

# 6TH STREET WATERLINE IMPROVEMENTS

## 6TH STREET WATERLINE FROM TERRITORIAL STREET TO DEMPSEY STREET HARRISBURG, OREGON



EXPIRES: DECEMBER 31, 2020

project title:

### LEGEND

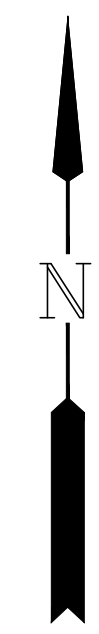
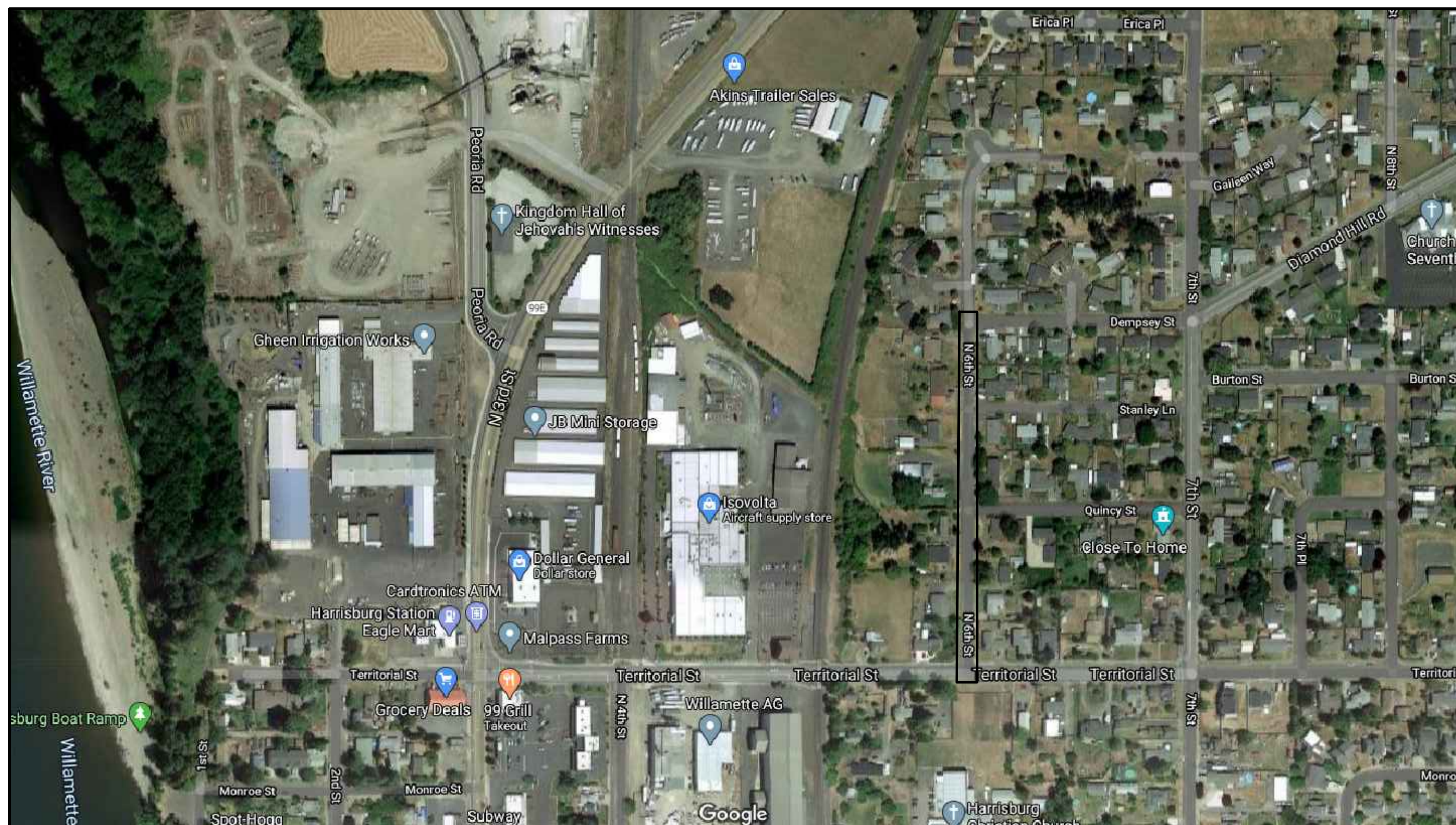
EXISTING	
---	PROPERTY LINE
---	ADJOINER PROPERTY LINE
---	CURB
---	EDGE OF ASPHALT
(E)OHP	OVERHEAD WIRES
(E)G	GAS LINE
(E)SD	STORMWATER LINE
(E)WW	WASTEWATER LINE
(E)W	WATER LINE
(E)T	UNDERGROUND TELEPHONE LINE
---	CONTOUR LINE
X X	FENCE
---	EDGE OF GRAVEL LINE
⊕	FIRE HYDRANT
⊕	WATER METER
⊕	WATER VALVE
⊕	WATER IRRIGATION VALVE
⊕	HOSE BIB
⊕	WASTEWATER MANHOLE
⊕	STORM DRAIN MANHOLE
⊕	CURB INLET
⊕	CATCH BASIN
⊕	MAIL BOX
⊕	SIGN
⊕	GUY WIRE
⊕	ELECTRIC POLE
⊕	TELEPHONE RISER
⊕	GAS VALVE
⊕	CLEAN OUT
⊕	CONCRETE
⊕	BUILDING
⊕	DECIDUOUS TREE
⊕	EVERGREEN TREE

### ABBREVIATIONS

TC	TOP OF CURB	HORZ.	HORIZONTAL
GL	GUTTER LINE	VERT.	VERTICAL
C	CONCRETE	ODOT	OREGON DEPARTMENT OF TRANSPORTATION
AC	ASPHALT CONCRETE	PC	POINT OF CURVATURE
BW	BACK OF WALK	PT	POINT OF TANGENCY
HMAC	HOT MIX ASPHALT	PVI	POINT OF VERTICAL INTERSECTION
MAX.	MAXIMUM	LVC	LENGTH OF VERTICAL INTERSECTION
MIN.	MINIMUM	BVCS	BEGIN VERTICAL CURVE STATION
PSI	POUNDS PER SQUARE INCH	EVCS	END VERTICAL CURVE STATION
STA.	STATION	BVCE	BEGIN VERTICAL CURVE ELEVATION
HWY.	HIGHWAY	EVCE	END VERTICAL CURVE ELEVATION
STD.	STANDARD	PCC	POINT OF COMPOUND CURVE
DWG	DRAWING	PRC	POINT OF REVERSE CURVE
W/L	WATERLINE	CL	CENTERLINE
EX.	EXISTING	L	LEFT
PROP.	PROPOSED	R	RIGHT
SAN	SANITARY	MW	WASTEWATER
LAT	LATERAL	SS	SANITARY SEWER
IE	INVERT ELEVATION	SD	STORM DRAIN
ELEV.	ELEVATION	STM	STORM
FG	FINISHED GRADE	MH	MANHOLE
EG	EXISTING GRADE	CB	CATCH BASIN
		DCVA	DOUBLE CHECK VALVE ASSEMBLY

### PROPOSED

---	PROPERTY LINE
---	ADJOINER PROPERTY LINE
---	CURB
---	STORMWATER LINE
---	WASTEWATER LINE
---	WATER LINE
---	CONTOUR LINE
X X	FENCE
---	CONCRETE
---	ASPHALT
⊕	FIRE HYDRANT
⊕	WATER METER
⊕	STORM DRAIN MANHOLE
⊕	CATCH BASIN
⊕	MAIL BOX
⊕	SIGN
⊕	GUY WIRE
⊕	ELECTRIC POLE



SHEET #	SHEET TITLE
C0	COVER SHEET
C1	GENERAL CONSTRUCTION NOTES
C2	EXISTING CONDITIONS & DEMOLITION PLAN
C3	PROPOSED WATERLINE - STA 0+00 TO 3+75
C4	PROPOSED WATERLINE - STA 3+75 TO 7+75
C5	PROPOSED WATERLINE - STA 7+75 TO 9+50
C6	DETAILS
C7	DETAILS

## 6TH STREET WATERLINE IMPROVEMENTS

FROM TERRITORIAL STREET TO DEMPSEY STREET  
HARRISBURG, OREGON

revisions:

UTILITY PROVIDERS		
UTILITY	PROVIDER	PHONE NUMBER
WATER	CITY OF HARRISBURG	541-995-6655
SEWER	CITY OF HARRISBURG	541-995-6655
STORM	CITY OF HARRISBURG	541-995-6655
ELECTRIC	PACIFIC POWER	503-255-4634
GAS	NW NATURAL	503-220-2415
TELEPHONE	CENTURY LINK	800-283-4237
TELEVISION	COMCAST	541-230-0079

date: AUGUST 27, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A

### COVER SHEET

sheet:

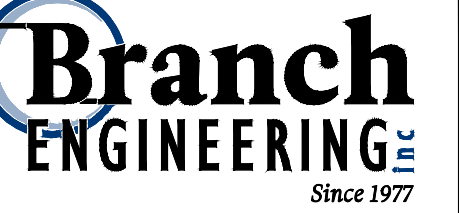
**C0**

**GENERAL CONSTRUCTION NOTES**

- CONTRACTOR SHALL PROCURE, AND CONFORM TO ALL CONSTRUCTION PERMITS REQUIRED BY THE CITY OF HARRISBURG, LINN COUNTY AND ODOT.
- ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 800-332-2334 or 811).
- CONTRACTOR TO NOTIFY CITY, COUNTY AND ALL UTILITY COMPANIES A MINIMUM OF 48 BUSINESS HOURS (2 BUSINESS DAYS) PRIOR TO START OF CONSTRUCTION, AND COMPLY WITH ALL OTHER NOTIFICATION REQUIREMENTS OF AGENCIES WITH JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL PROVIDE ALL BONDS AND INSURANCE REQUIRED BY PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION. WHERE REQUIRED BY PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION, THE CONTRACTOR SHALL SUBMIT A SUITABLE MAINTENANCE BOND PRIOR TO FINAL PAYMENT.
- ALL MATERIALS AND WORKMANSHIP FOR FACILITIES IN STREET RIGHT-OF-WAY OR EASEMENTS SHALL CONFORM TO APPROVING AGENCIES' CONSTRUCTION SPECIFICATIONS WHEREIN EACH HAS JURISDICTION, INCLUDING BUT NOT LIMITED TO THE CITY, COUNTY, OREGON HEALTH DIVISION (OHD) AND THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ).
- UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR, CONSTRUCTION OF ALL PUBLIC FACILITIES SHALL BE DONE BETWEEN 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH SATURDAY.
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DRAWINGS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET APPLICABLE AGENCY REQUIREMENTS AND PROVIDE A COMPLETED PROJECT.
- ANY INSPECTION BY THE CITY, COUNTY OR OTHER AGENCIES SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES, AND AGENCY REQUIREMENTS.
- CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF APPROVED DRAWINGS ON THE CONSTRUCTION SITE AT ALL TIMES WHEREON HE WILL RECORD ALL APPROVED DEVIATIONS IN CONSTRUCTION FROM THE APPROVED DRAWINGS, AS WELL AS THE STATION LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ENCOUNTERED. THESE FIELD RECORD DRAWINGS SHALL BE KEPT UP TO DATE AT ALL TIMES AND SHALL BE AVAILABLE FOR INSPECTION BY THE CITY OR OWNER'S REPRESENTATIVE UPON REQUEST. FAILURE TO CONFORM TO THIS REQUIREMENT MAY RESULT IN DELAY IN PAYMENT AND/OR FINAL ACCEPTANCE OF THE PROJECT.
- UPON COMPLETION OF CONSTRUCTION OF ALL NEW FACILITIES, CONTRACTOR SHALL SUBMIT A CLEAN SET OF FIELD RECORD DRAWINGS CONTAINING ALL AS-BUILT INFORMATION TO THE ENGINEER. ALL INFORMATION SHOWN ON THE CONTRACTOR'S FIELD RECORD DRAWINGS SHALL BE SUBJECT TO VERIFICATION. IF SIGNIFICANT ERRORS OR DEVIATIONS ARE NOTED, AN AS-BUILT SURVEY PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL LAND SURVEYOR SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL PROCURE AND CONFORM TO DEQ STORMWATER PERMIT NO. 1200C FOR CONSTRUCTION ACTIVITIES WHERE 1 ACRE OR MORE ARE DISTURBED.
- CONTRACTOR SHALL ERECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER CITY AND COUNTY REQUIREMENTS IN ACCORDANCE WITH THE MUTCD (INCLUDING OREGON AMENDMENTS). ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AND/OR RESIDENTS REGARDING ACCESS DURING CONSTRUCTION. ALL TRAFFIC CONTROL MEASURES SHALL BE APPROVED AND IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITY. PRIOR TO ANY WORK IN THE EXISTING PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL SUBMIT FINAL TRAFFIC CONTROL PLAN TO THE CITY, COUNTY AND ODOT FOR REVIEW AND ISSUANCE OF A LANE CLOSURE OR WORK IN RIGHT-OF-WAY PERMIT
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED OR NECESSARY INSPECTIONS ARE COMPLETED BY AUTHORIZED INSPECTORS PRIOR TO PROCEEDING WITH SUBSEQUENT WORK WHICH COVERS OR THAT IS DEPENDENT ON THE WORK TO BE INSPECTED. FAILURE TO OBTAIN NECESSARY INSPECTION(S) AND APPROVAL(S) SHALL RESULT IN THE CONTRACTOR BEING FULLY RESPONSIBLE FOR ALL PROBLEMS ARISING FROM UNINSPECTED WORK.
- UNLESS OTHERWISE SPECIFIED, THE ATTACHED "REQUIRED TESTING AND FREQUENCY" TABLE OUTLINES THE MINIMUM TESTING SCHEDULE FOR THE PROJECT. THIS TESTING SCHEDULE IS NOT COMPLETE, AND DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING ALL NECESSARY INSPECTIONS OR OBSERVATIONS FOR ALL WORK PERFORMED, REGARDLESS OF WHO IS RESPONSIBLE FOR PAYMENT. COST FOR RETESTING SHALL BE BORNE BY THE CONTRACTOR.
- THE LOCATION AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MARKING ALL EXISTING SURVEY MONUMENTS OF RECORD (INCLUDING BUT NOT LIMITED TO PROPERTY AND STREET MONUMENTS) PRIOR TO CONSTRUCTION. IF ANY SURVEY MONUMENTS ARE REMOVED, DISTURBED OR DESTROYED DURING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL RETAIN AND PAY FOR THE SERVICES OF A REGISTERED PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF OREGON TO REFERENCE AND REPLACE ALL SUCH MONUMENTS PRIOR TO FINAL PAYMENT. THE MONUMENTS SHALL BE REPLACED WITHIN A MAXIMUM OF 90 DAYS, AND THE COUNTY SURVEYOR SHALL BE NOTIFIED IN WRITING AS REQUIRED BY PER ORS 209.150.
- CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WHERE NEW FACILITIES CROSS. ALL UTILITY CROSSINGS MARKED OR SHOWN ON THE DRAWINGS SHALL BE POTHOLED USING HAND TOOLS OR OTHER NON BORING METHODS. PRIOR TO EXCAVATING, CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING POTENTIAL UTILITY CONFLICTS FAR ENOUGH AHEAD OF CONSTRUCTION TO MAKE NECESSARY GRADE OR ALIGNMENT MODIFICATIONS WITHOUT DELAYING THE WORK. IF GRADE OR ALIGNMENT MODIFICATION IS NECESSARY, CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, AND THE DESIGN ENGINEER OR THE OWNER'S REPRESENTATIVE SHALL OBTAIN APPROVAL FROM THE CITY PRIOR TO CONSTRUCTION.
- ALL FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER-THAN-ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AND OWNER'S REPRESENTATIVE.
- UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL PLUG THE REMAINING EXPOSED ENDS OF ABANDONED UTILITIES.
- CONTRACTOR SHALL REMOVE ALL EXISTING SIGNS, MAILBOXES, FENCES, LANDSCAPING, ETC., AS REQUIRED TO AVOID DAMAGE DURING CONSTRUCTION AND REPLACE THEM TO EXISTING OR BETTER CONDITION.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING CONSTRUCTION ACTIVITIES TO ENSURE THAT PUBLIC STREETS AND RIGHT-OF-WAYS ARE KEPT CLEAN OF MUD, AND DUST OR DEBRIS. DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE SITE BY THE CONTRACTOR.
- FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
- ALL EXISTING OR CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENT BOXES, GAS VALVES, WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA OR MEDIAN STRIP WHEREIN THEY LIE. VERIFY THAT ALL VALVE BOXES AND RISERS ARE CLEAN AND CENTERED OVER THE OPERATING NUT.
- CONTRACTOR SHALL SEED AND MULCH (UNIFORMLY BY HAND OR HYDROSEED) EXPOSED SLOPES AND DISTURBED AREAS WHICH ARE NOT SCHEDULED TO BE LANDSCAPED, INCLUDING TRENCH RESTORATION AREAS. IF THE CONTRACTOR FAILS TO APPLY SEED AND MULCH IN A TIMELY MANNER DURING PERIODS FAVORABLE FOR GERMINATION, OR IF THE SEEDED AREAS FAIL TO GERMINATE, THE CITY'S REPRESENTATIVE MAY (AT HIS DISCRETION) REQUIRE THE CONTRACTOR TO INSTALL SOD TO COVER SUCH DISTURBED AREAS.
- ALL TAPPING OF EXISTING MUNICIPAL SANITARY SEWER, STORM DRAIN MAINS, AND MANHOLES MUST BE DONE BY CONTRACTOR FORCES.
- THE CONTRACTOR SHALL HAVE APPROPRIATE EQUIPMENT ON SITE TO PRODUCE A FIRM, SMOOTH, UNDISTURBED SUBGRADE AT THE TRENCH BOTTOM, TRUE TO GRADE. THE BOTTOM OF THE TRENCH EXCAVATION SHALL BE SMOOTH, FREE OF LOOSE MATERIALS OR TOOTH GROOVES FOR THE ENTIRE WIDTH OF THE TRENCH PRIOR TO PLACING THE GRANULAR BEDDING MATERIAL.
- ALL PIPES SHALL BE BEDDED WITH MINIMUM 6-INCHES OF 3/4"-0 CRUSHED QUARRY ROCK BEDDING AND BACKFILLED WITH COMPACTED 3/4"-0 CRUSHED QUARRY ROCK IN THE PIPE ZONE (CRUSHED QUARRY ROCK SHALL EXTEND A MINIMUM OF 12-INCHES OVER THE TOP OF THE PIPE IN ALL CASES). CRUSHED QUARRY ROCK OR CDF TRENCH BACKFILL SHALL BE USED UNDER ALL IMPROVED AREAS, INCLUDING PAVEMENT, SIDEWALKS, FOUNDATION SLABS, BUILDINGS, ETC. IN ACCORDANCE WITH THE PLANS & SPECIFICATIONS. GRANULAR TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
- GRANULAR TRENCH BEDDING AND BACKFILL SHALL BE CRUSHED QUARRY ROCK CONFORMING TO THE REQUIREMENTS OF OSSC (ODOT/APWA) 02630.10 (DENSE GRADED BASE AGGREGATE), 3/4"-0. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, COMPACT GRANULAR BACKFILL TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
- ALL PIPED UTILITIES ABANDONED IN PLACE SHALL HAVE ALL OPENINGS CLOSED WITH CONCRETE PLUGS WITH A MINIMUM LENGTH EQUAL TO 2 TIMES THE DIAMETER OF THE ABANDONED PIPE.
- THE END OF ALL UTILITY SERVICE LINES SHALL BE MARKED WITH A 2-X-4 PAINTED WHITE AND WIRED TO PIPE STUB. THE PIPE DEPTH SHALL BE WRITTEN ON THE POST IN 2" BLOCK LETTERS.
- ALL NON-METALLIC WATER, SANITARY AND STORM SEWER PIPING SHALL HAVE AN ELECTRICALLY CONDUCTIVE INSULATED 12 GAUGE COPPER TRACER WIRE THE FULL LENGTH OF THE INSTALLED PIPE USING BLUE WIRE FOR WATER AND GREEN WIRE FOR STORM AND SANITARY PIPING. TRACER WIRE SHALL BE EXTENDED UP INTO ALL VALVE BOXES, CATCH BASINS, MANHOLES AND LATERAL CLEANOUT BOXES. TRACER WIRE PENETRATIONS INTO MANHOLES SHALL BE WITHIN 18 INCHES OF THE RIM ELEVATION AND ADJACENT TO MANHOLE STEPS. THE TRACER WIRE SHALL BE TIED TO THE TOP MANHOLE STEP OR OTHERWISE SUPPORTED TO ALLOW RETRIEVAL FROM THE OUTSIDE OF THE MANHOLE.
- NO TRENCHES IN SIDEWALKS, ROADS, OR DRIVEWAYS SHALL BE LEFT IN AN OPEN CONDITION OVERNIGHT. ALL SUCH TRENCHES SHALL BE CLOSED BEFORE THE END OF EACH WORKDAY AND NORMAL TRAFFIC AND PEDESTRIAN FLOWS RESTORED.
- CITY FORCES TO OPERATE ALL VALVES, INCLUDING FIRE HYDRANTS, ON EXISTING PUBLIC MAINS.
- ALL WATER MAINS AND SANITARY SEWER FORCE MAINS SHALL BE C-900 PVC (DR 18) RESPECTIVELY. ALL FITTINGS 4-INCHES THROUGH 24-INCHES IN DIAMETER SHALL BE DUCTILE IRON FITTINGS IN CONFORMANCE WITH AWWA C-153 OR AWWA C-110. THE MINIMUM WORKING PRESSURE FOR ALL MJ CAST IRON OR DUCTILE IRON FITTINGS 4-INCHES THROUGH 24-INCH IN DIAMETER SHALL BE 350 PSI FOR MJ FITTINGS AND 250 PSI FOR FLANGED FITTINGS.
- ALL WATER MAINS TO BE INSTALLED WITH A MINIMUM 36 INCH COVER TO FINISH GRADE UNLESS OTHERWISE NOTED OR DIRECTED. WATER SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM 30-INCH COVER. DEEPER DEPTHS MAY BE REQUIRED AS SHOWN ON THE DRAWINGS OR TO AVOID OBSTRUCTIONS.
- THRUST RESTRAINT SHALL BE PROVIDED ON ALL BENDS, TEES AND OTHER DIRECTION CHANGES PER LOCAL JURISDICTION REQUIREMENTS AND AS SPECIFIED OR SHOWN ON THE DRAWINGS. UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER, ALL VALVES SHALL BE FLANGE CONNECTED TO ADJACENT TEES OR CROSSES.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT AND MATERIALS (INCLUDING PLUGS, BLOWOFFS, VALVES, SERVICE TAPS, ETC.) REQUIRED TO FLUSH, TEST AND DISINFECT WATERLINES PER PUBLIC AGENCY REQUIREMENTS.
- WHERE SANITARY SEWER LINES CROSS ABOVE OR WITHIN 18-INCHES VERTICAL SEPARATION BELOW A WATERLINE, SEWER MAINS AND/OR SERVICE LATERALS SHALL BE REPLACED WITH A 18-FOOT LENGTH OF CLASS 50 DUCTILE IRON OR C-900 PVC PIPE (DR 18) CENTERED AT THE CROSSING IN ACCORDANCE WITH OAR 333 AND LOCAL JURISDICTION REQUIREMENTS. CONNECT TO EXISTING SEWER LINES WITH APPROVED RUBBER COUPLINGS. EXAMPLE: FOR AN 8-INCH WATERLINE WITH 36-INCHES COVER, 4-INCH SERVICE LATERAL INVERTS WITHIN 5.67- FEET (68-INCHES) OF FINISH GRADE MUST BE DI OR C-900 PVC AT THE CROSSING. CENTER ONE FULL LENGTH OF WATERLINE PIPE AT POINT OF CROSSING THE SEWER LINE OR SEWER LATERAL.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT AND FACILITIES TO TEST SANITARY SEWER PIPE AND APPURTENANCES FOR LEAKAGE IN ACCORDANCE WITH TESTING SCHEDULE HEREIN OR THE CITY'S CONSTRUCTION STANDARDS, WHICHEVER ARE MORE STRINGENT. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WITH FRANCHISE UTILITIES FOR REMOVAL OR RELOCATION OF POWER POLES, VAULTS, PEDESTALS, MANHOLES, ETC. TO AVOID CONFLICT WITH CITY UTILITY STRUCTURES, FIRE HYDRANTS, METERS, SEWER OR STORM LATERALS, ETC.
- CONTRACTOR TO COORDINATE AND NOTIFY WITH ALL PROPERTY OWNERS A MINIMUM OF 48 HOURS IN ADVANCE WHENEVER A CITY'S UTILITY (WATER, SEWER, &/OR STORM) SERVICE WILL BE DISRUPTED FOR ANY AMOUNT OF TIME.

REQUIRED TESTING AND FREQUENCY TABLE (IF APPLICABLE)		PARTY RESPONSIBLE FOR PAYMENT	
		CONTRACTOR	OTHERS (see note 1)
STREETS, PARKING LOTS, PADS, FILLS, ETC			
ASPHALT	1 TEST/6,000 S.F./LIFT (4 MIN.)	X	SEE NOTE 2
PIPED UTILITIES, ALL			
TRENCH BACKFILL	1 TEST/200 FOOT TRENCH/LIFT (4 MIN.)	X	SEE NOTE 2
TRENCH AC RESTORATION	1 TEST/300 FOOT OF TRENCH (4 MIN.)	X	SEE NOTE 2
WATER			
PRESSURE TEST	(TO BE WITNESSED BY OWNER'S REPRESENTATIVE OR APPROVING AGENCY)	X	SEE NOTE 4
BACTERIAL WATER TEST	PER OREGON HEALTH DIVISION	X	SEE NOTE 2
CHLORINE RESIDUAL TEST	PER CITY REQUIREMENTS	X	SEE NOTE 2
SANITARY SEWER (GRAVITY)			
PIPE	-AIR OR HYDROSTATIC PER ODOT REQUIREMENTS. -DEFLECTION TESTING PER ODOT REQUIREMENTS. -VIDEO INSPECTION PER ODOT REQUIREMENTS.	X	SEE NOTE 2
MANHOLES	VACUUM TESTING PER ODOT REQUIREMENTS	X	SEE NOTE 2
CONCRETE			
SLUMP, AIR & CYLINDERS FOR ALL STRUCTURES CURBS, SIDEWALKS AND PCC PAVEMENTS. UNLESS OTHERWISE SPECIFIED, ONE SET OF CYLINDERS PER 100 CUBIC YARDS (OR PORTION THEREOF) OF CONCRETE POURED PER DAY. SLUMP & AIR TESTS REQUIRED ON SAME LOAD AS CYLINDERS.		X	SEE NOTE 2
NOTE 1: "OTHERS" REFERS TO CITY'S AUTHORIZED REPRESENTATIVE OF APPROVING AGENCY AS APPLICABLE. CONTRACTOR RESPONSIBLE FOR SCHEDULING TESTING. ALL TESTING MUST BE COMPLETED PRIOR TO PERFORMING SUBSEQUENT WORK.			
NOTE 2: TESTING MUST BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY OR COMPANY.			
NOTE 3: IN ADDITION TO IN-PLACE DENSITY TESTING, THE SUBGRADE AND BASE ROCK SHALL BE PROOF ROLLED WITH A LOADED 10 YARD DUMP TRUCK PROVIDED BY THE CONTRACTOR. BASEROCK PROOFROLL SHALL TAKE PLACE IMMEDIATELY PRIOR TO (WITHIN 24 HOURS OF) PAVING, AND SHALL BE WITNESSED BY THE CITY'S AUTHORIZED REPRESENTATIVE OR APPROVING AGENCY. LOCATION AND PATTERN OF PROOFROLL TO BE DIRECTED BY SAID CITY'S REPRESENTATIVE OR APPROVING AGENCY.			
NOTE 4: TO BE WITNESSED BY THE CITY'S REPRESENTATIVE OR APPROVING AGENCY. THE CONTRACTOR SHALL PERFORM PRE-TESTS PRIOR TO SCHEDULING WATERLINE OR SANITARY SEWER PRESSURE TESTS, OR PIPELINE MANDREL TEST.			



civil • transportation  
structural • geotechnical  
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310 5th Street  
Springfield, OR 97477  
p: 541.746.0637  
www.BranchEngineering.com  
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project title:

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drawn by: GAM  
designer: GAM  
project no: 20-009A

**GENERAL NOTES**

sheet: **C1**

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EXPIRES: DECEMBER 31, 2020

project title:

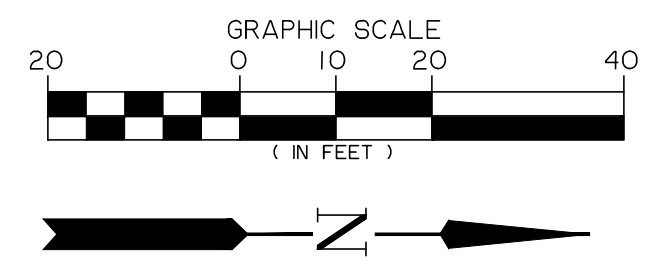
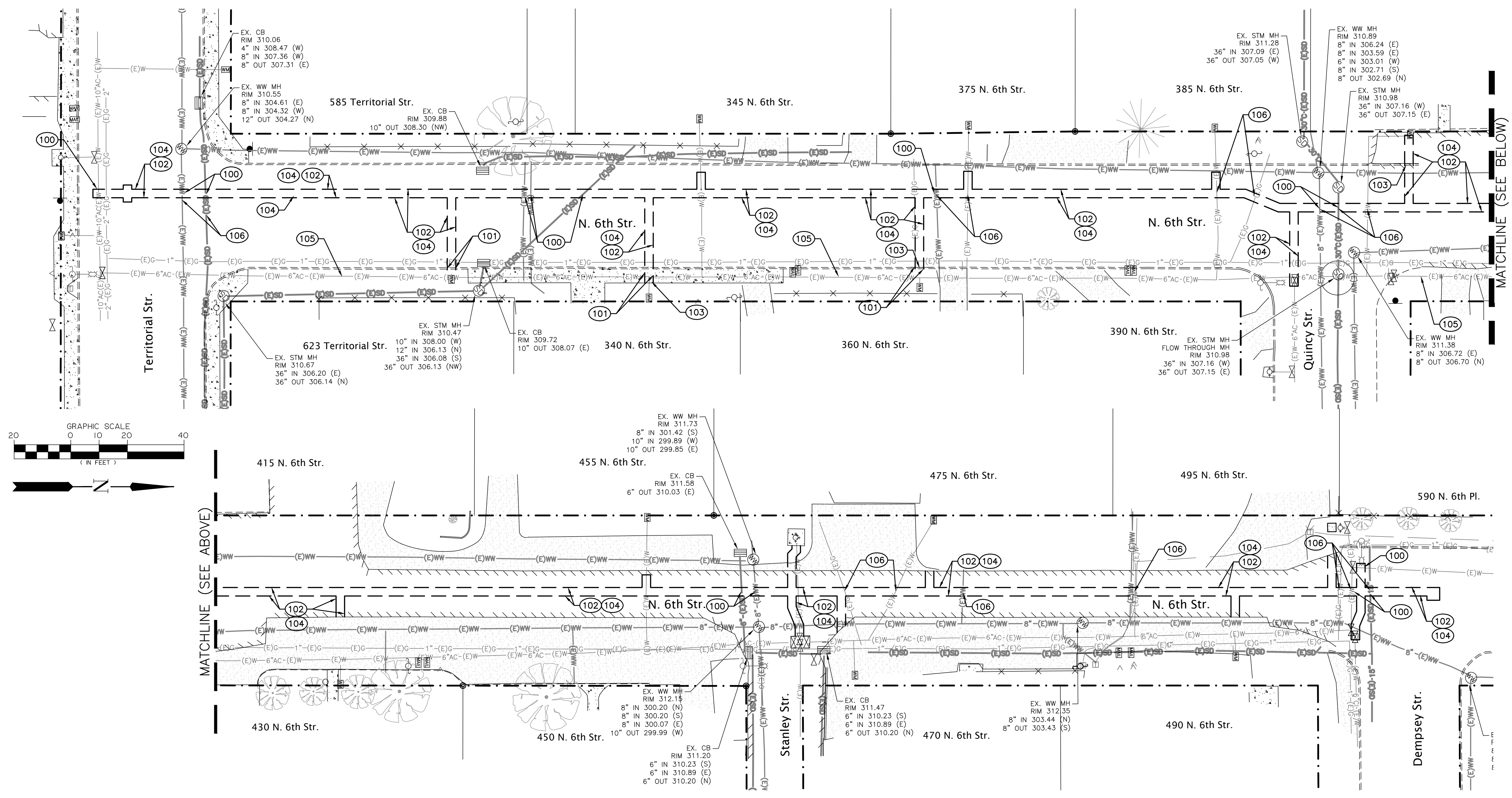
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HARRISBURG, OREGON

revisions:

date: AUGUST 27, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A

**EXISTING CONDITIONS & DEMOLITION PLAN**

sheet: **C2**



**CONSTRUCTION NOTES**

- 100 → POTHOLE EXISTING UTILITY LINE AND VERIFY LOCATION, DEPTH, MATERIAL AND SIZE. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 101 → SAWCUT EXISTING CONCRETE. PROTECT SAWCUT EDGE FROM DAMAGE.
- 102 → SAWCUT EXISTING AC PAVEMENT. INITIAL SAWCUT AT EDGE OF TRENCH. FINAL SAWCUT 6 INCHES FROM EDGE OF ANY DAMAGED AC PAVEMENT PER ODOT STD. DWG. RD302.
- 103 → REMOVE EXISTING CONCRETE SIDEWALK AND/OR CONCRETE CURB & GUTTER.
- 104 → REMOVE EXISTING ASPHALT PAVEMENT. REMOVE EXISTING BASE ROCK AND SUBGRADE AS REQUIRED FOR NEW PAVEMENT SECTION FINISHED GRADE.
- 105 → EXISTING PUBLIC WATER MAIN TO REMAIN IN SERVICE UNTIL NEW PUBLIC WATER MAIN IS CONSTRUCTED AND APPROVED FOR USE.
- 106 → PROTECT EXISTING UTILITIES



project title:

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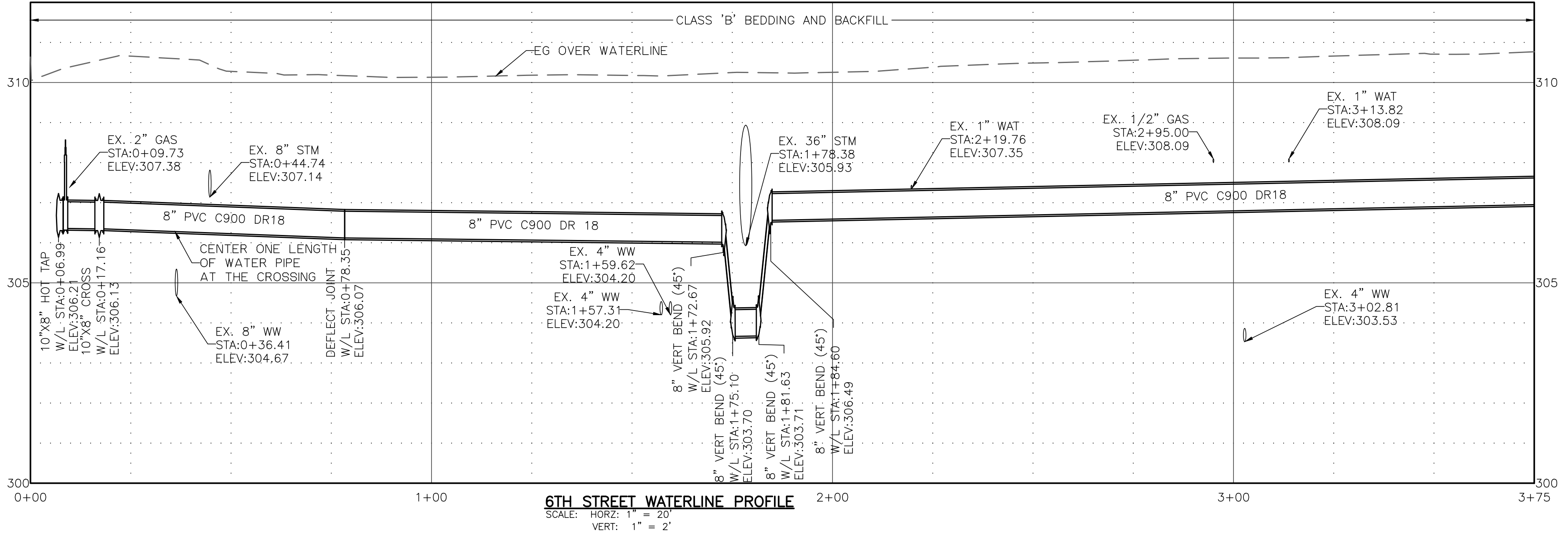
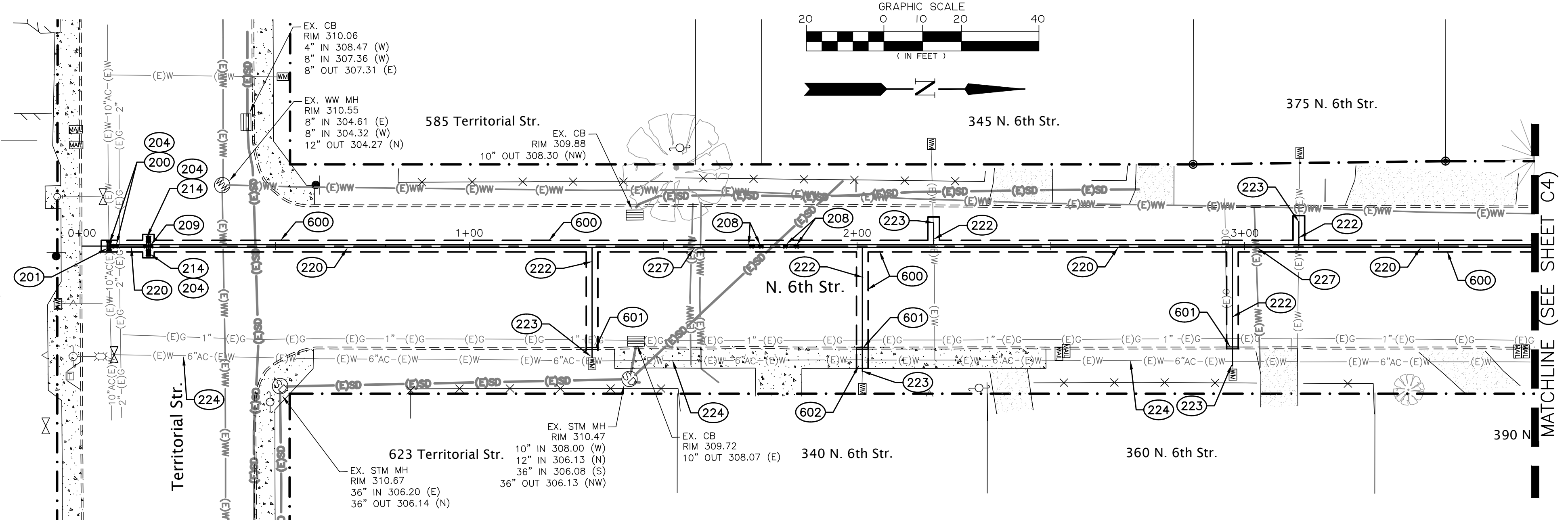
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drawn by: GAM  
designer: GAM  
project no: 20-009A

**PROPOSED WATERLINE**  
STA 0+00 TO  
3+75

sheet: **C3**

**CONSTRUCTION NOTES**

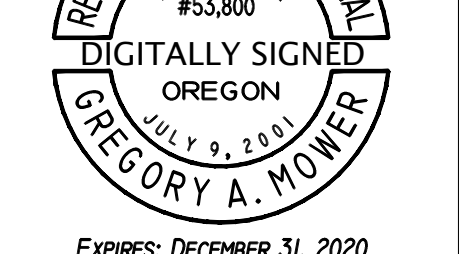
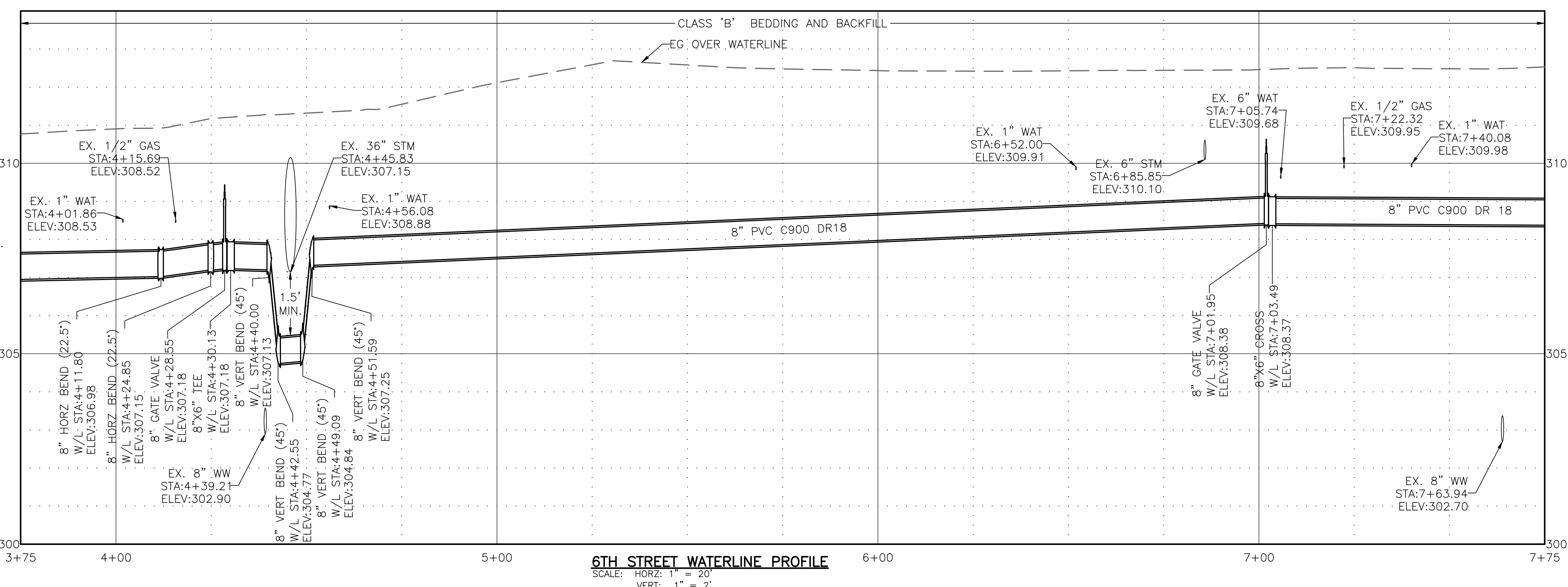
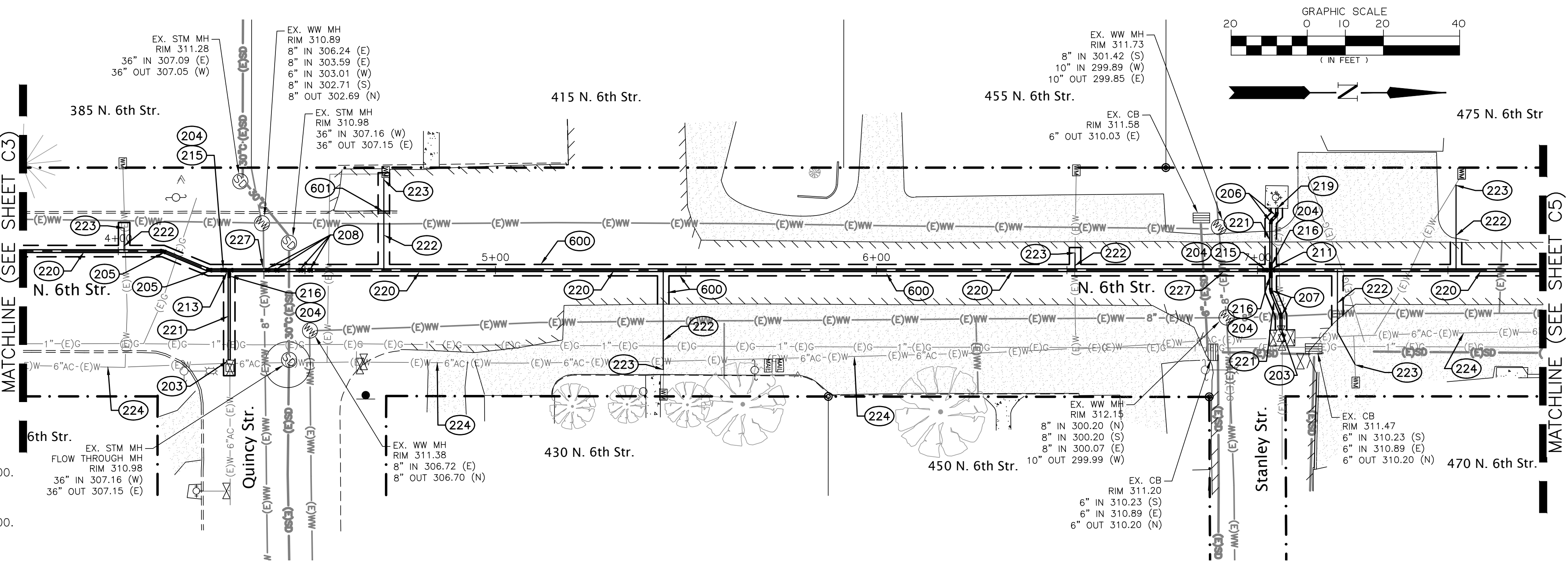
- (200) → POTHOLE EXISTING UTILITY AND VERIFY LOCATION, DEPTH, MATERIAL AND SIZE. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- (201) → HOT TAP EXISTING 10" WATERLINE WITH TAPPING SLEEVE (10"x8" MUELLER WITH MECHANICAL JOINT TAPPING SLEEVE OR APPROVED EQUAL) AND 8" TAPPING VALVE (MUELLER RESILIENT WEDGE TAPPING VALVE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
- (204) → FURNISH AND INSTALL WATER VALVE BOX PER ODOT STD DWG RD258.
- (208) → FURNISH AND INSTALL 8" - 45° VERTICAL BEND. RESTRAIN ALL JOINTS WITHIN 50 FEET OF UPPER BENDS AND 10 FEET ON LOWER BENDS.
- (209) → FURNISH AND INSTALL 10"x8" CROSS. RESTRAIN ALL PIPE JOINTS WITHIN 20 FEET OF TEE.
- (214) → FURNISH AND INSTALL 10" GATE VALVE (MUELLER RESILIENT WEDGE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
- (220) → FURNISH AND INSTALL 8" PVC C-900 DR18 WATERLINE. WATERLINE TRENCH PER ODOT STD DWG RD300. BEDDING AND BACKFILL TO BE CRUSHED QUARRY ROCK. DEFLECT PIPE AT JOINTS AS REQUIRED TO ACHIEVE ALIGNMENT. PROVIDE MECHANICAL JOINT THRUST RESTRAINT. MINIMUM 36" OF COVER.
- (222) → FURNISH AND INSTALL NEW WATER SERVICE PER ODOT STD DWG RD274 WITH THE CITY OF HARRISBURG PRE-APPROVED MATERIALS: SERVICE PIPE (1" POLYETHYLENE SDR 7) AND CORPORATION STOP (1" MUELLER) SERVICE SADDLES. BEDDING AND BACKFILL TO BE 1"-0" CRUSHED QUARRY ROCK.  
**NOTE:** IF DURING CONSTRUCTION, THE EXISTING WATER SERVICE IS DISCOVERED TO BE ANYTHING OTHER THAN CITY STANDARD WATER SERVICE (POLYETHYLENE), THEN CONTRACTOR TO REMOVE EXISTING WATER METER AND BOX AND INSTALL A NEW WATER SERVICE LINE AND WATER METER AND BOX PER THE CITY OF HARRISBURG PRE-APPROVED MATERIALS: METER BOX (ARMORCAST PRODUCTS 12"x20"x12" ROTOCAST BOX A6000485), WATER METER LID (ARMORCAST PRODUCTS 12"x20"x1-3" RPM COVER W/ TOUCH READ HOLE A6000484-H2), NEW WATER METER (3/4" IPEARL BY SENSUS), BALL ANGLE METER VALVE (1"x3/4" MUELLER 300 BALL ANGLE METER, B-24259N), SERVICE PIPE (1" POLYETHYLENE SDR 7) AND CORPORATION STOP (1" MUELLER) SERVICE SADDLES.
- (223) → CONTRACTOR TO CONNECT NEW WATER SERVICE TO EXISTING SERVICE USING APPROPRIATE COUPLINGS AND FITTINGS. CONTRACTOR TO DETERMINE SIZE OF EXISTING SERVICE LINE AND INSTALL NEW SERVICE LINE TO MATCH.
- (224) → ABANDON EXISTING WATERLINE IN PLACE ONCE NEW WATER LINE IS INSTALLED AND APPROVED FOR USE.
- (227) → WATER AND SANITARY SEWER CROSSING TO BE IN ACCORDANCE WITH OAR 333-061-0050 (9).
- (600) → CONTRACTOR TO CONSTRUCT AC REPAIR BY PLACING 4" OF COMPACTED LEVEL 2- 1/2" DENSE HMAC OR MATCH EXISTING THICKNESS (WHICHEVER IS GREATER) OVER COMPACTED CRUSHED ROCK PER PAVEMENT REPAIR DETAIL SHEET C7.
- (601) → CONSTRUCT CONCRETE CURB & GUTTER PER ODOT STD DWG RD700. DRILL 3/4" x 4-1/2" HOLES INTO EXISTING GUTTER BAR AND CURB. FILL HOLES WITH EPOXY AND INSERT 8" LONG #5 REBAR INTO HOLE PRIOR TO POURING NEW CURB & GUTTER.
- (602) → CONSTRUCT CONCRETE SIDEWALK 4" THICK PER OREGON STANDARD DRAWING RD720 OVER 4" OF 1"-0" CRUSHED QUARRY ROCK.



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**CONSTRUCTION NOTES**

- (200) POthOLE EXISTING UTILITY AND VERIFY LOCATION, DEPTH, MATERIAL AND SIZE. NOTIFY ENGINEER OF ANY DISCREPANCIES.
  - (203) CONNECT TO EXISTING 6" GATE VALVE. PROVIDE MECHANICAL JOINT RESTRAINT TO ALL PIPE JOINTS A MINIMUM OF 20 FEET FROM EXISTING GATE VALVE.
  - (204) FURNISH AND INSTALL WATER VALVE BOX PER ODOT STD DWG RD258.
  - (205) FURNISH AND INSTALL 8" - 22.5' HORIZONTAL BEND. RESTRAIN ALL JOINTS WITHIN 10 FEET OF BEND.
  - (206) FURNISH AND INSTALL 6" - 45' HORIZONTAL BEND. RESTRAIN ALL JOINTS WITHIN 10 FEET OF BEND.
  - (207) FURNISH AND INSTALL 6" - 22.5' HORIZONTAL BEND. RESTRAIN ALL JOINTS WITHIN 10 FEET OF BEND.
  - (208) FURNISH AND INSTALL 8" - 45' VERTICAL BEND. RESTRAIN ALL JOINTS WITHIN 50 FEET OF UPPER BENDS AND 10 FEET ON LOWER BENDS.
  - (211) FURNISH AND INSTALL 8"x6" CROSS. RESTRAIN ALL PIPE JOINTS WITHIN 20 FEET OF TEE.
  - (213) FURNISH AND INSTALL 8"x6" TEE. RESTRAIN ALL PIPE JOINTS WITHIN 20 FEET OF TEE.
  - (214) FURNISH AND INSTALL 10" GATE VALVE (MUELLER RESILIENT WEDGE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
  - (215) FURNISH AND INSTALL 8" GATE VALVE (MUELLER RESILIENT WEDGE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
  - (216) FURNISH AND INSTALL 6" GATE VALVE (MUELLER RESILIENT WEDGE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
  - (219) CONNECT TO EXISTING FIRE HYDRANT LINE USING APPROPRIATE COUPLINGS AND FITTINGS AFTER NEW WATERLINE IS APPROVED.
  - (220) FURNISH AND INSTALL 8" PVC C-900 DR18 WATERLINE. WATERLINE TRENCH PER ODOT STD DWG RD300. BEDDING AND BACKFILL TO BE CRUSHED QUARRY ROCK. DEFLECT PIPE AT JOINTS AS REQUIRED TO ACHIEVE ALIGNMENT. PROVIDE MECHANICAL JOINT THRUST RESTRAINT. MINIMUM 36" OF COVER.
  - (221) FURNISH AND INSTALL 6" PVC C-900 DR18 WATERLINE. WATERLINE TRENCH PER ODOT STD DWG RD300. BEDDING AND BACKFILL TO BE CRUSHED QUARRY ROCK. DEFLECT PIPE AT JOINTS AS REQUIRED TO ACHIEVE ALIGNMENT. PROVIDE MECHANICAL JOINT THRUST RESTRAINT. MINIMUM 36" OF COVER.
  - (222) FURNISH AND INSTALL NEW WATER SERVICE PER ODOT STD DWG RD274 WITH THE CITY OF HARRISBURG PRE-APPROVED MATERIALS: SERVICE PIPE (1" POLYETHYLENE SDR 7) AND CORPORATION STOP (1" MUELLER) SERVICE SADDLES. BEDDING AND BACKFILL TO BE 1"-0" CRUSHED QUARRY ROCK.
- NOTE:** IF DURING CONSTRUCTION, THE EXISTING WATER SERVICE IS DISCOVERED TO BE ANYTHING OTHER THAN CITY STANDARD WATER SERVICE (POLYETHYLENE), THEN CONTRACTOR TO REMOVE EXISTING WATER METER AND BOX AND INSTALL A NEW WATER SERVICE LINE AND WATER METER AND BOX PER THE CITY OF HARRISBURG PRE-APPROVED MATERIALS: METER BOX (ARMORCAST PRODUCTS 12"x20"x12" ROTOCAST BOX A6000485), WATER METER LID (ARMORCAST PRODUCTS 12"x20"x1-3/8" RPM COVER W/ TOUCH READ HOLE A6000484-H2), NEW WATER METER (3/4" PEARL BY SENSUS), BALL ANGLE METER VALVE (1"x3/4" MUELLER 300 BALL ANGLE METER, B-24259N), SERVICE PIPE (1" POLYETHYLENE SDR 7) AND CORPORATION STOP (1" MUELLER) SERVICE SADDLES.
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  - (224) ABANDON EXISTING WATERLINE IN PLACE ONCE NEW WATER LINE IS INSTALLED AND APPROVED FOR USE.
  - (225) REMOVE WATER VALVE BOXES ONCE NEW WATERLINE IS INSTALLED. ONCE NEW WATERLINE IS APPROVED, ABANDON EXISTING WATERLINE.
  - (227) WATER AND SANITARY SEWER CROSSING TO BE IN ACCORDANCE WITH OAR 333-061-0050 (9).
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project title:

**6TH STREET WATERLINE IMPROVEMENTS**  
FROM TERRITORIAL STREET TO DEMPSEY STREET  
HARRISBURG, OREGON

revisions:

date: AUGUST 27, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A

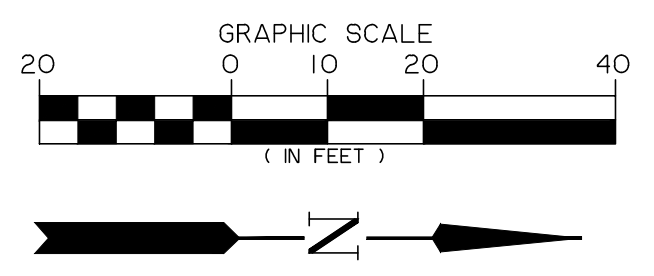
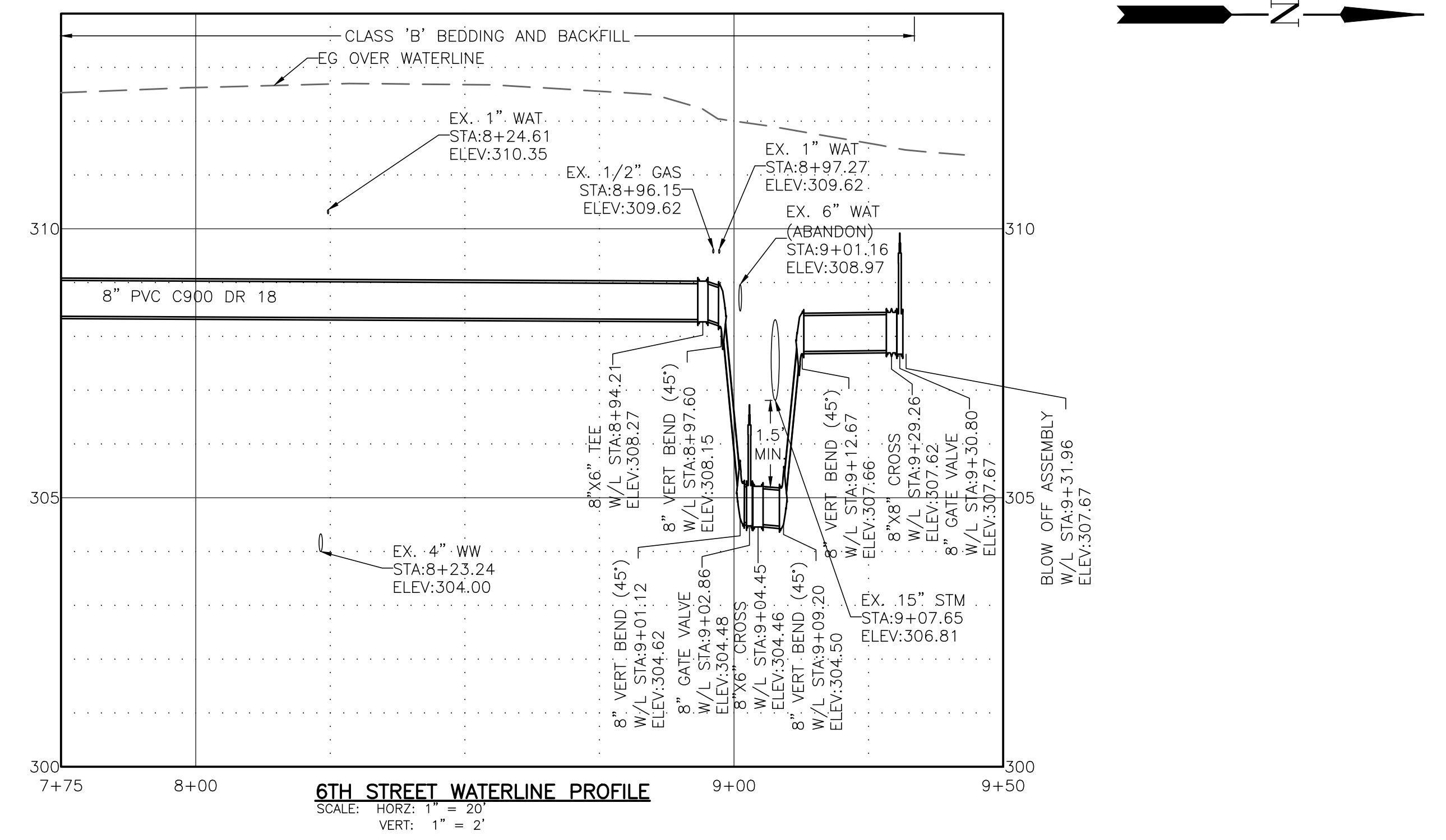
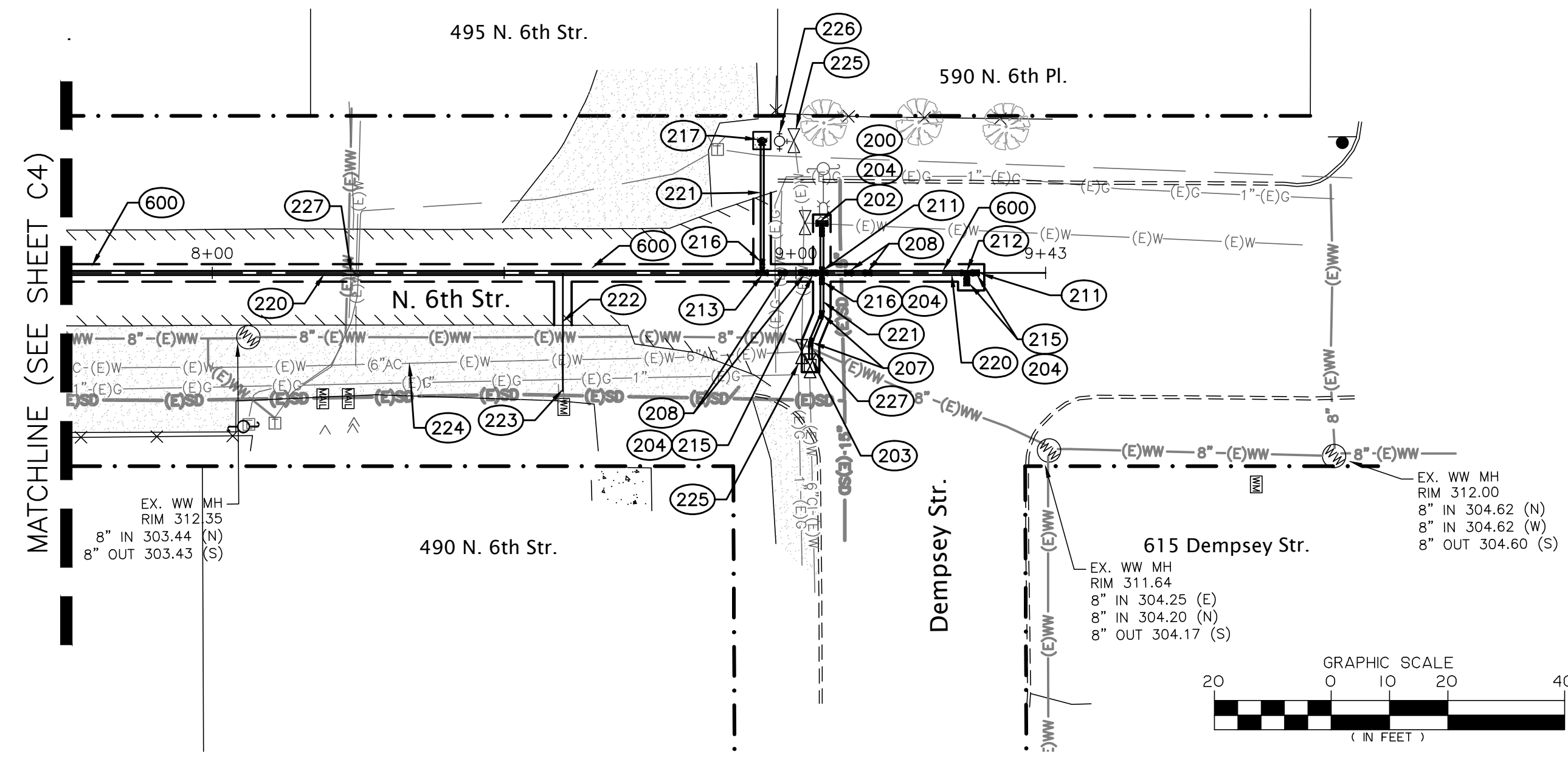
**PROPOSED WATERLINE**  
STA 3+75 TO 7+75

sheet: **C4**

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**CONSTRUCTION NOTES**

- 200 → POTHOLE EXISTING UTILITY AND VERIFY LOCATION, DEPTH, MATERIAL AND SIZE. NOTIFY ENGINEER OF ANY DISCREPANCIES.
  - 202 → HOT TAP EXISTING 8" WATERLINE WITH TAPPING SLEEVE (8"x6" MUELLER WITH MECHANICAL JOINT TAPPING SLEEVE OR APPROVED EQUAL) AND 6" TAPPING VALVE (MUELLER RESILIENT WEDGE TAPPING VALVE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
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  - 216 → FURNISH AND INSTALL 6" GATE VALVE (MUELLER RESILIENT WEDGE OR APPROVED EQUAL). PROVIDE MECHANICAL JOINT THRUST RESTRAINT.
  - 217 → FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY (MUELLER 5 1/2" A423 SUPER CENTURION "250" WITH TWO HOSE NOZZLES AND ONE PUMPER NOZZLE WITH 4" INTEGRAL STORZ CONNECTION). HYDRANT TO BE PAINTED YELLOW WITH APPROVED PAINT. INSTALL 36"x36"x6" CONCRETE PAD. SEE ODOT STD DWG RD254.
  - 218 → FURNISH AND INSTALL BLOW OFF ASSEMBLY. SEE ODOT STD DWG RD262. RESTRAIN ALL PIPE JOINTS 60 FEET FROM BLOW OFF ASSEMBLY.
  - 220 → FURNISH AND INSTALL 8" PVC C-900 DR18 WATERLINE. WATERLINE TRENCH PER ODOT STD DWG RD300. BEDDING AND BACKFILL TO BE CRUSHED QUARRY ROCK. DEFLECT PIPE AT JOINTS AS REQUIRED TO ACHIEVE ALIGNMENT. PROVIDE MECHANICAL JOINT THRUST RESTRAINT. MINIMUM 36" OF COVER.
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  - 224 → ABANDON EXISTING WATERLINE IN PLACE ONCE NEW WATER LINE IS INSTALLED AND APPROVED FOR USE.
  - 225 → REMOVE WATER VALVE BOXES ONCE NEW WATERLINE IS INSTALLED. ONCE NEW WATERLINE IS APPROVED, ABANDON EXISTING WATERLINE.
  - 226 → REMOVE EXISTING FIRE HYDRANT ONCE NEW WATERLINE IS INSTALLED.
  - 227 → WATER AND SANITARY SEWER CROSSING TO BE IN ACCORDANCE WITH OAR 333-061-0050 (9).
  - 600 → CONTRACTOR TO CONSTRUCT AC REPAIR BY PLACING 4" OF COMPACTED LEVEL 2- 1/2" DENSE HMAC OR MATCH EXISTING THICKNESS (WHICHEVER IS GREATER) OVER COMPACTED CRUSHED ROCK PER PAVEMENT REPAIR DETAIL SHEET C7.



project title:

**6TH STREET WATERLINE IMPROVEMENTS**  
FROM TERRITORIAL STREET TO DEMPSEY STREET  
HARRISBURG, OREGON

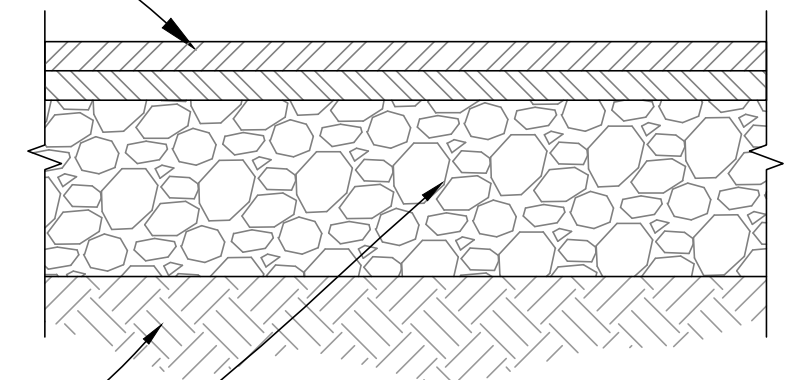
revisions:

date: AUGUST 27, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A

**PROPOSED WATERLINE**  
STA 7+75 TO 9+50

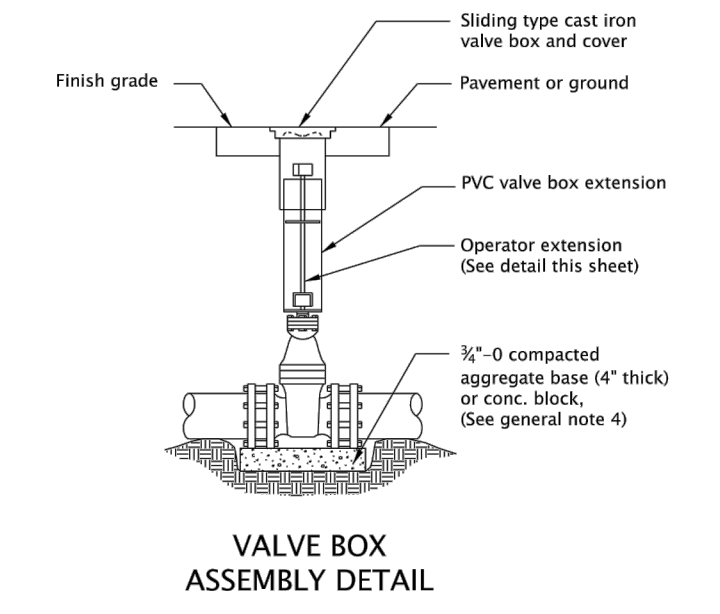
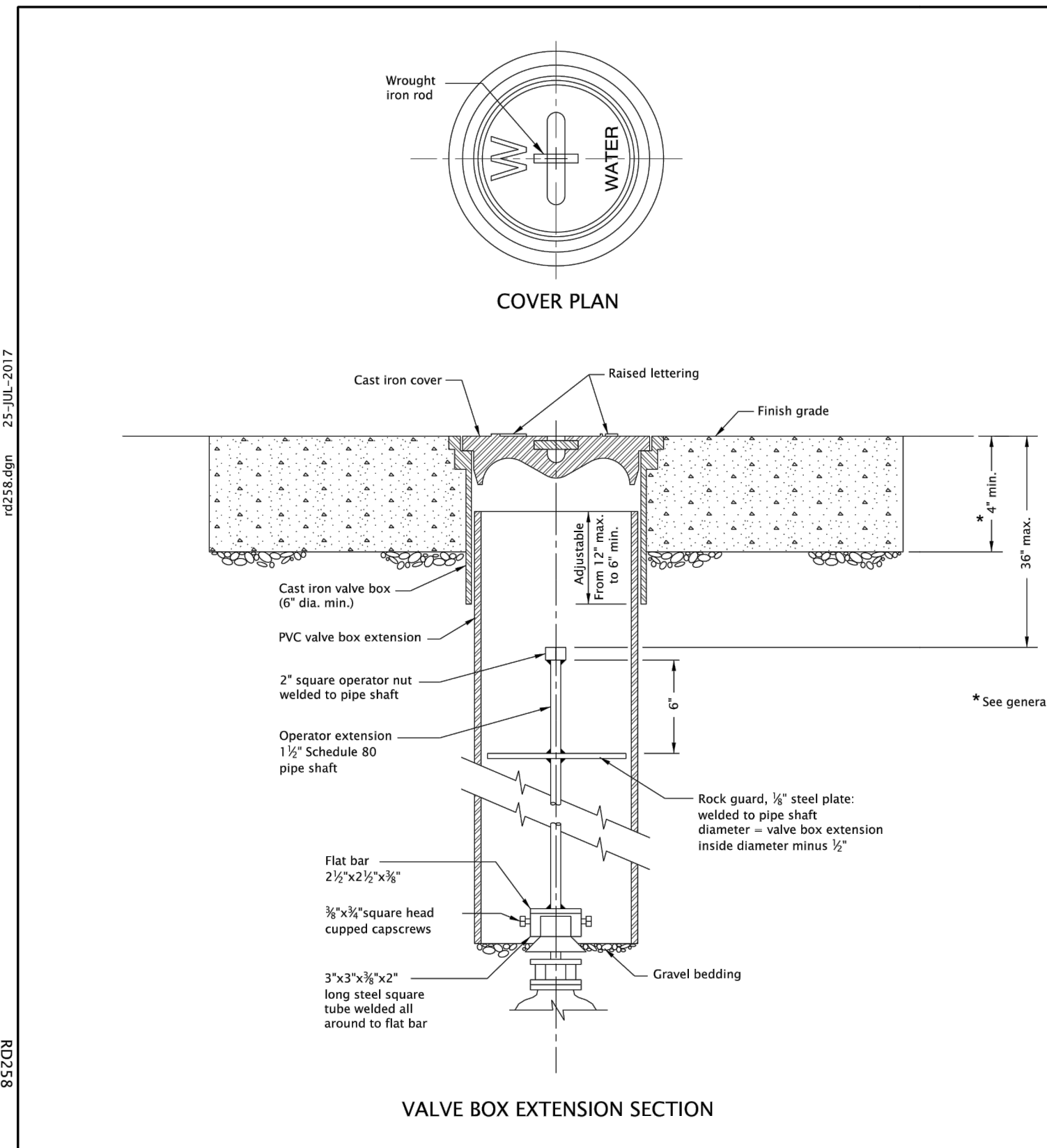
sheet: **C5**

PAVEMENT BASE COURSE SHALL BE 2" LIFT OF LEVEL 2, 1/2" DENSE GRADED HMAC. WEARING COURSE SHALL BE 2" LIFT OF LEVEL 2, 1/2" DENSE GRADED HMAC. FOLLOW 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.



BASE ROCK SHALL BE 12" MIN. 1"-0" CRUSHED QUARRY ROCK AGGREGATE. AGGREGATE SHALL BE COMPACTED TO 95% RELATIVE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. FOLLOW 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.

COMPACTED SUBGRADE  
**PAVEMENT REPAIR DETAIL**



- GENERAL NOTES FOR ALL DETAILS:
1. Valve box not to rest on operating assembly.
  2. Operator extension required when valve nut is deeper than 4" from finish grade.
  3. Center valve box on axis of operator nut.
  4. Valves 12" and smaller shall be provided with compacted aggr. base on undisturbed ground. Valves greater than 12" shall be installed on precast concrete block, (4" thick).
  5. Welds shall be minimum 1/4" all around.
  6. Hot dip galvanize operator extension after fabrication.
  7. Casting shall meet H20 load requirement.
  8. Provide concrete or asphalt pad (24" square, 4" thick), when required.
  9. See project plans for details not shown.

CALC. BOOK NO. N/A	BASELINE REPORT DATE 25-JUL-2017
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>VALVE BOX AND OPERATOR EXTENSION ASSEMBLY</b>	
2018	
DATE	REVISION DESCRIPTION

Effective Date: June 1, 2020 - November 30, 2020 RD258

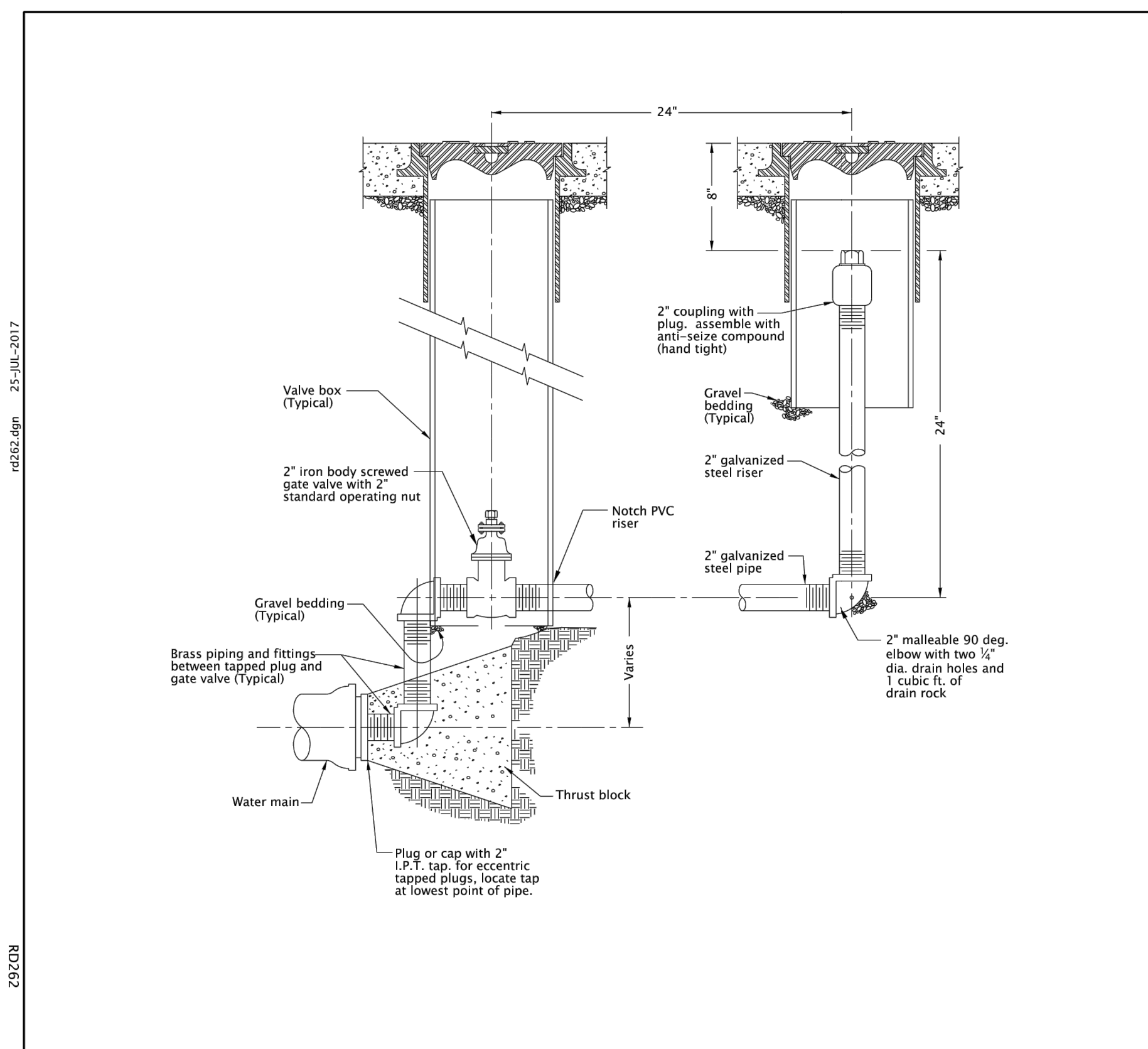
**6TH STREET WATERLINE IMPROVEMENTS**  
FROM TERRITORIAL STREET TO DEMPSEY HARRISBURG, OREGON

revisions:

date: JULY 8, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A

**DETAILS**

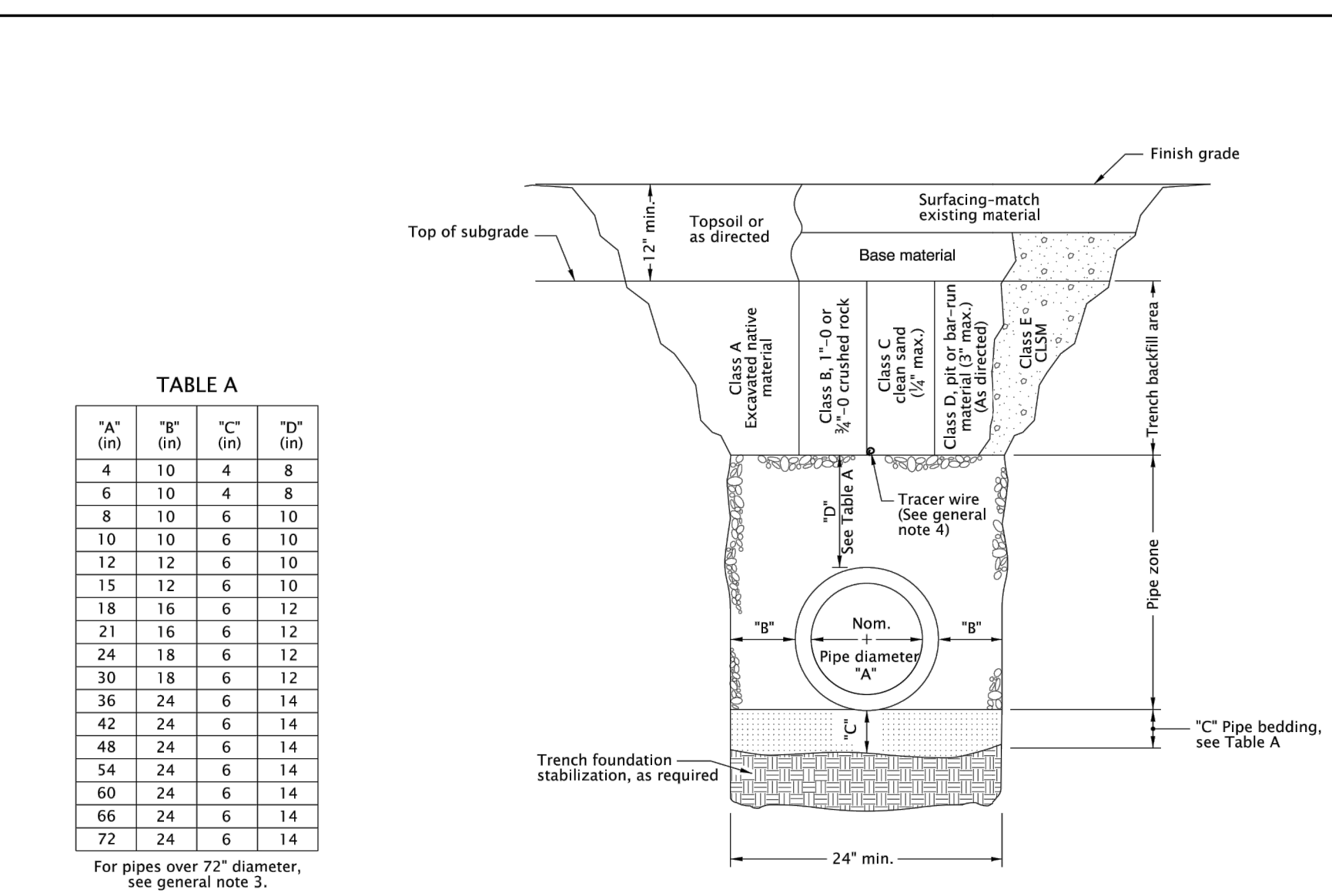
sheet: **C6**



- GENERAL NOTES FOR ALL DETAILS:
1. Wrap main and fittings in thrust block zone with two layers of polyethylene film to facilitate future removal.
  2. In lieu of concrete thrust block, restrain pipe or pour concrete straddle block.
  3. See project plans for details not shown.

CALC. BOOK NO. N/A	BASELINE REPORT DATE 25-JUL-2017
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>TYPICAL MAIN DEAD-END BLOWOFF ASSEMBLY</b>	
2018	
DATE	REVISION DESCRIPTION

Effective Date: June 1, 2020 - November 30, 2020 RD262



**TABLE A**

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.

**MULTIPLE INSTALLATIONS**

DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (1/2) dia. of pipe

NOTE: PIPE BEDDING, PIPE ZONE AND TRENCH BACKFILL SHALL BE 1'-0" OR 3/4'-0" CRUSHED QUARRY ROCK.

- GENERAL NOTES FOR ALL DETAILS:
1. Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
  2. For pipe installation in embankment areas where the trench method will not be used and the pipe is  $\geq 36"$  diameter, increase dimension "B" to nominal pipe diameter.
  3. Pipes over 72" diameter are structures, and are not applicable to this drawing.
  4. See Std. Dwg. RD336 for tracer wire details (When required).

CALC. BOOK NO. N/A	BASELINE REPORT DATE 14-JUL-2014
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS</b>	
2018	
DATE	REVISION DESCRIPTION

Effective Date: June 1, 2020 - November 30, 2020 RD300



EXPIRES: DECEMBER 31, 2020

project title:

**6TH STREET WATERLINE IMPROVEMENTS**  
FROM TERRITORIAL STREET TO DEMPSEY STREET  
HARRISBURG, OREGON

revisions:

date: JULY 8, 2020  
drawn by: GAM  
designer: GAM  
project no: 20-009A  
**DETAILS**

sheet: **C7**

**GENERAL NOTES FOR ALL DETAILS:**

- All existing AC or PCC pavement shall be sawcut prior to repaving.
- Concrete pavement shall be replaced with concrete to a minimum thickness of 6" or to the thickness of removed pavement, whichever is greater.
- Place AC mix minimum thkn. of 4" or the thkn. of the removed pavement, whichever is greater. Compact as specified.

CALC. BOOK NO.	N/A	BASELINE REPORT DATE	12-JUN-2008
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>STREET CUT</b>			
DATE	2018		
REVISION	DESCRIPTION		

Effective Date: June 1, 2020 – November 30, 2020 RD302

**GENERAL NOTES FOR ALL DETAILS:**

- When pipe is shorter than 18', no joints allowed. Use mechanical joint retainer glands. Two 3/4" galvanized tie rods may be used in lieu of thrust blocks for installations less than 18' long. Coat tie rods with two coats of coal tar epoxy.
- When pipe is longer than 18' retainer glands not required.
- There shall be a minimum of 18" horizontal clearance around hydrant.
- When placed adjacent to curb, hydrant port shall be 24" from face of curb.
- Concrete thrust blocks shall be constructed as per thrust blocking Std. Dwg. RD250. Do not block drain holes.
- Extensions required for hydrant systems shall be installed to the manufacturer's specifications.
- Hydrants shall be placed to provide a minimum of 5' clearance from driveways, poles, and other obstructions.
- Hydrant pumper port shall face direction of access.
- Set hydrant plumb in all directions.
- See project plans for details not shown.

CALC. BOOK NO.	N/A	BASELINE REPORT DATE	25-JUL-2017
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>HYDRANT INSTALLATION</b>			
DATE	2018		
REVISION	DESCRIPTION		

Effective Date: June 1, 2020 – November 30, 2020 RD254

**O.D.O.T. & City of Portland Standard "H"=16" STANDARD CURB**  
(See general note 11)

**MOUNTABLE CURB**  
(See general note 11)

**CURB AND GUTTER**

**MOUNTABLE CURB AND GUTTER**

**LOW PROFILE MOUNTABLE CURB**  
(See general note 11)

**MODIFICATION FOR KEYWAY**  
(Where shown on plans)

**WEEP HOLE DETAIL**  
(Where shown on plans, and allowed by jurisdiction)

**CURB ENDING DETAIL**

**VALLEY GUTTER**

**GUTTER PAN NOTES:**  
Slope 5.0% normal.  
Slope 4.0% max. at curb ramps.  
Vary slope as req'd. for drainage. Vary where shown on plans, and allowed by jurisdiction.

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

- Curb exposure "E" - 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or as directed. O.D.O.T. standard "E"-7".
- Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveway.
- Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet and curb ramp.
- Transitions shall be used to connect curbs of different exposures "E". ("E" is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
- Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
- Dimensions are nominal, vary to conform with curb machine approved by the engineer.
- Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
- For sidewalk details, and monolithic curb & sidewalk, see Std. Dwg. RD720 & RD721.
- For drainage curbs, see Std. Dwg. RD701.
- For curb ramp details, see Std. Dwg. RD755.
- On or along state highways, curb and gutter is required at curb ramp.

**The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.**

CALC. BOOK NO.	N/A	BASELINE REPORT DATE	13-JAN-2020
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>CURBS</b>			
DATE	2018		
REVISION	DESCRIPTION		

Effective Date: June 1, 2020 – November 30, 2020 RD700

**TYPICAL PLAN VIEW - CURB LINE SIDEWALK**

**TYPICAL CURB SIDEWALK CROSS SECTION**

**TYPICAL MONOLITHIC CURB & SIDEWALK CROSS SECTION**

**CLEAR CIRCULATION PATH**

**REQUIRED SIDEWALK WIDENING AROUND OBSTRUCTIONS**

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

- Include additional paved or unpaved 2' shy distance to vertical faces higher than 5' such as retaining walls, sound walls, fences and buildings.
- Curb type and sidewalk width as shown on plans or as directed.
- On sidewalks 8' and wider, provide a longitudinal joint at the midpoint.
- Place contraction joint over top of pipe. See Std. Dwg. RD700 for weep hole details.
- Provide expansion joints around poles, posts, boxes, at ends of each driveway, and other fixtures which protrude through or against the structures.
- For sidewalk, monolithic curb & sidewalk, const. expansion joints at 45' maximum spacing. See Std. Dwg. RD722 for expansion joints details.
- Const. contraction joints at 15' maximum spacing, and at ends of each curb ramp. See Std. Dwg. RD722 for contraction joints details.
- For curb details, see Std. Dwg. RD700 & RD701. ODOT standard E-7".
- Sidewalk details are based on ODOT applicable standards.
- Fully lowered sidewalk shown; see project plans for the driveway design specified. For driveway details not shown, see Std. Dwg. RD725, RD730, RD735, RD740, RD745 & RD750.
- See project plans for details not shown.

**LEGEND**

- Sidewalk pay limit.
- Driveway pay limit, varies by option. (See general note 8).
- Slope 1.5% max. (Max. 2.0% finished surface slope)

**The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.**

CALC. BOOK NO.	N/A	BASELINE REPORT DATE	21-JUN-2019
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>CURB LINE SIDEWALKS</b>			
DATE	2018		
REVISION	DESCRIPTION		

Effective Date: June 1, 2020 – November 30, 2020 RD720

RD302.dgn 25-JUL-2017  
RD254.dgn 25-JUL-2017  
RD302.dgn 25-JUL-2017  
RD700.dgn 13-JAN-2020  
RD720.dgn 21-JUN-2019  
002020  
20-009A-009A-6th St. Harrisburg Drawings 20-009A Details - 6th Street Waterline Replacements.dwg 8/5/2020 8:35 AM GREGM