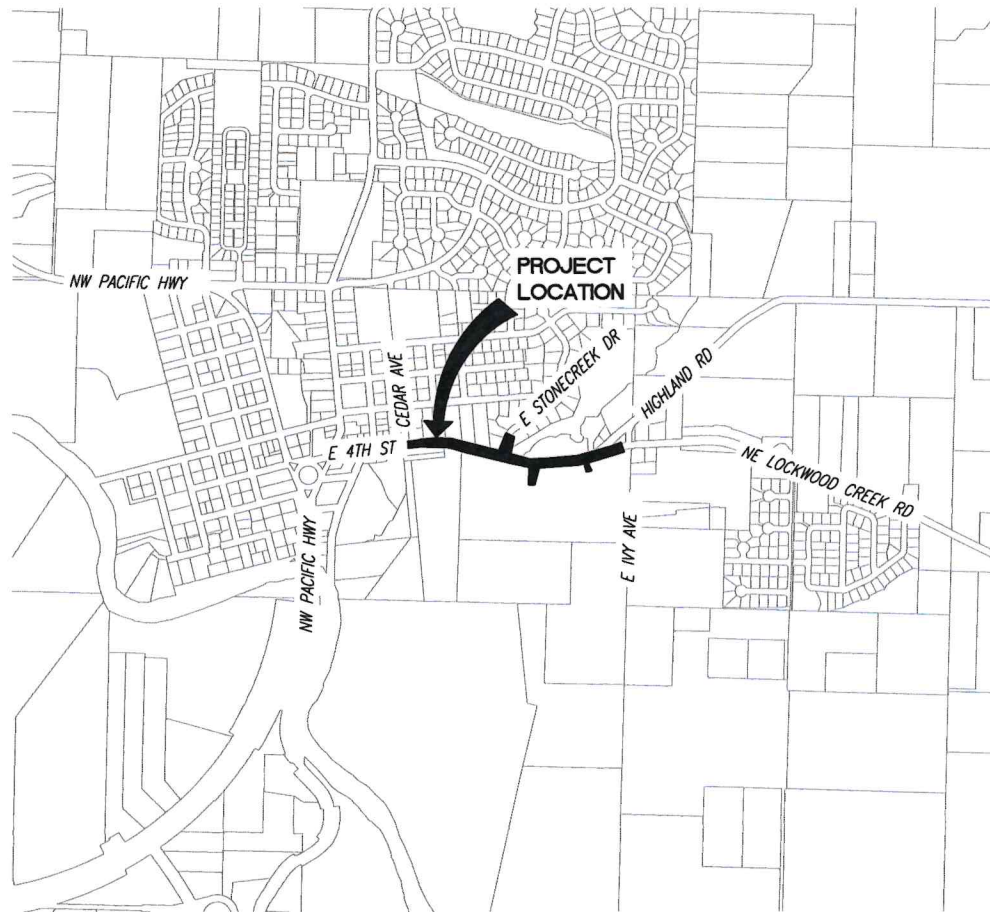


CITY OF LA CENTER

BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

PLANS FOR THE CONSTRUCTION OF
BRIDGE, WALLS, CREEK REALIGNMENT, STORMWATER, WATER, SANITARY SEWER, ILLUMINATION AND STREET IMPROVEMENTS



VICINITY MAP

CITY OF LA CENTER PROJECT NO. XXXXX



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CLARK PUBLIC UTILITIES - WATER SERVICES DEVELOPER INSTALLED WATER MATERIAL LIST

INSTALLED WATER ITEM	MATERIAL	QUANTITY	UNITS
8" WATER MAIN	PVC	190	LF
12" WATER MAIN	PVC	750	LF
16" WATER MAIN	HOPE/TF-FLEX	120	LF
18" WATER MAIN	HOPE	180	LF
18" WATER MAIN	DIP	290	LF
TEMPORARY 12" MAIN	HOPE	490	LF
ABANDONED 8" MAIN	HOPE	1	EA
ABANDONED 12" MAIN	DIP	1	EA

NOTES:

- PIPE MATERIAL ABBREVIATIONS:
 - PVC - POLYVINYL CHLORIDE PIPE
 - DIP - DUCTILE IRON PIPE
 - HOPE - HIGH DENSITY POLYETHYLENE PIPE
- QUANTITIES LISTED WITHIN THIS TABLE ARE NOT FOR BIDDING PURPOSES, BUT FOR USE BY CLARK PUBLIC UTILITIES TO DETERMINE THE INSTALLED WATER SYSTEM VALUE.



BREZEE CREEK - 4TH STREET PROJECT

CLARK PUBLIC UTILITIES - WATER

UTILITY WORK ORDER NO. 567117

SIGNED BY _____ DATE _____

CITY OF LA CENTER

FILE NO. XXXXX

Approved _____ Date _____



BID SET

No.	Revision	Date	By	App'd

FEDERAL CONTRACT No. TA-XXXX
FEDERAL AID No. STBGR-XXXX(XXX)



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MAY 2025

SHEET NO.
G01

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App Name: L:\Projects\7100\71485 Civil\CAD\Working\Sheets\71485-000-G01-03.dwg Layout Tab: G-02 User: Tyler O'Toole CAD Plot Date/Time: 5/14/2025 9:18:41 AM

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Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

BID SET

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SHEET INDEX FOR:
BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JAL
CHECKED:	CMK
DATE:	MAY 2025
TIME:	1:00:00
SHEET ID:	G03
SHEET	3 OF 173

GENERAL NOTES:

1. THE VERTICAL DATUM FOR THIS SURVEY IS NAVD88, SITE BENCHMARK: PBS CPW2.
N: 208628.03'
E: 1087652.88'
THE VERTICAL BENCHMARK IS A MAG NAIL SET IN THE SIDEWALK LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF E 4TH STREET AND E CEDAR AVE, 12' WEST OF THE FACE OF CURB, 9' SOUTH OF A FIRE HYDRANT, 15' NE OF A STORM MANHOLE LID.
*ELEVATION WAS DETERMINED BY GPS OBSERVATION USING CORRECTIONS OBTAINED THROUGH THE WASHINGTON STATE REFERENCE NETWORK (WSRN)
2. THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON OBSERVATIONS WASHINGTON STATE REFERENCE NETWORK (WSRN) HORIZONTAL DATUM: NAD 83, 2011, STATE PLANE COORDINATES, (WASHINGTON SOUTH ZONE 4602). DISTANCES SHOWN HERE ARE GROUND DISTANCES.
3. ALL CONSTRUCTION AND MATERIALS, UNLESS OTHERWISE SPECIFIED, SHALL BE IN CONFORMANCE WITH THE 2025 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AS PREPARED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND APWA, AND THE CITY OF LA CENTER PUBLIC WORKS ENGINEERING STANDARDS FOR CONSTRUCTION MANUAL.
4. THE UNDERGROUND UTILITIES SHOWN HEREON WERE BASED ON UTILITY LOCATE PAINT MARKS SUPPLIED BY THE WASHINGTON UTILITY NOTIFICATION CENTER (PRE-SURVEY TICKET REQUEST SUBMITTED ON 12/02/2016 AND PROCESSED AS TICKET NUMBER 18559624.) AS WELL AS SURFACE EVIDENCE AND PRIVATE AS-BUILT RECORDS. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED. THE CONTRACTOR IS ADVISED THAT EXCAVATION MAY BE NECESSARY. ADDITIONALLY, CERTAIN UTILITIES ON-SITE (WATER, SANITARY, STORM, GAS, ETC.) MAY NOT HAVE CONDUCTIBLE OR TRACEABLE LINES AND MAY BE PRESENT. UTILITIES SHOWN ON THE PLANS ARE PER SURFACE LOCATES AND RECORD DRAWINGS. THE CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION OF UNDERGROUND UTILITIES. IF CONFLICTS EXIST, NOTIFY THE ENGINEER.
5. CONTRACTOR SHALL NOTIFY OTHER PUBLIC UTILITIES (GAS, PHONE, ELECTRIC, CABLE TV, ETC.) TO MAKE ALL NECESSARY ADJUSTMENTS TO RESPECTIVE FACILITIES.
6. THE CONTRACTOR SHALL HAVE A COPY OF THESE PLANS, PROJECT SPECIFICATIONS, ADDENDA, CHANGE ORDERS AND SWPPP ON THE JOB SITE AT ALL TIMES. THE CONTRACTOR SHALL MAINTAIN AND UPDATE A FULL-SIZE SET OF AS-BUILTS AND THE SWPPP.
7. AT THE END OF EACH DAY, THE CONTRACTOR SHALL CLEAN UP THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT FREE OF DEBRIS AND UNUSED MATERIAL.
8. IF EXISTING CURB AND SIDEWALK DESIGNATED TO REMAIN ARE DAMAGED, THE CURB AND/OR SIDEWALK SHALL BE REMOVED AND REPLACED TO THE ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
9. ALL CONSTRUCTION WITHIN CITY OF LA CENTER RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
10. ALL PAVEMENT SHALL BE SAWCUT PRIOR TO PAVING. EXISTING PAVEMENT SHALL BE REMOVED AS NECESSARY TO PROVIDE A SMOOTH TRANSITION FOR BOTH RIDE AND DRAINAGE.
11. CONTRACTOR SHALL REPORT ALL DAMAGES IMMEDIATELY TO THE CITY'S CONSTRUCTION SERVICES OFFICE OR CONTACT THE INSPECTOR ON THE JOB.
12. AN ALTERNATE PEDESTRIAN ACCESSIBLE ROUTE OF TRAVEL IS REQUIRED WHEN AN EXISTING ACCESSIBLE ROUTE IS BLOCKED DURING CONSTRUCTION. THE ALTERNATE ACCESSIBLE ROUTE SHALL MEET MINIMUM ACCESSIBLE STANDARDS AS SET FORTH IN THE LATEST VERSION OF THE AMERICAN DISABILITIES ACT ACCESSIBILITY GUIDELINES MANUAL FOR PROJECTS IN PUBLIC RIGHT OF WAY, WSDOT'S WORK ZONE ACCOMMODATION POLICY AS REFERENCED IN CHAPTER 1520 OF THE WSDOT DESIGN MANUAL, (MOST CURRENT EDITION), AND THE 2025 EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" AS PREPARED BY WSDOT AND APWA.
13. CONTRACTOR SHALL MAINTAIN INGRESS/EGRESS FROM ALL PRIVATE PROPERTY DRIVEWAYS DURING CONSTRUCTION.
14. AT THE END OF EACH WORKDAY THE CONTRACTOR SHALL CLEAN THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.

15. ALL TRENCHING EXCAVATION AND PIPE INSTALLATION SHALL CONFORM TO THE MOST CURRENT APWA/WSDOT STANDARD SPECIFICATIONS SECTION 7-08.3(1) AND SPECIAL PROVISIONS. ALL EXCESS MATERIAL FROM THE TRENCH EXCAVATION SHALL BE DISPOSED OF AT AN APPROVED SITE.
16. ALL STORM DRAINAGE PIPE LABELED AS 'SD' SHALL BE SCHEDULE A STORM SEWER PIPE PER WSDOT STANDARD SPECIFICATION SECTION 7-04.3(1)B.
17. SHORING IS REQUIRED FOR ALL TRENCHES IN EXCESS OF 48-IN DEPTH.
18. ALL EXISTING WATER VALVES TO BE OPERATED BY CPU PERSONNEL ONLY.
19. SEE SHEETS TP01-TP06 FOR TREE REMOVAL. PROTECT EXISTING VEGETATION OUTSIDE CLEARING LIMITS AND AS WHERE NOTED IN PLANS. ALL OTHER PLAN SECTIONS HAVE BEEN REVISED TO SHOW ONLY TREES TO REMAIN AND/OR BE PROTECTED FOR PLAN CLARITY.
20. PROTECTION OF THE ENVIRONMENT: NO CONSTRUCTION RELATED ACTIVITIES SHALL CONTRIBUTE TO THE DEGENERATION OF THE ENVIRONMENT. ALLOW MATERIAL TO ENTER SURFACE OR GROUND WATERS, OR ALLOW PARTICULATE EMISSIONS TO ENTER THE ATMOSPHERE, WHICH EXCEED STATE OR FEDERAL STANDARDS, ANY ACTION THAT POTENTIALLY ALLOWS A DISCHARGE TO WATERS OF THE STATE MUST HAVE PRIOR APPROVAL BY THE STAFF OF WASHINGTON DEPARTMENT OF ECOLOGY. IT IS CRITICAL THAT NO SEDIMENT BE ALLOWED TO MIGRATE FROM THE CONSTRUCTION AREA OR DURING TRANSPORTATION OF EQUIPMENT AND MATERIALS TO THE WORK AREA. THE CONTRACTOR SHALL BE FAMILIAR WITH THE CITY OF LA CENTER MUNICIPAL CODE, A STOP-WORK ORDER WILL BE ISSUED UPON ANY OCCURRENCE OF SEDIMENT TRANSPORT, TRACKING, OR OTHER RELATED PROBLEMS. VIOLATIONS OF THE LA CENTER MUNICIPAL CODE AND THE CLEAN WATER ACT ARE SUBJECT TO ENFORCEMENT ACTIONS AND FINES BY THE CITY OF LA CENTER AND THE DEPARTMENT OF ECOLOGY.
21. TOXIC CLEANUP: NO CONTAMINATED SITES ARE LOCATED WITHIN APPROXIMATELY A HALF A MILE OF THE PROJECT. THE PROJECT SHOULD NOT COVER OR INTERFERE WITH EXISTING MONITORING WELLS OR STRUCTURES RELATED TO CLEANUP ACTIVITY. IF ANY ARE PRESENT, IF ENVIRONMENTAL CONTAMINATION IS ENCOUNTERED IT SHOULD BE MANAGED SO IT DOES NOT SPREAD TO OTHER MEDIA OR OFF-SITE, AND DISCOVERY AND CLEANUP SHOULD BE DOCUMENTED FOR AND REPORTED TO ECOLOGY'S SOUTHWEST REGIONAL OFFICE BY CONTACTING THE ENVIRONMENTAL REPORT TRACKING SYSTEM COORDINATOR AT (360) 407-8300.
22. INADVERTENT DISCOVERY PLAN: IN THE EVENT ANY ARCHAEOLOGICAL OR HISTORIC MATERIALS ARE ENCOUNTERED DURING PROJECT ACTIVITY, WORK IN THE IMMEDIATE AREA (INITIALLY ALLOWING FOR A 100' BUFFER, THIS NUMBER MAY VARY BY CIRCUMSTANCE) MUST STOP AND THE FOLLOWING ACTIONS TAKEN:
 - A. ADVISE OWNER; AND
 - B. IMPLEMENT REASONABLE MEASURES TO PROTECT THE DISCOVERY SITE, INCLUDING ANY APPROPRIATE STABILIZATION OR COVERING; AND
 - C. TAKE REASONABLE STEPS TO ENSURE THE CONFIDENTIALITY OF THE DISCOVERY SITE; AND,
 - D. TAKE REASONABLE STEPS TO RESTRICT ACCESS TO THE SITE OF DISCOVERY.
 - E. THE CITY WILL NOTIFY THE CONCERNED TRIBES AND ALL APPROPRIATE COUNTY, STATE, AND FEDERAL AGENCIES, INCLUDING THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION. THE AGENCIES AND TRIBES(S) WILL DISCUSS POSSIBLE MEASURES TO REMOVE OR AVOID CULTURAL MATERIAL, AND WILL REACH AN AGREEMENT WITH THE PROJECT PROPONENT REGARDING ACTIONS TO BE TAKEN AND DISPOSITION OF MATERIAL IF HUMAN REMAINS ARE UNCOVERED. APPROPRIATE LAW ENFORCEMENT AGENCIES SHALL BE NOTIFIED FIRST, AND THE ABOVE STEPS FOLLOWED. IF THE REMAINS ARE DETERMINED TO BE NATIVE, CONSULTATION WITH THE AFFECTED TRIBES WILL TAKE PLACE IN ORDER TO MITIGATE THE FINAL DISPOSITION OF SAID REMAINS. SEE THE REVISED CODE OF WASHINGTON, CHAPTER 27.53, "ARCHAEOLOGICAL SITES AND RESOURCES," FOR APPLICABLE STATE LAWS AND STATUTES. SEE ALSO WASHINGTON STATE EXECUTIVE ORDER 21-02, "ARCHAEOLOGICAL AND CULTURAL RESOURCES." ADDITIONAL STATE AND FEDERAL LAWS(S) MAY ALSO APPLY.

GRADING NOTES:

1. ALL GRADING SHALL CONFORM TO THE 2025 EDITION OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AND THE CITY OF LA CENTER PUBLIC WORKS ENGINEERING STANDARDS FOR CONSTRUCTION MANUAL.

2. THE CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT IN FULL PREPARED BY PBS ENGINEERING + ENVIRONMENTAL, INC TITLED "GEOTECHNICAL ENGINEERING REPORT REVISION 2 - BREZZEE CREEK CULVERT REPLACEMENT, EAST 4TH STREET, DATED OCTOBER 21, 2024." THE CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS AS DETAILED IN THE REPORT.
3. THE LIMITS OF CLEARING SHALL BE FLAGGED PRIOR TO CLEARING AND GRUBBING OF THE SITE.
4. ANY EXISTING TREES TO REMAIN WITHIN THE CLEARING LIMITS SHALL BE MAINTAINED AND PROTECTED FROM DAMAGE. SEE TREE REMOVAL PLAN FOR PROTECT/REMOVE INFORMATION, SHEETS TP01-TP06.
5. PRIOR TO ANY FILL PLACEMENT, ALL AREAS WHICH WILL RECEIVE STRUCTURAL FILL SHALL BE EXCAVATED TO FIRM, NON-ORGANIC, UNDISTURBED NATIVE GROUND. THE STRIPPED AREAS SHALL BE OBSERVED AND ACCEPTED BY THE GEOTECHNICAL ENGINEER AND THE CITY OF LA CENTER INSPECTOR.
6. ALL RIGHT-OF-WAY FILLS SHALL MEET 95% OF AASHTO T-180 COMPACTION.
7. FILLS SHALL BE INSTALLED IN VERTICAL LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND SHALL BE COMPACTED AS PREVIOUSLY NOTED.
8. FILLS PLACED ON SLOPES EXCEEDING 5H: 1V SHALL BE KEPT AND BENCHED. GEOTECHNICAL APPROVAL REQUIRED PRIOR TO ANY FILL PLACEMENT.
9. ALL SURFACES SHALL BE GRADED SMOOTH AND BE FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
10. ALL CUT AND FILL SLOPES SHALL NOT EXCEED 2:1 SLOPES.
11. ANY EXCESS MATERIAL NOT REQUIRED TO MEET THE GRADES SHOWN ON THE PLANS SHALL BE HAULED FROM THE SITE TO A CONTRACTOR PROVIDED WASTE SITE. IF WASTE SITE IS WITHIN CITY LIMITS, A GRADING PERMIT MAYBE REQUIRED.
12. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY SUITABLE APPLICATION OF EROSION CONTROL BMP'S.

EROSION/SEDIMENT CONTROL NOTES:

1. THE GRADING & EROSION CONTROL (EC01-EC08) PLAN AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORT OF LOOSE SOILS TO THE PROPERTY OUTSIDE OF THE CONSTRUCTION AREA AND AROUND THE CONSTRUCTION SITE. THE EROSION/SEDIMENT CONTROL MEASURES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
2. THE IMPLEMENTATION OF THE GRADING & EROSION CONTROL (EC01-EC08) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADE OF THE EROSION/SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED, APPROVED, AND PERMANENT VEGETATION/LANDSCAPING IS ESTABLISHED.
3. IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A "STOP WORK" ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY ENGINEERING STAFF.
4. THE CONTRACTORS SHALL BE RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE MOST RECENTLY ADOPTED EDITION OF THE CITY OF LA CENTER MUNICIPAL CODE CHAPTER 18.320 AND THE WSDOT HIGHWAY RUNOFF MANUAL (CURRENT EDITION).
5. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO DISTURBING AND EXPOSING ANY SOIL SURFACES (I.E. CONSTRUCTION ENTRANCES, FILTER FABRIC SEDIMENT BARRIERS, AND SEDIMENTATION TRAPS) AND MAINTAINED FOR THE DURATION OF THE PROJECT. TRAPPED SEDIMENT IN EXCESS OF 1 FOOT SHALL BE REMOVED OR STABILIZED ON-SITE. DISTURBED SOIL AREAS RESULTING FROM VEGETATION REMOVAL SHALL BE PERMANENTLY STABILIZED. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE CLEARING LIMITS AND/OR ANY EASEMENTS, SENSITIVE OR CRITICAL AREAS, AND THEIR BUFFERS, TREES, AND DRAINAGE COURSES FLAGGED PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. FLAGGING LIMITS ARE TO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
7. REMOVE ONLY THOSE TREES AND SHRUBS THAT NEED TO BE REMOVED FOR THE CONSTRUCTION OF ROADS, SIDEWALKS, UTILITIES, AND STORMWATER FACILITIES. SEE TREE REMOVAL PLAN FOR PROTECT/REMOVE INFORMATION, SHEETS TP01-TP06.
8. ALL EXISTING AND NEWLY CONSTRUCTED ROAD CATCH BASINS AND CURB INLETS AFFECTED BY CONSTRUCTION SHALL BE PROTECTED AGAINST SEDIMENT DEPOSITS. 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.
9. ALL POLLUTANTS THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF THE STORMWATER SYSTEM.
10. ALL DISTURBED SOIL SURFACES ARE TO BE STABILIZED BY A SUITABLE APPLICATION OF "BEST MANAGEMENT PRACTICES" (BMP'S). DURING THE PERIOD OF OCTOBER 1 THROUGH JULY 5 DISTURBED SOILS MAY REMAIN UNSTABILIZED FOR UP TO TWO DAYS WHEN NOT BEING WORKED, FROM JULY 5 THROUGH OCTOBER 1, DISTURBED SOILS MAY REMAIN UNSTABILIZED FOR UP TO 7 DAYS WHEN NOT BEING WORKED. STABILIZATION OF DISTURBED SOIL AREAS MAY CONSIST OF HYDROSEEDING, HAND-SEEDING AND MULCHING, PLACEMENT OF EROSION CONTROL, BLANKETS OR PLASTIC. ALL SEEDING AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENSURE THAT THE GROWTH OF VEGETATION OCCURS AS SOON AS POSSIBLE.
11. ALL TEMPORARY SEDIMENT AND EROSION CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR POLICING THE JOB SITE DAILY AND MAINTAINING THE EROSION/SEDIMENT CONTROL MEASURES THROUGHOUT ALL PHASES OF CONSTRUCTION. AN INSPECTION LOG SHALL BE KEPT AND MADE AVAILABLE TO THE CITY OF LA CENTER. THE POLICING AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
 - VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION DEVICE BEFORE DISCHARGE TO SURFACE.
 - REMOVAL OF TRAPPED SILT AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.
 - ADDITIONAL PROTECTIVE MEASURES DUE TO JOB SITE OR WEATHER CONDITIONS AS REQUIRED BY THE CITY OF LA CENTER.
 - MONITORING OF VEHICLES LEAVING THE SITE TO MINIMIZE TRANSMISSION OF LOOSE SOILS TO THE PUBLIC ROADWAYS.
 - VERIFY THAT ALL PROPERTIES ADJACENT TO THE PROJECT SITE ARE PROTECTED FROM SEDIMENTATION DEPOSITION, THIS MAY BE ACCOMPLISHED BY INSTALLING PERIMETER CONTROLS SUCH AS SEDIMENTATION BARRIERS, FILTERS OR DIKES, SEDIMENTATION BASIN/TRAPS, OR BY A COMBINATION OF SUCH MEASURES.
13. CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES SHALL BE STABILIZED IN ACCORDANCE WITH EROSION/SEDIMENT CONTROL NOTE 10. SLOPES FOUND TO BE ERODING EXCESSIVELY WITHIN TWO YEARS OF CONSTRUCTION MUST BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES. THESE MEASURES MAY CONSIST OF ROUGHENED SOIL SURFACES, INTERCEPTORS, DIVERSIONS OR TERRACES, TEMPORARY OR PERMANENT CHANNELS, ADDITIONAL VEGETATION, OR PIPE SLOPE DRAINS AS REQUIRED BY THE CITY OF LA CENTER UNTIL THE PROBLEM IS CORRECTED.
14. THE ESC MEASURES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING ANY STORM EVENT.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING UNDERGROUND UTILITIES AS SPECIFIED BELOW:
 - WHERE FEASIBLE, NO MORE THAN 500 FEET OF TRENCH SHALL BE OPEN AT ONE TIME.
 - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - TRENCH DE-WATER DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND

PBS Engineering and Environmental LLC
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NOTES FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: JHB
CHECKED: CMK
MAY 2025 17486.000
SHEET ID G04

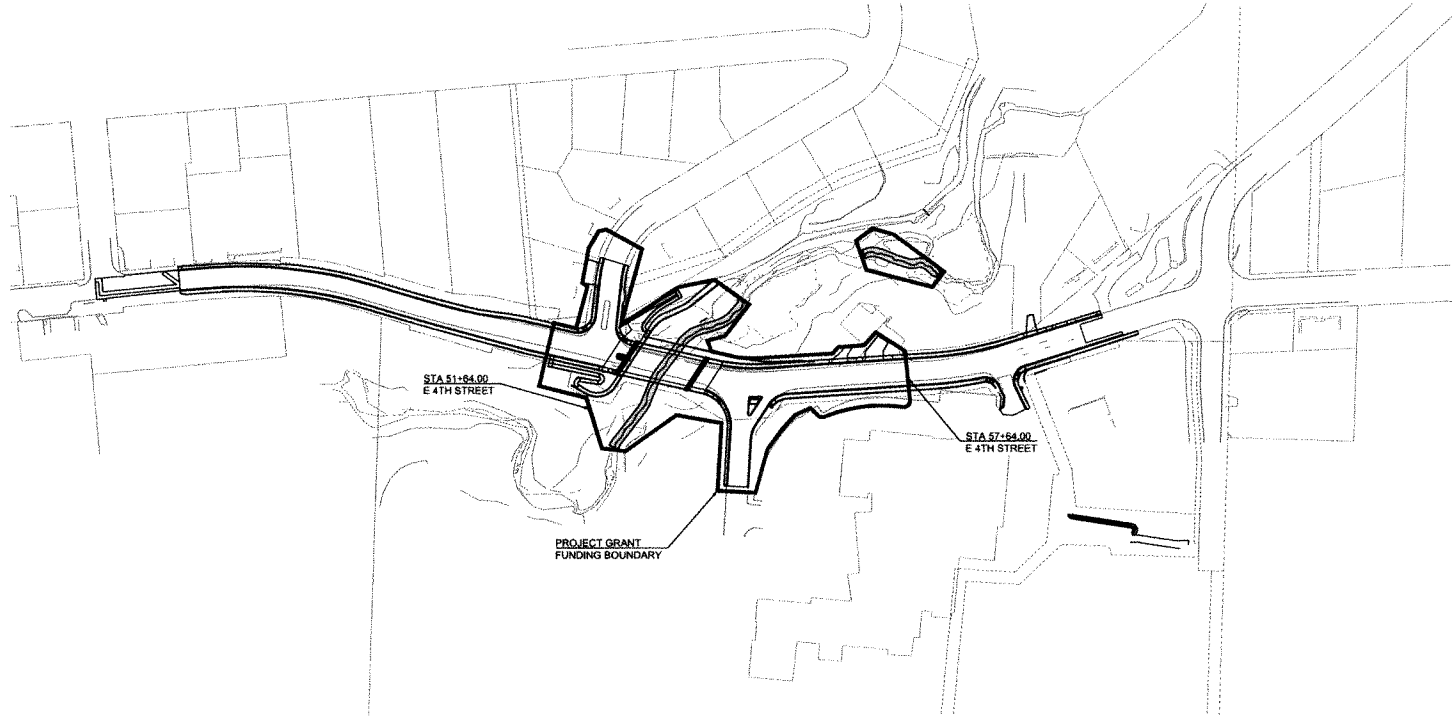
SHEET 4 of 173

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A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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1486.000
SHEET ID:
TS00

SHEET 5 OF 173



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DESIGNED:

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MAY 2026
71485.000

SHEET ID

TS01

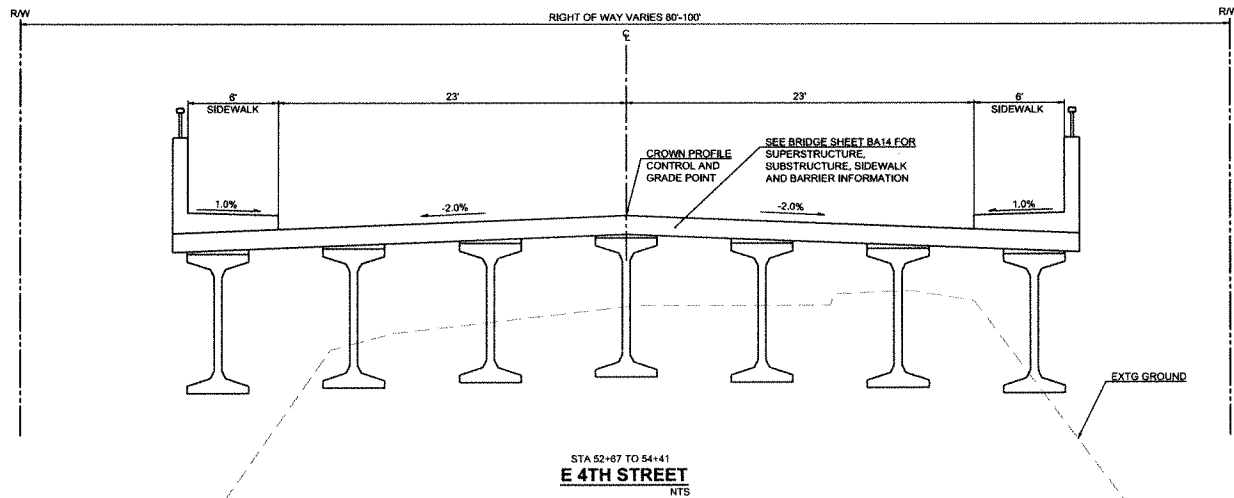
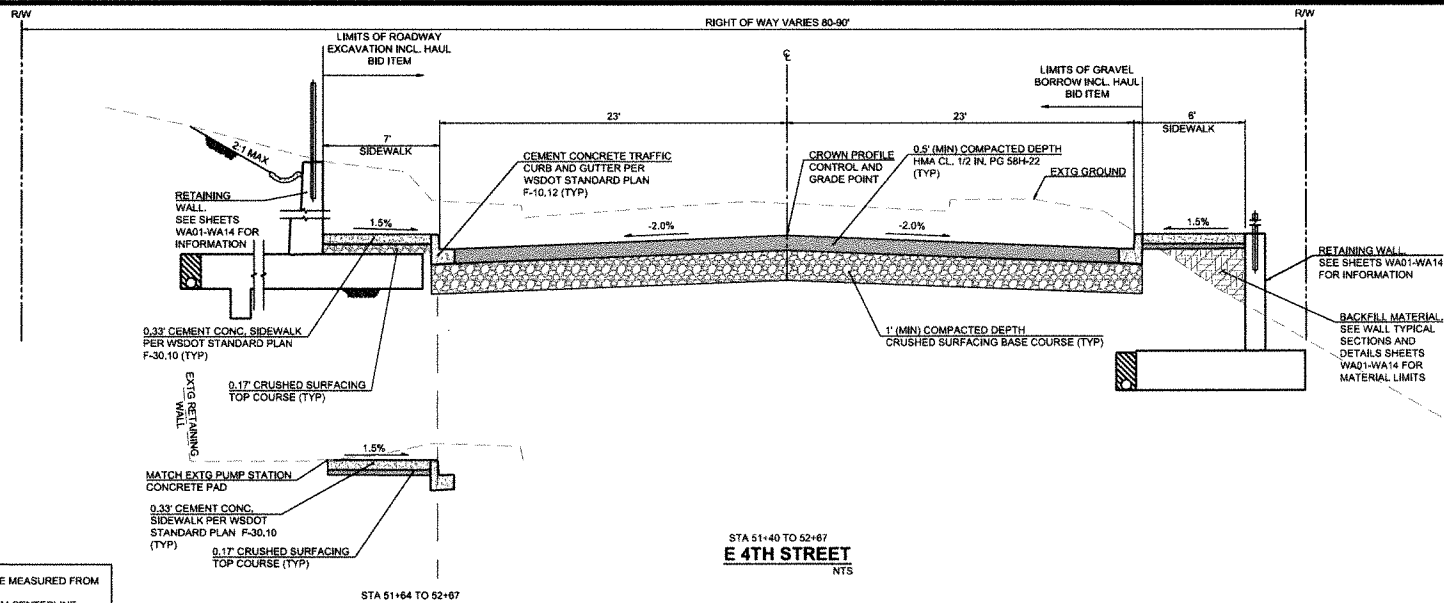
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SHEET **5** OF 1

SHEET 5 OF 173

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ROADWAY SLOPE MEASURED FROM CENTERLINE
+ UP SLOPE FROM CENTERLINE
- DOWNSLOPE FROM CENTERLINE



BID SET

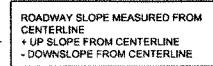
PBS Engineering and
1325 SE Top Center Drive
Portland, OR 97202
Phone: 503.228.1111
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DESIGNED:
JAB
CHECKED:
CMK
MAY 2025
71488.000
SHEET ID:
TS03
SHEET **7** OF **173**



STATION	LT LANE	RT LANE
54+41	-2.00%	-2.00%
60+00	-2.00%	-2.00%
60+63	-2.60%	-0.48%

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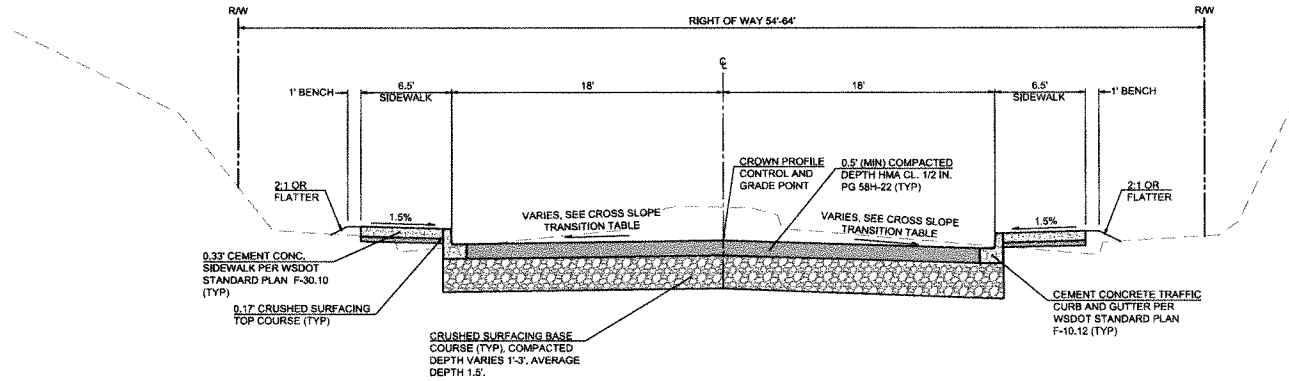


DESIGNED:	JAB
CHECKED:	CMK
MAY 2025	71486.000

SHEET ID
TS04

SHEET 8 OF 173

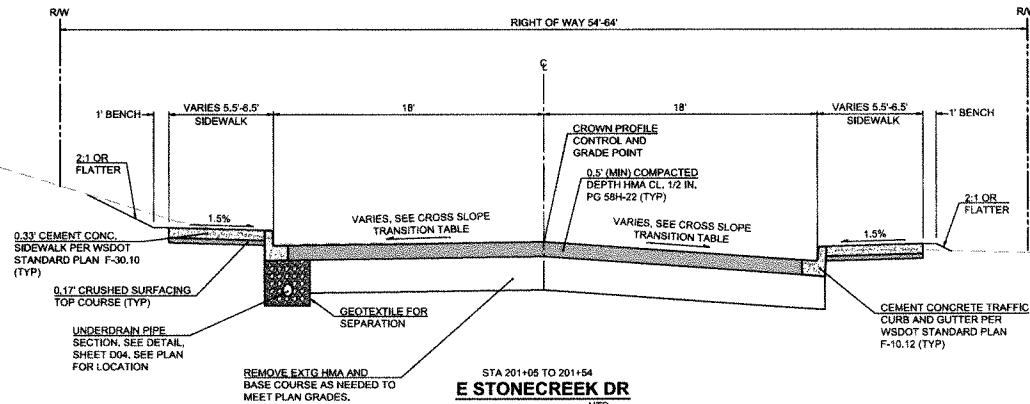
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STA 200+37 TO 201+05
E STONECREEK DR
NTS

STONECREEK DR CROSS SLOPE TRANSITION		
STATION	LT LANE	RT LANE
200+37	+0.50%	-1.00%
200+50	-1.00%	-1.50%
201+00	-1.50%	-2.00%
201+53.50	-1.10%	-3.50%

ROADWAY SLOPE MEASURED FROM CENTERLINE
 + UP SLOPE FROM CENTERLINE
 - DOWNSLOPE FROM CENTERLINE



STA 201+05 TO 201+54
E STONECREEK DR
NTS

BID SET

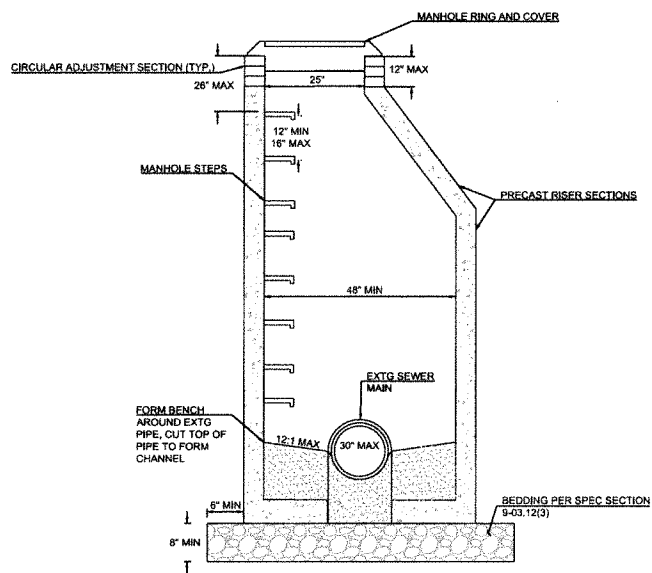
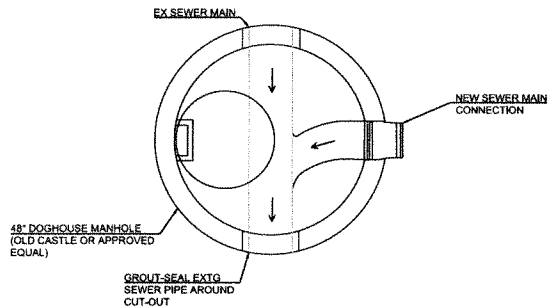
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 1325 SE 7th Center Drive
 Vancouver, WA 98683
 (360) 575-1100
 info@pbswa.com



TYPICAL SECTIONS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JMB
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DATE:	MAY 2025
SCALE:	7:1/486,000
SHEET NO.	TS05



PRE-CAST DOGHOUSE MANHOLE
NPS

- NOTES:
1. ALL PRECAST MANHOLE RINGS AND CONES SHALL CONFORM TO ASTM C-478 WITH CAST IN STEPS.
 2. IN OVER EXCAVATED AREAS, PROVIDE SUPPORT FOR THE PIPE AS FOLLOWS: PLACE 3/4\"
 3. BASE CONCRETE SHALL BE 3,000 P.S.I., 2.4 IN. SLUMP. FLOW LINES AND INSIDE SURFACES SHALL BE TROWELED SMOOTH & UNIFORM AT TIME OF POUR. CHANNELS SHALL CONFORM ACCURATELY TO SEWER GRADE. INSTALL BENCHES TO ELEVATION OF SPRINGLINE OF PIPE.
 4. JOINTS SHALL BE CONSTRUCTED SO AS TO BE WATERTIGHT.
 5. SEAL ALL MANHOLE JOINTS AND FRAME WITH INFI-SHIELD \"SEAL WRAP\" EXTERIOR SEAL OR APPROVED EQUAL.
 6. MANHOLES UNDER 6'-0\"
 7. LOCKING MANHOLE LIDS ARE REQUIRED IN UNIMPROVED AREAS OR AT THE DISCRETION OF THE CITY INSPECTOR.
 8. GROUT SHALL BE ALL-CRETE 20 OR APPROVED EQUAL.
 9. 60\"
 10. DOGHOUSE MANHOLES SHALL NOT BE USED OVER EXISTING PVC SEWER MAINS.

No.	Revision	Date	By	App'd
1	PRELIMINARY - SELECTION REVIEW			

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MISCELLANEOUS DETAILS FOR:
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A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



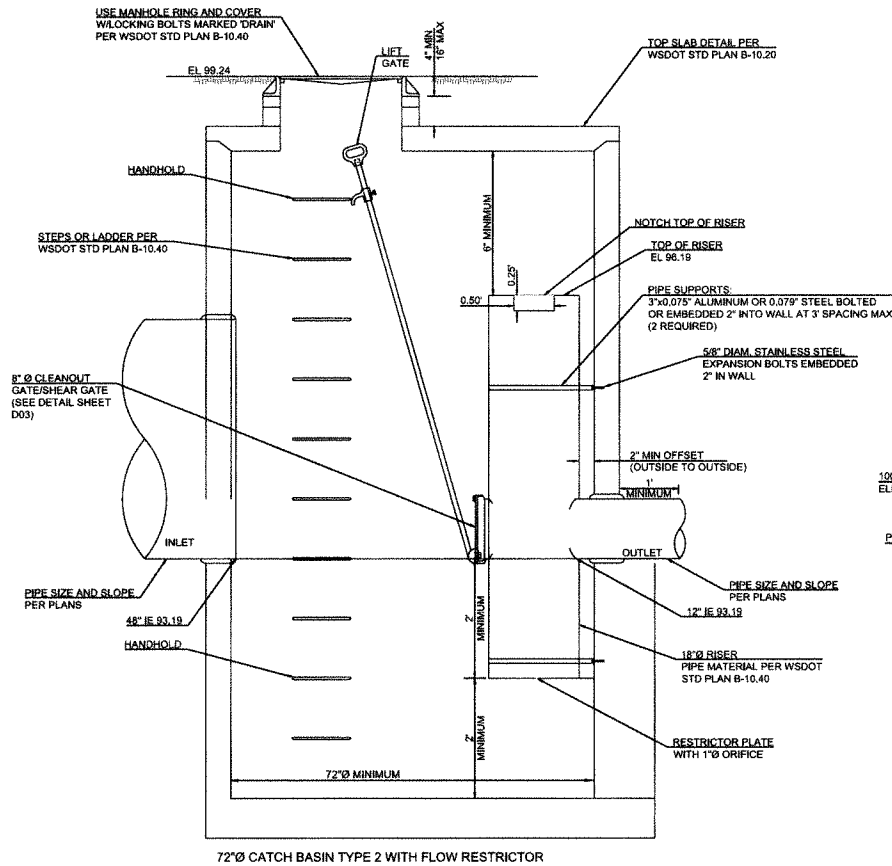
DESIGNED: JAB
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MAY 2023
71486.000
SHEET ID
D01

SHEET 11 OF 173

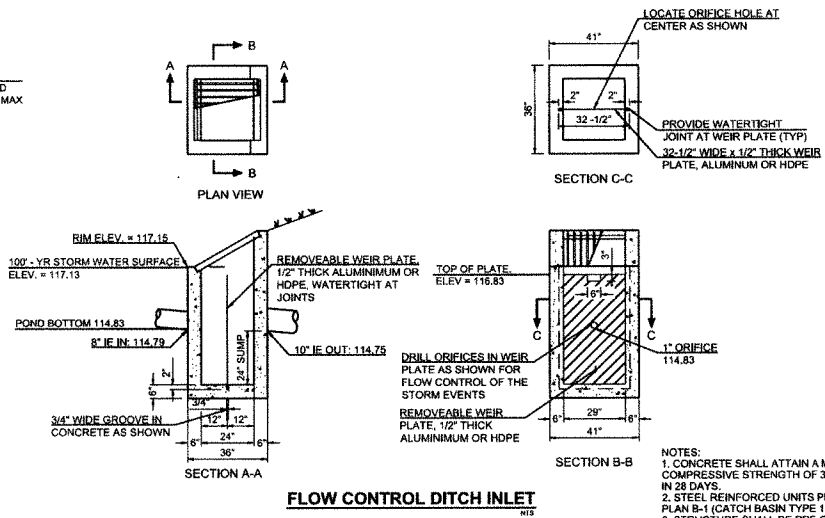
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DETENTION PIPE FLOW CONTROL MH 2-2
NTS



No.	Revision	Date	By	App'd
1	PRELIMINARY - SUBJECT TO REVIEW			

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MISCELLANEOUS DETAILS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
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DESIGNED:	JAB
CHECKED:	CMK
DATE:	MAY 2025
PROJECT NO:	71485-000
SHEET NO:	D02

SHEET 12 OF 173

DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. VARIABLE INVERT, SUMP, AND BASIN BODY HEIGHT AVAILABLE. RISERS ARE NEEDED FOR BASINS OVER 84" (IN) DUE TO SHIPPING RESTRICTIONS. THE MAXIMUM DEPTH FROM FINISHED GRADE TO THE LOWEST INVERT SHALL BE 8' (FT).

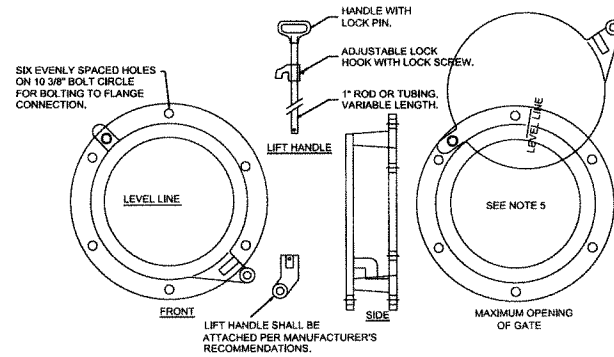
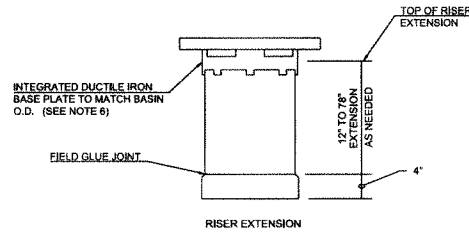
DRAINAGE CONNECTIONS STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE AND PVC SEWER (4" (IN) - 24" (IN)).

RISERS CAN BE TRIMMED DOWN TO 3" (IN) EXTENSION WITHOUT INTERFERING WITH THE INSTALLATION OF THE FRAME.

THE MAXIMUM DEPTH FROM FINISHED GRADE TO THE LOWEST INVERT SHALL BE 8' (FT).

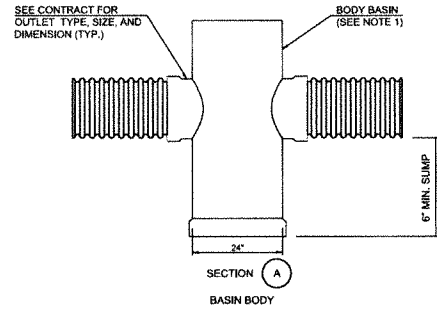
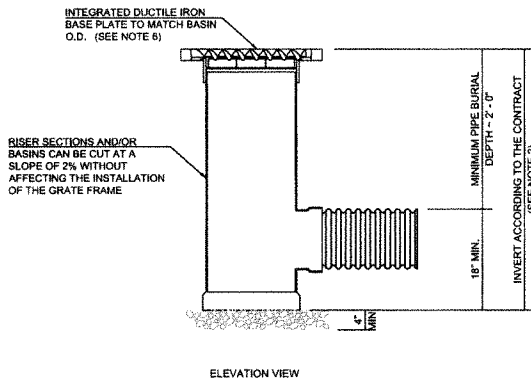
SOLID LID TO BE USED

DUCTILE IRON CASTINGS FOR PVC CATCH BASINS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A536, GRADE 70-50-05, AND SHALL MEET THE PROOF LOAD TESTING REQUIREMENTS OF AASHTO M 306.

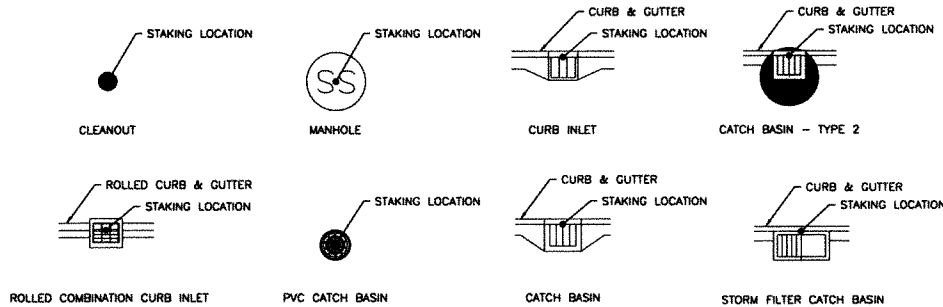


- SHEAR GATE NOTES**
1. SHEAR GATE SHALL BE ALUMINUM ALLOY PER ASTM B-26-ZG-32a OR CAST IRON ASTM A48 CLASS 30B AS REQUIRED.
 2. GATE SHALL BE 8" DIA. UNLESS OTHERWISE SPECIFIED.
 3. GATE SHALL BE JOINED TO TEE SECTION BY BOLTING (THROUGH FLANGE), WELDING, OR OTHER SECURE MEANS.
 4. LIFT ROD: AS SPECIFIED BY MFR. WITH HANDLE EXTENDING TO WITHIN ONE FOOT OF COVER AND ADJUSTABLE HOOK LOCK FASTENED TO FRAME OR UPPER HANDHOLD.
 5. GATE SHALL NOT OPEN BEYOND THE CLEAR OPENING BY LIMITED HINGE MOVEMENT, STOP TAB, OR SOME OTHER DEVICE.
 6. NEOPRENE RUBBER GASKET REQUIRED BETWEEN RISER MOUNTING FLANGE AND GATE FLANGE.
 7. MATING SURFACES OF LID AND BODY TO BE MACHINED FOR PROPER FIT.
 8. FLANGE MOUNTING BOLTS SHALL BE 3/8" DIA. STAINLESS STEEL.
 9. ALTERNATE CLEANOUT/SHEAR GATES TO THE DESIGN SHOWN ARE ACCEPTABLE, PROVIDED THEY MEET THE MATERIAL SPECIFICATIONS ABOVE AND HAVE A SIX BOLTS, 10-3/8" BOLT CIRCLE FOR BOLTING TO THE FLANGE CONNECTION.

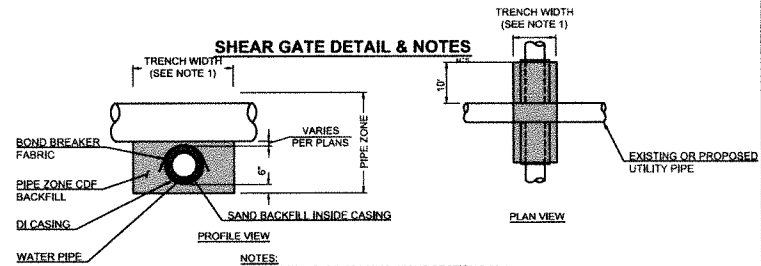
- FLOW CONTROL DEVICE NOTES**
1. EXCEPT AS SHOWN OR NOTED, UNITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR WISDOT CATCH BASIN TYPE 2, 54" MIN. DIA.
 2. FOR DETAILS SHOWING GRADE RING, LADDER, STEPS, HANDHOLDS, AND TOP SLABS, SEE STD. PLAN D1.5.
 3. THE RESTRICTOR/SEPARATOR AND PIPE SUPPORTS SHALL BE OF THE SAME MATERIAL AND SHALL BE FABRICATED FROM 0.080" ALUMINUM OR 0.084" ALUMINIZED STEEL OR 0.064" GALVANIZED STEEL PIPE IN ACCORDANCE WITH AASHTO M 36, M 196, M 197 AND M 274. GALVANIZED STEEL SHALL HAVE TREATMENT 1.
 4. OUTLET SHALL BE CONNECTED TO CULVERT OR SEWER PIPE WITH A STANDARD COUPLING BAND FOR CORRUGATED METAL PIPE OR GROUTED INTO THE BELL OF CONCRETE PIPE.
 5. THE VERTICAL RISER STEM OF THE RESTRICTOR/SEPARATOR SHALL BE THE SAME DIAMETER AS THE HORIZONTAL OUTLET PIPE WITH AN 8" MIN. SIZE.
 6. FRAME AND LATTER, OR STEPS TO BE OFFSET SO THAT:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 7. MOUNTING SURFACES OF LID AND BODY TO BE MACHINED FOR PROPER FIT.
 8. RESTRICTOR PLATE WITH ORIFICE AS SPECIFIED IN THE PLANS. OMIT PLATE IF ONLY FOR OIL POLLUTION CONTROL. SPECIFIED OPENING TO BE CUT ROUND AND SMOOTH EDGED.



PVC CATCH BASIN



STAKING LOCATION DETAIL



PIPE ZONE CDF BACKFILL

No.	Revision	Date	By	App'd
1	PRELIMINARY - ISSUED FOR REVIEW			

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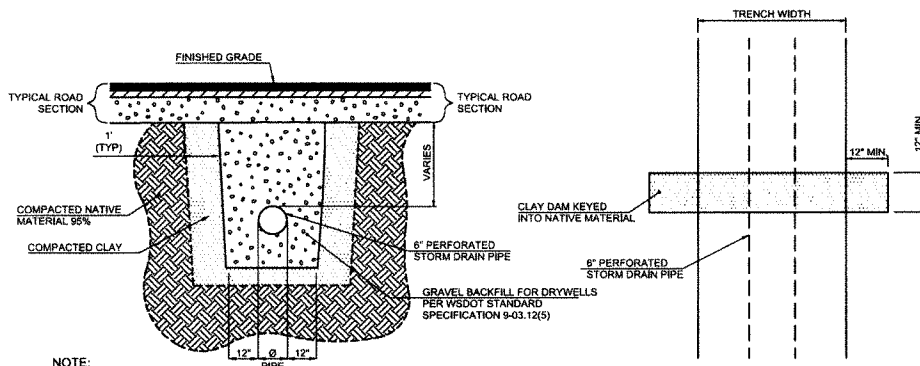
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MISCELLANEOUS DETAILS FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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SEAL
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF WASHINGTON
 No. 14856
 Exp. 12/31/2024

DESIGNED: JAL
 CHECKED: CMK
 MAY 2023
 71485.000
 SHEET D03
 SHEET 13 OF 173

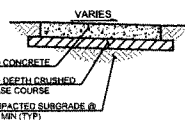


NOTE:

1. CONTRACTOR SHALL BACKFILL AND COMPACT TRENCH WITH CLAY.
2. NO STONE SHALL BE USED IN THE BOTTOM OF THE TRENCH ALONG THE LENGTH OF THE DAM.
3. CLAY SHALL BE FREE OF STONE, GRAVEL, AND OTHER DEBRIS.
4. NO JOINTS SHALL BE COVERED BY THE TRENCH DAM.
5. MATERIAL SHALL BE WELL COMPACTED. USE MAXIMUM 6\"/>

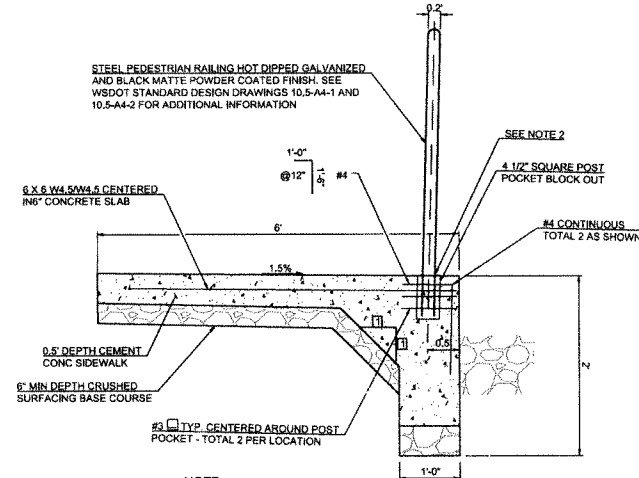
PERFORATED PIPE SECTION DETAIL

CLAY DAM PLAN VIEW DETAIL



CONCRETE DRIVEWAY APPROACH TYPICAL SECTION

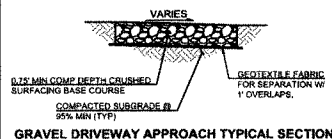
STEEL PEDESTRIAN RAILING HOT DIPPED GALVANIZED AND BLACK MATTE POWDER COATED FINISH. SEE WSDOT STANDARD DESIGN DRAWINGS 10.5-A4-1 AND 10.5-A4-2 FOR ADDITIONAL INFORMATION



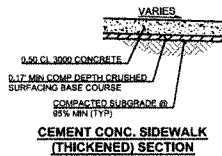
NOTE:

1. USE 2000 PSI MINIMUM STRENGTH LOW SHRINK GROUT TO FILL POST POCKETS. UNUSED POCKETS SHALL ALSO BE FILLED WITH THE SAME GROUT MATERIAL.
2. PROVIDE 1/4\"/>

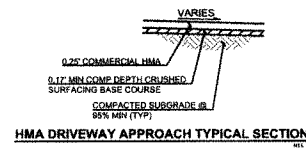
THICKENED EDGE SIDEWALK WITH PEDESTRIAN RAILING



GRAVEL DRIVEWAY APPROACH TYPICAL SECTION



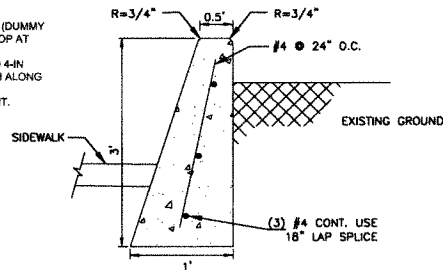
CEMENT CONC. SIDEWALK (THICKENED) SECTION



HMA DRIVEWAY APPROACH TYPICAL SECTION

NOTES:

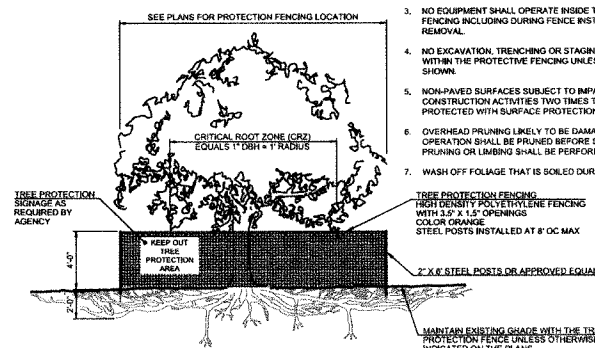
1. PROVIDE A 3/4\"/>



CURB WALL DETAIL

NOTES:

1. ALL TREE PROTECTION MEASURES SHALL FOLLOW THE LATEST VERSION OF ANSI A300 STANDARDS.
2. SEE PLANS OR SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
3. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
4. NO EXCAVATION, TRENCHING OR STAGING SHALL BE ALLOWED WITHIN THE PROTECTIVE FENCING UNLESS OTHERWISE SHOWN.
5. NON-PAVED SURFACES SUBJECT TO IMPACT (COMPACTION) BY CONSTRUCTION ACTIVITIES TWO TIMES THE CRZ SHALL BE PROTECTED WITH SURFACE PROTECTION MEASURES.
6. OVERHEAD PRUNING LIKELY TO BE DAMAGED BY EQUIPMENT OPERATION SHALL BE PRUNED BEFORE START OF WORK. ANY PRUNING OR LIMBING SHALL BE PERFORMED BY AN ARBORIST.
7. WASH OFF FOLIAGE THAT IS SOILED DURING CONSTRUCTION



Tree Protection Fencing

PBS Engineering and Construction, LLC
1205 38th Tech Center Drive
Arlington, VA 22202
703.261.1111
www.pbsva.com



MISCELLANEOUS DETAILS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



Know what's below.
Call before you dig.



DESIGNED:
JMB

CHECKED:
CMK

MAY 2023

7:1486.000

SHEET NO

D04

SHEET

14 OF 173

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CADD File Name: 5/11/2023 2:11 PM
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User: JMB Date: 5/11/2023 2:11 PM

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

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1. STORMWATER OUTFALLS SHALL DAYLIGHT ABOVE ORDINARY HIGH WATER WITH ENOUGH ROOM TO DISPERSE FLOWS THROUGH A NATURALIZED CHANNEL PRIOR TO ENTERING BREEZE CREEK.
2. STORMWATER OUTFALLS AND NATURALIZED CHANNELS SHALL AVOID TERMINATING DIRECTLY INTO STREAM CHANNELS TO THE EXTENT POSSIBLE.
3. ROCK DISPERSION SHALL BE DESIGNED AND CONSTRUCTED TO APPEAR TO BLEND IN WITH ADJACENT NATIVE HABITAT AREAS.
4. PRE-VEGETATED MATS SHALL BE A MINIMUM OF 10 FEET IN LENGTH AND INCLUDE NATIVE SPECIES KNOWN TO QUICKLY ESTABLISH, PROVIDE STRONG WEED COMPETITION, AND INTEGRATE WITH RIPARIAN VEGETATION. CONTRACTOR SHALL SUBMIT PRODUCT VENDOR AND PLANT SPECIES FROM APPROVAL.



1. IF NOT INSTALLING IMMEDIATELY, UNROLL AND STAGE IN A SHADED AREA ON SITE. PRE-VEGETATED COIR MUST BE KEPT MOIST AT ALL TIMES.

1. FINAL GRADE SHOULD BE SMOOTH, FREE OF ROCKS, STICKS, AND EXISTING VEGETATION.
2. DECOMPACT, LOOSEN, AND AMEND SOIL AS NEEDED PRIOR TO MAT INSTALLATION.
3. DO NOT INSTALL PRE-VEGETATED COIR MATS ON HARD, COMPACTED SOIL.
4. PRE-VEGETATED COIR MATS MUST HAVE GOOD SOIL CONTACT.
5. A MINIMUM OF 6 INCHES OF FABRIC SHOULD BE LEFT UNVEGETATED ALONG COIR MAT EDGES TO PROVIDE COIR AREA FOR OVERLAPPING AND ALIGNING PRE-VEGETATED MATS. REMOVE ADDITIONAL 6 INCHES OF COIR FROM EDGES OF TOP MAT TO ENSURE CONTINUOUS VEGETATED SURFACE.
6. SECURELY ANCHOR WITH CEDAR STAKES AS NEEDED TO MAINTAIN DIRECT CONTACT WITH SOIL.



A	PRELIMINARY - ISSUED FOR REVIEW				
No.	Revision	Date	By	App	

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BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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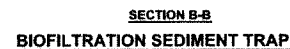
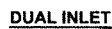
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| A | PRELIMINARY - ISSUED FOR REVIEW | | | | |
| No. | Revision | Date | By | App. | |

RICHARD K. & AMY R. CHASE
219 E 4TH ST
LA CENTER, WA 98629
64081000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER, WA 98629
62650000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER, WA 98629
62651000

CITY OF LA CENTER
214 E 4TH ST
LA CENTER, WA 98629
62724000

CHRISTIAN LATHAM &
COURTNEY B. SAPPINGTON
438 E 5TH ST
LA CENTER, WA 98629
62663000

DEBI HANSEN
514 E 5TH ST
LA CENTER, WA 98629
62864000

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422 E STONECREEK DR
LA CENTER, WA 98629
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414 E 5TH ST
LA CENTER, WA 98629
62692000

CLARK COUNTY LEGACY LANDS
62646000

LA CENTER SCHOOL DISTRICT #101
700 E 4TH ST
LA CENTER, WA 98629
62674000

GENERAL NOTES:

1. SEE TREE REMOVAL PLAN SHEETS TP01-TP06 FOR TREE PROTECTION AND REMOVAL INFORMATION.
2. PAVEMENTS AND CURBS WITHIN ROADWAY/BRIDGE CONSTRUCTION ON PRISM SHALL BE REMOVED THROUGH ROADWAY EXCAVATION. PAVEMENTS TO BE REMOVED OUTSIDE OF THE ROADWAY CONSTRUCTION WILL BE PAID UNDER REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

CONSTRUCTION NOTES:

1. PROTECT EXISTING UTILITY.
2. ABANDON EXISTING UTILITY.
3. REMOVE EXISTING UTILITY.
4. EXISTING UTILITY TO BE REMOVED/RELOCATED BY OTHERS.
5. PROTECT (P) OR REMOVED (RM) EXISTING CONCRETE CURB AND SIDEWALK.
6. ADJUST MANHOLE OR CATCH BASIN TO FINISHED GRADE.
7. ADJUST VALVE BOX TO FINISHED GRADE.
8. REMOVE EXISTING CATCH BASIN.
9. REMOVE EXISTING MANHOLE.
10. SEE SIGNING AND STRIPING PLAN FOR PROTECT/REMOVE/RELOCATE INFORMATION.
11. EXISTING POLE TO BE REMOVED BY OTHERS.
12. EXISTING UTILITY POLE TO BE ADJUSTED BY OTHERS.
13. REMOVE (RM), PROTECT (P), OR RESET A NEW FOUNDATION (RE) FOR EXISTING UTILITY POLE.
14. REMOVE (RM), PROTECT (P), OR REMOVE AND RESET (RMRE) EXISTING FENCE.
15. PROTECT (P) OR ADJUST (ADJ) EXISTING JUNCTION BOX.
16. PROTECT (P) OR RELOCATE (RE) EXISTING MAILBOX.
17. PROTECT EXISTING LIFT STATION INFRASTRUCTURE.
18. PROTECT (P) OR ADJUST (ADJ) EXISTING WATER METER.
19. REMOVE EXISTING GUARDRAIL.
20. SEE WATER AND SANITARY PLAN SHEETS USW01-USW06 FOR ABANDON, REMOVAL, OR RELOCATION.
21. PROTECT EXISTING WALL.
22. REMOVE EXISTING HANDRAIL.
23. REMOVE EXISTING WALL, EXTENTS SHOWN ON PLAN.
24. ADJUST EXISTING FIRE HYDRANT AND ASSEMBLY.
25. PROTECT EXISTING STAIRS.
26. PROTECT/DO NO DISTURB (P) OR ADJUST (ADJ) EXISTING MONUMENT. MONUMENT DESTRUCTION PERMITS WILL BE NEEDED FOR MONUMENTS LABELED FOR ADJUSTMENT.
27. EXISTING POLE TO BE RELOCATED BY OTHERS.
28. RESTORATIVE SEEDING FOR TRENCHING IMPACTS. SEE PP01-PP05 FOR INFORMATION.
29. ADJUST EXISTING BLOCK WALL TO FINISHED GRADE.

SITE PREP - ABBREVIATION LEGEND

- (GAS) NORTHWEST NATURAL GAS
(COMM) COMMUNICATION CONDUIT/STRUCTURE
(ELEC) CPU ELECTRIC
(WTR) CPU WATER MAIN
(SD) CITY OF LA CENTER STORM WATER
(SS) CITY OF LA CENTER SANITARY SEWER
(PED) PEDESTAL
(MH) MANHOLE
(IRR) IRRIGATION
(TRANS) TRANSFORMER

BID SET

SITE PREPARATION FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

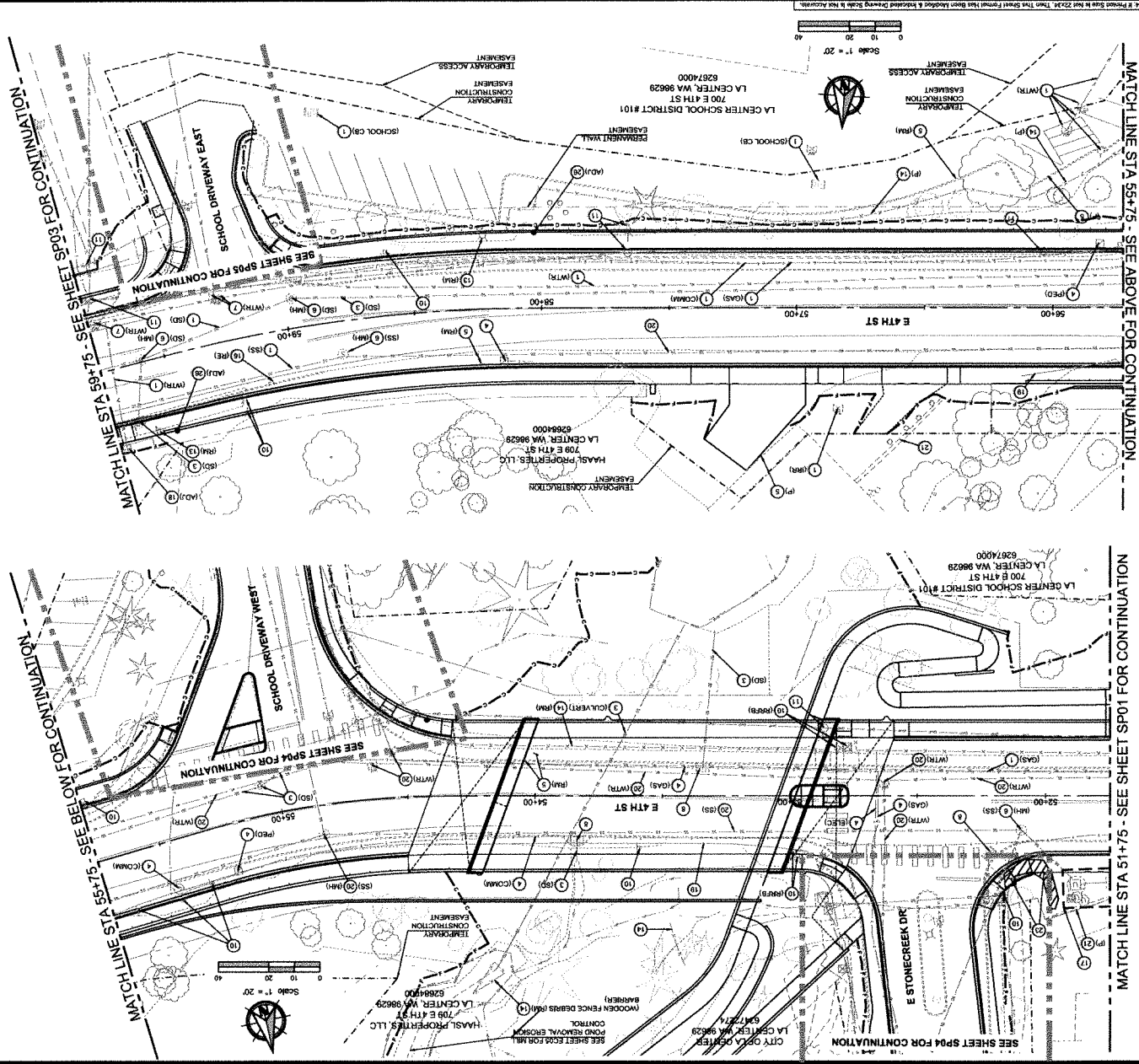
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CMK
MAY 2023
7:48:00

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SP01

SHEET 17 of 173



GENERAL NOTES:

CONSTRUCTION NOTES:

1. SEE TREE REMOVAL PLAN SHEETS TPD-17-006 FOR TREE PROTECTION AND REMOVAL INFORMATION.
2. PLANTMENTS AND CURBS WITHIN ROADWAY/BRIDGE CONSTRUCTION ON PMSM SHALL BE REMOVED THROUGH ROADWAY EXCAVATION. PLANTMENTS TO BE REMOVED OUTSIDE OF THE ROADWAY CONSTRUCTION WILL BE PAID UNDER REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

CONSTRUCTION NOTES:

- 1 PROTECT EXISTING UTILITY.
- 2 ABANDON EXISTING UTILITY.
- 3 REMOVE EXISTING UTILITY.
- 4 EXISTING UTILITY TO BE REMOVED/RELOCATED BY OTHERS.
- 5 PROTECT (P) OR REMOVE (RM) EXISTING CONCRETE CURB AND SIDEWALK.
- 6 EXISTING MANHOLE OR CATCH BASIN TO FINISHED GRADE.
- 7 REMOVE VALVE BOX TO FINISHED GRADE.
- 8 REMOVE EXISTING CATCH BASIN.
- 9 REMOVE EXISTING MANHOLE.

- 10 SET SIGNS AND STRIPPING MATERIAL FOR PROTECT/ REMOVE/ RELOCATE IN-PART FOR PROTECT/
- 11 EXISTING POLE TO BE REMOVED BY OTHERS
- 12 EXISTING UTILITY POLE TO BE ADJUSTED BY OTHERS
- 13 REMOVE LIGHT PROTECT P.O. OR RESET A NEW
- 14 REMOVE LIGHT PROTECT P.O. OR REMOVE AND RESET
- 15 (REMOVE) EXISTING FENCE.
- 16 BOX
- 17 PROTECT (P) OR ADJUST (AD) EXISTING JUNCTION
- 18 PROTECT (P) OR RELOCATE (RE) EXISTING MANHOLE BOX
- 19 PROTECT EXISTING LIGHT STATION INFRASTRUCTURE
- 20 PROTECT (P) OR ADJUST (AD) EXISTING WATER METER
- 21 REMOVE EXISTING GUARDRAIL.

- | SITE PREP - ABBREVIATION LEGEND | |
|---------------------------------|---|
| 20 | SEE WATER AND SANITARY PLAN SHEETS
USING US-1006 FOR ABANDON, REMOVAL OR
RELOCATION. |
| 21 | PROTECT EXISTING WALL. |
| 22 | REMOVE EXISTING HANDRAIL. |
| 23 | REMOVE EXISTING WALL, EXTERIORS SHOWN ON PLAN. |
| 24 | ADJUST EXISTING FIRE HYDRANT AND ASSEMBLY. |
| 25 | PROTECT EXISTING STAIRS. |
| 26 | PROTECT DO NOT ON DISTURB (P) OR ADJUST (ADJ)
EXISTING MONUMENT, MONUMENT DESTRUCTION
PERMITS WILL BE NEEDED FOR MONUMENTS LABELED
FOR ADJUSTMENT. |
| 27 | EXISTING POLE TO BE RELOCATED BY OTHERS. |
| 28 | RESTORATION SEEDING FOR TRENCING IMPACTS, SEE
PP1-PP05 FOR INFORMATION. |
| 29 | ADJUST EXISTING BLOCK WALL TO FINISHED GRADE. |

333

SITE PREPARATION FOR:

BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PHS Engineering and Environmental LLC
1225 SE Tech Center Drive
Suite 140
Vancouver, WA 98683
360.695.3430
phsusa.com

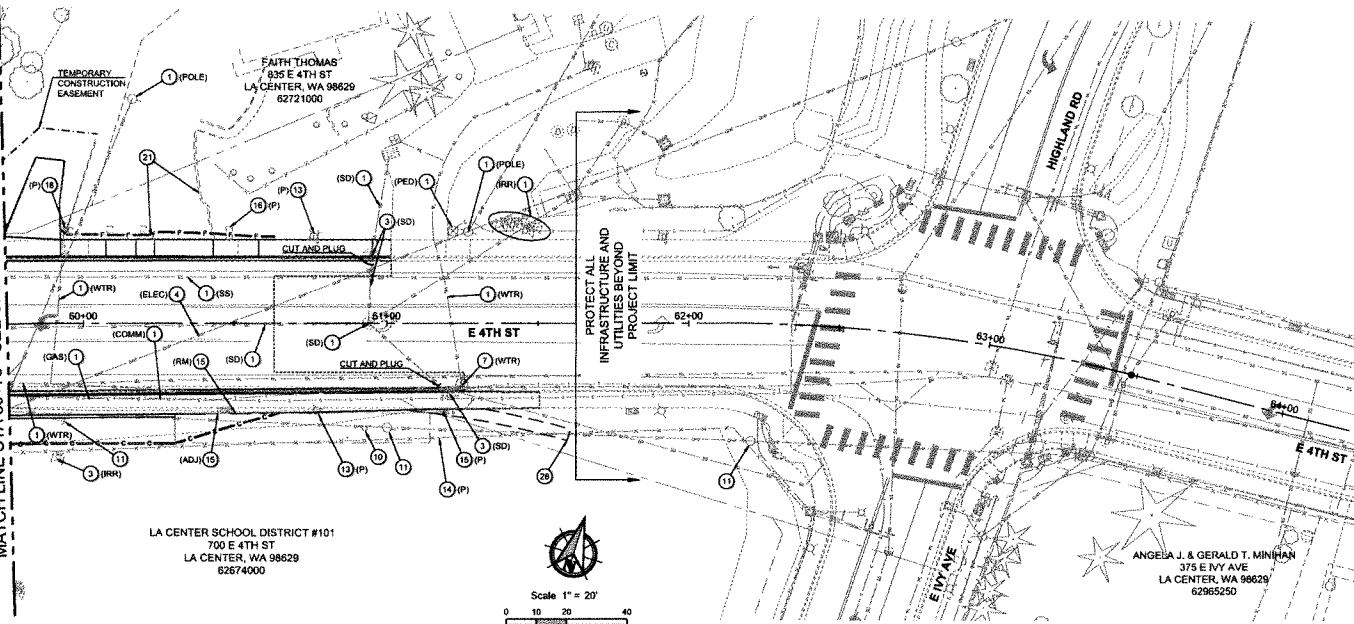


DESIGNED: JVS
CHECKED: CTR

SP02
SHEET NO
7/14/86,000
MAY 2025

SHEET 18 OF 173

MATCH LINE STA 59+75 - SEE SHEET SP02 FOR CONTINUATION



GENERAL NOTES:

1. SEE TREE REMOVAL PLAN SHEETS TP01-TP06 FOR TREE PROTECTION AND REMOVAL INFORMATION.
2. PAVEMENTS AND CURBS WITHIN ROADWAY BRIDGE CONSTRUCTION OR PRISM SHALL BE REMOVED THROUGH ROADWAY EXCAVATION. PAVEMENTS TO BE REMOVED OUTSIDE OF THE ROADWAY CONSTRUCTION WILL BE PAID UNDER REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

CONSTRUCTION NOTES:

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16. PROTECT (P) OR RELOCATE (RE) EXISTING MAILBOX.
17. PROTECT EXISTING LIFT STATION INFRASTRUCTURE.
18. PROTECT (P) OR ADJUST (ADJ) EXISTING WATER METER.
19. REMOVE EXISTING GUARDRAIL.
20. SEE WATER AND SANITARY PLAN SHEETS USWB1-USWB6 FOR ABANDON, REMOVAL, OR RELOCATION.
21. PROTECT EXISTING WALL.
22. REMOVE EXISTING HANDRAIL.
23. REMOVE EXISTING WALL, EXTENTS SHOWN ON PLAN.
24. ADJUST EXISTING FIRE HYDRANT AND ASSEMBLY.
25. PROTECT EXISTING STAIRS.
26. PROTECT/DO NO DISTURB (P) OR ADJUST (ADJ) EXISTING MONUMENT. MONUMENT DESTRUCTION PERMITS WILL BE NEEDED FOR MONUMENTS LABELED FOR ADJUSTMENT.
27. EXISTING POLE TO BE RELOCATED BY OTHERS.
28. RESTORATIVE SEEDING FOR TRENCHING IMPACTS. SEE PP01-PP05 FOR INFORMATION.
29. ADJUST EXISTING BLOCK WALL TO FINISHED GRADE.

SITE PREP - ABBREVIATION LEGEND

- (GAS) NORTHWEST NATURAL GAS
(COMM) COMMUNICATION CONDUIT/STRUCTURE
(ELEC) CPU ELECTRIC
(WTR) CPU WATER MAIN
(SD) CITY OF LA CENTER STORM WATER
(SS) CITY OF LA CENTER SANITARY SEWER
(PED) PEDESTAL
(MH) MANHOLE
(IRR) IRRIGATION
(TRANS) TRANSFORMER

BID SET

SITE PREPARATION FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: JAS

CHECKED: CMK

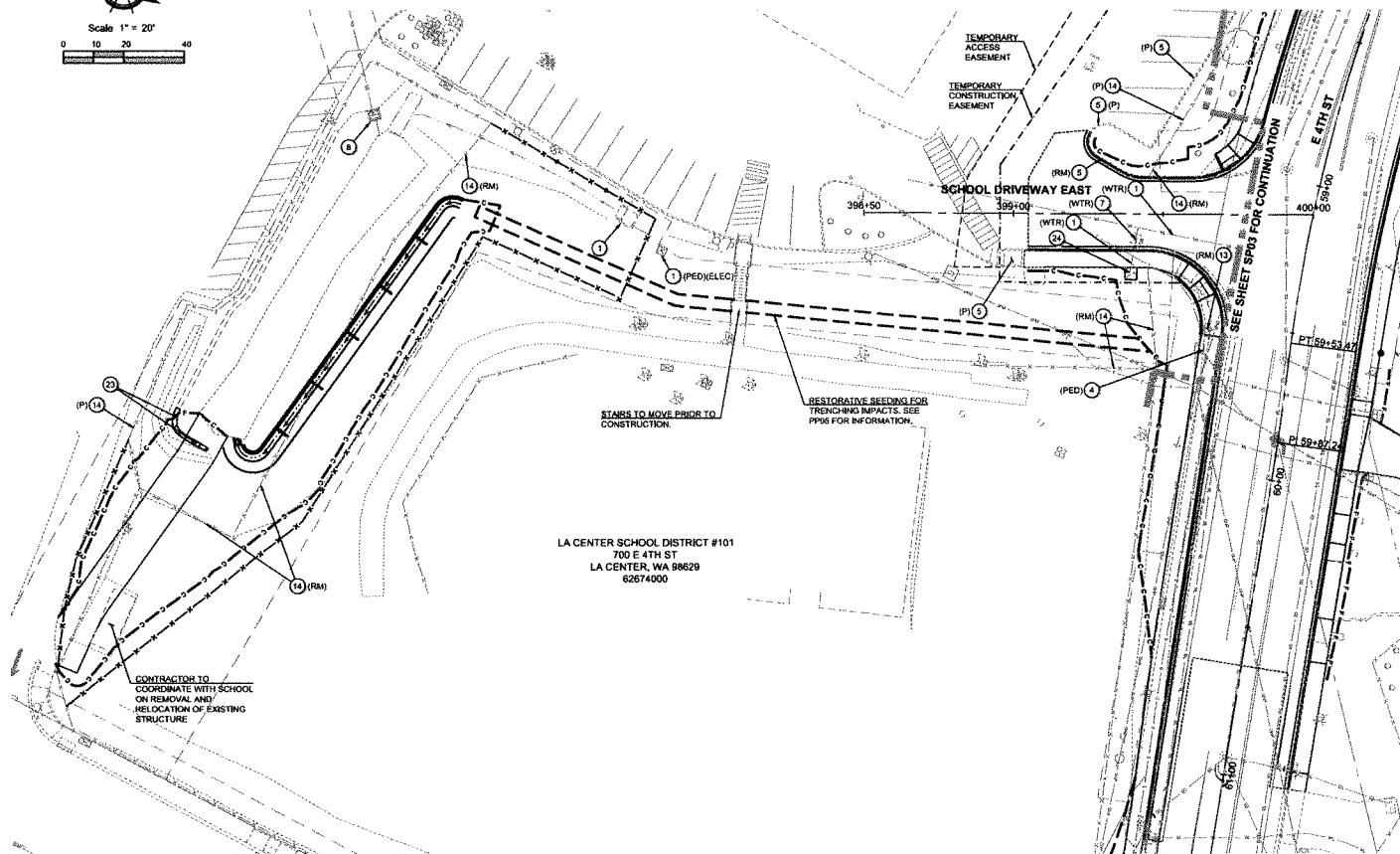
MAY 2025

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SHEET ID:

SP03

SHEET 19 of 173



CONTRACTOR TO
COORDINATE WITH SCHOOL
ON REMOVAL AND
RELOCATION OF EXISTING
STRUCTURE

SCHOOL DRIVEWAY EAST

SEE SHEET SP03 FOR CONTINUATION

1. SEE TREE REMOVAL PLAN SHEETS TP01-TP06 FOR TREE PROTECTION AND REMOVAL INFORMATION.
2. PAVEMENTS AND CURBS WITHIN ROADWAY/BRIDGE CONSTRUCTION ON PRISM SHALL BE REMOVED THROUGH ROADWAY EXCAVATION. PAVEMENTS TO BE REMOVED OUTSIDE OF THE ROADWAY CONSTRUCTION WILL BE PAID UNDER REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

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- ⑨ REMOVE EXISTING MANHOLE.
- ⑩ SEE SIGNING AND STRIPING PLAN FOR PROTECT/ REMOVE/ RELOCATE INFORMATION.
- ⑪ EXISTING POLE TO BE REMOVED BY OTHERS.
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- ⑬ REMOVE (RM), PROTECT (P), OR RESET A NEW FOUNDATION (RE) FOR EXISTING UTILITY POLE.
- ⑭ REMOVE (RM), PROTECT (P), OR REMOVE AND RESET (RMRE) EXISTING FENCE.
- ⑮ PROTECT (P) OR ADJUST (ADJ) EXISTING JUNCTION BOX.
- ⑯ PROTECT (P) OR RELOCATE (RE) EXISTING MAILBOX.
- ⑰ PROTECT EXISTING LIFT STATION INFRASTRUCTURE.
- ⑱ PROTECT (P) OR ADJUST (ADJ) EXISTING WATER METER.
- ⑲ REMOVE EXISTING GUARDRAIL.
- ⑳ SEE WATER AND SANITARY PLAN SHEETS USW01-USW06 FOR ABANDON, REMOVAL, OR RELOCATION.
- ㉑ PROTECT EXISTING WALL.
- ㉒ REMOVE EXISTING HANDRAIL.
- ㉓ REMOVE EXISTING WALL. EXTENTS SHOWN ON PLAN.
- ㉔ ADJUST EXISTING FIRE HYDRANT AND ASSEMBLY.
- ㉕ PROTECT EXISTING STAIRS.
- ㉖ PROTECT/ DO NOT DISTURB (PN) OR ADJUST (ADJ) EXISTING MONUMENT. MONUMENT DESTRUCTION PERMITS WILL BE NEEDED FOR MONUMENTS LABELED FOR ADJUSTMENT.
- ㉗ EXISTING POLE TO BE RELOCATED BY OTHERS.
- ㉘ RESTORATIVE SEEDING FOR TRENCHING IMPACTS. SEE PP01-PP05 FOR INFORMATION.
- ㉙ ADJUST EXISTING BLOCK WALL TO FINISHED GRADE.

(GAS) NORTHWEST NATURAL GAS
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(PED) PEDESTAL
(MH) MANHOLE
(IRR) IRRIGATION
(TRANS) TRANSFORMER

PBS Engineering and
Environmental LLC
11275 SE Tech Center Drive
Suite 140
Vancouver, WA 98683
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business.com



**SITE PREPARATION FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING**
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
JAB

CHECKED:
CMK

MAY 2025
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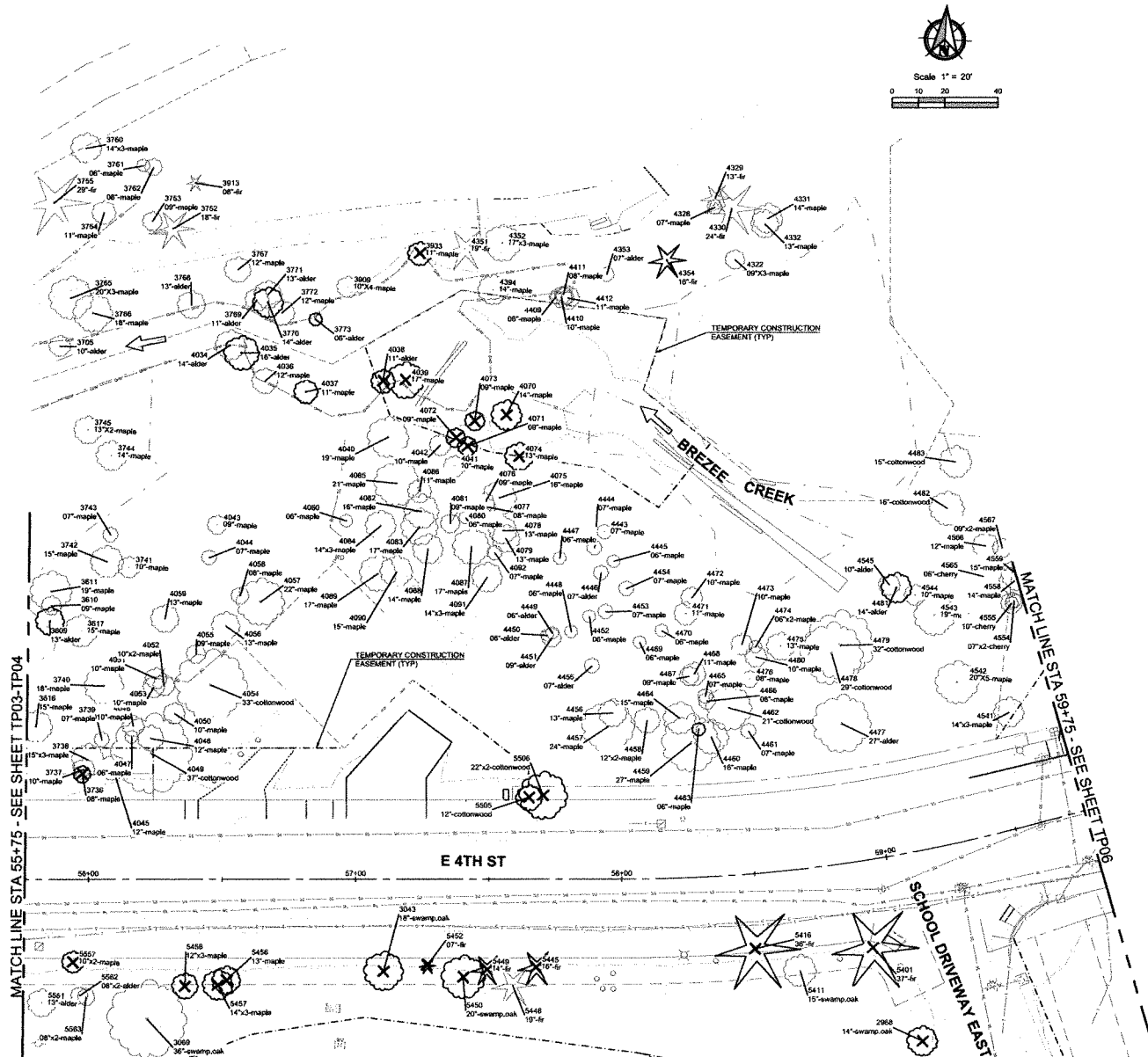
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SP04

SHEET 21 OF 173

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TREE REMOVAL TABLE			
TREE ID	DBH	SPECIES	NOTES
3737	10"	MAPLE	①
3738	8"	MAPLE	①
3833	11"	MAPLE	①
5505	12"	COTTONWOOD	①
5506	22" X2	COTTONWOOD	①
5557	10" X2	MAPLE	①
5458	12" X3	MAPLE	①
5456	13"	MAPLE	①
5457	14" X3	MAPLE	①
3043	18"	SWAMP OAK	①
5452	7"	FIR	①
5450	20"	SWAMP OAK	①
5445	16"	FIR	①
5449	14"	FIR	①
5416	36"	FIR	①
5401	37"	FIR	①
2968	14"	SWAMP OAK	①
4038	11"	ALDER	①
4039	17"	MAPLE	①
4072	9"	MAPLE	①
4071	9"	MAPLE	①
7074	13"	MAPLE	①

CONSTRUCTION NOTES	
SYM	TREE REMOVAL WORK
①	REMOVE TREE AND STUMP
②	REMOVE TREE, LEAVE STUMP
③	RETAIN FALLEN LOG AND ROOTWAD FOR LARGE WOODY DEBRIS (LWD)
④	INSTALL TREE PROTECTION FENCING, SEE SHEET 004.

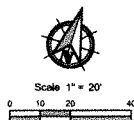
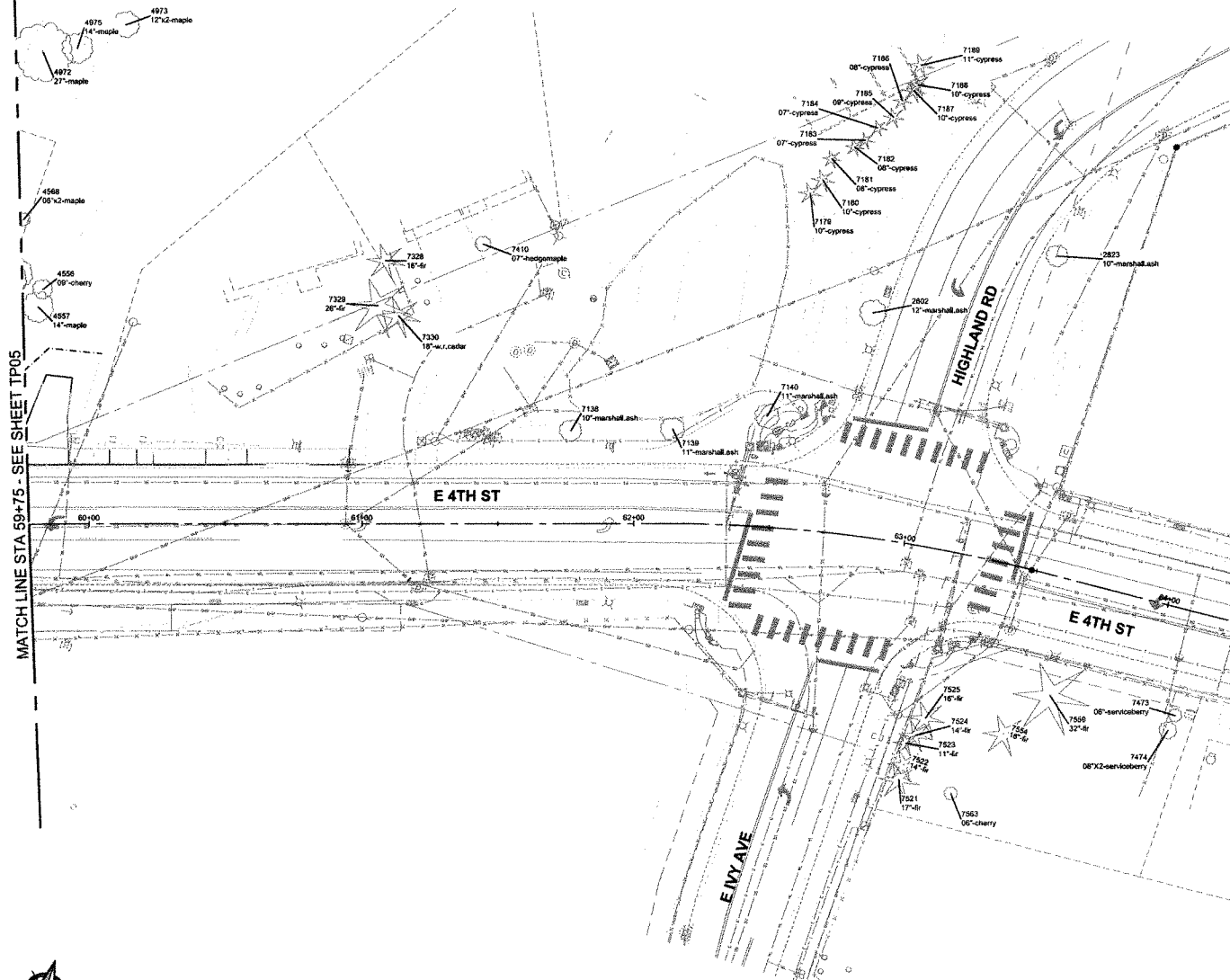
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TREE REMOVAL PLAN FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: JAO
CHECKED: PW
MAY 2025
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SHEET 26 OF 173

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CONSTRUCTION NOTES	
SYM	TREE REMOVAL WORK
①	REMOVE TREE AND STUMP
②	REMOVE TREE, LEAVE STUMP
③	RETAIN FALLEN LOG AND ROOTWAD FOR LARGE WOODY DEBRIS (LWD)
④	INSTALL TREE PROTECTION FENCING, SEE SHEET D04.

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TREE REMOVAL PLAN FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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SHEET 27 OF 173

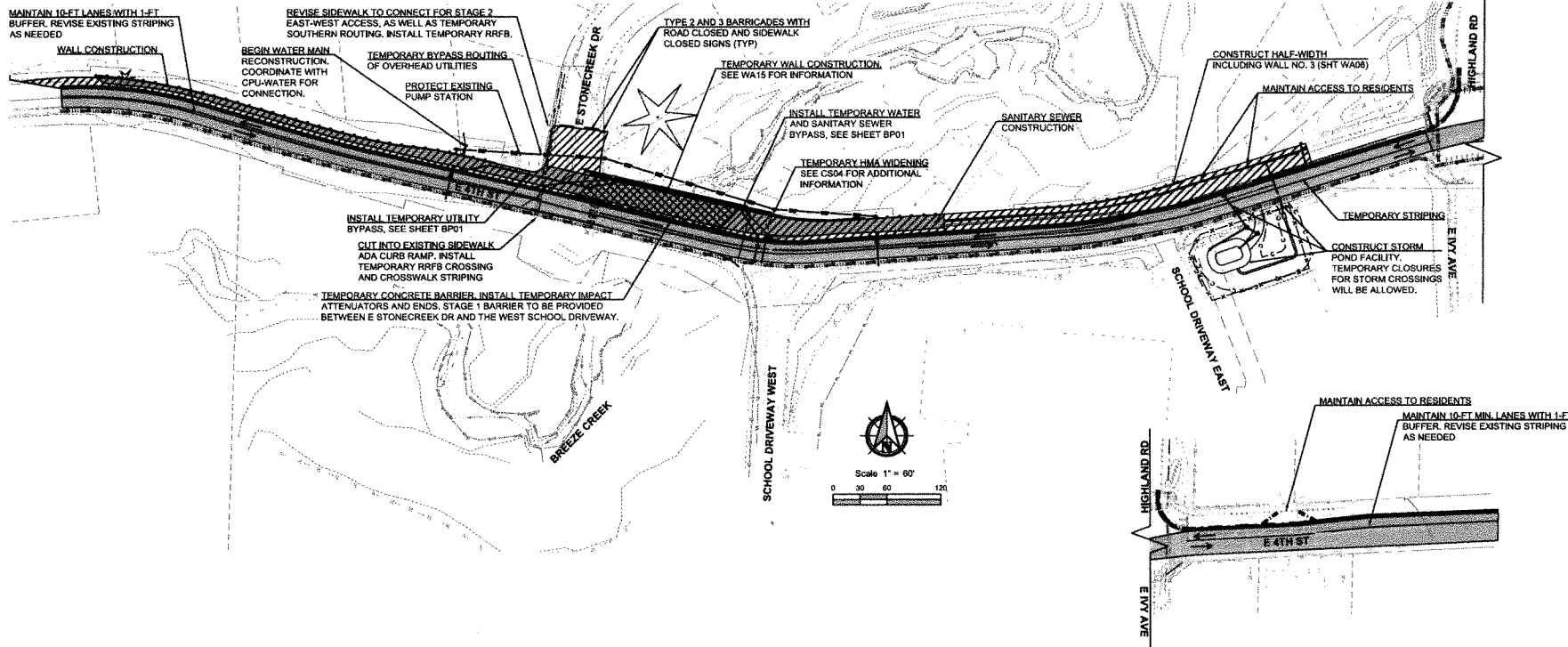
GENERAL NOTES:

- 1) 11:1 TAPER WHERE POSTED SPEED IS 25 MPH THROUGH STAGED CONSTRUCTION ZONES.
- 2) CONSTRUCTION ZONE SHALL BE POSTED FOR 25 MPH.
- 3) ALL CONSTRUCTION STAGING SHALL ADHERE TO WSDOT STANDARD PLANS.
- 4) EXISTING STRIPING SHALL BE REMOVED AT COMMENCEMENT OF STAGE 1 AND TEMPORARY LONG TERM STRIPING SHALL BE ADDED AS SHOWN IN PLAN BELOW.
- 5) CONTRACTOR SHALL MAINTAIN 10' MIN. TRAVEL LANES WITH 1' BUFFERS DURING CONSTRUCTION UNLESS NOTED OTHERWISE DURING CONSTRUCTION.

- 6) WHERE CONTRACTOR BLENDS EXISTING ROAD GRADES WITH PROPOSED ROAD GRADES, THE TRANSITION SHALL BE NO STEEPER THAN 5-10%.
- 7) THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DRAINAGE SYSTEM AS NECESSARY TO AVOID ANY PONDING CREATED BY BLENDING EXISTING, TEMPORARY GRAVEL AND 11) PAVEMENT AREAS, AND PROPOSED GRADES DURING CONSTRUCTION.
- 8) FOR CLASS A SIGNING, SEE CS04.
- 9) EXISTING PEDESTRIAN FACILITIES TO BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 10) WHEN CHANNELIZATION IS USED TO DELINEATE A PEDESTRIAN PATHWAY, A CONTINUOUS DETECTABLE

- EDGING SHALL BE PROVIDED THROUGHOUT THE LENGTH OF 14) THE FACILITY SUCH THAT PEDESTRIANS USING A CANE CAN FOLLOW IT. EDGING SHALL PROTRUDE AT LEAST 6-IN ABOVE THE SURFACE OF THE PATHWAY WITH THE BOTTOM EDGING 15) A MAXIMUM OF 2.5-IN ABOVE THE SURFACE.
- 12) LIMITS OF WORK SHALL BE TO THE MAXIMUM EXTENT FEASIBLE FOR THE AREAS SHOWN WHILE NOT IMPACTING THE EXISTING ROADWAY, UNLESS NOTED OTHERWISE.
- 13) ALL PAVING COMPLETED SHALL INCLUDE BASE AND LEVELING COURSE ONLY. WEARING COURSE TO BE COMPLETED AT END OF STAGE 3.

- CONTRACTOR TO PROVIDE LONG TERM TRAFFIC CONTROL AND PEDESTRIAN ROUTING PLANS TO CITY ENGINEER NO LESS THAN 2 WEEKS PRIOR TO TRAFFIC SHIFTS.
- PEDESTRIAN ROUTING PROVIDED IS PRELIMINARY.
- CONTRACTOR TO PROVIDE FINAL ACCESSIBLE PEDESTRIAN CHANNELIZATION PLAN TO CITY FOR REVIEW, COMMENT AND APPROVAL PRIOR TO IMPLEMENTATION. 5-FOOT MINIMUM HARD SURFACE ACCESS ON ONE SIDE OF THE ROADWAY SHALL BE MAINTAINED AT ALL TIMES.
- 16) ACCESS TO RESIDENTS SHALL BE MAINTAINED FOR THOSE ALONG E 4TH STREET.



LEGEND	
	CONCRETE BARRIER
	REFLECTIVE CHANNELIZATION DEVICE
	PEDESTRIAN ACCESS ROUTE
	WORK ZONE AREA
	TEMPORARY HMA
	TRAFFIC TRAVEL ZONE
	TRAFFIC FLOW DIRECTION

STAGING CONSTRUCTION SUMMARY

CONSTRUCT ALL IMPROVEMENTS IN WORK ZONE AS SHOWN ABOVE EXCEPT LANDSCAPE, STRIPING, AND FINAL LIFT OF HMA UNLESS OTHERWISE NOTED. WORK SHALL TYPICALLY INCLUDE THE FOLLOWING:

- POTHOLE EXISTING UTILITIES TO DETERMINE DEPTH. NOTIFY ENGINEER IF ACTUAL DEPTHS VARY FROM PLANS.
- INSTALL EROSION CONTROL MEASURES ACROSS ALL OUTER PROJECT LIMITS INCLUDING CONSTRUCTION ENTRANCES AND INLET PROTECTION AS FIRST ORDER OF WORK.
- INSTALL TREE PROTECTION FENCING AND REMOVE ALL TREES PER TREE REMOVAL PLAN AS SECOND ORDER OF WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. TREES TO BE REMOVED ARE FOUND ON TP01-####
- INSTALL ALL REQUIRED CLASS A SIGNAGE AND TEMPORARY PEDESTRIAN CROSSINGS.
- SHIFT ALL TRAFFIC TO SOUTH SIDE OF E 4TH STREET, PROVIDE SIGNAGE FOR BICYCLES TO MERGE WITH TRAFFIC.
- INSTALL TEMPORARY CONCRETE BARRIERS WHERE GRADE DIFFERENCES REQUIRE.
- CLOSE ACCESS TO E STONECREEK DRIVE.
- WORK WITH PRIVATE UTILITIES ON COMMENCEMENT OR REMOVAL OF OVERHEAD UTILITIES AND ANY TEMPORARY RELOCATIONS REQUIRED.
- GRADE NORTH SIDE OF PROJECT WITH GRAVEL BASE AND TEMPORARY HMA. CONSTRUCT WALL NO. 1, AND 3. PERMANENT SIDEWALK TO BE CONSTRUCTED STARTING APPROXIMATELY STA 57+00 TO STA 61+00 TO PROVIDE FOR VEHICLE ROUTING IN STAGE 2.
- CONSTRUCT TEMPORARY WALL. SEE SHEET WA15 FOR ADDITIONAL INFORMATION.
- INSTALL WATER MAIN & SANITARY SEWER BYPASS. SEE SHEET BP01 FOR ADDITIONAL INFORMATION. COORDINATE WITH NW NATURAL ON TEMPORARY GAS RELOCATION AND ATTACHMENT TO TEMPORARY WALL.
- INSTALL SANITARY SEWER MAIN (APPROX 400 LF) EAST OF BRIDGE.
- INSTALL CATCH BASINS AND STORM LATERALS ON NORTH SIDE OF PROJECT WHERE CURB AND SIDEWALK TO BE CONSTRUCTED.
- CONSTRUCT EAST DETENTION POND FACILITY AND REQUIRED STORM TO PROVIDE DRAINAGE OF SYSTEM.
- CONSTRUCT TEMPORARY DRAINAGE AT STONECREEK AND E 4TH STREET LOW POINT.
- BEGIN

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Environmental LLC
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Vancouver, WA 98603
phone: 360.575.8888
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CONSTRUCTION STAGING - STAGE 1 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



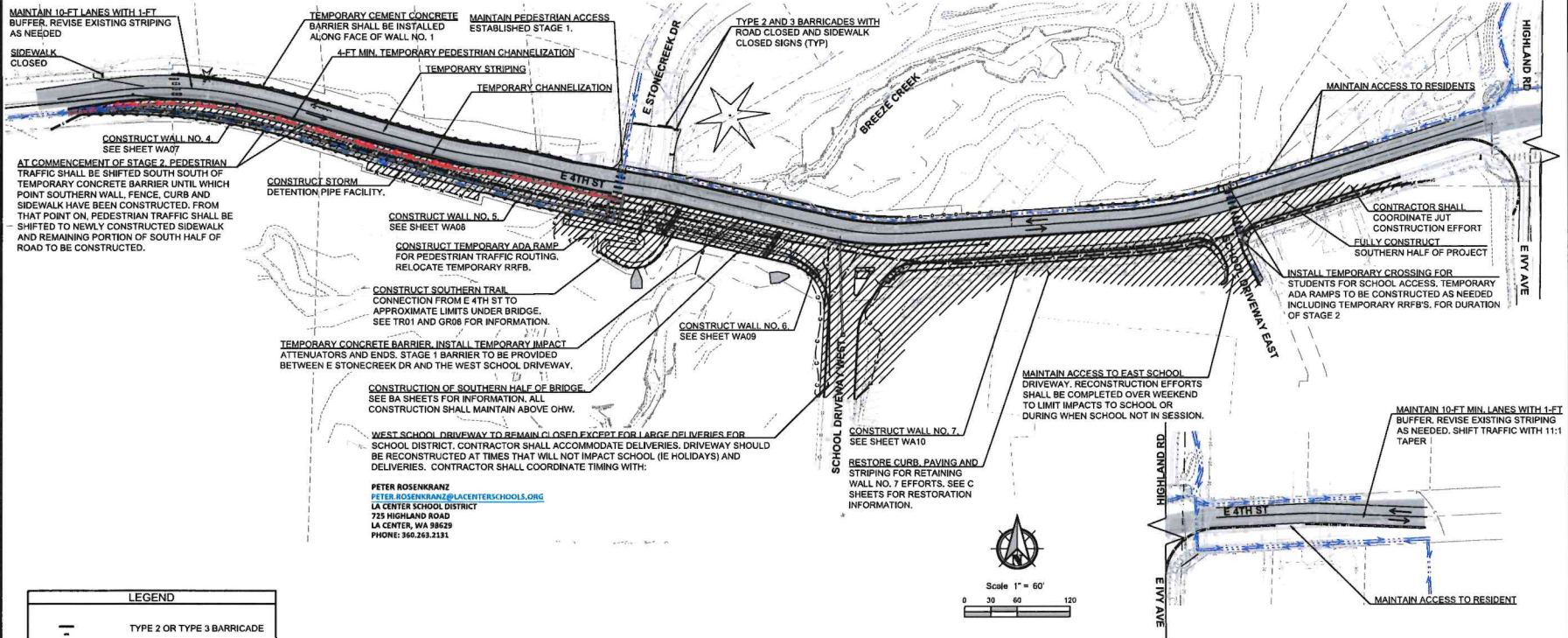
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CHECKED:
CUK
MAY 2025
1486.000

SHEET ID
CS01

SHEET 28 OF 173

GENERAL NOTES:

- 1) ***11:1 TAPER WHERE POSTED SPEED IS 25 MPH THROUGH STAGED CONSTRUCTION ZONES.
- 2) CONSTRUCTION ZONE SHALL BE POSTED FOR 25 MPH.
- 3) ALL CONSTRUCTION STAGING SHALL ADHERE TO WSDOT STANDARD PLANS.
- 4) TEMPORARY LONG TERM STRIPING SHALL BE REVISED FOR STAGE 2 TO SHIFT TRAFFIC TO NORTH SIDE OF E 4TH STREET/ADDED AS SHOWN IN PLAN BELOW.
- 5) CONTRACTOR SHALL MAINTAIN 11' MIN. TRAVEL LANES DURING CONSTRUCTION UNLESS NOTED OTHERWISE DURING CONSTRUCTION.
- 6) WHERE CONTRACTOR BLENDS EXISTING ROAD GRADES WITH PROPOSED ROAD GRADES, THE TRANSITION SHALL BE NO STEEPER THAN 5-10%.
- 7) THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DRAINAGE SYSTEM AS NECESSARY TO AVOID ANY PONDING CREATED BY BLENDING EXISTING, TEMPORARY GRAVEL AREAS, AND PROPOSED GRADES DURING CONSTRUCTION.
- 8) FOR CLASS A SIGNING, SEE CS04.
- 9) EXISTING PEDESTRIAN FACILITIES TO BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 10) ALL ADJACENT ACCESSES TO BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE NOTED.
- 11) LIMITS OF WORK SHALL BE TO THE MAXIMUM EXTENT FEASIBLE FOR THE AREAS SHOWN WHILE NOT IMPACTING THE EXISTING ROADWAY, UNLESS NOTED OTHERWISE.
- 12) ALL PAVING COMPLETED SHALL INCLUDE BASE AND LEVELING COURSE ONLY.
- 13) CONTRACTOR TO PROVIDE LONG TERM TRAFFIC CONTROL AND PEDESTRIAN ROUTING PLANS TO WSDOT & CITY ENGINEER NO SOONER THAN 2 WEEKS PRIOR TO TRAFFIC SHIFTS.
- 14) WHEN CHANNELIZATION IS USED TO DELINEATE A PEDESTRIAN PATHWAY, A CONTINUOUS DETECTABLE EDGING SHALL BE PROVIDED THROUGHOUT THE LENGTH OF THE FACILITY SUCH THAT PEDESTRIANS USING A CANE CAN FOLLOW IT. EDGING SHALL PROTRUDE AT LEAST 8-IN ABOVE THE SURFACE OF THE PATHWAY WITH THE BOTTOM EDGING A MAXIMUM OF 2.5-IN ABOVE THE SURFACE.
- 15) PEDESTRIAN ROUTING PROVIDED IS PRELIMINARY. CONTRACTOR TO PROVIDE FINAL ACCESSIBLE PEDESTRIAN CHANNELIZATION PLAN TO CITY FOR REVIEW, COMMENT AND APPROVAL PRIOR TO IMPLEMENTATION. 5-FOOT MINIMUM HARD SURFACE ACCESS ON ONE SIDE OF THE ROADWAY SHALL BE MAINTAINED AT ALL TIMES, UNLESS NOTED OTHERWISE.



LEGEND	
	TYPE 2 OR TYPE 3 BARRICADE
	PEDESTRIAN CHANNELIZATION BARRIER
	CONCRETE BARRIER
	REFLECTIVE CHANNELIZATION DEVICE
	PEDESTRIAN ACCESS ROUTE
	WORK ZONE AREA
	TRAFFIC TRAVEL ZONE
	TRAFFIC FLOW DIRECTION

STAGING CONSTRUCTION SUMMARY

CONSTRUCT ALL IMPROVEMENTS IN WORK ZONE AS SHOWN ABOVE EXCEPT LANDSCAPE, STRIPING, AND FINAL LIFT OF HMA UNLESS OTHERWISE NOTED. WORK SHALL TYPICALLY INCLUDE THE FOLLOWING:

- BUILD SOUTHERN 32' OF BRIDGE (STARTING FROM RIGHT-OF-WAY)
- WORK WITH NW NATURAL FOR CONSTRUCTION AND READJUSTMENT OF MAIN THROUGH BRIDGE
- CONSTRUCT WATER MAIN UP TO BRIDGE, MAINTAIN BYPASS
- CONSTRUCT JOINT UTILITY TRENCH ALONG SOUTH SIDE OF PROJECT AND THROUGH BRIDGE WITH UTILITIES.
- INSTALL CATCH BASINS, MANHOLES, AND STORM MAIN LINES ALONG SOUTH SIDE OF PROJECT WHERE CURB AND SIDEWALK TO BE CONSTRUCTED.
- BUILD SOUTHERN END OF PROJECT FOR PAVEMENT, SIDEWALK, WALLS, CURB ILLUMINATION.
- INSTALL TEMPORARY DISCHARGE OUTFALL TO SOUTH.
- CONSTRUCT STORMWATER DETENTION PIPE FACILITY.
- INSTALL WATER MAIN TRUNK LINE BUT NOT CONNECT. CONNECTION WORK TO BE COMPLETED STAGE 3.
- CONSTRUCT TRAIL CONNECTION ALONG SOUTHERN LIMITS.
- MAINTAIN EAST SCHOOL DRIVEWAY ACCESS. EAST SCHOOL DRIVE TO BE CONSTRUCTED OVER WEEKEND CLOSURE TO MAINTAIN ACCESS FOR SCHOOL DURING WEEK.
- PRIOR TO SHIFT TO STAGE 3 CONSTRUCTION, NIGHT WORK SHALL BE COMPLETED ON WEST SIDE TO ADJUST GRADES FOR STAGE 3 ROUTING. WORK SHALL MAINTAIN WB TRAFFIC TO NORTH AND MOVE EB TRAFFIC NEWLY CONSTRUCTED SOUTH IMPROVEMENTS.

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Vancouver, WA 98663
Phone: 360.575.1234



CONSTRUCTION STAGING - STAGE 2 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



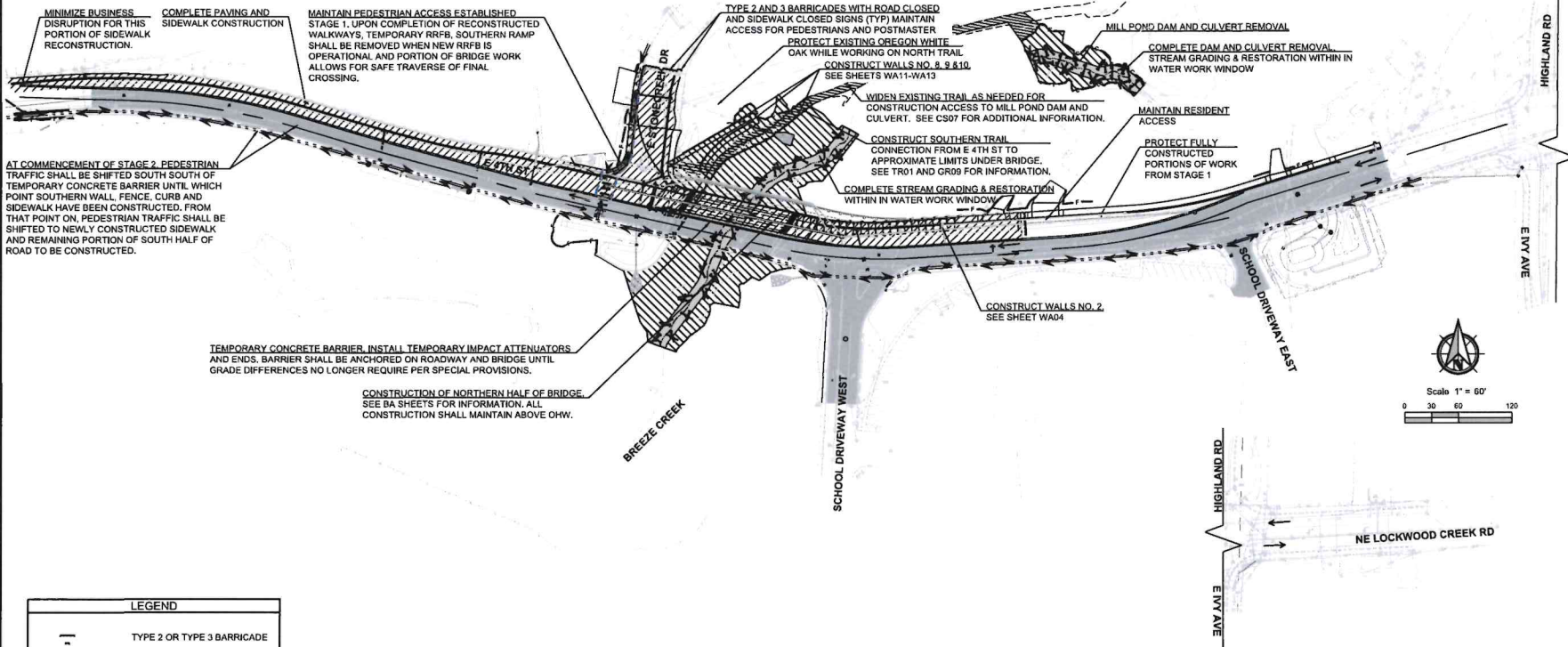
DESIGNED:	JAB
CHECKED:	CMK
	MAY 2025
	11486.000
SHEET ID:	CS02
SHEET	29 of 173

GENERAL NOTES:

- 1) 11:1 TAPER WHERE POSTED SPEED IS 25 MPH THROUGH STAGED CONSTRUCTION ZONES.
- 2) CONSTRUCTION ZONE SHALL BE POSTED FOR 25 MPH.
- 3) ALL CONSTRUCTION STAGING SHALL ADHERE TO WSDOT STANDARD PLANS.
- 4) EXISTING STRIPING SHALL BE REMOVED AT COMMENCEMENT OF STAGE 1 AND TEMPORARY LONG TERM STRIPING SHALL BE ADDED AS SHOWN IN PLAN BELOW.
- 5) CONTRACTOR SHALL MAINTAIN 11' MIN. TRAVEL LANES DURING CONSTRUCTION UNLESS NOTED OTHERWISE DURING CONSTRUCTION.
- 6) WHERE CONTRACTOR BLENDS EXISTING ROAD GRADES WITH PROPOSED ROAD GRADES, THE TRANSITION SHALL BE NO STEEPER THAN 5:10%.
- 7) THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DRAINAGE SYSTEM AS NECESSARY TO AVOID ANY PONDING CREATED BY BLENDING EXISTING, TEMPORARY GRAVEL AREAS, AND PROPOSED GRADES DURING CONSTRUCTION. FOR CLASS A SIGNING, SEE C504.
- 8) EXISTING PEDESTRIAN FACILITIES TO BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 9) WHEN CHANNELIZATION IS USED TO DELINEATE A PEDESTRIAN PATHWAY, A CONTINUOUS DETECTABLE EDGING SHALL BE PROVIDED THROUGHOUT THE LENGTH OF

- 10) THE FACILITY SUCH THAT PEDESTRIANS USING A CANE CAN FOLLOW IT. EDGING SHALL PROTRUDE AT LEAST 6-IN ABOVE THE SURFACE OF THE PATHWAY WITH THE BOTTOM EDGING A MAXIMUM OF 2.5-IN ABOVE THE SURFACE.
- 11) ALL ADJACENT ACCESSES TO BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE NOTED.
- 12) LIMITS OF WORK SHALL BE TO THE MAXIMUM EXTENT FEASIBLE FOR THE AREAS SHOWN WHILE NOT IMPACTING THE EXISTING ROADWAY, UNLESS NOTED OTHERWISE.
- 13) ALL PAVING COMPLETED SHALL INCLUDE BASE AND LEVELING COURSE ONLY.

- 14) CONTRACTOR TO PROVIDE LONG TERM TRAFFIC CONTROL AND PEDESTRIAN ROUTING PLANS TO WSDOT & CITY ENGINEER NO SOONER THAN 2 WEEKS PRIOR TO TRAFFIC SHIFTS.
- 15) PEDESTRIAN ROUTING PROVIDED IS PRELIMINARY. CONTRACTOR TO PROVIDE FINAL ACCESSIBLE PEDESTRIAN CHANNELIZATION PLAN TO CITY FOR REVIEW, COMMENT AND APPROVAL PRIOR TO IMPLEMENTATION. 5-FOOT MINIMUM HARD SURFACE ACCESS ON ONE SIDE OF THE ROADWAY SHALL BE MAINTAINED AT ALL TIMES.



LEGEND	
	TYPE 2 OR TYPE 3 BARRICADE
	PEDESTRIAN CHANNELIZATION BARRIER
	CONCRETE BARRIER
	REFLECTIVE CHANNELIZATION DEVICE
	PEDESTRIAN ACCESS ROUTE
	WORK ZONE AREA
	TRAFFIC TRAVEL ZONE
	TRAFFIC FLOW DIRECTION

STAGING CONSTRUCTION SUMMARY

CONSTRUCT ALL IMPROVEMENTS IN WORK ZONE AS SHOWN ABOVE EXCEPT LANDSCAPE, STRIPING, AND FINAL LIFT OF HMA UNLESS OTHERWISE NOTED. WORK SHALL TYPICALLY INCLUDE THE FOLLOWING:

- SHIFT ALL TRAFFIC TO SOUTH FOR STAGE 3.
- BUILD NORTHERN 28' OF BRIDGE
- COMPLETE CONSTRUCTION OF WATER MAIN AT E STONECREEK DR INTERSECTION, THROUGH BRIDGE AND END CONNECTIONS. REMOVE BYPASS ONCE COMPLETE.
- COMPLETE INSTALLATION OF NEW SANITARY SEWER MAINLINE THROUGH BRIDGE, REMOVE BYPASS ONCE COMPLETE.
- BUILD REMAINING PORTIONS OF NORTH PROJECT INCLUDING STONECREEK. WORK ON STONECREEK SHALL BE COMPLETED IN A WAY TO MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES.
- BUILD NORTHERN HALF OF PROJECT FOR PAVEMENT, SIDEWALK, WALLS, CURB ILLUMINATION AND REMAINING STORM.
- REMOVE TEMPORARY WALL
- COMPLETE FINAL WEST SIDEWALK CONNECTION.
- COMPLETE FINAL PAVING AND STRIPING
- DURING IN WATER WORK WINDOW, REMOVE MILL POND DAM BLOCKAGE AND REGRADE AREA. ACCESS TO FACILITY SHALL BE COMPLETED THROUGH EXISTING PATHWAY. WIDEN PATHWAY AS NEEDED FOR ACCESS. ANY TEMPORARY WIDENING SHALL BE REMOVED UPON DAM REMOVAL AND RESTORED. SEE LANDSCAPE PLANS FOR RESTORATION INFORMATION.
- INSTALL CREEK BYPASS AND REMOVE EXISTING CULVERT, REGRADE AND REALIGN BREZEE CREEK.
- FOLLOWING INWATER WORK, REMAINDER PORTION OF TRAILS AND ASSOCIATED WALLS MAY BE CONSTRUCTED. PATH SHALL BE CLOSED AT ALL ENTRANCES.

1235 SE 10th Center Drive
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phone: 206.461.1111
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CONSTRUCTION STAGING - STAGE 3 FOR:
BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

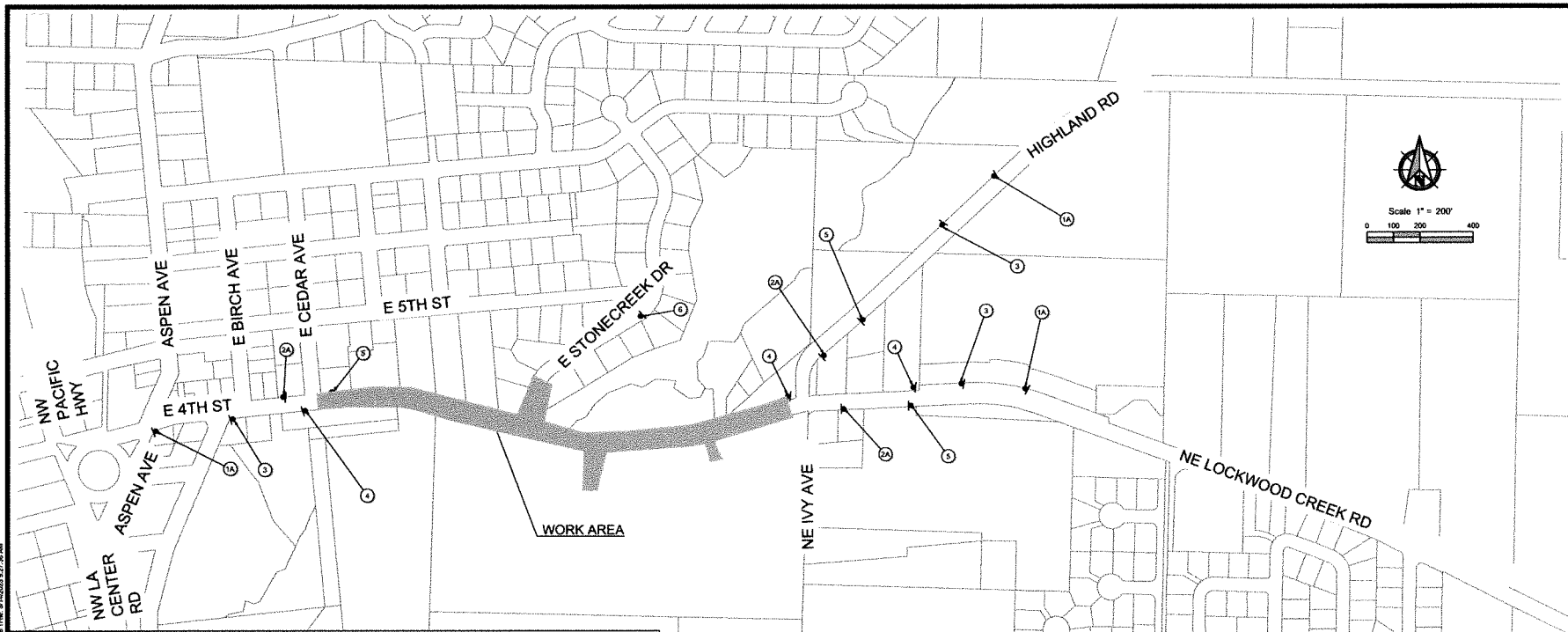


DESIGNED:	JAB
CHECKED:	CMK
DATE:	MAY 2025
PROJECT NO:	17486.000
SHEET NO:	CS03

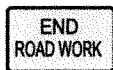
SHEET 30 OF 173

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1A
W20-1
36" x 36"



2A
G20-2
36" x 18"



3
W3-5
48" x 48"



4
R2-1
30" x 36"



5
CUSTOM
SIGN
36" x 48"



6
CUSTOM
SIGN
36" x 36"

CLASS A CONSTRUCTION SIGNS

 48" x 48" W21-B01	INCLUDE THIS SIGN WITH THE MOTORCYCLE CAUTION SIGN WHEN THERE IS AN ABRUPT LANE EDGE	 48" x 48" WB-15	INCLUDE THIS SIGN WITH THE MOTORCYCLE CAUTION SIGN WHEN THE PAVEMENT IS GROOVED	 36" x 36" W21-1701	WAC 489-65-306 & RCW 47.36.200 SIGN FOR COMPLIANCE WITH CURRENT LAW.
 48" x 48" WB-7	INCLUDE THIS SIGN WITH THE MOTORCYCLE CAUTION SIGN WHEN THERE IS LOOSE GRAVEL ON THE ROAD	 48" x 48" WB-24	INCLUDE THIS SIGN WITH THE MOTORCYCLE CAUTION SIGN WHEN THE STEEL PLATES ARE ON THE ROAD	USE OF THE "MOTORCYCLES USE EXTREME CAUTION" SIGN SHALL ONLY BE USED WHEN THE FOLLOWING CONDITIONS ARE PRESENT: <ul style="list-style-type: none">GROOVED PAVEMENTABRUPT LANE EDGESSTEEL PLATESGRAVEL OR EARTH ON ROADWAY SURFACES SUPPLEMENTAL SIGNS SHALL BE ADDED IN ADDITION TO THE "MOTORCYCLES USE EXTREME CAUTION" SIGN WHEN CERTAIN ROADWAY CONDITIONS ARE PRESENT. SEE BELOW.	

GENERAL TCP NOTES

- ALL LOCATIONS APPROXIMATE.
- SIGNS SHALL BE ORANGE WITH BLACK LEGEND, UNLESS NOTED OTHERWISE.
- SPEED LIMIT REDUCTIONS WILL BE A CONTINUOUS REGULATORY REDUCTION BUT WILL NOT BE IMPLEMENTED UNTIL IT IS NEEDED ON EACH HIGHWAY. IF THERE IS MINIMAL WORK OCCURRING THAT AFFECTS TRAFFIC AT THE START OF THE PROJECT, THE TEMPORARY SIGNS INSTALLED FOR THE SPEED REDUCTION SHALL BE COVERED UNTIL THE NEED FOR THE SPEED LIMIT REDUCTION IS REQUIRED. SPEED RADAR TRAILERS MAY BE DEPLOYED DURING THIS TIME, BUT SPEED LIMIT SIGNS (R2-1) POSTED ON TRAILERS SHALL BE COVERED UNTIL SPEED LIMIT REDUCTION IS REQUIRED.
- CONTRACTOR SHALL PROVIDE NO LESS THAN 2 WEEKS NOTICE TO WSDOT PRIOR TO INTENT ON IMPLEMENTATION OF TEMPORARY SPEED LIMIT REDUCTION.
- SPEED LIMIT REDUCTION SIGNING SHALL BE IMPLEMENTED ONLY WHEN WORK CONDITIONS REQUIRE CONTRACTOR'S USE OF EXISTING LANES FOR VEHICLE STAGING TO COMPLETE WIDENING WORK OR WHEN WORK FOR ISLANDS IS STARTED (WHICHEVER COMES FIRST).

LEGEND

CLASS A SIGN

For Engineering and
Professional Seal
1325 E. 1st Street, Suite 100
Spokane, WA 99202
Phone: (509) 325-1111
www.pbsinc.com



CLASS A SIGNING FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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MAY 2025
71486-000

SHEET ID
CS04

SHEET 31 OF 173

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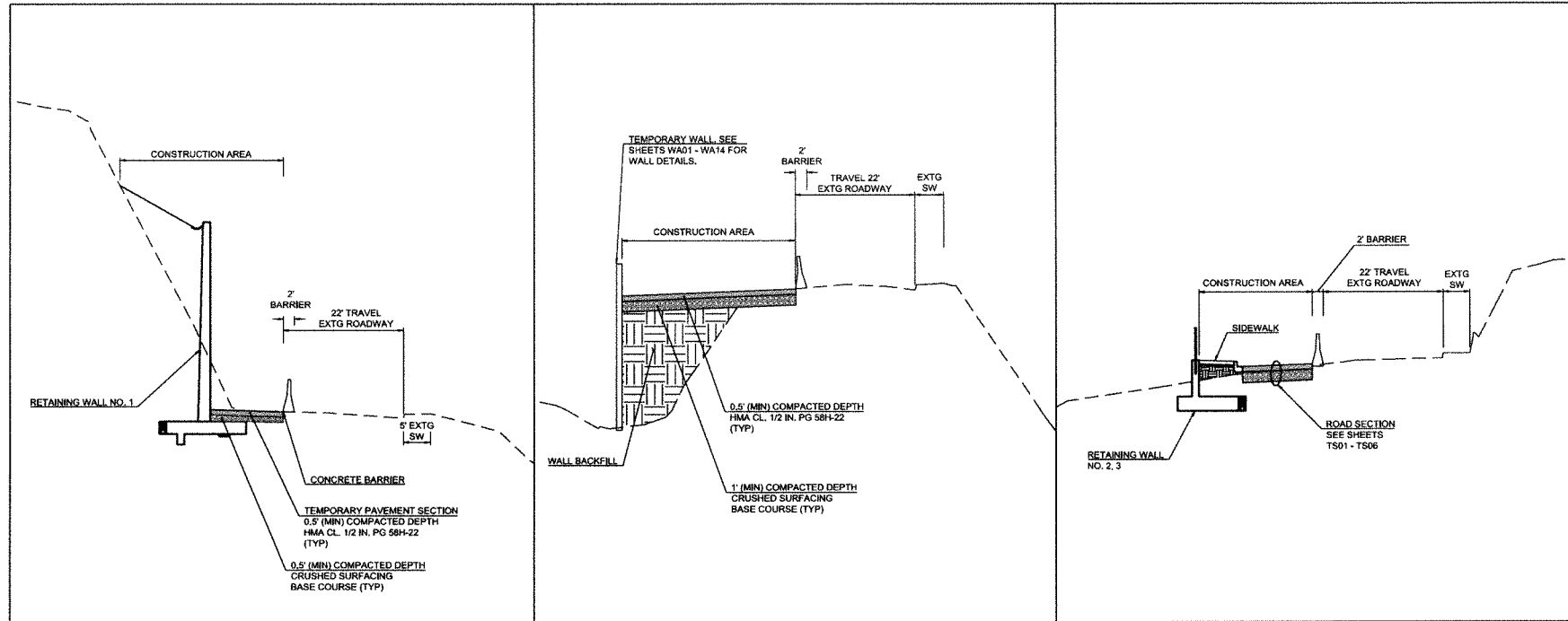
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STAGE 1 CONSTRUCTION

GENERAL NOTES

1. SEE SHEETS CS01 - CS03 FOR CONSTRUCTION STAGING PLAN VIEW.
2. SEE SHEETS TS01 - TS06 FOR TYPICAL SECTIONS.
3. SEE SHEETS WA01 - WA14 FOR WALL INFORMATION.
4. SEE SHEETS BA01 - BA32 FOR BRIDGE INFORMATION.



CONSTRUCTION STAGING TYPICAL SECTION

E 4TH STREET
NTS

PROJECT BEGINNING TO BRIDGE
STA. 43+50 TO STA. 52+67

CONSTRUCTION STAGING TYPICAL SECTION

E 4TH STREET
NTS

BRIDGE SECTION
STA. 52+67 TO STA. 54+42

CONSTRUCTION STAGING TYPICAL SECTION

E 4TH STREET
NTS

BRIDGE TO PROJECT END
STA. 54+42 TO STA. 64+00

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CONSTRUCTION STAGING TYPICAL SECTIONS - STAGE 1 FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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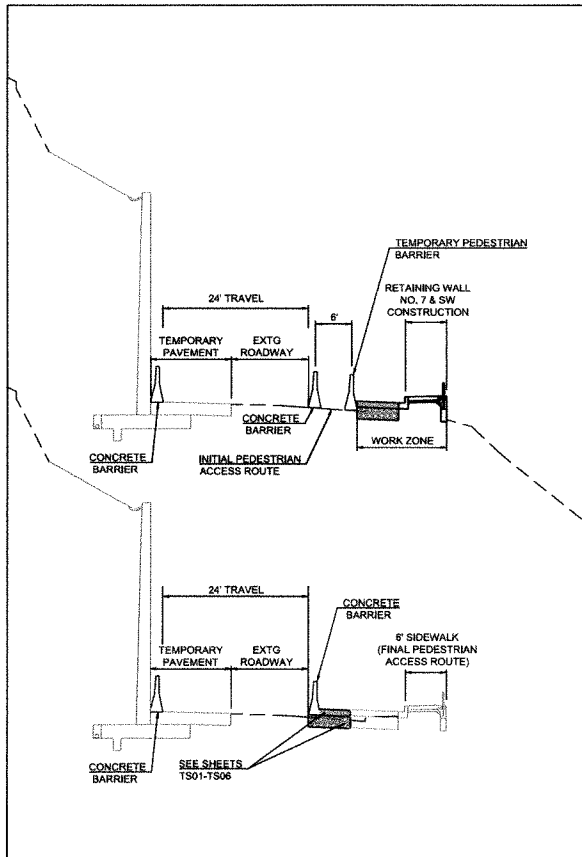
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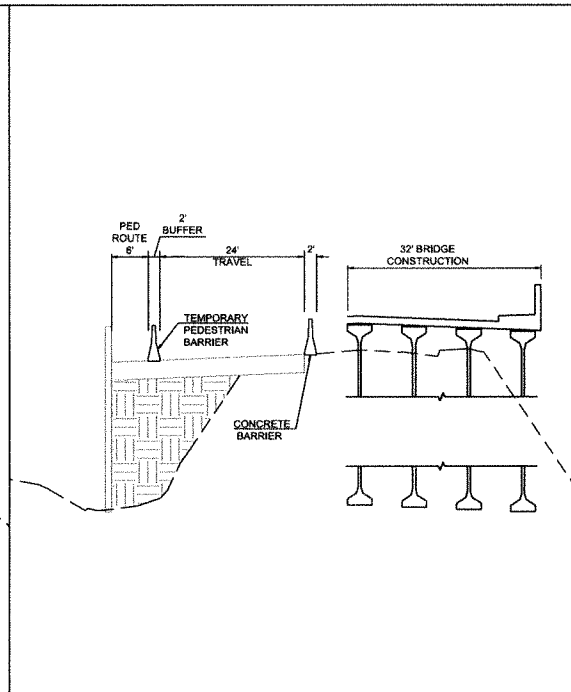
GENERAL NOTES

1. SEE SHEETS CS01 - CS03 FOR CONSTRUCTION STAGING PLAN VIEW.
2. SEE SHEETS TS01 - TS06 FOR TYPICAL SECTIONS.
3. SEE SHEETS WA01 - WA14 FOR WALL INFORMATION.
4. SEE SHEETS BA01 - BA32 FOR BRIDGE INFORMATION.



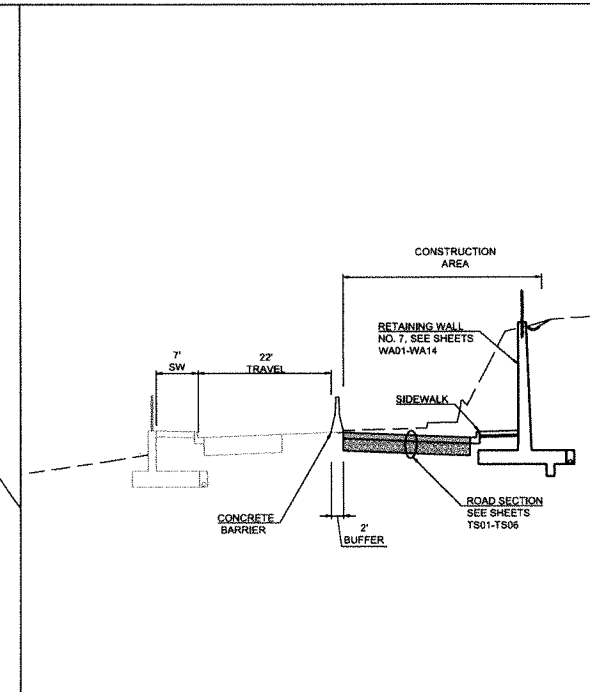
CONSTRUCTION STAGING TYPICAL SECTION
E 4TH STREET
NTS

PROJECT BEGINNING TO BRIDGE
STA. 43+50 TO STA. 52+67



CONSTRUCTION STAGING TYPICAL SECTION
E 4TH STREET
NTS

BRIDGE SECTION
STA. 52+67 TO STA. 54+42



CONSTRUCTION STAGING TYPICAL SECTION
E 4TH STREET
NTS

BRIDGE TO PROJECT END
STA. 54+42 TO STA. 64+00

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CONSTRUCTION STAGING TYPICAL SECTIONS - STAGE 2 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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JAB

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GMK

MAY 2025
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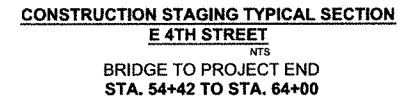
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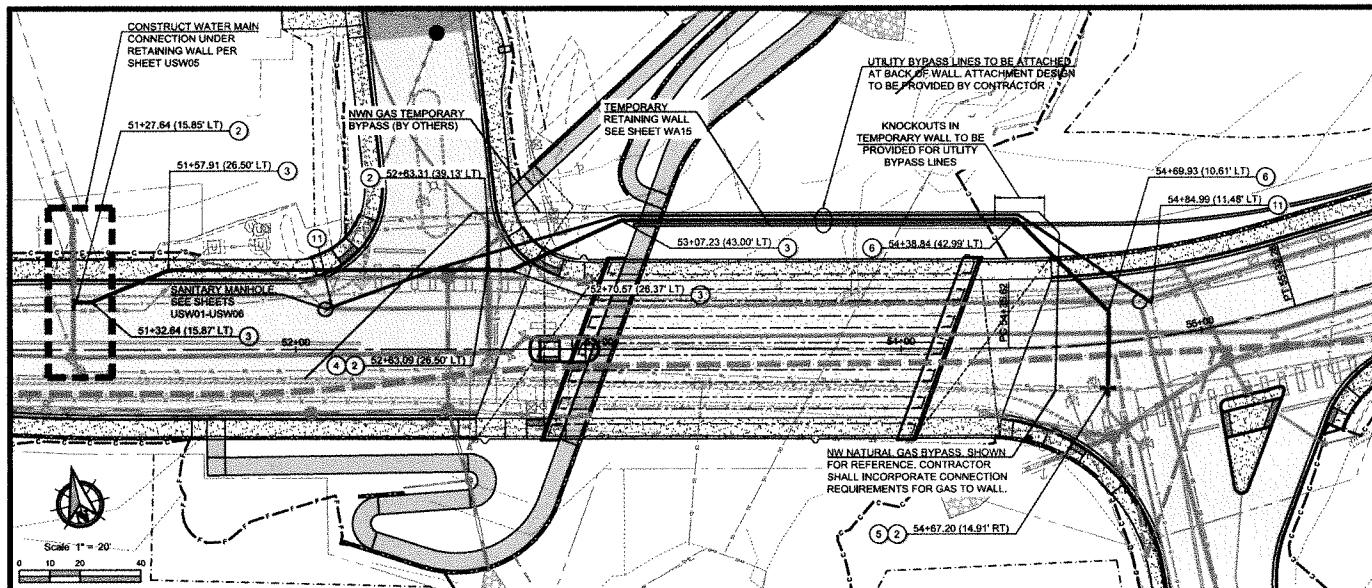
CS06

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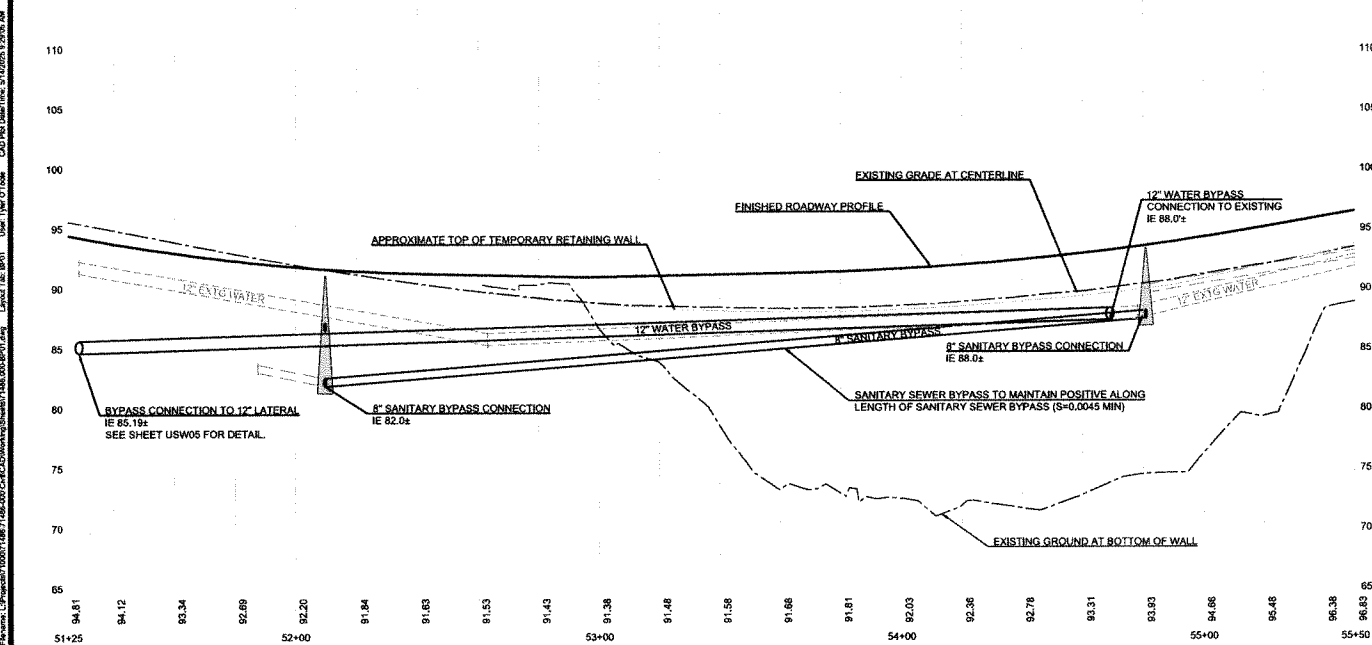
1. SEE SHEETS CS01 - CS03 FOR CONSTRUCTION STAGING PLAN VIEW.
2. SEE SHEETS TS01 - TS06 FOR TYPICAL SECTIONS.
3. SEE SHEETS WA01 - WA14 FOR WALL INFORMATION.
4. SEE SHEETS BA01 - BA32 FOR BRIDGE INFORMATION.



SHEET 34 OF 173



- CONSTRUCTION NOTES:**
- GENERAL NOTES:**
1. SEE SHEETS CS01-CS03 FOR CONSTRUCTION STAGING PLAN.
 2. SEE SHEETS USW01-USW05 FOR SANITARY AND WATER PLAN
- WATER BYPASS NOTES:**
1. INSTALL 12" DUCTILE IRON WATER BYPASS LINE.
 2. INSTALL TEMPORARY CONNECTION
 3. INSTALL 22.5° MJ BEND, RESTRAIN ALL JOINTS AND INSTALL THRUST BLOCK.
 4. INSTALL (1) 8" x 8" FLG TEE. (3) 8" FLG X MJ GATE VALVE. INSTALL THRUST BLOCKS AND MECHANICALLY RESTRAIN ALL JOINTS.
 5. INSTALL (1) 8" FLG CROSS. (4) 8" FLG X MJ GATE VALVE. INSTALL THRUST BLOCKS AND MECHANICALLY RESTRAIN ALL JOINTS.
 6. INSTALL 45° MJ BEND. RESTRAIN ALL JOINTS AND INSTALL THRUST BLOCK.
 7. INSTALL 8" DUCTILE IRON TEMPORARY WATER LINE.
- SANITARY BYPASS NOTES:**
10. INSTALL 8" HDPE SANITARY SEWER BYPASS
 11. INSTALL TEMPORARY SANITARY SEWER CONNECTION.



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UTILITY BYPASS PLAN FOR:

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

PBS

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CHECKED: CLK

MAY 2025

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SHEET 35 OF 173

RICHARD K. & AMY R. CHASE
219 E 4TH ST
LA CENTER, WA 98629
64081000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER, WA 98629
62650000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER, WA 98629
62651000

CONTRACTOR TO GRADE
TO FACE IF EXISTING ROCKERY
WALL AND MATCH EXISTING GRADES
ALONG FACE FROM SIDEWALK

CITY OF LA CENTER
214 E 4TH ST
LA CENTER, WA 98629
62724000

ELIZABETH GAYLE MARSHALL
414 E 5TH ST
LA CENTER, WA 98629
62692000

CHRISTIAN LATHAM &
COURTNEY B. SAPPINGTON
438 E 5TH ST
LA CENTER, WA 98629
62663000

DEBI HANSEN
514 E 5TH ST
LA CENTER, WA 98629
62664000

STEVE & JANICE ZELLER
422 E STONECREEK DR
LA CENTER, WA 98629
63472268



Scale 1" = 20'



Scale 1" = 20'

GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

1. CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
2. INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
3. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
4. INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN I-10.11.00.
5. INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 8-FT SPACING.
6. INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
7. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-80.10.
8. TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-31. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
9. FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-31.

LEGEND:

EXISTING CONTOUR	— 410 —
PROPOSED CONTOUR	— 410 —
SILT FENCE	— X — X — X —
HIGH VIS. SILT FENCE	— + — + — + —
TREE PROTECTION	— (T) — (T) — (T) —
INLET PROTECTION	— [INLET] —
WATTLES	— [WATTLE] —
STABILIZED CONSTRUCTION ENTRANCE	— [ENTRANCE] —

PBS Engineering and
Environmental LLC
5000 1st Ave
La Center, WA 98629
www.pbsenv.com



GRADING & EROSION CONTROL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
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MAY 2025
71486.000

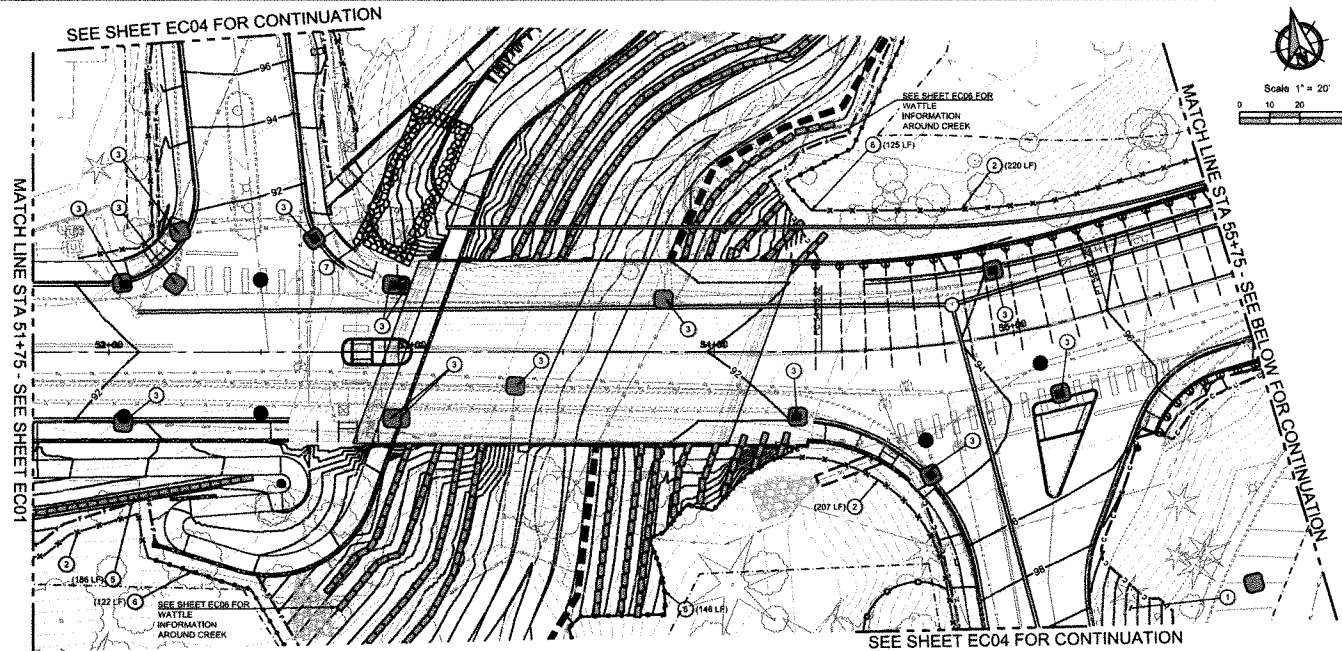
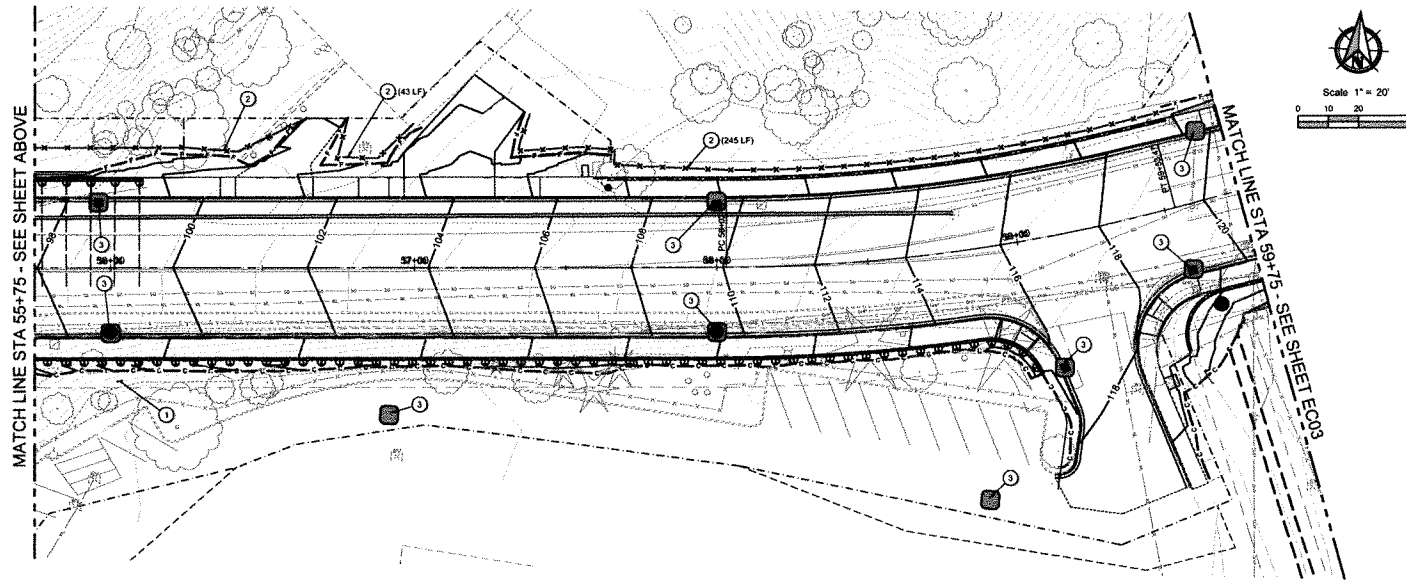
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EC01

SHEET 36 of 173

BID SET

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GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

- CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
- INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
- INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
- INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN I-10.11-00.
- INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 8-FT SPACING.
- INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-40.10.
- TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-31. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
- FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-31.

LEGEND:

EXISTING CONTOUR	410
PROPOSED CONTOUR	410
SILT FENCE	—X—X—X—X—
HIGH VIS. SILT FENCE	—+—+—+—+—
TREE PROTECTION	—●—●—●—●—
INLET PROTECTION	—■—■—■—■—
WATTLES	—■—■—■—■—
STABILIZED CONSTRUCTION ENTRANCE	—■—■—■—■—

BID SET

GRADING & EROSION CONTROL FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

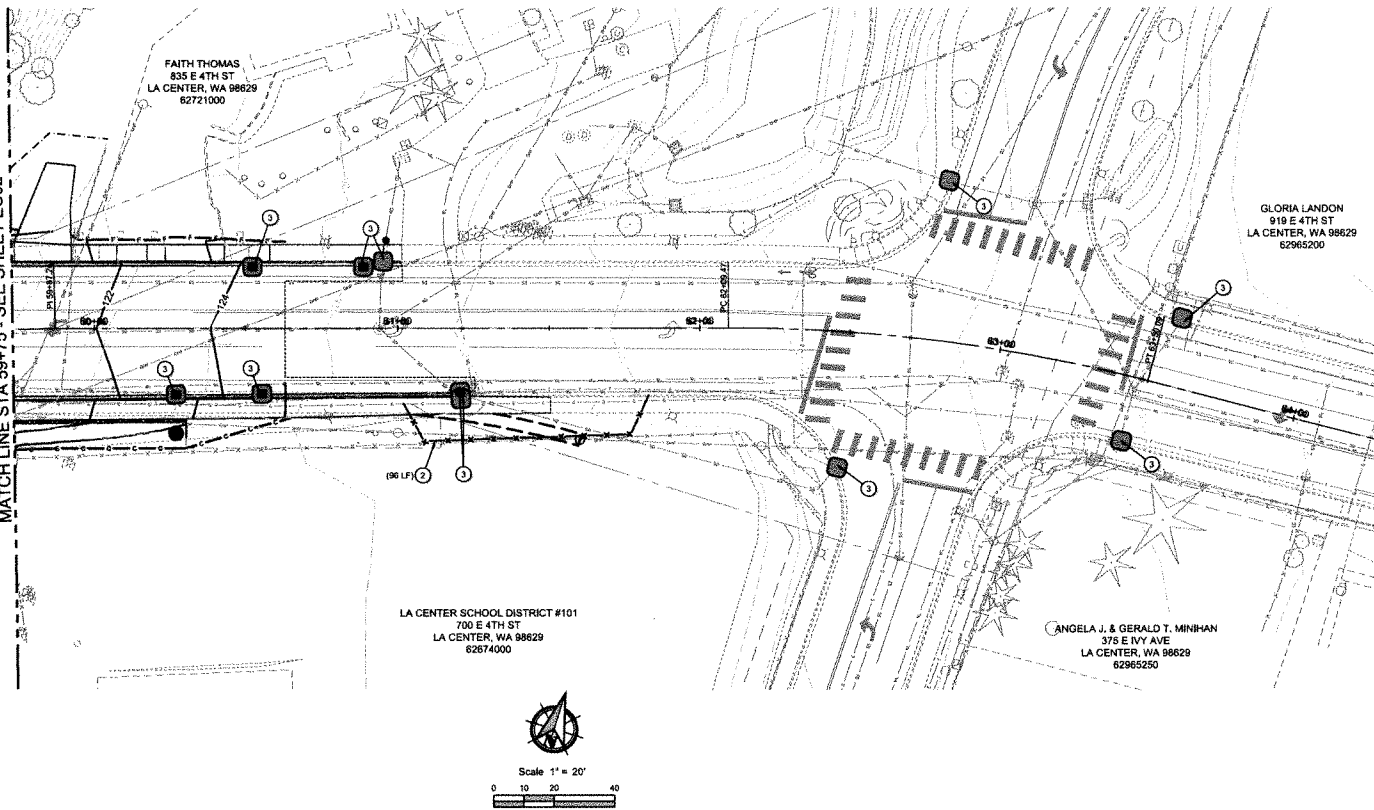


DESIGNED:	JAB
CHECKED:	CMK
DATE:	MAY 2025
PROJECT:	11488-000
SHEET NO:	EC02

SHEET 37 OF 173

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MATCH LINE STA 59+75 - SEE SHEET EC02



GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

1. CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
2. INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
3. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
4. INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN H-10.11-00.
5. INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 8-FT SPACING.
6. INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
7. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-40.10.
8. TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-31. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
9. FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-31.

LEGEND:

EXISTING CONTOUR	---
PROPOSED CONTOUR	— 410 —
SILT FENCE	—X—X—X—X—
HIGH VIS. SILT FENCE	—+—+—+—+—
TREE PROTECTION	—●—●—●—●—
INLET PROTECTION	■
WATTLES	▨
STABILIZED CONSTRUCTION ENTRANCE	▩

PBS Engineering and Construction LLC
3005 5th Ave N
Burien, WA 98148
Phone: 206.835.1234
Fax: 206.835.1235



GRADING & EROSION CONTROL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



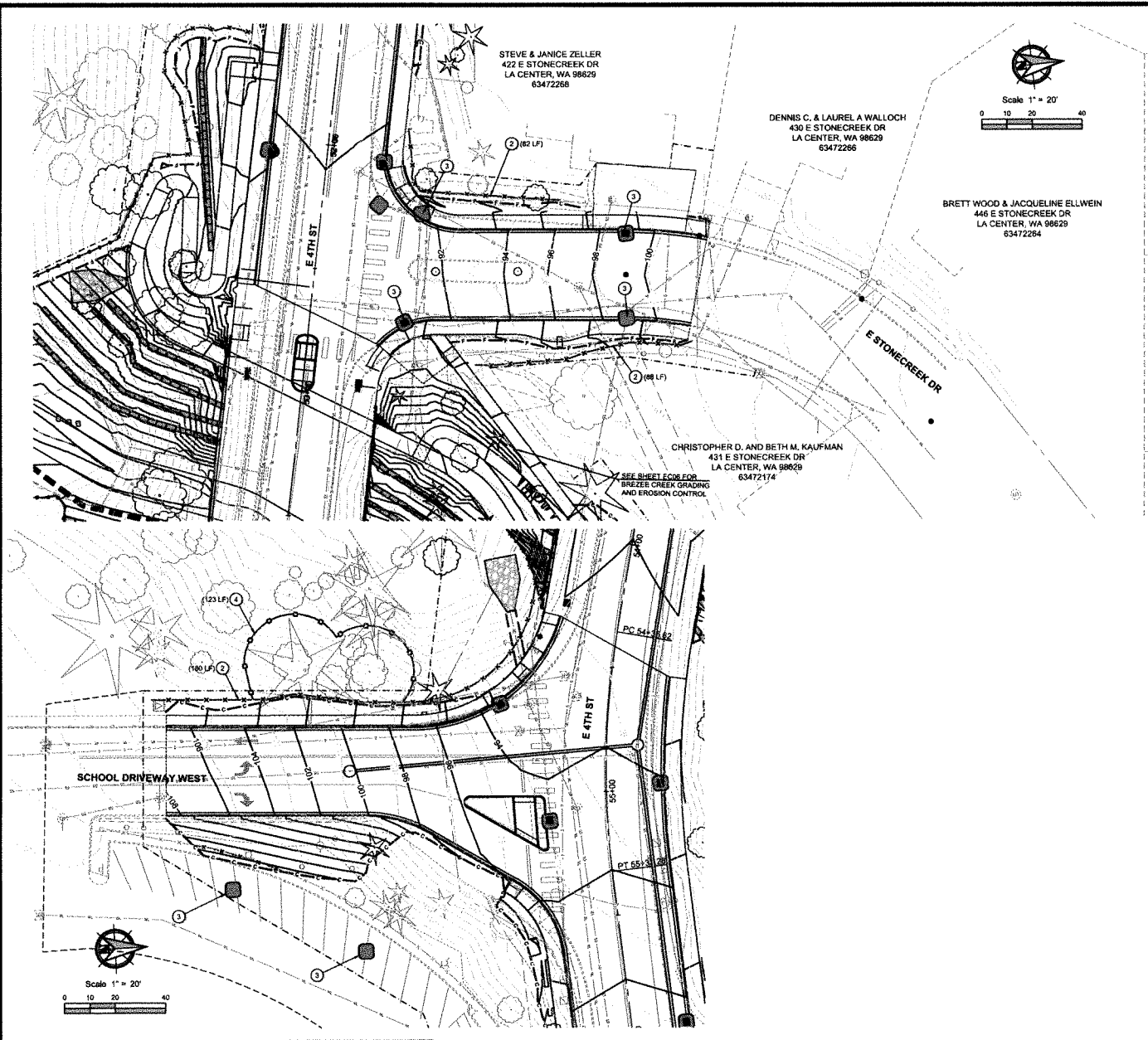
DESIGNED:	JAD
CHECKED:	CMK
DATE:	MAY 2025
PROJECT NO:	1486.000
SHEET NO:	EC03

SHEET 38 OF 173

BID SET

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

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GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

- ① CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
- ② INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
- ③ INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
- ④ INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN I-10.11-00.
- ⑤ INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 8-FT SPACING.
- ⑥ INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
- ⑦ INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-40.10.
- ⑧ TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-31. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
- ⑨ FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-31.

LEGEND:

EXISTING CONTOUR	— 410 —
PROPOSED CONTOUR	— 410 —
SILT FENCE	— X — X — X —
HIGH VIS. SILT FENCE	— + — + — + —
TREE PROTECTION	— [Symbol] —
INLET PROTECTION	[Symbol]
WATTLES	[Symbol]
STABILIZED CONSTRUCTION ENTRANCE	[Symbol]

BID SET

PBS Engineering and Environmental LLC
2330 E. 1st Ave. Suite 100
Vancouver, WA 98663
www.pbsenv.com

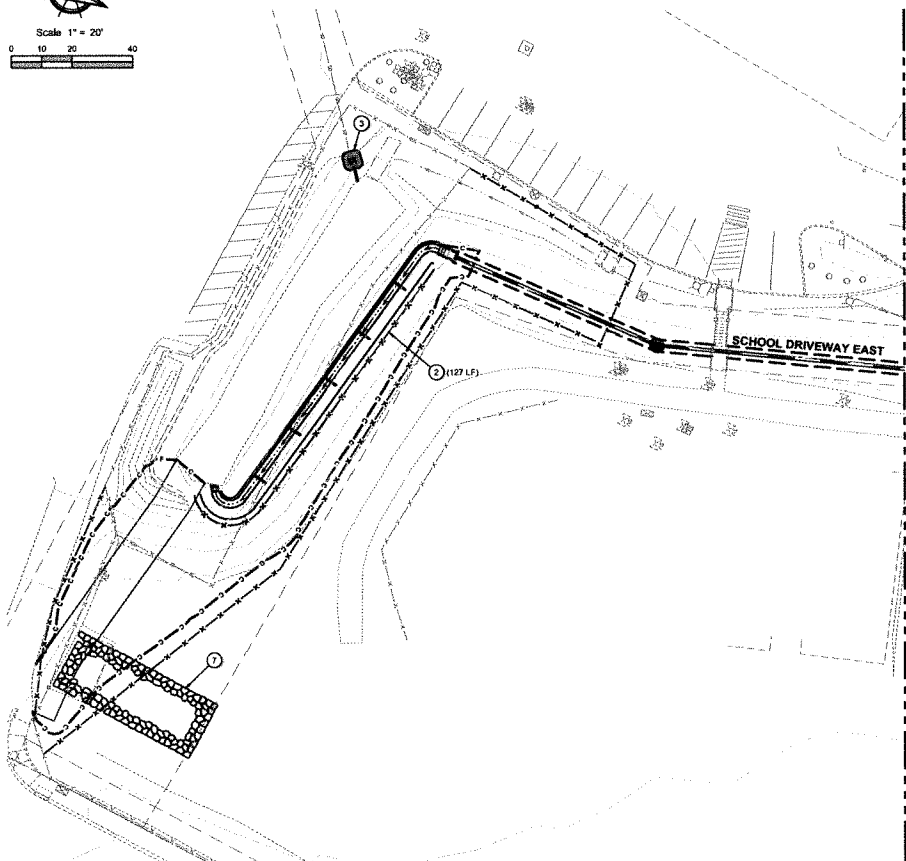
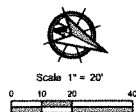


GRADING & EROSION CONTROL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JAD
CHECKED:	CMK
	MAY 2025
	11486.000
SHEET ID:	EC04

SHEET 39 of 173



GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

- ① CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
- ② INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
- ③ INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
- ④ INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN H-10.11-00.
- ⑤ INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 8-FT SPACING.
- ⑥ INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
- ⑦ INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-30.10.
- ⑧ TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-31. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
- ⑨ FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-31.

LEGEND:

EXISTING CONTOUR	
PROPOSED CONTOUR	
SILT FENCE	
HIGH VIS. SILT FENCE	
TREE PROTECTION	
INLET PROTECTION	
WATTLES	
STABILIZED CONSTRUCTION ENTRANCE	

BID SET

PBS Engineering and
Construction LLC
3000 1st Avenue, Suite 100
Vancouver, WA 98663
360.426.1111
pbs@pbs.com



GRADING & EROSION CONTROL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

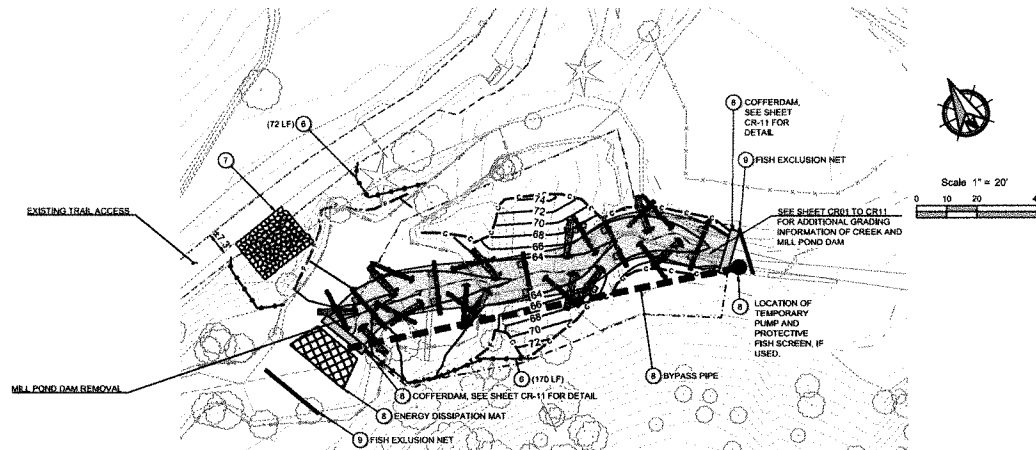
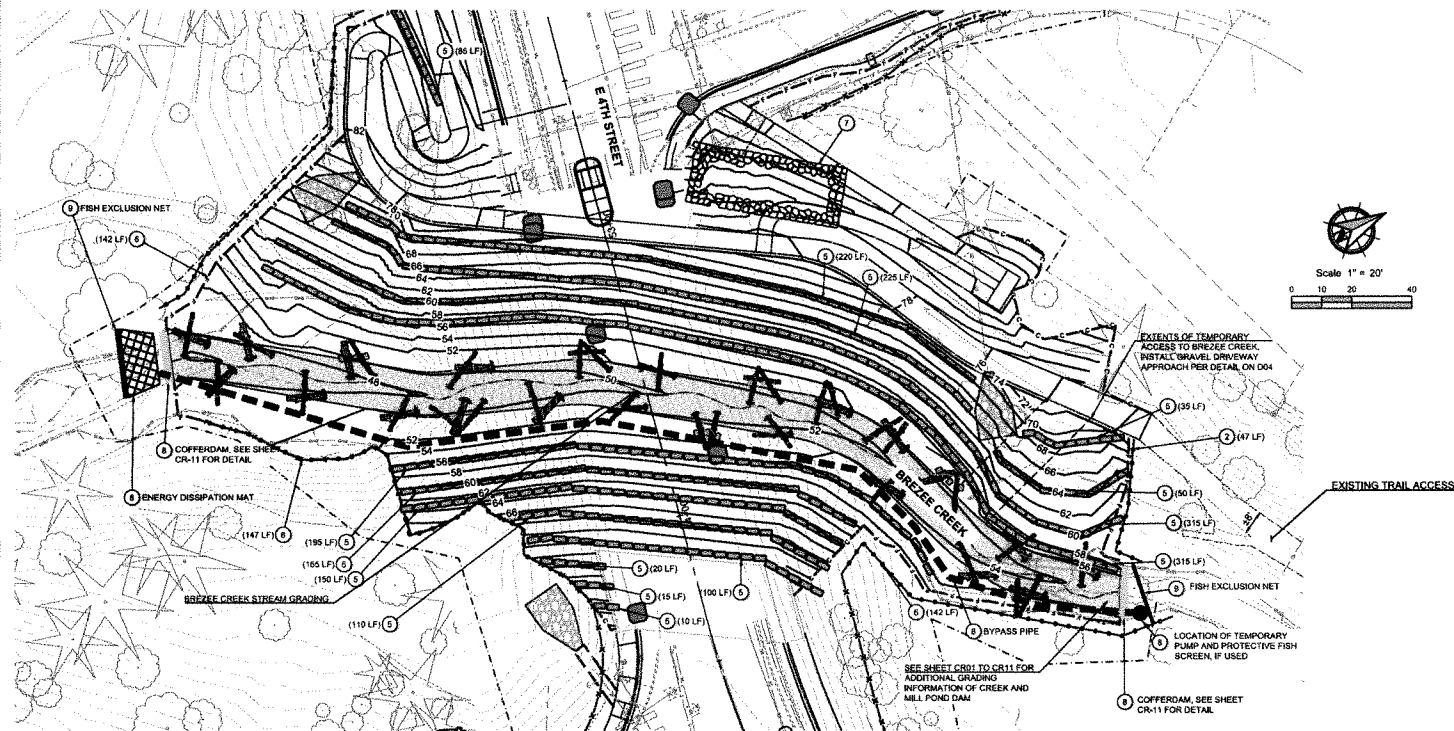


DESIGNED:	JAB
CHECKED:	CMK
	MAY 2025
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SHEET ID	EC05

SHEET 40 OF 173

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GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES.

CONSTRUCTION NOTES:

1. CUT AND FILL SLOPES AND DISTURBED AREAS OUTSIDE OF PROPOSED CONSTRUCTION SHALL BE RESTORED.
2. INSTALL SILT FENCE PER WSDOT STANDARD PLAN I-30.15.
3. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN I-40.20.
4. INSTALL TREE PROTECTION PER WSDOT STANDARD PLAN I-10.11-00.
5. INSTALL PERMANENT WATTLES PER WSDOT STANDARD PLAN I-30.30 WITH 6-FT SPACING.
6. INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STANDARD PLAN I-30.17.
7. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STANDARD PLAN I-80.10.
8. TEMPORARY STREAM DIVERSION PER WSDOT STD. SPECIFICATION SECTION 8-3.1. DIVERSION SYSTEM PROVIDED IN PLANS ARE FOR VISUAL PURPOSES. CONTRACTOR SHALL SUBMIT TEMPORARY STREAM DIVERSION PLAN FOR ENGINEER REVIEW AND APPROVAL PER WSDOT STD. SPECIFICATIONS.
9. FISH EXCLUSION PER WSDOT STD. SPECIFICATION SECTION 8-3.1.

LEGEND:

EXISTING CONTOUR

PROPOSED CONTOUR

SILT FENCE

HIGH VIS. SILT FENCE

TREE PROTECTION

INLET PROTECTION

WATTLES

STABILIZED CONSTRUCTION ENTRANCE

PBS Engineering and Construction, LLC
1235 SE 7th Street, Suite 100
Tomball, TX 77375
Phone: 281-350-1111
Website: pbseng.com



BREEZE CREEK GRADING & EROSION CONTROL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: JMO
CHECKED: CMK
MAY 2025
1487-000

SHEET ID:
EC06

SHEET 41 of 173

BID SET



- NOTES**
1. Install the ends of the silk fence to point slightly upwards to prevent sediment from flowing around the ends of the fence.
 2. Perform maintenance in accordance with *Standard Specifications 8-01.32(A) and 8-01.3(13)*.
 3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstated unless the Project Engineer approves the installation.
 4. Install silk fencing parallel to mapped contour lines.



- NOTES**
1. Size the Below Inlet Gristle Device (BIGD) for the storm water structure it will service.
 2. The BIGD shall have a built-in high flow relief system (overflow bypass).
 3. The relief system must allow removal of the BIGD without spilling the collected material.
 4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



WATTLE INSTALLATION ON SLOPE

- NOTES**
1. Weather shall be in accordance with Standard Specification, Section 8-01.03(b). Install Weather along contours. Incurator shall be in accordance with Standard Specification, Section 8-01.31(10).
 2. Securely anchor each end of Weather. Overlap adjacent Weather strips 12" (4) behind one another and securely tie together.
 3. Compact excavated soil and trenches to prevent undercutting. Additional staking may be necessary to prevent undercutting.
 4. Install Weather perpendicular to flow along contours.
 5. Weather shall be inspected regularly, and immediately after a rainfall produces runoff. To ensure they remain thoroughly embedded and in contact with the soil.
 6. Perform measurements in accordance with Standard Specification, Section 8-01.31(10).
 7. Refer to Standard Specification, Section 8-01.31(16).



- NOTES
1. Angle Terminal and splice 24" (12" to 48" (6") to prevent blow around. Single (Typical)
 2. Pilement maintenance in accordance with: Standards Specifications, Sections 8-01.31 (SPL) and 8-01.31 (S)
 3. Splitters shall never be placed in low spots or dump locations. If splitters are located in low or dump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
 4. Install all fencing parallel to mapped contour lines.

EROSION CONTROL DETAILS FOR:

BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING



DESIGNED:

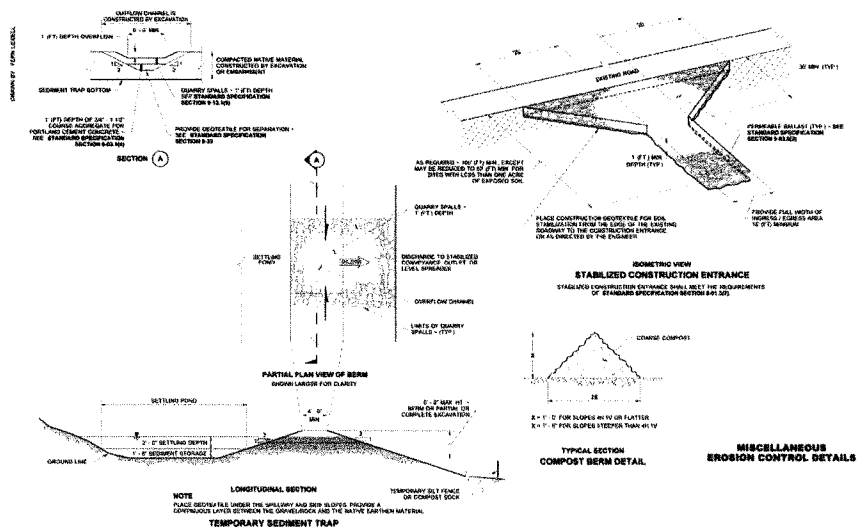
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MAY 2025
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SHEET 10

EC07

SHEET 42 OF 173



BID SET

PBS Engineering and Construction
 1333 SE 1st Avenue
 Tallahassee, FL 32301
 Phone: (904) 487-1111
 Fax: (904) 487-1112
 Email: info@pbseng.com

EROSION CONTROL DETAILS FOR:

BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

Keep what's below.
Call before you dig.

DESIGNED:
JAB

CHECKED:
CMK

MAY 2025
71486-000

SHEET ID
EC08

SHEET

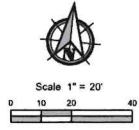
43 of 173

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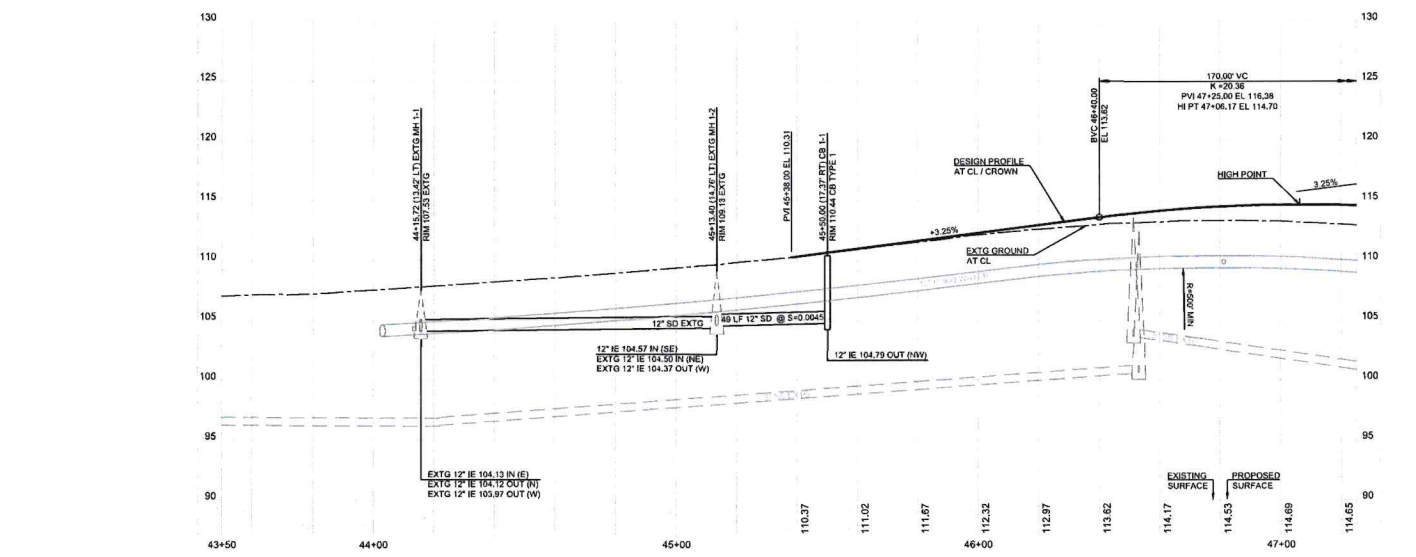
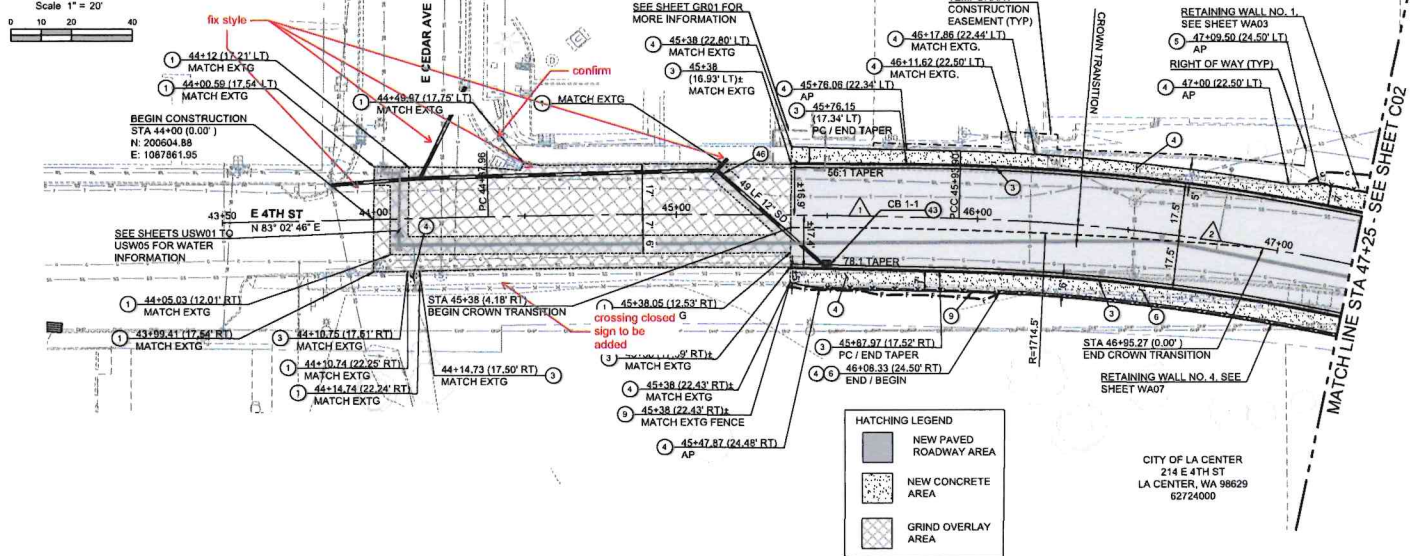


RICHARD K. & AMY R. CHASE
219 E 4TH ST
LA CENTER, WA 98629
64081000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER WA 98629
62650000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER WA 98629
62651000

CENTERLINE CURVE DATA				
Δ	R	L	T	
1	3°06'43"	2871.29	155.94	77.99
2	20°32'17"	740.00	265.26	134.07



CONSTRUCTION NOTES:

- GENERAL NOTES:**
1. SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
 2. TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
 3. SIDEWALK DIMENSIONS SHOWN C01-C08 INCLUDE CURB WIDTH.
 4. ALL CATCH BASINS TO BE INSTALLED WITH VANED GRATES.
- STREET NOTES:**
1. SAWCUT EXISTING HMA, CURB, AND/OR SIDEWALK, AND MATCH EXISTING. SEE CITY OF LA CENTER STANDARD DETAIL. SEE SHEET STD04.
 2. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 3. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 4. CONSTRUCT CEMENT CONCRETE SIDEWALK. SEE WSDOT STANDARD PLAN F-30.10, SEE SHEET STD01.
 5. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO CUT WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 6. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 7. CONSTRUCT GRAVITY BLOCK WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 8. CONSTRUCT CURB WALL PER DETAIL ON SHEET D04. SEE SHEET GR04 FOR GRADING INFORMATION.
 9. SITE SPECIFIC CHAIN LINK FENCE TYPE 4 PER WSDOT STANDARD PLAN L-20.10 WITH 2" SCHD 40 POSTS AT 6 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
 10. CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12. SEE SHEET STD02 FOR INFORMATION. WIDEN RAMP TO FACE OF PROPOSED WALL.
 11. CEMENT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTRIAN RAILING. SEE DETAIL, SHEET D04.
 12. PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20-4. SEE SHEET STD01 FOR INFORMATION.
 13. GRAVEL DRIVEWAY APPROACH PER DETAIL. SEE SHEET D04.
 14. GRAVEL ACCESS ROAD, 1.5" MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET PD01 FOR GRADING.
 15. REINSTALL MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
 16. INSTALL DETECTABLE WARNING SURFACE.
 17. CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
 18. NOT USED.

STORM DRAINAGE NOTES:

40. INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD03.
41. INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD04.
42. INSTALL COMBINATION CURB INLET PER WSDOT STANDARD PLAN B-25.20, SEE SHEET STD03.
43. INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20, SEE SHEET STD03.
44. INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20, SEE SHEET STD03.
45. INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
46. CONNECT TO EXISTING STORM FEATURE.
47. NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL. SEE SHEET D05.
48. INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
49. BRIDGE DECK BLOCKOUT. INSTALL FRAME AND GRATES. SEE BA20 FOR INFORMATION.
50. INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60, SEE SHEET STD04.
51. INSTALL NON-SLIP LID ON STRUCTURE.
52. WALL DRAIN, SEE WALL SHEETS WA01-WA14.
53. DUAL INLET PER DETAIL. SEE SHEET D06.
54. INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
55. NOT USED.

Professional Engineer
1325 SE 7th Street Drive
Vancouver, WA 98663
phone: 509.575.1111
pchs@pchs.com



4TH STREET - STREET AND STORM DRAINAGE PLAN AND PROFILE FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JAB
CHECKED:	CMK
DATE:	MAY 2023
PROJECT:	17486.000
SHEET ID:	C01
SHEET	44 OF 173

CENTERLINE CURVE DATA						
#	Δ	R	L	T		
2	20°32'17"	740.00	265.26	134.07		
3	3°55'00"	1909.86	130.56	65.30		

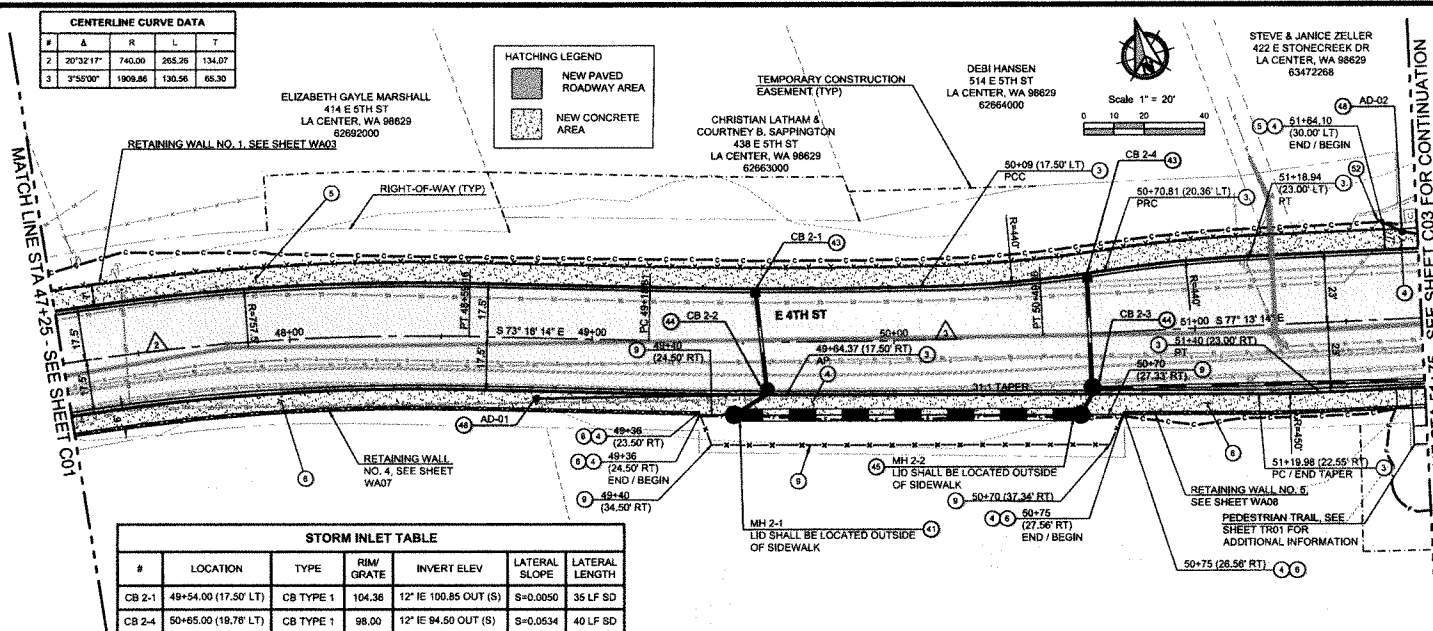
HATCHING LEGEND	
	NEW PAVED ROADWAY AREA
	NEW CONCRETE AREA

ELIZABETH GAYLE MARSHALL
414 E 5TH ST
LA CENTER, WA 98629
629922000

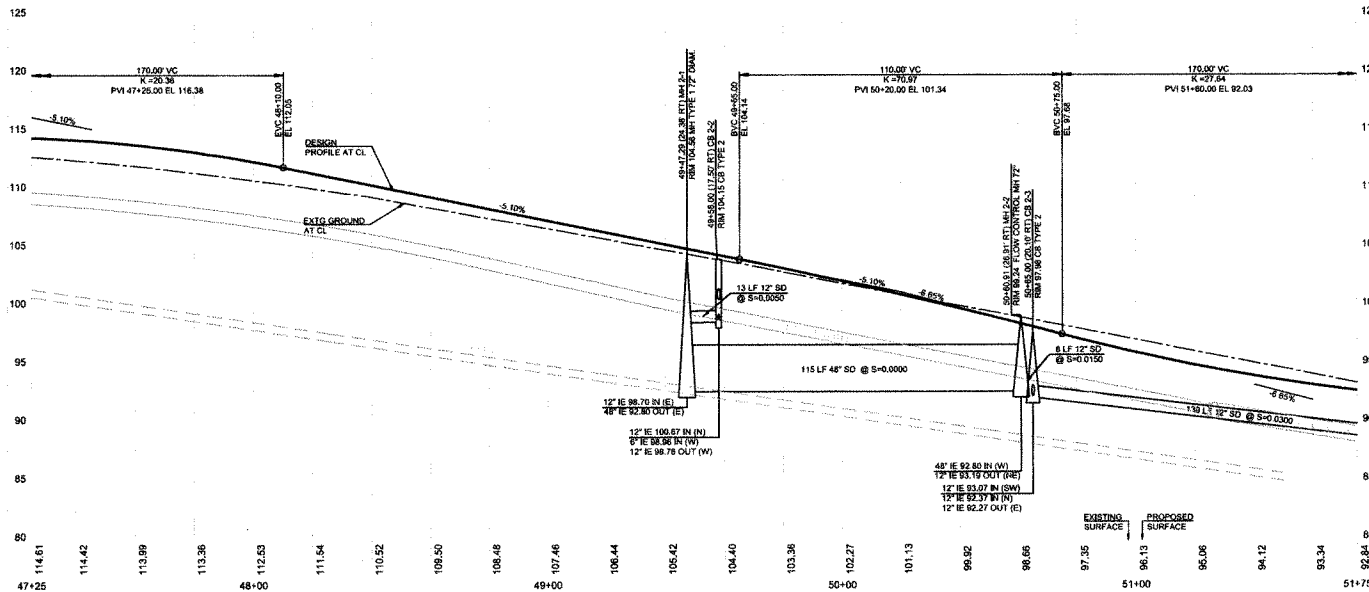
CHRISTIAN LATHAM &
COURTNEY B. SAPPINGTON
438 E 5TH ST
LA CENTER, WA 98629
62663000

DEBI HANSEN
514 E 5TH ST
LA CENTER, WA 98629
62664000

STEVE & JANICE ZELLER
222 E STONECREEK DR
LA CENTER, WA 98629
63472268



STORM INLET TABLE						
#	LOCATION	TYPE	RIM GRATE	INVERT ELEV	LATERAL SLOPE	LATERAL LENGTH
CB 2-1	49+54.00 (17.50' LT)	CB TYPE 1	104.36	12" IE 100.85 OUT (S)	S=0.0050	35 LF SD
CB 2-4	50+65.00 (19.78' LT)	CB TYPE 1	98.00	12" IE 94.50 OUT (S)	S=0.0534	40 LF SD



CONSTRUCTION NOTES:

1. SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
 2. TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
 3. SIDEWALK DIMENSIONS SHOWN C01-C08 INCLUDE CURB WIDTH.
 4. ALL CATCH BASINS TO BE INSTALLED WITH VANED GRATES.
- STREET NOTES:**
1. SAWCUT EXISTING HMA, CURB, AND/OR SIDEWALK, AND MATCH EXISTING. SEE CITY OF LA CENTER STANDARD DETAIL. SEE SHEET STD04.
 2. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12. SEE SHEET STD01.
 3. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER. SEE WSDOT STANDARD PLAN F-10.12. SEE SHEET STD01.
 4. CONSTRUCT CEMENT CONCRETE SIDEWALK. SEE WSDOT STANDARD PLAN F-30.10. SEE SHEET STD01.
 5. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO CUT WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 6. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 7. CONSTRUCT GRAVITY BLOCK WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 8. CONSTRUCT CURB WALL PER DETAIL ON SHEET D04. SEE SHEET GR04 FOR GRADING INFORMATION.
 9. SITE SPECIFIC CHAIN LINK FENCE TYPE 3 PER WSDOT STANDARD PLAN L-20.10 WITH 2 1/2" SCHD 40 POSTS AT 6 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
 10. CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12. SEE SHEET STD02 FOR INFORMATION. WIDEN RAMPS TO FACE OF PROPOSED WALL.
 11. CEMENT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTRIAN RAILING. SEE DETAIL, SHEET D04.
 12. PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20.4. SEE SHEET STD01 FOR INFORMATION.
 13. GRAVEL DRIVEWAY APPROACH PER DETAIL. SEE SHEET D04.
 14. GRAVEL ACCESS ROAD, 1/2" MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET PD01 FOR GRADING.
 15. REINSTALL MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
 16. INSTALL DETECTABLE WARNING SURFACE.
 17. CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
 18. NOT USED.

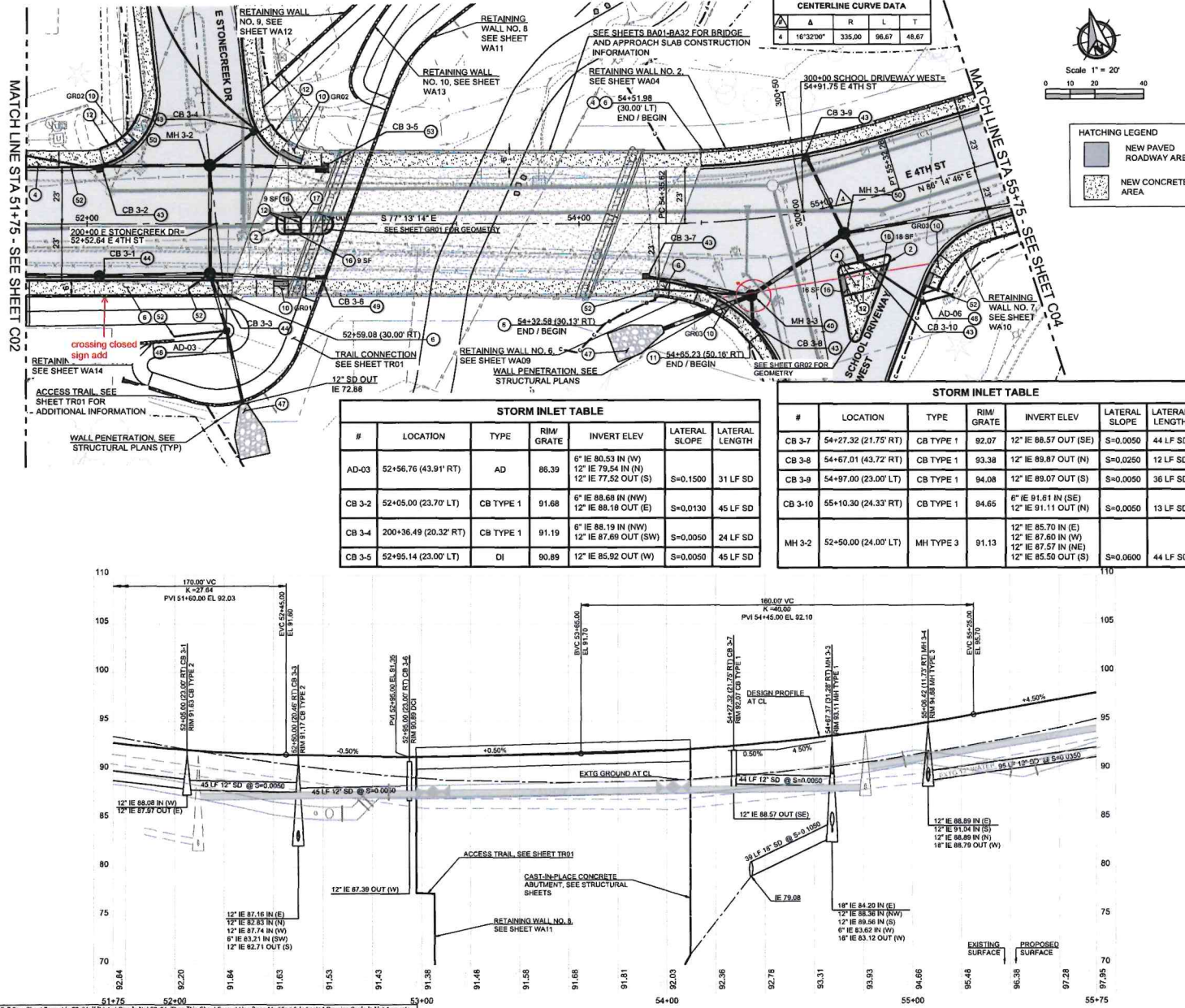
STORM DRAINAGE NOTES:

1. INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20. SEE SHEET STD03.
2. INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20. SEE SHEET STD04.
3. INSTALL COMBINATION CURB INLET PER WSDOT STANDARD PLAN B-25.20. SEE SHEET STD03.
4. INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20. SEE SHEET STD03.
5. INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20. SEE SHEET STD03.
6. INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
7. CONNECT TO EXISTING STORM FEATURE.
8. NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL. SEE SHEET D05.
9. INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
10. BRIDGE DECK BLOCKOUT. INSTALL FRAME AND GRATES. SEE BA20 FOR INFORMATION.
11. INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60. SEE SHEET STD04.
12. INSTALL NON-SLIP LID ON STRUCTURE.
13. WALL DRAIN. SEE WALL SHEETS WA01-WA14.
14. DUAL INLET PER DETAIL. SEE SHEET D06.
15. INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
16. NOT USED.

BID SET

4TH STREET - STREET AND STORM DRAINAGE PLAN AND PROFILE FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

DESIGNED: JAB
CHECKED: CMK
MAY 2023
71456.000
SHEET ID
C02
SHEET 45 OF 173



CONSTRUCTION NOTES:

- GENERAL NOTES:**
- SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
 - TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
 - SIDEWALK DIMENSIONS SHOWN C01-C08 INCLUDE CURB WIDTH.
 - ALL CATCH BASINS TO BE INSTALLED WITH VANED GRATES.
- STREET NOTES:**
- SAWCUT EXISTING HMA, CURB, AND/OR SIDEWALK, AND MATCH EXISTING. SEE CITY OF LA CENTER STANDARD DETAIL, SEE SHEET STD04.
 - CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK. SEE WSDOT STANDARD PLAN F-30.10, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO CUT WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 - CONSTRUCT GRAVITY BLOCK WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 - CONSTRUCT CURB WALL PER DETAIL ON SHEET D04. SEE SHEET GR04 FOR GRADING INFORMATION.
 - SITE SPECIFIC CHAIN LINK FENCE TYPE 4 PER WSDOT STANDARD PLAN L-20.10 WITH 2" SCHD 40 POSTS AT 6 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
 - CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12, SEE SHEET STD02 FOR INFORMATION. WIDEN RAMPS TO FACE OF PROPOSED WALL.
 - CEMENT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTRIAN RAILING. SEE DETAIL, SHEET D04.
 - PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20-4. SEE SHEET STD01 FOR INFORMATION.
 - GRAVEL DRIVEWAY APPROACH PER DETAIL, SEE SHEET D04.
 - GRAVEL ACCESS ROAD, 1.0' MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET PD01 FOR GRADING.
 - REINSTALL MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
 - INSTALL DETECTABLE WARNING SURFACE.
 - CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
 - NOT USED.
- STORM DRAINAGE NOTES:**
- INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD03.
 - INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD04.
 - INSTALL COMBINATION CURB INLET PER WSDOT STANDARD PLAN B-25.20, SEE SHEET STD03.
 - INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20, SEE SHEET STD03.
 - INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20, SEE SHEET STD03.
 - INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
 - CONNECT TO EXISTING STORM FEATURE.
 - NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL, SEE SHEET D05.
 - INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
 - BRIDGE DECK BLOCKOUT. INSTALL FRAME AND GRATES. SEE BA20 FOR INFORMATION.
 - INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60, SEE SHEET STD04.
 - INSTALL NON-SLIP LID ON STRUCTURE.
 - WALL DRAIN. SEE WALL SHEETS WA01-WA14.
 - DUAL INLET PER DETAIL, SEE SHEET D06.
 - INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
 - NOT USED.

THE ENGINEERING FIRM OF
 LARRY S. TAYLOR & ASSOCIATES, INC.
 1335 SE Tenth Center Drive
 Vancouver, WA 98662
 PH: 509.575.1111 FAX: 509.575.1112
 WWW.LSTAYLOR.COM

PBS

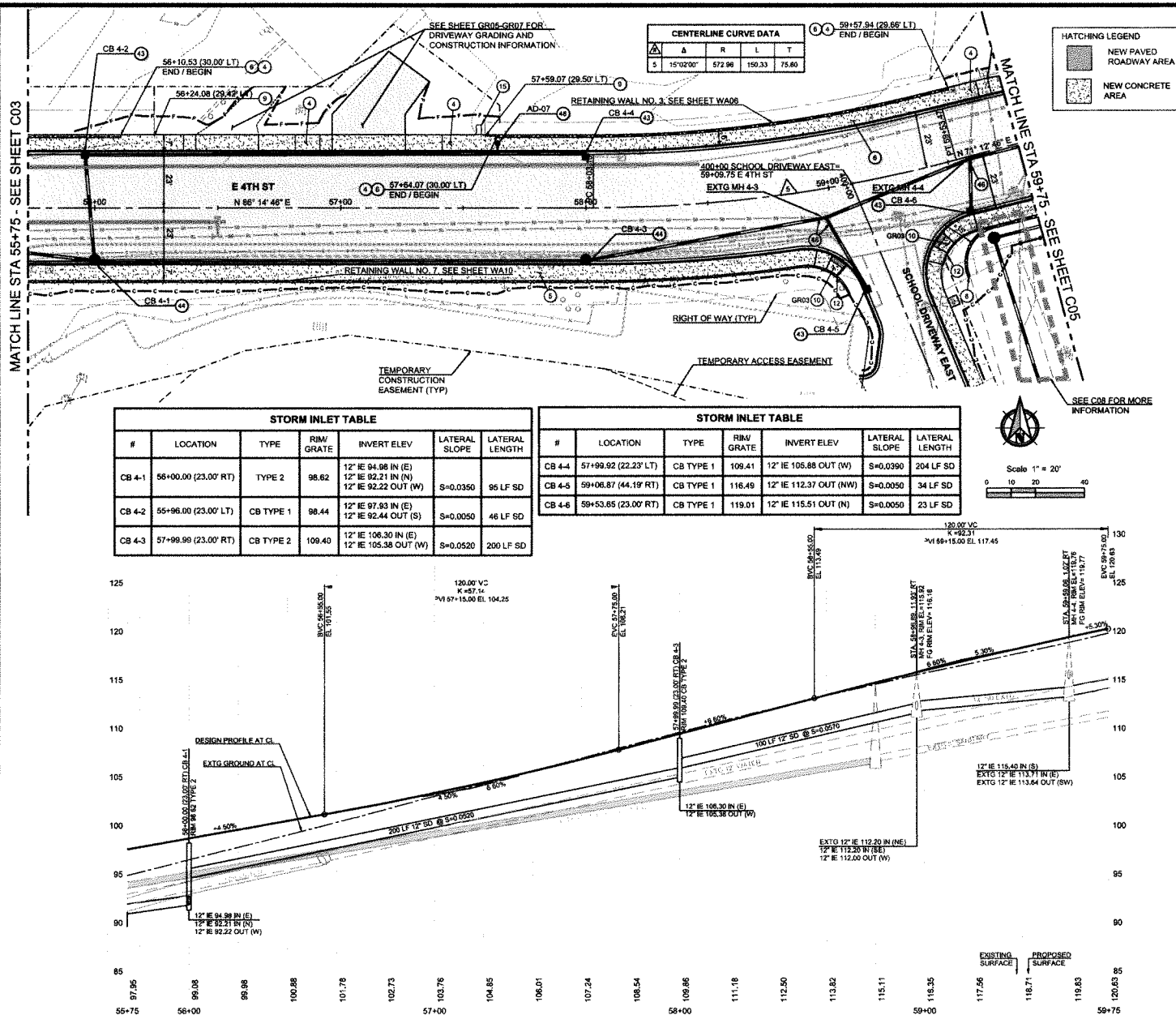
**4TH STREET - STREET AND STORM DRAINAGE PLAN AND PROFILE FOR:
 BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON**

811
 Know what's below.
 Call before you dig.

RELINQUISH
 STATE OF WASHINGTON
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DESIGNED: JAB
 CHECKED: CMK
 MAY 2025
 71488.000
 SHEET ID
C03
 SHEET 46 OF 173

File name: L:\Projects\100071488\1488-000-Culvert\Drawings\Sheet\1488-BD-C04.dwg User: T. Tran Date: 5/14/2025 3:35:49 AM Layout: Tab: C04



CONSTRUCTION NOTES:

GENERAL NOTES:

1. SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
2. TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
3. SIDEWALK DIMENSIONS SHOWN C01-C08 INCLUDE CURB WIDTH.
4. ALL CATCH BASINS TO BE INSTALLED WITH VANED GRATES.

STREET NOTES:

1. SAWCUT EXISTING HMA, CURB, AND/OR SIDEWALK, AND MATCH EXISTING. SEE CITY OF LA CENTER STANDARD DETAIL. SEE SHEET STD04.
2. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12. SEE SHEET STD01.
3. CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER. SEE WSDOT STANDARD PLAN F-10.12. SEE SHEET STD01.
4. CONSTRUCT CEMENT CONCRETE SIDEWALK. SEE WSDOT STANDARD PLAN F-30.10. SEE SHEET STD01.
5. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO CUT WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
6. CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
7. CONSTRUCT GRAVITY BLOCK WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
8. CONSTRUCT CURB WALL PER DETAIL ON SHEET D04. SEE SHEET GR04 FOR GRADING INFORMATION.
9. SITE SPECIFIC CHAIN LINK FENCE TYPE 4 PER WSDOT STANDARD PLAN L-20.10 WITH 2" SCHD 40 POSTS AT 6 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
10. CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12. SEE SHEET STD02 FOR INFORMATION. WIDEN RAMPS TO FACE OF PROPOSED WALL.
11. CEMENT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTAL RAILING. SEE DETAIL, SHEET D04.
12. PEDESTALIAN CURB PER WSDOT STANDARD PLAN F-10.20-4. SEE SHEET STD01 FOR INFORMATION.
13. GRAVEL DRIVEWAY APPROACH PER DETAIL. SEE SHEET D04.
14. GRAVEL ACCESS ROAD, 1.0" MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET PD01 FOR GRADING.
15. REINSTALL MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
16. INSTALL DETECTABLE WARNING SURFACE.
17. CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
18. NOT USED.

STORM DRAINAGE NOTES:

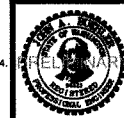
40. INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20. SEE SHEET STD03.
41. INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20. SEE SHEET STD04.
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43. INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20. SEE SHEET STD03.
44. INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20. SEE SHEET STD03.
45. INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
46. CONNECT TO EXISTING STORM FEATURE.
47. NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL. SEE SHEET D05.
48. INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
49. BRIDGE DECK BLOCKOUT. INSTALL FRAME AND GRATES. SEE BA20 FOR INFORMATION.
50. INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60. SEE SHEET STD04.
51. INSTALL NON-SLIP LID ON STRUCTURE.
52. WALL DRAIN. SEE WALL SHEETS WA01-WA14.
53. DUAL INLET PER DETAIL. SEE SHEET D06.
54. INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
55. NOT USED.

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4TH STREET - STREET AND STORM DRAINAGE PLAN AND PROFILE FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

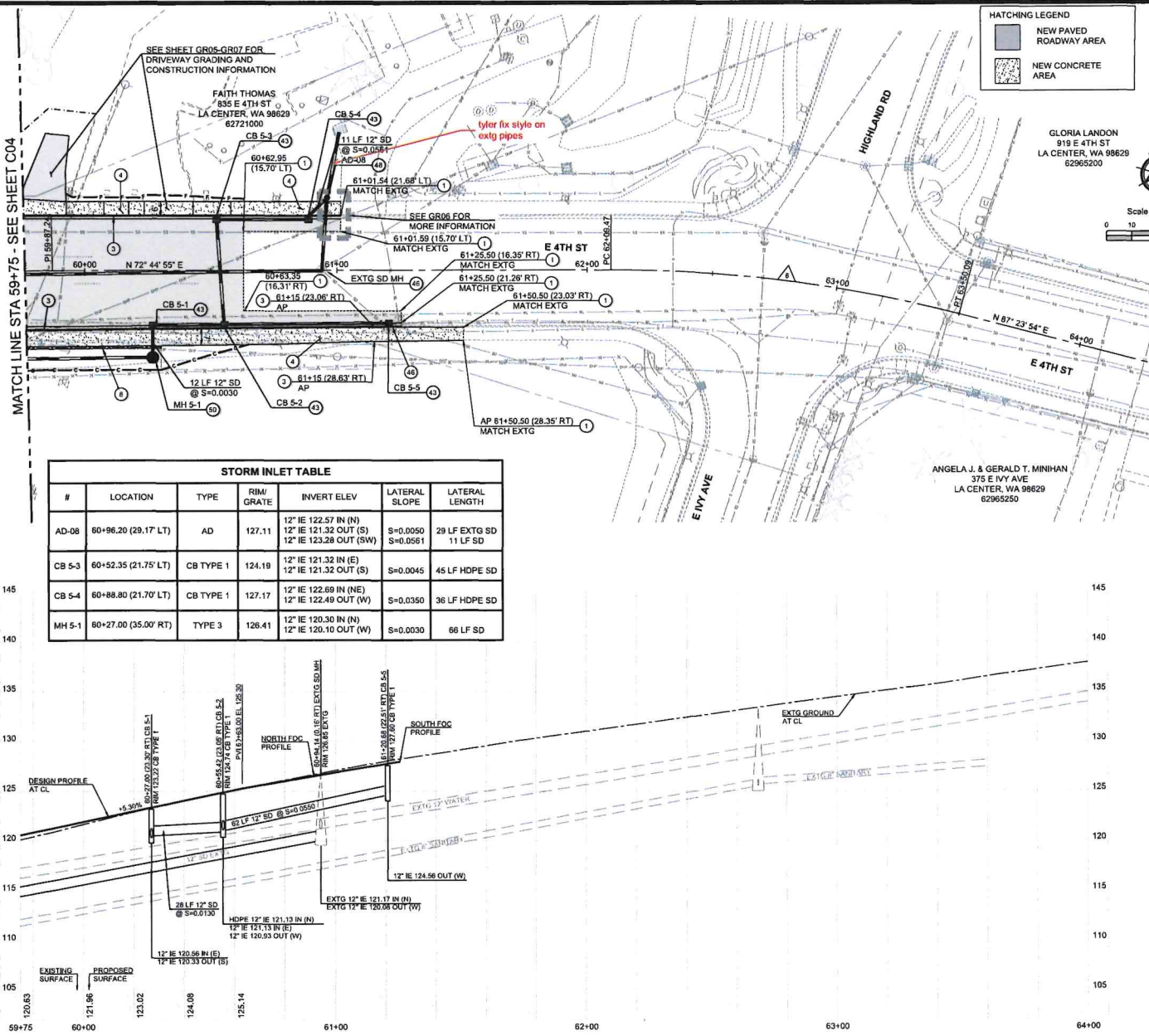


DESIGNED: L.A.
CHECKED: CMK
MAY 2025
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SHEET 47 OF 173

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Layout: T-01.dwg

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale Is Not Accurate.



CONSTRUCTION NOTES:

GENERAL NOTES:

- SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
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STREET NOTES:

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- CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
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- CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12, SEE SHEET STD02 FOR INFORMATION. WIDEN RAMP TO FACE OF PROPOSED WALL.
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- PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20-4. SEE SHEET STD01 FOR INFORMATION.
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- GRAVEL ACCESS ROAD, 1.0' MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET D01 FOR GRADING.
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- CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
- NOT USED.

STORM DRAINAGE NOTES:

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- INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20, SEE SHEET STD03.
- INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20, SEE SHEET STD03.
- INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
- CONNECT TO EXISTING STORM FEATURE.
- NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL. SEE SHEET D05.
- INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
- BRIDGE DECK BLOCKOUT. INSTALL FRAME AND GRATES. SEE BA20 FOR INFORMATION.
- INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60, SEE SHEET STD04.
- INSTALL NON-SLIP LID ON STRUCTURE.
- WALL DRAIN. SEE WALL SHEETS WA01-WA14.
- DUAL INLET PER DETAIL. SEE SHEET D06.
- INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR. SEE DETAIL, SHEET D02.
- NOT USED.

BID SET

4TH STREET - STREET AND STORM DRAINAGE PLAN AND PROFILE FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

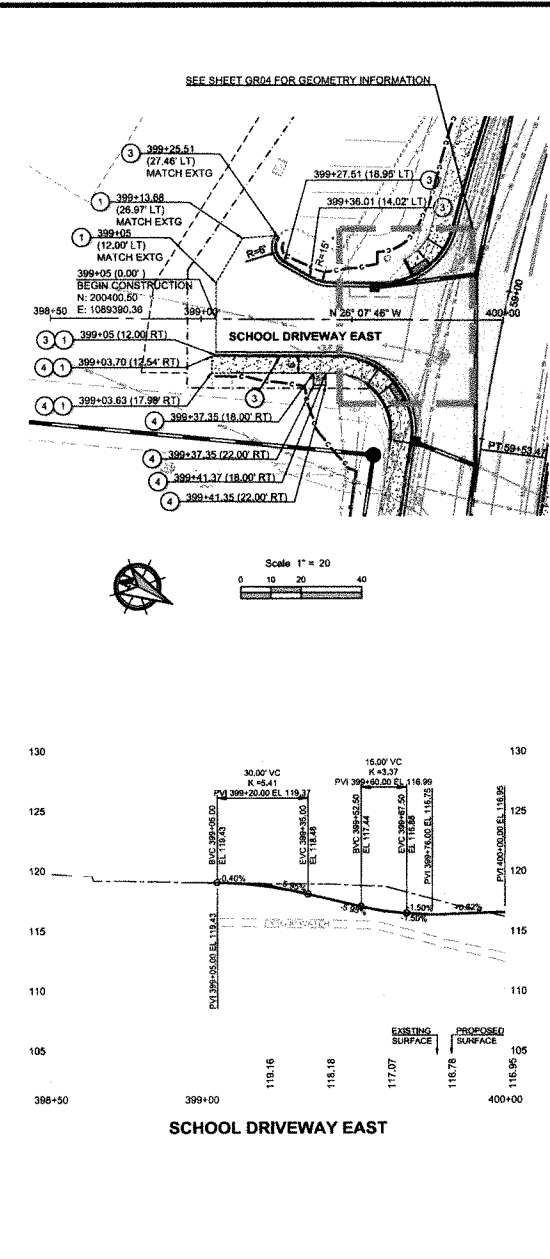
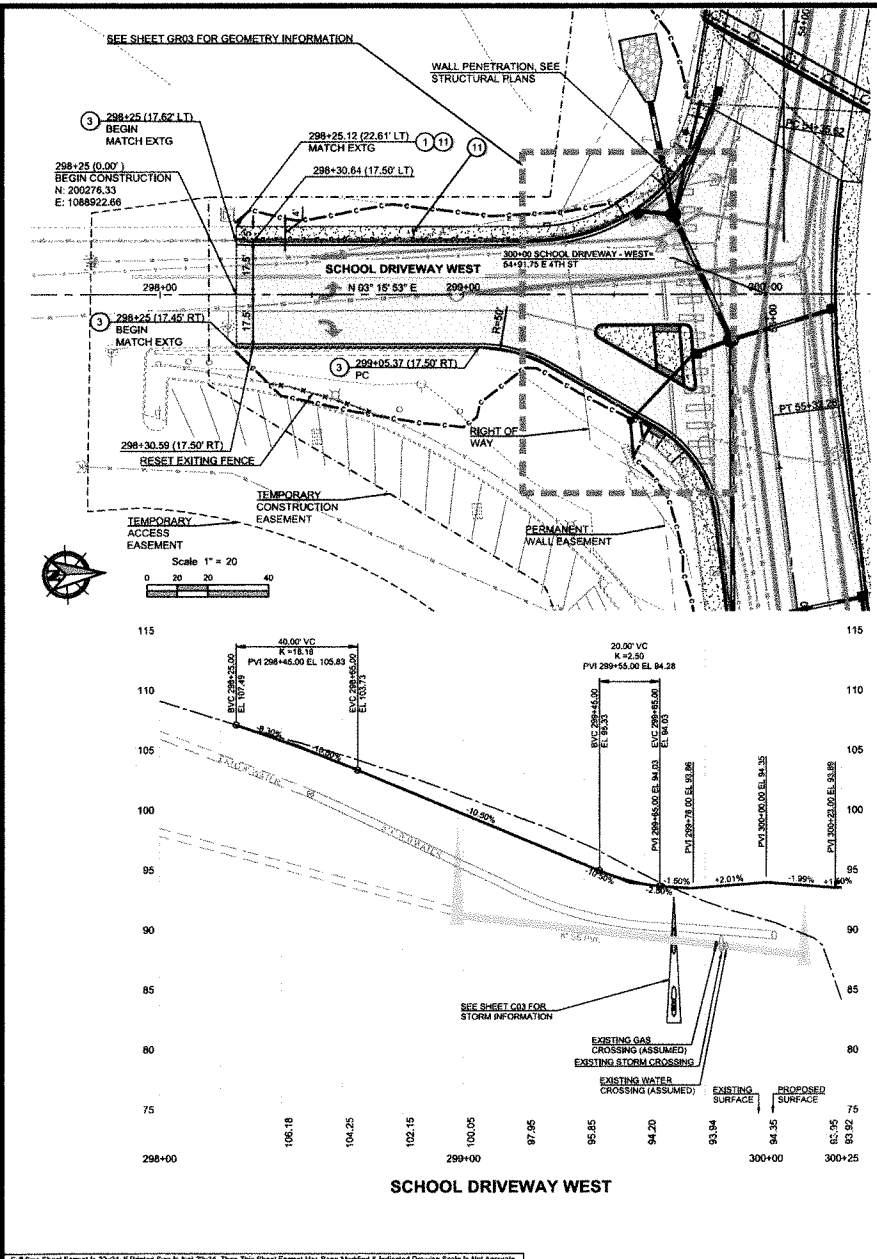
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Know what's below.
Call before you dig.

DESIGNED: JAB
CHECKED: CMK
DATE: MAY 2025
1:48LS00

SHEET ID:
C05

SHEET 48 OF 173

File Name: L:\Projects\15000\15000-Civil\Working\Sheet\15000-C07.dwg User: TML/OT/ML Date: 5/14/2015 9:27:10 AM
 Layout: TML/OT/ML Date: 5/14/2015 9:27:10 AM



- ### CONSTRUCTION NOTES:
- GENERAL NOTES:**
- SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
 - TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
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- STREET NOTES:**
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 - CONSTRUCT CEMENT CONCRETE TRAFFIC CURB, SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER, SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK, SEE WSDOT STANDARD PLAN F-30.10, SEE SHEET STD01.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO CUT WALL, SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 - CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL, SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
 - CONSTRUCT GRAVITY BLOCK WALL, SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
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 - SITE SPECIFIC CHAIN LINK FENCE TYPE 4 PER WSDOT STANDARD PLAN L-20.10 WITH 2" SCHD 40 POSTS AT 6 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
 - CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12, SEE SHEET STD02 FOR INFORMATION. WIDEN RAMP TO FACE OF PROPOSED WALL.
 - CEMENT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTRIAN RAILING, SEE DETAIL, SHEET D04.
 - PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20-4, SEE SHEET STD01 FOR INFORMATION.
 - GRAVEL DRIVEWAY APPROACH PER DETAIL, SEE SHEET D04.
 - GRAVEL ACCESS ROAD, 1.5" MIN COMP DEPTH CRUSHED SURFACING BASE COURSE, SEE SHEET PD01 FOR GRADING.
 - REINSTALL MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
 - INSTALL DETECTABLE WARNING SURFACE.
 - CLASS 4000 CEMENT CONCRETE PAVEMENT, SEE STRUCTURAL SHEETS BA01-BA32.
 - NOT USED.
- STORM DRAINAGE NOTES:**
- INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD03.
 - INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD04.
 - INSTALL COMBINATION CURB INLET PER WSDOT STANDARD PLAN B-25.20, SEE SHEET STD03.
 - INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20, SEE SHEET STD03.
 - INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20, SEE SHEET STD03.
 - INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR, SEE DETAIL, SHEET D02.
 - CONNECT TO EXISTING STORM FEATURE.
 - NATURALIZED STORMWATER OUTFALL CHANNEL PER DETAIL, SEE SHEET D05.
 - INSTALL PVC CATCH BASIN 24" DIAM, W/ SOLID GRATE PER DETAIL, SHEET D03.
 - BRIDGE DECK BLOCKOUT, INSTALL FRAME AND GRATES, SEE BA20 FOR INFORMATION.
 - INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.60, SEE SHEET STD04.
 - INSTALL NON-SLIP LID ON STRUCTURE.
 - WALL DRAIN, SEE WALL SHEETS WA01-WA14.
 - DUAL INLET PER DETAIL, SEE SHEET D06.
 - INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR, SEE DETAIL, SHEET D02.
 - NOT USED.

SCHOOL DRIVEWAY - PLAN AND PROFILE FOR:

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

PBS

811

Know what's below. Call before you dig.

DESIGNED: JAB
CHECKED: CMK
DATE: MAY 2015
PROJECT NO: 15000-000
SHEET NO: C07

BID SET

SHEET 50 OF 173



CENTERLINE CURVE DATA				
STATION	Δ	R	L	T
8	78°36'01"	5.00	6.86	4.10
9	134°24'27"	5.00	11.73	11.90

SEE SHEET PD01 FOR ACCESS ROAD
GRADING AND FENCE INFORMATION

GENERAL NOTES:

1. SEE TYPICAL SECTIONS SHEET TS01-TS06 FOR ADDITIONAL INFORMATION.
2. TREES TO BE REMOVED NOTED ON TP01-TP06 HAVE BEEN REMOVED FOR PLAN CLARITY.
3. SIDEWALK DIMENSIONS SHOWN C01-C06 INCLUDE CURB WIDTH.
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STREET NOTES:

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- 2 CONSTRUCT CEMENT CONCRETE TRAFFIC CURB. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET SD001.
- 3 CONSTRUCT CEMENT CONCRETE TRAFFIC CURB & GUTTER. SEE WSDOT STANDARD PLAN F-10.12, SEE SHEET SD001.
- 4 CONSTRUCT CEMENT CONCRETE SIDEWALK. SEE WSDOT STANDARD PLAN F-30.10, SEE SHEET SD001.
- 5 CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO GUTTER. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
- 6 CONSTRUCT CEMENT CONCRETE SIDEWALK ADJACENT TO FILL WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
- 7 CONSTRUCT GRAVITY BLOCK WALL. SEE SHEETS WA16-WA25 FOR MORE INFORMATION.
- 8 CONSTRUCT CURB WALL PER DETAIL ON SHEET D04. SEE SHEET GR04 FOR GRADING INFORMATION.
- 9 CHAIN LINK FENCE. SEE SHEETS WA16-WA25 FOR WSDOT STANDARD PLAN L-20.10 WITH 2" SCHD 40 POSTS AT 8 FT O.C. SEE WALL DETAIL SHEETS WA01-WA14 FOR INFORMATION.
- 10 CEMENT CONCRETE PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-10.12, SEE SHEET SD002 FOR INFORMATION. WIDEN RAMP TO FACE OF PROPOSED WALL.
- 11 CONSTRUCT CONC. SIDEWALK WITH THICKENED EDGE AND PEDESTRIAN RAILING. SEE DETAIL SHEET D04.
- 12 PEDESTRIAN CURB PER WSDOT STANDARD PLAN F-10.20-4. SEE SHEET SD001 FOR INFORMATION.
- 13 GRAVEL DRIVEWAY APPROACH PER DETAIL. SEE SHEET D04.
- 14 GRAVEL ACCESS ROAD, 1.0" MIN COMP DEPTH CRUSHED SURFACING BASE COURSE. SEE SHEET PD01 FOR GRADING.
- 15 REINSTATE MAILBOX REMOVED DURING SITE PREPARATION WITH EXISTING PEDESTAL AND FOUNDATION ON 2' X 2' X 0.5' CONCRETE PAD.
- 16 INSTALL DETECTABLE WARNING SURFACE.
- 17 CLASS 4000 CEMENT CONCRETE PAVEMENT. SEE STRUCTURAL SHEETS BA01-BA32.
- 18 NOT USED.

STORM DRAINAGE NOTES:

40. INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET SDT03.
41. INSTALL 72" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET SDT04.
42. INSTALL COMBINATION CURB INLET PER WSDOT STANDARD PLAN B-15.20, SEE SHEET SDT03.
43. INSTALL CATCH BASIN TYPE 1 PER WSDOT STANDARD PLAN B-5.20, SEE SHEET SDT03.
44. INSTALL CATCH BASIN TYPE 2 PER WSDOT STANDARD PLAN B-10.20, SEE SHEET SDT03.
45. INSTALL 72" DIAMETER CATCH BASIN TYPE 2 WITH FLOW RESTRICTOR, SEE DETAIL, SHEET D02.
46. CONNECT TO EXISTING STORM FEATURE.
47. NATURALIZED STORMWATER DRAINAGE CHANNEL PER DETAIL, SEE SHEET D05.
48. INSTALL PVC CATCH BASIN 24" DIAM. W/ SOLID GRATE PER DETAIL, SHEET D03.
49. BRIDGE DECK BLOCKOUT, INSTALL FRAME AND GRATES, SEE B220 FOR INFORMATION.
50. INSTALL 48" DIAMETER MANHOLE TYPE 3 PER WSDOT STANDARD PLAN B-15.50, SEE SHEET SDT04.
51. INSTALL NON-SLIP LID ON STRUCTURE.
52. WALL DRAIN, SEE WALL SHEETS WA01-WA14.
53. DUAL INLET PER DETAIL, SEE SHEET D06.
54. INSTALL FLOW CONTROL DITCH INLET WITH FLOW RESTRICTOR, SEE DETAIL, SHEET D02.
55. NOT USED.

185 Engineering and
Environmental LLC
325 SE Tech Center Drive
Suite 140
Vancouver, WA 98683
860.695.3486
vcp@vcp.com



**SCHOOL POND CONVEYANCE PLAN AND PROFILE FOR:
BRZEEZ CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON**



DESIGNED:
JAB

CHECKED:
CMK

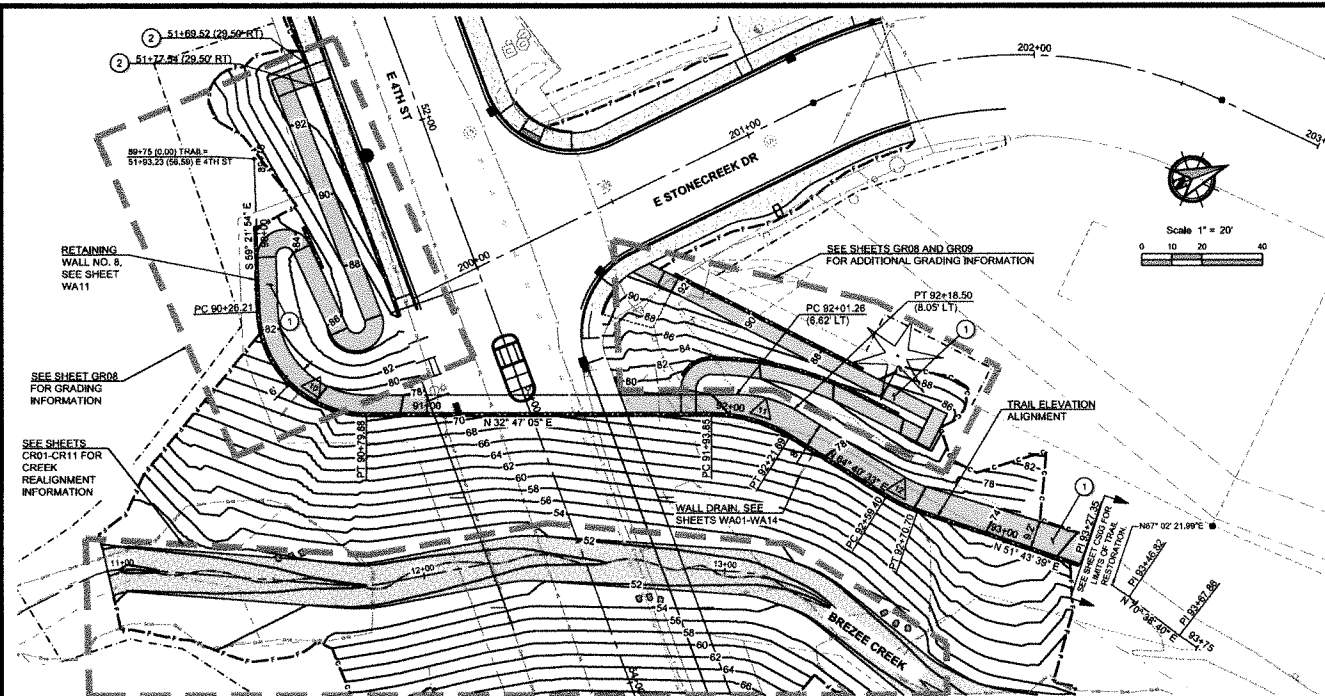
MAY 2025
71486.000

SHEET ID
C08

SHEET **51** OF **1**

SHEET 51 OF 173

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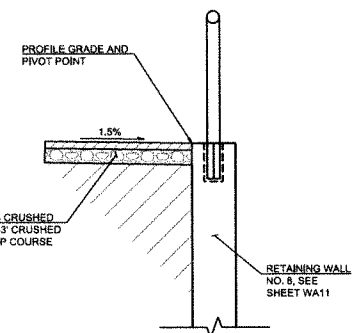
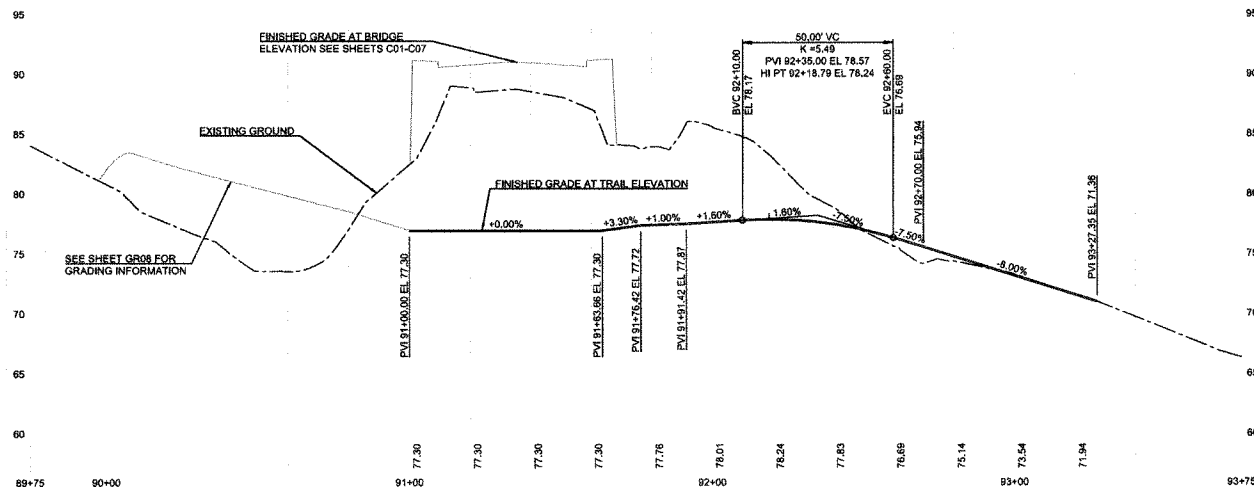
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- PEDESTRIAN TRAIL SURFACING PER DETAIL THIS SHEET.
- SITE SPECIFIC CHAIN LINK SINGLE GATE PER WSDOT STANDARD PLAN L-30.10-02. SEE SHEET STD02.

HATCHING LEGEND

- TRAIL CONSTRUCTION LIMITS
- NEW CONCRETE AREA

TRAIL ALIGNMENT CURVE DATA				
Δ	A	R	L	T
10	87°51'01"	35.00	53.66	30.71
11	31°53'28"	50.00	27.83	14.29
12	12°58'54"	50.00	11.30	5.67



TRAIL CONSTRUCTION DETAIL

BID SET

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

PBS Suburban and
Environmental LLC
225 8th Street, Suite 200
Washington, WA 98003
Phone: 206.461.1111
Fax: 206.461.1112



ACCESS TRAIL - PLAN AND PROFILE FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



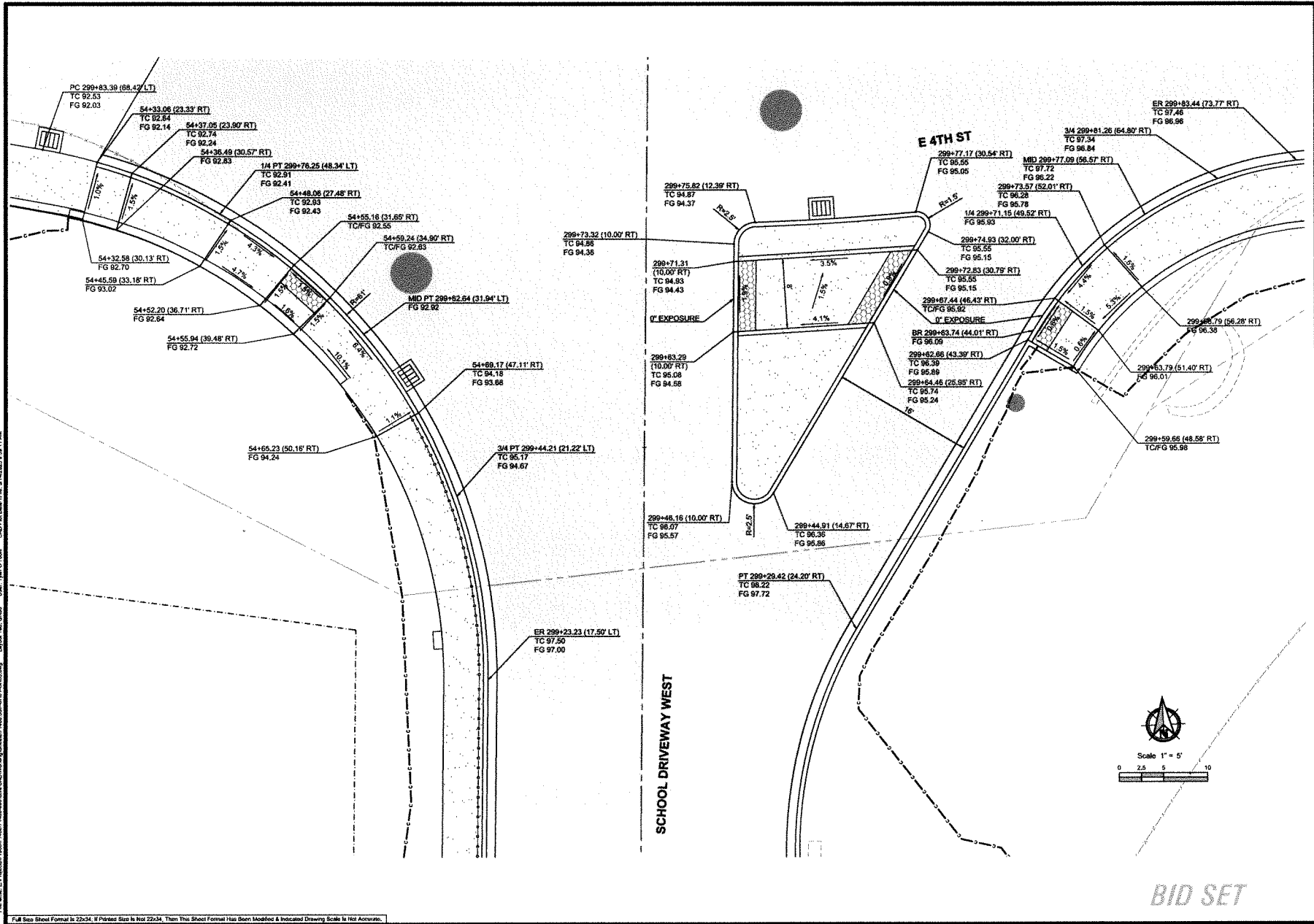
DESIGNED:
JAP
CHECKED:
CMK
MAY 2025
\$1486,000

SHEET ID:
TR01

SHEET **52** OF **173**

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 CAD File Date/Time: 5/11/2024 9:11:44 AM



PBS Engineering and
 Environmental LLC
 335 S. 1st Street
 Washington, VA 22602
 (703) 596-1000
 www.pbseng.com



INTERSECTION GEOMETRY FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

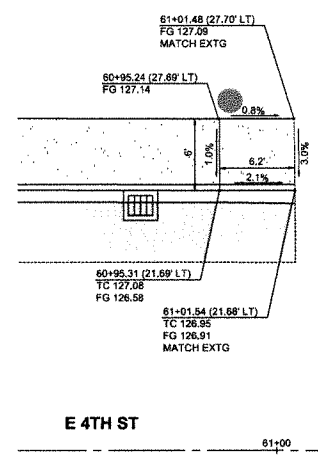
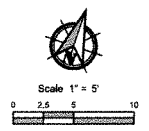
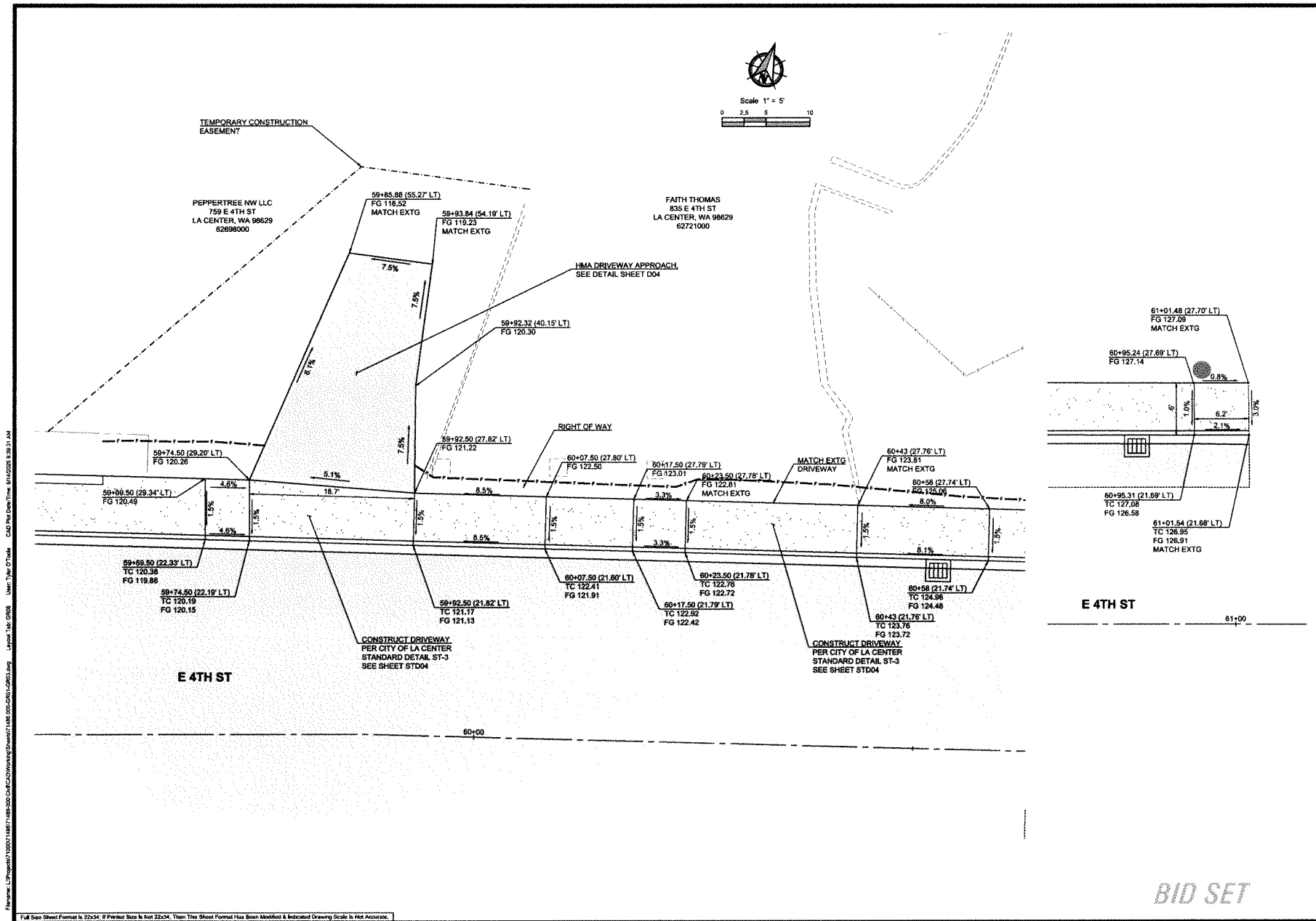
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
 JAB
 CHECKED:
 CMK
 MAY 2024
 \$148,000
 SHEET ID:
GR03
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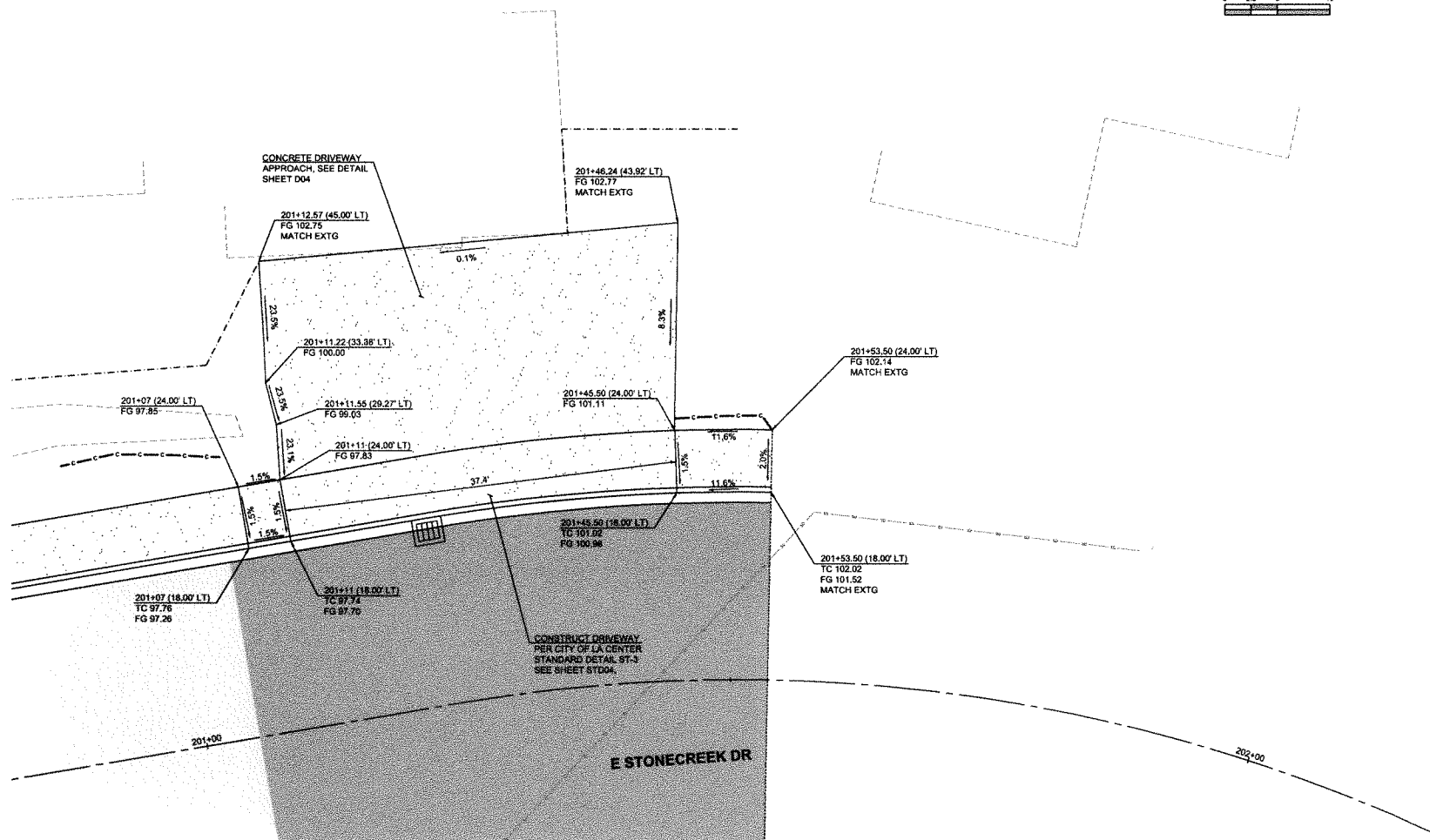
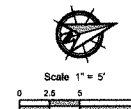
PBS Engineering and Surveying
1328 SE Top Center Drive
Vancouver, WA 98663
Phone: 509.575.1000

DRIVEWAY GRADING FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

City of La Center

DESIGNED: JAB
CHECKED: CLK
MAY 2025
71486.000
SHEET ID
GR06
SHEET **58** OF **173**

DENNIS C. & LAUREL A WALLOCH
430 E STONECREEK DR
LA CENTER, WA 98629
83472266



810 SET

DBS Engineering and
Environmental LLC
325 SE Tech Center Drive
Suite 140
Portland, OR 97214
503.295.2438



DRIVEWAY GRADING FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED

CHECKED:

CMR
MAY 2016

71486.000

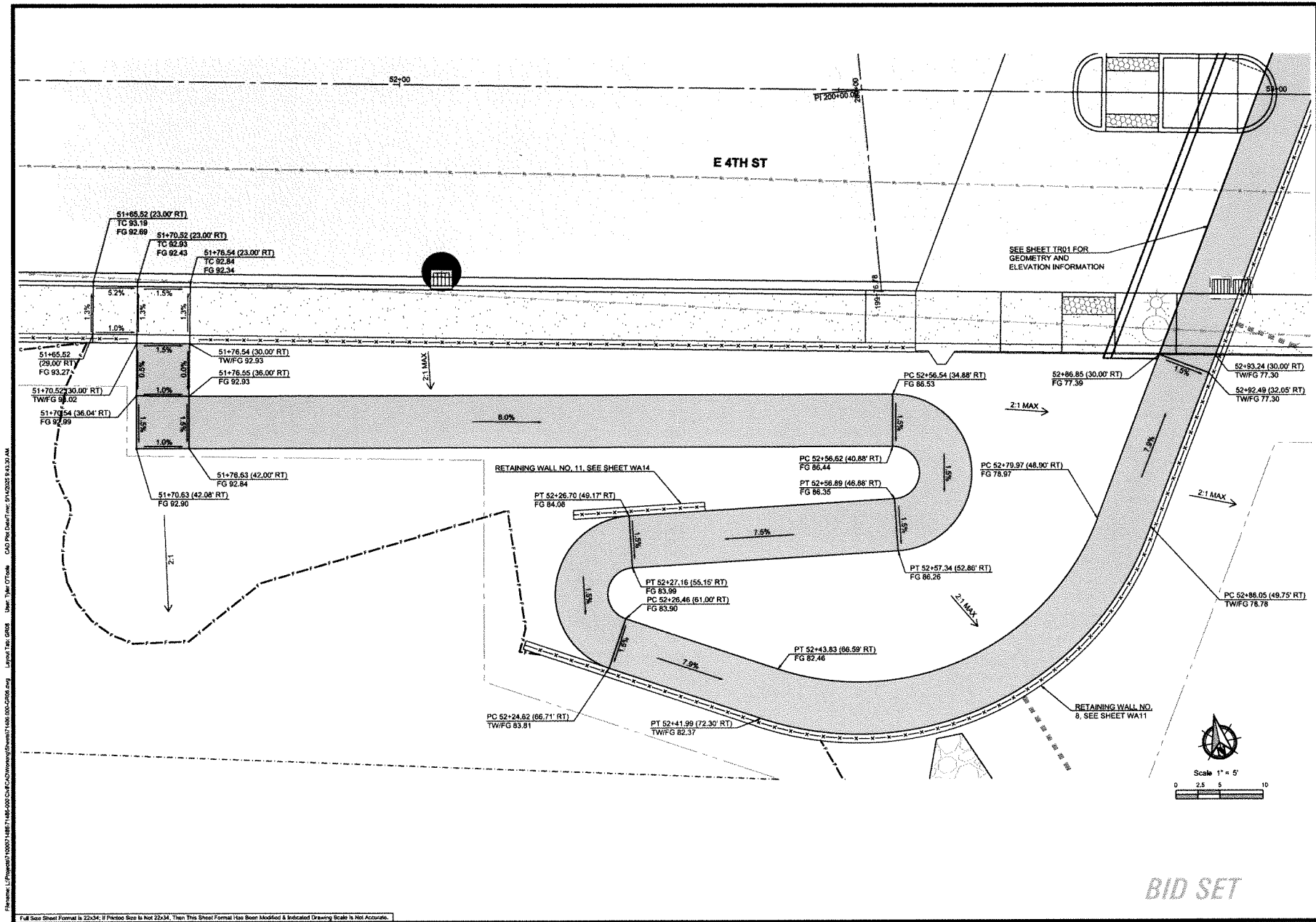
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SHEET 59 OF 173

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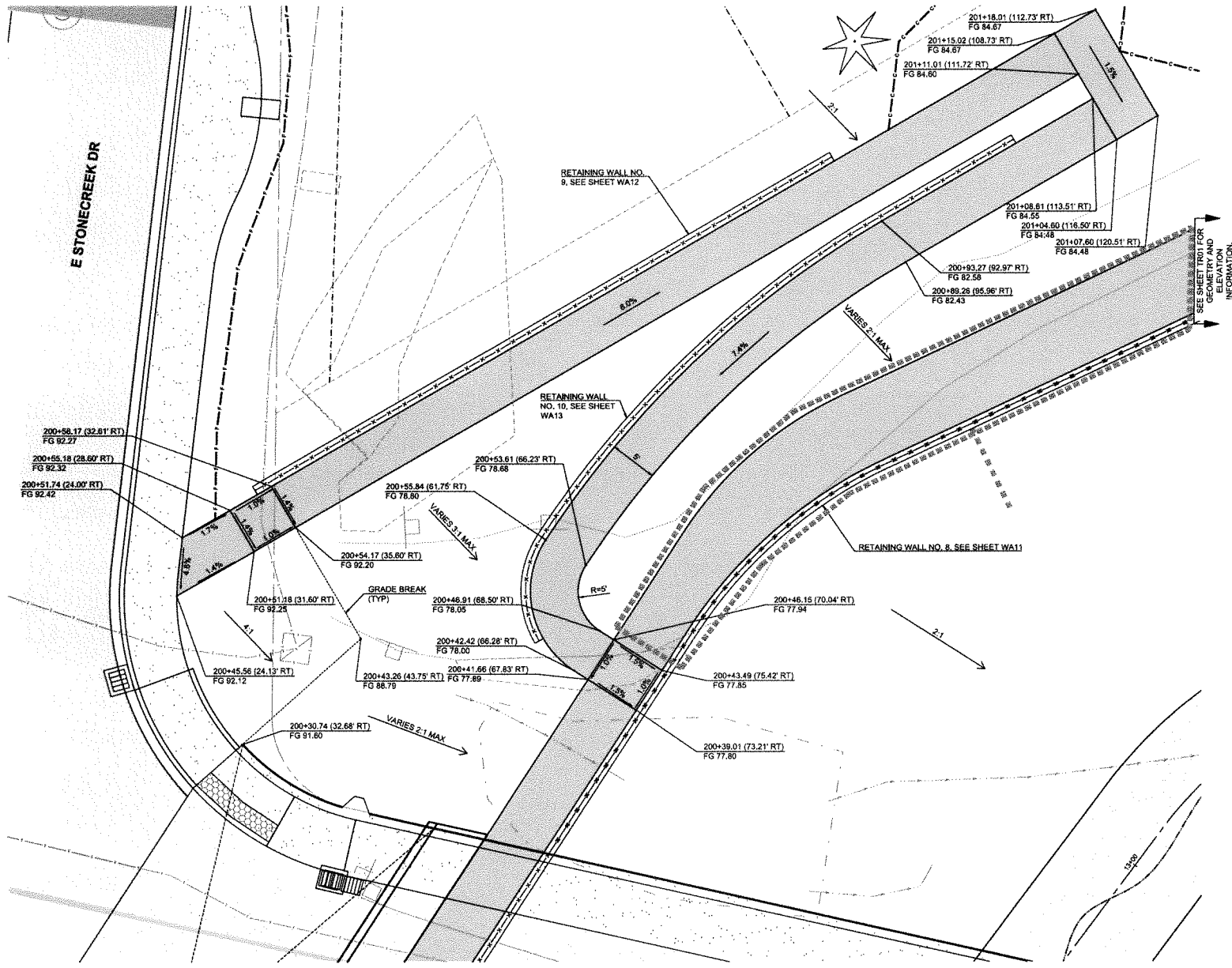


SOUTH ADA TRAIL CONNECTION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JAB
CHECKED:	CMK
DATE:	MAY 2025
SCALE:	1"=400.00'
SHEET NO:	GR08
SHEET OF:	60 OF 173

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BID SET

PBS Engineering and
1335 SE Tenth Center Drive
Vancouver, WA 98683
Phone: 360.581.1111
pbsemail.com



NORTH ADA TRAIL CONNECTION FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
JAB
CHECKED:
CMK
MAY 2025
71488.000
SHEET ID:
GR09
SHEET **61** OF **173**

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RICHARD K. & AMY R. CHASE
219 E 4TH ST
LA CENTER, WA 98629
64081000

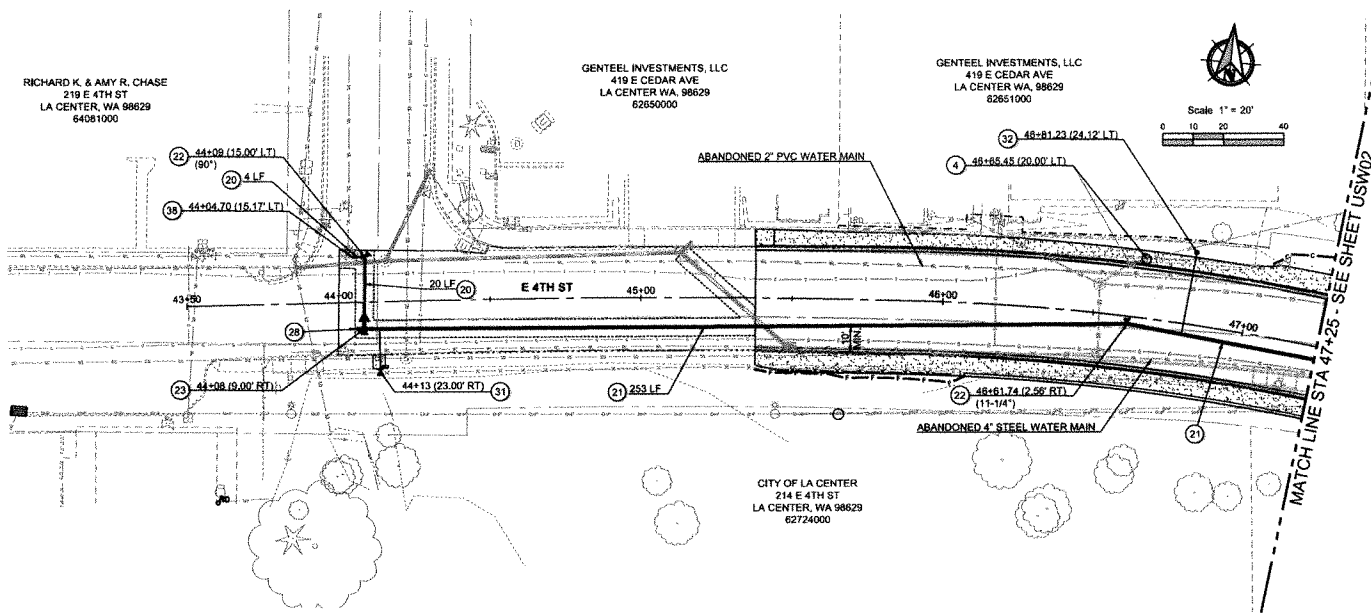
GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER WA, 98629
62650000

GENTEEL INVESTMENTS, LLC
419 E CEDAR AVE
LA CENTER WA, 98629
62651000

CITY OF LA CENTER
214 E 4TH ST
LA CENTER, WA 98629
62724000



Scale 1" = 20'



GENERAL NOTES:

1. SEE SHEET BP01 FOR TEMPORARY BYPASS PLAN
2. SEE SHEETS CS01-CS03 FOR CONSTRUCTION STAGING PLAN
3. SEE SHEETS STD05-07 FOR CPU WATER DETAIL.

CONSTRUCTION NOTES:

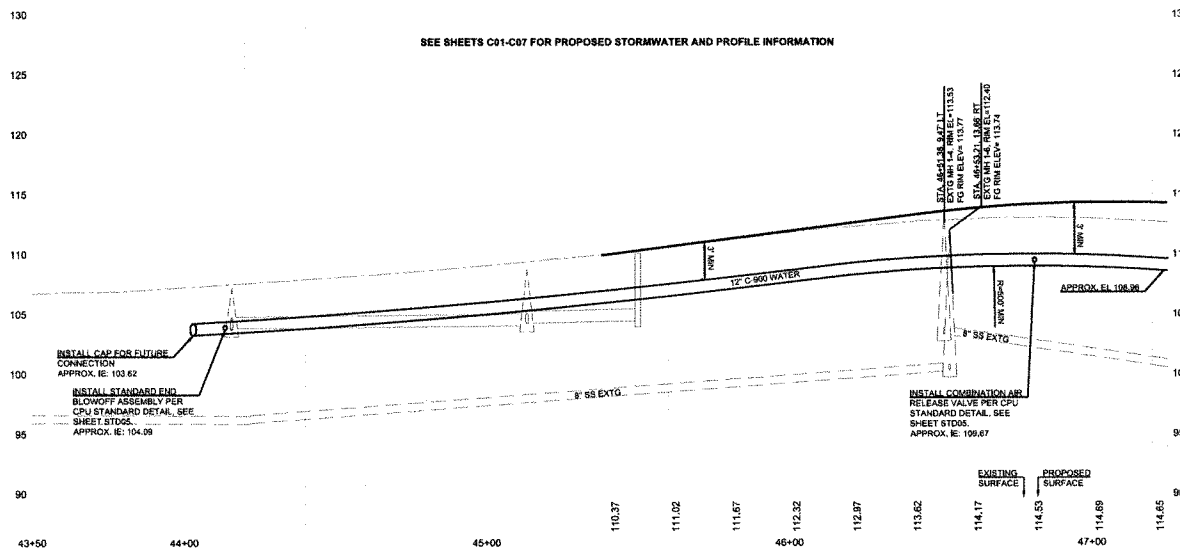
SANITARY NOTES:

1. INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD03.
2. INSTALL 8" PVC SANITARY SEWER PIPE.
3. INSTALL 8" C900 PVC SANITARY SEWER PIPE.
4. RELOCATE EXISTING SANITARY CLEANOUT.
5. INSTALL 48" DOGHOUSE MANHOLE PER DETAIL ON SHEET D01.
6. CONNECT TO EXISTING SANITARY MANHOLE PER CITY OF LA CENTER STANDARD DETAIL SS-9, SEE SHEET STD04.

CPU WATER NOTES:

20. INSTALL 8" PVC C-900 WATER MAIN
21. INSTALL 12" PVC C-900 WATER MAIN
22. INSTALL MJ BEND, SEE PLAN FOR BEND TYPE. RESTRAIN ALL JOINTS AND INSTALL THRUST BLOCK PER CPU STANDARD DETAIL, SEE SHEET STD05.
23. INSTALL:
 - (1) 12" X 12" FLG TEE
 - (3) 12" FLG X MJ BUTTERFLY VALVE
 - (1) 12" X 8" FLG X MJ REDUCERINSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
24. INSTALL:
 - (1) 16" X 8" FLG TEE
 - (2) 16" FLG X MJ BUTTERFLY VALVE
 - (1) 8" FLG X MJ BUTTERFLY VALVEINSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
25. ADJUST EXISTING FIRE HYDRANT TO FINISHED GRADE. CONSTRUCT MIN. 4' X 4' CONCRETE PAD.
26. INSTALL 24" DUCTILE IRON CASING AND BACKFILL WITH CDF PER DETAIL, SEE SHEET D03.
27. INSTALL 16" MJ CAP AND BLOW-OFF ASSEMBLY.
28. INSTALL 12" MJ CAP AND BLOW-OFF ASSEMBLY.
29. CONNECT TO EXISTING MAIN LINE. HOT-TAP INTO EXISTING PER CPU DETAIL, SEE SHEET STD05. COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
30. INSTALL 8" FLG X MJ GATE VALVE
31. INSTALL STANDARD END BLOWOFF ASSEMBLY PER CPU STANDARD DETAIL, SEE SHEET STD05.
32. INSTALL COMBINATION AIR RELEASE VALVE PER CPU STANDARD DETAIL, SEE SHEET STD05.
33. INSTALL 16" PVC C-900 WATER MAIN
34. INSTALL 16" DI TR-FLEX RESTRAINED JOINT PIPE.
35. INSTALL:
 - (1) 16" X 15" FLG TEE
 - (1) 16" FLG X MJ BUTTERFLY VALVE
 - (1) 16" X 12" FLG X MJ REDUCERINSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
36. INSTALL 16" DUCTILE IRON PIPE.
37. INSTALL 30" DUCTILE IRON CASING AND BACKFILL WITH CDF PER DETAIL, SEE SHEET D03.
38. AFTER TESTING AND APPROVAL, CONNECT TO EXISTING 8" WATER MAIN. COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
39. INSTALL 16" FLG X MJ BUTTERFLY VALVE AND 16" X 12" FLG X MJ REDUCER.
40. AFTER TESTING AND APPROVAL, CONNECT TO EXISTING 12" WATER MAIN. COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
41. INSTALL:
 - (1) 16" X 12" FLG TEE
 - (2) 16" FLG X MJ BUTTERFLY VALVE
 - (1) 12" FLG X MJ BUTTERFLY VALVEINSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
42. INSTALL 12" FLG X MJ BUTTERFLY VALVE AND 12" X 8" FLG X MJ REDUCER
43. CONNECT TO EXISTING 8" GATE VALVE.

SEE SHEETS C01-C07 FOR PROPOSED STORMWATER AND PROFILE INFORMATION



BID SET




SANITARY AND WATER PLAN FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

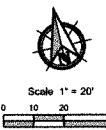
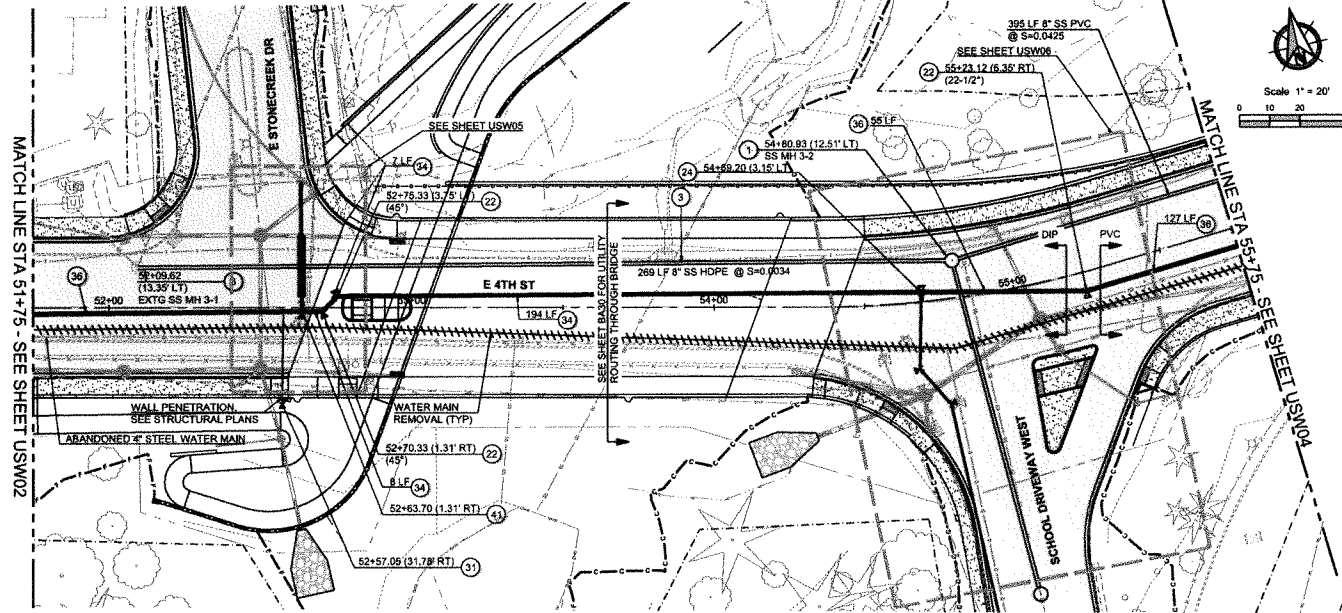


DESIGNED:
JAB
CHECKED:
CMK
MAY 2025
71486.000

SHEET ID
USW01
SHEET 62 OF 173



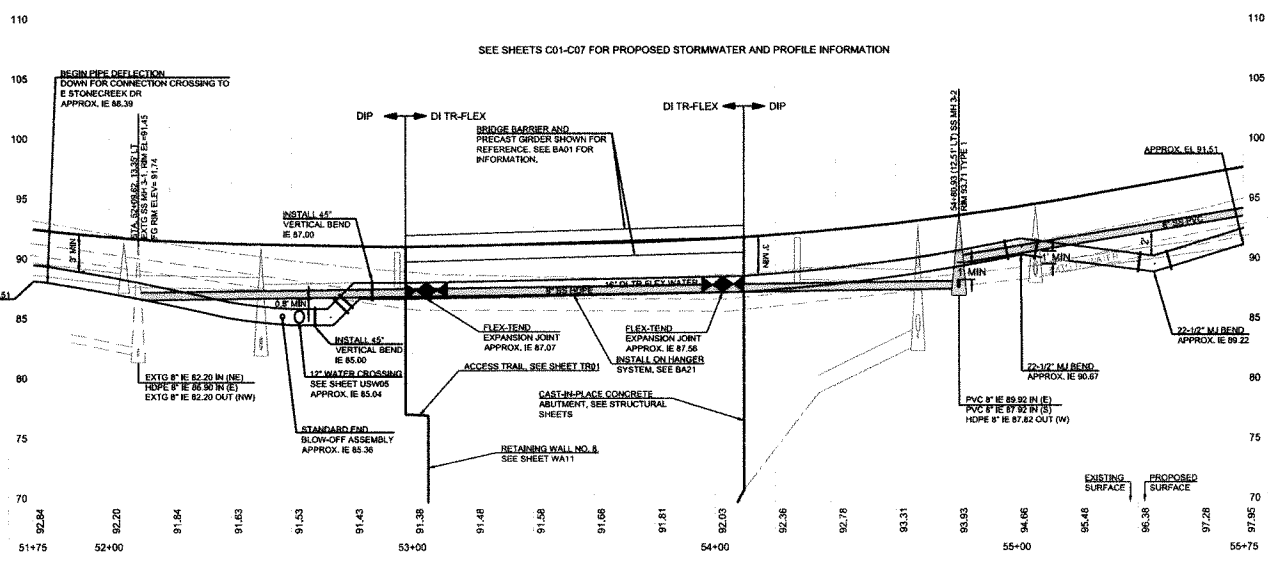
	<p>PBS Engineering and Environment LLC 10000 Wilshire Blvd Suite 1500 Westwood, CA 90024 Tel: 310.207.1000 Fax: 310.207.1001 www.pbsusa.com</p>	<p>SANITARY AND WATER PLAN FOR:</p>	<p>BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING</p>	<p>A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON</p>
	<p>Know what's below, Call before you dig.</p>		<p>DESIGNED: JAB CHECKED: CLK MAY 2025 71486.000</p>	<p>SHEET ID</p>
<p>USW02</p>	<p>SHEET 63 OF 173</p>			



- GENERAL NOTES:**
- SEE SHEET BP01 FOR TEMPORARY BYPASS PLAN
 - SEE SHEETS CS01-CS03 FOR CONSTRUCTION STAGING PLAN
 - SEE SHEETS STD05-07 FOR CPU WATER DETAILS.
- CONSTRUCTION NOTES:**

- SANITARY NOTES:**
- INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, SEE SHEET STD03.
 - INSTALL 8" PVC SANITARY SEWER PIPE.
 - INSTALL 8" C900 PVC SANITARY SEWER PIPE.
 - RELOCATE EXISTING SANITARY CLEANOUT.
 - INSTALL 48" DOGHOUSE MANHOLE PER DETAIL ON SHEET D01.
 - CONNECT TO EXISTING SANITARY MANHOLE PER CITY OF LA CENTER STANDARD DETAIL SS-9, SEE SHEET STD04.

- CPU WATER NOTES:**
- INSTALL 8" PVC C-900 WATER MAIN
 - INSTALL 12" PVC C-900 WATER MAIN
 - INSTALL MJ BEND, SEE PLAN FOR BEND TYPE. RESTRAIN ALL JOINTS AND INSTALL THRUST BLOCK PER CPU STANDARD DETAIL, SEE SHEET STD05.
 - INSTALL (1) 12" X 12" FLG TEE (3) 12" FLG X MJ BUTTERFLY VALVE (1) 12" X 8" FLG X MJ REDUCER INSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
 - INSTALL (1) 16" X 8" FLG TEE (2) 16" FLG X MJ BUTTERFLY VALVE (1) 8" FLG X MJ BUTTERFLY VALVE INSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
 - ADJUST EXISTING FIRE HYDRANT TO FINISHED GRADE. CONSTRUCT MIN. 4' X 4' CONCRETE PAD.
 - INSTALL 24" DUCTILE IRON CASING AND BACKFILL WITH CDF PER DETAIL, SEE SHEET D03.
 - INSTALL 16" MJ CAP AND BLOW-OFF ASSEMBLY.
 - INSTALL 12" MJ CAP AND BLOW-OFF ASSEMBLY.
 - CONNECT TO EXISTING MAIN LINE, HOT-TAP INTO EXISTING PER CPU DETAIL, SEE SHEET STD05. COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
 - INSTALL 8" FLG X MJ GATE VALVE
 - INSTALL STANDARD END BLOWOFF ASSEMBLY PER CPU STANDARD DETAIL, SEE SHEET STD05.
 - INSTALL COMBINATION AIR RELEASE VALVE PER CPU STANDARD DETAIL, SEE SHEET STD05.
 - INSTALL 16" PVC C-900 WATER MAIN
 - INSTALL 16" DI TR-FLEX RESTRAINED JOINT PIPE.
 - INSTALL (1) 16" X 16" FLG TEE (1) 16" FLG X MJ BUTTERFLY VALVE (1) 16" X 12" FLG X MJ REDUCER INSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
 - INSTALL 16" DUCTILE IRON PIPE.
 - INSTALL 30" DUCTILE IRON CASING AND BACKFILL WITH CDF PER DETAIL, SEE SHEET D03.
 - AFTER TESTING AND APPROVAL, CONNECT TO EXISTING 8" WATER MAIN, COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
 - INSTALL 16" FLG X MJ BUTTERFLY VALVE AND 16" X 12" FLG X MJ REDUCER
 - AFTER TESTING AND APPROVAL, CONNECT TO EXISTING 12" WATER MAIN, COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION.
 - INSTALL (1) 16" X 12" FLG TEE (2) 16" FLG X MJ BUTTERFLY VALVE (1) 12" FLG X MJ BUTTERFLY VALVE INSTALL THRUST BLOCK AND MECHANICALLY RESTRAIN ALL JOINTS
 - INSTALL 12" FLG X MJ BUTTERFLY VALVE AND 12" X 8" FLG X MJ REDUCER
 - CONNECT TO EXISTING 8" GATE VALVE.



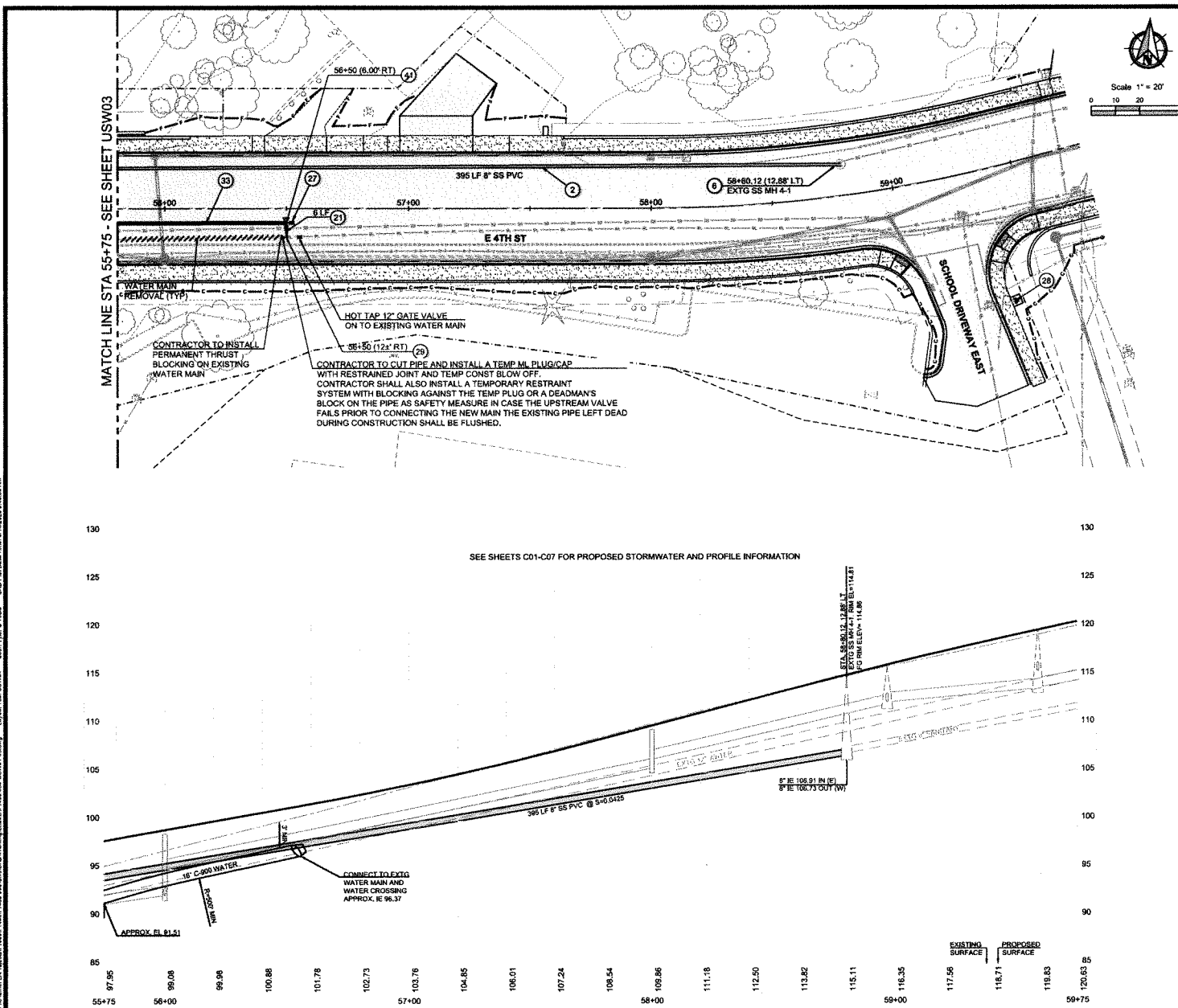
SEE SHEETS C01-C07 FOR PROPOSED STORMWATER AND PROFILE INFORMATION

BID SET

Sanitary and Water Plan for:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

DESIGNED: JAS
CHECKED: CLK
MAY 2023
71466.000
SHEET 64 OF 173

Revised: L:\Projects\1000714887\1488714887-Civil\DWG\Sheet\1488714887-001.dwg User: Tye O'Leary Layout: Title: USW04 Date: 04/20/2024 1:45:03 AM



GENERAL NOTES:

1. SEE SHEET B001 FOR TEMPORARY BYPASS PLAN
2. SEE SHEETS C501-C503 FOR CONSTRUCTION STAGING PLAN
3. SEE SHEETS STD05-07 FOR CPU WATER DETAILS.

CONSTRUCTION NOTES:

SANITARY NOTES:

1. INSTALL 48\"/>

CPU WATER NOTES:

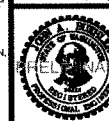
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41. INSTALL (1) 12\"/>
42. INSTALL (1) 12\"/>
43. CONNECT TO EXISTING 8\" GATE VALVE.

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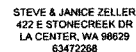
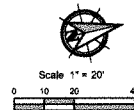
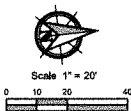
PBS Engineering and
Environmental LLC
1000 1st Avenue
Suite 100
Portland, OR 97201
503.228.1100
pbsenv.com

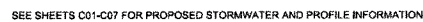
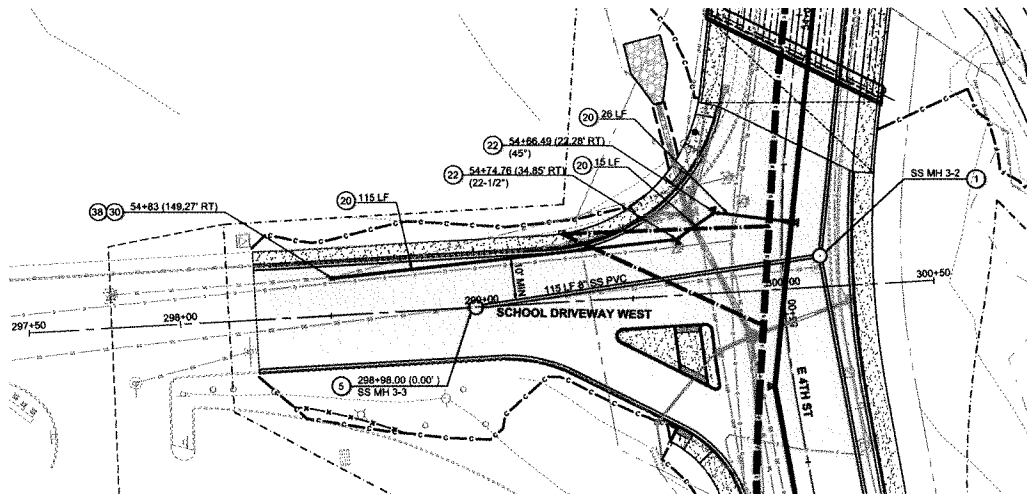


SANITARY AND WATER PLAN FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JAB
CHECKED:	CHK
DATE:	MAY 2025
PROJECT:	714887-000
SHEET NO:	USW04
TOTAL SHEETS:	65 OF 173





1. SEE SHEET BP01 FOR TEMPORARY BYPASS PLAN
2. SEE SHEETS CS01-CS03 FOR CONSTRUCTION STAGING PLAN
3. SEE SHEETS STD05-07 FOR CPU WATER DETAILS.

SANITARY NOTES:

- ① INSTALL 48" DIAMETER MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15-20, SEE SHEET SD03.
- ② INSTALL 6" PVC SANITARY SEWER PIPE.
- ③ INSTALL 8" C900 PVC SANITARY SEWER PIPE.
- ④ RELOCATE EXISTING SANITARY CLEANOUT.
- ⑤ INSTALL 48" DOGHOUSE MANHOLE PER DETAIL ON SHEET D01.
- ⑥ CONNECT TO EXISTING SANITARY MANHOLE PER CITY OF LA CENTER STANDARD DETAIL SS-8, SEE SHEET SD04.

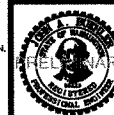
20. INSTALL 8" PVC C-900 WATER MAIN
21. INSTALL 12" PVC C-900 WATER MAIN
22. INSTALL MJ BEND, SEE PLAN FOR BEND TYPE.
RESTRAIN ALL JOINTS AND INSTALL THRUST BLOCK
PER CPU STANDARD DETAIL, SEE SHEET STD05.
23. INSTALL
(1) 12" X 12" FLG TEE
(2) 12" FLG X MJ BUTTERFLY VALVE
(1) 12" X 8" FLG X MJ REDUCER
INSTALL THRUST BLOCK AND MECHANICALLY
RESTRAIN ALL JOINTS
24. INSTALL
(1) 16" X 8" FLG TEE
(2) 16" FLG X MJ BUTTERFLY VALVE
(1) 8" FLG X MJ BUTTERFLY VALVE
INSTALL THRUST BLOCK AND MECHANICALLY
RESTRAIN ALL JOINTS
25. ADJUST EXISTING FIRE HYDRANT TO FINISHED GRADE
CONSTRUCT MIN. 4' X 4' CONCRETE PAD.
26. INSTALL 24" DUCTILE IRON CASING AND BACKFILL
WITH CDF PER DETAIL, SEE SHEET D03.
27. INSTALL 16" MJ CAP AND BLOW-OFF ASSEMBLY.
28. INSTALL 12" MJ CAP AND BLOW-OFF ASSEMBLY.
29. CONNECT TO EXISTING MAIN LINE, HOT-TAP INTO
EXISTING PER CPU DETAIL, SEE SHEET STD05.
COORDINATE TIE-IN WITH CPU INSPECTOR 48-HR MIN
PRIOR TO CONSTRUCTION.
30. INSTALL 8" FLG X MJ GATE VALVE
31. INSTALL STANDARD END BLOWOFF ASSEMBLY PER
CPU STANDARD DETAIL, SEE SHEET STD05.
32. INSTALL COMBINATION AIR RELEASE VALVE PER CPU
STANDARD DETAIL, SEE SHEET STD05.
33. INSTALL 16" PVC C-900 WATER MAIN
34. INSTALL 16" DI TR-FLEX RESTRAINED JOINT PIPE.
35. INSTALL
(1) 16" X 16" FLG TEE
(1) 16" FLG X MJ BUTTERFLY VALVE
(1) 16" X 12" FLG X MJ REDUCER
INSTALL THRUST BLOCK AND MECHANICALLY
RESTRAIN ALL JOINTS
36. INSTALL 16" DUCTILE IRON PIPE.
37. INSTALL 30" DUCTILE IRON CASING AND BACKFILL
WITH CDF PER DETAIL, SEE SHEET D03.
38. AFTER TESTING AND APPROVAL, CONNECT TO
EXISTING 8" WATER MAIN, COORDINATE TIE-IN WITH
CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION
39. INSTALL 16" FLG X MJ BUTTERFLY VALVE AND 16" X 12"
FLG X MJ REDUCER
40. AFTER TESTING AND APPROVAL, CONNECT TO
EXISTING 12" WATER MAIN, COORDINATE TIE-IN WITH
CPU INSPECTOR 48-HR MIN PRIOR TO CONSTRUCTION
41. INSTALL
(1) 16" X 12" FLG TEE
(2) 16" FLG X MJ BUTTERFLY VALVE
(1) 12" FLG X MJ BUTTERFLY VALVE
INSTALL THRUST BLOCK AND MECHANICALLY
RESTRAIN ALL JOINTS
42. INSTALL 12" FLG X MJ BUTTERFLY VALVE AND 12" X 8"
FLG X MJ REDUCER
43. CONNECT TO EXISTING 8" GATE VALVE.

BID SET

985 Engineering and
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1225 SE Tech Center Drive
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Vancouver, WA 98663
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SBB

SANITARY AND WATER PLAN FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
JAB

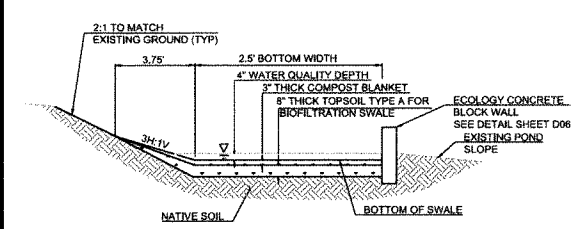
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MAY 2025
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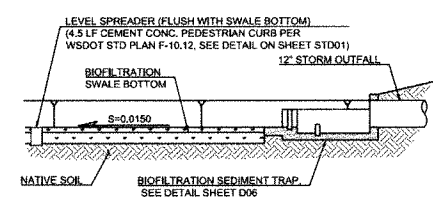
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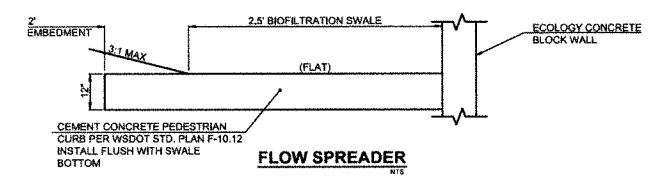


SECTION A-A



SECTION B-B

COMPOST AMENDED BIOFILTRATION SWALE DETAIL



FLOW SPREADER

POND GRADING TABLE

POINT	FG ELEVATION	NOTES	NORTHING	EASTING
A-1	118.95	PC	200229.69	1089472.03
A-2	118.90	MID	200225.97	1089473.32
A-3	118.85	PT	200224.38	1089476.35
A-4	118.83		200222.14	1089490.47
A-5	118.42		200219.89	1089504.58
A-6	118.20		200217.64	1089518.70
A-7	117.99		200215.40	1089532.81
A-8	117.77		200213.15	1089546.93
A-9	117.56		200210.91	1089561.05
A-10	117.35	PC	200208.66	1089575.16
A-11	117.26	MID	200204.91	1089579.23
A-12	117.17	PT	200199.70	1089577.36
A-13	125.54		200186.18	1089609.47
A-14	125.13	PC	200185.43	1089555.81
A-15	124.48	MID	200185.41	1089650.70

POND GRADING TABLE

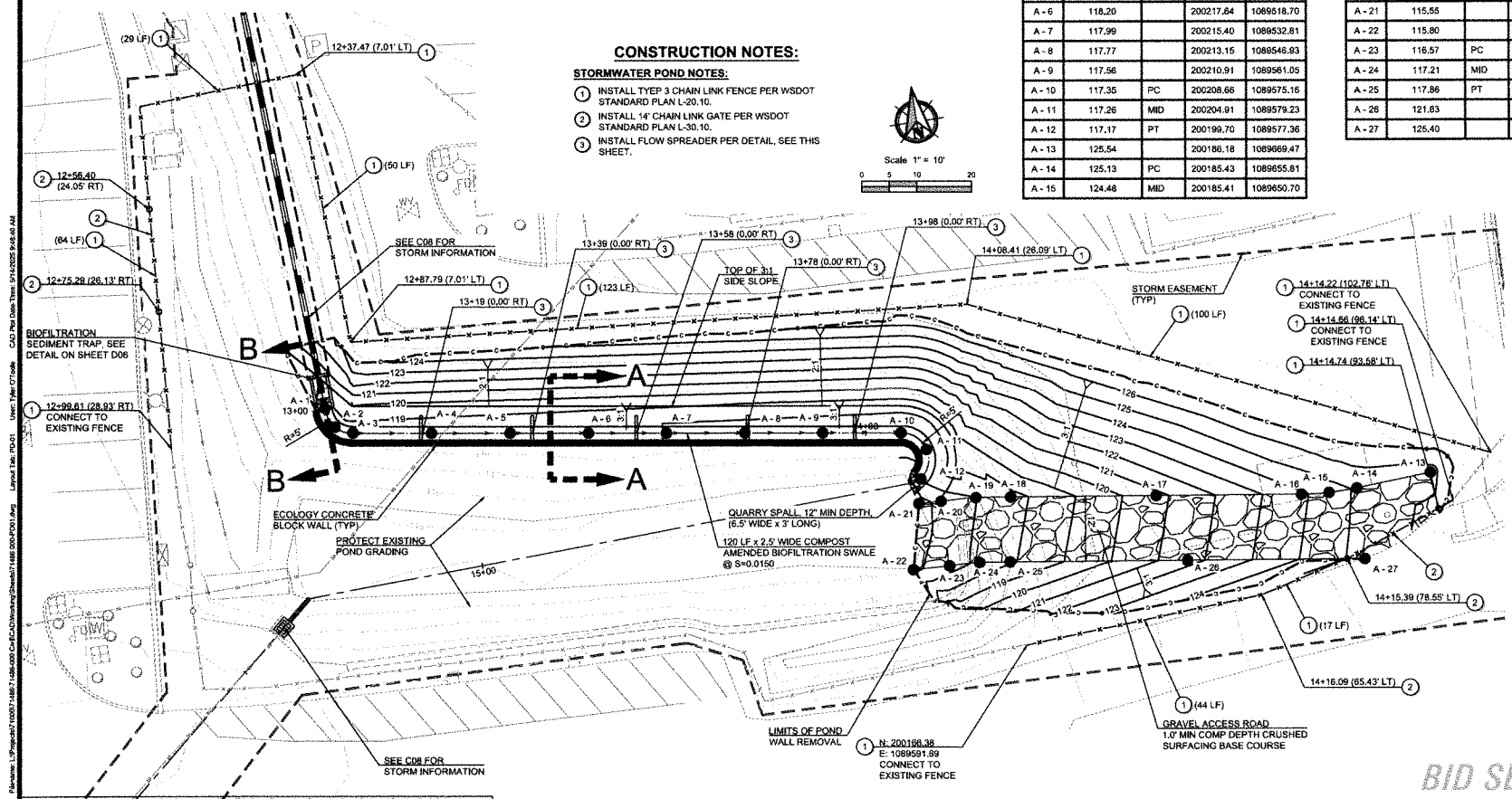
POINT	FG ELEVATION	NOTES	NORTHING	EASTING
A-16	123.83	PT	200185.91	1089645.62
A-17	120.73		200189.87	1089619.34
A-18	117.62	PC	200193.84	1089593.06
A-19	116.97	MID	200194.71	1089586.76
A-20	116.33	PT	200195.04	1089580.40
A-21	115.55		200195.25	1089576.32
A-22	115.80		200183.39	1089573.41
A-23	116.57	PC	200183.05	1089580.05
A-24	117.21	MID	200182.77	1089586.59
A-25	117.86	PT	200182.00	1089591.08
A-26	121.63		200177.17	1089623.15
A-27	125.40		200172.33	1089655.21

CONSTRUCTION NOTES:

- STORMWATER POND NOTES:**
1. INSTALL TYPE 3 CHAIN LINK FENCE PER WSDOT STANDARD PLAN L-20.10.
 2. INSTALL 14" CHAIN LINK GATE PER WSDOT STANDARD PLAN L-20.10.
 3. INSTALL FLOW SPREADER PER DETAIL, SEE THIS SHEET.



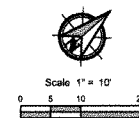
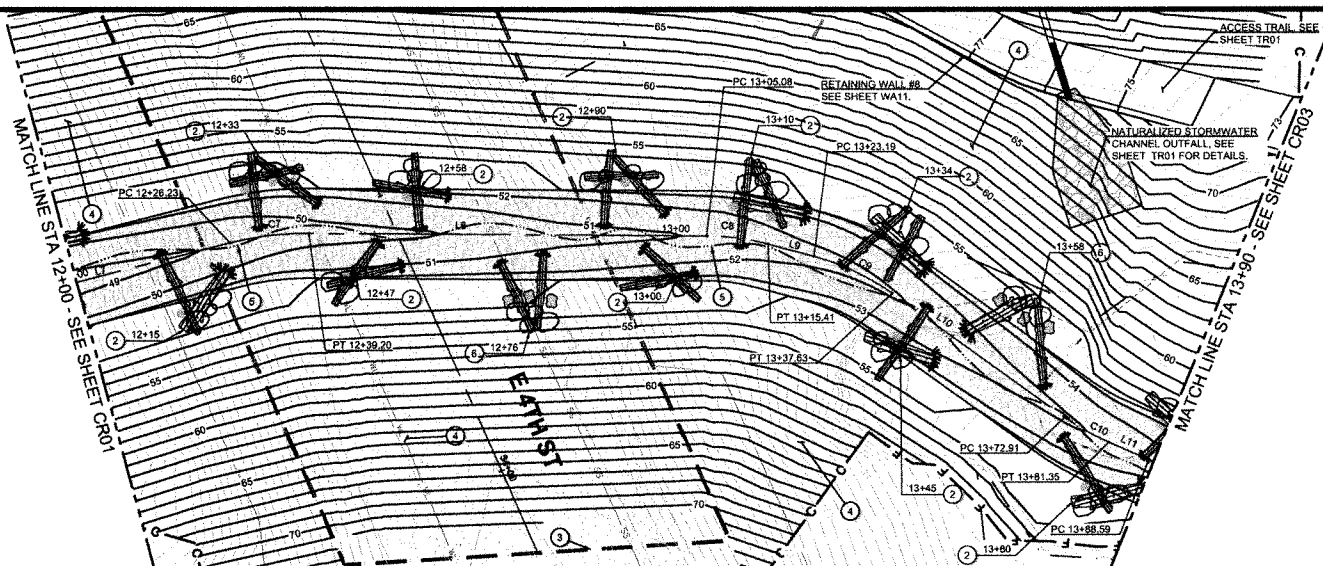
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STORMWATER FACILITY GRADING FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

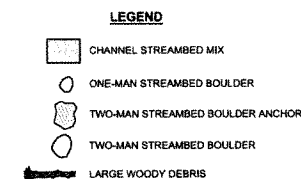
PBS

DESIGNED: JAB
 CHECKED: CMK
 MAY 2025
 71466.000
 SHEET ID: PD01
 SHEET 68 OF 173



#	Length	Direction
L7	39.314	N21° 54' 33.38"
L8	65.888	N36° 46' 10.47"
L9	7.787	N51° 33' 19.72"
L10	35.283	N72° 13' 37.36"
L11	7.233	N60° 07' 41.32"

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C7	14°51'37"	50.00	12.97	6.1
C8	14°47'09"	40.00	10.32	5.1
C9	20°40'18"	40.00	14.43	7.1
C10	12°05'56"	40.00	8.45	4.1

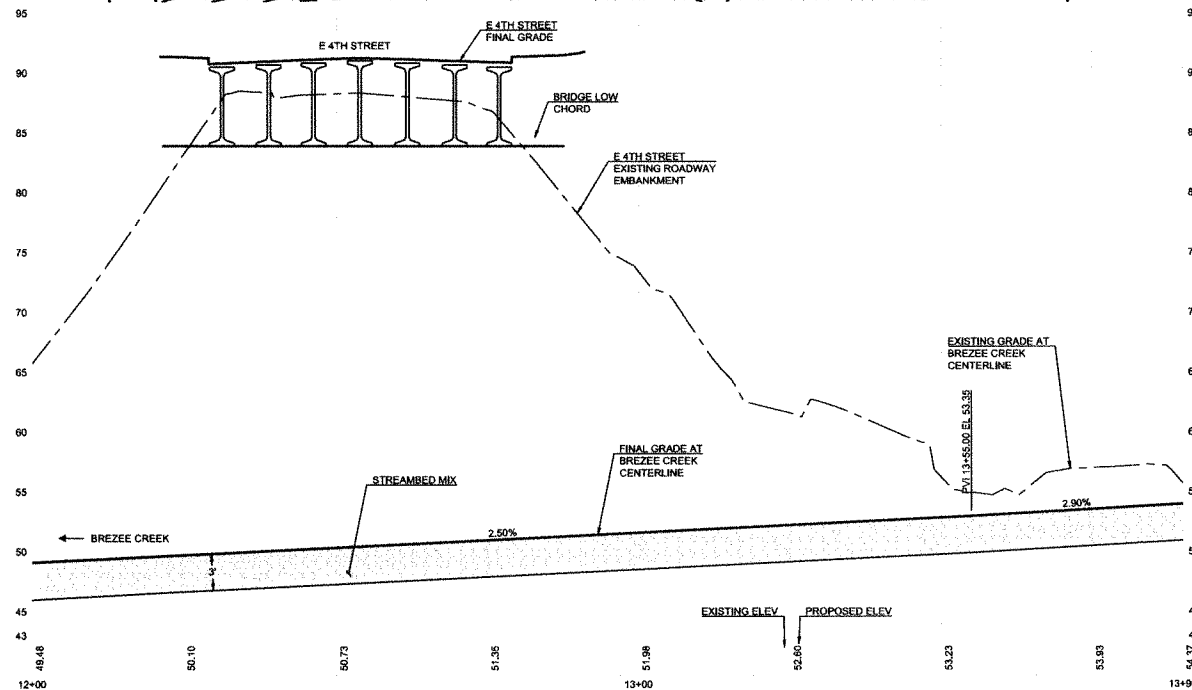


CONSTRUCTION PLAN NOTES:

- ① RECONSTRUCT STREAM CHANNEL PER DETAILS, SEE SHEET CR11
- ② INSTALL LARGE WOODY DEBRIS FEATURES WITH EARTH ANCHORS PER DETAIL, SEE SHEET CR10
- ③ INSTALL BRIDGE PER BRIDGE PLAN AND DETAILS, SEE SHEETS BA10
- ④ RESTORATION PLANTINGS PER PLANTING PLANS
- ⑤ INSTALL THALWEG PER PLAN, LOCATION MAY BE ADJUSTED IN FIELD IF APPROVED BY ENGINEER
- ⑥ INSTALL LARGE WOODY DEBRIS FEATURE WITH EARTH ANCHORS PER DETAIL, SEE SHEET CR11

GENERAL NOTES:

1. LARGE WOODY DEBRIS FEATURES, BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. SEE RESTORATION REQUIREMENTS ON LANDSCAPE PLANS.



PROFILE SCALE:
HORIZ: 1" = 10'
VERT: 1" = 5'

BID SET

PBS
PBS Engineering and
Environmental LLC
1325 SE Tech Center Drive
Suite 140
Vincennes, VA 99853
360.695.3458
pbsusa.com

BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING



PRELIMINARY

DESIGNED

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MAY 2025

SHEET NO.

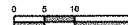
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Scale 1" = 10'



CENTERLINE LINE DATA		
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L19	7.704	S67° 32' 14.90"E
L20	12.447	S80° 39' 01.39"E
L21	12.366	N66° 36' 57.25"E
L22	7.393	S71° 51' 22.88"E
L23	17.693	S67° 38' 58.77"E
L24	17.641	S72° 36' 37.06"E
L25	4.798	N80° 52' 41.20"E
L26	21.746	S47° 02' 41.53"E

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C18	36°08'22"	20.00	12.62	6.53
C19	13°06'46"	40.00	9.15	4.60
C20	32°44'01"	20.00	11.43	5.87
C21	41°31'40"	30.00	21.74	11.37
C22	4°12'24"	50.00	3.67	1.84
C23	4°57'38"	50.00	4.33	2.17
C24	26°30'42"	25.00	11.57	5.89
C25	52°04'37"	25.00	22.72	12.21

LEGEND

- CHANNEL STREAMBED MIX
- ONE-MAN STREAMBED BOULDER
- TWO-MAN STREAMBED BOULDER ANCHOR
- TWO-MAN STREAMBED BOULDER
- LARGE WOODY DEBRIS

CONSTRUCTION PLAN NOTES:

- RECONSTRUCT STREAM CHANNEL PER DETAILS, SEE SHEET CR11
- INSTALL LARGE WOODY DEBRIS FEATURES WITH EARTH ANCHORS PER DETAIL, SEE SHEET CR10
- INSTALL BRIDGE PER BRIDGE PLAN AND DETAILS, SEE SHEETS BA10
- RESTORATION PLANTINGS PER PLANTING PLANS
- INSTALL THALWEG PER PLAN, LOCATION MAY BE ADJUSTED IN FIELD IF APPROVED BY ENGINEER
- INSTALL LARGE WOODY DEBRIS FEATURE WITH TWO MAN STREAMBED BOULDER ANCHORS PER DETAIL, SHEET CR11

GENERAL NOTES:

- LARGE WOODY DEBRIS FEATURES, BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
- SEE RESTORATION REQUIREMENTS ON LANDSCAPE PLANS.

PRELIMINARY

DESIGNED: _____

CHECKED: _____

MAY 2025

71486.000

SHEET ID

CR04

SHEET 72 OF 173

BREZEE CREEK PLAN AND PROFILE FOR:

BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

PBS

PREPARED BY

1235 SE Trent Creek Drive

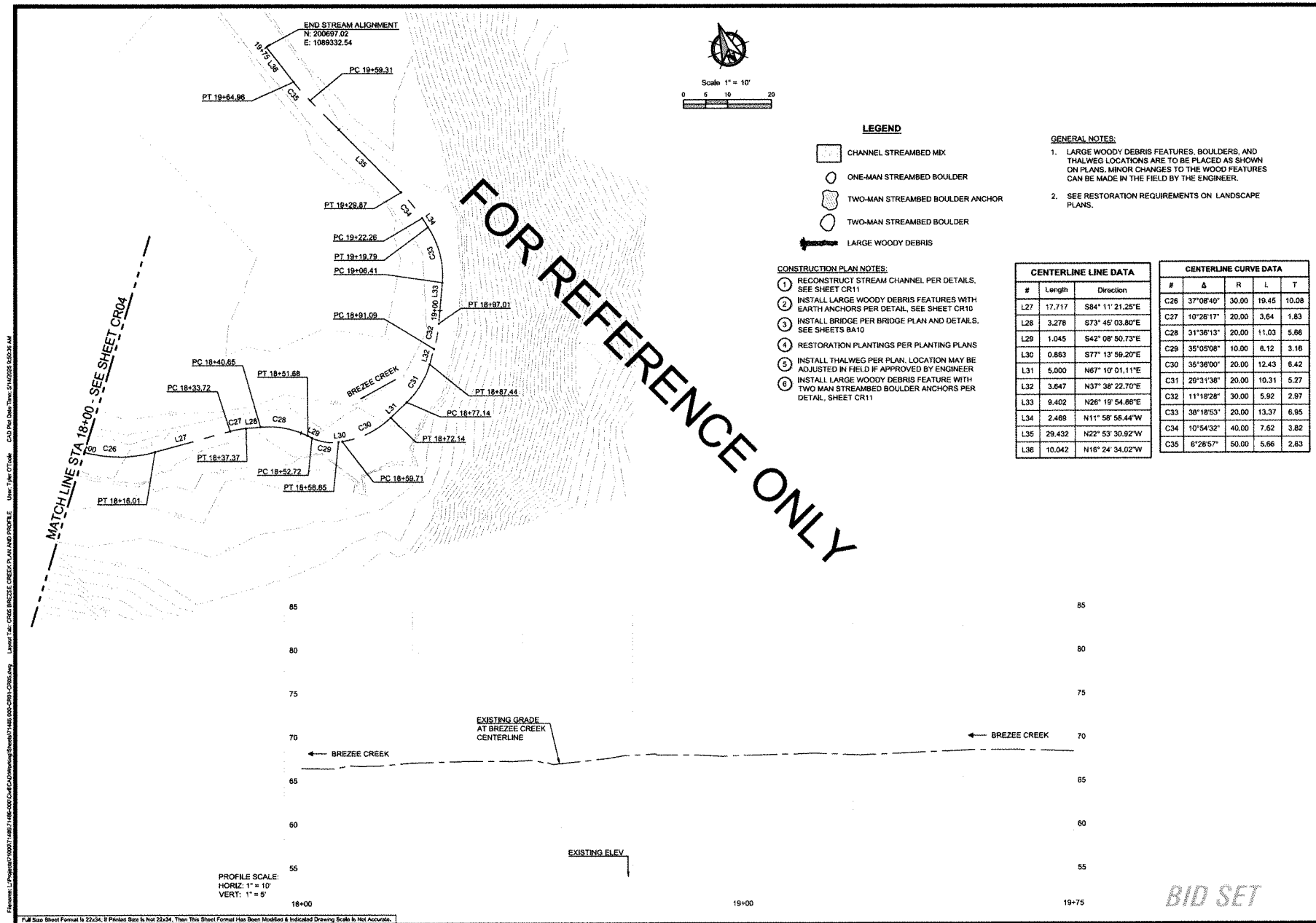
Portland, OR 97202

PHONE: 503.281.1111

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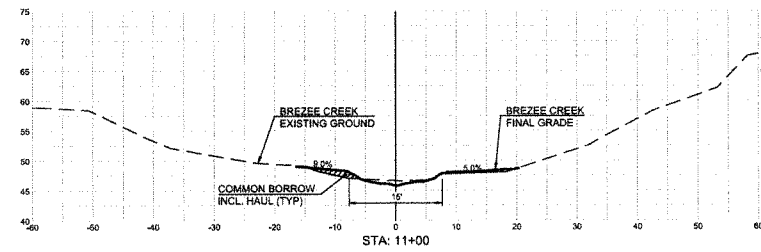
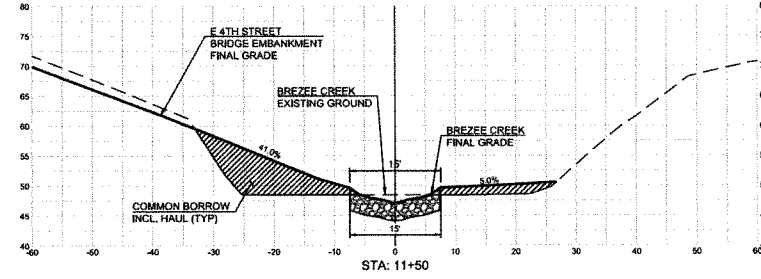
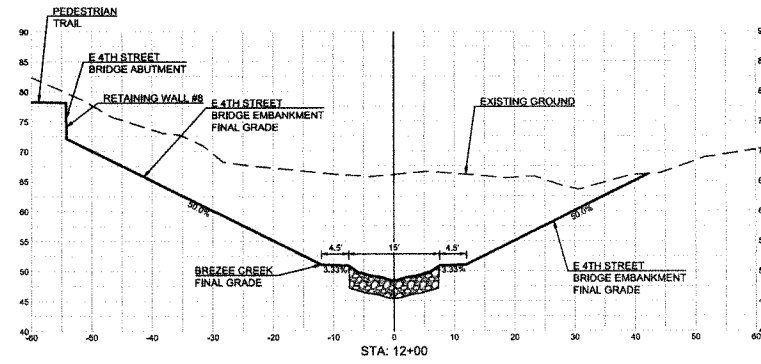
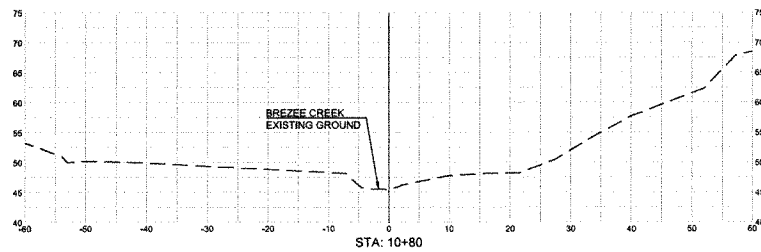
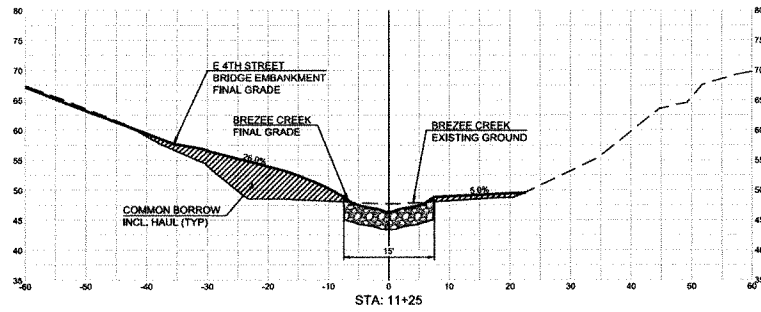
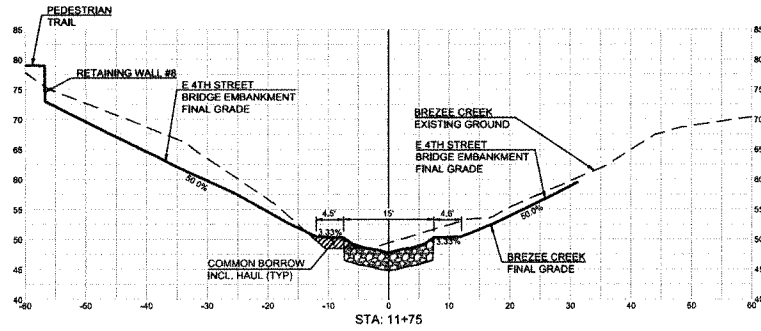
PBS
PBS Engineering and
Environmental LLC
1000 1st Avenue
Suite 100
Vancouver, WA 98660
Phone: 360.581.1111
www.pbsenv.com

**BREEZE CREEK PLAN AND PROFILE FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON**

PRELIMINARY

DESIGNED:
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MAY 2025
71486.000
SHEET ID
CR05
SHEET **73** OF **173**

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**E 4TH STREET
BREZZEE CREEK CHANNEL SECTIONS**

HORIZ: 1"=10'
 VERT: 1"=10'

BID SET

PBS Engineering and
 Environmental LLC
 200 S. 10th Center Drive
 Vancouver, WA 98660
 phone: 360.575.1111
 pbs@pbs.com



**BREZZEE CREEK CHANNEL CROSS SECTIONS FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING**
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

DESIGNED:

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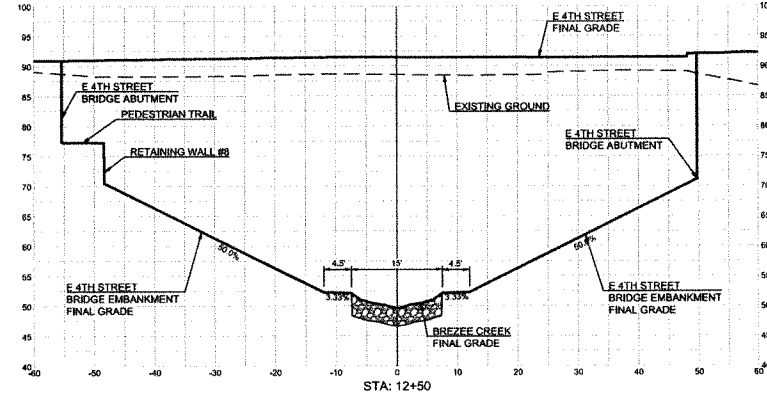
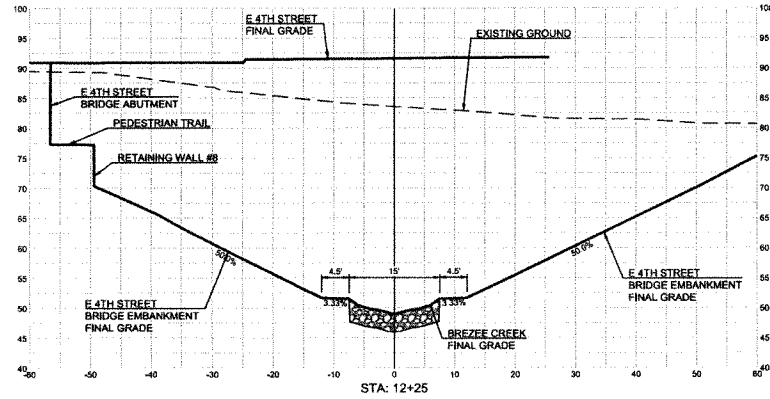
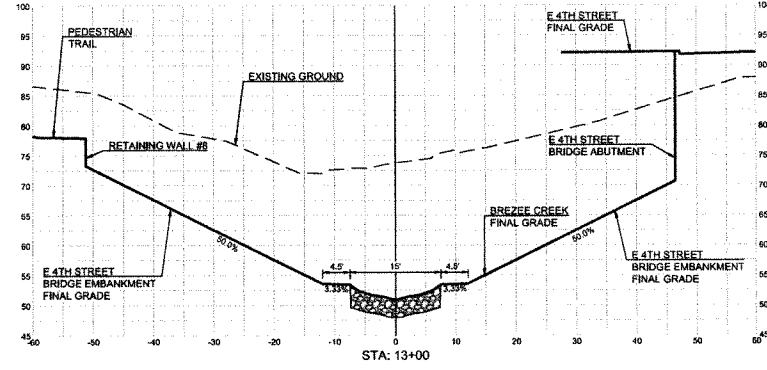
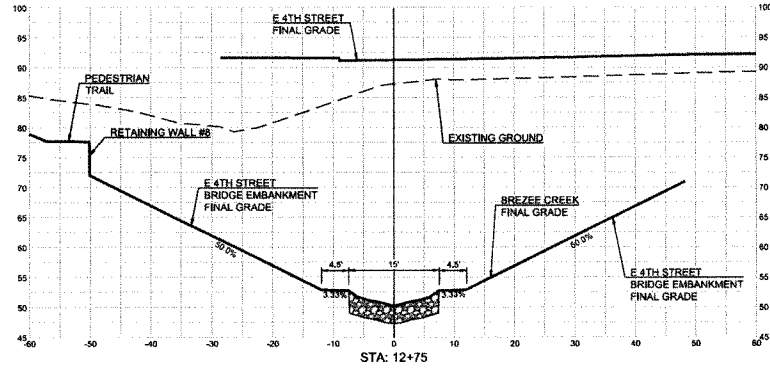
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**E 4TH STREET
BREZEE CREEK CHANNEL SECTIONS**

HORIZ: 1"=10'
VERT: 1"=10'

BID SET

PBS Engineering and
Environmental LLC
200 S. 1st Street, Suite 200
Vancouver, WA 98663
(206) 835-1111
pbes.com



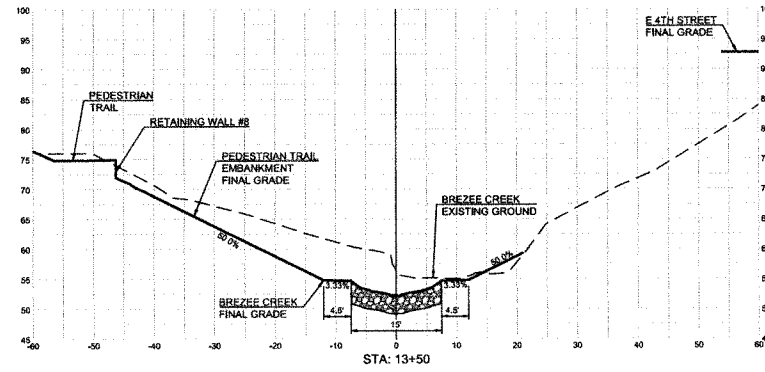
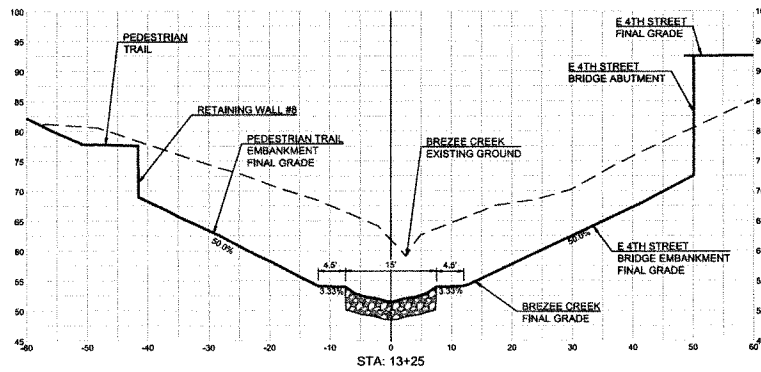
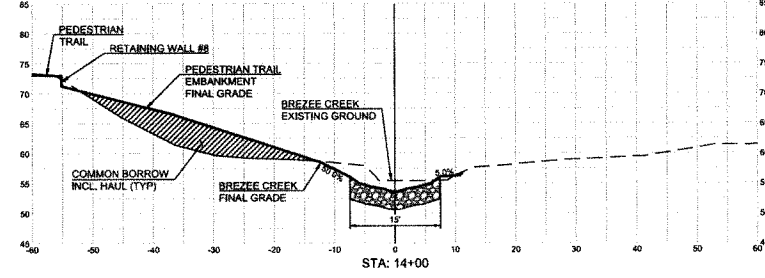
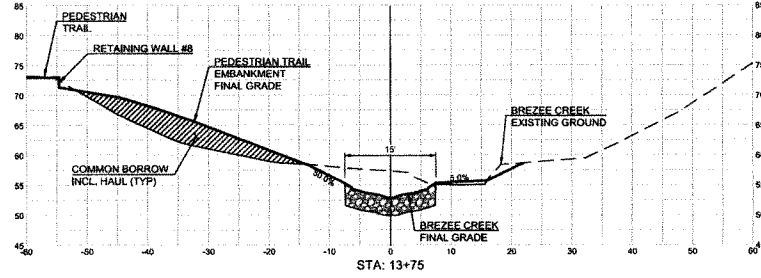
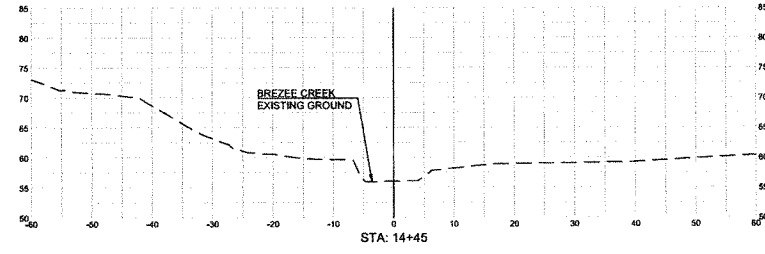
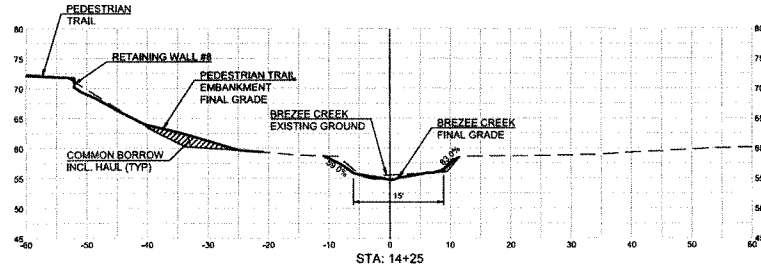
**BREZEE CREEK CHANNEL CROSS SECTIONS FOR:
BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING**
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

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MAY 2025 \$1485,000
SHEET ID
CR07
SHEET 75 OF 173

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**E 4TH STREET
BREZZEE CREEK CHANNEL SECTIONS**

HORIZ: 1"=10'
VERT: 1"=10'

BID SET

PBS Engineering and
Construction LLC
1000 1st Street, NW
Suite 100
Washington, DC 20004
202.462.1000
pbseng.com



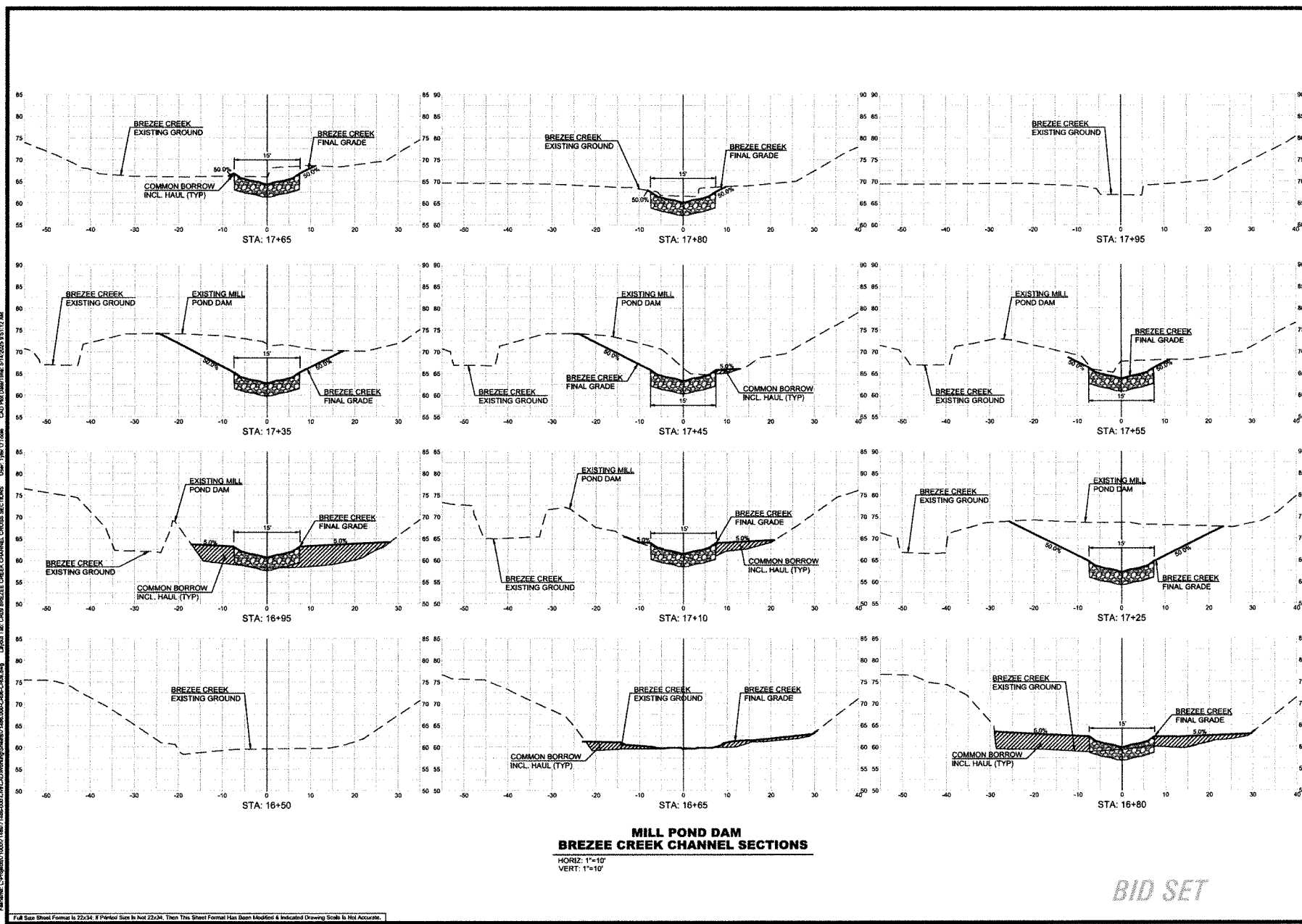
BREZZEE CREEK CHANNEL CROSS SECTIONS FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

DESIGNED:
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MAY 2025 11486.000
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SHEET 76 OF 173

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MILL POND DAM
BREEZZE CREEK CHANNEL SECTIONS
 HORIZ: 1"=10'
 VERT: 1"=10'

BID SET

PBS Engineering and
 Environmental LLC
 1205 SE 17th Street
 Vancouver, WA 98683
 (509) 575-1111
 www.pbseng.com



BREEZZE CREEK CHANNEL CROSS SECTIONS FOR:
BREEZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

DESIGNED:
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MAY 2025 7:48:00
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GENERAL NOTES:

1. LARGE WOODY DEBRIS FEATURES, BOULDERS, AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. LWD FEATURES SHALL INCLUDE SMALLER PIECES OF WOOD (DIA UNDER 4") STACKED WITHIN THE FEATURE. LENGTHS SHALL NOT EXCEED 6'.
3. STREAMBED MIX: THREE PART 8" COBBLES SHALL BE MIXED THOROUGHLY WITH TWO PART STREAMBED SEDIMENT.
4. STREAMBED SEDIMENT IS TO PROVIDE STABILITY TO THE STREAMBED MIX AND BE PLACED IN AREA OF VOIDS TO CREATE A UNIFORM, NON-POROUS BED. STREAMBED MATERIAL SHALL BE PLACED IN 12-INCH LIFTS AND WASHED WITH A PRESSURIZED HOSE AT EACH LIFT.
5. SEE LANDSCAPING PLANS FOR RESTORATION REQUIREMENTS.
6. MOBILE WOODY DEBRIS CAN BE SOURCED FROM TREES REMOVED ON SITE. ON SITE MOBILE WOODY DEBRIS MUST BE FREE OF ROT AND SIGNIFICANT DAMAGE.
7. CONTRACTOR SHALL COORDINATE VISIT WITH LANDSCAPE ARCHITECT TO CONFIRM TREES FOR RETAINAGE.

EAST 4TH STREET LARGE WOODY DEBRIS CONTROL TABLE		
LWD STATION	LOGS*	VOLUME (FT ³)
11+01	1,2,4,4,5	77.9
11+12	1,2,4,4,5	77.9
11+17	1,2,4,4,5	77.9
11+40	1,2,4,4,5	77.9
11+50	1,2,4,4,5	77.9
11+71	1,2,4,4,5	77.9
11+89	1,2,3,4,4,5	90.1
11+94	1,2,4,4,5	77.9
12+15	1,2,4,4,5	77.9
12+33	3,4,4,5,5,5,6	69.4
12+47	4,4,5,5,6	51.0
12+58	4,4,5,5,6	51.0
12+76	4,4,6,6	44.8
12+90	3,4,4,5,5,5,6	69.4
13+00	4,4,5,5,6	51.0
13+10	1,2,3,4,4,5,5	96.3
13+34	1,2,3,4,4,5,5	96.3
13+45	1,2,4,4,5	77.9
13+58	1,2,4,4	71.7
13+80	1,2,4,4,5	77.9
13+91	1,2,4,4,5	77.9
14+00	1,2,3,4,4,5,5	96.3
14+15	1,2,4,4,5	77.9

* SEE LOG SCHEDULE TO THE RIGHT

MILL POND DAM LARGE WOODY DEBRIS CONTROL TABLE		
LWD STATION	LOGS*	VOLUME (FT ³)
16+62	1,4	36.8
16+63	1,2,4,4,5	77.9
16+70	7	14.1
16+77	1,2,4,4,5	77.9
16+80	1,2,4,4,5	77.9
16+94	7	14.1
17+05	1,2,2,4,4,5	79.0
17+13	1,2,4,4,5	77.9
17+25	7	14.1
17+37	1,2,2,4,4	72.8
17+49	1,2,4,4	71.7
17+57	7	14.1
17+68	1,2,3,4,4,5	90.1
17+72	1,2,2,4,4,5	90.1
17+84	7	14.1

* SEE LOG SCHEDULE TO THE RIGHT

LOG SCHEDULE					
LOG #	LOG LENGTH (FT)	LOG DIAMETER (FT)	ROOTWAD LENGTH (FT)	ROOTWAD DIAMETER (FT)	VOLUME (FT ³)
1*	12	2	2	4.5	37.7
2	18	1.5	1.75	4	31.8
3	10	1.25	-	-	12.2
4**	6	0.5	-	-	1.1
5	8	1	-	-	6.2
6	12	1.5	1.75	4	21.3
7	18	1	-	-	14.1

* KEY LOG (VOLUME = 35 FT³)
** MOBILE WOODY DEBRIS

STREAMBED BOULDERS

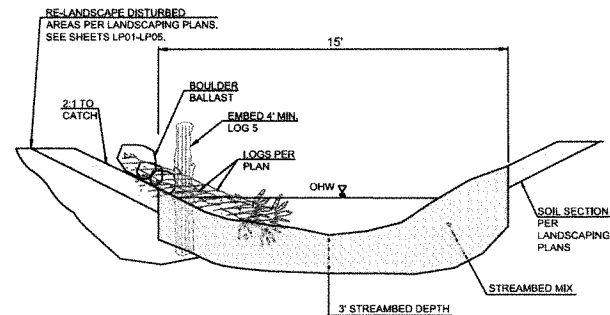
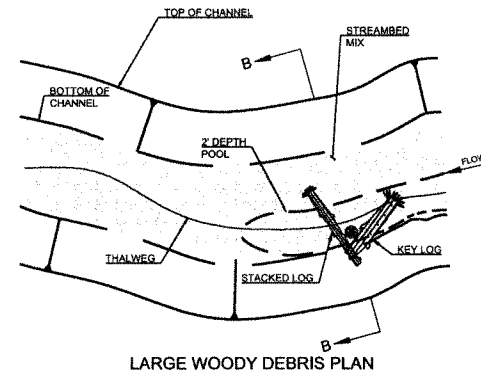
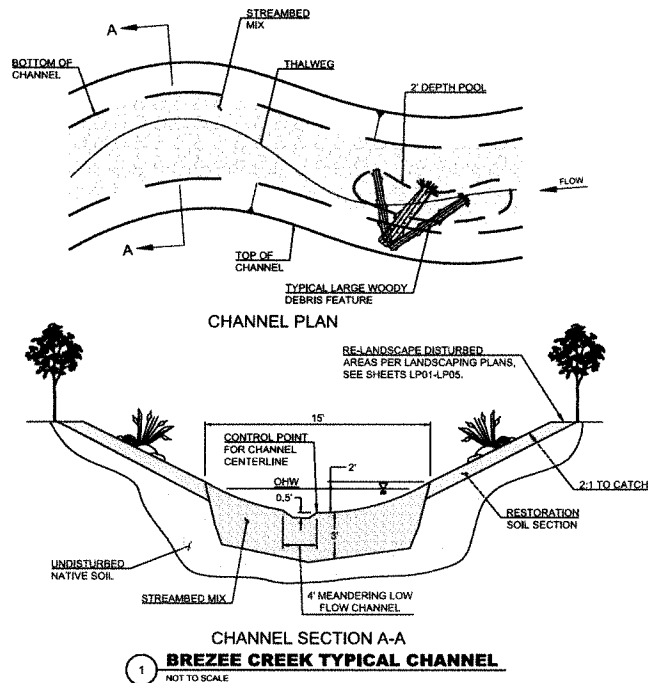
ONE MAN	12"-18"
TWO MAN	18"-28"

8" STREAMBED COBBLES GRADATION

APPROXIMATE SIZE	% PASSING
8"	99 - 100
6"	70 - 90
3"	30 - 60
3/4"	10 MAX

STREAMBED SEDIMENT GRADATION

SIEVE SIZE	% PASSING
2.5"	99 - 100
2"	65 - 95
1"	50 - 85
U.S. NO. 4	26 - 44
U.S. NO. 40	16 MAX
U.S. NO. 200	5.0 - 9.0



LARGE WOODY DEBRIS SECTION B-B

LARGE WOODY DEBRIS TYPICAL FEATURE

NOT TO SCALE

BID SET

PBS Engineering and
Construction, LLC
1320 SE Tenth Center Drive
Vancouver, WA 98603
509.575.1111
pbseng.com



BREEZEE CREEK CHANNEL DETAILS FOR:
BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

DESIGNED:

CHECKED:

MAY 2025
71486.000

SHEET NO.

CR10

SHEET 78 OF 173

3 **TWO-MAN STREAMBED BOULDER ANCHOR**
NOT TO SCALE

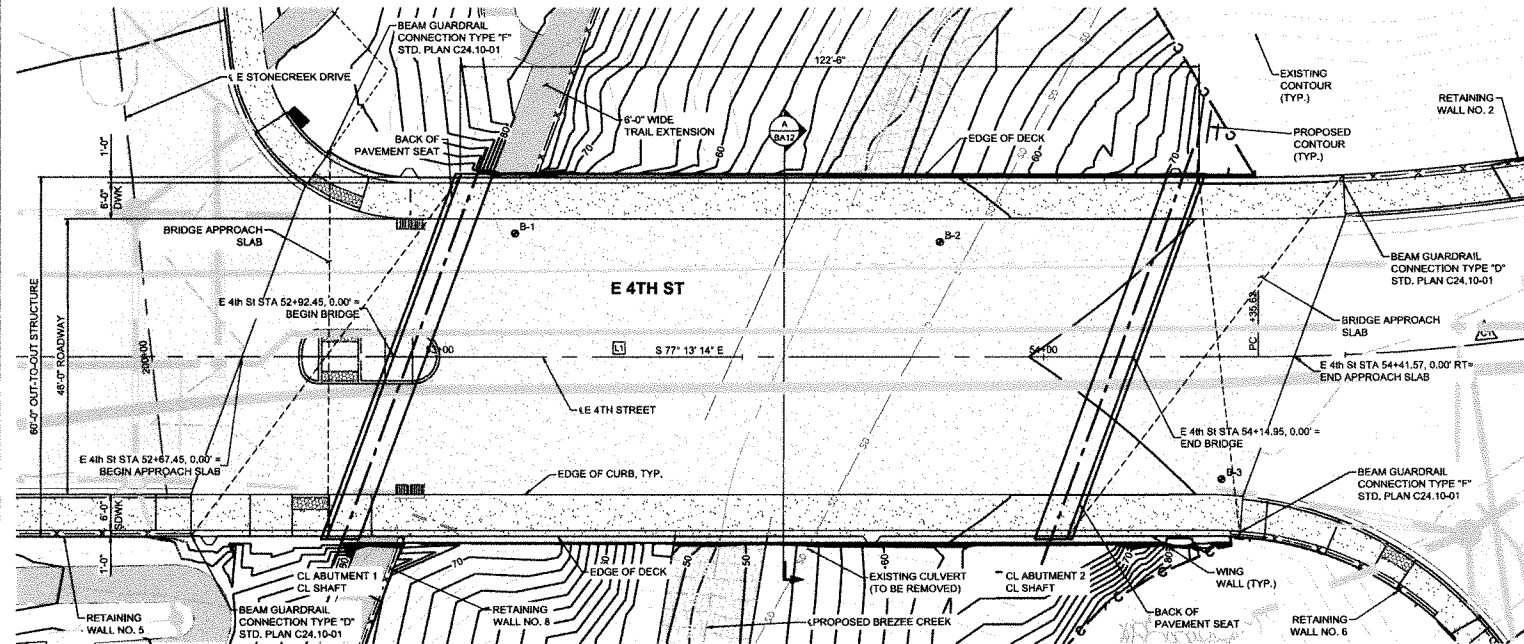
2 LARGE WOODY DEBRIS EARTH ANCHOR
NOT TO SCALE

1 LARGE WOODY DEBRIS WITH EARTH ANCHOR
NOT TO SCALE

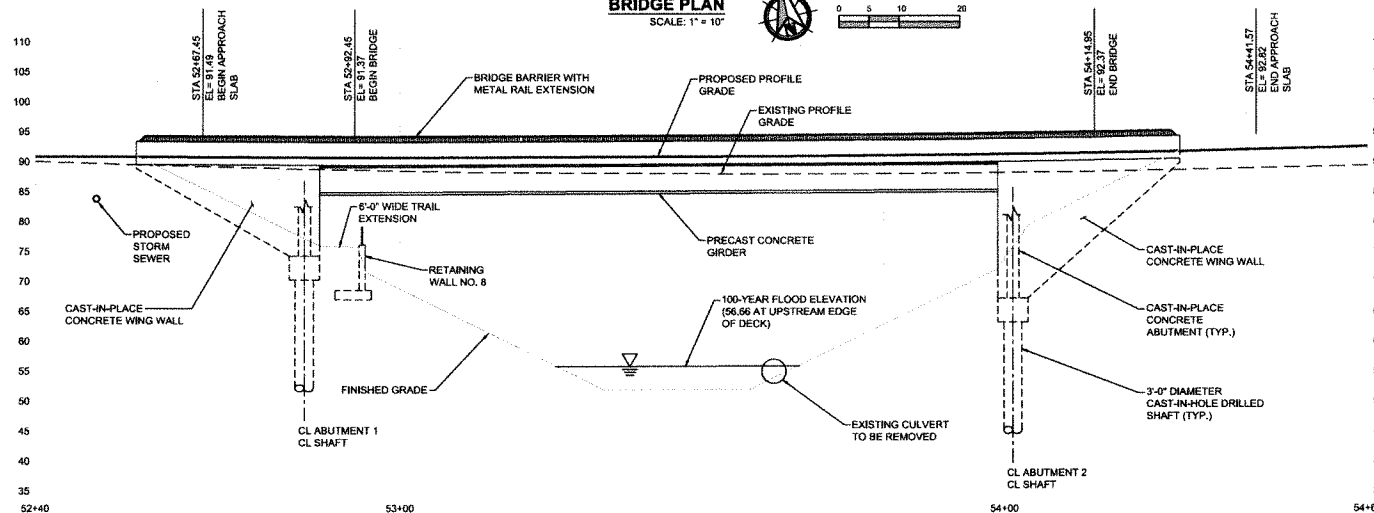
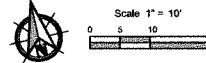
5 **TEMPORARY STREAM DIVERSION DETAIL COFFERDAM**
NOT TO SCALE

4 **CHANNEL SPANNING LARGE WOODY DEBRIS**
NOT TO SCALE

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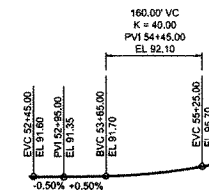


BRIDGE PLAN
SCALE: 1" = 10'



BRIDGE ELEVATION
SCALE: 1" = 10'

NOTE:
SEE NEXT SHEET FOR E 4TH ST
ALIGNMENT TABLE



PROFILE GRADE
NTS

BID SET

PBS Engineering LLC
 1325 SE 1st Avenue
 Tallahassee, FL 32309
 Phone: 904.438.1111
 Fax: 904.438.1112



BRIDGE LAYOUT FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: DGL
 CHECKED: HMM
 MAY 2023
 71486.000

SHEET ID
BA01

SHEET **80** OF **173**

GENERAL NOTES:

- ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, M 41-10, DATED 2025 AND THE SPECIAL PROVISIONS.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS IN EDITION DATED 2020. SEISMIC DESIGN OF THIS STRUCTURE HAS BEEN COMPLETED USING A DESIGN SPECTRAL PEAK GROUND ACCELERATION OF 0.34g AND SITE CLASS D.
- THIS STRUCTURE HAS BEEN DESIGNED WITH AN ADDITIONAL DEAD LOAD ALLOWANCE OF 35 PSF FOR FUTURE WEARING SURFACE.
- THE CONCRETE IN THE ROADWAY DECK SHALL BE CLASS 4000. THE CONCRETE IN THE SHAFTS SHALL BE CLASS 4000P. ALL OTHER CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000 UNLESS NOTED OTHERWISE.
- THE BACKFILL BEHIND THE ABUTMENTS SHALL NOT BE PLACED ABOVE THE BEARING SEAT PRIOR TO THE PLACEMENT OF THE SUPERSTRUCTURE.
- UNLESS OTHERWISE SHOWN IN THE PLANS, THE CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING STEEL SHALL BE 2 1/2" AT THE TOP OF THE ROADWAY SLAB, 1" AT THE BOTTOM OF THE ROADWAY SLAB, 3" AT THE BOTTOM OF FOOTINGS, 2" AT THE TOP OF FOOTINGS AND 1 1/2" AT ALL OTHER LOCATIONS.
- NO DRILLING OR INSTALLATION OF ANCHORS SHALL BE ALLOWED FOR THE PRECAST GIRDERS AFTER FABRICATION. ALL PLANNED INSERT TYPES AND LOCATIONS SHALL BE SHOWN AS PART OF THE WORKING DRAWING SUBMITTAL PROVIDED TO THE ENGINEER OF RECORD PRIOR TO FABRICATION.
- THE CONDUIT AND JUNCTION BOXES ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL COORDINATE THESE PLANS WITH THE ELECTRICAL PLANS.
- THE WATER, SEWER AND COMMUNICATION UTILITY COMPONENTS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL COORDINATE THESE PLANS WITH THE UTILITY INSTALLATION PLANS.
- DRILLED SHAFTS HAVE BEEN DESIGNED FOR THE FOLLOWING NOMINAL SIDE RESISTANCE AND NOMINAL TIP RESISTANCE FOR THE SERVICE LIMIT STATE.
- CONSTRUCTION JOINTS SHALL BE ROUGHENED TO AN AMPLITUDE OF 1/4" IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE.

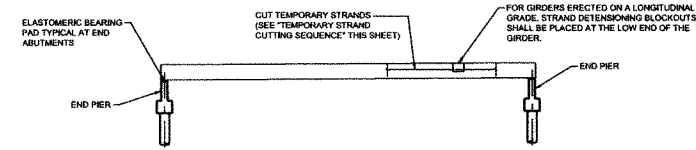
ABUTMENT	NOMINAL SIDE RESISTANCE LIMIT (R _s)	NOMINAL TIP RESISTANCE LIMIT (R _p)
1 & 2	750 k	306 k

LEGEND:

- IDENTIFIES SECTION OR VIEW
- TAKEN OR SHOWN ON BRIDGE SHEET 06
- IDENTIFIES DETAIL
- TAKEN OR SHOWN ON BRIDGE SHEET 06
- USE DASH WHERE SECTION, VIEW OR DETAIL IS TAKEN AND SHOWN ON THE SAME SHEET
- TAKEN OR SHOWN ON BRIDGE SHEET 06, 07 AND 09

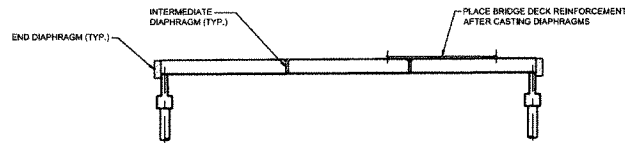
E 4TH ST ALIGNMENT TABLE					
LABEL	START STATION	RADIUS	LENGTH	UNCHORD DIRECTION	START NORTHING
L1	50+49.36		386.25'	S77° 13' 13.85"E	20544.27
C1	54+36.62	335.00'	96.67'	S85° 29' 13.65"E	20458.63
					1088877.10

SUPERSTRUCTURE CONSTRUCTION SEQUENCE:



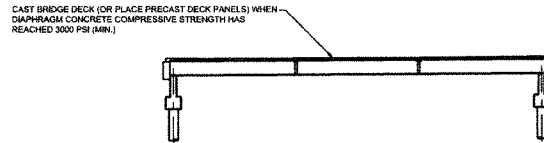
STEP 1 - SET GIRDERS IN PLACE

INSTALL TEMPORARY BRACING FOR DIAPHRAGM AND DECK PLACEMENT IN ACCORDANCE WITH STD. SPEC. SECTION 6-02.3(17)F.4.

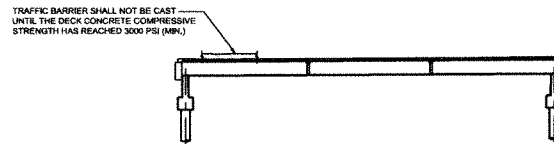


STEP 2 - CAST DIAPHRAGMS AND PLACE BRIDGE DECK REINFORCEMENT

INSTALL TEMPORARY BRACING FOR DIAPHRAGM AND DECK PLACEMENT IN ACCORDANCE WITH STD. SPEC. SECTION 6-02.3(17)F.5.



STEP 3 - CAST BRIDGE DECK



STEP 4 - CAST TRAFFIC BARRIERS

TEMPORARY STRAND CUTTING SEQUENCE:

- ERECT AND BRACE GIRDERS.
- JUST PRIOR TO CUTTING THE TEMPORARY STRANDS, REMOVE EXPANDED POLYSTYRENE IN BLOCKOUTS IN TOP FLANGE OF GIRDERS. ONCE THE EXPANDED POLYSTYRENE HAS BEEN REMOVED FROM THE STRAND DETENSIONING BLOCKOUT, PREVENT MOISTURE FROM ENTERING THE BLOCKOUT UNTIL THE TEMPORARY TOP STRAND IS CUT AND THE BLOCKOUT FILLED WITH GROUT.
- CUT STRANDS IN BLOCKOUTS. STRANDS MAY BE CUT BY USING A CUTTING TORCH AND MOVING THE FLAME BACK AND FORTH OVER THE LENGTH OF EXPOSED STRAND TO LET INDIVIDUAL WIRES BREAK ONE AT A TIME TO LESSEN THE SHOCK TO THE GIRDER. STRANDS SHALL BE RELEASED IN A SYMMETRICAL MANNER ABOUT THE GIRDER CENTERLINE STARTING WITH THOSE FURTHEST FROM THE CENTERLINE AND WORKING INWARDS. FOR POST-TENSIONED TEMPORARY TOP STRANDS, ACTIVELY RESTRAIN THE STRAND CHUCKS AT THE GIRDER ENDS DURING CUTTING.
- WITHIN 24 HOURS OF CUTTING THE TEMPORARY STRANDS, FILL THE BLOCKOUTS WITH A GROUT CONFORMING TO STD. SPEC. 9-20.3(2). REMOVE ALL MOISTURE IN BLOCKOUTS PRIOR TO FILLING THEM WITH GROUT.

BID SET

PBS Engineering and Construction LLC
1325 3RD Street Center Drive
Naperville, IL 60563
Phone: 630.390.1000
www.pbs-engineering.com



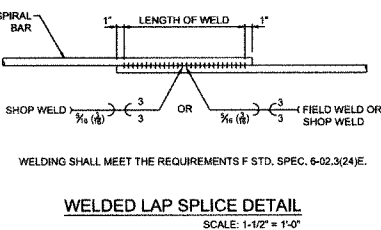
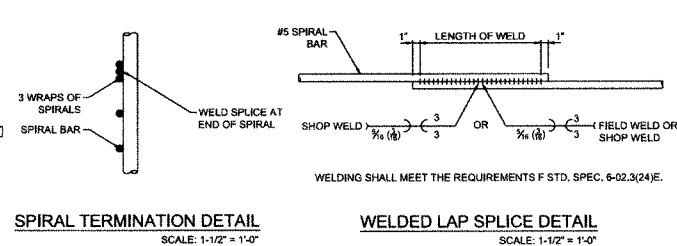
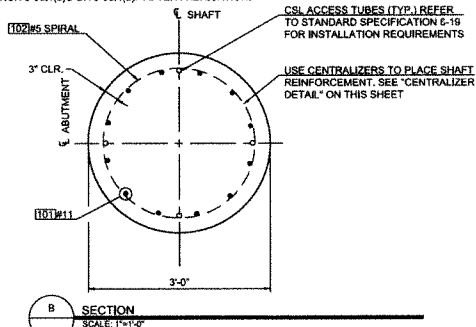
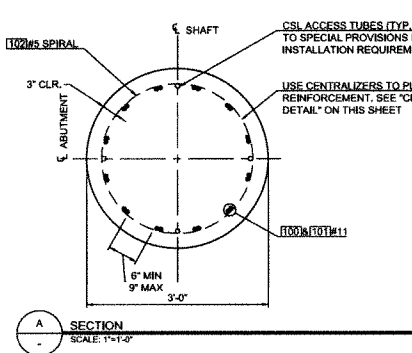
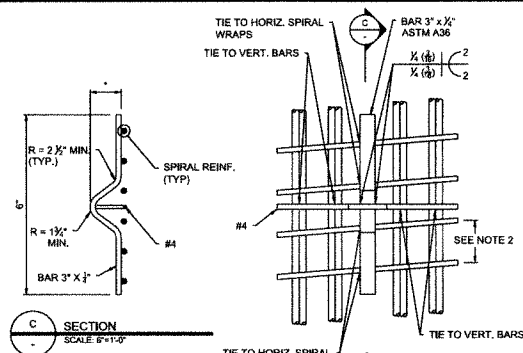
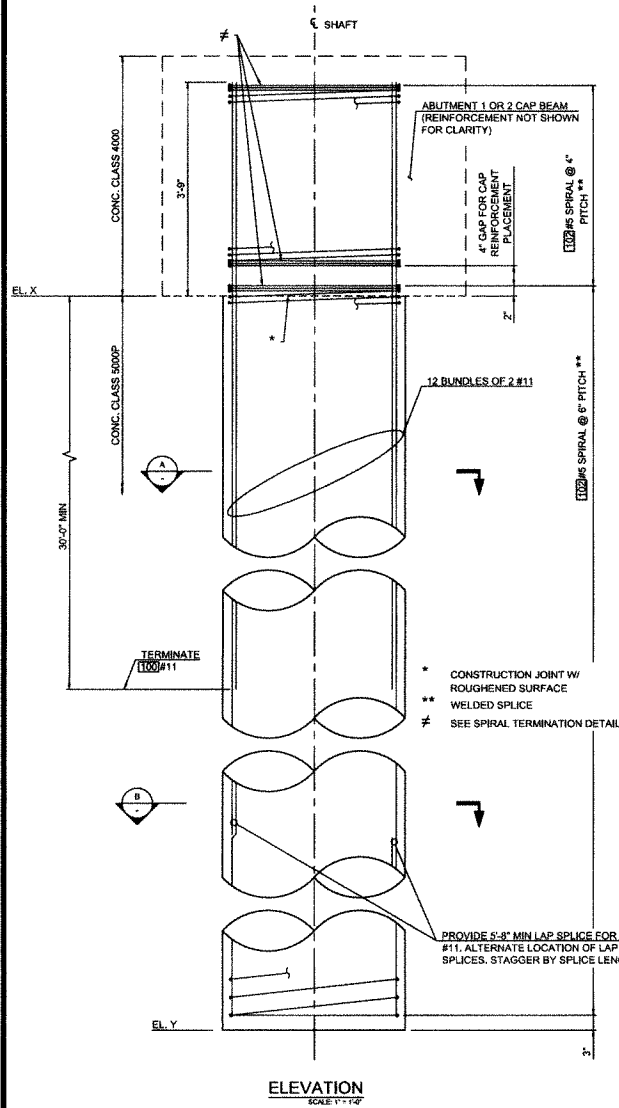
BRIDGE GENERAL NOTES AND CONSTRUCTION STAGING FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	DGL
CHECKED:	HAW
	MAY 2023
	71486.000
SHEET ID:	BA02

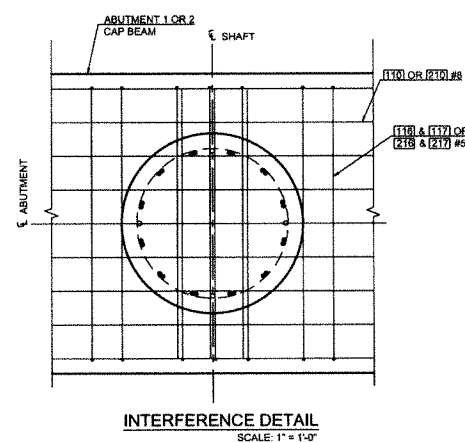
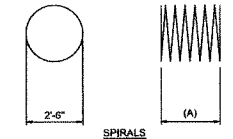
SHEET 81 OF 173

ABUTMENT SHAFT ELEVATIONS					
ABUTMENT 1			ABUTMENT 2		
SHAFT	X	Y	SHAFT	X	Y
A-E	71'	-14'	F-K	64'	-21'



SHAFT BAR LIST							
QUANTITIES ARE PER SHAFT							
ABUTMENT	NAME	MARK	SIZE	NO.	LENGTH	BEND TYPE	WT. (LB)
1	LONGITUDINAL	100	#11	12	33'-0"	STRAIGHT	2151
	LONGITUDINAL	101	#11	12	68'-0"	STRAIGHT	5658
	SPIRAL	102	#5	1	(A)	SPIRAL	1408
2	LONGITUDINAL	100	#11	12	33'-0"	STRAIGHT	2151
	LONGITUDINAL	101	#11	12	68'-0"	STRAIGHT	5658
	SPIRAL	102	#5	1	(A)	SPIRAL	1408

- NOTES:
1. WEIGHT DOES NOT INCLUDE SPLICE.
 2. (A) TO BE DETERMINED FROM PLANS.
 3. WEIGHT DOES NOT INCLUDE SPIRAL SPLICES.



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 Plot Size: 22x34
 Plot Orientation: Landscape
 Plot Range: Full Sheet
 Plot Method: Plot
 Plot Device: HP DesignJet 500

Full Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

BID SET

PBS Engineering and Environmental LLC
 1000 1st Avenue
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 Vancouver, WA 98660
 Phone: 360.581.1111
 Fax: 360.581.1112
 Email: info@pbsllc.com

PBS

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 Fax: 360.581.1112
 Email: info@pbsllc.com

BRIDGE ABUTMENT SHAFTS FOR:

BRZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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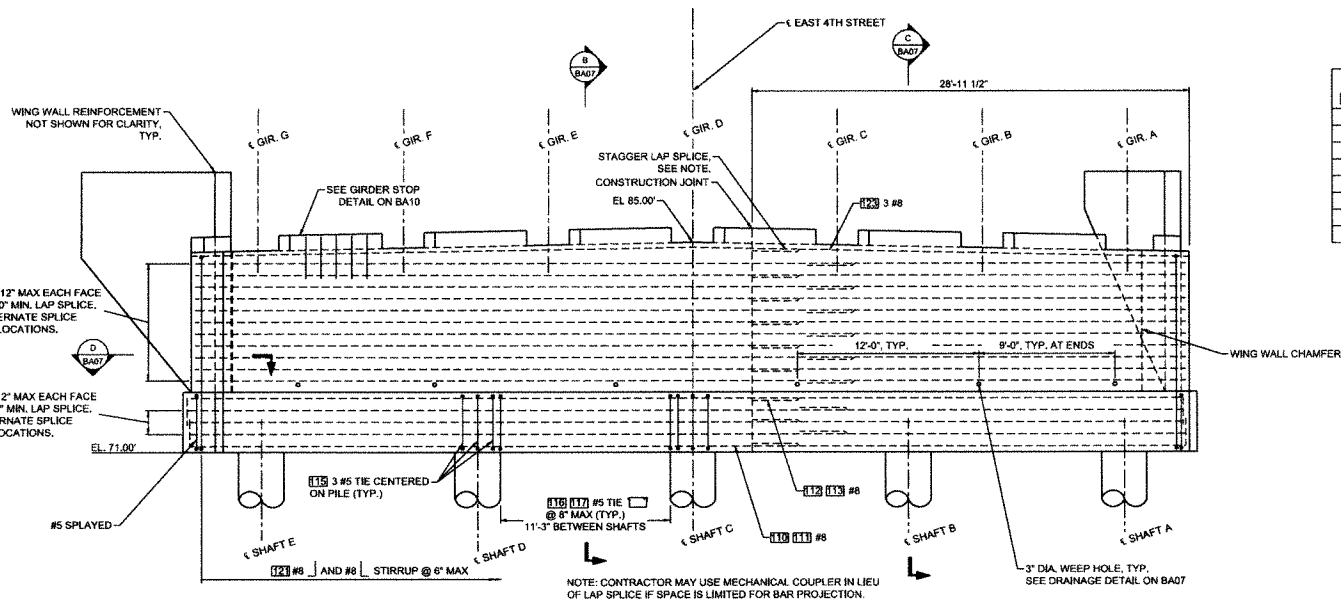
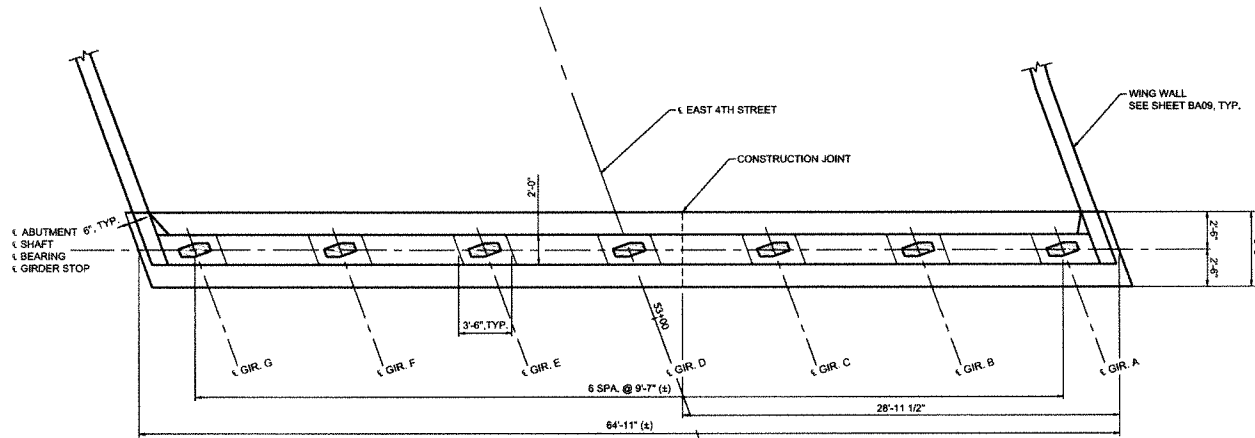
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TOP OF GROUT PAD ELEVATIONS	
GIRDER	ABUTMENT 1
A	84.57
B	84.78
C	84.94
D	85.13
E	84.98
F	84.82
G	84.65

PBS Engineering and
Environmental LLC
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Arlington, VA 22204
(703) 517-1000
www.pbseng.com



BRIDGE ABUTMENT 1 PLAN AND ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



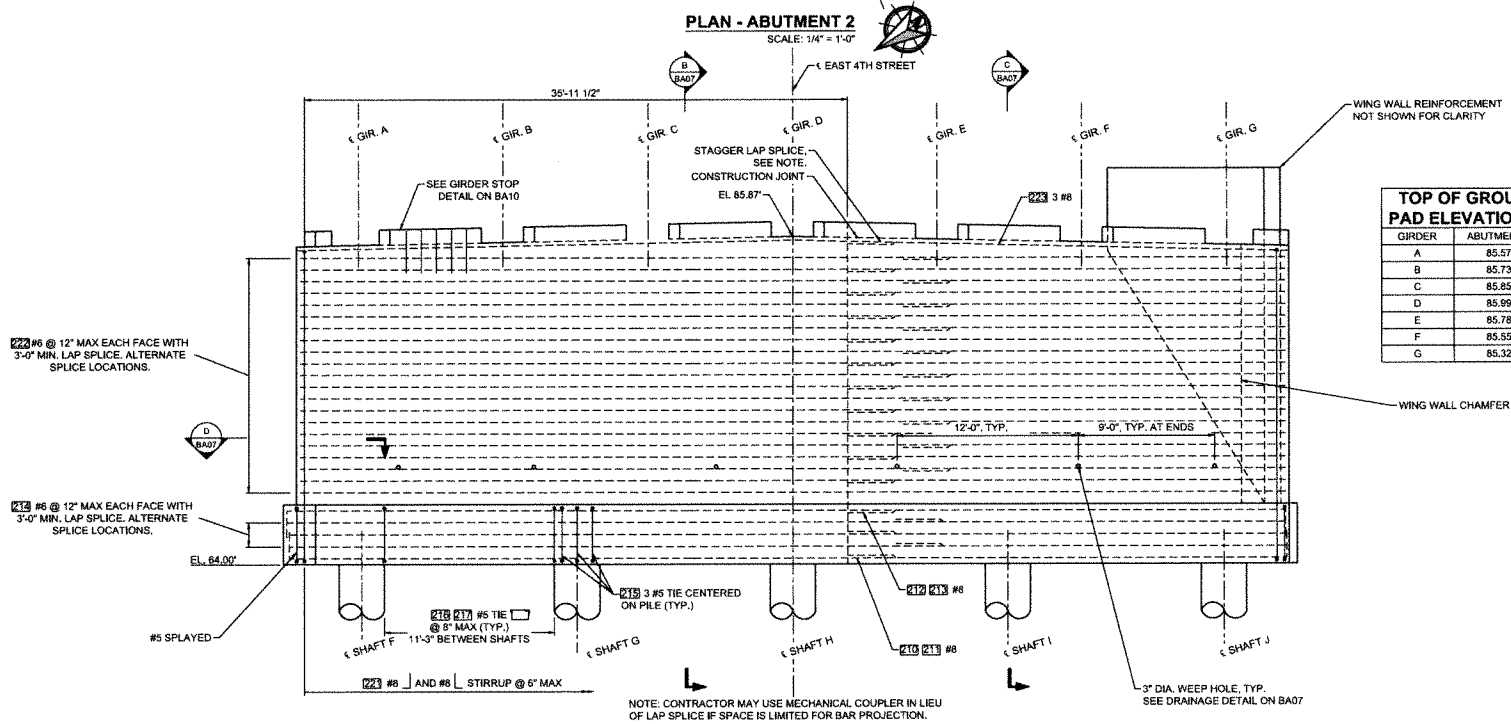
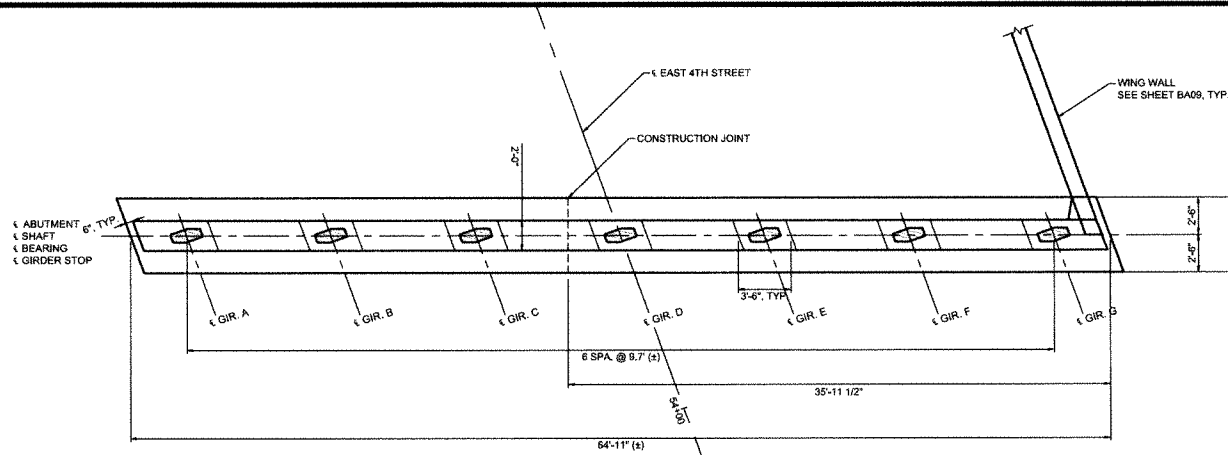
DESIGNED:
DCL
CHECKED:
HAW
MAY 2025
11485.000

SHEET ID:
BA05

SHEET 84 OF 173

BID SET

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 Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.



NOTE: CONTRACTOR MAY USE MECHANICAL COUPLER IN LIEU OF LAP SPlice IF SPACE IS LIMITED FOR BAR PROJECTION.

BID SET

PBS Engineering and Construction, LLC
 1335 SE 17th Center Drive
 Vancouver, WA 98683
 phone@pbs.com



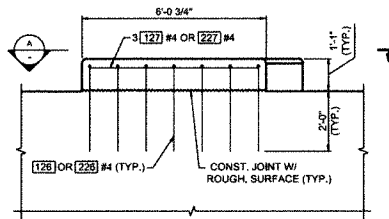
BRIDGE ABUTMENT 2 PLAN AND ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



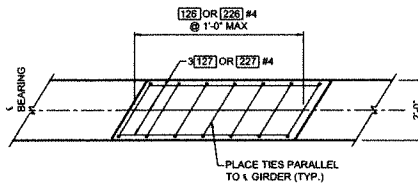
DESIGNED: DCL
 CHECKED: HAW
 MAY 2023
 1486.000

SHEET ID:
BA06

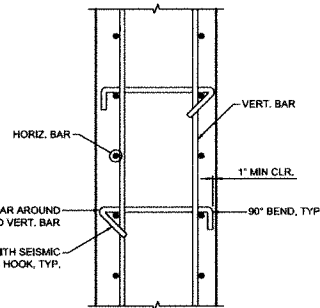
SHEET 85 OF 173



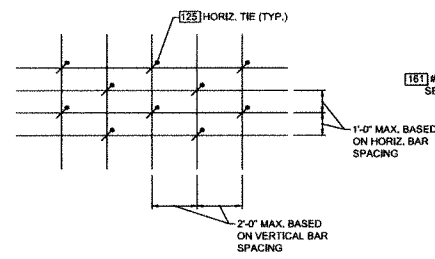
GIRDER STOP DETAIL
SCALE: 1/2" = 1'-0"
SEE BA10 FOR EXTERIOR GIRDER STOP DETAIL



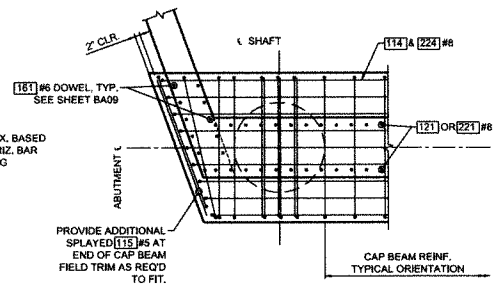
TIE BAR DETAIL
SCALE: 1/2" = 1'-0"



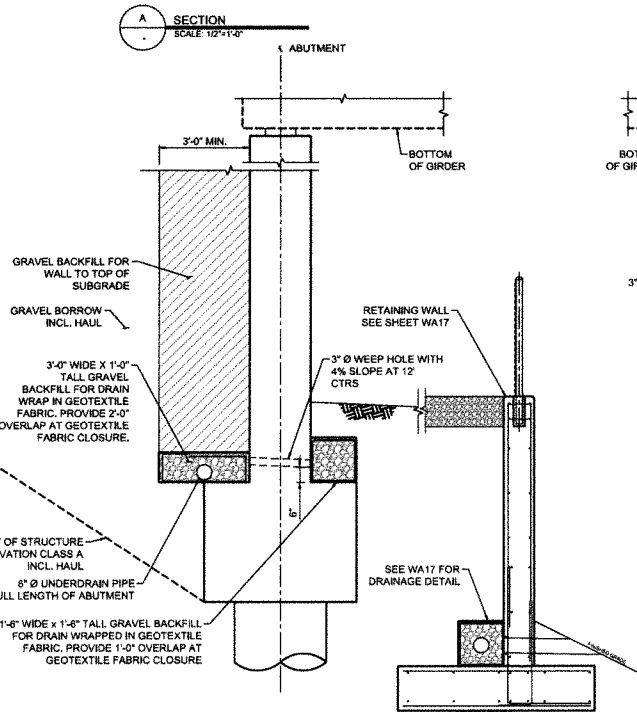
TIE BAR DETAIL
ALTERNATE 135° HOOK
EVERY OTHER TIE BAR
SCALE: 1/2" = 1'-0"



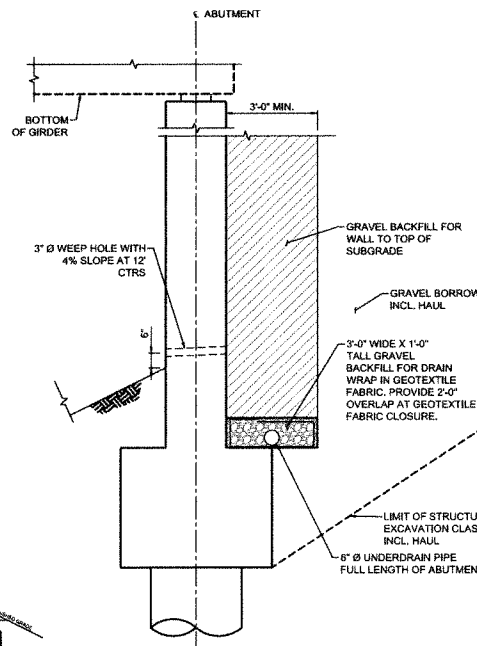
TIE SPACING DETAIL
SCALE: 3/8" = 1'-0"



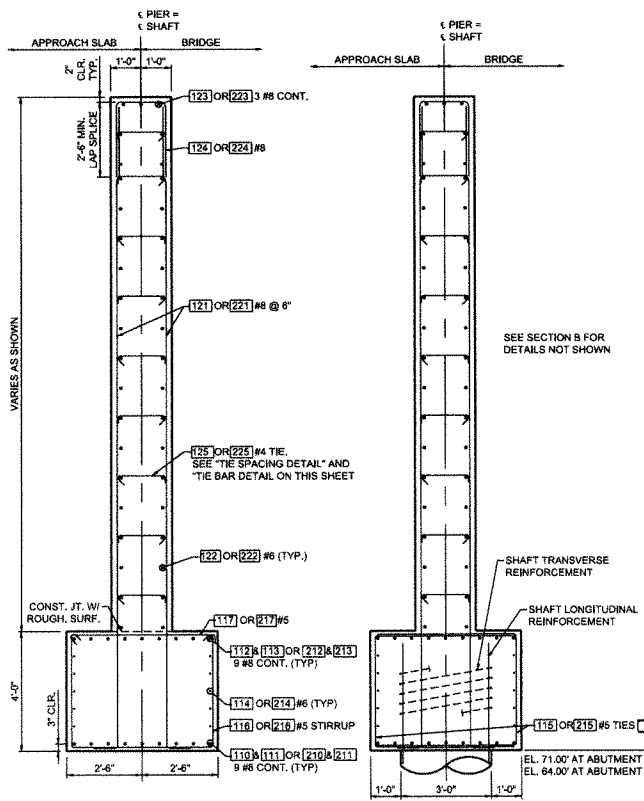
D SECTION
SCALE: 1/2" = 1'-0"
SHAFT REINF.
NOT SHOWN



DRAINAGE DETAIL - ABUTMENT 1
SCALE: 1/2" = 1'-0"



DRAINAGE DETAIL - ABUTMENT 2
SCALE: 1/2" = 1'-0"



B SECTION
SCALE: 1/2" = 1'-0"
DIMENSIONS SHOWN ARE
NORMAL TO < BEARING

C SECTION
SCALE: 1/2" = 1'-0"
DIMENSIONS SHOWN ARE
NORMAL TO < BEARING

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 User: Tyler C. Cook
 CAD File Date/Time: 5/11/2025 5:53:13 AM
 Layout: Title BA07

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www.pbsinc.com

BRIDGE ABUTMENT DETAILS FOR:

BRZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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 \$148,000

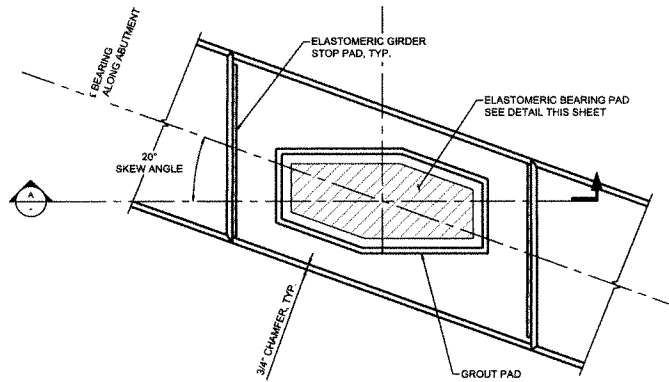
SHEET ID

BA07

SHEET 86 OF 173

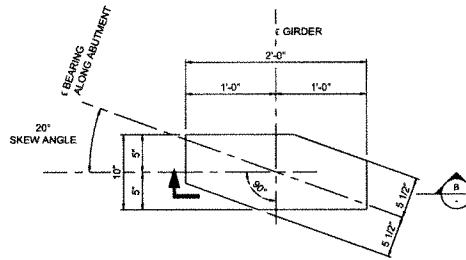
SHEET

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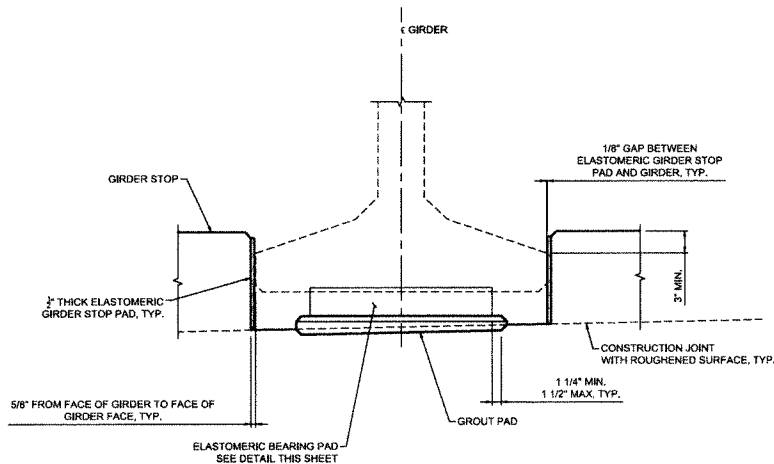


GIRDER NOT SHOWN FOR CLARITY

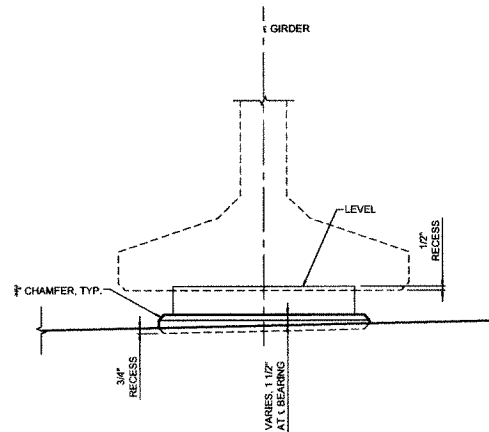
GROUT PAD DETAIL
 SCALE: 1 1/2" = 1'-0"



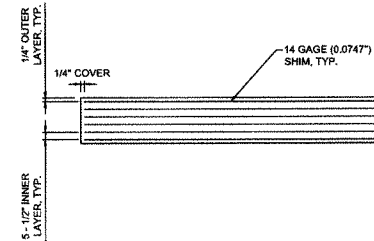
ELASTOMERIC BEARING PAD
 SCALE: 1 1/2" = 1'-0"



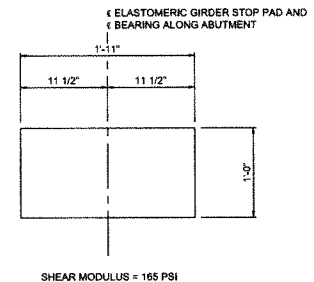
SECTION A
 SCALE: 1 1/2" = 1'-0"



GROUT PAD ELEVATION
 SCALE: 1 1/2" = 1'-0"



SECTION B
 SCALE: 3" = 1'-0"



SHEAR MODULUS = 165 PSI

ELASTOMERIC GIRDER STOP PAD
 SCALE: 1 1/2" = 1'-0"

BEARING DESIGN TABLE AASHTO METHOD B DESIGN	
SERVICE - I LIMIT STATE	
DEAD LOAD (DL) REACTION	168 KIPS
LIVE LOAD REACTION (W/O IMPACT)	90 KIPS
UNLOADED HEIGHT	3.45 IN
LOADED HEIGHT (DL)	3.32 IN
SHEAR MODULUS	165 PSI

NOTES:

- GIRDER STOPS SHALL BE CONSTRUCTED AFTER GIRDER PLACEMENT.
- THE ELASTOMERIC GIRDER STOP PADS SHALL BE BONDED TO THE GIRDER STOPS WITH AN APPROVED ADHESIVE.

BID SET

PBS Engineering and
 Environmental LLC
 235 S. 10th Street, Suite 100
 Vancouver, WA 98662
 509.575.1111
 info@pbs-engineering.com



BRIDGE BEARING DETAILS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

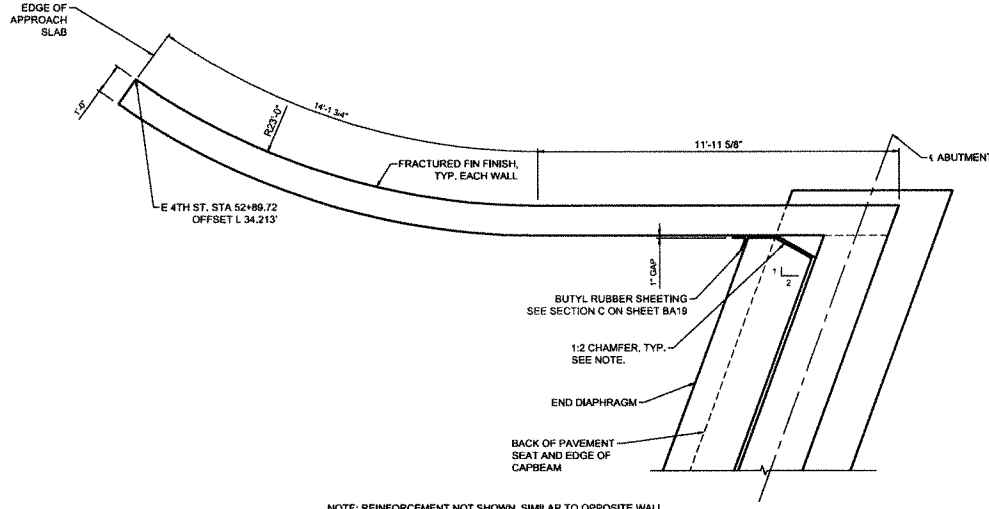


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 DCL
 CHECKED:
 HAW
 MAY 2025
 1748,000

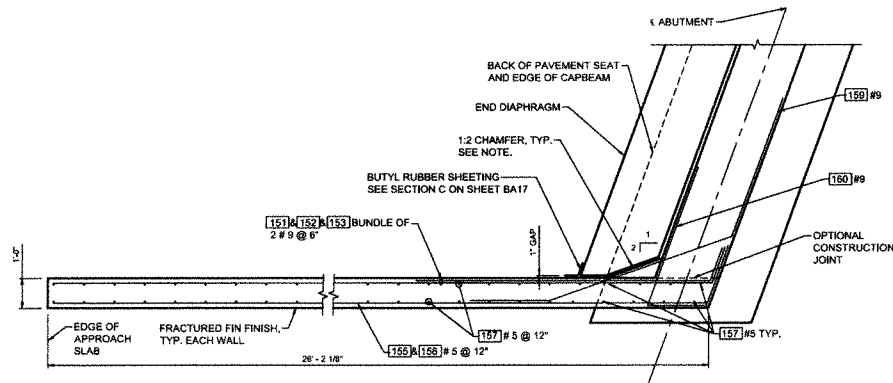
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BA08

SHEET **87** OF **173**

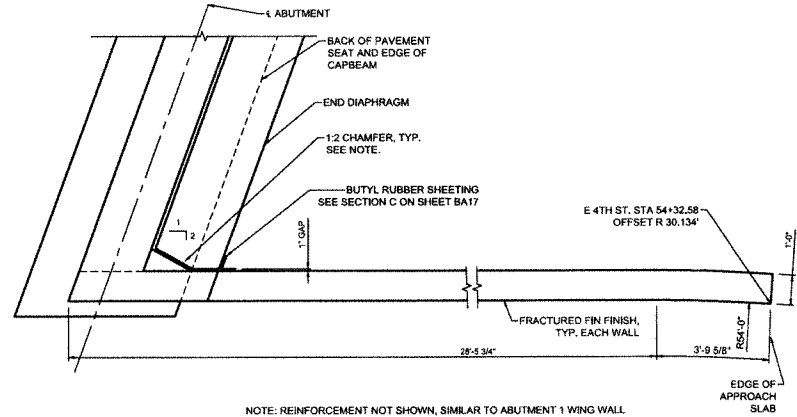
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NW WING WALL PLAN
SCALE: 1/2" = 1'-0"



NOTE: CHAMFER ALIGNED WITH GIRDER STOP ADJACENT TO STEM
SW WING WALL PLAN
SCALE: 1/2" = 1'-0"



NOTE: REINFORCEMENT NOT SHOWN, SIMILAR TO ABUTMENT 1 WING WALL
SE WING WALL PLAN
SCALE: 1/2" = 1'-0"

BID SET

PBS Engineering and
Environmental LLC
3235 SE 110th Center Drive
Vancouver, WA 98683
509.835.1100
pbs@pbs.com



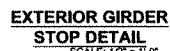
BRIDGE WING WALLS 1 OF 2 FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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DCL
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HAW
MAY 2025
1"=60.000

SHEET ID:
BA09

SHEET **88** OF **173**



CONTINUOUS CLOSED CELL POLYETHYLENE BACKER RD. INSTALL AFTER BRIDGE APPROACH SLAB FORMWORK IS REMOVED

3' OPEN JOINT

1' 12

1 #5 @ 6" AT ELEVATION ABOVE STEM WALL

#5 @ 12" #5 @ 12"

#57 & #54 #5 @ 12"

#57 & #54 BUNDLE OF 2 #5

NEAR FACE

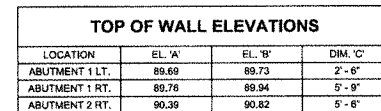
FAR FACE

2'-0" LAP MIN.

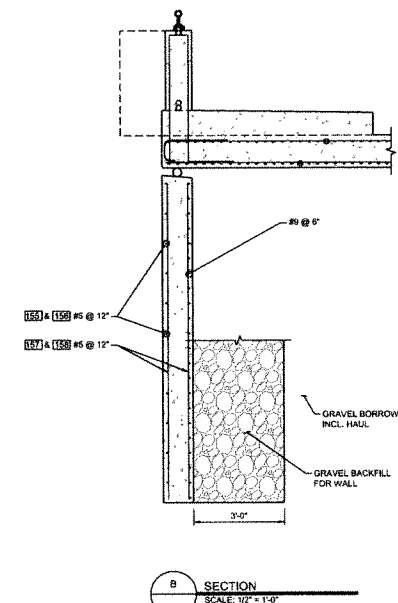
BLOCKOUT FOR 6" DIA. UNDERDRAIN PIPE

CONSTRUCTION JOINT WITH ROUGHENED SURFACE

#57 #6 @ (EF) @ 5" MAX.



ELEVATIONS MEASURED AT NEAR FACE OF WING WALL



BIO SET



**BRIDGE WING WALLS 2 OF 2 FOR:
BRZEEZ CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON**



DESIGNED:

CHECKED:
HAW

71485.000

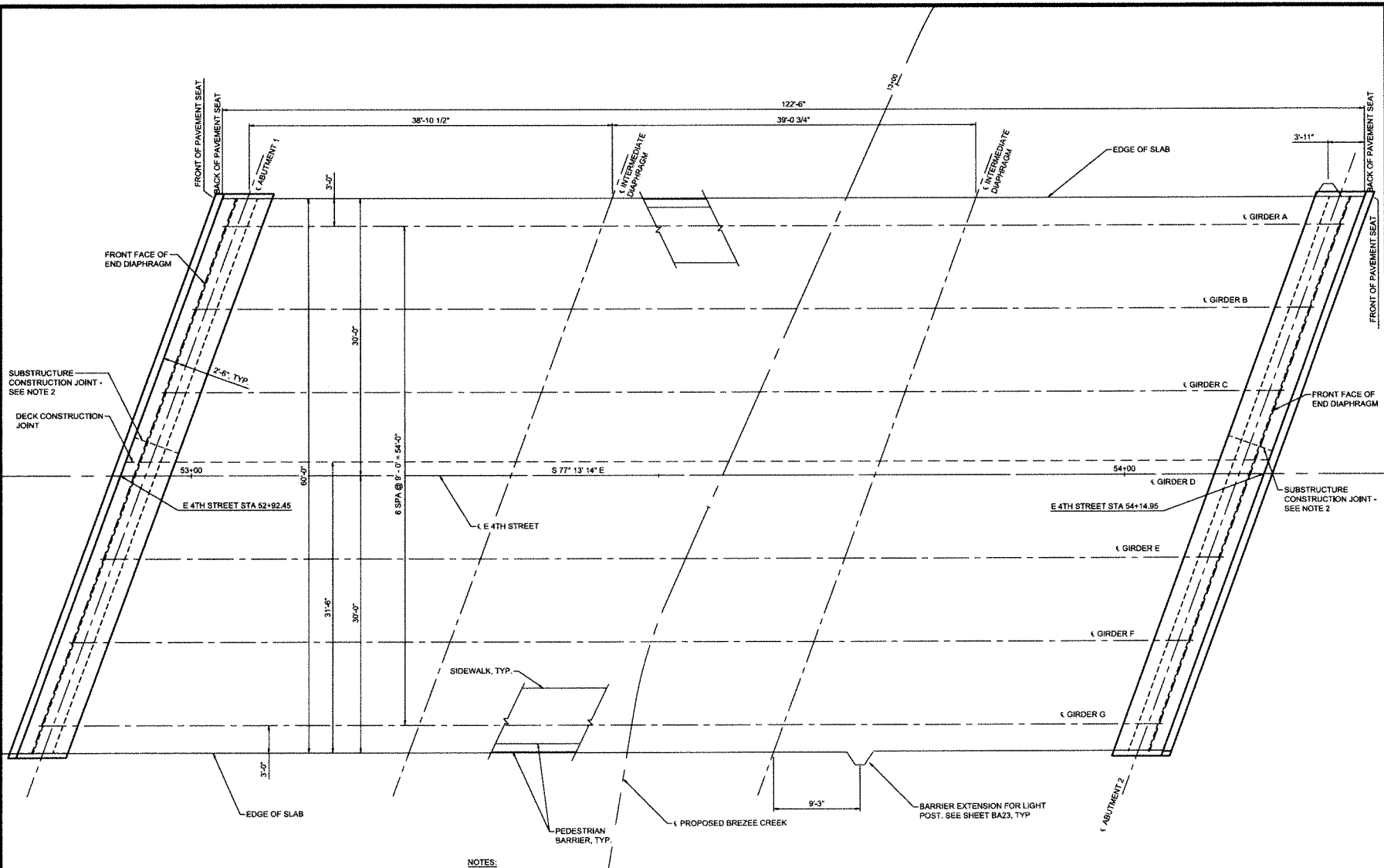
SHEET 10

RA1

DAI

SHEET **89** OF

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 Layout Tab: BA11
 Plot Size: 22x34
 Plot Scale: 1" = 5'



NOTES:

1. BEARING FOR ALL PIERS IS N 32° 46' 46.53" E.
2. SEE SHEET BA03 AND BA06 FOR ADDITIONAL INFORMATION FOR SUBSTRUCTURE CONSTRUCTION JOINT.

BRIDGE FRAMING PLAN
 SCALE: 1" = 5'



BID SET

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 3305 SE 7th Center Drive
 Vancouver, WA 98683
 509.575.1111
 pbsllc.com



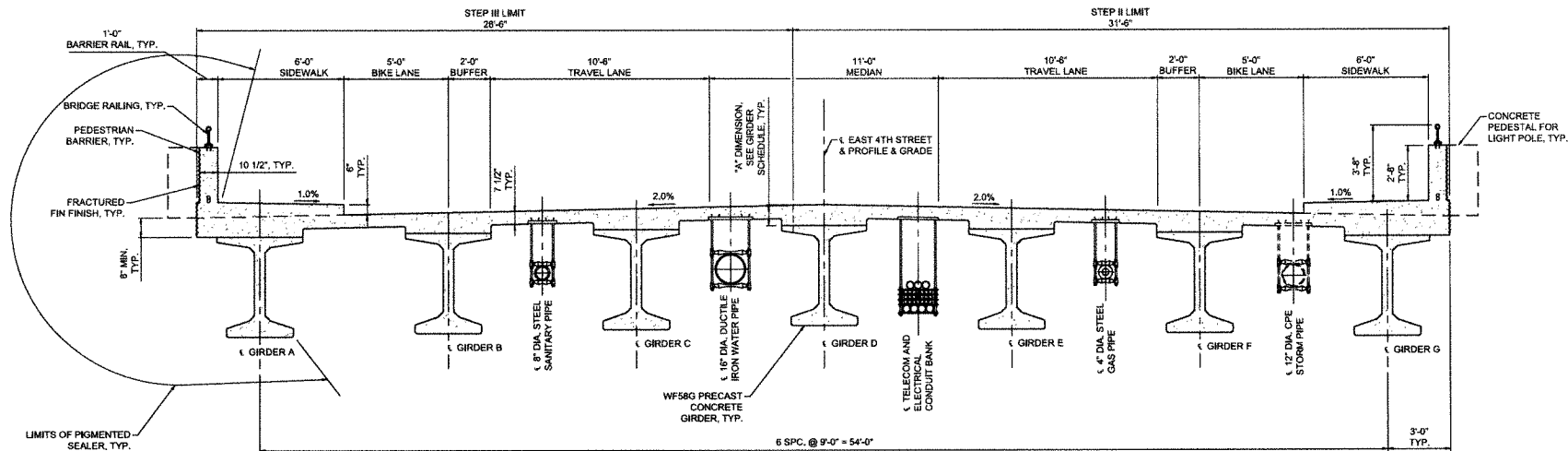
BRIDGE FRAMING PLAN FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
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 AUGUST 2021
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 SHEET NO.
BA11

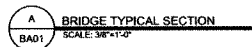
SHEET 90 OF 173

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NOTE:

1. FOR BRACING REQUIREMENTS FOR UTILITIES SEE SHEET BA30 AND BA31.

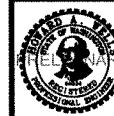


BID SET

1486 Engineering and
Surveying, LLC
1325 SE 7th Center Drive
Tallahassee, FL 32305
Phone: 904.241.1486
www.1486eng.com



BRIDGE TYPICAL SECTION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

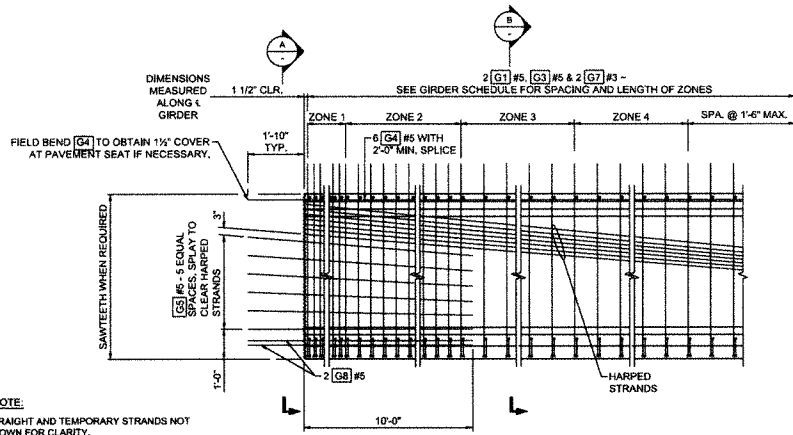


DESIGNED:
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CHECKED:
JAW
MAY 2023
71486.000

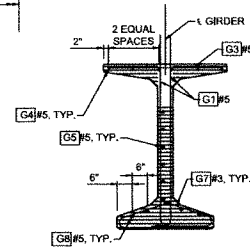
SHEET ID
BA12

SHEET 91 OF 173

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 Layout Tab: BA13



NOTE:
STRAIGHT AND TEMPORARY STRANDS NOT SHOWN FOR CLARITY.

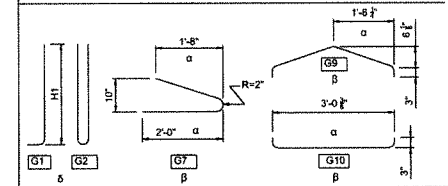


NOTES:
1. STRANDS NOT SHOWN
2. SAW TEETH SHOWN BY HATCHED AREA. SEE SAW TEETH DETAIL ON BA14

NOTES:

1. REMOVE TO TOP OF GIRDER AFTER ERECTION. ADJUST HOLE LOCATION VERTICALLY TO MISS HARPED STRANDS. OMIT HOLES AND PLACE INSERTS ON THE INTERIOR FACE OF EXTERIOR GIRDERS. PLACE HOLES AND INSERTS PARALLEL TO DIAPHRAGM CENTERLINE. INSERTS SHALL BE 1" Ø MEADOWBURKE MK-3 HTENSILE, 1" Ø MEADOWBURKE FX-19 FERRULE INSERT, 1" Ø x 5 1/2" WILLIAMS F22 OPEN FERRULE INSERT, 1" Ø x 4 1/2" DAYTON-SUPERIOR F-62 FLARED THIN SLAB FERRULE INSERT OR APPROVED EQUAL.
2. APPLY APPROVED RETARDANT FOR 3/4" ETCH TO SIDE FORMS OR 3/4" ROUGHENED SURFACE TREATMENT BY APPROVED MECHANICAL METHOD. OMIT AT EXTERIOR FACE OF EXTERIOR GIRDERS.

BENDING DIAGRAM
(ALL DIMENSIONS ARE OUT TO OUT)

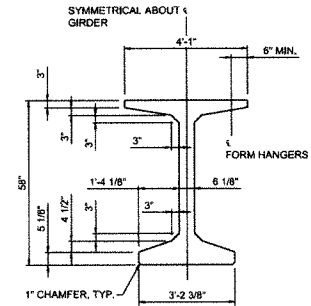
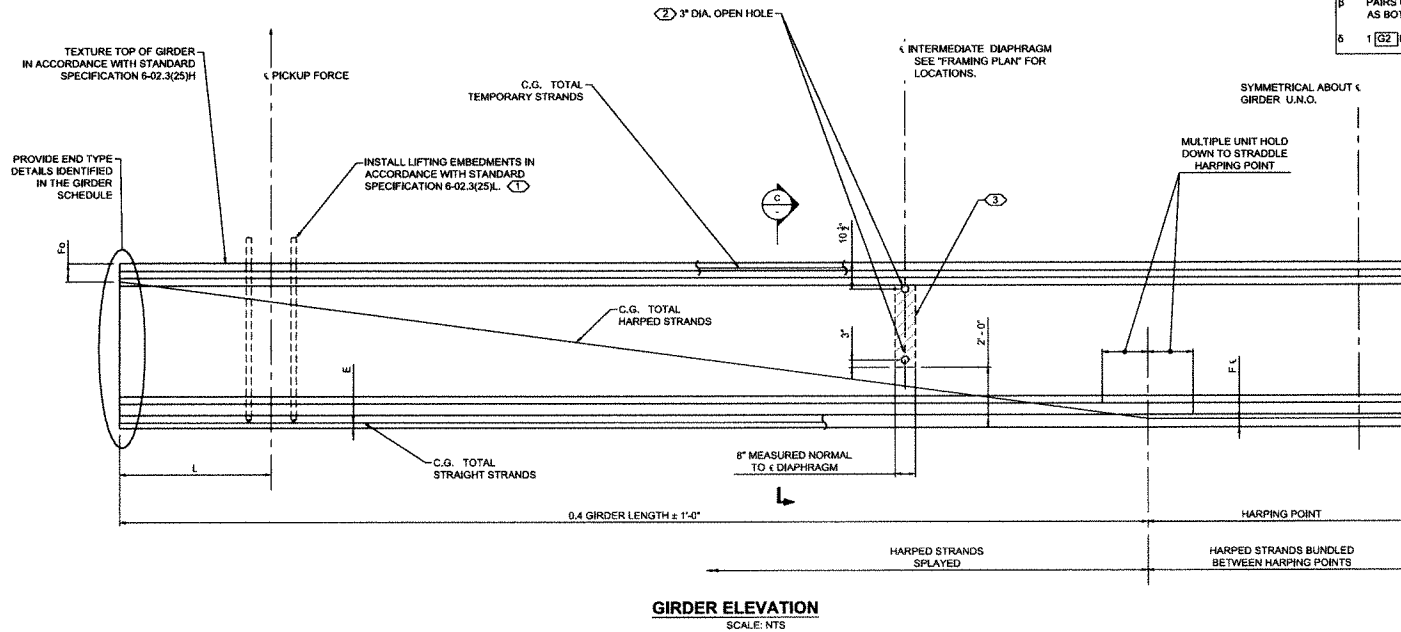


MARK	LOCATION	SIZE
G1	GIRDER STIRRUPS	5
G2	GIRDER END STIRRUPS	5
G3	GIRDER TOP FLANGE	5 STR
G4	GIRDER LONGITUDE FULL LENGTH	5 STR
G5	GIRDER END LONGIT.	5 STR
G6	GIRDER END TIES	W12 6
G7	GIRDER BOT. FLANGE TIES	3
G8	GIRDER END LONGIT.	5 STR
G9	GIRDER BOT. FLANGE TIES	3
G10	GIRDER BOT. FLANGE TIES	3

VARIES FOR SKEWED ENDS.

PAIRS OF G7 BARS, OR G9 AND G10 BARS, MAY BE USED INTERCHANGEABLY AS BOTTOM FLANGE TIES.

1 G2 MAY BE SUBSTITUTED FOR 2 G1 WITHIN ZONE 1.



NOTE:
REINFORCEMENT AND STRANDS NOT SHOWN.

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

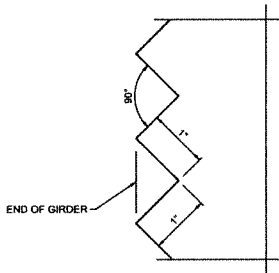
Know what's below.
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BRIDGE GIRDER DETAILS 1 OF 4 FOR:

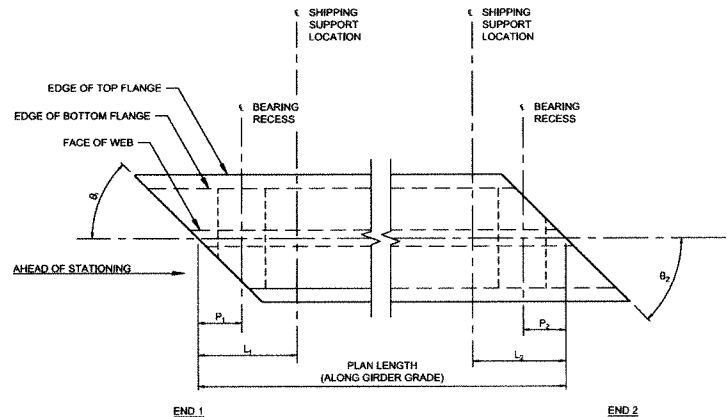
SHEET ID:
BA13
 SHEET 92 OF 173

BID SET



NOTE:
SAWTEETH SHALL BE FULL WIDTH OVER AREA SHOWN
ON SECTION A ON BA13.

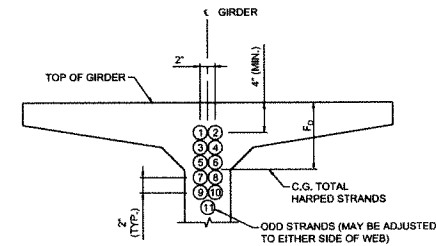
SAWTEETH DETAIL
SCALE: 12" = 1'-0"



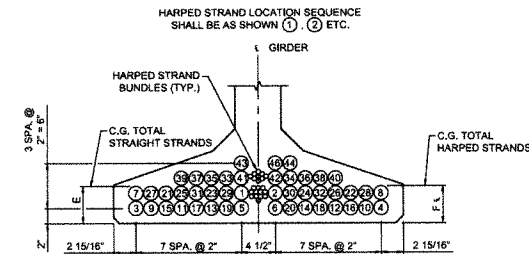
GIRDER PLAN
SCALE: NTS

GIRDER NOTES:

1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
2. ALL PRETENSIONED AND TEMPORARY STRANDS SHALL BE 0.6" Ø AASHTO M203 GRADE 270 LOW RELAXATION STRANDS, JACKED TO 202.5 KSI (43.8 KIPS PER STRAND).
3. THE TOP SURFACE OF THE GIRDER FLANGE SHALL BE ROUGHENED IN ACCORDANCE WITH SECTION 6-02.3(25)H OF THE STANDARDS SPECIFICATIONS.
4. LIFTING EMBEDMENTS SHALL BE IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARDS SPECIFICATIONS.
5. CAUTION SHALL BE EXERCISED IN HANDLING AND PLACING GIRDERS. ALL THE GIRDERS SHALL BE CHECKED BY THE CONTRACTOR TO ENSURE THAT THEY ARE BRACED ADEQUATELY TO PREVENT TIPPING AND TO CONTROL LATERAL BENDING DURING SHIPPING. ONCE ERECTED, ALL GIRDERS SHALL BE BRACED LATERALLY TO PREVENT TIPPING UNTIL THE DIAPHRAGMS ARE CAST AND CURED.
6. TEMPORARY TOP STRANDS SHALL BE PRETENSIONED IN ACCORDANCE WITH SECTION 6.02.3(25)I OF THE STANDARD SPECIFICATIONS AND THE GIRDER DETAIL SHEETS. THE LIFTING LOCATION 'L' AND CONCRETE RELEASE STRENGTH 'F_{cr}' SHOWN IN THE GIRDER SCHEDULE ASSUME THAT THE TEMPORARY TOP STRANDS ARE PRETENSIONS.



GIRDER END STRAND PATTERN
SCALE: 1 1/2" = 1'-0"



MIDDLE SPAN STRAND PATTERN
SCALE: 1 1/2" = 1'-0"

STRAIGHT STRAND LOCATION SEQUENCE
SHALL BE AS SHOWN ①, ②, ETC.

GIRDER SCHEDULE

SPAN	GIRDER	GIRDER SERIES	PLAN LENGTH (ALONG GIRDER GRADE) (SEE GIRDER NOTE 1)	INT. DIAPHRAGM TYPE (FULL OR PARTIAL)	GIRDER END DETAILS						MIN. CONC. COMP. STRENGTH	NUMBER OF STRANDS (SEE GIRDER NOTE 2)	LOCATION OF C.G. STRANDS	STRAIGHT STRANDS TO EXTEND			DECK SCREED CAMBER C	MIDSPAN VERTICAL DEFLECTION D		REINFORCEMENT DETAILS										SHIPPING AND HANDLING DETAILS															
					END 1 TYPE	END 2 TYPE	θ ₁	θ ₂	P ₁	P ₂				STRAIGHT	HARPED	TEMPORARY		E	F ₁	F ₀	STRAIGHT	EXTENSION LENGTH	STRAIGHT	EXTENSION LENGTH	SPACING	LENGTH	SPACING	LENGTH	SPACING	LENGTH	SPACING	LENGTH	H1	MAXIMUM MIDSPAN VERTICAL DEFLECTION AT SHIPPING	L	L ₁	L ₂	K _s MINIMUM SHIPPING SUPPORT ROTATIONAL SPRING CONSTANT (KIP-IN/RAD)	W _{cc} MINIMUM SHIPPING SUPPORT CNTR.-TO- CNTR. WHEEL SPACING						
																																								END 1	END 2	ZONE 1	ZONE 2	ZONE 3	ZONE 4
														"X" DIMENSION AT L BEARINGS		LOWER BOUND @ 40 DAYS		UPPER BOUND @ 120 DAYS																											
1	A	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	10	4	3 1/2"	4"	8"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-2 1/2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-3 1/2"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	B	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	10	4	3 1/2"	4"	8"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-3"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	C	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	12	4	3 1/2"	4"	9"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-3"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	D	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	10	4	3 1/2"	4"	8"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-1 1/2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-2 3/4"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	E	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	12	4	3 1/2"	4"	9"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-0"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-2 3/4"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	F	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	10	4	3 1/2"	4"	8"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-1 1/2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-2 3/4"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				
1	G	WF58G	120'-2 3/4"	PARTIAL	A	A	110.00"	110.00"	1'-6 1/2"	1'-6 1/2"	9.0	6.6	38	10	4	3 1/2"	4"	8"	1 TO 8	1'-4"	1 TO 8	1'-4"	1'-1 1/2"	2 1/2"	2 1/2"	5 1/2"	3"	1'-0"	4"	5'-4"	6"	2'-6"	9"	28'-6"	6'-2 1/2"	5 1/2"	3'-0"	4'-10"	4'-10"	40,000	6'-0"				

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PBS Engineering and Construction, LLC
1335 SE 10th Center Drive
Tomball, TX 77375
Houston, TX 77055
www.pbsllc.com



BRIDGE GIRDER DETAILS 2 OF 4 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: DGL

CHECKED: HAW

MAY 2023

11480.000

SHEET D

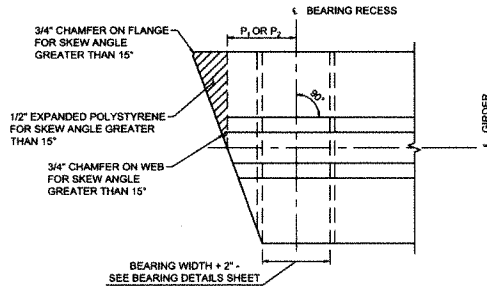
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SHEET 93 OF 173

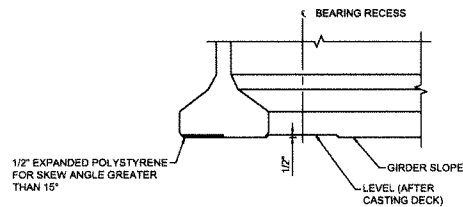
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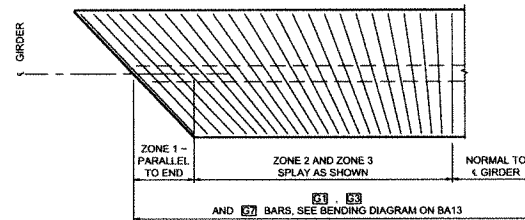
PLAN



ELEVATION

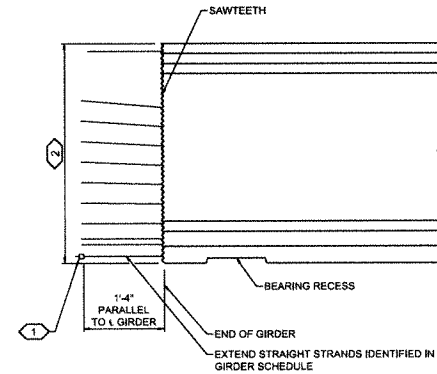
NOTE:
BEARING RECESS FORMS SHALL BE CONSTRUCTED AND FASTENED TO
AVOID GIRDER DAMAGE DURING STRAND RELEASE.

**BEARING RECESS AND BOTTOM
FLANGE SPALL PROTECTION DETAIL**
SCALE: 1" = 1'-0"



NOTE:
LONGITUDINAL REINF. NOT SHOWN.

**PLAN
TRANSVERSE REINFORCING AT SKEWED ENDS**
SCALE: NTS



NOTES:

1. 1 1/2" Ø MIN. STRAND CHUCK OR ASTM A108 2 1/2" Ø x 1 1/2" STRAND ANCHOR, ANCHOR STRAND WITH WEDGES BEFORE GIRDER ERECTION. VERIFY WEDGES ARE SEATED TIGHTLY IMMEDIATELY BEFORE PLACING DIAPHRAGM CONCRETE.
2. CUT ALL STRANDS FLUSH WITH THE GIRDER ENDS AND PAINT WITH AN APPROVED EPOXY RESIN, EXCEPT FOR EXTENDED STRANDS AS SHOWN.

END TYPE A
SCALE: NTS

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PBS Engineering and
Environmental LLC
235 S. 1st Street, Suite 200
Baltimore, MD 21202
410.552.1000
pbs@aol.com



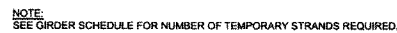
BRIDGE GIRDER DETAILS 3 OF 4 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



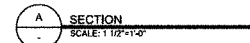
DESIGNED:
DGL
CHECKED:
HAW
MAY 2025
11486.000

SHEET ID:
BA15

SHEET **94** OF **173**



SCALE: 3/8" = 1'-0"



TEMPORARY STRAND LOCATION SEQUENCE
SHALL BE AS SHOWN ① . ② ETC.

1. TEMPORARY TOP STRANDS SHALL BE PRETENSIONED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 6-02.3.25JL.
2. FOR GIRDERS ERECTED ON A LONGITUDINAL GRADE, STRAND DETENSIONING BLOCKOUTS SHALL BE PLACED AT THE LOW END OF THE GIRDER.
3. SEE "TEMPORARY STRAND CUTTING SEQUENCE" ON CONSTRUCTION SEQUENCE SHEET FOR TEMPORARY STRAND DETENSIONING PROCEDURE.

- 1 FORM WITH EXPANDED POLYSTYRENE, TYP.
- 2 FORM WITH EXPANDED POLYSTYRENE. REMOVE POLYSTYRENE JUST PRIOR TO CUTTING THE TEMPORARY STRANDS AND PREVENT MOISTURE FROM ENTERING THE BLOCKOUT AS DESCRIBED IN THE TEMPORARY STRAND CUTTING SEQUENCE, TYP.

**PBS Engineering and
Environmental LLC**
1325 SE Tech Center Drive
Suite 140
Vancouver, WA 98683
360.695.3483
pbsusa.com



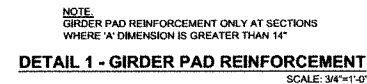
BRIDGE GIRDER DETAILS 4 OF 4 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
DGL
CHECKED:
HAW
MAY 2025
71486.000

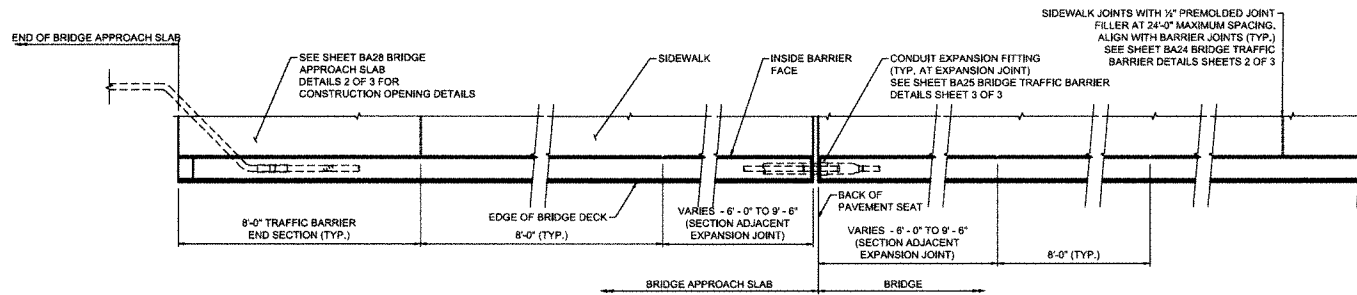
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BA16

SHEET 95 OF 173



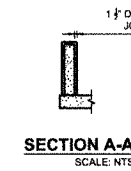
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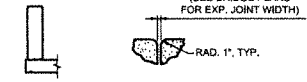


NOTE:
BARRIER CONTINUOUS BETWEEN BRIDGE DECK EXPANSION JOINTS.
CONSTRUCTION JOINTS WITH SHEAR KEYS ARE PERMISSIBLE AT DUMMY JOINT LOCATIONS.
FORM JOINTS BETWEEN DUMMY JOINTS SHALL NOT BE PERMITTED.

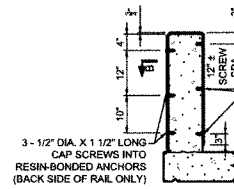
BRIDGE TRAFFIC BARRIER PLAN
SCALE: 1/2" = 1'-0"



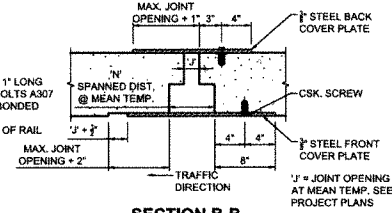
DETAIL 1
SCALE: NTS



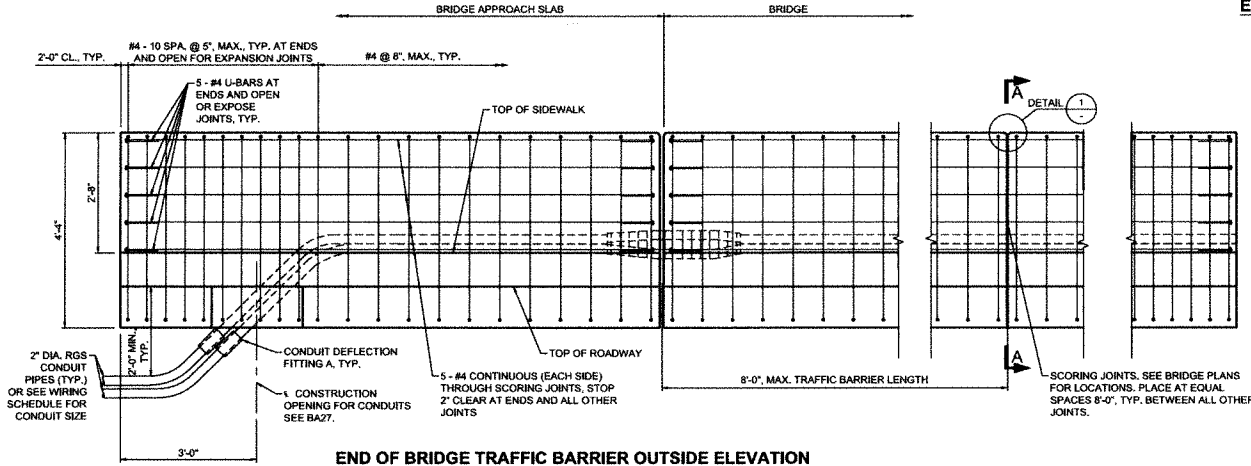
OPEN OR EXPANSION JOINT DETAIL
SCALE: NTS



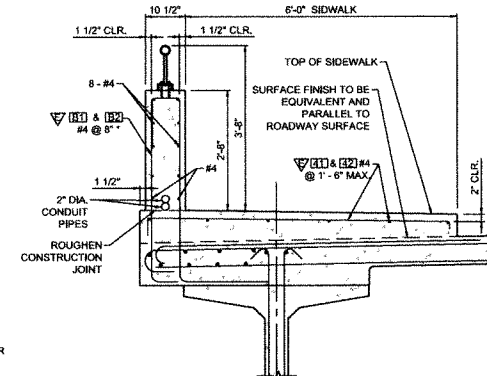
EXPANSION JOINT COVER PLATE
SCALE: NTS



SECTION B-B
SCALE: NTS



END OF BRIDGE TRAFFIC BARRIER OUTSIDE ELEVATION
SCALE: 3/4" = 1'-0"



TYPICAL RAIL SECTION
SCALE: 3/4" = 1'-0"

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PE Engineering and Construction LLC
3000 10th Ave NW
Suite 300
Seattle, WA 98107
206.461.1963
info@pe-engineering.com



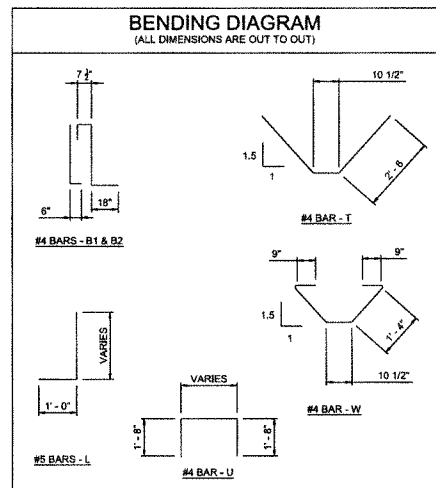
BRIDGE TRAFFIC BARRIER DETAILS 1 OF 3 FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



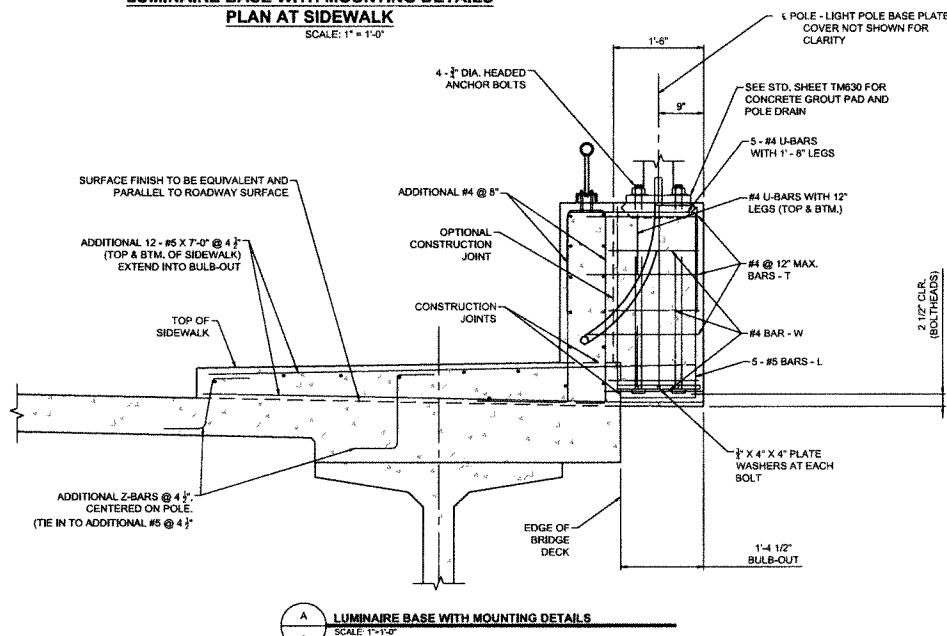
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CHECKED: HAW
MAY 2023
7/16/2023

SHEET ID
BA22

SHEET 101 OF 173



SCALE: 1" = 1'-0"

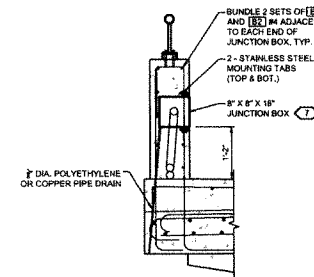
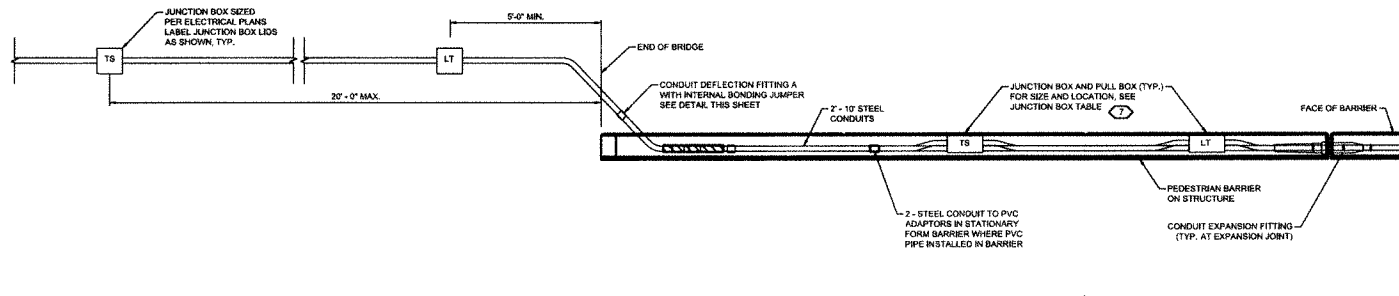


A LUMINAIRE BASE WITH MOUNTING DETAILS
SCALE: 1"=1'-0"

1. LUMINAIRE BASE MOUNTING DETAILS DESIGNED ACCORDING TO AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1994).
2. THE DESIGN WIND VELOCITY IS 100MPH UNLESS SHOWN OTHERWISE IN SPECIAL PROVISIONS FOR THE PROJECT.
3. SEE PROJECT PLANS FOR CONCRETE IN DECK AND BRIDGE RAIL. PROVIDE CLASS 4000 CONCRETE IN BULB-OUPS FOR LUMINAIRE POLE MOUNTS AND BARRIER.
4. PROVIDE REINFORCING STEEL ACCORDING TO ASTM SPECIFICATION A706, OR AASHTO M31 (ASTM A615) GRADE 60.
5. PLACE BARS 1/2" CLEAR OF THE NEAREST FACE OF CONCRETE UNLESS SHOWN OTHERWISE. PROVIDE STRUCTURAL STEEL ACCORDING TO AASHTO SPECIFICATION M183, (ASTM A36), PROVIDE ANCHOR BOLTS ACCORDING TO ASTM SPECIFICATION F1554, GRADE 10S. LUMINAIRE BASE MOUNTING DETAILS DESIGNED TO MEET A MAXIMUM 'BASE TO LUMINAIRE' HEIGHT OF 50 FEET, AND A MAXIMUM LUMINAIRE ARM LENGTH OF 30 FEET. SEE TMS029 AND TMS030 FOR OTHER LUMINAIRE SUPPORT DETAILS. SEE PROJECT PLANS FOR SIZE AND LOCATION OF CONDUITS AND JUNCTION BOX.
6. HOT DIP GALVANIZE ANCHOR BOLTS AND PLATE WASHERS.
7. EXTEND TOP AND BOTTOM TRANSVERSE DECK STEEL REINFORCEMENT INTO LUMINAIRE BASE BULB-OUT. STOP 1/2" CLEAR OF NEAREST FACE OF CONCRETE.
8. DECK AND RAIL REINFORCEMENT ARE NOT SHOWN FOR CLARITY.
9. RAIL DESIGNED AND CRASH TESTED TO MEET NCHRP 350 TL-4 REQUIREMENTS.
10. PROVIDE ALL REINFORCING STEEL CONFORMING TO AASHTO M31 (ASTM A615), GRADE 60 OR ASTM A706.
11. PLACE ALL BARS 2" CLEAR OF THE NEAREST FACE OF CONCRETE UNLESS SHOWN OTHERWISE.
12. PROVIDE STEEL COVER PLATES CONFORMING TO AASHTO M183 (ASTM A36). HOT DIP GALVANIZE AFTER FABRICATION.
13. AT SKewed BENTS UP TO 20° MAKE JOINTS PARALLEL TO THE BENT CENTER LINE. FOR SKEWS GREATER THAN 20° MAKE JOINTS NORMAL TO RAIL.
14. PROVIDE STEEL TUBING CONFORMING TO ASTM A500, GRADE B, A501 OR A618.
15. PROVIDE STEEL TUBING CONFORMING TO ASTM A500, GRADE B, A501 OR A618.
16. PROVIDE REINFORCING STEEL ACCORDING TO AASHTO A706, OR AASHTO M31 (ASTM A615) GRADE 60. SPACING #4 BARS 1'-4" MIN.
17. CONSTRUCT RAIL (POSTS AND PARAPET) NORMAL TO GRADE IN THE LONGITUDINAL DIRECTION AND VERTICAL IN THE TRANSVERSE DIRECTION.

BIG SET

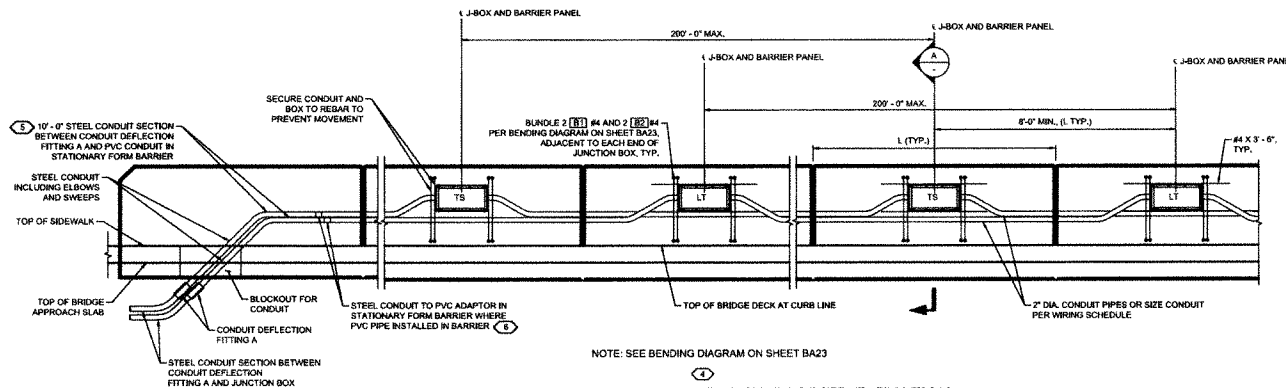
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NOTE: SEE BENDING DIAGRAM ON SHEET BA23

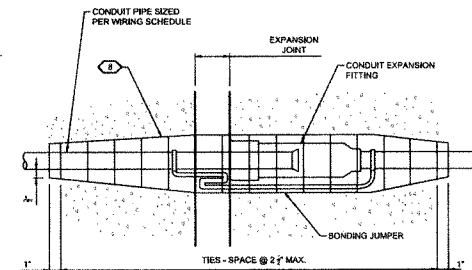
SECTION
SCALE: 3/4" = 1'-0"

CONDUITS AND J-BOX IN TRAFFIC BARRIER PLAN
SCALE: 1/2" = 1'-0"



NOTE: SEE BENDING DIAGRAM ON SHEET BA23

CONDUITS AND J-BOX IN TRAFFIC BARRIER ELEVATION
SCALE: 1/2" = 1'-0"

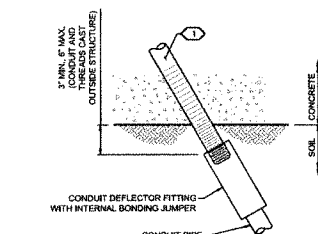


NOTE:
CONDUIT FITTING - (TYPE AX FOR MOVEMENT OF 1/2") AT BRIDGE EXPANSION JOINTS.

CONDUIT EXPANSION FITTING
SCALE: NTS

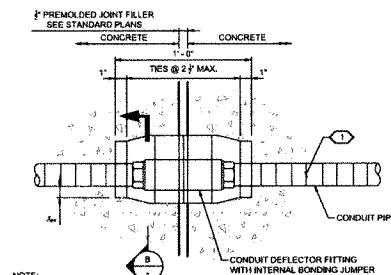
NOTES

- WHERE CONDUIT IN A STRUCTURE IS ROUTED ACROSS A JOINT, WRAP STEEL CONDUIT PIPE FOR 1'-0" ON EACH SIDE OF JOINT. PIPE WRAP TAPE SHALL BE 2" WIDE, 30 MIL THICK, AND INSTALLED WITH A MINIMUM OF 1" OVERLAP.
- PLACE AT CONDUIT PIPE EXIT FROM STRUCTURE AND SHALL BE IN NEUTRAL STATE AFTER INSTALLATION.
- CONDUIT PIPES PLACED THROUGH RETAINING WALL PEDESTRIAN BARRIER SHALL BE FITTED WITH DEFLECTION FITTINGS AT A MAXIMUM SPACING OF 120'. THE DEFLECTION FITTINGS SHALL BE PLACED AT THE PEDESTRIAN BARRIER OPEN JOINT THAT COINCIDES WITH THE RETAINING WALL EXPANSION JOINT.
- LABEL JUNCTION BOX COVER IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 9-29.2(4). ADJACENT JUNCTION BOXES ARE SHOWN CENTERED BETWEEN ADJACENT DUMMY JOINTS. IF THE DISTANCE BETWEEN ADJACENT DUMMY JOINTS IS 16'-0" OR GREATER, PLACE ADJACENT JUNCTION BOXES SYMMETRICALLY ON EITHER SIDE OF THE CENTER OF ONE DUMMY PANEL WHILE MAINTAINING 8'-0" MINIMUM BETWEEN CENTER LINES OF THE JUNCTION BOXES.
- TERMINATE STEEL CONDUIT IN JUNCTION BOX IF LESS THAN 10'-0" FROM ELBOW OR SWEEP.
- INSTALL ONLY WHERE CONDUIT IS HORIZONTAL.
- NEMA 4X IN STATIONARY FORM BARRIER, OR NEMA 3R IN SLIP FORM BARRIER. MOUNT JUNCTION BOX SO COVER IS FLUSH WITH BARRIER, CAN BE RECESSED UP TO 'A'.
- 3'-0" LONG EXPANDED POLYSTYRENE SLEEVE AROUND CONDUIT, DUCT TIE BEAMS AND ENDS TO SEAL AND PREVENT CONCRETE FROM BONDING WITH FITTING AND CONDUIT.



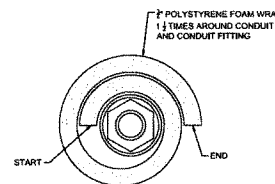
NOTE:
CONDUIT FITTING - TYPE DX FOR DEFLECTION OF 30° AND 1/2" MOVEMENT.

CONDUITS DEFLECTION FITTING A
SCALE: NTS



NOTE:
CONDUIT FITTING - TYPE DX FOR DEFLECTION OF 30° AND 1/2" MOVEMENT.

CONDUITS DEFLECTION FITTING B
SCALE: NTS



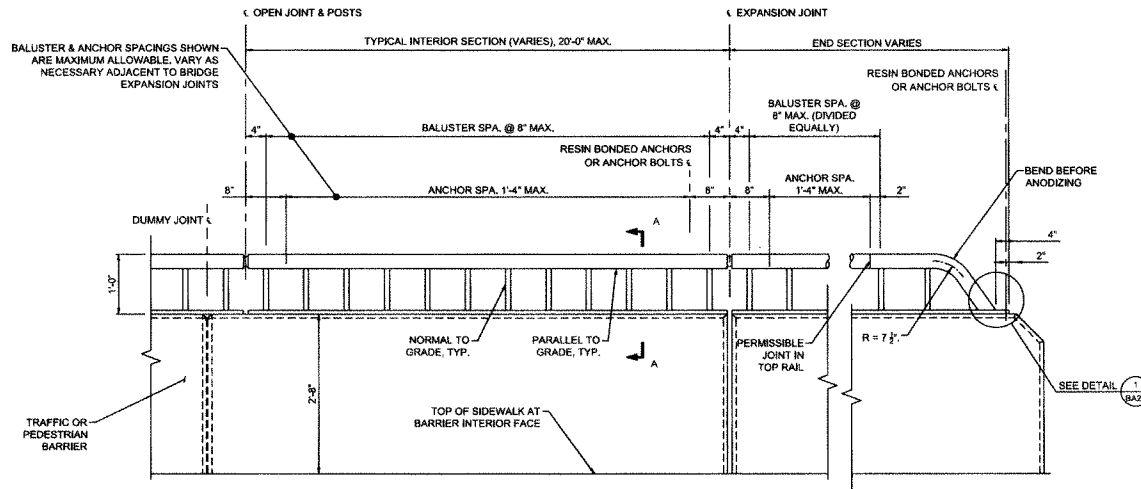
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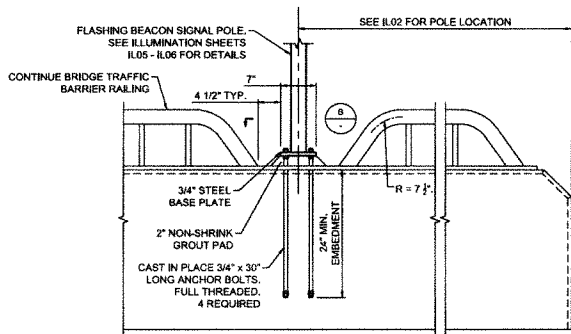
BRIDGE TRAFFIC BARRIER DETAILS 3 OF 3 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



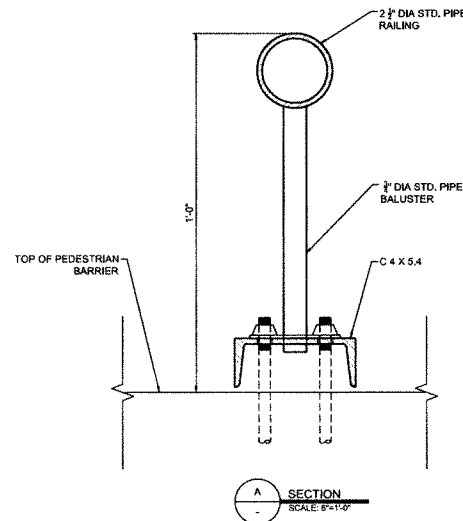
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CHECKED:	HAW
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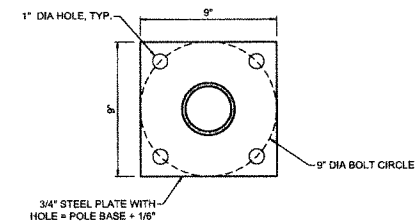
BRIDGE TRAFFIC BARRIER RAILING ELEVATION
SCALE: 1" = 1'-0"



NOTE: SEE BRIDGE TRAFFIC BARRIER RAILING ELEVATION FOR DETAILS NOT SHOWN
BARRIER RAILING POLE OPENING ELEVATION
SCALE: 1" = 1'-0"



SECTION A-A
SCALE: 1" = 1'-0"



BASE PLATE DETAIL B
SCALE: 3" = 1'-0"

NOTES:

- PIPE RAILING, PIPE RAILING SPICES, AND CHANNELS SHALL BE BENT TO THE HORIZONTAL CURVE WHERE THE RADIUS OF CURVATURE IS LESS THAN 200'.
- SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION, GALVANIZING AND INCLUDING AN ERECTION DIAGRAM. MATERIAL BEING USED SHALL BE SPECIFIED IN THE SHOP DRAWINGS.
- THE BRIDGE RAILING SHALL BE HOT DIP GALVANIZED AFTER FABRICATION PER AASHTO M 111. ALL COMPONENTS OF RAIL, PANEL, POSTS AND SPICE SLEEVES SHALL HAVE ALL SURFACES HOT DIP GALVANIZED PRIOR TO ASSEMBLY.
- CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH.
- PIPE RAILING, PIPE BALLUSTERS, RAILING SPICE AND CHANNELS SHALL BE ADEQUATELY WRAPPED TO ENSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.
- WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.1.
- PIPE RAILING AND SPICES MAY BE HEATED TO FACILITATE FORMING OR BENDING.
- THE CONTRACTOR SHALL REPAIR ALL GALVANIZED STEEL SURFACES DAMAGED BY FIELD OPERATIONS, BY PAINTING THE DAMAGED AREAS WITH TWO COATS OF PAINT CONFORMING TO FORMULA A-973 AS SPECIFIED IN SECTION 9-08.2 OF THE WASHINGTON STATE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.

MATERIAL	PART	MATERIAL SPECIFICATION
STEEL	RAILS & BALUSTERS	ASTM A53 GRADE B OR ASTM A500 GRADE C SCHEDULE 40 (STD. PIPE), GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
	WASHERS	ASTM A 183 GRADE BY GALVANIZED IN ACCORDANCE WITH AASHTO M 232
	PLATES/BAR CHANNELS	ASTM A 36 GALVANIZED IN ACCORDANCE WITH AASHTO M 111
	DRIVE PINS	ASTM A 276 TYPE 302 STAINLESS STEEL
	ANCHOR BOLTS	STANDARD SPECIFICATION SECTION 9-08.5(4) GR. 36 (GALVANIZE IN ACCORDANCE WITH AASHTO SPECIFICATION M 232)
	NUTS	TAMPER-PROOF TYPE ZINC ALLOY SEE SPECIAL PROVISIONS SECTION 6-08.2

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PBS Engineering and Construction
1335 SE 17th Center Drive
Vancouver, WA 98603
360.438.8888
pbes.com



BRIDGE TRAFFIC BARRIER RAILING 1 OF 2 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
GCL

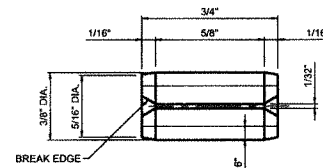
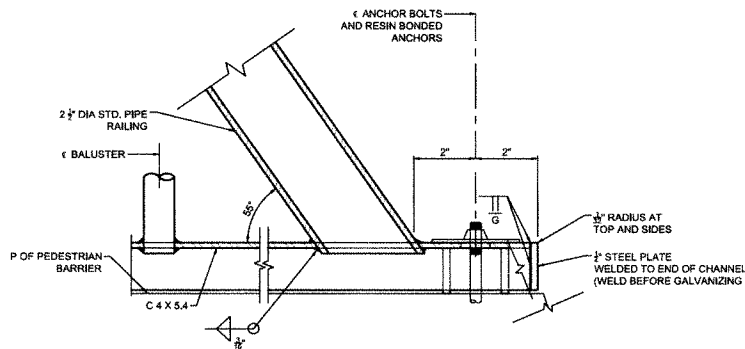
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MAY 2025
71488.000

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BA25

SHEET 104 OF 173

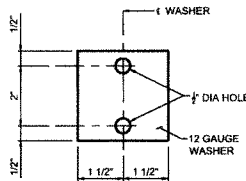
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SLOTTED TYPE SPRING PIN (ANSI B18.8.2.)

DRIVE PIN DETAIL

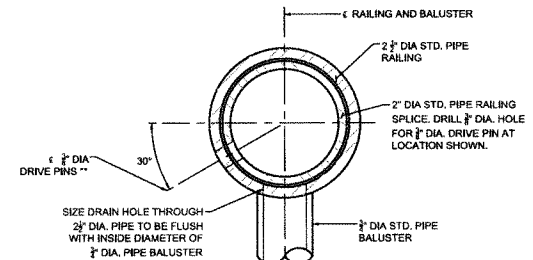
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HOT DIP GALVANIZE AFTER FABRICATION

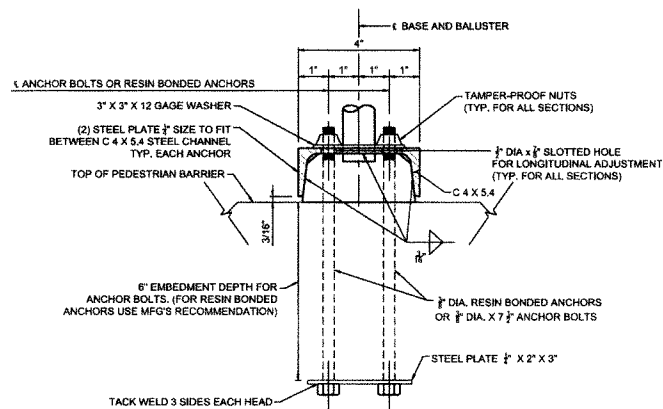
WASHER DETAIL

SCALE: 6"=1'-0"



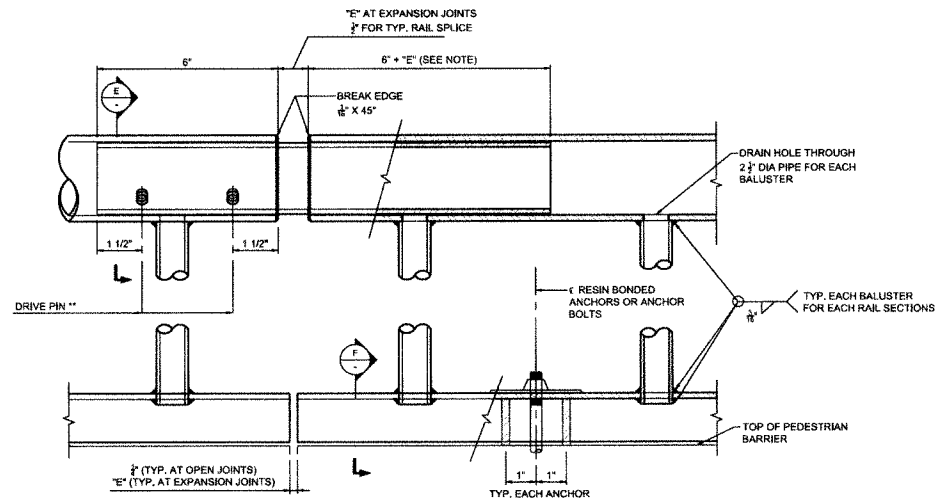
NOTE:

** LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH WITH THE OUTSIDE FACE OF THE RAILING.



NOTE:

ANCHOR BOLTS SHALL BE POSITIONED IN A JOG DURING WELDING



NOTES:

1. "E" DIMENSION EQUALS MAX. OPENING OR CLOSING OF CONCRETE RAIL BASE AT EXPANSION JOINTS.
2. ** LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH WITH THE OUTSIDE FACE OF THE RAILING.

B PART ELEVATION
SCALE: 6"=1'-0"

BID SET

PBS Engineering and Construction
1000 8th Street Drive
Yonkers, NY 10553
914.963.1111
www.pbs-engineering.com

PBS

BRIDGE TRAFFIC BARRIER RAILING 2 OF 2 FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

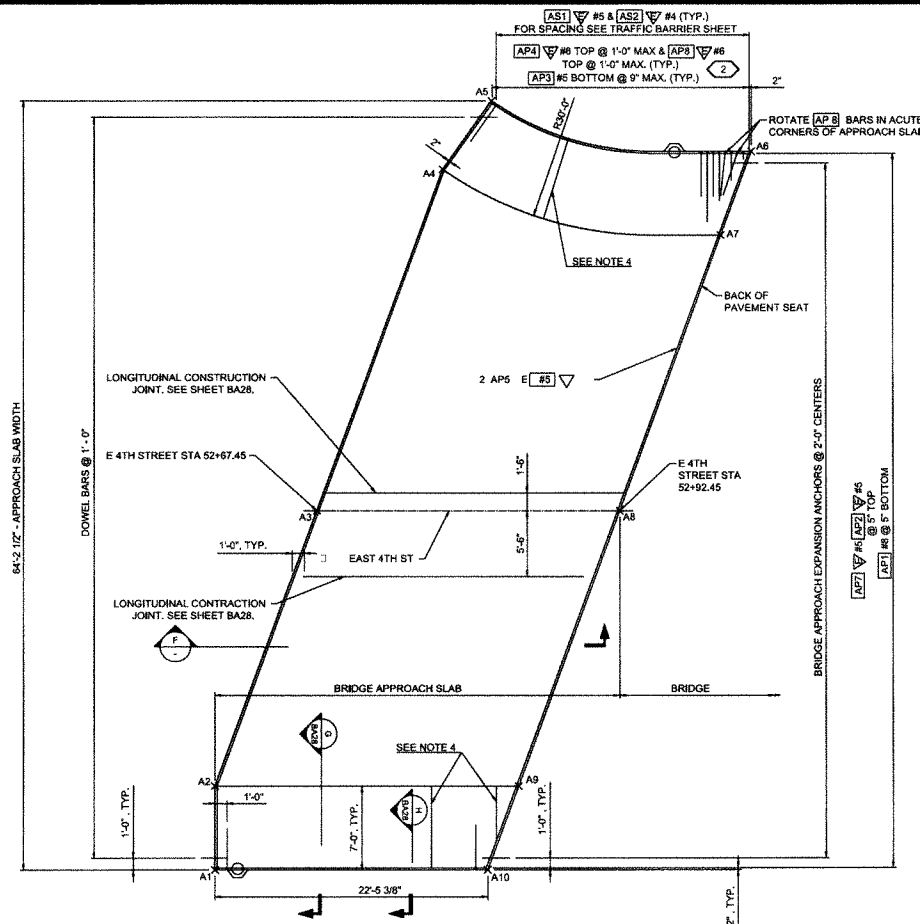


DESIGNED
COL
CHECKED:
HAW
MAY 2025
71486.000

SHEET ID
BA26

SHEET 105 OF 173

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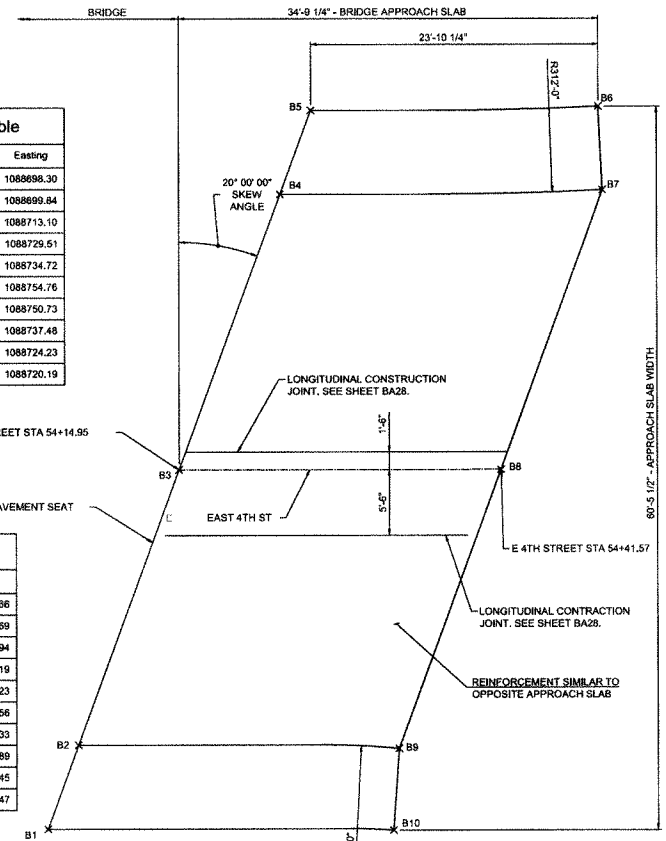


Point Table

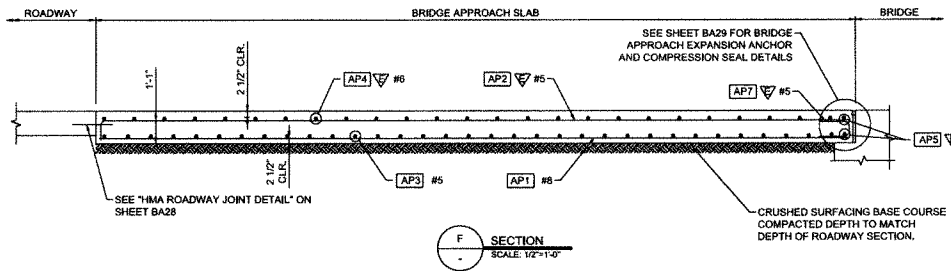
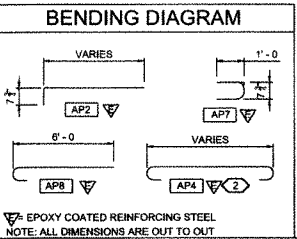
Point #	Northing	Easting
A1	200468.62	1088698.30
A2	200475.45	1088699.64
A3	200496.03	1088713.10
A4	200521.52	1088729.51
A5	200526.20	1088734.72
A6	200517.34	1088754.76
A7	200511.08	1088750.73
A8	200490.50	1088737.48
A9	200469.92	1088724.23
A10	200463.65	1088720.19

Point Table

Point #	Northing	Easting
B1	200436.56	1088839.86
B2	200442.82	1088843.69
B3	200463.40	1088856.94
B4	200483.98	1088870.19
B5	200490.24	1088874.23
B6	200485.28	1088897.56
B7	200478.39	1088896.33
B8	200457.52	1088882.89
B9	200436.64	1088868.45
B10	200430.11	1088867.47



PLAN
SCALE: 1" = 5'



GENERAL NOTES:

- ALL EDGES OF BRIDGE APPROACH SLAB SHALL HAVE 1/2" RADIUS EXCEPT AT LONGITUDINAL JOINTS AND ADJACENT TO L-TYPE ABUTMENTS.
- THE MINIMUM LAP SPICE OF #5 IS 2'-0", #5 IS 2'-0", #6 IS 3'-0", AND #8 IS 3'-3". ALL LAP SPICES SHALL BE STAGGERED SO THAT NO MORE THAN 50% OF REBAR IS SPICED AT THE SAME LOCATION. LAP SPICES SHALL BE LOCATED WITHIN THE MIDDLE HALF OF THE BRIDGE APPROACH SLAB. OPTIONAL SPICES ARE ALLOWED FOR #5.
- FOR TRAFFIC BARRIER DETAILS, INCLUDING ANY BRIDGE APPROACH SLAB BLOCKOUT INFORMATION, SEE BRIDGE PEDESTRIAN BARRIER DETAIL SHEETS.
- SEE CIVIL DRAWINGS FOR DETAILS OF SIDEWALK RAMPS.

NOTES:

- LONGITUDINAL JOINTS SHALL BE PLACED ON LANE LINES AND SHALL BE CONSTRUCTED AND SEALED IN ACCORDANCE WITH STD. SPEC. SECTION 5-05.3(8). JOINTS MAY BE EITHER A SAWCUT CRACK CONTROL JOINT OR A CONSTRUCTION JOINT. SAWCUT JOINTS SHALL TERMINATE 1'-0" BEFORE REACHING EDGE OF SLAB AND MUST BE SAW CUT AS SOON AS POSSIBLE AFTER PLACEMENT OF CONCRETE. SEE "LONGITUDINAL JOINT DETAIL" ON BRIDGE APPROACH SLAB DETAILS 2 OF 3.
- AP4 HOOKS ARE ONLY REQUIRED AT THE BRIDGE PEDESTRIAN BARRIER DETAIL SHEETS.

BID SET

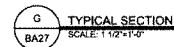
PBS
 BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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 MAY 2023
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 SHEET ID
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 SHEET 106 OF 173



NOTE: LAP SPLICES MAY BE REPLACED WITH MECHANIC COUPLERS IF NECESSARY.

LONGITUDINAL CONSTRUCTION JOINT DETAIL
SCALE: 3/4" = 1'-0"

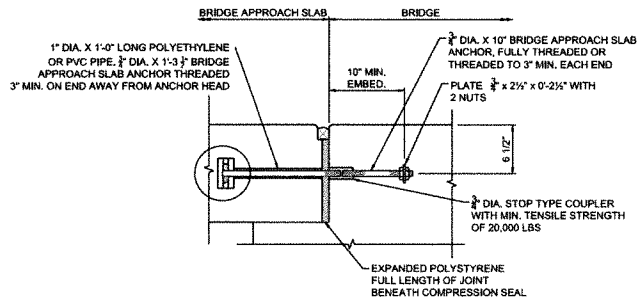


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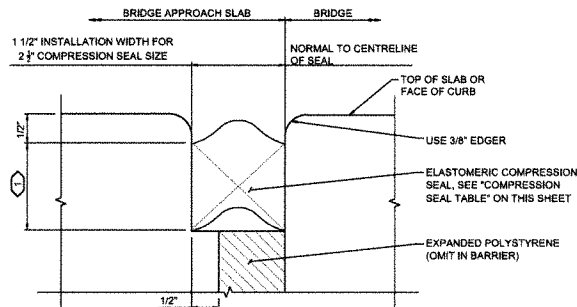
SECTION AT CONDUIT
SCALE: 1 1/2"=1'-0"

RIO SET

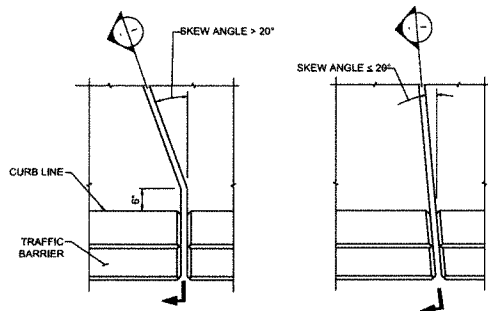
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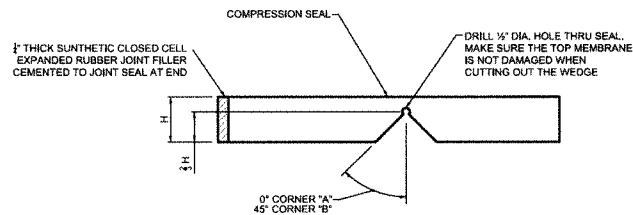
APPROACH EXPANSION SLAB
SCALE: 1 1/2" = 1'-0"



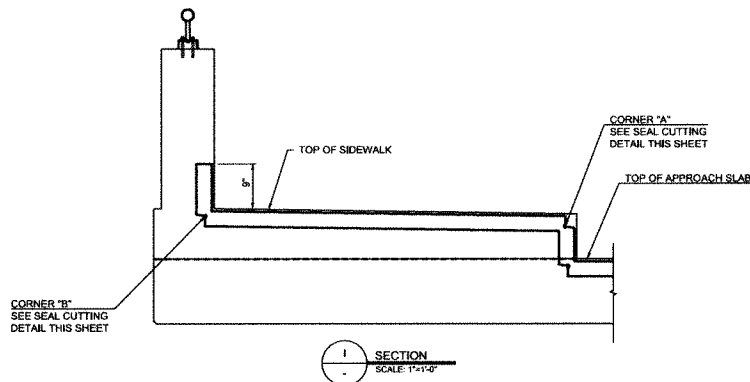
EXPANSION JOINT AT BACK OF PAVEMENT SEAT
COMPRESSION SEAL DETAIL
SCALE: 1" = 1'-0"



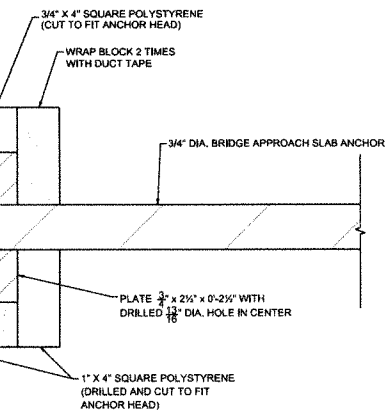
EXPANSION JOINT PLAN
SCALE: 3/4" = 1'-0"



SEAL CUTTING DETAIL
SCALE: 3" = 1'-0"



SECTION
SCALE: 1" = 1'-0"



ANCHOR HEAD DETAIL
SCALE: 1" = 1'-0"

COMPRESSION SEAL TABLE

D.S. BROWN	WATSON BOWMAN
SEAL	SEAL
CV-2502	IWA-250
2 1/2"	2 1/2"

TESTING SHALL BE PER ASTM D 2628 PRIOR TO USE.

- ALL METAL PARTS OF THE APPROACH EXPANSION ANCHOR SHALL RECEIVE ONE COAT OF PAINT CONFORMING TO STANDARD SPECIFICATION SECTION 9-08.12(F) OR BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
 - BRIDGE APPROACH SLAB ANCHORS SHALL BE INSTALLED PARALLEL TO ROADWAY AND TO EACH OTHER.
- ① FULLY COMPRESSED SEAL HEIGHT, SEAL HEIGHT VARIES WITH MANUFACTURER, VERIFY PRIOR TO SLAB CONSTRUCTION

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PBS Engineering and Construction
1325 SE 14th Street Drive
Vancouver, WA 98683
Phone: 206.461.1000
www.pbsinc.com



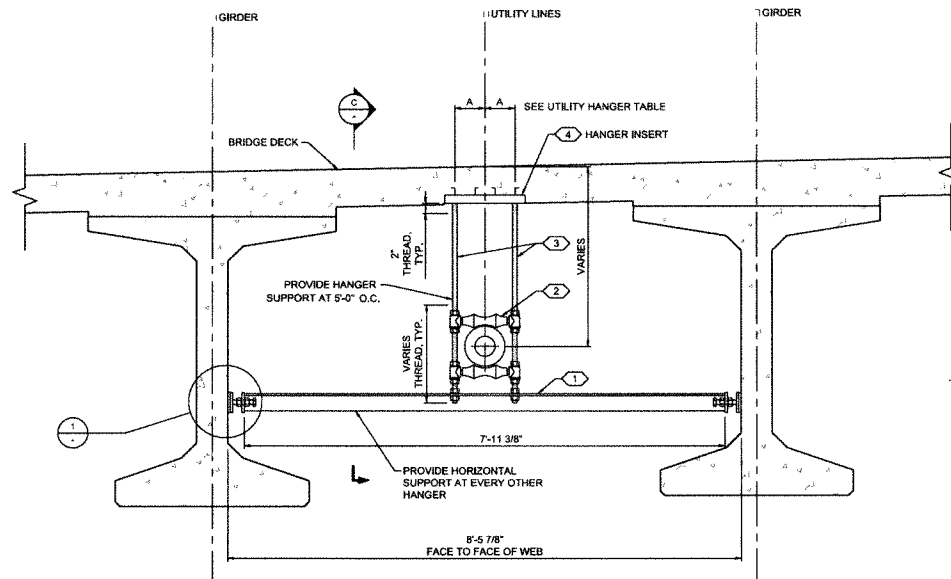
BRIDGE APPROACH SLAB DETAILS 3 OF 3 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: DCL
CHECKED: HAW
MAY 2025
1485-005

SHEET ID:
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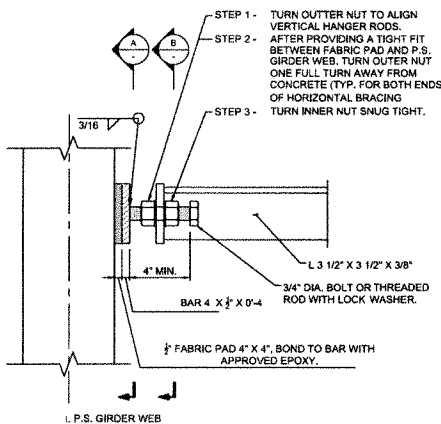
SHEET 108 OF 173



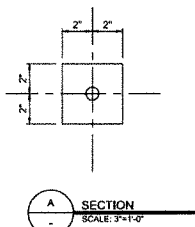
NOTE:
BOTTOM SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.

HANGER UTILITY SUPPORT
SCALE: 1" = 1'-0"

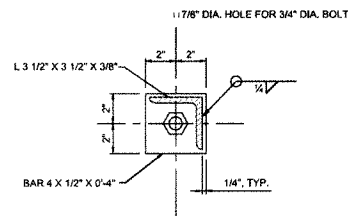
□ BAR, FABRIC PAD AND 3/4" DIA. BOLT



1 DETAIL
SCALE: 3" = 1'-0"

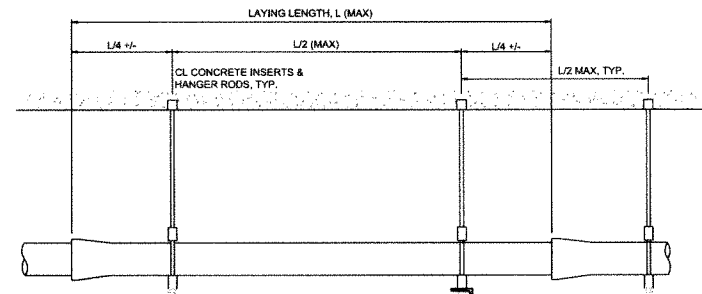


A SECTION
SCALE: 3" = 1'-0"



B SECTION
SCALE: 3" = 1'-0"

UTILITY HANGER TABLE		
UTILITIES	A (INCH)	L (FEET)
4" GAS PIPE	3 1/2"	8'-0"
8" SANITARY PIPE	6"	8'-0"
16" STORM PIPE	9 7/8"	8'-0"
DRY UTILITIES	SEE BA31	8'-0"



C SECTION
SCALE: NTS
PIPE SUPPORTS SHOWN, DRY UTILITIES SIMILAR.

GENERAL NOTES:

- ALL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION PER AASHTO M 111 OR AASHTO M 232 EXCEPT PIPE ROLLERS.
- PAINT ROLLERS WITH THREE COATS OF GALVANIZING REPAIR PAINT. SEE STD. SPEC. SECTION 9-08.1(2)B.

NOTES:

- L 3/2 x 3/2 x 1/2 WITH 2 - X" DIA. HOLES FOR X" DIA. HANGER RODS AT EVERY OTHER VERTICAL SUPPORT, NEAR PIERS, AND AT EXPANSION JOINTS
- ANVIL PIPE ROLL FIG. 171, B-LINE B3114, CARPENTER AND PATTERSON FIG. 142 OR APPROVED EQUAL
- X" DIA. GALV. HANGER RODS WITH 8 HEX HEAD NUTS, STD. WASHERS, AND LOCK WASHERS. X" DETERMINED FROM MANUFACTURER
- COOPER B-LINE B224-30, POWERSTRUT PS 348, OR UNISTRUT P32, WITH SPRING NUT (TYP.). CHASE THREADS ON HANGER ROD FOR THREAD COMPATIBILITY WITH SPRING NUT. INSERT TO BE INSTALLED LEVEL LONGITUDINALLY AND TRANSVERSELY. PLACE INSERT TO PROVIDE FOR TRANSVERSE ADJUSTMENT OF HANGER RODS. HANGER RODS SHALL NOT BE WITHIN 2" OF THE END OF THE INSERT. TWO INSERTS MAYBE USED TO ACCOMMODATE SUPERELEVATION.

BID SET

RED Engineering and
1205 SE 10th Street
Vancouver, WA 98683
907.546.2000
redeng.com

PBS

UTILITY DETAILS 1 OF 2 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

811
Know what's below.
Call before you dig.

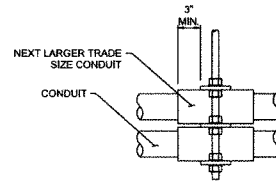
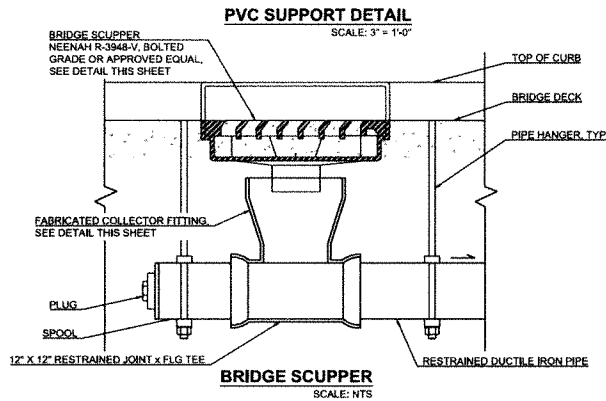
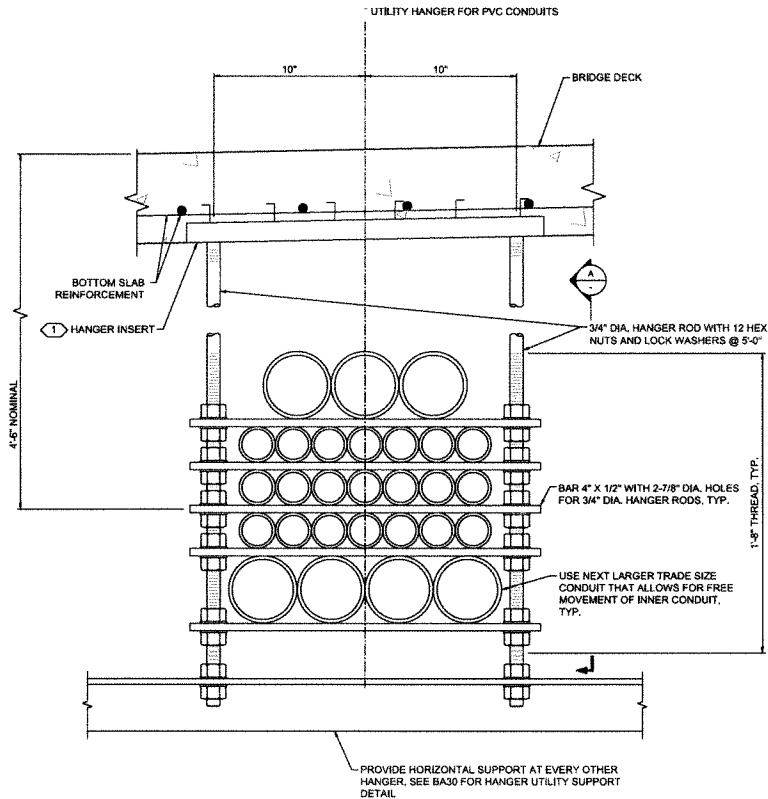
SEAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
NO. 14862
DATE: MAY 2025

DESIGNED:
DCL
CHECKED:
HAW
MAY 2025
1486200

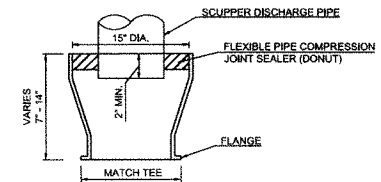
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SHEET 109 OF 173

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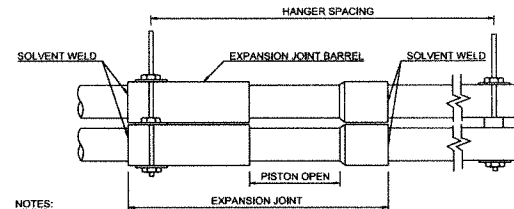


HANGER SIDE VIEW
 SCALE: 1 1/2\"/>



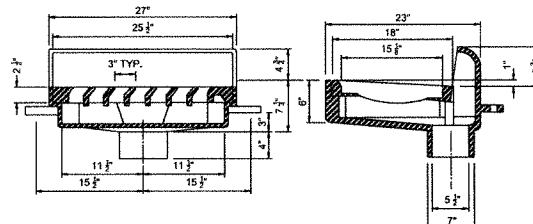
- NOTES:**
1. FABRICATE FITTING AS SHOWN PER AWWA C110/ANSI A21.10.
 2. MATERIAL SHALL BE MINIMUM CLASS 52 DUCTILE IRON PIPE.
 3. EXTERIOR COATING SHALL BE ASPHALTIC COATING PER AWWA C151/ANSI A21.51
 4. INTERIOR COATING SHALL MATCH THAT OF THE STORM PIPE.
 5. LENGTH OF FITTING SHALL VARY AS REQUIRED TO PROVIDED MINIMUM OVERLAP OF SCUPPER DISCHARGE PIPE.

FABRICATED COLLECTOR FITTING
 SCALE: NTS



- NOTES:**
1. NOT ALL EXPANSION JOINTS/CONDUITS ARE SHOWN FOR CLARITY.
 2. BASIS OF DESIGN IS:
 4\"/>
 3. SET THE EXPANSION JOINT PISTON OPENING PER MANUFACTURER'S RECOMMENDATIONS AND THE FOLLOWING CHART:
- | INSTALLATION TEMP | PISTON OPENING |
|-------------------|----------------|
| 30 | 9-3/4" |
| 40 | 5-1/8" |
| 50 | 4-3/8" |
| 60 | 3-5/8" |
| 70 | 2-7/8" |

ELECTRICAL CONDUIT EXPANSION JOINT
 SCALE: NTS



- NOTES:**
1. BASIS OF DESIGN IS NENAH FOUNDRY MODEL R-3948-V.

BRIDGE SCUPPER, BOLTED GRATE
 SCALE: NTS

- GENERAL NOTES:**
1. ALL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION PER AASHTO M 111 OR AASHTO M 232 EXCEPT PIPE ROLLERS.
 2. PAINT ROLLERS WITH THREE COATS OF GALVANIZING REPAIR PAINT. SEE STD. SPEC. SECTION 9-08.1(2)B.
 3. CONDUIT EXPANSION JOINTS TO BE PROVIDED BEYOND EACH ABUTMENT, APPROXIMATELY 5 FEET FROM THE ABUTMENT.
 4. ONLY CLARK PUBLIC UTILITIES APPROVED CONTRACTOR SHALL INSTALL THE CONDUITS AND RACKING SYSTEMS.

- NOTES:**
1. COOPER B-LINE B22-4-30, POWERSTRUT PS 349, OR UNISTRUT P32, WITH SPRING NUT (TYP.). CHASE THREADS ON HANGER ROD FOR THREAD COMPATIBILITY WITH SPRING NUT. INSERT TO BE INSTALLED LEVEL LONGITUDINALLY AND TRANSVERSELY. PLACE INSERT TO PROVIDE FOR TRANSVERSE ADJUSTMENT OF HANGER RODS. HANGER RODS SHALL NOT BE WITHIN 2\"/>

BID SET

PBS Engineering Ltd
 1205 SE 7th Center Drive
 Vancouver, WA 98683
 206.461.1111
 pbs@pbs.com



UTILITY DETAILS 2 OF 2 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
 DCL

CHECKED:
 HWW

DATE:
 MAY 2025

PROJECT NO:
 71486.000

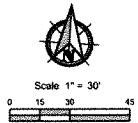
SHEET ID:
BA31

SHEET 110 OF 173

S-BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES L=LUMP SUM QUANTITY T=TRANSVERSE OR S=SEISMIC										E-BAR IS TO BE EPOXY COATED V=BAR DIMENSIONS VARY BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE												
MARK NUMBER	LOCATION	SIZE	# REQUIRED	BEND TYPE OR STR	LUMP SUM	EPOXY COAT	VARIES	# EACH	DIMENSIONS (OUT TO OUT)										LENGTH	WEIGHT		
									U		W		X		Y		Z				6	6
									FT	IN	FT	IN	FT	IN	FT	IN	FT	IN				
ABUTMENT 1 CAP BEAM																						
110	Bot Longit w/ hook	8	9	54		S			31	6								32	7	784		
111	Bot Longit w/ hook	8	9	54		S			45	6								46	7	1120		
112	Top Longit w/ hook	8	9	54		S			31	6								32	7	784		
113	Top Longit w/ hook	8	9	54		S			45	6								46	7	1120		
114	Side Face Longit	6	8	90		S			64	5	4	0						68	5	817		
115	Pair of "C" w/ in Shult	5	15	74	T	S			3	6	4	8	4	8				12	3	192		
116	Stairup Blue Shult	5	48	72	T	S			4	6	3	6	3	6				12	3	611		
117	Typical Tie	5	48	96	T	S			4	6								5	4	267		
ABUTMENT 1 STEM WALL																						
121	Vertical L Bar	8	262	54	T	S			12	10								13	11	8784		
122	Side Longit	8	22	90		S			64	5	4	0						68	5	2261		
123	Top Longit	8	3	88		S			34	6								34	6	843		
124	Top "U" Bar	8	131	74	T	S			1	8	2	6	2	6				6	3	2186		
125	Cross Tie	4	790	58	T	S			1	8								2	4	1221		
126	"U" Bar in Order Stop	4	48	74	T	S			1	8	2	6	2	6				6	12	229		
127	Longit in Order Stop	4	21	50		S			5	8								5	8	79		
ABUTMENT 2 CAP BEAM																						
210	Bot Longit w/ hook	8	9	54		S			31	6								32	7	784		
211	Bot Longit w/ hook	8	9	54		S			45	6								46	7	1120		
212	Top Longit w/ hook	8	9	54		S			31	6								32	7	784		
213	Top Longit w/ hook	8	9	54		S			45	6								46	7	1120		
214	Side Face Longit	6	8	90		S			64	5	4	0						68	5	817		
215	Pair of "C" w/ in Shult	5	15	74	T	S			3	6	4	8	4	8				12	3	192		
216	Stairup Blue Shult	5	48	72	T	S			4	6	3	6	3	6				12	3	611		
217	Typical Tie	5	48	96	T	S			4	6								5	4	267		
ABUTMENT 2 STEM WALL																						
221	Vertical L Bar	8	262	54	T	S			20	9								21	10	13002		
222	Side Longit	8	22	90		S			64	5	4	0						68	5	2261		
223	Top Longit	8	3	88		S			34	6								34	6	843		
224	Top "U" Bar	8	131	74	T	S			1	8	2	6	2	6				6	3	2186		
225	Cross Tie	4	1179	58	T	S			1	8								2	4	1221		
226	"U" Bar in Order Stop	4	48	74	T	S			1	8	2	6	2	6				6	12	229		
227	Longit in Order Stop	4	21	50		S			5	8								5	8	79		
ABUTMENT 1 SOUTH WIND WALL																						
151	End Block	4	2	74		S			1	7	2	6	2	6				6	4	9		
152	Inside Horizontal - Upper	8	10	90		S			25	7								25	7	873		
153	Inside Horiz. - Lower (Full)	9	22	80		S			1	23	7	1	10	0	0	0	110	180	27	3	1244	
154	Inside Horiz. - Lower (Term.)	9	22	80		S			1	4	5	1	10	0	0	0	110	180	6	1		
155	Top Horiz (w/grade)	9	2	90		S			1	4	5	1	10	0	0	0	110	180	6	1		
156	Outside Horiz. - Upper	5	4	90		S			1	25	7							25	7	107		
157	Outside Horiz. - Lower	5	12	50		S			1	25	7							25	7	107		
158	Vertical Both Face (approx)	5	48	50		S			1	14	2							14	2	486		
159	Vertical Both Face (Full)	5	8	50		S			1	5	3							5	3			
160	Filler Below Seal	9	22	80		S			1	14	2							14	2	118		
161	Transverse Tie Below Seal	5	12	80	T	S			1	6	8	2	0	2	0	0	9.5	180	130	10	7	790
162	Footings Lapped Vertically	5	12	80	T	S			1	5.0	1	0	1	0	0	0	4.5	70	110	2	11	53
163	Footings Lapped Vertically	5	12	50	T	S			1	8	0							8	0	144		
ABUTMENT 1 NORTH WIND WALL																						
150	End Block	4	2	74		S			1	7	2	6	2	6				6	4	9		
151	Inside Horizontal - Upper	8	10	90		S			25	7								25	7	873		
152	Inside Horiz. - Lower (Full)	9	22	80		S			1	23	7	1	10	0	0	0	110	180	27	3	1244	
153	Inside Horiz. - Lower (Term.)	9	22	80		S			1	4	5	1	10	0	0	0	110	180	6	1		
154	Top Horiz (w/grade)	9	2	90		S			1	4	5	1	10	0	0	0	110	180	6	1		
155	Outside Horiz. - Upper	5	4	90		S			1	25	7							25	7	107		
156	Outside Horiz. - Lower	5	12	50		S			1	25	7							25	7	107		
157	Vertical Both Face (approx)	5	48	50		S			1	14	2							14	2	486		
158	Vertical Both Face (Full)	5	8	50		S			1	5	3							5	3			
159	Filler Below Seal	9	22	80		S			1	14	2							14	2	118		
160	Transverse Tie Below Seal	5	12	80	T	S			1	6	8	2	0	2	0	0	9.5	180	130	10	7	790
161	Footings Lapped Vertically	5	12	80	T	S			1	5.0	1	0	1	0	0	0	4.5	70	110	2	11	53
162	Footings Lapped Vertically	5	12	50	T	S			1	8	0							8	0	144		
ABUTMENT 2 NORTH WIND WALL																						
150	End Block	4	2	74		S			1	7	2	6	2	6				6	4	9		
151	Inside Horizontal - Upper	8	10	90		S			25	7								25	7	873		
152	Inside Horiz. - Lower (Full)	9	22	80		S			1	23	7	1	10	0	0	0	110	180	27	3	1244	
153	Inside Horiz. - Lower (Term.)	9	22	80		S			1	4	5	1	10	0	0	0	110	180	6	1		
154	Top Horiz (w/grade)	9	2	90		S			1	4	5	1	10	0	0	0	110	180	6	1		
155	Outside Horiz. - Upper	5	4	90		S			1	25	7							25	7	107		
156	Outside Horiz. - Lower	5	12	50		S			1	25	7							25	7	107		
157	Vertical Both Face (approx)	5	48	50		S			1	14	2							14	2	486		
158	Vertical Both Face (Full)	5	8	50		S			1	5	3							5	3			
159	Filler Below Seal	9	22	80		S			1	14	2							14	2	118		
160	Transverse Tie Below Seal	5	12	80	T	S			1	6	8	2	0	2	0	0	9.5	180	130	10	7	790
161	Footings Lapped Vertically	5	12	80	T	S			1	5.0	1	0	1	0	0	0	4.5	70	110	2	11	53
162	Footings Lapped Vertically	5	12	50	T	S			1	8	0							8	0	144		

S-BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES L=LUMP SUM QUANTITY T=TRANSVERSE OR S=SEISMIC										E-BAR IS TO BE EPOXY COATED V=BAR DIMENSIONS VARY BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE															
MARK NUMBER	LOCATION	SIZE	# REQUIRED	BEND TYPE	TE OR STR	LUMP SUM	EPOXY COAT	VARIES # EACH	DIMENSIONS (OUT TO OUT)										LENGTH		WEIGHT				
									U		W		X		Y		Z		6		DEG	DEG	FT	IN	LBS
									FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN					
150	ABUTMENT 2 SOUTH WIND WALL	4	2	74			S		1	7	2	6	2	6					6	4	9				
151	End Block	8	10	90			S		31	9									25	7	673				
152	Inside Horizontal - Upper	9	22	80			S		1	31	9	1	10	0	0	0	10	0	0	110	180	27	3		
	Inside Horiz. - Lower (Full)	9	22	80			S		4	5	1	10	0	0	0	10	0	0	110	180	6	8			
153	Inside Horiz. - Lower (Term.)	9	22	80			S		9	0	1	10	0	0	0	10	0	0	110	180	8	12			
154	Top Horiz (w/grade)	9	2	90			S		25	7									25	7	107				
155	Outside Horiz. - Upper	5	4	90			S		25	7									25	7	107				
156	Outside Horiz. - Lower	5	12	50			S	V	1	25	7								25	7	107				
157	Vertical Both Face (approx)	5	48	50			S	V	1	3	11								14	2	606				
	Vertical Both Face (Full)	5	8	50			S		5	3									5	3	5				
158	Filler Below Seal	9	22	80			S		14	2									14	2	118				
159	Transverse To Below Seal	9	22	80			T		4	15	2	0	2	0	0	9.5	0	180	150	7	12				
160	Footings (approx) Vertical	6	12	80			T		1	6	1	0	1	0	0	4.5	0	4.5	70	110	2	54			
161	Footings (approx) Vertical	6	12	80			T		8	0									8	0	164				
ABUTMENT 1 END DIAPHRAGM																									
170	Top Tie	4	53	58	T				1	6									2	2	76				
171	Outer Stirrup	4	53	76	T				1	10	6	3	0	0					7	3	256				
172	Inner Stirrup	4	53	58	T				6	0									6	6	236				
173	Top Longitudinal	6	3	51			E		40	0									40	0	181				
174	Side Longitudinal	4	11	89			E		61	1	2	0							63	1	464				
175	Bottom Longitudinal	6	2	85			E		61	1	2	0							63	1	464				
176	Utility Walkout	4	30	50	T			V	5	9									5	5	84				
									3	5									3	6					
ABUTMENT 2 END DIAPHRAGM																									
170	Top Tie	4	53	58	T				1	6									2	2	76				
171	Outer Stirrup	4	53	76	T				1	10	5	3	0	0					7	3	256				
172	Inner Stirrup	4	53	58	T				6	0									6	6	236				
173	Top Longitudinal	6	3	51			E		40	0									40	0	181				
174	Side Longitudinal	4	11	89			E		61	1	2	0							63	1	464				
175	Bottom Longitudinal	6	2	85			E		61	1	2	0							63	1	464				
176	Utility Walkout	4	34	50	T			V	5	1	0								5	0	84				
									3	5									3	6					
INTERIOR DIAPHRAGM (2X)																									
30	Top Longitudinal (face)	6	4	89			E		61	1	3	0							64	1	361				
31	Top Longitudinal (center)	7	2	88			E		57	0	3	7							57	0	231				
32	Side Longitudinal	4	32	50			E		9	1									9	1	43				
33	Bottom Longitudinal	7	4	80			E		57	0	3	7							57	0	231				
34	Stirrup (projected)	5	46	74	T				0	5	4	6	4	6					9	0	84				
35	Stirrup	5	46	74	T				0	5	7	2	2	4					4	11	15				
ROADWAY SLAB																									
1	Top Long Exterior Bay	5	6	89			E		122	0	2	6							127	0	101				
2	Top Long Interior Bay	5	64	88			E		127	0	2	6							127	0	71				
3	Top Longit. Outer Line	5	14	89			E		122	0	2	6							127	0	161				
4	Bottom Longit. Exterior Bay	5	6	88			E		122	0	2	6							127	0	100				
5	Bottom Longit. Interior Bay	5	60	88			E		122	0	2	6							127	0	112				
6	Top Trans. Overwing (corner)	5	68	51			E		56	5	2	0							58	7	46				
7	Top Trans. Typical	5	205	80			E		56	5	2	0							58	11	57				
8	Top & Bot Trans. Typical	5	140	51			E	V	1	10	0								10	0	11				
9	Bottom Trans. Typical	5	205	51			E		56	5									59	12	121				
SIDEWALK ON BRIDGE																									
STEEL REINFORCING BAR QUANTITIES NOT INCLUDED IN THIS BAR LIST																									
TRAFFIC BARRIER																									
BRIDGE GRATE PANELS																									
LUMINAIRE POLE SUPPORTS																									

WA01	RETAINING WALL LOCATION MAP
WA02	RETAINING WALL NOTES AND DESIGN CRITERIA
WA03 - WA04	RETAINING WALL NO. 1
WA05	RETAINING WALL NO. 2
WA06	RETAINING WALL NO. 3
WA07	RETAINING WALL NO. 4
WA08	RETAINING WALL NO. 5
WA09	RETAINING WALL NO. 6
WA10	RETAINING WALL NO. 7
WA11	RETAINING WALL NO. 8
WA12	RETAINING WALL NO. 9
WA13	RETAINING WALL NO. 10
WA14	RETAINING WALL NO. 11
WA15	TEMPORARY RETAINING WALL
WA16	RETAINING WALLS 1 AND 7 TYPICAL SECTIONS
WA17 - WA18	RETAINING WALLS 1 AND 7 PILE SCHEDULE
WA19 - WA20	CANTILEVER RETAINING WALL TYPICAL SECTIONS
WA21	RETAINING WALL 2 TYPICAL SECTIONS



RETAINING WALL LOCATION MAP FOR:

BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING


A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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WA01

SHEET **112** OF **173**

112 OF **173**

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RETAINING WALL GENERAL NOTES:

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH STATE AND FEDERAL CODES GOVERNING OPEN TRENCH SLOPING WALLS, SHORING AND BRACING OF EXCAVATIONS AND TRENCHES.
2. ALL STATIONING IS CENTERLINE STATIONING BASED ON HORIZONTAL MEASUREMENTS. ALL OFFSETS ARE PERPENDICULAR TO THE CENTERLINE AT REFERENCED STATION.
3. THE PLANS ARE TO BE USED IN CONJUNCTION WITH THE CONTRACT PROVISIONS.
4. ANY DISCREPANCIES IN THESE DRAWINGS, SPECIFICATIONS, NOTES AND SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER, WHO SHALL CORRECT SUCH DISCREPANCIES IN WRITING AFTER REVIEWING ANY CHANGES. ANY WORK PERFORMED BY THE CONTRACTOR AFTER SUCH DISCOVERY SHALL BE PERFORMED AT THE CONTRACTOR'S OWN RISK. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK.
5. NO FIELD CHANGES WILL BE PERMITTED WITH DIRECT WRITTEN AUTHORIZATION FROM THE ENGINEER.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT.
7. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREIN ARE BASED UPON EXISTING RECORD DRAWINGS AND ARE NOT GUARANTEED TO BE ACCURATE. OR ALL INCLUSIVE, CONTRACTOR SHALL VERIFY AND RECORD HORIZONTAL AND VERTICAL LOCATIONS OF ALL ENCOUNTERED UTILITIES ON THE CONTRACTOR'S RECORD DRAWINGS.
8. IT SHALL BE THE CONTRACTOR'S OWN RESPONSIBILITY TO PROTECT, IN PLACE, ALL UTILITIES AND / OR THEIR STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. DAMAGE DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO CURRENT AGENCY STANDARDS.
9. ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF LA CENTER STANDARDS.
10. STANDARD SPECIFICATION REFERENCES FOR RETAINING WALL SHEETS REFER TO WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, 2021, M41-10. SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND PROJECT REQUIREMENTS.
11. ALL CONCRETE SHALL BE CLASS 4000.
12. ALL REINFORCING STEEL SHALL BE GRADE 60 AND MEET THE REQUIREMENTS OF SECTION 9-07.2 OF THE STANDARD SPECIFICATIONS.
13. SOIL PARAMETERS ARE BASED ON GEOTECHNICAL ENGINEERING REPORT, BREZEE CREEK CULVERT REPLACEMENT, EAST 4TH STREET, LA CENTER, WASHINGTON PREPARED BY PBS ENGINEERING AND ENVIRONMENTAL INC FOR THE CITY OF LA CENTER, DATED SEPTEMBER 3, 2020.

RETAINING WALL NO. 3-6, DESIGN CRITERIA AND NOTES:

DESIGN CRITERIA:
CONCRETE RETAINING WALL DESIGN, INCLUDING SEISMIC DESIGN, IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION, 2020.

CONCRETE UNIT WEIGHT = 155 PCF
REFER TO THE PROJECT'S GEOTECHNICAL REPORT FOR SOIL UNIT WEIGHT, FRICTION OF FRICTION, AND EARTH PRESSURE COEFFICIENTS.

NOTES:

1. CONCRETE IN 25 FOOT WALL SECTIONS SHALL BE PLACED SEPARATELY BETWEEN EXPANSIONS JOINTS WITH A MINIMUM 12 HOUR PERIOD BETWEEN CONCRETE PLACEMENTS.
2. CONSTRUCTION JOINTS IN WALL FOOTINGS SHALL BE PROVIDED AT 120' MAXIMUM CENTERS.
3. COMPACT FILL IN FRONT OF RETAINING WALL TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
4. SUBGRADE UNDER RETAINING WALLS SHALL BE CLEAN CRUSHED ROCK OR GRAVEL AND SAND WITH A MAX AGGREGATE SIZE OF 1-1/2" MEETING WSDOT SS 9-03.12 (1)A - GRAVEL BACKFILL FOR FOUNDATIONS (CLASS A). SUBGRADE SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY.

RETAINING WALL NO. 1, 2, AND 7 DESIGN CRITERIA AND NOTES:

DESIGN CRITERIA:
SOLDIER PILE RETAINING WALL DESIGN, INCLUDING SEISMIC DESIGN, IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION, 2020.

CONCRETE UNIT WEIGHT = 155 PCF

REFER TO THE PROJECT'S GEOTECHNICAL REPORT FOR SOIL UNIT WEIGHT, FRICTION OF FRICTION, AND EARTH PRESSURE COEFFICIENTS.

NOTES:

1. PILES MUST BE PLACED CAREFULLY SO THEY ARE PLUMB.
2. W SECTION STEEL SOLDIER PILES SHALL CONFORM TO ASTM A992. SOLDIER PILES SHALL BE PAINTED TO THE LIMITS SHOWN IN THE PLANS IN ACCORDANCE WITH SECTION 6-16.3(4).
3. PLATES FOR THE SOLDIER PILE ASSEMBLY STIFFENER SHALL CONFORM TO ASTM A572 GR. 50. THE 8"Ø EXTRA STRONG PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A53 GR. B.
4. ANCHORS SHALL BE (4) 0.6" DIAMETER ASTM A416 GRADE 270 STRANDS.
5. PERMANENT GROUND ANCHOR LOCK OFF LOAD = 60 PERCENT OF FACTORED DESIGN LOAD.
6. ALL STEEL EXPOSED TO WEATHER, MOISTURE, SOIL, OR AS NOTED ON PLANS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123, OR HAVE AN APPROVED PROTECTIVE COATING.
7. ALL WELDING SHALL BE DONE TO MINIMIZE DISTORTION. THE WELDING SEQUENCES AND PROCEDURES TO BE USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WELDING

TEMPORARY RETAINING WALL DESIGN CRITERIA AND NOTES:

DESIGN CRITERIA:

TEMPORARY RETAINING WALL SHALL BE DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION. SEISMIC DESIGN IS NOT REQUIRED BASED ON THE DURATION OF THAT THE WALL WILL BE IN SERVICE.

REFER TO THE PROJECT'S GEOTECHNICAL REPORT FOR SOIL UNIT WEIGHT, FRICTION OF FRICTION, AND EARTH PRESSURE COEFFICIENTS.

ACTIVE PRESSURE COEFFICIENT (LEVEL BACKFILL) = 0.26
PASSIVE PRESSURE COEFFICIENT (LEVEL SLOPE) = 5.30
PASSIVE PRESSURE COEFFICIENT (2:1 SLOPE) = 1.10

NOTES:

1. ALL COMPONENTS OF THE TEMPORARY RETAINING WALL SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

SPREAD FOOTING BASE PREPARATION NOTES:

1. ALL SPREAD FOOTINGS SHALL BE PLACED ON BASE PREPARED IN ACCORDANCE WITH PROJECT'S GEOTECHNICAL ENGINEERING REPORT.
2. SPREAD FOOTINGS SHALL BE PLACED ON OVER-EXCAVATED AND BACKFILLED CRUSHED ROCK BASE COURSE PER REQUIREMENTS OF STANDARD SPECIFICATIONS 4-04 AND 9-03.9(3). THE THICKNESS OF THE BASE MATERIAL IS AS FOLLOWS:
-WALLS 3.4, 6.9, AND 10: 2FT
-WALLS 5.8, AND 11: 6 INCHES
3. FOR WALLS 5.8, AND 11, THE CRUSHED ROCK BASE THICKNESS SHALL BE INCREASED IF COMPRESSIBLE SOILS ARE ENCOUNTERED DURING FOUNDATION EXCAVATION.
4. A GEOTECHNICAL REPRESENTATIVE SHALL OVERSEE ALL RETAINING WALL FOOTING SUBGRADE INSTALLATIONS TO DETERMINE WHETHER ADDITIONAL THICKENING OF THE CRUSHED ROCK IS NECESSARY

TEMPORARY SHORING NOTES:

1. THE CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY SHORING IN COMPLIANCE WITH OSHA, STATE, AND LOCAL REQUIREMENTS TO PREVENT RIGHT-OF-WAY ENCROACHMENT FOR THE FOLLOWING WALLS:

WALL NO. 3: FULL LENGTH OF WALL
WALL NO. 4: STN 50+96 TO END OF WALL
WALL NO. 9: FULL LENGTH OF WALL
WALL NO. 10: WILL BE COVERED BY SHORING USED FOR WALL NO.9.

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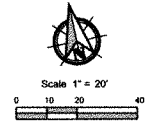
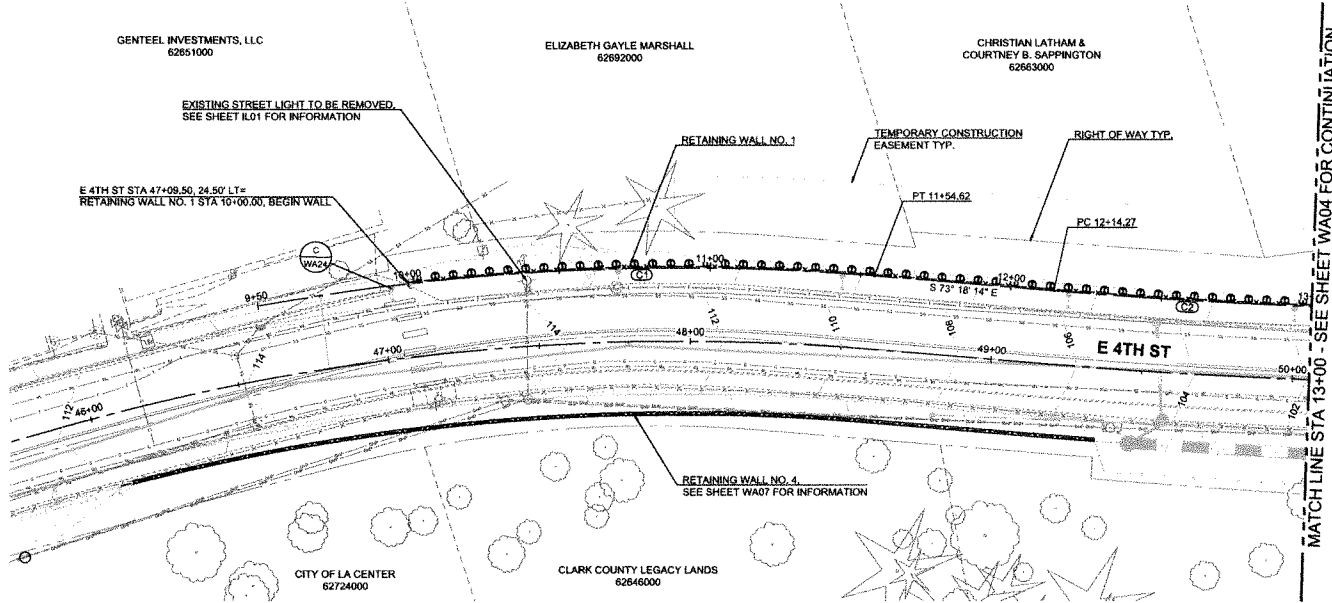
RETAINING WALL NOTES AND DESIGN CRITERIA FOR:
BREZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
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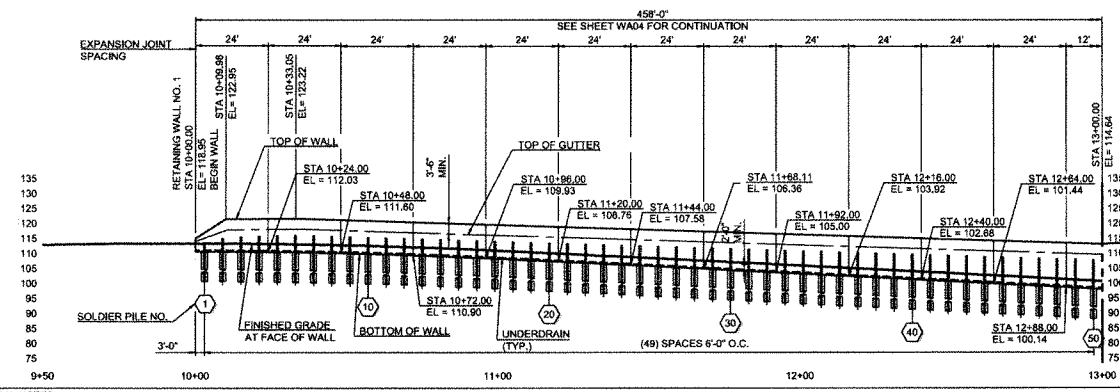
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RETAINING WALL NO. 1 ALIGNMENT TABLE

Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C1	10+00.00	784.50	154.62	S79° 05' 52.47"E	200647.27	1088172.51
C2	12+14.27	1685.36	89.06	S74° 39' 25.70"E	200600.94	1088361.22

RETAINING WALL NO. 1 PLAN



- NOTES:**
- SEE SHEET WA02 FOR GENERAL NOTES.
 - SEE SHEET WA16 FOR TYPICAL SECTION.
 - CONTRACTOR SHALL EMPLOY A CHECKBOARD (STAGGERED) EXCAVATION AND LAGGING INSTALLATION SEQUENCE FOR THIS WALL. EXCAVATION SHALL PROCEED IN ALTERNATIVE PANELS (E.G. EVERY OTHER BAY), WITH LAGGING INSTALLED PRIOR TO EXCAVATION OF ADJACENT PANELS.

RETAINING WALL NO. 1 DEVELOPED ELEVATION

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RETAINING WALL NO. 1 PLAN AND DEVELOPED ELEVATION 1 OF 2 FOR:

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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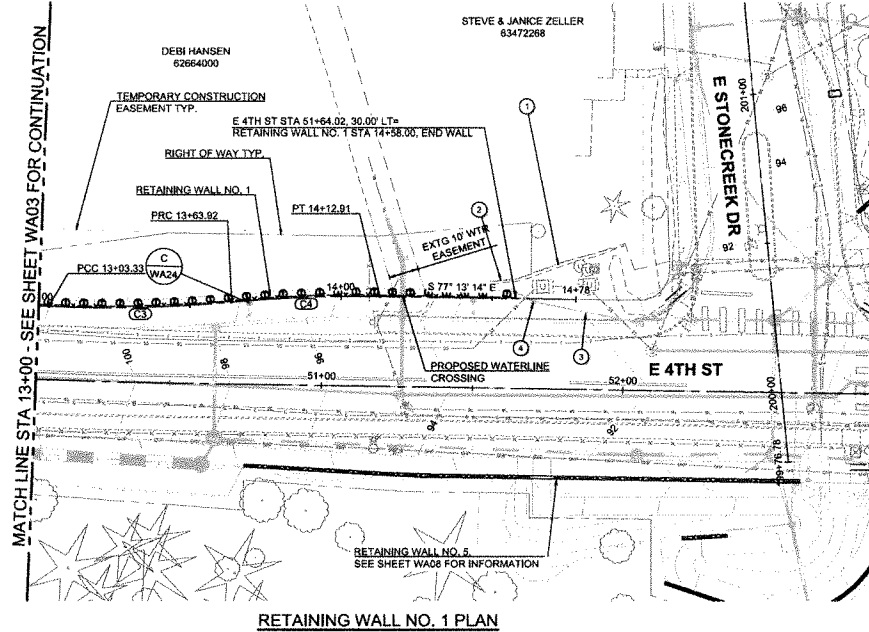
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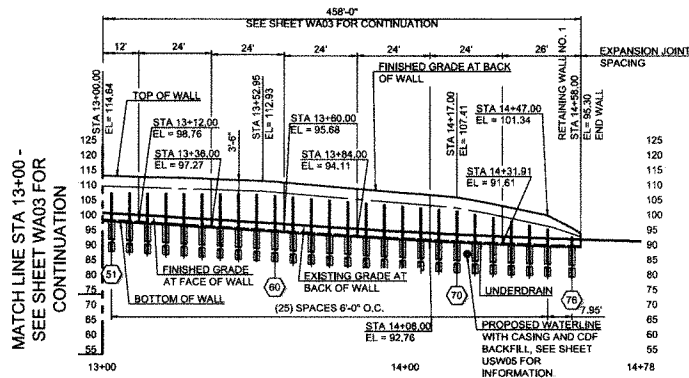
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WA03

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RETAINING WALL NO. 1 PLAN



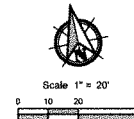
- NOTES
1. SEE SHEET WA02 FOR GENERAL NOTES.
 2. SEE SHEET WA16 FOR TYPICAL SECTION.

RETAINING WALL NO. 1 DEVELOPED ELEVATION

RETAINING WALL NO. 1 ALIGNMENT TABLE (CONT.)						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C3	13+03.33	433.00	60.59	S79° 29' 28.24" E	200577.38	1088467.10
C4	13+63.92	447.00	48.98	S80° 21' 35.77" E	200566.33	1088526.63

CONSTRUCTION NOTES:

1. EXISTING RETAINING WALL. PROTECT IN PLACE.
2. TRIM EXISTING WALL FACING UNITS AS REQUIRED TO CREATE A SOIL TIGHT INTERFACE BETWEEN THE EXISTING RETAINING WALL THAT IS TO REMAIN IN PLACE AND THE BACK OF RETAINING WALL NO. 1 FASCIA. ATTACH FACING BLOCKS TO EACH OTHER WITH ALL WEATHER EPOXY.
3. CONNECT WALL UNDERDRAIN TO DRAINAGE STRUCTURE AS SHOWN WITH 6" DIAM. DRAIN PIPE. MAINTAIN 1% MINIMUM GRADIENT.
4. 45° WYE WITH A 12" CLEANOUT



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RETAINING WALL NO. 1 PLAN AND DEVELOPED ELEVATION 2 OF 2 FOR:
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A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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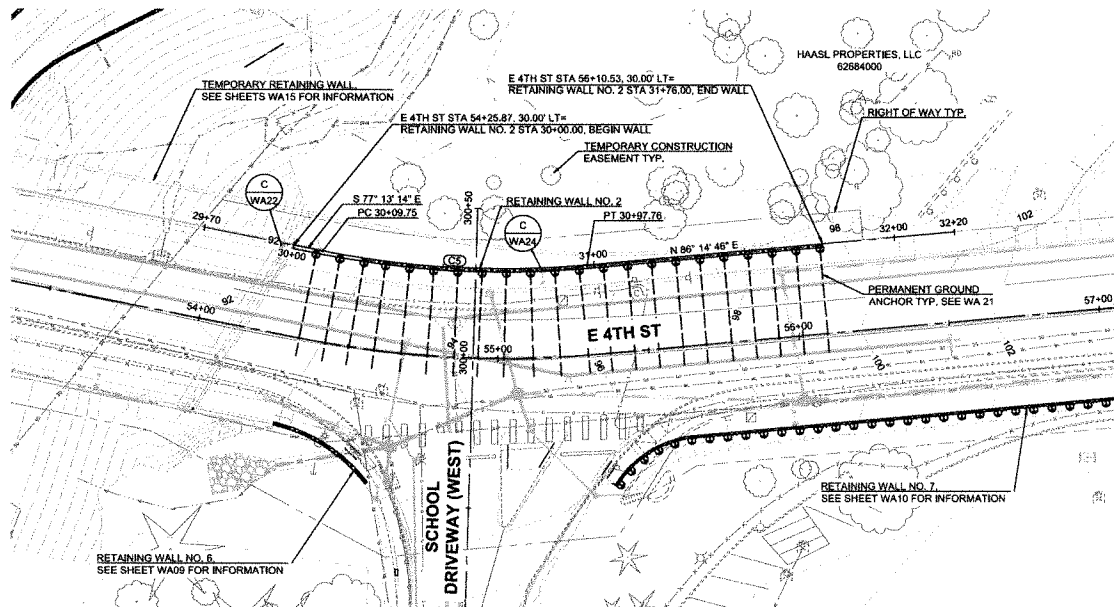
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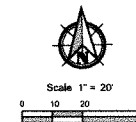
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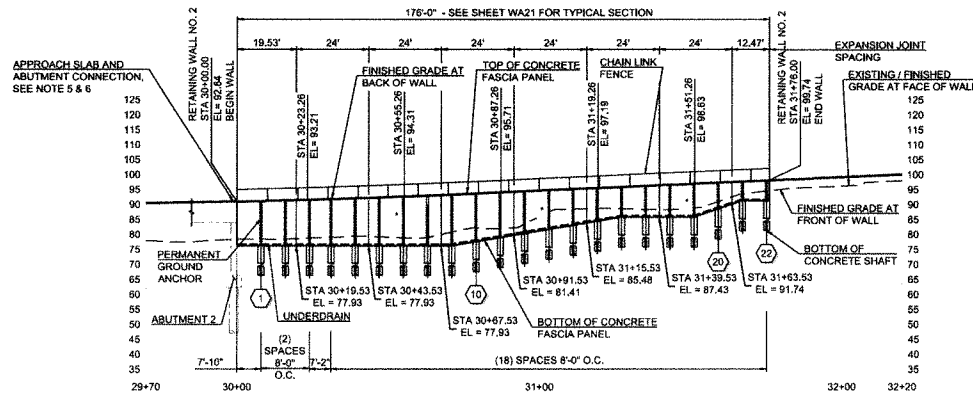
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RETAINING WALL NO. 2 ALIGNMENT TABLE						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C5	30+09.75	305.00	88.01	S85° 29' 13.65"E	200468.08	1088883.73



RETAINING WALL NO. 2 PLAN



NOTES:

1. SEE SHEET WA02 FOR GENERAL NOTES.
2. SEE SHEET WA21 FOR SOLDIER PILE DATA TABLE.
3. DEVELOPED ELEVATION SHOWN IS FROM THE RETAINED SIDE OF THE WALL.
4. CONTRACTOR SHALL COORDINATE THE REMOVAL OF THE TEMPORARY RETAINING WALL WITH THE CONSTRUCTION OF RETAINING WALL NO. 2.
5. SEE ABUTMENT LAGGING CONNECTION, DETAIL A, ON SHEET WA22.
6. SEE APPROACH SLAB INTERFACE, DETAIL B, ON SHEET WA22.
7. SEE CONCRETE FASCIA JOINT AT P3, DETAIL E, ON SHEET WA25.
8. SEE UTILITY PENETRATION DETAIL A, ON SHEET WA 24.
9. * INDICATES ANCHOR PERFORMANCE TEST LOCATION.

RETAINING WALL NO. 2 DEVELOPED ELEVATION

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RETAINING WALL NO. 2 PLAN AND DEVELOPED ELEVATION FOR:
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A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



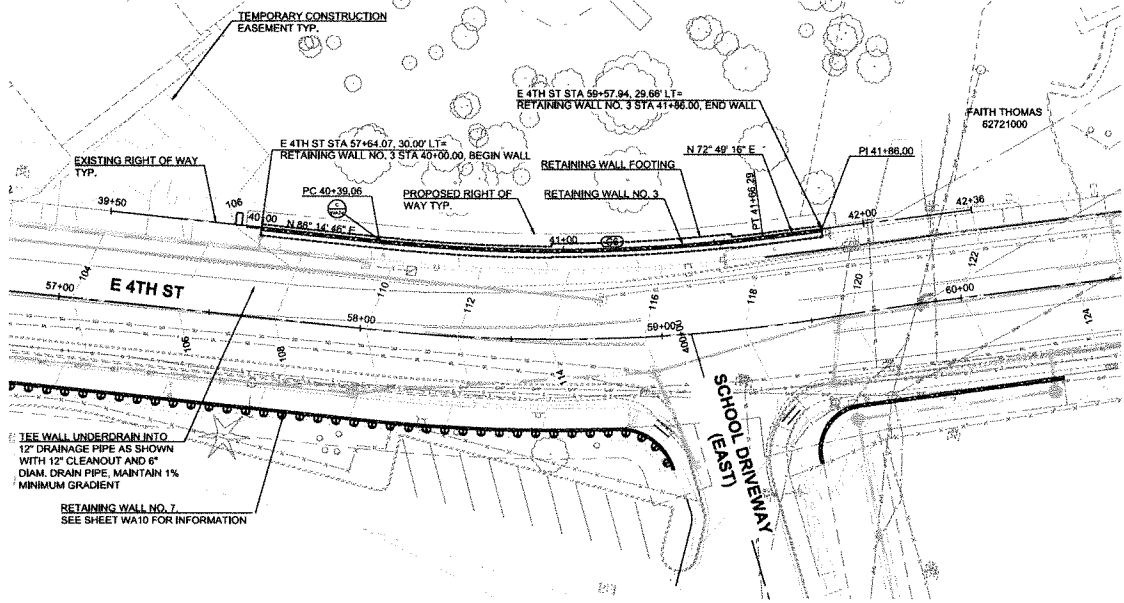
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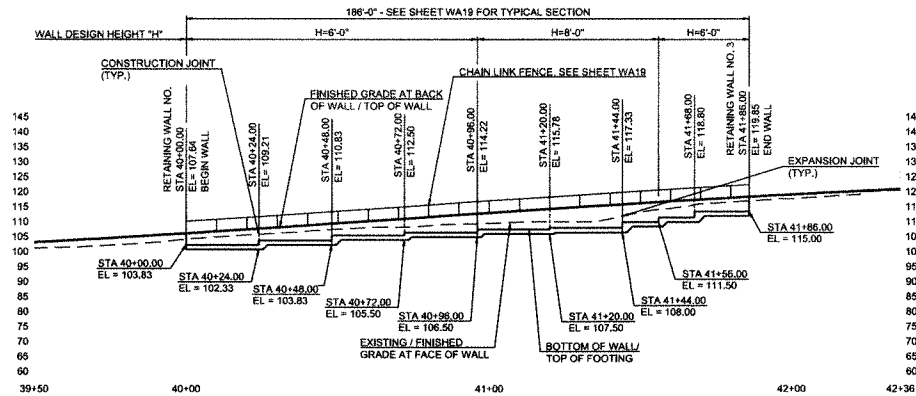
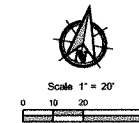
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RETAINING WALL NO. 3 PLAN

RETAINING WALL NO. 3 ALIGNMENT TABLE					
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing
C6	40+39.06	542.96	127.23	N79° 32' 00.01\"E	200498.82
					1089241.44



- NOTES:
- SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.
 - DEVELOPED ELEVATION SHOWN IS FROM THE RETAINED SIDE OF THE WALL.
 - TEMPORARY SHORING IS NEEDED. SEE WA02 TEMPORARY SHORING NOTES.

RETAINING WALL NO. 3 DEVELOPED ELEVATION

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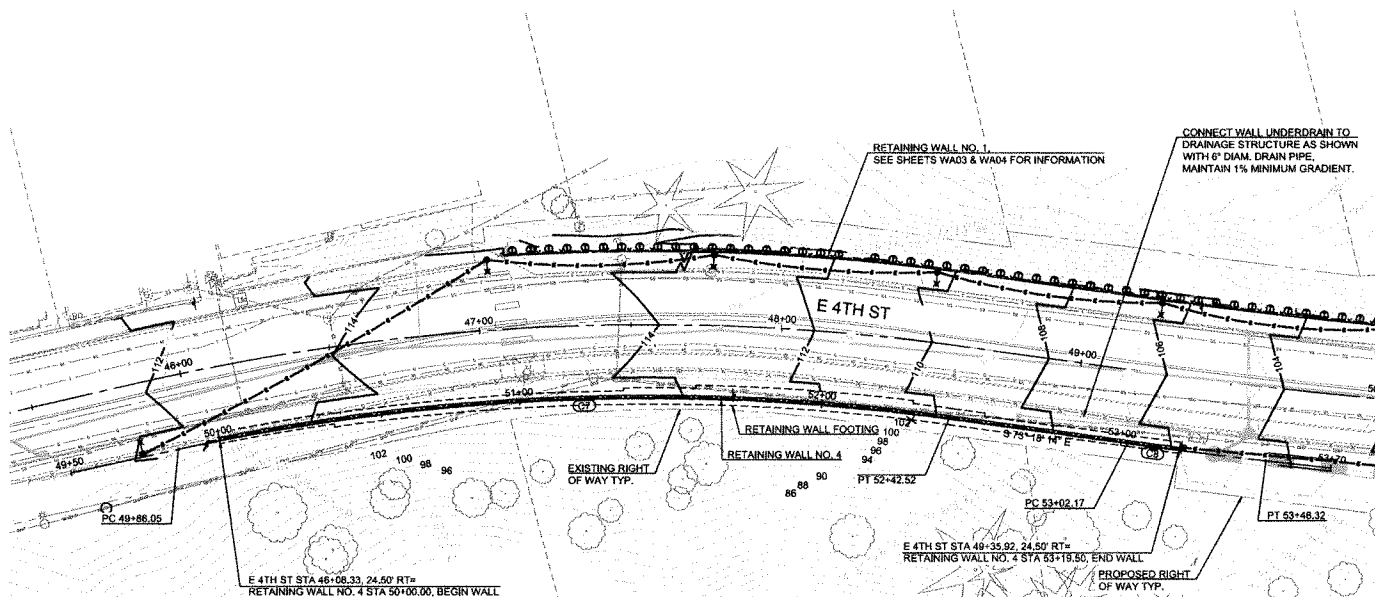
RETAINING WALL NO. 3 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



PRELIMINARY

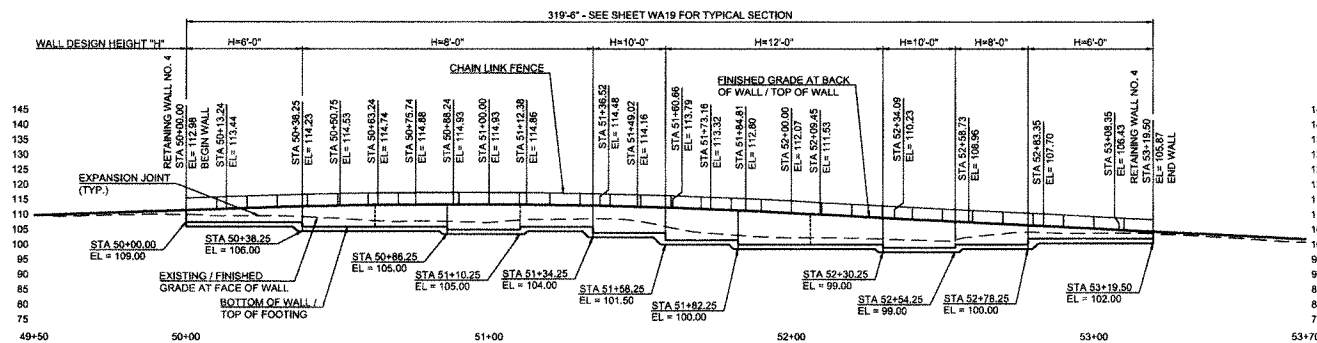
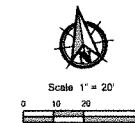
DESIGNED:
HSA
CHECKED:
HAW
MAY 2023
71486.000
SHEET NO
WA06

Filename: L:\projects\170007-1887-1\88-000\Drawings\Sheet\188-000-WA07.dwg Layout File: WA07 User: Tyler O'Toole CAD Plot Date/Time: 5/14/2023 10:07:21 AM



RETAINING WALL NO. 4 PLAN

RETAINING WALL NO. 4 ALIGNMENT TABLE						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C7	50+00.00	715.50	242.52	S83° 00' 51.15"E	200600.50	1088070.44
C8	53+02.17	1934.38	17.33	S73° 33' 37.82"E	200554.01	1088367.14



- NOTES:
1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 4 DEVELOPED ELEVATION

BID SET

PBS Engineering and
Construction
1325 SE Tenth Center Drive
Vancouver, WA 98603
(206) 441-2888
pbes.com



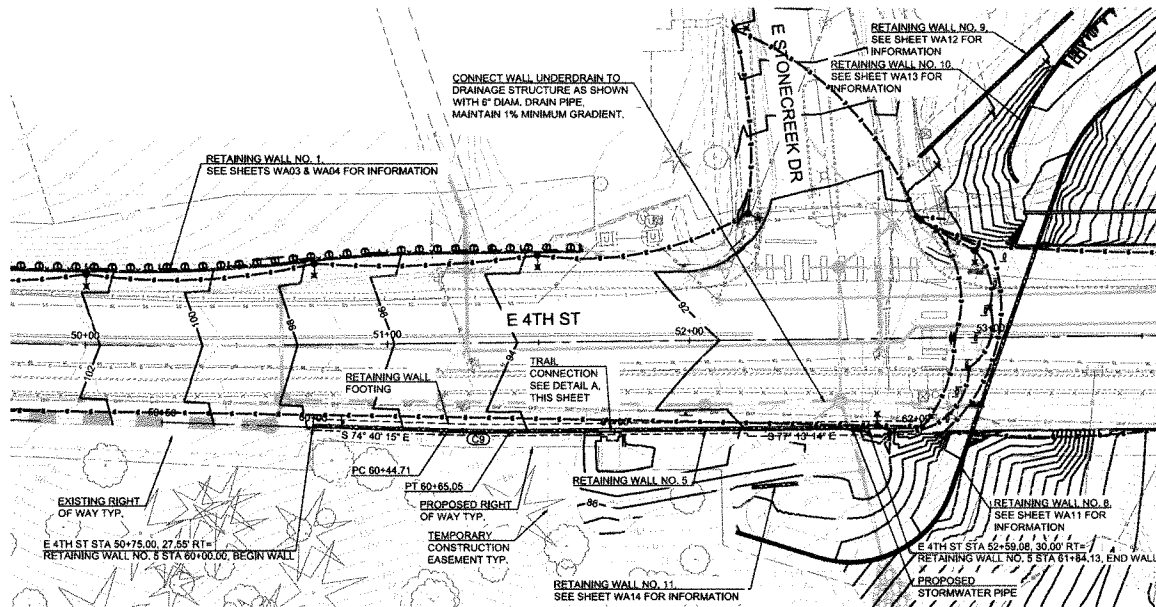
RETAINING WALL NO. 4 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	HOH
CHECKED:	HAW
	MAY 2023
	71486.000
SHEET NO	WA07

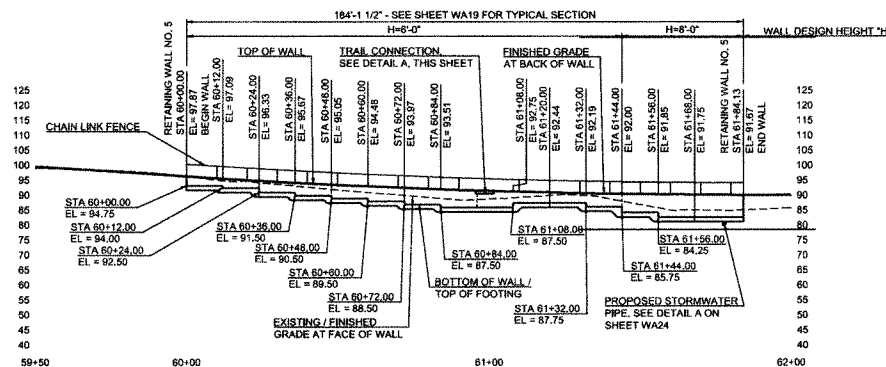
SHEET 118 OF 173

File Name: L:\Projects\171000-1480-71480-000-Civil\Drawings\Sheet\1480-000-WA08.dwg User: Tye O'Toole Date: 5/14/2023 1:07:30 PM



RETAINING WALL NO. 5 PLAN

RETAINING WALL NO. 5 ALIGNMENT TABLE						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C9	60+44.71	457.00	20.34	S75° 56' 44.27"E	200499.90	1088562.44



NOTES:

1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 5 DEVELOPED ELEVATION

BID SET

PBS Engineering and Construction, LLC
1335 SE 2nd Street, Suite 200
Vancouver, WA 98683
509.536.1000
pbseng.com



RETAINING WALL NO. 5 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
HSM

CHECKED:
HSM

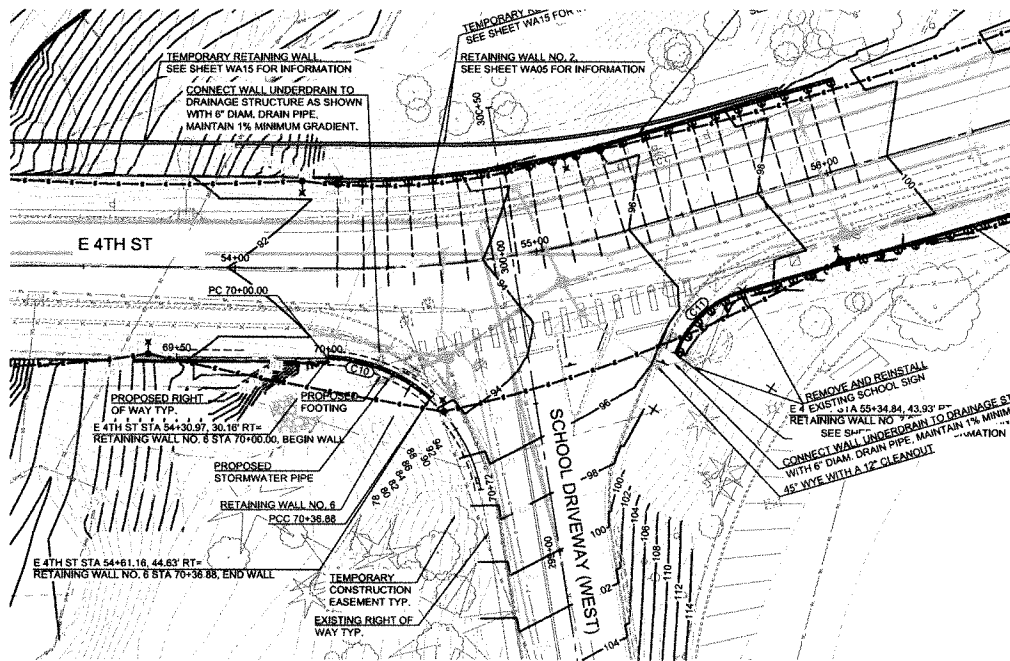
DATE: 5/14/2023

SCALE: 1" = 5'

SHEET ID
WA08

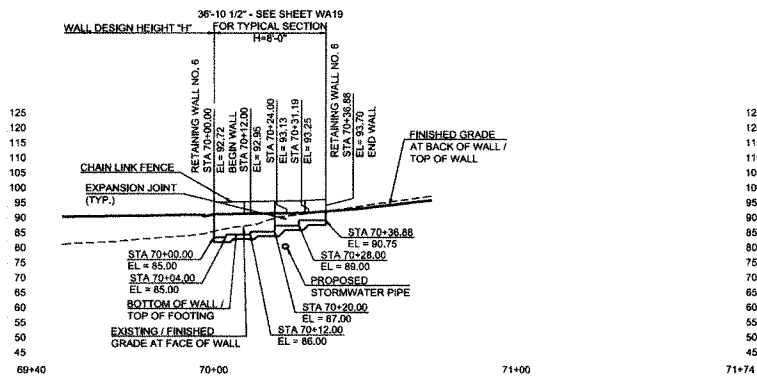
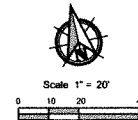
SHEET 119 OF 173

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RETAINING WALL NO. 6 PLAN

RETAINING WALL NO. 6 ALIGNMENT TABLE					
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing Start Easting
C10	70+00.00	52.98	36.88	S55° 30' 44.76"E	200430.44 1088865.89



- NOTES:
1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 6 DEVELOPED ELEVATION

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

Professional Engineer
1035 SE 10TH STREET
VANCOUVER, WA 98683
PBR0001001



RETAINING WALL NO. 6 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

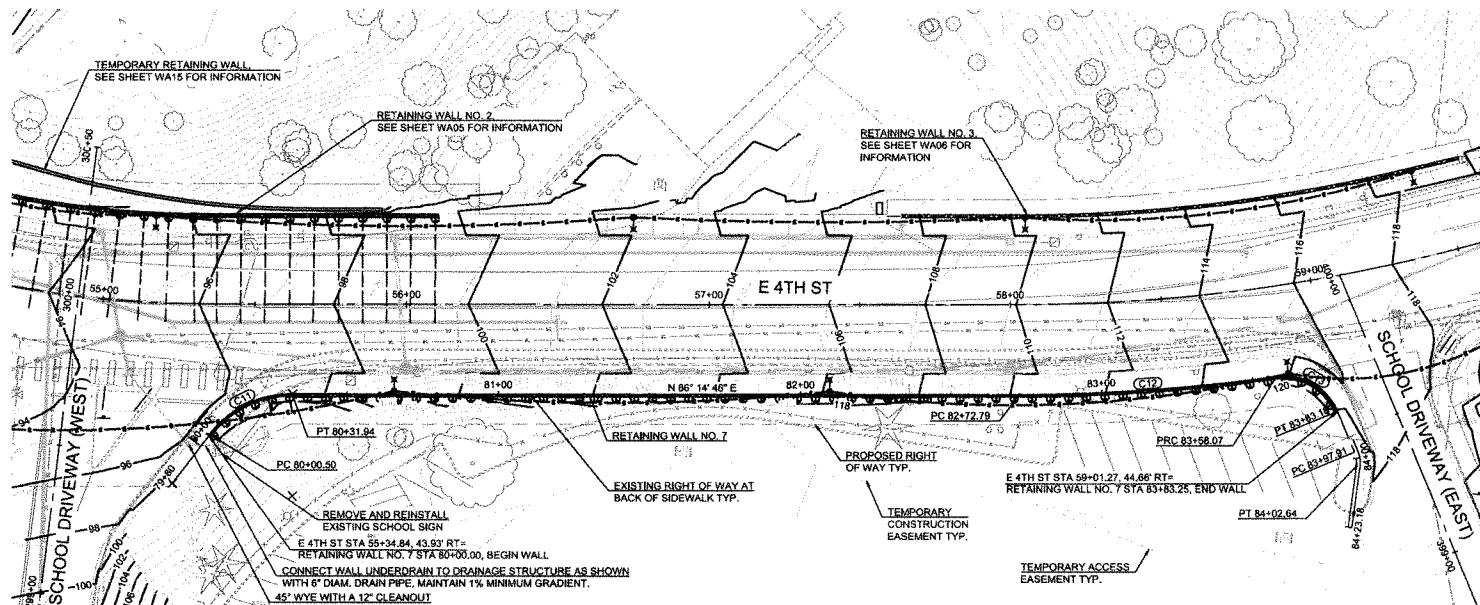


DESIGNED: NHA
CHECKED: HAW
MAY 2025
1"=48.00'
SHEET ID:
WA09

SHEET 120 OF 173

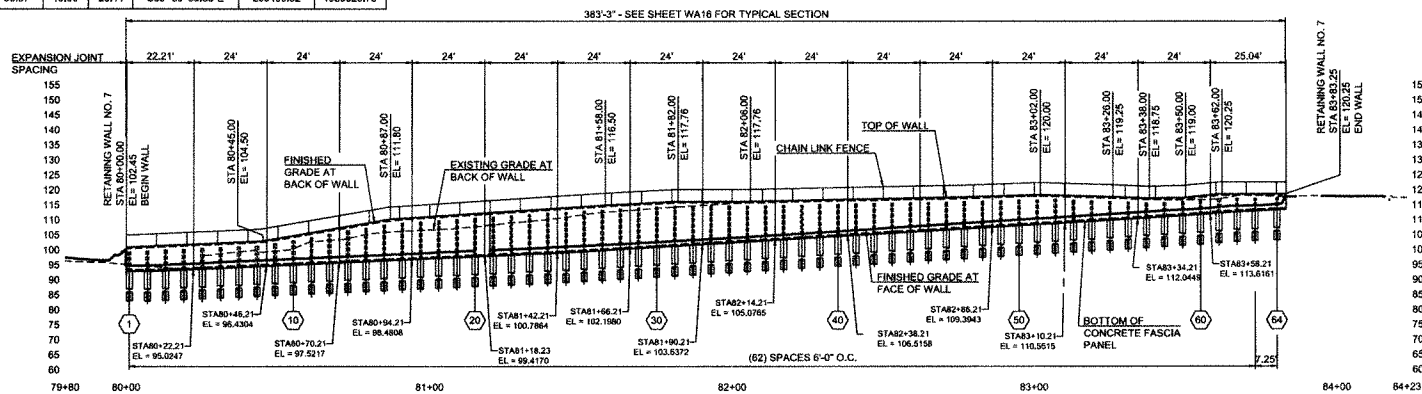
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Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C11	80+00.00	34.00	31.94	N59° 20' 03.08"E	200407.56	1088978.56
C12	82+72.79	602.90	85.28	N82° 11' 40.06"E	200439.05	1089245.36
C13	83+58.07	18.00	25.11	S63° 59' 36.36"E	200450.62	1089329.78

RETAINING WALL NO. 7 PLAN



NOTES:

- SEE SHEET WA02 FOR GENERAL NOTES.
- SEE SHEET WA18 FOR SOLDIER PILE DATA TABLE.
- DEVELOPED ELEVATION SHOWN IS FROM THE RETAINED SIDE OF THE WALL.
- SEE ABUTMENT LAGGING CONNECTION, DETAIL A, ON SHEET WA22.
- SEE CONCRETE FASCIA JOINT AT P3, DETAIL E, ON SHEET WA25.

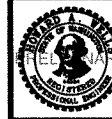
RETAINING WALL NO. 7 DEVELOPED ELEVATION

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

PBS Engineering and Construction
1200 SE 1st Center Drive
Vancouver, WA 98603
360.435.1588
www.pbsinc.com



RETAINING WALL NO. 7 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



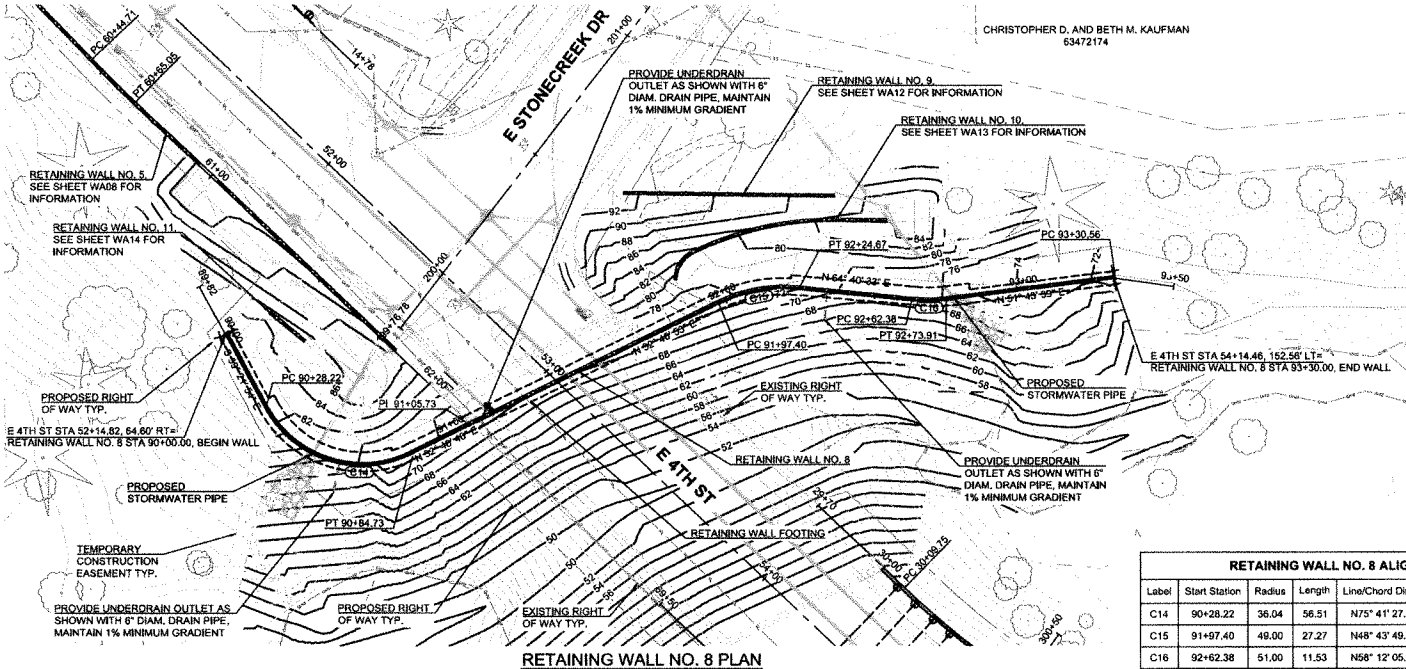
DESIGNED:
HMW
CHECKED:
10W
MAY 2015
7:1486.000

SHEET NO.

WA10

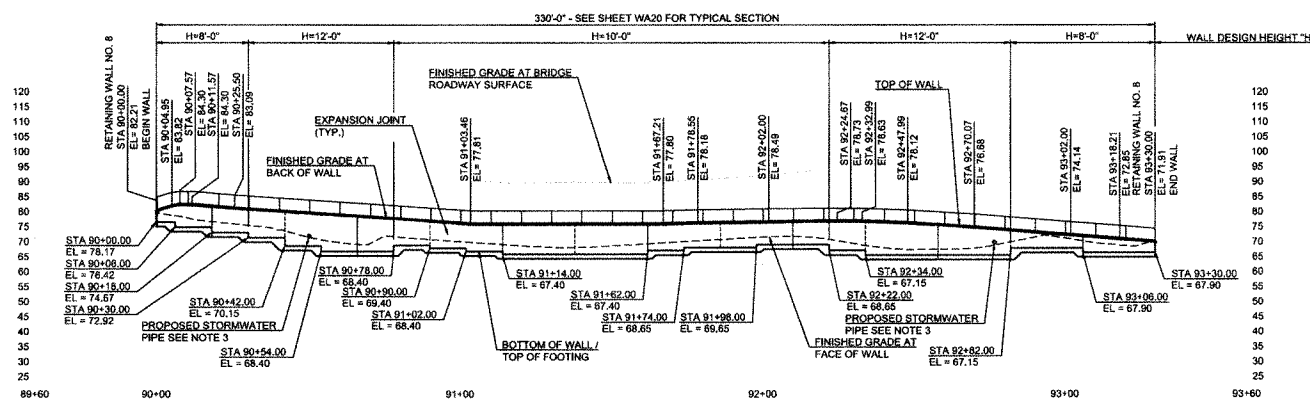
SHEET 121 OF 173

BID SET



RETAINING WALL NO. 8 ALIGNMENT TABLE

Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C14	90+28.22	36.04	56.51	N75° 41' 27.93"E	200430.29	1088671.76
C15	91+97.40	48.00	27.27	N48° 43' 49.52"E	200537.60	1088782.08
C16	92+62.38	51.00	11.53	N58° 12' 05.95"E	200571.48	1088836.41



- NOTES:
- SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.
 - SEE WALL PENETRATION DETAIL A ON SHEET WA24.

BID SET

RETAINING WALL NO. 8 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

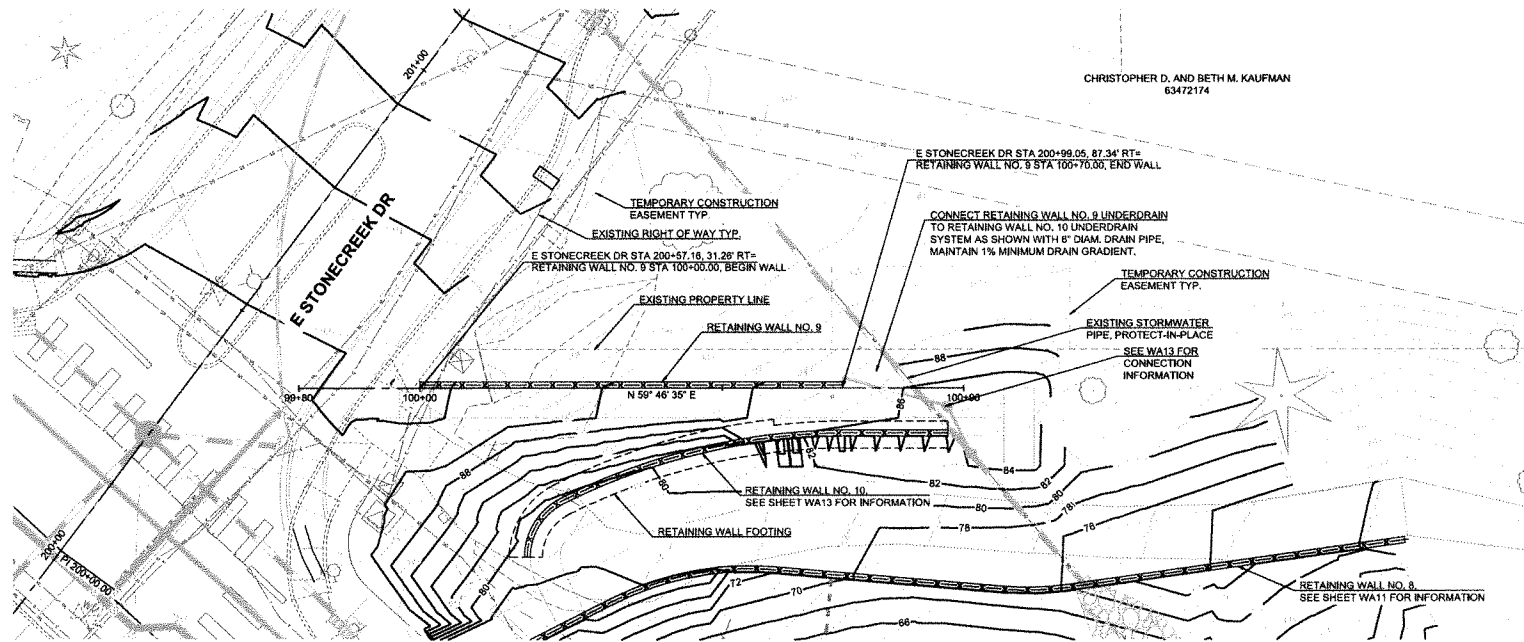
PBS

DESIGNED: NEW
 CHECKED: HAW
 MAY 2023
 71486.000

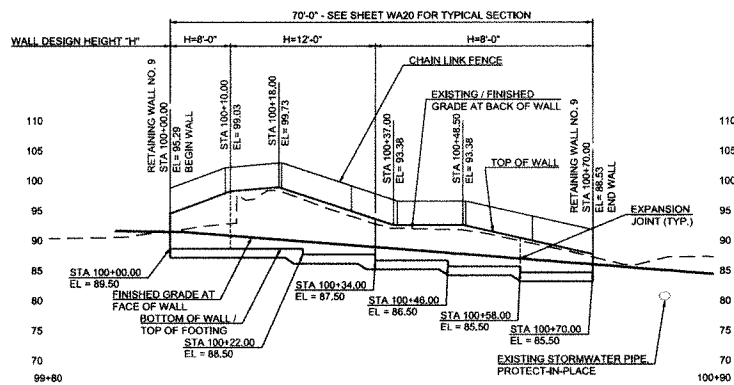
SHEET ID
WA11

SHEET 122 OF 173

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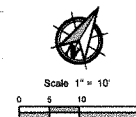
RETAINING WALL NO. 9 PLAN



NOTES:
1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 9 DEVELOPED ELEVATION

CHRISTOPHER D. AND BETH M. KAUFMAN
63472174



PBS Engineering Ltd
1335 SE Tenth Center Drive
Vancouver, WA 98683
604.271.1111
pbs@pbs.com



RETAINING WALL NO. 9 PLAN AND DEVELOPED ELEVATION FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
NSM
CHECKED:
HAW

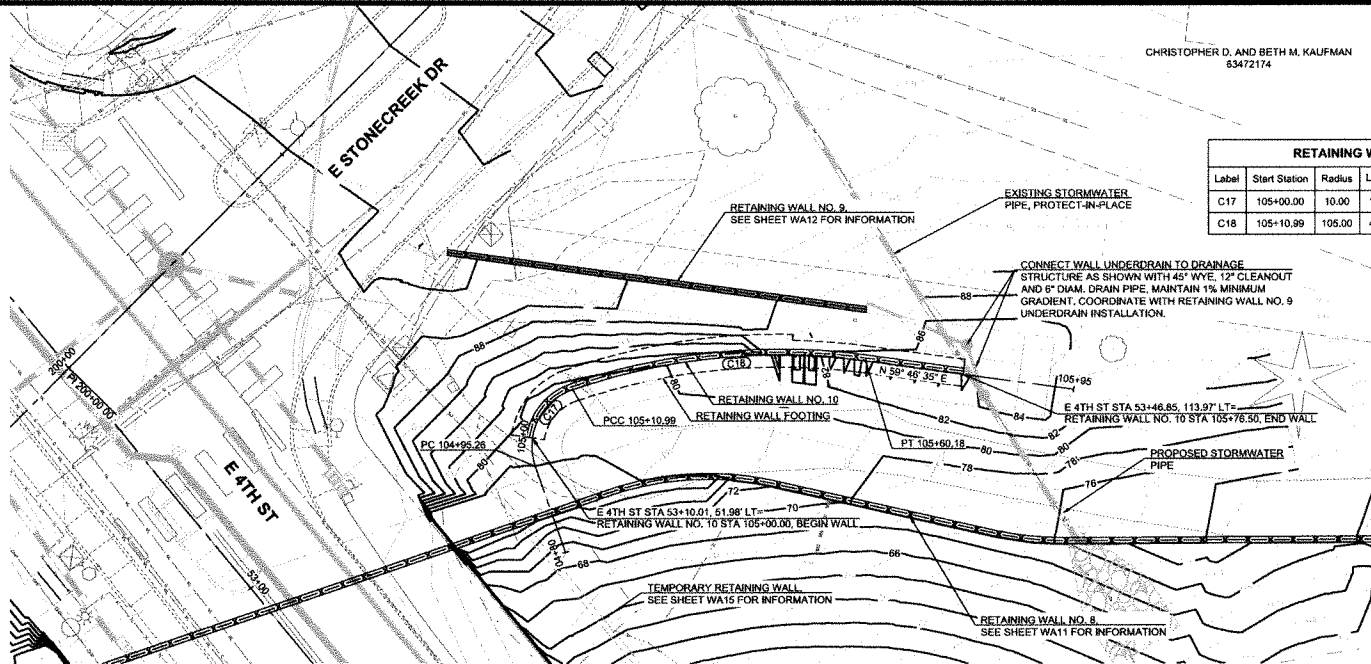
MAY 2019
7:14:59.000
SHEET ID
WA12

SHEET 123 OF 173

BID SET

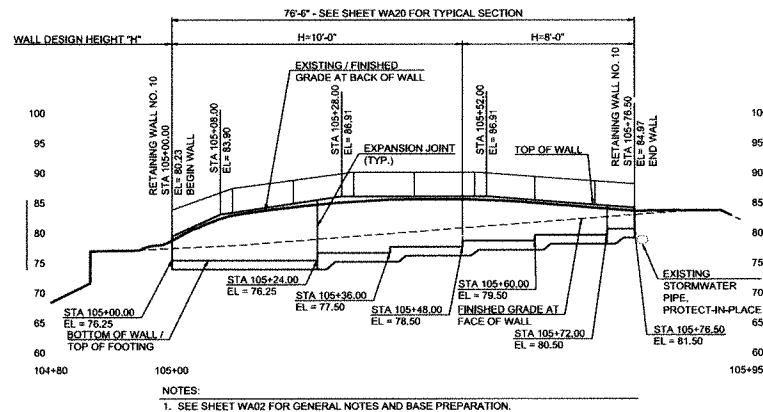
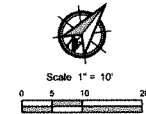
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CHRISTOPHER D. AND BETH M. KAUFMAN
63472174

RETAINING WALL NO. 10 ALIGNMENT TABLE						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C17	105+00.00	10.00	10.99	N1° 28' 52.33"E	200537.31	1088766.10
C18	105+10.99	105.00	49.19	N46° 21' 22.22"E	200547.75	1088766.36



NOTES:
1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 10 DEVELOPED ELEVATION

BID SET

PBS Engineering and
1275 SE 14th Center Drive
Vancouver, WA 98683
360.583.3333
pbes.com



RETAINING WALL NO. 10 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

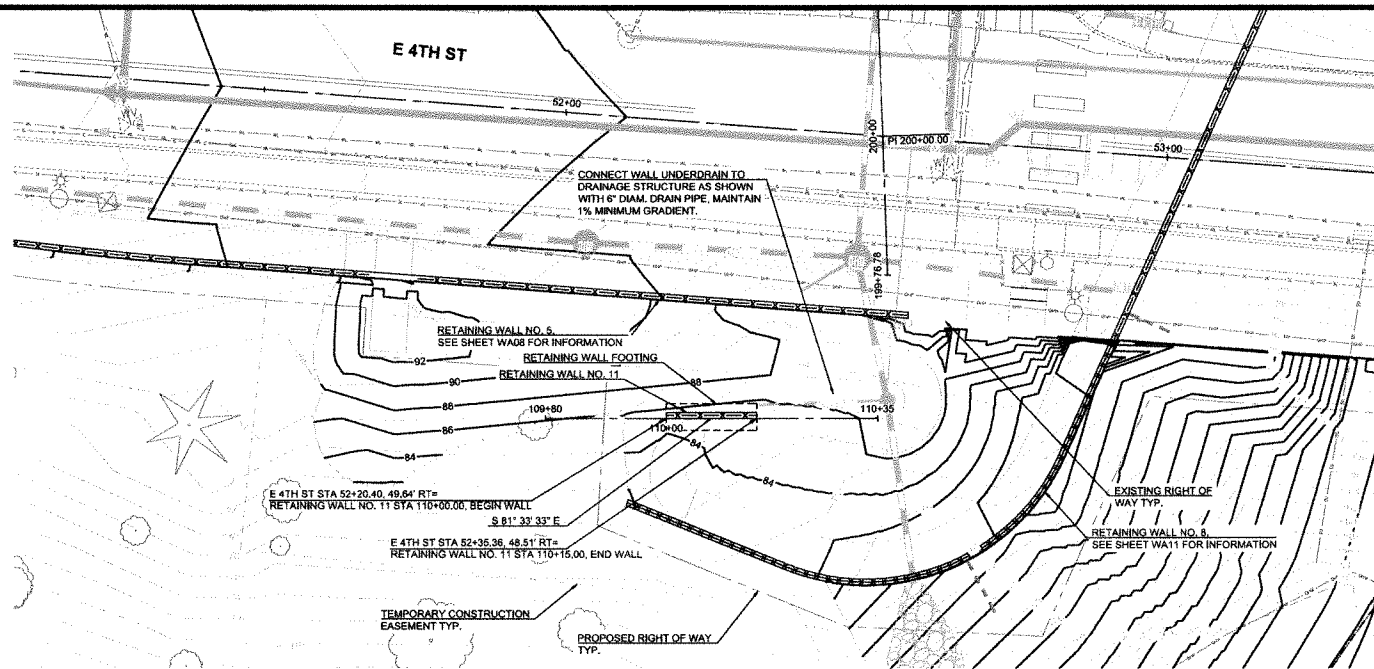


DESIGNED:
NKH
CHECKED:
IAW
MAY 2025
7:16:00 PM

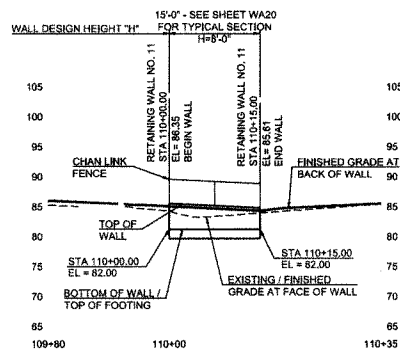
SHEET ID:
WA13

SHEET 124 OF 173

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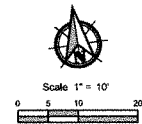
RETAINING WALL NO. 11 PLAN



NOTES:

1. SEE SHEET WA02 FOR GENERAL NOTES AND BASE PREPARATION.

RETAINING WALL NO. 11 DEVELOPED ELEVATION



PBS Engineering Ltd
1335 SE 7th Center Drive
Vancouver, WA 98683
604.681.1111
pbes.com



RETAINING WALL NO. 11 PLAN AND DEVELOPED ELEVATION FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
HSA

CHECKED:
HAW

MAY 2025
71486000

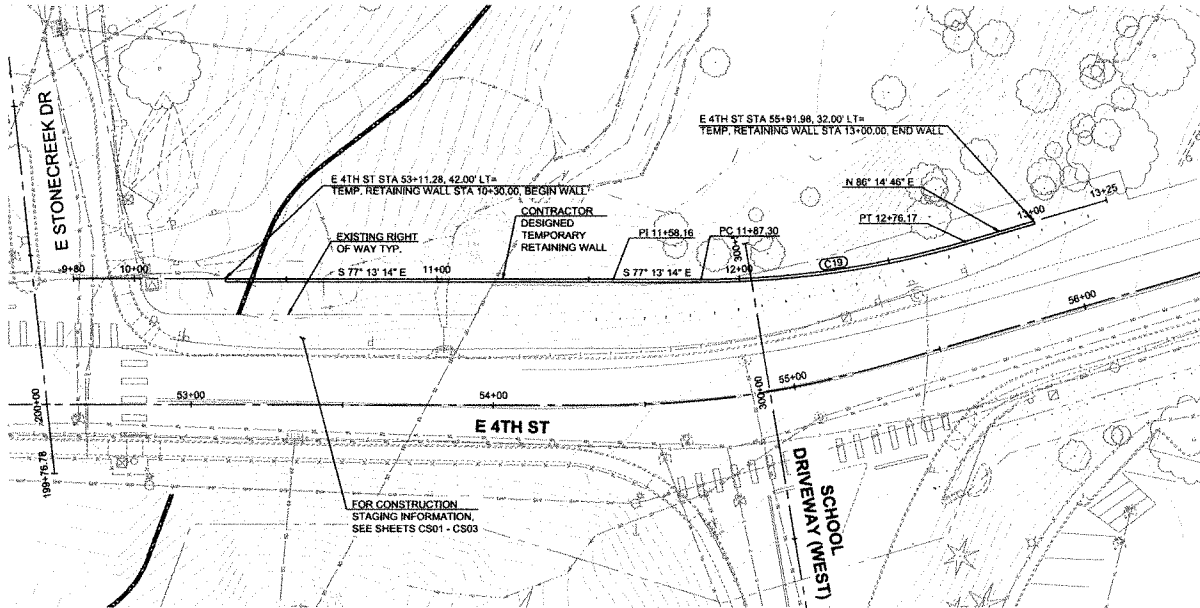
SHEET NO.

WA14

SHEET 125 OF 173

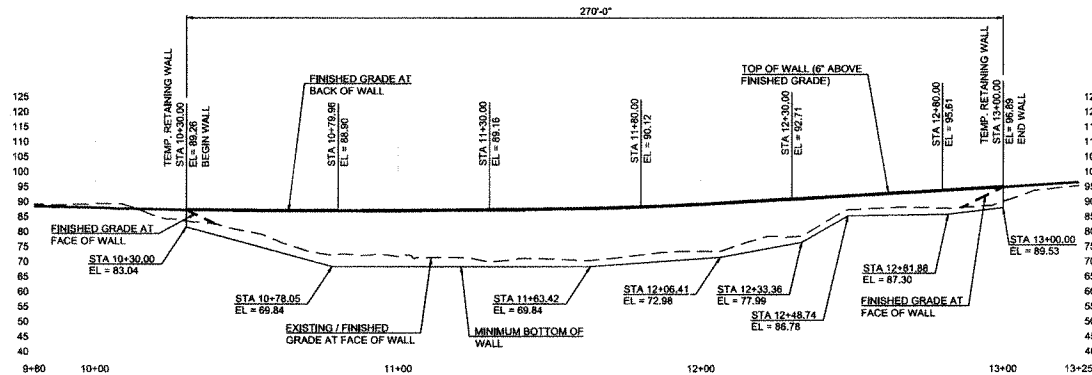
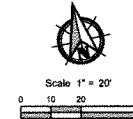
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TEMPORARY RETAINING WALL PLAN

TEMPORARY RETAINING WALL ALIGNMENT TABLE						
Label	Start Station	Radius	Length	Line/Chord Direction	Start Northing	Start Easting
C19	11+87.30	308.00	88.88	S85° 29' 13.65"E	200492.50	1088916.53



NOTES:

1. TEMPORARY FENCE BEHIND TOP OF WALL NOT SHOWN FOR CLARITY. FENCE SHALL BE PROVIDED FOR THE FULL LENGTH OF WALL.
2. SEE SHEET WA02 FOR GENERAL NOTES.
3. DEVELOPED ELEVATION SHOWN IS FROM THE RETAINED SIDE OF THE WALL.

TEMPORARY RETAINING WALL DEVELOPED ELEVATION

BID SET

PBS Engineering & Construction
1305 SE 7th Center Drive
Vancouver, WA 98603
phone: 360.581.1111
www.pbsinc.com



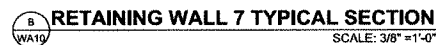
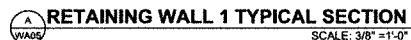
TEMPORARY RETAINING WALL PLAN AND DEVELOPED ELEVATION FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
NOM
CHECKED:
HAW
MAY 2010
17481.000

SHEET ID:
WA15

SHEET 126 of 173

[illegible]

PILE LABEL	SOLDIER PILE	SHAFT DIA.	NORTHING	EASTING	TOP OF WALL ELEVATION	TOP OF SOLDIER PILE ELEVATION	BOTTOM OF WALL ELEVATION	BOTTOM OF SHAFT ELEVATION
P1	W18X65	2'-6"	1088175.6419	200648.5078	118.44	115.62	112.20	83.62
P2	W18X65	2'-6"	1088181.6251	200647.9255	122.32	117.86	112.17	86.86
P3	W18X65	2'-6"	1088187.8040	200647.2964	123.01	118.51	112.13	86.51
P4	W18X65	2'-6"	1088193.5777	200646.6203	123.08	118.58	112.07	86.58
P5	W18X65	2'-6"	1088199.5400	200645.8973	123.15	118.65	111.99	86.65
P6	W18X65	2'-6"	1088206.5084	200645.1276	123.22	118.72	111.90	86.72
P7	W18X65	2'-6"	1088211.4848	200644.3110	123.22	118.72	111.79	86.72
P8	W18X65	2'-6"	1088217.4141	200643.4478	123.22	118.72	111.66	86.72
P9	W18X65	2'-6"	1088223.3568	200642.5379	122.64	118.14	111.52	86.14
P10	W18X65	2'-6"	1088229.2921	200641.5813	122.45	117.95	111.36	85.95
P11	W18X65	2'-6"	1088235.2187	200640.5783	112.25	107.75	111.19	75.75
P12	W18X65	2'-6"	1088241.1393	200639.5287	122.06	117.56	111.00	85.56
P13	W18X65	2'-6"	1088247.0604	200638.4327	121.87	117.37	110.79	85.37
P14	W18X65	2'-6"	1088252.9528	200637.2903	121.88	117.18	110.96	85.18
P15	W18X65	2'-6"	1088258.8440	200636.1017	121.48	116.98	110.32	84.98
P16	W18X65	2'-6"	1088264.7287	200634.8608	121.29	116.79	110.06	84.79
P17	W18X65	2'-6"	1088270.6035	200633.5858	121.1	116.60	109.79	84.60
P18	W18X65	2'-6"	1088276.4671	200632.2688	120.91	116.41	109.50	84.41
P19	W18X65	2'-6"	1088282.3201	200630.8858	120.71	116.21	109.20	84.21
P20	W18X65	2'-6"	1088288.1821	200629.4658	120.52	116.02	108.91	84.02
P21	W18X65	2'-6"	1088293.9928	200628.0021	120.33	115.83	108.61	83.83
P22	W18X65	2'-6"	1088299.8119	200626.4817	120.13	115.63	108.32	83.63
P23	W18X65	2'-6"	1088305.6189	200624.9358	119.94	115.44	108.02	83.44
P24	W18X65	2'-6"	1088311.4135	200623.3340	119.75	115.25	107.72	83.25
P25	W18X65	2'-6"	1088317.1984	200621.6870	119.56	115.06	107.43	83.06
P26	W18X65	2'-6"	1088322.9642	200619.9940	119.36	114.86	107.13	82.86
P27	W18X65	2'-6"	1088328.7148	200618.2716	119.17	114.67	106.83	82.67
P28	W18X65	2'-6"	1088334.4819	200616.5478	118.98	114.48	106.52	82.48
P29	W18X65	2'-6"	1088340.2089	200614.8240	118.78	114.28	106.22	82.28
P30	W18X65	2'-6"	1088345.9560	200613.1002	118.59	114.09	105.91	82.09
P31	W18X65	2'-6"	1088351.7030	200611.3764	118.39	113.89	105.61	81.89
P32	W18X65	2'-6"	1088357.4501	200609.6526	118.21	113.71	105.30	81.71
P33	W18X65	2'-6"	1088363.1971	200607.9289	118.01	113.51	104.99	81.51
P34	W18X65	2'-6"	1088368.9442	200606.2051	117.82	113.32	104.69	81.32
P35	W18X65	2'-6"	1088374.6912	200604.4813	117.62	113.12	104.38	81.12
P36	W18X65	2'-6"	1088380.4383	200602.7575	117.43	112.93	104.07	80.93
P37	W18X65	2'-6"	1088386.1834	200601.0409	117.24	112.74	103.76	80.74

P38	W18X65	2'-6"	1088391.9328	200599.3417	117.05		112.55	103.45	80.55
P39	W18X65	2'-6"	1088397.6876	200597.6812	116.85		112.35	103.14	80.35
P40	W18X65	2'-6"	1088403.4477	200595.9890	116.66		112.16	102.83	80.16
P41	W18X65	2'-6"	1088409.2131	200594.2551	116.47		111.97	102.52	79.97
P42	W18X65	2'-6"	1088414.9837	200592.7296	116.27		111.77	102.21	79.77
P43	W18X65	2'-6"	1088420.7585	200591.1225	116.08		111.58	101.90	79.58
P44	W18X65	2'-6"	1088426.5403	200589.5337	115.89		111.39	101.59	79.39
P45	W18X65	2'-6"	1088432.3262	200587.9634	115.7		111.20	101.28	79.20
P46	W18X65	2'-6"	1088438.1170	200586.4114	115.5		111.00	100.96	79.00
P47	W18X65	2'-6"	1088443.9127	200584.8780	115.31		110.81	100.64	78.81
P48	W18X65	2'-6"	1088449.7133	200583.3829	115.12		110.62	100.31	78.62
P49	W18X65	2'-6"	1088455.5187	200581.8864	114.92		110.42	99.99	78.42
P50	W18X65	2'-6"	1088461.3288	200580.3887	114.73		110.23	99.68	78.23
P51	W18X65	2'-6"	1088467.1436	200578.8287	114.54		110.04	99.29	78.04
P52	W18X65	2'-6"	1088472.9659	200577.2849	114.34		110.04	98.94	78.04
P53	W18X65	2'-6"	1088478.7728	200575.6822	114.15		109.85	98.58	77.85
P54	W18X65	2'-6"	1088484.6082	200574.1807	113.96		109.66	98.21	77.66
P55	W18X65	2'-6"	1088490.4812	200572.5592	113.79		109.39	97.84	77.39
P56	W18X65	2'-6"	1088496.3305	200571.0195	113.66		109.16	97.46	77.16
P57	W18X65	2'-6"	1088502.2150	200571.3612	113.38		108.88	97.07	76.88
P58	W18X65	2'-6"	1088508.1136	200570.3845	113.19		108.69	96.68	76.69
P59	W18X65	2'-6"	1088514.0252	200569.4896	112.95		108.45	96.28	76.45
P60	W18X65	2'-6"	1088519.9486	200568.6787	112.58		108.08	95.88	76.08
P61	W18X65	2'-6"	1088525.8827	200567.8462	112.07		107.57	95.47	75.57
P62	W18X65	2'-6"	1088531.8549	200567.2335	111.55		107.05	95.07	75.05
P63	W18X65	2'-6"	1088537.8229	200566.4459	111.04		106.54	94.68	74.54
P64	W18X65	2'-6"	1088543.7801	200565.5764	110.52		106.02	94.30	74.02
P65	W18X65	2'-6"	1088549.7250	200564.6269	110.01		105.51	93.93	73.51
P66	W18X65	2'-6"	1088555.6567	200563.5878	109.49		104.99	93.58	72.99
P67	W18X65	2'-6"	1088561.5741	200562.4891	108.98		104.48	93.24	72.48
P68	W18X65	2'-6"	1088567.4760	200561.3011	108.46		103.96	92.82	71.96
P69	W18X65	2'-6"	1088573.3615	200560.0340	107.94		103.44	92.41	71.44
P70	W18X65	2'-6"	1088579.2201	200558.7064	107.41		102.91	92.01	70.91
P71	W18X65	2'-6"	1088585.0714	200557.3822	106.34		101.84	92.02	69.84
P72	W18X65	2'-6"	1088590.9228	200556.0590	105.2		100.70	91.74	68.70
P73	W18X65	2'-6"	1088596.7742	200554.7278	103.91		99.41	91.46	67.41
P74	W18X65	2'-6"	1088602.6255	200553.4006	102.63		98.13	91.23	66.13
P75	W18X65	2'-6"	1088608.4769	200552.0734	101.34		96.75	91.00	64.75
P76	W18X65	2'-6"	1088616.2888	200550.7015	97.26		94.26	90.70	62.26

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WALL 1 SOLDIER PILE WALL DATA TABL FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
HJM
CHECKED:
JHW
MAY 2015
71486.000
SHEET ID
WA17
SHEET 128 OF 173

File Name: L:\Projects\1700071487\1487-1488-000-Civil\DWG\Sheet171488-000-171488-000.dwg User: JTB Date: 5/1/2025 10:10:42 AM

RETAINING WALL NO. 7 - SOLDIER PILE DATA TABLE									
PILE LABEL	SOLDIER PILE	SHAFT DIA.	NORTHING	EASTING	TOP OF WALL ELEVATION	TOP OF SOLDIER PILE ELEVATION	BOTTOM OF WALL ELEVATION	BOTTOM OF SHAFT ELEVATION	
P1	W16X100	2'-6"	1088980.3149'	200407.5975'	102.5	101.00	94.49	69.00	
P2	W16X100	2'-6"	1088983.9369'	200412.0443'	102.77	101.27	94.39	69.27	
P3	W16X100	2'-6"	1088988.2832'	200415.7862'	103.05	101.55	94.63	69.55	
P4	W16X100	2'-6"	1088993.2190'	200418.7069'	103.32	101.82	94.88	69.82	
P5	W16X100	2'-6"	1088996.5908'	200420.7158'	103.6	102.10	95.15	70.10	
P6	W16X100	2'-6"	1089004.2319'	200421.7505'	103.87	102.37	95.43	70.37	
P7	W16X100	2'-6"	1089010.1779'	200422.1530'	104.15	102.65	95.72	70.65	
P8	W16X100	2'-6"	1089016.1650'	200422.5458'	104.42	102.92	96.00	70.92	
P9	W16X100	2'-6"	1089022.1521'	200422.9387'	105.24	103.74	96.28	71.74	
P10	W16X100	2'-6"	1089028.1393'	200423.3315'	106.28	104.78	96.55	72.78	
P11	W16X100	2'-6"	1089034.1264'	200423.7243'	107.32	105.82	96.82	73.82	
P12	W16X100	2'-6"	1089040.1135'	200424.1171'	108.37	106.87	97.09	74.87	
P13	W16X100	2'-6"	1089046.1007'	200424.5099'	109.41	107.91	97.37	75.91	
P14	W16X100	2'-6"	1089052.0878'	200424.9027'	110.45	108.95	97.64	76.95	
P15	W16X100	2'-6"	1089058.0749'	200425.2956'	111.5	110.00	97.91	78.00	
P16	W16X100	2'-6"	1089064.0620'	200425.6884'	112.08	110.58	98.18	78.58	
P17	W16X100	2'-6"	1089070.0492'	200426.0812'	112.48	110.98	98.45	78.98	
P18	W16X100	2'-6"	1089076.0363'	200426.4740'	112.88	111.38	98.73	79.38	
P19	W16X100	2'-6"	1089082.0234'	200426.8668'	113.27	111.77	99.00	79.77	
P20	W16X100	2'-6"	1089088.0106'	200427.2596'	113.67	112.17	99.27	80.17	
P21	W16X100	2'-6"	1089093.9977'	200427.6524'	114.07	112.57	99.54	80.57	
P22	W16X100	2'-6"	1089099.9848'	200428.0453'	114.46	112.96	99.81	80.96	
P23	W16X100	2'-6"	1089105.9719'	200428.4381'	114.86	113.36	100.09	81.36	
P24	W16X100	2'-6"	1089111.9591'	200428.8309'	115.26	113.76	100.36	81.76	
P25	W16X100	2'-6"	1089117.9462'	200429.2237'	115.66	114.16	100.64	82.16	
P26	W16X100	2'-6"	1089123.9333'	200429.6165'	116.05	114.55	101.00	82.55	
P27	W16X100	2'-6"	1089129.9204'	200430.0093'	116.45	114.95	101.36	82.95	
P28	W16X100	2'-6"	1089135.9076'	200430.4021'	116.78	115.28	101.72	83.28	
P29	W16X100	2'-6"	1089141.8947'	200430.7950'	117.09	115.59	102.08	83.59	
P30	W16X100	2'-6"	1089147.8818'	200431.1878'	117.41	115.91	102.44	83.91	
P31	W16X100	2'-6"	1089153.8690'	200431.5806'	117.72	116.22	102.80	84.22	
P32	W16X100	2'-6"	1089159.8561'	200431.9734'	117.76	116.26	103.16	84.26	
P33	W16X100	2'-6"	1089165.8432'	200432.3662'	117.76	116.26	103.52	84.26	
P34	W16X100	2'-6"	1089171.8303'	200432.7590'	117.76	116.26	103.88	84.26	
P35	W16X100	2'-6"	1089177.8175'	200433.1519'	117.76	116.26	104.24	84.26	
P36	W16X100	2'-6"	1089183.8046'	200433.5447'	117.87	116.37	104.60	84.37	
P37	W16X100	2'-6"	1089189.7917'	200433.9375'	117.99	116.49	104.96	84.49	
P38	W16X100	2'-6"	1089195.7788'	200434.3303'	118.11	116.61	105.32	84.61	

P39	W16X100	2'-6"	1089201.7660'	200434.7231'	118.23	116.73	105.68	84.73	
P40	W16X100	2'-6"	1089207.7531'	200435.1159'	118.35	116.85	106.04	84.85	
P41	W16X100	2'-6"	1089213.7402'	200435.5087'	118.47	116.97	106.40	84.97	
P42	W16X100	2'-6"	1089219.7274'	200435.9016'	118.59	117.09	106.76	85.09	
P43	W16X100	2'-6"	1089225.7145'	200436.2944'	118.71	117.21	107.12	85.21	
P44	W16X100	2'-6"	1089231.7016'	200436.6872'	118.83	117.33	107.48	85.33	
P45	W16X100	2'-6"	1089237.6887'	200437.0800'	118.95	117.45	107.84	85.45	
P46	W16X100	2'-6"	1089243.6759'	200437.4728'	119.07	117.57	108.20	85.57	
P47	W16X100	2'-6"	1089249.6722'	200437.8651'	119.19	117.69	108.56	85.69	
P48	W16X100	2'-6"	1089255.6686'	200438.2585'	119.38	117.88	108.92	85.88	
P49	W16X100	2'-6"	1089261.6601'	200438.6717'	119.58	118.08	109.28	86.08	
P50	W16X100	2'-6"	1089267.6461'	200439.0565'	119.78	118.28	109.64	86.28	
P51	W16X100	2'-6"	1089273.6260'	200440.1008'	119.98	118.48	110.00	86.48	
P52	W16X100	2'-6"	1089279.5952'	200440.8045'	119.84	118.34	110.36	86.34	
P53	W16X100	2'-6"	1089285.5650'	200441.5677'	119.65	118.15	110.72	86.15	
P54	W16X100	2'-6"	1089291.5230'	200442.3902'	119.46	117.96	111.09	85.96	
P55	W16X100	2'-6"	1089297.4725'	200443.2719'	119.27	117.77	111.47	85.77	
P56	W16X100	2'-6"	1089303.4130'	200444.2129'	119.03	117.53	111.84	85.53	
P57	W16X100	2'-6"	1089309.3437'	200445.2128'	118.78	117.28	112.22	85.28	
P58	W16X100	2'-6"	1089315.2643'	200446.2718'	118.46	117.36	112.58	85.36	
P59	W16X100	2'-6"	1089321.1740'	200447.3896'	118.98	117.48	112.95	85.48	
P60	W16X100	2'-6"	1089327.0723'	200448.5661'	119.55	118.05	113.32	86.05	
P61	W16X100	2'-6"	1089332.7650'	200449.5400'	120.17	118.67	113.88	86.67	
P62	W16X100	2'-6"	1089338.2509'	200448.9598'	120.25	118.75	114.25	86.75	
P63	W16X100	2'-6"	1089343.2854'	200446.7046'	120.25	118.75	114.54	86.75	
P64	W16X100	2'-6"	1089348.0623'	200442.0740'	120.25	118.75	114.88	86.75	

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

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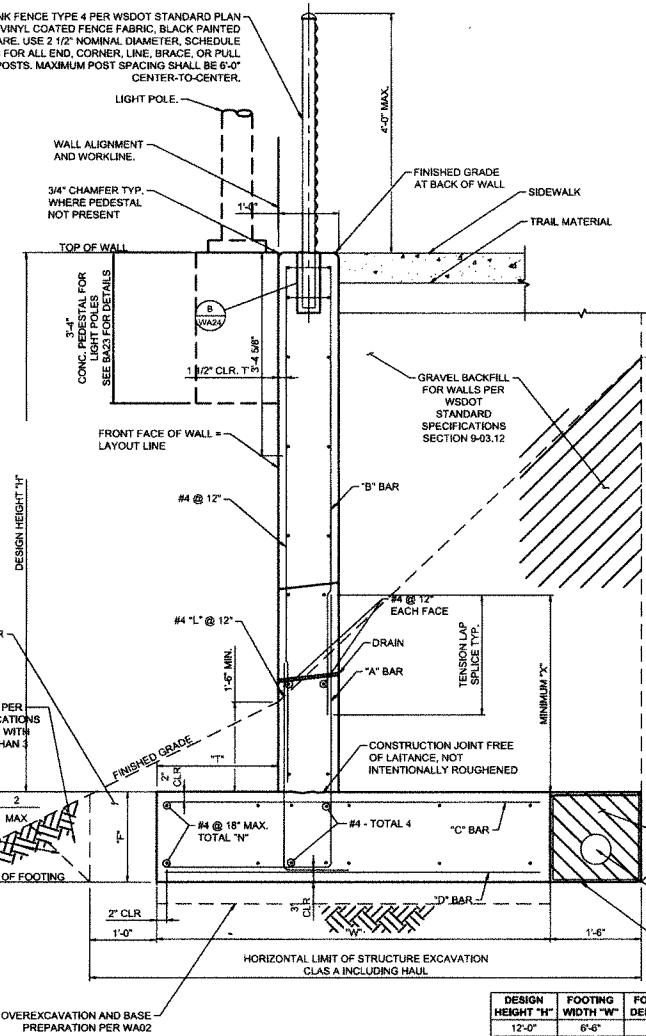
WALL 7 SOLDIER PILE DATA TABLE FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
HAW
CHECKED:
HAW
MAY 2025
17486.000
SHEET ID:
WA18
SHEET 129 OF 173

File Name: L:\projects\1000714871486-005-CAD\working\dwg\1486-005-w11-10-22.dwg
 Layout: T10: WA19
 User: Tyler O'Hara
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COATED CHAIN LINK FENCE TYPE 4 PER WSDOT STANDARD PLAN
 L-20.10 WITH BLACK VINYL COATED FENCE FABRIC, BLACK PAINTED
 POSTS AND HARDWARE. USE 2 1/2" NOMINAL DIAMETER, SCHEDULE
 40, PIPE SECTIONS FOR ALL END, CORNER, LINE, BRACE, OR PULL
 POSTS. MAXIMUM POST SPACING SHALL BE 6'-0"
 CENTER-TO-CENTER.



EMBANKMENT COMPACTION PER
 WSDOT STANDARD SPECIFICATIONS
 SECTION 9-03.14(3) OPTION 1 WITH
 NO AGGREGATES LARGER THAN 3
 INCHES

EXISTING
 GROUND
 VARIES

VERTICAL LIMIT OF STRUCTURE EXCAVATION
 CLASS A INCLUDING HAIL

EXCAVATION
 LIMIT

UNDERDRAIN PIPE 6IN. DIAM., MINIMUM
 1% GRADIENT. CONNECT TO SUITABLE
 OUTLET AS SHOWN ON PLANS.

CONSTRUCTION GEOTEXTILE FOR
 UNDERGROUND DRAINAGE

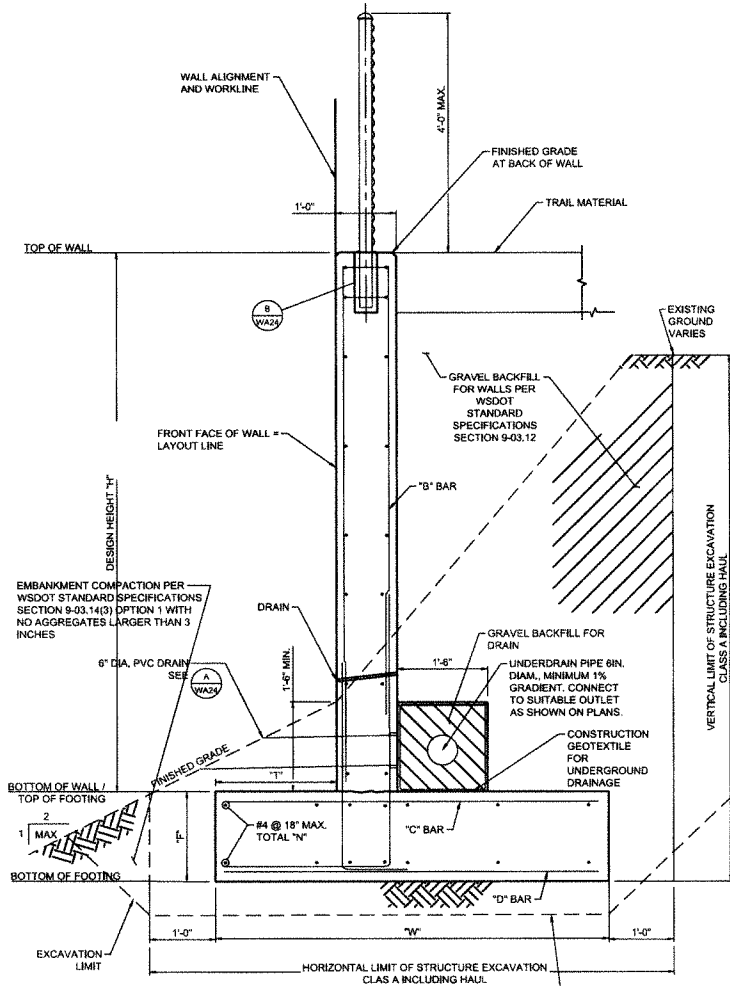
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12'-0"	6'-6"	1'-6"	2'-0"	#7 @ 12"	#4 @ 12"	#6 @ 12"	#4 @ 18"	4'-0"	14
10'-0"	5'-6"	1'-6"	2'-0"	#6 @ 12"	#4 @ 12"	#5 @ 12"	#4 @ 18"	3'-0"	12
8'-0"	4'-6"	1'-6"	2'-0"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 18"	3'-0"	10
6'-0"	3'-9"	1'-6"	1'-0"	#4 @ 12"	#4 @ 12"	#4 @ 12"	#4 @ 18"	3'-0"	8

RETAINING WALL NO. 3, 4, 5 & 6 TYPICAL SECTION

SCALE: 1" = 1'-0"

NOTE: WALLS 3 AS SHOWN, WALLS 4, 5 & 6 SIMILAR

A
 WA06
 WA07
 WA08
 WA09



EMBANKMENT COMPACTION PER
 WSDOT STANDARD SPECIFICATIONS
 SECTION 9-03.14(3) OPTION 1 WITH
 NO AGGREGATES LARGER THAN 3
 INCHES

EXISTING
 GROUND
 VARIES

EXCAVATION
 LIMIT

UNDERDRAIN PIPE 6IN. DIAM., MINIMUM
 1% GRADIENT. CONNECT TO SUITABLE
 OUTLET AS SHOWN ON PLANS.

CONSTRUCTION GEOTEXTILE FOR
 UNDERGROUND DRAINAGE

RETAINING WALL NO. 8 TYPICAL SECTION

SCALE: 1" = 1'-0"

NOTE: SECTION SHOWN DOWNSTATION,
SEE TYPICAL SECTION A FOR INFORMATION NOT SHOWN.

B
 WA11

PBS Engineering and
 Consulting
 1335 SE 14th Center Drive
 Vancouver, WA 98683
 360.583.5248
 pbs@pbs.com



RETAINING WALL TYPICAL SECTIONS AND DETAILS 4 OF 10 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:

NOH

CHECKED:

HAW

MAY 2025

71486.000

SHEET ID:

WA19

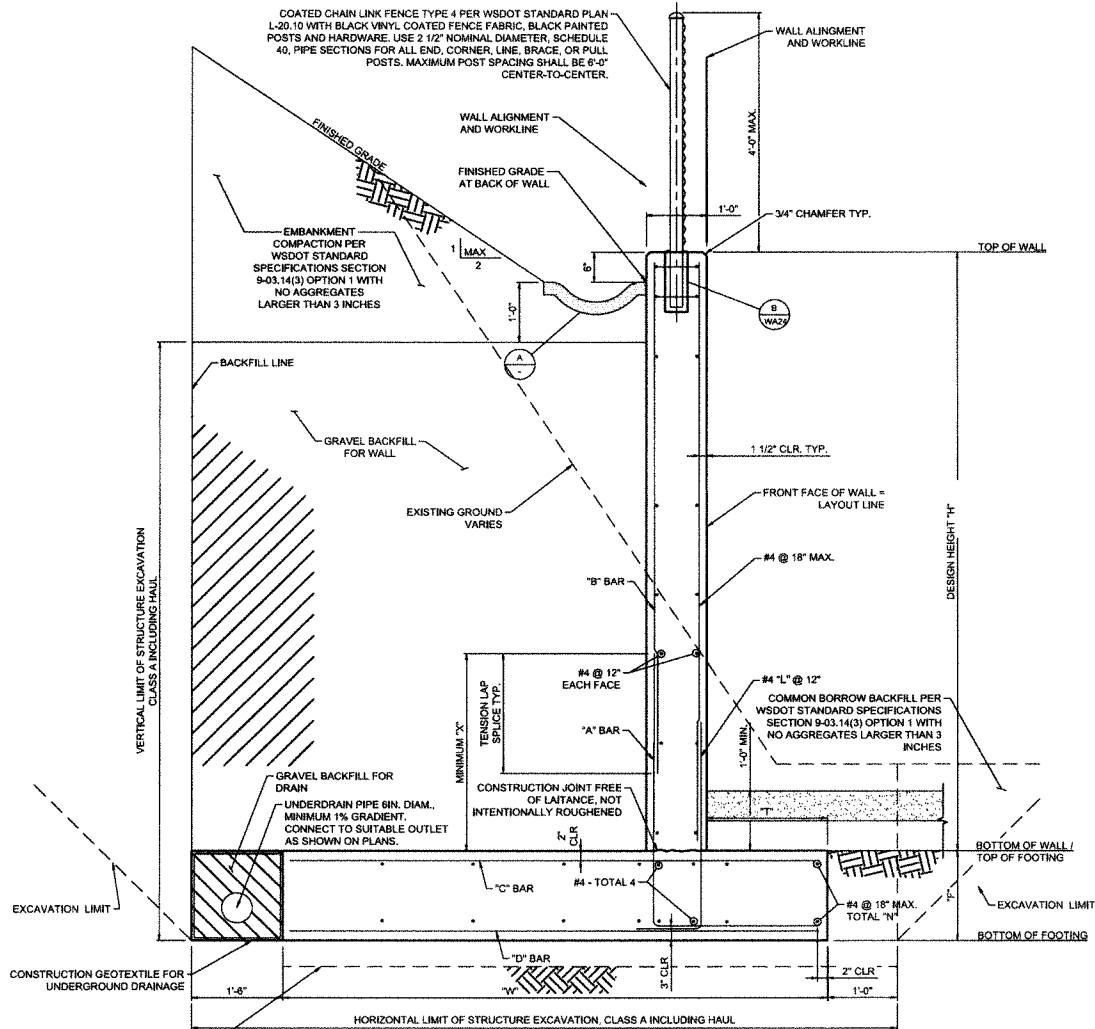
SHEET **130** OF **173**

BID SET

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<https://ci.lacenter.wa.us/city/capital-projects/>

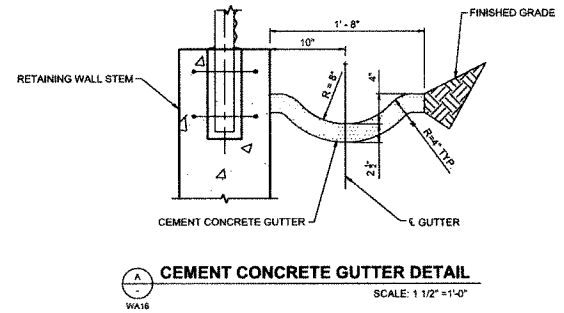
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 Plot Size: 11.69x16.69
 Plot Scale: 1"=1'-0"



Design Height "H"	Footing Width "W"	Footing Depth "T"	Wall Setback "T"	"A" Bars	"B" Bars	"C" Bars	"D" Bars	Min. "X"	"N" Bars
12'-0"	9'-3"	1'-6"	2'-0"	#11 @ 9"	#6 @ 12"	#6 @ 6"	#4 @ 18"	4'-0"	13
10'-0"	7'-6"	1'-6"	2'-0"	#10 @ 12"	#5 @ 12"	#7 @ 12"	#4 @ 18"	4'-0"	16
8'-0"	6'-3"	1'-6"	2'-0"	#7 @ 12"	#4 @ 12"	#6 @ 12"	#4 @ 18"	4'-0"	13

RETAINING WALL NO. 9, 10 & 11 TYPICAL SECTION

SCALE: 1" = 1'-0"
 NOTE: WALLS 9, 10, 11 AS SHOWN.



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 pbs@pbs.com



RETAINING WALL TYPICAL SECTIONS AND DETAILS 5 OF 10 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

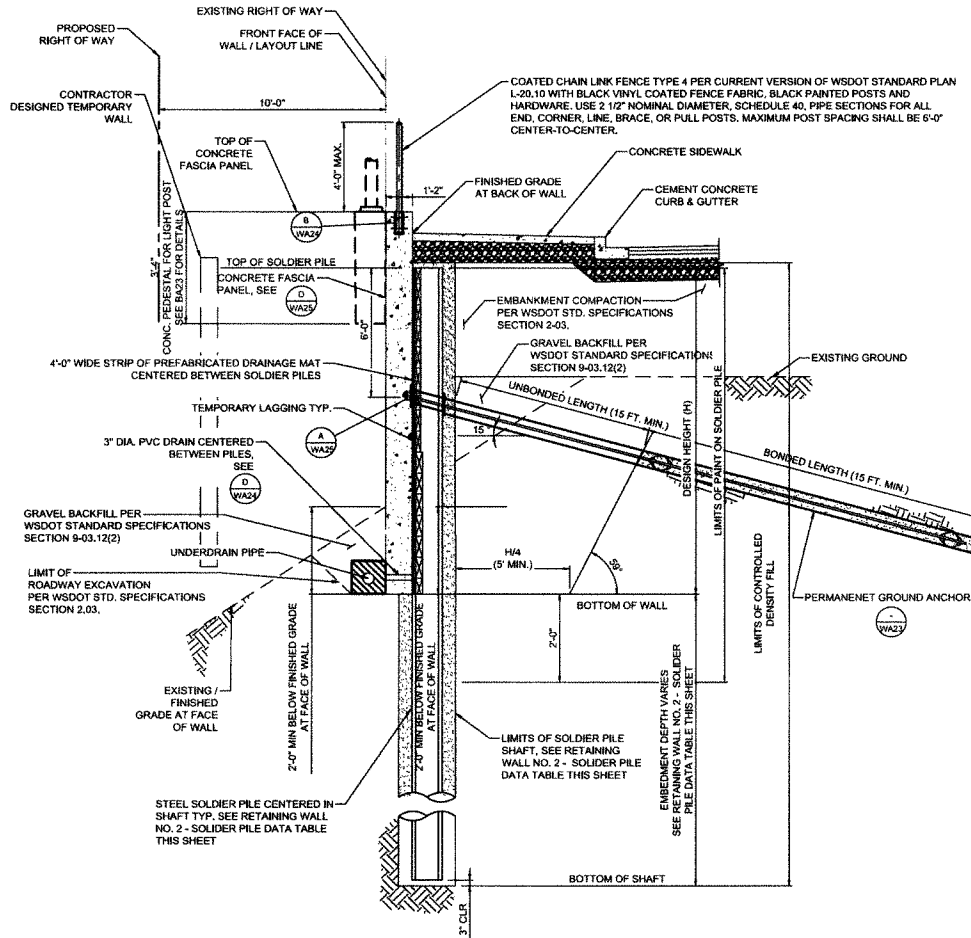


DESIGNED:
 NISW
 CHECKED:
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 MAY 2025
 71486.000

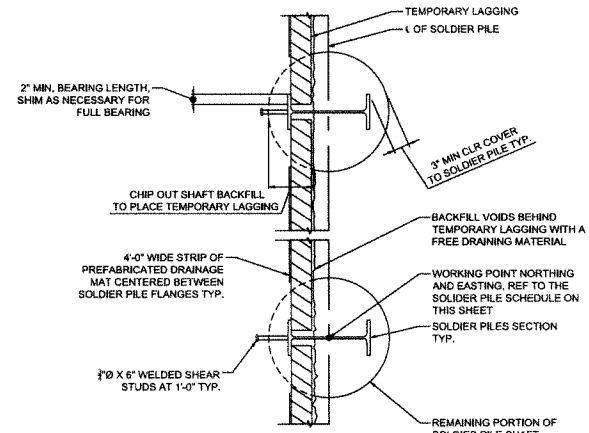
SHEET ID
WA20

SHEET 131 OF 173

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RETAINING WALL 2 TYPICAL SECTION
SCALE: 3/8" = 1'-0"



SOLDIER PILE TO CONCRETE FASCIA PANEL SECTION
SCALE: 1" = 1'-0"

RETAINING WALL NO. 2 - SOLDIER PILE DATA TABLE									
PILE LABEL	SOLDIER PILE	SHAFT DIA.	NORTHING	EASTING	TOP OF SOLDIER PILE ELEVATION	BOTTOM OF WALL ELEVATION	BOTTOM OF SHAFT ELEVATION	FACTORED DESIGN LOAD (KIPS)	UNBONDED LENGTH (FT)
P1	W12X60	2'-4"	1088881.5226	200488.8730	92.83	77.93	62.83	92.00	15
P2	W12X60	2'-4"	1088888.5703	200488.1581	93.03	77.93	63.03	92.00	15
P3	W12X60	2'-4"	1088897.2692	200483.8379	93.23	77.93	63.23	92.00	15
P4	W12X60	2'-4"	1088904.3507	200482.4582	93.48	77.93	63.48	92.00	15
P5	W12X60	2'-4"	1088912.3157	200481.3338	93.75	77.93	63.75	92.00	15
P6	W12X60	2'-4"	1088920.3066	200480.4187	94.02	77.93	64.02	92.00	15
P7	W12X60	2'-4"	1088928.3167	200479.7135	94.30	77.93	64.30	92.00	15
P8	W12X60	2'-4"	1088936.3478	200479.2186	94.58	77.93	64.58	92.00	15
P9	W12X60	2'-4"	1088944.3882	200478.9349	94.80	77.93	64.80	92.00	15
P10	W12X60	2'-4"	1088952.4295	200478.6613	95.05	78.29	65.05	92.00	15
P11	W12X60	2'-4"	1088960.4719	200478.9997	95.30	80.64	65.30	92.00	15
P12	W12X60	2'-4"	1088968.5079	200479.2477	95.57	82.00	65.57	92.00	15
P13	W12X60	2'-4"	1088976.5066	200479.8999	95.84	83.36	65.84	92.00	15
P14	W12X60	2'-4"	1088984.4894	200480.3637	96.11	84.72	66.11	92.00	15
P15	W12X60	2'-4"	1088992.4723	200480.9574	96.38	86.07	66.38	92.00	15
P16	W12X60	2'-4"	1089000.4551	200481.4312	96.64	87.43	66.64	92.00	15
P17	W12X60	2'-4"	1089008.4379	200481.9549	96.91	88.79	66.91	92.00	15
P18	W12X60	2'-4"	1089016.4208	200482.4787	97.18	89.15	67.18	92.00	15
P19	W12X60	2'-4"	1089024.4036	200483.0024	97.44	89.51	67.44	92.00	15
P20	W12X60	2'-4"	1089032.3865	200483.5262	97.70	90.87	67.70	92.00	15
P21	W12X60	2'-4"	1089040.3693	200484.0499	97.96	92.23	67.96	92.00	15
P22	W12X60	2'-4"	1089048.3521	200484.5737	98.22	93.59	68.22	92.00	15

INDICATES PERFORMANCE TEST ANCHOR

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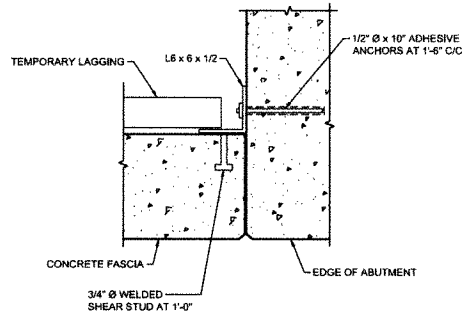
PBS Engineering and Construction, LLC
1205 SE 1st Street, Suite 100
Portland, OR 97214
503.228.1234
pbes.com



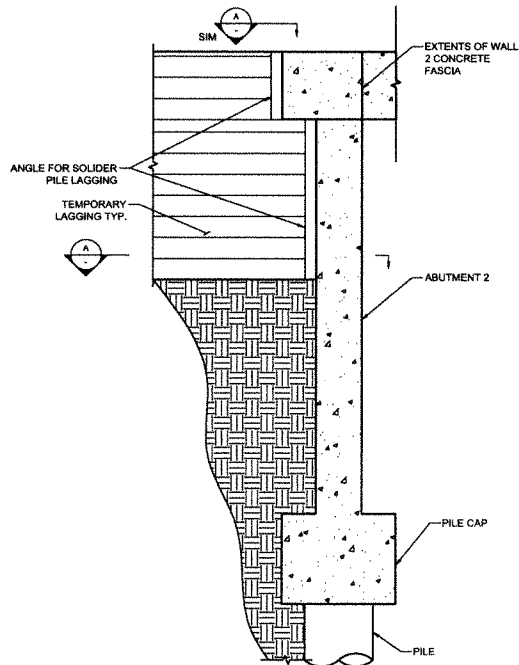
RETAINING WALL TYPICAL SECTIONS AND DETAILS 6 OF 10 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



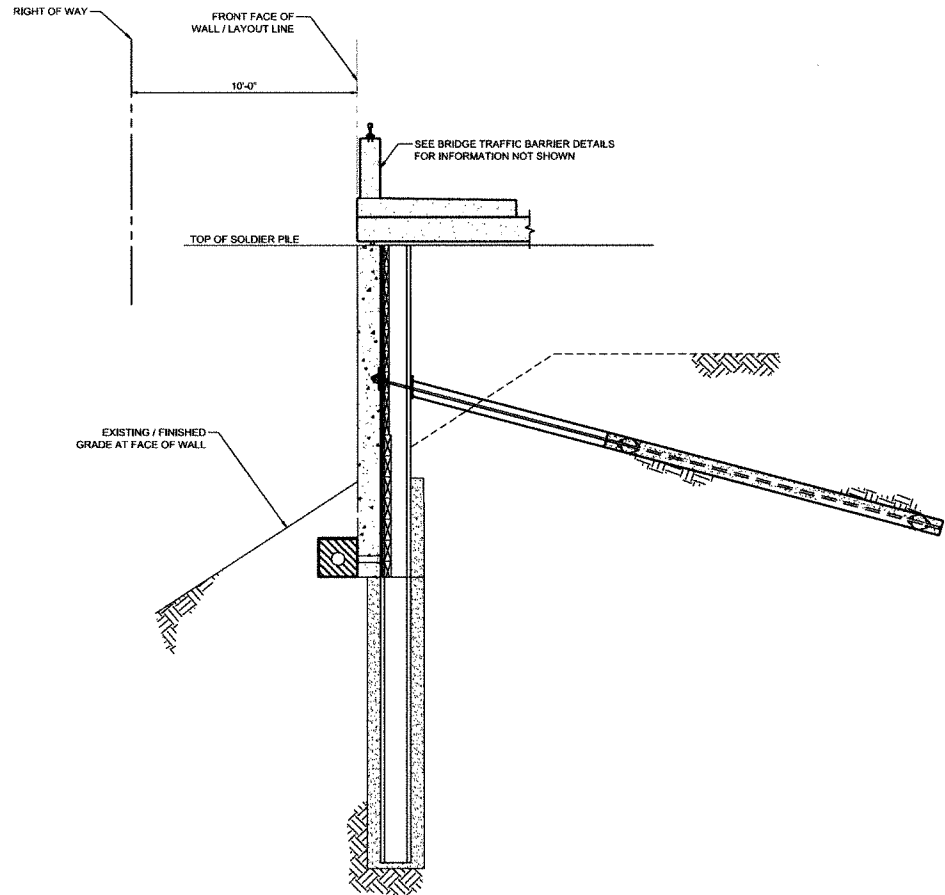
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CHECKED: HAW
MAY 2025
17486.000
SHEET ID:
WA21
SHEET 132 OF 173



ABUTMENT LAGGING CONNECTION
SCALE: 1 1/2" = 1'-0"



WALL 2 / ABUTMENT 2 INTERFACE
SCALE: 1/2" = 1'-0"



RETAINING WALL APPROACH SLAB INTERFACE
SCALE: 3/8" = 1'-0"

BID SET

PBS Engineering and
1225 SE 74th Street
Portland, OR 97206
503.288.3488
www.pbs-engineering.com



RETAINING WALL TYPICAL SECTIONS AND DETAILS 7 OF 10 FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

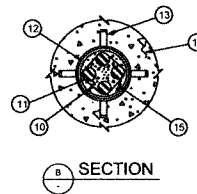
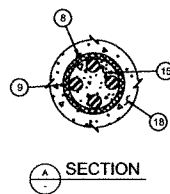
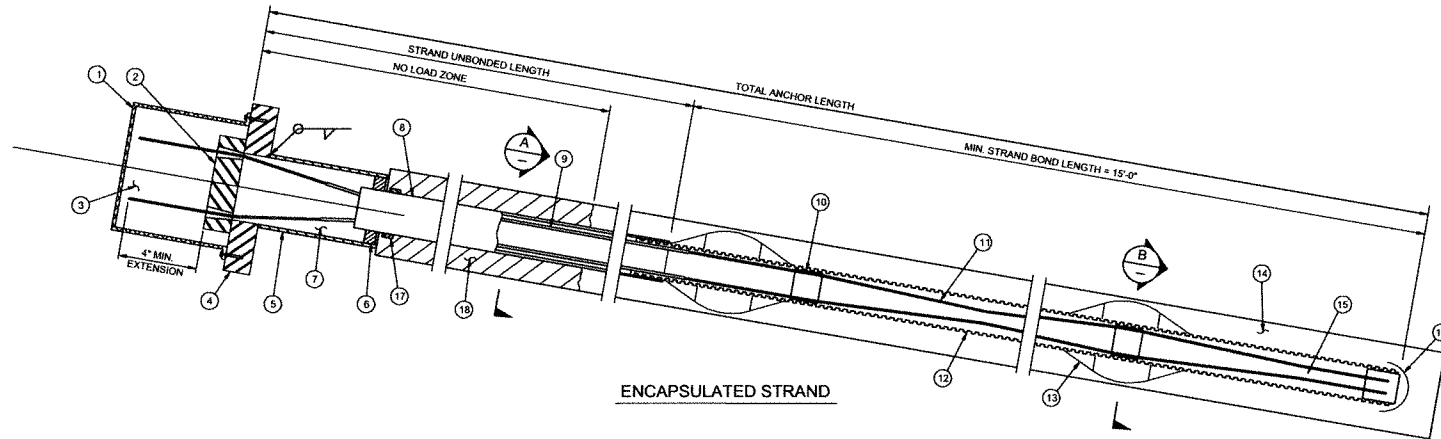


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SHEET 133 OF 173

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STRAND DETAILS FOR RETAINING WALL 2

1. ANCHORAGE COVER
2. ANCHOR HEAD AND WEDGES
3. ANTICORROSION GREASE
4. BEARING PLATE
5. TRUMPET
6. SEAL
7. ANTICORROSION GREASE
8. PVC OR POLYETHYLENE TUBE
9. INDIVIDUALLY GREASED AND SHEATHED STRAND.
10. SPACER
11. STRAND
12. CORRUGATED PVC
13. CENTRALIZER
14. ANCHOR GROUT
15. ENCAPSULATION GROUT
16. END CAP
17. TENSION RING TO RESIST SPLITTING FORCE OF DEFLECTED STRANDS.
18. NON-STRUCTURAL FILLER

BID SET

PBS Engineering Ltd
1035 SE Tenth Center Drive
Vancouver, BC V6H 2G6
Canada
Tel: 604.271.1111
Fax: 604.271.1112
www.pbs-engineering.com



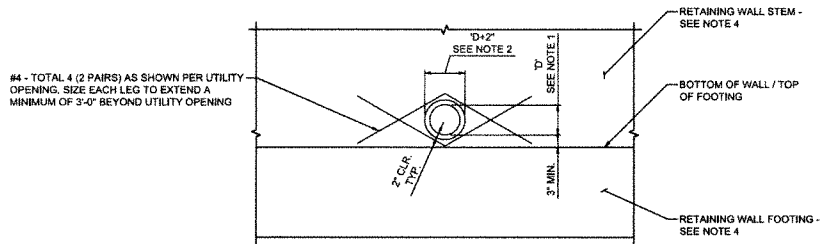
RETAINING WALL TYPICAL SECTIONS AND DETAILS 8 OF 10 FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
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CHECKED:
JAW
MAY 2023
71486.000

SHEET NO.
WA23

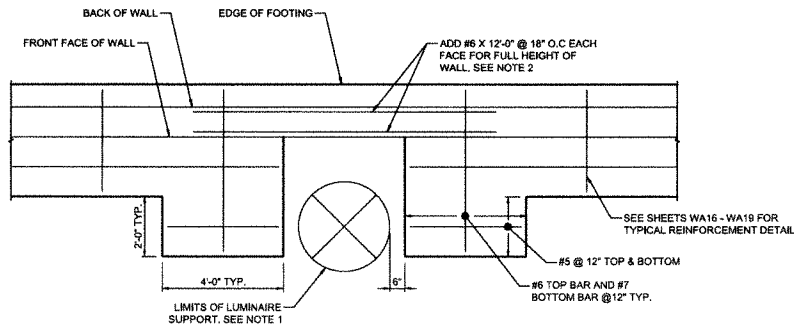
SHEET 134 OF 173



NOTES:

1. "D" REFLECTS THE EXTERIOR DIAMETER OF THE UTILITY.
2. IF MORE THAN TWO INCHES INCREASE IN OPENING SIZE BEYOND "D" IS REQUIRED, SUBMIT ALTERNATIVE DETAIL TO ENGINEER FOR REVIEW AND APPROVAL.
3. DETAILS SHOWN ABOVE ASSUME THAT THE PIPE PASSES THROUGH THE WALL FACE AT A NEARLY PERPENDICULAR ORIENTATION TO THE WALL STEM.
4. WALL STEM AND FOOTING REINFORCING NOT SHOWN ABOVE FOR CLARITY, SEE SHEETS WA19 - WA21 FOR ADDITIONAL INFORMATION.
5. REPLICATE THIS DETAIL TO WALL 1 TO THE EXTEND APPLICABLE.

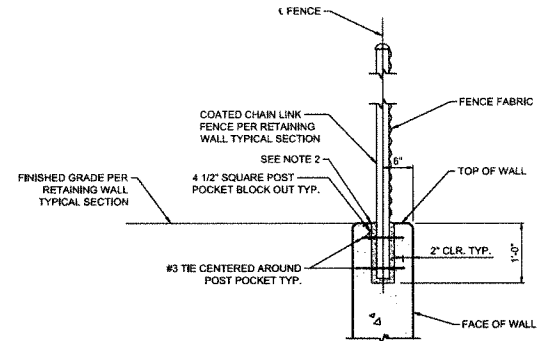
A UTILITY OPENING DETAIL
SCALE: 1/2" = 1'-0"



NOTES:

1. CONFIRM FOOTING OPENING IS ADEQUATE FOR LUMINAIRE SUPPORT.
2. REBAR FOR WALL STEM NOT SHOWN FOR CLARITY.

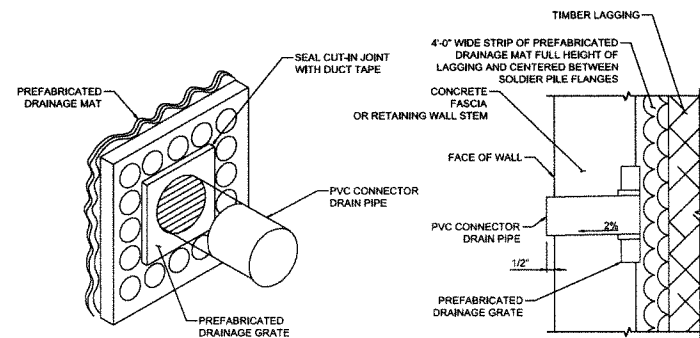
C FOOTING FOR LUMINAIRE SUPPORT
SCALE: 1/2" = 1'-0"



NOTES:

1. USE 2000 PSI MINIMUM STRENGTH LOW SHRINK GROUT TO FILL POST POCKETS. UNUSED POCKETS SHALL ALSO BE GROUT FILLED.
2. PROVIDE 1/4" CROWN ABOVE TOP OF WALL WITH GROUT SURROUNDING FENCE POST AS SHOWN TO PREVENT PONDING.
3. RETAINING WALL REINFORCING NOT SHOWN FOR CLARITY.

B FENCE POST POCKET DETAIL
SCALE: 1" = 1'-0"



ISOMETRIC VIEW

SECTIONAL VIEW

NOTE - DRAIN GRATE INSTALLATION SHALL NOT DISRUPT PREFABRICATED DRAINAGE MAT.

D WEEP HOLE DRAIN DETAILS
SCALE: 3" = 1'-0"

BID SET

PBS Engineering and
1235 SE 17th Center Drive
Vancouver, WA 98683
408.348.3488
pbes.com

PBS

RETAINING WALL TYPICAL SECTIONS AND DETAILS 9 OF 10 FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

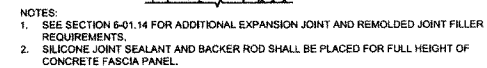
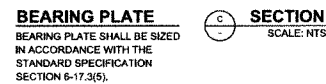
811
Know what's below.
Call before you dig.



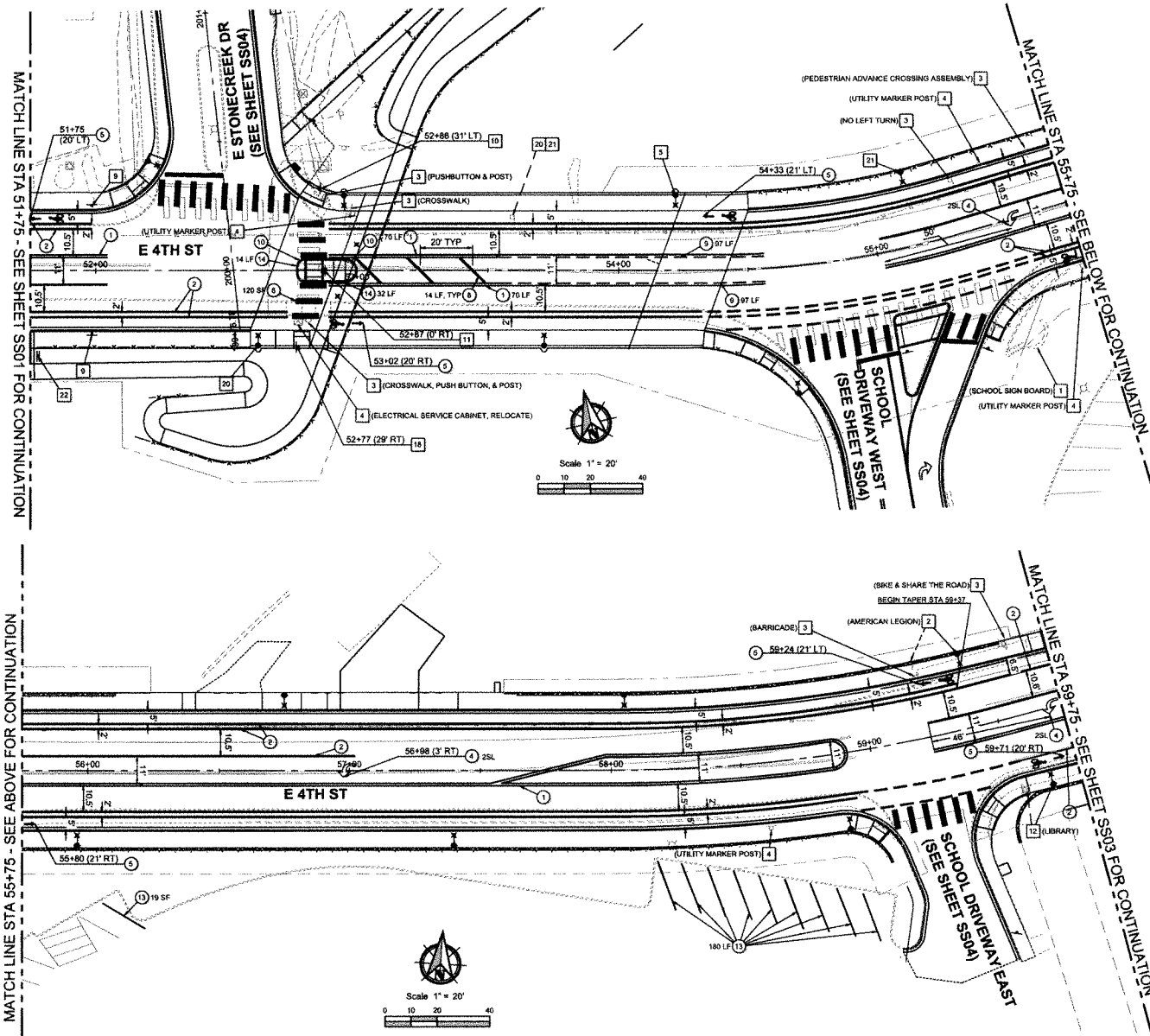
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HAW
CHECKED:
HAW
MAY 2005
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SHEET ID:
WA24

SHEET 135 OF 173







STRIPING AND SIGNING NOTES:

GENERAL NOTES:

- SEE SIGN TABLES, SHEET SS05, FOR SIGN INSTALLATION DETAILS.

STRIPING:

- YELLOW PAINTED DOUBLE YELLOW CENTERLINE PER WSDOT STANDARD PLAN M-20.10, SEE SHEET SS07, WITH RAISED PAVEMENT MARKERS (RPMs) PER WSDOT STANDARD PLAN M-20.30, SEE SHEET SS09.
- 8" WHITE PAINTED WIDE EDGE LINE PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.30 AND M-20.40, SEE SHEET SS09.
- 8" PLASTIC WHITE DOTTED EXTENSION LANE LINE PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.30, SEE SHEET SS09.
- PLASTIC WHITE TYPE 2SL (LEFT) TRAFFIC ARROW OR 2SR (RIGHT) AS SHOWN, PER WSDOT STANDARD PLAN M-24.40, SHEET SS08.
- PLASTIC WHITE BICYCLE LANE SYMBOL PER WSDOT STANDARD PLAN M-15.10, SHEET SS07.
- PLASTIC WHITE CROSS WALK PER WSDOT STANDARD PLAN M-15.10, SHEET SS07.
- REMOVE EXISTING STOP LINE AND INSTALL PLASTIC WHITE STOP LINE PER WSDOT STANDARD PLAN M-24.60, SHEET SS09.
- 12" YELLOW PLASTIC CROSSHATCH MARKING AT 45 DEGREES TO CENTERLINE.
- YELLOW PAINTED TWO-WAY LEFT TURN LANE STRIPING PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.40, SEE SHEET SS09.
- INSTALL RAISED PAVEMENT MARKERS (RPMs) AROUND RADIUS OF CURBS PER DETAIL, SEE SHEET SS08.
- REMOVE EXISTING LONGITUDINAL STRIPING AND SYMBOLS BETWEEN SAWCUT AND CROSSWALK, STA 60+03 TO STA 62+43.
- REMOVE EXISTING CROSS WALK AND INSTALL PLASTIC WHITE CROSS WALK PER WSDOT STANDARD PLAN M-15.10, SHEET SS07.
- REPAINT 4" WHITE PAINTED PARKING LINE STRIPING FOLLOWING PAVEMENT RESTORATION.
- PAINT FACE AND TOP OF CURB YELLOW.

SIGNING:

- PROTECT EXISTING SIGN.
- RELOCATE EXISTING SIGN.
- REMOVE EXISTING SIGN AND RETURN TO CITY PUBLIC WORKS DEPARTMENT.
- REMOVE/RELOCATE BY OTHERS.
- INSTALL SCHOOL ADVANCE CROSSING ASSEMBLY S1-1 & W15-RP.
- INSTALL SPEED LIMIT 25 (R2-1) SIGN ABOVE END SCHOOL ZONE (S5-2) SIGN ON SAME POST.
- INSTALL R3-17 BIKE LANE SIGN AND R3-17AP AHEAD PLAQUE.
- REMOVE EXISTING BIKE LANE END SIGNS FROM LIGHT POLE AT STA 60+76 AND INSTALL ON NEW POST WITH EXISTING NO PARKING SIGN NEAR WEST PROJECT EXTENT (STA 48+09, 23' LT). SEE SHEETS SS01 AND SS03 FOR LOCATIONS.
- INSTALL CROSSWALK CLOSED SIGN (R9-9) ON MODIFIED BIKE RACK PER DETAIL, SEE SHEET SS08.
- INSTALL UNIDIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7L, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN M-20.11, SEE SHEET SS10, SEE SHEET B425 FOR BRIDGE CONNECTION.
- INSTALL BIDIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN M-20.11, SEE SHEET SS10, SEE SHEET B425 FOR BRIDGE CONNECTION.
- REMOVE LIBRARY SIGN FROM EXISTING STREET LIGHT POLE AT STA 59+54, 29' RT, & RELOCATE TO NEW STREET LIGHT POLE AT STA 59+64, 29' RT.
- RELOCATE EXISTING STOP SIGN TO PROPOSED LIGHT POLE AND INSTALL NEW STREET NAME SIGN (D3-1) ABOVE IT. SEE DETAILS, SHEET SS06.
- INSTALL S1-1 AND M4-4 SCHOOL ADVANCE CROSSING ASSEMBLY.
- INSTALL R1-1 STOP SIGN.
- INSTALL SCHOOL SPEED LIMIT ASSEMBLY (S5-1) WITH TWO FLASHING YELLOW LED BEACONS PER CLATSOP COUNTY SCHOOL ZONE SIGNING & PAVEMENT MARKING POLICY (DECEMBER 2016), FIGURE 8.
- INSTALL SCHOOL ZONE SIGN (S1-1).
- INSTALL UNIDIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7L, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS06. USE STANDARD BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN M-20.10, SEE SHEET SS10, SEE SHEET B425 FOR BRIDGE CONNECTION.
- REMOVE EXISTING STOP AHEAD (W3-1) SIGN ONLY. INSTALL SIGNAL AHEAD (W3-2) SIGN ON EXISTING POST.
- REMOVE EXISTING EASTBOUND CREEK SIGN AT STA 53+60 AND INSTALL ON NEW LIGHT POLE AT STA 52+42.
- REMOVE EXISTING WESTBOUND CREEK SIGN AT STA 53+60 AND INSTALL ON NEW LIGHT POLE AT STA 55+18.
- INSTALL HIKING TRAIL (R5-06B) SIGN AND RIGHT DIRECTIONAL ARROW (M6-4R) SIGN FACING WEST AND INSTALL HIKING TRAIL (R5-06B) AND LEFT DIRECTIONAL ARROW (M6-4L) SIGN FACING EAST.
- INSTALL DO NOT ENTER (R5-1) SIGN.

SIGNING AND STRIPING PLAN FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

Know what's below.
Call before you dig.

811

CLATSOP COUNTY
PUBLIC WORKS
DEPARTMENT

DESIGNED:
BUSHKOWSKI
CHECKED:
DAH
MAY 2018
7:48:00

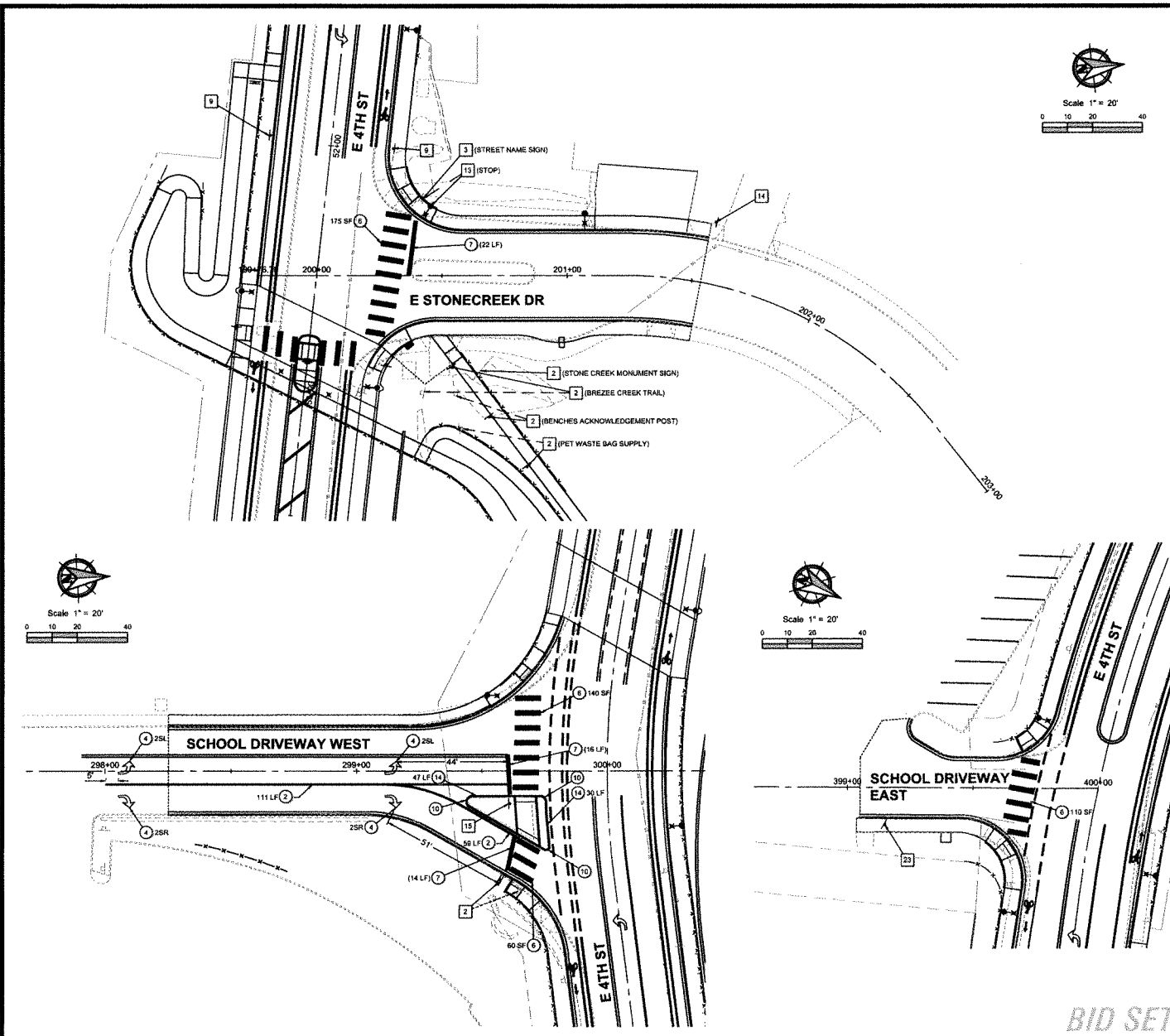
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SS02

SHEET 138 OF 173



PBS Engineering and
1235 SE 1st Center Drive
Vancouver, WA 98683
pbc.com

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STRIPING AND SIGNING NOTES:

GENERAL NOTES:

1. SEE SIGN TABLES, SHEET SS05, FOR SIGN INSTALLATION DETAILS.

STRIPING:

1. YELLOW PAINTED DOUBLE YELLOW CENTERLINE PER WSDOT STANDARD PLAN M-20.10, SEE SHEET SS07, WITH RAISED PAVEMENT MARKERS (RPMs) PER WSDOT STANDARD PLAN M-20.30, SEE SHEET SS09.
2. 8" WHITE PAINTED WIDE EDGE LINE PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.30, SEE SHEET SS09.
3. 8" PLASTIC WHITE DOTTED EXTENSION LANE LINE PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.30, SEE SHEET SS09.
4. PLASTIC WHITE TYPE 2SL (LEFT) TRAFFIC ARROW OR 2SR (RIGHT) AS SHOWN, PER WSDOT STANDARD PLAN M-24.40, SHEET SS08.
5. PLASTIC WHITE BICYCLE LANE SYMBOL PER WSDOT STANDARD PLAN M-20.30, SHEET SS07.
6. PLASTIC WHITE CROSS WALK PER WSDOT STANDARD PLAN M-15.10, SHEET SS07.
7. REMOVE EXISTING STOP LINE AND INSTALL PLASTIC WHITE STOP LINE PER WSDOT STANDARD PLAN M-24.80, SHEET SS08.
8. 12" YELLOW PLASTIC CROSSHATCH MARKING AT 45 DEGREES TO CENTERLINE.
9. YELLOW PAINTED TWO-WAY LEFT TURN LANE STRIPING PER WSDOT STANDARD PLAN M-20.10, SHEET SS07, WITH RPMs PER WSDOT STANDARD PLAN M-20.40, SEE SHEET SS09.
10. INSTALL RAISED PAVEMENT MARKERS (RPMs) AROUND RADIUS OF CURBS PER DETAIL, SEE SHEET SS08.
11. REMOVE EXISTING LONGITUDINAL STRIPING AND SYMBOLS BETWEEN SAWCUT AND CROSSWALK, STA 60+63 TO STA 62+43.
12. REMOVE EXISTING CROSS WALK AND INSTALL PLASTIC WHITE CROSS WALK PER WSDOT STANDARD PLAN M-15.10, SHEET SS07.
13. REPAINT 4" WHITE PAINTED PARKING LINE STRIPING FOLLOWING PAVEMENT RESTORATION.
14. PAINT FACE AND TOP OF CURB YELLOW.

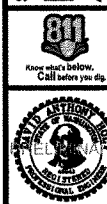
SIGNING:

1. PROTECT EXISTING SIGN.
2. RELOCATE EXISTING SIGN.
3. REMOVE EXISTING SIGN AND RETURN TO CITY PUBLIC WORKS DEPARTMENT.
4. REMOVE/RELOCATE BY OTHERS.
5. INSTALL SCHOOL ADVANCE CROSSING ASSEMBLY S1-1 & W16-9P.
6. INSTALL SPEED LIMIT 25 (R2-1) SIGN ABOVE END SCHOOL ZONE (SS-2) SIGN ON SAME POST.
7. INSTALL R2-17 BIKE LANE SIGN AND R3-17AP AHEAD PLAQUE.
8. REMOVE EXISTING BIKE LANE ENDS SIGNS FROM LIGHT POLE AT STA 60+76 AND INSTALL ON NEW POST WITH EXISTING NO PARKING SIGN NEAR WEST PROJECT EXTENT, STA 48+09, 23' LT. SEE SHEETS SS01 AND SS03 FOR LOCATIONS.
9. INSTALL CROSSWALK CLOSED SIGN (R9-8) ON MODIFIED BIKE RACK PER DETAIL, SEE SHEET SS08.
10. INSTALL UNI-DIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7L, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS04. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.11. SEE SHEET SS10. SEE SHEET BAZ5 FOR BRIDGE CONNECTION.
11. INSTALL BI-DIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS04. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.11. SEE SHEET SS10. SEE SHEET BAZ5 FOR BRIDGE CONNECTION.
12. REMOVE LIBRARY SIGN FROM EXISTING STREET LIGHT POLE AT STA 59+54, 28' RT, & RELOCATE TO NEW STREET LIGHT POLE AT STA 59+64, 29' RT.
13. RELOCATE EXISTING STOP SIGN TO PROPOSED LIGHT POLE AND INSTALL NEW STREET NAME SIGN (D3-1) ABOVE IT. SEE DETAILS, SHEET SS08.
14. INSTALL S1-1 AND M6-4 SCHOOL ADVANCE CROSSING ASSEMBLY.
15. INSTALL R1-1 STOP SIGN.
16. INSTALL SCHOOL SPEED LIMIT ASSEMBLY (SS-1) WITH TWO FLASHING YELLOW LED BEACONS PER CLARK COUNTY SCHOOL ZONE SIGNING & PAVEMENT MARKING POLICY (DECEMBER 2016), FIGURE 8.
17. INSTALL SCHOOL ZONE SIGN (S1-1).
18. INSTALL UNI-DIRECTIONAL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY WITH S1-1, W16-7L, RRFB, W11-501, AND PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY PER DETAILS ON SHEET SS04. USE STANDARD BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.10. SEE SHEET SS10. SEE SHEET BAZ5 FOR BRIDGE CONNECTION.
19. REMOVE EXISTING STOP AHEAD (W3-1) SIGN ONLY. INSTALL SIGNAL AHEAD (W3-3) SIGN ON EXISTING POST.
20. REMOVE EXISTING EASTBOUND CREEK SIGN AT STA 53+60 AND INSTALL ON NEW LIGHT POLE AT STA 52+62.
21. REMOVE EXISTING WESTBOUND CREEK SIGN AT STA 53+60 AND INSTALL ON NEW LIGHT POLE AT STA 55+18.
22. INSTALL HIKING TRAIL (R5-56B) SIGN AND RIGHT DIRECTIONAL ARROW (M6-4R) SIGN FACING WEST AND INSTALL HIKING TRAIL (R5-56B) AND LEFT DIRECTIONAL ARROW (M6-4L) SIGN FACING EAST.
23. INSTALL DO NOT ENTER (R5-1) SIGN.

SIGNING AND STRIPING PLAN FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:
BURNING WOOD
CHECKED:
DAH
MAY 2025
7:14M.000
SHEET ID:
SS04

SHEET 140 OF 173

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Roadside Sign Specifications - 4th Street									
Sign #	Sign Code / Description	Location*	Post Material	Post Size (IN)	Post Length (FT)			Clearance (FT)	Remarks
					H	V	W		
1-1	BIKE LANE SIGN (R3-17)	44+54	PSST	2	10'-8"	7'-8"	5'-4"		INSTALL ABOVE SIGN 1-2 PERPENDICULAR TO 4TH STREET.
1-2	AHEAD SIGN (R3-17aP)	44+54	PSST	2	10'	7'	5'-4"		INSTALL PERPENDICULAR TO 4TH STREET.
1-3	BIKE LANE SIGN (R3-17)	46+09	PSST	2	12'-2"	9'-2"	5'-4"		INSTALL ABOVE SIGN 1-4 PERPENDICULAR TO 4TH STREET.
1-4	ENDS SIGN (R3-17bP)	46+09	PSST	2	12'-2"	8'-6"	5'-4"		INSTALL ABOVE SIGN 1-5 PERPENDICULAR TO 4TH STREET.
1-5	NO PARKING	46+09	PSST	2	12'-2"	7'	5'-4"		INSTALL 30' FROM PERPENDICULAR TO 4TH STREET.
1-6	SCHOOL SIGN (S1-1)	47+85	PSST	2	11'-6"	7'	5'-6"		INSTALL PERPENDICULAR TO 4TH STREET.
1-7	SCHOOL SPEED LIMIT 20 WHEN FLASHING (SS-1)	49+37				7'	6'		INSTALL PERPENDICULAR TO 4TH STREET AS PART OF SCHOOL SPEED LIMIT ASSEMBLY PER CLARK COUNTY SCHOOL ZONE SIGNING & PAVEMENT MARKING POLICY (DECEMBER 2016), FIGURE 8.
1-8	SPEED LIMIT 25 (R2-1)	49+37	PSST	2	13'-6"	9'-6"	6'		INSTALL ABOVE SIGN 1-9 PERPENDICULAR TO 4TH STREET.
1-9	END SCHOOL ZONE SIGN (SS-2)	49+37	PSST	2	13'-6"	7'	6'		INSTALL PERPENDICULAR TO 4TH STREET.
1-10	SCHOOL SIGN (S1-1)	50+85	PSST	2	12'-6"	8'	5'		INSTALL ABOVE SIGN 1-11 PERPENDICULAR TO 4TH STREET.
1-11	AHEAD SIGN (W16-6P)	50+85	PSST	2	12'-6"	7'	5'		INSTALL PERPENDICULAR TO 4TH STREET.
2-1	HIKING TRAIL SIGN (RS-06B)	51+78	PSST	2	4'-9"	3'-3"	10'		INSTALL ABOVE SIGN 2-3 PERPENDICULAR TO 4TH STREET FACING WEST.
2-2	HIKING TRAIL SIGN (RS-06B)	51+78	PSST	2	4'-9"	3'-3"	10'		INSTALL ABOVE SIGN 2-4 PERPENDICULAR TO 4TH STREET FACING EAST.
2-3	RIGHT DIRECTIONAL ARROW (M6-4R)	51+78	PSST	2	4'-9"	2'-6"	10'		INSTALL PERPENDICULAR TO 4TH STREET FACING WEST.
2-4	LEFT DIRECTIONAL ARROW (M6-4L)	51+78	PSST	2	4'-9"	2'-6"	10'		INSTALL PERPENDICULAR TO 4TH STREET FACING EAST.
2-5	CROSSWALK CLOSED SIGN (R9-9)	51+99	BIKE RACK	2	2'-11"	12'	1'-6"		INSTALL ON MODIFIED BIKE RACK PER DETAIL, SEE SHEET SS06. STATION REFERENCE IS TO CENTER OF BIKE RACK STRUCTURE.
2-6	CROSSWALK CLOSED SIGN (R9-9)	51+99	BIKE RACK	2	2'-11"	12'	2'		INSTALL ON MODIFIED BIKE RACK PER DETAIL, SEE SHEET SS06. STATION REFERENCE IS TO CENTER OF BIKE RACK STRUCTURE.
2-7	CREEK SIGN	52+62				7'	6'		INSTALL ON LIGHT POLE PERPENDICULAR TO 4TH STREET.
2-8	SCHOOL SIGN (S1-1)	52+77	STANDARD	3	14'	9'	6'-6"		INSTALL ABOVE SIGN 2-9 PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE STANDARD BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.10, SEE SHEET SS10.
2-9	DIAGONAL ARROW SIGN (W16-7L)	52+77	STANDARD	3	14'	7'	6'-6"		INSTALL ABOVE SIGN 2-10 PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE STANDARD BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.10, SEE SHEET SS10.
2-10	CROSS TRAFFIC MAY NOT STOP SIGN (W11-501)	52+77	STANDARD	3	14'	5'	6'-6"		INSTALL PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE STANDARD BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.10, SEE SHEET SS10.
2-11	SCHOOL SIGN (S1-1)	52+86	CURB	3	14'	9'	4'-6"		INSTALL ABOVE SIGN 2-13 PERPENDICULAR TO 4TH STREET FACING WEST AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-12	SCHOOL SIGN (S1-1)	52+86	CURB	3	14'	9'	4'-6"		INSTALL ABOVE SIGN 2-14 PERPENDICULAR TO 4TH STREET FACING EAST AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-13	DIAGONAL ARROW SIGN (W16-7L)	52+86	CURB	3	14'	7'	4'-6"		INSTALL ABOVE SIGN 2-15 PERPENDICULAR TO 4TH STREET FACING WEST AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-14	DIAGONAL ARROW SIGN (W16-7L)	52+86	CURB	3	14'	7'	4'-6"		INSTALL PERPENDICULAR TO 4TH STREET FACING EAST AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-15	CROSS TRAFFIC MAY NOT STOP SIGN (W11-501)	52+86	CURB	3	14'	5'	4'-6"		INSTALL PERPENDICULAR TO 4TH STREET FACING WEST AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-16	SCHOOL SIGN (S1-1)	52+87	CURB	3	14'	9'	6'-6"		INSTALL ABOVE SIGN 2-17 PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.11, SEE SHEET SS10.
2-17	DIAGONAL ARROW SIGN (W16-7L)	52+87	CURB	3	14'	7'	6'-6"		INSTALL ABOVE SIGN 2-18 PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.11, SEE SHEET SS10.
2-18	CROSS TRAFFIC MAY NOT STOP SIGN (W11-501)	52+87	CURB	3	14'	5'	6'-6"		INSTALL PERPENDICULAR TO 4TH STREET AS PART OF RRFB ASSEMBLY PER DETAIL, SEE SHEET SS06. USE CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLANJ-20.11, SEE SHEET SS10.
2-19	SCHOOL SIGN (S1-1)	54+33				8'	6'		INSTALL ON LIGHT POLE ABOVE SIGN 2-16 PERPENDICULAR TO 4TH STREET.
2-20	AHEAD SIGN (W16-6P)	54+33				7'	6'		INSTALL ON LIGHT POLE PERPENDICULAR TO 4TH STREET.
2-21	CREEK SIGN	55+16				7'	6'		INSTALL ON LIGHT POLE PERPENDICULAR TO 4TH STREET.
2-22	AMERICAN LEGION SIGN	59+41				7'	6'		INSTALL ON LIGHT POLE PERPENDICULAR TO 4TH STREET.
2-23	LIBRARY SIGN	59+64				7'	5'-10"		INSTALL ON LIGHT POLE PERPENDICULAR TO 4TH STREET.
*STATIONING FOR SIGN LOCATIONS BASED ON 4TH STREET CONSTRUCTION CENTERLINE.									
Roadside Sign Specifications - E Stonecreek Dr									
Sign #	Sign Code / Description	Location*	Post Material	Post Size (IN)	Post Length (FT)			Clearance (FT)	Remarks
					H	V	W		
4-1	STREET NAME SIGN (D3-1)	200+46				10'-2"	6'		INSTALL ON LIGHT POLE ABOVE SIGN 4-2 PERPENDICULAR TO STONECREEK DR SEE SNS-1 DETAIL, SHEET SS06.
4-2	STREET NAME SIGN (D3-1)	200+46				9'-6"	6'		INSTALL ON LIGHT POLE ABOVE SIGN 4-3 PERPENDICULAR TO 4TH STREET SEE SNS-2 DETAIL, SHEET SS06.
4-3	STOP SIGN (R1-1)	200+46				7'	6'		INSTALL ON LIGHT POLE PERPENDICULAR TO E STONECREEK DR.
4-4	BREEZEE CREEK TRAIL SIGN								REINSTALL SIGN USING EXISTING SIGN POST PERPENDICULAR TO TRAIL.
4-5	BENCHES ACKNOWLEDGEMENT POST								REINSTALL SIGN USING EXISTING SIGN POST PERPENDICULAR TO TRAIL.
4-6	PET WASTE BAG SUPPLY SIGN								REINSTALL SIGN USING EXISTING SIGN POST PERPENDICULAR TO TRAIL.
4-7	SCHOOL SIGN (S1-1)	201+55	PSST	2	12'-3"	7'-9"	7'		INSTALL ABOVE SIGN 4-5 PERPENDICULAR TO E STONECREEK DR.
4-8	DIRECTIONAL ARROWS SIGN (M6-4)	201+55	PSST	2	12'-3"	7'	7'		INSTALL PERPENDICULAR TO E STONECREEK DR.
*STATIONING FOR SIGN LOCATIONS BASED ON E STONECREEK DR CONSTRUCTION CENTERLINE.									

Roadside Sign Specifications - School Driveway West									
Sign #	Sign Code / Description	Location***	Post Material	Post Size (IN)	Post Length (FT)			Clearance (FT)	Remarks
					H	V	W		
4-9	STOP SIGN (R1-1)	299+57	PSST	2	11'	7'	3'-3"		INSTALL PERPENDICULAR TO SCHOOL DRIVEWAY WEST.
4-10	STOP SIGN (R1-1)	299+61	PSST	2	11'	7'	3'-3"		INSTALL PERPENDICULAR TO SCHOOL DRIVEWAY WEST.
***STATIONING FOR SIGN LOCATIONS BASED ON SCHOOL DRIVEWAY WEST CONSTRUCTION CENTERLINE.									
Roadside Sign Specifications - School Driveway East									
Sign #	Sign Code / Description	Location****	Post Material	Post Size (IN)	Post Length (FT)			Clearance (FT)	Remarks
					H	V	W		
4-11	DO NOT ENTER SIGN (R5-1)	399+15	PSST	2	11'	7'	3'		INSTALL PERPENDICULAR TO SCHOOL DRIVEWAY WEST.
****STATIONING FOR SIGN LOCATIONS BASED ON SCHOOL DRIVEWAY EAST CONSTRUCTION CENTERLINE.									
Roadside Sign Specifications - NE Highland Rd									
Sign #	Sign Code / Description	Location*****	Post Material	Post Size (IN)	Post Length (FT)			Clearance (FT)	Remarks
					H	V	W		
3-1	SIGNAL AHEAD (W3-3)	501+89	PSST	2	11'	7'	8'-5"		INSTALL PERPENDICULAR TO NE HIGHLAND RD.
*****STATIONING FOR SIGN LOCATIONS BASED ON NE HIGHLAND RD CONSTRUCTION CENTERLINE.									
NOTES									
1. ALL SIGNS PER MUTCD.									
2. ALL SIGNS TO BE MUTCD STANDARD SIZE. TYPE IV SHEETING UNLESS OTHERWISE NOTED.									
3. PSST SIGN INSTALLATION PER DETAIL, THIS SHEET.									
4. SEE TRAFFIC SIGNAL SHEETS ##### FOR SIGNS MOUNTED OVERHEAD ON TRAFFIC SIGNAL MAST ARMS.									
5. SEE RRFB SIGN ASSEMBLY AND PEDESTRIAN PUSHBUTTON DETAIL S, SHEET SS06, AND CURB BASE FOUNDATION TYPE PER WSDOT STANDARD PLAN J-20.11, SEE SHEET SS10.									

SIGN INSTALLATION DETAIL

PBS Engineering and Construction
1235 SE 14th Center Drive
Vero Beach, FL 32909
407.565.5544
pbes.com

SIGNING AND STRIPING DETAILS FOR:
BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

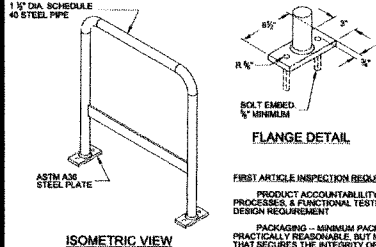
Know what's below.
Call before you dig.

DESIGNED: BUNBURY
CHECKED: DAH
DATE: MAY 2023
TIME: 7:14:00:000

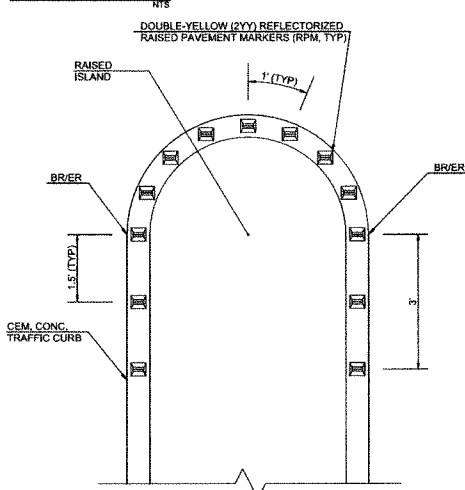
SHEET ID:
SS05

SHEET 141 OF 173

BID SET



BIKE RACK DETAIL

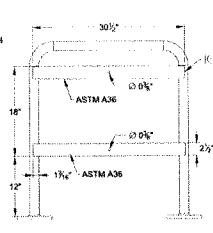


**RAISED PAVEMENT MARKER
(RPM) PLACEMENT DETAIL**

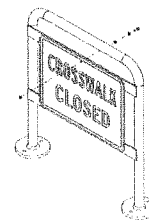
- MATERIALS**
1. PIPE: ASTM A53 GRADE B STANDARD WEIGHT STEEL PIPE, 1 1/2" DIAMETER CONSTRUCTED OF 90° BENDS WITH AN INSID RADIUS OF BEND OF 3 R₁ (± 1% SNOP TOLERANCE.)
 2. PLATE: ASTM A36 1/4" THICK PLATE WITH TWO 3/4" DIAMETER HOLES.
 3. BOLT: 1/2" DIAMETER X 1 1/2" LONG PIN HEX BUTTON SOCKET SCREWER BOLT, STAINLESS STEEL, OR APPROVED EQUAL.
 4. ANCHOR: 3/4" DIAMETER 2" LONG THREADED FOR 3/4" BOLTS
- MATERIAL FINISH**
1. SANDBLAST.
 2. ZINC-RICH EPOXY PRIMER
 3. POLYESTER TRIGLYCEROL ACRYLATE (TGA) FRSH, 4 MIL THICK IN RAYONOL 805010, GENTIAN BLUE

MOUNTING PROCEDURES

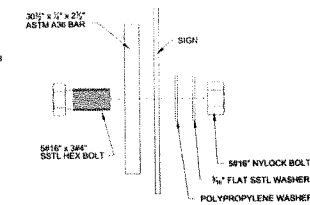
1. ALL BICYCLE RACKS TO BE LOCATED IN CITY RIGHT-OF-WAY SHALL BE INSTALLED PER ADMINISTRATIVE RULE 16.09
2. ALL BOLT HOLES IN THE CONCRETE PAVEMENT OR THE CONCRETE FOUNDATION SHALL BE PREDRILLED HOLES, 5" DIAMETER x 2" DEEP, NO PROTRUDING OR NON-FLUSH. ALL BOLT HOLES SHALL BE USED. BOLTS TO BE INSTALLED USING LOGIC TIGHT.
3. FOR INSTALLATION IN PAVERS OR FOR CONCRETE PAVEMENT THAT IS LESS THAN 3" THICK, CONSTRUCT CONCRETE FOUNDATION IN ACCORDANCE WITH DETAILS SHOWN.
4. FOR CONCRETE PAVEMENT THAT IS NOT LEVEL, USE HOT DIPPED GALVANIZED STEEL OR STAINLESS STEEL WASHERS UNDER THE RACK AND SUPPORT PLATES BEFORE DRIVING ANCHOR BOLTS.



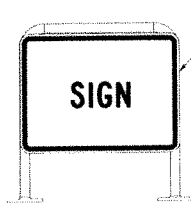
FRONT VIEW



ISOMETRIC VIEW

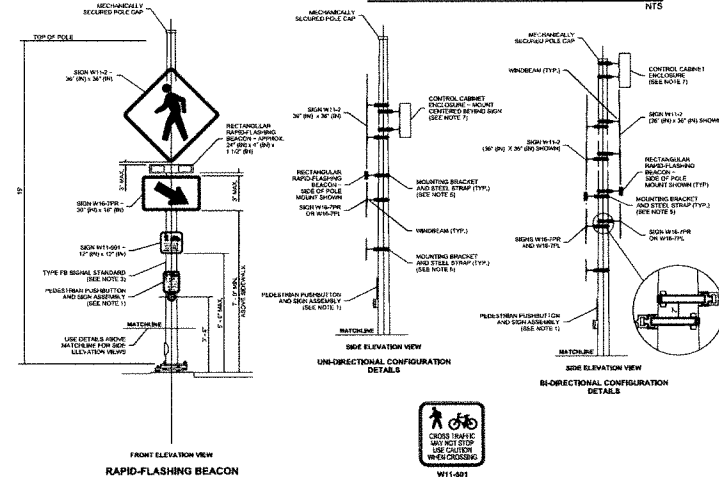


ASSEMBLY DETAIL



FRONT VIEW LARGE SIGN

MODIFIED BIKE RACK SIGN MOUNT



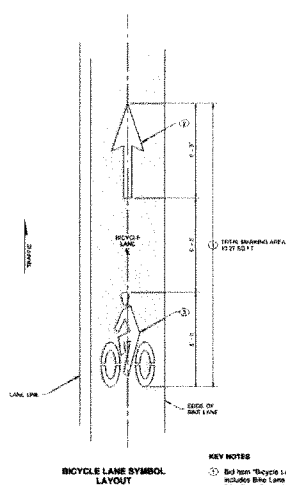
RRFB DETAILS

- NOTES:
1. FOR DETAIL, NOT SHOWN, SEE BIKE RACK DETAIL, THIS SHEET.
 2. WELD CROSS BARS AND DRILL HOLES PRIOR TO GALVANIZATION. GALVANIZE PER F-576
 3. WELD CROSS BARS TO OUTSIDE FACE OF BIKE RACK 1/4" FROM INSIDE AS SHOWN.
 4. INSTALL SIGN TO ALIGN WITH TOP AND BOTTOM EDGE OF CROSS BARS SO THAT THE SIGN DOES NOT OBLITERATE THE CROSS BARS

- NOTES
1. FIFTEEN DAY PURCHASE TURN AND LEASE ASSEMBLY - MAY BE SUPPLIED PARTS, LEASE OF 10K AT 1.00 PER 810-2500 IN ACCORDANCE WITH LEASE AGREEMENT. THIS INCLUDE INTEGRATED VIEWING LIGHTS.
 2. SEE DETAIL SHEET BAZN FOR BANNER CONSTRUCTION DETAILS NOT SHOWN.
 3. SEE STANDARD PLAN 3-21 FOR SIGNAL STANDARD DETAILS NOT SHOWN.
 4. SEE STANDARD PLAN 3-21 17 DETAIL C FOR WIRING DETAILS NOT SHOWN.
 5. SEE STANDARD PLAN 3-21 FOR 350K IN ADDITION WITH CHW SIGNAL STANDARD DETAILS.
 6. TERMINATE 1919 CONNECTIONS FOR MANUFACTURERS RECOMMENDATION.
 7. CONTROL CABINET ENCLOSURE SHALL BE DESIGNED BY THE RFB MANUFACTURER. THE CABINET SHALL BE MANUFACTURED FOR TERMINAL CABINET QUALITY. QUALITY OF STANDARD SPECIFICATION SHALL BE OBSERVED.
 8. BIRPS DISPLAYS SHALL BE LITE TYPE MEETING THE INTENSITY REQUIREMENTS OF C-24E 1905.1 IN YELLOW. BUT SHALL NOT EXCEED 1905.1 CANDLEMILS DURING DAYLIGHT AND 1905.1 CANDLEMILS AT NIGHT.

BIO SKET

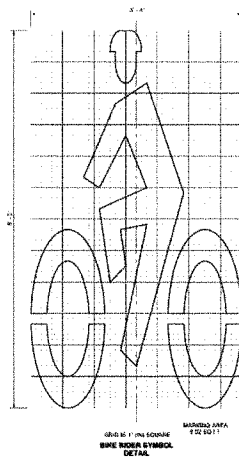
Drawn By: Mike Schum



BICYCLE LANE SYMBOL LAYOUT

KEY NOTES

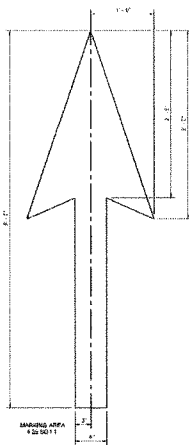
- ① Bid Item "Bicycle Lane Symbol" includes Bike Lane Arrow and Bike Rider Symbol
- ② 7' (B) x 6' (H) White Plastic Lane Arrow
- ③ Bike Rider Symbol



BIKE RIDER SYMBOL DETAIL

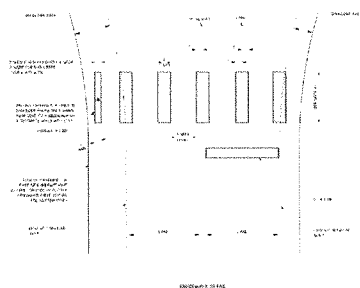
GENERAL NOTE

See Contract for location and material requirements.



BIKE LANE ARROW DETAIL

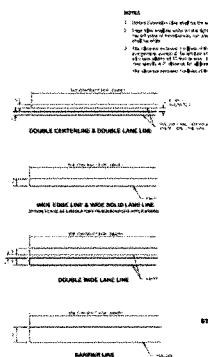
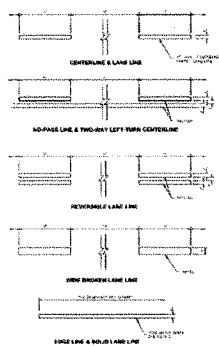
BICYCLE LANE SYMBOL LAYOUT



STANDARD PLAN VIEW



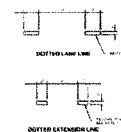
ELEVATION VIEW



NOTES

1. Lines shown on this drawing are to be used as a guide only.
2. The lines shown on this drawing are to be used as a guide only.
3. The lines shown on this drawing are to be used as a guide only.
4. The lines shown on this drawing are to be used as a guide only.
5. The lines shown on this drawing are to be used as a guide only.
6. The lines shown on this drawing are to be used as a guide only.
7. The lines shown on this drawing are to be used as a guide only.
8. The lines shown on this drawing are to be used as a guide only.
9. The lines shown on this drawing are to be used as a guide only.
10. The lines shown on this drawing are to be used as a guide only.

**LONGITUDINAL MARKING PATTERNS
STANDARD PLAN 0-30, 10-04**



ROUNDABOUT SPECIFIC LINES



**LONGITUDINAL MARKING PATTERNS
STANDARD PLAN 0-30, 10-04**

BID SET

PBS

Professional Building Services, Inc.
1235 SE First Center Drive
Portland, OR 97214
(503) 238-1111
www.pbsinc.com

SIGNING AND STRIPING WSDOT DETAILS FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

City of La Center

1000 1st Street
La Center, WA 99026
(509) 325-1111
www.lacenterwa.gov

DESIGNED:

BUNGEAL & SONS

CHECKED:

DAH

MAY 2025

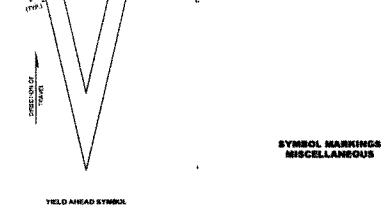
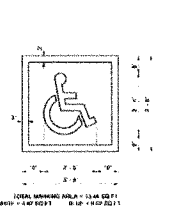
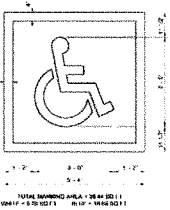
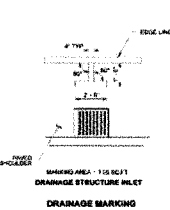
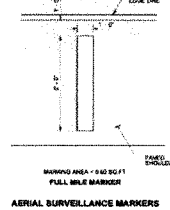
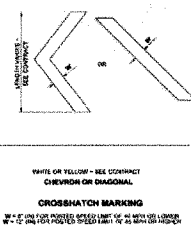
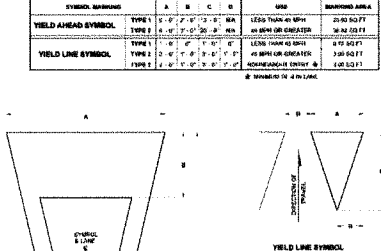
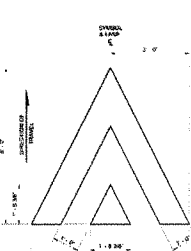
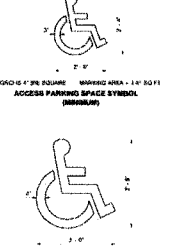
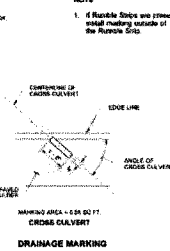
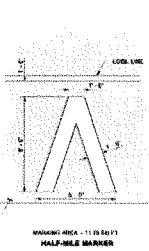
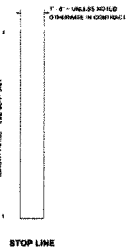
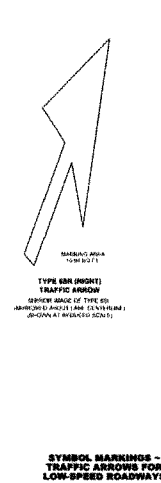
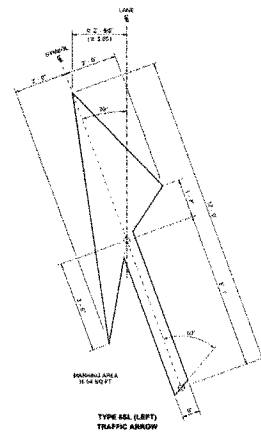
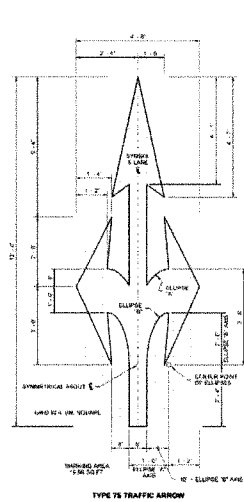
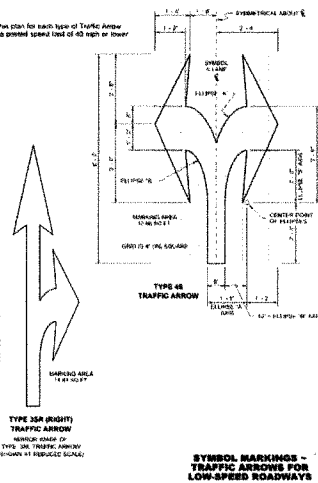
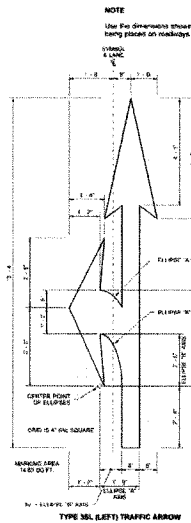
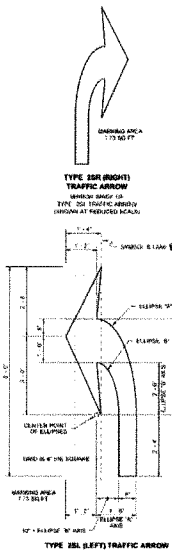
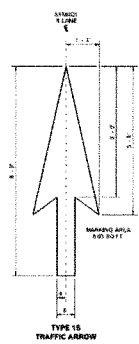
71456.000

SHEET ID

SS07

SHEET

143 OF 173



WHITE OR YELLOW - SEE CONTRACT
 CHEVRON OR DIAGONAL

MARKING AREA: 10' x 10' (10' x 10')

MARKING AREA: 10' x 10' (10' x 10')

MARKING AREA: 10' x 10' (10' x 10')

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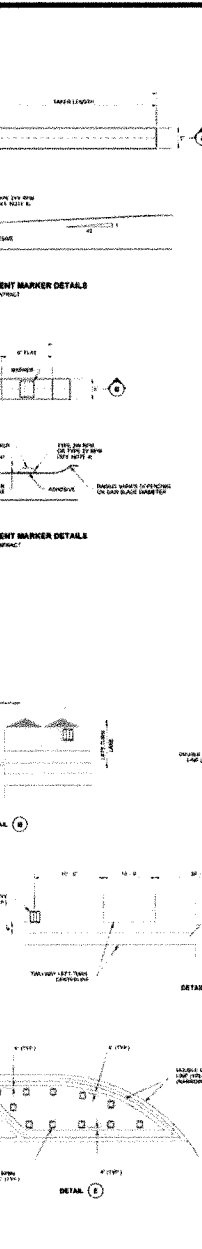
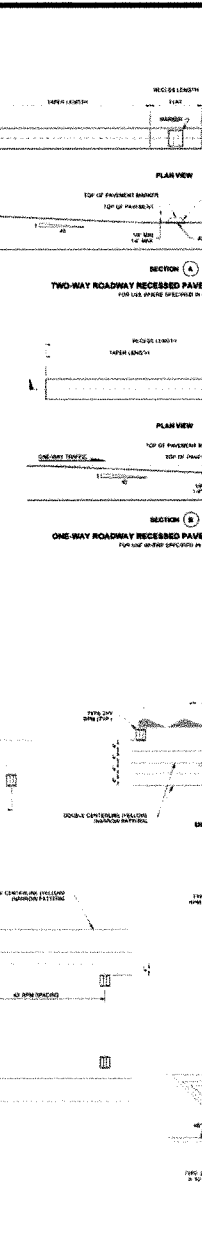
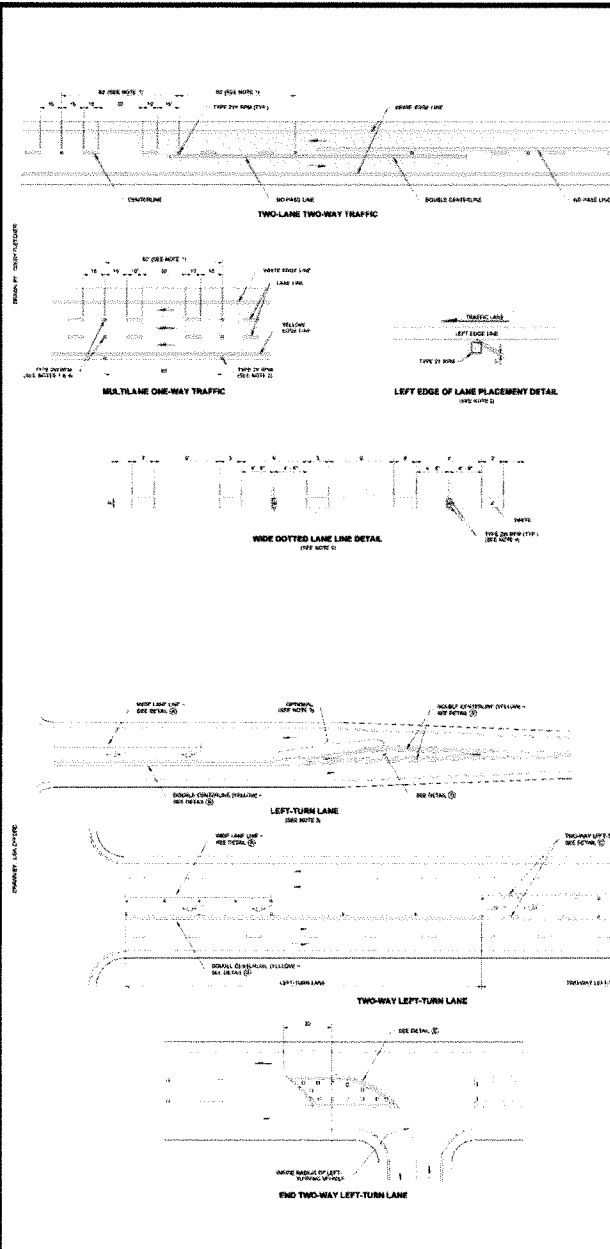
MARKING AREA: 10' x 10' (10' x 10')

PBS Engineering & Construction
 1335 SE Tenth Center Drive
 Vancouver, WA 98683
 (509) 525-1000
 pbs@pbs.com

SIGNING AND STRIPING WSDOT DETAILS FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
 A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

Know what's below.
 Call before you dig.

DESIGNED: JLM/KAS/W
 CHECKED: DAH
 MAY 2023
 1487000
 SHEET 144 OF 173



PBS

SIGNING AND STRIPING WSDOT DETAILS FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

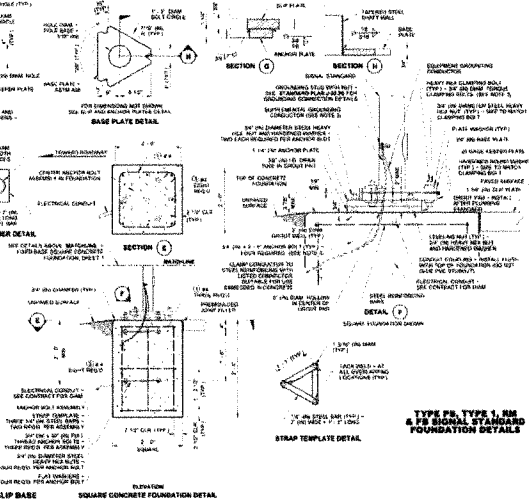
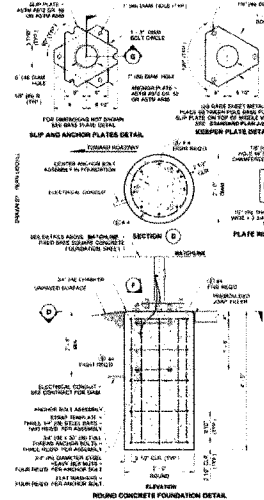
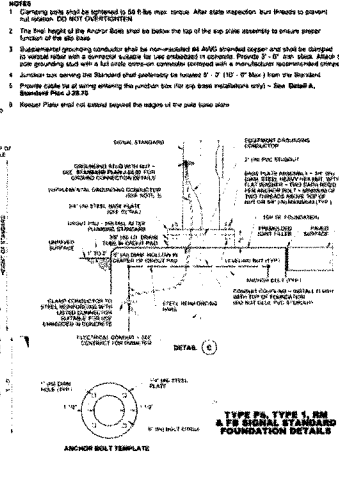
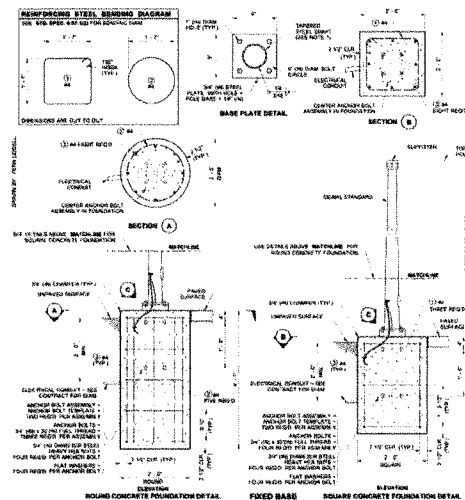
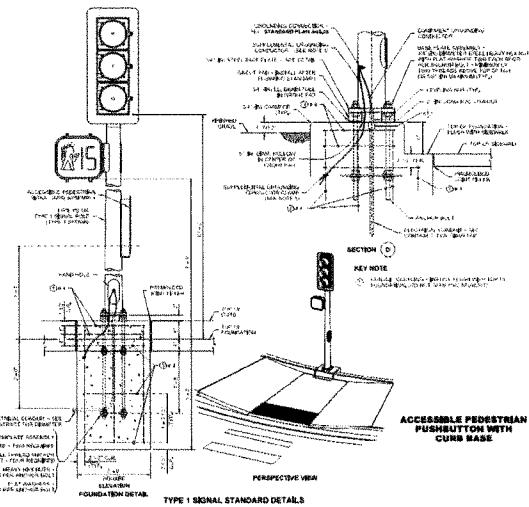
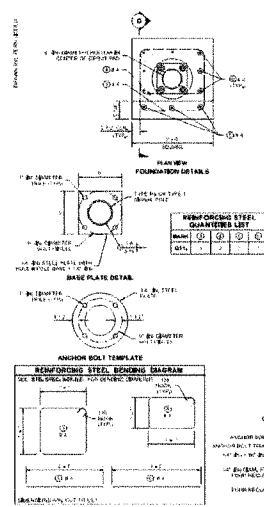
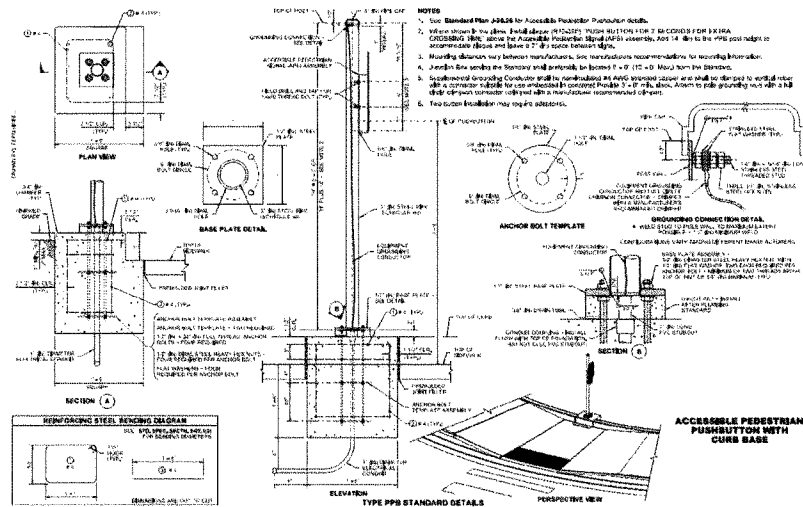
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

811

Know what's below. Call before you dig.

SEAL OF THE CITY OF LA CENTER, WASHINGTON

DESIGNED: BUREAU/ASW
CHECKED: DAN
MAY 2025
14871487-000
SHEET NO.
SS09
SHEET 145 OF 173



PBS

ENGINEERING AND DESIGN

1325 SE 10th Center Drive

Van Nuys, CA 91411

PH: 818.708.1111

WWW.PBS-ED.COM

SIGNING AND STRIPING WSDOT DETAILS FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

811

Know what's below. Call before you dig.

DESIGNED: SUBUDASH

CHECKED: DAH

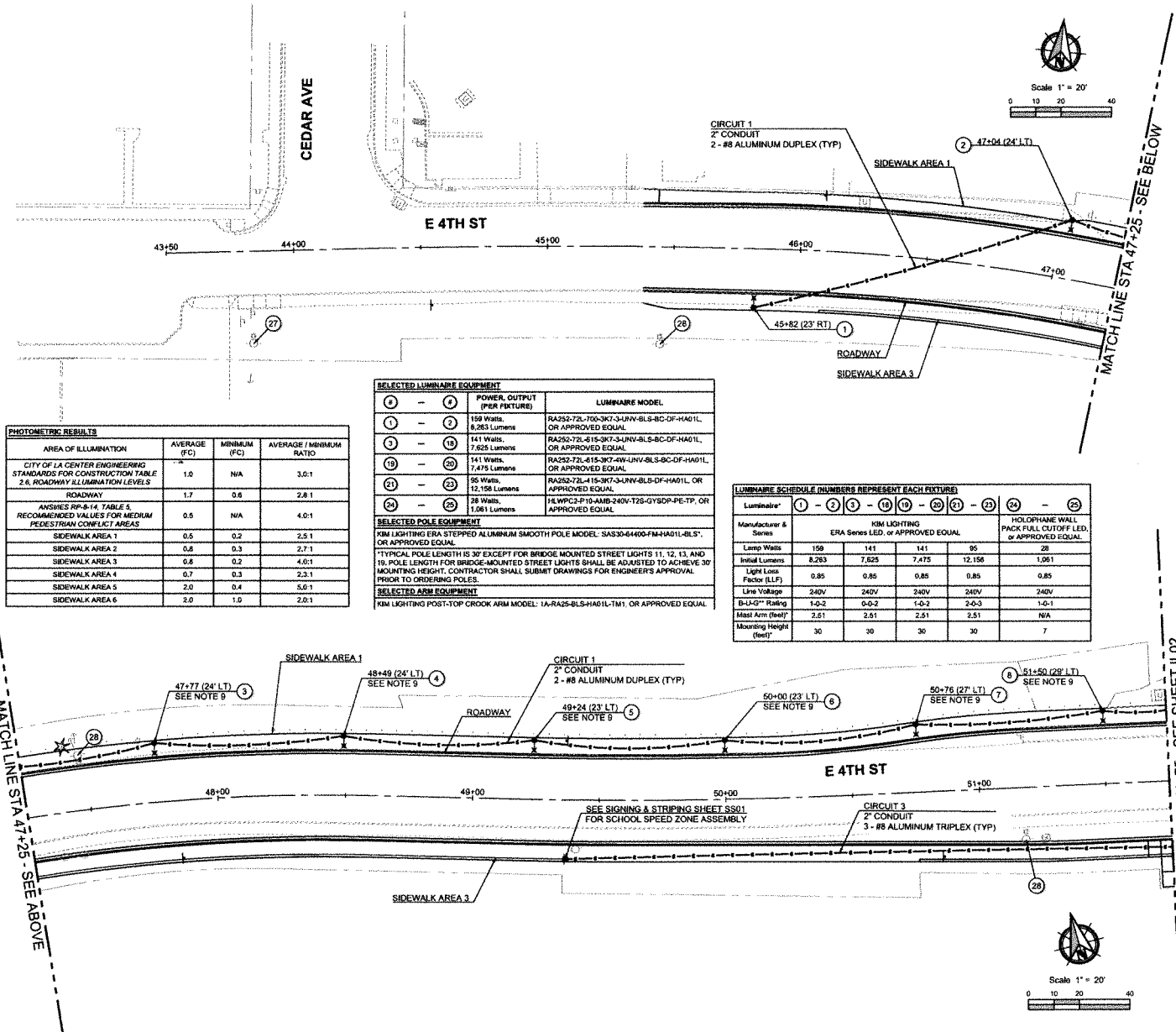
MAY 2023

1485-00

SHEET ID: SS10

SHEET 146 OF 173

BID SET



PHOTOMETRIC RESULTS

AREA OF ILLUMINATION	AVERAGE (FC)	MINIMUM (FC)	AVERAGE / MINIMUM RATIO
CITY OF LA CENTER ENGINEERING STANDARDS FOR CONSTRUCTION TABLE 2.6, ROADWAY ILLUMINATION LEVELS	1.0	N/A	3.0:1
ROADWAY	1.7	0.6	2.8:1
ANSIIES RP-8-14, TABLE 3, RECOMMENDED VALUES FOR MEDIUM PEDESTRIAN CONFLICT AREAS	0.5	N/A	4.0:1
SIDEWALK AREA 1	0.5	0.2	2.5:1
SIDEWALK AREA 2	0.8	0.3	2.7:1
SIDEWALK AREA 3	0.8	0.2	4.0:1
SIDEWALK AREA 4	0.7	0.3	2.3:1
SIDEWALK AREA 5	2.0	0.4	5.0:1
SIDEWALK AREA 6	2.0	1.0	2.0:1

SELECTED LUMINAIRE EQUIPMENT

POWER, OUTPUT (PER FIXTURE)	LUMINAIRE MODEL
159 Watts, 8,263 Lumens	RA252-72L-700-3K7-3-UNV-BS-BC-DF-HA01L OR APPROVED EQUAL
141 Watts, 7,925 Lumens	RA252-72L-615-3K7-3-UNV-BS-BC-DF-HA01L OR APPROVED EQUAL
141 Watts, 7,475 Lumens	RA252-72L-615-3K7-4-UNV-BS-BC-DF-HA01L OR APPROVED EQUAL
95 Watts, 12,158 Lumens	RA252-72L-415-3K7-3-UNV-BS-DF-HA01L OR APPROVED EQUAL
38 Watts, 1,061 Lumens	16LWPC2-P10-AMB-280V-T2S-GYSDP-PE-TP OR APPROVED EQUAL

SELECTED POLE EQUIPMENT

KIM LIGHTING ERA STEPPED ALUMINUM SMOOTH POLE MODEL: SAS30-64400-FM-HA01L-BLS* OR APPROVED EQUAL

*TYPICAL POLE LENGTH IS 30' EXCEPT FOR BRIDGE MOUNTED STREET LIGHTS 11, 12, 13, AND 19. POLE LENGTH FOR BRIDGE MOUNTED STREET LIGHTS SHALL BE ADJUSTED TO ACHIEVE 30' MOUNTING HEIGHT. CONTRACTOR SHALL SUBMIT DRAWINGS FOR ENGINEER'S APPROVAL PRIOR TO ORDERING POLES.

SELECTED ARM EQUIPMENT

KIM LIGHTING POST-TOP CROOK ARM MODEL: 1A-RA25-BLS-HA01L-TM1 OR APPROVED EQUAL

LUMINAIRE SCHEDULE (NUMBERS REPRESENT EACH FIXTURE)																									
Luminaire*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Manufacturer & Series	KIM LIGHTING ERA Series LED, OR APPROVED EQUAL															HOLOPHANE WALL PACK FULL CUTOFF LED, OR APPROVED EQUAL									
Lamp Watts	159	141	141	95	28																				
Initial Lumens	8,263	7,925	7,475	12,158	1,061																				
Light Loss Factor (LLF)	0.85	0.85	0.85	0.85	0.85	0.85																			
Line Voltage	240V	240V	240V	240V	240V	240V																			
B-LUG** Rating	1-0-2	0-0-2	1-0-2	2-0-3	1-0-1																				
Max Arm (feet)	2.51	2.51	2.51	2.51	N/A																				
Mounting Height (feet)	30	30	30	30	7																				

- ILLUMINATION PLAN NOTES**
- PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
 - PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
 - PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 4W)
 - PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
 - PROPOSED WALL-MOUNTED LUMINAIRES AFFIXED TO BRIDGE ABUTMENT ABOVE TRAIL, SHIELD CREEK FROM LIGHT AND INSTALL PROTECTIVE CAGE.
 - INSTALL TYPE D SERVICE CABINET. SEE WSDOT STD PLAN 4-10.21(A), SHEET IL05. * ONE 200 AMP MAIN BREAKER * FIVE 20-AMP CIRCUIT BREAKERS CONNECT TO ASSIGNED NEAREST CLARK PUBLIC UTILITIES (CPU) POWER SOURCE. COORDINATE WITH CPU.
 - EXISTING STREET LIGHT TO REMAIN. PHOTOMETRICS ARE ASSUMED BASED ON SIMILAR LUMINAIRES.
 - EXISTING STREET LIGHT TO BE REMOVED BY OTHERS
 - REMOVE EXISTING PRIVATE SITE LIGHT
 - REMOVE EXISTING STREET LIGHT AND RETURN MATERIALS TO CITY PUBLIC WORKS
 - PROPOSED RECTANGULAR RAPID FLASHING BEACON (RRFB), INSTALLED ON BRIDGE BARRIER W/ PEDESTRIAN PUSH BUTTON (LSFT ABOVE SIDEWALK) PER WSDOT STD PLANS 4-00.26, AND 4-21.16, SHEETS IL05 & IL06. SEE DETAIL, SHEET BA3 FOR BARRIER CONNECTION. SEE ADDITIONAL DETAIL ON SIGNING & STRIPING SHEET SS02.
 - EXISTING SIGNAL POLE AND PUSH BUTTON TO REMAIN.

- ILLUMINATION GENERAL NOTES**
- LUMINAIRES ARE ORIENTED PERPENDICULAR TO ROADWAY CENTERLINE UNLESS NOTED OTHERWISE.
 - ALL CONDUITS SHALL BE SCHEDULE 40 PVC OR POLYPROPYLENE ELECTRICAL CONDUIT.
 - THIS DRAWING PROVIDES A SCHEMATIC OF THE STREET LIGHT SYSTEM ONLY. ALL CONDUIT MUST BE INSTALLED AROUND CONFLICTING UTILITIES THAT MAY NOT BE SHOWN ON THIS PLAN. FINAL CONDUIT LOCATIONS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
 - POWER SOURCE LOCATION(S) SHALL BE DETERMINED BY CLARK PUBLIC UTILITIES (CPU). ALL ILLUMINATION POWER SOURCES SHALL BE VERIFIED WITH CPU PLANS. CHANGES IN POWER SOURCE LOCATIONS WILL REQUIRE AS-BUILT DRAWINGS.
 - CALL CPU AT 360-992-3000 FOR UTILITY COORDINATION ON STREET LIGHTS.
 - THE CONTRACTOR SHALL INSTALL ALL POLES, CONDUITS, CONDUIT WIRING, LUMINAIRE ASSEMBLIES, AND LUMINAIRE WIRING.
 - STREET LIGHTING MATERIALS AND INSTALLATIONS SHALL CONFORM TO CITY OF LA CENTER AND CPU STANDARDS AND THE CONTRACT PLANS. MATERIALS AND INSTALLATIONS SHALL BE APPROVED BY CITY (LUMINAIRES, POLES, FOUNDATIONS) AND CPU (CONDUIT, WIRES, CONNECTIONS).
 - ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO THE CURRENT STANDARDS OF THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AND THE UNDERWRITERS LABORATORY (UL) WHEREVER APPLICABLE. IN ADDITION TO THE REQUIREMENTS OF THE PLANS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE, THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AND ANY APPLICABLE LOCAL ORDINANCES.
 - FOR LUMINAIRES PROPOSED IN FRONT OF STRUCTURAL WALLS, SEE FOOTING DETAIL C, SHEET BA3.
 - FOR LUMINAIRES PROPOSED ON BRIDGE, SEE FOOTING DETAIL, SHEET BA3.

ILLUMINATION PLAN FOR:

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

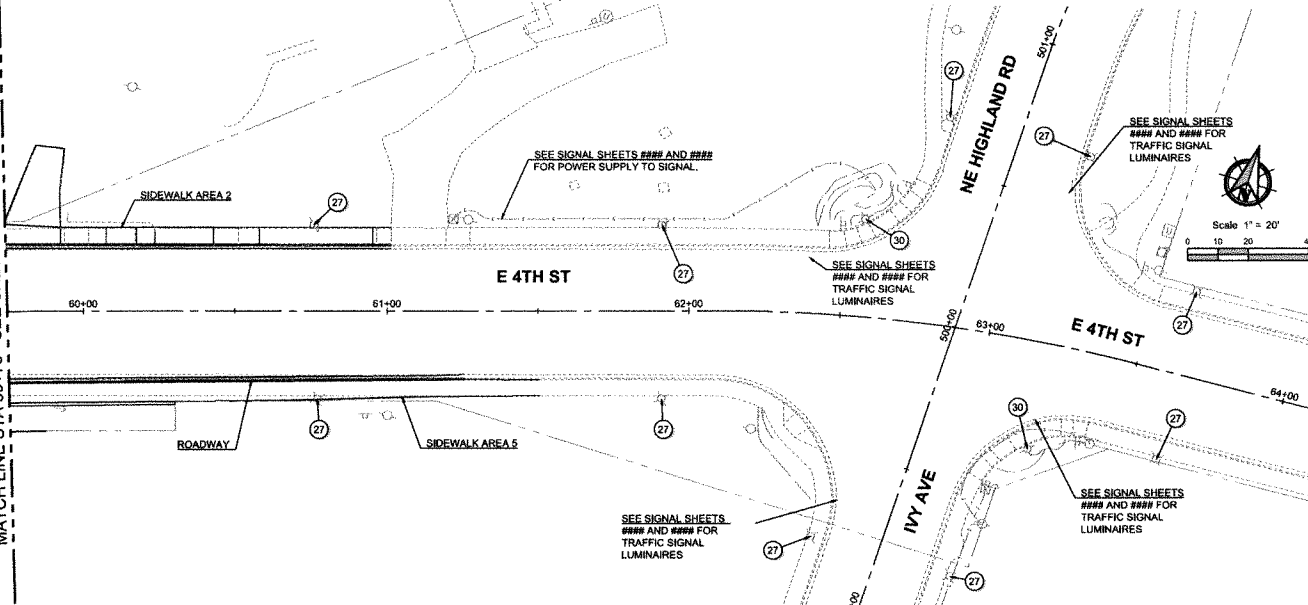
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MAY 2025
71486.000

SHEET ID
IL01

SHEET 147 OF 173

MATCH LINE STA 59+75 - SEE SHEET IL02 FOR CONTINUATION



ILLUMINATION GENERAL NOTES	
1.	LUMINAIRES ARE ORIENTED PERPENDICULAR TO ROADWAY CENTERLINE UNLESS NOTED OTHERWISE.
2.	ALL CONDUITS SHALL BE SCHEDULE 40 PVC OR POLYPROPYLENE ELECTRICAL CONDUIT.
3.	THIS DRAWING PROVIDES A SCHEMATIC OF THE STREET LIGHT SYSTEM ONLY. ALL CONDUIT MUST BE INSTALLED AROUND CONFLICTING UTILITIES THAT MAY NOT BE SHOWN ON THIS PLAN. FINAL CONDUIT LOCATIONS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
4.	POWER SOURCE LOCATION(S) SHALL BE DETERMINED BY CLARK PUBLIC UTILITIES (CPU). ALL ILLUMINATION POWER SOURCES SHALL BE VERIFIED WITH CPU PLANS. CHANGES IN POWER SOURCE LOCATIONS WILL REQUIRE AS-BUILT DRAWINGS.
5.	CALL CPU AT 360-992-3000 FOR UTILITY COORDINATION ON STREET LIGHTS.
6.	THE CONTRACTOR SHALL INSTALL ALL POLES, CONDUITS, CONDUIT WIRING, LUMINAIRE ASSEMBLIES, AND LUMINAIRE WIRING.
7.	STREET LIGHTING MATERIALS AND INSTALLATIONS SHALL CONFORM TO CITY OF LA CENTER AND CPU STANDARDS AND THE CONTRACT PLANS, MATERIALS AND SPECIAL INSTALLATIONS SHALL BE APPROVED BY CITY (LUMINAIRES, POLES, FOUNDATIONS) AND CPU (CONDUIT, WIRES, CONNECTIONS).
8.	ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO THE CURRENT STANDARDS OF THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AND THE UNDERWRITERS LABORATORY (UL) WHEREVER APPLICABLE. IN ADDITION TO THE REQUIREMENTS OF THE PLANS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE, THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AND ANY APPLICABLE LOCAL ORDINANCES.
9.	FOR LUMINAIRES PROPOSED IN FRONT OF STRUCTURAL WALLS, SEE FOOTING DETAIL C, SHEET ###.
10.	FOR LUMINAIRES PROPOSED ON BRIDGE, SEE FOOTING DETAIL, SHEET ###.

PHOTOMETRIC RESULTS			
AREA OF ILLUMINATION	AVERAGE (FC)	MINIMUM (FC)	AVERAGE / MINIMUM RATIO
CITY OF LA CENTER ENGINEERING STANDARDS FOR CONSTRUCTION TABLE 2.8, ROADWAY ILLUMINATION LEVELS	1.0	N/A	3.0:1
ROADWAY	1.7	0.6	2.8:1
ARKHISE RP-8-14, TABLE 5, RECOMMENDED VALUES FOR MEDIUM PEDESTRIAN TRAFFIC AREAS	0.5	N/A	4.0:1
SIDEWALK AREA 1	0.5	0.2	2.5:1
SIDEWALK AREA 2	0.8	0.3	2.7:1
SIDEWALK AREA 3	0.8	0.2	4.0:1
SIDEWALK AREA 4	0.7	0.3	2.3:1
SIDEWALK AREA 5	2.0	0.4	5.0:1
SIDEWALK AREA 6	2.0	1.0	2.0:1

LUMINAIRE SCHEDULE NUMBERS REPRESENT EACH FIXTURE									
Luminaire*	1	2	3	18	19	20	21	22	23
Manufacturer & Series	KIM LIGHTING ERA Series LED, or APPROVED EQUAL						HID OFFROAD WALL PACK FULL CUTOFF LED, or APPROVED EQUAL		
Lamp Watts	150	141	141	95			28		
Initial Lumens	8,263	7,625	7,475	12,156			1,061		
Light Loss Factor (LLF)	0.85	0.85	0.85	0.85			0.85		
Line Voltage	240V	240V	240V	240V			240V		
B-U-G Rating	1-0-2	0-0-2	1-0-2	2-0-3			1-0-1		
Mount Arm (feet)	2.51	2.51	2.51	2.51			N/A		
Mounting Height (feet)	30	30	30	30			7		

* See equipment table in this sheet, for specifications or model options.

ILLUMINATION PLAN NOTES		
1	2	PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
3	18	PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
19	20	PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 4W)
21	22	PROPOSED POLE-MOUNTED LUMINAIRES (ERA SERIES, TYPE 3)
24	25	PROPOSED WALL-MOUNTED LUMINAIRES AFFIXED TO BRIDGE ABUTMENT ABOVE TRAIL, SHIELD CREEK FROM LIGHT AND INSTALL PROTECTIVE OAGE.
26		INSTALL TYPE D SERVICE CABINET. SEE WSDOT STD PLAN J-1021.00, SHEET IL05. * ONE 200 AMP MAIN BREAKER * FIVE 20 AMP CIRCUIT BREAKERS CONNECT TO ASSIGNED NEAREST CLARK PUBLIC UTILITIES (CPU) POWER SOURCE, COORDINATE WITH CPU.
27		EXISTING STREET LIGHT TO REMAIN. PHOTOMETRIC ARE ASSUMED BASED ON SIMILAR LUMINAIRES.
28		EXISTING STREET LIGHT TO BE REMOVED BY OTHERS.
29		REMOVE EXISTING PRIVATE SITE LIGHT
30		REMOVE EXISTING STREET LIGHT AND RETURN MATERIALS TO CITY PUBLIC WORKS
31		PROPOSED RECTANGULAR RAPID FLASHING BEACON (RRFB), INSTALLED ON BRIDGE. BARRIER W/ PEDESTRIAN PUSH BUTTON (13.5 FT ABOVE SIDEWALK) PER WSDOT STD PLANS J-2028, AND J-2116, SHEETS IL05 & IL06. SEE DETAIL, SHEET B425 FOR BARRIER CONNECTION. SEE ADDITIONAL DETAIL ON SIGNING & STIPPSING SHEET S502.
32		EXISTING SIGNAL POLE AND PUSH BUTTON TO REMAIN.

SELECTED LUMINAIRE EQUIPMENT		
1	2	LUMINAIRE MODEL
1	2	159 Watts, 8,263 Lumens RA252-72L-700-3K7-3-UNV-BLS-BC-OF-HA01L, OR APPROVED EQUAL
3	18	141 Watts, 7,625 Lumens RA252-72L-615-3K7-3-UNV-BLS-BC-OF-HA01L, OR APPROVED EQUAL
19	20	141 Watts, 7,475 Lumens RA252-72L-615-3K7-4W-UNV-BLS-BC-OF-HA01L, OR APPROVED EQUAL
21	22	95 Watts, 12,156 Lumens RA252-72L-615-3K7-3-UNV-BLS-OF-HA01L, OR APPROVED EQUAL
24	25	28 Watts, 1,061 Lumens HLWPC24-10-AMB-240V-12S-GYSDP-PE-1P, OR APPROVED EQUAL
SELECTED POLE EQUIPMENT		
KIM LIGHTING ERA STEPPED ALUMINUM SMOOTH POLE MODEL: SAS35-64400-FM-HA01L-BLS*, OR APPROVED EQUAL		
* TYPICAL POLE LENGTH IS 30' EXCEPT FOR BRIDGE MOUNTED STREET LIGHTS 11, 12, 13, AND 18. POLE LENGTH FOR BRIDGE-MOUNTED STREET LIGHTS SHALL BE ADJUSTED TO ACHIEVE 30' MOUNTING HEIGHT. CONTRACTOR SHALL SUBMIT DRAWINGS FOR ENGINEER'S APPROVAL PRIOR TO ORDERING POLES.		
SELECTED ARM EQUIPMENT		
KIM LIGHTING POST-TOP CROOK ARM MODEL: 1A-RA25-BLS-HA01L-TM1, OR APPROVED EQUAL		

BID SET

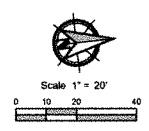
PBS Engineering, Inc.
1325 SE 10th Center Drive
Vancouver, WA 98683
Phone: (206) 441-1111
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ILLUMINATION PLAN FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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MAY 2024
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SHEET 149 OF 173



SELECTED LUMINAIRE EQUIPMENT			
#	θ	POWER OUTPUT (PER FIXTURE)	LUMINAIRE MODEL
1	2	150 Watts, 8,835 Lumens	RA252-7L-700-3K7-3-UNV-BL-S-6C-OF-NA#1L OR APPROVED EQUAL
4	10	141 Watts, 7,625 Lumens	RA252-7L-415-3K7-4W-UNV-BL-S-6C-OF-NA#1L OR APPROVED EQUAL
10	20	141 Watts, 7,475 Lumens	RA252-7L-415-3K7-4W-UNV-BL-S-6C-OF-NA#1L OR APPROVED EQUAL
14	23	95 Watts, 12,158 Lumens	RA252-7L-415-3K7-4W-UNV-BL-S-6C-OF-NA#1L OR APPROVED EQUAL
24	25	20 Watts, 2,904 Lumens	HLWPC2-P10-30K-240V-72S-GYSP-ET/P OR APPROVED EQUAL

SELECTED POLE EQUIPMENT

KM LIGHTING AREA STEPPED ALUMINUM SMOOTH POLE MODEL: SAS30-6440-FL-NA#1-BLS-
OR APPROVED EQUAL

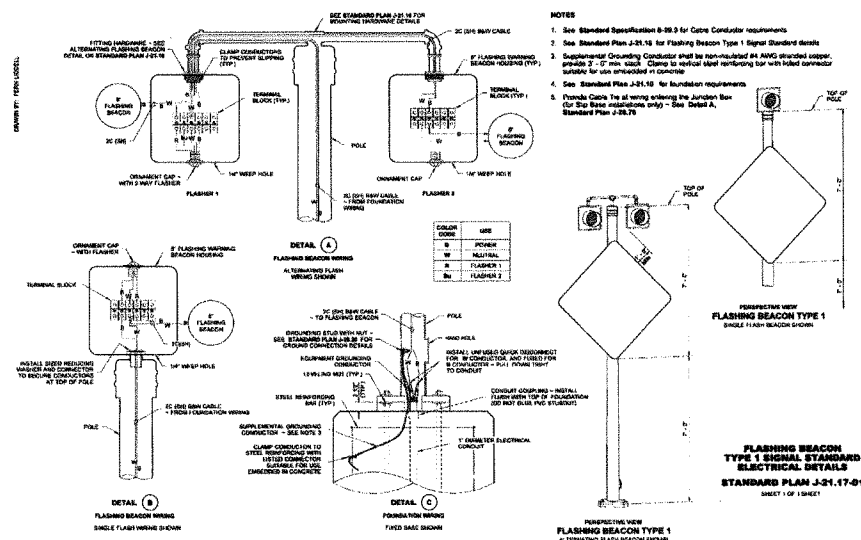
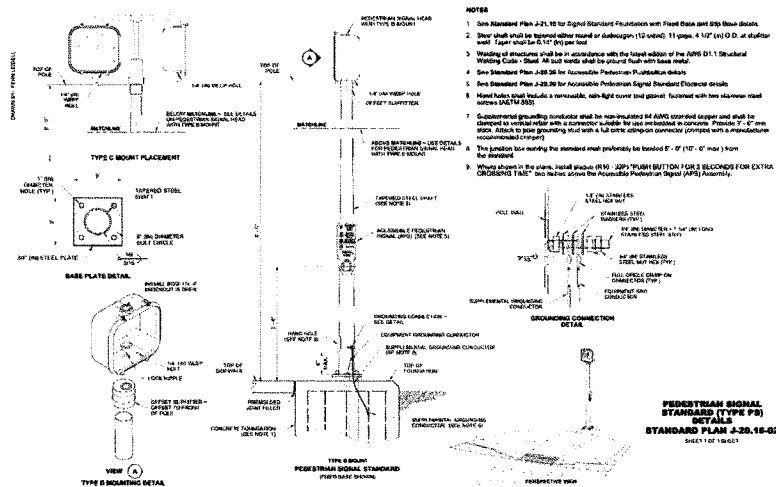
KM LIGHTING POLE LENGTH IS 30' EXCEPT FOR BRIDGE MOUNTED STREET LIGHTS 11, 12, 13, AND 19. POLE LENGTH FOR BRIDGE-MOUNTED STREET LIGHTS SHALL BE ADJUSTED TO ACHIEVE 30' MOUNTING HEIGHT. CONTRACTOR SHALL SUBMIT DRAWINGS FOR ENGINEER'S APPROVAL PRIOR TO ORDERING POLES.

SELECTED ARM EQUIPMENT

KM LIGHTING POST-TOP CROOK ARM MODEL: 1A-RA25-BL-S-#A01L-TM1 OR APPROVED EQUAL

BIO SET

- | LUMINAIRE SCHEDULE DIMMERS REPRESENT EACH FIXTURE | | | | | | | | | |
|---|---|-------|-----|-------|-----|------|--------|---|-------------|
| Luminaire* | (1) | (2) | (3) | (8) | (9) | (20) | (21) | (22) | (24) - (26) |
| Manufacturer & Series | KIM LIGHTING
ERA Series LED, or APPROVED EQUAL | | | | | | | HOLOPHANE WALL
PACK FULL CUTOFF LEE
or APPROVED EQUAL | |
| Lamp Watts | 150 | 141 | | 141 | | | 95 | | 28 |
| Solid lumens | 8,283 | 7,825 | | 7,475 | | | 12,156 | | 1,061 |
| Light Loss Factor (LLF) | 0.85 | 0.85 | | 0.85 | | | 0.85 | | 0.85 |
| Line Voltage | 240V | 240V | | 240V | | | 240V | | 240V |
| B-I-J-G-M Rating | 1-0-2 | 0-0-2 | | 1-0-2 | | | 2-0-3 | | 1-0-1 |
| Max Area (feet ²) | 2.51 | 2.51 | | 2.51 | | | 2.51 | | N/A |
| Mounting Height (feet) | | | | 30 | | | 30 | | 7 |



BID SET

ILLUMINATION WSDOT DETAILS FOR:

BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

PBS

1335 SE 10th Street, Suite 100
 Vancouver, WA 98683
 (360) 575-1000
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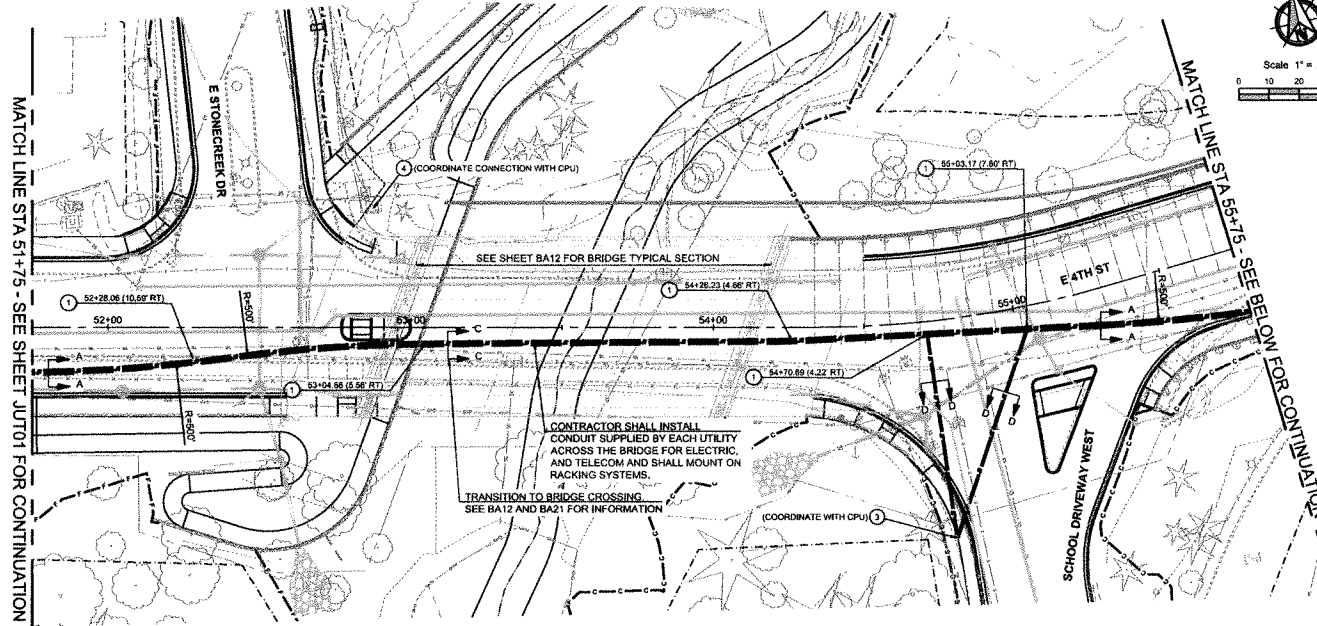
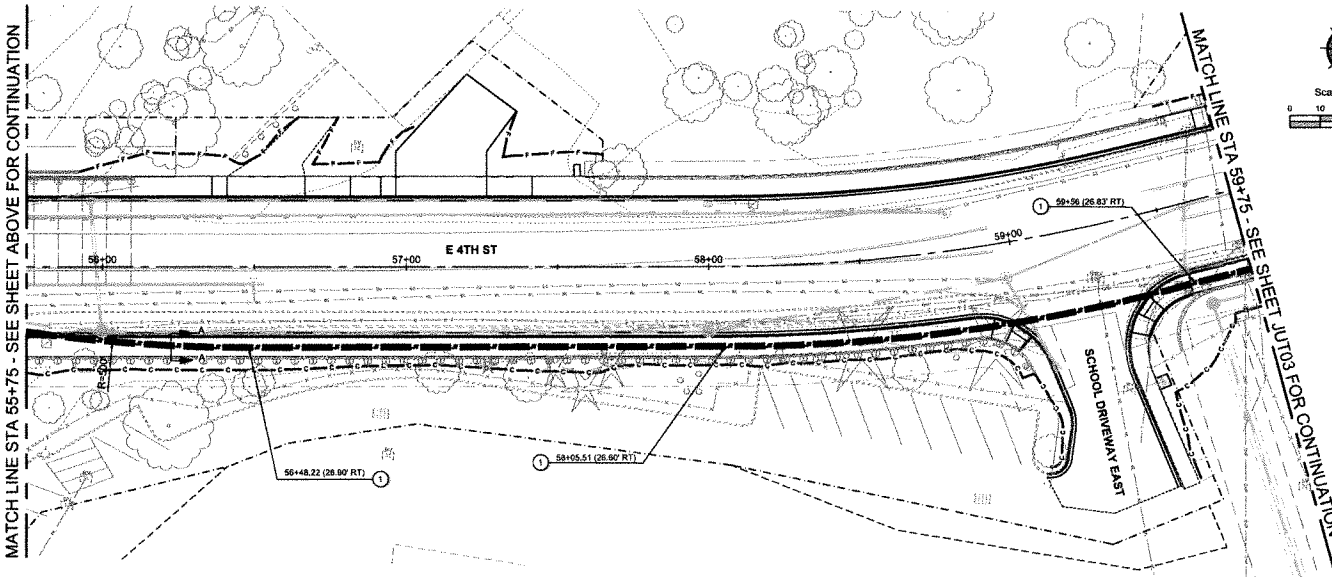
SAVING AMERICA'S INFRASTRUCTURE

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SHEET 152 OF 173

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MATCH LINE STA 55+75 - SEE SHEET ABOVE FOR CONTINUATION



GENERAL NOTES

1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES

CONSTRUCTION NOTES:

1. INSTALL JOINT UTILITY TRENCH. SEE SHEET JUT04 FOR SECTION DETAILS.
2. NEW POWER POLE (INSTALLED BY OTHERS).
3. NEW VAULT OR JUNCTION BOX (INSTALLED BY OTHERS).
4. EXISTING VAULT CONNECTION (TO BE COMPLETED BY OTHERS).

BID SET

JOINT UTILITY TRENCH PLAN FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



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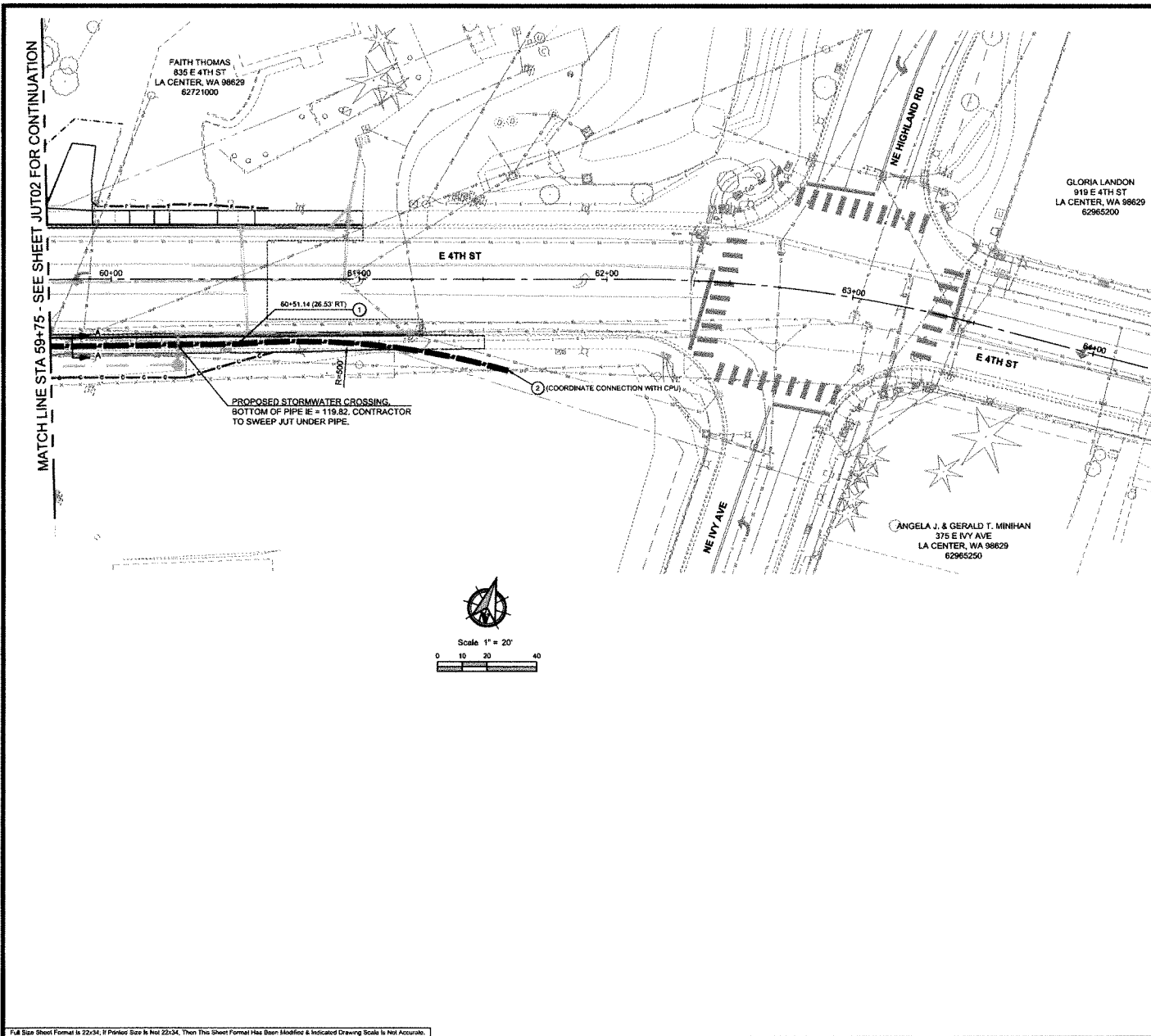
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SHEET 154 OF 173

PBS Engineering and
1205 SE 7th Center Drive
Tomball, TX 77375
281.465.5446
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- GENERAL NOTES**
1. SEE SHEET G02 AND G03 FOR LEGEND AND GENERAL NOTES
- CONSTRUCTION NOTES:**
1. INSTALL JOINT UTILITY TRENCH. SEE SHEET JUT04 FOR SECTION DETAILS.
 2. NEW POWER POLE (INSTALLED BY OTHERS).
 3. NEW VAULT OR JUNCTION BOX (INSTALLED BY OTHERS).
 4. EXISTING VAULT CONNECTION (TO BE COMPLETED BY OTHERS).

BID SET

JOINT UTILITY TRENCH PLAN FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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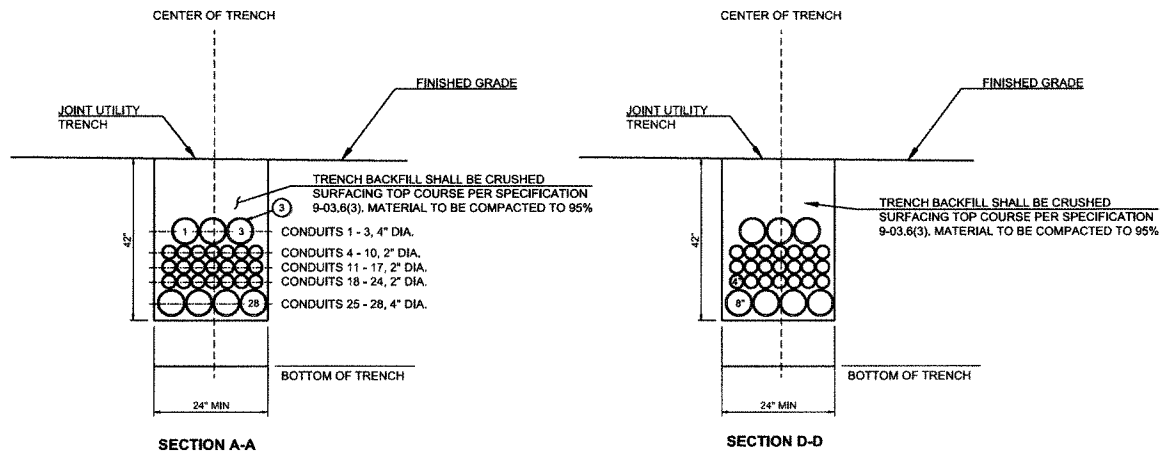
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Washington State
No. 12345
Exp. 12/31/2025

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CHECKED: CMK
MAY 2015
17100071486-000

SHEET NO:
JUT03

SHEET 155 OF 173

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UTILITY	DESCRIPTION	
1	8" DIA. STEEL SANITARY PIPE	
2	16" DIA. DUCTILE IRON WATER PIPE	CPU
3	SCH. 80 PVC DRY UTILITIES (SEE NOTE 5)	LUMEN: 1 AND 2; CPU: 18 TO 21, 25 TO 28
4	4" DIA. STEEL GAS PIPE	NWN
5	12" DIA. CPE STORM PIPE	

Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

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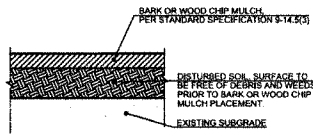
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BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



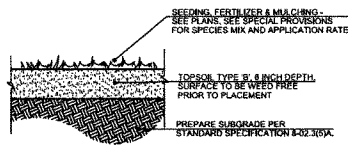
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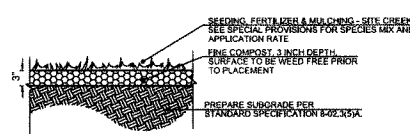
SHEET 156 of 173



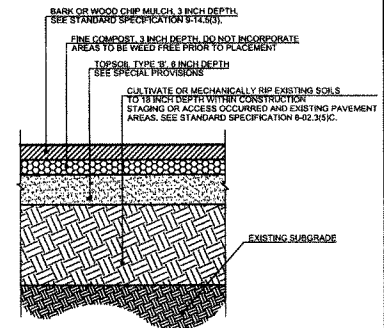
4 Bark and Wood Chip Mulch Only
NOT TO SCALE



3 Seeding - Site Roadside, Lawn, Storm
NOT TO SCALE



2 Seeding - Site Creek
NOT TO SCALE



1 Planting Areas
NOT TO SCALE

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Full Size Sheet Format is 22x34. If Printed Size is Not 22x34, Then This Sheet Format Has Been Modified & Indicated Drawing Scale is Not Accurate.

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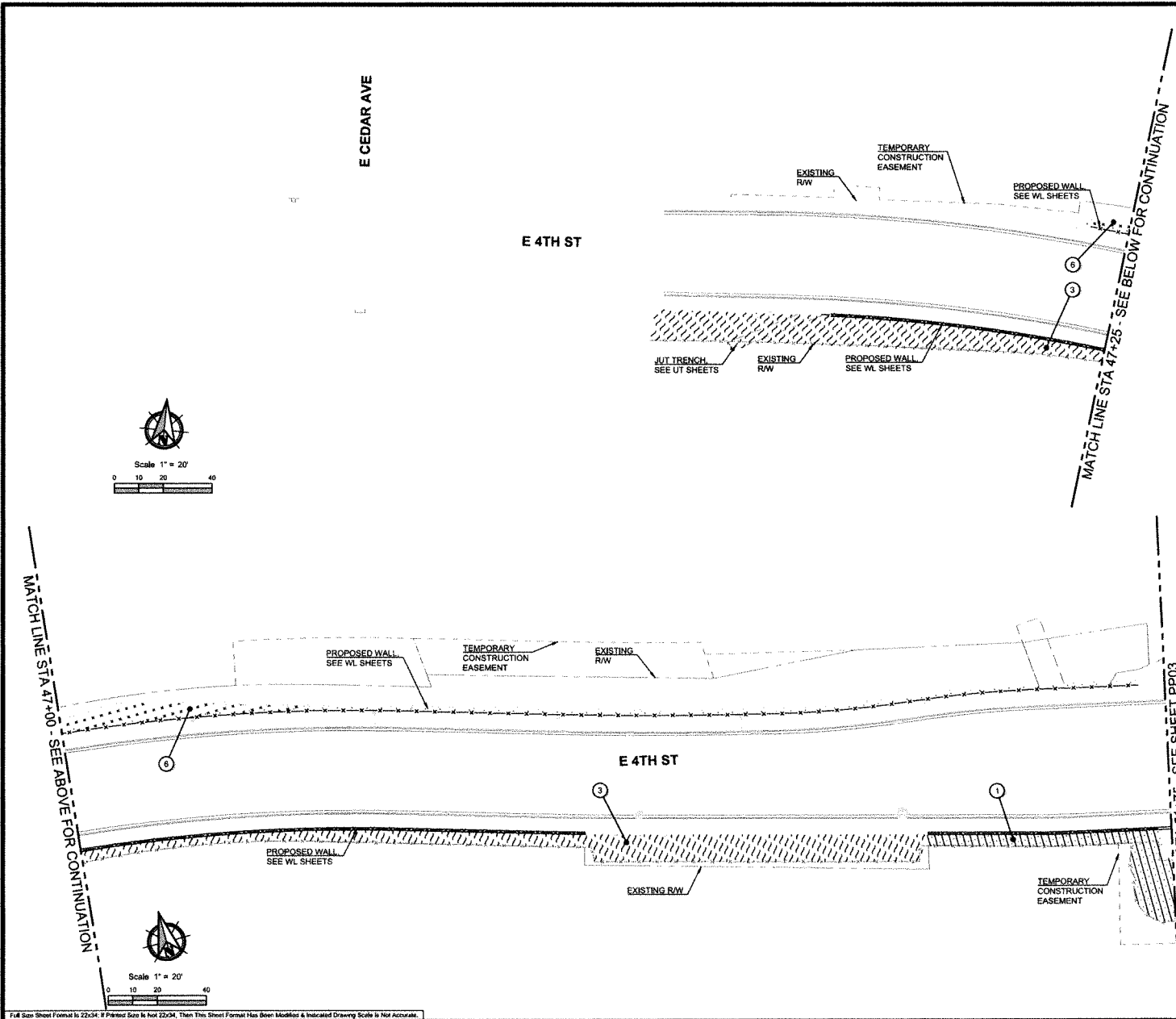
PLANTING PREPARATION & SEEDING FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JM
CHECKED:	PV
	MAY 2023
	71486.000
SHEET ID	
PP01	

SHEET 157 OF 173

File Name: L:\Projects\1700017-148-000-Civil\Drawings\Sheet\148-000-PP02.dwg User: Tye O'Neil CAD File Created: 5/14/2025 10:17:56 AM Layout Tab: PP02 User: Tye O'Neil



GENERAL SHEET NOTES

1. SEE SHEET PP01 FOR DETAILS.
2. COORDINATE PLANTING AND SEEDING PREPARATION WORK WITH SITE PREP AND EROSION CONTROL PLANS

LEGEND:

- ① [Pattern] PLANTING AREAS (TOPSOIL, COMPOST, BARK MULCH). SEE DETAIL 1 SHEET PP-01
- ② [Pattern] SEEDING, FERTILIZING AND MULCHING - SITE CREEK. SEE DETAIL 2 SHEET PP-01
- ③ [Pattern] SEEDING, FERTILIZING AND MULCHING - SITE ROADSIDE. SEE DETAIL 3 SHEET PP-01
- ④ [Pattern] SEEDING, FERTILIZING AND MULCHING - SITE STORM. SEE DETAIL 3 SHEET PP-01
- ⑤ [Pattern] SEEDING, FERTILIZING AND MULCHING - SITE LAWN. SEE DETAIL 3 SHEET PP-01
- ⑥ [Pattern] BARK OR WOOD CHIP MULCH ONLY
- [Symbol] CUT LIMITS, SEE SITE PREP SHEETS
- [Symbol] FILL LIMITS, SEE SITE PREP SHEETS
- [Symbol] HIGH VIS FENCE, SEE SITE PREP SHEETS
- [Symbol] EROSION CONTROL FENCE, SEE SITE PREP SHEETS
- [Symbol] TREE PROTECTION FENCING, SEE SITE PREP SHEETS
- [Symbol] EXISTING DECIDUOUS TREE
- [Symbol] EXISTING EVERGREEN TREE
- [Symbol] PROPOSED LIGHTING, SEE IL SHEETS

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1325 SE Van Center Drive
Vancouver, WA 98683
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PLANTING PREPARATION & SEEDING FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: M
CHECKED: PW
MAY 2025
17486.000

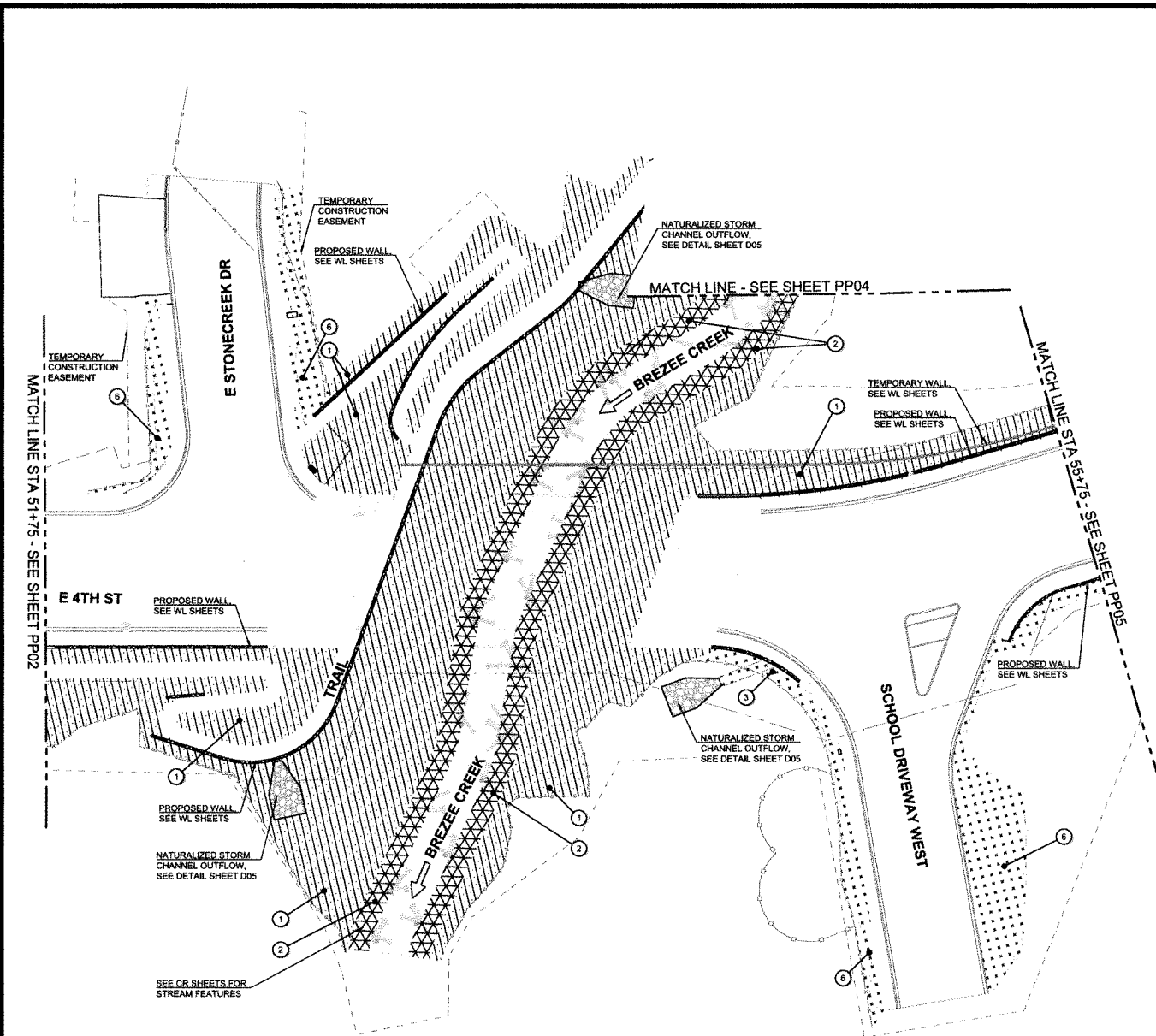
SHEET ID:
PP02

SHEET 158 OF 173

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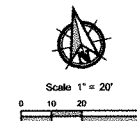


GENERAL SHEET NOTES

1. SEE SHEET PP01 FOR DETAILS.
2. COORDINATE PLANTING AND SEEDING PREPARATION WORK WITH SITE PREP AND EROSION CONTROL PLANS

LEGEND:

- ① PLANTING AREAS (TOPSOIL, COMPOST, BARK MULCH). SEE DETAIL 1 SHEET PP-01
- ② SEEDING, FERTILIZING AND MULCHING - SITE CREEK. SEE DETAIL 2 SHEET PP-01
- ③ SEEDING, FERTILIZING AND MULCHING - SITE ROADSIDE. SEE DETAIL 3 SHEET PP-01
- ④ SEEDING, FERTILIZING AND MULCHING - SITE STORM. SEE DETAIL 3 SHEET PP-01
- ⑤ SEEDING, FERTILIZING AND MULCHING - SITE LAWN. SEE DETAIL 3 SHEET PP-01
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- HIGH VIS FENCE, SEE SITE PREP SHEETS
- EROSION CONTROL FENCE, SEE SITE PREP SHEETS
- TREE PROTECTION FENCING, SEE SITE PREP SHEETS
- EXISTING DECIDUOUS TREE
- ★ EXISTING EVERGREEN TREE
- PROPOSED LIGHTING, SEE IL SHEETS



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PH: 503.281.3348
FAX: 503.281.3349



PLANTING PREPARATION & SEEDING FOR:
BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

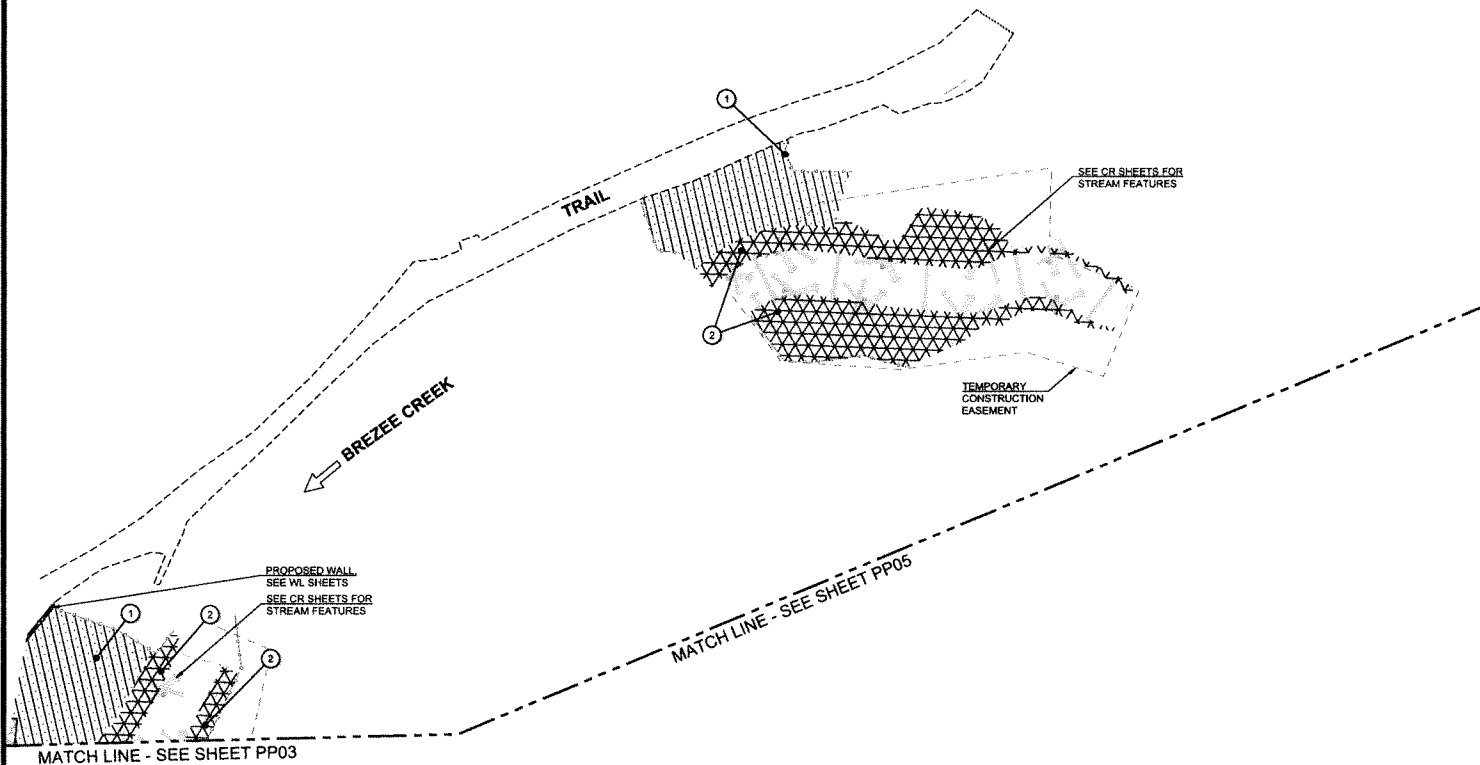


DESIGNED:
PW
CHECKED:
PW
MAY 2025
1485-005

SHEET ID
PP03

SHEET 159 OF 173

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GENERAL SHEET NOTES

1. SEE SHEET PP01 FOR DETAILS.
2. COORDINATE PLANTING AND SEEDING PREPARATION WORK WITH SITE PREP AND EROSION CONTROL PLANS

LEGEND:

- ① PLANTING AREAS (TOPSOIL, COMPOST, BARK MULCH). SEE DETAIL 1 SHEET PP-01
- ② SEEDING, FERTILIZING AND MULCHING - SITE CREEK. SEE DETAIL 2 SHEET PP-01
- ③ SEEDING, FERTILIZING AND MULCHING - SITE ROADSIDE. SEE DETAIL 3 SHEET PP-01
- ④ SEEDING, FERTILIZING AND MULCHING - SITE STORM. SEE DETAIL 3 SHEET PP-01
- ⑤ SEEDING, FERTILIZING AND MULCHING - SITE LAWN. SEE DETAIL 3 SHEET PP-01
- ⑥ BARK OR WOOD CHIP MULCH ONLY
- CUT LIMITS, SEE SITE PREP SHEETS
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- EROSION CONTROL FENCE, SEE SITE PREP SHEETS
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- EXISTING DECIDUOUS TREE
- ★ EXISTING EVERGREEN TREE
- PROPOSED LIGHTING, SEE IL SHEETS

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PLANTING PREPARATION & SEEDING FOR:
BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED: JM
CHECKED: PJW
MAY 2025
71486.000
SHEET ID:
PP04

SHEET 160 OF 173

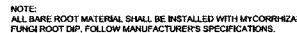
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1. REFER TO CITY STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE.

- PLANTING NOTES:**

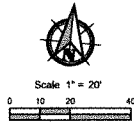
- NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



E CEDAR AVE

E 4TH ST

EXISTING
RW

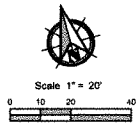
PROPOSED WALL
SEE WL SHEETS

CUT SEE UT SHEETS

EXISTING
RW

PROPOSED WALL
SEE WL SHEETS

MATCH LINE STA 47+25 - SEE BELOW



MATCH LINE STA 47+00 - SEE ABOVE

PROPOSED WALL
SEE WL SHEETS

TEMPORARY
CONSTRUCTION
EASEMENT

EXISTING
RW

E 4TH ST

PROPOSED WALL
SEE WL SHEETS

EXISTING RW

TEMPORARY
CONSTRUCTION
EASEMENT

MATCH LINE STA 51+75 - SEE SHEET LP03

GENERAL LANDSCAPE NOTES:

1. SEE SHEET LP01 FOR PLANT LIST, NOTES AND DETAILS.
2. AREAS WITH QUANTITIES SHOWN, SHALL BE INSTALLED AT ON CENTER SPACING.
3. SEE SP SHEETS FOR CONSTRUCTION ACCESS AND STAGING AREAS. ALL EXISTING LANDSCAPE IMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED.
4. COORDINATE STREAM PLANTINGS WITH STREAM FEATURES AND WATLLES. SEE EC SHEETS FOR WATTLE LOCATIONS.
5. RESTORATION LIMITS ARE APPROXIMATE AND BASED ON PLANNED CONSTRUCTION EXTENTS. ANY EXISTING LANDSCAPE IMPACTED BY CONSTRUCTION ACTIVITIES OUTSIDE OF WHAT IS SHOWN SHALL BE RESTORED USING THE ADJACENT METHOD AND AS APPROVED BY THE LANDSCAPE ARCHITECT.

LEGEND:

SYMBOL	CODE	NAME
	TBM	PSIPE, TREE BUFFER MIX
	UBM	PSIPE, UPLAND BUFFER MIX
	SBM	PSIPE, STREAMBANK MIX
	RBM	PSIPE, RIPARIAN BUFFER MIX
	LSM	PSIPE, LIVE STAKE MIX
		BARK MULCH OR SEEDING. SEE PP SHEETS
		CUT LIMITS. SEE SITE PREP SHEETS
		FILL LIMITS. SEE SITE PREP SHEETS
		HIGH VIS FENCE. SEE SITE PREP SHEETS
		EROSION CONTROL FENCE. SEE SITE PREP SHEETS
		TREE PROTECTION FENCING. SEE SITE PREP SHEETS
		EXISTING DECIDUOUS TREE
		EXISTING EVERGREEN TREE
		PROPOSED LIGHTING. SEE IL SHEETS

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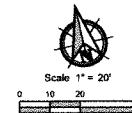
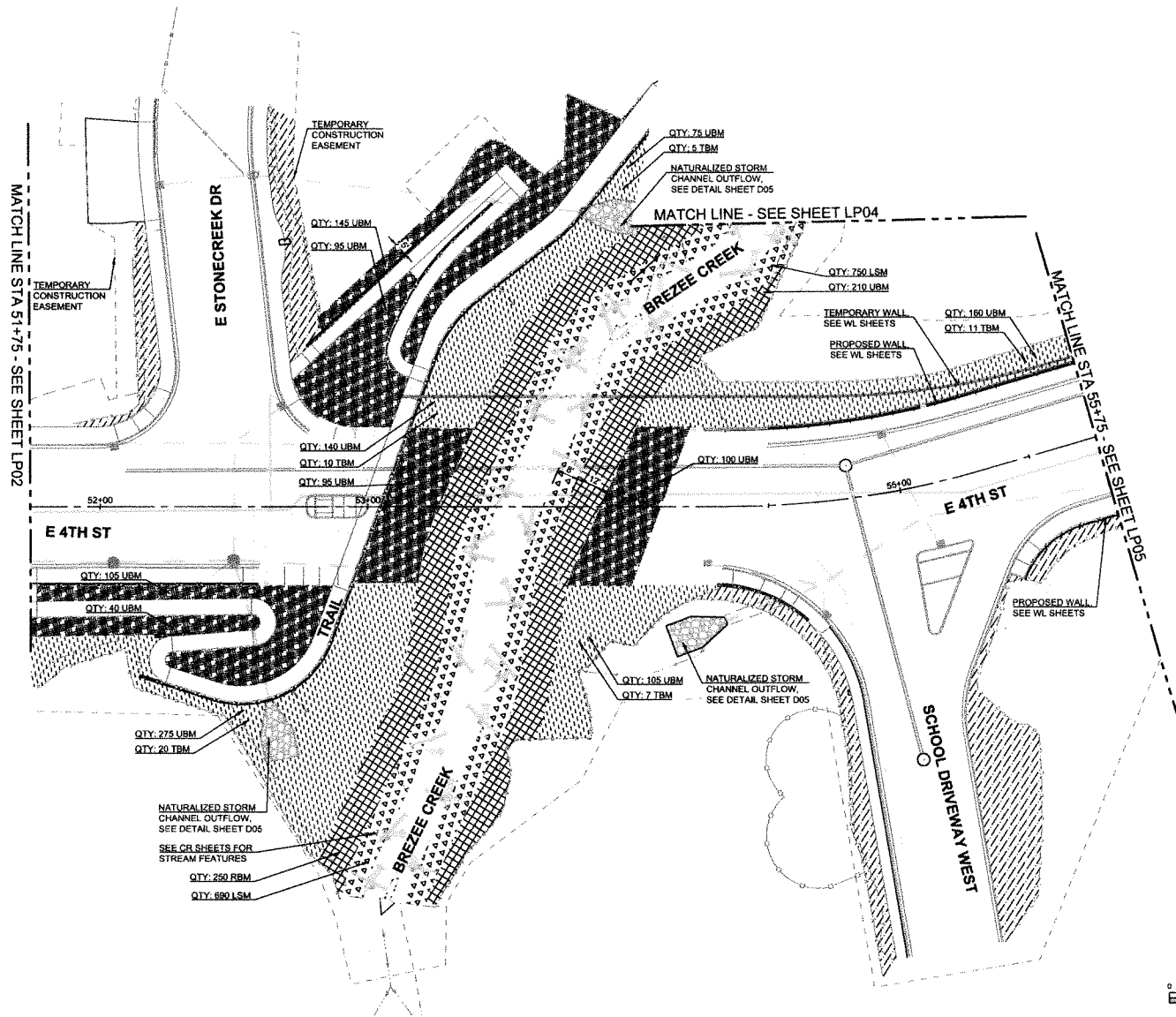
LANDSCAPE PLANS FOR:
BREZZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED JA
CHECKED PW
MAY 2025 11456.000
SHEET ID LP02

SHEET 163 OF 173

Filepath: L:\Projects\10007-148-148-000-Civil\Drawings\Sheet\148-000-LP03.dwg User: jhcr CT Date: 5/14/2025 10:15:09 AM



GENERAL LANDSCAPE NOTES:

1. SEE SHEET LP01 FOR PLANT LIST, NOTES AND DETAILS.
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		TREE PROTECTION FENCING, SEE SITE PREP SHEETS
		EXISTING DECIDUOUS TREE
		EXISTING EVERGREEN TREE
		PROPOSED LIGHTING, SEE IL SHEETS

LANDSCAPE PLANS FOR:

Brezee Creek Culvert Replacement & 4th Street Widening

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON



DESIGNED:	JM
CHECKED:	PW
MAY 2025	1486.000
SHEET ID:	LP03

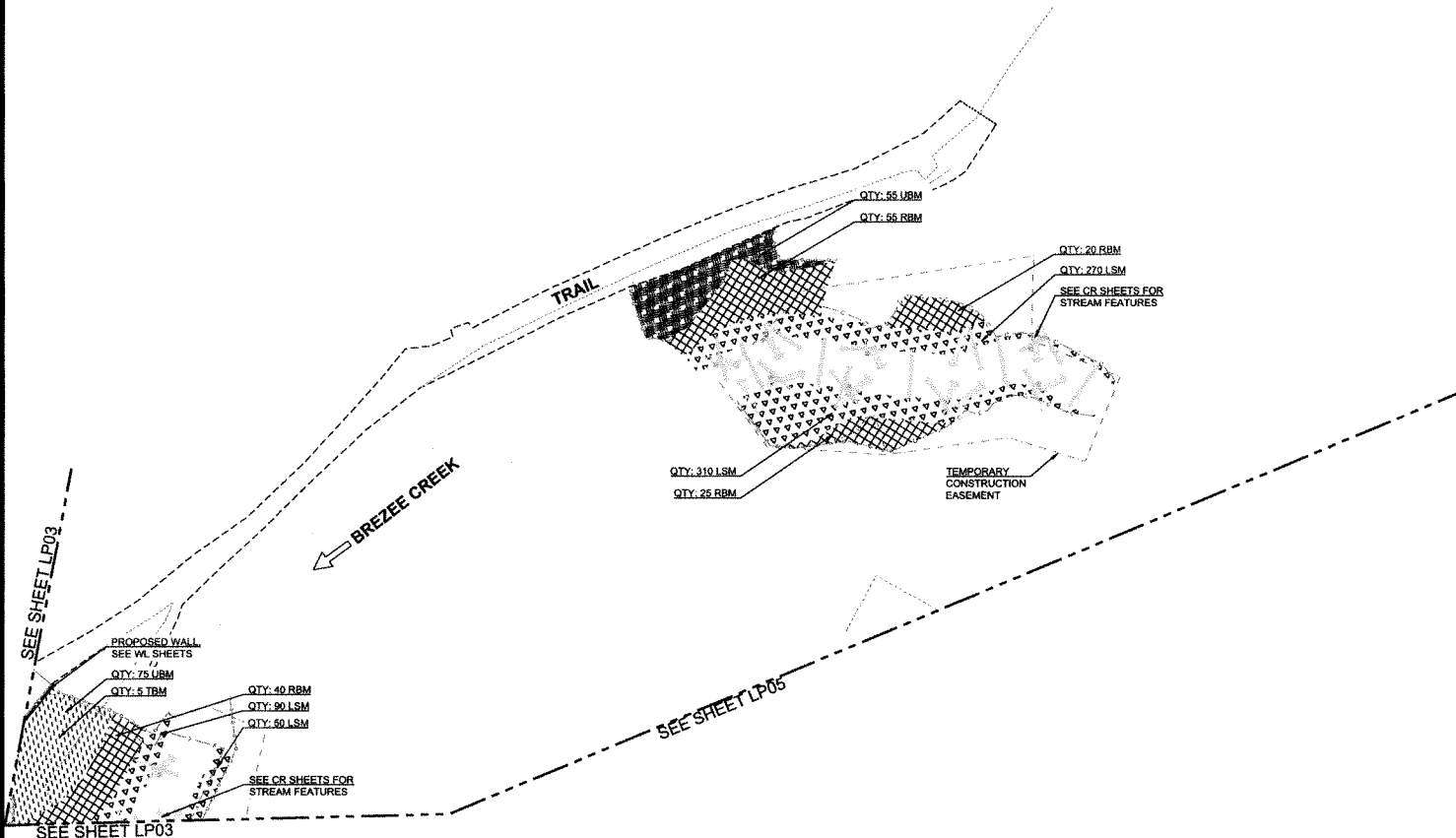
SHEET 164 OF 173

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Vancouver, WA 98603
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GENERAL LANDSCAPE NOTES:

1. SEE SHEET LP01 FOR PLANT LIST, NOTES AND DETAILS.
2. AREAS WITH QUANTITIES SHOWN, SHALL BE INSTALLED AT ON CENTER SPACING.
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		CUT LIMITS, SEE SITE PREP SHEETS
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		TREE PROTECTION FENCING, SEE SITE PREP SHEETS
		EXISTING DECIDUOUS TREE
		EXISTING EVERGREEN TREE
		PROPOSED LIGHTING, SEE IL SHEETS

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LANDSCAPE PLANS FOR:
BREEZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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CITY OF LA CENTER
WASHINGTON

DESIGNED:
JA

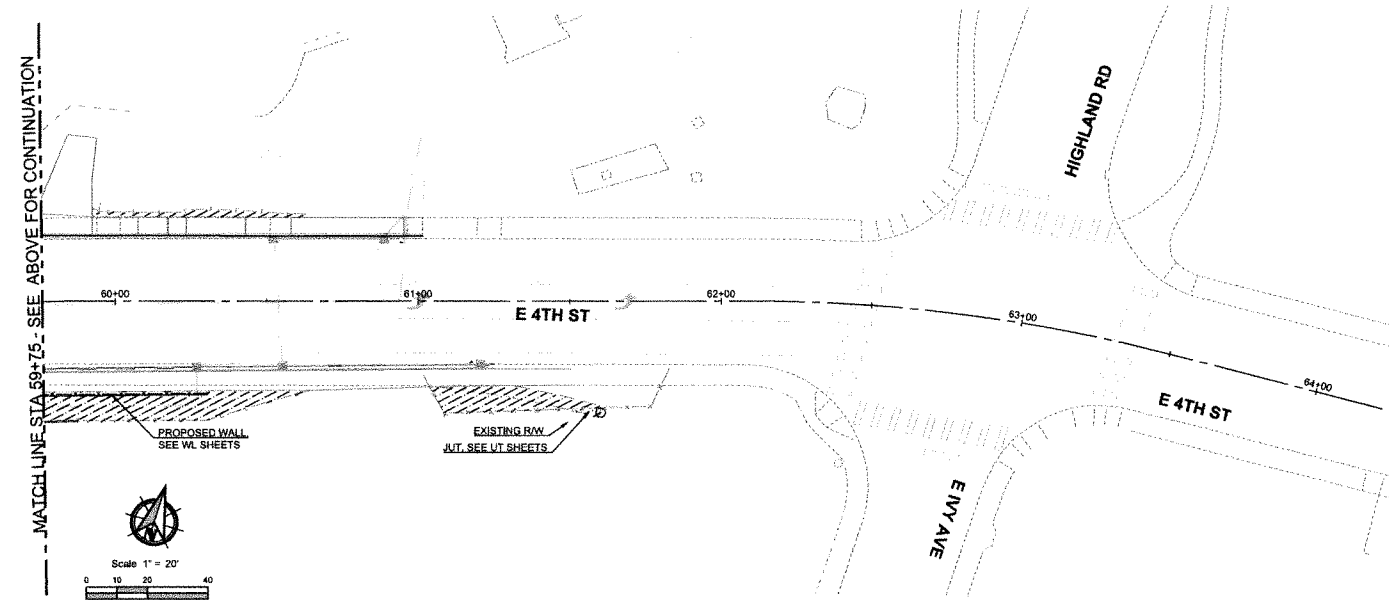
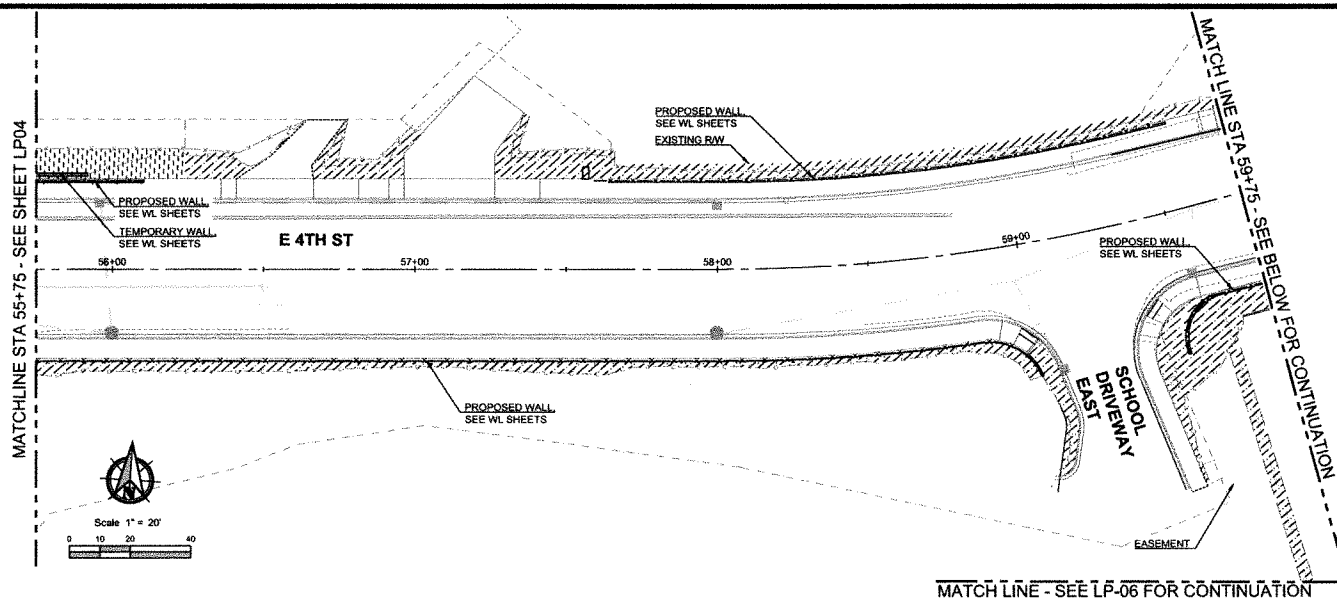
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MAY 2025
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SHEET ID:
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SHEET **165** OF **173**

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CADD File Date/Time: 5/14/2025 10:18:16 AM
Layout: Tye LP05



GENERAL LANDSCAPE NOTES:

1. SEE SHEET LP01 FOR PLANT LIST, NOTES AND DETAILS.
2. AREAS WITH QUANTITIES SHOWN, SHALL BE INSTALLED AT ON CENTER SPACING.
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		EXISTING DECIDUOUS TREE
		EXISTING EVERGREEN TREE
		PROPOSED LIGHTING, SEE IL SHEETS

BID SET

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LANDSCAPE PLANS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

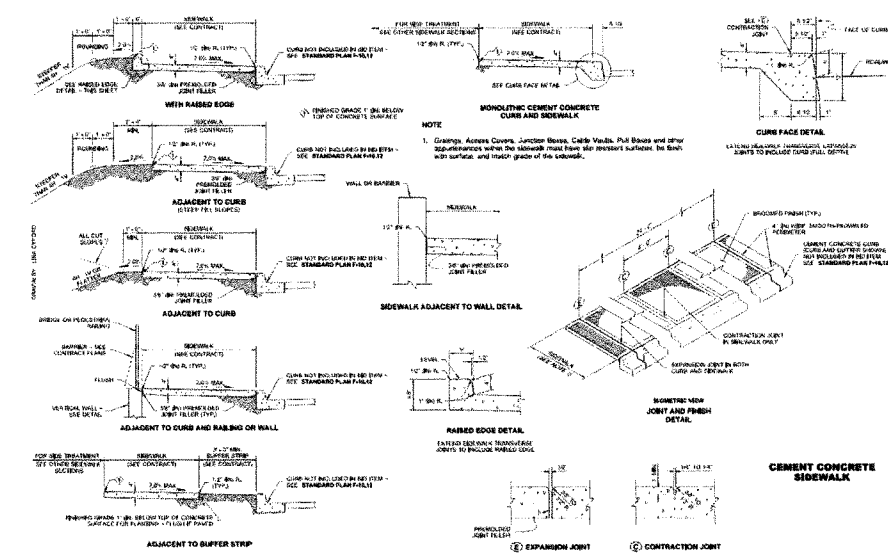
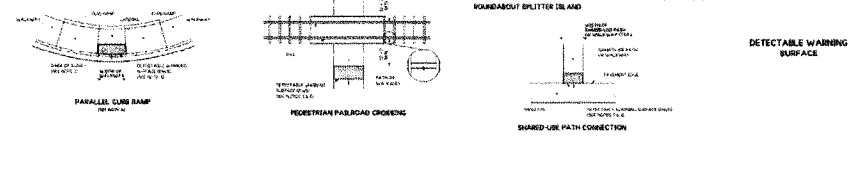
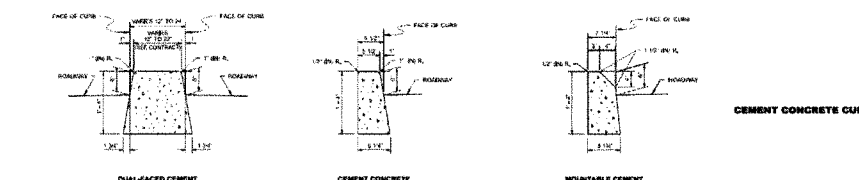



DESIGNED:
JM

CHECKED:
PW
MAY 2025
7/14/2025

SHEET ID:
LP05


SHEET 166 OF 173






PBS Acquisition and
 Construction
 1305 SE Tenth Avenue, Drive
 Suite 100
 Vancouver, WA 98662
 (206) 461-1000
 pbs@pbs.com

WSDOT STANDARD DETAILS FOR:
BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

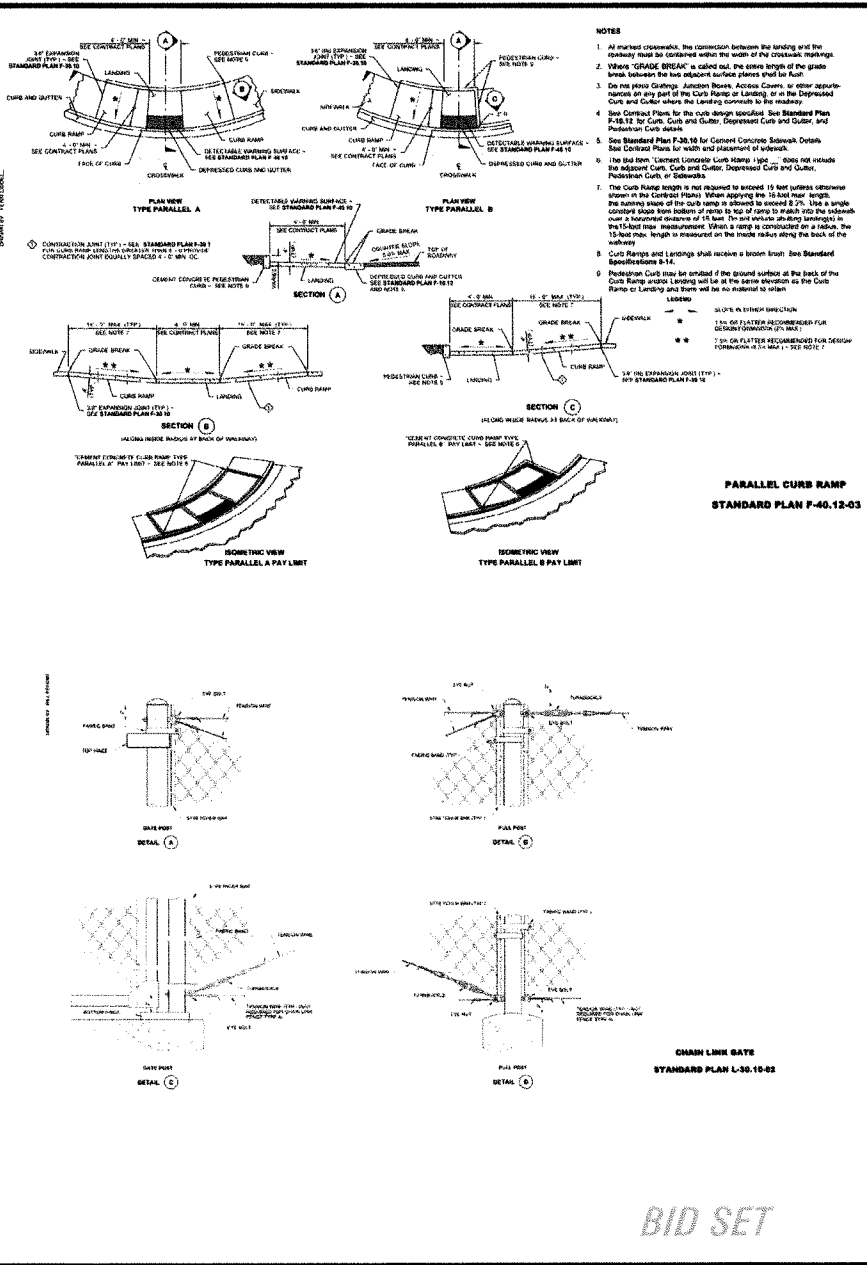
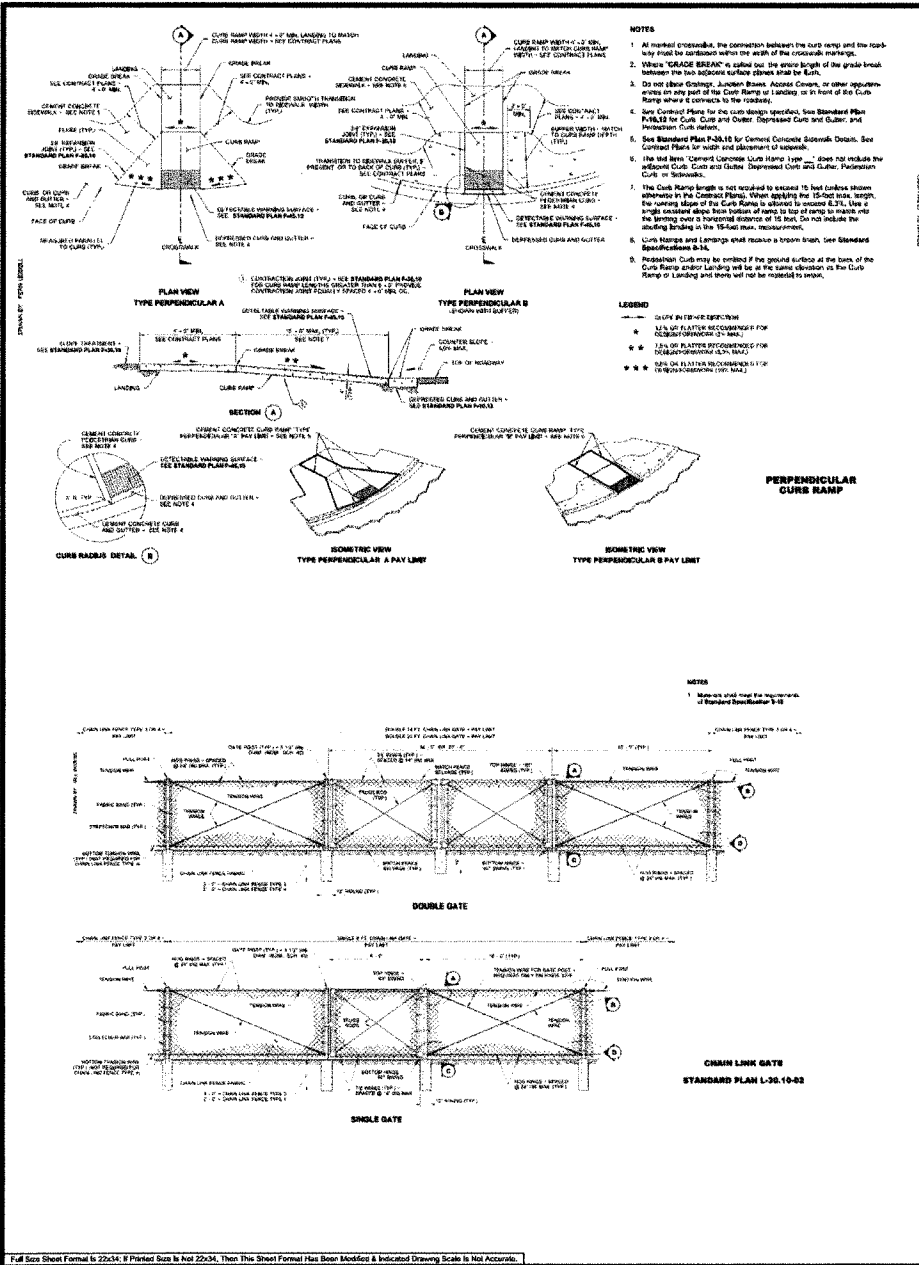


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DESIGNED: JAB
 CHECKED: CLK
 MAY 2025
 71486.000

SHEET ID
STD01
 167 - 173



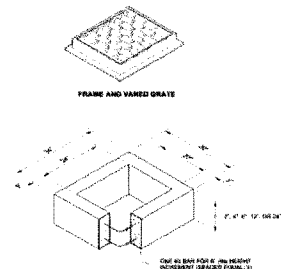
WSDOT STANDARD DETAILS FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

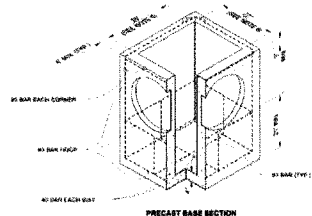
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

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DESIGNED: JAB
CHECKED: CMK
MAY 2025
1486-000
SHEET ID:
STD02
SHEET 168 OF 173



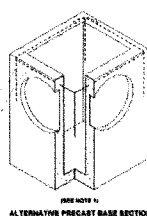
RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM PIPE Diameter (inches)
REINFORCED OR PLAIN CONCRETE	42"
ALL METAL PIPE	18"
GROUP B STEEL PIPE, SCHED. 40-60	36"
GROUP C STEEL PIPE, SCHED. 80-160	36"
PIPELESS SAND PIPES STEEL, SCHED. 40-60	36"

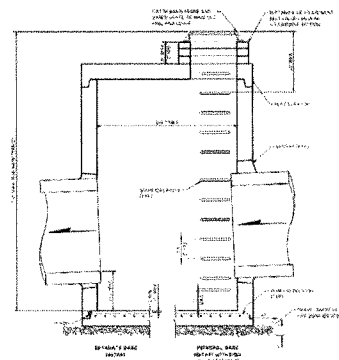
de COMPAGNIE DE CREDIT MUTUEL



ALTERNATIVE PRECAST BASE SECTION

CATCH BASIN TYPE 1

- An acceptable alignment is the letter shown in the **PREFACE BASE SECTION**. Tones (spaces) indicated on the Standard Specification, or indicated on the Standard Specification, are not required. The letter 'A' must be used with the standard specified letter shown in the **ALTERNATIVE PREFACE BASE SECTION**. Use fresh steel with the face plan.
- The finished diameter shall not be greater than 22" (in). Allowable shall have a wall thickness of 2" (in) minimum to 2 1/2" (in) maximum. The wall thickness shall be uniform along the longitudinal wall with the outside of the pipe. After the pipe is installed, it is to give up part material to coincide with the Standard Specification Section 5-3.3
- The maximum depth from the finished grade to the lowest pipe invert shall be 10' (in).
- The frame and grade may be modified with the face plan, or integrity shall be in the adjacent section with the face plan.
- The Standard Section 5-3.4 may be modified with the face plan, and the wall shall be placed at a rate of 1/4" on edge.
- The opening shall be measured at the top of the **Standard Base Section**.
- At pickup holes shall be provided full over the beam has been placed



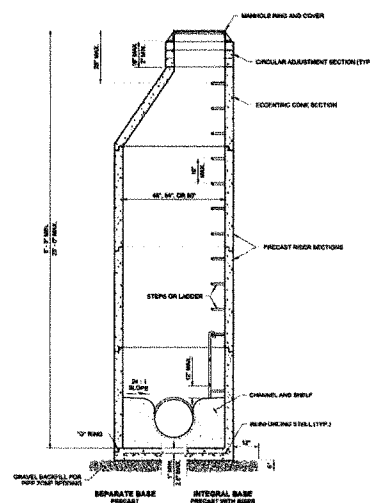
CATCH BASIN TYPE 2

ANION (CATION)	ANION COORDINATION NUMBER	ANION COORDINATION DISTANCE (Å)	ANION COORDINATION ANGLE (°)	ANION COORDINATION ANGLE (°)
Cl ⁻	4	3.1	102	102
Br ⁻	4	3.2	102	102
I ⁻	4	3.3	102	102
NO ₃ ⁻	4	3.4	102	102
SO ₄ ²⁻	4	3.5	102	102
PO ₄ ³⁻	4	3.6	102	102
CO ₃ ²⁻	4	3.7	102	102
BO ₃ ³⁻	4	3.8	102	102
SiO ₄ ⁴⁻	4	3.9	102	102
AlO ₄ ⁵⁻	4	4.0	102	102
FeO ₄ ⁶⁻	4	4.1	102	102
CrO ₄ ⁶⁻	4	4.2	102	102
MnO ₄ ⁶⁻	4	4.3	102	102
VO ₄ ⁶⁻	4	4.4	102	102
CrO ₅ ⁶⁻	4	4.5	102	102
MoO ₄ ⁶⁻	4	4.6	102	102
WO ₄ ⁶⁻	4	4.7	102	102
UO ₂ ²⁺	8	2.4	90	90
ThO ₂ ²⁺	8	2.5	90	90
PaO ₂ ²⁺	8	2.6	90	90
UO ₃ ²⁺	8	2.7	90	90
ThO ₃ ²⁺	8	2.8	90	90
PaO ₃ ²⁺	8	2.9	90	90
UO ₄ ²⁺	8	3.0	90	90
ThO ₄ ²⁺	8	3.1	90	90
PaO ₄ ²⁺	8	3.2	90	90
UO ₅ ²⁺	8	3.3	90	90
ThO ₅ ²⁺	8	3.4	90	90
PaO ₅ ²⁺	8	3.5	90	90
UO ₆ ²⁺	8	3.6	90	90
ThO ₆ ²⁺	8	3.7	90	90
PaO ₆ ²⁺	8	3.8	90	90
UO ₇ ²⁺	8	3.9	90	90
ThO ₇ ²⁺	8	4.0	90	90
PaO ₇ ²⁺	8	4.1	90	90
UO ₈ ²⁺	8	4.2	90	90
ThO ₈ ²⁺	8	4.3	90	90
PaO ₈ ²⁺	8	4.4	90	90
UO ₉ ²⁺	8	4.5	90	90
ThO ₉ ²⁺	8	4.6	90	90
PaO ₉ ²⁺	8	4.7	90	90
UO ₁₀ ²⁺	8	4.8	90	90
ThO ₁₀ ²⁺	8	4.9	90	90
PaO ₁₀ ²⁺	8	5.0	90	90
UO ₁₁ ²⁺	8	5.1	90	90
ThO ₁₁ ²⁺	8	5.2	90	90
PaO ₁₁ ²⁺	8	5.3	90	90
UO ₁₂ ²⁺	8	5.4	90	90
ThO ₁₂ ²⁺	8	5.5	90	90
PaO ₁₂ ²⁺	8	5.6	90	90
UO ₁₃ ²⁺	8	5.7	90	90
ThO ₁₃ ²⁺	8	5.8	90	90
PaO ₁₃ ²⁺	8	5.9	90	90
UO ₁₄ ²⁺	8	6.0	90	90
ThO ₁₄ ²⁺	8	6.1	90	90
PaO ₁₄ ²⁺	8	6.2	90	90
UO ₁₅ ²⁺	8	6.3	90	90
ThO ₁₅ ²⁺	8	6.4	90	90
PaO ₁₅ ²⁺	8	6.5	90	90
UO ₁₆ ²⁺	8	6.6	90	90
ThO ₁₆ ²⁺	8	6.7	90	90
PaO ₁₆ ²⁺	8	6.8	90	90
UO ₁₇ ²⁺	8	6.9	90	90
ThO ₁₇ ²⁺	8	7.0	90	90
PaO ₁₇ ²⁺	8	7.1	90	90
UO ₁₈ ²⁺	8	7.2	90	90
ThO ₁₈ ²⁺	8	7.3	90	90</

CARTRIDGE	TYPE	WAVELENGTH	WAVELENGTH	WAVELENGTH	WAVELENGTH	WAVELENGTH
NO.	NO.	NO.	NO.	NO.	NO.	NO.
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
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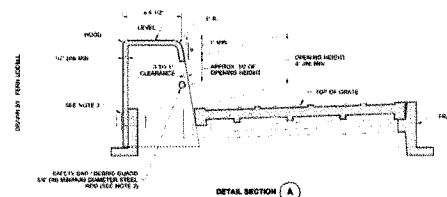
- **Curriculum Frameworks** See **A. Future Plans**
- **Class Standard Development** See **4-05.201**
- **Class Standard Development** See **4-05.203**
- **Class Standard Development** See **4-05.202**
- **Instructional Plan** See **Instructional Plan** See **4-05.204**

MANHOLE TYPE 1

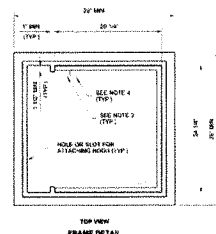


- NOTES**
1. Knipknuts shall have a wall thickness of 2" minimum to 2.5" maximum.
 2. For pipe allowances, see Standard Plan B-15.25.

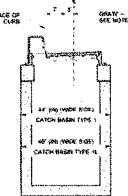
DIAM.	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	6"
54"	4.5"	6"	42"	6"
60"	5"	6"	48"	6"



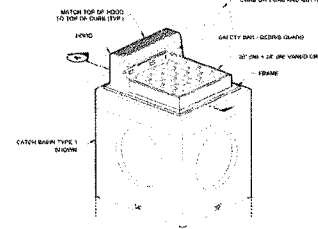
DETAIL SECTION



TOP VIEW
FRAME 001

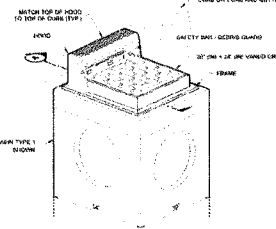


SECTION A



ISOMETRIC VIEW
COMBINATION INLET
FRAME, HOOD, AND VARIOUS GRATE

COMBINATION INLET



- [illegible]

- NOTES:**
1. No reops are required when height is 4' or less.
 2. The bottom of the precast catch basin may be sloped to facilitate raveling.
 3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
 4. Knockouts shall have a wall thickness of 2" (min) to 2.5" (max). Knockouts shall have a minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification Section 9-04.3.
 5. Pipe allowances will vary depending on the pipe material used. Contact the Region Hydrologic Engineer for assistance.

PPS Engineering and
 Environmental LLC
 1325 SE Tech Center Drive
 Suite 140
 Vancouver, WA 98683
 360.696.3468
 ppsusa.com

**WSDOT STANDARD DETAILS FOR:
BREZZEE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING
A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON**

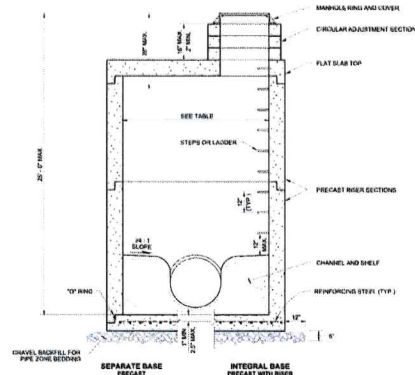


DESIGNED:
JAB
CHECKED:
CMK
MAY 2025
71486.000

SHEET ID
STD03

SHEET 169 OF 173

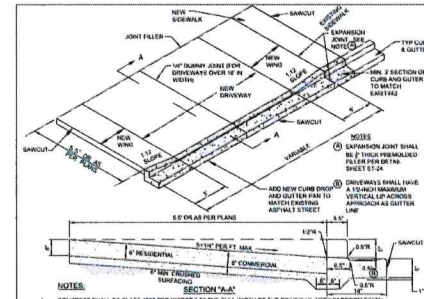
SECTION IV: DISCUSSION



NOTES

1. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum.
2. For pipe allowances, see **Standard Plan B-10.20**.
3. No steps are required when height is 4' (ft) or less.



DIAM.	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUT
48"	4"	0"	36"	8"
54"	4.5"	0"	42"	8"
60"	5"	0"	48"	8"
72"	6"	0"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

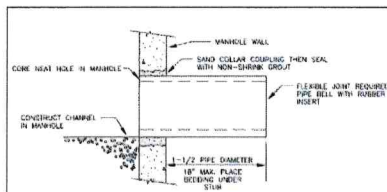


NOTE

- [illegible]

**RESIDENTIAL/COMMERCIAL DRIVEWAY
(WITHOUT PLANTER STRIP)**

	CITY OF LA CENTER APPROVED		<table> <tr> <th>REVISIONS</th> <th>DATE</th> <th>DRAWN</th> <th>DESIGNED</th> </tr> <tr> <td>1</td> <td>4/7/10</td> <td>BES</td> <td>BES</td> </tr> <tr> <td>2</td> <td>1/9/13</td> <td>ALC</td> <td>ALC</td> </tr> <tr> <td>3</td> <td>7/18/13</td> <td>ALC</td> <td>ALC</td> </tr> <tr> <td>4</td> <td>4/3/17</td> <td>ALC</td> <td>ALC</td> </tr> </table>		REVISIONS	DATE	DRAWN	DESIGNED	1	4/7/10	BES	BES	2	1/9/13	ALC	ALC	3	7/18/13	ALC	ALC	4	4/3/17	ALC	ALC	ST-3
	REVISIONS	DATE	DRAWN	DESIGNED																					
	1	4/7/10	BES	BES																					
	2	1/9/13	ALC	ALC																					
	3	7/18/13	ALC	ALC																					
4	4/3/17	ALC	ALC																						
																									
4/3/17																									
CITY ENGINEER	DATE																								




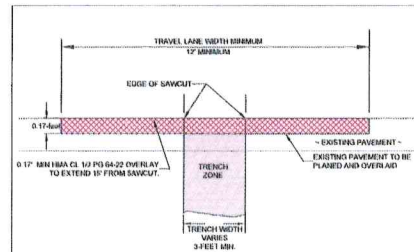
TYPES OF CONNECTIONS APPROVED:

1. CONCRETE PIPE, GROUTED WITH NON-SHRINK GROUT.
2. KODWASEAL 1
3. FIBROD CONCRETE MANHOLE ADAPTER
4. CAST-A-BEAL CAST-IN BOOT TYPE CONNECTOR

NOTES:


1. CENTER STUB OR SLEEVE IN HOLE W/2" GROUTED SPACE ALL AROUND. CORE HOLE 4" LARGER THAN I.D. OF STUB OR SLEEVE.
2. STANDARD GROUT WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR NON-SHRINK GROUT.
3. STUBS/OUTS INSTALLED FOR FUTURE EXTENSION ARE TO BE PLUGGED AT BOTH ENDS AND MARKED.

MANHOLE CONNECTION DETAILS				PLAN #
	CITY OF LA CENTER APPROVED	PENDING	DATE	COMMENTS/NOTES
	<i>Audrey Perlepin</i>	3	11-28-17	M.C.
	11-28-17			
	11-28-17			

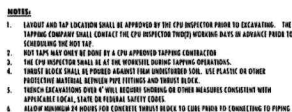


NOTE

1. THIS DETAIL IS TO BE USED ON ARTERIALS OR COLLECTORS OR PAVEMENT SURFACE RECONSTRUCTION AND/OR WHEN THE EXISTING ROADWAY IS LESS THAN 5 YEARS OLD.
2. SEE APPROPRIATE DETAIL FOR TRENCH ZONE RECONSTRUCTION REQUIREMENTS TO BE USED AS AN ALTERNATIVE IN LIEU OF FULL REMOVAL BY THE CITY OF LA CENTER.

PAVEMENT SURFACE RECONSTRUCTION (ALT. FOR TRANSVERSE OR LONGITUDINAL CUTS)							PLAN #
	CITY OF LA CIENEGA APPROVED		REVISIONS	DATE	DRAWN BY	DESIGNED BY	
			1	7/29/10	URS	BES	
			2	10/5/11	ALC	ALC	
			3	11/19/18	ALC	ALC	
			3	7/25/21	ALC	ALC	
<i>Adelle D. Colangelo, 1/25/21</i> CITY ENGINEER							

BID SET



RECEIVED JANUARY 2007



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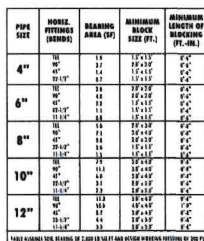
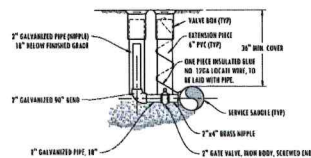


TABLE A-2000-1000: HEARING OF 2,000 IN 10 FT AND 85 DBM HEARING PRESURE BY SEX P

REVISED JANUARY 2007



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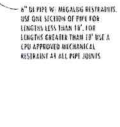


RESTRAINED PIPE LENGTHS					
PIPE TYPE	4"	6"	8"	10"	12"
PVC	40	56	74	90	107

REVISED JANUARY 2021



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RENDER: SAMALAM 200



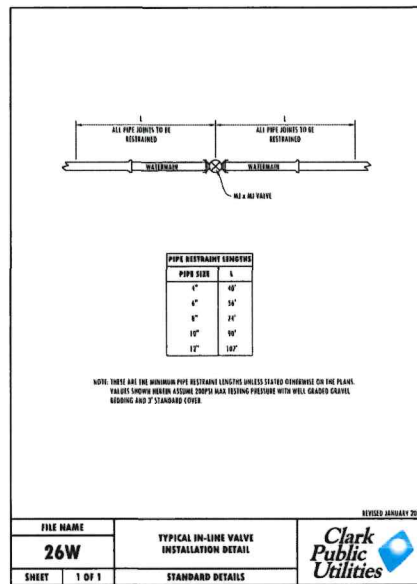
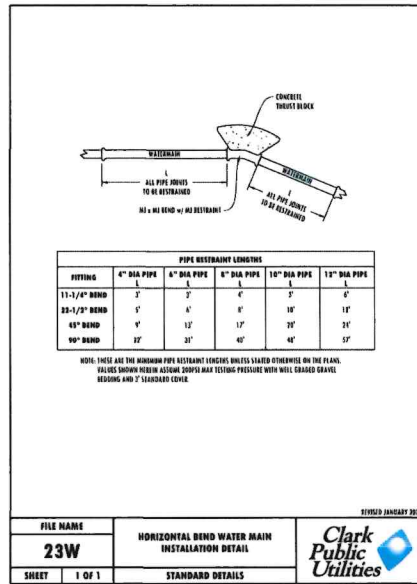
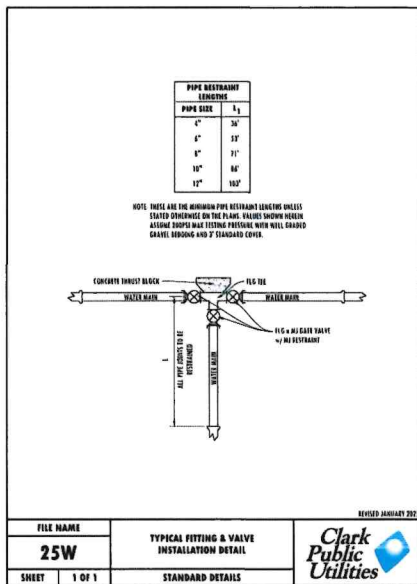
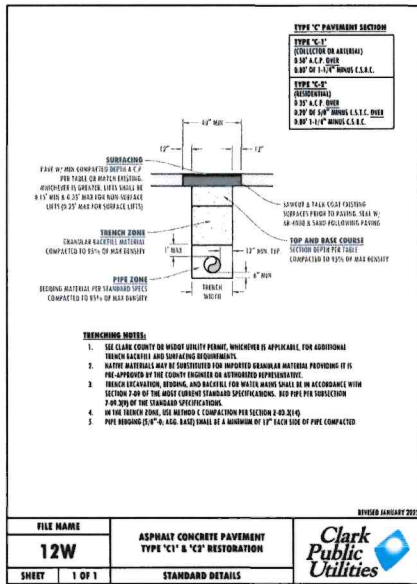
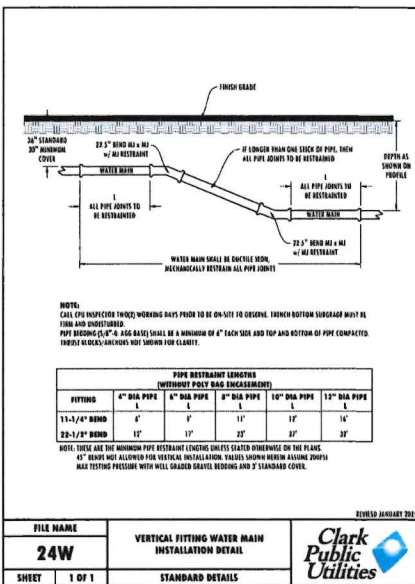
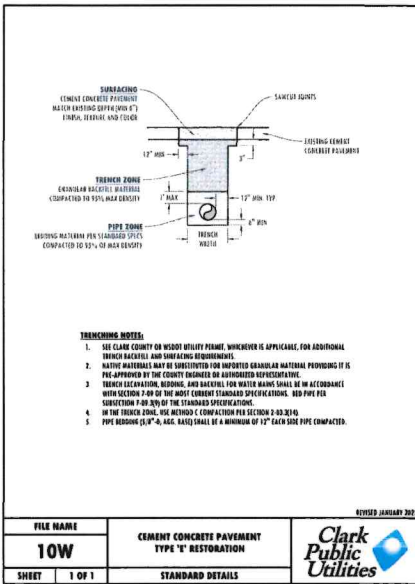
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BID SET

PBS Engineering and Construction
1235 SE 14th Street, Suite 100
Vancouver, WA 98603
(206) 463-3333
pbes.com

CLARK PUBLIC UTILITIES STANDARD DETAILS FOR:

BREEZE CREEK CULVERT REPLACEMENT & 4TH STREET WIDENING

A SITE LOCATED IN THE CITY OF LA CENTER, WASHINGTON

Know what's below.
Call before you dig.

DESIGNED:
AND
CHECKED:
CMK
MAY 2018
71486.000

SHEET ID
STD06

SHEET 172 OF 173

A diagram of a three-part jointed stick, labeled '3-Part Jointed Stick'. It shows a central section with a joint in the middle, and two side sections, each with a joint at its outer end. The stick is shown in a slightly curved position.

ALLOWABLE PVC PIPE BENDING		
PIPE SIZE	ALLOWABLE MINIMUM BENDING RADIUS	ALLOWABLE OFFSET "S"
6"	20'	12"
8"	25'	9.5"
12"	35'	7"

NO BENDING OF PVC PIPE ALLOWED FOR PIPE LARGER THAN 12" DIAMETER

A diagram of a three-part joint. It consists of three cylindrical sections labeled 'PVC' at the bottom. The central section is bent at an angle of 95°, indicated by an arc and the number '95°' above it. The two outer sections are straight and extend horizontally from the central bent section.

NOTE: DEFLECTIONS IN ALIGNMENT FOR PVC PIPE SHALL BE MADE BY BENDING THE PIPE AND NOT DEFLECTING PIPE JOINTS

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