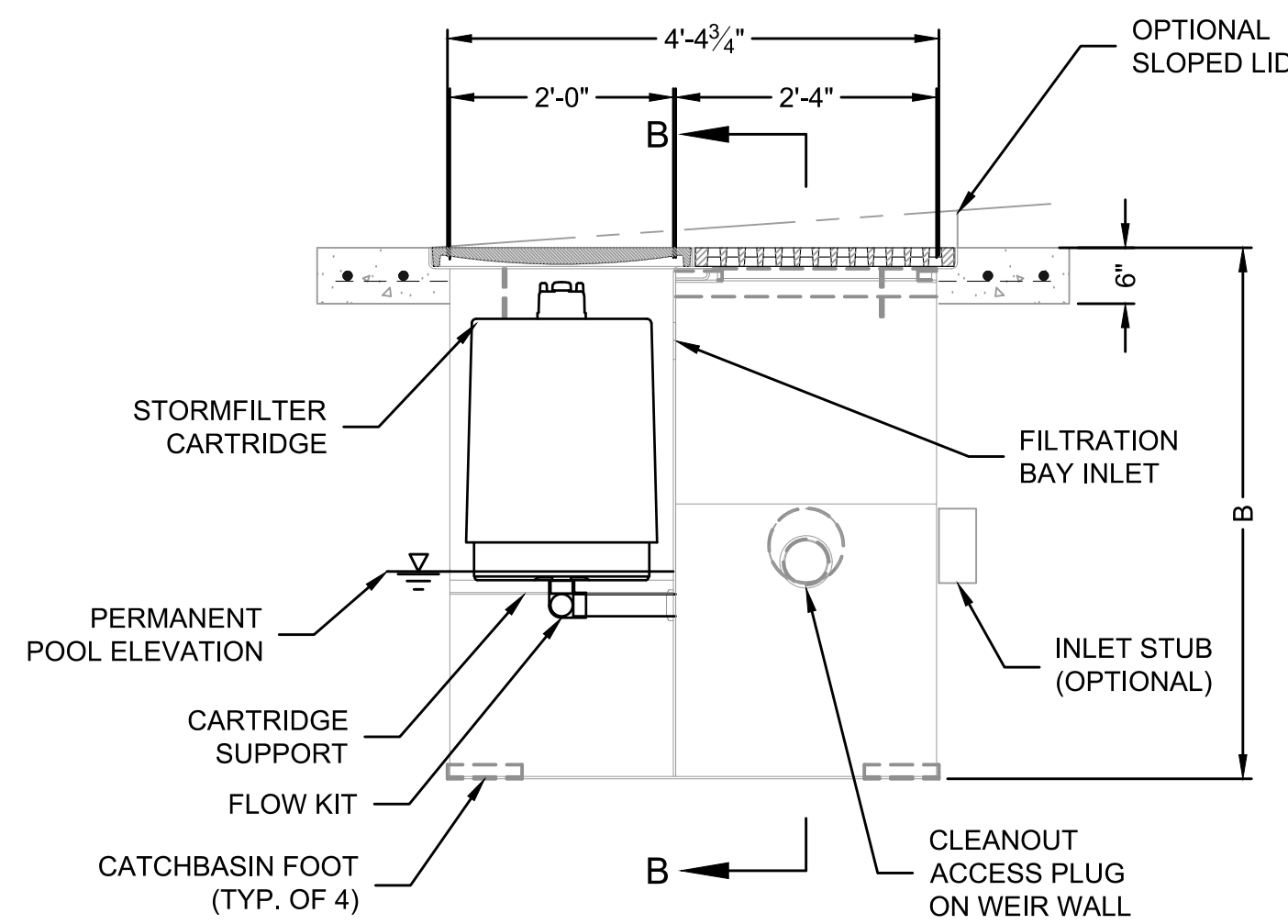
1-CARTRIDGE CATCHBASIN STORMFILTER DATA	
STRUCTURE ID	SFCB-F1
WATER QUALITY FLOW RATE (cfs)	0.01
PEAK FLOW RATE (<1 cfs)	0.05
RETURN PERIOD OF PEAK FLOW (yrs)	25
CARTRIDGE HEIGHT (27" 18" 18" DEEP)	18"
CARTRIDGE FLOW RATE (gpm)	7.5
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX
RIM ELEVATION	143.68'
PIPE DATA:	1E DIAMETER
INLET STUB	139.80'
OUTLET STUB	12"
CONFIGURATION	OUTLET INLET INLET INLET
SLOPED LID	YES/NO
SOLID COVER	YES/NO
NOTES/SPECIAL REQUIREMENTS:	

SEE PLAN SHEET SP06 FOR LOCATION

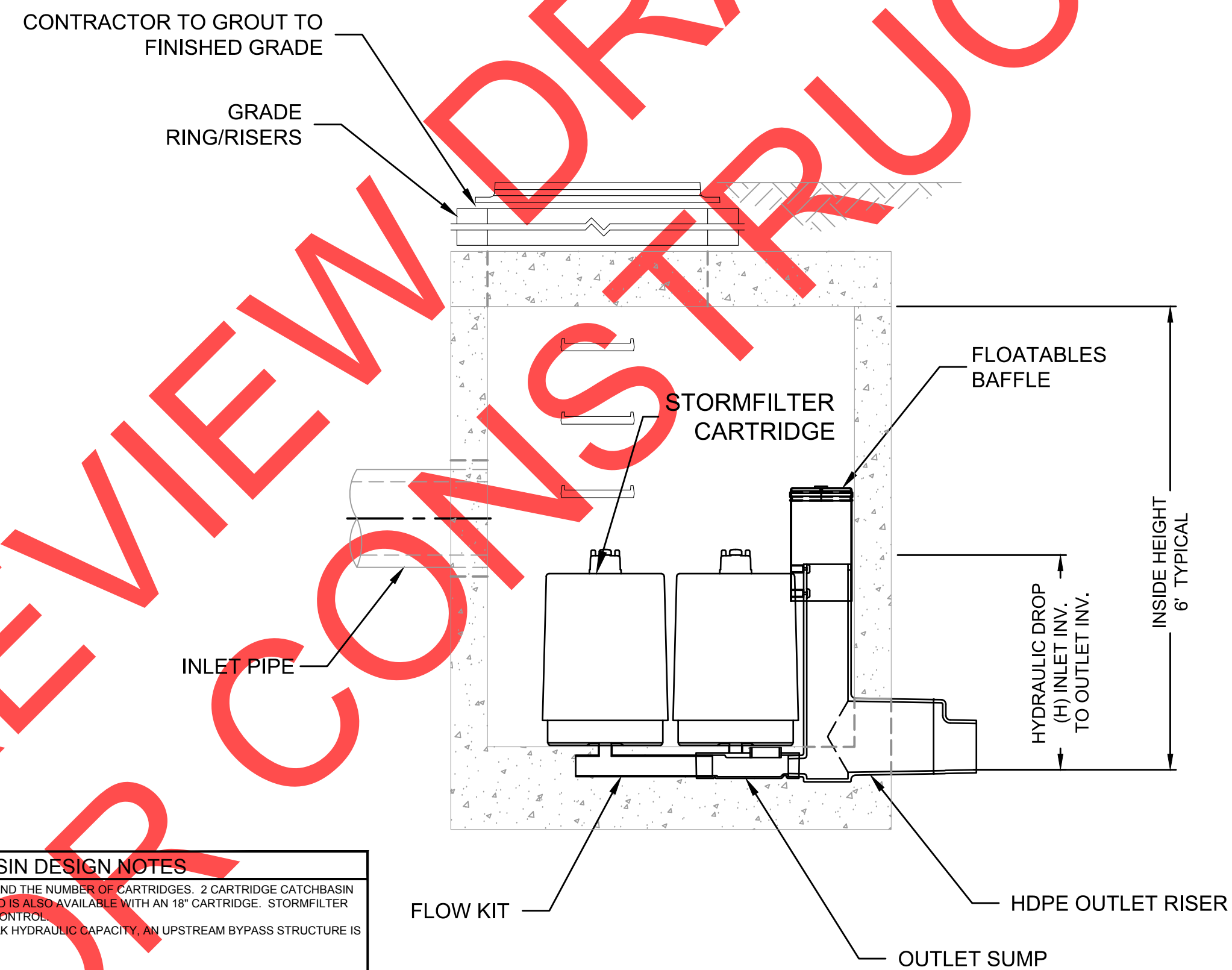


PLAN VIEW
STANDARD OUTLET RISER
FLOWKIT: 41A

SITE SPECIFIC DATA REQUIREMENTS	
STRUCTURE ID	SFMH-BF1
WATER QUALITY FLOW RATE (cfs)	0.09
PEAK FLOW RATE (cfs)	0.32
RETURN PERIOD OF PEAK FLOW (yrs)	25
CARTRIDGE HEIGHT (27" 18" LOW DROP(LD))	27"
NUMBER OF CARTRIDGES REQUIRED	4
CARTRIDGE FLOW RATE	11.25 GPM
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX
PIPE DATA:	1E MATERIAL DIAMETER
INLET PIPE #1	142.00
INLET PIPE #2	-
OUTLET PIPE	138.95
RIM ELEVATION	147.5
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:	
*PER ENGINEER OF RECORD	



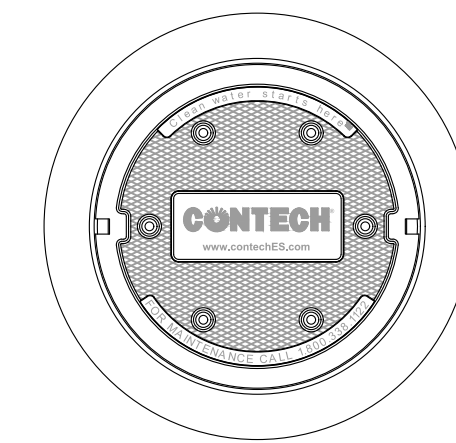
SECTION A-A



SECTION B-B

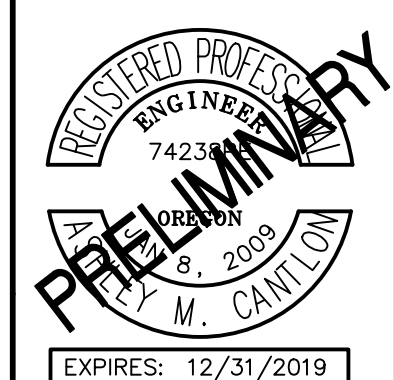
STORMFILTER STEEL CATCHBASIN DESIGN NOTES					
STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 2 CARTRIDGE CATCHBASIN HAS A MAXIMUM OF TWO CARTRIDGES. SYSTEMS SHOWN WITH A 27" CARTRIDGE AND IS ALSO AVAILABLE WITH AN 18" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL.					
PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.					
CARTRIDGE SELECTION:	27"	18"	18" DEEP		
CARTRIDGE HEIGHT	27"	18"	18" DEEP		
RECOMMENDED HYDRAULIC DROP (H)	3.05'	2.3'	3.3'		
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf	1.67 gpm/sf	1 gpm/sf	2 gpm/sf	1.67 gpm/sf
CARTRIDGE FLOW RATE (gpm)	22.5	16.7	11.25	15	12.53
PEAK HYDRAULIC CAPACITY	1.0	1.0	1.8		
INLET PERMANENT POOL LEVEL (A)	1'-0"	1'-0"	2'-0"		
OVERALL STRUCTURE HEIGHT (B)	4'-9"	3'-9"	4'-9"		

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS, LLC REPRESENTATIVE. WWW.CONTECHES.COM
 - STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
 - MANUFACTURER TO APPLY A SURFACE BEAD WELD IN THE SHAPE OF THE LETTER "O" ABOVE THE OUTLET PIPE STUB ON THE EXTERIOR SURFACE OF THE STEEL SFCB.
 - STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.
 - STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M306 LOAD RATING. TO MEET HS20 LOAD RATING ON STRUCTURE. A CONCRETE COLLAR IS REQUIRED. WHEN REQUIRED, CONCRETE COLLAR WITH #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.
 - FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
 - SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).
- INSTALLATION NOTES
- MANUFACTURER TO PROVIDE BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

CONTECH
ENGINEERED SOLUTIONS LLC
www.contechES.com
9022 Centre Pointe Dr., Suite 400, West Chester, OH 45380
800-526-3999 513-645-7000 513-645-7993 FAX



City of Wilsonville
Engineering Department
29799 SW Town Center Loop E
Wilsonville, OR 97070
Phone 503-682-4960



Date: 1 February 2019
Scale: AS SHOWN
Designed By: PH/BB
Drawn By: SLR
Checked By: A.HENDY

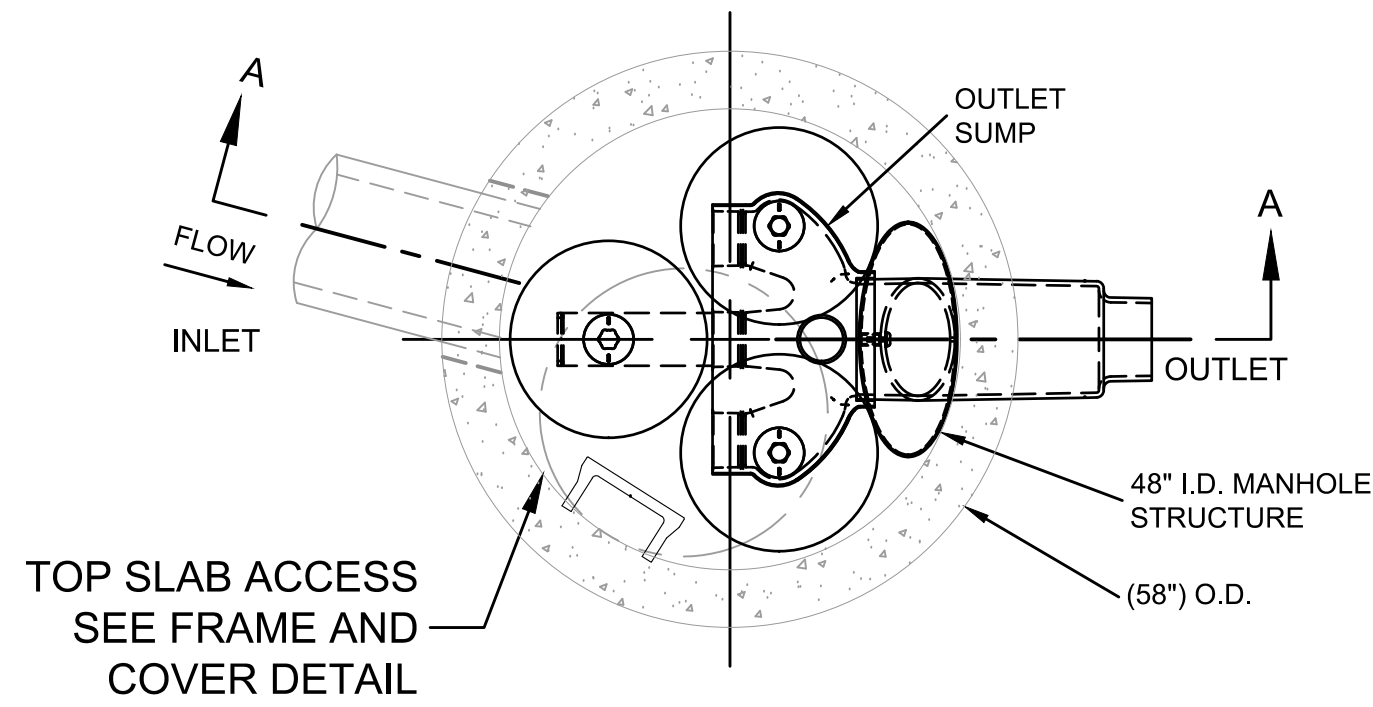
SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS

Otak
Otak, Inc.
700 Washington St., Suite 300
Vancouver, WA 98660
360.737.9613
www.otak.com

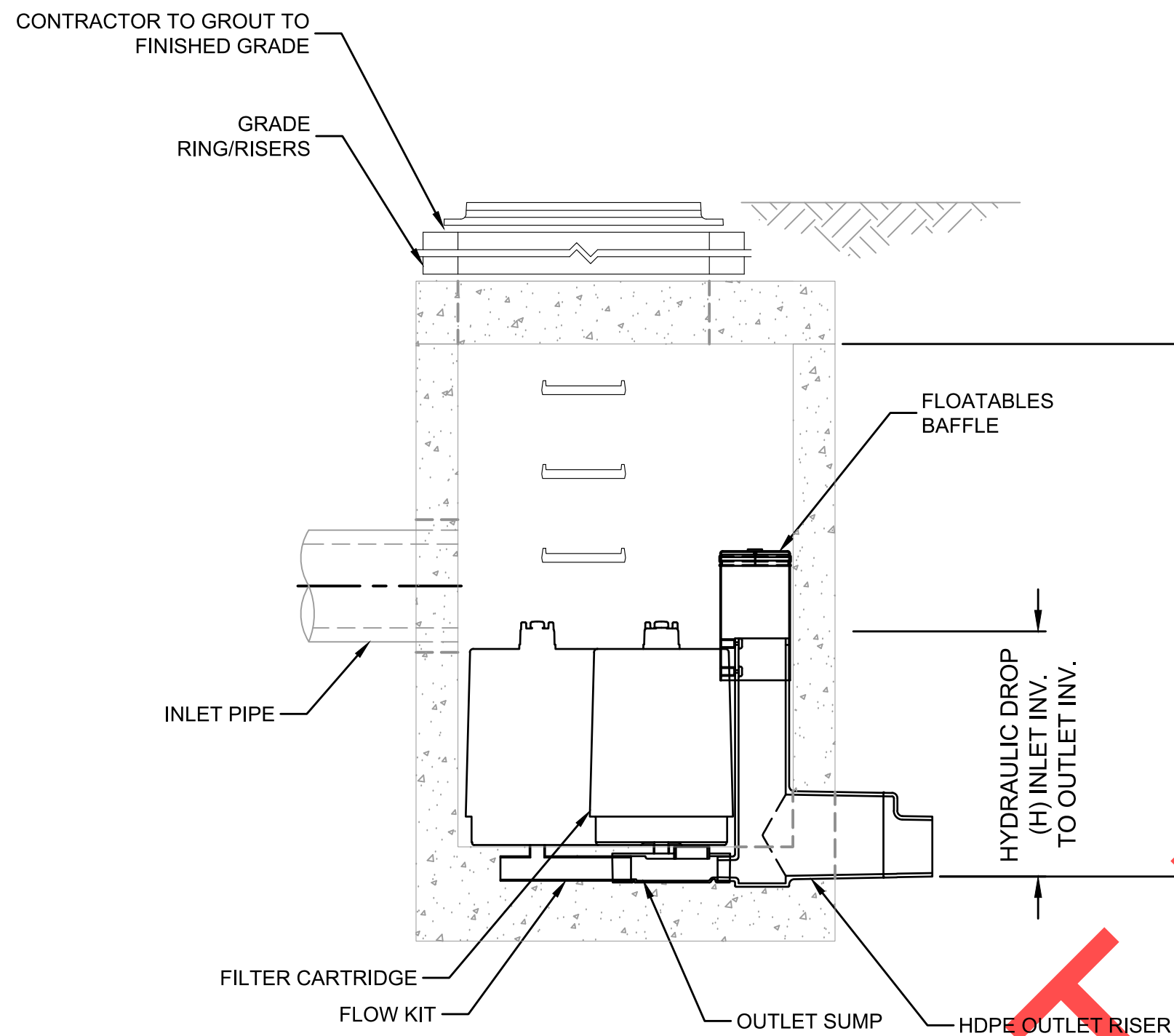
CIP # 4196
PROJECT # 2017-02-001
SF05
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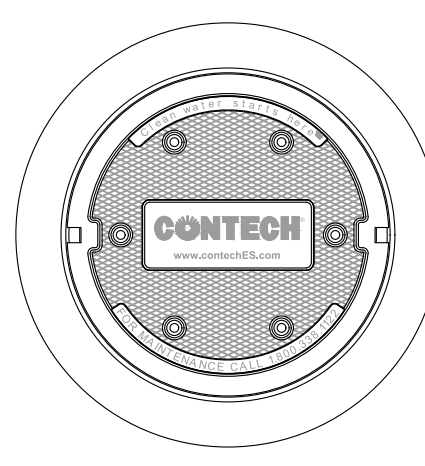
SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID	SFMH-BF2		
WATER QUALITY FLOW RATE (cfs)	0.05		
PEAK FLOW RATE (cfs)	0.17		
RETURN PERIOD OF PEAK FLOW (yrs)	25		
CARTRIDGE HEIGHT (27", 18", LOW DROP(LD))	18"		
NUMBER OF CARTRIDGES REQUIRED	3		
CARTRIDGE FLOW RATE	7.5 GPM		
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX		
PIPE DATA:	SIZE	MATERIAL	DIAMETER
INLET PIPE #1	42"	"	10"
INLET PIPE #2	"	"	"
OUTLET PIPE	18"	"	10"
RIM ELEVATION	147.5		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			



PLAN VIEW
STANDARD OUTLET RISER
FLOWKIT: 40A



SECTION A-A



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

STORMFILTER DESIGN NOTES

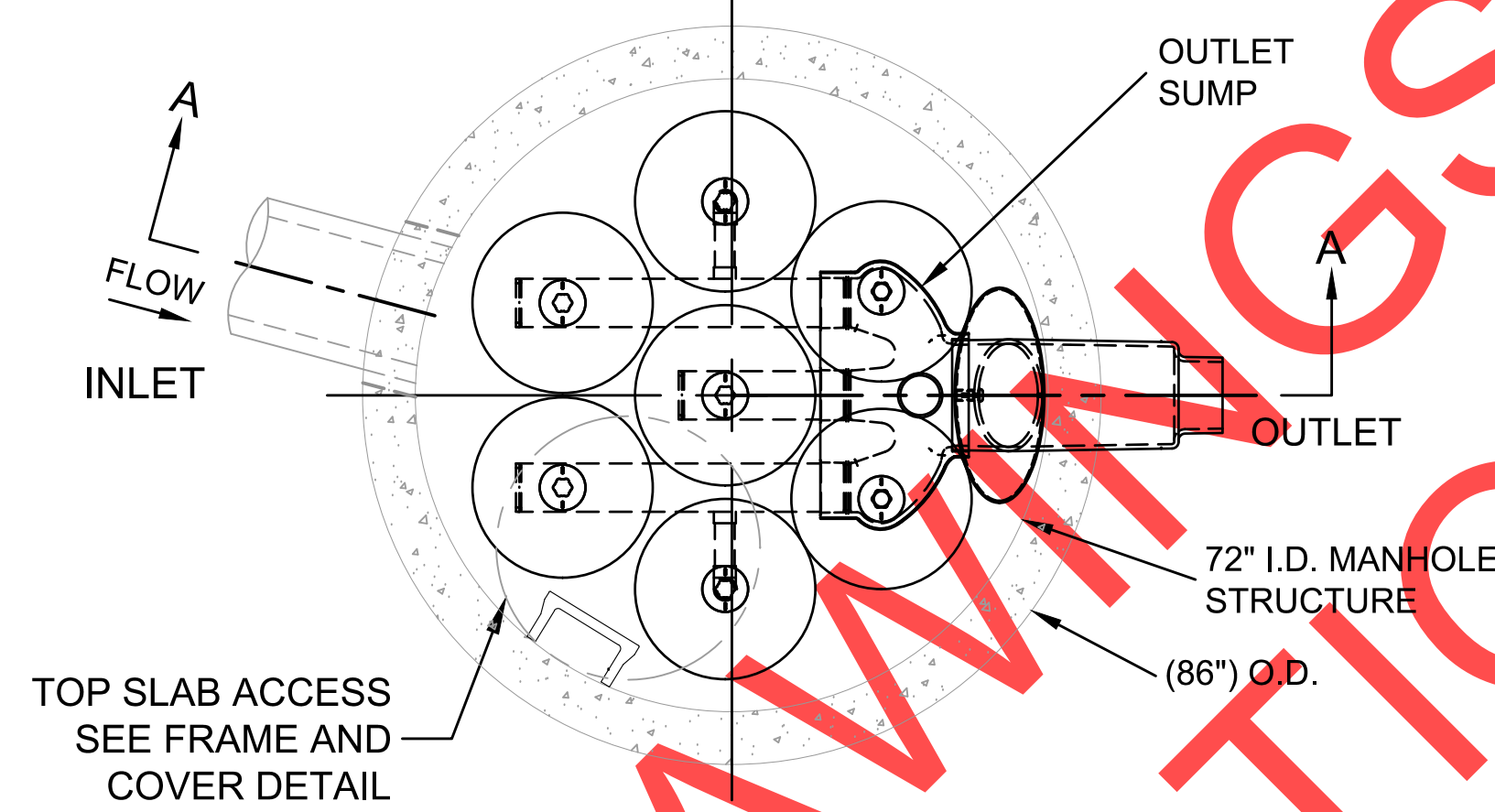
STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (3). THE LINE SYSTEM IS ALSO AVAILABLE WITH MAXIMUM 3 CARTRIDGES. 048" MANHOLE STORMFILTER PEAK HYDRAULIC CAPACITY IS 1.0 CFS. IF THE SITE CONDITIONS EXCEED 1.0 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	LOW DROP		
CARTRIDGE HEIGHT	27"	18"	18"	18"	18"
RECOMMENDED HYDRAULIC DROP (H)	3.05'	2.3'	2.3'	2.3'	2.3'
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf	1.67 gpm/sf	1 gpm/sf	1.67 gpm/sf	1 gpm/sf
CARTRIDGE FLOW RATE (gpc)	22.5	18.75	11.25	12.53	7.5
			10	8.35	5

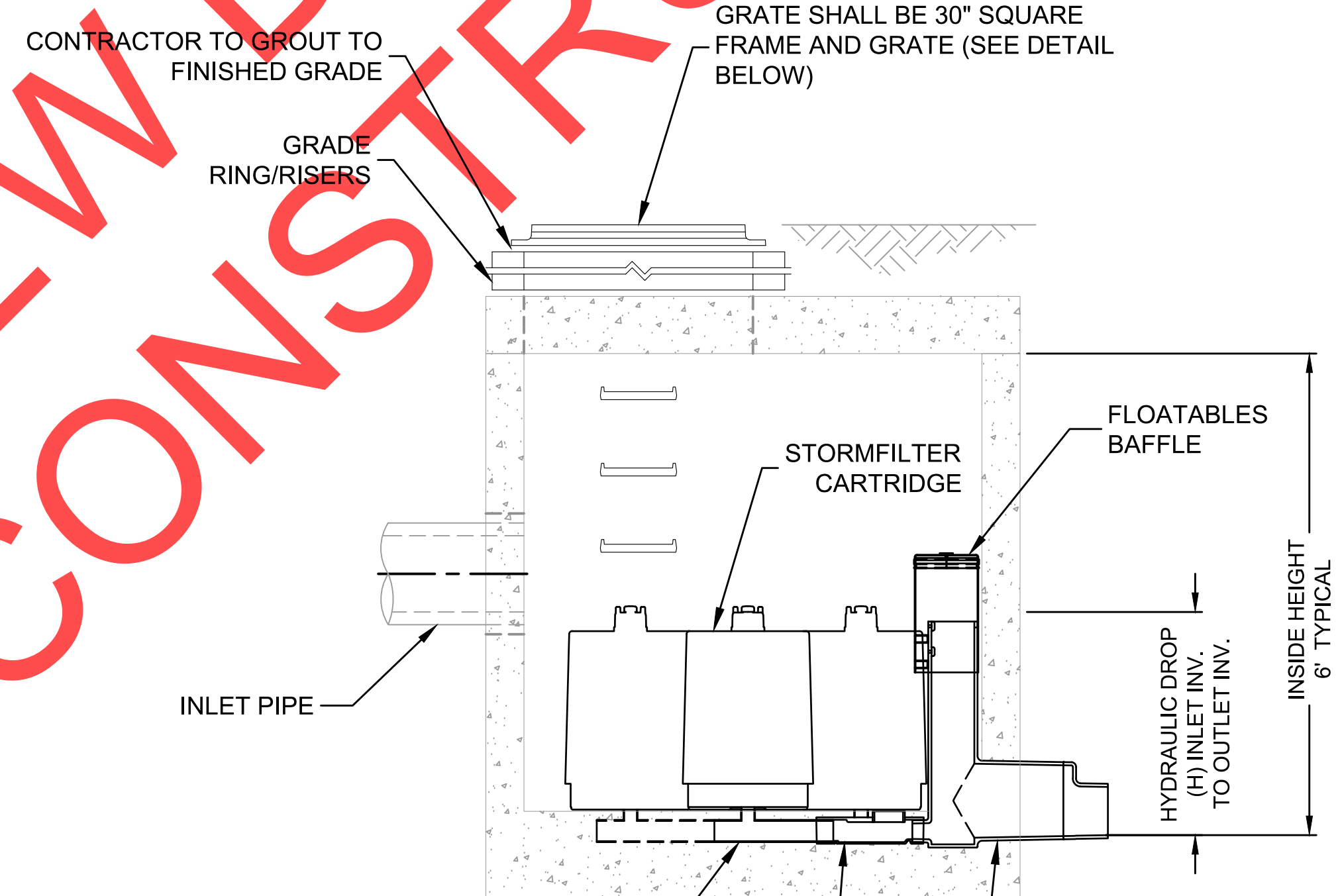
* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY.

- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M208 AND BE QUOTE WITH THE CONTECH LOGO.
 - FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
 - SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).
 - STORMFILTER STRUCTURE SHALL BE CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

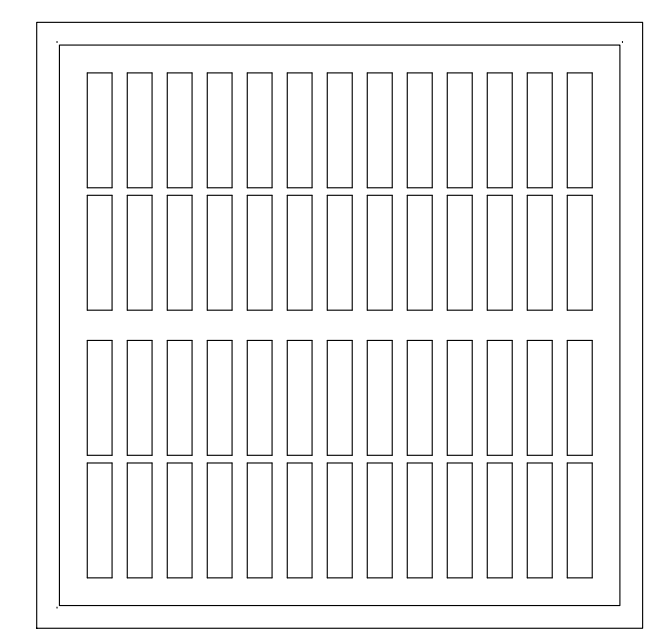
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPES.
 - CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8 INCHES, CONTRACTOR TO REMOVE THE 8 INCH OUTLET STUB AT MOLDED IN OUT LINE. COUPLING BY FERROD OR EQUAL AND PROVIDED BY CONTRACTOR.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.



PLAN VIEW
STANDARD OUTLET RISER
FLOWKIT: 42A



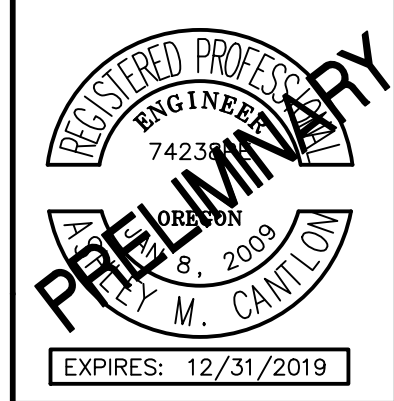
SECTION A-A



30" SQ. FRAME AND GRATE
(ALSO AVAILABLE IN ROUND)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID	SFMH-K1		
WATER QUALITY FLOW RATE (cfs)	0.11		
PEAK FLOW RATE (cfs)	0.39		
RETURN PERIOD OF PEAK FLOW (yrs)	25		
CARTRIDGE HEIGHT (27", 18", LOW DROP(LD))	18"		
NUMBER OF CARTRIDGES REQUIRED	7		
CARTRIDGE FLOW RATE	7.5 GPM		
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX		
PIPE DATA:	SIZE	MATERIAL	DIAMETER
INLET PIPE #1	139.45	"	12"
INLET PIPE #2	NA	NA	NA
OUTLET PIPE	137.15	"	12"
RIM ELEVATION	144.77		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
NOTES/SPECIAL REQUIREMENTS:			
USE GRATED LID			
* PER ENGINEER OF RECORD			
SEE PLAN SHEET SP09 FOR LOCATION			

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID	SFMH-A1		
WATER QUALITY FLOW RATE (cfs)	0.11		
PEAK FLOW RATE (cfs)	0.39		
RETURN PERIOD OF PEAK FLOW (yrs)	25		
CARTRIDGE HEIGHT (27", 18", LOW DROP(LD))	18"		
NUMBER OF CARTRIDGES REQUIRED	7		
CARTRIDGE FLOW RATE	7.5 GPM		
MEDIA TYPE (PERLITE, ZPG, PSORB)	MetalRX		
PIPE DATA:	SIZE	MATERIAL	DIAMETER
INLET PIPE #1	132.94	"	12"
INLET PIPE #2	NA	NA	NA
OUTLET PIPE	130.64	"	12"
RIM ELEVATION	142.60		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			
SEE PLAN SHEET SP01 FOR LOCATION			

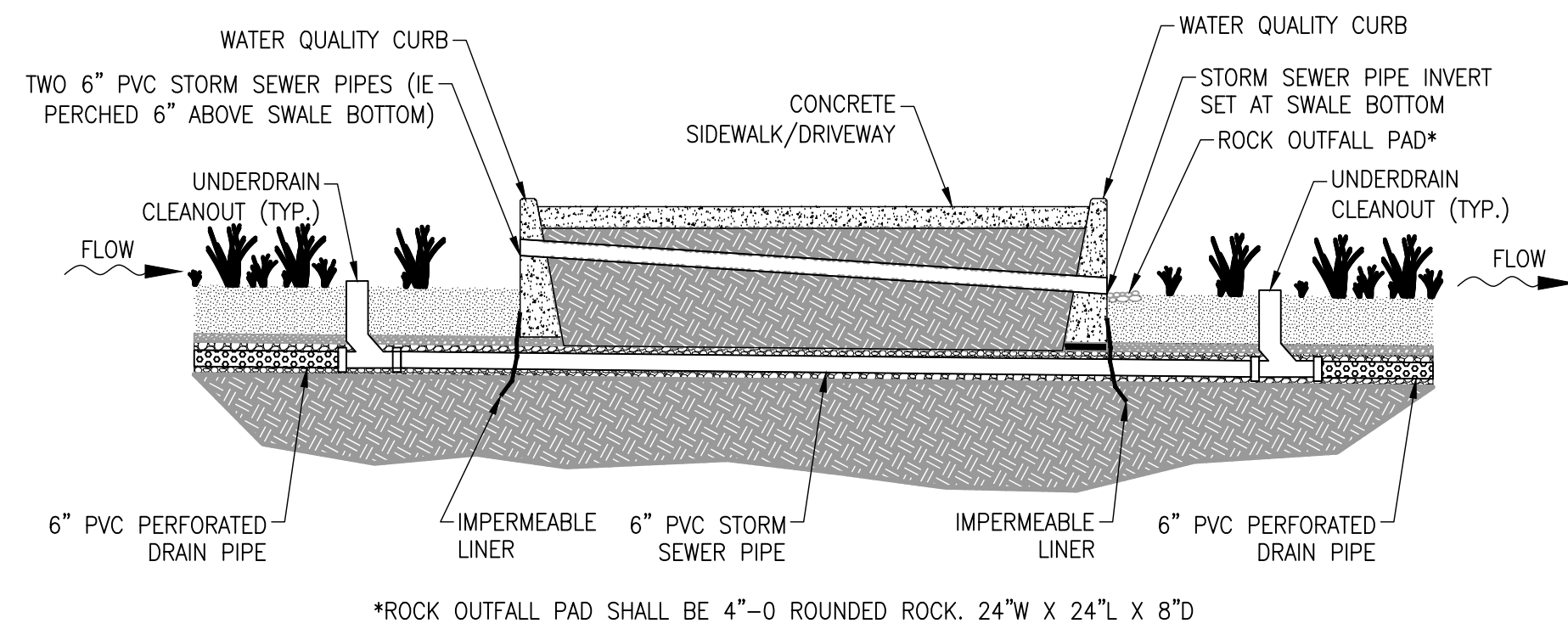
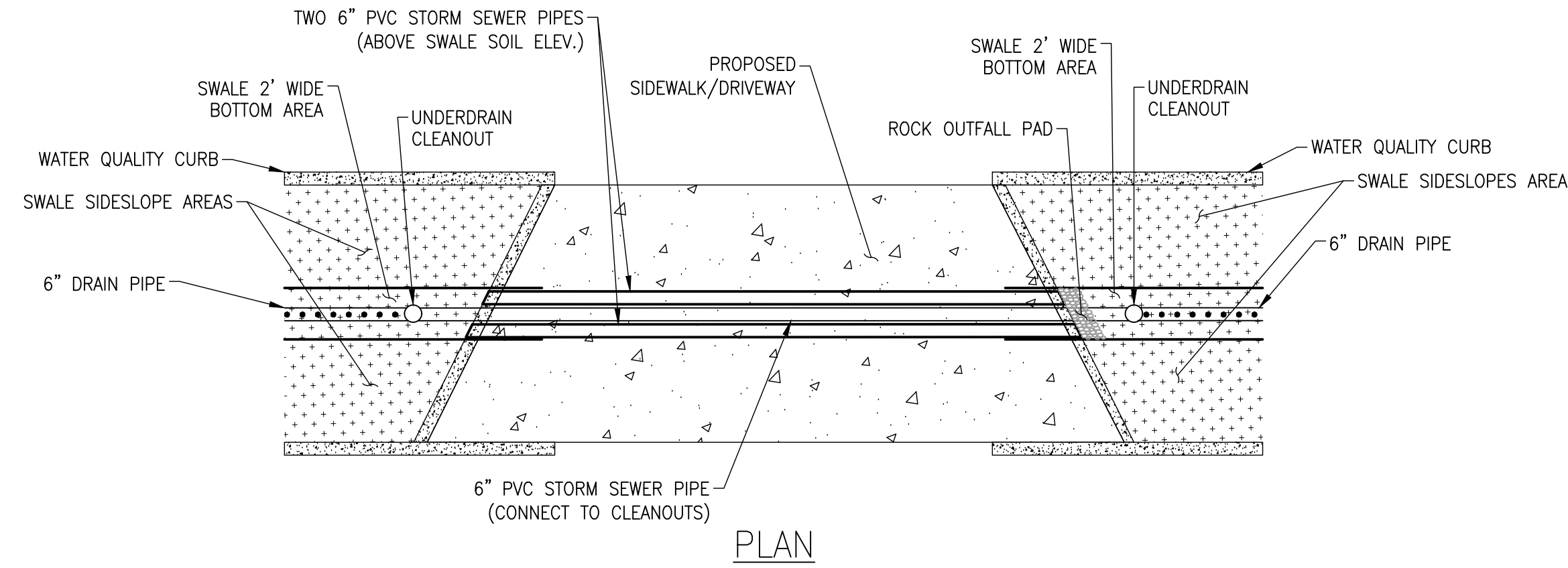


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Date: 1 February 2019
Scale: AS SHOWN
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Drawn By: SLR
Checked By: A.HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS

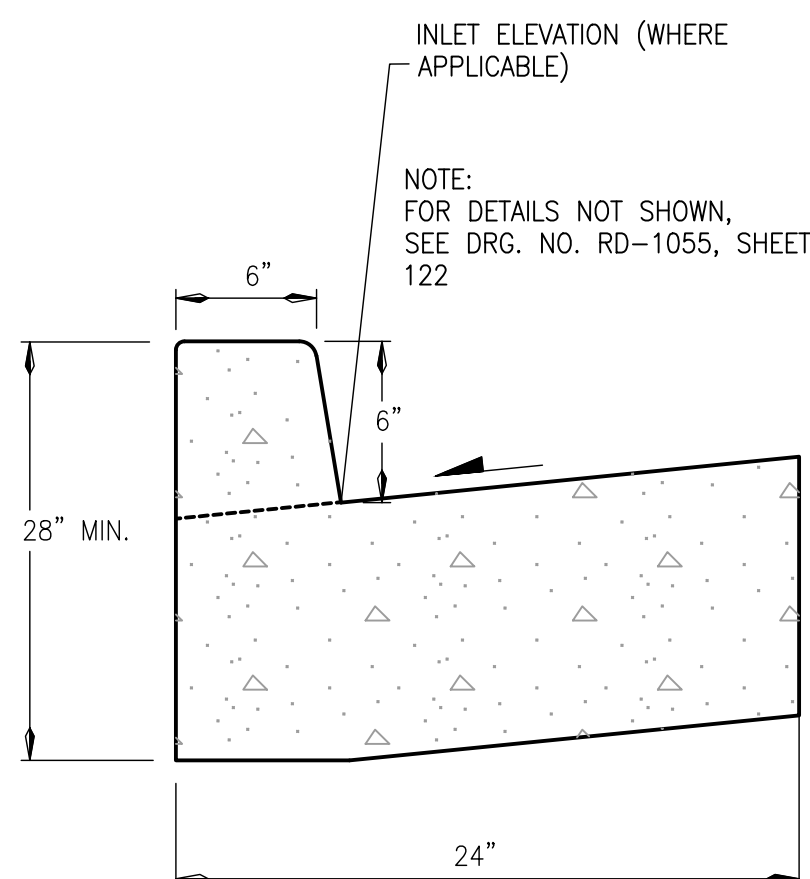
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PROJECT# 2017-02-001
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*ROCK OUTFALL PAD SHALL BE 4"-0 ROUNDED ROCK. 24"W X 24"L X 8"D

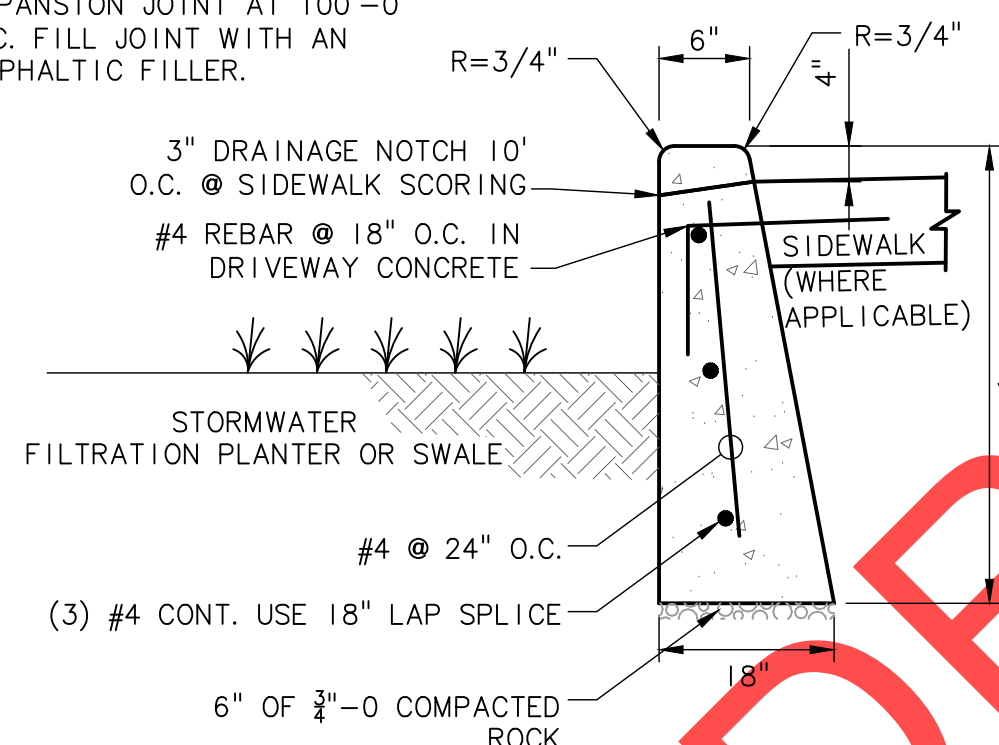
PROFILE

PIPE CROSSING
N.T.S.

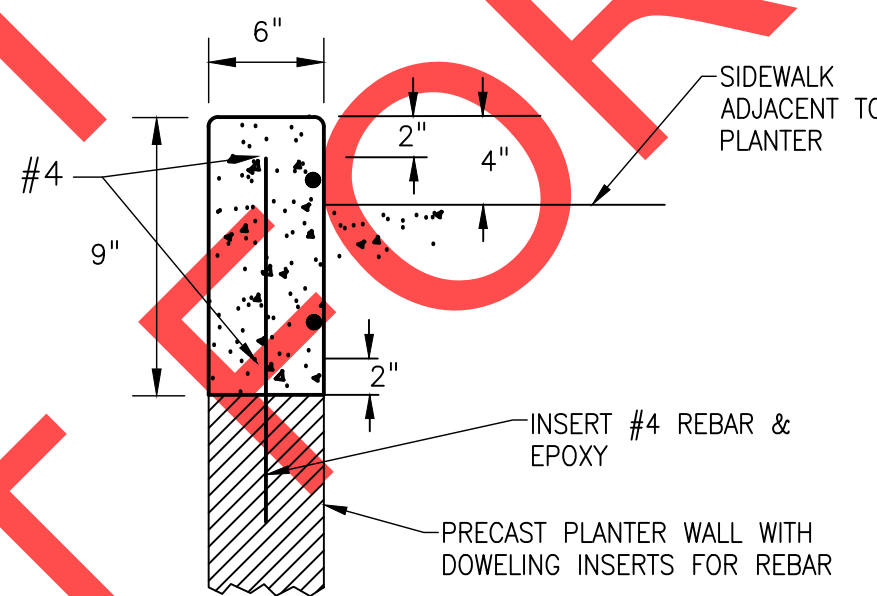


MODIFIED CURB AND GUTTER
N.T.S.

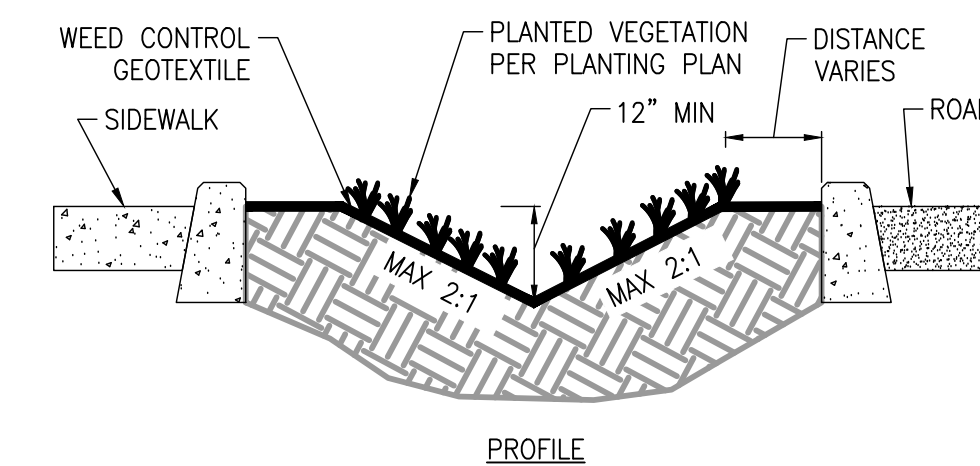
NOTE:
PROVIDE A 3/4" REVEAL (DUMMY JOINT) ON SIDES AND TOP AT 10'-0" O.C. AND PROVIDE A 1/2" EXPANSION JOINT AT 100'-0" O.C. FILL JOINT WITH AN ASPHALTIC FILLER.



WATER QUALITY CURB
N.T.S.



PLANTER CURB
N.T.S.

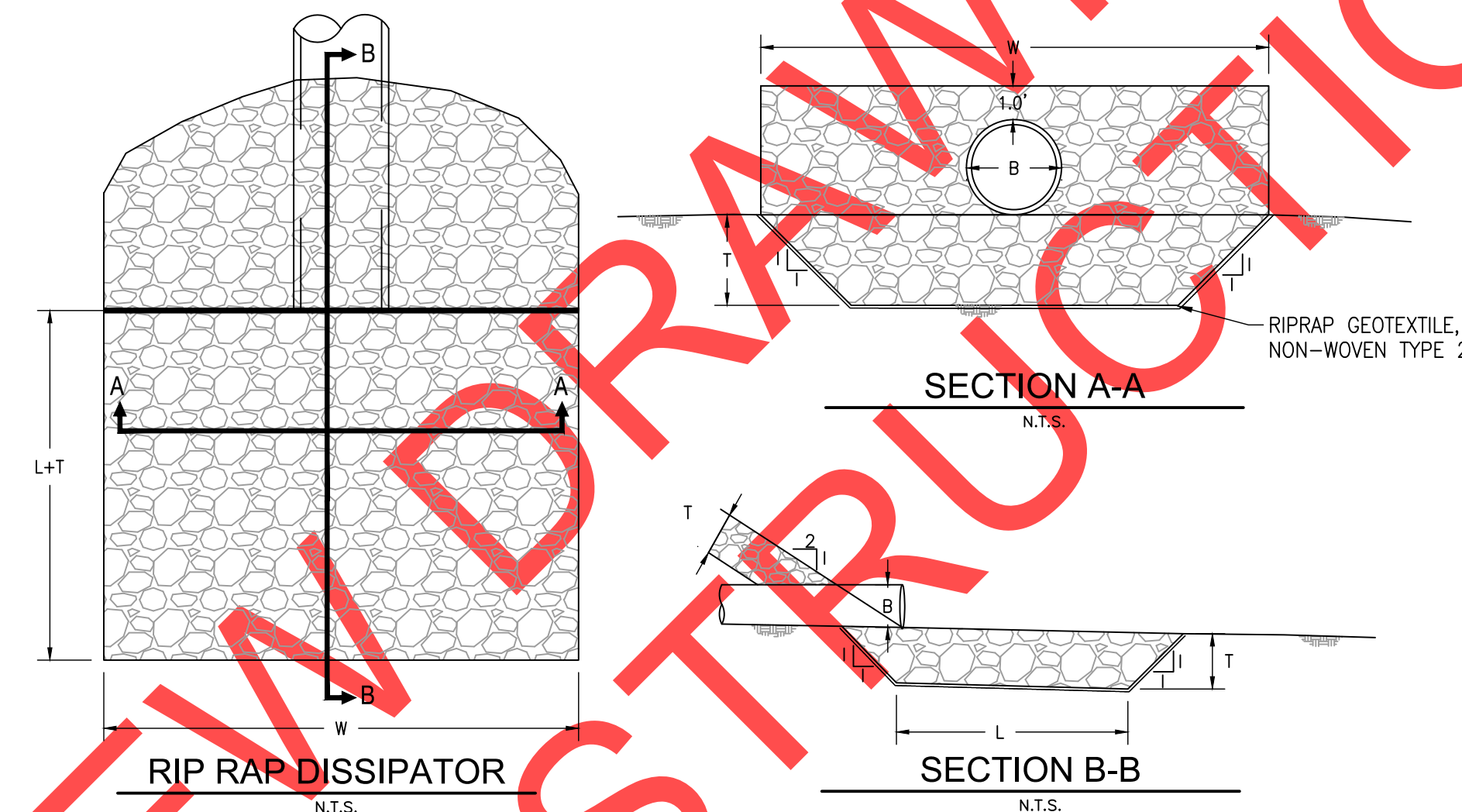


*ROCK OUTFALL PAD SHALL BE 4"-0 ROUNDED ROCK. 24"W X 24"L X 8"D

CONVEYANCE DITCH
N.T.S.

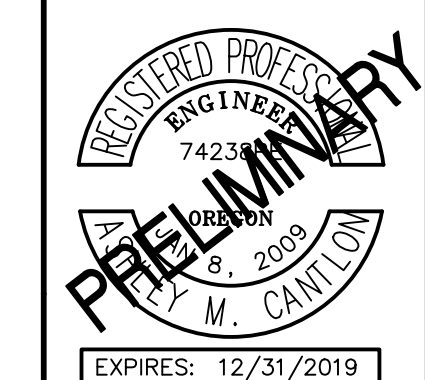
RIPRAP OUTFALL TABLE				
B (IN)	RIPRAP CLASS	L (FT)	T (FT)	W (FT)
12	50	4	2.3	5
24	50	8	2.3	10

B= DIAMETER OR SPAN OF CONDUIT
L= LENGTH OF BOTTOM OF RIPRAP PAD
T= THICKNESS OF RIPRAP PAD
W= WIDTH OF TOP OF RIPRAP PAD



RIPRAP OUTFALL PROTECTION
N.T.S.

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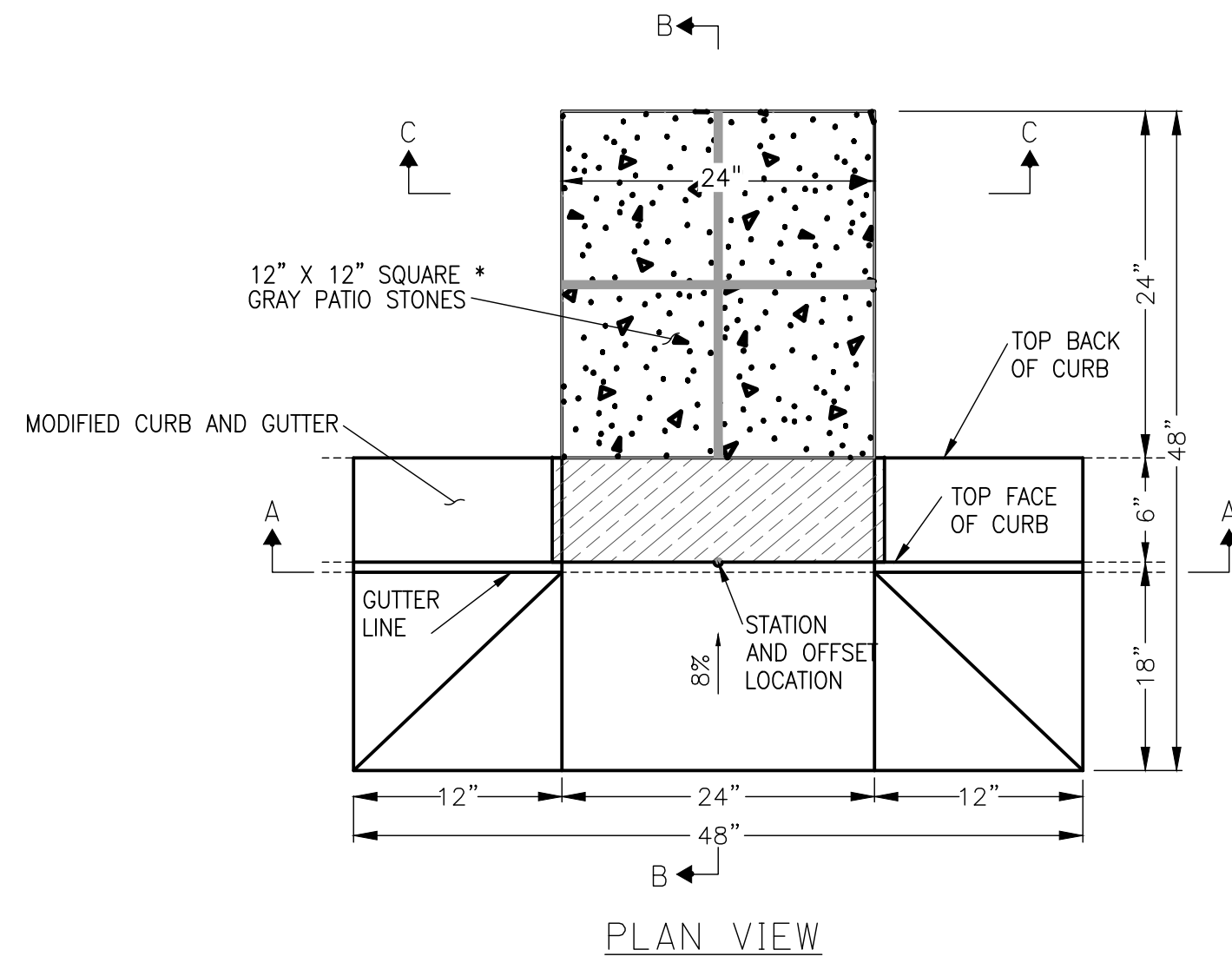
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SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS

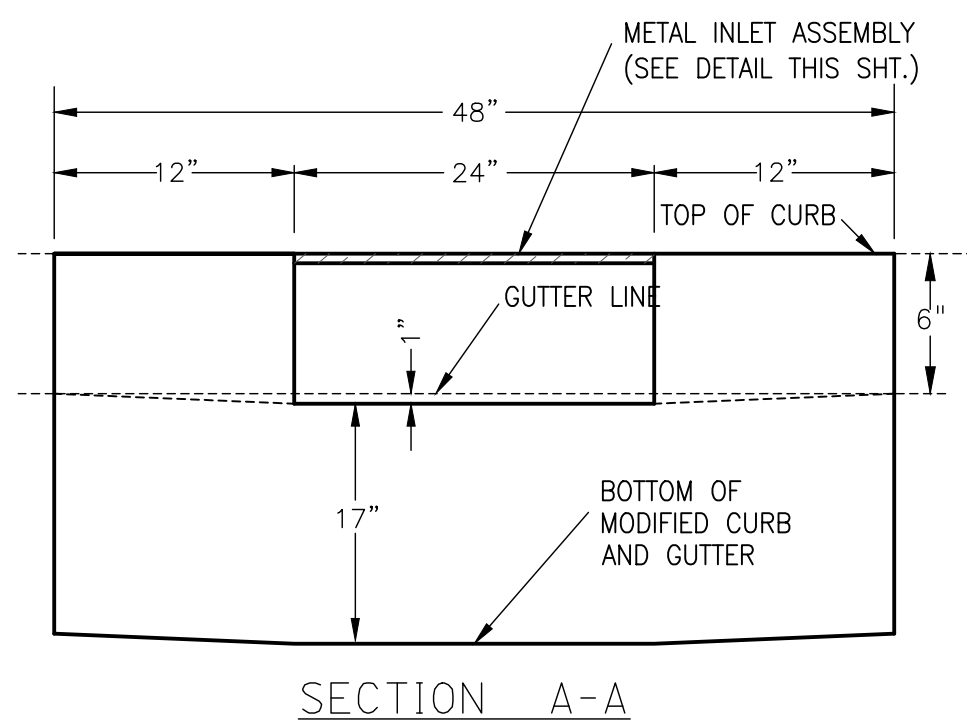
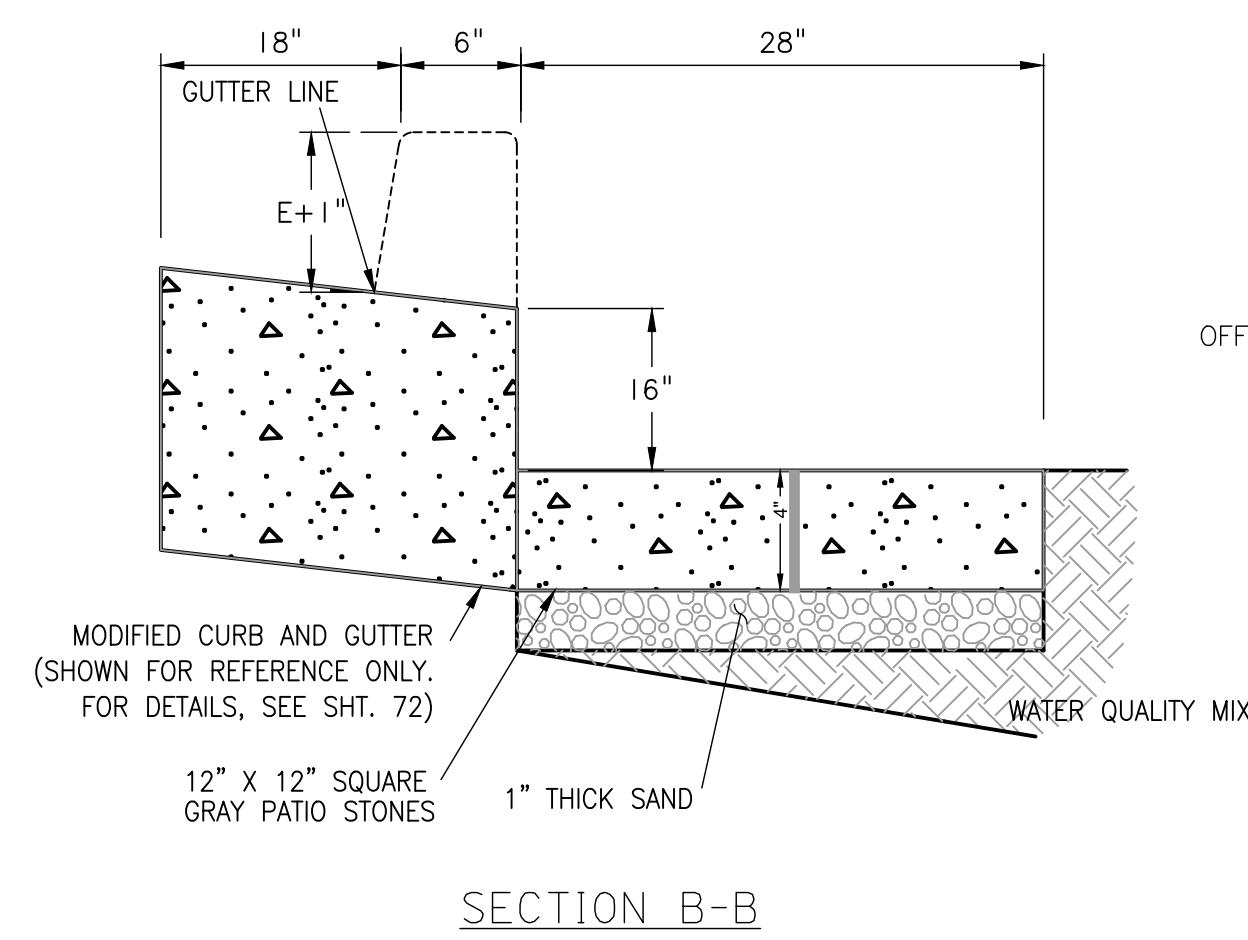
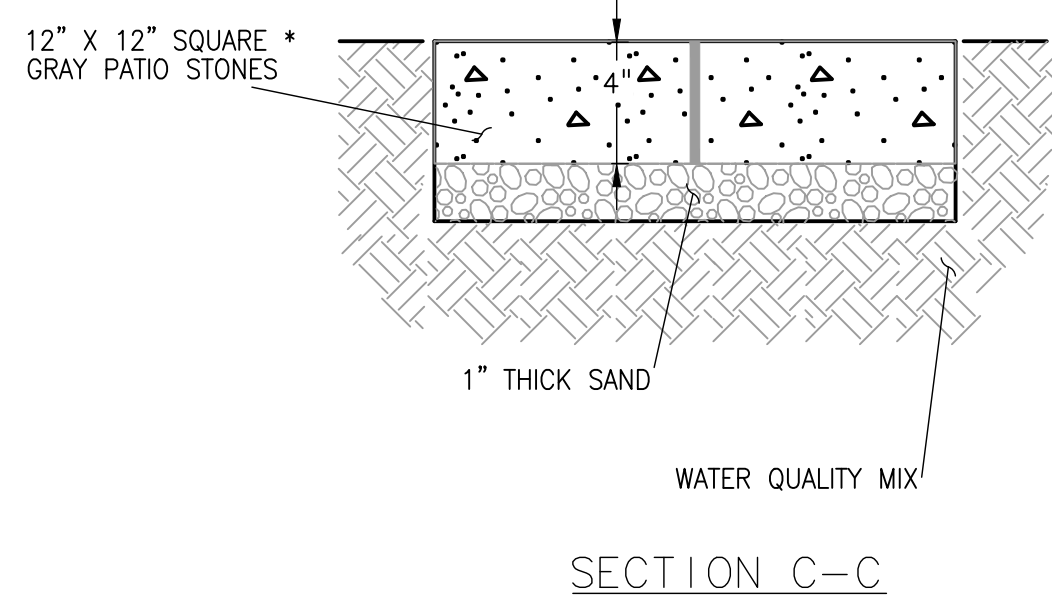
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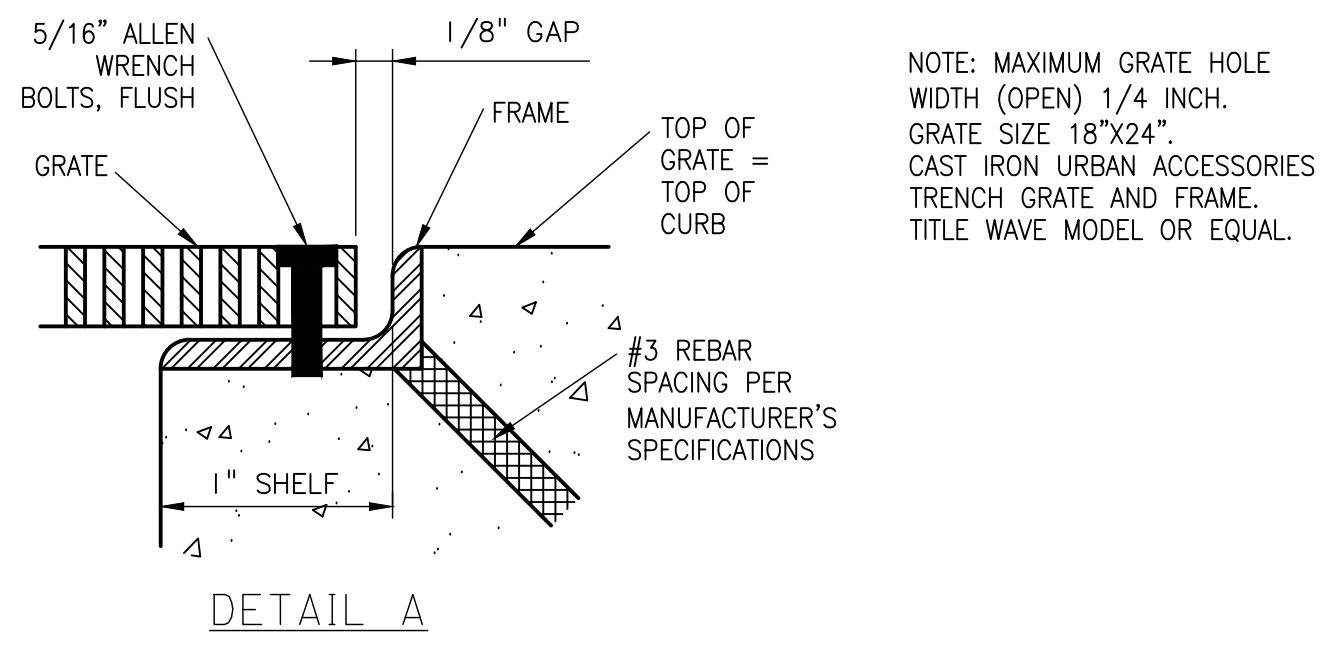
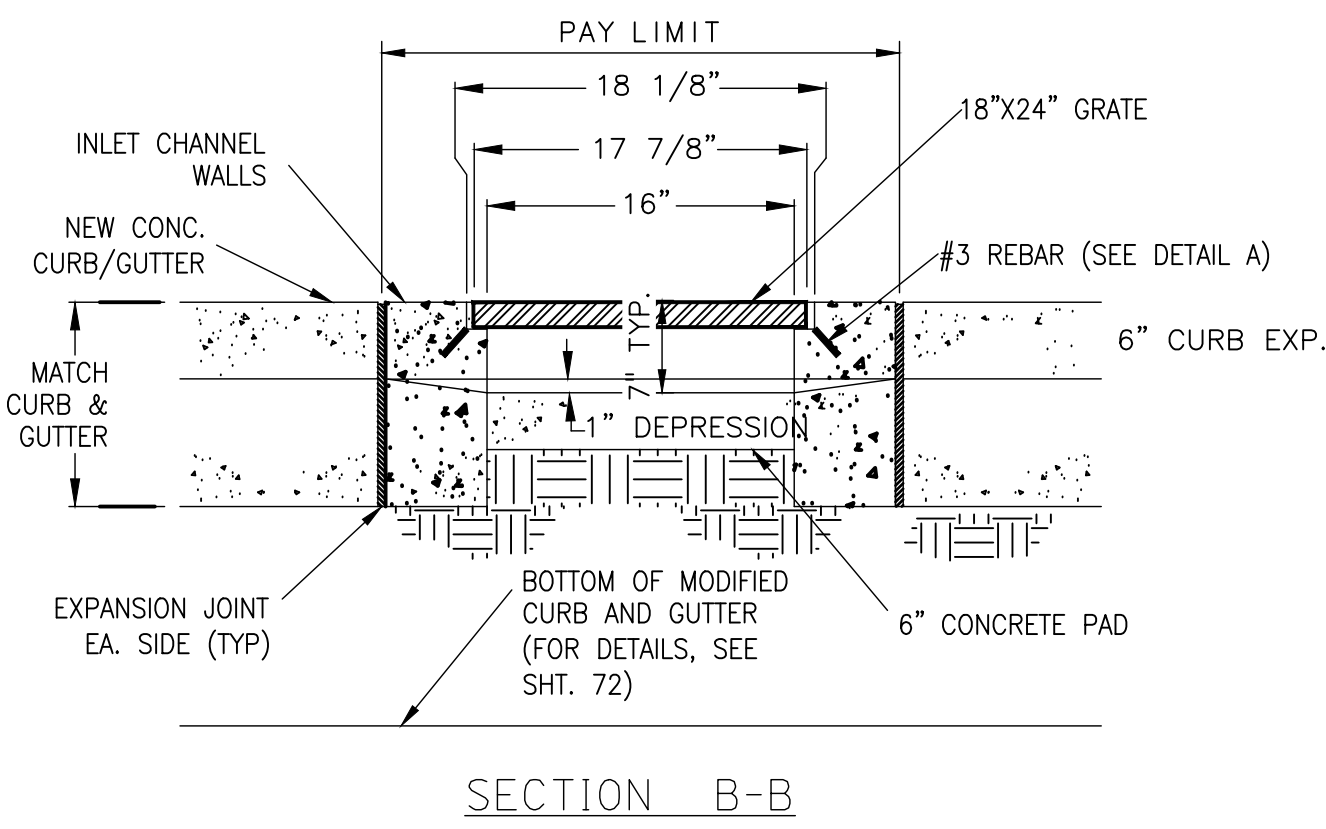
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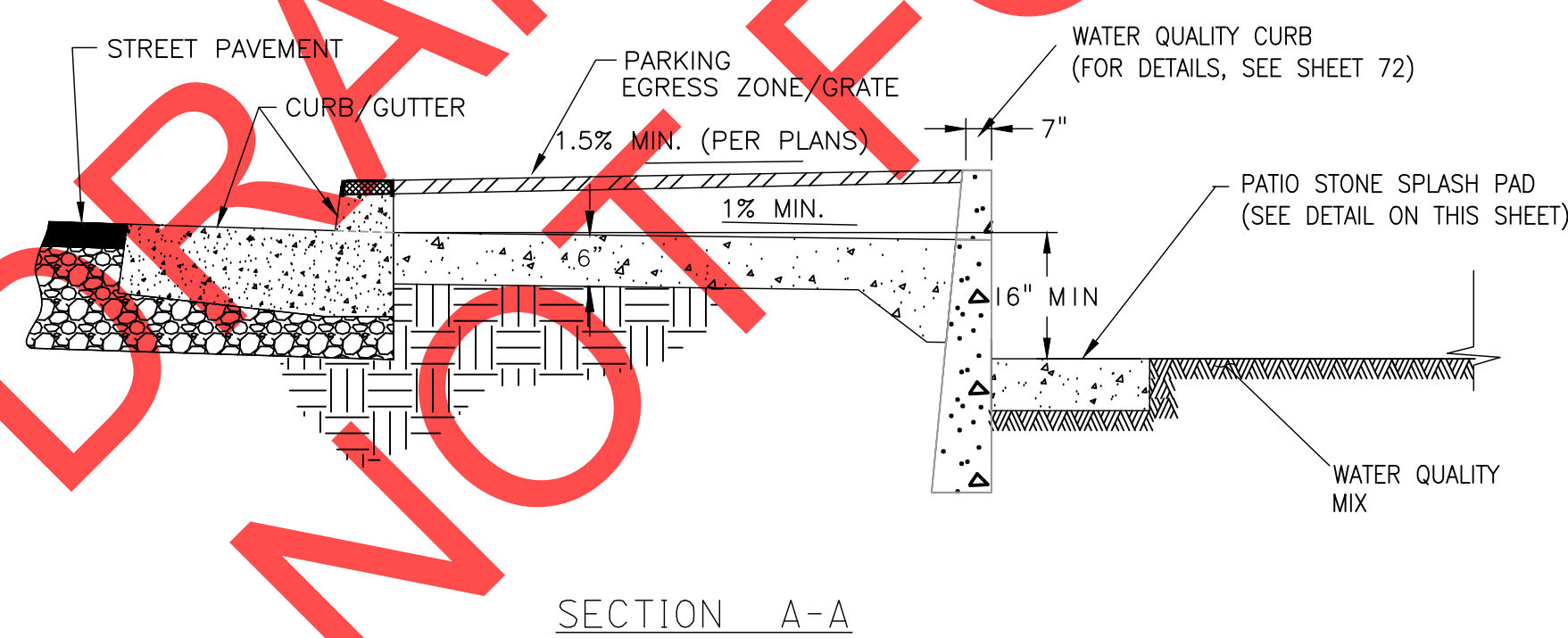
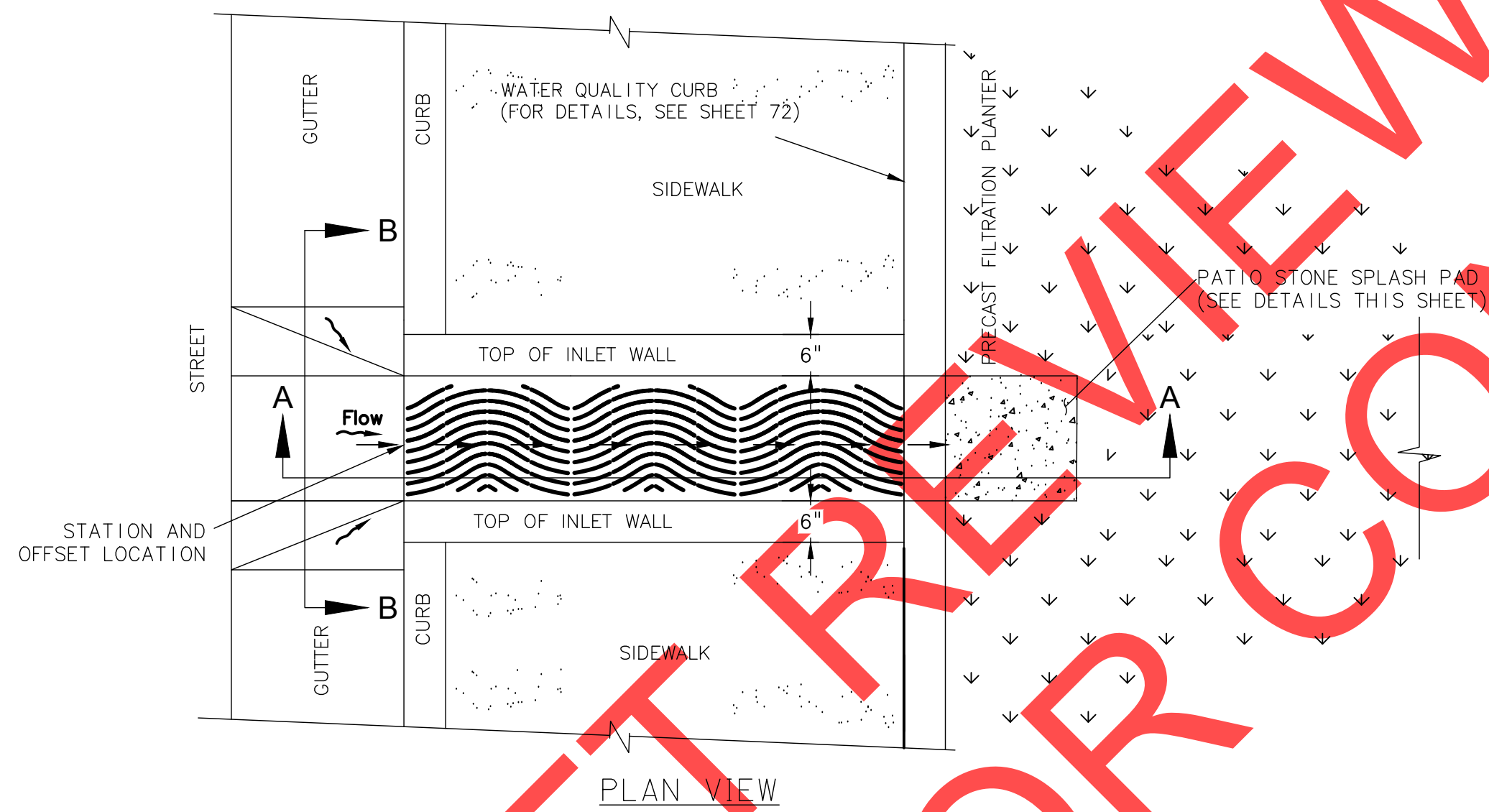
* EACH PATIO STONE SPLASH PAD SHALL BE FOUR (4) 12" X 12" GRAY PATIO STONES ARRANGED IN A 2' X 2' SQUARE.



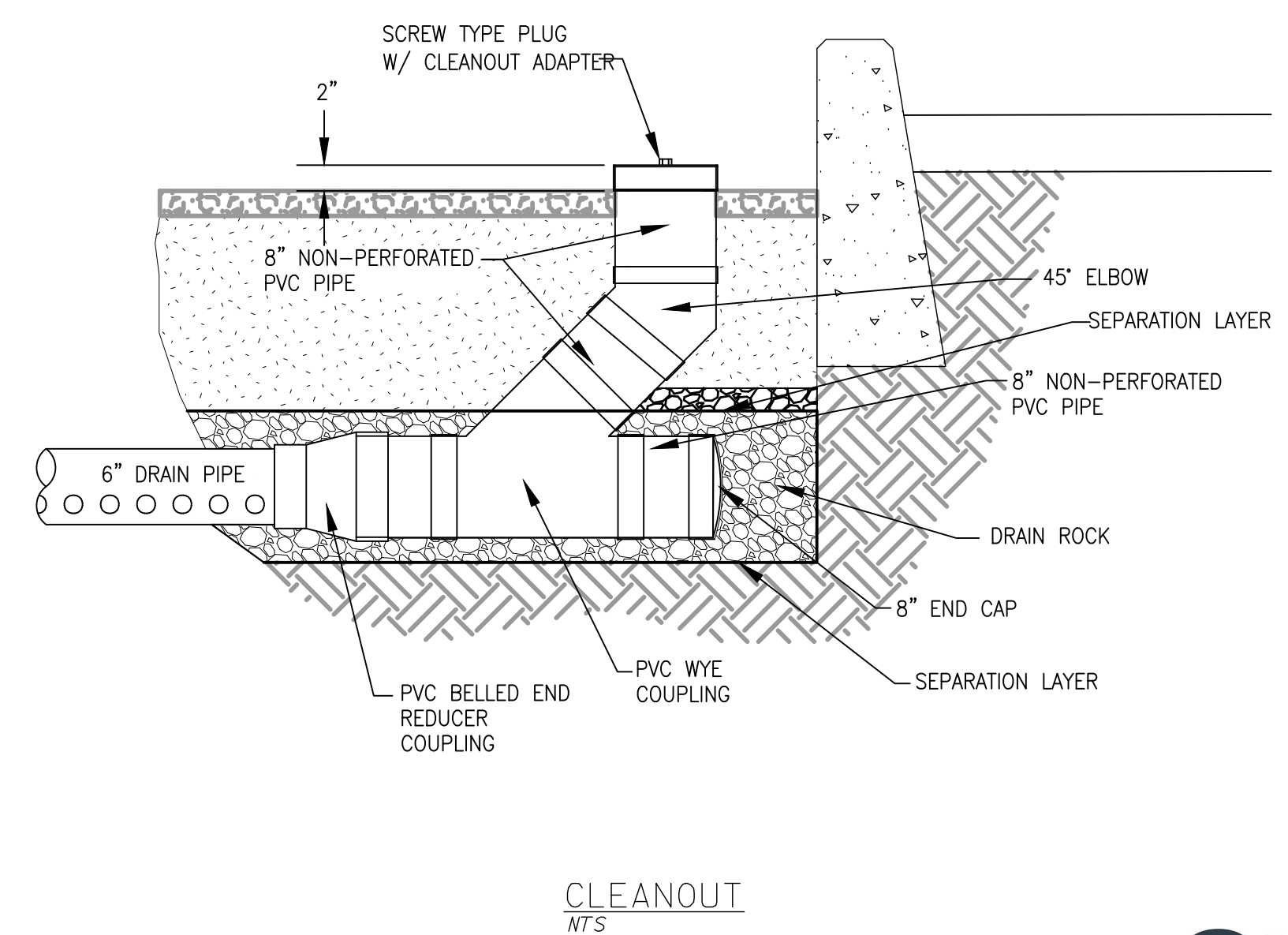
CURB CUT INLET WITH SPLASH PAD
NTS



NOTE: MAXIMUM GRATE HOLE WIDTH (OPEN) 1/4 INCH.
GRATE SIZE 18"x24".
CAST IRON URBAN ACCESSORIES
TRENCH GRATE AND FRAME.
TITLE WAVE MODEL OR EQUAL.

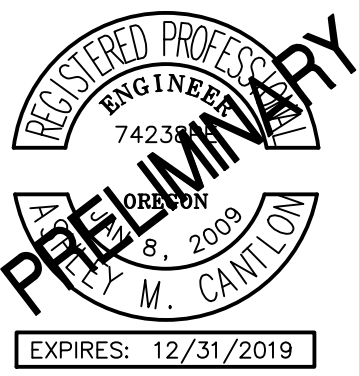


CONCRETE CHANNEL INLET WITH SPLASH PAD
NTS



CLEANOUT
NTS

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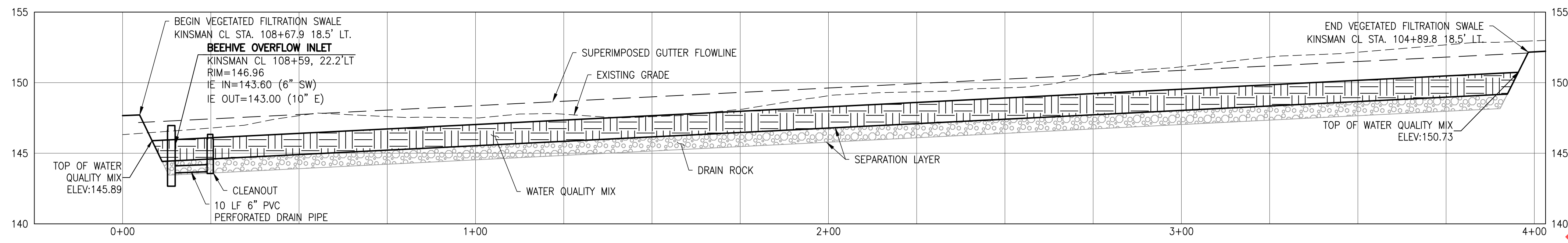


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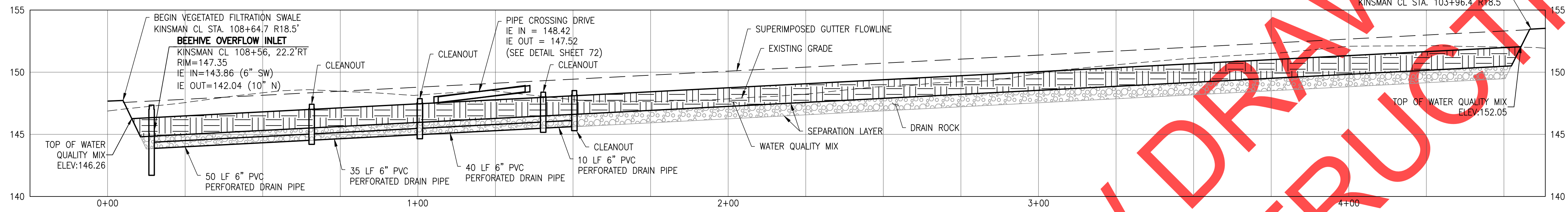
SW 5TH ST TO SW KINSMAN RD EXTENSION
STORMWATER FACILITY DETAILS

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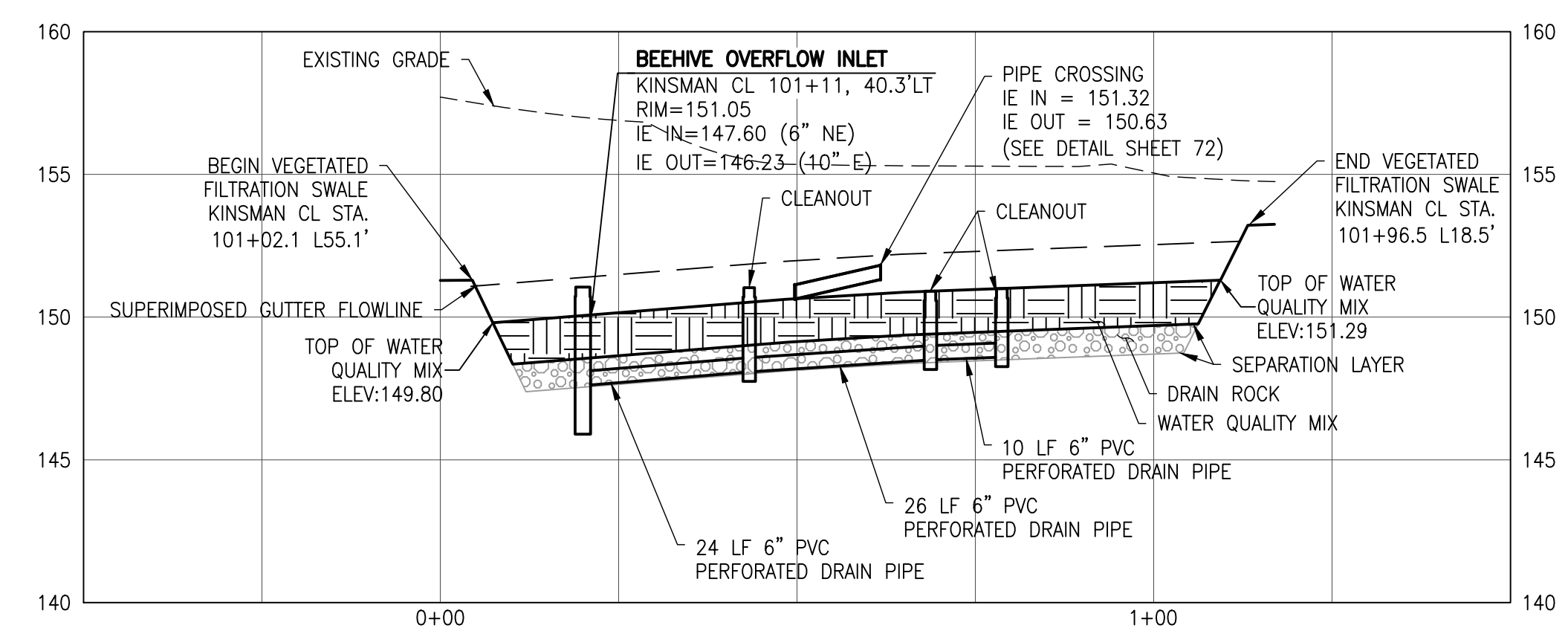
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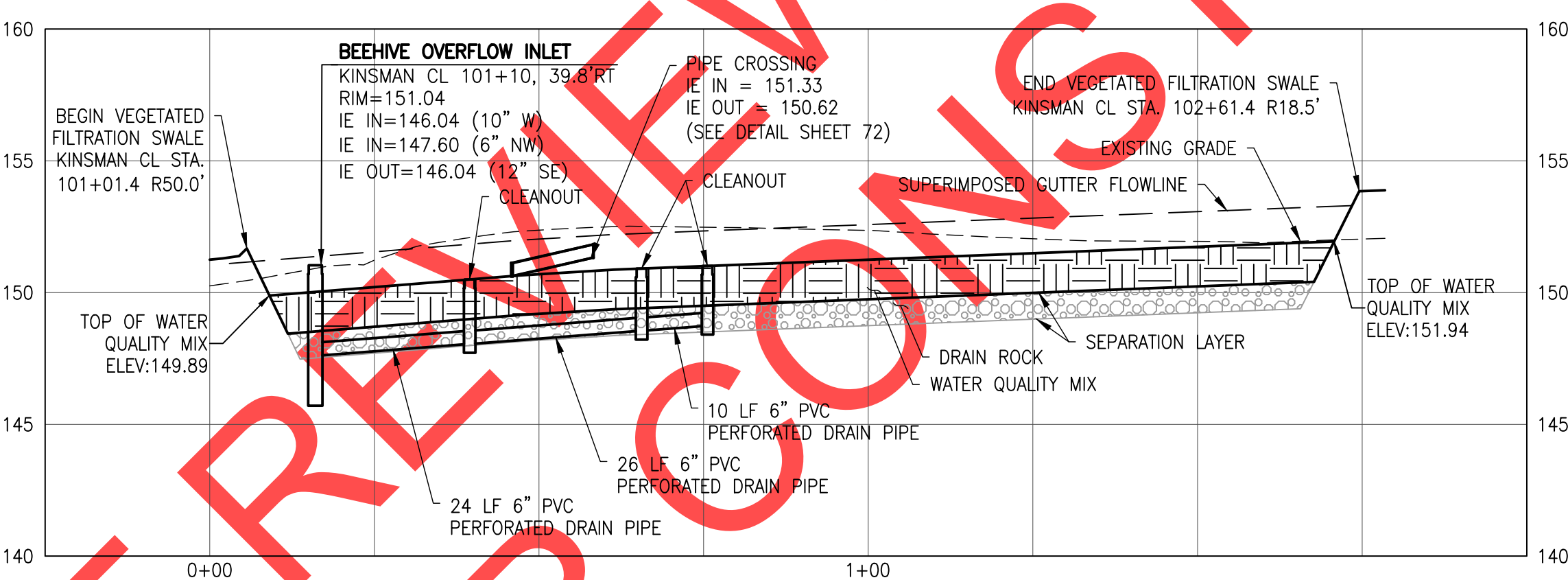
SW-K1 CL PROFILE: -0+25-4+03



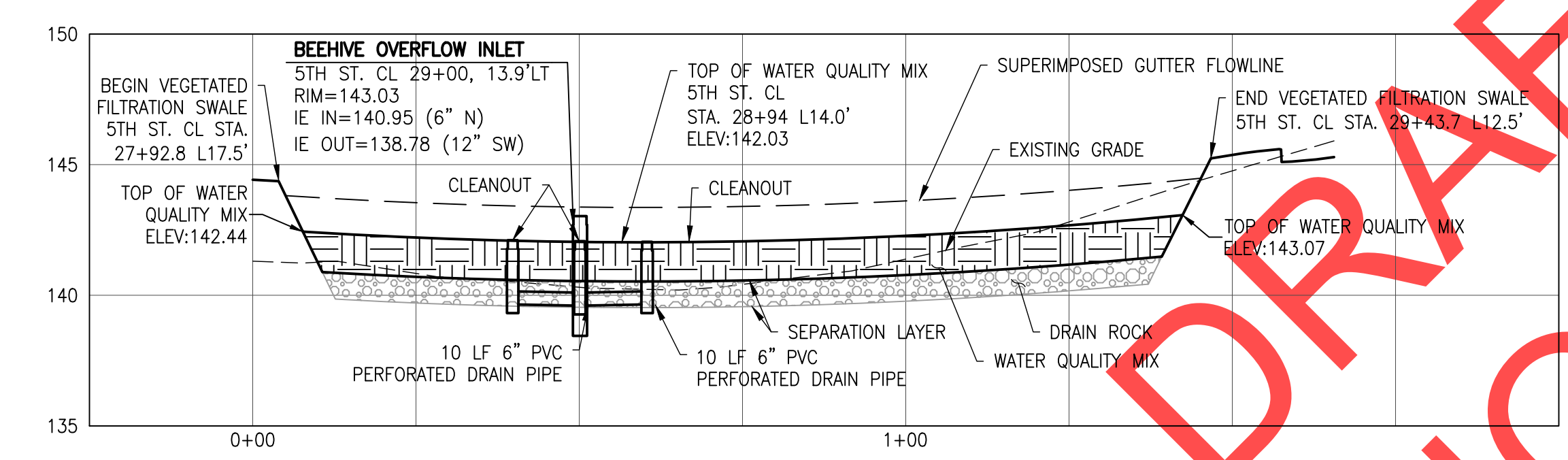
SW-K2 CL PROFILE: -0+25-4+63



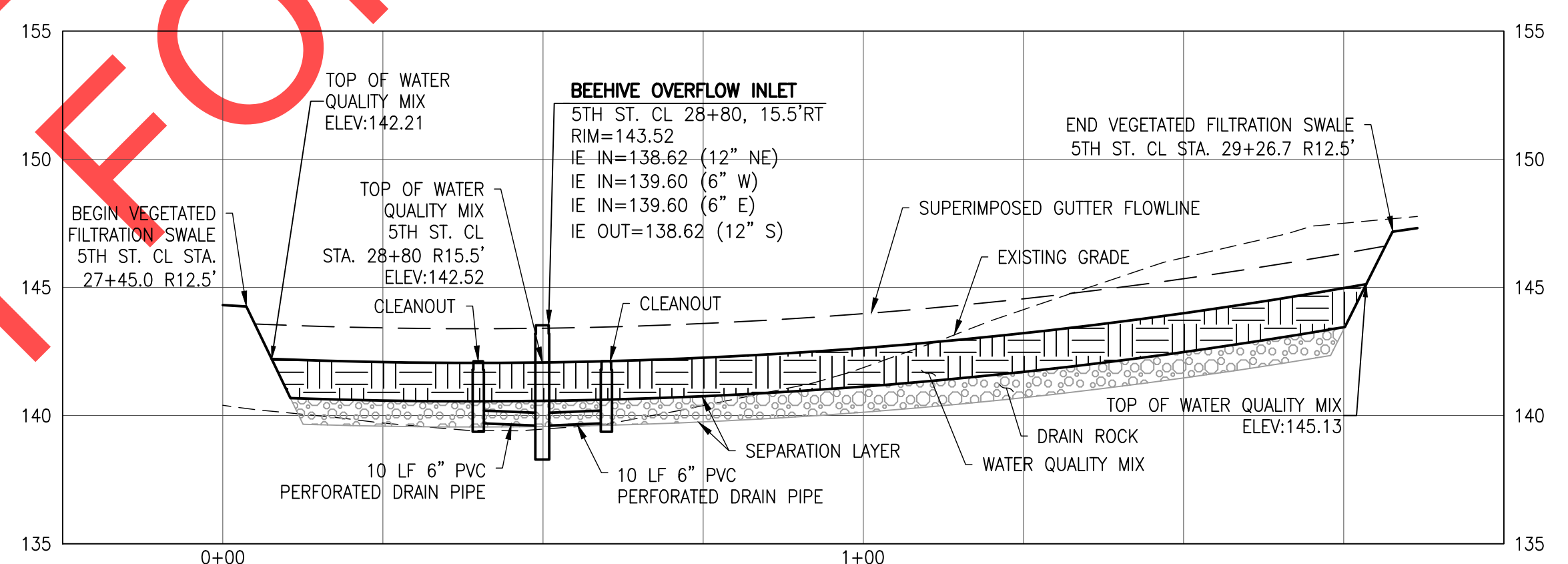
SW-K3 CL PROFILE: -0+50-1+50



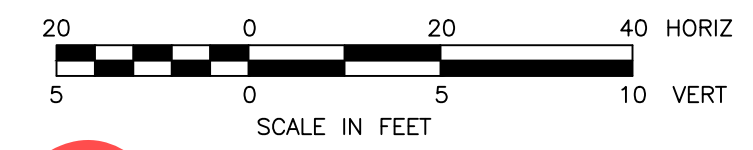
SW-K4 CL PROFILE: -0+25-2+00



SW-F1 CL PROFILE: -0+25-2+00



SW-F2 CL PROFILE: -0+25-2+00



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NO.	DATE	DESCRIPTION

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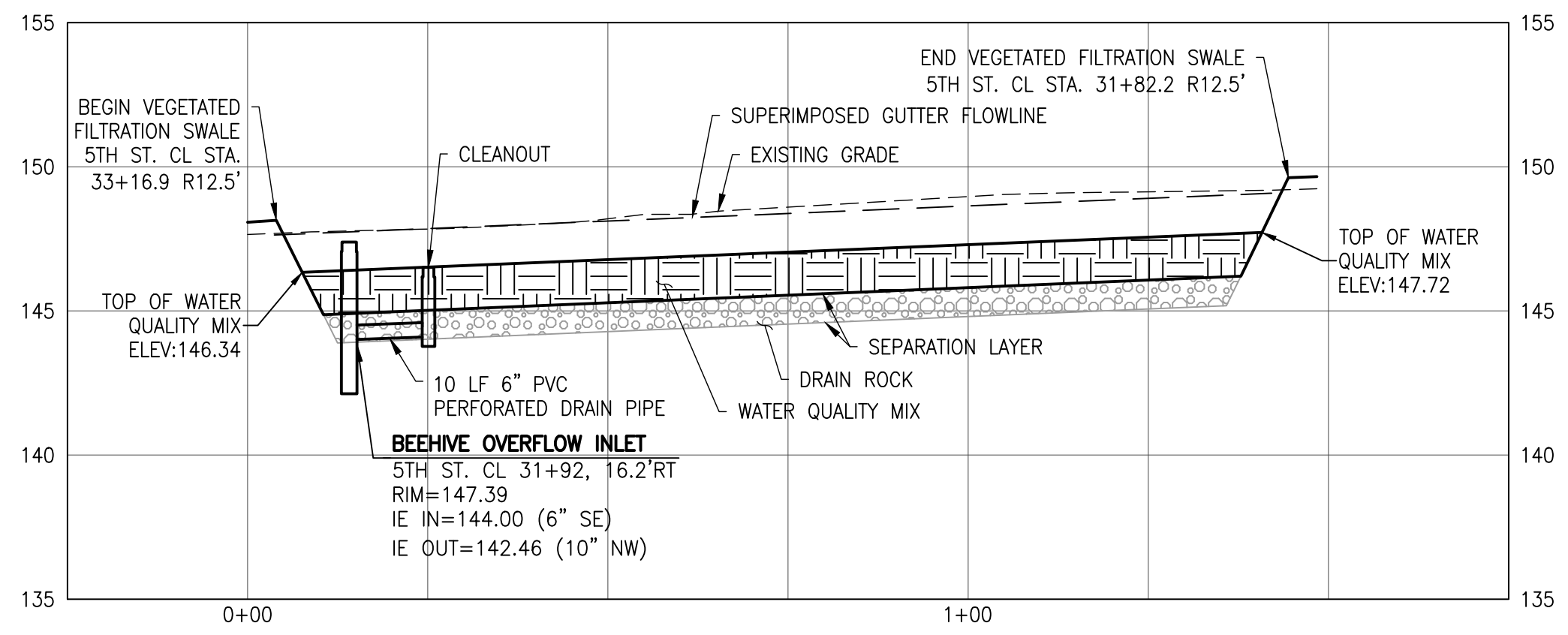
Date	9 January 2019
Scale	AS SHOWN
Designed By	PH/BB
Drawn By	EID
Checked By	A HENDY

SW 5TH ST TO SW KINSMAN RD EXTENSION
 STORMWATER FACILITY DETAILS

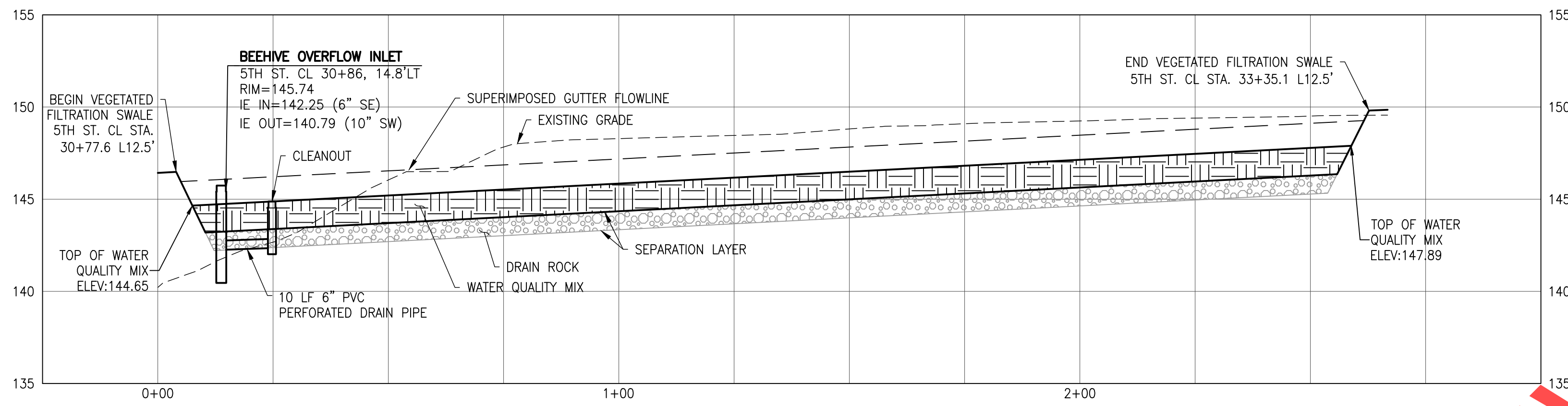
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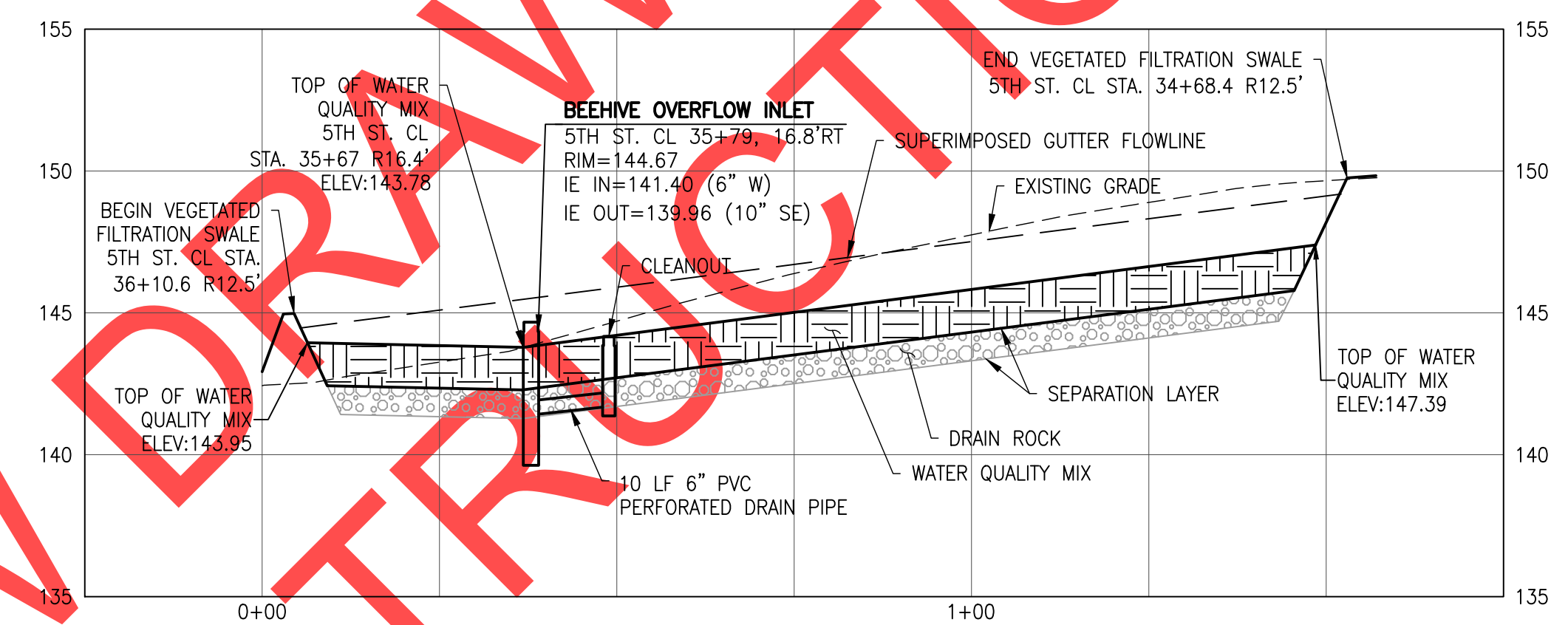
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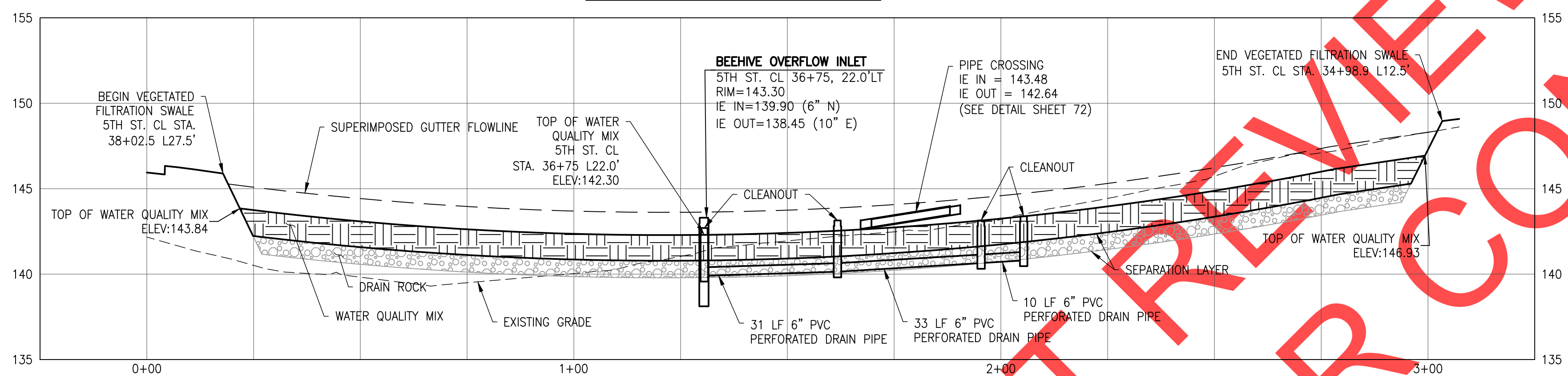
SW-F3 CL PROFILE: -0+25-1+75



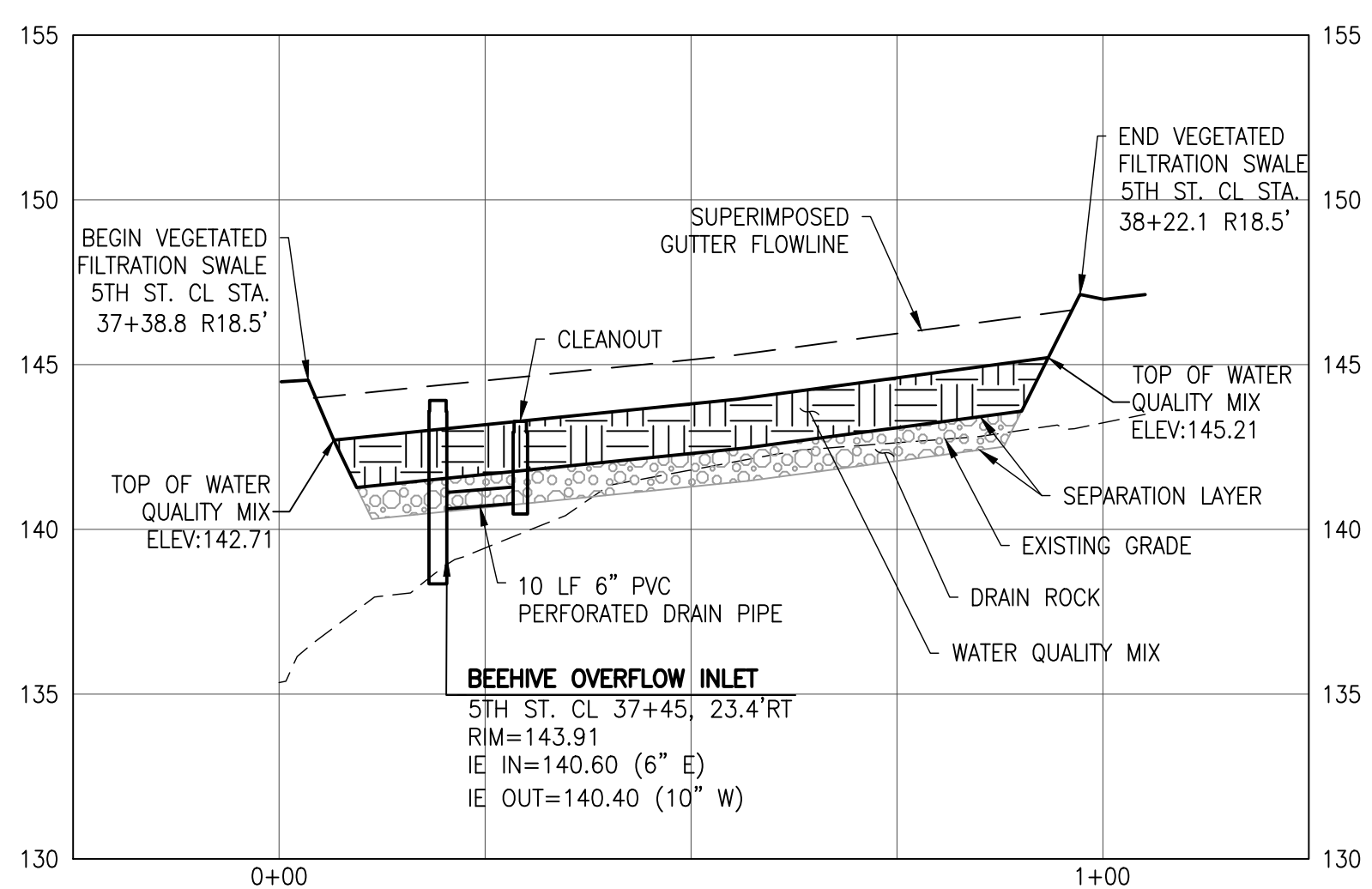
SW-F4 CL PROFILE: -0+25-3+00



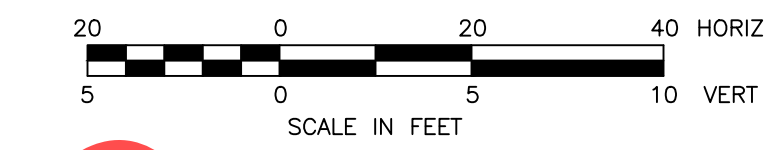
SW-F5 CL PROFILE: -0+25-1+75



SW-F6 CL PROFILE: -0+25-3+25



SW-F7 CL PROFILE: -0+25-1+25



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SW 5TH ST TO SW KINSMAN RD EXTENSION
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