

CITY OF ST. HELENS
 DEPARTMENT OF PUBLIC WORKS
 PLANS FOR PROPOSED PROJECT

S. 1st Street at St. Helens Street Intersection Improvements

June, 2022



**KITTELSON
 & ASSOCIATES**

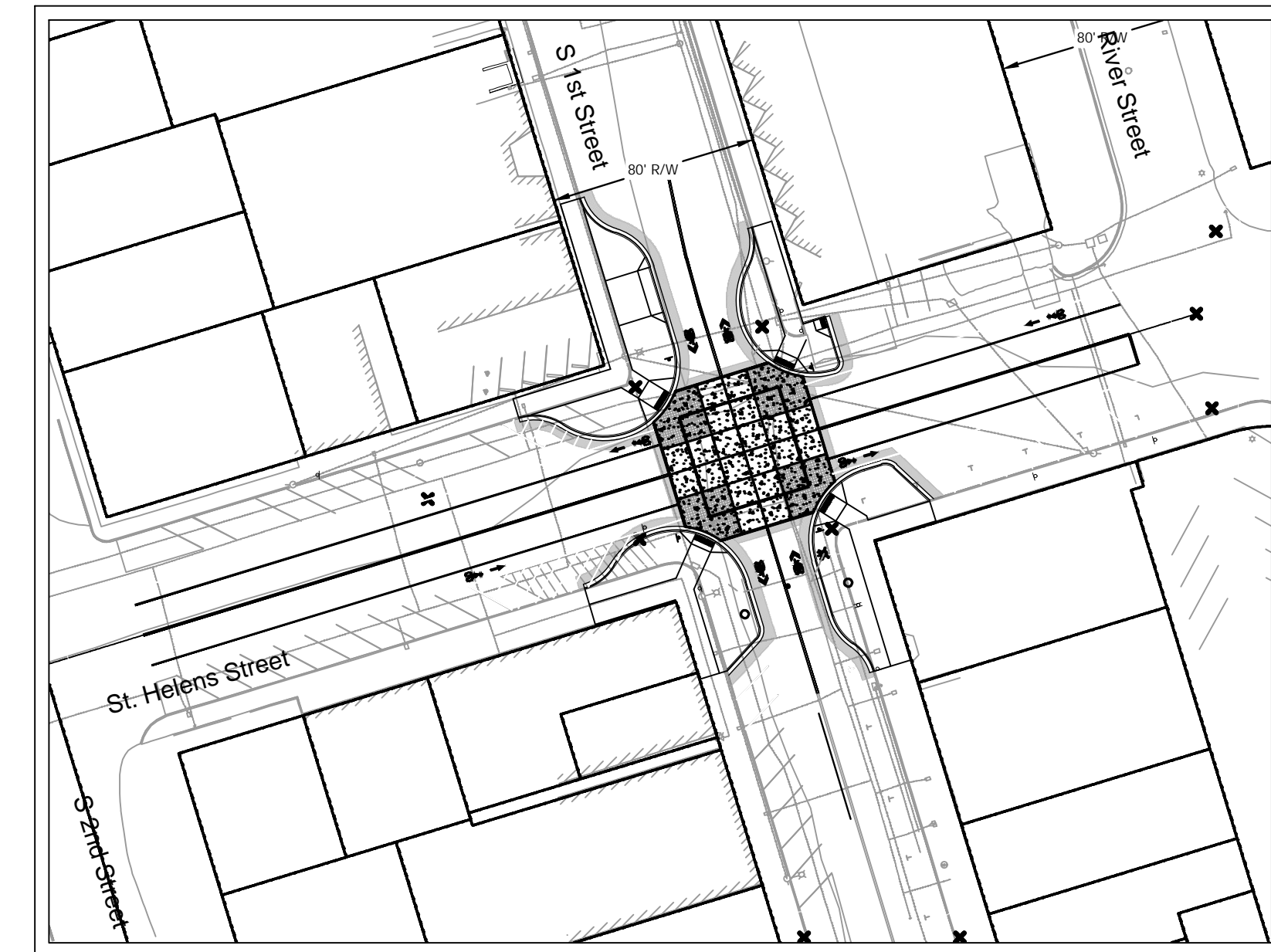
610 SW ALDER STREET, SUITE 700
 PORTLAND, OR 97205
 P. 503.228.5230 F. 503.273.8169

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SITE VICINITY MAP
 N.T.S.



SITE PLAN
 N.T.S.

LOCATES
 (48 HOUR NOTICE PRIOR TO EXCAVATION)



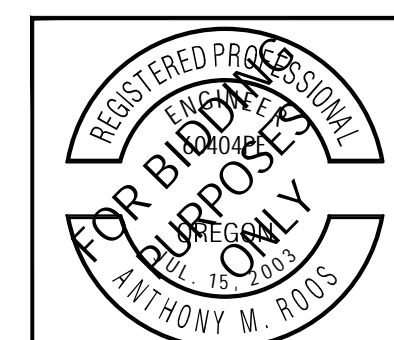
Know what's below.
 Call before you dig.

OREGON LAW REQUIRES YOU 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. YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER BY CALLING (503) 246-1987

ONE CALL SYSTEM 1-800-332-2344

PUBLIC WORKS SUPERVISOR, DAVE ELDER (503) 397-3532, MUST BE NOTIFIED 48 HOURS IN ADVANCE TO COORDINATE ANY TAPS OR WATER VALVE OPERATION. THE CONTRACTOR IS NOT ALLOWED TO OPERATE ANY WATER VALVES CONTROLLING FLOW TO NEW PIPING FROM THE CITY'S POTABLE WATER SYSTEM

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 Center Is (503) 232-1987.)



City Project No. R-685

OWNER

City of St. Helens
 Contact: Sharon Darroux, PMP
 265 Strand Street
 St Helens, OR 97051
 Email: sdarroux@sthelensoregon.gov

CIVIL ENGINEER

Kittelson & Associates, Inc.
 Contact: Tony Roos, P.E., Caleb Cox, P.E.
 851 SW 6th Avenue, Suite 600
 Portland, OR 97204
 Tel: 503-535-7415
 Email: troos@kittelson.com, ccox@kittelson.com

LANDSCAPE ARCHITECT

Greenworks, PC
 Contact: Andrew Holder
 24 NW 2nd Avenue, Suite 100
 Portland, OR 97209
 Email: andrewh@greenworkspc.com

SURVEYOR

S&F Land Services
 Contact: Chris Sherby, PLS
 4858 SW Scholls Ferry Rd, Ste A
 Portland, OR 97225
 Email: chris.sherby@sflands.com

#	DATE	REVISION	APP'D.

Submission Date: 04/22/2022
 Drawn: CEC, Designed: CEC, Checked: AMR

PROJECT NO. 23544

S 1st Street at St. Helens Street
 Intersection Improvements

COVER SHEET & INDEX

SHEET NO. 1

Plot Stamp: 6/27/2022 5:14:17 PM - Caleb Cox
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SURVEY CONTROL POINTS			
Point No.	Northing (Project)	Easting (Project)	Elevation (NAVD88)
200	296695.655	315424.913	68.365
201	296622.185	315464.867	67.525
202	296738.861	315623.601	60.677
203	296723.387	315705.058	56.233
204	296582.424	315768.596	51.132
205	296570.277	315828.232	48.791
206	296727.468	315778.994	52.836
207	296773.736	315925.211	42.689
208	296841.82	315926.675	38.6
209	296805.152	315752.12	55.185
210	297010.049	315695.924	59.668
211	296998.171	315657.964	66.433
212	296781.906	315703.375	57.16

ST. HELENS ST. ALIGNMENT POINTS			
Station	Northing (Project)	Easting (Project)	
10+00	296674.83	315475.66	
14+64	296810.09	315919.21	

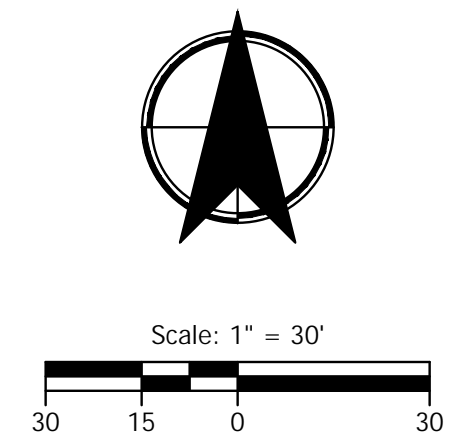


SURVEY NOTES

- Horizontal datum: Project system derived from the Oregon Coordinate Reference System, Portland Zone, NAD83(2011), Epoch 2010.00.
- Vertical datum: NAVD88
- Units: International Feet.
- The existing underground utilities shown herein are approximate locations only based on the field location of utility locate paint marks and physical features visible on or above the ground surface. The contractor shall determine the exact location of any and all underground utilities before beginning work. The contractor shall be fully responsible for any and all damages arising out of his/her failure to exactly locate and protect all existing utility facilities.
- Right-of-way lines provided as a reference only based on the City of St. Helens GIS database. Right-of-way has not been resolved by the Surveyor or Engineer.

GENERAL NOTES

- All right-of-way shown is approximate and based on GIS data.



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Submission Date: 04/22/2022
Drawn: CEC
Designed: CEC
Checked: AMR
PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements
SURVEY CONTROL
SHEET NO. 1A

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT AND APPLICABLE REGULATIONS, SPECIFICATIONS, CODES, AND REQUIREMENTS OF CITY OF ST. HELENS, THE OREGON STATE PLUMBING SPECIALTY CODE (UPC), AND THE OREGON STATE STRUCTURAL SPECIALTY CODE (OSSC).
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET APPLICABLE AGENCY REQUIREMENTS AND AS NECESSARY TO PROVIDE A COMPLETED PROJECT.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES PRIOR TO COMMENCING WORK ON THIS PROJECT.
- THE CONTRACTOR SHALL KEEP A COPY OF ALL REQUIRED PERMITS AND AN APPROVED SET OF PLANS WITH ALL APPROVED REVISIONS ON THE PROJECT SITE AT ALL TIMES.
- THE EXISTING AND APPROXIMATE LOCATION OF KNOWN UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE DRAWINGS WERE DETERMINED BY A SEARCH OF AVAILABLE PUBLIC RECORDS AND AS-BUILTS. THE LOCATIONS AND DEPTHS OF THESE UTILITIES ARE FROM THESE RECORDS AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. NO RESPONSIBILITY IS ASSUMED BY EITHER THE CITY OR THE ENGINEER FOR ACCURACY OR COMPLETENESS OF THESE LOCATIONS.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THIS SITE AND IN ADJACENT STREETS. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THIS DRAWING, SHALL BE REPAIRED / REPLACED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. EXISTING SURFACE FEATURES AND FENCING DAMAGED BY CONTRACTOR SHALL BE REPLACED IN KIND TO THE SATISFACTION OF THE CITY.
- THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED PRIOR TO STARTING ANY WORK.

ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH ON OAR 952-001-0010 THROUGH OAR 52-001-0090. 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 24 HOURS BEFORE COMMENCING CONSTRUCTION IN THEIR VICINITY.
- THE CONTRACTOR SHALL NOTIFY ALL COMPANIES AND AGENCIES WITH UNDERGROUND FACILITIES IN THE PROJECT AREA FOR 24 HOURS BEFORE COMMENCING CONSTRUCTION IN THEIR VICINITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF BURIED AND OVERHEAD UTILITIES. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
- THE INSTALLATION OF NEW OR RELOCATION OF EXISTING ELECTRICAL, TELEPHONE, GAS, AND CABLE SERVICE SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF UTILITY TRENCHES, CONDUIT, VAULTS, PADS, PEDESTALS, AND UTILITY TRENCH BACKFILL IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND PLANS OF SERVICING UTILITIES (ELECTRICAL, TELEPHONE, GAS, AND CABLE).
- ALL EXISTING SITE CONDITIONS AND ELEVATIONS SHOWN ON THESE DRAWINGS ARE FROM A TOPOGRAPHIC SURVEY. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND ELEVATIONS. CONTRACTOR SHALL CONFIRM BENCHMARK LOCATION AND ELEVATION WITH SURVEYOR.
- PROPERTY AND RIGHT-OF-WAY LINES SHOWN ARE FOR REFERENCE ONLY. THESE PLANS ARE NOT MEANT TO SERVE BOUNDARY SURVEY PURPOSES.
- ANY ALTERATION OR VARIANCE FROM THESE PLANS, EXCEPT MINOR FIELD ADJUSTMENTS NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL BE APPROVED BY THE ENGINEER AND APPLICABLE REGULATORY AGENCY REPRESENTATIVE.
- ANY CONSTRUCTION OBSERVATION BY CITY OF ST. HELENS, OR THE ENGINEER, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND REGULATORY AGENCY REQUIREMENTS.
- APPROVED EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY AGENCY REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, AND PERSONNEL NECESSARY TO MAINTAIN SUCH EROSION PROTECTION MEASURES. ANY DAMAGE CAUSED BY EROSION SHALL BE CORRECTED BY THE CONTRACTOR AT ONCE.
- THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
- ALL OPEN CUTTING OF EXISTING STREETS SHALL BE PATCHED WITH A.C., COLD (TEMPORARY) OR HOT MIX, AT THE CLOSE OF EACH WORK DAY. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT.
- DEMOLITION WORK SHALL INCLUDE REMOVAL OF ALL STUMPS AND VEGETATION DEBRIS. CONFORMANCE WITH ALL REGULATIONS AND PERMITTING REQUIREMENTS FOR SUCH WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND COORDINATE THE REMOVAL AND/OR ABANDONMENT OF EXISTING UTILITIES OR PROPER FILLING OF THE UTILITIES (SEPTIC TANKS, LINES, ETC.) IF THEY ARE TO REMAIN. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE OF OREGON WATER MASTER 503-681-7018 TO APPROVE THE FILLING OF ANY SEPTIC TANKS AND REMOVAL OF ANY EXISTING WATER WELLS.
- ALL SURVEY MONUMENTS ON THE SUBJECT SITE, OR THAT MAY BE SUBJECT TO DISTURBANCE WITHIN THE CONSTRUCTION AREA, OR THE CONSTRUCTION OF ANY OFF-SITE IMPROVEMENTS SHALL BE ADEQUATELY REFERENCED AND PROTECTED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY. IF THE SURVEY MONUMENTS ARE DISTURBED, MOVED, RELOCATED, OR DESTROYED AS A RESULT OF ANY CONSTRUCTION, THE PROJECT SHALL, AT ITS COST, RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OREGON TO RESTORE THE MONUMENT TO ITS ORIGINAL CONDITION AND FILE THE NECESSARY SURVEYS AS REQUIRED BY OREGON STATE LAW. A COPY OF ANY RECORDED SURVEY SHALL BE SUBMITTED TO STAFF.

GENERAL UTILITY NOTES

- ABANDONED STORM AND SANITARY SEWERS SHALL BE REMOVED IN THEIR ENTIRETY OR PIPE FULLY GROUTED. INSPECTION IS REQUIRED.
- THE DEQ IS OPPOSED TO ANY OIL, GREASE, GASOLINE, ETC. DRAINED INTO ANY SANITARY SEWER OR STORM SEWER. DEQ WANTS ALL OIL, GASOLINE, GREASE, ETC. TO BE TREATED AS ANY OTHER HAZARDOUS WASTE WITH ON-SITE CONTAINMENT AND REMOVAL BY LICENSED HAZARDOUS WASTE DISPOSAL PROFESSIONALS. THE DEQ MAY ISSUE CITATIONS FOR INTRODUCING OIL, GAS, ETC. INTO A DRAINAGE SYSTEM THAT CONNECTS TO THE SANITARY SEWER OR THE STORM SEWER, THE FACT THAT AN OIL/WATER SEPARATOR IS INSTALLED INLINE WOULD NOT MAKE A DIFFERENCE. IT IS RECOMMENDED THAT THE DRAINS TO THE OIL/WATER SEPARATOR NOT BE INSTALLED.
- THE UTILITY TAPS TO SERVE THIS PROJECT WILL BE INSPECTED UNDER THE ASSOCIATED PUBLIC IMPROVEMENT WORK.
- THE EXCAVATION CONTRACTOR SHALL CALL THE OREGON UTILITY NOTIFICATION CENTER AT 503-232-1987 AT LEAST 48 HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS BEFORE BEGINNING EXCAVATION. 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 ADMINISTRATIVE CENTER.

GRADING

- PROJECT GRADING LIMITS SHALL BE ALL PROPERTY LINES AND STREET RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON THE GRADING PLANS.
- STRAIGHT GRADES SHALL BE CONSTRUCTED BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN, UNLESS OTHERWISE NOTED.
- ALL PROPOSED ELEVATIONS SHOWN SHALL BE CONSIDERED TO BE FINISH SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
- DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE SITE.
- CONTRACTOR TO REMOVE ALL UNSUITABLE MATERIAL, DEBRIS, AND ORGANIC MATERIAL WITHIN GRADING AND FILL LIMITS PRIOR TO FILL PLACEMENT. NEW FILL MATERIAL SHALL BE BENCHED INTO EXISTING GROUND IN ACCORDANCE WITH RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
- THE REMOVAL OF UNSUITABLE MATERIAL SHALL BE DONE IN CONSULTATION WITH THE GEOTECHNICAL ENGINEER. UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DETERMINED BY THE GEOTECHNICAL ENGINEER. IF SUCH MATERIAL IS REMOVED FROM THE SITE IT SHALL BE REMOVED AT THE CONTRACTOR'S SOLE EXPENSE. 7. ALL CUT OR FILL SLOPES SHALL BE CONSTRUCTED AT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE
- VERTICAL UNLESS OTHERWISE SHOWN ON THE PLANS OR SPECIFIED IN THE GEOTECHNICAL REPORT.
- IF SPRINGS OR GROUND WATER ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL ADVISE THE GEOTECHNICAL ENGINEER AND THE CIVIL ENGINEER OF THE CONDITION FOUND AND COORDINATE CONSTRUCTION ACTIVITIES IN A MANNER THAT WILL ALLOW THE ENGINEERS TIME TO REVIEW THE SITUATION AND PREPARE A PLAN TO PROPERLY DISPOSE OF THE WATER ENCOUNTERED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL CATCH BASINS, CLEANOUTS, MANHOLES, VAULTS, ETC., THAT ARE AFFECTED BY CONSTRUCTION AND/OR FILL TO FINISH GRADE. STORM DRAIN INLET STRUCTURES SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING. 10. ORGANIC MATERIAL (TREES, BRUSH, ROOTS, STUMPS, ETC.) SHALL BE REMOVED FROM THE SITE. STRIPPING SHALL GENERALLY BE 2 TO 5 INCHES, BUT MAY BE DEEPER IN WOODED AREAS. UNSUITABLE EXCESS STRIPPINGS SHALL BE DISPOSED OF BY THE CONTRACTOR. REMOVAL OF TOPSOIL WILL BE IN THE ORDER OF 12 TO 24 INCHES THICK. SEE GEOTECH REPORT FOR STRIPPING AND TOPSOIL REMOVALS.



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#	DATE	REVISION	APPROVED

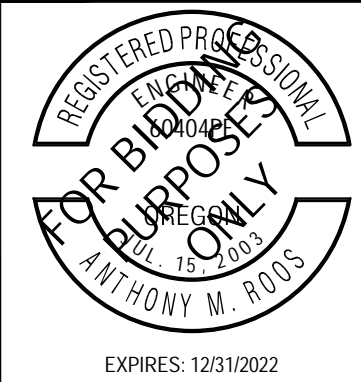
Submission Date: 04/22/2022

Drawn: CEC	Designed: CEC	Checked: AMR
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PROJECT NO.
23544

S 1st Street at St. Helens Street Intersection Improvements

GENERAL NOTES



SHEET NO.
1B



KITTELSON & ASSOCIATES

610 SW ALDER STREET, SUITE 700
 PORTLAND, OR 97205
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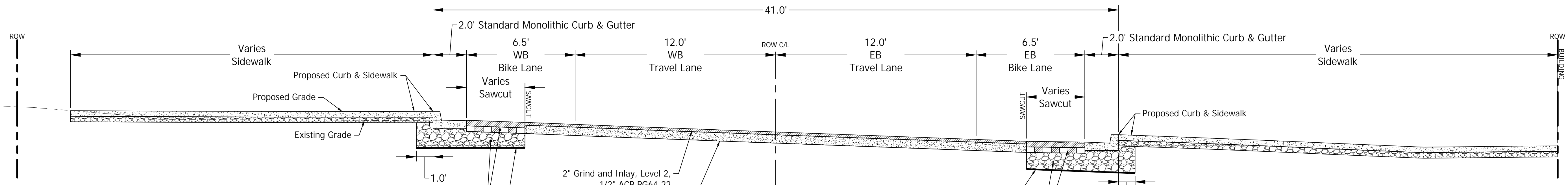
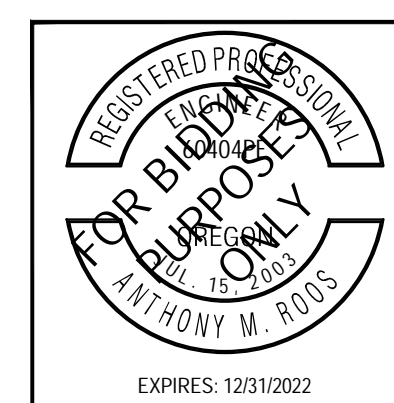
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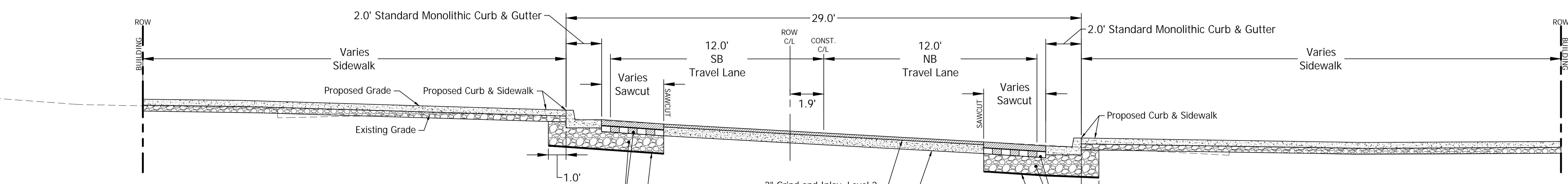
S 1st Street at St. Helens Street
 Intersection Improvements

TYPICAL SECTIONS

SHEET NO. 2A

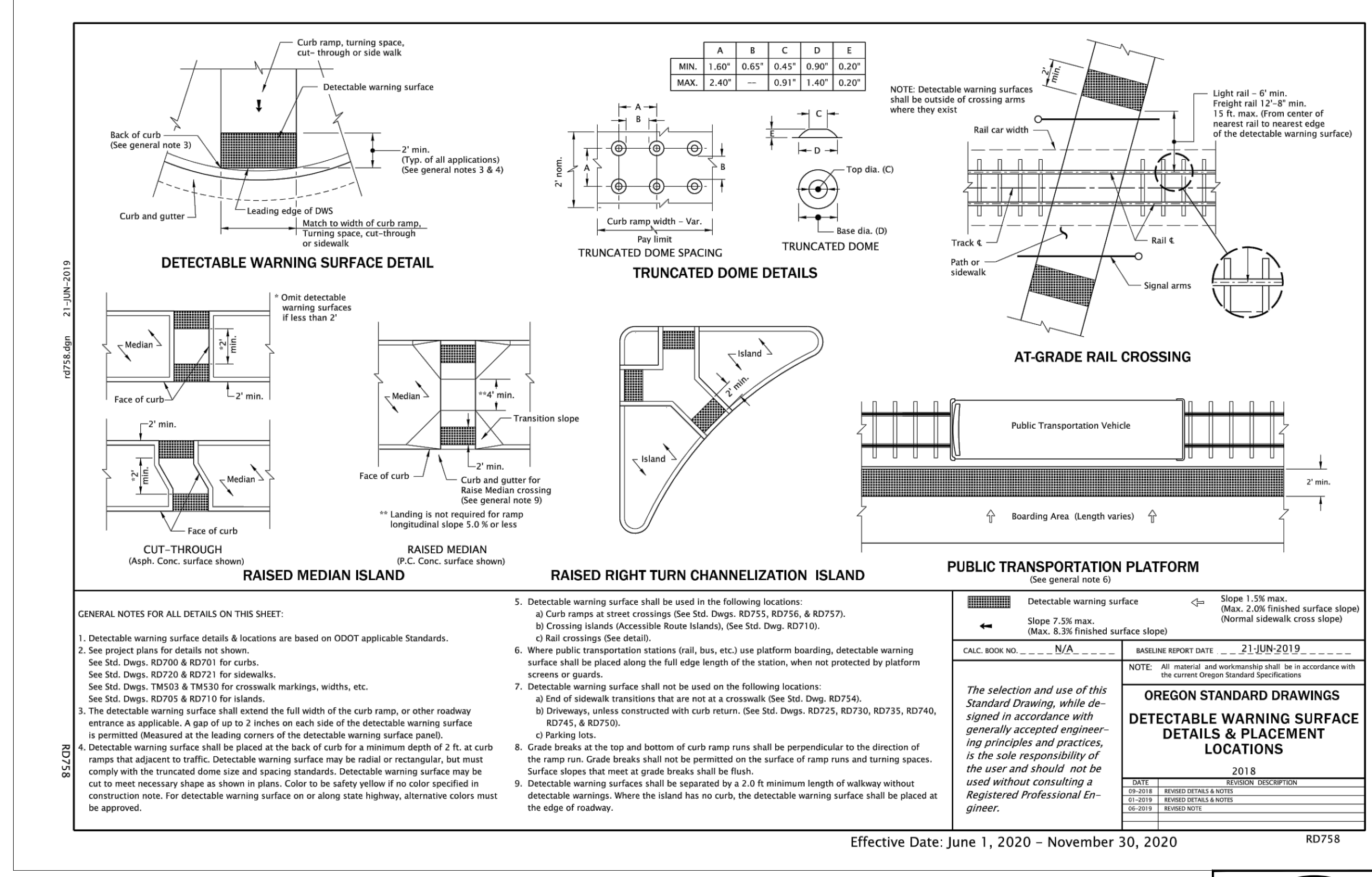
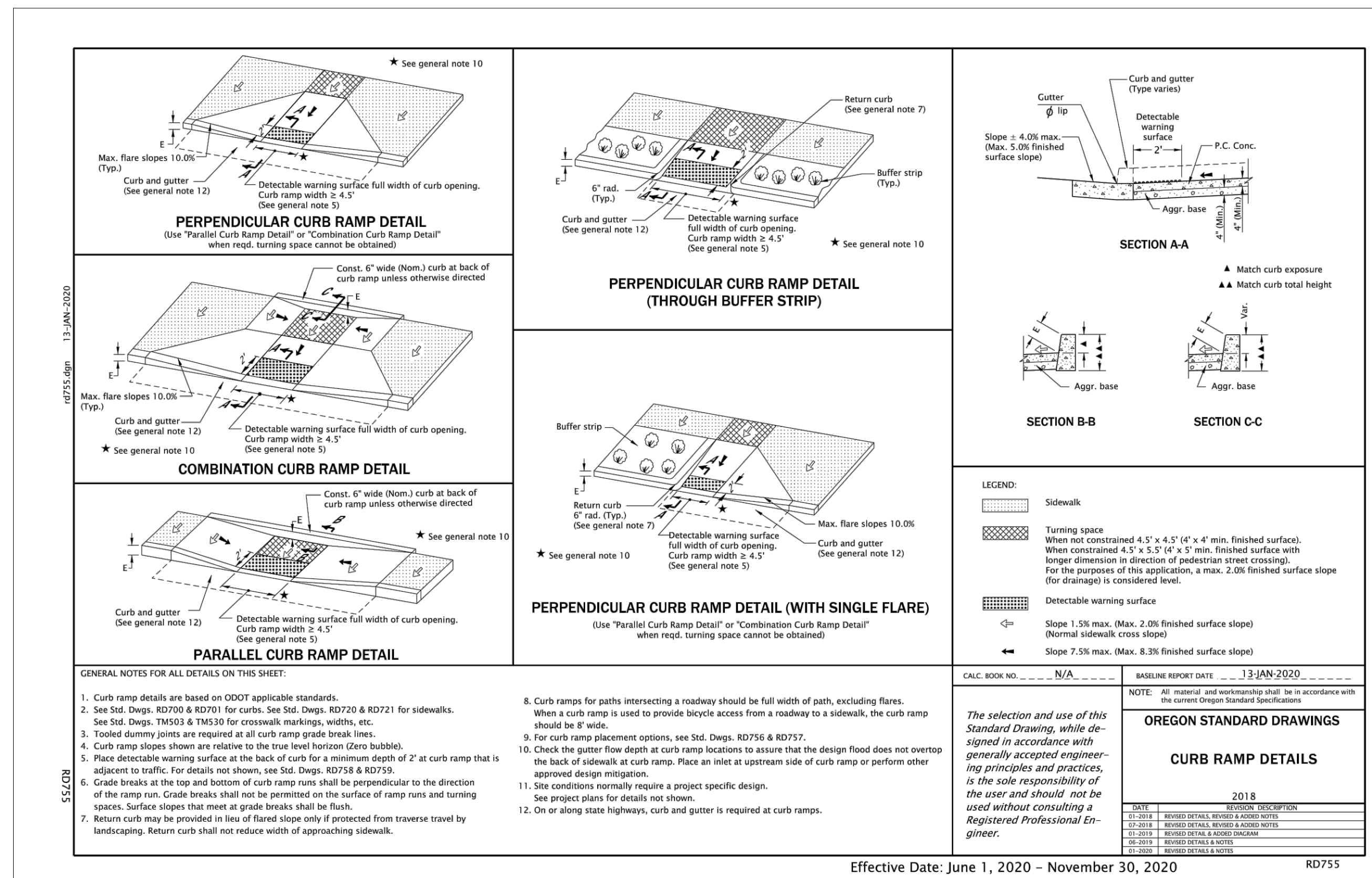
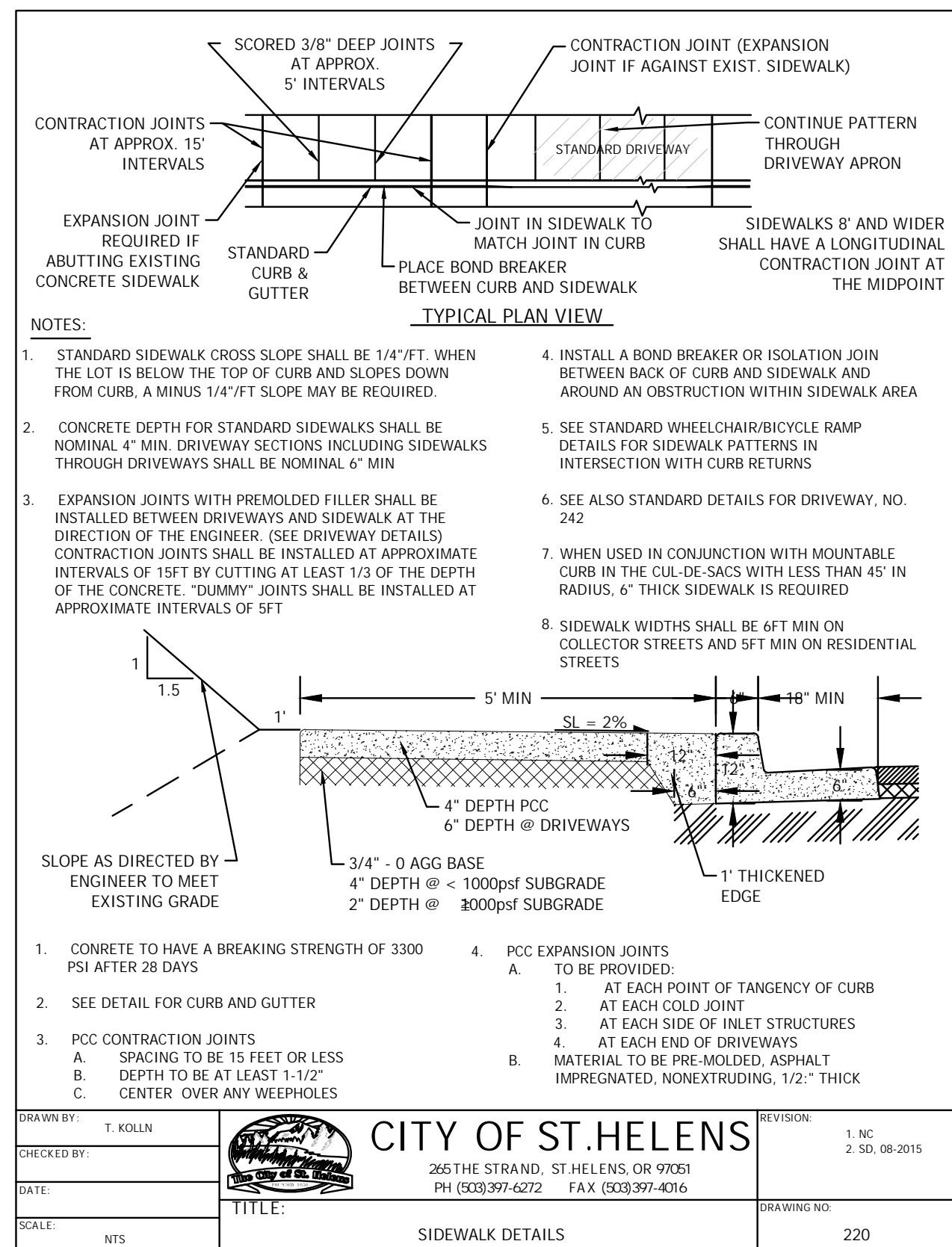
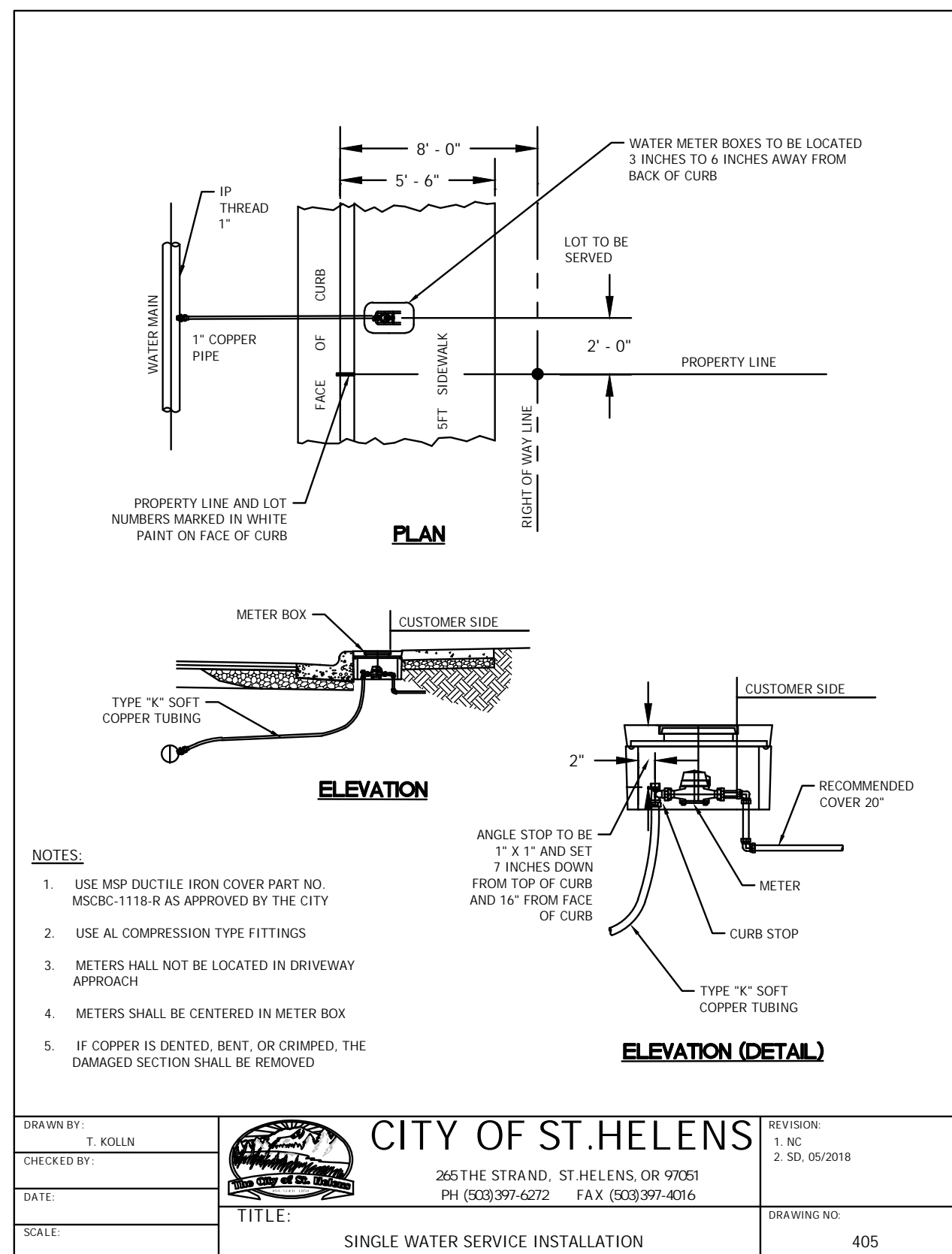
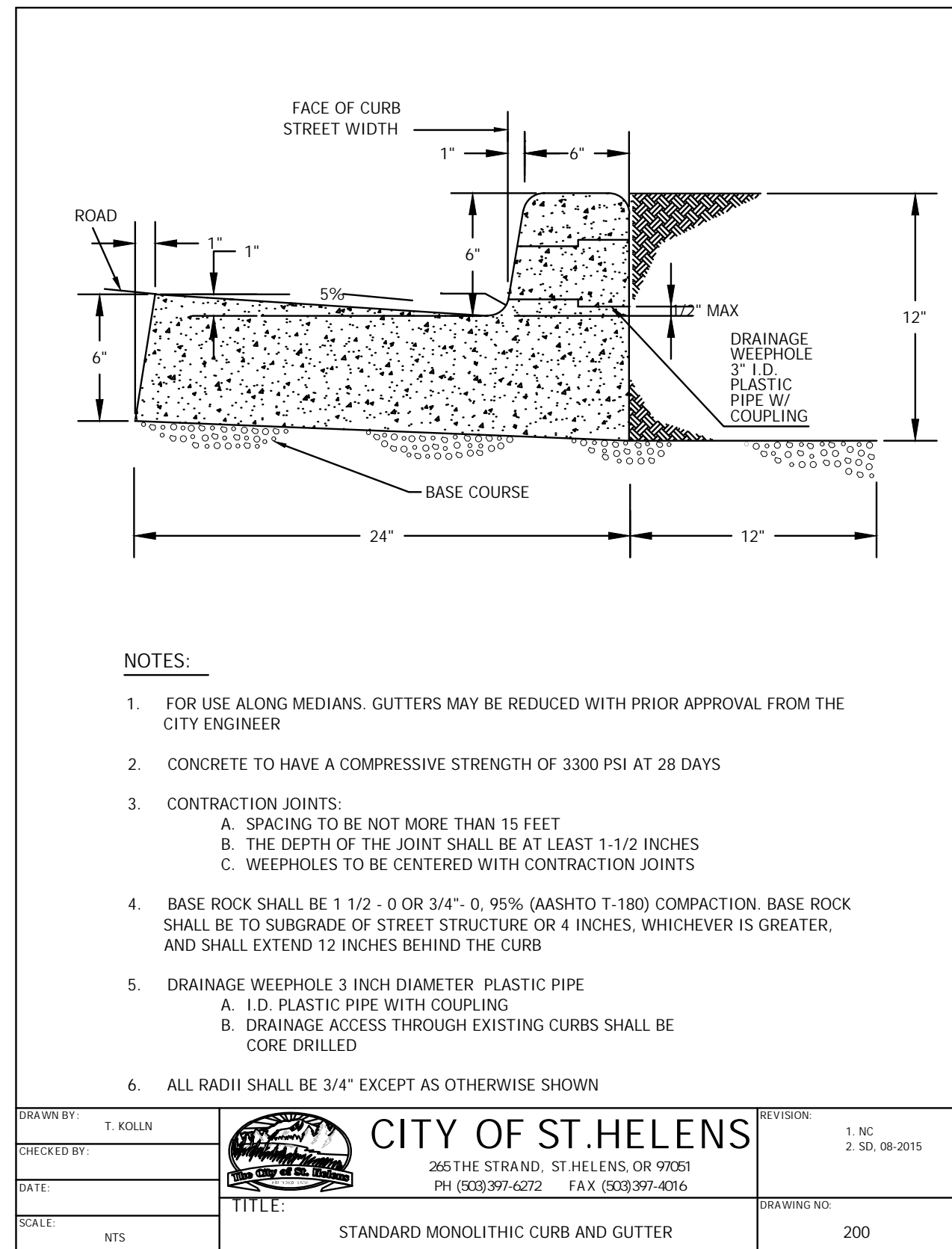
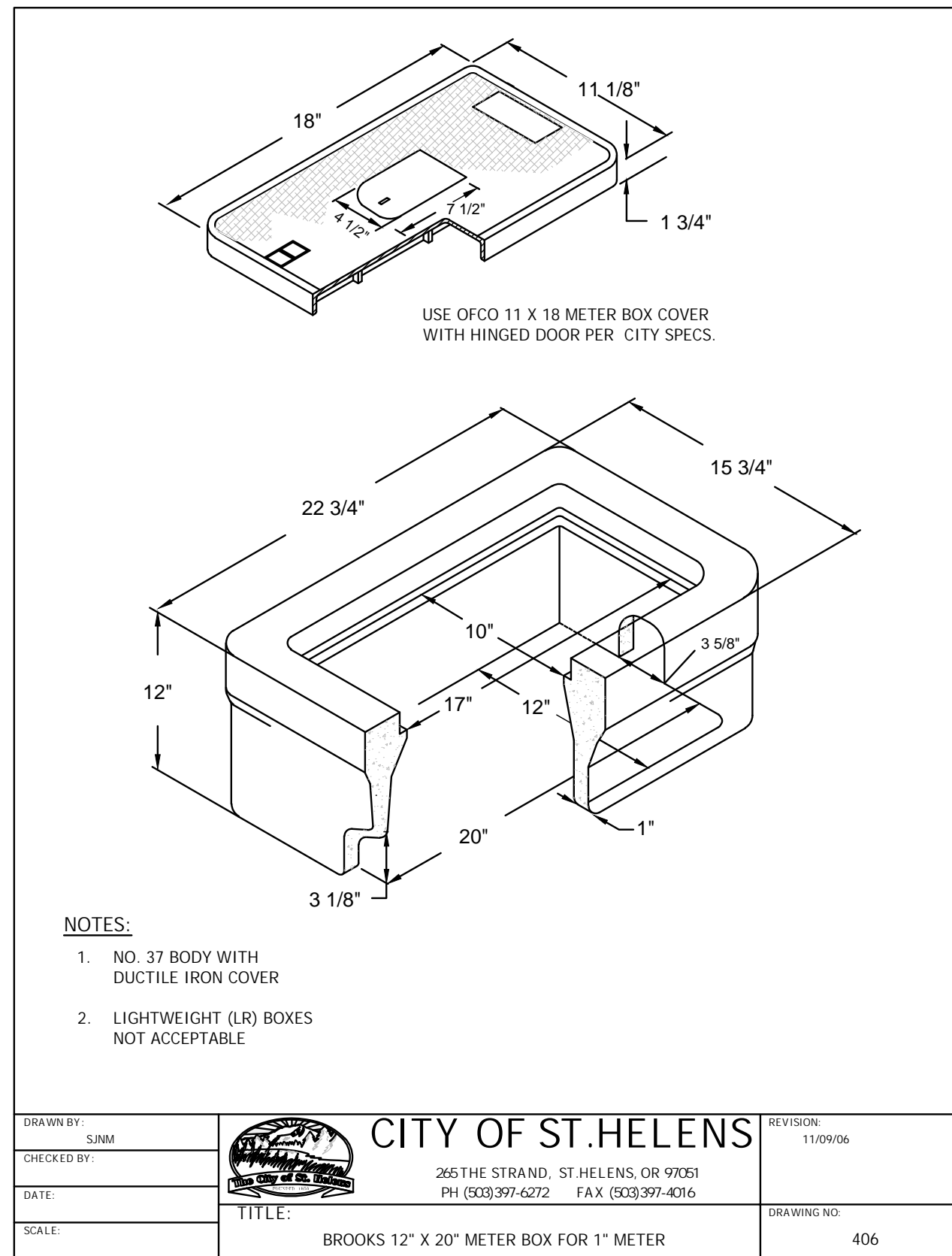


Typical Section At Curb Extensions St. Helens Street, Looking East
 SCALE: NTS



Typical Section At Curb Extensions S. 1st Street, Looking North
 SCALE: NTS

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DATE	REVISION DESCRIPTION
08-2018	REVISED DETAILS & ADDED NOTES
07-2018	REVISED DETAILS & ADDED NOTES
06-2018	REVISED DETAILS & ADDED NOTES
05-2018	REVISED DETAILS & ADDED NOTES
04-2018	REVISED DETAILS & ADDED NOTES

Submission Date: 04/22/2022

Drawn: CEC	Designed: CEC	Checked: AMR
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PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements

#	DATE	REVISION

DETAILS

SHEET NO. 2B

EXP. 12/31/2022

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REQUIRED SIDEWALK WIDENING AROUND OBSTRUCTIONS

POST MOUNTED OBSTRUCTION WITHIN SIDEWALK

TYPICAL MAILBOX INSTALLATION

PROTRUDING OBJECTS AND OTHER OBSTRUCTIONS

NOTES:

- CLEAR ZONE AND THE CIRCULATION PATH MAY BE COMBINED PROVIDING A 5 FOOT MINIMUM SIDEWALK WIDTH IS MAINTAINED
- DEFLECT SIDEWALK AROUND AREA OF OBSTRUCTION WHEN OVERHANGS EXCEED ALLOWABLE LIMITS
- WHEN OBSTRUCTIONS ARE LOCATED WITHIN THE SIDEWALK AREA THE DIMENSION APPLIES IN ALL DIRECTIONS
- INSTALL FULL DEPTH EXPANSION JOINT AROUND ALL OBSTRUCTIONS PENETRATING SIDEWALK SURFACE
- ON CUL-DE-SACS, PLACE FRONT EDGE OF MAILBOX 6 INCHES BEHIND BACK OF CURB
- EXCEPTIONS TO THE REQUIREMENTS IN THIS DRAWING MUST BE APPROVED BY THE ENGINEER AND MUST COMPLY WITH THE "AMERICANS WITH DISABILITY" ACT

DRAWN BY:		CITY OF ST. HELENS	REVISION:	1. SD. 08-2015
CHECKED BY:		265 THE STRAND, ST. HELENS, OR 97051 PH (503)397-6272 FAX (503)397-4016		
DATE:		TITLE:	DRAWING NO.	
SCALE:	NTS	SIDEWALK DETAILS: OBSTRUCTIONS & PROTRUDING OBJECTS		255

TYPICAL TRENCH DETAIL

NOTES:

- MINIMUM TRENCH WIDTH IS 24 INCHES (SEE OSSC 405.40-C)

DRAWN BY:		CITY OF ST. HELENS	REVISION:	1. SD. 08-2015- UPDATED SPECIFICATION REFERENCE
CHECKED BY:		265 THE STRAND, ST. HELENS, OR 97051 PH (503)397-6272 FAX (503)397-4016		
DATE:		TITLE:	DRAWING NO.	
SCALE:		TYPICAL TRENCH DETAIL		300

TYPICAL 20" x 24" CATCH BASIN

NOTES:

USES WSDOT STD STYLE "C" - 2" GRATE

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DATE:		TITLE:	DRAWING NO.	
SCALE:		TYPICAL 20" x 24" CATCH BASIN		315

MANHOLE COVER & FRAME DETAILS

NOTES:

- TAMPERPROOF COVERS REQUIRED ON SANITARY OR STORM DRAIN MANHOLE WHERE LOCATED IN PEDESTRIAN WAYS OR EASEMENT AREAS. TAMPERPROOF COVERS FOR SANITARY MANHOLES SHALL HAVE 2 HOLES MAXIMUM
- WATERTIGHT COVERS REQUIRED IF LOCATED WHERE COVER MAY BE SUBMERGED
- FRAMES AND COVERS SHALL BE STAMPED WITH MANUFACTURERS INITIALS, HEAT NUMBER AND POINT OF ORIGIN

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DATE:		TITLE:	DRAWING NO.	
SCALE:		MANHOLE COVER & FRAME DETAILS		346

FLAT-TOP MANHOLE

NOTES:

- SEE MANHOLE BASE SECTION DRAWING FOR BASE DETAILS
- MANHOLE MAY BE 42" DIAMETER IF DIRECTED BY ENGINEER
- REFER TO STANDARD MANHOLE DETAIL
- FRAME AND RISER RINGS SHALL BE SEALED WITH PREFORMED PLASTIC RUBBER TO FORM A WATERTIGHT SEAL. GROUT MAY BE USED FOR STORM SYSTEMS

DRAWN BY:		CITY OF ST. HELENS	REVISION:	1. NC 1. SD. 02-2018
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DATE:		TITLE:	DRAWING NO.	
SCALE:		FLAT-TOP MANHOLE		351

FIRE HYDRANT INSTALLATION

NOTES:

- KENNEDY GUARDIAN OR OTHER APPROVED CITY HYDRANT. (VERIFY APPROVED HYDRANTS WITH CITY OF ST. HELENS MAINTENANCE DEPARTMENT AT (503) 397-3532
- NO OBSTRUCTIONS WITHIN 3 FT OF FIRE HYDRANT
- SIDEWALK SHALL BE WIDENED AROUND FIRE HYDRANT
- INSTALL 3-FT X 3-FT X 8-IN PCC RESTRAINT COLLAR WHEN NOT WITHIN PCC SIDEWALK

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DATE:		TITLE:	DRAWING NO.	
SCALE:		FIRE HYDRANT INSTALLATION		400

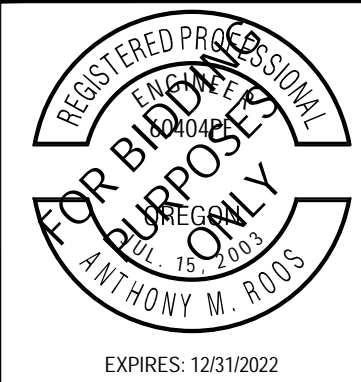


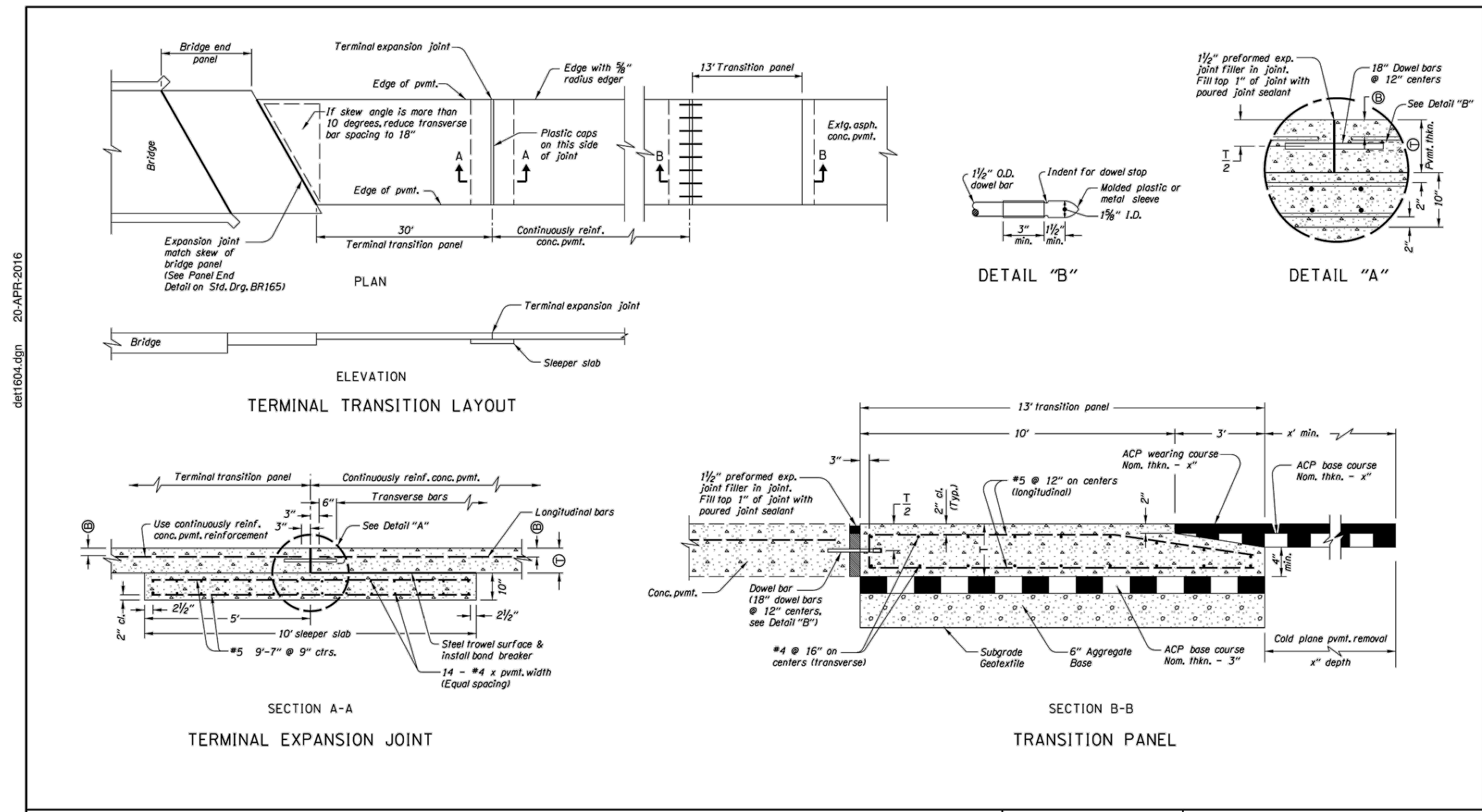
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NO.	REVISION	DATE	BY	APP'D

Submission Date: 04/22/2022
 Drawn: CEC
 Designed: CEC
 Checked: AMR
 PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements
 DETAILS
 SHEET NO. 2B-2

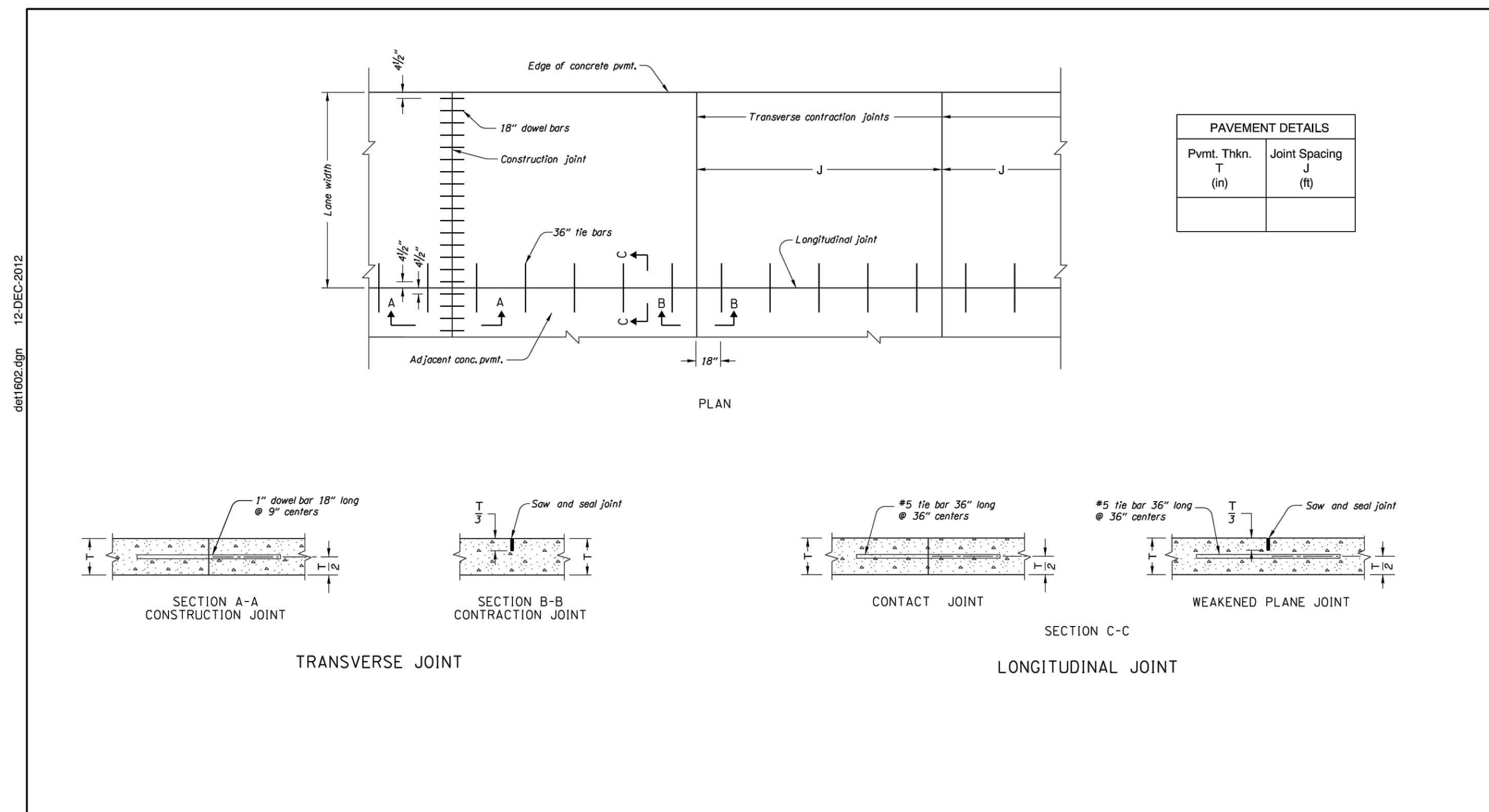




GENERAL NOTES FOR ALL DETAILS:
 1. Use a transition panel at the transition to an asphaltic conc. pvmt.
 2. Lap all bars 24" at splices.
 3. Use reinforcing steel conforming to ASTM A706 or AASHTO M31 (ASTM A615) grade 60. Use full length bars as shown, and place them a minimum 2" clear of the nearest face of conc. unless shown or noted otherwise.
 4. Use HPC4000-1 1/2 paving concrete.
 5. For ACP type and other details not shown, see other plan sheets.

The selection and use of this detail, 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.

OREGON DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES DETAILS	
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT TRANSITION PANEL AND DETAILS	DETAIL NO. DET1604



GENERAL NOTES:
 1. Lane width as shown. See typical sections.
 2. Center tie bars on joint.

The selection and use of this detail, 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.

OREGON DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES DETAILS	
PLAIN CONCRETE PAVEMENT, UNDOWELLED	DETAIL NO. DET1602



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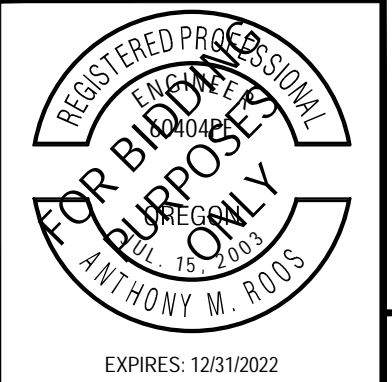
NO.	REVISION	DATE	APP'D.

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PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements

SHEET NO. 2B-3





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**S 1st Street at St. Helens Street
Intersection Improvements**

CONCRETE JOINTING PLAN

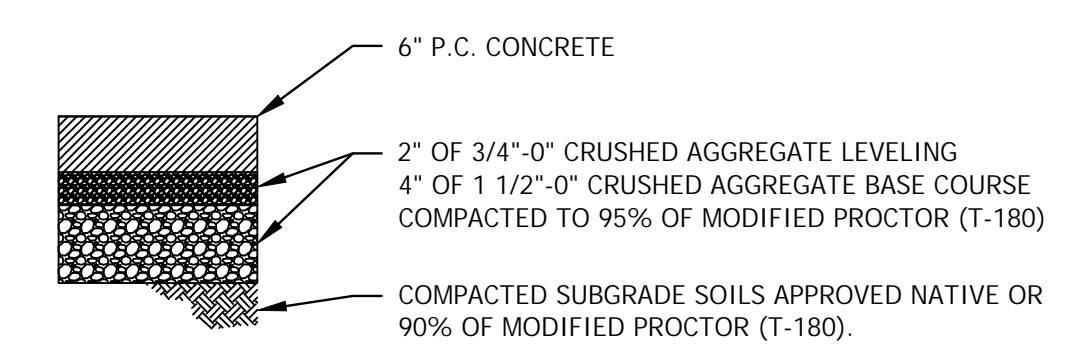
SHEET NO. 2C

CONCRETE PAVING CONSTRUCTION NOTES

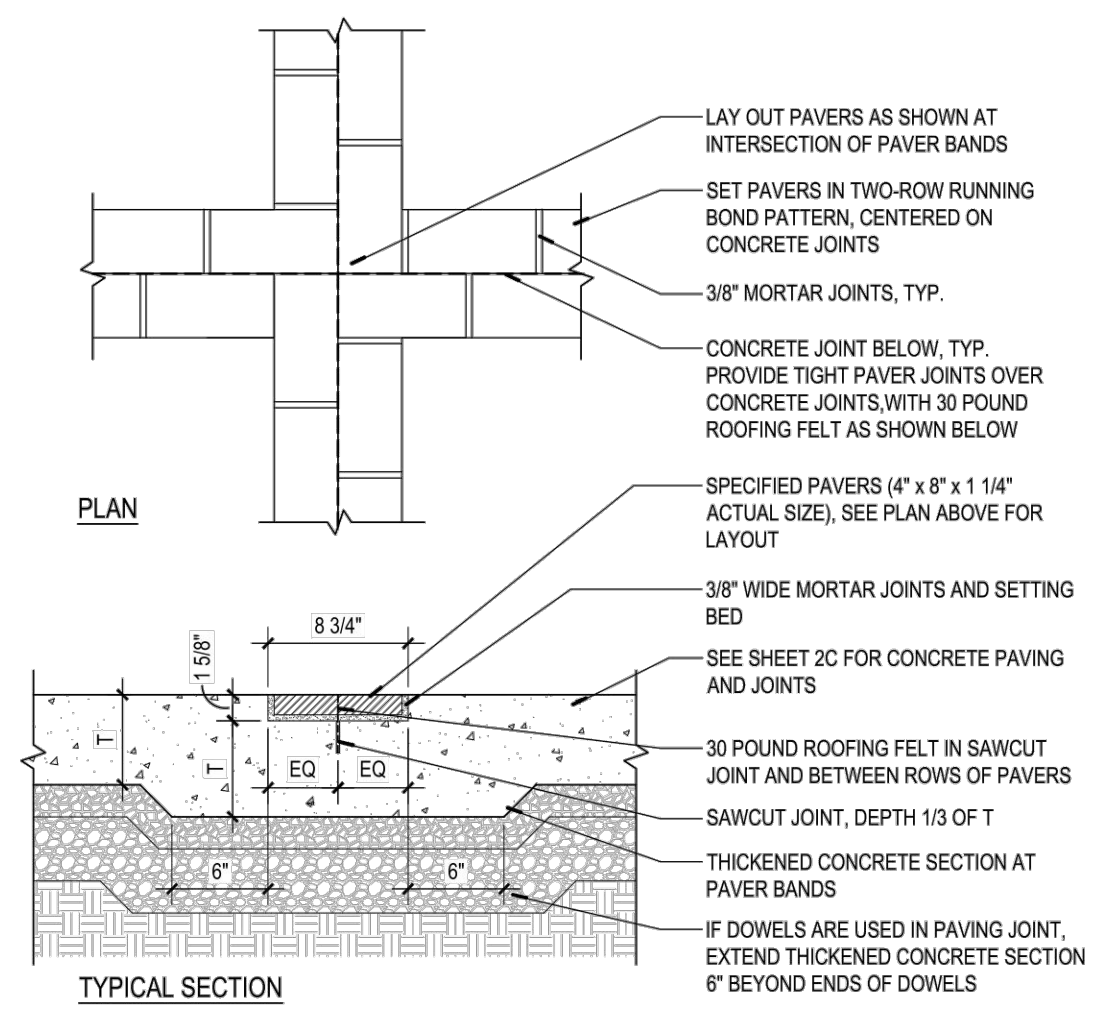
- 1 Construct Plain Concrete Pavement per detail below. See landscape plans for scoring pattern dimensions.
- 2 Edge of concrete pavement. Construct concrete transition panel per ODOT detail 1604 on sheet 2B-3.
- 3 Construct transverse joint (2" deep) Per ODOT standard detail 1602 on sheet 2B-3.
- 4 Construct longitudinal joint (2" deep) Per ODOT standard detail 1602 on sheet 2B-3.
- 5 Construct unit paver band. See detail on this sheet.
- 6 Construct isolation joint (full depth). Isolation joint to be filled with 30 pound roofing felt.
- 7 Construct steel reinforcement with #4 deformed bar at 12" OC spacing. Do not tie to adjacent slabs.

LEGEND

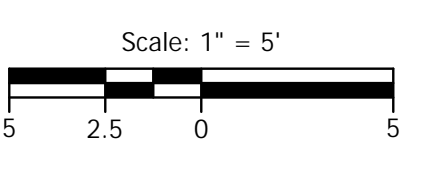
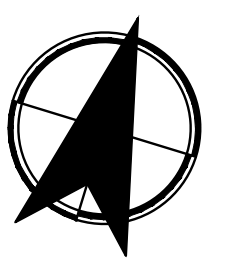
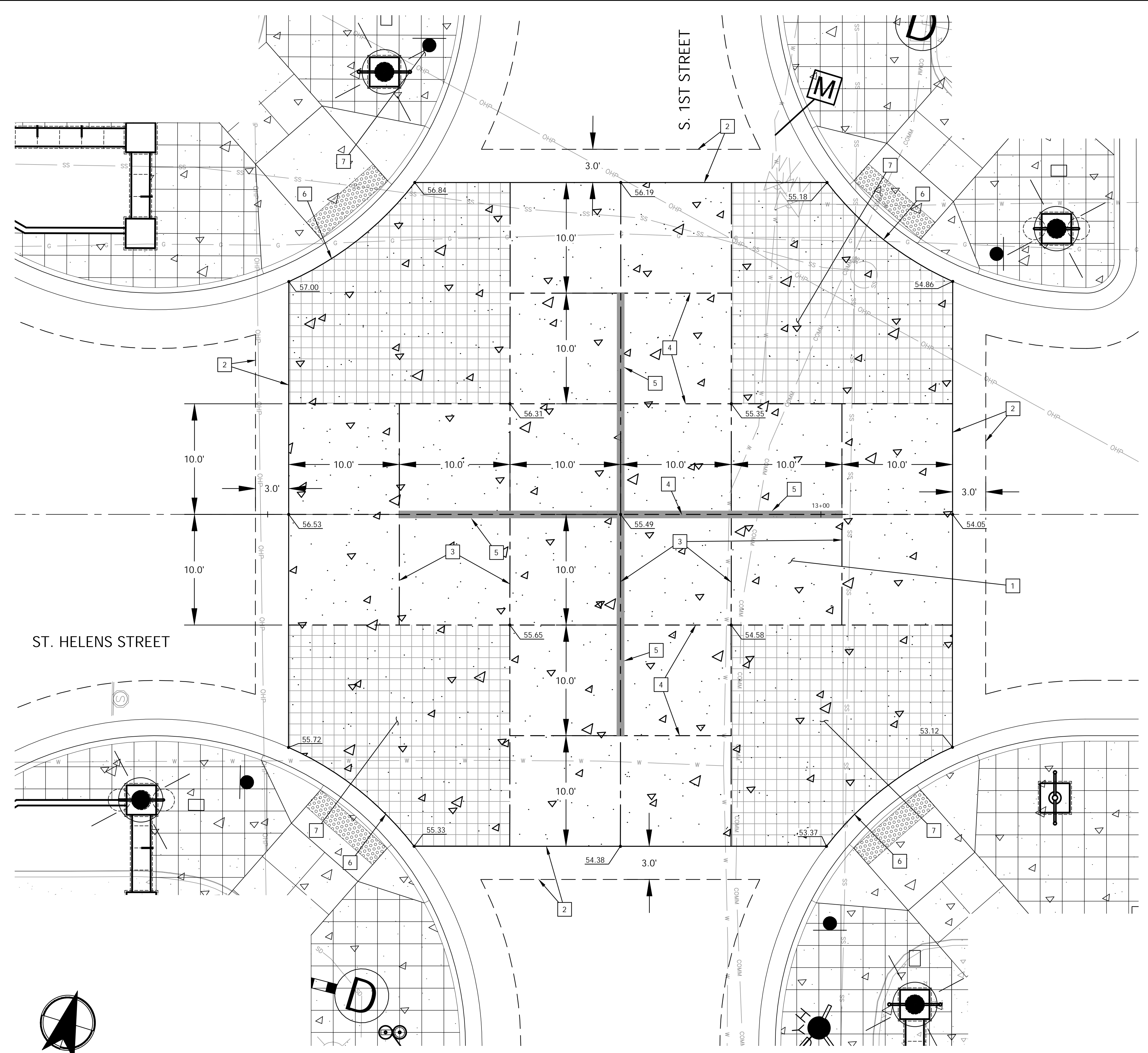
- LONGITUDINAL JOINT (2" DEEP)
- TRANSVERSE CONSTRUCTION JOINT (2" DEEP)
- UNIT PAVER BAND (SEE LANDSCAPE PLANS)
- AREA OF CONCRETE WITH STEEL REINFORCING



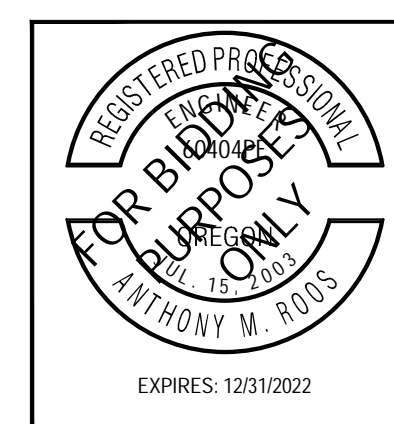
P.C. CONCRETE SECTION



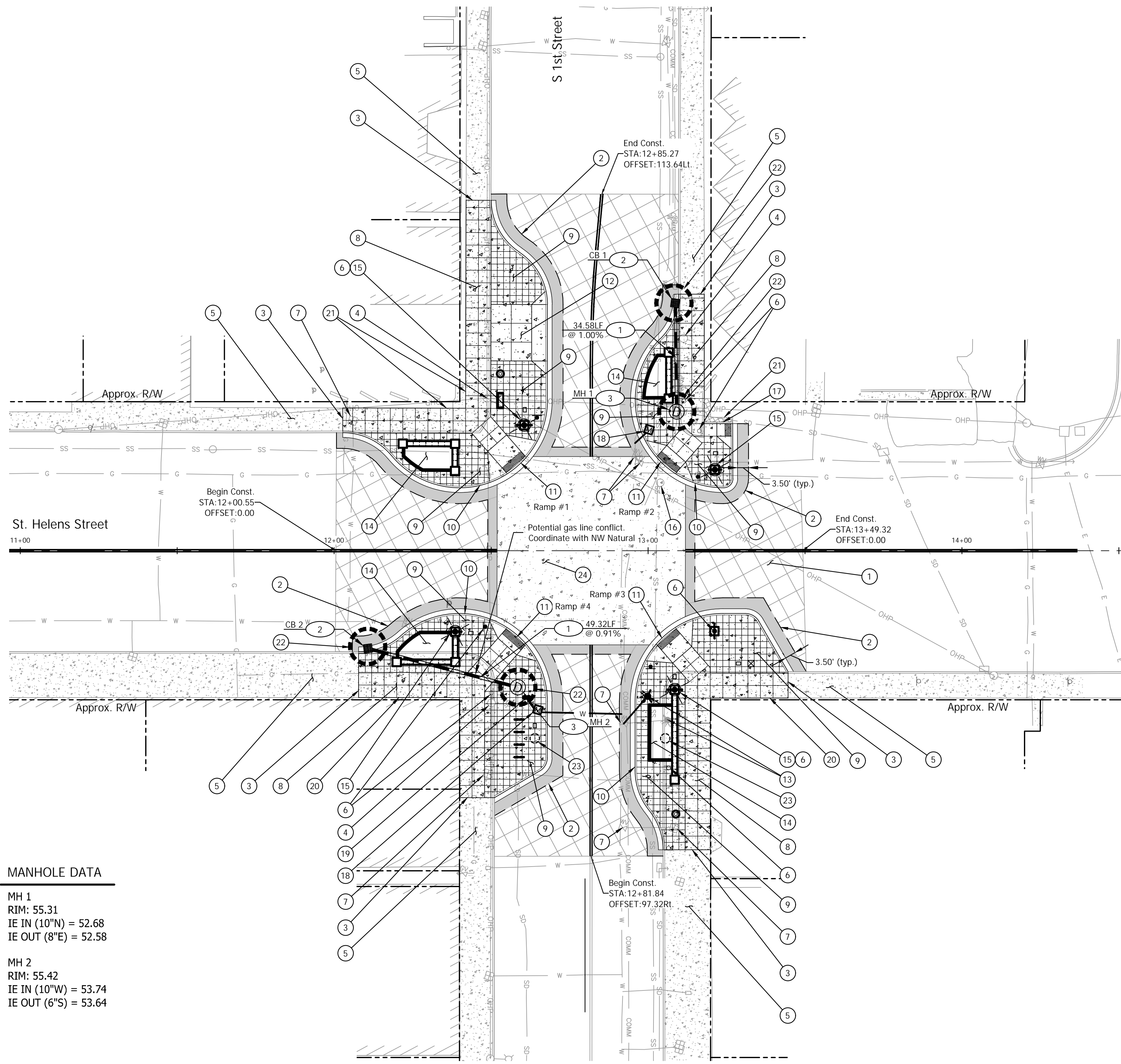
UNIT PAVER BAND



Plot Stamp: 6/27/2022 12:21:00 PM - Caleb Cox
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EXPIRES: 12/31/2022



CATCH BASIN DATA

CB 1
 TOP OF CURB: 56.10
 IE IN (8"N) = 53.13
 IE OUT (10"S) = 53.03

CB 2
 TOP OF CURB: 57.36
 IE OUT (10"E) = 54.19

MANHOLE DATA

MH 1
 RIM: 55.31
 IE IN (10"N) = 52.68
 IE OUT (8"E) = 52.58

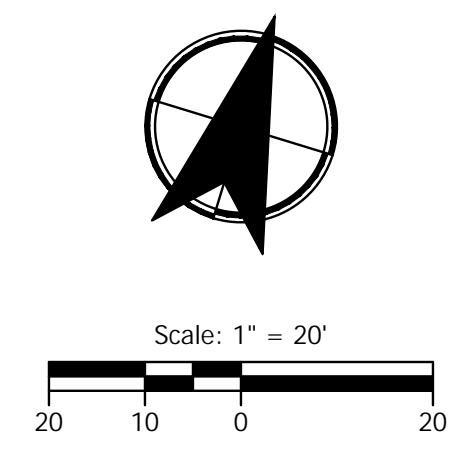
MH 2
 RIM: 55.42
 IE IN (10"W) = 53.74
 IE OUT (6"S) = 53.64

STORM CONSTRUCTION NOTES

- ① Install 10 inch ductile iron storm sewer pipe.
- ② Install 20 inch x 24 inch catch basin per City of St. Helens Standard Dwg. No. 315 on sheet 2B-2.
- ③ Remove existing catch basin and install flat-top manhole per City of St. Helens Standard Dwg. No. 351 on sheet 2B-2.

STREET CONSTRUCTION NOTES

- ① Area of 2 inch asphalt grind and inlay.
- ② Sawcut and remove existing asphalt pavement.
- ③ Remove existing concrete sidewalk, curbs, and curb ramps.
- ④ Existing utility pole to be removed by owner. Contact Brooke Cisco with CRPUD at 971-225-8328
- ⑤ Preserve and protect existing curb and sidewalk.
- ⑥ Sign equipment. See signing and striping plans.
- ⑦ Adjust water valve to box to grade.
- ⑧ Construct sidewalk with 4 ft x 4 ft scoring pattern. See City of St. Helens std. dwg. 220 on sheet 2B for details. See sheets 3A-2 thru 3A-5 for detailed grading.
- ⑨ Construct sidewalk with 2 ft x 2 ft scoring pattern. See City of St. Helens std. dwg. 220 on sheet 2B for details.
- ⑩ Construct curb and gutter. See City of St. Helens std. dwg. 200 on sheet 2B for details. See detailed grading sheets 3A-2 thru 3A-5 for gutter counter slope requirements.
- ⑪ Construct perpendicular curb ramp with charcoal grey truncated domes per ODOT Std Dwg. RD 916. See sheets 3A-2 thru 3A-5 for detailed grading.
- ⑫ Construct concrete driveway with 6" thick concrete over 6" thick aggregate base. See sheets 3A-2 thru 3A-5 for detailed grading.
- ⑬ Remove and install new fire hydrant STA. 13+01.25, 54.35' RT. Install EJ model with internal Storz Cap or approved equal. Connect new hydrant to existing lateral and retain existing gate valve and valve riser. See details on sheet 2B-2. Top of landscape curb elev. = 53.85'
- ⑭ Landscape features. See Landscaping Plans.
- ⑮ Lighting equipment. See lighting plans.
- ⑯ Adjust sanitary sewer manhole to grade.
- ⑰ Construct curb per City of St. Helens std. dwg. 210. See detailed grading sheets 3A-2 thru 3A-5 details.
- ⑱ Install 1" copper pipe, water meter, and water meter box per details on sheet 2B-3. See landscape plans for irrigation details.
- ⑲ Install drinking fountain (City furnished).
- ⑳ Use preformed joint filler between new sidewalk and face of building.
- ㉑ Replace 2 ft wide section of asphalt to match finish grade of new sidewalk and transition grade to parking lot.
- ㉒ Install inlet protection.
- ㉓ Location of future gateway pole.
- ㉔ Concrete pavement. See Sheet 2C for details



Plot Stamp: 6/27/2022 12:21:12 PM - Caleb Cox
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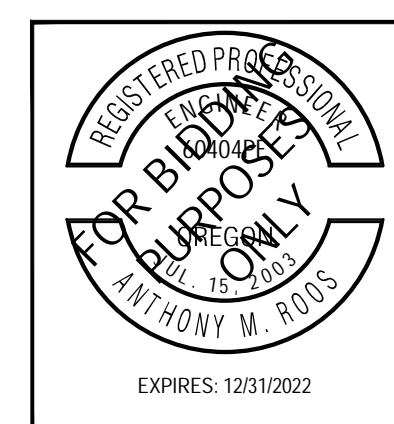


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 Drawn: CEC
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 PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements
 ROADWAY & STORMWATER
 SHEET NO. 3

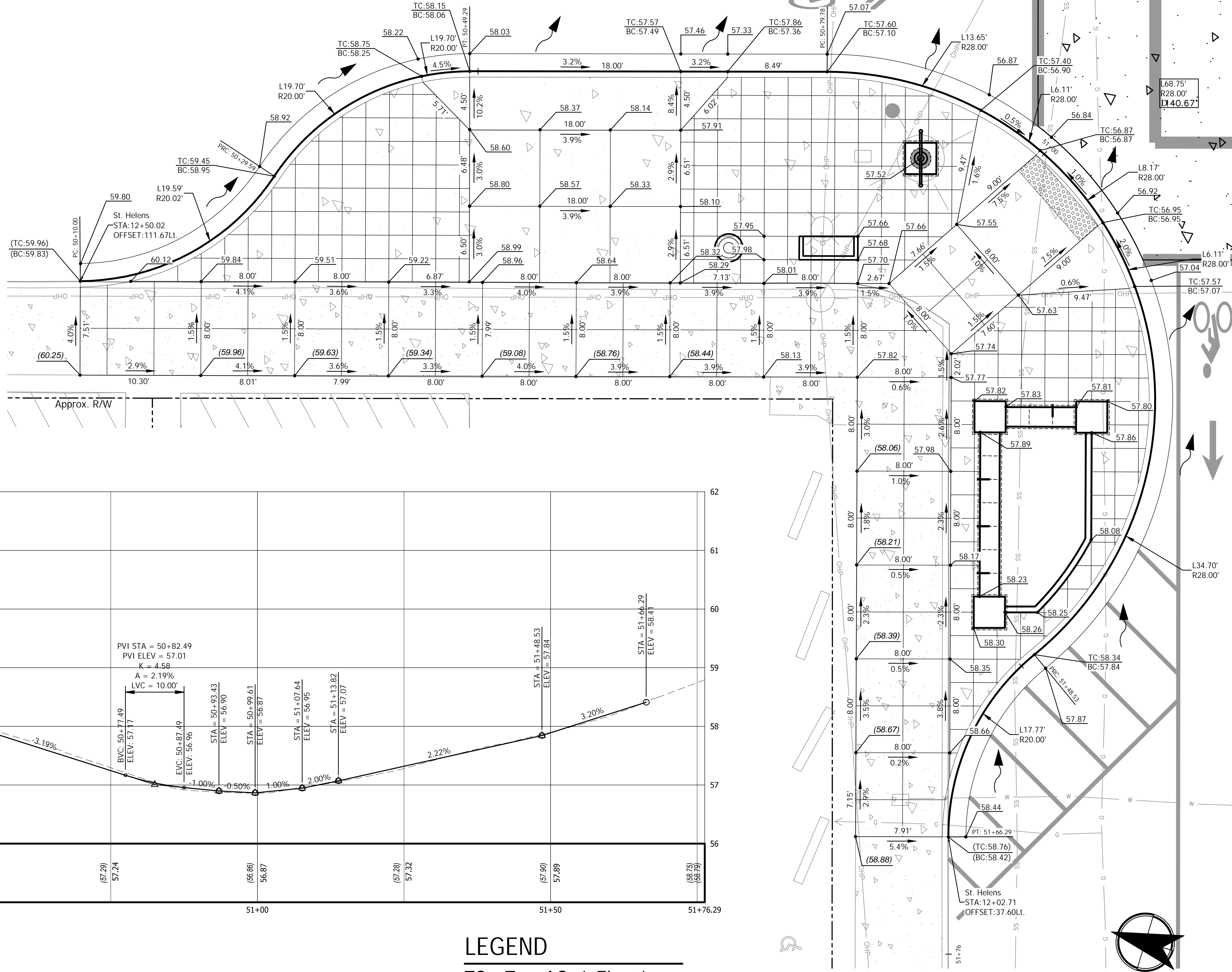


RAMP # 1

S 1st Street

GENERAL NOTES

- Contractor shall be responsible for meeting all Americans with Disabilities Act (ADA) requirements as defined by the Public Rights-of-Way Accessibility Guidelines (PROWAG).
- Details and dimensions shown are approximate. Slopes hold over elevations. Contractor shall take all necessary field measurements to verify ADA compliance and notify the engineer if ramps cannot be constructed as shown.
- Refer to ODOT STD. DWG RD 755 for ADA requirements
- Contractor shall notify Engineer and City of St. Helens 24 hours prior to concrete pours to inspect forms and verify ADA standards can be achieved.
- Contractor shall protect freshly poured concrete from vandalism or other damage for a minimum of 24 hours or until cured enough to support typical use, whichever is longer. Any concrete damage within this time period shall be repaired at no cost to the City.
- Contractor shall submit traffic control plans to the City of St. Helens for approval prior to construction. Two way traffic with minimum lane widths of 10 feet must be maintained for the duration of construction.
- Contractor shall submit temporary pedestrian access route plans to the City of St. Helens for approval prior to construction. Pedestrian detour routes must be no longer than 1 block length. The maximum closure time for any single curb ramp shall be one week.
- Contractor shall notify engineer once ramps are completed for a post ramp construction inspection.
- Concrete shall be placed only during periods when it will not be damaged by rain. Contractor shall protect uncured concrete from all forms of precipitation and inclement weather.



CURB RETURN PROFILE

Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 1'

LEGEND

- TC = Top of Curb Elevation
- BC = Bottom of Curb Elevation
- FL = Flow Line Elevation
- (XXX.XX) = Match Extg. Grade
- ➔ = Flow Direction

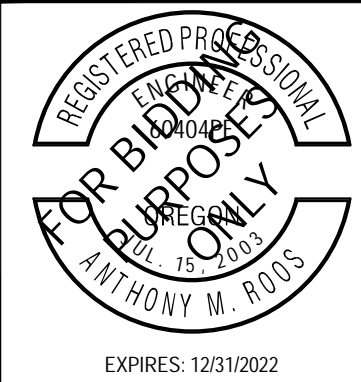


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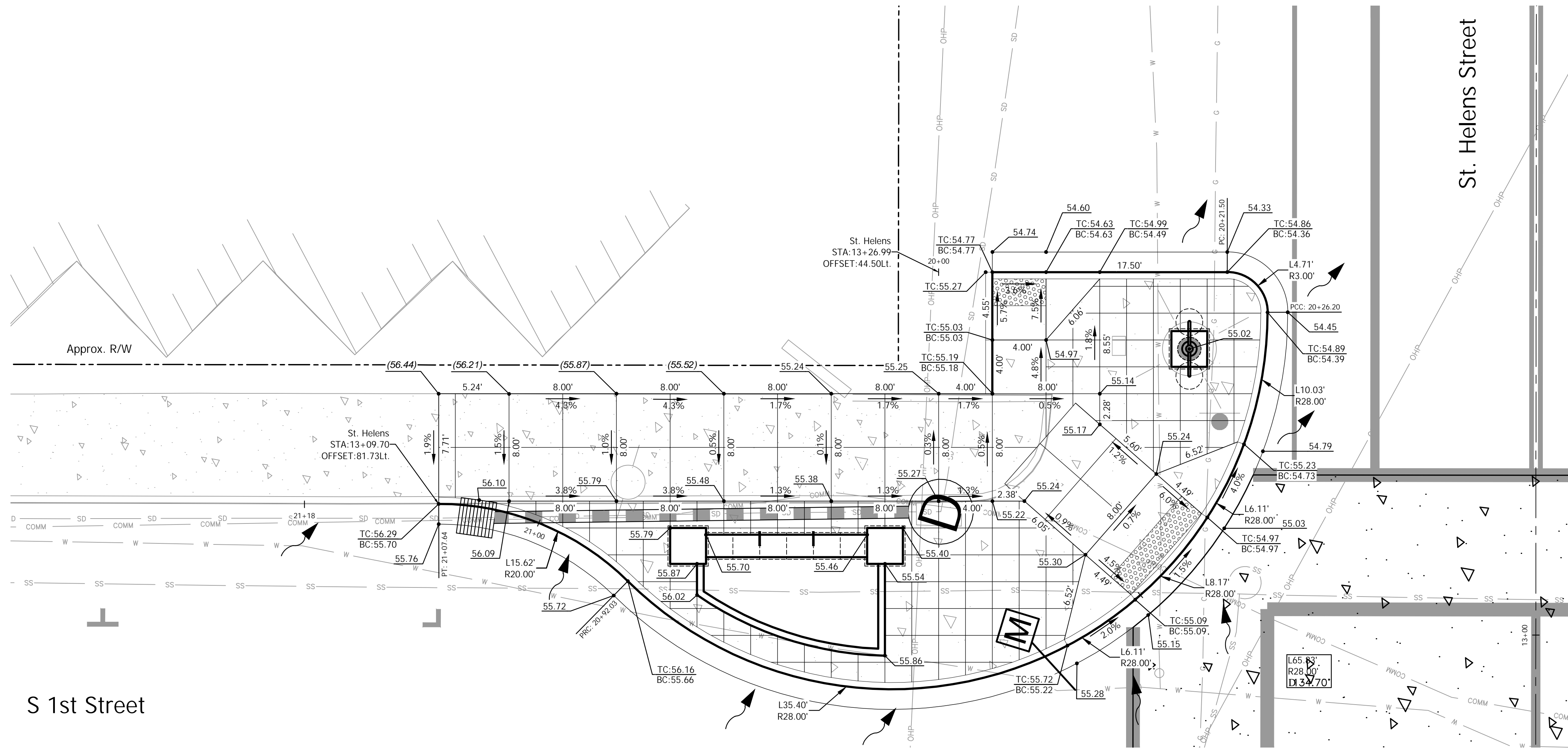
Submission Date: 04/22/2022
Drawn: CEC, Designed: CEC, Checked: AMR
PROJECT NO. 23544

S 1st Street at St. Helens Street Intersection Improvements
CURB RAMP DETAILS
SHEET NO. 3A-2



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RAMP # 2



- Contractor shall be responsible for meeting all Americans with Disabilities Act (ADA) requirements as defined by the Public Rights-of-Way Accessibility Guidelines (PROWAG).
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#	DATE	REVISION	APP'D

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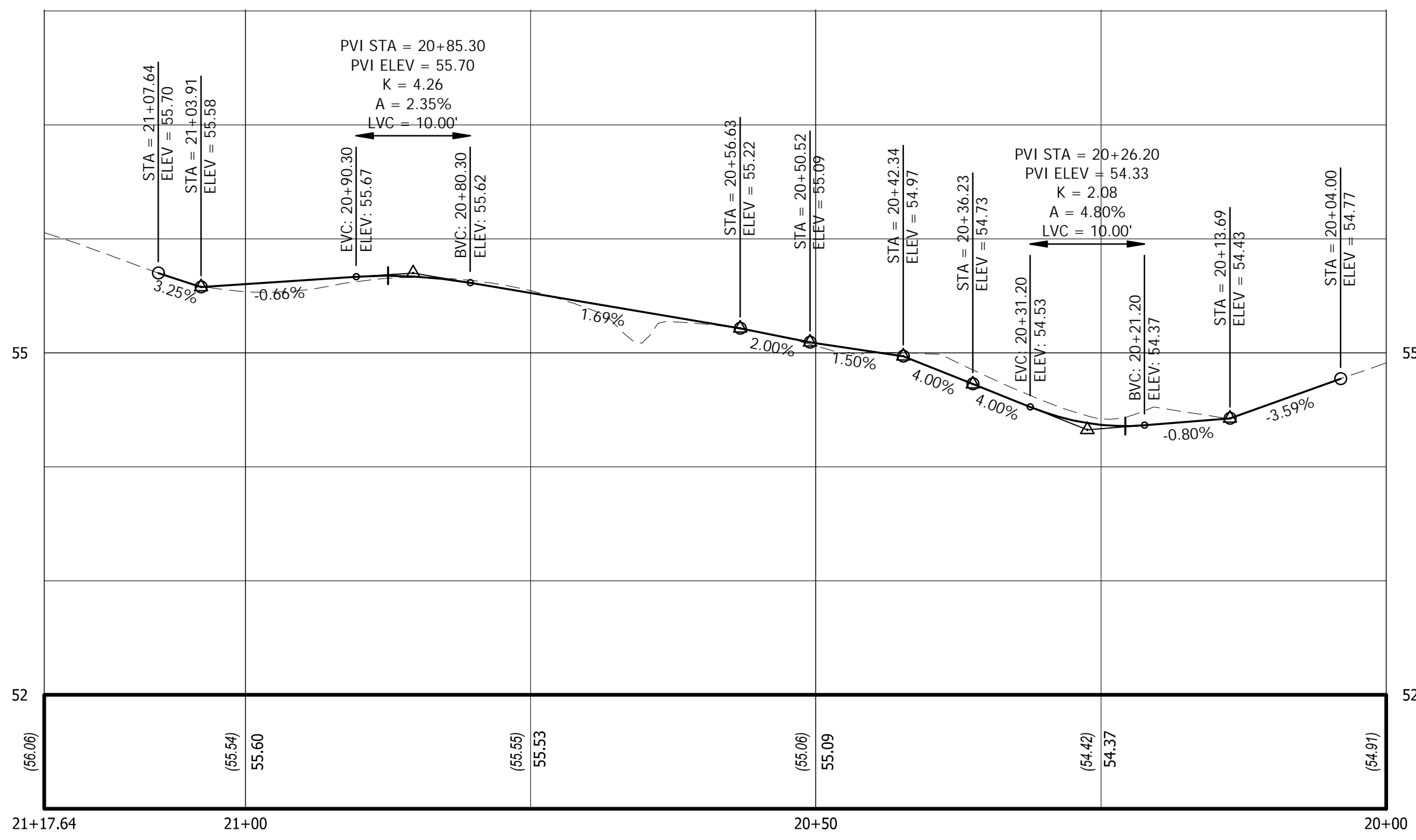
S 1st Street at St. Helens Street
 Intersection Improvements

CURB RAMP DETAILS

SHEET NO. 3A-3

S 1st Street

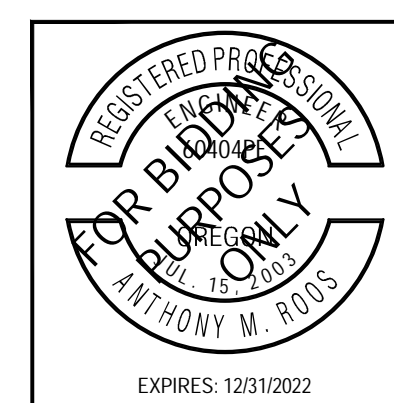
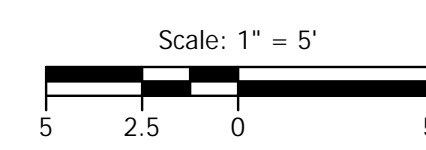
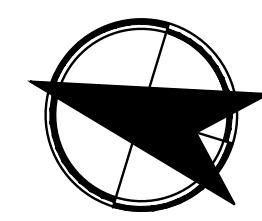
St. Helens Street



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- (XXX.XX) = Match Extg. Grade
- ➔ = Flow Direction

CURB RETURN PROFILE

Horizontal Scale: 1" = 10'
 Vertical Scale: 1" = 1'




Plot Stamp: 6/27/2022 12:21:31 PM - Caleb Cox
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RAMP # 3

GENERAL NOTES

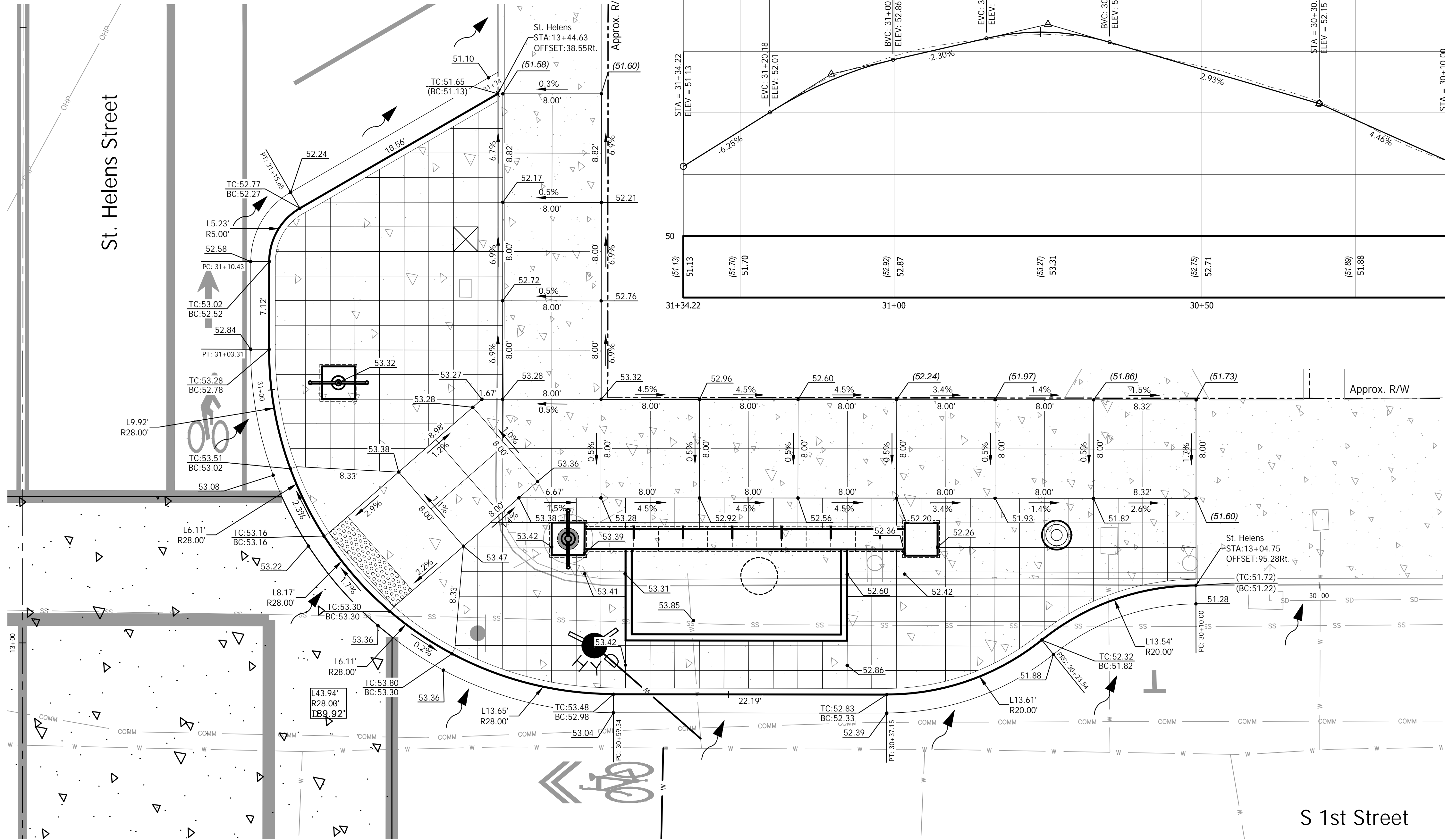
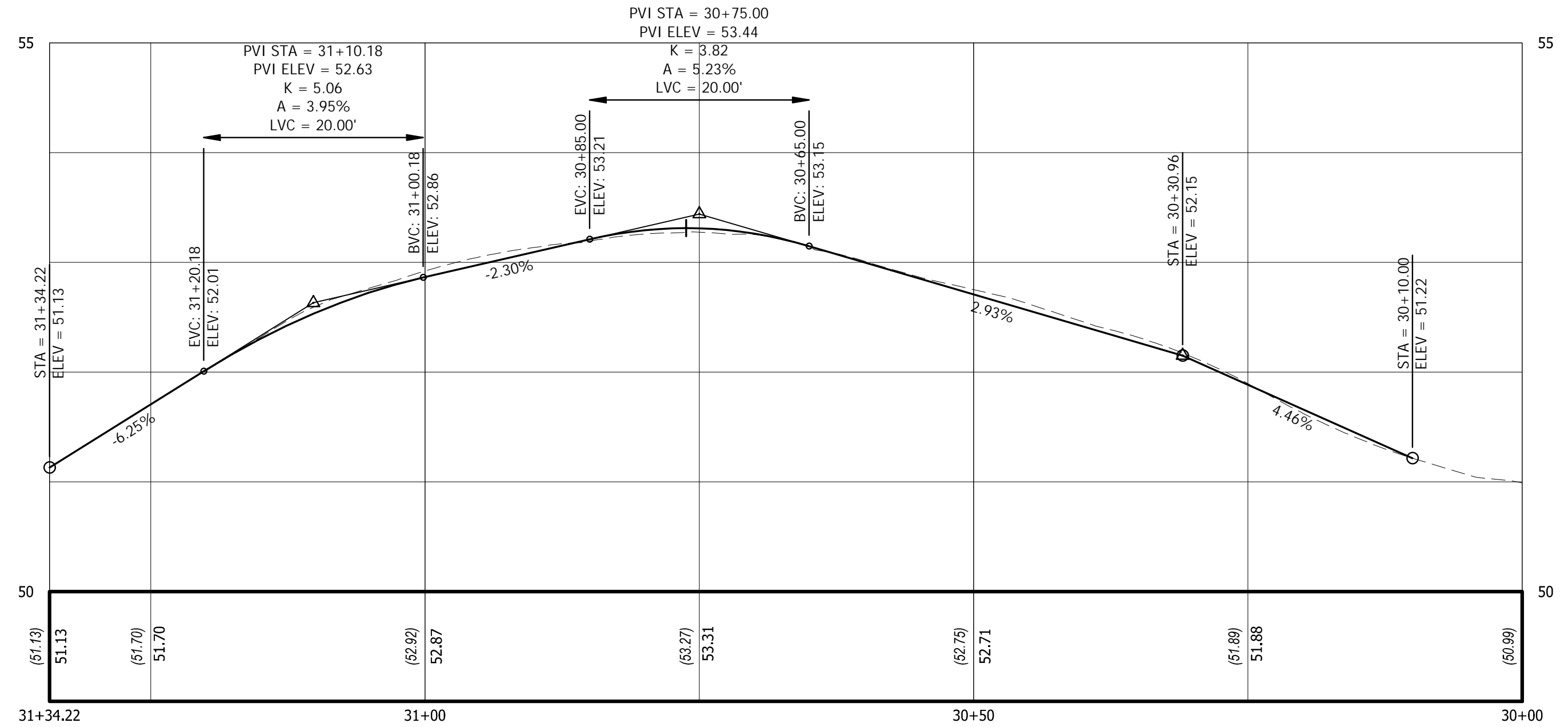
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 (XXX.XX) = Match Extg. Grade
 = Flow Direction

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Horizontal Scale: 1" = 10'
 Vertical Scale: 1" = 1'

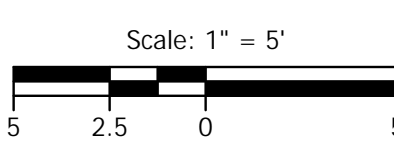
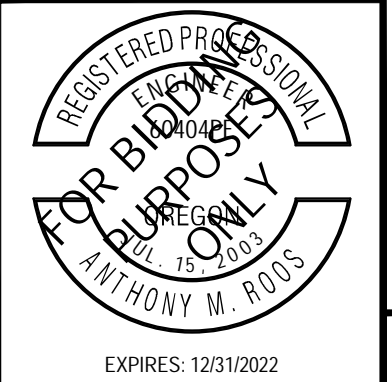


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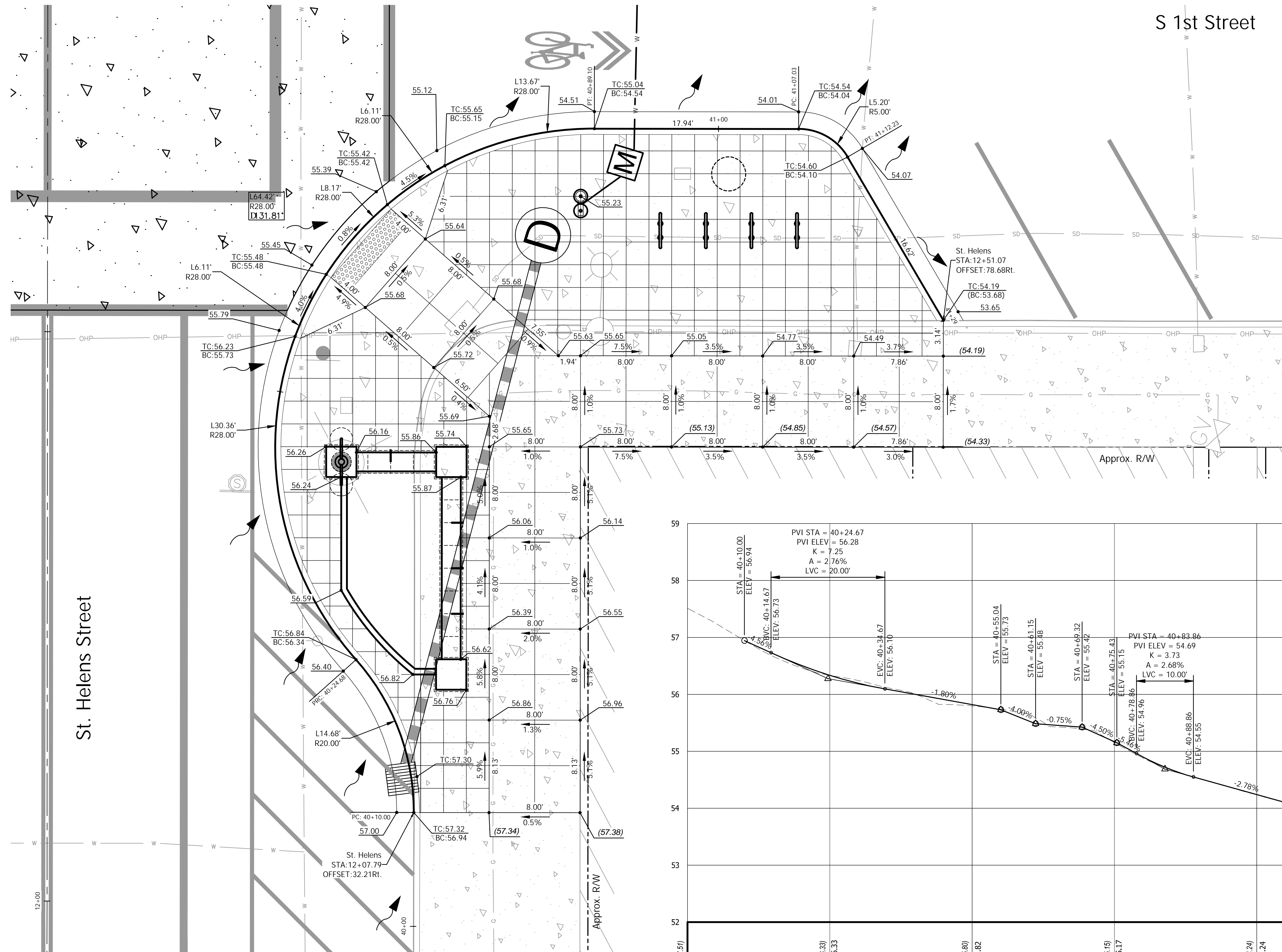
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S 1st Street at St. Helens Street
 Intersection Improvements
 CURB RAMP DETAILS
 SHEET NO. 3A-4



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RAMP # 4



GENERAL NOTES

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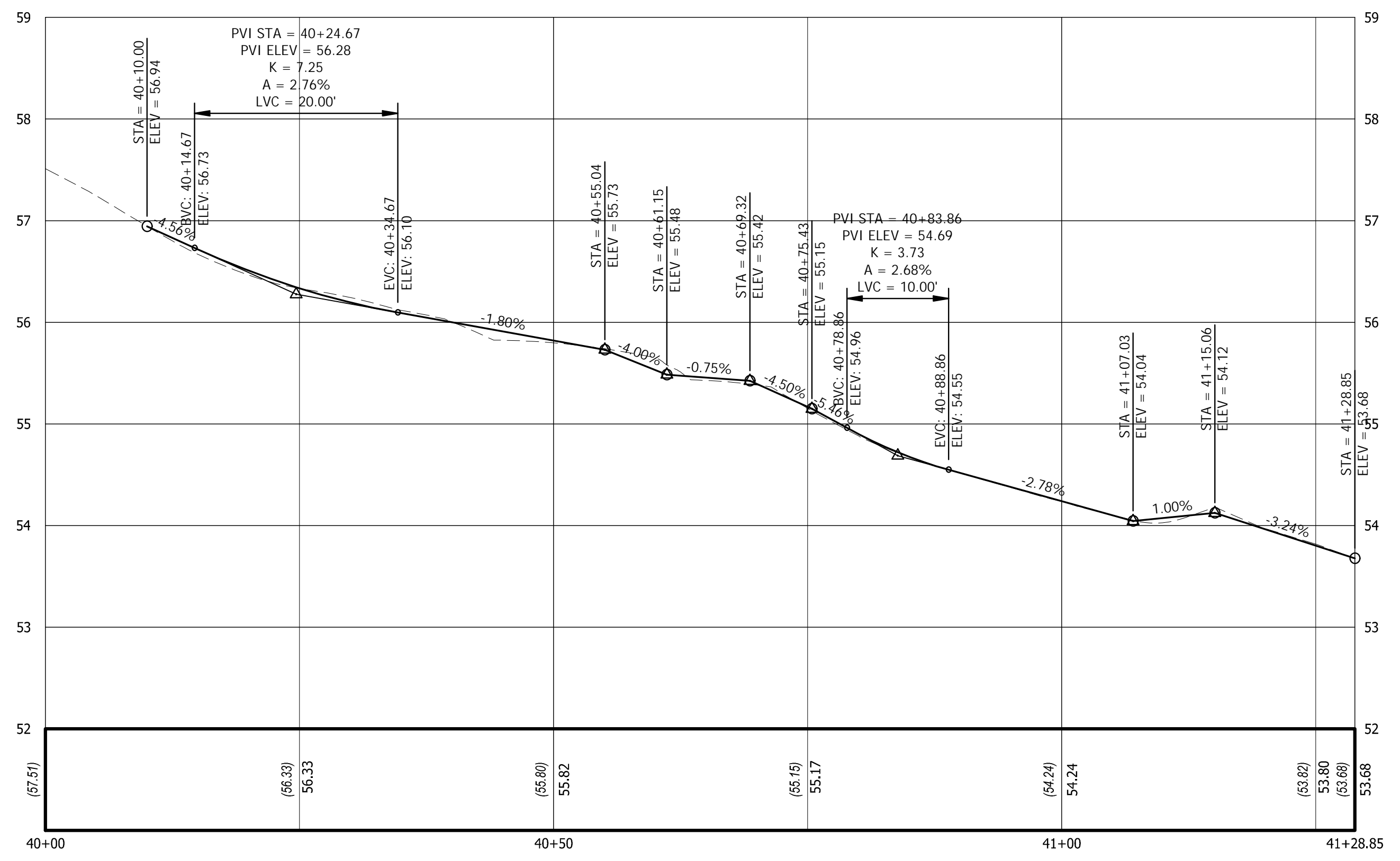
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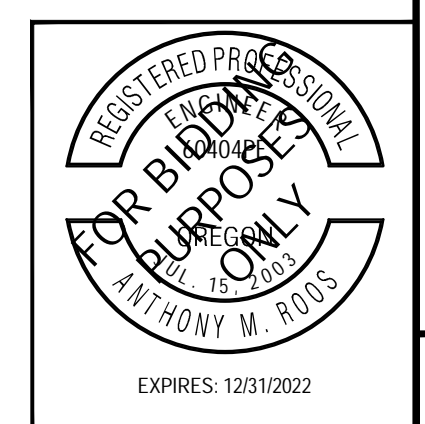
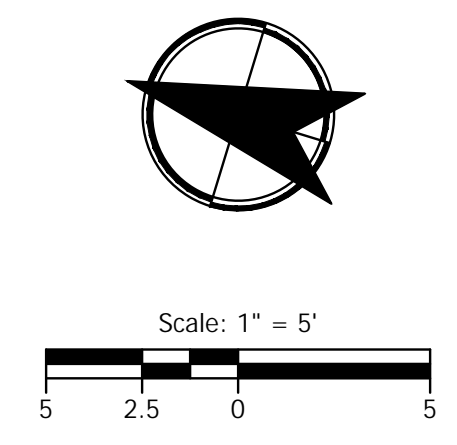
S 1st Street at St. Helens Street Intersection Improvements
 CURB RAMP DETAILS

SHEET NO. 3A-5



CURB RETURN PROFILE

Horizontal Scale: 1" = 10'
 Vertical Scale: 1" = 1'



LEGEND
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I L L U M I N A T I O N

LIGHTING NOTES:

1. 14 ft decorative acorn style light pole shall be:

MANUFACTURER: VISCO
CATALOG NUMBER: V1-S13-F/14'

2. Acorn style luminaire shall be:

MANUFACTURER: VISCO
CATALOG NUMBER: 1200M-98-40-T3-NL-PEC-9005

3. Junction boxes shall be PGE approved splice boxes. Approved junction boxes are:

MANUFACTURER: NEW BASIS, QUAZITE (HUBBELL), OLDCASTLE, ARMORCAST, HIGHLINE
CATALOG NUMBER: JB1, FCA173018T-90026, A42173018A017, 17301620, A6001640TAX18-PGE, CHA173018HE1

"LIGHTING" shall be in the lid marking area.

GENERAL NOTES

- All electrical equipment shall conform to the current standards of the National Electrical Manufacturers Association (NEMA) and the Underwriters Laboratories, inc. (U.L.) wherever applicable. In addition to the requirements of the plans, standard specifications, and the special provisions, all materials and workmanship shall conform to the current requirements of the National Electrical Code (NEC) the National Electrical Safety Code, standards of the American National Standards Institute (ANSI), and any local ordinances which may apply.
- Location of illumination conduits and junction boxes are approximate. Coordinate with other utilities to ensure proper installation.
- Equipment submittals and pole drawings shall be provided to the City of St. Helens by the contractor after an initial review has been completed by the project engineer. City of St. Helens approval of these submittals must be obtained prior to construction.

LEGEND

JUNCTION BOXES

JB 1 — INSTALL 17"X10" (MIN. DIMENSION) TYPE JB1 PRECAST CONCRETE JUNCTION BOX PER ODOT STD. DWG. TM472.

ILLUMINATION

LP (N) — INSTALL LUMINAIRE POLE. NO. (N) PER DETAIL ON SHEET IL-3

BMCL — INSTALL BASE MOUNTED SERVICE CABINET, 120/240 VOLT METERED PER ODOT STD. DWG. NOS. TM482 & TM485. SEE WIRING DIAGRAM ON THIS SHEET FOR DETAILS.

CONDUIT

S — INSTALL (S=SIZE) INCH ELECTRICAL CONDUIT.

W — INSTALL CONDUIT AND WIRE AS REQUIRED BY POWER COMPANY

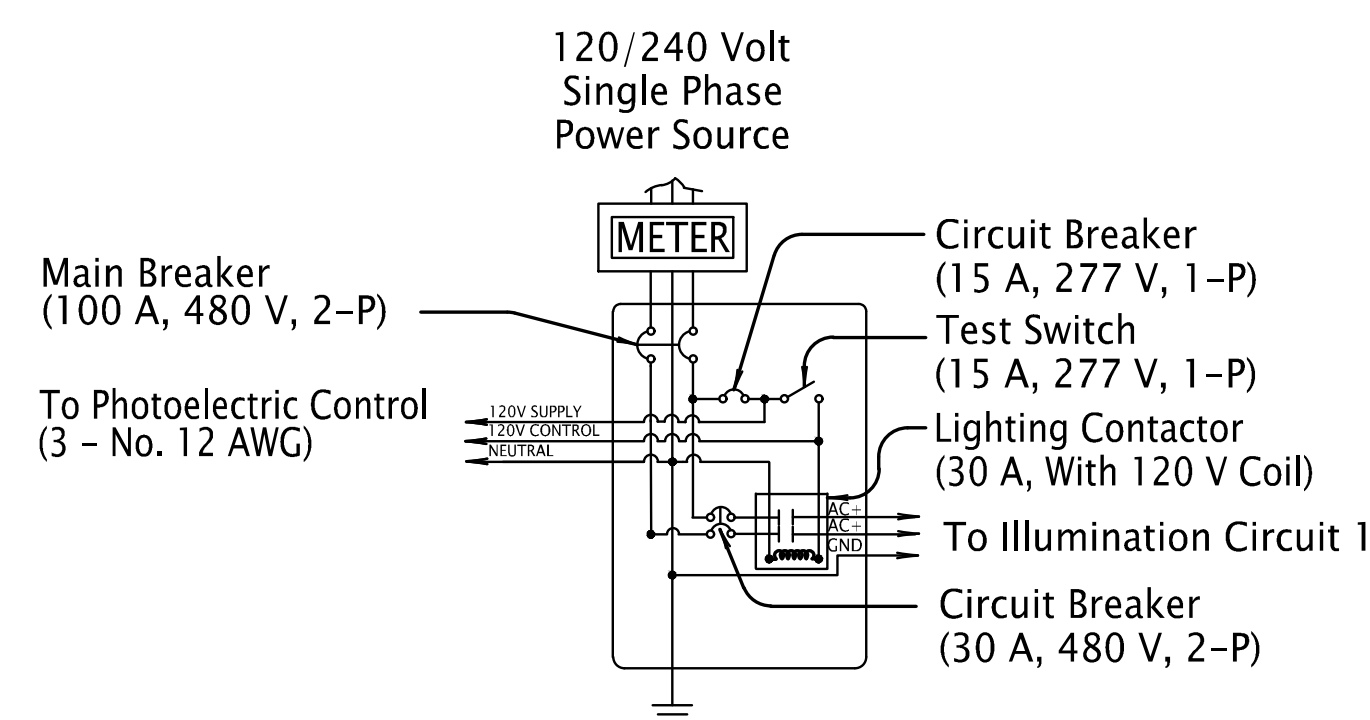
CS — 2" CONDUIT STUB (FOR FUTURE USE, CAP ENDS)

WIRES

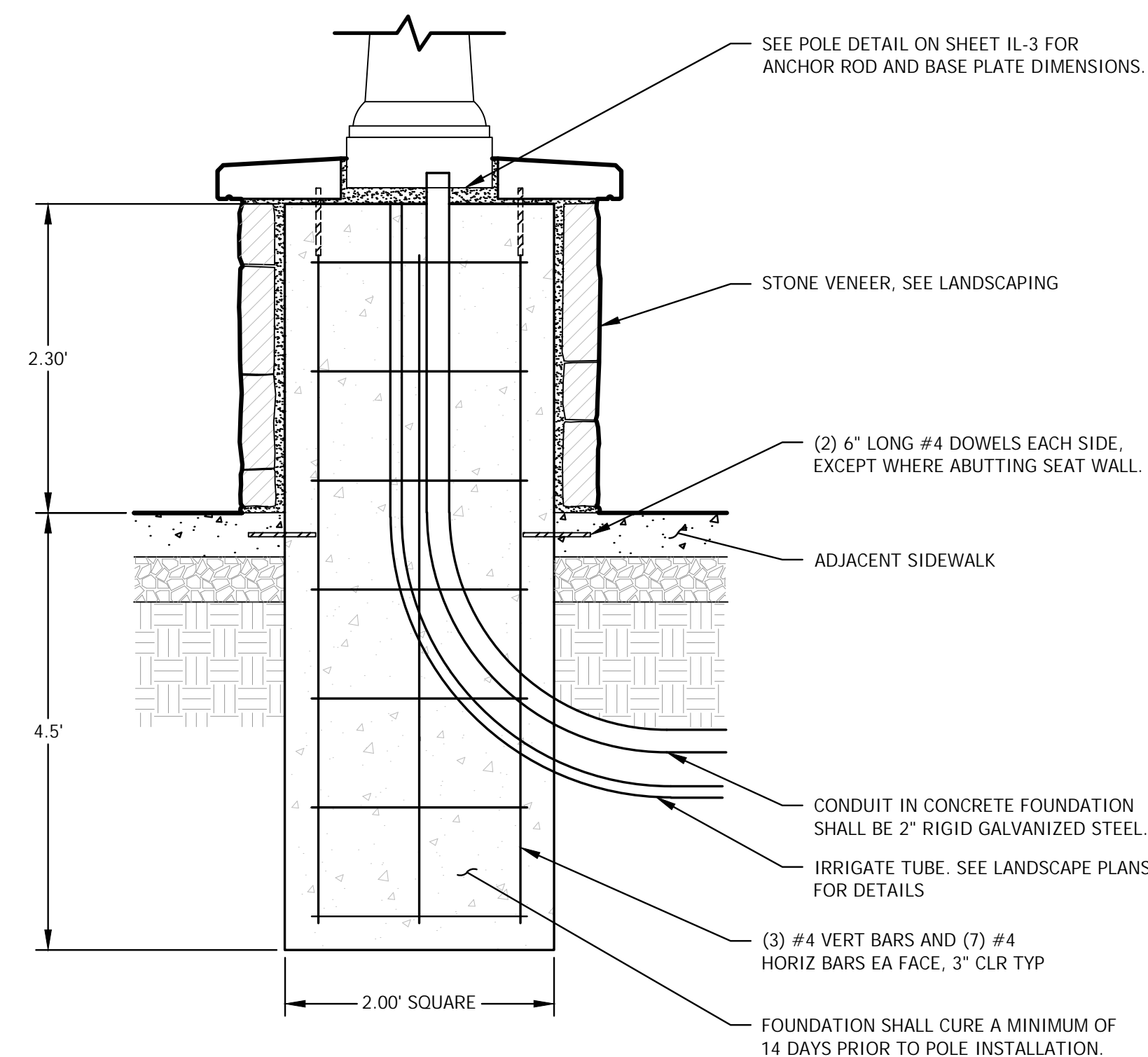
CKT (X) **N** **G** — INSTALL (N=NUMBER) NO. (G=AWG WIRE SIZE) XHHW WIRES CONNECTED TO ILLUMINATION CIRCUIT NO. (X)

G (S) — INSTALL ONE NO. (S) AWG WIRE SIZE COPPER GROUND WIRE

PL — INSTALL POLYETHYLENE PULL LINE



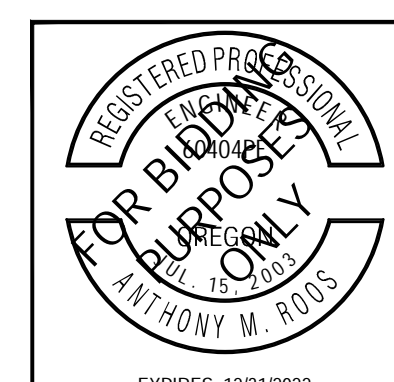
SERVICE PANEL WIRING DIAGRAM



POLE FOUNDATION DETAIL

POLE FOUNDATION NOTES

- Standard Foundation Design Is Based On The Following Soil Parameter, Which Are Characteristic Of The Predominantly Silty Soils Located Throughout The Greater Portland Area: Soil Internal Friction Angle: 26 Degrees Soil Effective Weight = 110 Pcf.
- Project Bids For Foundations Shall Be Based On Standard Design Depth As Shown On This Drawing. Additional Foundation Depth, If Required For Conditions As Outlined Below In Notes 3-6, Will Be Paid For By A Contract Change Order.
- Shafts That Encounter Up To 3 Feet Of Fill Soil Require The Total Foundation Depth Be Increased By An Amount Equal To The Thickness Of The Fill.
- Shafts That Encounter More Than 3 Feet Of Fill Soil Require A Site Observation And Special Foundation Design Provided By The City. Contractor To Contact The City's Project Engineer To Coordinate.
- Shafts That Encounter Groundwater Level In Lower Half Of Shaft Require A 2 Foot Increase In Total Foundation Depth.
- Shafts That Encounter Groundwater Level In Upper Half Of Shaft Require A Total Foundation Depth Of 1.5 Times The Standard Depth.
- See Irrigation Plan L3.02 For Irrigation Sleeve Through Foundation.



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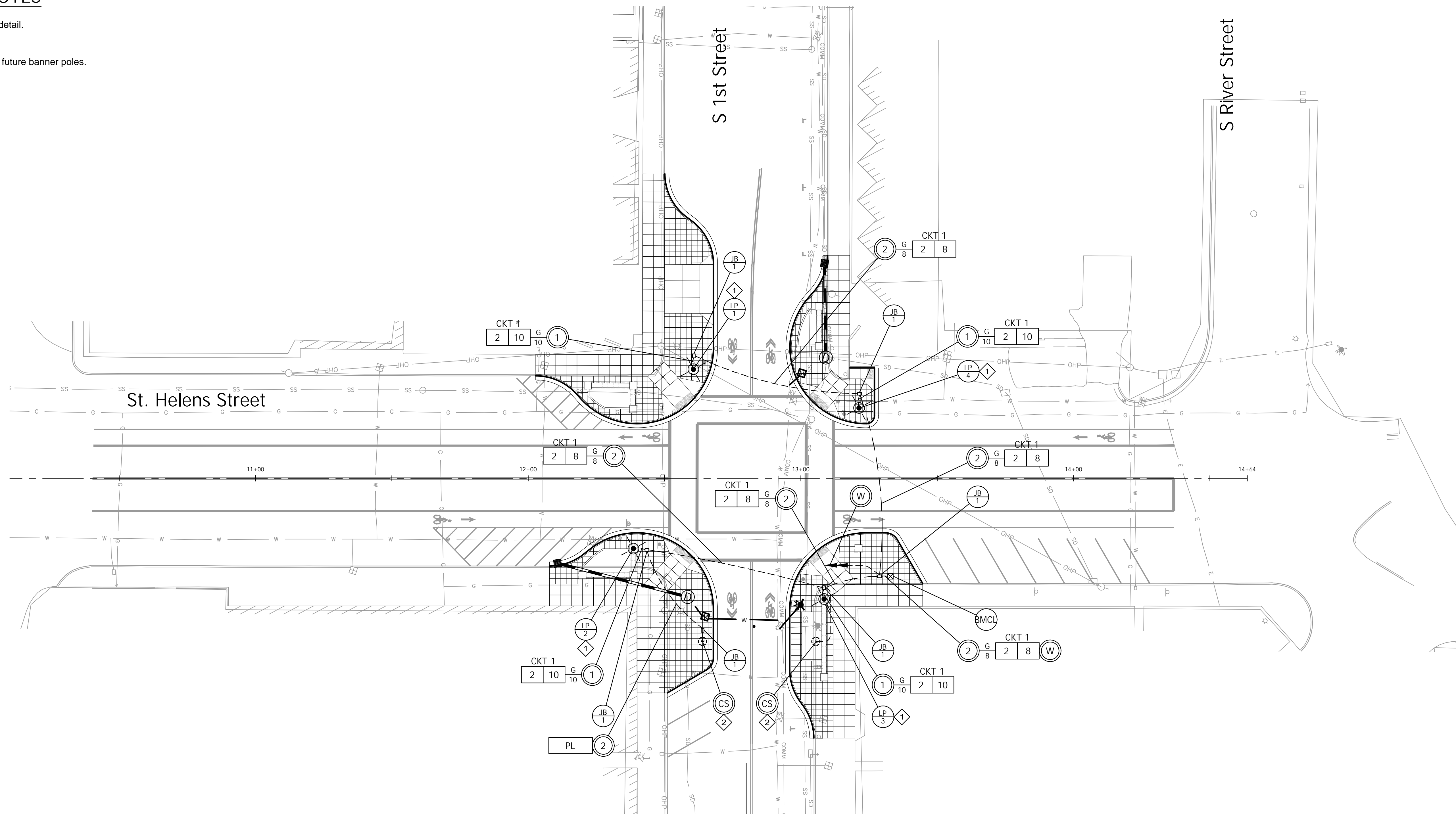
#	DATE	REVISION	APP'D

Submission Date: 04/22/2022
Drawn: CEC, Designed: CEC, Checked: AMR
PROJECT NO. 23544

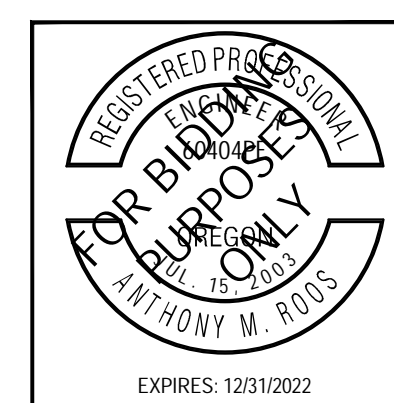
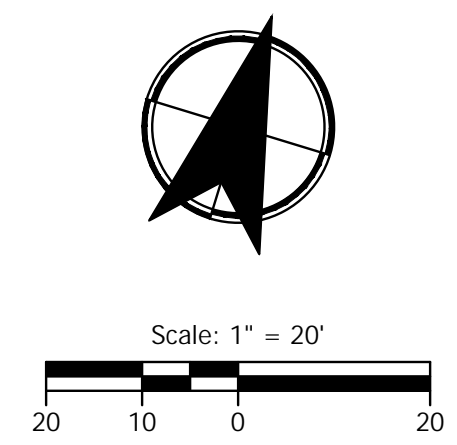
S 1st Street at St. Helens Street Intersection Improvements
ILLUMINATION LEGEND
SHEET NO. IL-1

CONSTRUCTION NOTES

- 1 See sheet IL-1 for foundation detail.
- 2 Conduit stub for connection to future banner poles.



STREET LIGHT POLE SCHEDULE					
POLE NO.	LUMINAIRE	STREET	STATION	OFFSET (FT.)	MOUNTING HEIGHT (FT.)
1	1200M-98-40-T3-NL-PEC-9005	ST. HELENS ST	STA 12+60.55	40.00 LT	14
2	1200M-98-40-T3-NL-PEC-9005	ST. HELENS ST	STA 12+38.52	25.81 RT	14
3	1200M-98-40-T3-NL-PEC-9005	ST. HELENS ST	STA 13+08.48	44.29 RT	14
4	1200M-98-40-T3-NL-PEC-9005	ST. HELENS ST	STA 13+21.29	25.83 LT	14



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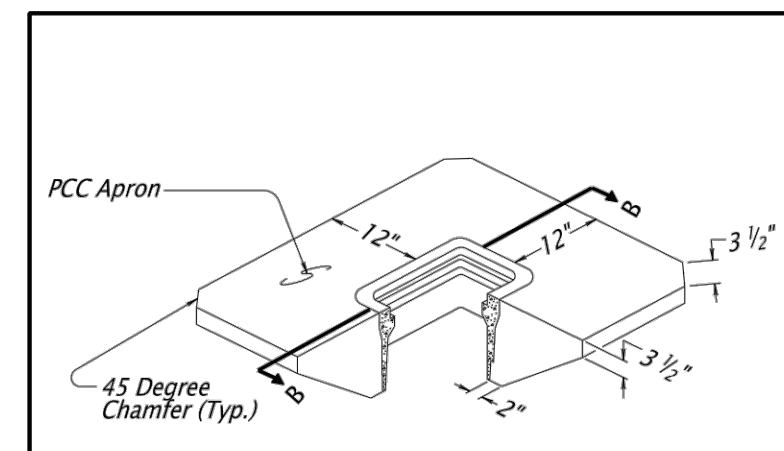
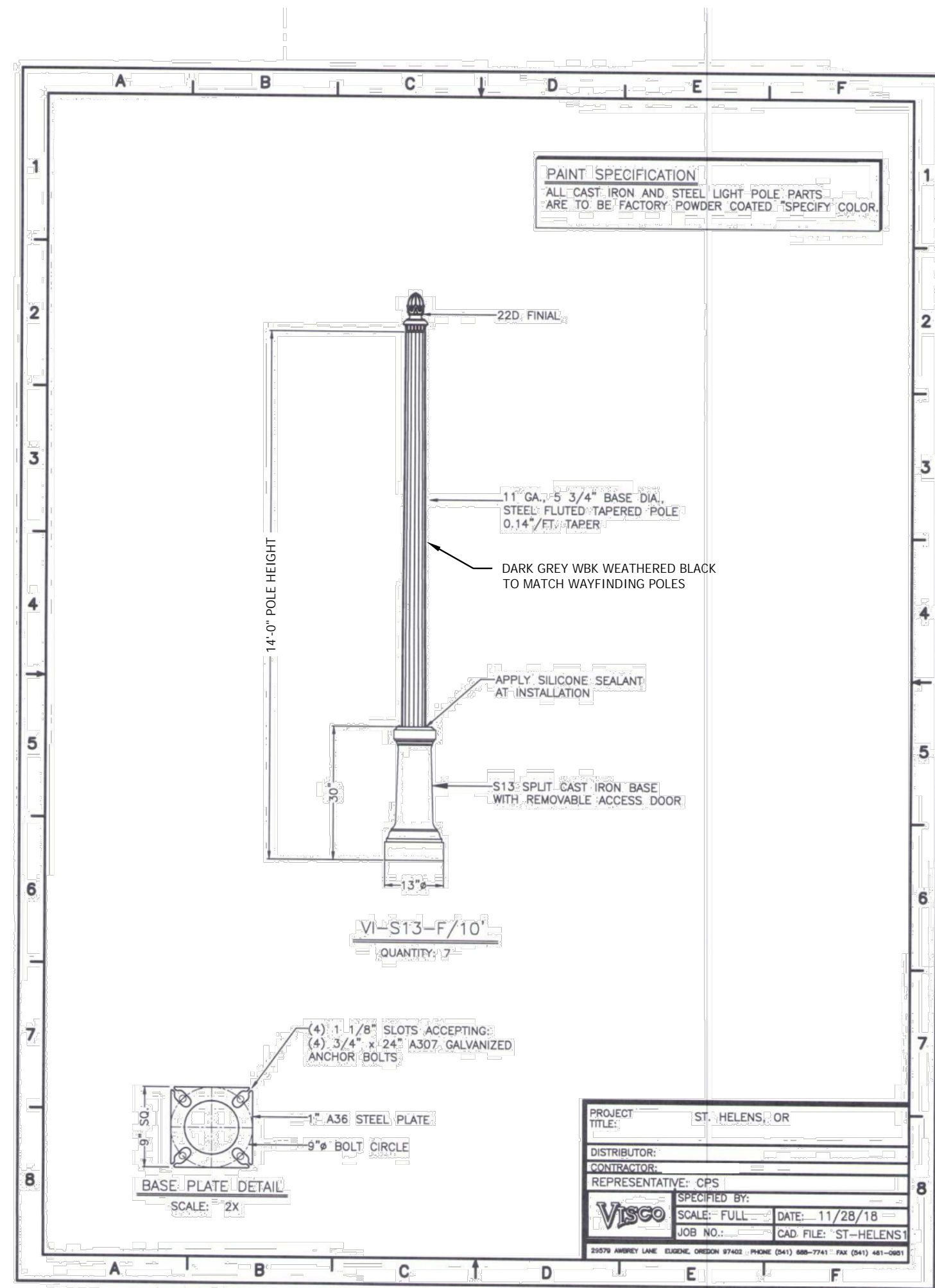
#	DATE	REVISION	APP'D

Submission Date: 04/22/2022
 Drawn: CEC, Designed: CEC, Checked: AMR
 PROJECT NO. 23544

**S 1st Street at St. Helens Street
 Intersection Improvements**
 ILLUMINATION PLAN

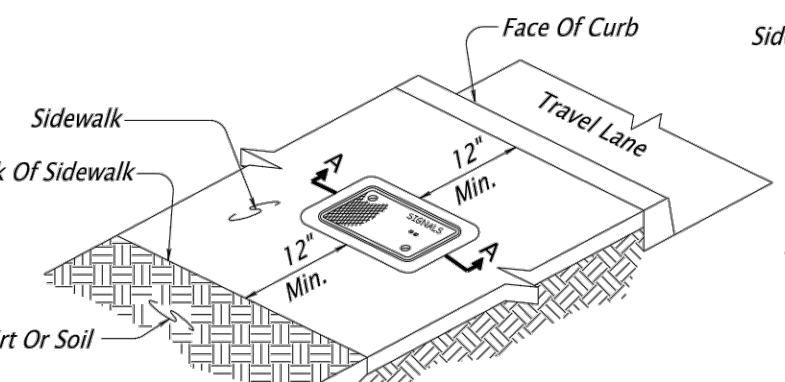
SHEET NO. IL-2

Plot Stamp: 6/27/2022 12:21:49 PM - Caleb Cox
 File: H:\23\23544 - 1st & St. Helens\design\CD\CD-IL-Illumination Plan-23544.dwg



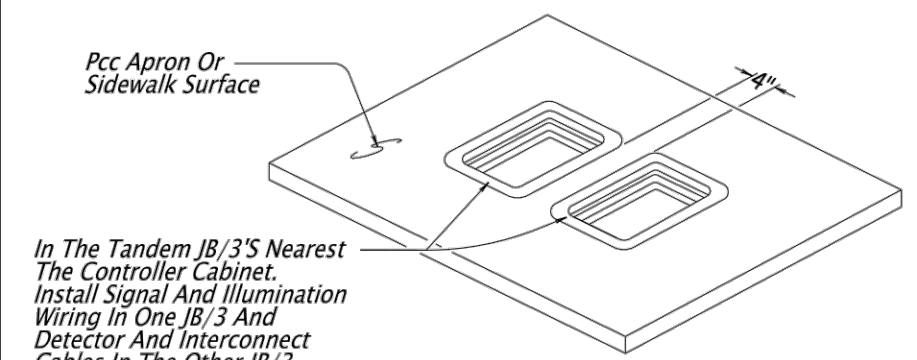
INSTALLATION IN UNSURFACED AREA

(This Detail Only Applicable for Junction Boxes Located In Incidental Travel Areas; Gravel Shoulders, Behind Guardrail, Etc. Do Not Install In Travel Lanes, Paved Shoulders, Or Other Areas Exposed To Traffic.)



INSTALLATION IN PCC SIDEWALK

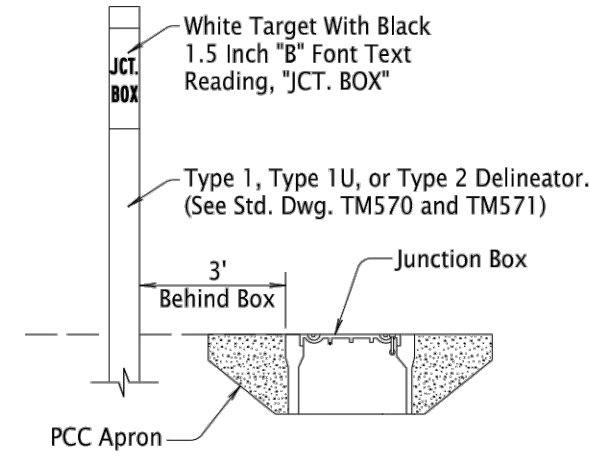
(This Detail Only Applicable for Junction Boxes Located In Flat Areas Of Sidewalks. Do Not Install In Slopes Or Ramps Or Driveways)



TANDEM JB/3A JUNCTION BOX DETAILS

GENERAL NOTES:

1. Install Top of Junction Box Flush With The Sidewalk, Surrounding Grade, Or Top Of Curb
2. Install Junction Boxes At The Approximate Locations Shown, Or If Not Shown, No More Than 300 Feet Apart
3. More Junction Boxes Than Specified May Be Installed To Facilitate The Work At The Option And Cost Of The Contractor
4. Use Materials According To 00640.10 and 00640.16. Use Compaction Equipment Suitable For Area And Compact Each Six Inch Layer With Sufficient Coverages To Produce A Firm Unyielding Surface.



Framing Channel Shall be Galvanized Steel Unistrut P1000 Or Equivalent. Framing Channel Is For Mounting Of Splice Closures And Slack Loops.

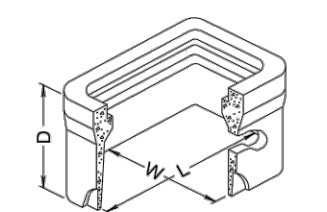
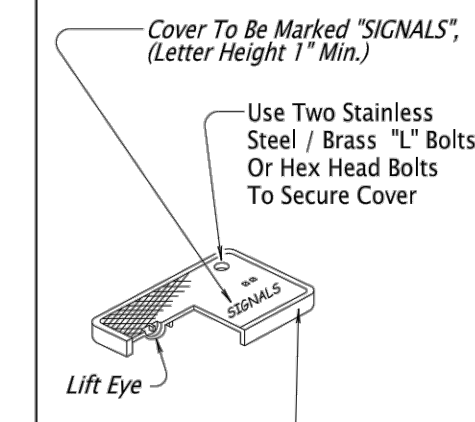
Splice Closure (As Needed)

Coil 100' Minimum Of Fiber Optic Cable In Each Hand Hole.

Hand Hole

Conduit

HAND HOLE INSTALLATION



CALC. BOOK NO. ... N/A	BASELINE REPORT DATE ... 2-Jan-2020
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
OREGON STANDARD DRAWINGS	
TRAFFIC SIGNAL JUNCTION BOXES/ HAND HOLES	
2018	
DATE	REVISION DESCRIPTION
07/18	Added A New Detail & Notes, Revised & Simplified Details
01/20	Added General Note 4

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

TM472



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APPROVED	REVISION	DATE	#

Submission Date: 04/22/2022

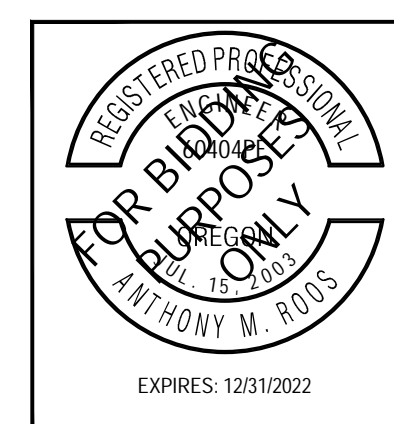
Drawn: CEC
Designed: CEC
Checked: AMR

PROJECT NO. 23544


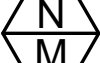







S 1st Street at St. Helens Street Intersection Improvements

ILLUMINATION DETAILS

SHEET NO. IL-3



SIGNING LEGEND

-  INSTALL NEW SIGN (N).
-  INSTALL NEW SIGN (N) ON NEW (M) SIGN SUPPORT
-  MAINTAIN AND PROTECT EXISTING SIGN (N) AND SUPPORT
-  REMOVE AND SALVAGE EXISTING SIGN (N) AND REMOVE (M) SIGN SUPPORT
-  REMOVE AND SALVAGE EXISTING SIGN (N)
-  REINSTALL EXISTING SIGN (N) ON NEW (M) SIGN SUPPORT
-  REINSTALL EXISTING SIGN (N)
-  REMOVE EXISTING SIGN (N)
-  REMOVE EXISTING SIGN (N) AND EXISTING (M) SIGN SUPPORT

N = SIGN NUMBER





M = MATERIAL OPTIONS:

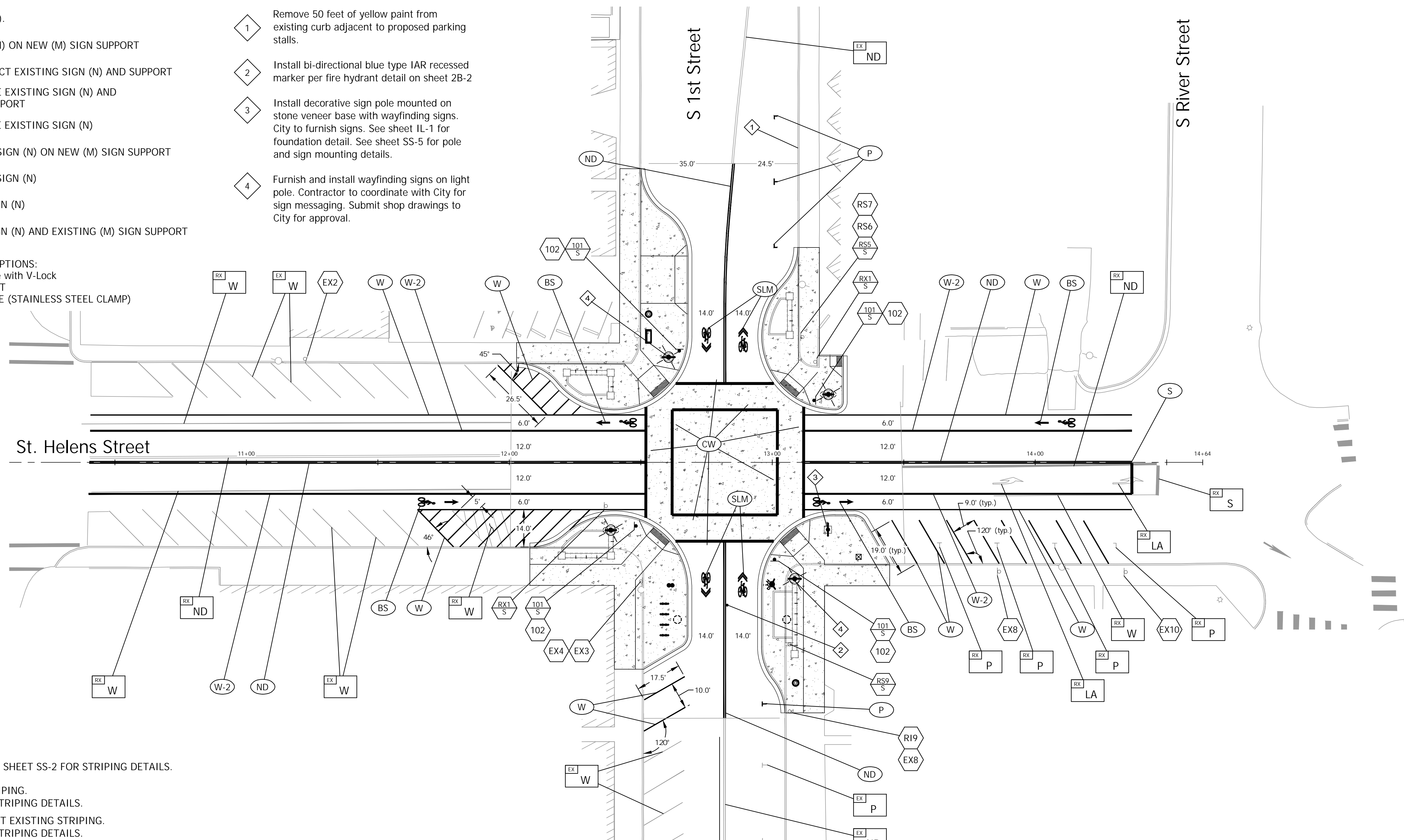
P = 2" Steel Pipe with V-Lock

W = WOOD POST

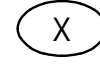
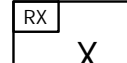
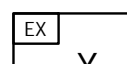
LP = LIGHT POLE (STAINLESS STEEL CLAMP)

CONSTRUCTION NOTES

-  Remove 50 feet of yellow paint from existing curb adjacent to proposed parking stalls.
-  Install bi-directional blue type IAR recessed marker per fire hydrant detail on sheet 2B-2
-  Install decorative sign pole mounted on stone veneer base with wayfinding signs. City to furnish signs. See sheet IL-1 for foundation detail. See sheet SS-5 for pole and sign mounting details.
-  Furnish and install wayfinding signs on light pole. Contractor to coordinate with City for sign messaging. Submit shop drawings to City for approval.

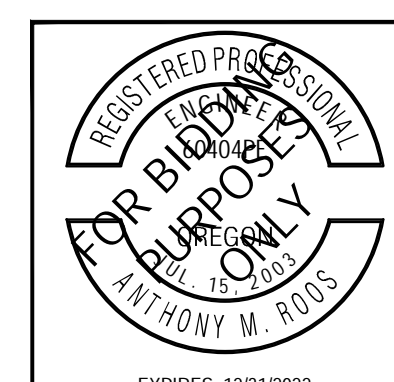
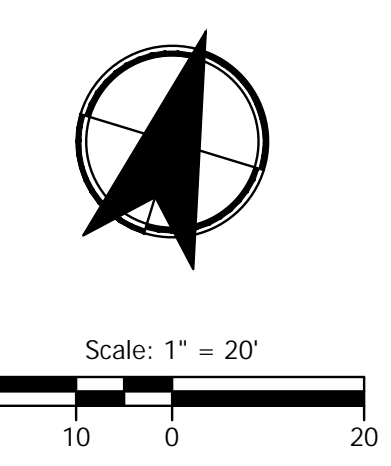


STRIPING LEGEND

-  INSTALL STRIPING. SEE SHEET SS-2 FOR STRIPING DETAILS.
-  REMOVE EXISTING STRIPING. SEE SHEET SS-2 FOR STRIPING DETAILS.
-  MAINTAIN AND PROTECT EXISTING STRIPING. SEE SHEET SS-2 FOR STRIPING DETAILS.

SIGNING AND STRIPING GENERAL NOTES

1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PER COUNTY STANDARD DRAWINGS. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIRED SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) LATEST EDITION AND CURRENT COUNTY ROAD STANDARDS.
2. EXISTING MARKINGS NOT SHOWN ARE TO REMAIN IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. ALL SIGNING SHALL CONFORM TO THE REQUIRED SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) LATEST EDITION AND CURRENT COUNTY ROAD STANDARDS.
4. TRAFFIC SIGN LEGEND AND MOUNTING DETAILS ARE SHOWN SHEETS SS-3 & SS-4.
5. EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



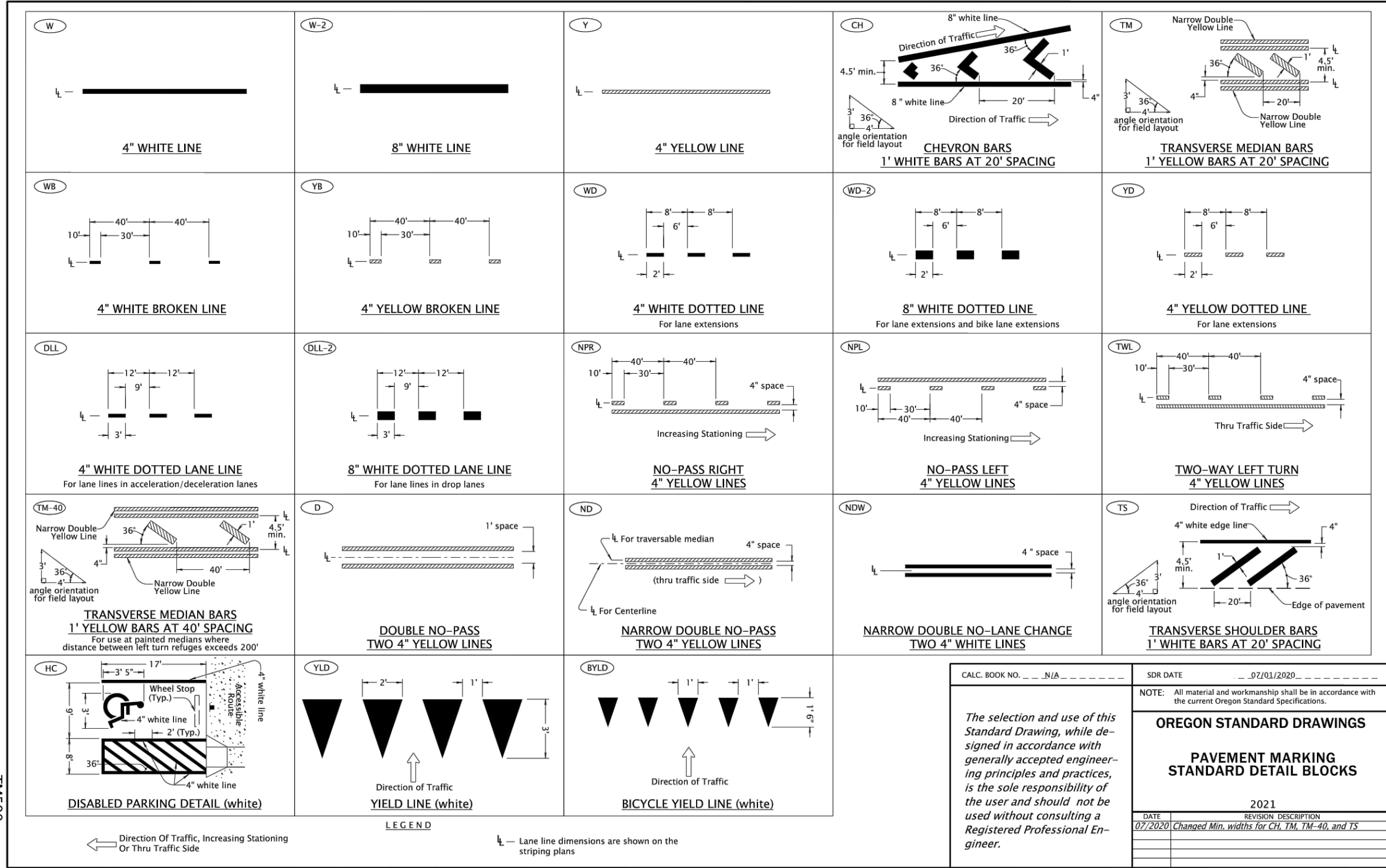
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 PORTLAND, OR 97205
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NO.	REVISION	DATE	APP'D.

Submission Date: 04/22/2022
 Drawn: CEC
 Designed: CEC
 Checked: AMR
 PROJECT NO. 23544

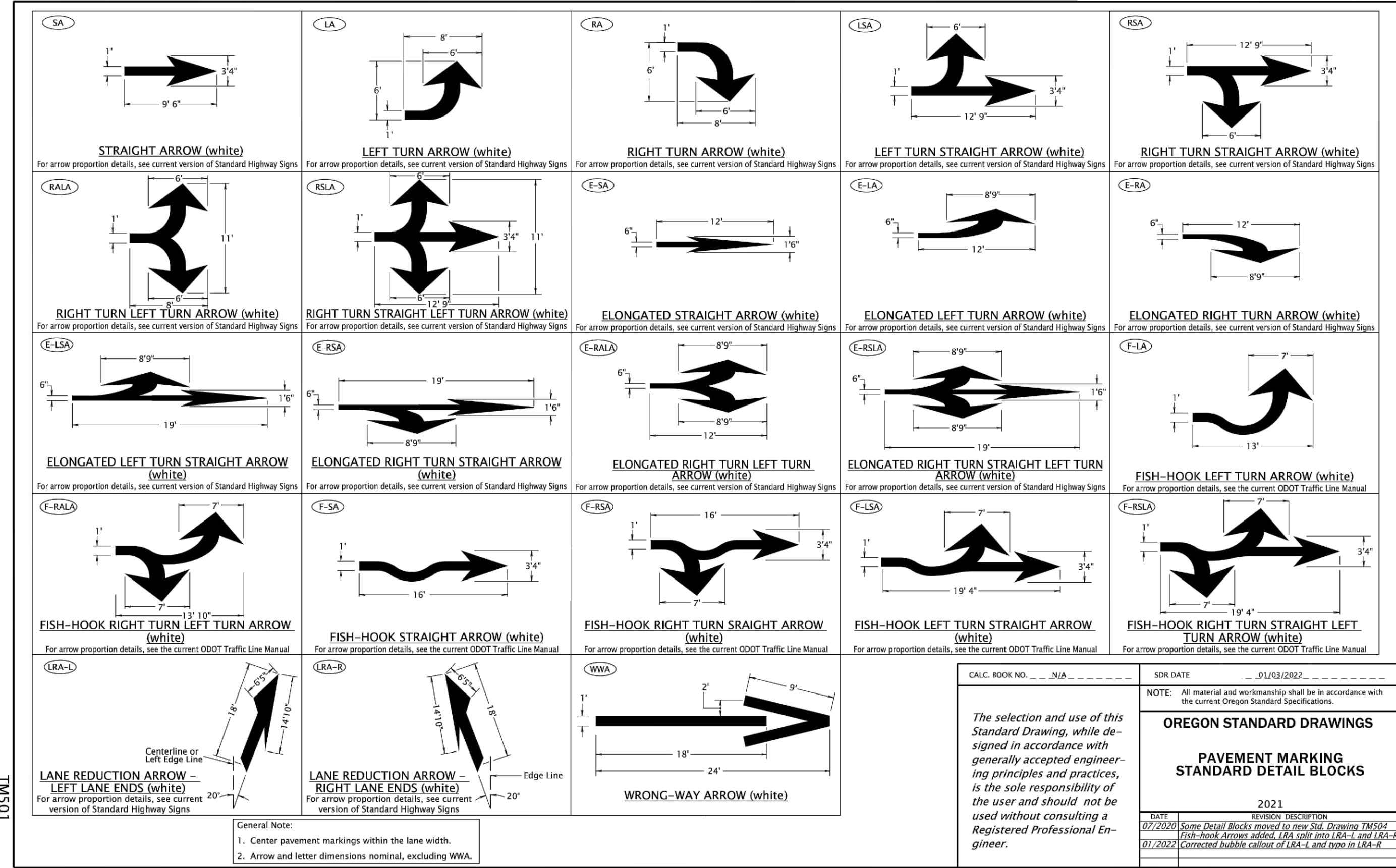
S 1st Street at St. Helens Street Intersection Improvements
 SIGNING & STRIPING PLANS
 SHEET NO. SS-1

Plot Stamp: 6/27/2022 12:22:03 PM - Caleb Cox
 File: H:\23\23544 - 1st & St-Helens\design\CD\CD-SS-Signing & Striping Plan-23544.dwg



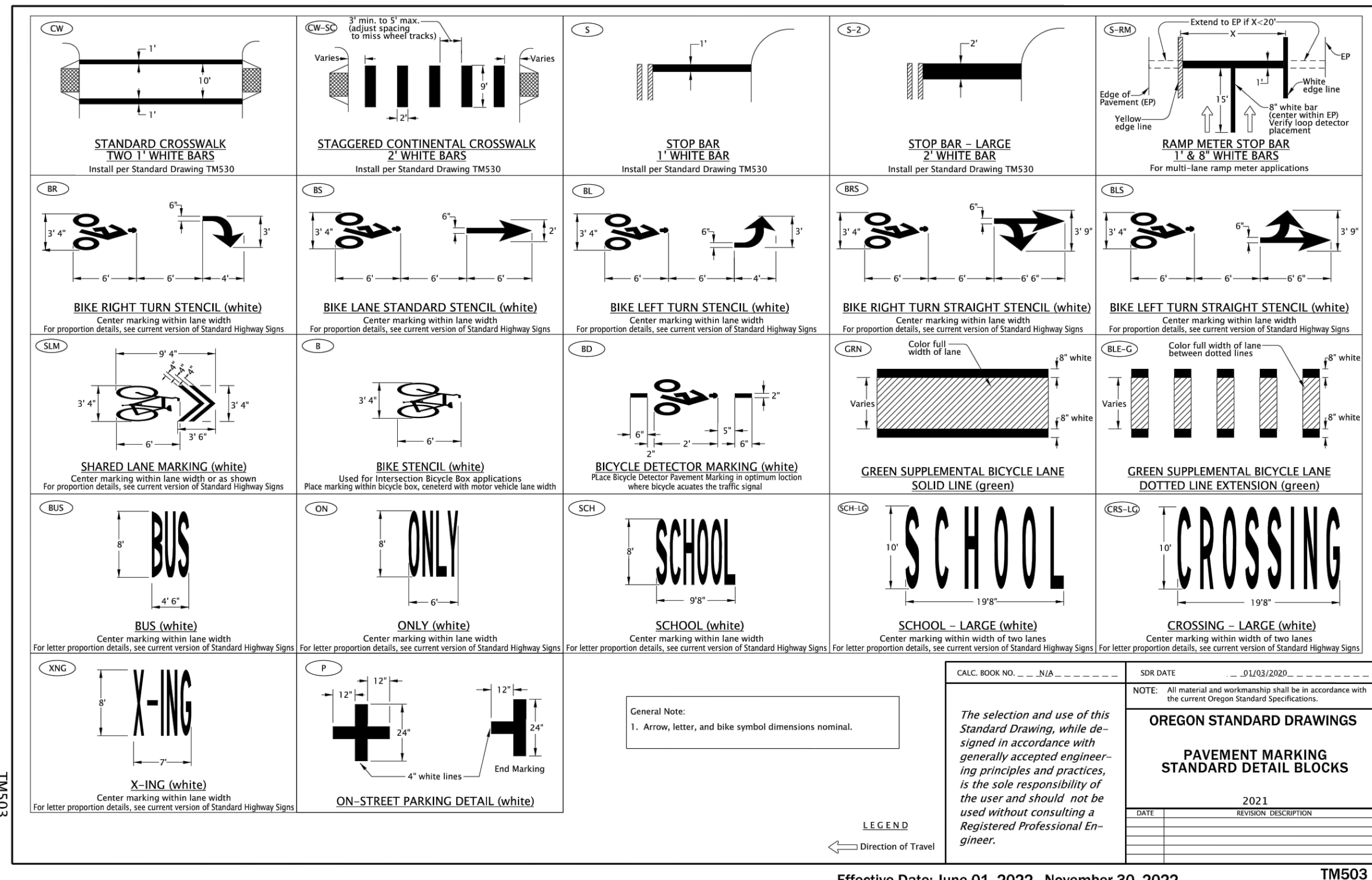
Effective Date: June 01, 2022 - November 30, 2022

TM500



Effective Date: June 01, 2022 - November 30, 2022

TM501



Effective Date: June 01, 2022 - November 30, 2022

TM503



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DATE	REVISION DESCRIPTION
07/2020	Some Detail Blocks moved to new Std. Drawing TM504
01/2022	Fish-hook Arrows added, LRA split into LRA-L and LRA-R
01/2022	Corrected bubble callout of LRA-L and LRA-R

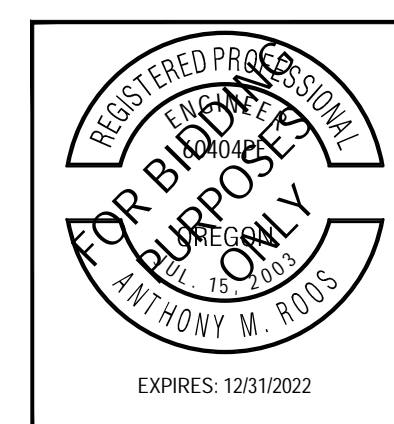
DATE	REVISION DESCRIPTION
07/2020	Some Detail Blocks moved to new Std. Drawing TM504
01/2022	Fish-hook Arrows added, LRA split into LRA-L and LRA-R
01/2022	Corrected bubble callout of LRA-L and LRA-R

Drawn: CEC	Designed: CEC	Checked: AMR
PROJECT NO. 23544		

S 1st Street at St. Helens Street
Intersection Improvements

STRIPING DETAILS

SHEET NO. SS-2

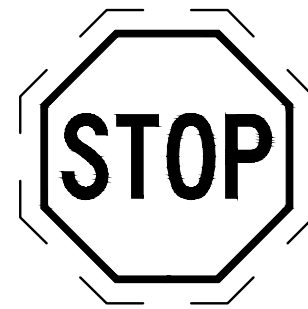


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EXISTING SIGNS



1



2



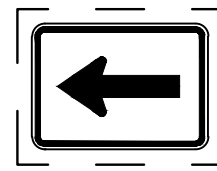
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4



5



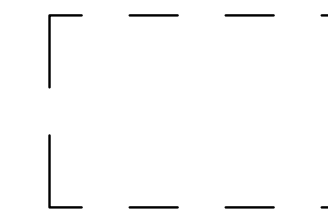
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7



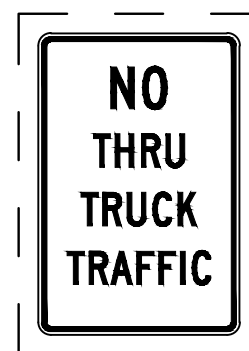
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EXISTING SIGN

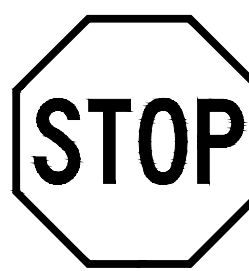


9



10

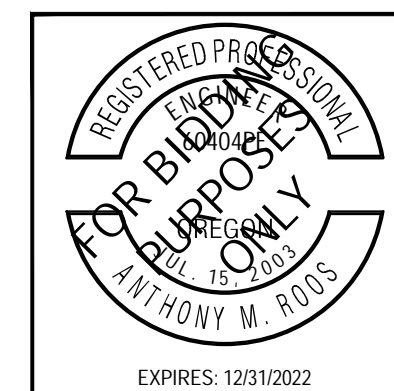
PROPOSED SIGNS



R1-1
36"x36"
4 Required



R1-4
18"x6"
4 Required



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Submission Date:
04/22/2022

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PROJECT NO.
23544

S 1st Street at St. Helens Street
Intersection Improvements

SIGNING DETAILS

SHEET NO.
SS-3

Plot Stamp: 6/27/2022 12:22:07 PM - Caleb Cox
 File: H:\23\23544 - 1st & St. Helens\design\CD\CD-SS-Signing & Striping Plan-23544.dwg

SIGN NO.	SIGN LOCATION 4/	SIGN DIMENSIONS		SUB-STRATE			COLOR 1/					LEGEND	SIGN NO. 2/	TYPE OF SUPPORT														POST		FOOTING		REMARKS			
		WIDTH	HEIGHT	PLYWOOD	SHEET ALUM.	EXTRUDED ALUM. (TM675)	BACKGROUND		LEGEND					TYPE OF SUPPORT														SIZE	LENGTH	LOCATION 3/	MIN. DEPTH 5/				
							ASTM TYPE III OR TYPE IV	ASTM TYPE IX	ASTM TYPE III OR TYPE IV	ASTM TYPE VII OR TYPE IV	NON-REFLECTIVE			PERMANENT	DEMOUNTABLE	WOOD POST (TM670-TM671, TM676)	SINGLE PIPE POST (SCH 40)	PERF STEEL SQUARE TUBE (ODOT TM671, TM676, TM687-689)	TRIANGULAR BASE BREAKAWAY (ODOT TM602)	MULTI-POST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (SSC) (TM677)	SIGNAL POLE MOUNT (TM680)	CROSSWALK CLOSURE BARRICADE (TM490)	VERTICAL SIGN MOUNT ON EXISTING STRUCTURE	EXISTING PIPE POST	MILEPOST MARKER POST (TM221-TM222)	ADJUSTABLE SIGN MOUNT						MAST ARM SNS MOUNT	C 4 X 5.4	C 4 X 7.25
101	"St. Helens Street" 12+48 RT	36"	36"	X			R		SW		X		101		X																2-3/8"	12'	3'		MOUNT ABOVE SIGN 102
101	"St. Helens Street" 12+65 LT	36"	36"	X			R		SW		X		101		X																			MOUNT ABOVE SIGN 102	
101	"St. Helens Street" 13+01 RT	36"	36"	X			R		SW		X		101		X																			MOUNT ABOVE SIGN 102	
101	"St. Helens Street" 13+16 LT	36"	36"	X			R		SW		X		101		X																			MOUNT ABOVE SIGN 102	
102	"St. Helens Street" 12+48 RT	18"	6"	X			R		SW		X		102																					MOUNT BELOW SIGN 101	
102	"St. Helens Street" 12+65 LT	18"	6"	X			R		SW		X		102																					MOUNT BELOW SIGN 101	
102	"St. Helens Street" 13+01 RT	18"	6"	X			R		SW		X		102																					MOUNT BELOW SIGN 101	
102	"St. Helens Street" 13+16 LT	18"	6"	X			R		SW		X		102																					MOUNT BELOW SIGN 101	

1/
 BK= BLACK
 BL= BLUE
 BR= BROWN
 FY= FLUORESCENT YELLOW
 G= GREEN
 O= ORANGE
 R= RED
 RB= RED-BLUE
 SW= SILVER-WHITE
 W= WHITE
 Y= YELLOW
 YG= YELLOW-GREEN

2/
 NOTE: L,C,R ARE LOCATIONS OF POSTS FACING THE SIGN.
 L = LEFT POST
 C = CENTER POST
 R = RIGHT POST

3/
 DISTANCE FROM EDGE OF PAVEMENT, FACE OF CURB, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM600, TM602, AND TM635.

4/
 NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, OBJECT MARKERS AND MILEPOST MARKERS, EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

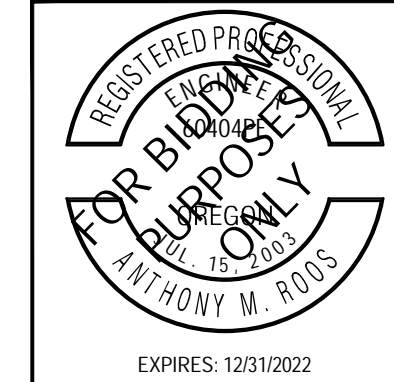
5/
 MINIMUM DEPTH OF FOOTING FOR TRIANGULAR BASE BREAKAWAY AND MULTI-POST BREAKAWAY INSTALLATIONS IS FOR A 2' DIAMETER FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS



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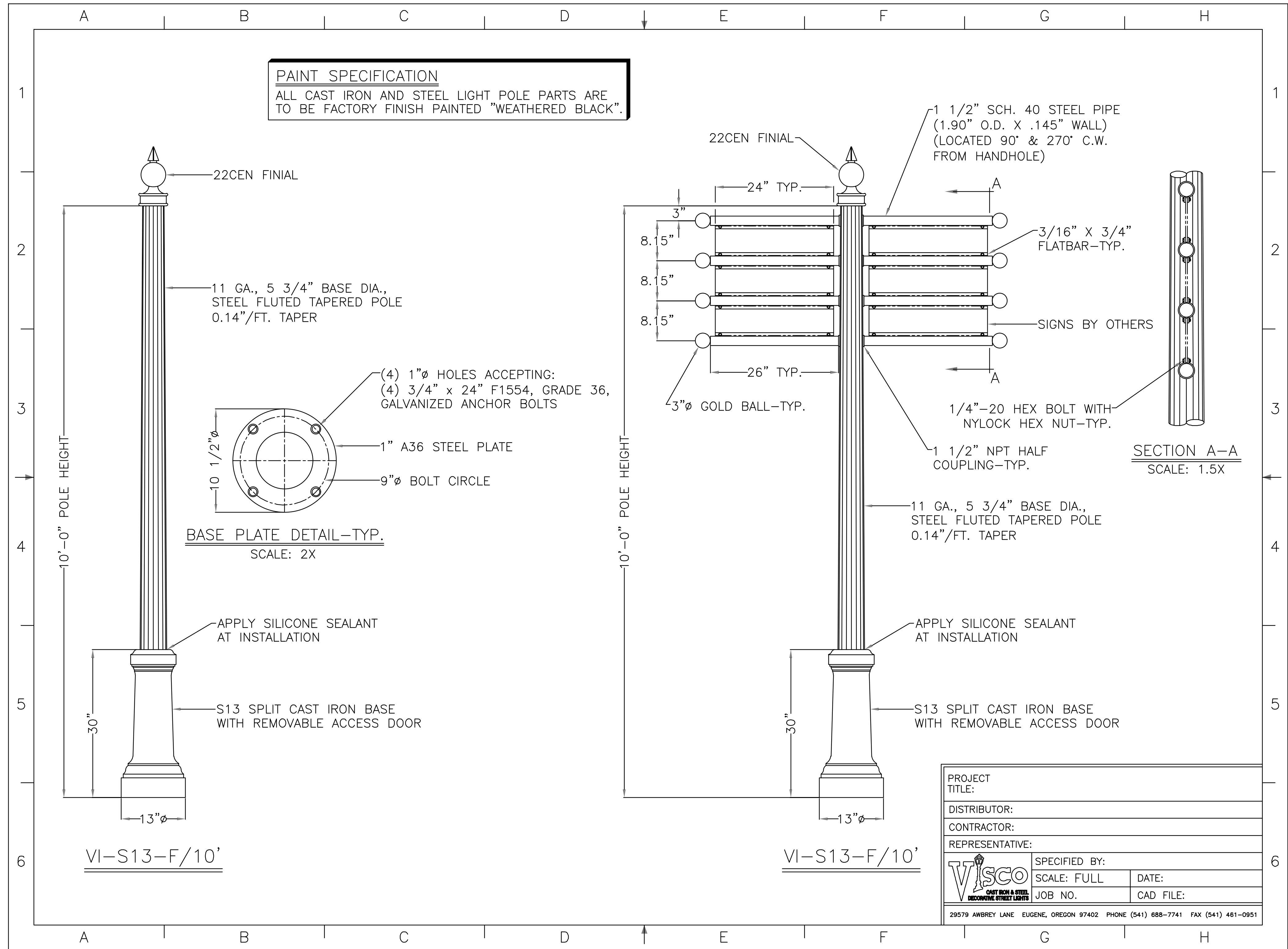
APPROVED	DATE	REVISION	#

Submission Date: 04/22/2022
 Drawn: CEC
 Designed: CEC
 Checked: AMR
 PROJECT NO. 23544



S 1st Street at St. Helens Street Intersection Improvements
 SIGNING DETAILS
 SHEET NO. SS-4

Plot Stamp: 6/27/2022 12:22:08 PM - Caleb Cox
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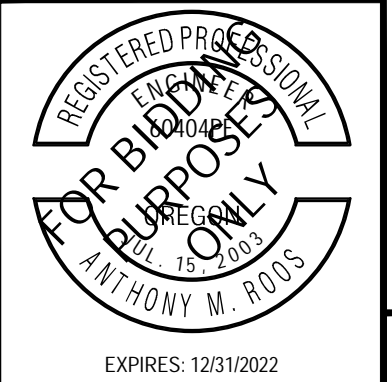
#	DATE	REVISION	APP'D.

Submission Date: 04/22/2022
 Drawn: CEC Designed: CEC Checked: AMR
 PROJECT NO. 23544

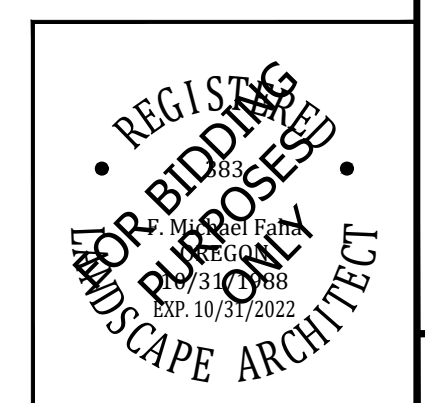
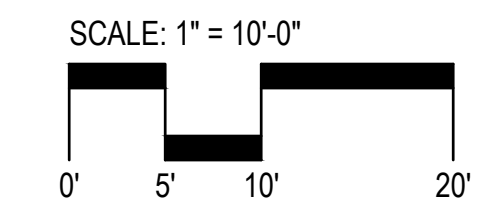
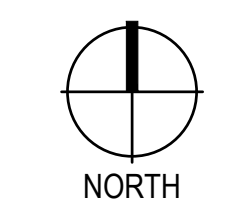
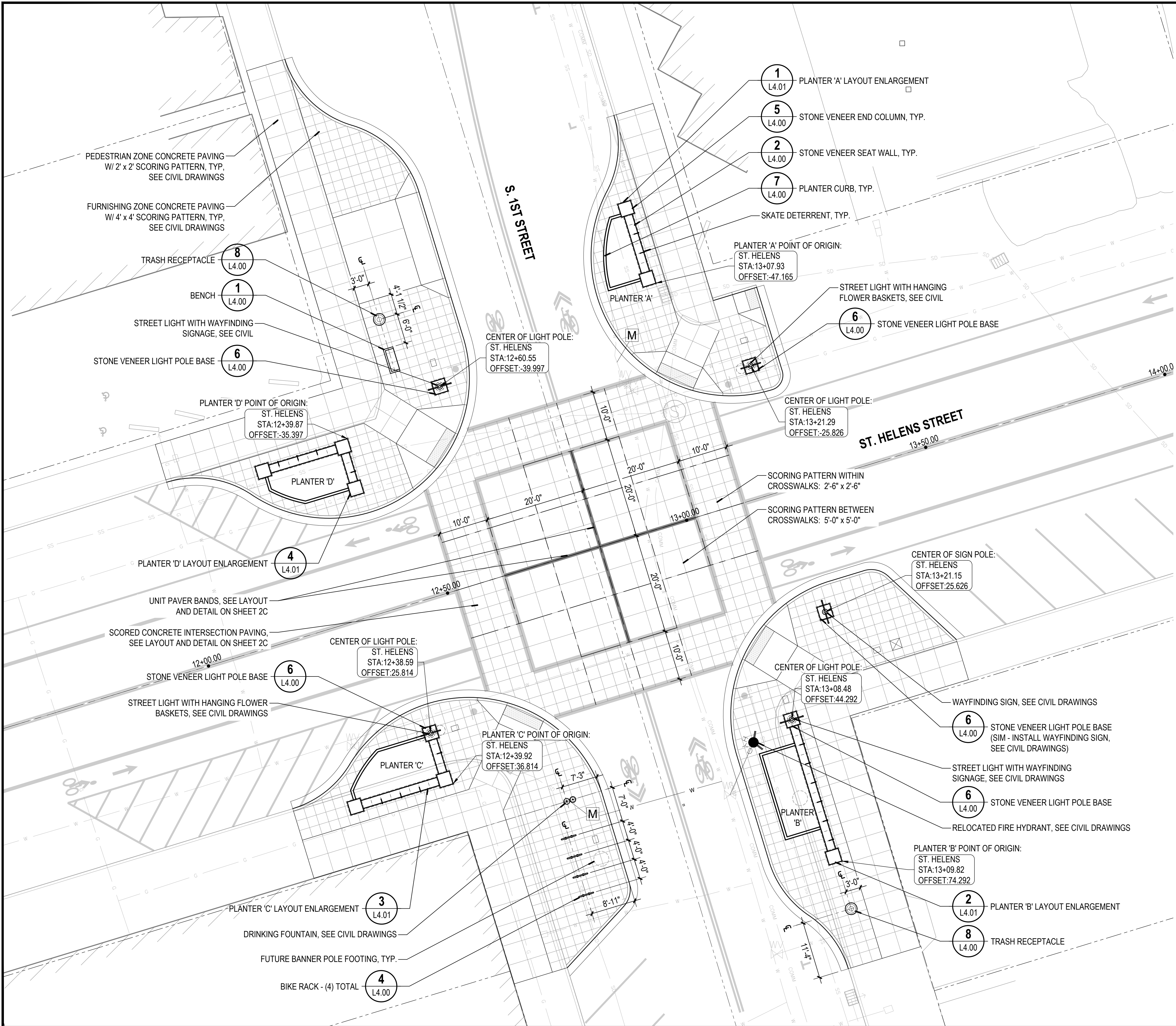
S 1st Street at St. Helens Street
 Intersection Improvements

SIGNING DETAILS

SHEET NO. SS-5



Plot Stamp: 6/27/2022 6:35:39 PM - Andrew Holder
 File: G:\Projects\190503_1_St_Helens_List_Intersection\02_Production\01_CAD\01_Plot_Sheets\190503_MATL.dwg



GREENWORKS
 LANDSCAPE ARCHITECTURE • ENVIRONMENTAL DESIGN
 110 SE Main St., Suite 100, Portland, OR 97214
 PH: 503.222.8512
 Email: info@greenworksac.com

#	DATE	REVISION	APP'D.

Submission Date: 06/29/2022
 Drawn: AH, Designed: AH, Checked: RT

PROJECT NO. 190503.1

S 1st Street at St. Helens Street
 Intersection Improvements
 MATERIALS PLAN
 SHEET NO. L1.01

Plot Stamp: 6/27/2022 6:35:52 PM - Andrew Holder
 File: G:\Projects\190503_1_St_Helens_List_Intersection\02_Production\01_CAD\01_Plot_Sheets\190503_IRRG.dwg

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	GPM	RADIUS	DETAIL
⊙	RAIN BIRD 1812-PRS 5 SERIES MPR	180	30	0.20	5'	8/L2.02
⊙	RAIN BIRD 1812-PRS 8 SERIES MPR	180	30	0.52	8'	8/L2.02
⊙	RAIN BIRD 1812-PRS 8 SERIES MPR	90	30	0.26	8'	8/L2.02
⊙	RAIN BIRD 1812-PRS VAN SERIES	ADJ	30		4'	8/L2.02
⊙	RAIN BIRD 1812-PRS VAN SERIES	ADJ	30		6'	8/L2.02
⊙	RAIN BIRD 1812-PRS VAN SERIES	ADJ	30	0.01	8'	8/L2.02

SYMBOL	MANUFACTURER/MODEL	PSI	DETAIL
■	DRIP CONTROL ZONE KIT - RAIN BIRD XCZ-100-PRB-COM W/TBOSPSOL - POTTED LATCHING SOLENOID		3/L2.03
▼	XERI-BUBBLE - RAIN BIRD SXB-025 SXB-360-025	15	1/L2.03

SYMBOL	MANUFACTURER/MODEL	DETAIL
⊙	RAIN BIRD PEB W/TBOSPSOL - POTTED LATCHING SOLENOID	2/L2.03
⊙	QUICK COUPLER - RAIN BIRD 44-LRC	7/L2.02
⊗	GATE VALVE - LINE SIZE	5/L2.02
▲	PRESSURE REGULATING DEVICE - LINE SIZE	1/L2.02
⊗	1" BACKFLOW PREVENTION DEVICE - WATTS LF007	2/L2.02
⊞	BATTERY OPERATED CONTROLLER - RAIN BIRD TBOS-BT2	2/L2.03
⊙	10" ROUND VALVE BOX	
↓	MANUAL DRAIN VALVE - CHAMPION BRASS ANGLE - 200RS - LINE SIZE	

	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40
	2" PIPE SLEEVE: PVC SCHEDULE 40 W/PULL WIRE

CONTROL VALVE TARGET

	TYPE: L - LAWN S - SHRUB D - DRIP
	VALVE SIZE
	STATION NUMBER
	FLOW IN GPM

IRRIGATION NOTES

1. CALL DIG SAFELY 811 TO LOCATE EXISTING SERVICES PRIOR TO EXCAVATION.
2. SYSTEM OPERATION AND DESIGN IS BASED ON 70 POUNDS OF PRESSURE AND 20 GALLONS PER MINUTE AT THE SHUTOFF VALVE. THE CONTRACTOR SHALL VERIFY THE DESIGN PRESSURE AND VOLUME BEFORE INSTALLATION AND NOTIFY OWNER IF THERE IS A DISCREPANCY.
3. EQUIPMENT AND VALVE LOCATIONS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION OF NEW IRRIGATION SYSTEM.
4. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LAYOUT OF ALL NEW PLANTING AREAS ON SITE BEFORE STARTING WORK AND IMMEDIATELY NOTIFY OWNER OF ANY DEVIATIONS FROM PLAN.
5. LOCATE EQUIPMENT AND VALVE BOXES WITHIN FURNISHING ZONE PAVING AREA, AND ALIGN TO PAVING PATTERN.
6. MAIN AND LATERAL LINES MAY BE SHOWN DIAGRAMMATICALLY FOR CLARITY. MAIN AND LATERAL LINES SHOWN IN PAVED AREAS SHALL BE PLACED IN ADJACENT PLANTING BEDS UNLESS SPECIFICALLY SHOWN AS PASSING UNDER PAVING IN SLEEVING (SEE LEGEND FOR SLEEVE SYMBOL). THE CONTRACTOR MUST OBTAIN THE APPROVAL OF OWNER'S REPRESENTATIVE BEFORE MAKING CHANGES IN ROUTING OF PIPE OR LOCATION OF VALVES.



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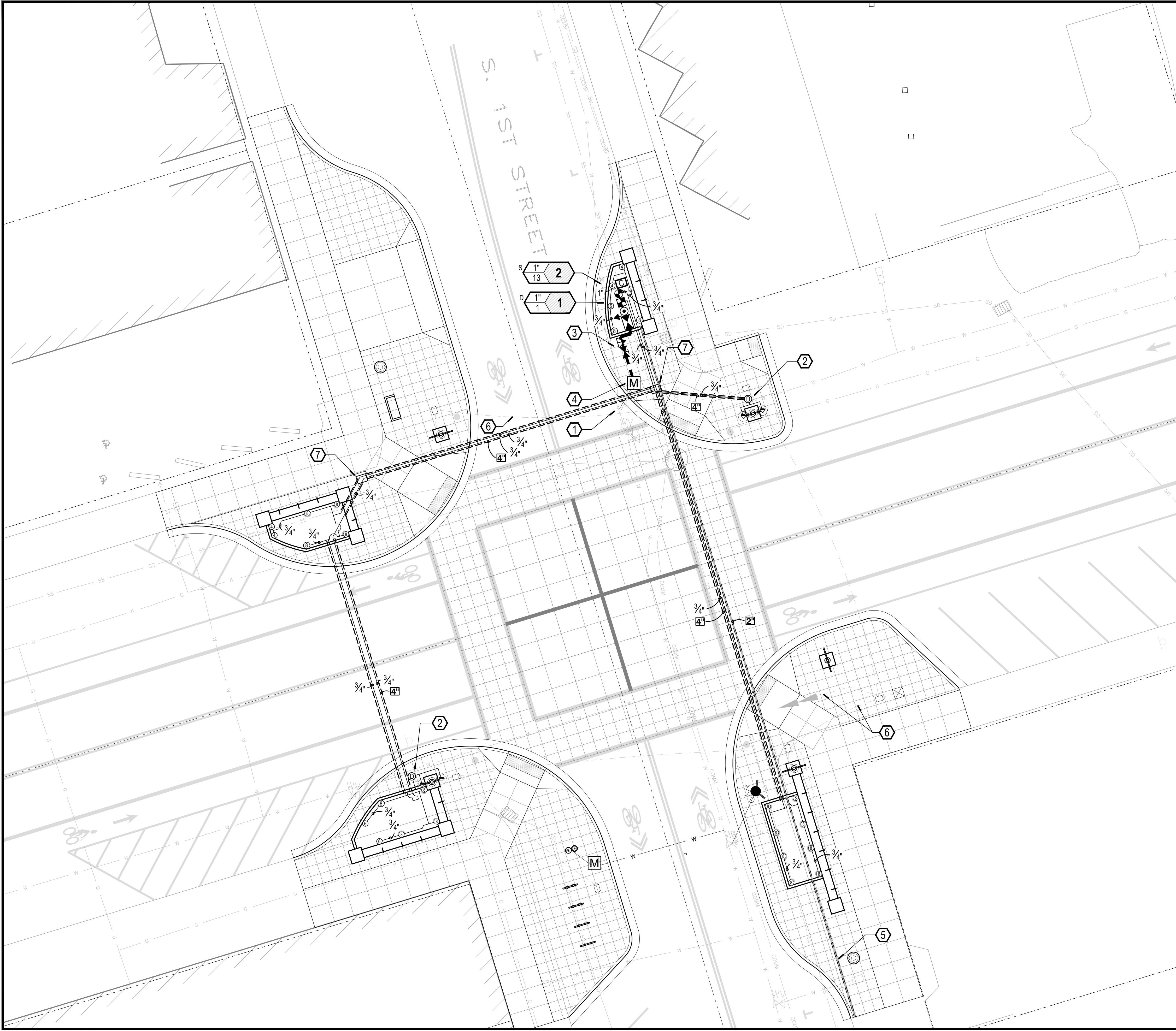
PROJECT NO.
190503.1

**S 1st Street at St. Helens Street
 Intersection Improvements**

IRRIGATION LEGEND

SHEET NO.
L2.00

Plot Stamp: 6/27/2022 6:35:56 PM - Andrew Holder
 File: G:\Projects\190503.1_St_Helens_List_Intersection\02_Plot_Sheets\190503_IRRG.dwg



KEY NOTES

- ① IRRIGATION SYSTEM WATER SERVICE - SEE CIVIL DRAWINGS FOR EXISTING WATER LINE SERVICE / TAP
- ② HANGING BASKET IRRIGATION W/ ROUND VALVE BOX FOR DRIP CONNECTION AT LIGHT POLE. - SEE DETAIL 1/L2.03
- ③ POINT OF CONNECTION - SEE DETAIL 1/L2.02
- ④ IRRIGATION WATER METER - SEE CIVIL DRAWINGS
- ⑤ PROVIDE 2" CONDUIT WITH PULL WIRE FOR FUTURE CONNECTION TO DOWNTOWN 2-WIRE CONTROLLER
- ⑥ LIGHTING CONDUIT BY OTHERS - TYP
- ⑦ 18"x24" POLYMER CONCRETE VALVE BOX - (2) 45 DEG LATERAL LINE PIPE CONNECTIONS AT THIS LOCATION. COORDINATE INSTALLATION / LOCATION WITH PROPOSED HARDSCAPE IMPROVEMENTS

GENERAL NOTE

SEE SHEET L2.00 FOR IRRIGATION SCHEDULE AND NOTES



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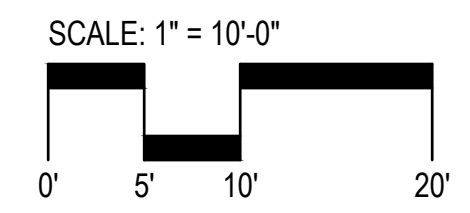
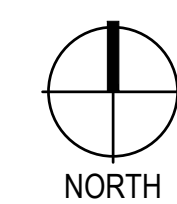
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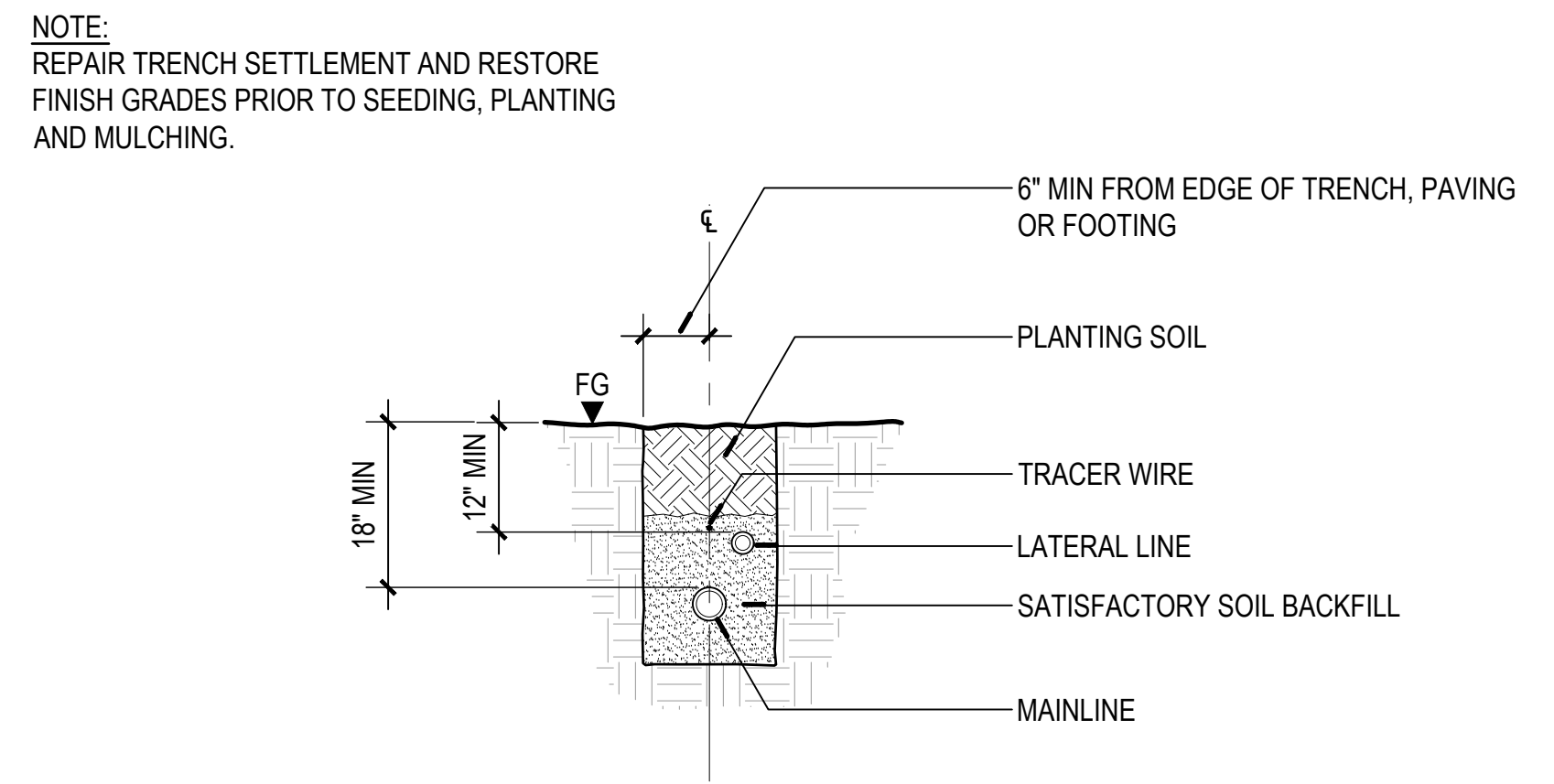
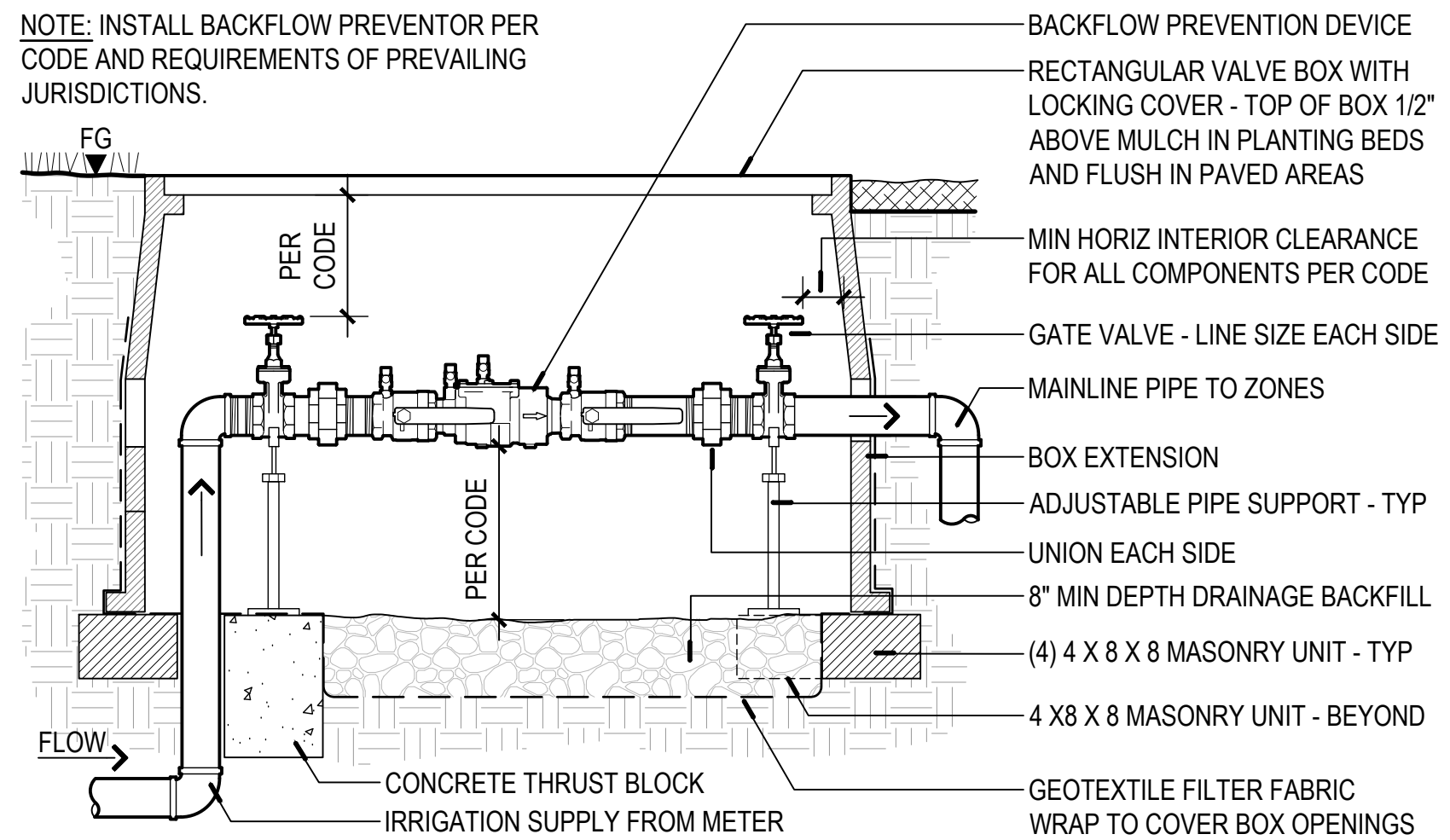
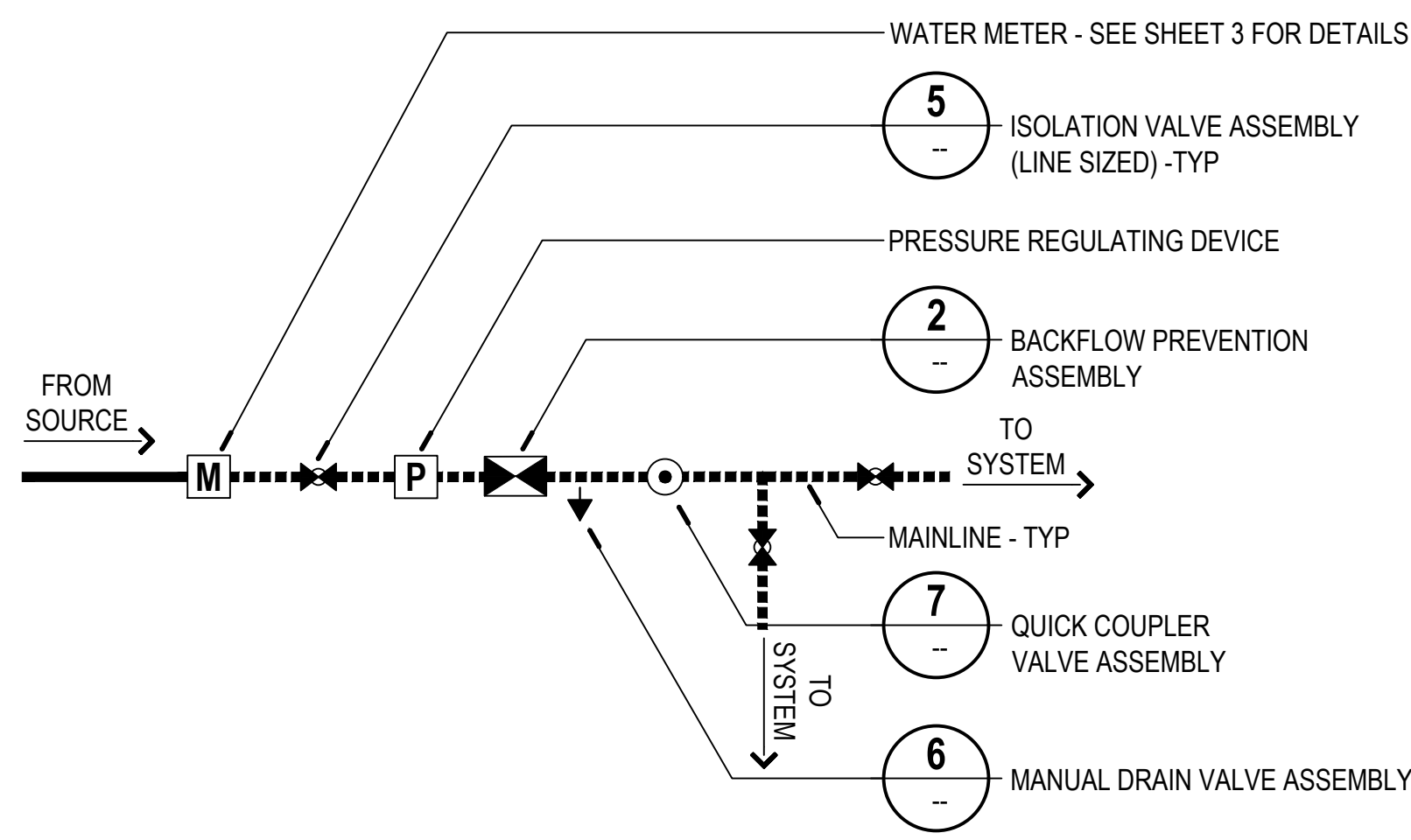
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PROJECT NO.
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**S 1st Street at St. Helens Street
 Intersection Improvements**
 IRRIGATION PLAN

SHEET NO.
L2.01





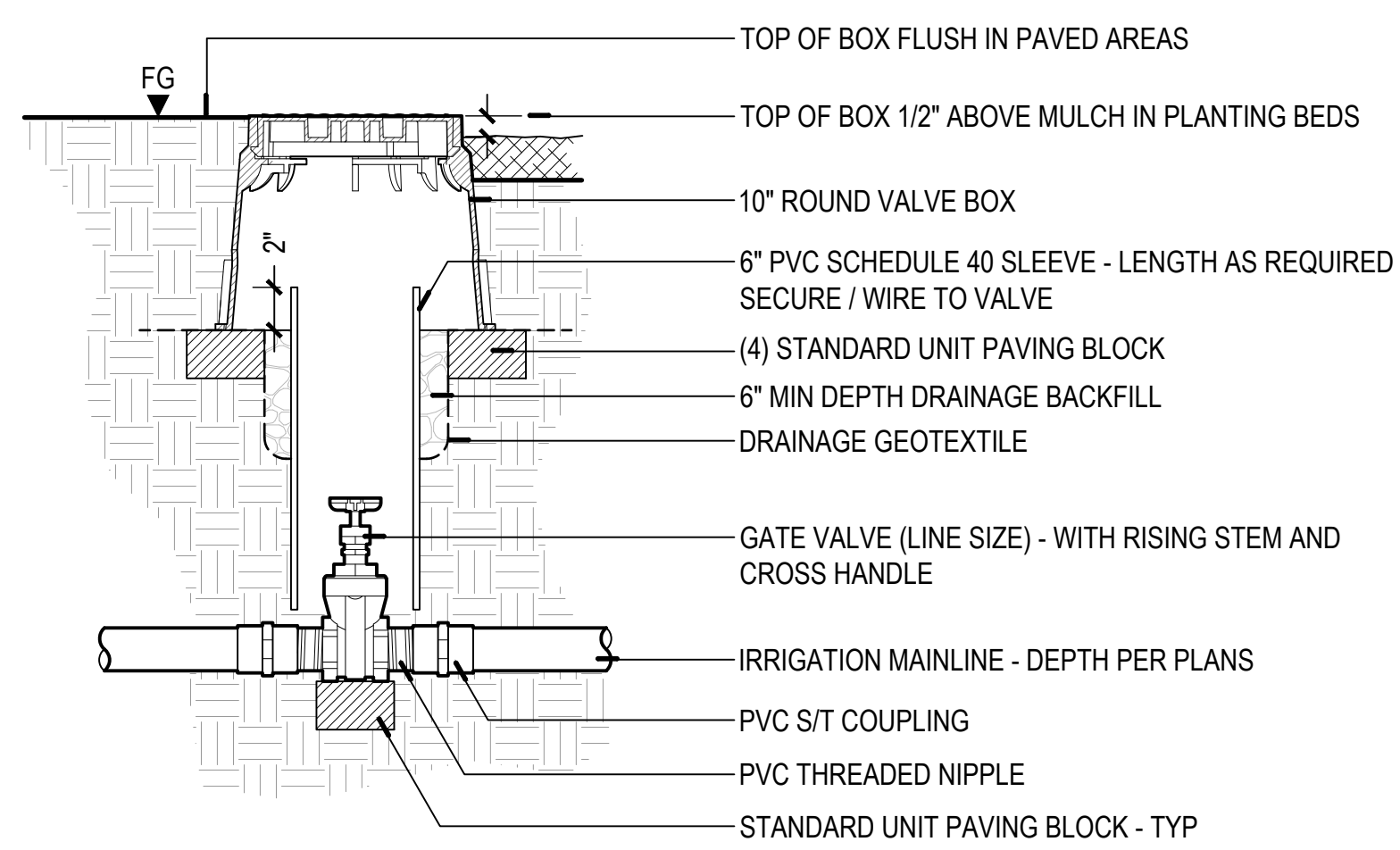
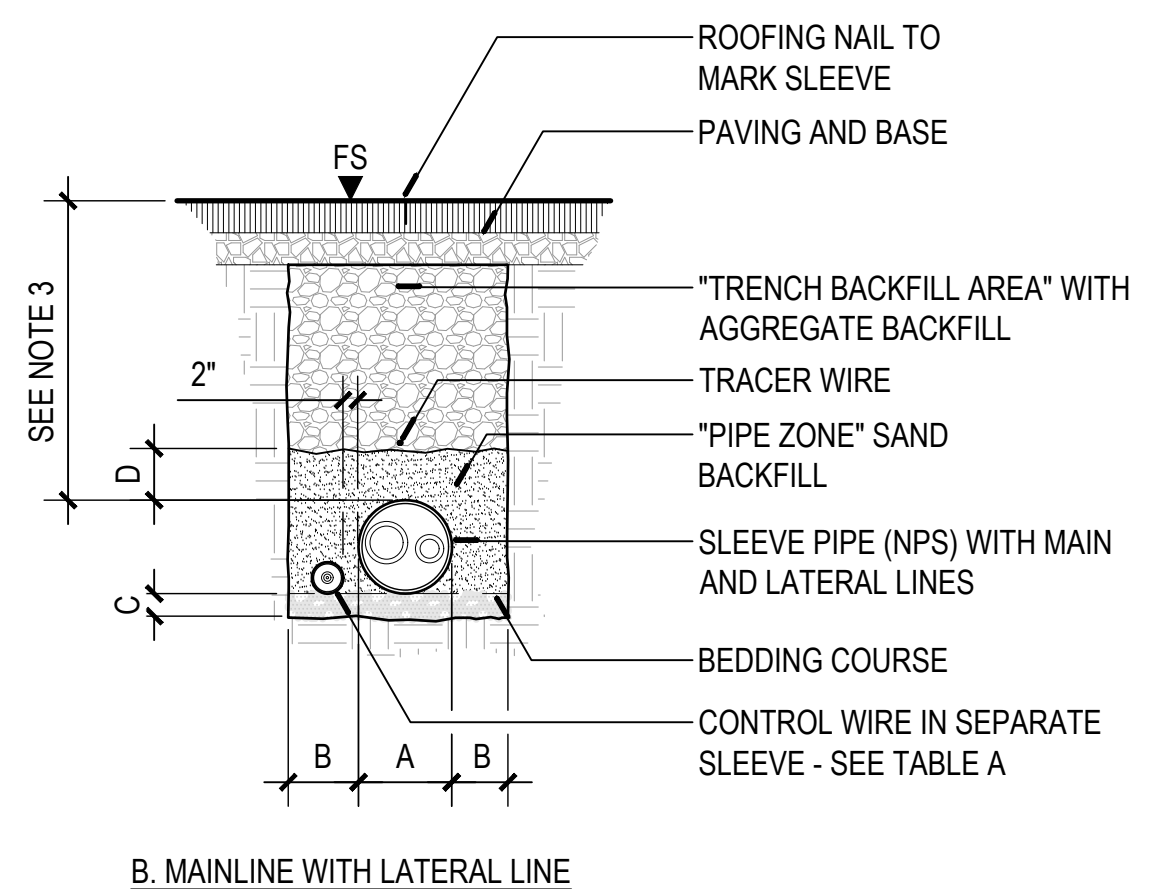
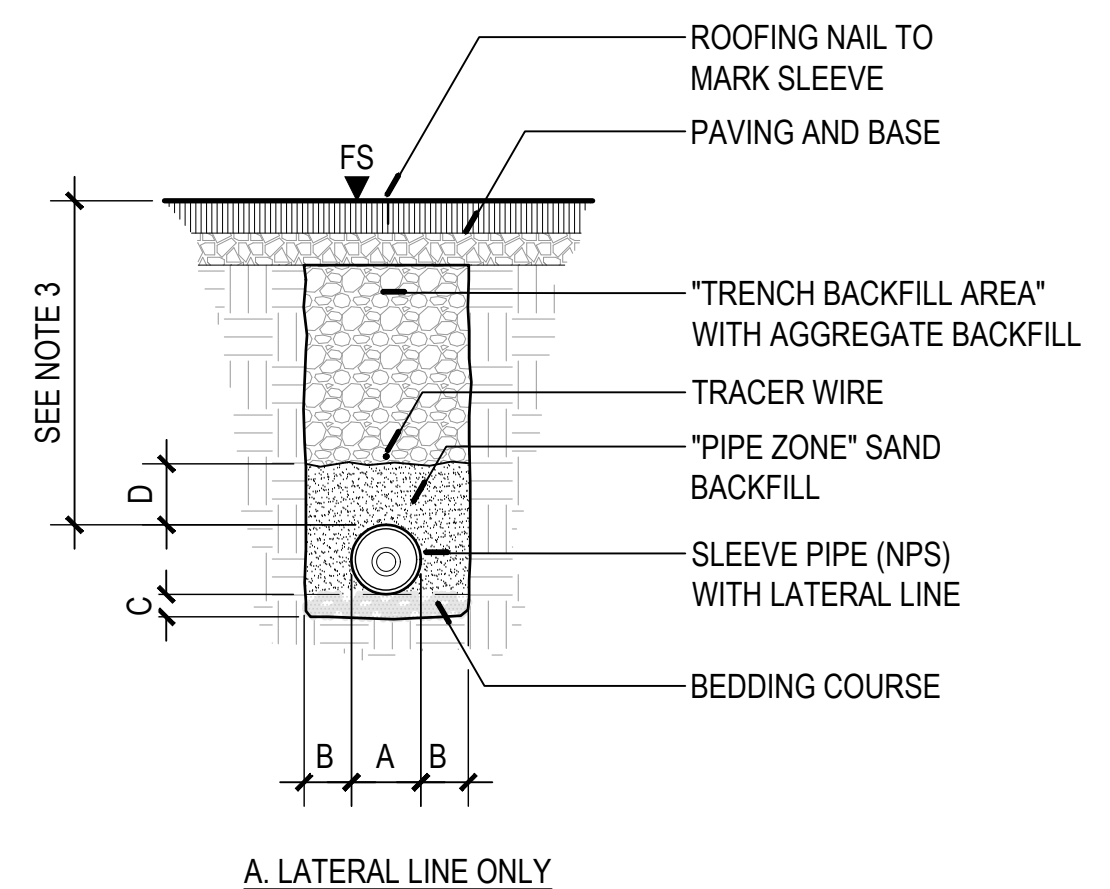
1 POINT OF CONNECTION DIAGRAM
PLAN NOT TO SCALE

2 BACKFLOW PREVENTION DEVICE ASSEMBLY
SECTION NOT TO SCALE

3 TRENCHING IN PLANTING AREAS
SECTION NOT TO SCALE

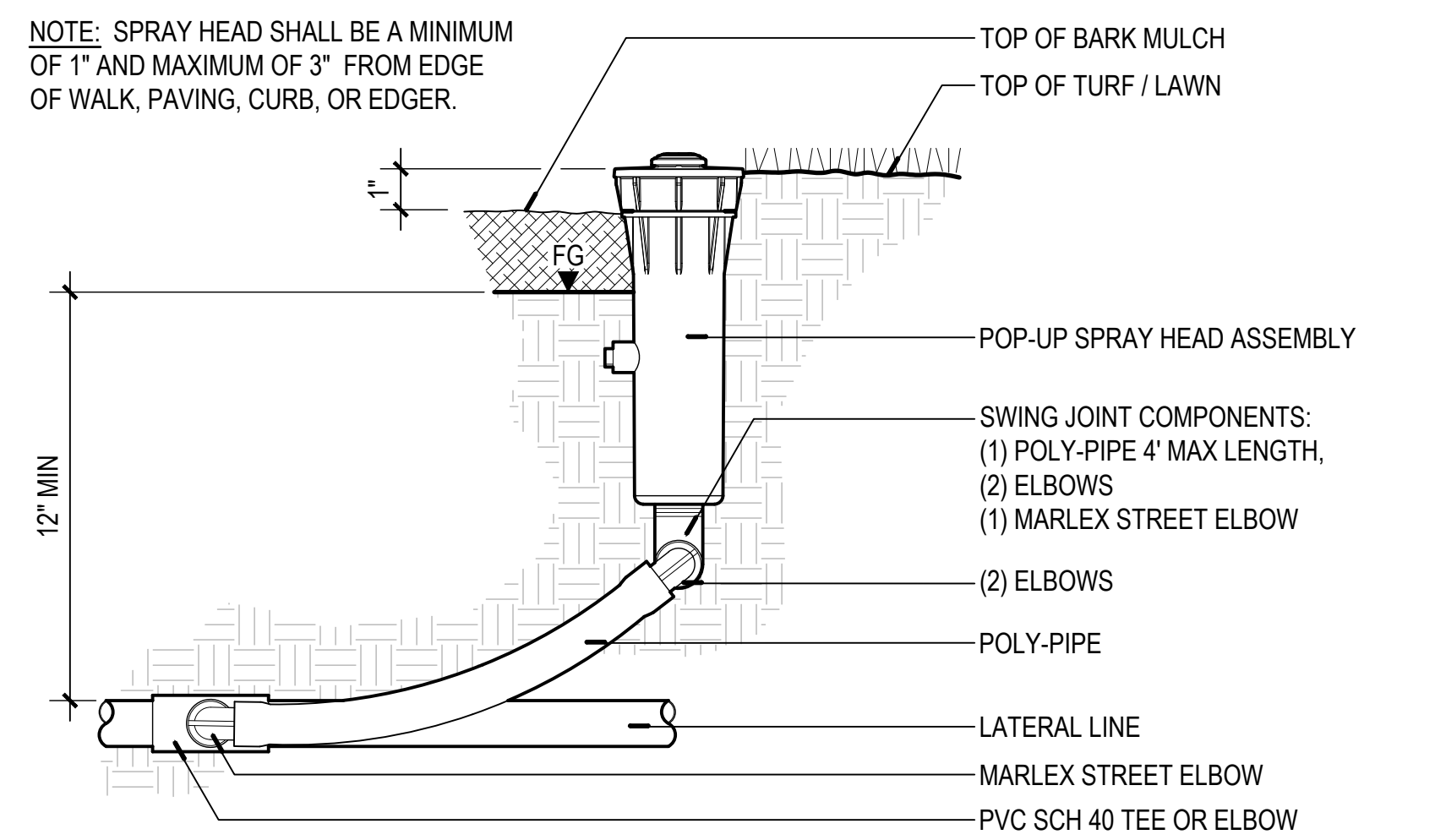
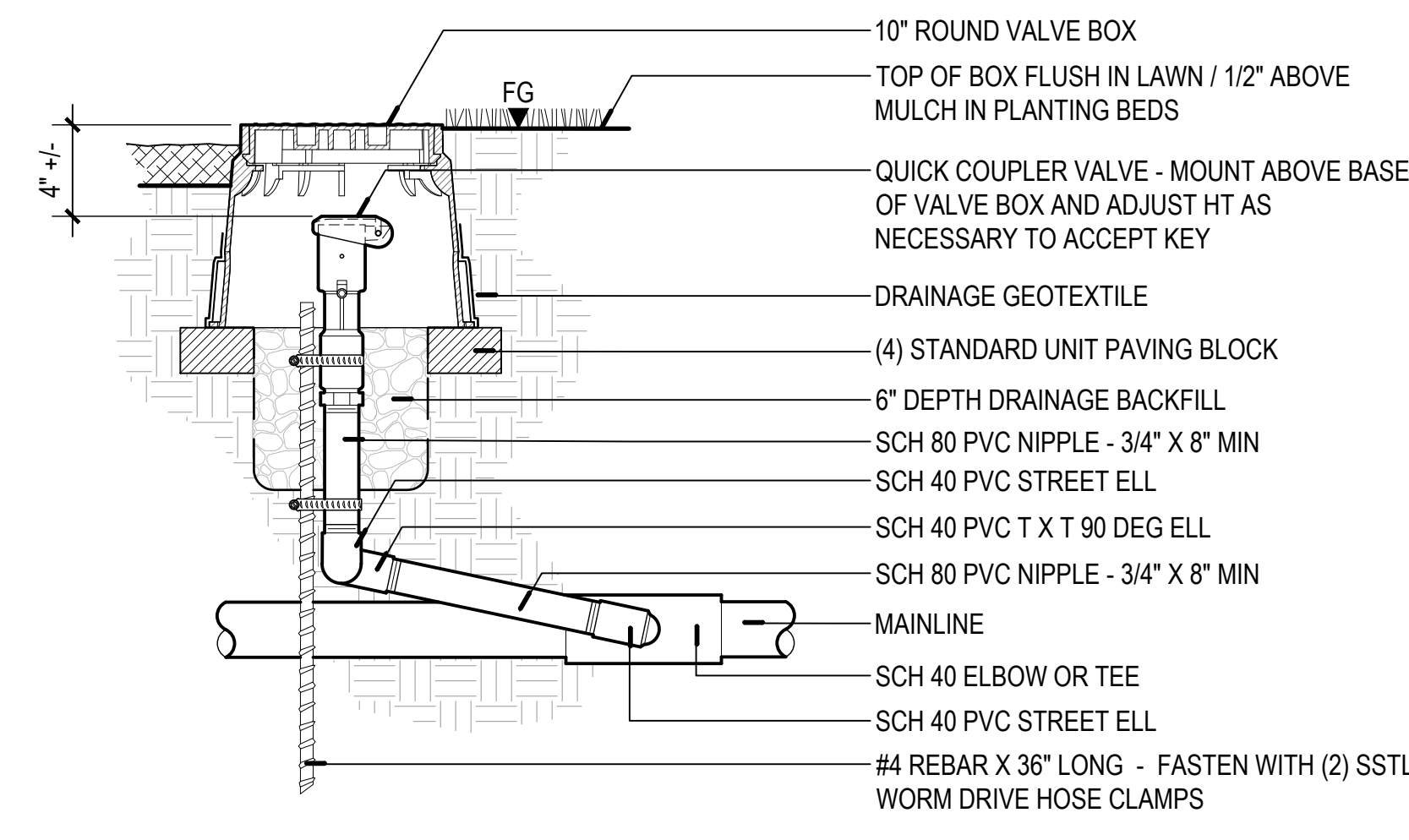
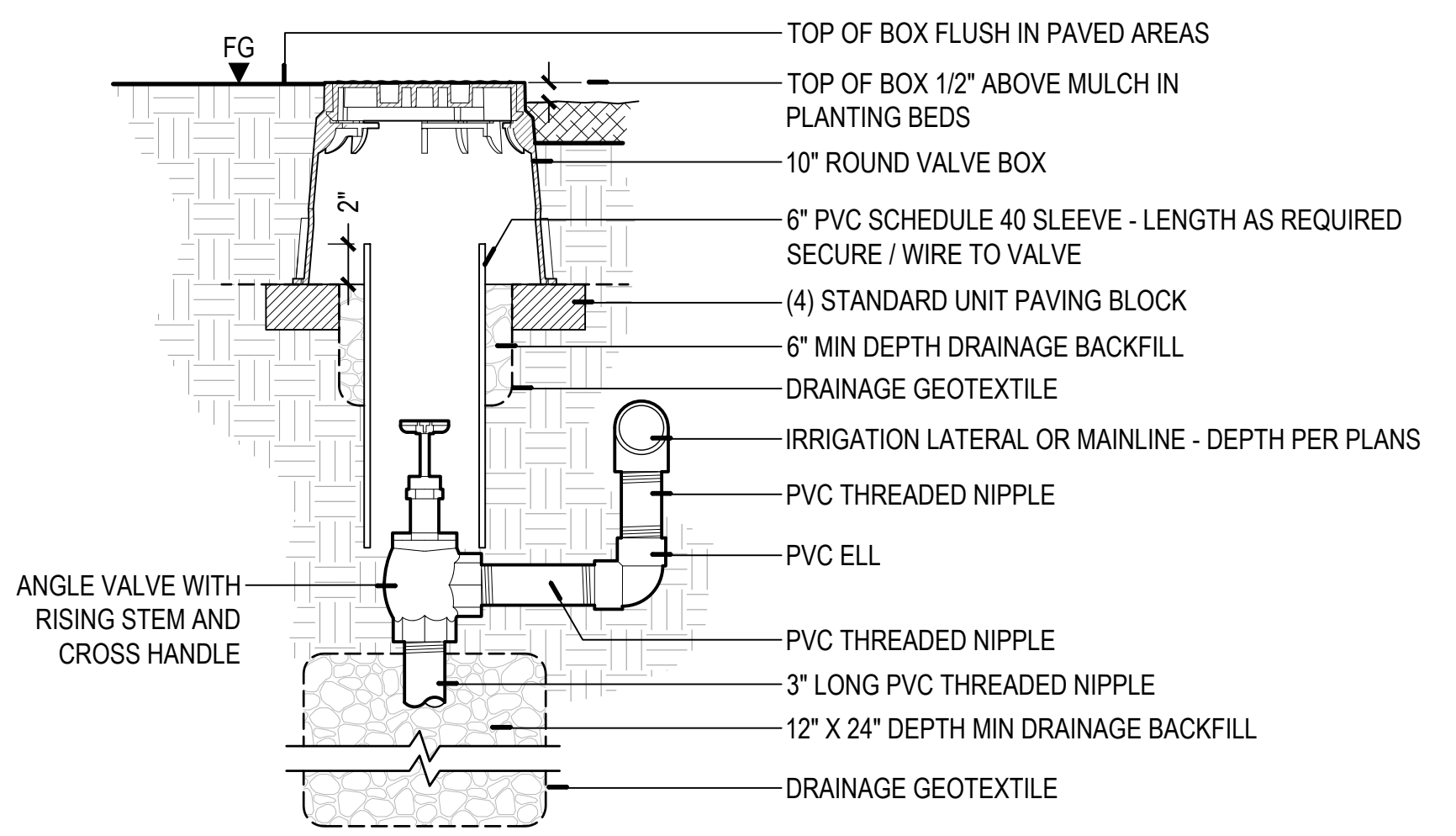
- NOTES:
- EXTEND IRRIGATION SLEEVES 24" BEYOND EACH SIDE OF PAVING, EXCEPT AT HANGING BASKETS.
 - SLEEVE PIPE DIAMETER TO BE A MINIMUM OF TWO TIMES PIPE DIAMETER(S) IT CONTAINS.
 - 24" MINIMUM DEPTH UNDER PEDESTRIAN WALKS; 30" MINIMUM DEPTH UNDER VEHICULAR PAVING.

TABLE A			
A (NPS)	B	C	D
<4"	6"	4"	8"
4"	10"	4"	8"
6"	10"	4"	8"
8"	10"	6"	10"



4 TRENCHING - SLEEVE UNDER PAVEMENT
SECTION NOT TO SCALE

5 ISOLATION VALVE ASSEMBLY
SECTION NOT TO SCALE



6 MANUAL DRAIN VALVE ASSEMBLY
SECTION NOT TO SCALE

7 QUICK COUPLER VALVE ASSEMBLY
SECTION NOT TO SCALE

8 SPRAY HEAD ASSEMBLY
SECTION NOT TO SCALE

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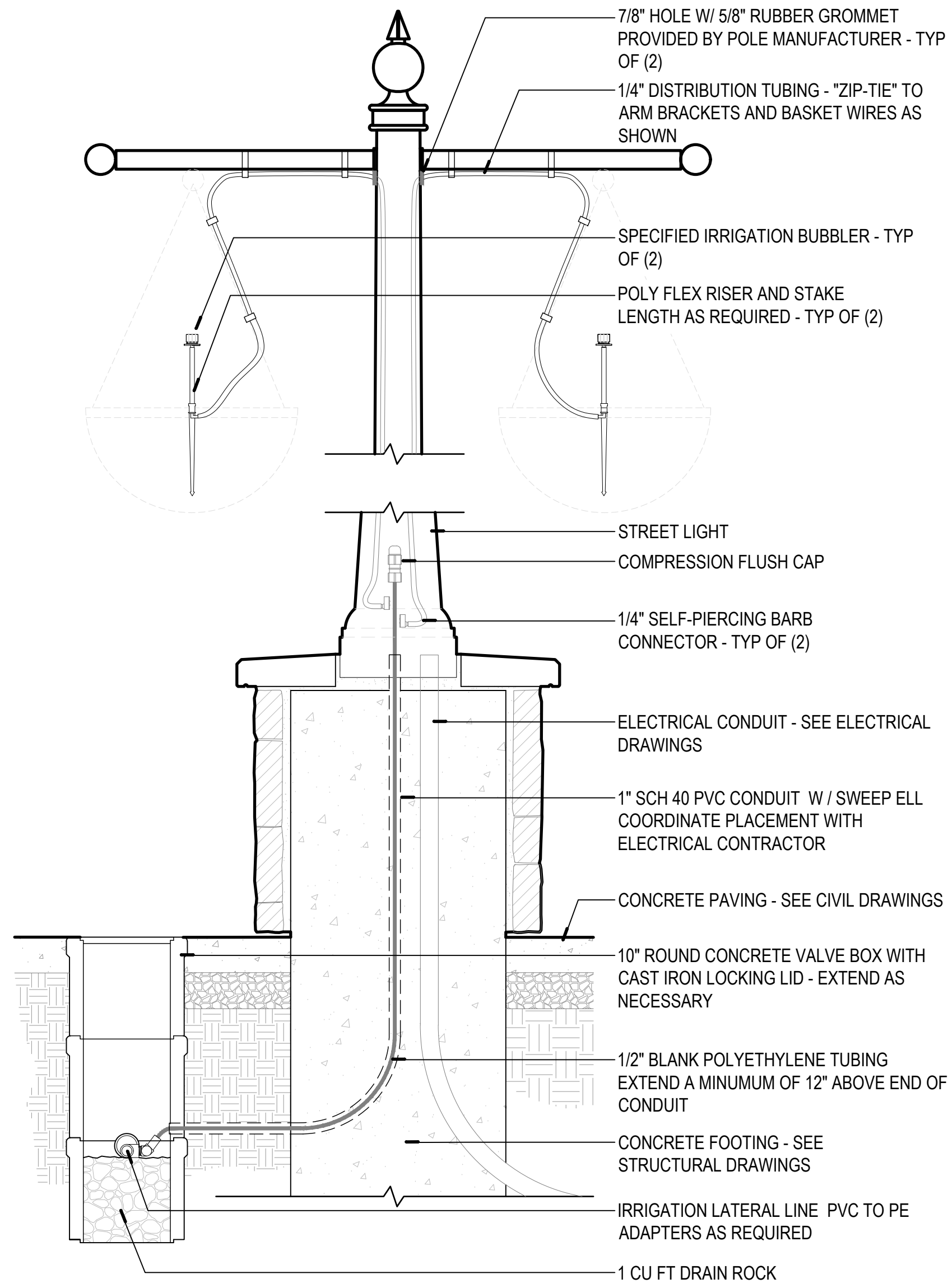
PROJECT NO. 190503.1

S 1st Street at St. Helens Street Intersection Improvements

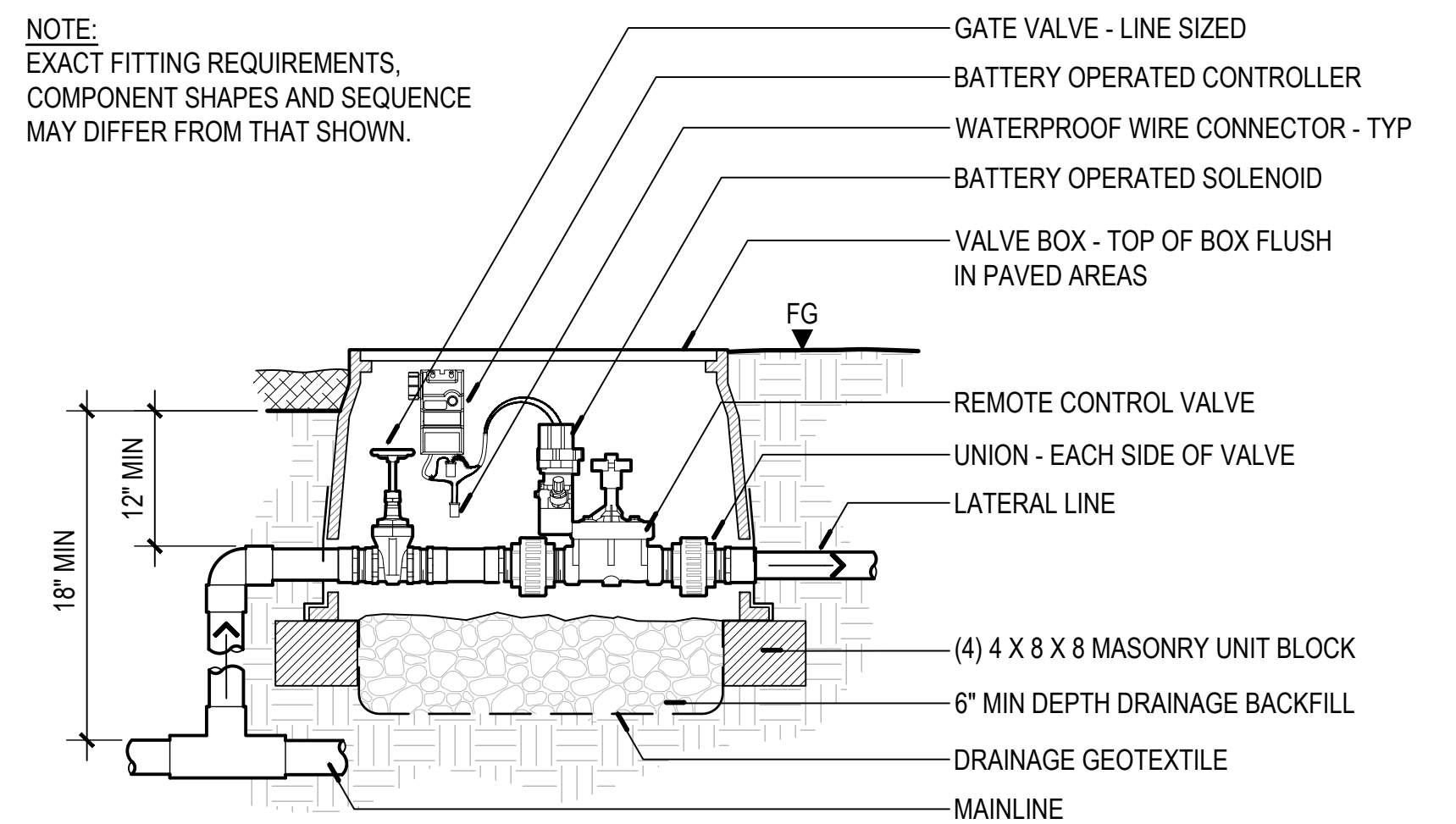
IRRIGATION DETAILS

SHEET NO. L2.02

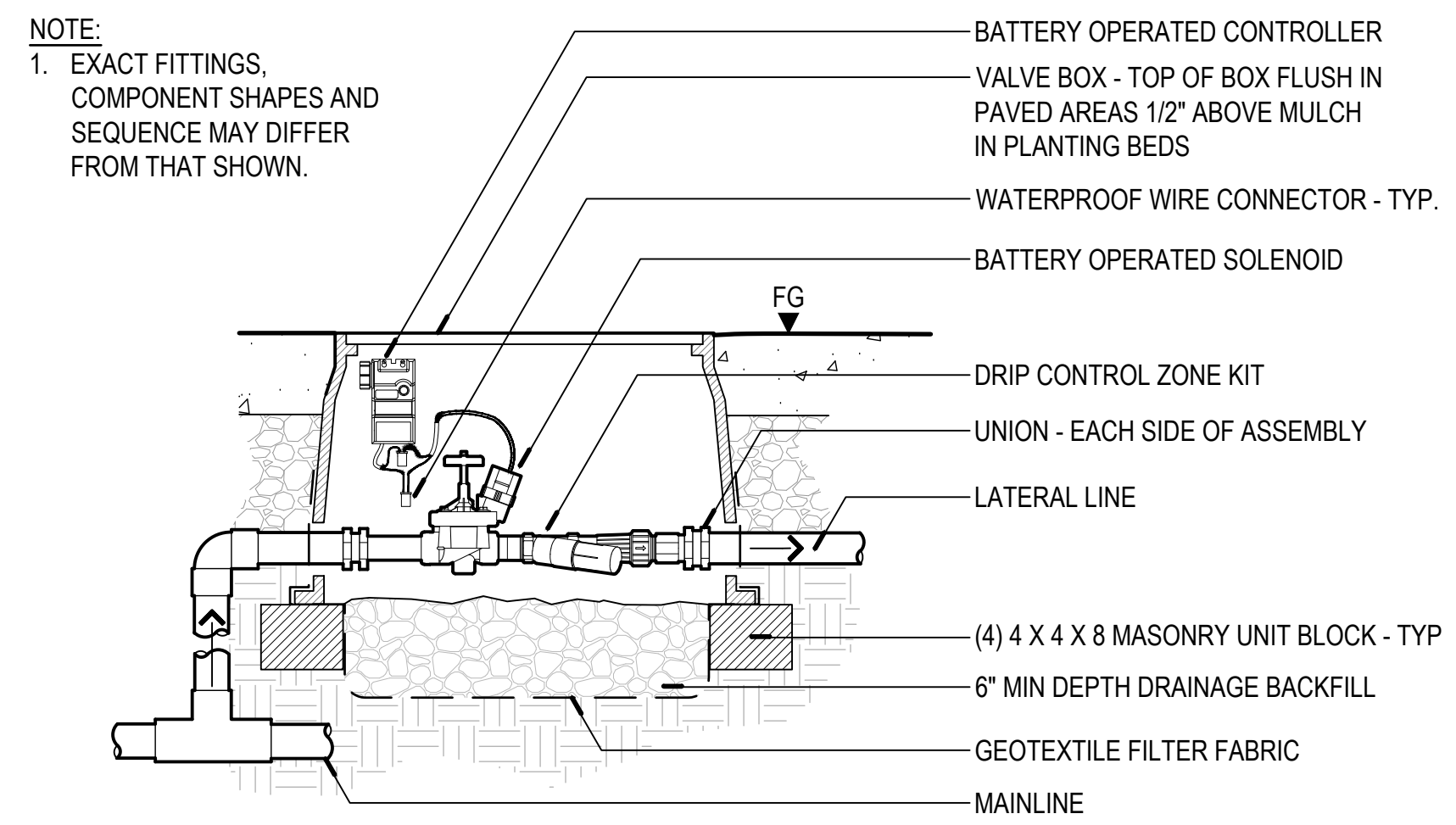




1 DRIP IRRIGATION AT HANGING BASKETS
SECTION NOT TO SCALE

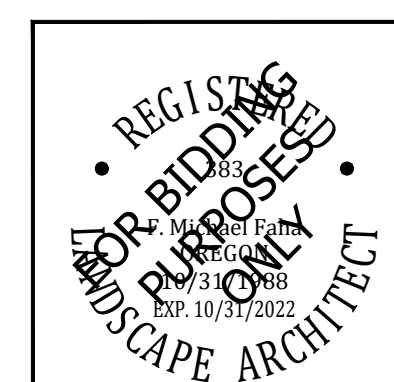


2 BATTERY OPERATED CONTROLLER REMOTE CONTROL VALVE ASSEMBLY
SECTION NOT TO SCALE



3 BATTERY OPERATED CONTROLLER DRIP CONTROL ZONE ASSEMBLY
SECTION NOT TO SCALE

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S 1st Street at St. Helens Street Intersection Improvements
IRRIGATION DETAILS

SHEET NO. 2.03

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(2) HANGING BASKETS
 W/ (6) CERASTIUM
 TOMENTOSA EACH

(2) HANGING BASKETS
 W/ (6) CERASTIUM
 TOMENTOSA EACH

FUTURE BANNER POLE FOOTING, TYP.

PLANTING SCHEDULE

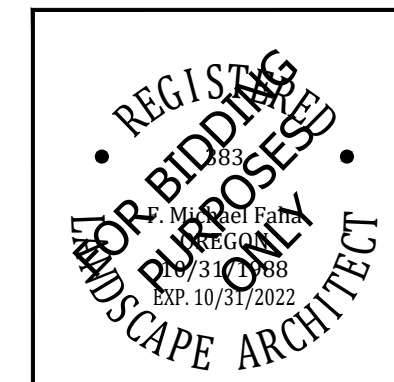
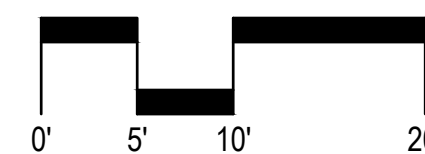
SHRUBS / GCVRS	QTY	BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	REMARKS	DETAILS
○	53	ARCTOSTAPHYLOS UVA-URSI 'VANCOUVER JADE'	VANCOUVER JADE KINNIKINNIK	1 GAL CONT	18" O.C.		4 L3.02
⊕	16	HYLOTELEPHIUM 'HERBSTSFREUDE'	AUTUMN JOY SEDUM	1 GAL CONT	15" O.C.		
⊗	38	MAHONIA REPENS	CREeping OREGON GRAPE	1 GAL CONT	18" O.C.		
⊙	52	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY DWARF FOUNTAIN GRASS	1 GAL CONT	15" O.C.		
⊙	6	PEROVSKIA ATRIPLICIFOLIA 'BLUE SPIRE'	BLUE SPIRE RUSSIAN SAGE	2 GAL CONT	36" O.C.		3 L3.02
⊕	11	PHILADELPHUS 'MINIATURE SNOWFLAKE'	MINIATURE SNOWFLAKE MOCK ORANGE	2 GAL CONT	30" O.C.		
AS CALLED OUT ON PLAN	28	CERASTIUM TOMENTOSA	SNOW-IN-SUMMER	4 IN POT	12" O.C.	7 PER HANGING BASKET, EVENLY SPACED.	

PLANTING NOTES

1. PROVIDE PLANTING SOIL AND BARK MULCH TO THE COMPOSITION AND DEPTHS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
2. INSTALL PLANTS IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
3. PLANT QUANTITIES ARE LISTED FOR CONVENIENCE ONLY. ALL COUNTS MUST BE VERIFIED PRIOR TO INSTALLATION. IN THE CASE OF A DISCREPANCY BETWEEN THE LEGEND AND THE PLAN, PLANTS INDICATED ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN THE LEGEND.
4. UTILITY LOCATIONS SHOWN ON PLANS MAY DIFFER FROM FIELD CONDITIONS. CONTRACTOR TO FIELD VERIFY ALL UTILITIES BEFORE INSTALLATION. CONFLICTS BETWEEN ANY EXISTING AND PROPOSED UTILITIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IMMEDIATELY.
5. HANGING BASKETS SHALL BE BY PLANTERS UNLIMITED, (888) 320-0626, OR APPROVED EQUAL.
 - 36" DIAMETER POWDER COATED IRON BASKET, PART # B-HB-XL-36
 - COIR LINER, PART # B-HBL-XL-36



SCALE: 1" = 10'-0"



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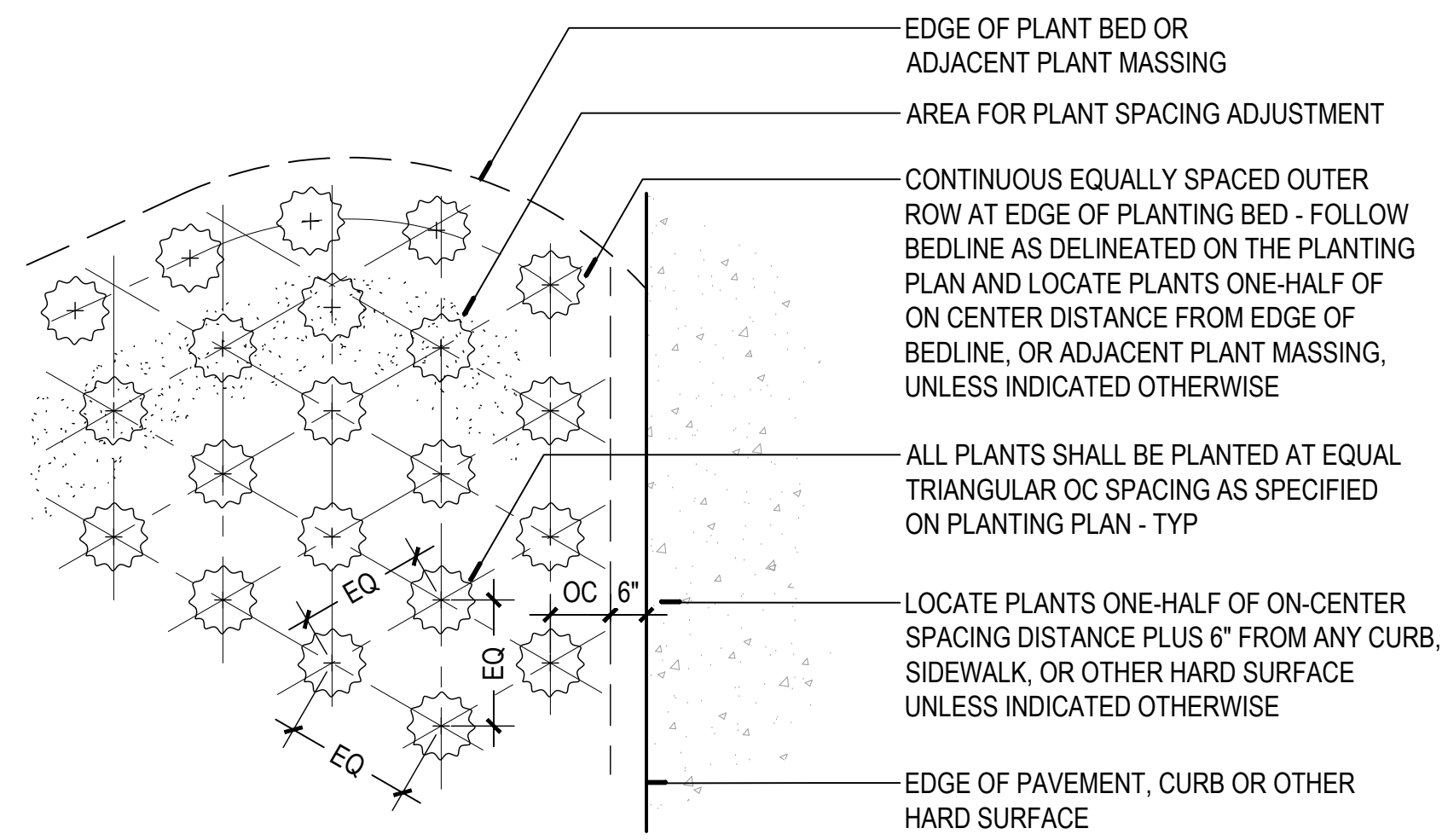
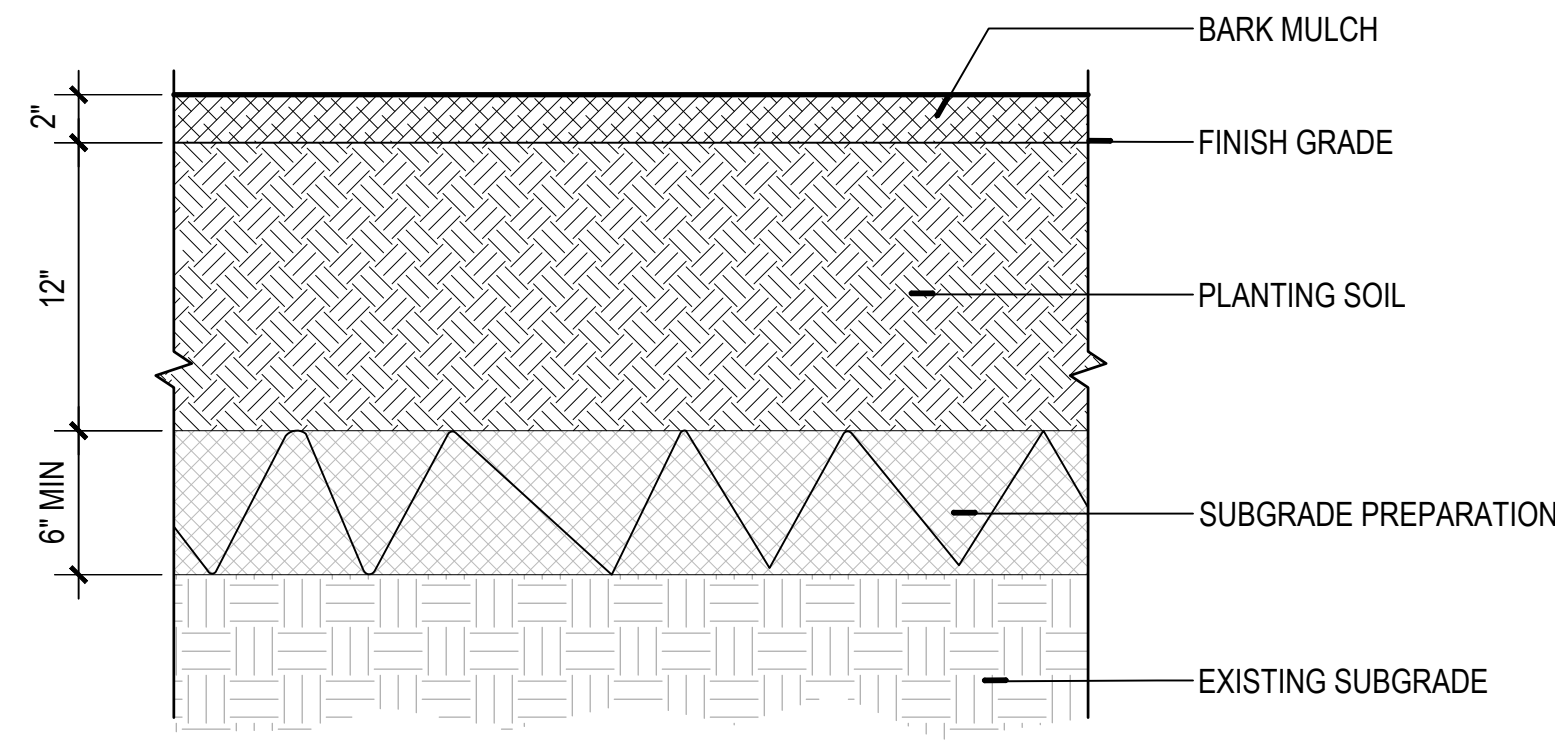
PROJECT NO.
190503.1

S 1st Street at St. Helens Street
 Intersection Improvements
 PLANTING PLAN

SHEET NO.
L3.01

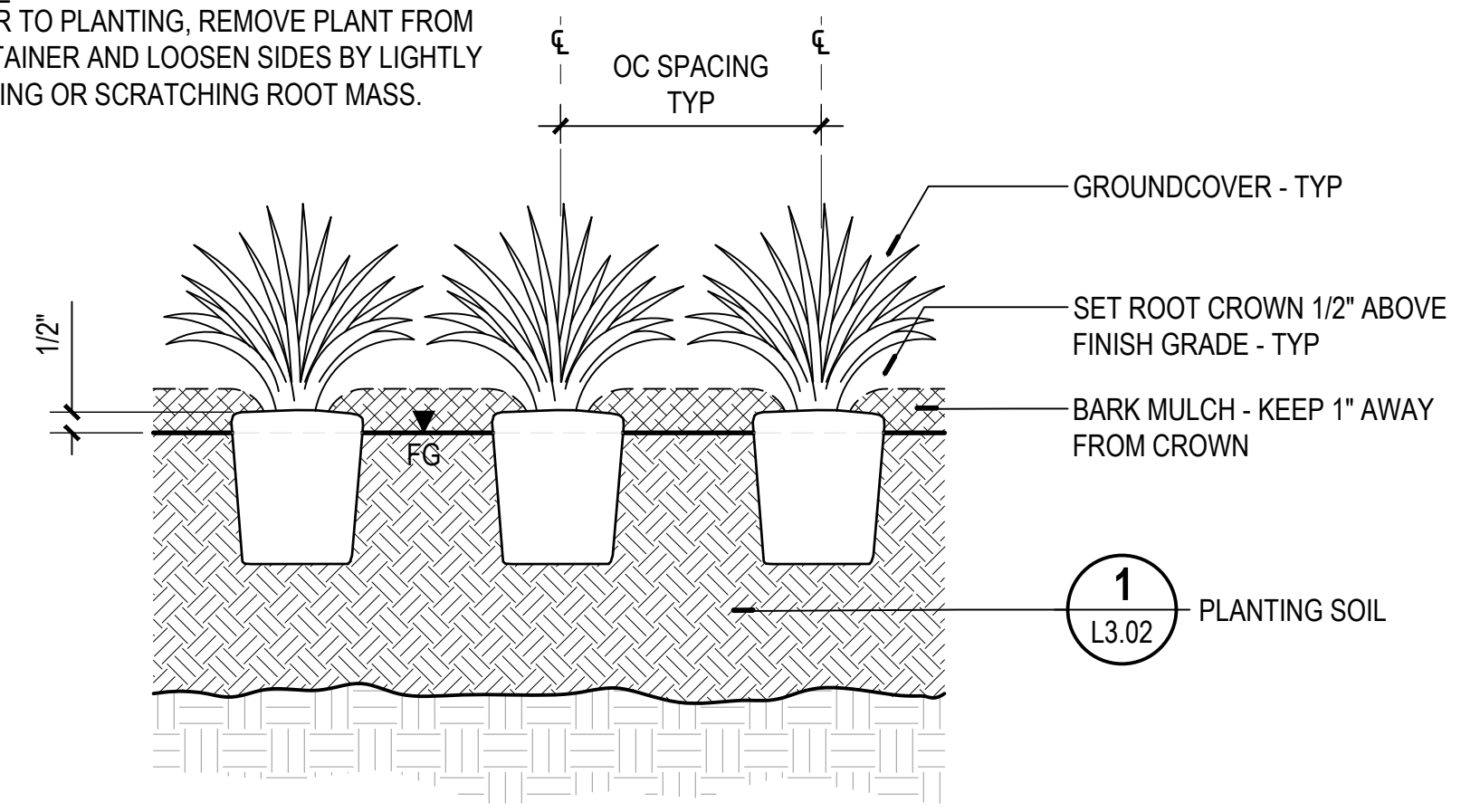
NOTES:

1. BARK MULCH LAYER IS AN ADDITION TO THE PLANTING SOIL AND IS NOT THE FINISH GRADE.
2. CONFIRM THE SUBGRADE IS AT THE PROPER ELEVATION PRIOR TO FINAL PLANTING SOIL INSTALLATION.
3. SUBGRADE TO SLOPE TO SUBSURFACE DRAINAGE LINES AND AWAY FROM STRUCTURES IF PRESENT.



NOTE:

PRIOR TO PLANTING, REMOVE PLANT FROM CONTAINER AND LOOSEN SIDES BY LIGHTLY TEASING OR SCRATCHING ROOT MASS.



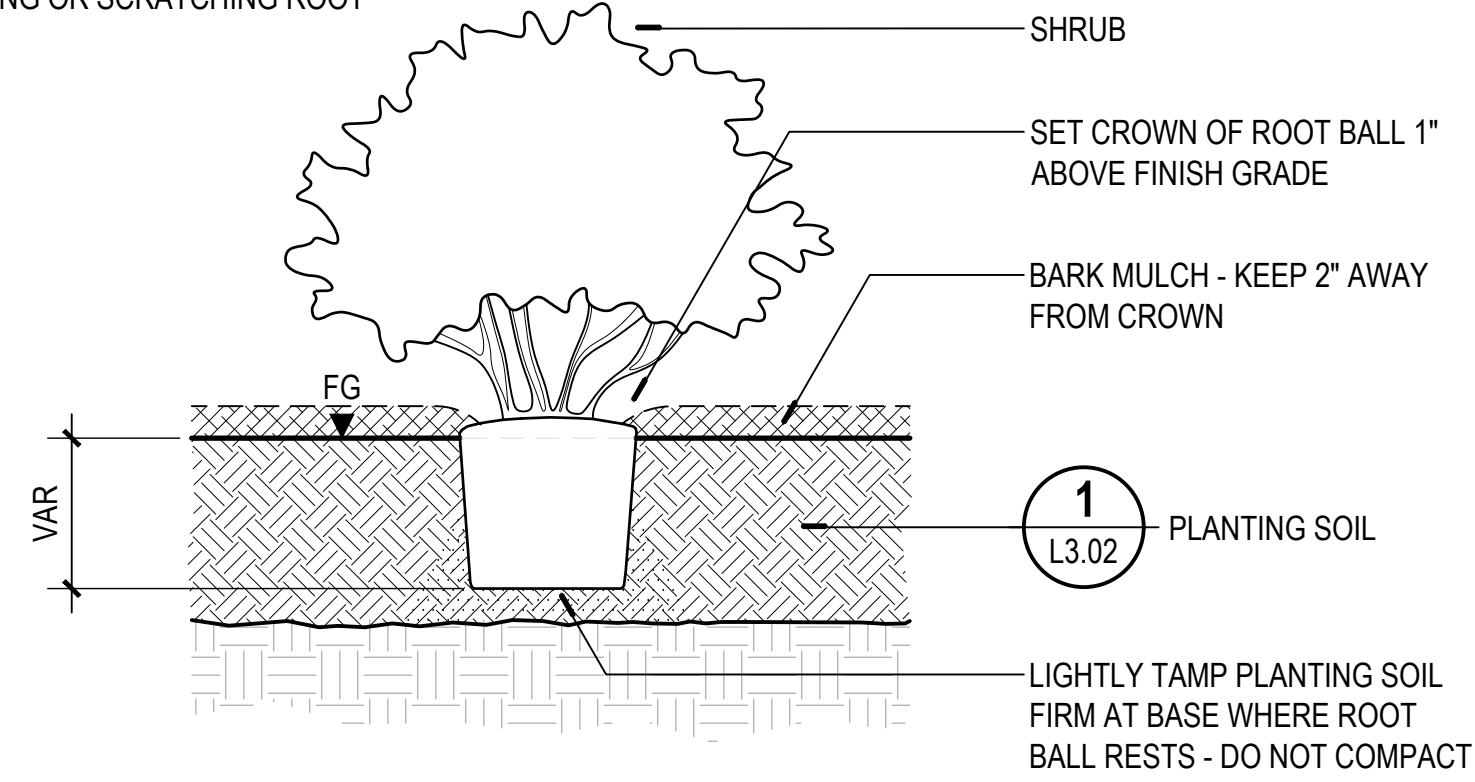
1 PLANTING SOIL
SECTION NOT TO SCALE

2 PLANT SPACING DIAGRAM
PLAN NOT TO SCALE

3 GROUNDCOVER PLANTING
SECTION NOT TO SCALE

NOTE:

PRIOR TO PLANTING, REMOVE PLANT FROM CONTAINER AND LOOSEN SIDES BY LIGHTLY TEASING OR SCRATCHING ROOT MASS.



4 SHRUB CONTAINER PLANTING W/ PLANTING SOIL
SECTION NOT TO SCALE



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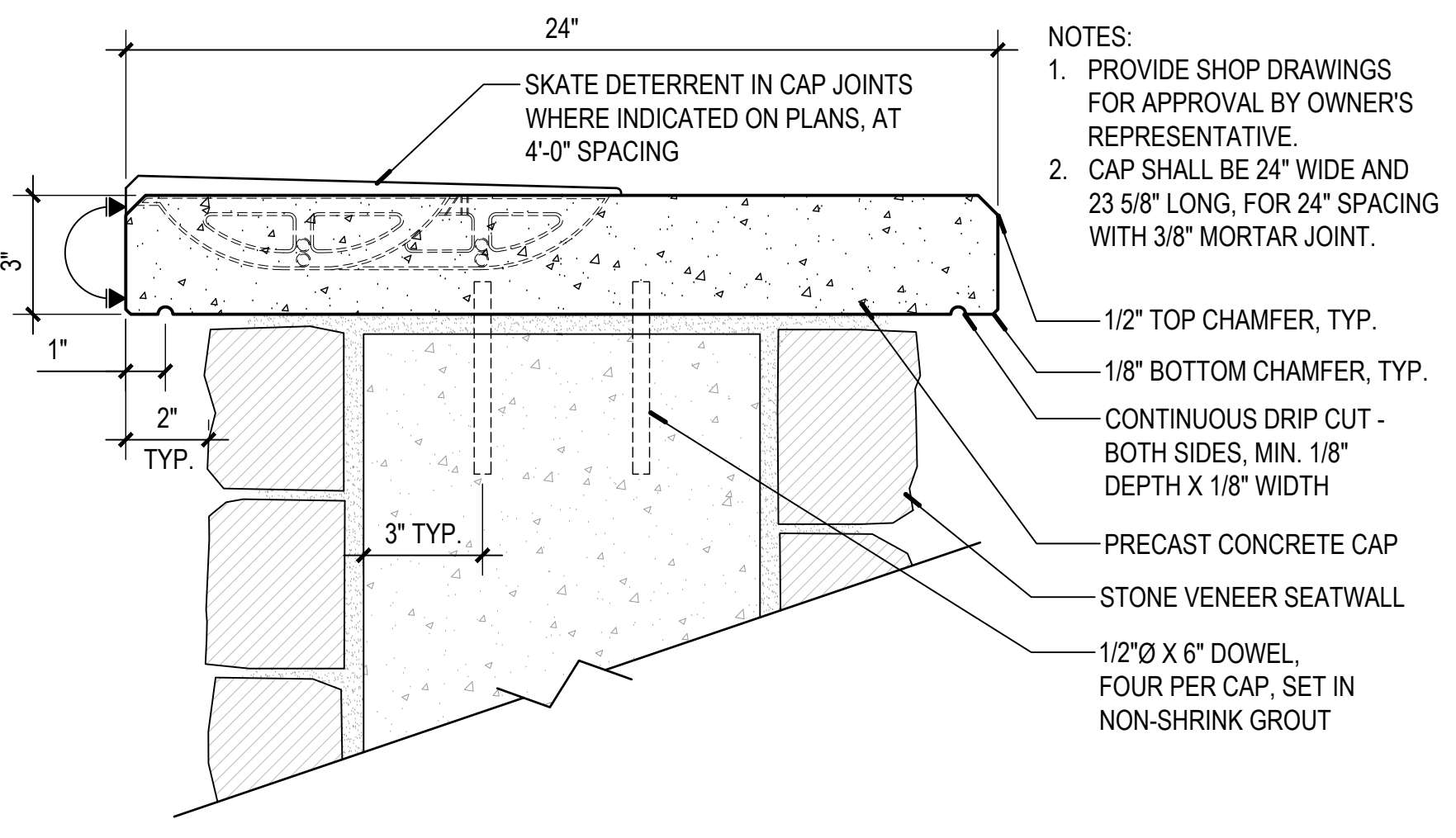
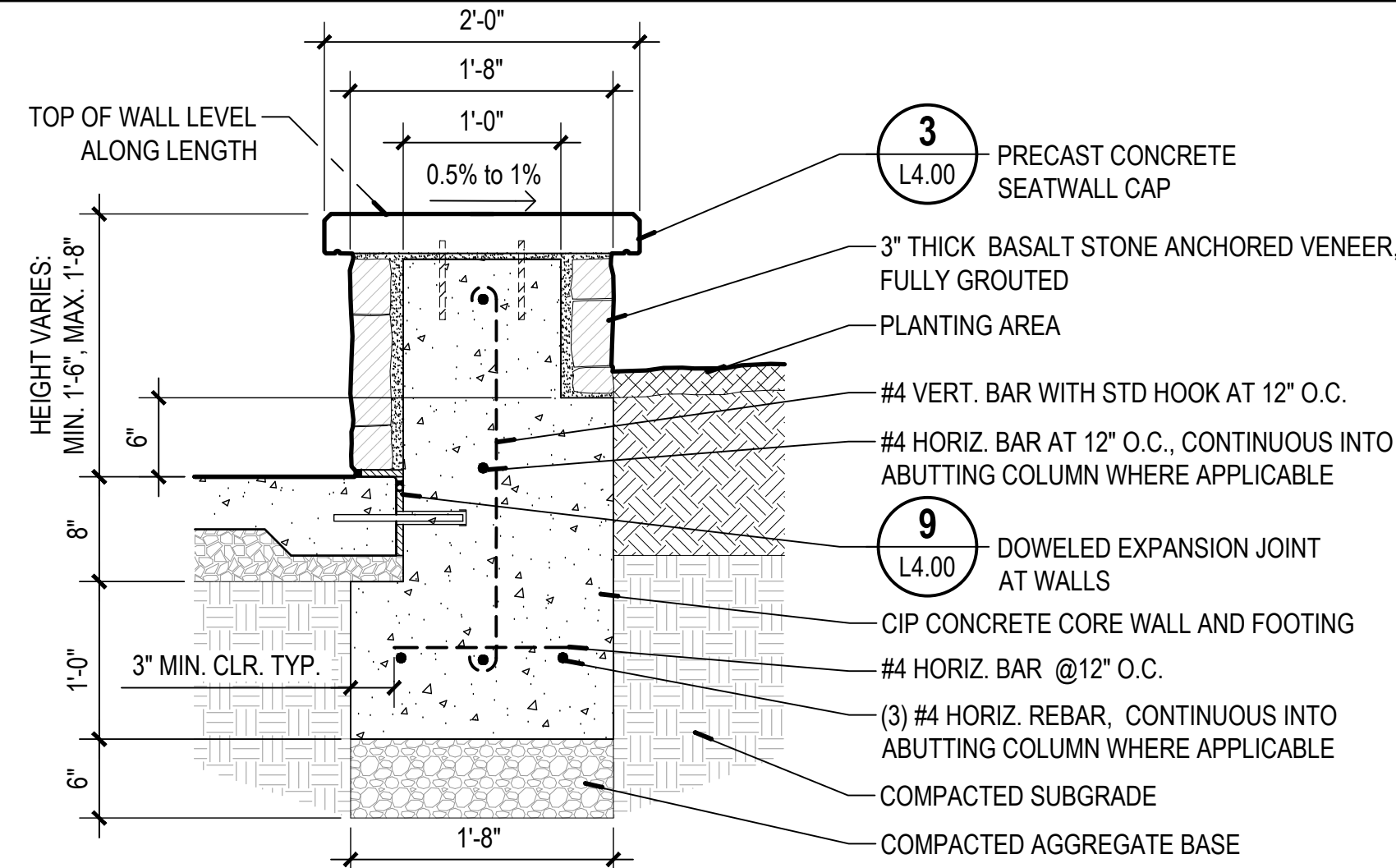
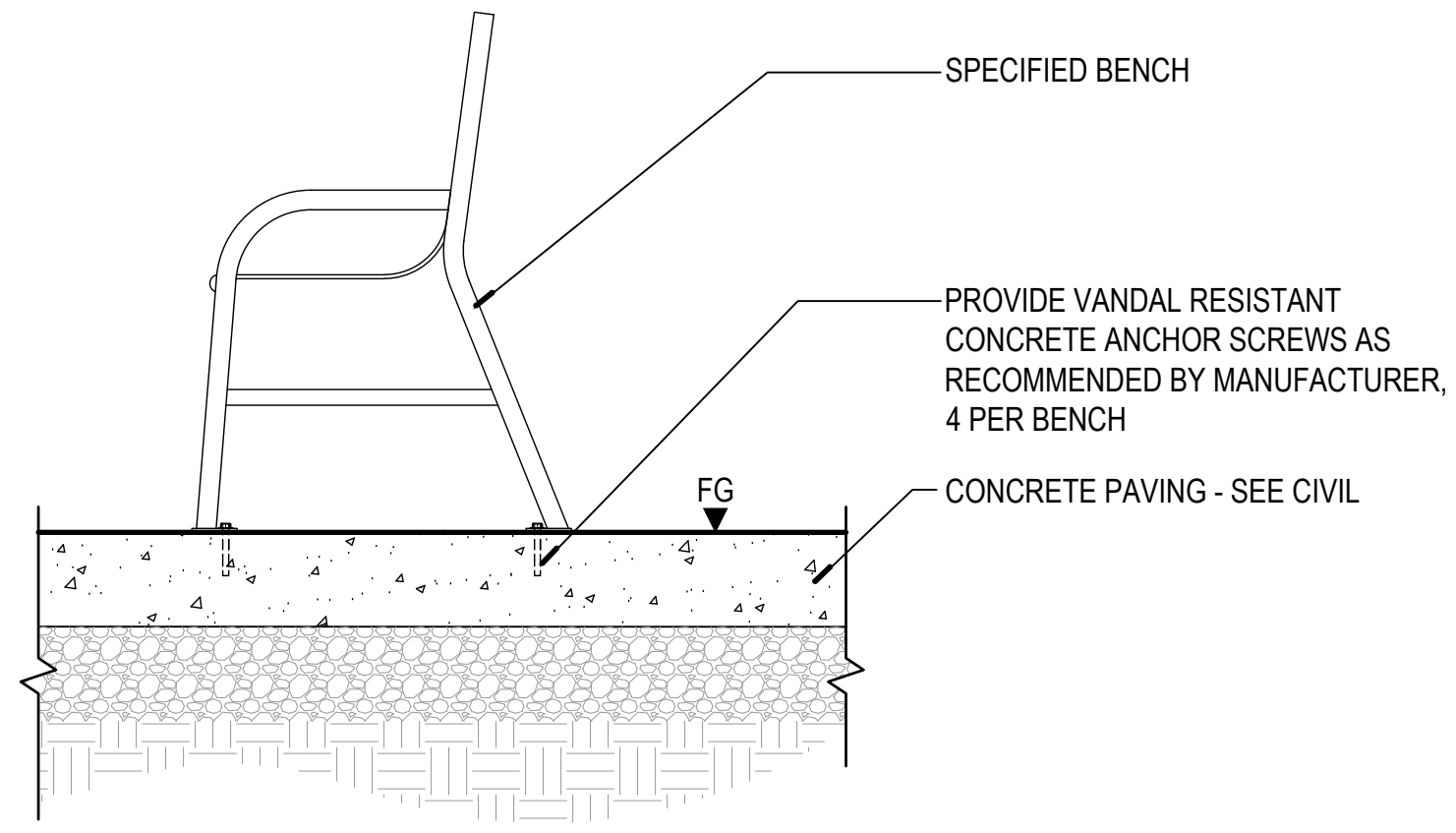
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PROJECT NO.
190503.1

S 1st Street at St. Helens Street
Intersection Improvements
PLANTING DETAILS

SHEET NO.
L3.02

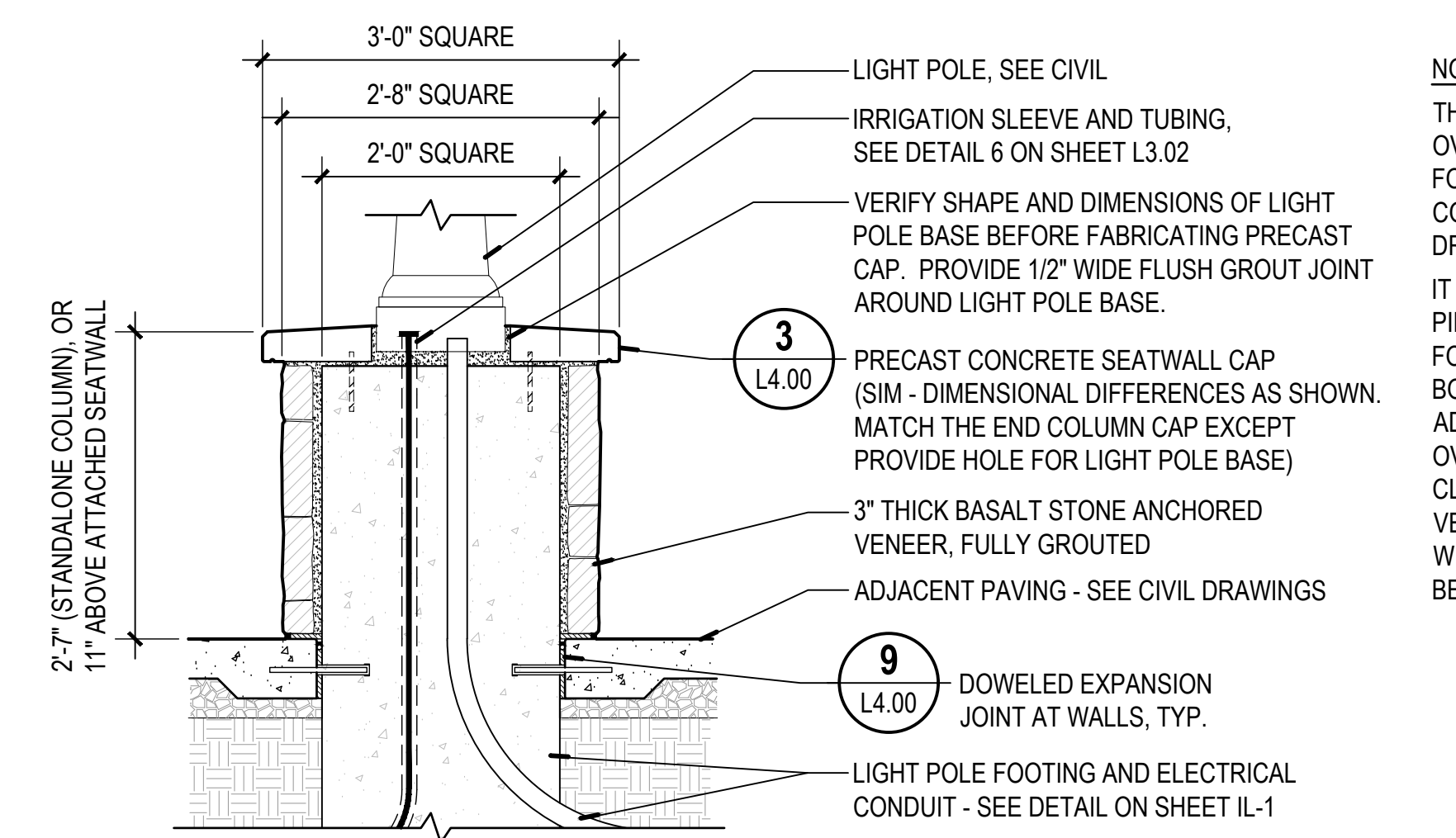
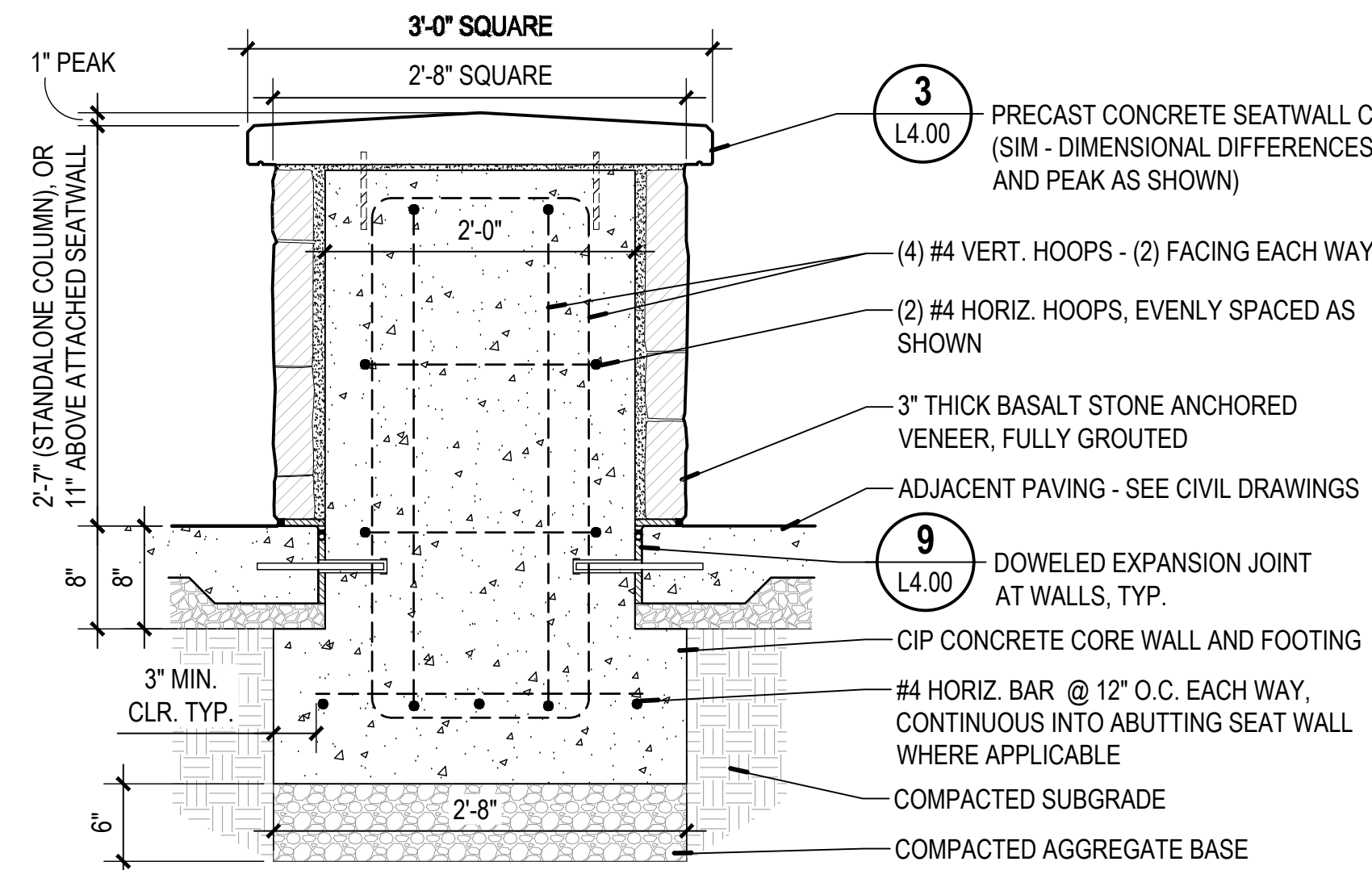
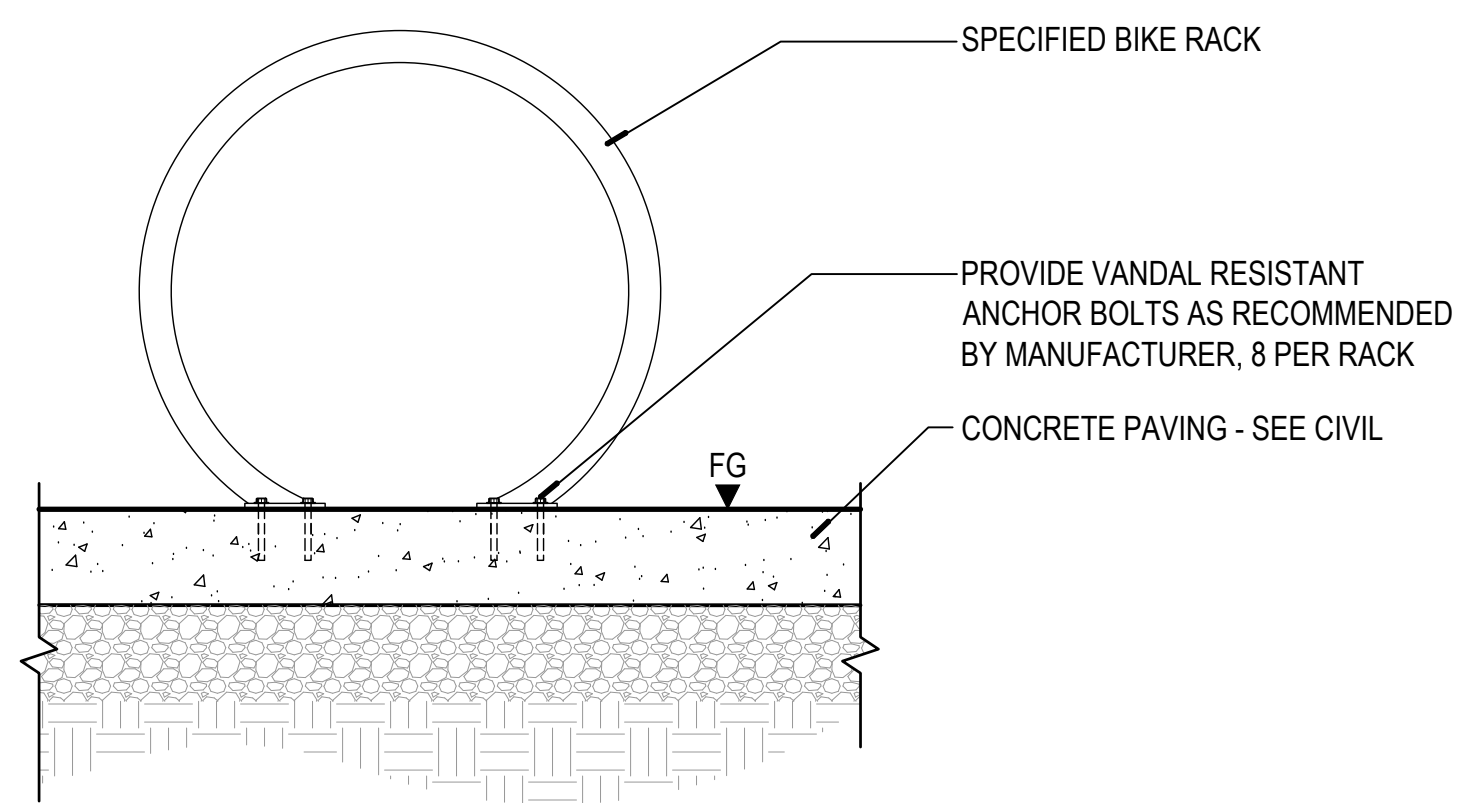




1 BENCH
SECTION
SCALE: 1" = 1'-0"
0" 3" 6" 12"

2 STONE VENEER SEATWALL
SECTION
SCALE: 1" = 1'-0"
0" 3" 6" 12"

3 PRECAST CONCRETE SEATWALL CAP
SECTION
SCALE: 3" = 1'-0"
0" 1" 2" 4"



NOTE:

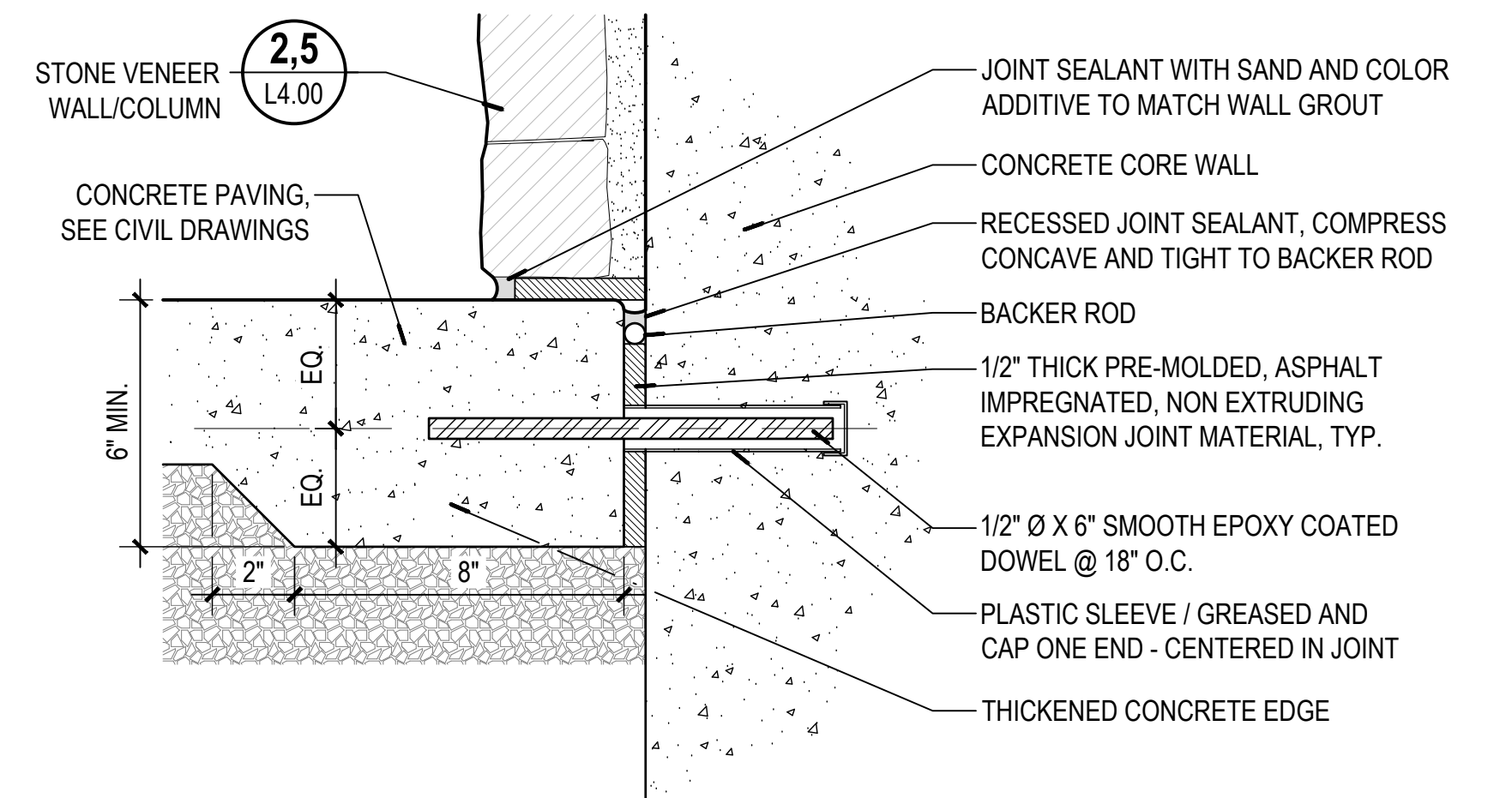
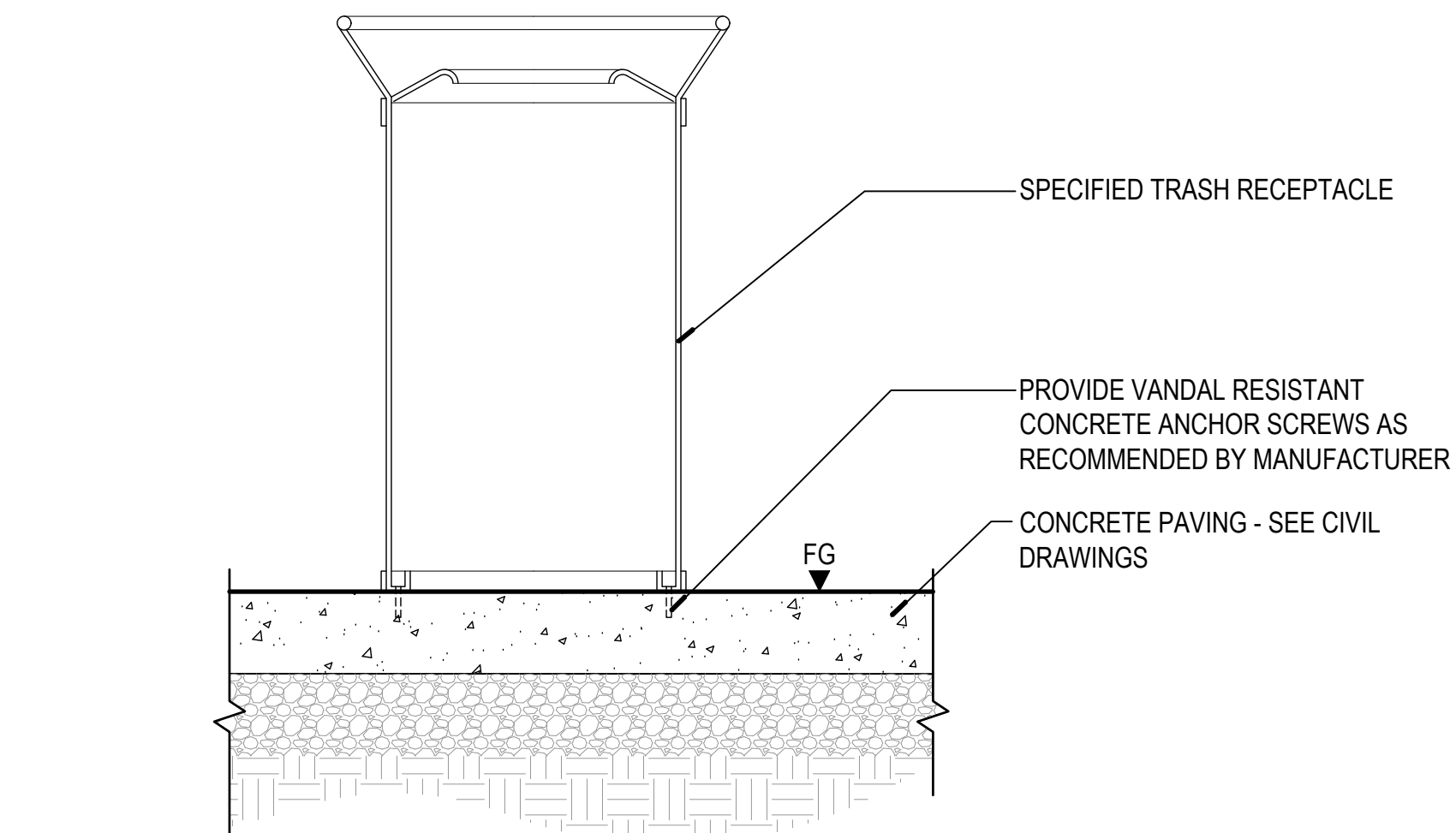
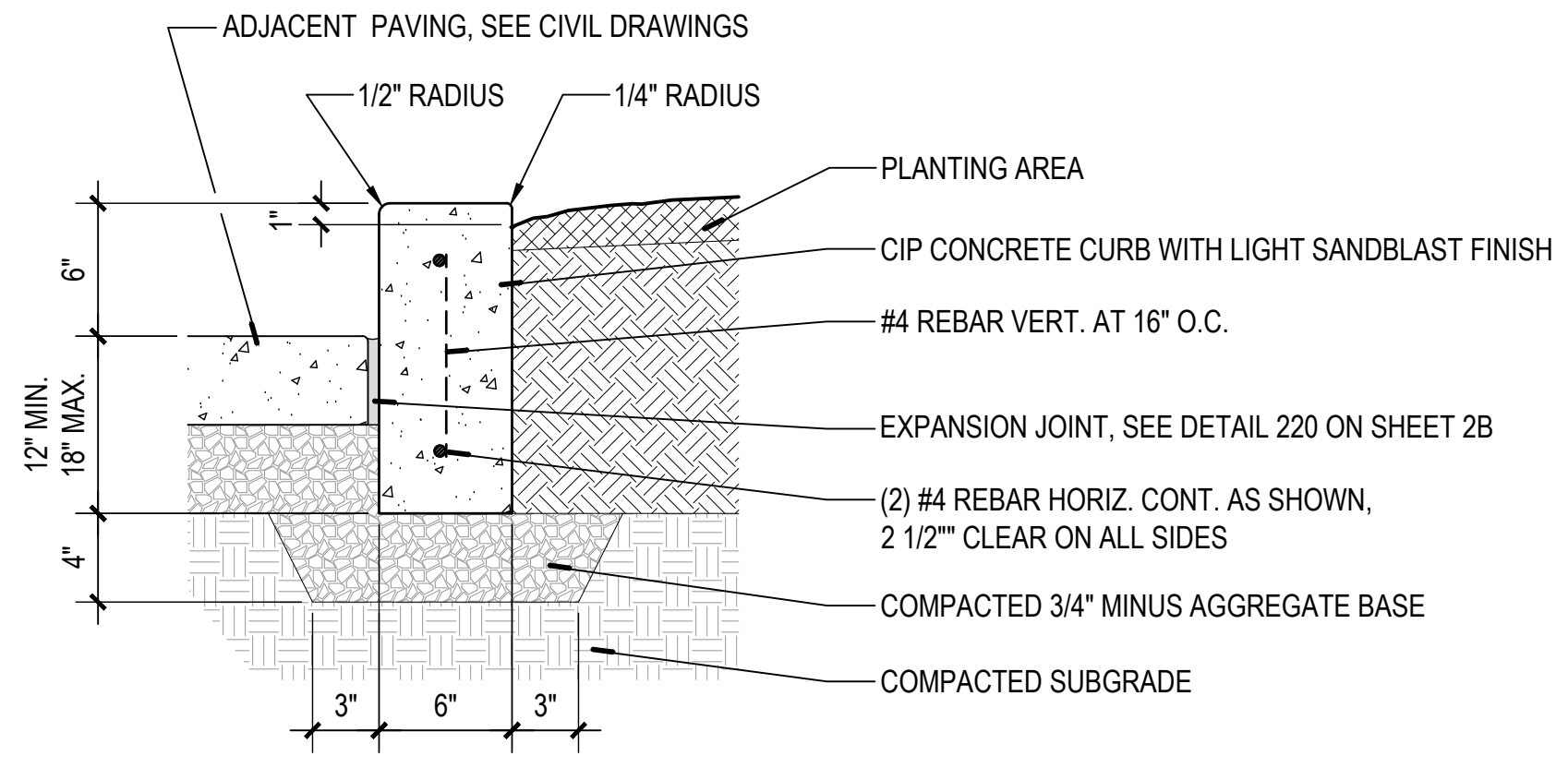
THERE WILL BE AT LEAST ONE OVERLAP BETWEEN THE FOOTINGS FOR SEATWALLS AND END COLUMNS, AND PROPOSED STORM DRAIN PIPES.

IT IS ACCEPTABLE FOR THE STORM PIPE TO PARTIALLY OVERLAP THE FOOTINGS, UP TO 6" FROM THE BOTTOM OF FOOTING AS DRAWN. ADJUST REINFORCING AT ANY OVERLAPS TO PROVIDE MIN. 2 1/2" CLEARANCE TO FACE OF CONCRETE. VERIFY FORMS AND REINFORCING WITH OWNER'S REPRESENTATIVE BEFORE POURING FOOTINGS.

4 BIKE RACK
SECTION
SCALE: 1" = 1'-0"
0" 3" 6" 12"

5 STONE VENEER END COLUMN
SECTION
SCALE: 1" = 1'-0"
0" 3" 6" 12"

6 STONE VENEER LIGHT POLE BASE
SECTION
SCALE: 3/4" = 1'-0"
0" 4" 8" 16"



7 PLANTER CURB
SECTION
SCALE: 1 1/2" = 1'-0"
0" 2" 4" 8"

8 TRASH RECEPTACLE
SECTION
SCALE: 1" = 1'-0"
0" 3" 6" 12"

9 DOWELED EXPANSION JOINT AT WALLS
SECTION
NOT TO SCALE

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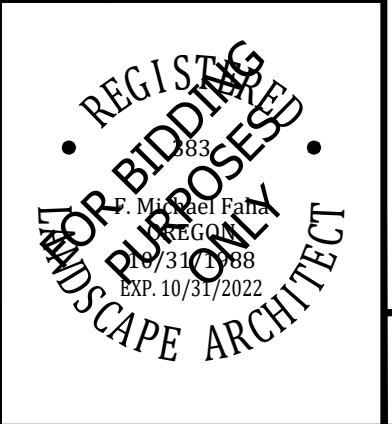


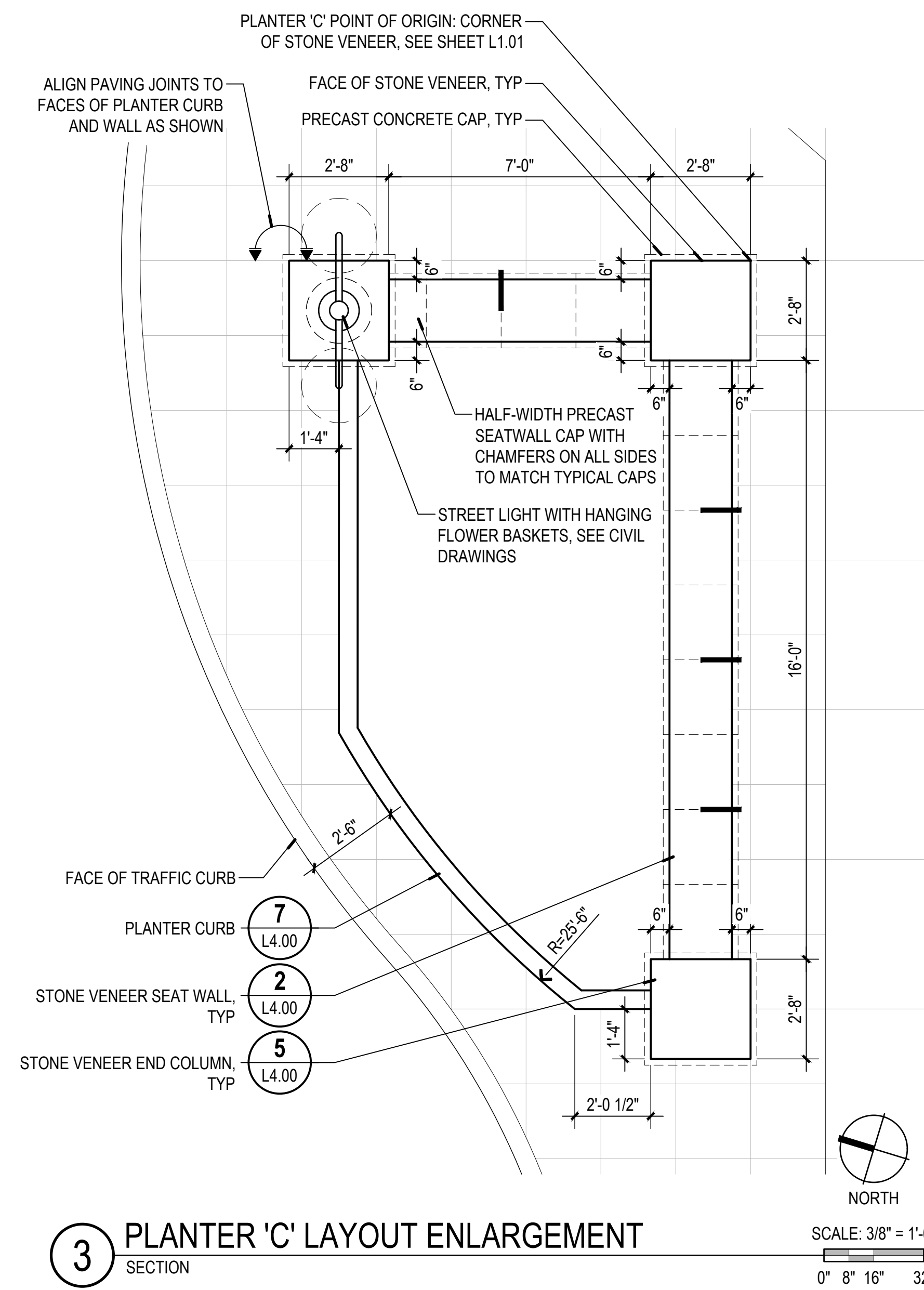
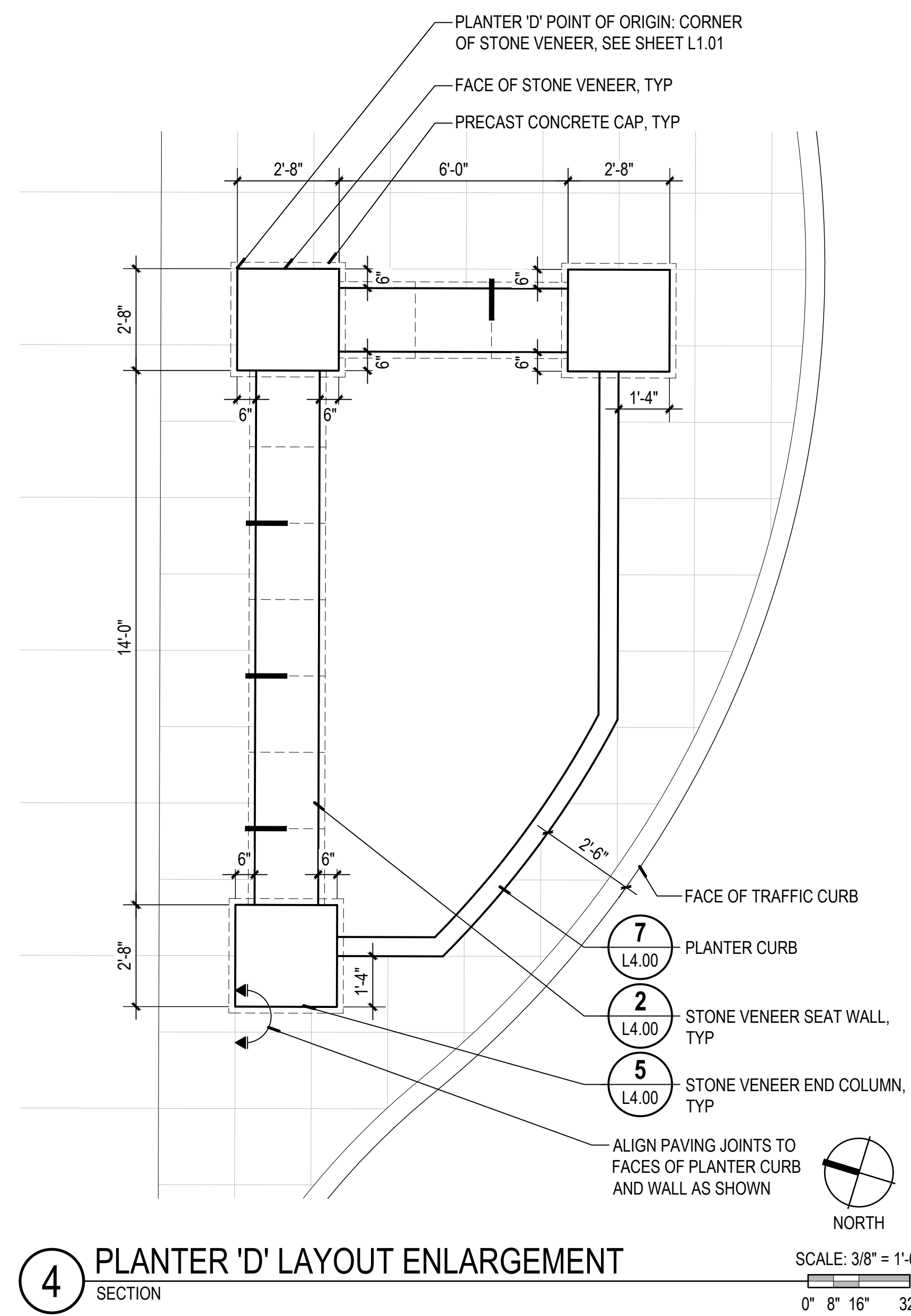
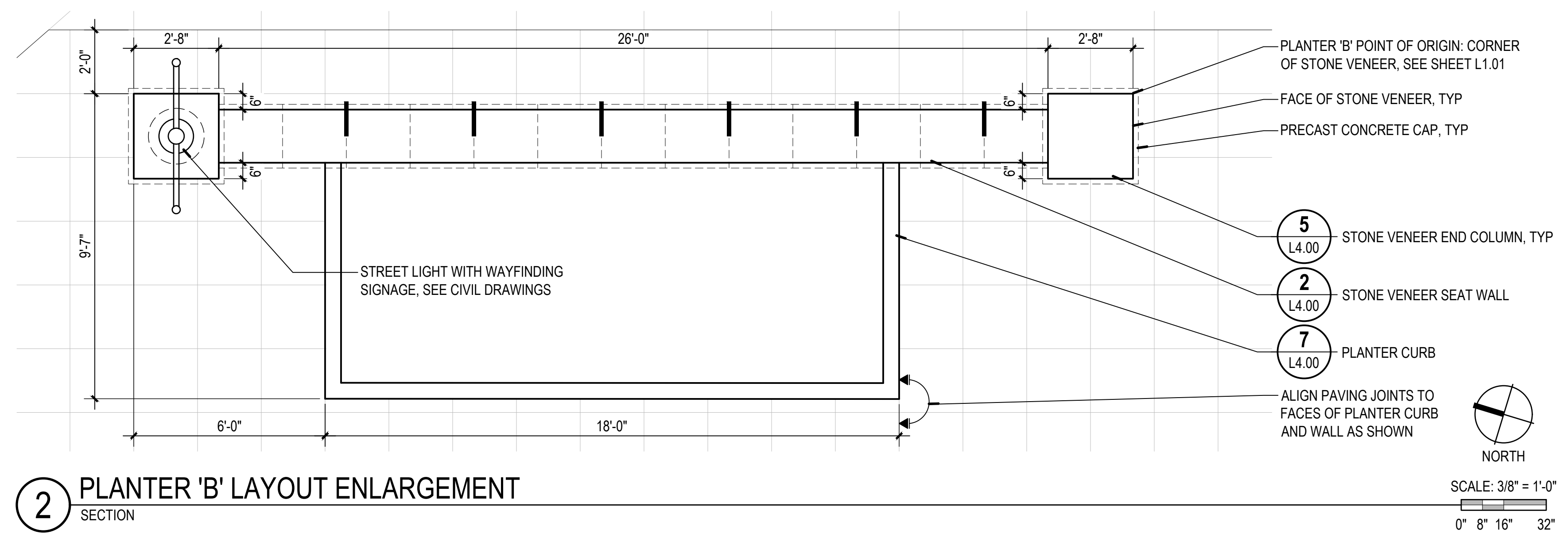
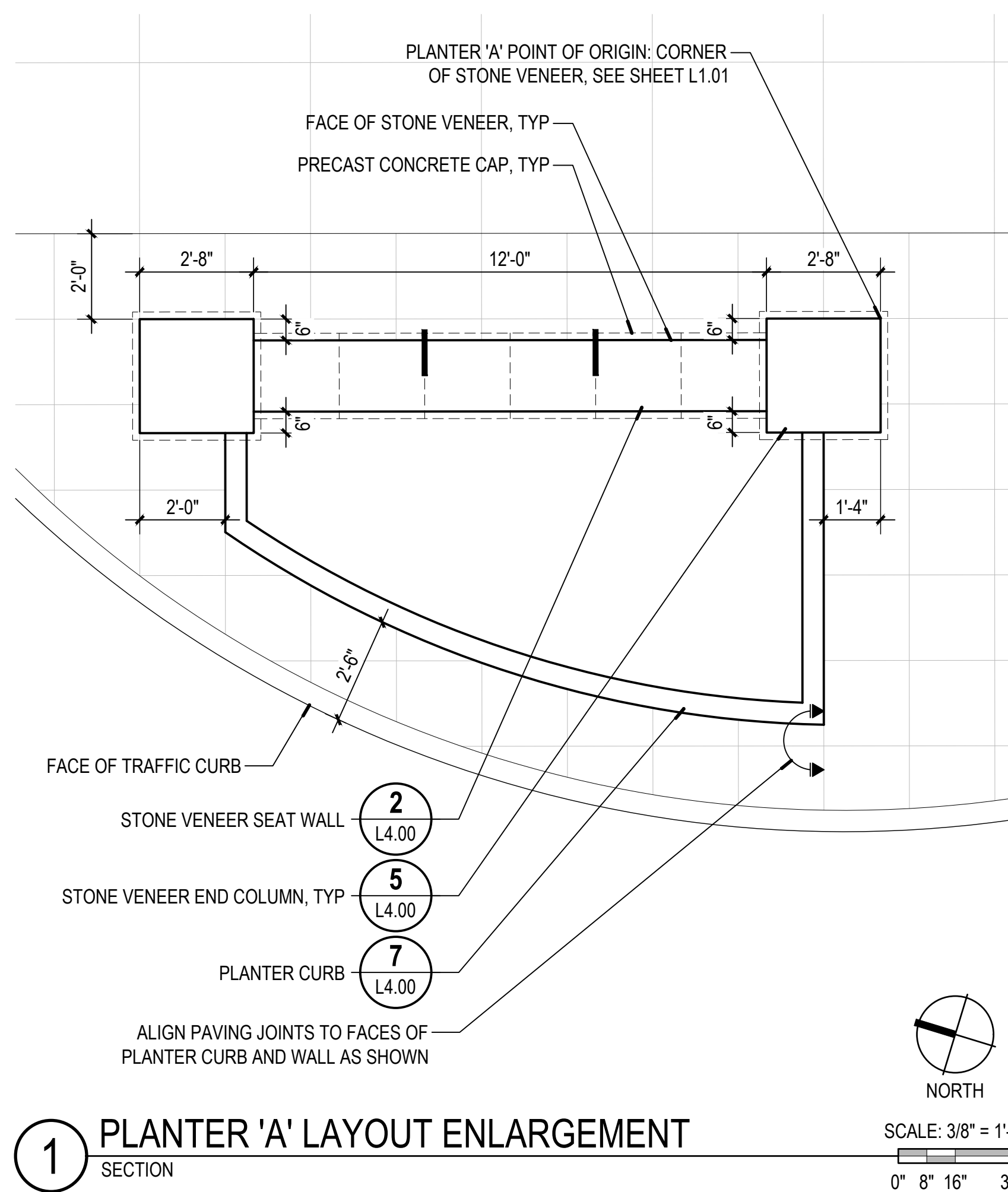
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S 1st Street at St. Helens Street Intersection Improvements
SITE DETAILS
SHEET NO. L4.00





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S 1st Street at St. Helens Street Intersection Improvements
 LAYOUT ENLARGEMENTS
 SHEET NO. L4.01

