



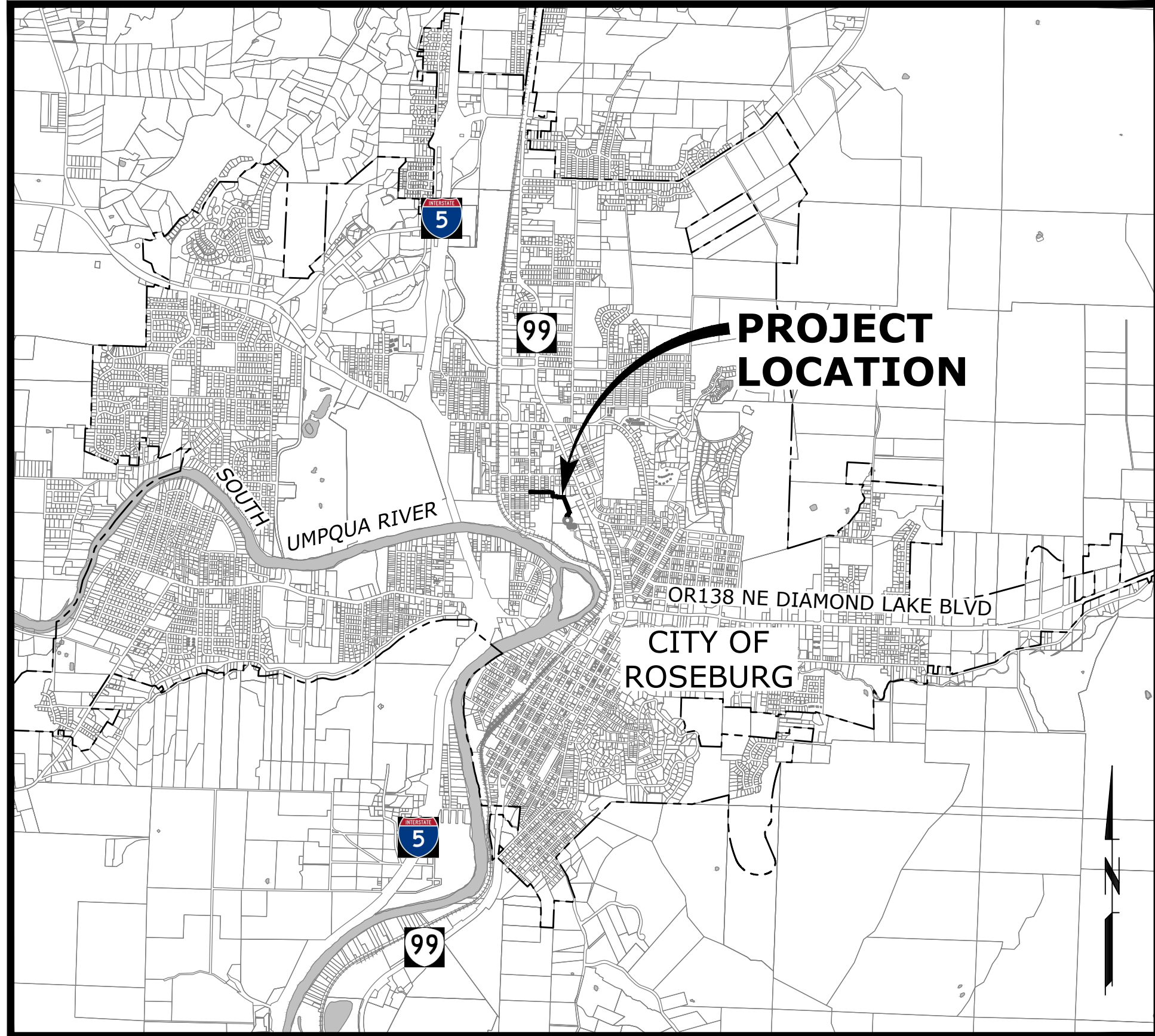
PROJECT #19WA04

WEST AVENUE WATER MAIN EXTENSION

CITY OF ROSEBURG, OREGON

VOLUME 2 OF 2 DRAWINGS

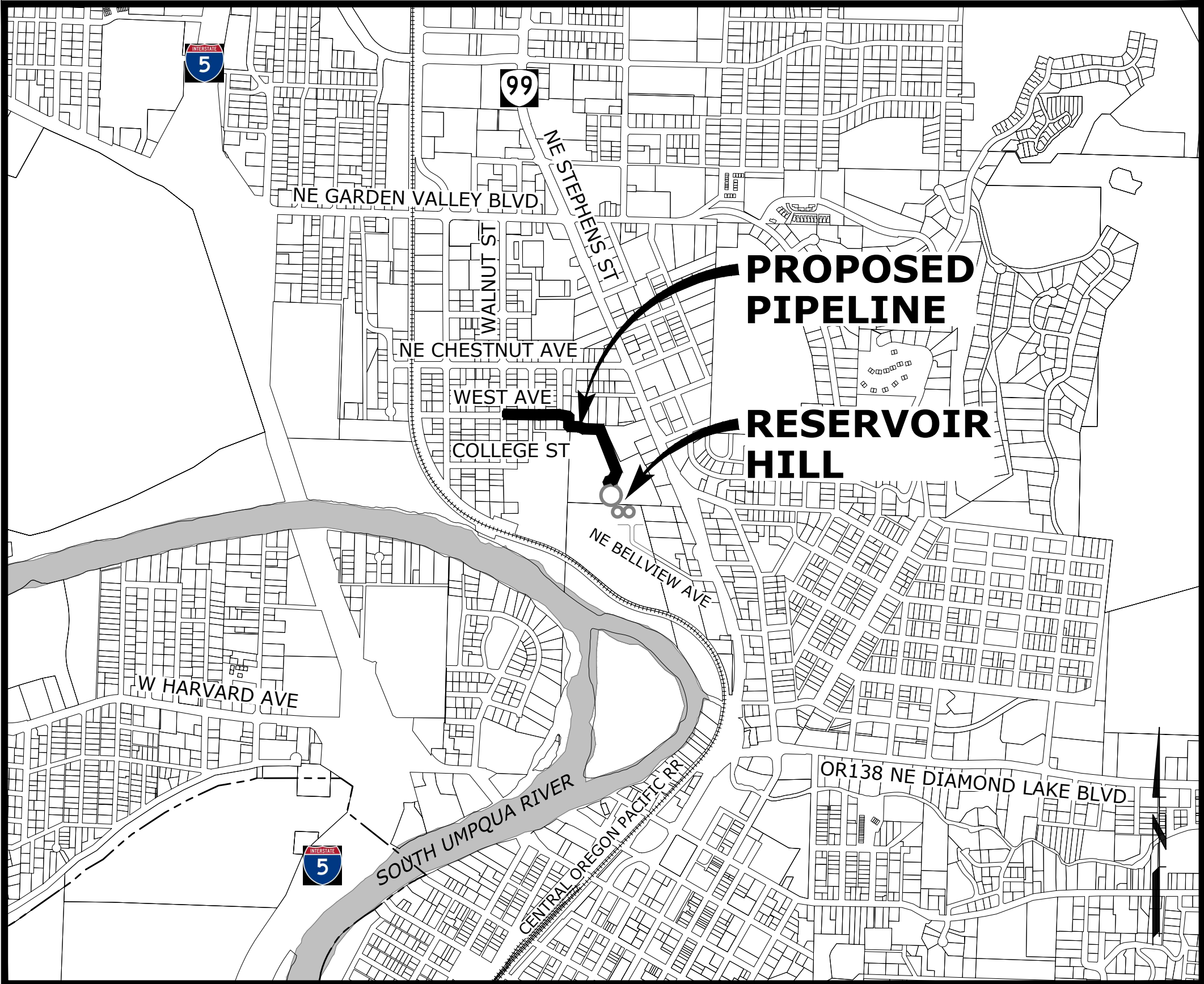
DECEMBER 2020



VICINITY MAP
SCALE: 1"=3,000'

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LOCATION MAP
SCALE: 1"=1,000'

murraysmith

888 SW 5TH AVENUE, SUITE 1170
PORTLAND, OREGON 97204
P 503.225.9010

ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)

G:\PDX_Projects\18\2368 - Roseburg West Ave Water Main Extension\CAD\Sheets\18-2368-OR-G.dwg G-2 12/1/2020 12:36 PM KENT.HARJALA 23.0s (LMS Tech)

GENERAL NOTES

1. THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, ELEVATIONS, TYPES AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING NEW PIPING FAR ENOUGH IN ADVANCE TO ALLOW NECESSARY ADJUSTMENTS IN GRADE AND SHALL NOTIFY ENGINEER OF NEED TO ADJUST PIPING INSTALLATION ACCORDINGLY. POTHOLING SHALL SUFFICIENTLY PRECEDE LAYING OF PIPE TO ALLOW REQUIRED ELEVATION ADJUSTMENTS TO BE ACCOMPLISHED WITHOUT REWORK. ELEVATION ADJUSTMENTS SHALL BE EXPECTED AND ARE INCIDENTAL TO THE WORK. DEFLECT PIPE AS REQUIRED AND WITHIN MANUFACTURER'S TOLERANCES TO AVOID EXISTING UTILITIES AND COMPLETE TIE-INS.
2. ALL PROPOSED PRESSURE PIPING SHALL BE RESTRAINED WITH AN APPROVED JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS FOR APPROVED TYPES OF PIPE RESTRAINT FOR PRESSURE PIPE.
3. SEE SPECIFICATION SECTIONS 01 10 00 – SUMMARY OF WORK AND 01 12 16 – WORK SEQUENCE AND SCHEDULE CONSTRAINTS FOR SPECIAL CONSTRUCTION SCHEDULING AND EXISTING TRANSMISSION MAIN SHUTDOWN REQUIREMENTS.
4. ALL CONCRETE SHALL BE A MINIMUM OF 3000 PSI STRENGTH.
5. LOCATIONS OF EXISTING UTILITIES ARE BASED ON INFORMATION SUPPLIED BY THE UTILITIES AND SHALL BE CONSIDERED AS APPROXIMATE ONLY. AS REQUIRED BY STATE LAW, THE CONTRACTOR SHALL OBTAIN UTILITY LOCATES PRIOR TO COMMENCING CONSTRUCTION.
6. ALL PRESSURE PIPING SHALL BE TESTED UNDER A HYDROSTATIC TEST PRESSURE OF 150 PERCENT THE DESIGN PRESSURE, BUT NOT LESS THAN 150 PSI (± 5 PSI), MEASURED FROM THE LOWEST POINT ALONG THE TEST SECTION OR AS SHOWN ON THE PLANS. SEE SPECIFICATIONS.
7. ALL EXISTING FEATURES INCLUDING BUT NOT LIMITED TO ROADWAYS, STRUCTURES, LOTS, CURBS, SIDEWALKS, FENCES, WALLS, PLANTING, DITCHES, MAILBOXES, SIGNS, PIPING AND UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO AS GOOD OR BETTER THAN EXISTING CONDITION AS DETERMINED BY THE OWNER. CONTRACTOR SHALL REPAIR ALL UTILITY SERVICES DAMAGED DURING CONSTRUCTION AND SUCH REPAIR SHALL BE CONSIDERED INCIDENTAL UNLESS PROVIDED FOR OTHERWISE IN THE SPECIFICATIONS.
8. COMPLY WITH OAR CHAPTER 333 RULES FOR REQUIRED WATERLINE-SEWERLINE SEPARATION AND CROSSING REQUIREMENTS. IN SPECIFIC LOCATIONS WHERE WATER PIPELINE IS TO BE INSTALLED CROSSING UNDERNEATH EXISTING SANITARY SEWERS, CONTRACTOR TO EXPOSE EXISTING SEWERS TO NEAREST JOINTS TO EXAMINE CONDITION AND THEN CONCRETE ENCASE OR REPLACE SECTION OF SEWER PER THE REQUIREMENTS OF OAR 333-061-0050(9)(c)(C) IF IT IS FOUND TO BE LEAKING OR ITS CONDITION IS DETERMINED TO BE UNFAVORABLE BY THE CITY'S INSPECTOR. IF EXISTING SEWER'S CONDITION IS DETERMINED TO BE FAVORABLE, CENTER A FULL STICK OF WATER PIPING AT THE CROSSING, ASSURE THAT SEWER IS PROPERLY SUPPORTED DURING AND AFTER BACKFILLING, AND PREPARE A WRITTEN REPORT, ALL PER THE REQUIREMENT'S OF OAR 333. WITH THE CITY AND RUSA'S APPROVAL, THE CONTRACTOR MAY ALSO ELECT TO CUT AND REPLACE A FULL STICK OF SEWER LATERAL PIPING AT CROSSING REGARDLESS OF PIPING CONDITION TO FACILITATE SHORING PROGRESSION AND WATERLINE INSTALLATION. CONTRACTOR SHALL PROVIDE SEWER BYPASS AS REQUIRED TO FACILITATE THE WORK.
9. LIMIT OF TREE/BRUSH LINES SHOWN ON PLANS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD. CONTRACTOR SHALL CLEAR AND GRUB EXISTING VEGETATION WITHIN WORK LIMITS AS REQUIRED TO FACILITATE THE WORK. ALL SURFACES SHALL BE RESTORED PER THE SPECIFICATIONS AFTER WORK HAS BEEN COMPLETED. HYDROSEEDING SHALL BE COMPLETED PRIOR TO SEPTEMBER 1ST UNLESS OTHERWISE APPROVED BY THE ENGINEER. DO NOT REMOVE TREES UNLESS THEY HAVE BEEN PREVIOUSLY IDENTIFIED ON THE PLANS OR IN THE FIELD FOR REMOVAL PER CITY.
10. FINAL LOCATIONS OF ALL NEW FACILITIES SHALL BE FIELD VERIFIED WITH THE CITY'S INSPECTOR AND ENGINEER PRIOR TO CONSTRUCTION.
11. PROVIDE "AS CONSTRUCTED" DRAWINGS TO THE ENGINEER INDICATING ALL CHANGES IN GRADE, ALIGNMENT, FITTINGS AND MATERIALS INSTALLED AND ANY OTHER UTILITIES OR OBSTACLES NOT SO INDICATED ON THESE PLANS.
12. AT THE END OF EACH WORK DAY ALL OPEN TRENCHES SHALL BE BACKFILLED OR COVERED TO THE SATISFACTION OF THE ENGINEER.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CONSTRUCTION SURVEYS. PRIOR TO CONSTRUCTION, FIELD LAYOUT SHALL BE APPROVED BY ENGINEER. SEE CONTRACT DOCUMENTS FOR SURVEY REQUIREMENTS.
14. ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN

COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 1-800-332-2344).

15. CONTRACTOR SHALL PROVIDE ENGINEER WITH MINIMUM 24 HOURS NOTICE WHEN POTHOLING WILL BE COMPLETE. THE CITY'S INSPECTOR OR ENGINEER WILL BE ON SITE DURING POTHOLING TO COORDINATE WITH CONTRACTOR TO REVIEW UTILITY INVESTIGATIONS AND ASSIST CONTRACTOR IN MAKING APPROPRIATE ADJUSTMENTS FOR ANY ALIGNMENT CONFLICTS WHERE CONNECTING TO EXISTING UTILITIES.
16. CONTRACTOR SHALL SUPPORT AND PROTECT AS NECESSARY ANY PIPE OR CONDUIT EXPOSED AS PART OF THE NEW PIPE TRENCH EXCAVATION. CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES AND SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES TO MAINTAIN AND PROTECT SERVICES.
17. THE CONTRACTOR SHALL CONSTRUCT THE WATER MAIN TO THE MINIMUM DEPTHS OF COVER INDICATED ON THE DRAWINGS FOLLOWING THE EXISTING GROUND CONTOURS. WHERE PIPING INVERTS ARE SHOWN ON THE PIPELINE PROFILES, THE PIPELINE SHALL BE CONSTRUCTED TO THOSE INVERTS WITH A UNIFORM SLOPE BETWEEN INVERTS, UNLESS OTHERWISE SPECIFIED OR APPROVED BY ENGINEER.
18. CORROSION MONITORING FACILITIES SHALL BE INSTALLED ON ALL NEW DUCTILE IRON PIPE, AND ANODES SHALL BE INSTALLED WHERE SHOWN ON THE PLANS. JOINT BOND ALL DUCTILE IRON PIPE, VALVES AND FITTINGS BETWEEN ISOLATION JOINTS (INSULATED FLEXIBLE COUPLINGS OR INSULATED FLANGES) UNLESS NOTED OTHERWISE ON THE DRAWINGS. TEST ALL ISOLATION JOINTS AND JUMPER BONDS PRIOR TO BURYING. SEE SPECIFICATION SECTION 26 42 01 FOR DETAILED REQUIREMENTS. SEE SHEET G-3 FOR CORROSION MONITORING LEGEND AND ABBREVIATIONS AND SHEETS C-11 AND C-12 FOR CORROSION MONITORING SYSTEM DETAILS.
19. NO CONNECTION TO EXISTING MAIN LINES WILL BE ALLOWED, EXCEPT BY MEANS OF AN APPROVED BACKFLOW PREVENTION DEVICE, PRIOR TO SATISFACTORY FLUSHING, TESTING, DISINFECTION, AND RECEIPT OF SATISFACTORY BACTERIOLOGICAL TESTS. CONTRACTOR TO PROVIDE TEMPORARY BLOW-OFF ASSEMBLIES AT ALL CONNECTIONS TO EXISTING PIPING AS REQUIRED TO FACILITATE TESTING AND DISINFECTION OF NEW PIPELINES. SEE DETAIL 2, SHEET C-7.
20. POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL BURIED DUCTILE IRON PIPES PER THE REQUIREMENTS OF AWWA C105.
21. INSTALL WAX TAPE COATING SYSTEM ON BURIED DUCTILE IRON PIPE FITTINGS AND VALVES, AND THEIR FASTENERS AND RESTRAINTS. INSTALL POLYETHYLENE ENCASEMENT OVER WAX TAPE AS NOTED ABOVE. SEE SPECIFICATIONS.
22. CONTRACTOR'S WORK WILL BE ON STEEP TERRAIN IN REMOTE LOCATION FOR SECTIONS OF THIS PROJECT. IT SHALL BE NOTED THAT IN THE EVENT OF A FIRE EMERGENCY, WATER WILL NOT BE READILY AVAILABLE TO THE CONTRACTOR FROM THE EXISTING PIPING CONFIGURATION AT THE RESERVOIR SITE UNLESS SPECIAL PROVISIONS ARE COORDINATED WITH THE CITY AHEAD OF PROGRESS OF WORK. CONTRACTOR TO EXERCISE CAUTION AS NECESSARY.

SURVEY CONTROL POINTS *

NO.	NORTHING	EASTING	ELEVATION	RAW DESCRIPTION
1	578692.4380'	4162524.7600'	694.844'	CP IR LMSI
2	579228.4670'	4161382.1260'	463.507'	CP IR LMSI

* SEE SHEET C-1 FOR APPROXIMATE LOCATIONS.

SURVEY CONTROL

HORIZONTAL DATUM:
SYSTEM - OREGON STATE PLANE 1983 (2011)
ZONE – OREGON SOUTH ZONE PER GPS OBSERVATION UTILIZING C.O.R.S. STATION "RSBG"

VERTICAL DATUM:
NAVD 88

NO.	DATE	BY	REVISION

NOTICE

0

1/2

1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

JRL
DESIGNED
NEM
DRAWN
TPB
CHECKED

REGISTERED PROFESSIONAL
ENGINEER
80998

OREGON
MAY 23, 2019

JUSTIN RUSSELL LUCE

RENEWS 12-31-20

murraysmith



WEST AVENUE
WATER MAIN
EXTENSION

GENERAL NOTES AND SURVEY
CONTROL POINTS

PROJECT NO.:	18-2368	SCALE:	AS SHOWN	DATE:	DECEMBER 2020
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SHEET

G-2

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TOPOGRAPHIC LEGEND

	EXISTING	PROPOSED
WATERLINE	--- 10"W ---	— 24" W —
ELECTRICITY	--- E ---	— E —
GAS	--- 4"G ---	— 4"G —
TELEPHONE/TELEMETRY	--- T ---	— T —
CABLE TELEVISION	--- CATV ---	— CATV —
SANITARY SEWER LINE	--- 8"SS ---	— 8"SS —
SANITARY SEWER FORCE MAIN	--- 6"FM ---	— 6"FM —
STORM DRAIN	--- 8"SD ---	— 8"SD —
CULVERT	- - - - -	— 18"D —
ABANDON PIPE		+ + + + +
DRAINAGE DITCH	-	-
FENCE	- x - x - x -	- x - x - x -
CHAIN LINK FENCE	- o - o - o - o -	- o - o - o - o -
GUARDRAIL	-	-
ROCK WALL	-	-
TREE/BUSH LINE	-	-
CENTERLINE	- - - - -	- - - - -
EASEMENT/PROPERTY LINE	- - - - -	- - - - -
RIGHT-OF-WAY	- - - - -	- - - - -
EDGE OF PAVEMENT/AC	-	-
EDGE OF GRAVEL	-	-
CURB	- - - - -	- - - - -
SIDEWALK	- S/W -	- S/W -
STRUCTURE OR FACILITY	- - - - -	- - - - -
CONTOUR MINOR	- - - - -	- - - - -
CONTOUR MAJOR	- 426 -	- 426 -
MANHOLE	- o -	- o -
CLEAN-OUT	- o -	- o -
CATCH BASIN/FIELD INLET	- - - - -	- - - - -
THRUST BLOCK	- Δ -	- Δ -
VALVE	- ⊗ -	- ⊗ -
BLOW-OFF ASSEMBLY	- - - - -	- - - - -
AIR RELEASE ASSEMBLY	- - - - -	- - - - -
FIRE HYDRANT ASSEMBLY	- - - - -	- - - - -
WATER METER	- - - - -	- - - - -
CONCRETE ANCHOR BLOCK	- - - - -	- - - - -
PULL BOX/JUNCTION BOX	- - - - -	- - - - -
UTILITY POLE	- o -	- o -
GUY WIRE	- - - - -	- - - - -
LIGHT POST	- * -	- * -
MAILBOX	- - - - -	- - - - -
SIGN	- - - - -	- - - - -
SURVEY CONTROL POINT	- Δ -	- Δ -
TREE DECIDUOUS	- - - - -	- - - - -
TREE CONIFEROUS	- - - - -	- - - - -
TREE TO BE REMOVED	- - - - -	- - - - -
SURFACE ELEVATION	+ 426.00	+ 426.00

PIPE SYMBOLS

PLANT	SCHEMATIC	
		WELDED JOINT
		FLANGED JOINT
		GROOVED END JOINT
		MECHANICAL JOINT
		PUSH-ON JOINT (RUBBER GASKET)
		FLANGED COUPLING ADAPTER
		DOUBLE BALL FLEXIBLE EXTENSION COUPLING
		FLEXIBLE COUPLING W/THRUST RING
		ELBOW UP
		ELBOW DOWN
		TEE UP
		TEE DOWN
		LATERAL UP
		LATERAL DOWN
		CONCENTRIC REDUCER
		ECCENTRIC REDUCER
		UNION
		BLIND FLANGE
		CAP
		LONG SLEEVE OR FLEX/TRANS CPLG
		FLEXIBLE JOINT
		CAPPED END OR PLUGGED END
		FITTING

VALVE SYMBOLS

PLANT	SCHEMATIC	
		BUTTERFLY VALVE
		GATE VALVE
		GLOBE VALVE
		BALL VALVE
		BALANCING VALVE
		DIAPHRAGM VALVE
		PLUG VALVE (TOP)
		PLUG VALVE (SIDE)
		3-WAY PLUG VALVE
		SWING CHECK VALVE
		DOUBLE CHECK ASSEMBLY
		BALL SWING CHECK
		SILENT CHECK VALVE
		PRESSURE REDUCING VALVE
		ALTITUDE CONTROL VALVE
		SOLENOID VALVE
		RELIEF VALVE
		NEEDLE VALVE
		HOSE VALVE
		REDUCED PRESSURE BACKFLOW PREVENTER W/GATE VALVES
		HOSE BIBB

MISCELLANEOUS PIPING SYMBOLS

	STRAINER
	SIGHT GLASS
	PRESSURE GAUGE W/COCK
	PRESSURE SWITCH W/COCK
	METER

LEGEND AND ABBREVIATIONS FOR CORROSION MONITORING FACILITIES FOR DI PIPE

	EXISTING TEST STATION
	PROPOSED TEST STATION
CP	CATHODIC PROTECTION
IFC	INSULATED FLEXIBLE COUPLING
IFL	INSULATED FLANGE
TS	TEST STATION

PLAN AND PROFILE SYMBOLS

COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) AND AC SURFACE RESTORATION	AC
COMPACTED NATIVE TRENCH BACKFILL (CLASS A)	N
COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) - GRAVEL ROADWAYS	GR
COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) AND NATIVE SURFACE RESTORATION	GRN
TRENCH CHECK DAMS (AT 500' SPACING UNLESS NOTED OTHERWISE AND AS DIRECTED BY ENGINEER)	CD
1½" GRAVEL OVERLAY (¾"-0") - FULL ROADWAY WIDTH (SEE SPEC SECTION 32 11 23)	GRO
CONTROLLED LOW STRENGTH MATERIAL TRENCH BACKFILL AND AC SURFACE RESTORATION	CLSM

NOTE:

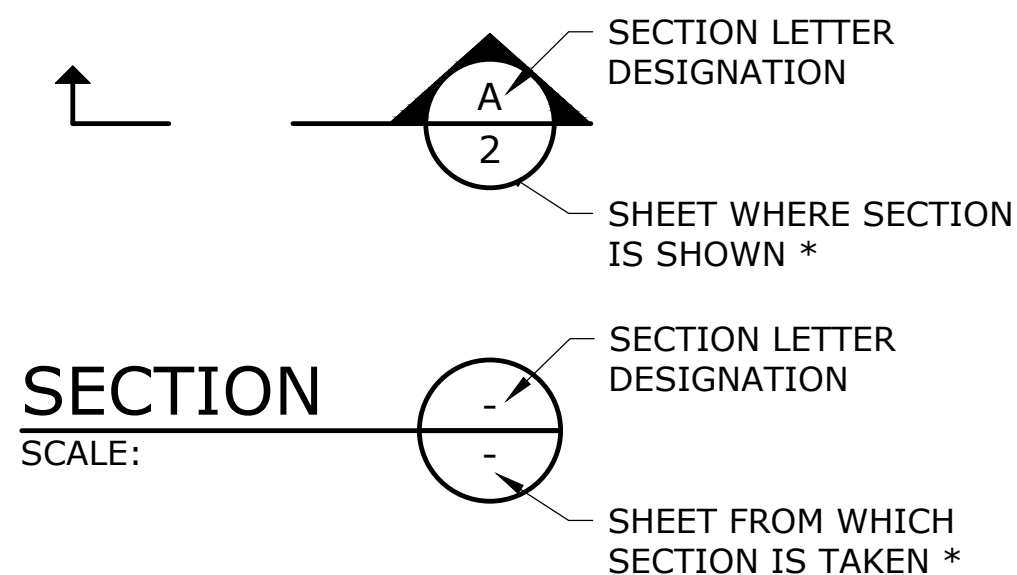
SEE SHEET C-6 FOR SPECIFIC BACKFILL AND SURFACE RESTORATION REQUIREMENTS.

GEOTECHNICAL EXPLORATION SYMBOLS

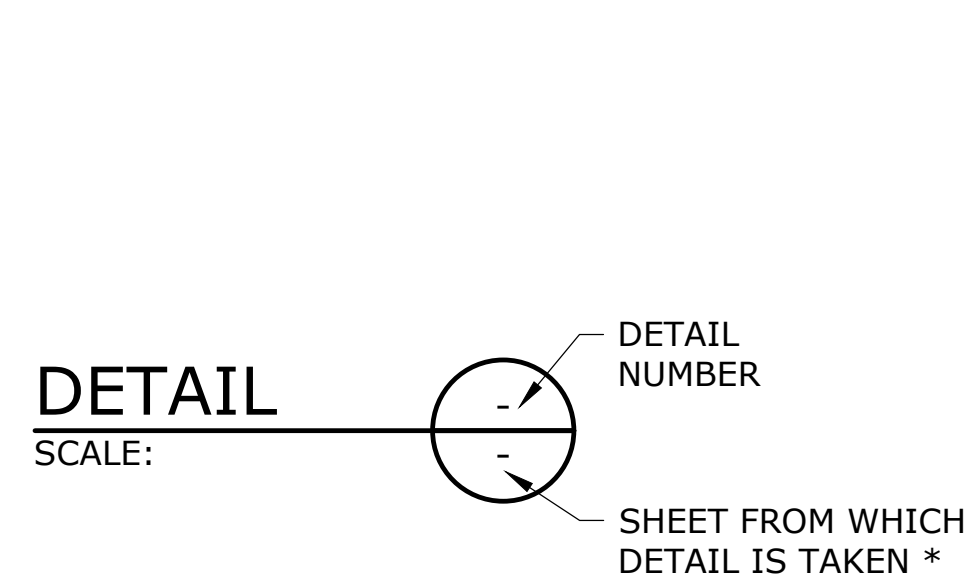
	BORING
	TEST PIT

SECTION AND DETAIL DESIGNATIONS

SECTION DESIGNATIONS



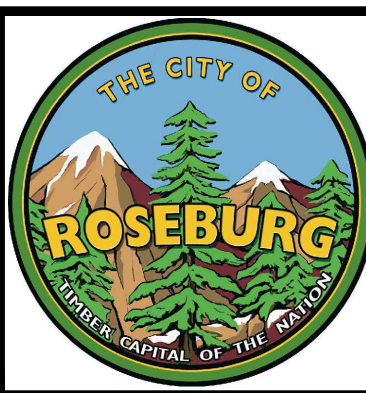
DETAIL DESIGNATION



* NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED WITH A DASH.

NO.	DATE	BY	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE
JRL DESIGNED
NEM DRAWN
TPB CHECKED



WEST AVENUE
WATER MAIN
EXTENSION

SYMBOLS AND LEGEND

PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

G-3

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@ AASHTO AB ABAN(D) ABS ABV AC ACP ADJ ADJC AFF AFG AHR AL ALT AMP ANSI APPROX APPVD APWA ARCH ARV ASCE ASSN ASSY ASTM ATM AUTO AUX AVE AVG AWWA B&S BC BD BETW BF BFD BFILL BFV BHP BKGD BLDG BLK BLVD BM BMP BO BOC BS BSMT BTF BTU BV BW C C TO C CALTRANS CARV CATV CB CCP CCW CDOT CFM CFS CHAN CHEM CHFR CHKV CI CIP CIPC CISP CJ CL OR C/L CL2 CLG CLJ CLR CLSM	AT AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS ANCHOR BOLT ABANDON(ED) ACRYLONITRILE BUTADIENE STYRENE ABOVE / ALCOHOL BY VOLUME ASPHALTIC CONCRETE ASPHALTIC CONCRETE PAVING ADJUSTABLE ADJACENT ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ANCHOR ALUMINUM ALTERNATE AMPERE AMERICAN NATIONAL STANDARDS INSTITUTE APPROXIMATE APPROVED AMERICAN PUBLIC WORKS ASSOCIATION ARCHITECTURAL AIR RELEASE VALVE AMERICAN SOCIETY OF CIVIL ENGINEERS ASSOCIATION ASSEMBLY AMERICAN SOCIETY FOR TESTING & MATERIALS ATMOSPHERE AUTOMATIC AUXILIARY AVENUE AVERAGE AMERICAN WATER WORKS ASSOCIATION BELL & SPIGOT BOLT CIRCLE BOARD BETWEEN BOTH FACE BACKFLOW PREVENTION DEVICE BACKFILL BUTTERFLY VALVE BRAKE HORSEPOWER BACKGROUND BUILDING BLOCK BOULEVARD BENCHMARK / BEAM BEST MANAGEMENT PRACTICES BLOW-OFF BACK OF CURB BOTH SIDES BASEMENT BOTTOM FACE BRITISH THERMAL UNIT BALL VALVE BOTH WAYS CELSIUS CENTER TO CENTER CALIFORNIA DEPARTMENT OF TRANSPORTATION COMBINATION AIR RELEASE VALVE CABLE TELEVISION CATCH BASIN CONCRETE CYLINDER PIPE COUNTER CLOCKWISE COLORADO DEPARTMENT OF TRANSPORTATION CUBIC FEET PER MINUTE CUBIC FEET PER SECOND CHANNEL CHEMICAL CHAMFER CHECK VALVE CAST IRON CAST IRON PIPE CAST IN PLACE CONCRETE CAST IRON SOIL PIPE CONSTRUCTION JOINT CENTER LINE CHLORINE CEILING CONTROL JOINT CLEAR CONTROLLED LOW STRENGTH MATERIAL	CMP CMU CND CNO COL COMB CONC CONN CONST CONT CONTR COORD COP CORP CORR CP CPLG CPVC CR CS CSP CT CTR CU CULV CV CW CY CYL D DC DEFL DEQ DET DI DIA DIM DIR DIST DN DR DS DWG DWL DWV DWY E / ELEC EA ECC EF EL ELB ENCL EOP EQ EQL SP EQUIP ESMT EW EXC EXIST EXP EXP BT EXP JT EXT F F TO F FAB FB FCA FCO FD FDN FEXT FF FGL FH FIN FIPT FITG FL FLEX FLG FLL FLR FM	CORRUGATED METAL PIPE CONCRETE MASONRY UNIT CONDUIT CLEANOUT COLUMN COMBINATION CONCRETE CONNECTION CONSTRUCTION CONTINUOUS / CONTINUATION CONTRACT(OR) COORDINATE COPPER CORPORATION CORRUGATED CONTROL POINT / CATHODIC PROTECTION COUPLING CHLORINATED POLYVINYL CHLORIDE CRUSHED ROCK COMBINED SEWER CONCRETE SEWER PIPE COURT CENTER CUBIC CULVERT CONTROL VALVE CLOCKWISE / COLD WATER CUBIC YARDS CYLINDER LOCK DRAIN DIRECT CURRENT DEFLECTION DEPARTMENT OF ENVIRONMENTAL QUALITY DETAIL DUCTILE IRON DIAMETER DIMENSION DIRECTION DISTANCE DOWN DRIVE DOWNSPOUT DRAWING DOWEL DRAIN WASTE AND VENT DRAINWAY ELECTRICAL EACH ECCENTRIC EACH FACE ELEVATION ELBOW ENCLOSURE EDGE OF PAVEMENT EQUAL EQUALLY SPACED EQUIPMENT EASEMENT EACH WAY EXCAVATE EXISTING EXPANSION EXPANSION BOLT EXPANSION JOINT EXTERIOR FAHRENHEIT FACE TO FACE FABRICATE FLAT BAR FLANGED COUPLING ADAPTER FLOOR CLEANOUT FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FAR FACE FIBERGLASS FIRE HYDRANT FINISH(ED) FEMALE IRON PIPE THREAD FITTING FLOOR LINE FLEXIBLE FLANGE FLOW LINE FLOOR FORCE MAIN	FO FOC FOF FOM FOS FPM FPS FRP FT FTG FUT FXTR G GA GAL GALV GC GEN GFA GI GIP GJ GL GLV GND GPD GPH GPM GPS GR GR LN GRTG GV GRVL GYP HB HC HDPE HDR HDWE HGR HGT HH HM HMAC HNDRL HOA HOR HORIZ HP HPG HPT HR HSB HV HVAC HWL HWY HYD HYDR I&C IAW ID IE IF IJ IMPTV IN INCC INFL INJ INSTL INSUL INTER INTR INV IP IPT IR IRRIG JT JUNC KPL	FIBER OPTIC FACE OF CONCRETE FACE OF FINISH FACE OF MASONRY FACE OF STUDS FEET PER MINUTE FEET PER SECOND FIBERGLASS REINFORCED PLASTIC FEET / FOOT FOOTING FUTURE FIXTURE GAS GAUGE GALLON GALVANIZED GROOVED COUPLING GENERAL GROOVED FLANGE ADAPTER GALVANIZED IRON GALVANIZED IRON PIPE GRIP JOINT GLASS GLOBE VALVE GROUND GALLONS PER DAY GALLONS PER HOUR GALLONS PER MINUTE GALLONS PER SECOND GRADE GRADE LINE GRATING GATE VALVE GRAVEL GYPSUM HOSE BIBB HOLLOW CORE HIGH DENSITY POLYETHYLENE HEADER HARDWARE HANGER HEIGHT HANDHOLD HOLLOW METAL HOT MIX ASPHALT CONCRETE HANDRAIL HAND-OFF-AUTO HAND-OFF-REMOTE HORIZONTAL HIGH PRESSURE / HORSEPOWER HIGH PRESSURE GAS HIGH POINT HOUR HIGH STRENGTH BOLT HOSE VALVE HEATING, VENTILATION, AIR CONDITIONING HIGH WATER LINE HIGHWAY HYDRANT HYDRAULIC INSTRUMENTATION & CONTROL IN ACCORDANCE WITH INSIDE DIAMETER INVERT ELEVATION INSIDE FACE ISOLATION JOINT IMPROVEMENT INCH INCLUDE(D)(ING) INFLEUNT INJECTION INSTALLATION / INSTALL INSULATION INTERCEPTOR INTERIOR INVERT IRON PIPE IRON PIPE THREAD IRON ROD IRRIGATION JOINT JUNCTION KICK PLATE	KVA KW KWY L LAB LAV LB LF LIN LN LOC LONG LP LPT LRG LS LT LVL LWL MAN MAT MAX MCC MCP MECH MET MFR MGD MH MIN MIPT MISC MJ MON MOT MP MSL MTD NA NAVD NC NF NIC NO / NO. NOM NORM NRS NTS O TO O OAR OC OD / O.D. ODOT OF OPNG OPP ORIG OSHA OVHD P&ID PC PCC PCVC PE PERF PERM PERP PG PH PI PIVC PL OR P/L PLBG PNL POC POLY PP PRC PRCST KILOVOLT AMPERE KILOWATT KEYWAY LENGTH LABORATORY LAVATORY POUND LINEAR FOOT LINEAL LANE LOCATION LONGITUDINAL LOW PRESSURE LOW POINT LARGE LONG SLEEVE / LUMP SUM LEFT LEVEL LOW WATER LINE MANUAL MATERIAL MAXIMUM MOTOR CONTROL CENTER MASTER CONTROL PANEL MECHANICAL METAL MANUFACTURER MILLION GALLONS PER DAY MANHOLE MINIMUM MALE IRON PIPE THREAD MISCELLANEOUS MECHANICAL JOINT MONUMENT / MONOLITHIC MOTOR MILEPOST MEAN SEAL LEVEL MOUNTED NOT APPLICABLE NORTH AMERICAN VERTICAL DATUM NORMALLY CLOSED NEAR FACE NOT IN CONTRACT NORMALLY OPEN / NUMBER NOMINAL NORMAL NON-RISING STEM NOT TO SCALE OUT TO OUT OREGON ADMINISTRATIVE RULES ON CENTER OUTSIDE DIAMETER OREGON DEPARTMENT OF TRANSPORTATION OVERFLOW / OUTSIDE FACE OPENING OPPOSITE ORIGINAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION OVERHEAD PROCESS & INSTRUMENTATION DIAGRAM POINT OF CURVE POINT OF COMPOUND CURVE POINT OF CURVATURE ON VERTICAL CURVE PLAIN END PERFORATED PERMANENT PERPENDICULAR PRESSURE GAUGE PIPE HANGER POINT OF INTERSECTION POINT OF INTERSECTION ON VERTICAL CURVE PROPERTY LINE / PLATE / PLASTIC PLUMBING PANEL POINT OF CURVATURE POLYETHYLENE POWER POLE POINT OF REVERSE CURVATURE PRECAST PREP PRESS PRKG PROP PRV PS PSIG PSL PSPT PT PTVC PV PVC PVMT PWR QTY RAD RC RCP RD RDCR REF REINF REQ'D RESTR RFCA RM RND RO R/W RPBPD RPM RR RST RT SALV SAN SC SCHED SD SDL SDR SECT SHLDR SHT SIM SLP SLV SOLN SP SPCL SPEC(S) SPG SPL SPRT SQ SQ FT SQ IN SQ YD SS SST STL STOR STR STRUCT SUBMG SUCT SV S/W SWD SWGR SYMM SYS T OR TEL T&B TAN TB TBM TC PREPARATION PRESSURE PARKING PROPERTY PRESSURE REDUCING VALVE PUMP STATION POUNDS PER SQUARE INCH GAUGE PIPE SLEEVE PIPE SUPPORT POINT OF TANGENCY POINT OF TANGENCY ON VERTICAL CURVE PLUG VALVE POLYVINYL CHLORIDE PAVEMENT POWER QUANTITY RADIUS REINFORCED CONCRETE REINFORCED CONCRETE PIPE ROAD / ROOF DRAIN REDUCER REFERENCE REINFORCE(D)(ING)(MENT) REQUIRED RESTRAINED RESTRAINED FLANGE COUPLING ADAPTER ROOM ROUND ROUGH OPENING RIGHT-OF-WAY REDUCED PRESSURE BACKFLOW PREVENTION DEVICE REVOLUTIONS PER MINUTE RAILROAD REINFORCED STEEL RIGHT SALVAGE SANITARY SOLID CORE SCHEDULE STORM DRAIN SADDLE STANDARD DIMENSION RATIO SECTION SHOULDER SHEET SIMILAR SLOPE SLEEVE SOLUTION SOIL PIPE / SEWER PIPE SPECIAL SPECIFICATION(S) SPACING SPOOL SUPPORT SQUARE SQUARE FOOT SQUARE INCH SQUARE YARD SANITARY SEWER STAINLESS STEEL STREET STATION STANDARD STEEL STORAGE STRAIGHT STRUCTURE / STRUCTURAL SUBMERGED SUCTION SOLENOID VALVE SIDEWALK SIDEWATER DEPTH SWITCH GEAR SYMMETRICAL SYSTEM TELEPHONE TOP & BOTTOM TANGENCY THRUST BLOCK TEMPORARY BENCHMARK TOP OF CONCRETE / TOP OF CURB	TCE TDH TEMP T&G THK THRD THRU TP TRANS UH UN UON USGS V VAC VB VBOX VC VERT VFD VOL VCP VTR W W/ W/IN W/O W/W WD WF WH WI WM WP WS WSDOT WT WTP WTRT WWF WWTF WWTP X SECT XFMR YD YH YR ZN	TEMPORARY CONSTRUCTION EASEMENT TOTAL DYNAMIC HEAD TEMPERATURE / TEMPORARY TONGUE & GROOVE THICK / THICKNESS THREAD (ED) THROUGH TEST PIT / TOP OF PAVEMENT / TURNING POINT TRANSITION TEST STATION TRI-SODIUM PHOSPHATE TOP OF STEEL TOP OF WALL TYPICAL UNDERGROUND UNIT HEATER UNION UNLESS OTHERWISE NOTED UNITED STATES GEOLOGIC SURVEY VENT / VOLT VACUUM VACUUM BREAKER VALVE BOX VERTICAL CURVE VERTICAL VARIABLE FREQUENCY DRIVE VOLUME VITRIFIED CLAY PIPE VENT THROUGH ROOF WATER WITH WITHIN WITHOUT WALL TO WALL WOOD WIDE FLANGE WATER HEATER WROUGHT IRON WATER METER WORKING POINT / WATERPROOFING WATER SERVICE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION WEIGHT WATER TREATMENT PLANT WATERTIGHT WELDED WIRE FABRIC WASTEWATER TREATMENT FACILITY WASTEWATER TREATMENT PLANT CROSS SECTION TRANSFORMER YARD DRAIN / YARD YARD HYDRANT YEAR ZINC
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NO.	DATE	BY	REVISION

NOTICE

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1/2

1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

JRL

DESIGNED

NEM

DRAWN

TPB

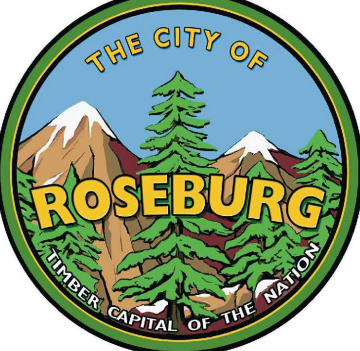
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REGISTERED PROFESSIONAL
ENGINEER
80998

OREGON
MAY 23, 2019
JUSTIN RUSSELL LUCE

RENEWS 12-31-20





WEST AVENUE
WATER MAIN
EXTENSION

ABBREVIATIONS

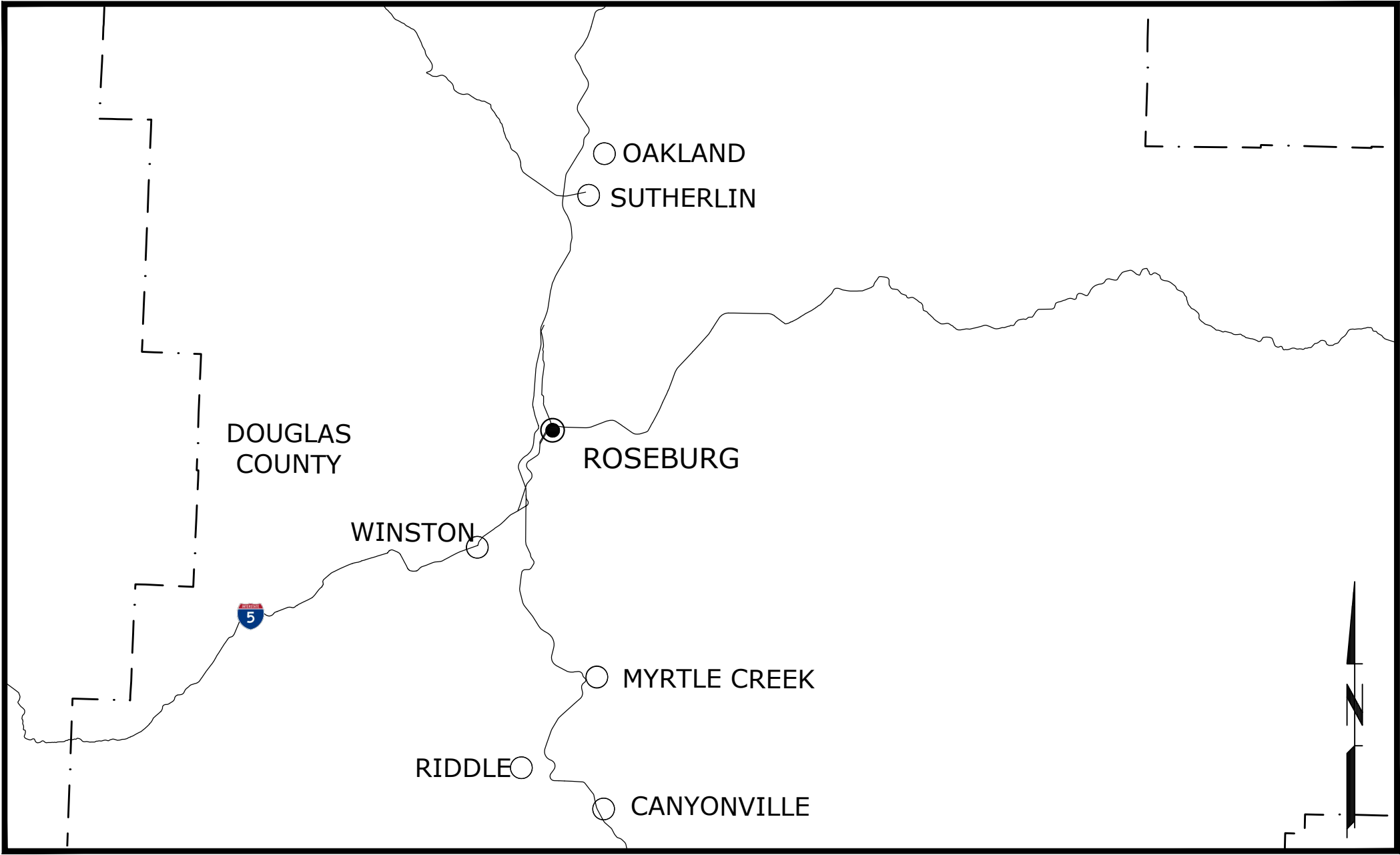
PROJECT NO.: 18-2368 | SCALE: AS SHOWN | DATE: DECEMBER 2020

SHEET

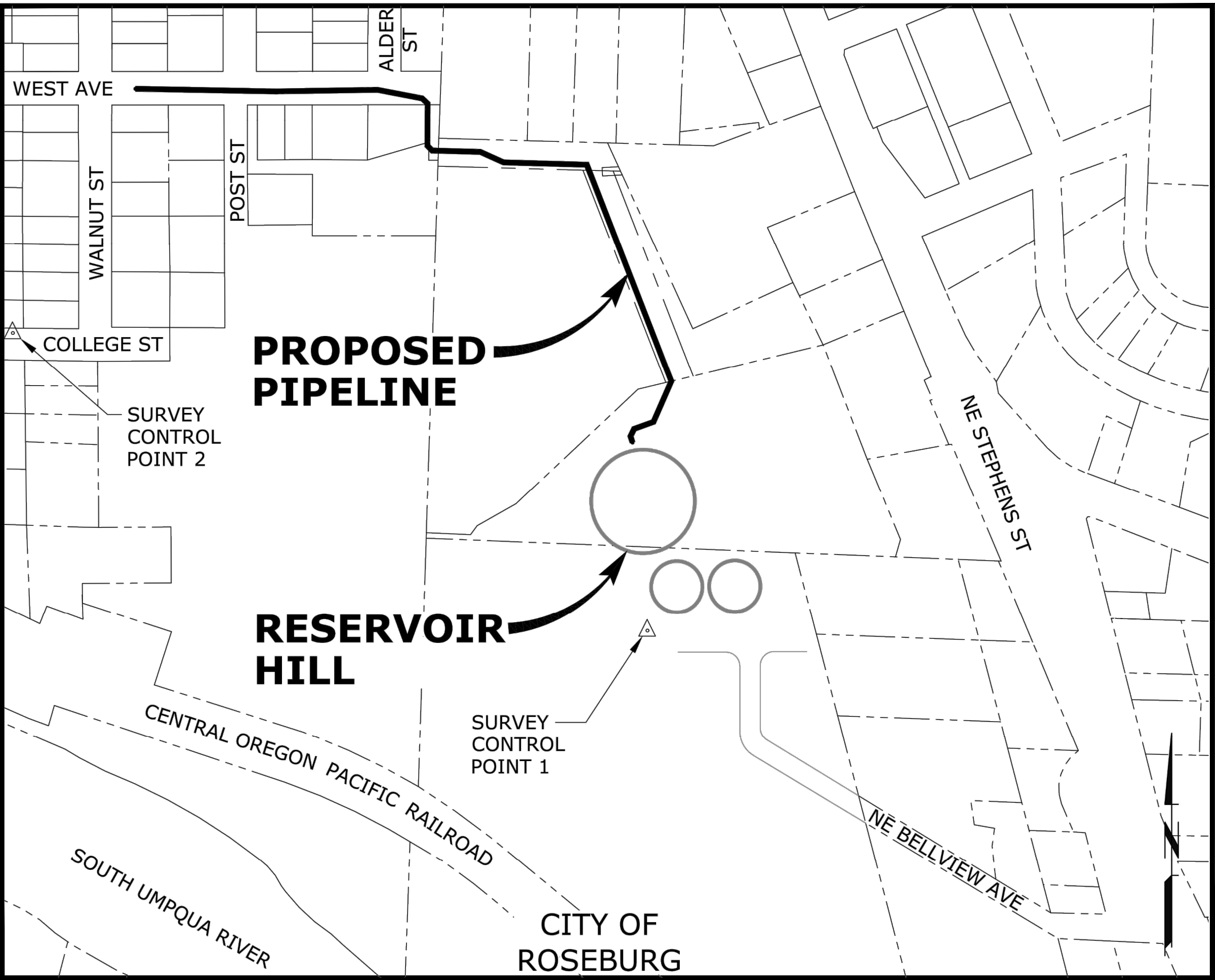
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EROSION AND SEDIMENT CONTROL PLANS



REGIONAL MAP
SCALE: 1"=35,000'



VICINITY MAP
SCALE: 1"=1,000'

PROJECT LOCATION:

NE WEST AVENUE AND RESERVOIR HILL @ LAT, LONG:
43°13'11"N, 123°20'50"W

PROPERTY DESCRIPTION:

CITY OF ROSEBURG ROADWAYS, RIGHTS-OF-WAY, AND EASEMENTS

DEVELOPER NAME

CITY OF ROSEBURG
CONTACT: DARYN ANDERSON
900 SE DOUGLAS AVENUE
ROSEBURG, OR 97470
PHONE: (541) 492-6730

PLANNING / ENGINEERING SURVEYING FIRM

MURRAYSMITH, INC.
CONTACT: JUSTIN LUCE, P.E.
888 SW 5TH AVE, SUITE 1170
PORTLAND, OR 97204
PHONE: (503) 225-9010

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

* CITY OF ROSEBURG ROADWAYS AND UNIMPROVED RIGHTS-OF-WAY

DEVELOPED CONDITIONS

* BURIED 24" DIAMETER DUCTILE IRON WATER PIPELINE APPROX. 1,500 FT LONG

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

* UTILITY INSTALLATION & FINAL RESTORATION (JULY 2020 – OCTOBER 2020)

TOTAL SITE AREA = 123,695 SF = 2.84 ACRES

TOTAL DISTURBED AREA = 123,695 SF = 2.84 ACRES

SITE SOIL CLASSIFICATION:

CURTIN CLAY

PHILOMATH-DIXONVILLE COMPLEX

RECEIVING WATER BODIES:

SOUTH UMPQUA RIVER

PERMITTEE'S SITE INSPECTOR: DARYN ANDERSON

COMPANY/AGENCY: CITY OF ROSEBURG

PHONE: (503) 492-6730

FAX: N/A

E-MAIL: DANDERSON@CITYOFROSEBURG.ORG

DESCRIPTION OF EXPERIENCE: INTEND TO TRANSFER 1200C PERMIT AND REASSIGN INSPECTOR ROLE TO CONTRACTOR AFTER BID AWARD

INSPECTION FREQUENCY:

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING. AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY:	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER, ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY MONTH.
4. PERIODS DURING WHICH THE SITE INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
5. PERIODS DURING WHICH DISCHARGE IS UNLIKELY DUE TO FROZEN CONDITIONS.	MONTHLY: RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

- * HOLD A PRE-CON MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EC INSPECTOR.
- * ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200C PERMIT REQUIREMENTS.
- * INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200C PERMIT REQUIREMENTS.
- * CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.

ATTENTION EXCAVATORS:

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 THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 1-800-332-2344.

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.B AND SCHEDULE B.1)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.C AND B.2)
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.C)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
6. THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SCHEDULE A.12.C.I)
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.C.IV AND V)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.A.III)
9. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) AND (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS, RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.A.V)
11. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SCHEDULE A.7.B.I. AND (2)(A)(B))
12. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.C.I.(5))
13. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.C)
14. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.D.I)
15. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
16. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATIONS MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SCHEDULE A.8.C.II.(3))
17. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
18. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A.7.D.I AND A.8.C.I.(4))
19. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE.
20. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)
21. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
22. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.E.II)
23. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.A.V)
24. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
25. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.8.B)
26. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
27. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.E.II.(2))
28. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (SCHEDULE A.7.A.I)
29. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
30. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.I)
31. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
32. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
33. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
34. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
35. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
36. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.C.II.(1) AND D.3.C.II AND III)

BMP MATRIX FOR CONSTRUCTION PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S

	UTILITY INSTALLATION	STREET CONSTRUCTION/ RESTORATION	FINAL STABILIZATION	WET WEATHER (OCT. 1-MAY 31ST)
EROSION PREVENTION				
PRESERVE NATURAL VEGETATION	X	X	X	X
GROUND COVER	X	X	X	X
HYDRAULIC APPLICATIONS				
PLASTIC SHEETING				X
MATTING			X	X
DUST CONTROL	X	X	X	X
TEMPORARY/ PERMANENT SEEDING	X		X	X
BUFFER ZONE	X		X	X
OTHER:				
SEDIMENT CONTROL				
SEDIMENT FENCE (PERIMETER)	X	X	X	X
SEDIMENT FENCE (INTERIOR)			X	X
BIO BAGS	X	X	X	X
STRAW WATTLES	X	X	X	X
FILTER BERM	X	X	X	X
INLET PROTECTION	X	X	X	X
DEWATERING (GENERAL)	X	X	X	
DEWATERING (BORE PITS)	X			X
SEDIMENT TRAP				
OTHER:				
RUN-OFF CONTROL				
CONSTRUCTION ENTRANCE	X	X	X	X
PIPE SLOPE DRAIN				
OUTLET PROTECTION				
SURFACE ROUGHENING			X	
CHECK DAMS	X	X	X	X
OTHER:				
POLLUTION PREVENTION				
PROPER SIGNAGE	X	X	X	X
HAZ WASTE MGMT	X	X	X	X
SPILL KIT ON-SITE	X	X	X	X
CONCRETE WASHOUT AREA				
OTHER:				

ALL BMP'S WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY, UNLESS OTHERWISE APPROVED.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

JRL
INITIAL

SHEET INDEX

EROSION AND SEDIMENT CONTROL PLANS

- ESC-1 EROSION AND SEDIMENT CONTROL COVER SHEET
ESC-2 EROSION AND SEDIMENT CONTROL NOTES AND LEGEND
ESC-3 EROSION AND SEDIMENT CONTROL PLAN-1
ESC-4 EROSION AND SEDIMENT CONTROL PLAN-2
ESC-5 EROSION AND SEDIMENT CONTROL DETAILS-1
ESC-6 EROSION AND SEDIMENT CONTROL DETAILS-2

				NOTICE 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		JRL DESIGNED NEM DRAWN TPB CHECKED		REGISTERED PROFESSIONAL ENGINEER 80998 OREGON MAY 23, 2019 JUSTIN RUSSELL LUCE RENEWS 12-31-20		THE CITY OF ROSEBURG OFFICIAL CAPITAL OF THE REGION		WEST AVENUE WATER MAIN EXTENSION		EROSION AND SEDIMENT CONTROL COVER SHEET		SHEET ESC-1	
NO.	DATE	BY		REVISION								PROJECT NO.: 18-2368		SCALE: AS SHOWN	DATE: DECEMBER 2020	5 of 22	

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PRE-CONSTRUCTION EROSION & GLOBAL:
SEDIMENTATION CONTROL NOTES:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
3. CONSTRUCTION ENTRANCES/ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
4. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.
5. LIMIT SPEED OF VEHICLES ON SITE AND MOISTEN HAUL ROADS AS NECESSARY TO CONTROL DUST.

GRADING, STREET AND UTILITY EROSION AND
SEDIMENT CONTROL NOTES:

1. EFFECTIVE EROSION, DUST, SEDIMENTATION AND DRAINAGE CONTROL SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR PER REQUIREMENTS OF LANE COUNTY, CITY OF VENETA, OREGON DEPARTMENT OF TRANSPORTATION (ODOT), OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ), AND ALL OTHER AGENCIES WITH JURISDICTION OVER THE PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL WORK, ADJACENT PROPERTIES AND DOWNSTREAM FACILITIES FROM EROSION AND SILTATION DURING THE COURSE OF THE WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR.
2. THESE PLANS DO NOT RELIEVE THE PERMIT HOLDER AND/OR THE CONTRACTOR FROM ALL OTHER PERMITTING REQUIREMENTS. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, ALL OTHER NECESSARY APPROVALS SHALL BE OBTAINED.
3. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G.: SIZE AND LOCATION OF ROADS, PIPES, RESTRICTIONS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
4. THE IMPLEMENTATION OF THESE EROSION/SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
5. IN THE EVENT THE FACILITIES ARE NOT FUNCTIONING PROPERLY, THE CONTRACTOR IS RESPONSIBLE FOR IMMEDIATELY IMPLEMENTING CHANGES AS DIRECTED BY THE ENGINEER OR INSPECTOR. THE ENGINEER, INSPECTOR OR THE CITY MAY STOP ALL CONSTRUCTION ACTIVITY ON SITE UNTIL THE EROSION PROBLEM IS CORRECTED AND ALL EROSION AND SEDIMENT CONTROL (ESC) FACILITIES ARE FUNCTIONING PROPERLY. IF THE CONTRACTOR DOES NOT IMMEDIATELY IMPLEMENT CHANGES TO THE EROSION AND SEDIMENT CONTROL (ESC) IDENTIFIED BY THE ENGINEER OR INSPECTOR, THE CITY MAY IMPLEMENT THE NECESSARY CHANGES AND REQUIRE PAYMENT FROM THE CONTRACTOR PRIOR TO PROJECT ACCEPTANCE BY THE CITY.
6. THE ESC FACILITIES SHOWN ON THESE PLANS MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL EARTHWORK ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT- LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS
7. THE ESC FACILITIES SHOWN ON THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
8. THE EROSION AND SEDIMENT CONTROL MEASURES ON ACTIVE SITES SHALL BE INSPECTED AND MAINTAINED DAILY AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD. MEASURES SHALL BE INSPECTED BY THE PERMIT HOLDER AND OR THE CONTRACTOR AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS OR ADJUSTMENTS SHALL BE MADE IMMEDIATELY. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
10. SLOPES AND DISTURBED AREAS TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
11. LONG TERM SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE. SEE SPECIFICATIONS.

GRADING, STREET AND UTILITY EROSION AND
SEDIMENT CONTROL NOTES (CONTINUED):

12. TEMPORARY SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
13. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
14. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
15. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
16. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
17. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
18. NO HAZARDOUS SUBSTANCES, SUCH AS PAINTS, THINNERS, FUELS AND OTHER CHEMICALS SHALL BE RELEASED ONTO THE SITE, ADJACENT PROPERTIES, OR INTO WATER FEATURES, THE CITY'S STORM WATER SYSTEM, OR RELATED NATURAL RESOURCES.
19. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
20. EXTRACTED GROUND WATER FROM EXCAVATED TRENCHES SHALL BE DISPOSED OF IN A SUITABLE MANNER WITHOUT DAMAGE TO ADJACENT PROPERTY, PUBLIC STORM WATER SYSTEM, WATER FEATURES, AND RELATED NATURAL RESOURCES.
21. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
22. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
23. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.
24. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.
25. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
26. PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.
27. SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1 FOR EACH PHASE OF CONSTRUCTION. SEE SPECIFICATIONS FOR SEED MIX REQUIREMENTS.
28. ESC MEASURES SHALL BE REMOVED BY THE CONTRACTOR WHEN VEGETATION IS FULLY ESTABLISHED.
29. NOTIFY ENGINEER 24 HOURS PRIOR TO ANY WORK ON SITE.

SEDIMENT FENCE NOTES:

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING AS REQUIRED BY ACTUAL SITE CONDITIONS DURING CONSTRUCTION. SEDIMENT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. EROSION, SEDIMENT AND POLLUTION CONTROL PLAN MEASURES SHALL BE REMOVED BY THE CONTRACTOR UPON SUBSTANTIAL COMPLETION. EROSION AND SEDIMENT CONTROLS MUST REMAIN IN-PLACE UNTIL GROUNDCOVERS HAVE MATURED ENOUGH TO PREVENT NORMAL EROSION FROM OCCURRING.
3. TRENCHED SLOPES SHALL BE SEEDED AND/OR PLANTED IMMEDIATELY AFTER EXCAVATION AND WATERLINE INSTALLATION. DISTURBED SLOPES GREATER THAN 20 PERCENT SHALL BE STABILIZED WITH A STAKED COCONUT MAT FOLLOWING EXCAVATION, BACKFILL, AND SEEDING WITH NATIVE MIX TO PREVENT SOIL RUNOFF.





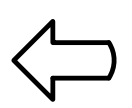
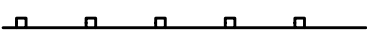

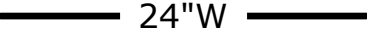

SEDIMENT FENCE NOTES (CONTINUED):

4. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.
5. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
6. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRE OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 12 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
8. WHEN EXTRA-STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF THE ABOVE STANDARD NOTE FOR STANDARD STRENGTH FILTER FABRIC APPLYING.
9. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
10. SEDIMENT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
11. SEDIMENT FENCES SHALL BE INSTALLED AT THE TOE OF FILL SLOPES AND OTHER AREAS IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.

BIO-FILTER BAG NOTES:

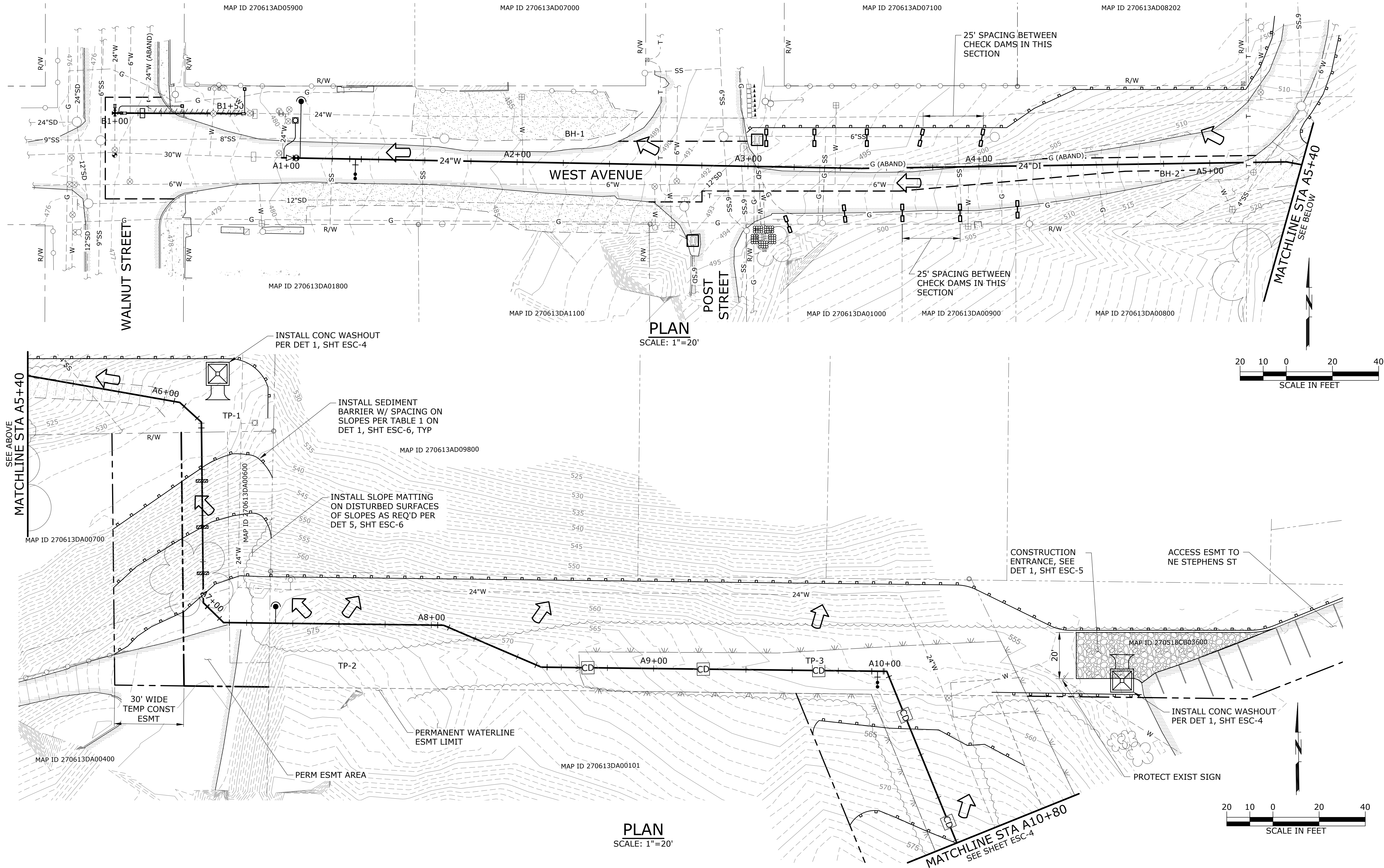
1. BIO-FILTER BAGS SHOULD BE CLEAN 100% RECYCLED WOOD PRODUCT WASTE.
2. BIO-FILTER BAGS SHALL BE STANDARD SIZE 10" x 8" x 30", WEIGHING APPROXIMATELY 45 POUNDS WITH ½" PLASTIC NETTING.
3. USE 2 - 1" x 2" STAKES PER BAG, DRIVEN 12-INCHES INTO GROUND.
4. OVERLAP ENDS OF ADJACENT BAGS 6-INCHES TO PREVENT PIPING BETWEEN JOINTS.
5. ROUTINELY INSPECT BAGS. CHECK THAT STAKES ARE SECURE, ENDS OF BAGS ARE OVERLAPPED AND PLASTIC MESH BAGS HAVE NO TEARS.
6. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO ½ HEIGHT OF BAG.

LEGEND

EXISTING CONTOURS (1')	
EXISTING CONTOURS (5')	
INLET PROTECTION-TYPES 1, 2, 3	
INLET PROTECTION-TYPE 4	
DRAINAGE FLOW DIRECTION	
SEDIMENT BARRIER	
CHECK DAM	
PROPOSED WATERLINE	
CONCRETE WASHOUT	

				<div>NOTICE</div> <div><div>01/21</div></div> <div>IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE</div>		<div>JRL</div> <div>DESIGNED</div> <div>NEM</div> <div>DRAWN</div> <div>TPB</div> <div>CHECKED</div>		<div><div>REGISTERED PROFESSIONAL ENGINEER 80998</div><div>OREGON MAY 23, 2019</div><div>JUSTIN RUSSELL LUCE</div></div> <div>RENEWS 12-31-20</div>		<div><div><div><div></div></div><div><i>murraysmith</i></div></div></div>		<div><div><div>THE CITY OF ROSEBURG</div><div>HEREIN CAPITAL OF THE OREGON</div></div></div> <div>WEST AVENUE WATER MAIN EXTENSION</div>		<div>EROSION AND SEDIMENT CONTROL NOTES AND LEGEND</div>				<div>SHEET</div> <div>ESC-2</div> <div>6 of 22</div>	
NO.	DATE	BY	REVISION								PROJECT NO.:		18-2368	SCALE:	AS SHOWN	DATE:	DECEMBER 2020		

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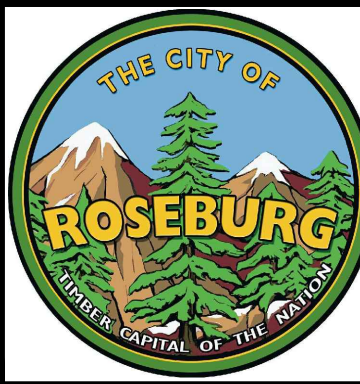
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WEST AVENUE
WATER MAIN
EXTENSION

EROSION AND SEDIMENT
CONTROL PLAN - 1

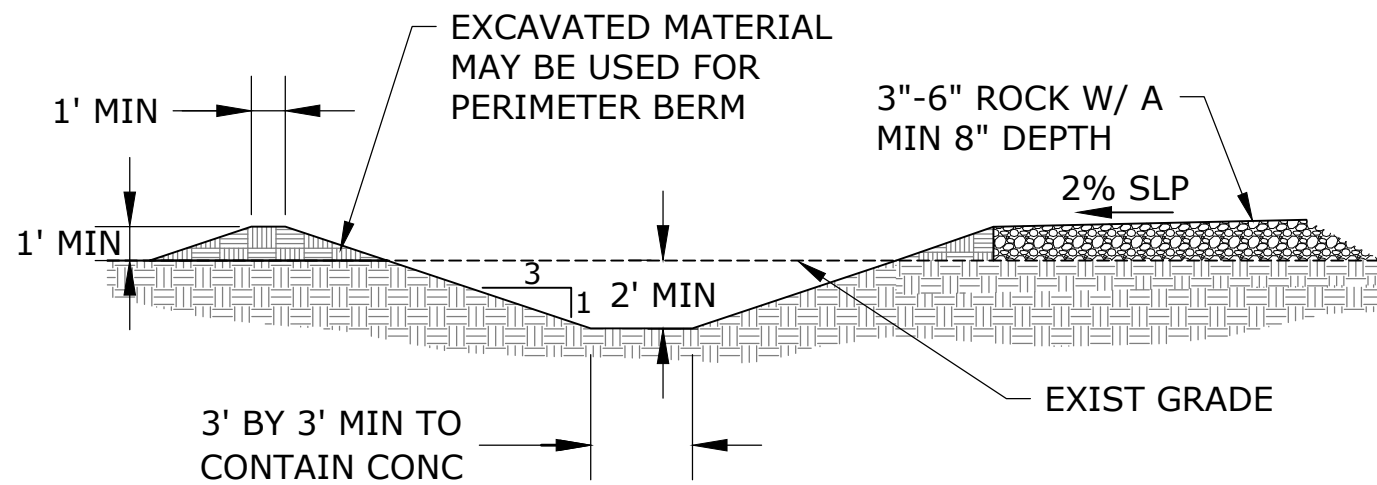
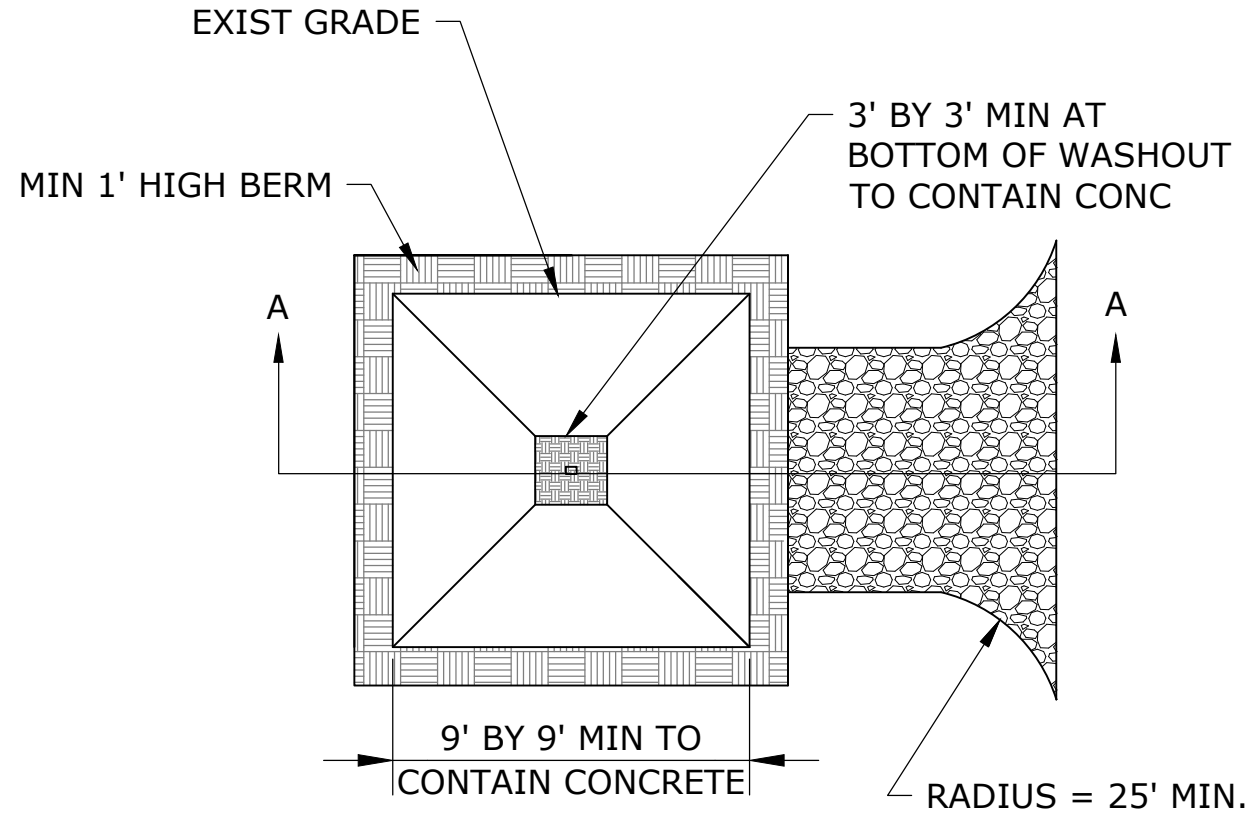
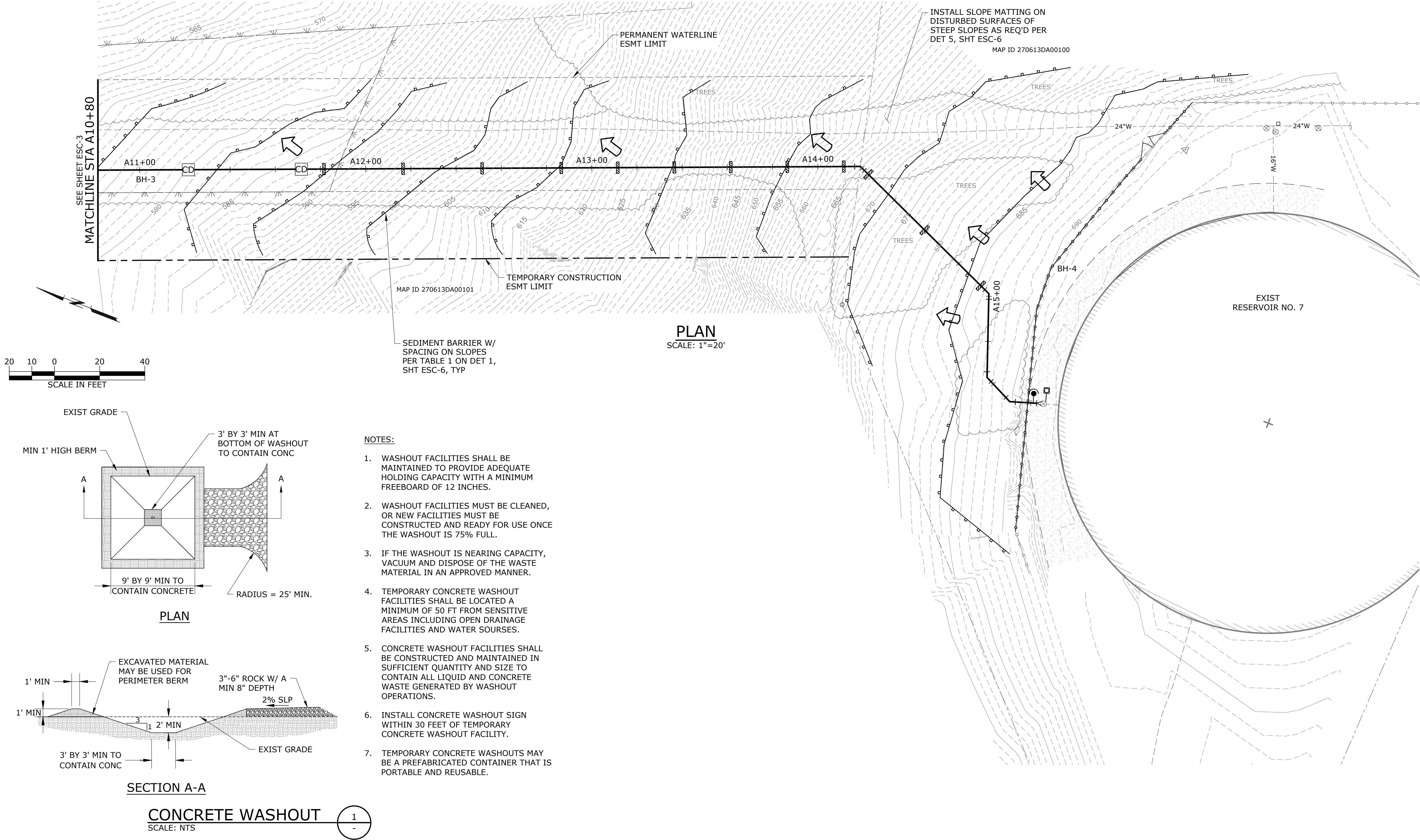
PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

ESC-3

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NOTES:

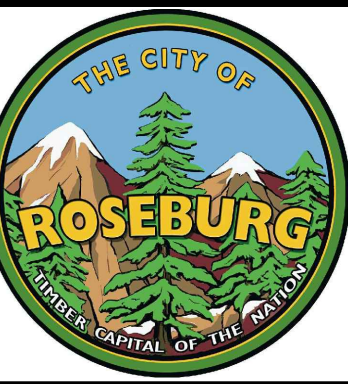
1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATER SOURCES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.

CONCRETE WASHOUT
SCALE: NTS

1
-

NO.	DATE	BY	REVISION

NOTICE	JRL
0 1/2 1	DESIGNED
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	NEM
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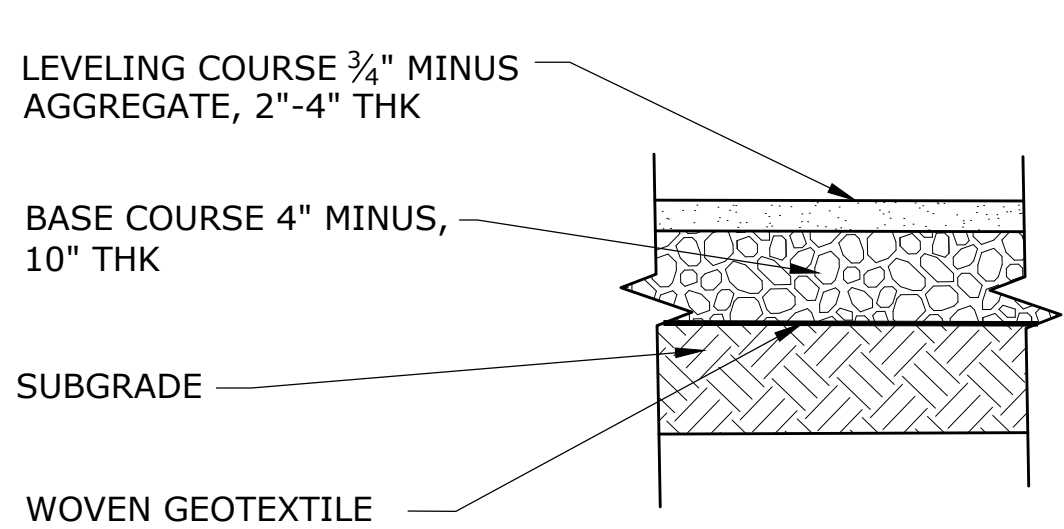
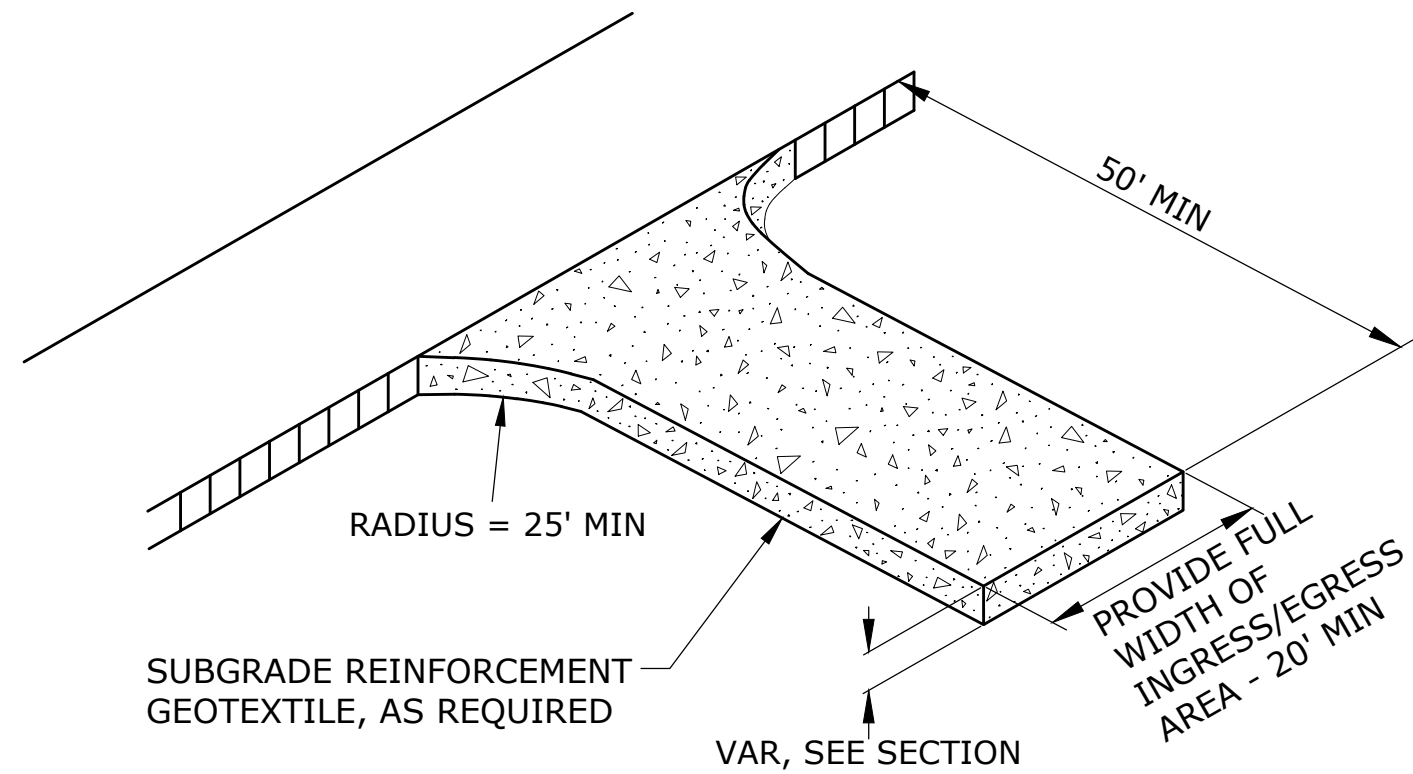


WEST AVENUE
WATER MAIN
EXTENSION

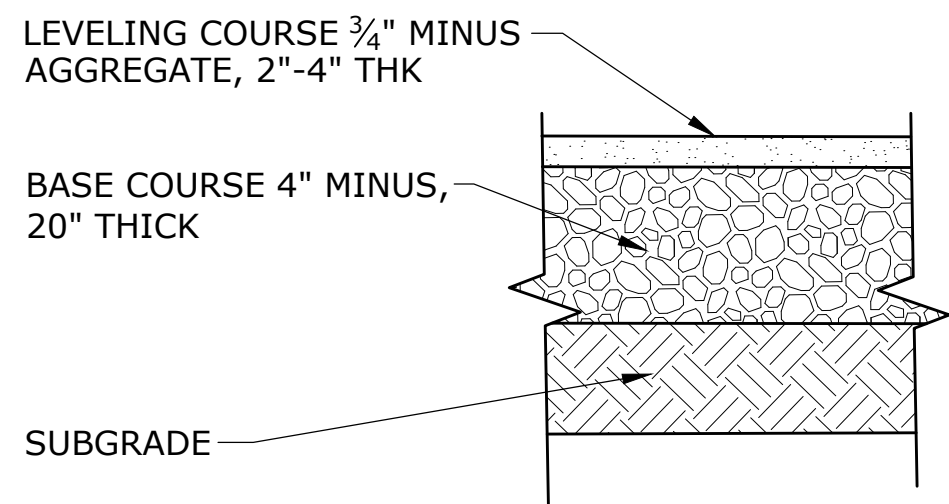
EROSION AND SEDIMENT CONTROL PLAN - 2			
PROJECT NO.:	18-2368	SCALE:	AS SHOWN
DATE:	DECEMBER 2020		

SHEET
ESC-4
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SECTION - OPTION 1

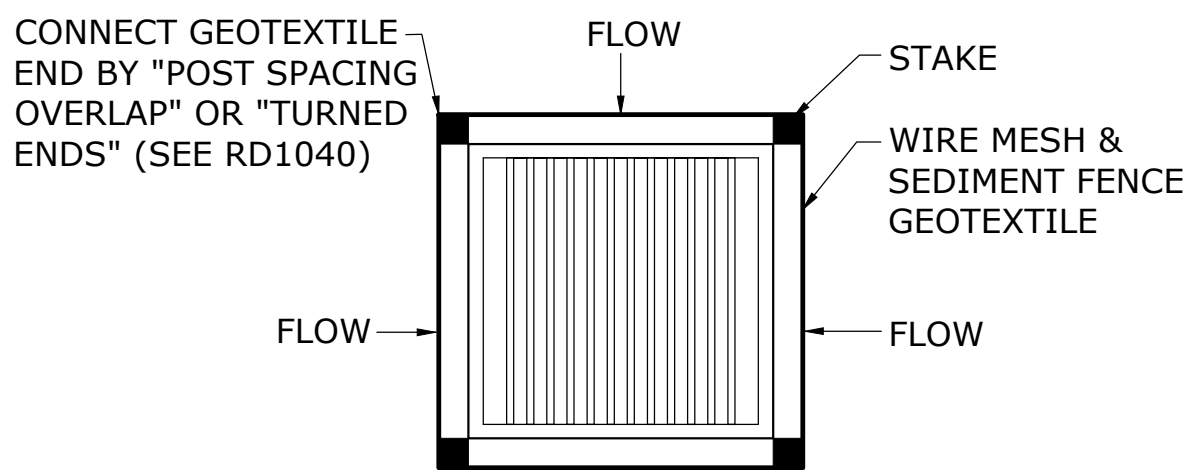


SECTION - OPTION 2

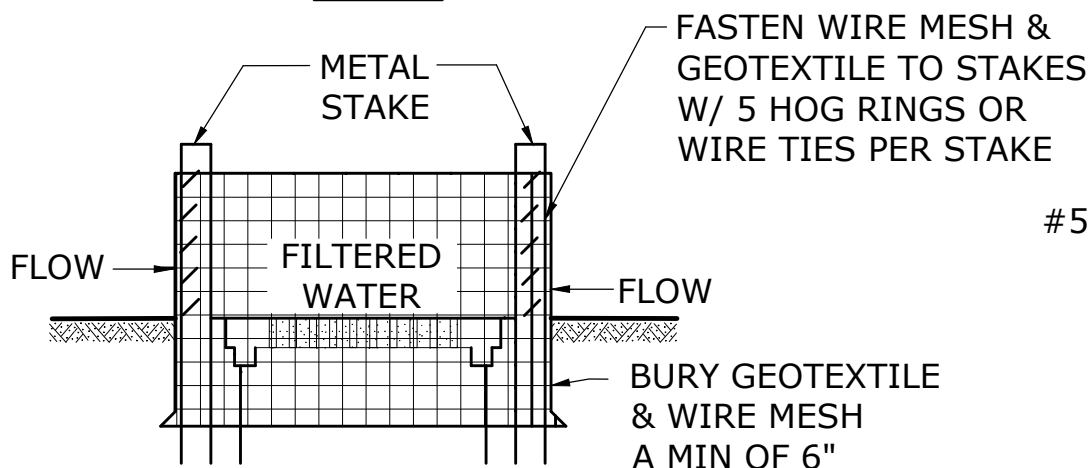
CONSTRUCTION ENTRANCE/ROAD

SCALE: NTS

1
-

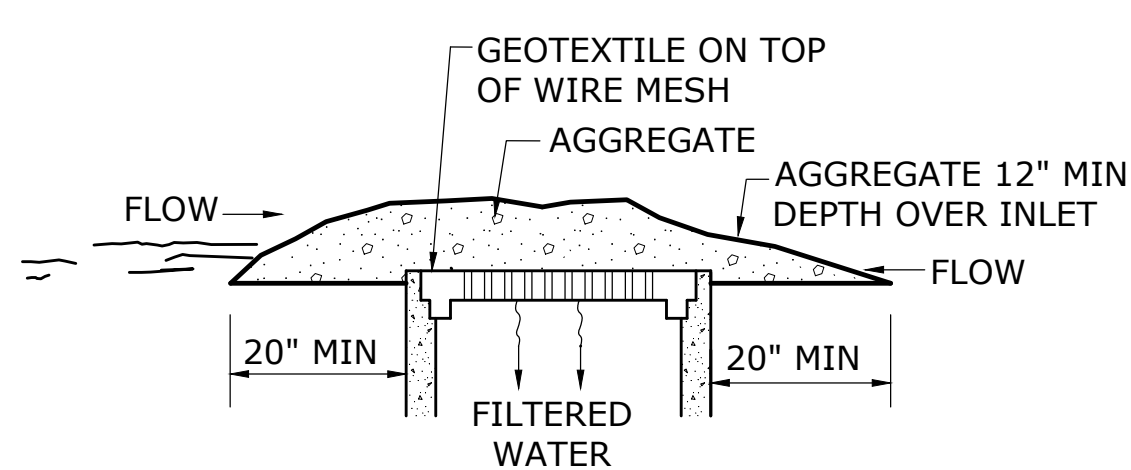


PLAN

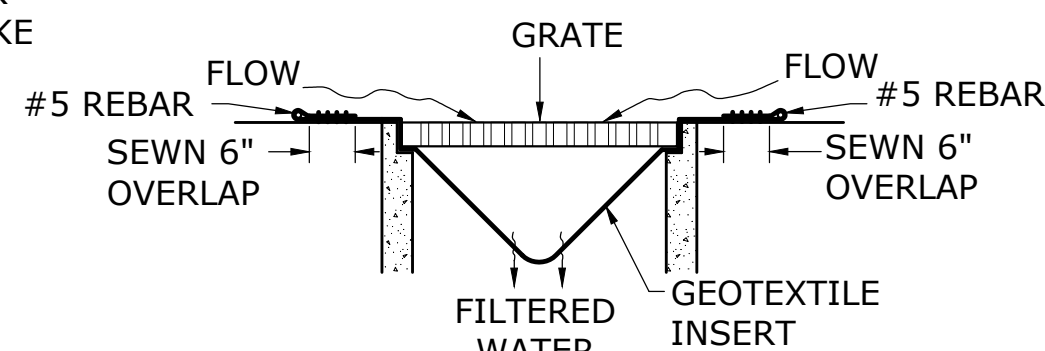


ELEVATION

SEDIMENT FENCE
TYPE 1



GEOTEXTILE/WIREMESH/AGGREGATE
TYPE 2



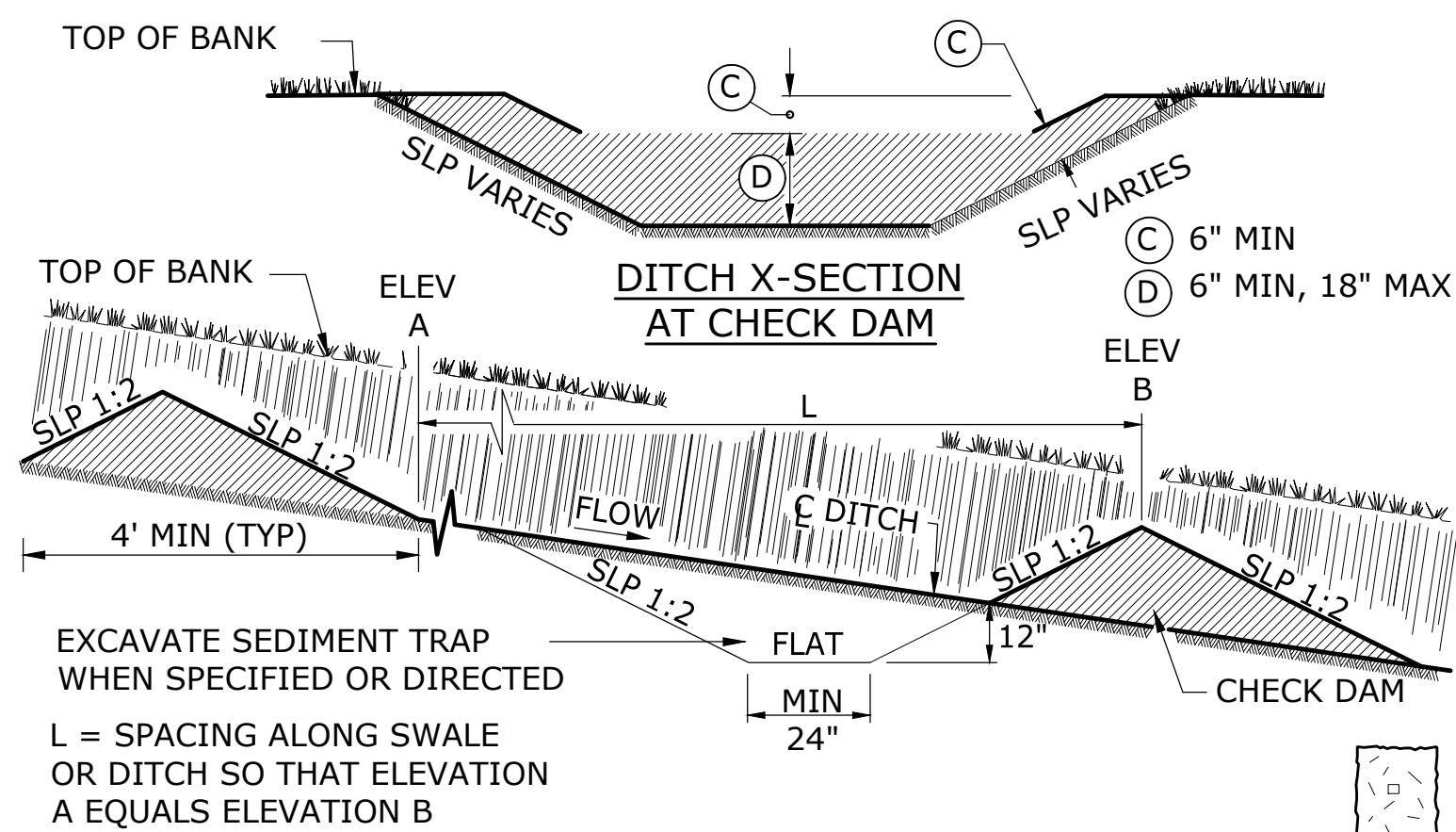
PREFABRICATED FILTER INSERT
TYPE 3

NOTES:
TYPE 1 SEDIMENT FENCE
TYPE 2 GEOTEXTILE/WIRE MESH/AGGREGATE
TYPE 3 PREFABRICATED FILTER INSERT
TYPE 4 BIOFILTER BAGS

INLET PROTECTION (TYPES 1, 2, AND 3)

SCALE: NTS

3
-



DITCH X-SECTION
AT CHECK DAM

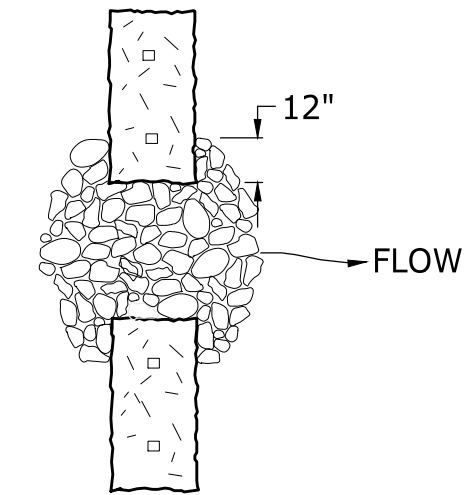
NOTES:

- TYPE 2 ONLY ENTRENCH BALES AND AGGREGATE MIN OF 4" INTO THE SOIL. TOE OF LAST BALE IS HIGHEST WATER CONTROL POINT.
- TYPE 2 ONLY PLACE BALES SO WIRE/TWINE BINDING MATL IS NOT IN CONTACT WITH THE SOIL.
- TYPES 2 OR 3 DRIVE 2 STAKES MIN PER BALE OR BAG FLUSH WITH TOP AND INTO UNDISTURBED GROUND A MIN OF 4". STAKES MAY BE OMITTED IF PLACED OVER PAVED SURFACES.
- TYPES 2, 3 OR 4 CONST TOP OF AGGREGATE MIN OF 6" LOWER THAN THE TOE OF LAST BALE OR BAG.
- TYPES 2 OR 4 TIGHTLY ABUT OR OVERLAP ENDS OF BALES OR BAGS AT EACH JT.
- TYPE 3 OVERLAP BAGS 6" MIN AT EACH JT.

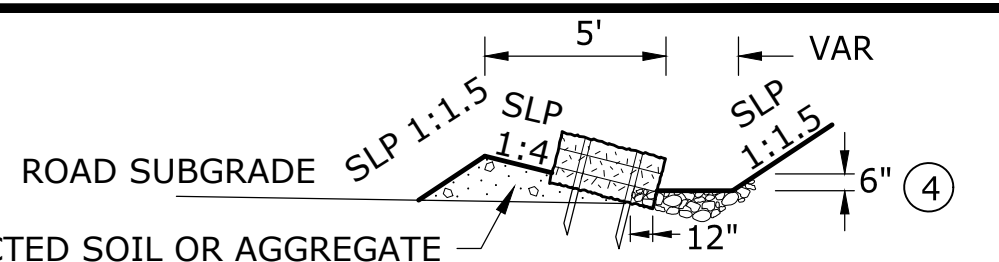
CHECK DAM APPROXIMATE SPACING

DITCH GRADE	D = DIMENSION		
	6"	12"	18"
6%	**	15' OC	25' OC
5%	**	20'	30'
4%	**	25'	40'
3%	15'	30'	50'
2%	25'	50'	80'

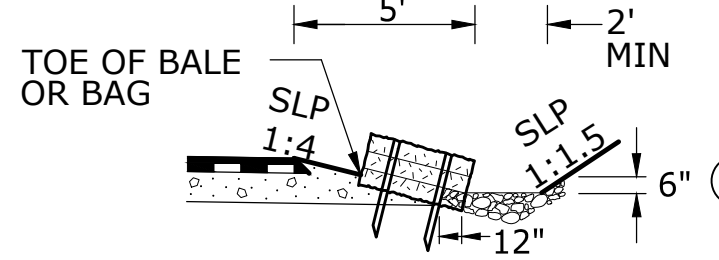
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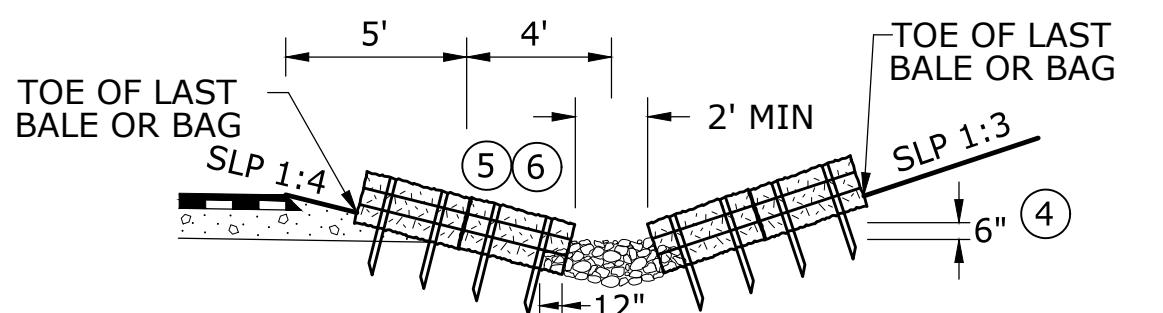
TOP VIEW -
TYPES 2, 3 & 4



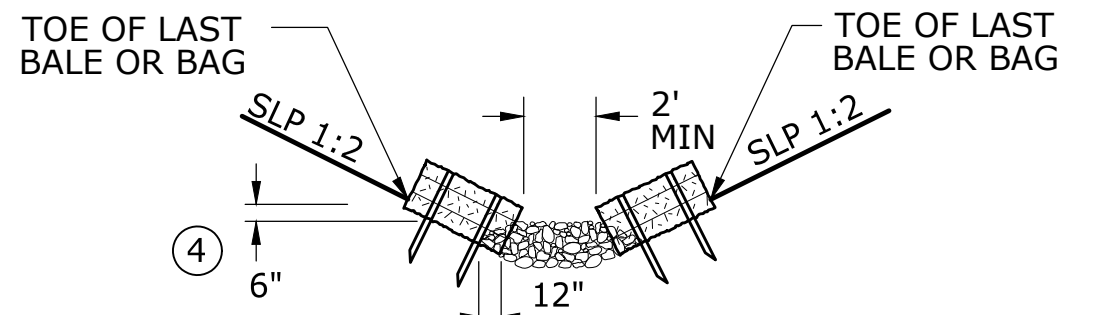
SUBGRADE SECTION



STEEP BACKSLOPE SECTION



VARIABLE BACKSLOPE SECTION - 1:3 TO 1:6



FLAT BOTTOM DITCH SECTION CHECK DAM TYPES 2, 3 & 4

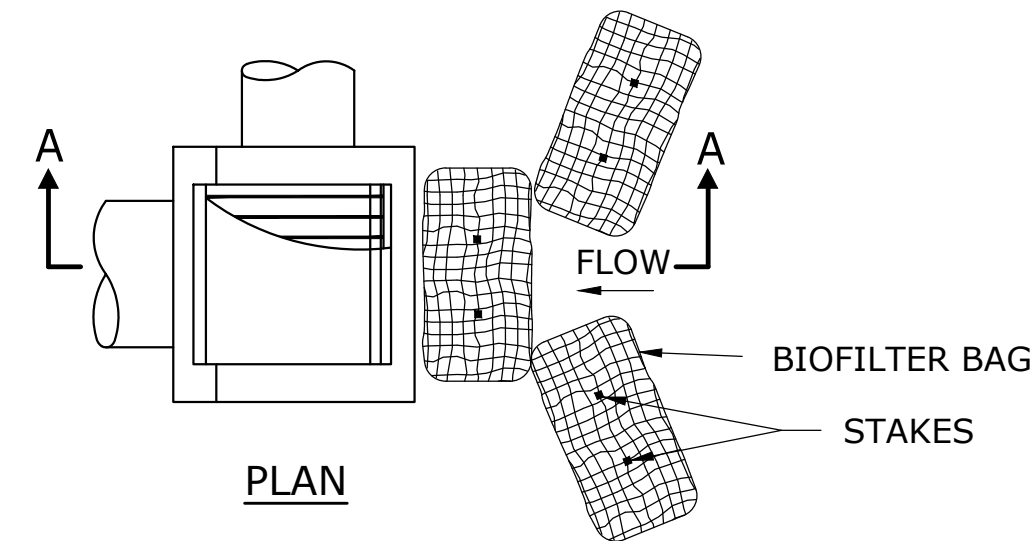
NOTE:

WHEN BID ITEM IS "CHECK DAMS" THE FOLLOWING MATL MAY BE USED, AS APPROPRIATE TO MEET THE FUNCTIONAL REQUIREMENTS OF THE CONTROL:
TYPE 1 - AGGREGATE
TYPE 2 - STRAW BALES WITH AGGREGATE WEIR
TYPE 3 - BIOFILTER BAGS
TYPE 4 - SAND BAGS
TYPE 5 - PREFAB CHECK DAM SYSTEM

CHECK DAMS

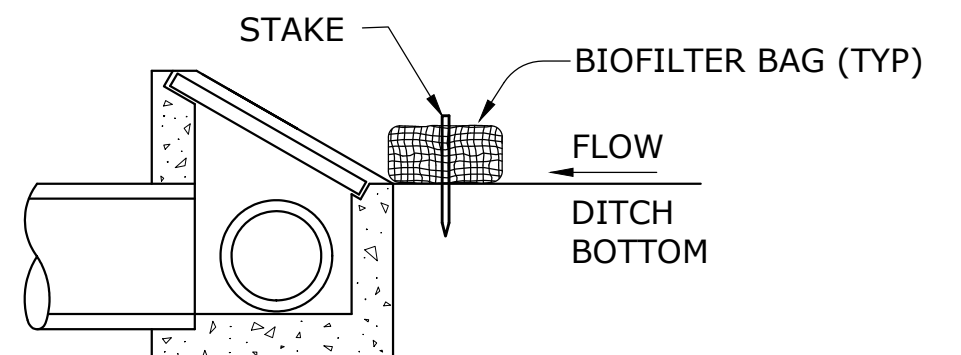
SCALE: NTS

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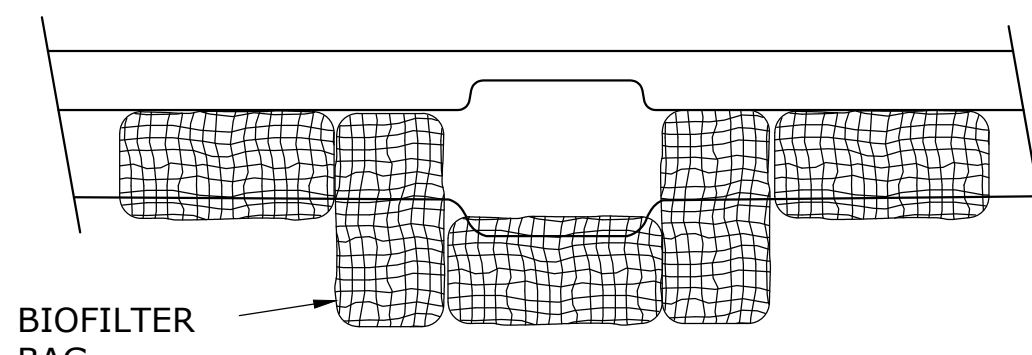


PLAN

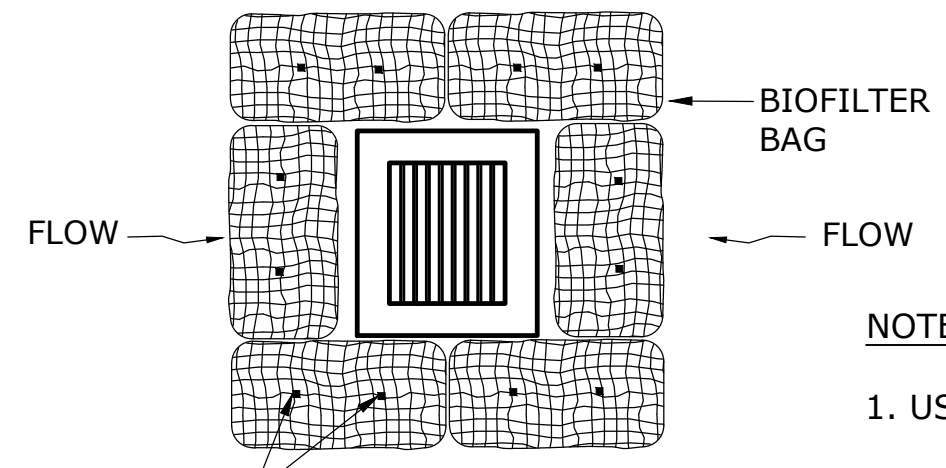
DITCH INLET



SECTION A-A



PLAN - CATCH BASIN



AREA DRAIN

NOTES:

- USE 2 STAKES PER BAG.
- STAKES MAY BE OMITTED IF BAGS ARE PLACED ON PAVEMENT SURFACE.
- OVERLAP ALL BAG JOINTS 6".

INLET PROTECTION (TYPE 4) BIOFILTER BAGS

SCALE: NTS

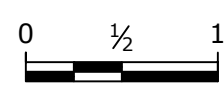
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INLET PROTECTION

SITE CONDITION	TYPE			
	1	2	3	4
AREA DRAIN, SOIL	Y	Y	Y	Y
AREA DRAIN, PAVEMENT	N	Y	Y	Y
DITCH INLET, SOIL	Y	N	Y	Y
DITCH INLET, PAVEMENT	N	N	Y	Y
GRATE INLET ALONG CURB, SOIL	N	Y	Y	Y
GRATE INLET ALONG CURB, PAVEMENT	N	Y	Y	Y
CURB OPENING INLET, SOIL	N	N	N	Y
CURB OPENING INLET, PAVEMENT	N	N	N	Y

FOR INLET PROTECTION TYPE 4 SEE DET 4, THIS SHT

NOTICE

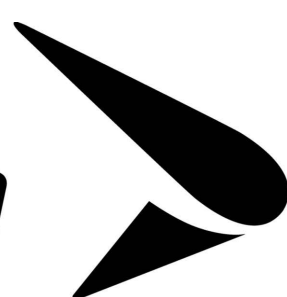


IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

JRL
DESIGNED
NEM
DRAWN
TPB
CHECKED



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WEST AVENUE
WATER MAIN
EXTENSION

EROSION AND SEDIMENT
CONTROL DETAILS - 1

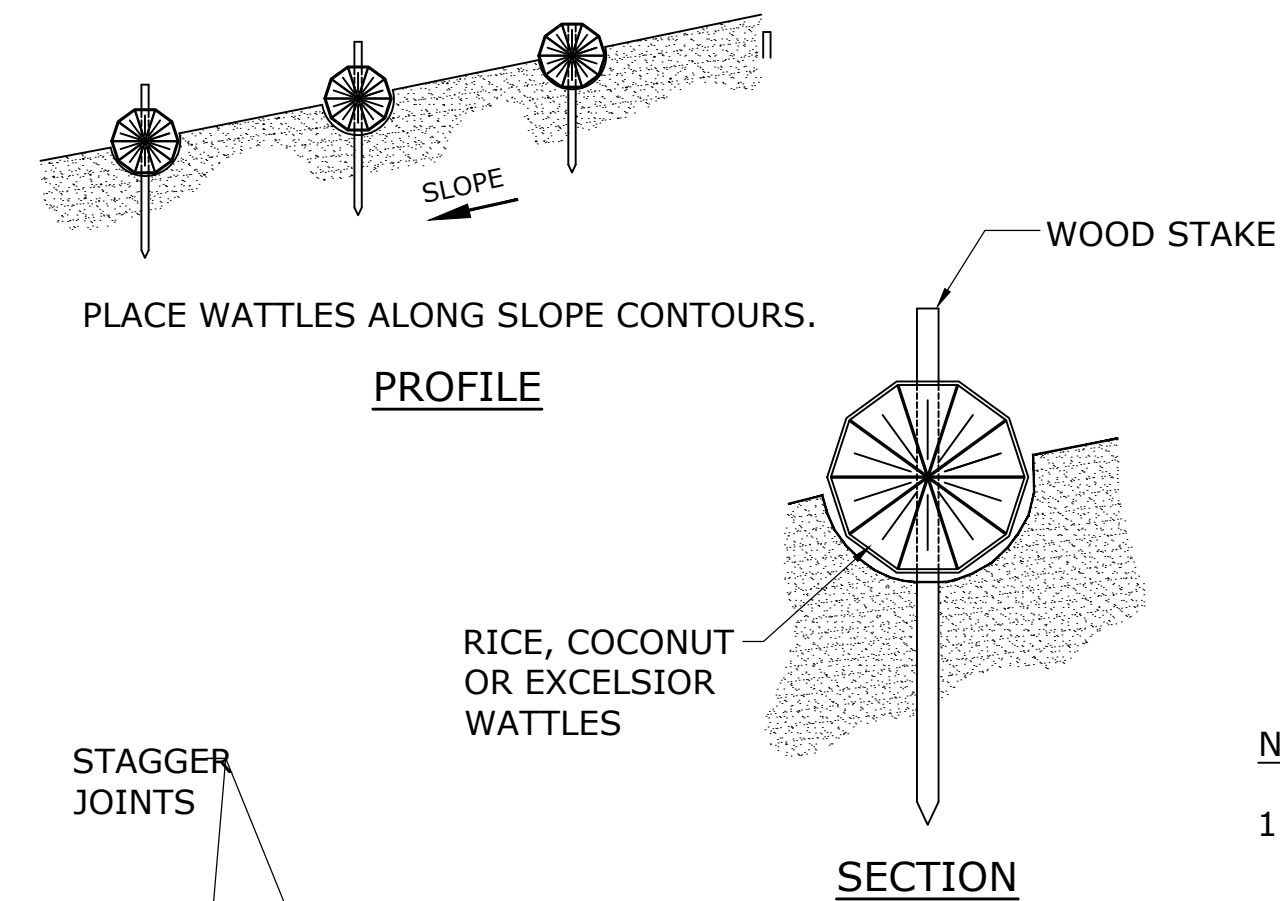
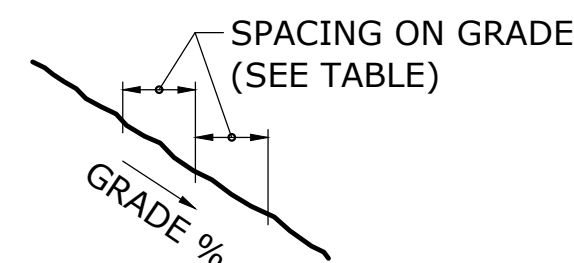
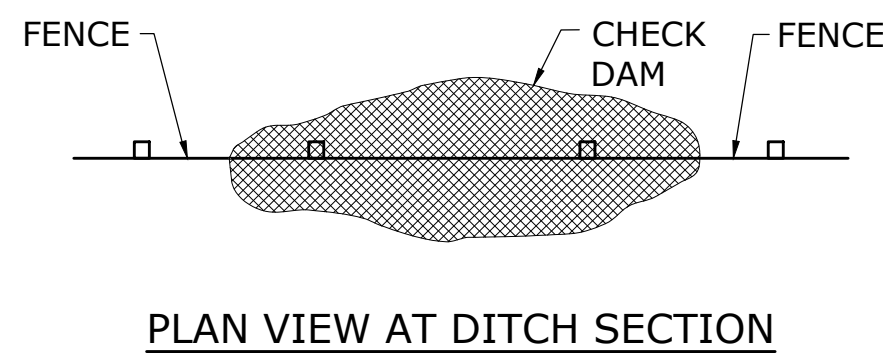
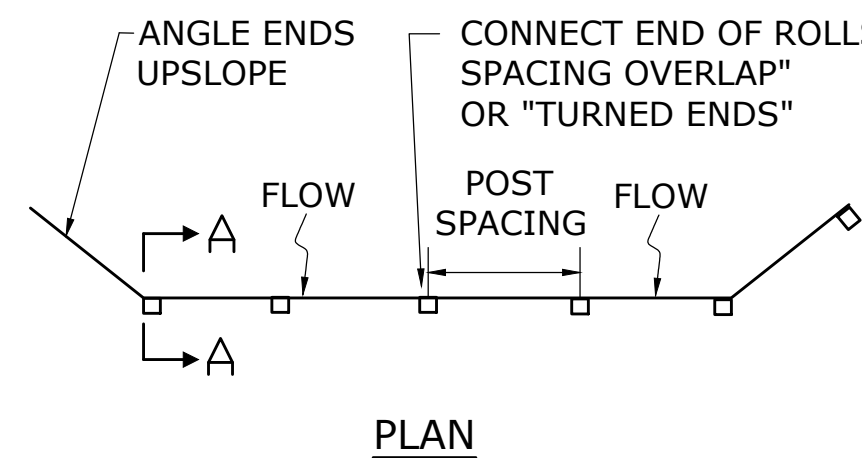
PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

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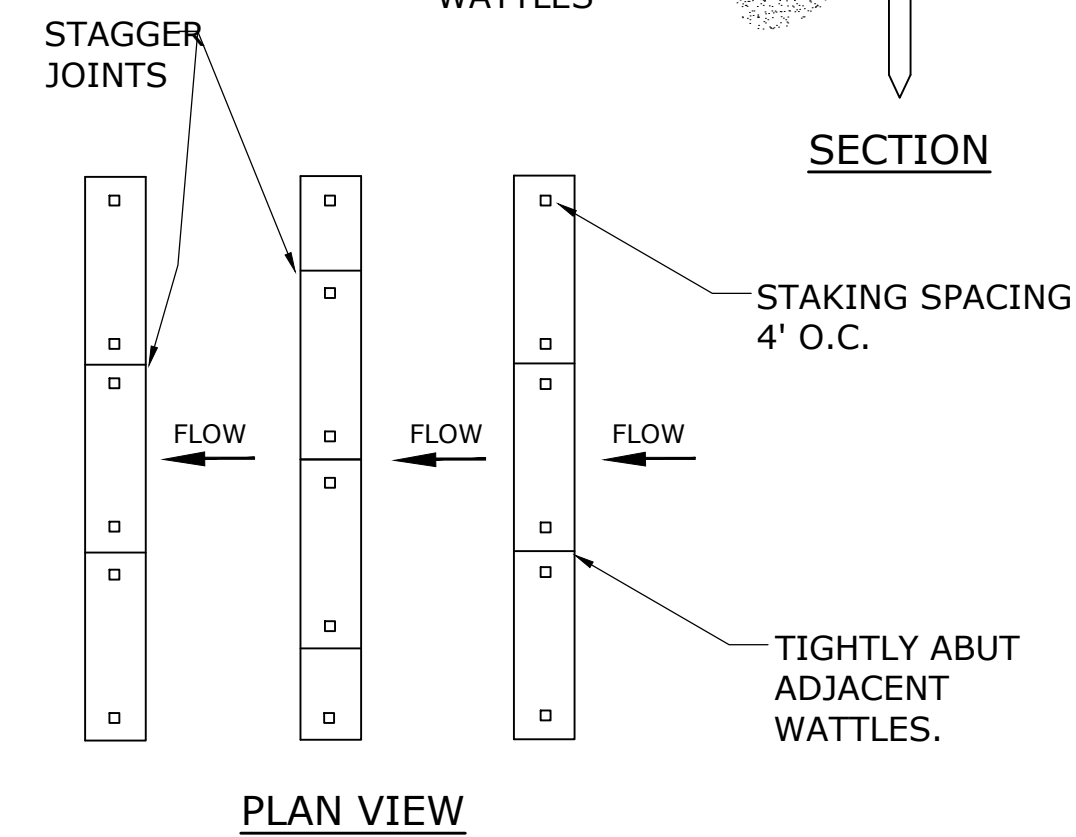
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NOTES:

1. STAKING SPECIFICATIONS:
A. 1"x2" WOODEN STAKED.
B. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY ERODIVE SOILS.
2. SPACE WATTLES PER TABLE 1 ON DETAIL 1, THIS SHEET, ALONG THE SLOPE.



WATTLES DETAIL

SCALE: NTS

2

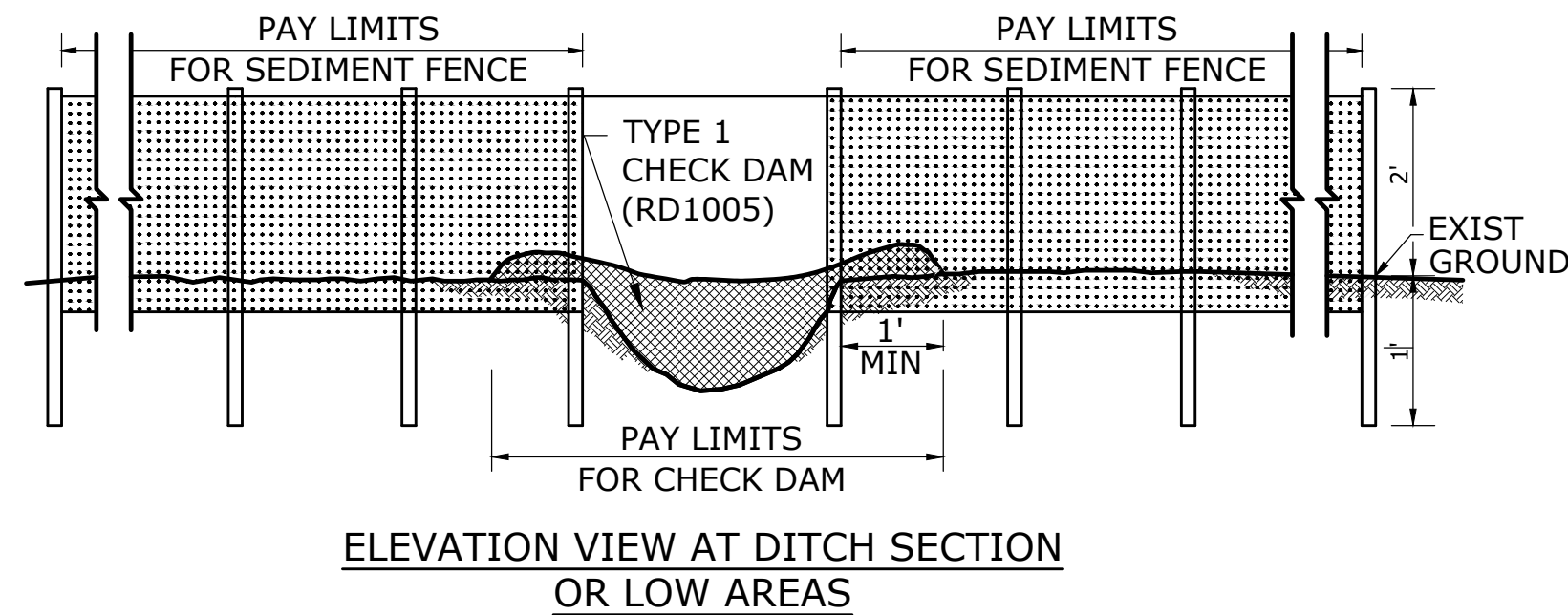
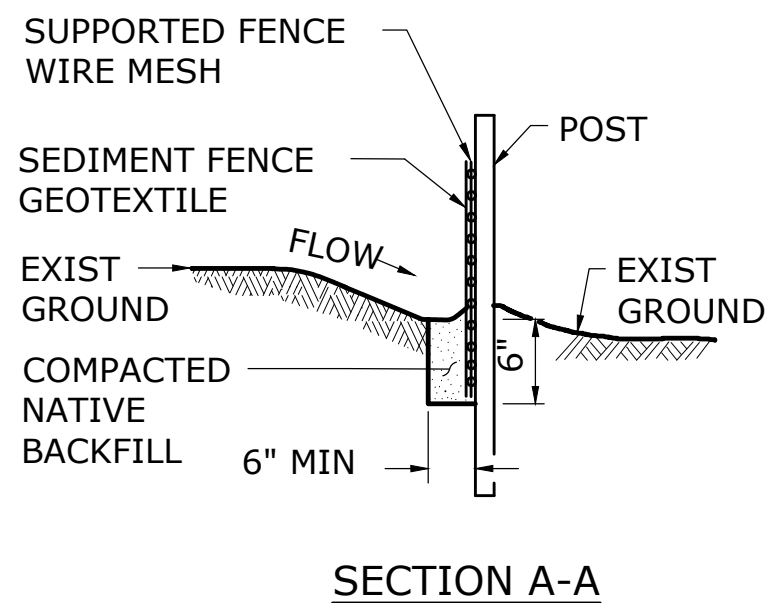


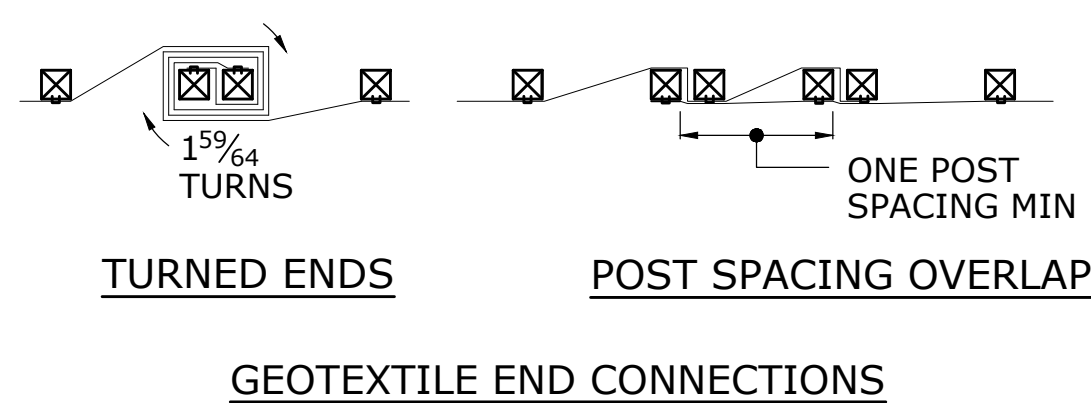
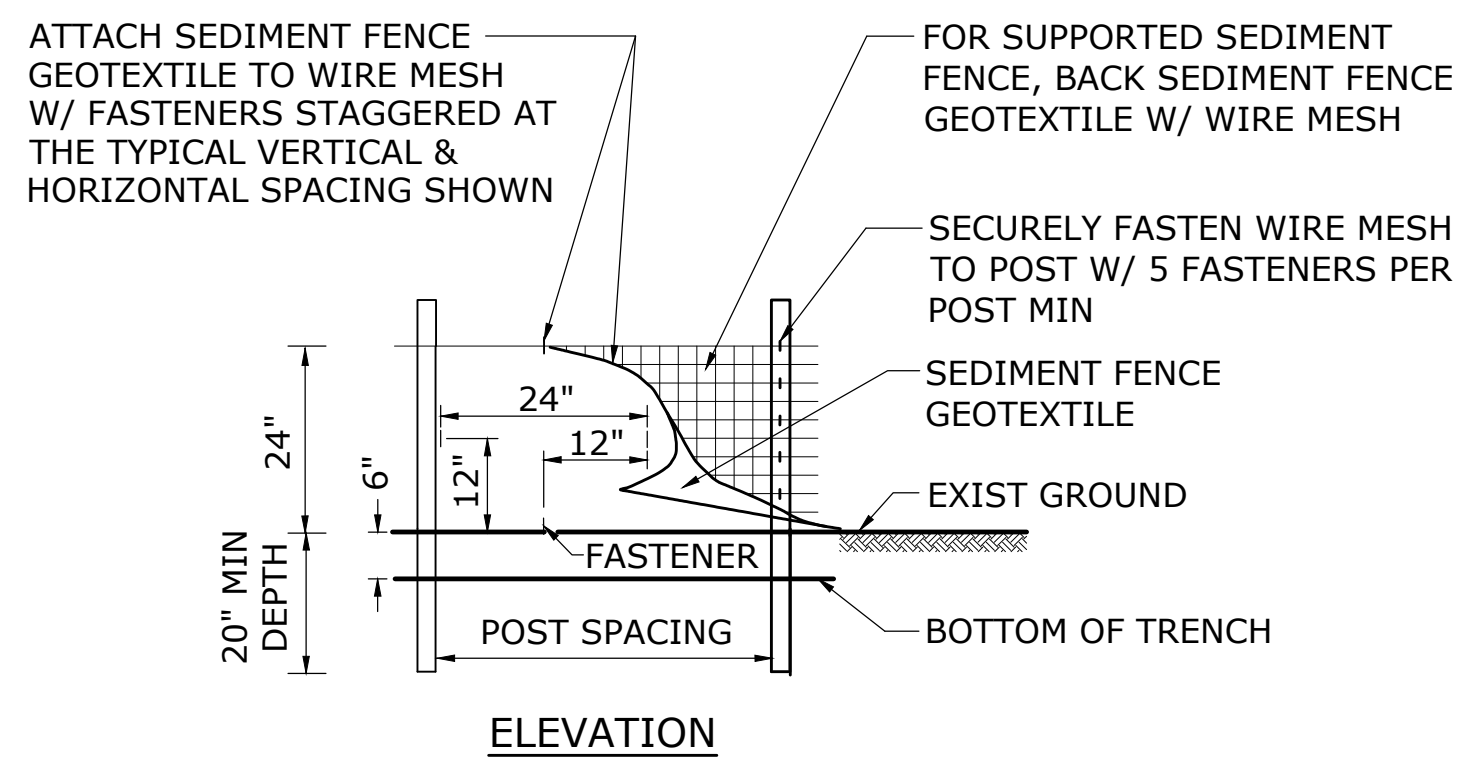
TABLE 1
SEDIMENT BARRIER SPACING FOR
GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAX SPACING ON GRADE
GRADE <10%	300'
10% ≤ GRADE <15%	150'
15% ≤ GRADE <20%	100'
20% ≤ GRADE <30%	50'
30% ≤ GRADE	25'

TABLE 2

POST SPACING	
4'	SUPPORTED SEDIMENT FENCE
6'	UNSUPPORTED SEDIMENT FENCE WITH GEOTEXTILE ELONGATION *LESS THAN 50%
4'	UNSUPPORTED SEDIMENT FENCE WITH GEOTEXTILE ELONGATION *MORE THAN 50%

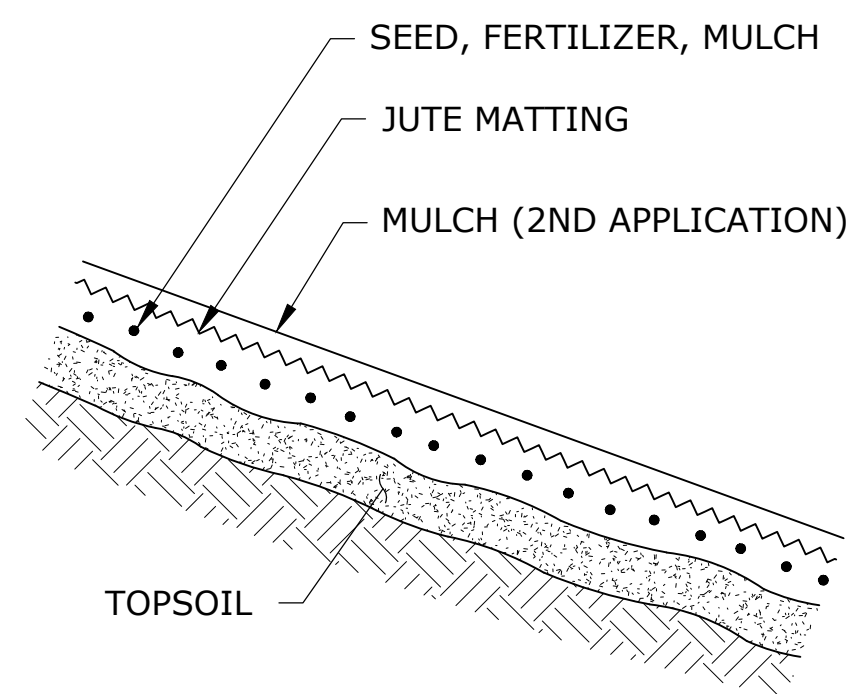
* GEOTEXTILE GRAB ELONGATION VALUE
AS DOCUMENTED BY "LEVEL B"
MANUFACTURER'S DOCUMENTATION (SEE
STANDARD SPECIFICATIONS).



SEDIMENT FENCE, SUPPORTED SEDIMENT FENCE, UNSUPPORTED

SCALE: NTS

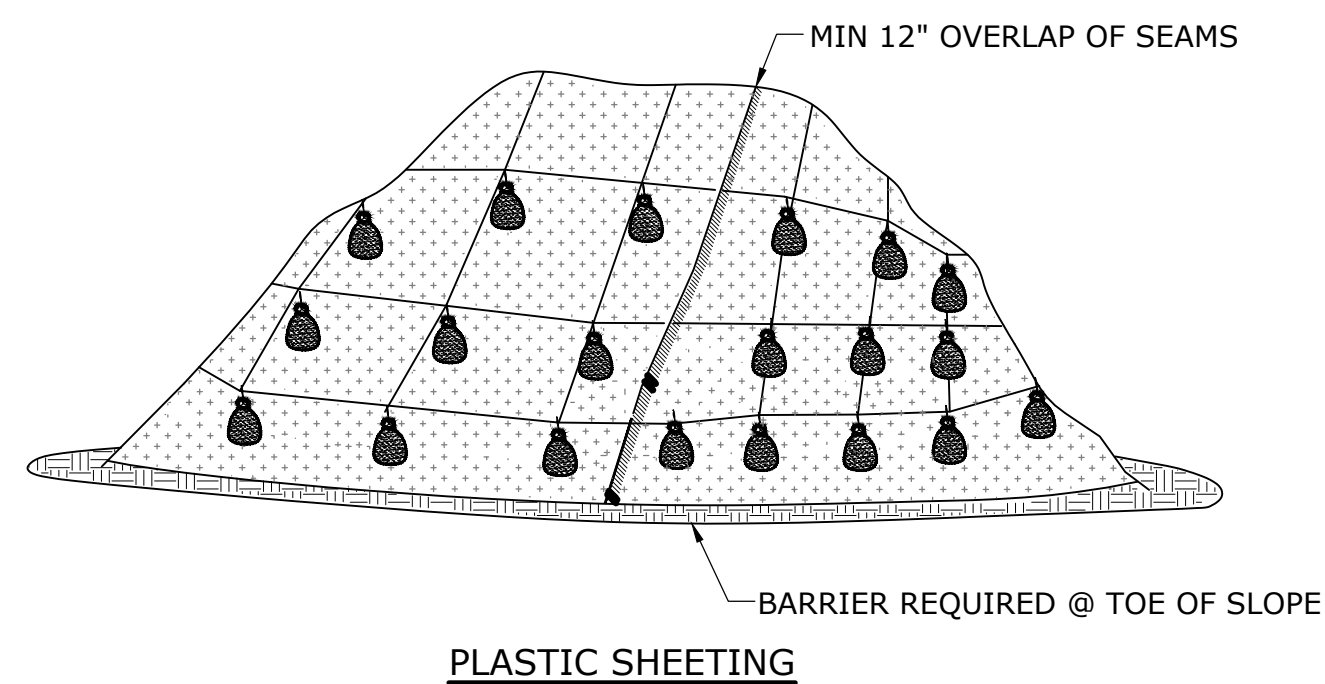
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JUTE MATTING

SCALE: NTS

3



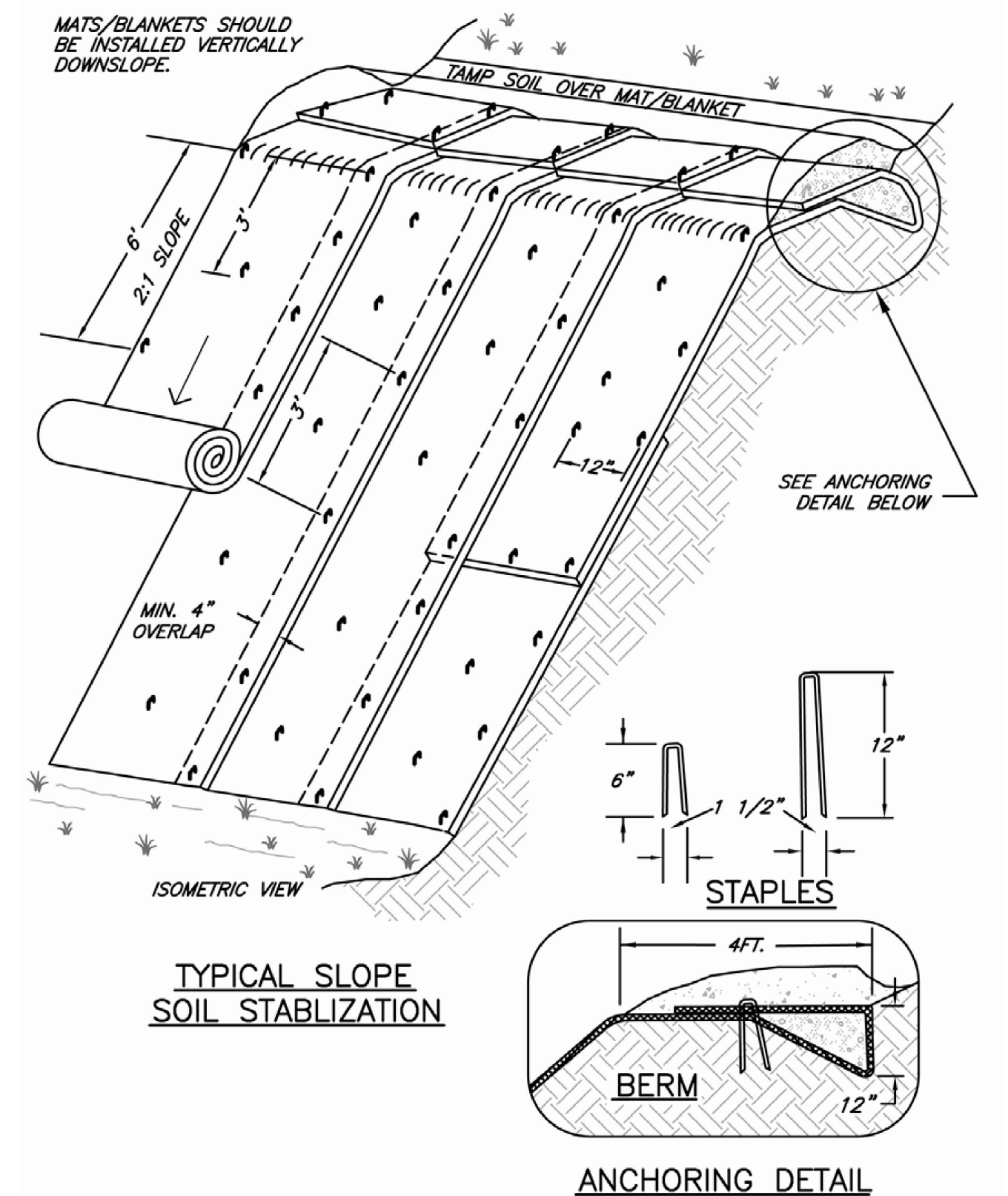
NOTES:

1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCK PILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

PLASTIC SHEETING DETAIL

SCALE: NTS

4



SLOPE MATTING

SCALE: NTS

5

NO.	DATE	BY	REVISION

NOTICE

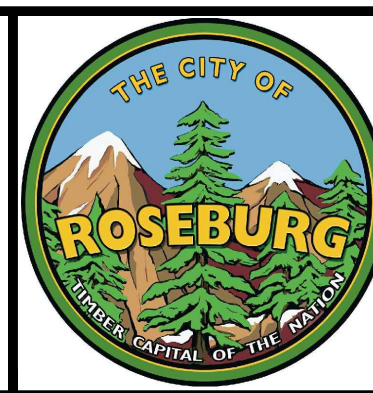
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WEST AVENUE
WATER MAIN
EXTENSION

EROSION AND SEDIMENT
CONTROL DETAILS - 2

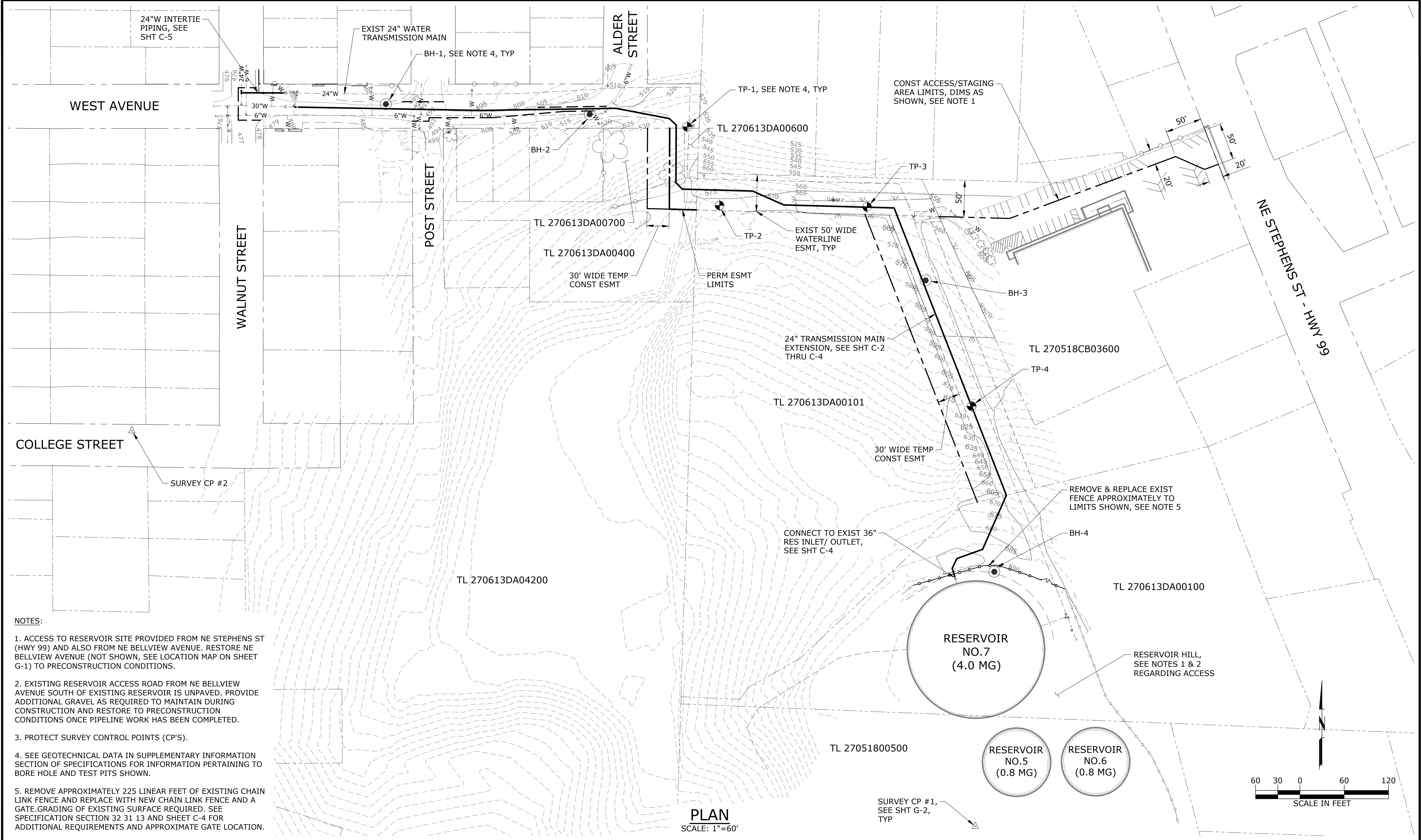
PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

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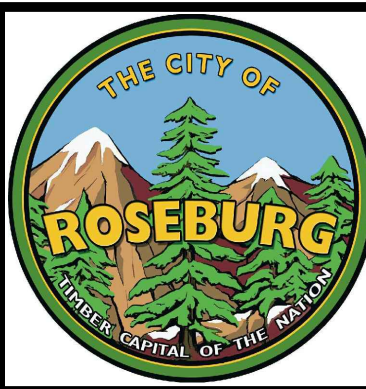
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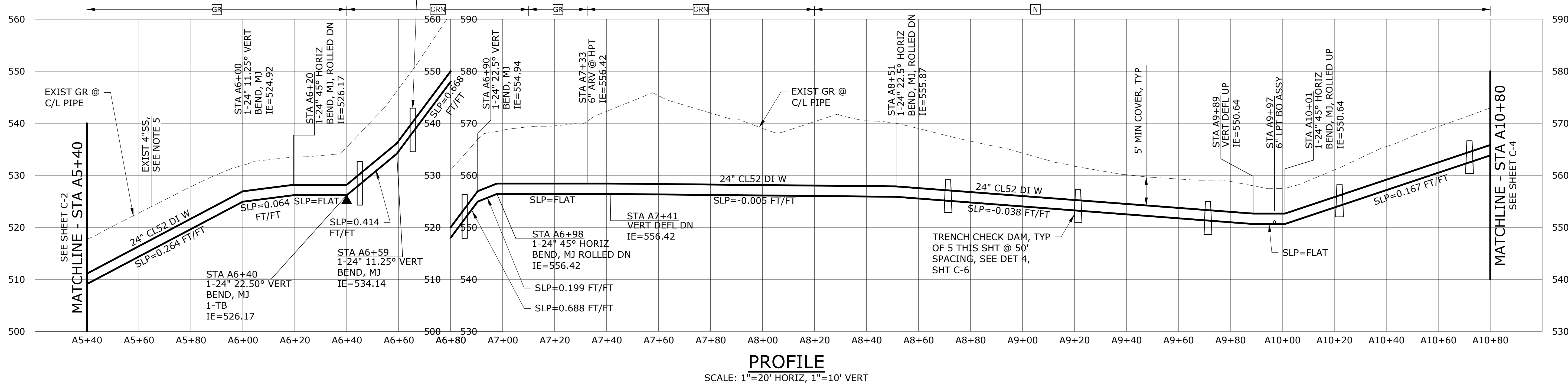
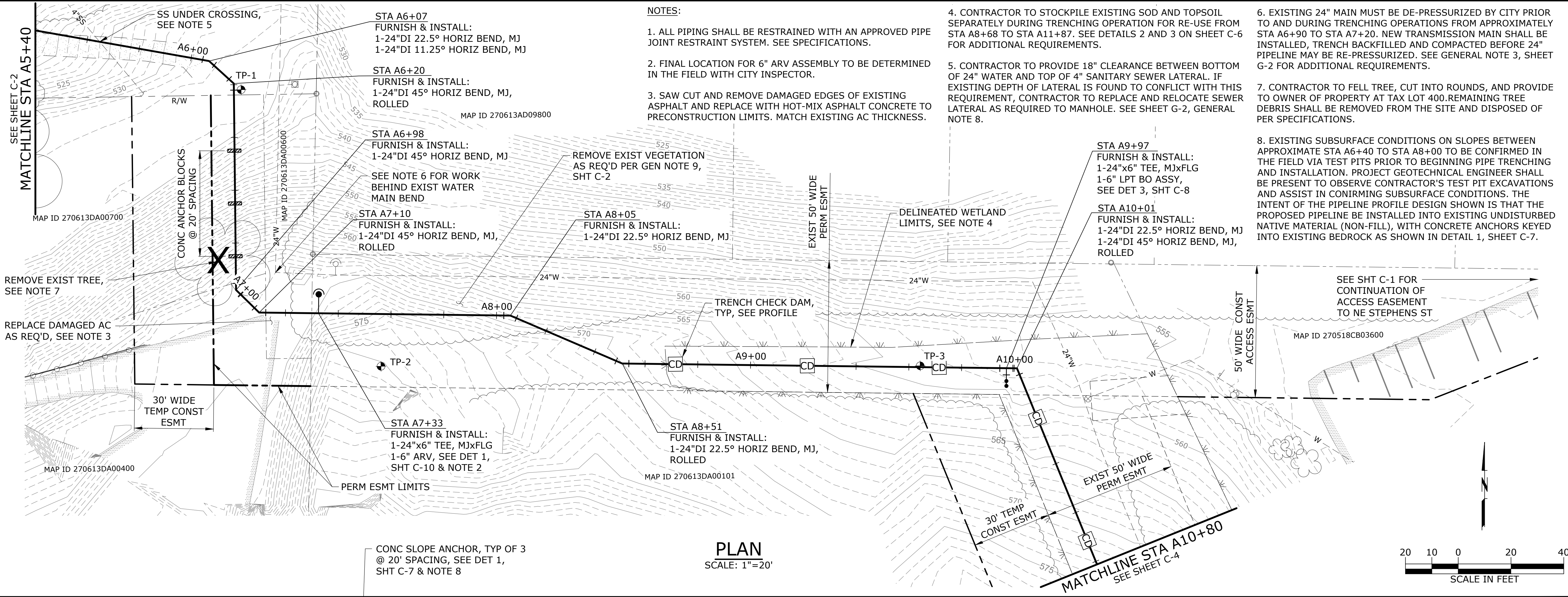


**WEST AVENUE
WATER MAIN
EXTENSION**

SITE LAYOUT AND FENCE REPLACEMENT PLAN			
PROJECT NO.:	18-2368	SCALE:	AS SHOWN
DATE:	DECEMBER 2020		

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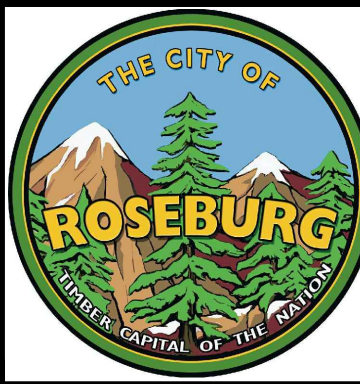
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**WEST AVENUE
WATER MAIN
EXTENSION**

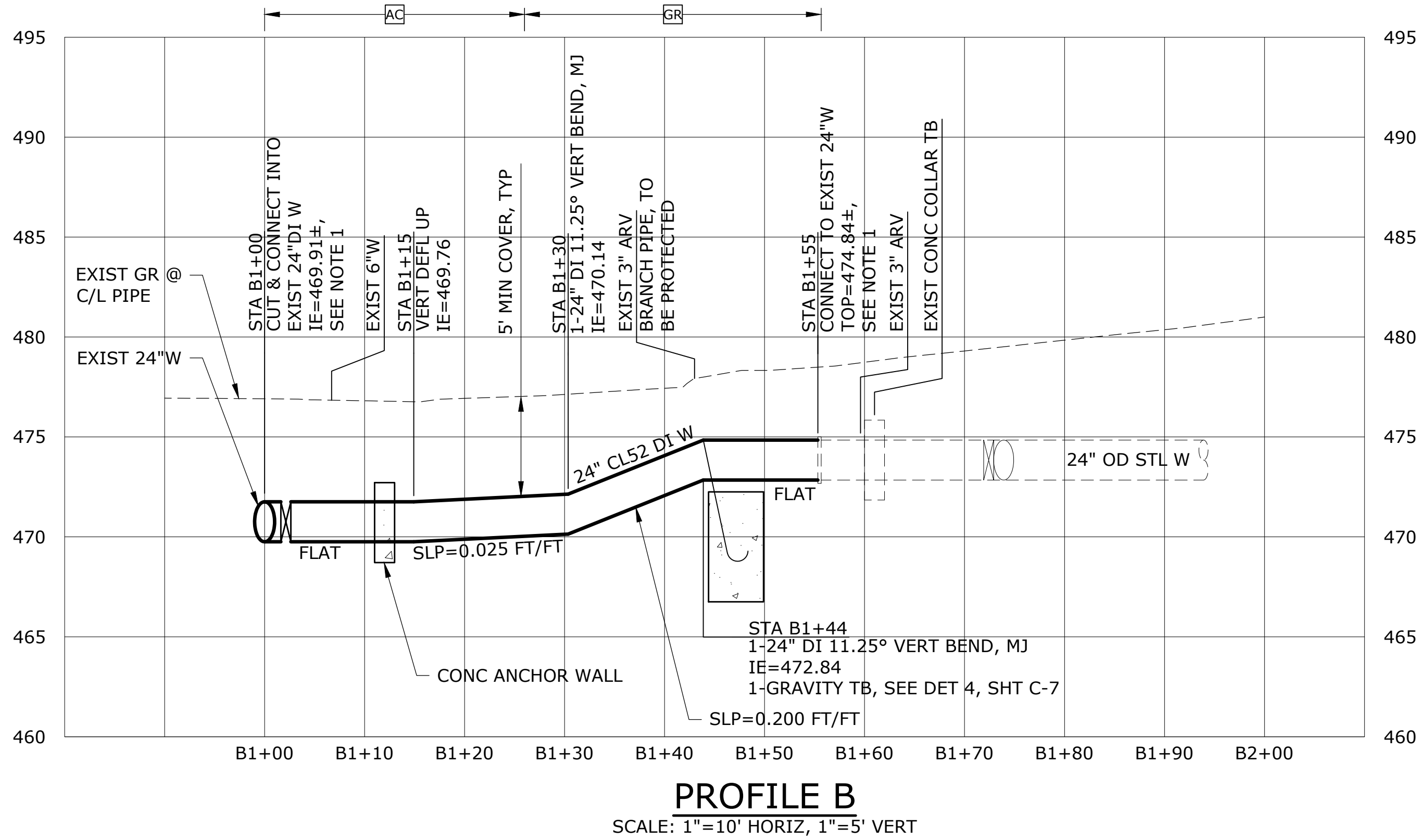
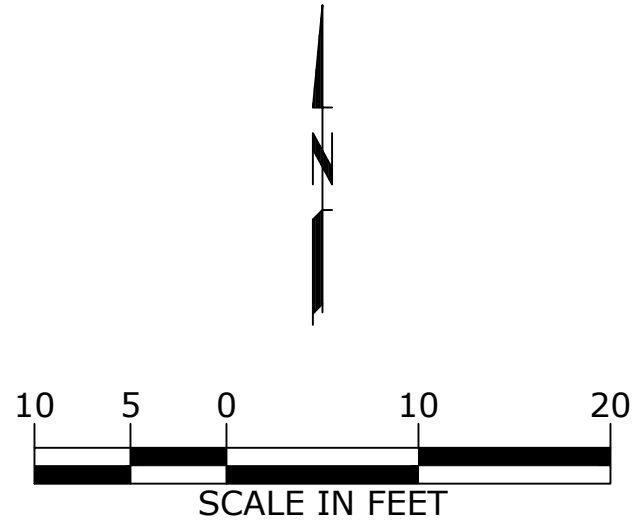
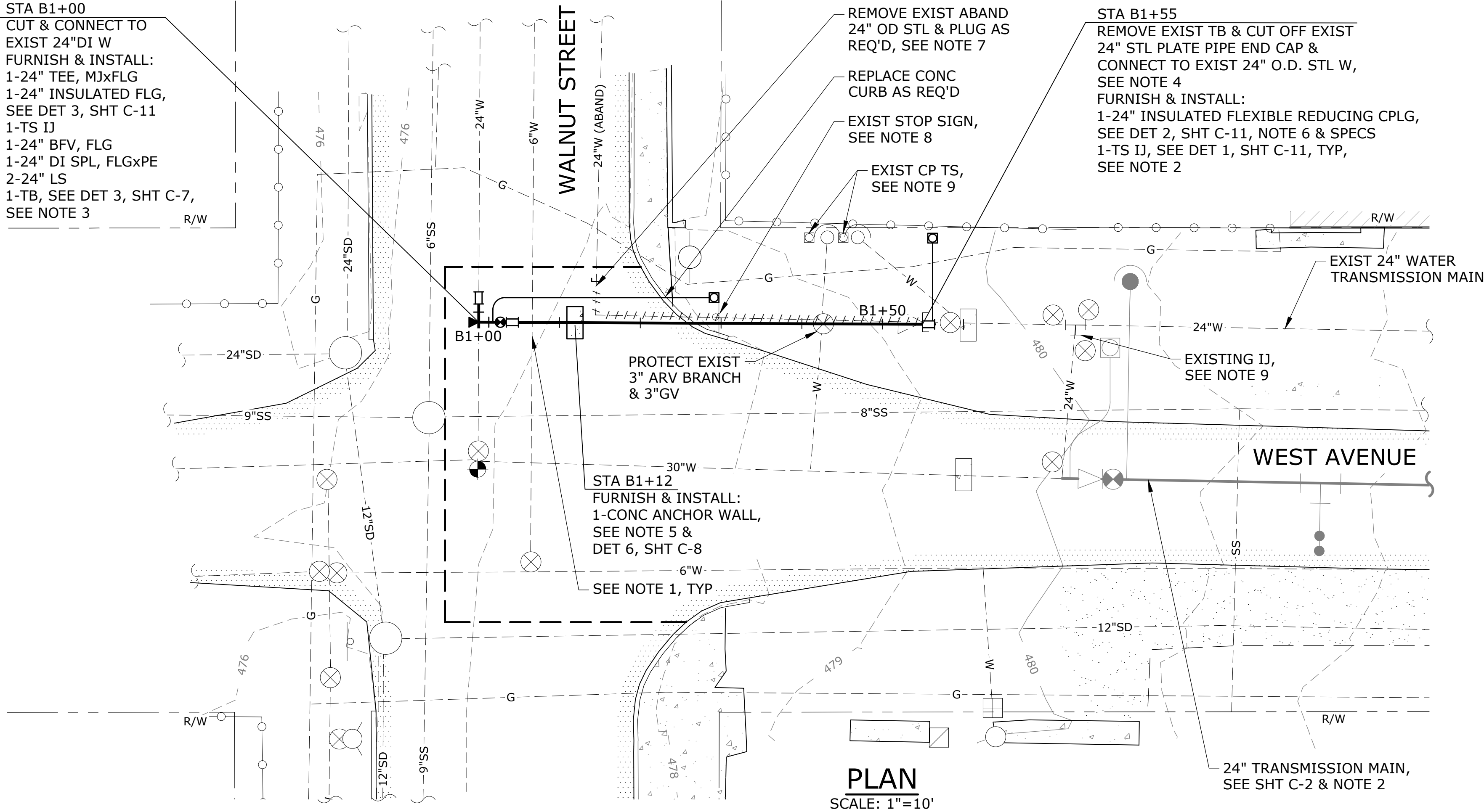
TRANSMISSION MAIN PLAN AND PROFILE STA A5+40 TO STA A10+80			
PROJECT NO.:	18-2368	SCALE:	AS SHOWN
DATE:	DECEMBER 2020		

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C-3
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NOTES:

- CONTRACTOR TO POTHOLE EXISTING WATER PIPING PRIOR TO CONSTRUCTING CONNECTING INTERTIE PIPING.
- SEE NOTE 2 ON SHEET C-2 REGARDING WATERLINE CONSTRUCTION SEQUENCING, AND NOTE 3.
- CONTRACTOR TO COORDINATE WITH CITY STAFF FOR SHUTDOWN AND DRAINING OF EXISTING WATERLINES AT TIE-IN CONNECTION LOCATIONS. SEE SPECIFICATIONS SECTION 01 12 16 FOR WORK SEQUENCE AND SHUTDOWN CONSTRAINTS.
- AFTER DEMOLISHING AND REMOVING CONCRETE THRUST BLOCK AND CUTTING OFF EXISTING STEEL PLATE END CAP, AND PRIOR TO CONNECTING TO 24" O.D. STEEL PIPE WITH COUPLING AS SPECIFIED, PREPARE STEEL SURFACES AND REPAIR COATING AND LINING OF CUT END OF 24" PIPE WITH NSF 61 APPROVED SURFACE TOLERANT EPOXY COATING SYSTEM. EPOXY REPAIR SYSTEM SHALL CONSIST OF A PRIMER COAT OF PRE PRIME 167 SEALER AND A TOP COAT OF BAR RUST 233H, OR EQUAL. TOTAL SYSTEM MINIMUM THICKNESS SHALL BE 12 MILS DFT. CONTRACTOR SHALL FOLLOW ALL COATING MANUFACTURER'S RECOMMENDATIONS INCLUDING THOSE PERTAINING TO PROPER SURFACE PREPARATION, AND CURE TIME PRIOR TO ASSEMBLING COUPLING AND PLACING WATERLINE BACK INTO SERVICE. CONTRACTOR SHALL ALSO APPLY WAX TAPE COATING OVER COUPLING AND ADJACENT 24-INCH PIPING AFTER COUPLING AND CATHODIC MONITORING ITEMS HAVE BEEN INSTALLED.
- INSTALL CONCRETE ANCHOR WALL PRIOR TO CONNECTING TO EXISTING 24" DUCTILE IRON AT STA B1+00. ALLOW SUFFICIENT CURE TIME PRIOR TO PUTTING PIPELINE CONNECTIONS UNDER PRESSURE.
- CONTRACTOR TO EXPOSE EXISTING 24" STEEL PIPING TO CONFIRM EXISTING PIPE O.D. PRIOR TO ORDERING INSULATED COUPLING.
- COAL TAR COATING WRAP ON EXISTING 24" OD STEEL PIPELINE FROM APPROXIMATE STA B1+14 TO STA B1+50 CONTAINS ASBESTOS THAT MAY BECOME FRIABLE WHEN DISTURBED. ALL WORK THAT WILL DISTURB EXISTING PIPELINE OR RELATES TO ITS REMOVAL SHALL BE COMPLETED BY A LICENSED ASBESTOS ABATEMENT CONTRACTOR ACCORDING TO DEQ REGULATIONS, OSHA REQUIREMENTS AND OREGON ADMINISTRATIVE RULES. SEE SPECIFICATIONS SECTION 33 11 50, EXISTING PIPE ABANDONMENT.
- REMOVE AND TEMPORARILY RELOCATE EXISTING "STOP" SIGN DURING INTERTIE CONSTRUCTION. REINSTALL PERMANENTLY PER CITY DIRECTION AFTER INTERTIE WORK HAS BEEN COMPLETED.
- CONTRACTOR'S CATHODIC PROTECTION ENGINEER OR SPECIALIST TO TEST WIRING TO EXISTING TEST STATIONS AND PROVIDE RECOMMENDATIONS FOR CONTRACTOR TO REPLACE EXISTING ANODES AND WIRING AS REQUIRED TO PROVIDE ADDITIONAL CATHODIC PROTECTION FOR EXISTING PIPING. CONTRACTOR TO ALSO INSTALL NEW REFERENCE ELECTRODE AND MONITORING COUPONS SIMILAR TO THOSE SHOWN ON DETAIL 1, SHEET C-11. SEE AS-BUILT SKETCH OF "WEST AVE EAST OF CEDAR ST INTERCONNECTION TEST STA INSTALL" INCLUDED IN THE SUPPLEMENTARY INFORMATION SECTION OF THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONTRACTOR TO INSTALL ANODES, WIRES AND OTHER TEST STATION MATERIALS PER SPECIFICATION SECTION 26 42 01.
- ALL PIPING SHALL BE RESTRAINED WITH AN APPROVED PIPE JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS.



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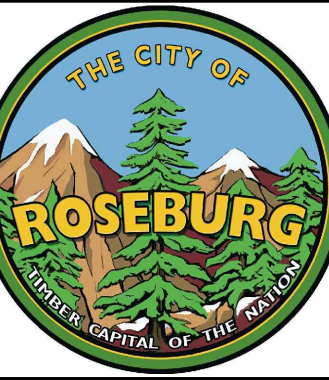
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ENGINEER
80998
OREGON
MAY 23, 2019
JUSTIN RUSSELL LUCE
RENEWALS 12-31-20

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WEST AVENUE
WATER MAIN
EXTENSION

24" WATER INTERTIE PIPING
PLAN AND PROFILE

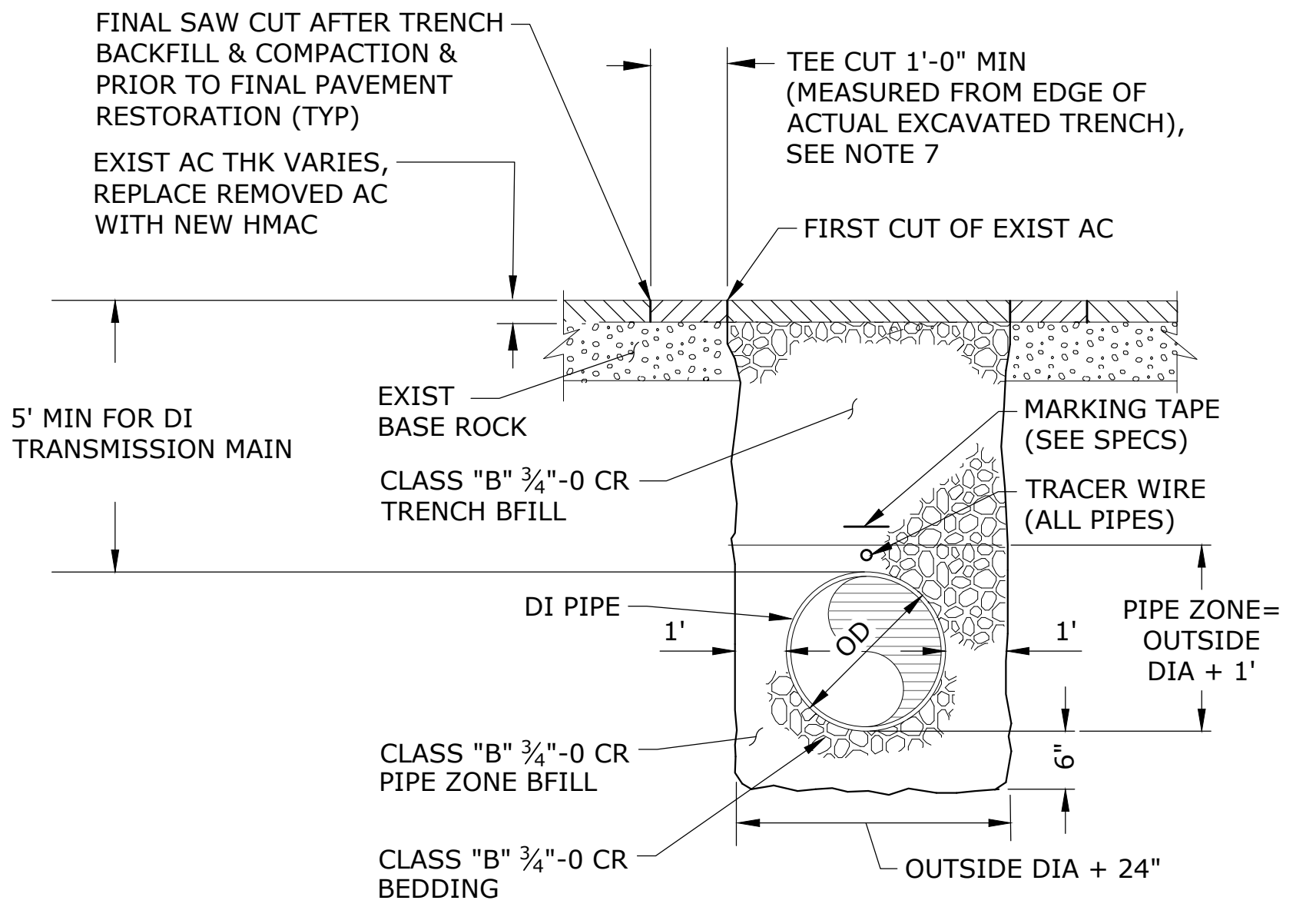
PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

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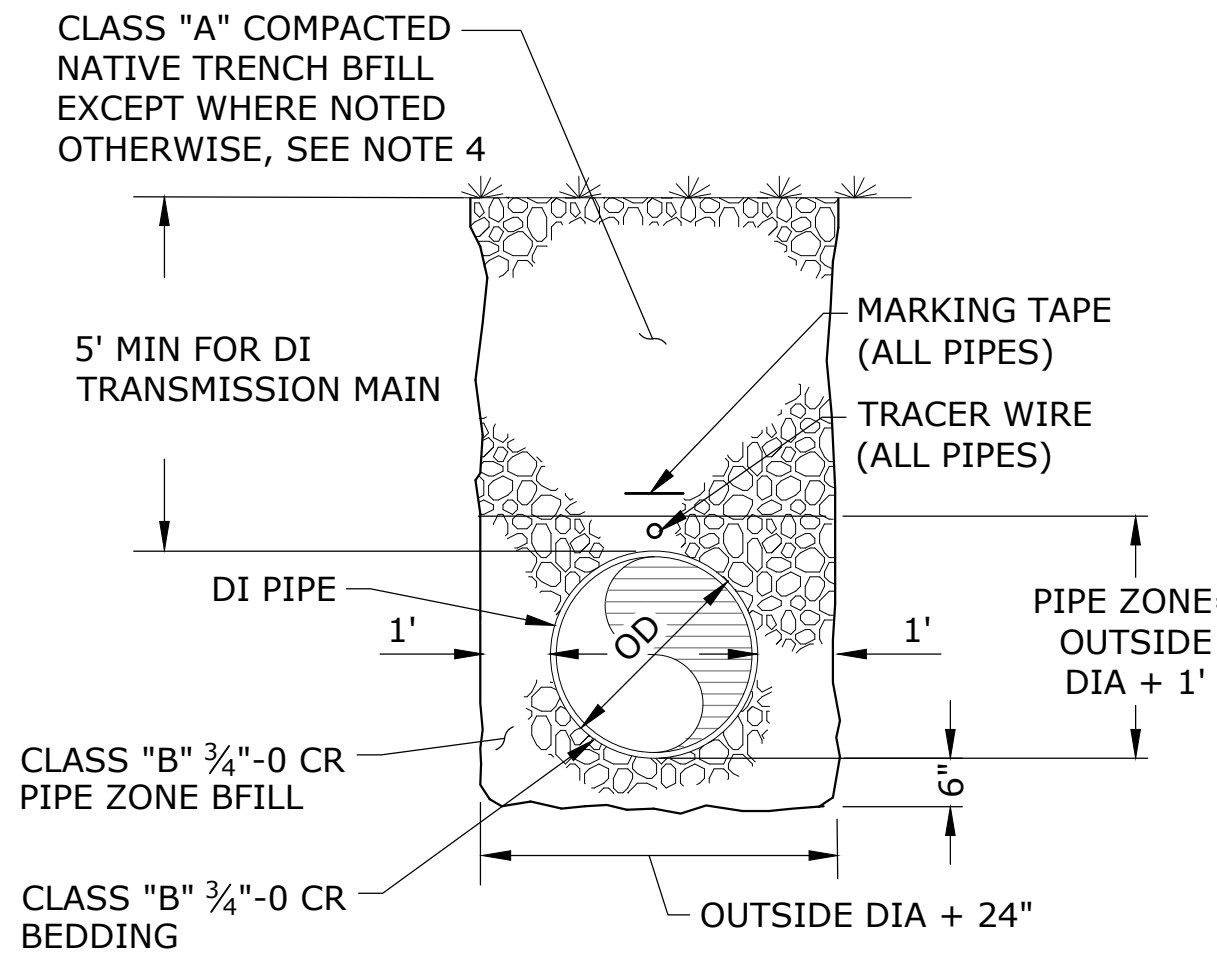


SINGLE PIPE TRENCH DETAIL - ROADWAYS AND DRIVEWAYS
SCALE: NTS

1
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NOTES:

1. USE $\frac{3}{4}$ "-0" CRUSHED ROCK BEDDING AND PIPE ZONE BACKFILL AT ALL LOCATIONS. COMPACT TO ACHIEVE 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99.
2. FURNISH AND INSTALL $\frac{3}{4}$ "-0" CR TRENCH BACKFILL TO PAVEMENT BASE OR EXISTING GRADE. COMPACT ALL $\frac{3}{4}$ "-0" BACKFILL IN LIFTS TO ACHIEVE 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99.
3. REFER TO SPECIFICATIONS FOR OTHER BACKFILL/ BEDDING REQUIREMENTS.
4. REPLACE REMOVED ASPHALT WITH LEVEL 2, $\frac{1}{2}$ " DENSE HMAC. MATCH EXISTING AC THICKNESS OR 4", WHICHEVER IS THICKER. MAXIMUM AC BASE COURSE LIFTS SHALL BE 3"; MAX WEARING COURSE LIFT SHALL BE 2". FOR NON-AC (GRAVEL) SURFACES BRING $\frac{3}{4}$ "-0" BACKFILL TO GRADE.
5. AT THE END OF EACH WORKDAY, ALL OPEN TRENCHES SHALL BE BACKFILLED TO THE TOP OF THE TRENCH. PRIOR TO OPENING TO TRAFFIC ALL TRENCHES WITHIN THE ROADWAY SHALL BE TEMPORARILY OR PERMANENTLY PAVED TO MATCH THE ADJACENT PAVEMENT GRADE. TEMPORARY TRENCH PAVEMENT SHALL BE 2-INCH THICK MINIMUM. TEMPORARY PAVEMENT SHALL BE REPLACED WITHIN 14 DAYS OF INSTALLATION WITH FULL-DEPTH PERMANENT TRENCH PAVEMENT.
6. REPLACE EXISTING GRAVEL BASE DISTURBED BY THE TRENCHING OPERATIONS.
7. EXISTING ROAD CONDITIONS ON WEST AVENUE ARE POOR AND IT IS ANTICIPATED THAT ADDITIONAL AC REMOVAL WILL BE REQUIRED PAST TEE CUT. FOR SECTIONS OF ROADWAY REQUIRING FULL RECONSTRUCTION, SEE DETAIL 3 ON SHEET C-9.

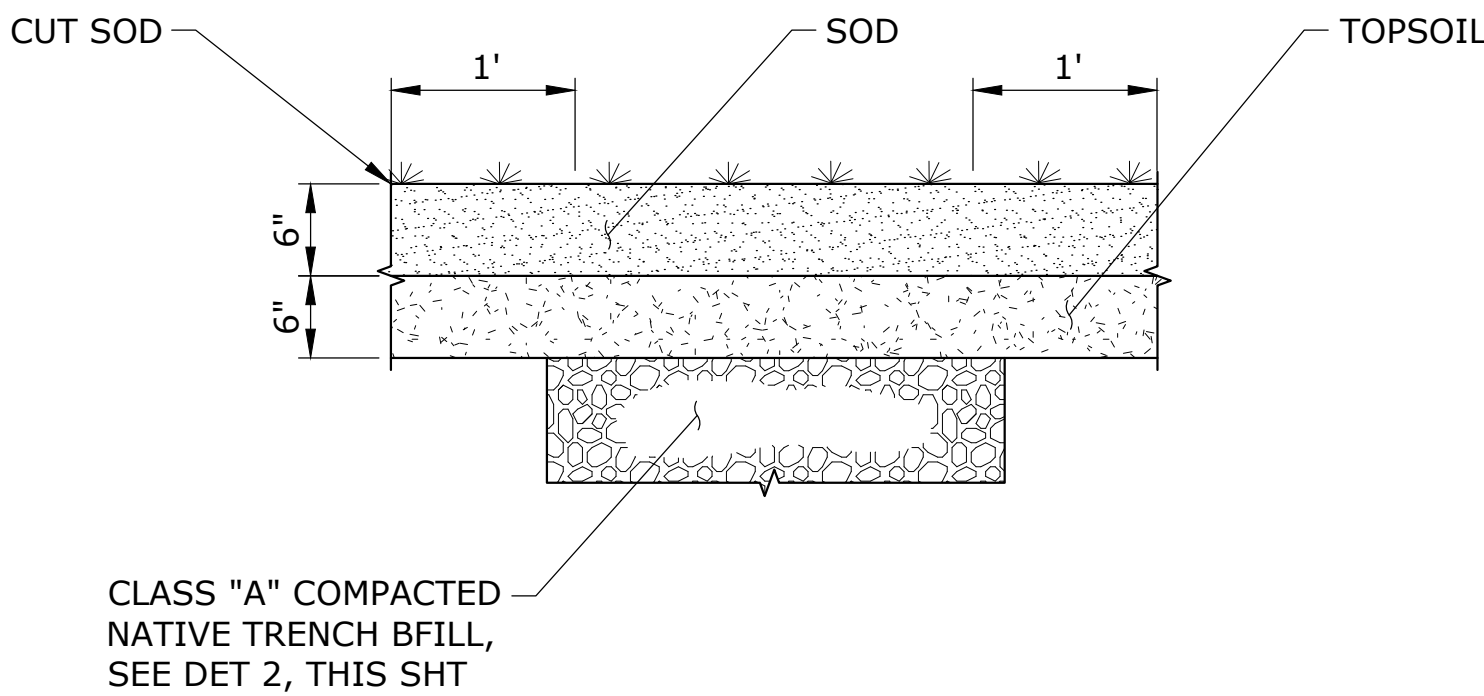


**SINGLE PIPE TRENCH DETAIL
OUTSIDE OF ROADWAYS AND DRIVEWAYS**
SCALE: NTS

2
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NOTES:

1. FURNISH AND INSTALL CLASS "B" $\frac{3}{4}$ "-0" CRUSHED ROCK BEDDING AND PIPE ZONE BACKFILL COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-99. FURNISH AND INSTALL CLASS "A" NATIVE TRENCH BACKFILL COMPACTED TO 95% MAXIMUM DENSITY PER AASHTO T-99.
2. FINISH TRENCH SURFACE TO MATCH ORIGINAL CONTOURS. REPLACE EXISTING LANDSCAPE WITH GRASS SEED PER SPECIFICATIONS.
3. SURFACE RESTORATION IN WETLANDS SHALL BE PER DETAIL 3, THIS SHEET.
4. FOR PIPELINE INSTALLATIONS WITHIN STEEP FILL SLOPE FROM STA A6+40 TO A7+10 AND STA A7+30 TO A8+20, CONTRACTOR TO BACKFILL TRENCH TO WITHIN 18" OF EXISTING SURFACE GRADE WITH CLASS B OR 1 $\frac{1}{2}$ "-0 COMPACTED COARSE AGGREGATE STRUCTURAL FILL. THE TOP 18" TO BE BACKFILLED WITH CLASS "A" NATIVE AND TOPSOIL AS REQUIRED FOR RE-SEEDING.

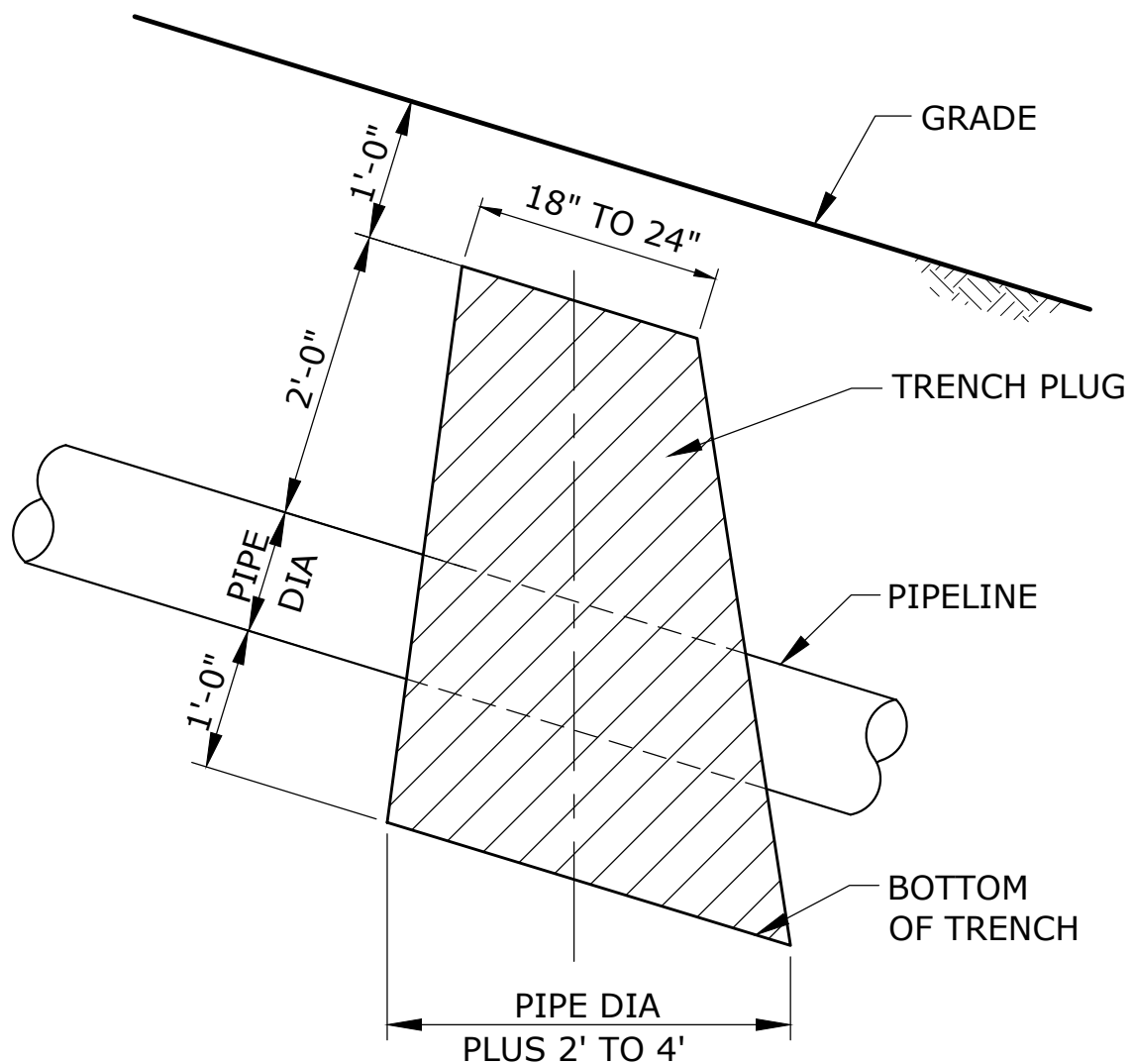


**TYPICAL WETLANDS AND GRASS AREAS
SURFACE RESTORATION**
SCALE: NTS

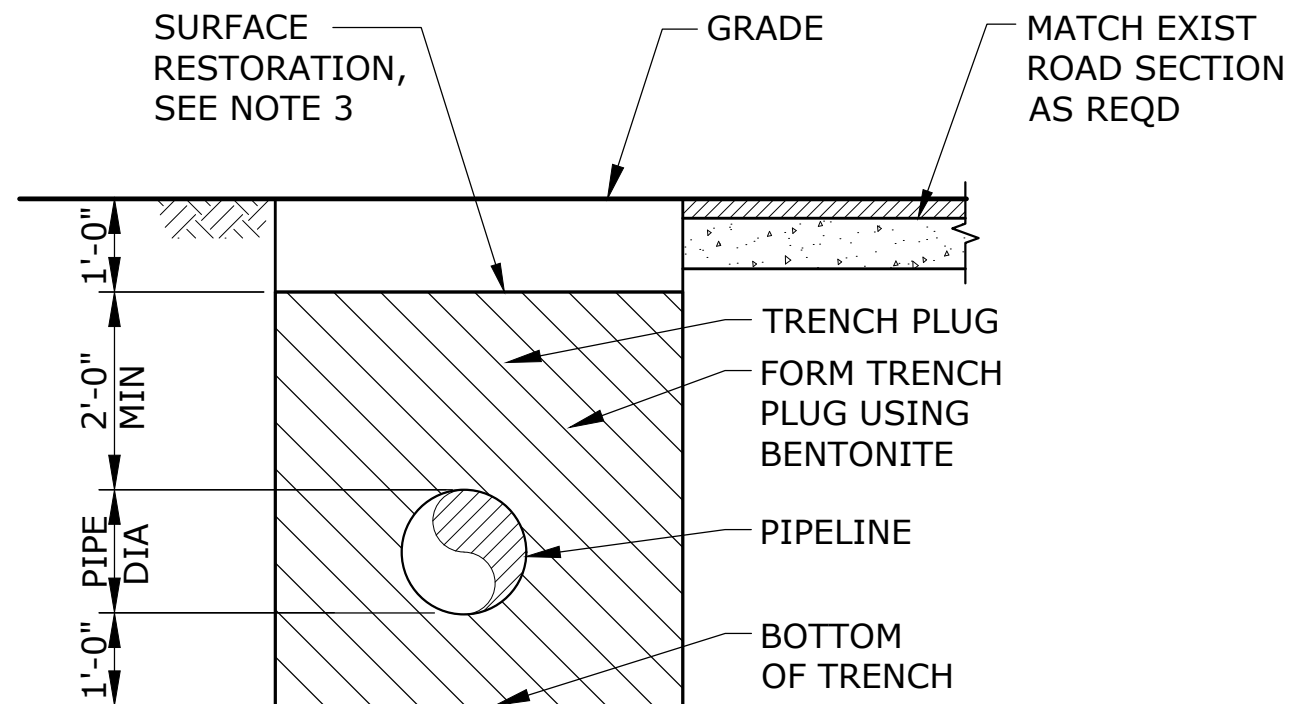
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NOTES:

1. NON-PAVED SURFACES SHALL BE RESURFACED TO MATCH EXISTING. FINISH TRENCH SURFACE TO MATCH ORIGINAL CONTOURS. REPLACE EXIST LANDSCAPING.
2. CUT SOD WITH SOD HARVESTING EQUIPMENT AND STOCKPILE BESIDE TRENCH.
3. EXCAVATE TOPSOIL AND STOCKPILE BESIDE TRENCH, SEPARATE FROM SOD.
4. PROTECT EXIST WETLANDS AND GRASS AREAS WITH GEOTEXTILE BENEATH STOCKPILES.
5. FURNISH AND INSTALL CLASS "A" NATIVE TRENCH BACKFILL TO 1' BELOW FINISH GRADE COMPACTED TO 95% MAXIMUM DENSITY PER AASHTO T-99.
6. REPLACE TOPSOIL AND STOCKPILED SOD TO MATCH ORIGINAL LANDSCAPE AND CONTOURS.



ELEVATION



SECTION

NOTES:

1. CONSTRUCT TRENCH PLUGS WITH BENTONITE. DO NOT USE TOPSOIL.
2. APPROXIMATE LOCATION OF TRENCH PLUGS ARE SHOWN ON PLAN SHEETS. COORDINATE EXACT LOCATION WITH FIELD ENGINEER.
3. SURFACE RESTORATION FOR TRENCH OUT OF ROADWAY SHALL BE CLASS 'A' TRENCH BACKFILL TO FINISH GRADE OR AS SPECIFIED ELSEWHERE.

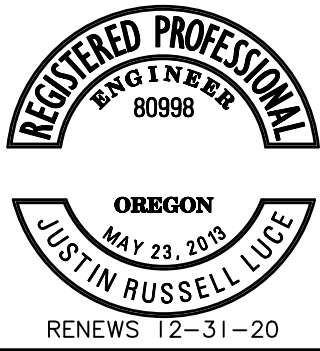
TRENCH CHECK DAM
SCALE: NTS

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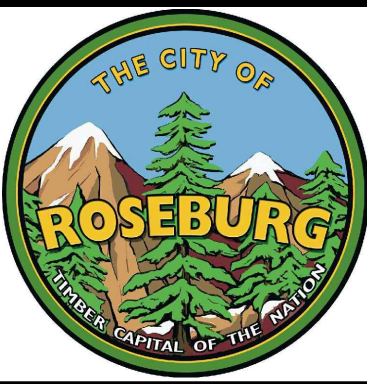
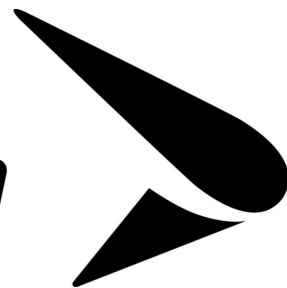
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**WEST AVENUE
WATER MAIN
EXTENSION**

MISCELLANEOUS DETAILS - 1

PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

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NOTES:

1. CONTRACTOR TO INSTALL DUCTILE IRON MID SPAN RESTRAINT DEVICE AND STEEL BEARING PLATE ORIENTED TO RESIST GRAVITATIONAL FORCES FROM PIPING INSTALLED DOWN STEEPLY GRADED HILL. BUTT TIGHT AND BOLT BEARING PLATE TO MIDSPAN RESTRAINT WITH PLATE LOCATED ON THE UPHILL SIDE OF THE ASSEMBLY.

2. CONCRETE ANCHOR BLOCKS SHALL BE CONSTRUCTED USING FORMS. REMOVE FORMS PRIOR TO BACKFILLING TRENCH. CONCRETE SHALL REACH 90% DESIGN STRENGTH PRIOR TO REMOVAL OF FORMS.

3. ALL CONCRETE SHALL BE COMMERCIAL GRADE CONCRETE, 3000 PSI COMPRESSIVE STRENGTH OR GREATER.

4. PROVIDE A MINIMUM OF 3" OF CONCRETE COVER OVER RESTRAINT DEVICE AND STEEL BEARING PLATE WITHIN ANCHOR BLOCK.

5. PROVIDE POLYETHYLENE (PE) ENCASEMENT FOR ALL PIPING AND RESTRAINT DEVICES IN CONTACT WITH CONCRETE AND WITHIN 1 FOOT OF ANCHOR WALL.

6. CONCRETE SLOPE ANCHORS SHALL BE KEYED 3' MINIMUM DEPTH INTO EXISTING SUBSURFACE BEDROCK AS SHOWN.

5" SQ GALV WIRE MESH W/ ¼" OPENINGS, INSTALL OVER 3" WEEP HOLE ON INLET END

UNDISTURBED TRENCH WALL

UNDISTURBED TRENCH WALL

INSTALL 3" WEEP HOLES AT BOTTOM OF TRENCH

KEYED INTO BEDROCK PER NOTE 6

24" MIN

18" MIN

18" MIN

PLAN

24" MIN OR AS REQ'D FOR CONC CLR, SEE NOTE 4

24" DI

EBAA IRON SERIES 1124SDB MID SPAN RESTRAINT DEVICE & ¾" THK STL BEARING PLATE, 36" DIA, SEE NOTES 1 & 5

PIPE BEDDING
POUR AGAINST UNDISTURBED NATIVE SOIL/ BEDROCK, SEE NOTE 6

#6 GR60 DOWELS @ 12" OC, TYP EA WAY, BOTH FACES

ELEVATION

CONCRETE SLOPE ANCHOR BLOCK

SCALE: NTS

1

NOTES:

1. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.

2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING BLOCKING.

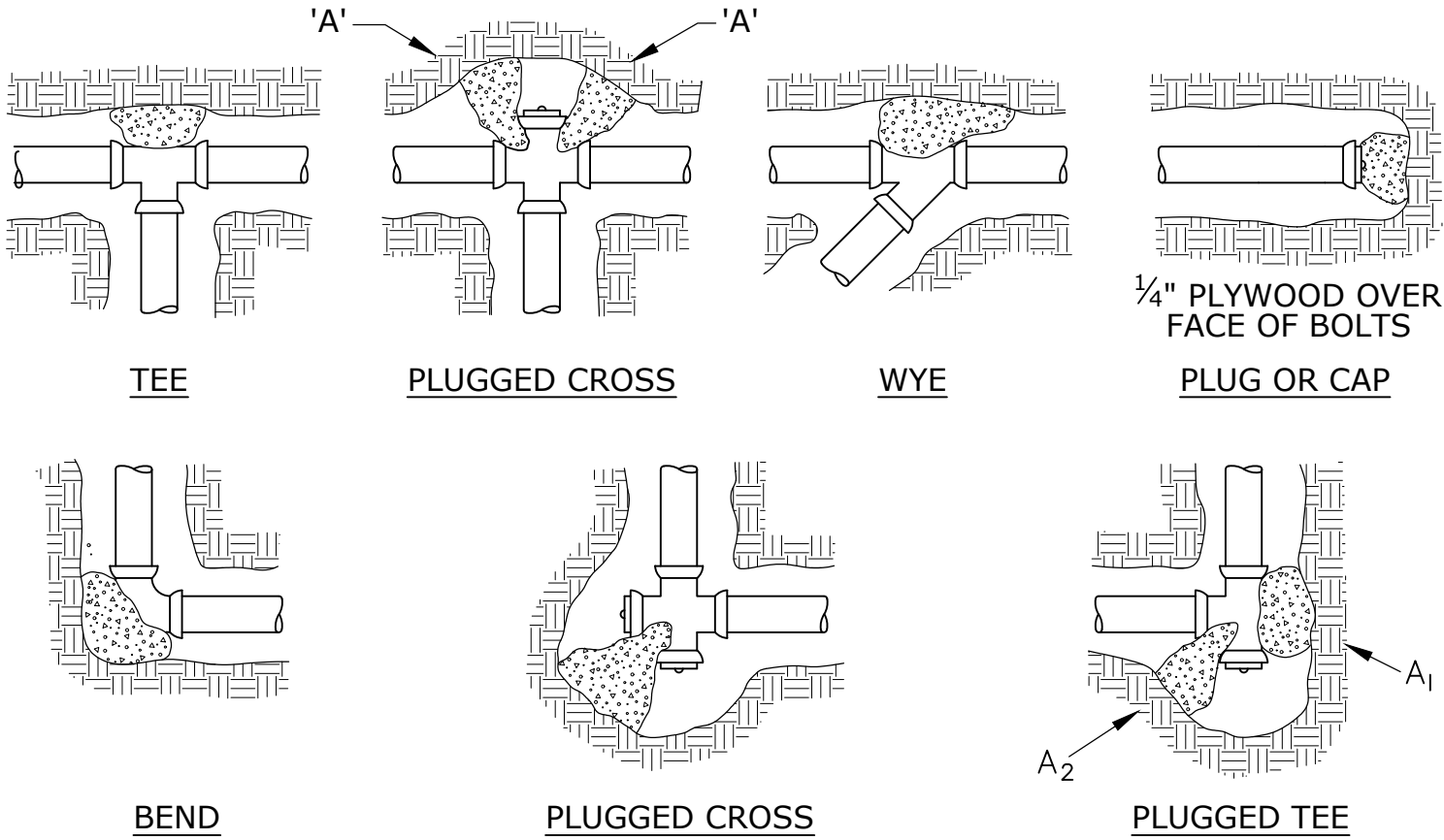
3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLANS; e.g. 15 INDICATES 15 SQUARE FEET BEARING AREA REQUIRED

4. IF NOT SHOWN ON PLANS, REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED IN TABLE, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.

5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS DETAIL.

6. CONCRETE SHALL BE 3000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH.

7. BEARING AREAS WHERE EXISTING PIPE WILL BE ABANDONED IN PLACE, AS SHOWN ON PLAN, SHALL INCLUDE ½" STEEL PLATE AT THE BASE OF THE THRUST BLOCK. THE MINIMUM BEARING AREA OF THE STEEL PLATE SHALL BE BASED ON DATA FROM THE TABLE.



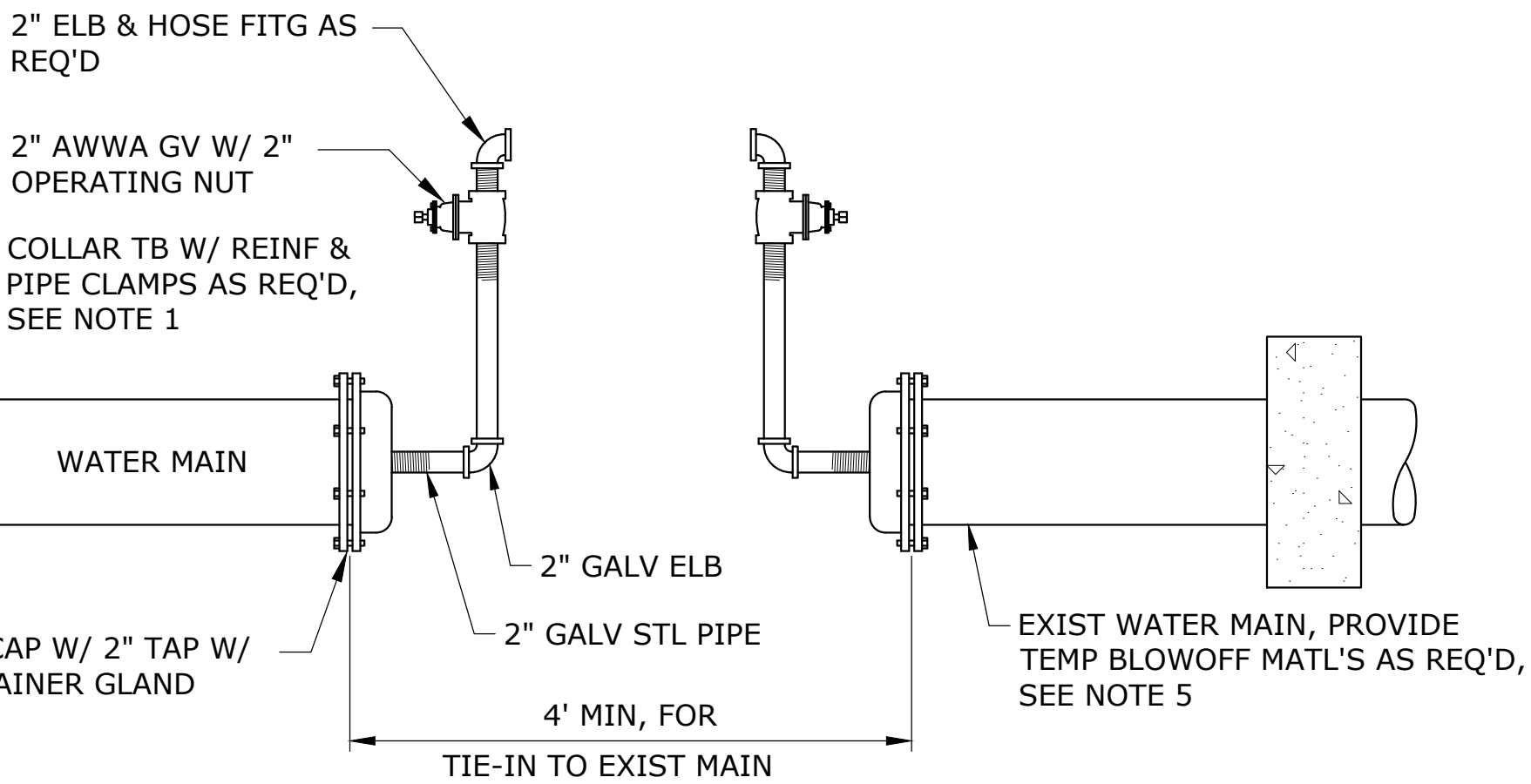
FITTING SIZE	BEARING AREA, 'A', OF THRUST BLOCKS IN SQUARE FEET						*
	TEE, WYE, PLUG OR CAP	90° BEND, PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22 ° BEND	
	A	A	A ₁	A ₂	A	A	A
4	1.4	1.9	2.7	1.9	1.0	-	-
6	2.8	4.0	5.6	4.0	2.1	1.1	-
8	4.8	6.8	9.6	6.8	3.7	1.9	0.9
10	7.3	10.3	14.5	10.3	5.6	2.8	1.4
12	10.3	14.5	20.4	14.5	7.9	4.0	2.0
14	13.8	19.5	27.5	19.5	10.6	5.4	2.7
16	17.8	25.2	35.5	25.2	13.6	7.0	3.5
18	22.4	31.7	44.7	31.7	17.1	8.7	4.4
20	27.5	38.9	54.8	38.9	21.0	10.7	5.4
24	39.2	55.5	78.3	55.5	30.0	15.3	7.7

*ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA=(TEST PRESSURE/150) X (2000/SOIL BEARING STRESS) X (TABLE VALUE).

STANDARD THRUST BLOCK DETAILS

SCALE: NTS

3



NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINTS AS REQUIRED.

2. SEE SPECIFICATIONS REGARDING DISPOSAL/ DECHLORINATION FOR SUPERCHLORINATED WATER.

3. PROVIDE LARGER BLOWOFF PIPING MATERIAL AT CONTRACTOR OPTION.

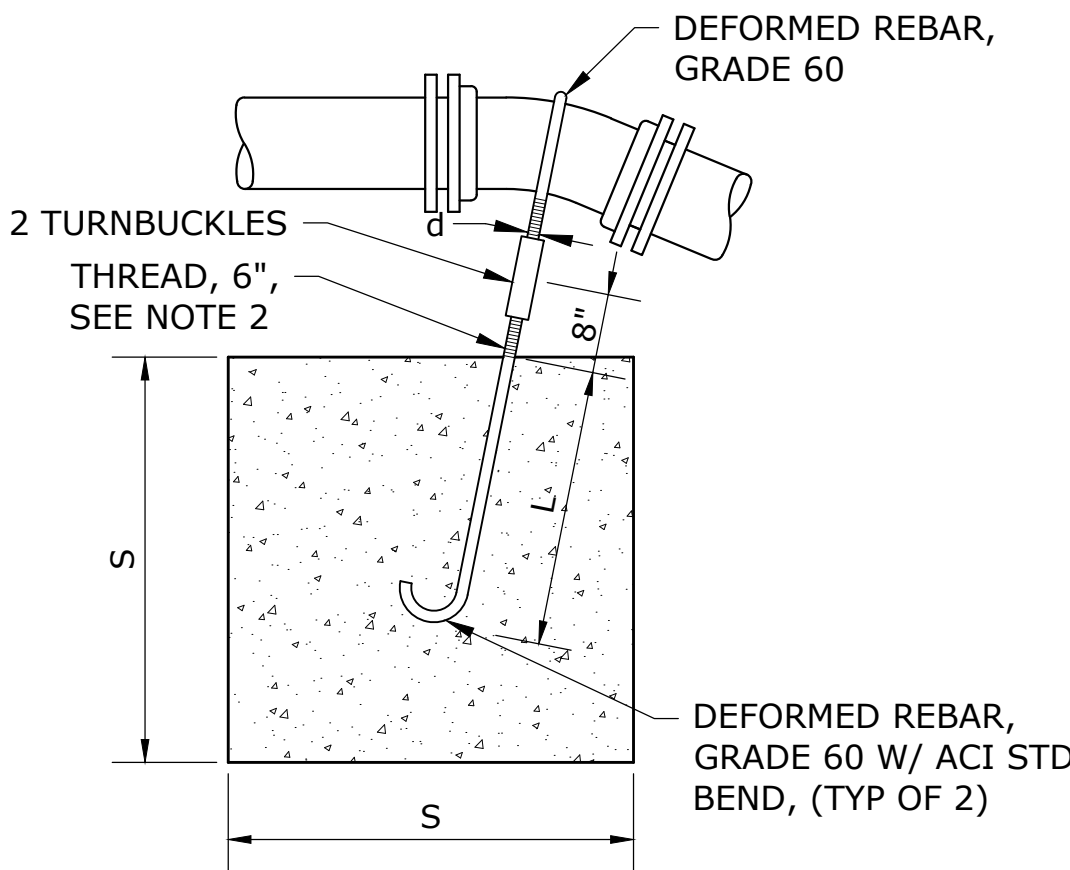
4. WHERE BLOWOFF IS TO BE REMOVED, CONTRACTOR TO CONDUCT OPERATIONS SO AS TO PREVENT SUBSEQUENT CONTAMINATION OF APPROVED DISINFECTED WATER MAIN.

5. PROVIDE TEMPORARY BLOWOFF ON EXISTING WATER MAIN AS REQUIRED TO FACILITATE TESTING AND DISINFECTION OF NEW MAINS AND RESERVOIR YARD PIPING. CONTRACTOR TO PROVIDE BACKFLOW PREVENTION DEVICE FOR TEMPORARY CONNECTION TO EXISTING WATER SYSTEM PER GENERAL NOTE 19, SHEET G-2. CONTRACTOR TO DISINFECT EXISTING WATER MAIN PER REQUIREMENTS OF AWWA C651 DURING INSTALLATION OF TEMPORARY BLOWOFF ASSEMBLY.

TEMPORARY BLOWOFF ASSEMBLY

SCALE: NTS

2



NOTES:

1. TURNBUCKLE AND DEFORMED REBAR SHALL BE HOT DIP GALVANIZED.

2. DEFORMED REBAR SHALL BE SIZED TO ALLOW NOMINAL THREAD DIAMETER "d" AS SHOWN ABOVE.

3. CONCRETE SHALL BE 3000 PSI MIN 28 DAY COMPRESSIVE STRENGTH.

4. ALL-THREAD ROD IS NOT AN ACCEPTABLE SUBSTITUTE FOR REBAR.

5. COAT REBAR AND TURNBUCKLES WITH WAX TAPE. SEE SPECIFICATIONS.

PIPE SIZE	TYPE "A" ANCHORS *				
	(DEG) VERT BEND	(CU FT) CONC	(FT) S	(IN) d	(FT) L
24	11.25	170	5.5	1	2.5
	22.5	333	6.9	1½	5.5

* BASED ON 150 PSI TEST PRESSURE

GRAVITY THRUST BLOCK

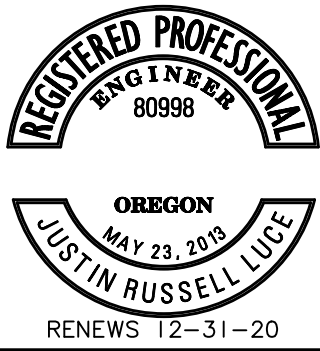
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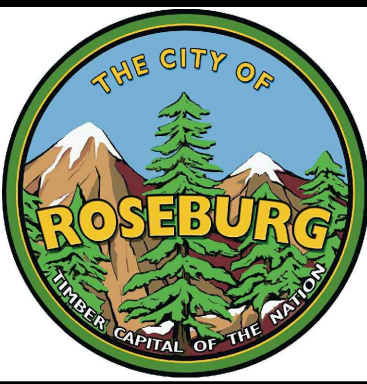
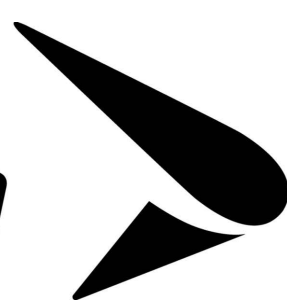
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WEST AVENUE
WATER MAIN
EXTENSION

MISCELLANEOUS DETAILS - 2

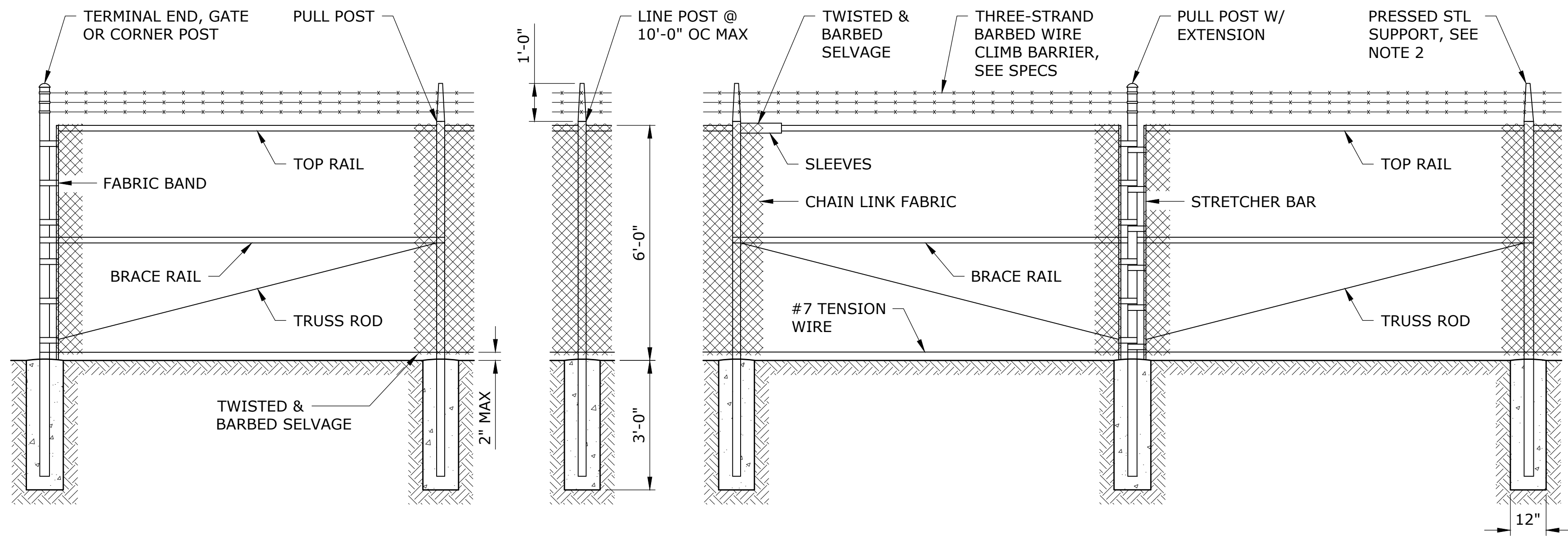
PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

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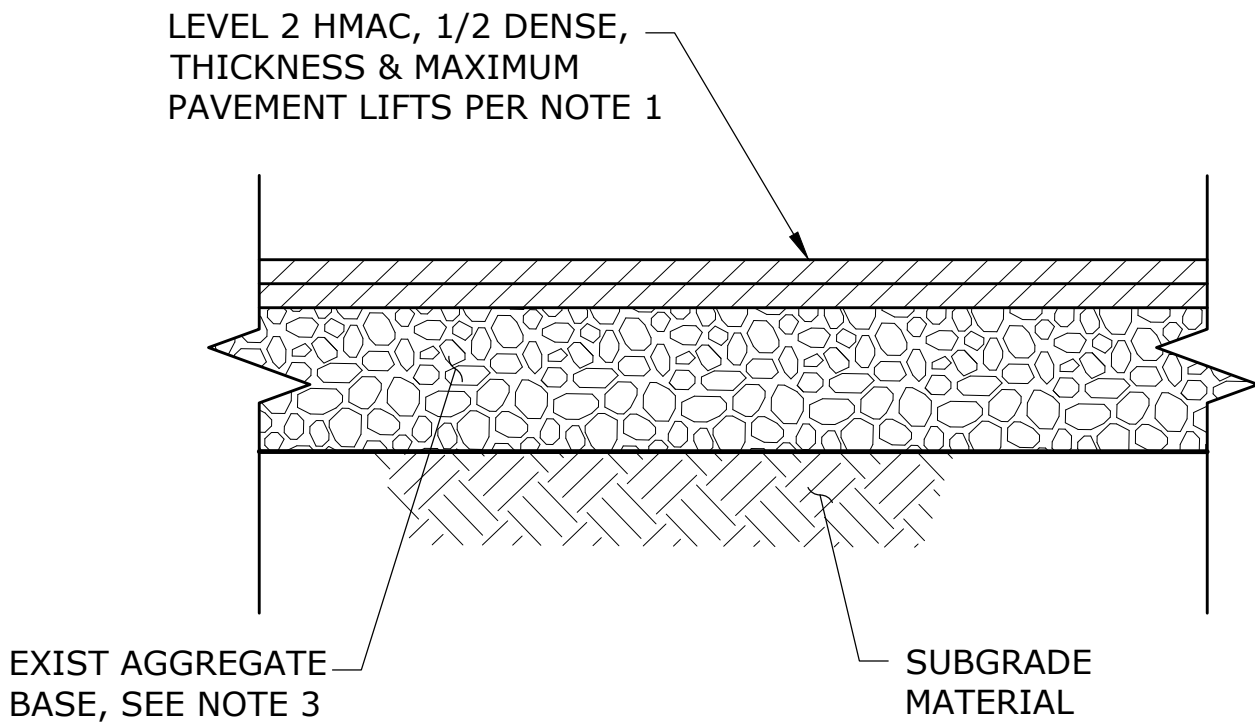
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CHAIN LINK FENCE
SCALE: NTS

1
C-4

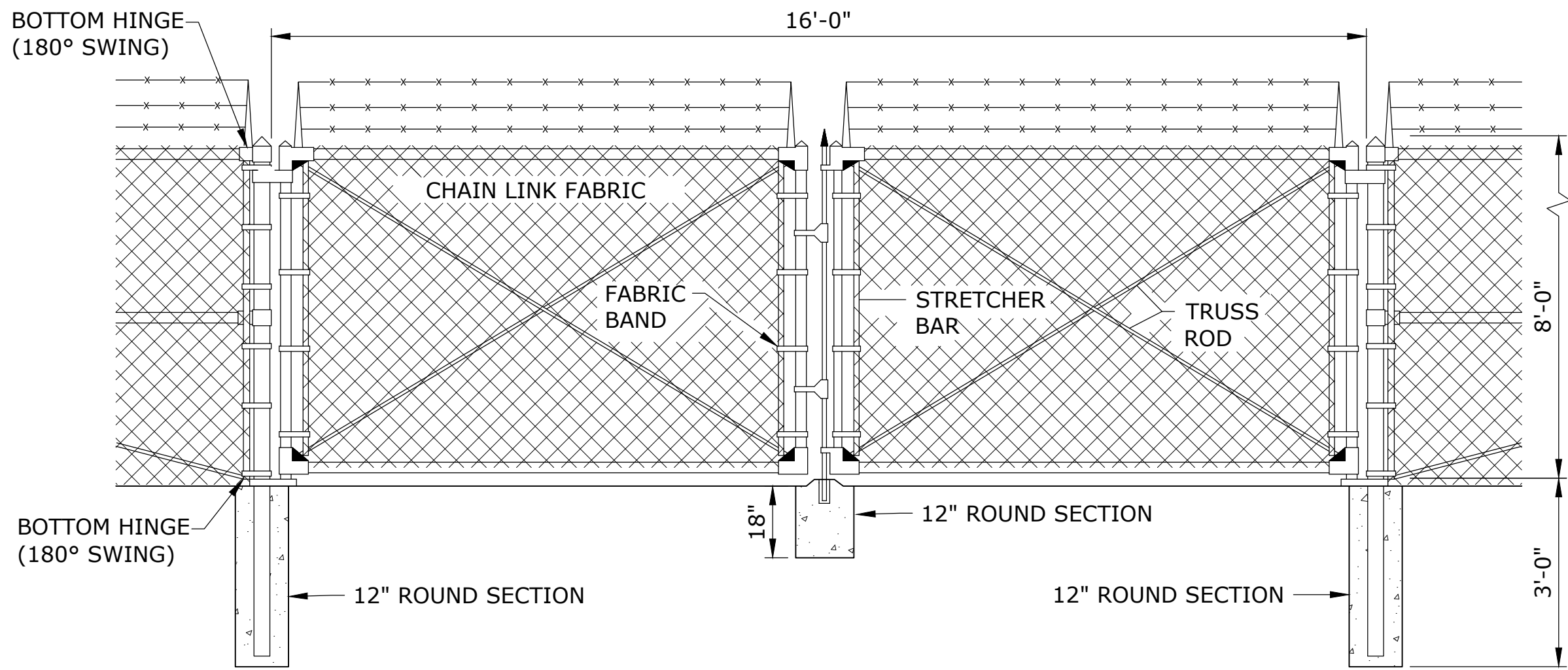
- FENCE NOTES:
1. LAYOUT AND INSTALL FENCE POSTS TO MAINTAIN MAXIMUM 2" SPACE BETWEEN BOTTOM OF FENCE AND GROUND SURFACE.
 2. BARBED WIRE CLIMB BARRIER PRESSED STEEL SUPPORTS SHALL FACE AWAY FROM THE SITE. AT 45° ANGLE. TRANSITION TO VERTICAL BARB WIRE SUPPORT AT GATE LOCATION.
 3. TENSION WIRES ARE NOT ALLOWED IN PLACE OF TOP OR BOTTOM RAILS.
 4. CONCRETE FOOTINGS SHALL HAVE 12" MIN DIAMETER AND 3000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH.



- NOTES:
1. CONTRACTOR TO REMOVE DAMAGED AC FULL DEPTH ON WEST AVENUE TO LIMITS AS DIRECTED BY CITY. REPLACE AC TO EXISTING THICKNESS OR 4", WHICHEVER IS THICKER. MAXIMUM AC BASE COURSE LIFTS SHALL BE 3"; MAX WEARING COURSE LIFT SHALL BE 2", MINIMUM LIFT SHALL BE 1.5".
 2. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE CONTROL AS REQUIRED TO RE-ESTABLISH EDGE OF PAVEMENT DAMAGED BY CONSTRUCTION OPERATIONS.
 3. CONTRACTOR TO ADD CRUSHED ROCK AS REQUIRED TO EXISTING AGGREGATE BASE WHERE AC IS REMOVED OUTSIDE OF TRENCH WIDTH.
 4. SEE SHEET C-2 FOR ANTICIPATED PAVEMENT RESTORATION LIMITS; HOWEVER, FINAL LIMITS TO BE DETERMINED IN THE FIELD PER NOTE 1.

AC PAVEMENT RECONSTRUCTION,
TYPICAL SECTION
SCALE: NTS

3
-



CHAIN LINK GATE
SCALE: NTS

2
C-4

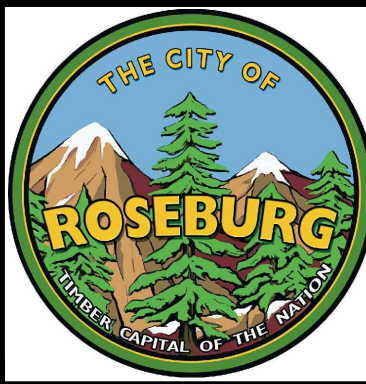
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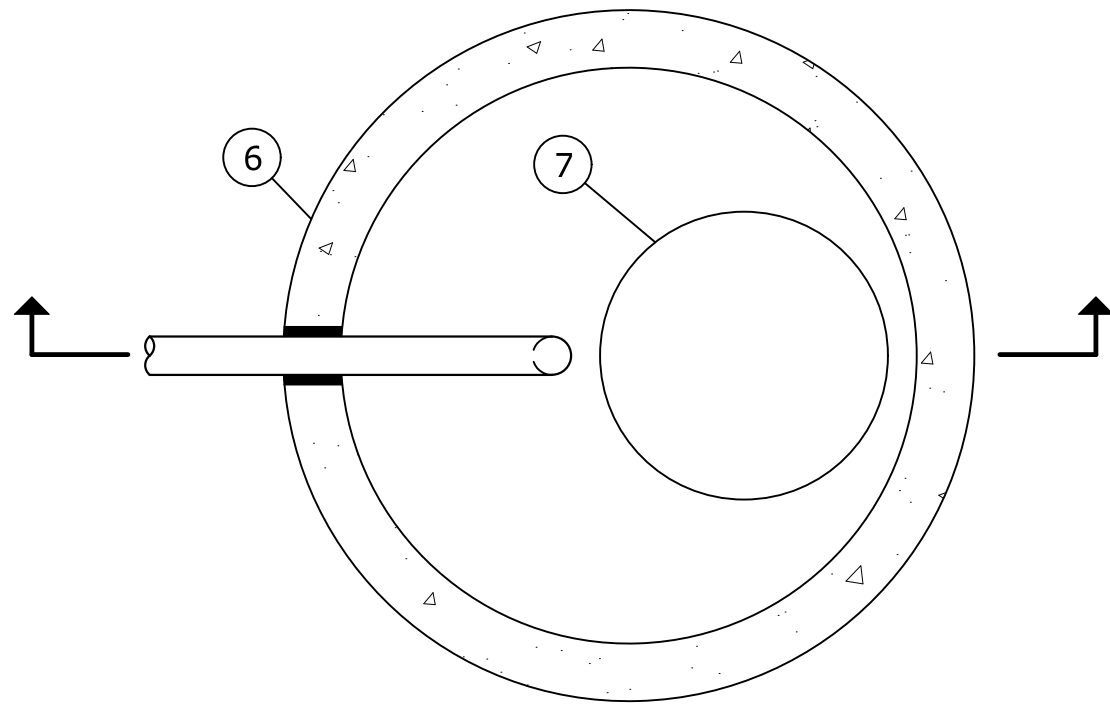
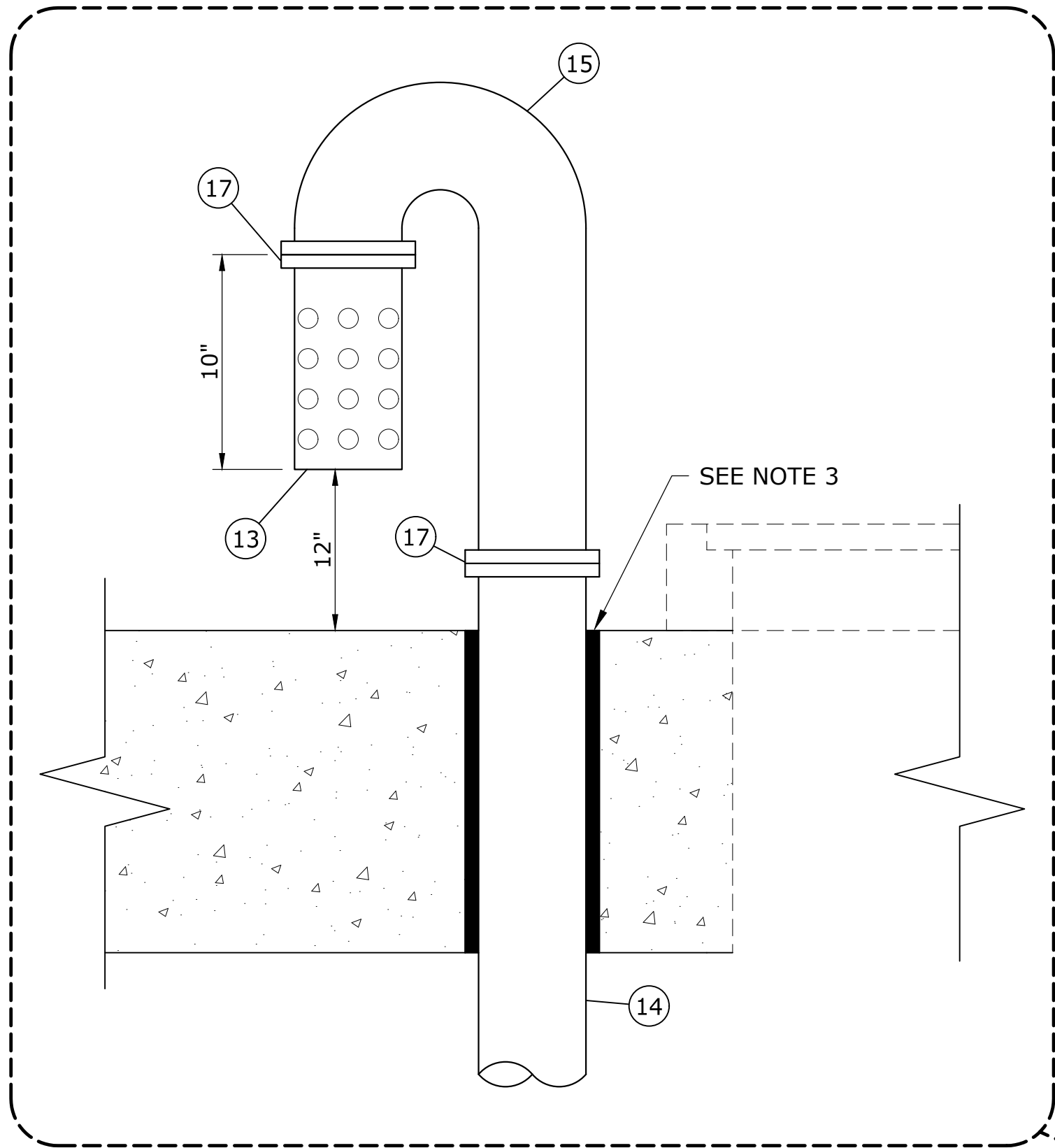
WEST AVENUE
WATER MAIN
EXTENSION

MISCELLANEOUS DETAILS - 4

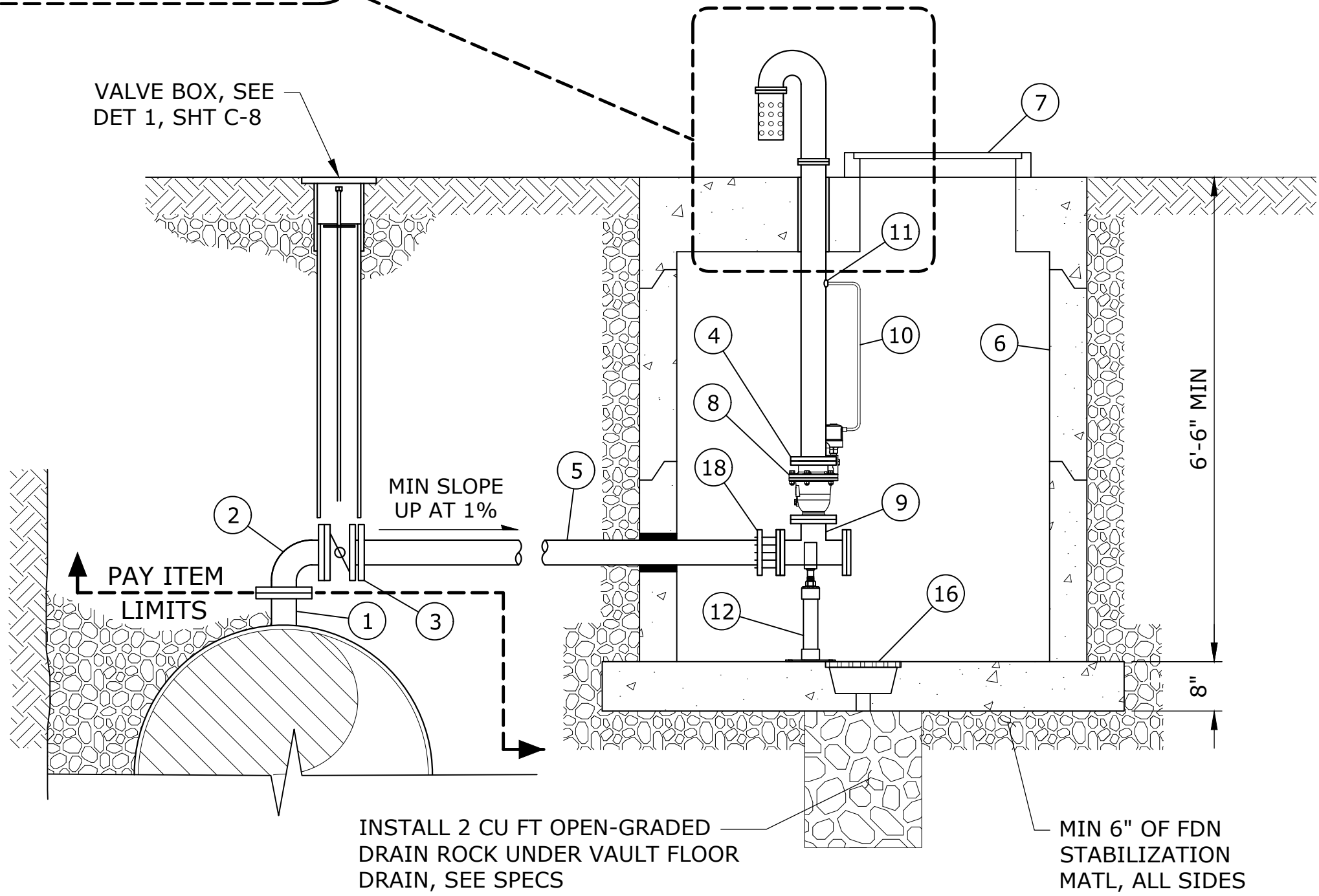
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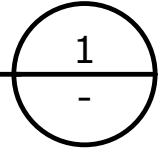
PLAN



SECTION

6" AIR RELEASE VALVE DETAIL

SCALE: NTS



MATERIAL LIST:

- 1 24"x6" DI TEE, SEE PLANS
- 2 6" DI 90° BEND, FLG
- 3 6" GV, FLGxMJ
- 4 6" FLG CONN W/ GALV BOLTS SIZED FOR BLIND TAPPED HOLES IN VALVE COVER
- 5 6" DI SPL, PE, LENGTH AS REQ'D
- 6 60" STD MH W/ FLAT TOP
- 7 STD APWA 30" MH COVER & FRAME
- 8 6" COMBINATION AIR VALVE ASSY ARI D-060-C HF
- 9 6" DI TEE, FLG
- 10 1/4" COPPER TUBING, TAP INTO 6" VENT PIPE
- 11 THREAD-O-LET
- 12 PIPE SUPPORT, STANDON MODEL S92 OR APPVD EQ
- 13 6" SCHED 40 PIPE W/ 1/4" THK END CAP (WELDED), VENT TO INCLUDE APPROX 36 - 1" DIA HOLES AT APPROX 3/4" SPACING ON PIPE SECTION & END CAP, TACK WELD 1/8" 20 GAUGE GALV WIRE MESH INSIDE PERFORATED PIPE
- 14 6" GALV SCHED 40 VENT PIPE, FLGxTHRD FLG, LENGTH AS REQ'D
- 15 6" GALV SCHED 40 VENT PIPE W/ 2 SHORT RADIUS 90° BENDS, WELDED
- 16 FLR DRAIN W/ GRATE
- 17 6" FLG W/ GALV BOLTS & RED RUBBER GASKET
- 18 6" RESTRAINED FCA

NOTES:

- 1. ALL PIPE AND FITTINGS SHALL BE RESTRAINED.
- 2. VERIFY LOCATION OF VAULT AND STAND PIPE WITH ENGINEER.
- 3. ALL MANHOLE PENETRATIONS SHALL BE SEALED WITH WALL SEALS. USE LINK-SEAL IN HOLES AROUND PIPE.
- 4. HOT DIP GALVANIZE ALL STEEL PARTS AFTER FABRICATION.
- 5. JUMPER BOND BURIED AIR RELEASE VALVE PIPE AND JOINTS TO MAIN. SEE SHEET C-11 FOR CORROSION MONITORING DETAILS.
- 6. WRAP ALL BURIED DUCTILE IRON PIPING AND VALVE WITH POLYETHYLENE AND WAX TAPE PER SPECIFICATIONS.
- 7. PRECAST CONCRETE MANHOLE SHALL INCLUDE STEPS IN ACCORDANCE WITH THE SPECIFICATIONS.

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REGISTERED PROFESSIONAL
ENGINEER
80998
OREGON
MAY 23, 2019
JUSTIN RUSSELL LUCE
RENEWALS 12-31-20

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THE CITY OF
ROSEBURG
NATURE CAPITAL OF THE REGION

**WEST AVENUE
WATER MAIN
EXTENSION**

MISCELLANEOUS DETAILS - 5

PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

C-10

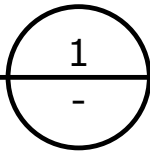
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ITEM	CABLE AND NAME PLATE COLOR	CABLE	TERMINAL IDENTIFICATION ABBREVIATION
NEW PIPE	WHITE	#8 HMWPE AND #12 THWN	NP
EXISTING PIPE	BLUE	#8 HMWPE AND #12 THWN	EP
ZINC REFERENCE CELL	YELLOW	#12 THWN	Z
COUPON (NATIVE)	GREEN	#12 THHN	C-N
COUPON (CP)	GREEN (RED TAPE)	#12 THHN	C-CP

CORROSION CONTROL CABLE IDENTIFICATION TABLE

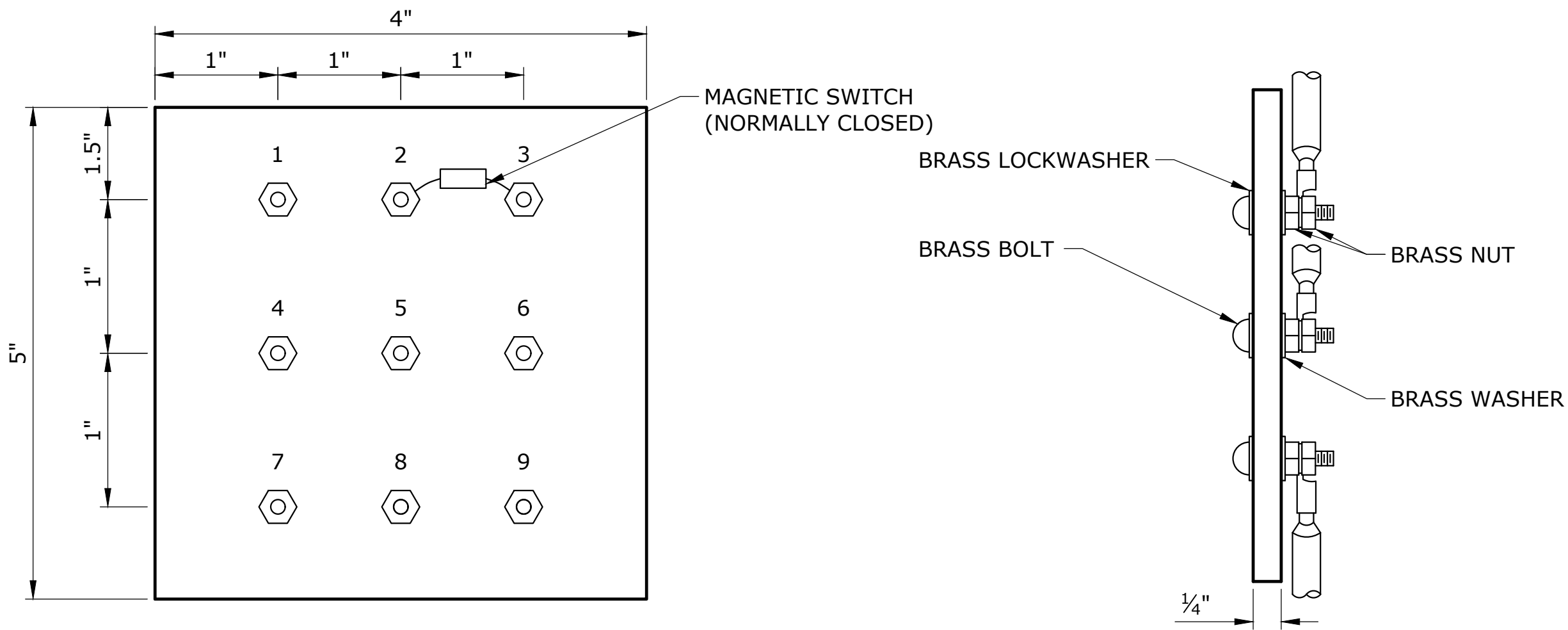
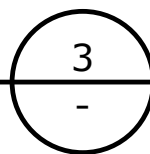
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TERMINAL NUMBER	TEST STATION TYPE A	CABLE
1	NP	#12
2	NP	#8
3	C-CP	#12
4	EP	#8
5	EP	#8
6	C-CP	#12
7	C-N	#12
8	C-N	#12
9	Z	#12

TERMINAL IDENTIFICATION FOR TEST STATION

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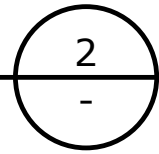


TEST STATION TYPE IJ

TYPICAL TERMINAL BOARD SECTION

TERMINAL BOARD WIRE DIAGRAM

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**WEST AVENUE
WATER MAIN
EXTENSION**

**DUCTILE IRON PIPE
CORROSION MONITORING
DETAILS - 2**

PROJECT NO.: 18-2368 SCALE: AS SHOWN DATE: DECEMBER 2020

SHEET

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