

LOCATION MAP

LATITUDE: 40°04'40" LONGITUDE: 83°01'15"



PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	—————

DESIGN DESIGNATION

DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
AVERAGE DAILY TRAFFIC	300
DESIGN HOURLY VOLUME	30
DIRECTIONAL DISTRIBUTION	50%
TRUCK PERCENTAGE	1%

DESIGN FUNCTIONAL CLASSIFICATION: 07 LOCAL ROADS

NHS PROJECT NO

DESIGN EXCEPTIONS

NO DESIGN EXCEPTIONS

ADA DESIGN WAIVERS

NO ADA DESIGN WAIVERS

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig



OHIO 811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:

AMERICAN STRUCTUREPOINT INC. 2550 CORPORATE EXCHANGE DR, STE 300 COLUMBUS, OH 43231 TEL 614.901.2235 FAX 614.901.2236 www.structurepoint.com

FRA - SELBY BLVD WEST BRIDGE

CITY OF WORTHINGTON

INDEX OF SHEETS:

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FEMA FIRM INFORMATION
Panel 159 of 465
Map Number 39049C0159K
Map Revised June 17, 2008
Zone X

ENGINEER'S SEAL
BRIDGE

SIGNED: Joseph C Schmitz
DATE: 12/15/23

ENGINEER'S SEAL
ROADWAY

SIGNED: Anthony J Lenhart
DATE: 12/15/23

STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-2.1	1/21/22		
BP-3.1	1/21/22		
BP-3.2	1/18/19		
DM-1.1	7/17/20		
PCB-91	7/17/20		
MT-95.40	1/17/20		
MT-96.11	4/16/21		
MT-96.20	7/15/16		
MT-96.26	1/18/19		
MT-97.10	4/19/19		
L-6324	1/26/18		
L-6637A	9/21/22		

FEDERAL PROJECT NUMBER

E220083

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

EXISTING TWIN 12' X 8' BOX CULVERTS REPLACED WITH A PRECAST 26' x 7'-2" CONCRETE THREE-SIDED FLAT-TOP STRUCTURE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.47 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.13 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A

MAINTENANCE OF TRAFFIC ENDORSEMENT

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

APPROVED	<i>John M Stewart</i>	CITY OF WORTHINGTON, CITY MANAGER
DATE	12/15/23	
APPROVED	<i>John Winkler</i>	CITY OF WORTHINGTON, DIRECTOR OF ENGINEERING
DATE	12/15/2023	
APPROVED	N/A	CITY OF WORTHINGTON, POLICE - CHIEF
DATE		
APPROVED	N/A	CITY OF WORTHINGTON FIRE - CHIEF
DATE		
APPROVED	<i>John A Wene</i>	CITY OF COLUMBUS, DIVISION OF WATER
DATE	1-18-24	
APPROVED	<i>Kristen Atchley</i>	CITY OF COLUMBUS, DEPARTMENT OF PUBLIC UTILITIES
DATE	1-18-2024	

DESIGN AGENCY

AMERICAN STRUCTUREPOINT

DESIGNER

DMS

REVIEWER

AJL 10/27/23

PROJECT ID

116037

SHEET

P.1

TOTAL

38

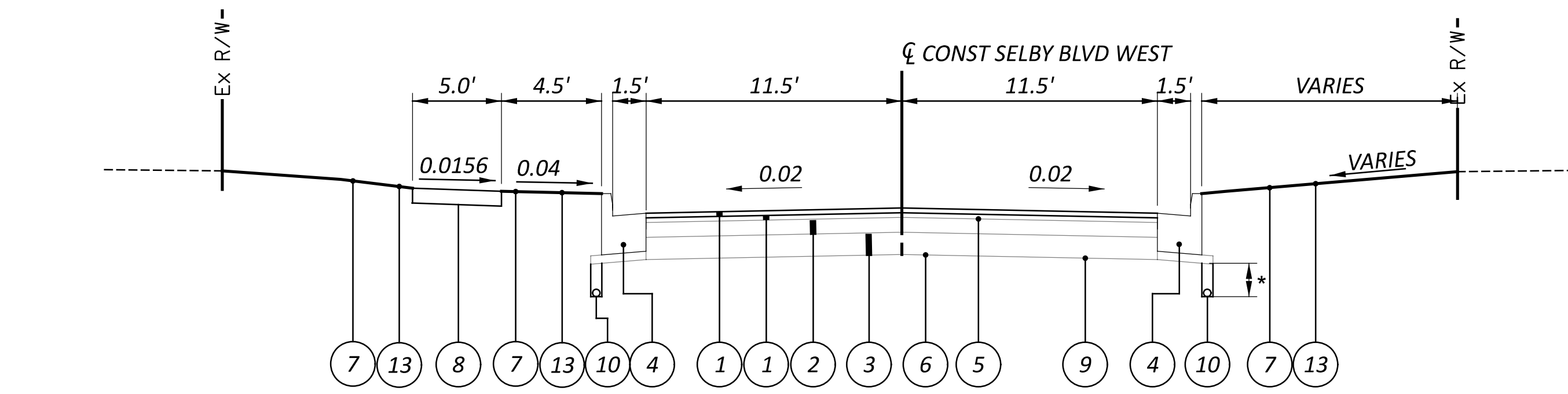
HORIZONTAL CONTROL				
COORDINATES ARE BASED ON OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND AN NGS OPUS SOLUTION. A PROJECT ADJUSTMENT FACTOR OF 1.0000241577 WAS APPLIED ABOUT C.P. 1500 TO OBTAIN GROUND COORDINATES.				
C.P.	DESCRIPTION	NORTHING (GROUND)	EASTING (GROUND)	ELEVATION
1500	5/8" IRON PIN SET W/ "ASI CONTROL POINT" CAP LOCATED ON THE NORTH SIDE OF SELBY BLVD WEST AT THE INTERSECTION WITH EMERSON AVE, +/-13.1 FEET NORTH OF A CONC WALK, +/-10.5 FEET NORTHWEST OF A LIGHT POLE, +/-24.8 FEET WEST OF A PARKING LOT/DRIVE	757100.295	1822990.382	805.17
1501	MAG NAIL SET IN CURB LOCATED ON THE SOUTH SIDE OF W. SELBY BLVD, EAST OF THE INTERSECTION WITH EMERSON AVE, +/-9.7 FEET NORTHEAST OF A FIRE HYDRANT (TBM 102), +/-39.8 FEET NORTHEAST OF A STOP SIGN, +/- 73.5 FEET SOUTHEAST OF A STREET SIGN LOCATED ON THE NORTH SIDE OF SELBY BLVD WEST	757043.480	1823012.094	804.83
1502	MAG NAIL SET IN CONC WALK LOCATED ON THE NORTH SIDE OF W. SELBY BLVD, EAST OF THE BRIDGE, +/-90.9 FEET SOUTHEAST OF A POST W/ "12 TON LIMIT" SIGN, +/-112.0 FEET NORTHEAST OF A POWER POLE LOCATED ON THE SOUTH SIDE OF W. SELBY BLVD, +/-196.5 FEET NORTHEAST OF A FIRE HYDRANT (TBM 101) LOCATED ON THE SOUTH SIDE OF SELBY BLVD WEST	757153.048	1822817.912	791.76
1503	MAG NAIL SET IN CURB LOCATED ON THE SOUTH SIDE OF SELBY BLVD WEST, WEST OF THE BRIDGE, +/-8.2 FEET WEST OF A FIRE HYDRANT (TBM 101), +/-7.8 FEET NORTHWEST OF A WATER VALVE, +/-58.1 FEET NORTHEAST OF A POWER POLE	757132.966	1822613.370	781.82
1504	5/8" IRON PIN SET W/ "ASI CONTROL POINT" CAP LOCATED ON THE SOUTH SIDE OF SELBY BLVD WEST, WEST OF THE BRIDGE, +/-3.3 FEET SOUTH OF THE CURB, +/-104.1 FEET WEST OF A POWER/LIGHT POLE, +/-170.7 FEET SOUTHWEST OF A FIRE HYDRANT (TBM 101)	757092.401	1822455.822	781.30
1505	MAG NAIL SET IN CURB LOCATED ON THE NORTH SIDE OF SELBY BLVD WEST, WEST OF THE INTERSECTION WITH NORTHBROOK DR E., +/-25.0 FEET SOUTHWEST OF A STOP SIGN, +/-60.2 FEET WEST OF A STREET SIGN, +/-53.4 FEET SOUTHWEST OF A FIRE HYDRANT (TBM 100)	757134.604	1822189.731	782.60

SEE PLAN AND PROFILE SHEET P.19 FOR CONTROL POINT LOCATIONS.

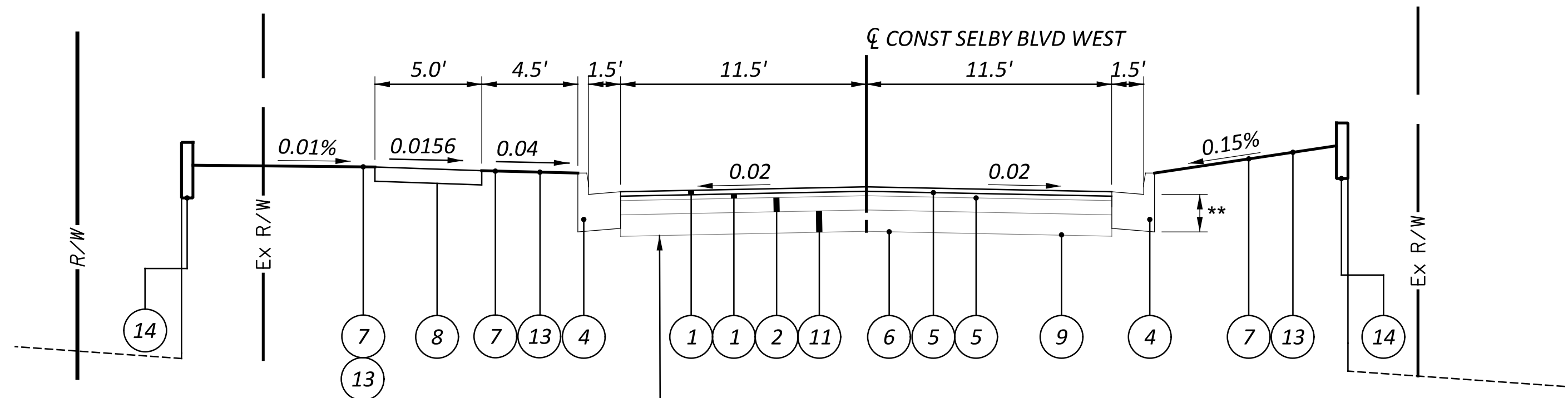
VERTICAL CONTROL				
ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED UTILIZING A LEVEL CIRCUIT ORIGINATING ON CP 1500				
B.M.	DESCRIPTION	NORTHING (GROUND)	EASTING (GROUND)	ELEVATION
CP 1500	5/8" IRON PIN SET W/ "ASI CONTROL POINT" CAP LOCATED ON THE NORTH SIDE OF SELBY BLVD WEST AT THE INTERSECTION WITH EMERSON AVE, +/-13.1 FEET NORTH OF A CONC WALK, +/-10.5 FEET NORTHWEST OF A LIGHT POLE, +/-24.8 FEET WEST OF A PARKING LOT/DRIVE	757100.295	1822990.382	805.17
TBM 100	CUT "X" ON SW ARROW BOLT OF FIRE HYDRANT LOCATED AT THE NE CORNER OF THE INTERSECTION OF SELBY BLVD WEST & NORTHBROOK DR E.	-	-	784.73
TBM 101	CUT "X" ON E ARROW BOLT OF FIRE HYDRANT LOCATED ON THE SOUTH SIDE OF SELBY BLVD WEST, FIRST FIRE HYDRANT WEST OF BRIDGE	-	-	783.74
TBM 102	CUT "X" ON NE ARROW BOLT OF FIRE HYDRANT LOCATED AT THE SE CORNER OF THE INTERSECTION OF SELBY BLVD WEST & EMERSON AVE	-	-	806.79

SEE PLAN AND PROFILE SHEET P.19 FOR BENCH MARK LOCATIONS.

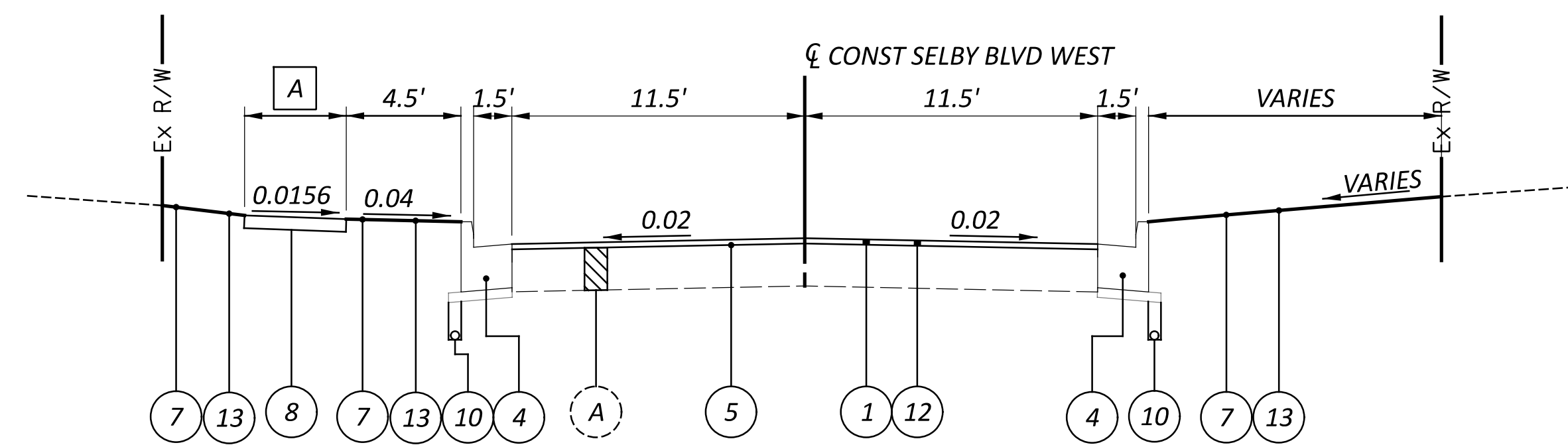
DESIGN AGENCY	
STRUCTUREPOINT <small>INC.</small>	
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.2	38



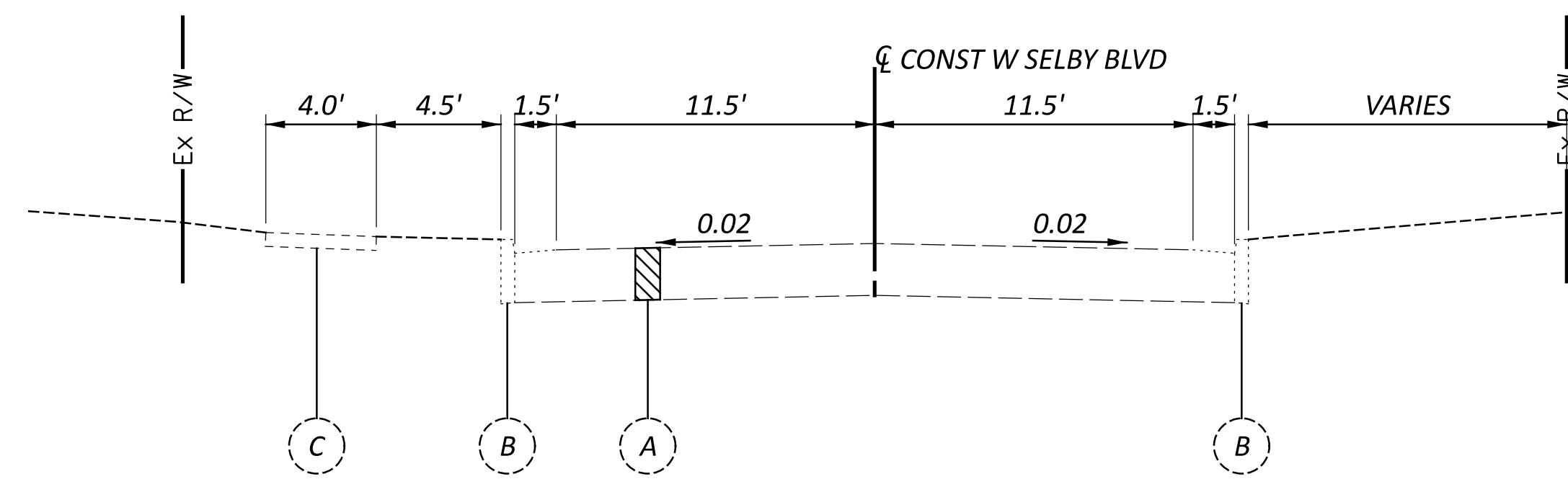
TYPICAL SECTION - SELBY BLVD WEST
 STA 108+22.00 TO STA 109+58.06
 STA 109+91.46 TO STA 110+90.00 * 18" (TYP.)



TYPICAL SECTION - SELBY BLVD WEST
 STA 109+58.06 TO STA 109+91.46
 LOW STRENGTH MORTAR EXTENDS TO TOP OF CULVERT
 ** MODIFY CURB BOTTOM FROM STA 109+42.61 TO STA 109+55.85 TO FIT OVER CULVERT. MAX DEPTH: 0.75', MIN DEPTH: 0.5'



TYPICAL SECTION - SELBY BLVD WEST
 STA 108+00.00 TO STA 108+22.00
 STA 110+90.00 TO STA 110+97.00



EXISTING ADJOINING SECTION - SELBY BLVD WEST
 STA 108+00.00
 STA 110+97.00

LEGEND

- 1 ITEM 441 - 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
- 2 ITEM 301 - 4" ASPHALT CONCRETE BASE, (449), PG64-22
- 3 ITEM 304 - 6" AGGREGATE BASE
- 4 ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2
- 5 ITEM 407 - NON TRACKING TACK COAT
- 6 ITEM 204 - SUBGRADE COMPACTION
- 7 ITEM 659 - SEEDING AND MULCHING
- 8 ITEM 608 - 4" CONCRETE WALK
- 9 ITEM 204 - PROOF ROLLING
- 10 ITEM 605 - 4" BASE UNDERDRAINS
- 11 ITEM 613 - LOW STRENGTH MORTAR
- 12 ITEM 254 - PAVEMENT PLANING, 1.5"
- 13 ITEM 659 - 4" TOPSOIL
- 14 ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, HEADWALL
- A EX 7" ± ASPHALT CONCRETE
- B EX CURB
- C EX WALK

VARIABLE DEPTH MILLING

STATION RANGE	MILLING DEPTH (FT)
108+00 - 108+22	0.01
110+80 - 110+97	0.03

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERICAN ELECTRIC POWER
 PAUL PAXTON, ENGINEERING LIASON COORDINATOR
 777 HOPEWELL DR, HEATH, OH 43056
 OFFICE: 740-348-5322
 AEP SOLUTION CENTER: 800-277-2177
 ALSO COPY:
 AEP TELECOM
 UNA BLANUSA
 ohfiberrelocate@aep.com

BREEZELINE - COLUMBUS
 3675 CORPORATE DR, COLUMBUS, OH 43231
 ADD BOTH:
 DL_CMHFR@ATLANTICBB.com
 jborreson@breezeline.com

COLUMBIA GAS OF OHIO - COLUMBUS
 ROB CALDWELL, LEADER FIELD ENGINEERING
 3550 JOHNNY APPLESEED CT, COLUMBUS, OH 43231
 OFFICE: 614-818-2104
 CELL: 614-370-1906
 CUSTOMER SERVICE: 1-800-344-4077
 DAMAGER PREVENTION: 1-866-632-6243
 columbiagas_columbuseng@nisource.com
 ALSO COPY: rcaldwell@nisource.com

MCI
 757 COMMERCE CT, LEWIS CENTER, OH 43035
 CELL: 614-593-6685 (MAURICE JONES)
 CELL: 614-816-0361 (BOB DILLOW)
 vz.net.columbus@verizon.com
 brian.anse1@verizon.com
 ALSO COPY:
 terry.shumate@verizonwireless.com
 john.cornell@verizonwireless.com
 michael.hennon@verizonwireless.com
 michael.bondy@verizonwireless.com
 sven.christianson@verizonwireless.com

AT&T - OHIO
 DONALD G. MARSHALL JR., MANAGER OSP PLANNING
 111 N 4TH ST, COLUMBUS, OH 43215
 CELL: 614-216-2396
 AT&T REPAIR SERVICES: 888-611-4466
 DAMAGE PREVENTION: 937-296-3929
 G01553@att.com

COLUMBUS DIVISION OF WATER
 910 DUBLIN RD, COLUMBUS, OH 43215
 OFFICE: 614-645-7788

CHARTER COMM
 3760 INTERCHANGE RD, COLUMBUS, OH 43204
 DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM

WORTHINGTON - CITY OF (SEWER)
 6550 N HIGH ST, WORTHINGTON, OH
 43085

WORTHINGTON - CITY OF (TRAFFIC)
 380 HIGHLAND AVE, WORTHINGTON, OH
 43085

WORTHINGTON - CITY OF (WATER)
 380 HIGHLAND AVE, WORTHINGTON, OH
 43085

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7 AM AND 9 PM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. THE DEWATERING PUMP MUST BE SILENT OR SOUND ATTENUATED FOR BYPASS PUMPING.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID ITEM 201, CLEARING AND GRUBBING.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET P.2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: VRS GNSS SURVEY
 MONUMENT TYPE: TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD '88
 GEOID: GEOID 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
 ELLIPSOID: GRS80
 MAP PROJECTION: LAMBERT CONFORMAL CONIC
 COORDINATE SYSTEM: OHIO STATE PLAN (SOUTH)
 COMBINED SCALE FACTOR: 0.99997584288358
 ORIGIN OF COORDINATE
 SYSTEM: CP 1500 (757100.295, 1822990.382)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEET NO. P.3 FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 2 HOUR.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	72.00 CU. YD.
659, SEEDING AND MULCHING	843 SQ. YD.
659, COMMERCIAL FERTILIZER	0.09 TON
659, LIME	0.13 ACRES
659, WATER	4.00 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

WATER GENERAL NOTES

THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

ALL WATER MAIN MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

WATER GENERAL NOTES CONT'D

ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).

APPROVAL ON THE PART OF THE CITY OF COLUMBUS IS GIVEN PURSUANT TO THE PROVISIONS OF THE WATER SERVICE AGREEMENT BETWEEN WORTHINGTON AND THE CITY OF COLUMBUS, OHIO ON APRIL 9, 2008 AND ALL SUBSEQUENT AMENDMENTS THEREOF.

THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MUST BE OBTAINED FROM THE RESPECTIVE HYDRANT OWNER (MUNICIPALITY OR TOWNSHIP) PRIOR TO CONTACTING THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. PERMITS MAY BE OBTAINED BY ACCESSING <http://portal.columbus.gov/permits/>.

ALL WATER MAINS SHALL BE CLEANED AND FLUSHED, AND ANY WATER MAIN 12-INCH AND LARGER MUST BE PROPERLY PIGGED, IN ACCORDANCE WITH SECTION 801.15 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.16 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE CITY MAY NOT APPROVE ANY TEST LASTING LESS THAN TWO HOURS, REGARDLESS OF THE AMOUNT OF LEAKAGE.

ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 801.17 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. SPECIAL ATTENTION IS DIRECTED TO THE APPLICABLE SECTIONS OF A.W.W.A. C-651. WHEN THE WATER MAINS ARE READY FOR DISINFECTION, THE CITY OF WORTHINGTON SHALL SUBMIT A WRITTEN REQUEST FOR CHLORINATION OF THE MAINS THAT NEED DISINFECTED, THREE (3) SETS OF "AS-BUILT" PLANS (FULL SIZE SHEETS ONLY), THE AS-BUILT SURVEY COORDINATES, WATER SERVICE REPORTS AND A PRESSURE TEST TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTION OF ALL WATER MAINS CONSTRUCTED UNDER THIS PLAN.

THE CONTRACTOR SHALL PROVIDE CHLORINATION TAPS AND BLOWOFFS AS PER THE REQUIREMENTS OF SECTION 801.17 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. IN ADDITION TO THE BLOWOFF LOCATIONS NOTED IN 801.17, THE CONTRACTOR SHALL ALSO INSTALL BLOWOFFS AT EVERY 1,100 LINEAR FEET OF THE WATER MAIN INSTALLED FOR SAMPLING.

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	P.4
TOTAL	38

WATER GENERAL NOTES CONT'D

ANY SECTION OF WATER MAIN THAT IS LONGER THAN 20 FEET IN LENGTH SHALL BE CHLORINATED. HAND SWABBING METHODS WILL ONLY BE PERMITTED FOR SECTIONS LESS THAN OR EQUAL TO 20 FEET IN LENGTH. USE UNSCENTED HOUSEHOLD BLEACH FOR HAND SWABBING OF PIPE AND FITTINGS. PLEASE NOTE THAT CUT-IN-TEES, SLEEVES, AND ANY OTHER REQUIRED FITTINGS OR PIPING SHALL BE TAKEN INTO ACCOUNT AND ARE INCLUDED IN THE TOTAL LENGTH OF THE SECTION (CUT TO CUT).

ONLY ONE CONNECTION TO AN EXISTING WATER MAIN IS PERMITTED BEFORE DISINFECTION OF A NEW WATER MAIN HAS BEEN COMPLETED. ALL OTHER CONNECTIONS MUST BE MADE AFTER THE MAIN HAS BEEN DISINFECTED.

NO WATER SERVICE CONNECTION PERMITS SHALL BE ISSUED OR CONNECTIONS MADE TO ANY WATER TAPS UNTIL WATER MAINS HAVE BEEN DISINFECTED BY THE CITY OF COLUMBUS, DIVISION OF WATER. WHEN A 3-INCH OR LARGER TAP IS TO OCCUR ON A 20-INCH OR LARGER WATER MAIN, THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER OPERATIONS CONTROL CENTER AT (614)-645-7168 TWENTY-FOUR (24) HOURS IN ADVANCE OF PERFORMING THE TAP.

WHEN PERFORMING WATER SERVICE LINE TRANSFERS, THE CONTRACTOR SHALL FLUSH THE WATER TAP PRIOR TO CONNECTING TO THE EXISTING SERVICE LINE.

MAINTAIN EIGHTEEN (18) INCHES VERTICAL AND TEN (10) FEET HORIZONTAL SEPARATION BETWEEN ANY SANITARY OR STORM SEWER PIPING AND ALL PROPOSED WATER MAINS.

WHEN CROSSING THE EXISTING WATER MAIN, AND LOW STRENGTH MORTAR (ITEM 613) IS TO BE USED AS BACKFILL, THE CONTRACTOR SHALL PROVIDE SIZE NO. 57 CRUSHED CARBONATE STONE (CCS) 1 FOOT ABOVE THE EXISTING WATER MAIN.

IF DURING EXCAVATION, THE POLYETHYLENE ENCASMENT ON THE EXISTING WATER MAIN BECOMES DAMAGED, THE CONTRACTOR SHALL REPAIR THE POLYETHYLENE ENCASMENT PER MANUFACTURER'S SPECIFICATIONS AND DOW STANDARD DRAWINGS L-1003 AND L-1004, AT THEIR OWN EXPENSE. ENSURE THAT THE ENTIRE EXPOSED AREA IS COVERED WITH NEW POLYETHYLENE ENCASMENT AND SECURELY TAPED, PRIOR TO BACKFILLING.

CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE OHIO ADMINISTRATIVE CODE CHAPTER 3745-83-02 WATER DISRUPTION OF SERVICE RULE. EXCAVATE PITS SUFFICIENTLY BELOW THE AREA TO BE CONNECTED TO IN ORDER TO MAINTAIN WATER LEVELS BELOW THE WATER MAIN. IF WATER FROM THE PIT ENTERS THE EXISTING MAIN, CONTACT DIVISION OF WATER IMMEDIATELY. ENSURE THAT SUFFICIENTLY SIZED PUMPS ARE UTILIZED TO REMOVE WATER FROM THE TRENCH AND BACKUP PUMPS ARE KEPT ON SITE FOR REDUNDANCY.

A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.

A MINIMUM OF 4 FEET OF COVER IS REQUIRED PRIOR TO PRESSURE TESTING ANY WATER MAIN. A SUFFICIENT AMOUNT OF BACKFILL SHALL BE INSTALLED TO PROVIDE THE ADEQUATE RESTRAINT IN AREAS WHERE REQUIRED.

WATER GENERAL NOTES CONT'D

ALL VALVE BOXES, WATER TAP BOXES, AND FIRE HYDRANTS SHALL BE LOCATED WITHIN THE EASEMENT AREA.

THE CONTRACTOR SHALL COORDINATE HIS WORK SUCH THAT NO WATER CUSTOMER WILL HAVE THEIR SERVICE DISRUPTED MORE THAN TWO (2) TIMES THROUGHOUT THE DURATION OF THIS PROJECT.

FIRE HYDRANT RELOCATIONS SHALL CONFORM TO APPLICABLE SECTIONS OF ITEM 809 OF THE COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. WORK SHALL CONSIST OF REMOVING THE EXISTING HYDRANT, INSTALLING NEW 6" PIPE AND FITTING AS REQUIRED TO LOCATE THE FIRE HYDRANT 2 FEET FROM BACK OF PROPOSED CURB OR 8 FEET OFF EDGE OF PAVEMENT, RESETTING HYDRANT AND BLOCKING AS REQUIRED. ALL 6" PIPE SHALL BE INSTALLED AT 4'-0" MINIMUM COVER. HYDRANT EXTENSIONS SHALL BE PROVIDED PER ITEM 810, AS REQUIRED. RELOCATED FIRE HYDRANTS SHALL BE ADJUSTED TO PROPER GRADE AND FACED IN THE PROPER DIRECTION. WHEN A HYDRANT IS RELOCATED FIFTEEN (15) FEET OR MORE FROM THE "TYPICAL HYDRANT SETTING" VALVE LOCATION (SEE L-6409 & L-6637), AN ADDITIONAL VALVE SHALL BE INSTALLED, AND RESTRAINED, WITHIN TWO (2) FEET OF THE RELOCATED HYDRANT. PAYMENT IS TO BE INCLUDED UNDER ITEM 809, FIRE HYDRANT RELOCATED.

RELOCATED FIRE HYDRANTS SHALL BE PUT BACK IN SERVICE AS SOON AS POSSIBLE. NO TWO (2) ADJACENT FIRE HYDRANTS SHALL BE TAKEN OUT OF SERVICE CONCURRENTLY.

IF A LEAD WATER TAP IS ENCOUNTERED AND IS NEITHER DAMAGED NOR PART OF A PLANNED RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL REPORT THE PRESENCE OF THE LEAD TAP TO THE DIVISION OF WATER DISTRIBUTION MAINTENANCE GROUP AT 614-645-7788.

IF A LEAD WATER TAP IS ENCOUNTERED AND IS EITHER DAMAGED OR IS PART OF A PLANNED RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS:

1. IF DAMAGED, IMMEDIATELY CONTACT LEW FLEMISTER, DIVISION OF WATER, (614-645-7027), TO REQUEST THE SHUT OFF OF THE EXISTING CURB STOP. IF LEW CANNOT BE REACHED, CONTACT THE DIVISION OF WATER DISTRIBUTION ENGINEERING OFFICE AT 614-645-7677 TO REQUEST THE SHUT OFF.
2. CONTRACTOR SHALL EXPOSE THE OWNER'S SIDE OF THE WATER SERVICE TO CONFIRM THE MATERIAL. THE INSPECTOR SHALL BE PRESENT FOR THIS.
3. IF THE CUSTOMER'S PRIVATE SERVICE MATERIAL IS LEAD, STOP WORK AND NOTIFY THE DIVISION OF WATER DISTRIBUTION ENGINEERING OFFICE (614-645-7677) IMMEDIATELY. IF THE MATERIAL IS NOT LEAD, THE CONTRACTOR SHALL REPLACE THE LEAD TAP (FROM EXISTING CORPORATION STOP TO CURB STOP) AND REINSTATE SERVICE TO THE CUSTOMER. PARTIAL REPAIRS OF THE LEAD TAP ARE NOT PERMITTED.
4. REFER TO DIVISION OF WATER STANDARD DRAWINGS L-7102C AND L-9901 FOR INFORMATION ON WATER TAP RELOCATIONS, PLACING NEW CURB STOPS, AND RELOCATING CURB BOXES.

ANY WORK ON THE PRIVATE WATER SERVICE LINE (BETWEEN CURB STOP AND METER) WILL REQUIRE ADDITIONAL INSPECTION BY THE UTILITY METER SERVICES SECTION. CONTRACTOR SHALL CALL 614-645-8276 TO SCHEDULE INSPECTION.

SEE SHEET 23 ITEM	STATION	AS BUILT		
		NORTHING	EASTING	C/L ELEVATION
CONNECT TO EX 6"WM, 8"x6"	108+74.38			
8" GATE VALVE BOX	108+79.20			
8" 45° BEND (HORIZ)	108+83.93			
8" 45° BEND (HORIZ)	108+90.73			
8" GATE VALVE BOX	108+92.49			
ANCHORING TEE AND VALVE FOR FIRE HYDRANT SETTING	108+92.64			
8" 22.5° BEND (VERT)	108+93.14			
8" 45° BEND (HORIZ)	108+93.44			
8" 22.5° BEND (HORIZ)	109+01.46			
8" 22.5° BEND (VERT)	109+10.82			
8" 45° BEND (HORIZ)	109+73.54			
8" 22.5° BEND (VERT)	109+85.94			
8" 22.5° BEND (HORIZ)	109+90.45			
8" 45° BEND (HORIZ)	110+00.18			
8" 22.5° BEND (VERT)	110+07.37			
8" 22.5° BEND (HORIZ)	110+15.41			
8" GATE VALVE BOX	110+20.92			
CONNECT TO EX 6"WM, 8"x6"	110+26.69			

ABESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT AT THE BRIDGE.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA ELECTRONICALLY OR VIA MAIL TO:

OHIO EPA
 DAPC-ASBESTOS
 P.O. BOX 1049
 COLUMBUS, OHIO 43216-1049

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER.

INFORMATION REQUIRED ON THE FORM WILL INCLUDE: 1) THE CONTRACTOR'S NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

THE CONTRACTOR SHALL FURNISH ALL FESS, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.



ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:
 ITEM 616, WATER 3 M. GAL.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614, WORK ZONE CENTER LINE 0.06 MILES
 ITEM 614, WORK ZONE EDGE LINE 0.19 MILES
 ITEM 614, WORK ZONE STOP LINE 24 FEET

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THE ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS P.8 & P.13 AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	PHASE			
	1	2	3	4
	(ALL RED) DUMMY PHASE	MAINLINE (EASTBOUND)	(ALL RED) DUMMY PHASE	MAINLINE (WESTBOUND)
MIN. GREEN		10		10
EXTENSION		4		4
MAX. GREEN		30		30
YELLOW		3.5		3.5
ALL RED	X		X	
RECALL	ON	OFF	OFF	OFF

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

STAGE 1:

TRAFFIC: MAINTAIN TWO WAY TRAFFIC ON SELBY BLVD WEST

CONSTRUCTION: REMOVE SOUTHERN CURB AND GUTTER AND SIDEWALK. REMOVE AND RELOCATE FIRE HYDRANT. PLACE TEMPORARY PAVEMENT ALONG SOUTH SIDE OF THE ROADWAY.

STAGE 2:

TRAFFIC: MAINTAIN TWO-WAY TRAFFIC ON ONE LANE OF TEMPORARY PAVEMENT VIA TEMPORARY SIGNAL ALONG THE SOUTH SIDE OF THE ROADWAY.

CONSTRUCTION: REMOVE NORTHERN 5 SEGMENTS OF THE EXISTING BOX CULVERT (BOTH CELLS). CONSTRUCT NORTHERN 36'-0" OF PROPOSED STRUCTURE. CONSTRUCT TEMPORARY PAVEMENT ON NORTH SIDE OF THE ROADWAY FOR STAGE 3.

STAGE 3:

TRAFFIC: MAINTAIN TWO-WAY TRAFFIC ON ONE LANE OF TEMPORARY PAVEMENT/ PERMANENT PAVEMENT VIA TEMPORARY SIGNAL ALONG THE NORTH SIDE OF THE ROADWAY.

CONSTRUCTION: REMOVE REMAINING SEGMENTS OF THE EXISTING BOX CULVERT (BOTH CELLS). CONSTRUCT SOUTHERN 36'-0" OF PROPOSED STRUCTURE, BACKFILL, AND INSTALL NEW PAVEMENT FOR PERMANENT ROADWAY.

STAGE 4:

TRAFFIC: MAINTAIN TWO-WAY TRAFFIC ON NEW PAVEMENT.

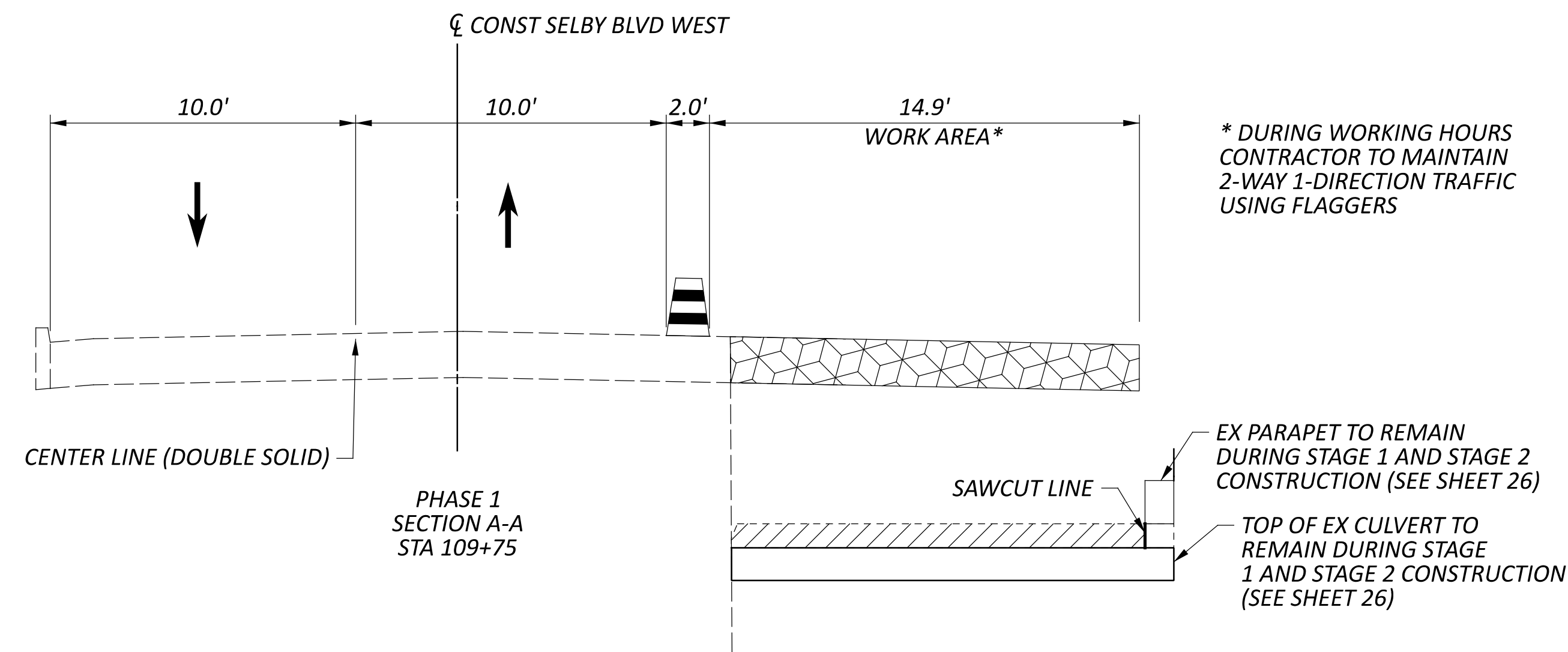
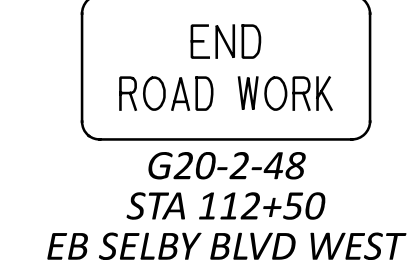
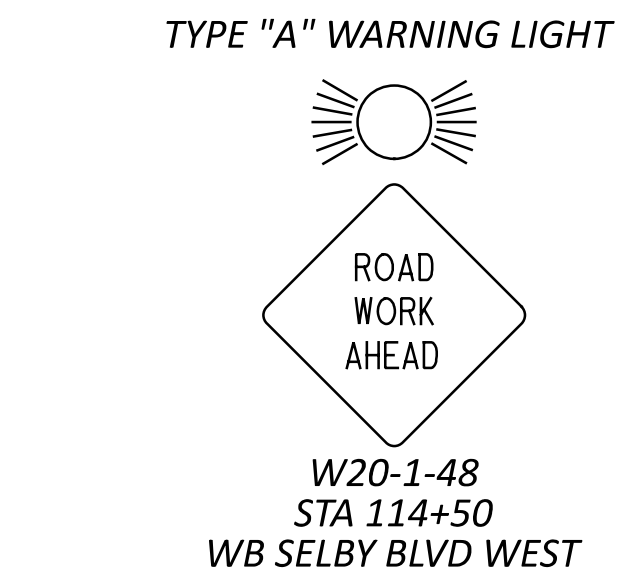
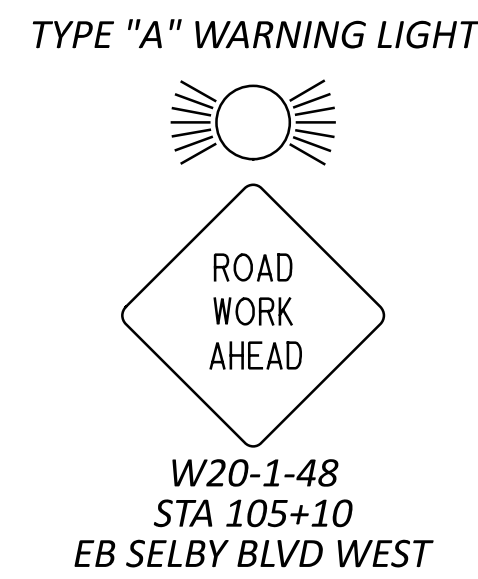
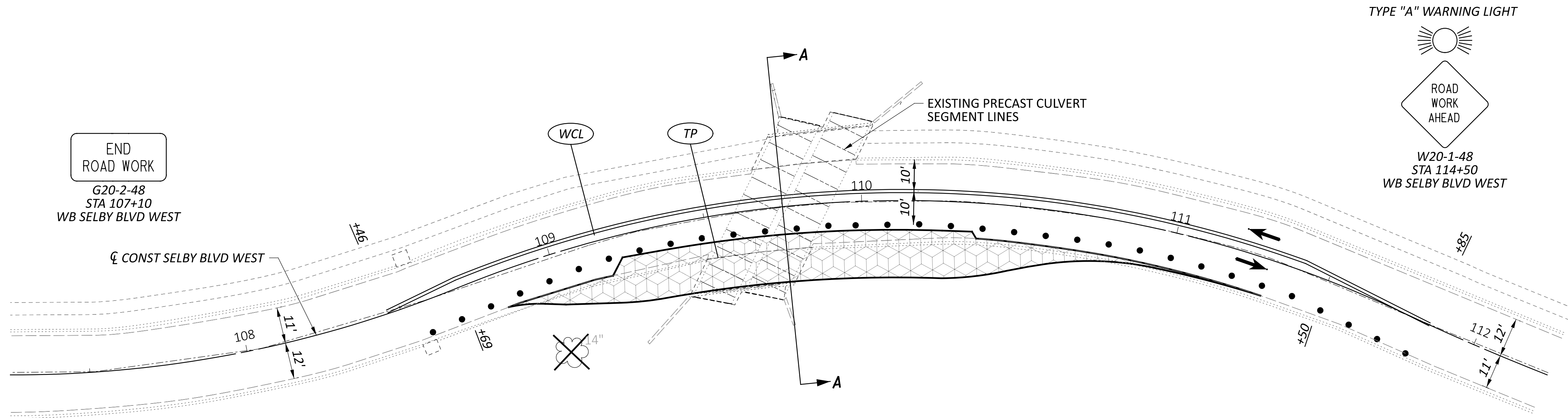
PROPOSED GAS LINE RELOCATION MUST OCCUR DURING STAGE 4. IT WILL INCLUDE CARRIER AND CASING PIPE TO BE PLACED IN THE FILL BETWEEN THE TOP SLAB OF THE PROPOSED STRUCTURE AND THE FINISHED GRADE ON THE NORTH SIDE OF SELBY BLVD WEST.

SEQUENCE OF CONSTRUCTION (CONT.)

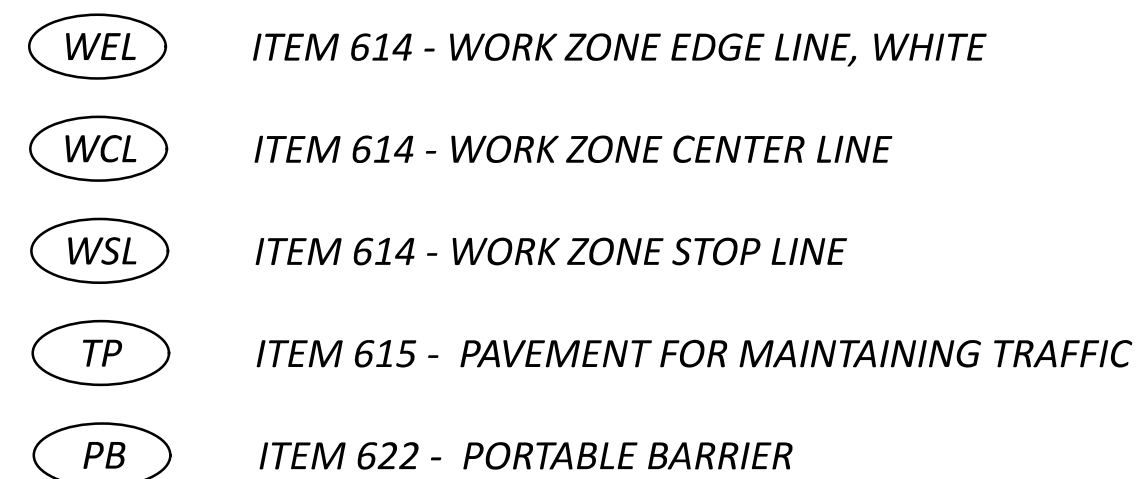
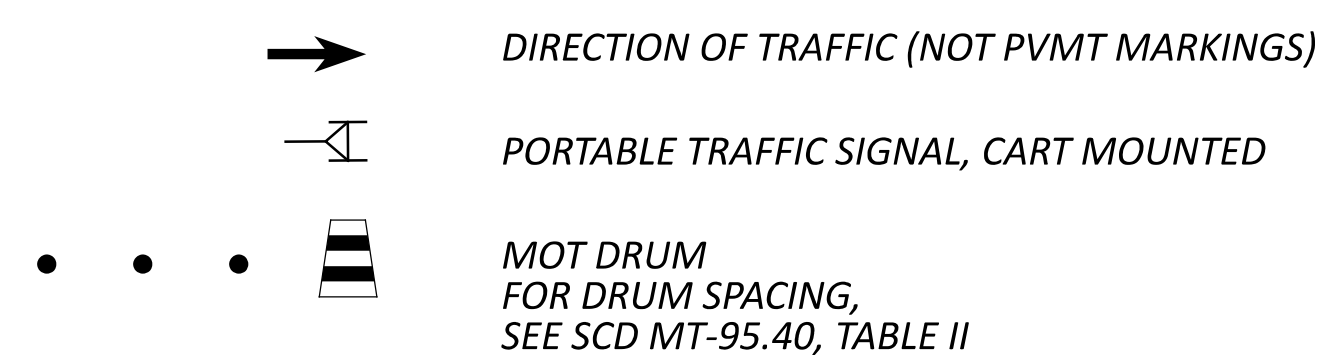
PRIOR TO STARTING STAGE 4 MAINTENANCE OF TRAFFIC, CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE TIMING OF STAGE 4 WORK WITH COLUMBIA GAS AS REQUIRED TO ACCOMMODATE GAS LINE RELOCATION. RELOCATION WILL BE PERFORMED BY COLUMBIA GAS AND IT IS ANTICIPATED IT WILL TAKE UP TO 2 WEEKS. FINAL GRADING SHALL NOT BE PERFORMED PRIOR TO THE COMPLETION OF THE GAS LINE RELOCATION WORK. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK OR DELAYS LESS THAN 2 WEEKS.

CONSTRUCTION: REMOVE TEMPORARY PAVEMENT ALONG NORTH SIDE OF THE PROJECT. PLACE PROPOSED CURB AND GUTTER AND SIDEWALK. RESURFACE PAVEMENT FOR THE EXTENTS OF THE PROJECT. PLACE PERMANENT PAVEMENT MARKINGS.

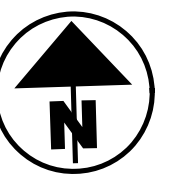
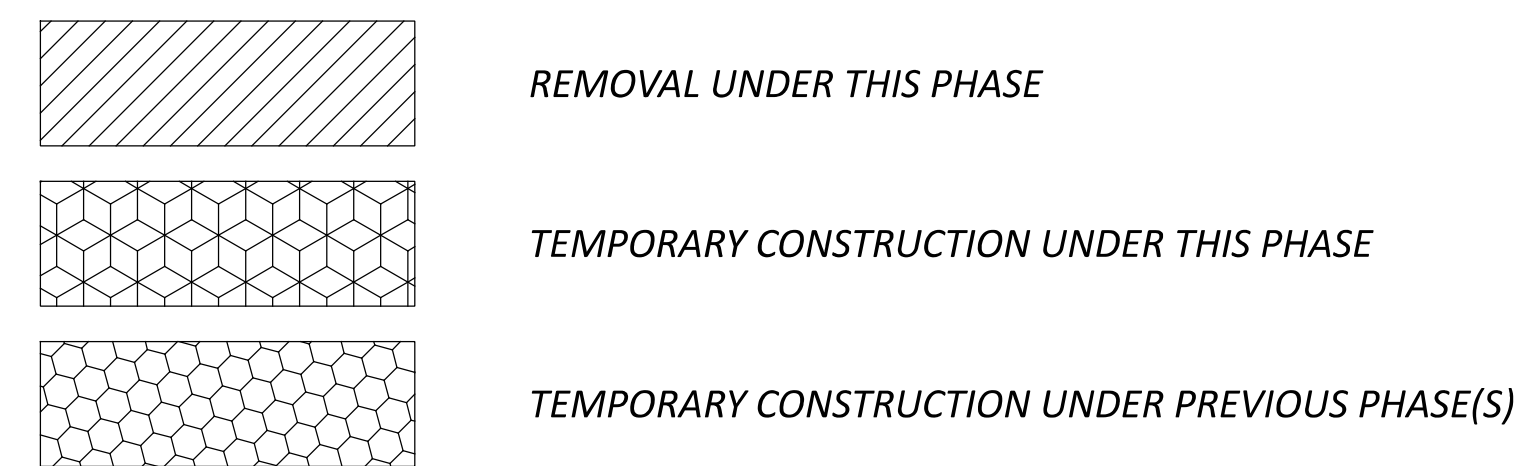
DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.6	38



QUANTITIES			
615	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	SY	237
622	PORTABLE BARRIER, ANCHORED	FT	-



LEGEND

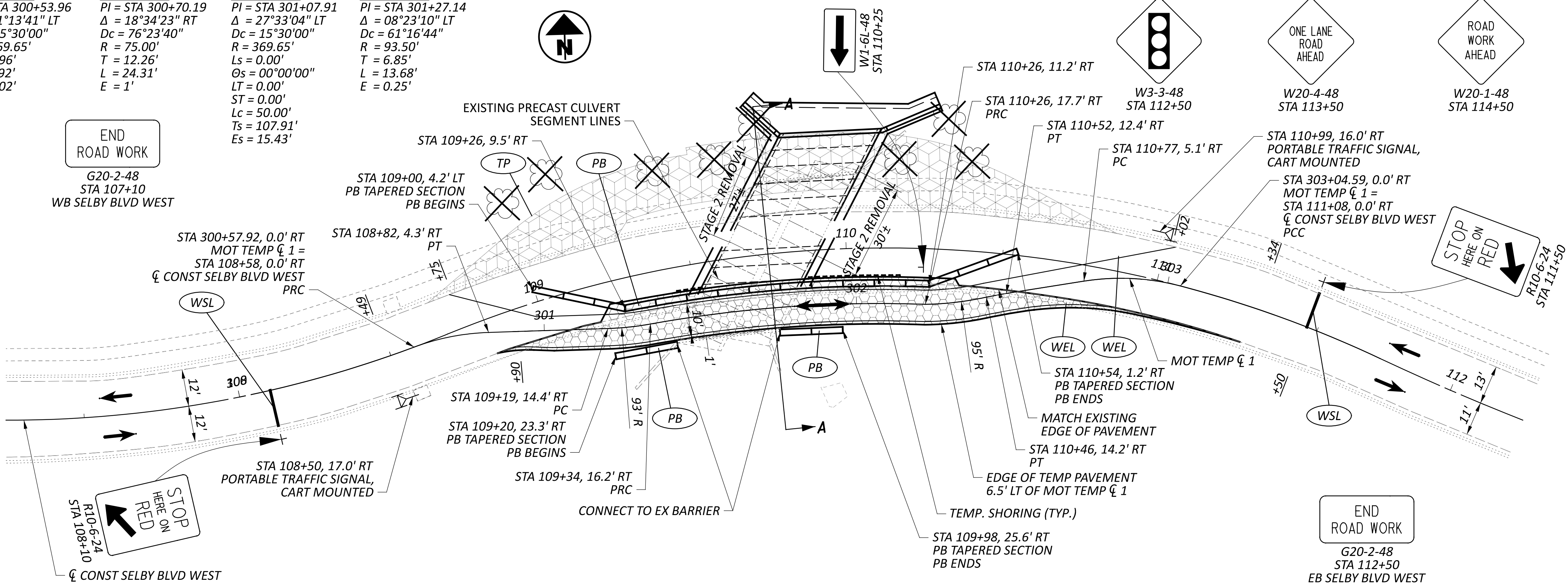


MAINTENANCE OF TRAFFIC
STAGE 1

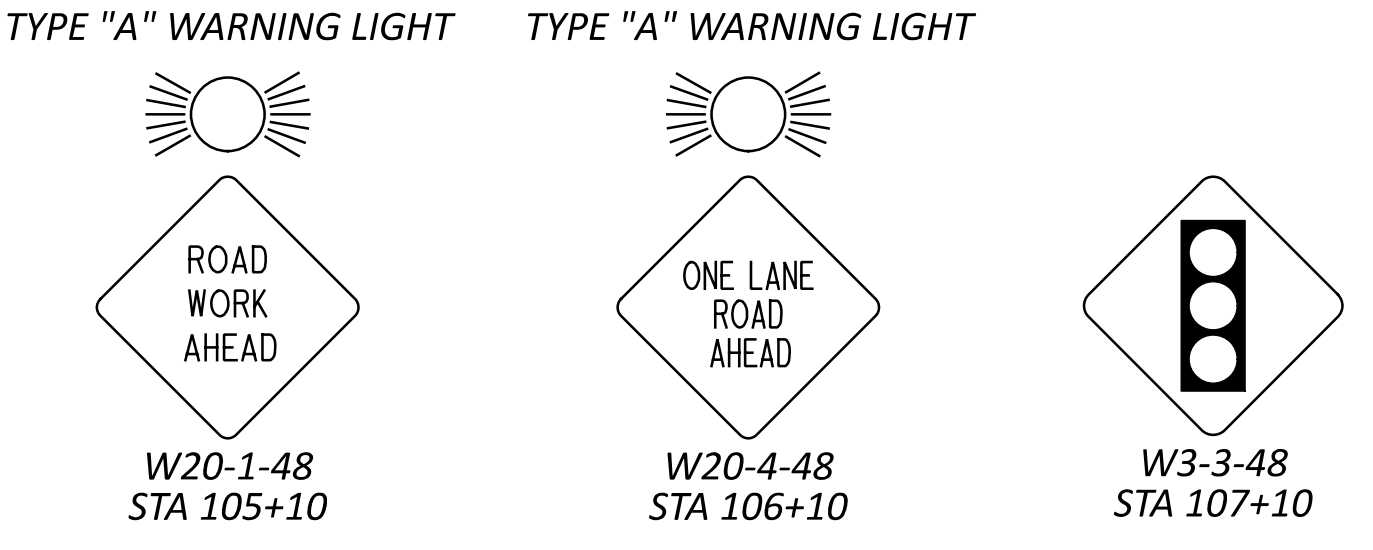
DESIGN AGENCY	
STRUCTUREPOINT	
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.7	38

CURVE DATA	CURVE DATA	CURVE DATA	CURVE DATA
PI = STA 300+53.96	PI = STA 300+70.19	PI = STA 301+07.91	PI = STA 301+27.14
$\Delta = 01^{\circ}13'41''$ LT	$\Delta = 18^{\circ}34'23''$ RT	$\Delta = 27^{\circ}33'04''$ LT	$\Delta = 08^{\circ}23'10''$ LT
Dc = 15°30'00"	Dc = 76°23'40"	Dc = 15°30'00"	Dc = 61°16'44"
R = 369.65'	R = 75.00'	R = 369.65'	R = 93.50'
T = 3.96'	T = 12.26'	Ls = 0.00'	T = 6.85'
L = 7.92'	L = 24.31'	$\Theta_s = 00^{\circ}00'00''$	L = 13.68'
E = 0.02'	E = 1'	LT = 0.00'	E = 0.25'
		ST = 0.00'	
		Lc = 50.00'	
		Ts = 107.91'	
		Es = 15.43'	

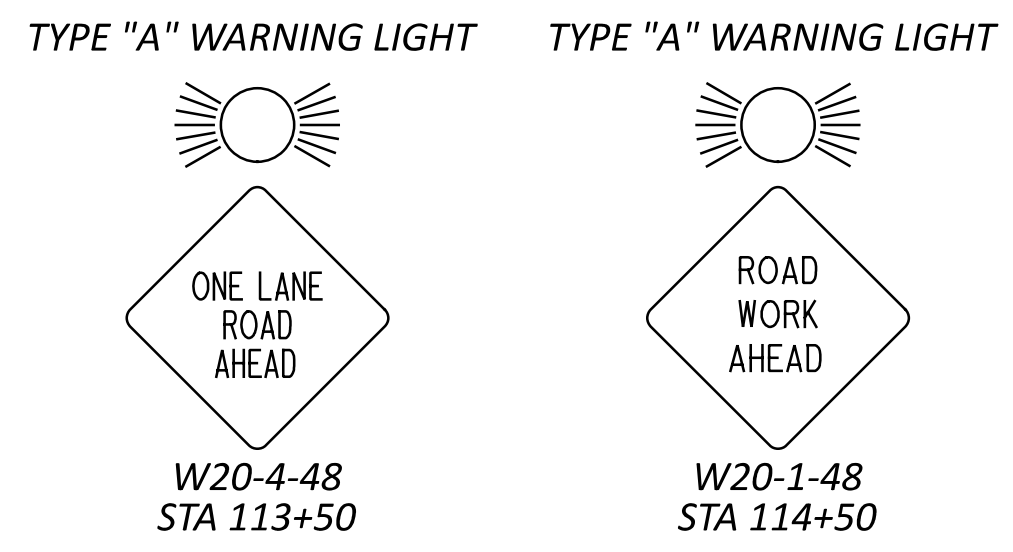
END ROAD WORK
 G20-2-48
 STA 107+10
 WB SELBY BLVD WEST



LEAD IN SIGNS FOR EB SELBY BLVD WEST

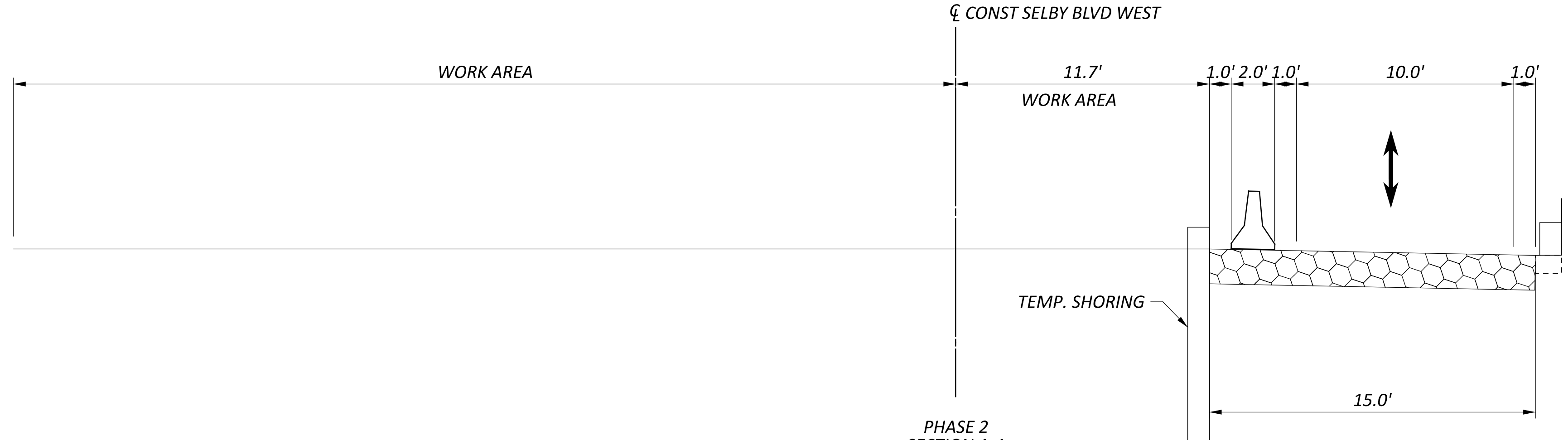


LEAD IN SIGNS FOR WB SELBY BLVD WEST

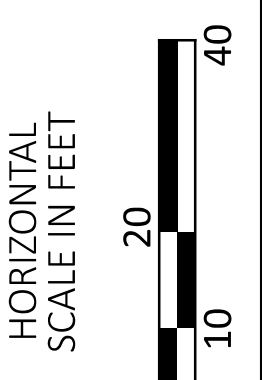


CURVE DATA	CURVE DATA	CURVE DATA	CURVE DATA
PI = STA 301+78.13	PI = STA 302+31.79	PI = STA 302+88.83	PI = STA 303+04.98
$\Delta = 12^{\circ}18'50''$ RT	$\Delta = 11^{\circ}49'47''$ LT	$\Delta = 23^{\circ}40'54''$ RT	$\Delta = 34^{\circ}11'38''$ RT
Dc = 13°59'49"	Dc = 60°18'41"	Dc = 76°23'40"	Dc = 76°23'40"
R = 409.35'	R = 95.00'	R = 75.00'	R = 75.00'
T = 44.16'	T = 9.84'	T = 15.72'	Ls = 0.00'
L = 87.98'	L = 19.61'	L = 31'	$\Theta_s = 00^{\circ}00'00''$
E = 2.37'	E = 0.51'	E = 1.63'	LT = 0.00'
			ST = 0.00'
			Lc = 31.00'
			Ts = 31.87'
			Es = 6.49'

QUANTITIES			
615	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	SY	366
622	PORTABLE BARRIER, ANCHORED	FT	200

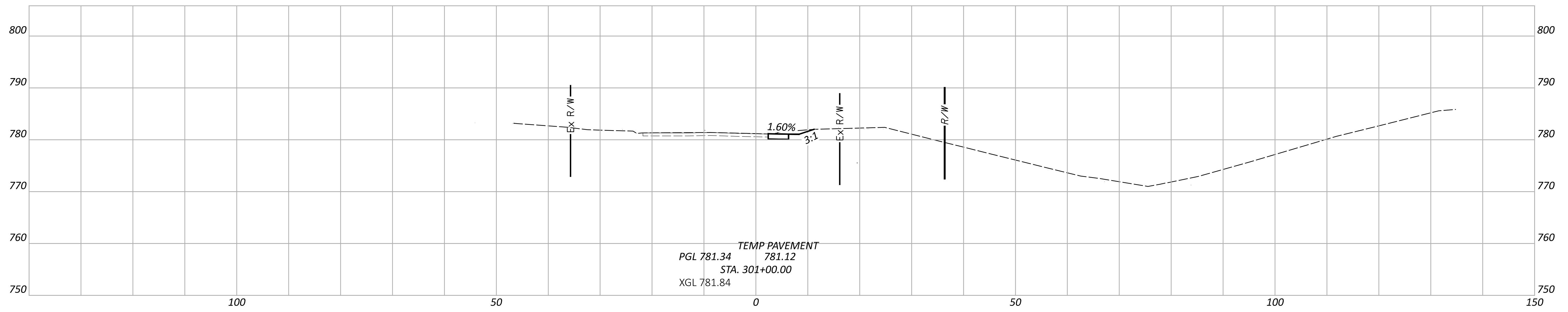
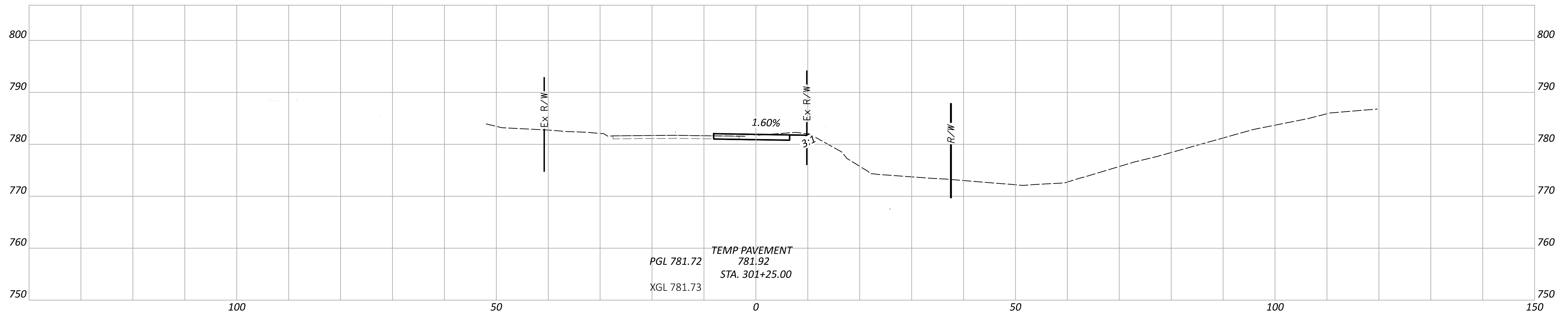
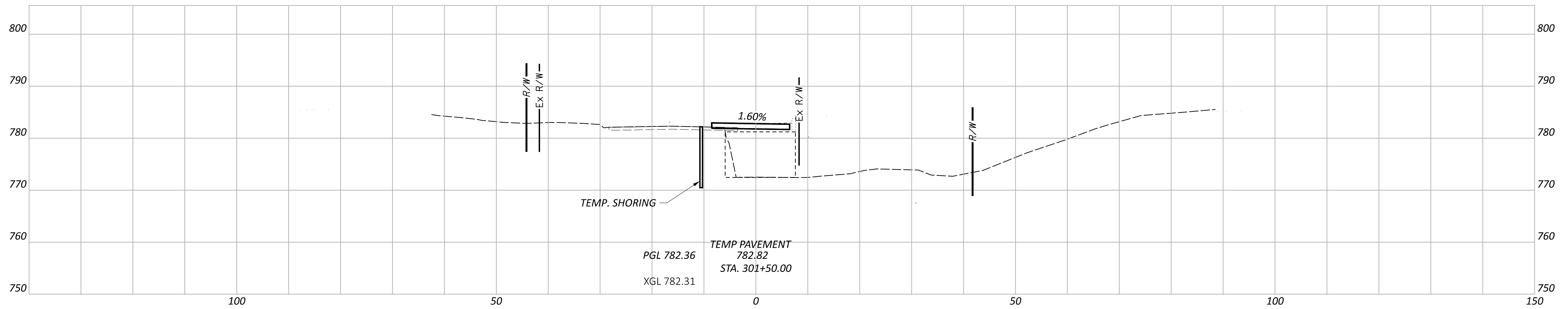


NOTES:
 1. STAGE 2 TEMPORARY SHORING SHALL NOT PENETRATE BELOW ELEVATION 770.50. SEE SHEET P.26.
 2. FOR MOT LEGEND, SEE SHEET P.7.



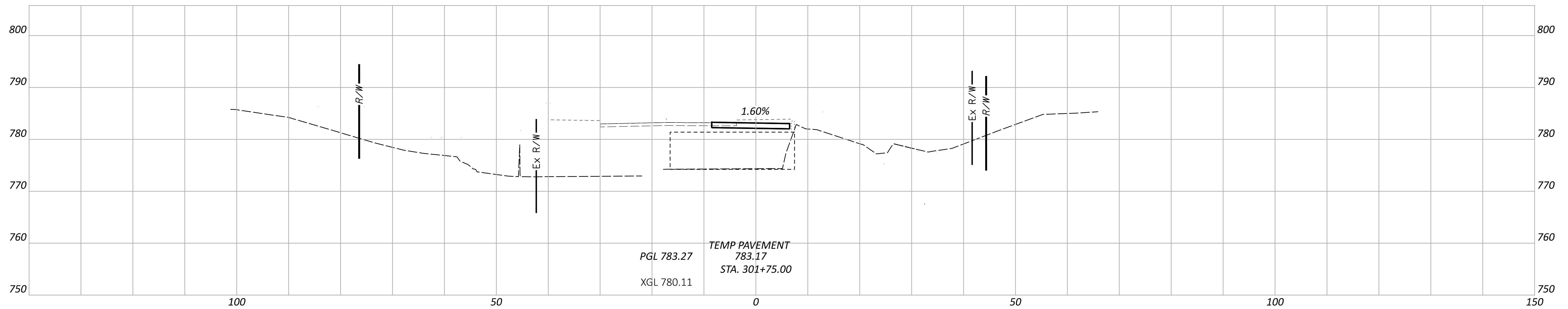
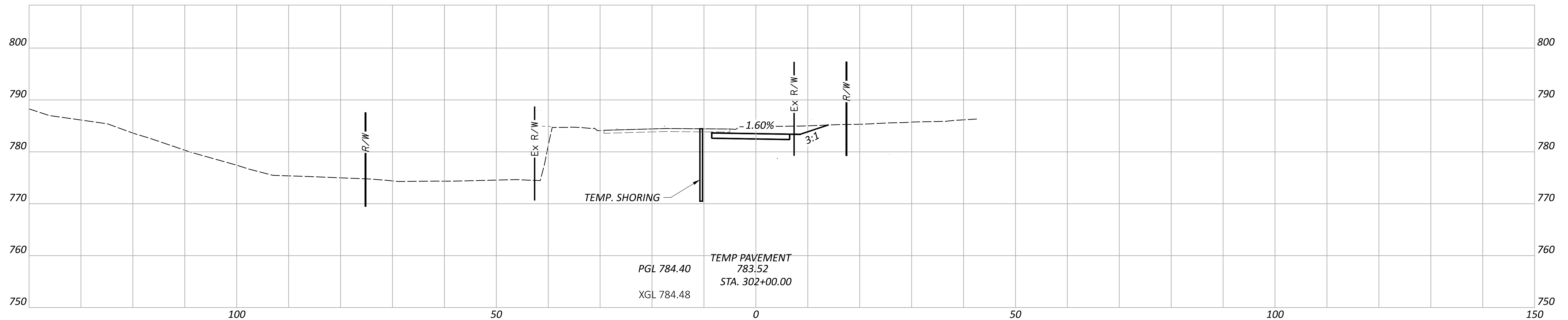
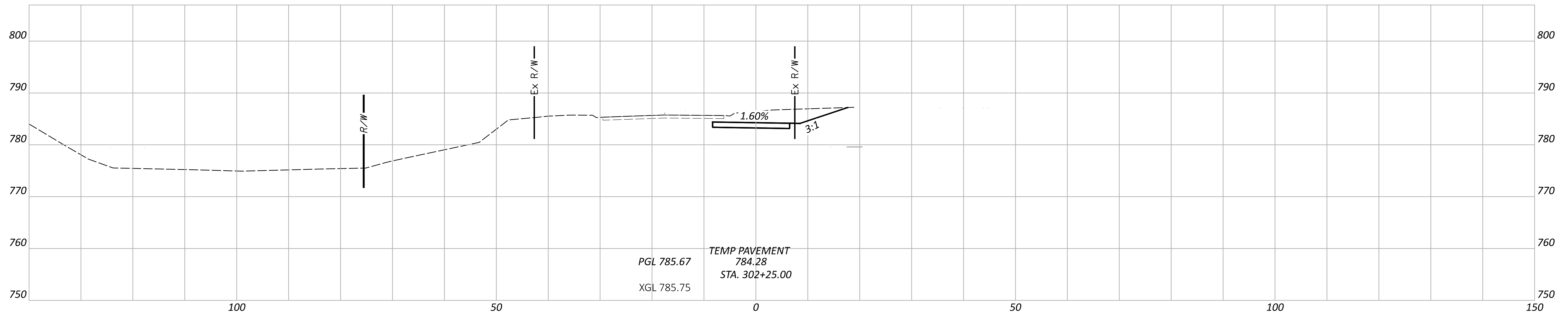
MAINTENANCE OF TRAFFIC
 STAGE 2

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	P.8
TOTAL	38



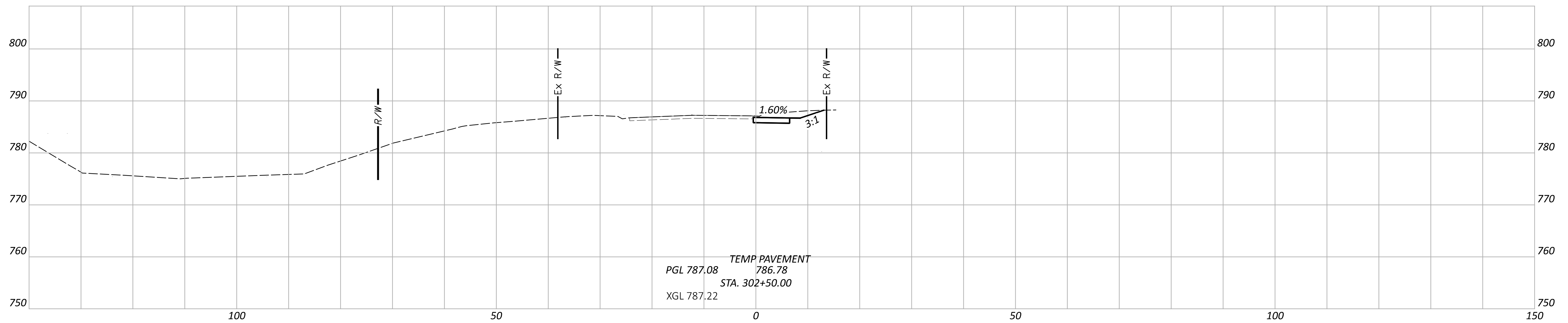
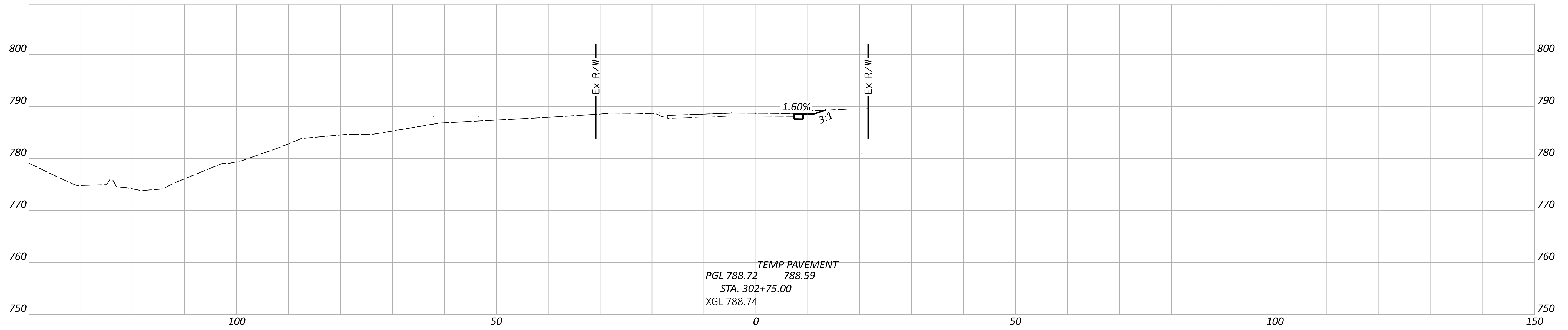
MAINTENANCE OF TRAFFIC STAGE 2 CROSS SECTIONS
 STA 301+00 TO STA 301+50

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.9	38



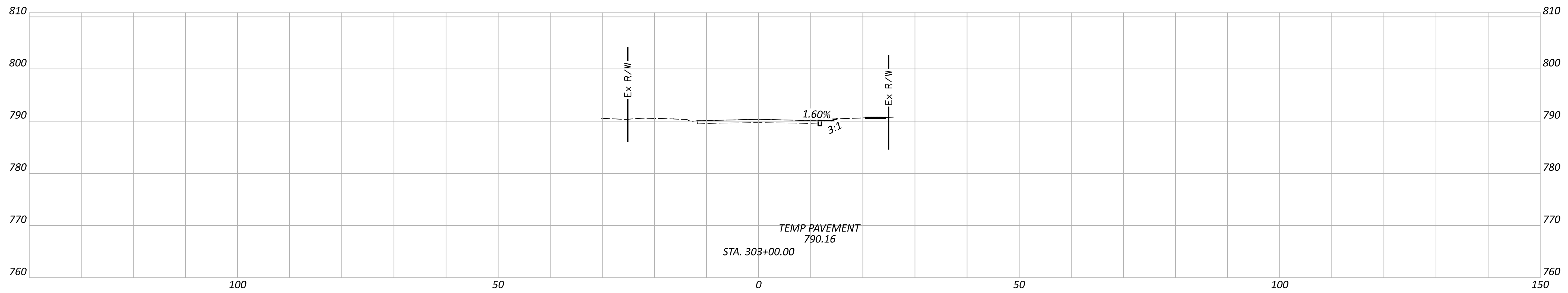
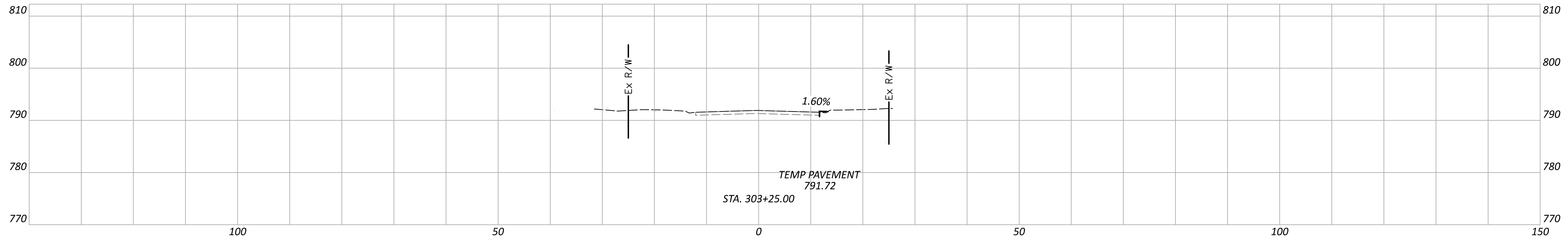
MAINTENANCE OF TRAFFIC STAGE 2 CROSS SECTIONS
 STA 301+75 TO STA 302+25

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.10	38



MAINTENANCE OF TRAFFIC STAGE 2 CROSS SECTIONS
 STA 302+50 TO STA 302+75

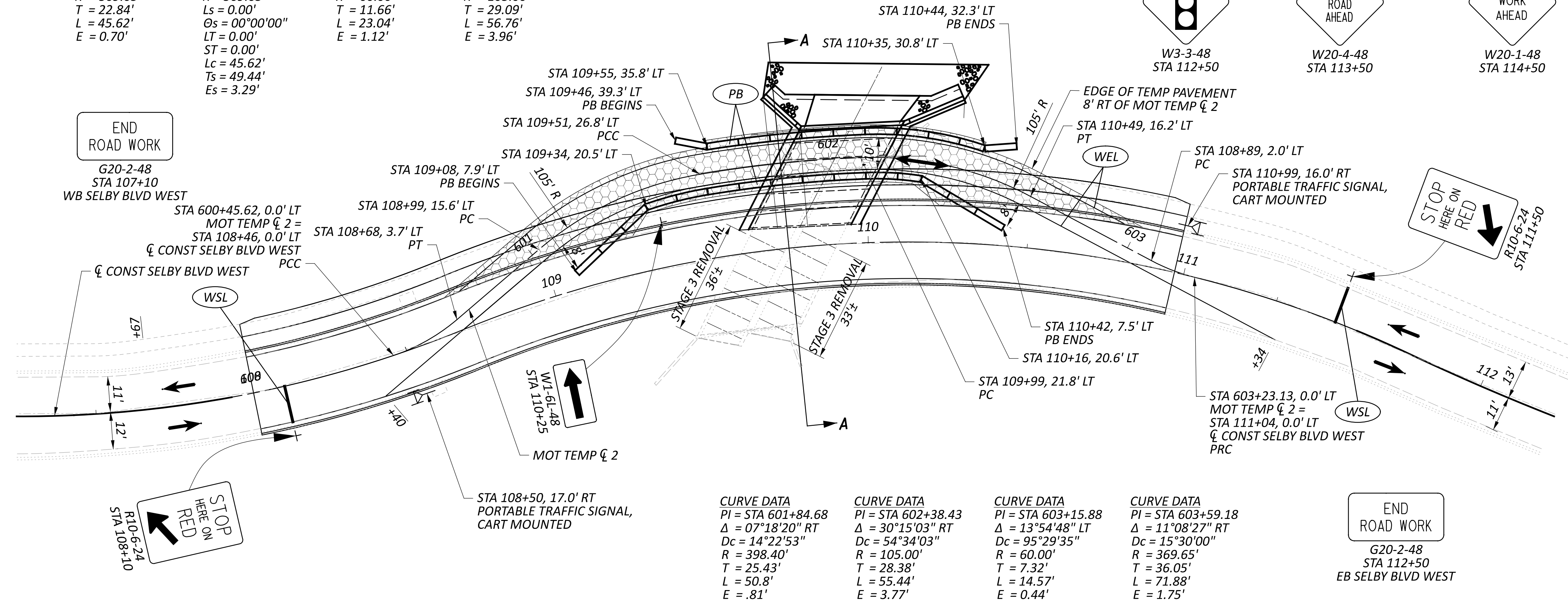
DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.11	38



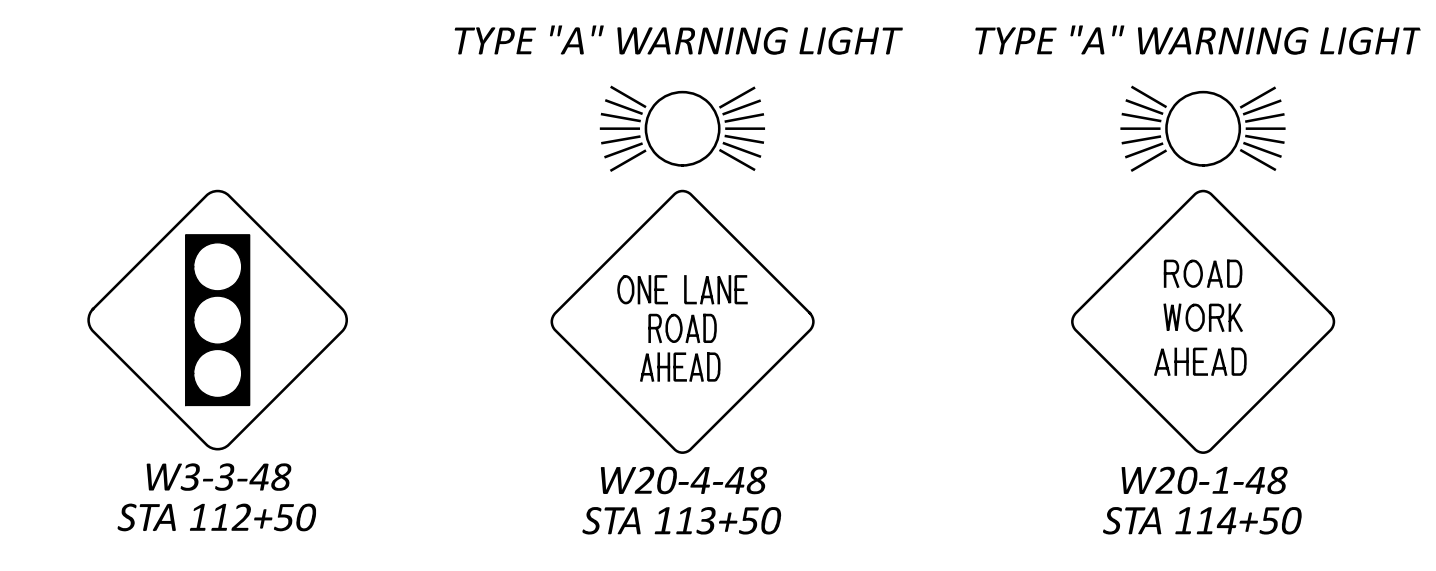
MAINTENANCE OF TRAFFIC STAGE 2 CROSS SECTIONS
 STA 303+00 TO STA 303+25

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.12	38

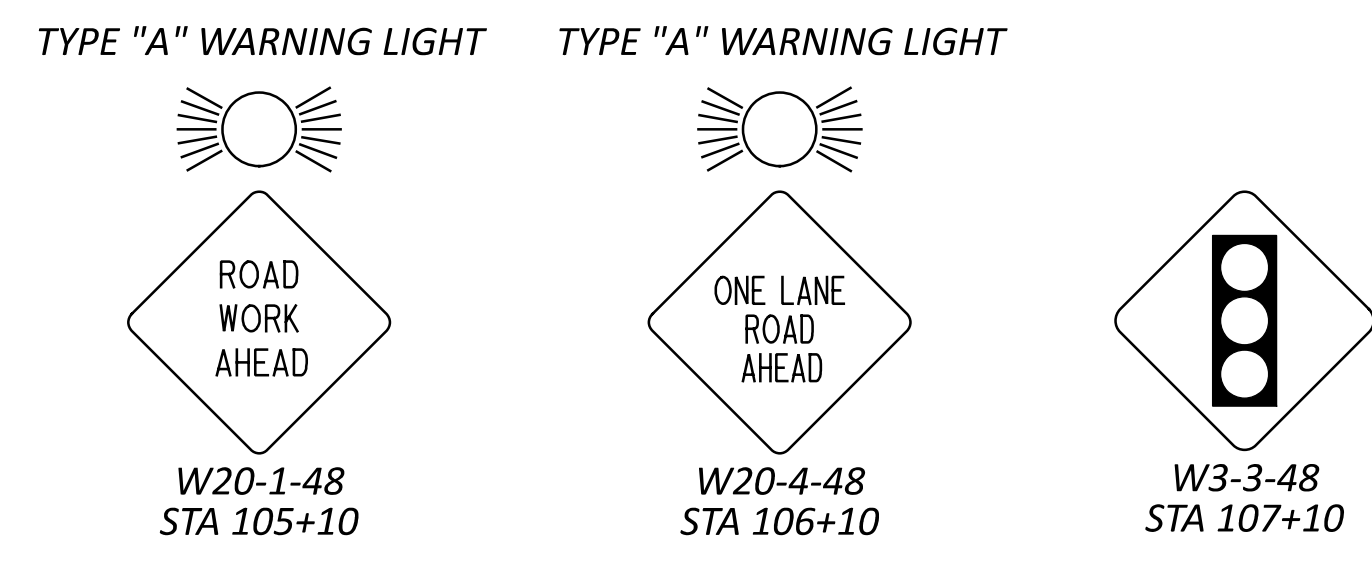
CURVE DATA	CURVE DATA	CURVE DATA	CURVE DATA
PI = STA 600+22.84 Δ = 07°04'18" LT Dc = 15°30'00" R = 369.65' T = 22.84' L = 45.62' E = 0.70'	PI = STA 600+49.44 Δ = 29°04'23" LT Dc = 15°30'00" R = 369.65' Ls = 0.00' Os = 00°00'00" LT = 0.00' ST = 0.00' Lc = 45.62' Ts = 49.44' Es = 3.29'	PI = STA 600+57.29 Δ = 22°00'06" LT Dc = 95°29'35" R = 60.00' T = 11.66' L = 23.04' E = 1.12'	PI = STA 601+31.58 Δ = 30°58'13" RT Dc = 54°34'03" R = 105.00' T = 29.09' L = 56.76' E = 3.96'



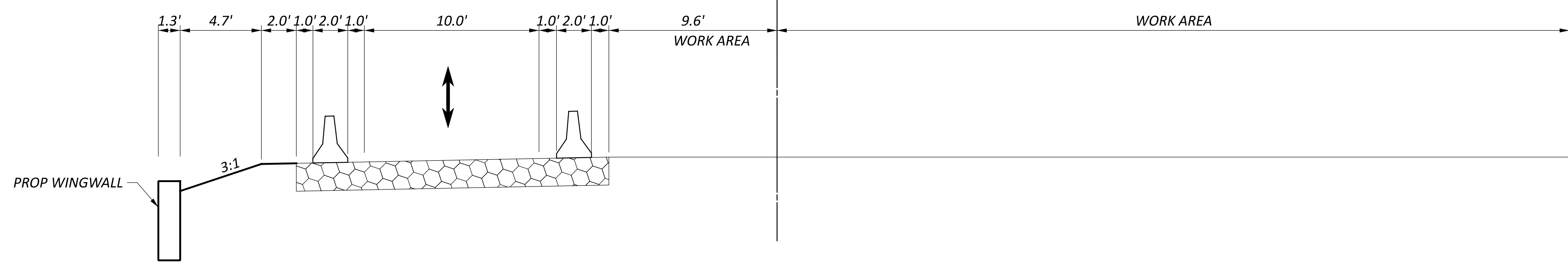
LEAD IN SIGNS FOR WB SELBY BLVD WEST



LEAD IN SIGNS FOR EB SELBY BLVD WEST

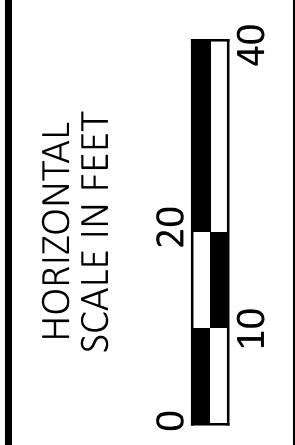


QUANTITIES			
615	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	SY	-
622	PORTABLE BARRIER, ANCHORED	FT	200



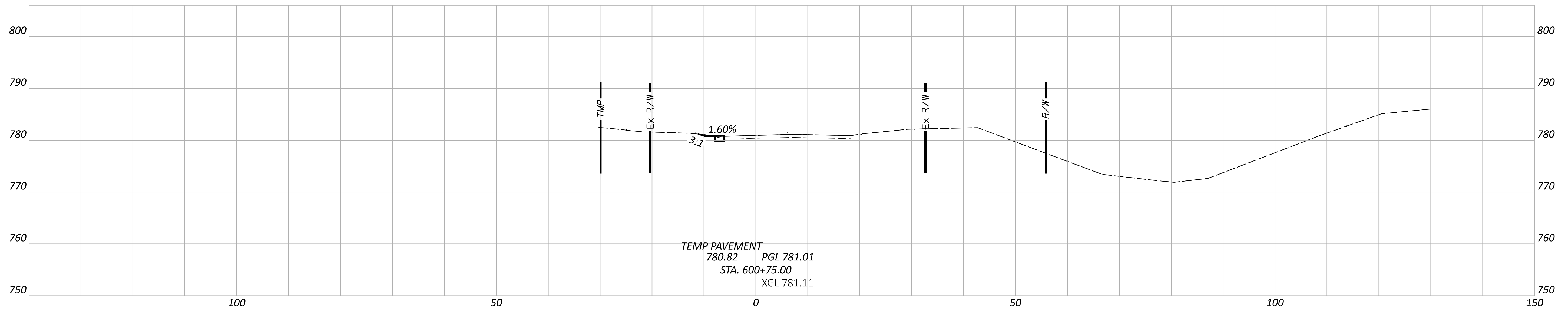
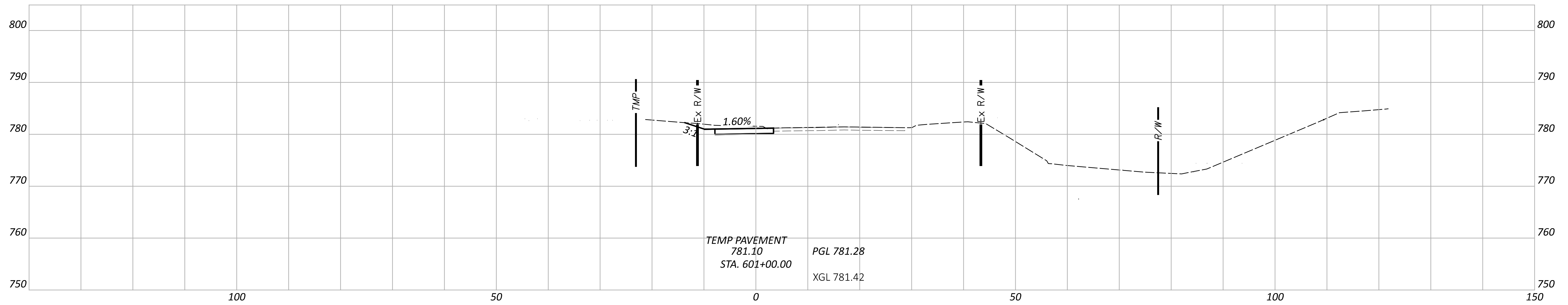
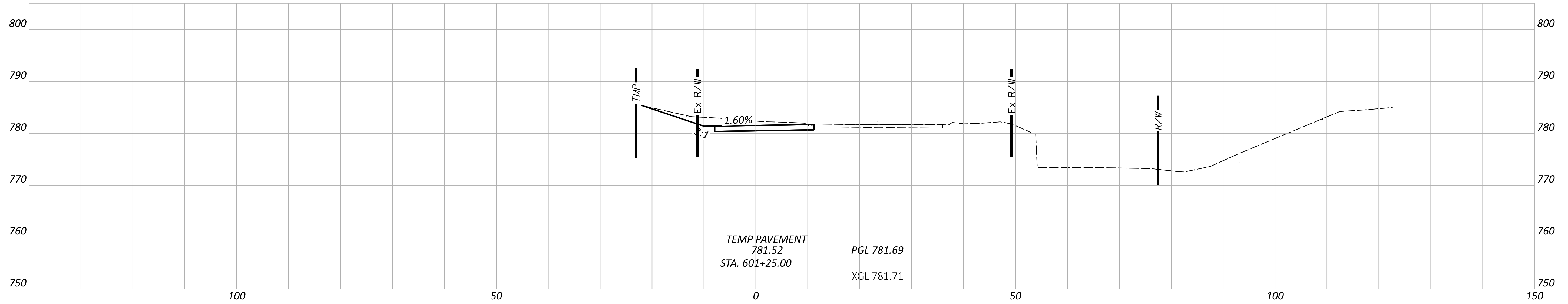
PHASE 3 SECTION A-A STA 109+75

NOTES:
 1. FOR DETAILED PHASED CONSTRUCTION SEQUENCE, SEE SHEET P. 26.
 2. FOR MOT LEGEND, SEE SHEET P. 7.



MAINTENANCE OF TRAFFIC
 STAGE 3

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL
PROJECT ID	116037
SHEET	P.13
TOTAL	38



MAINTENANCE OF TRAFFIC STAGE 3 CROSS SECTIONS
 STA 600+75 TO STA 601+25

DESIGN AGENCY



DESIGNER

DMS

REVIEWER

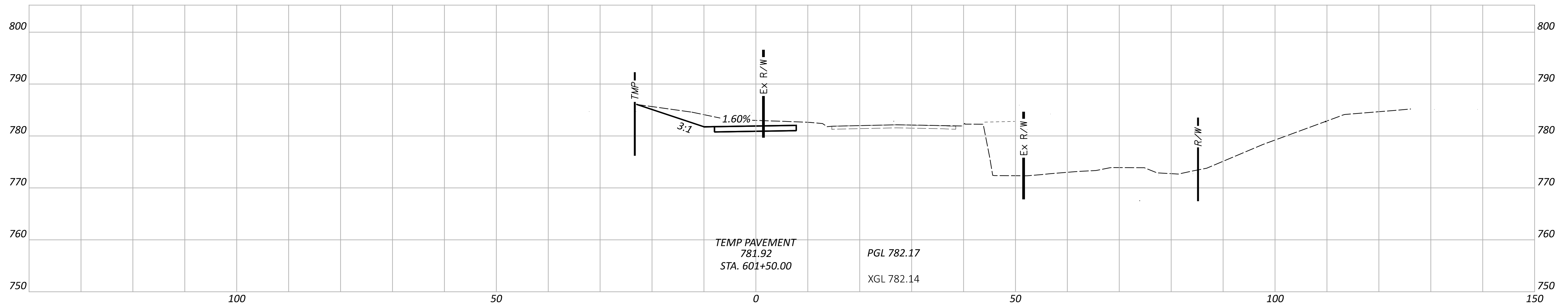
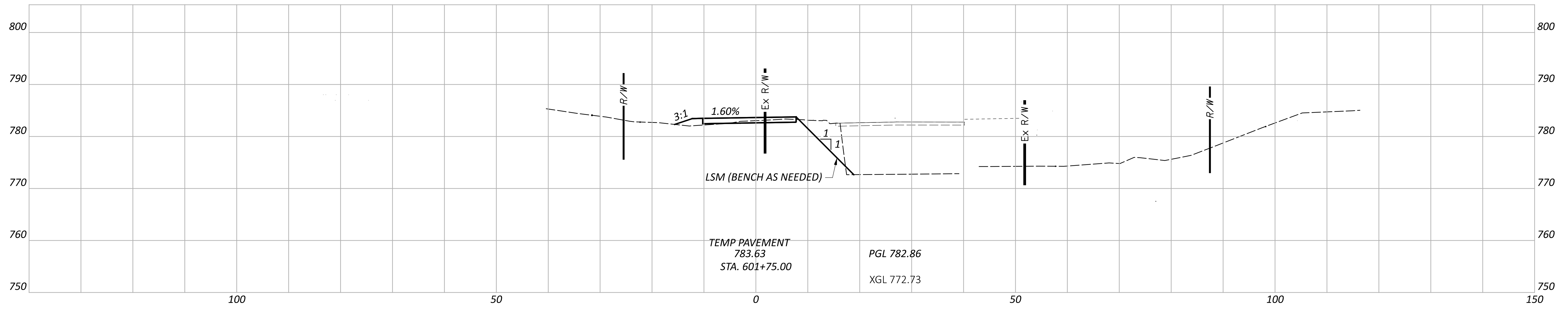
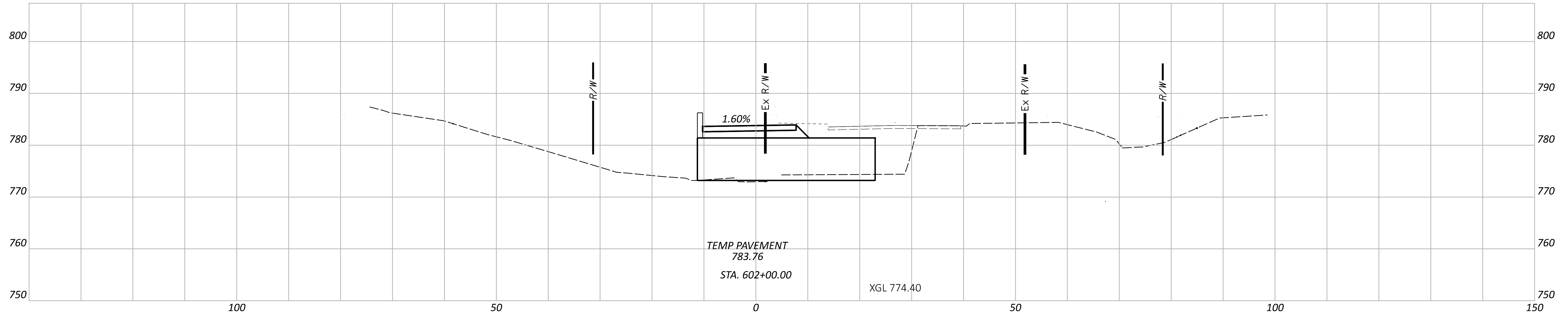
AJL 10/27/23

PROJECT ID

116037

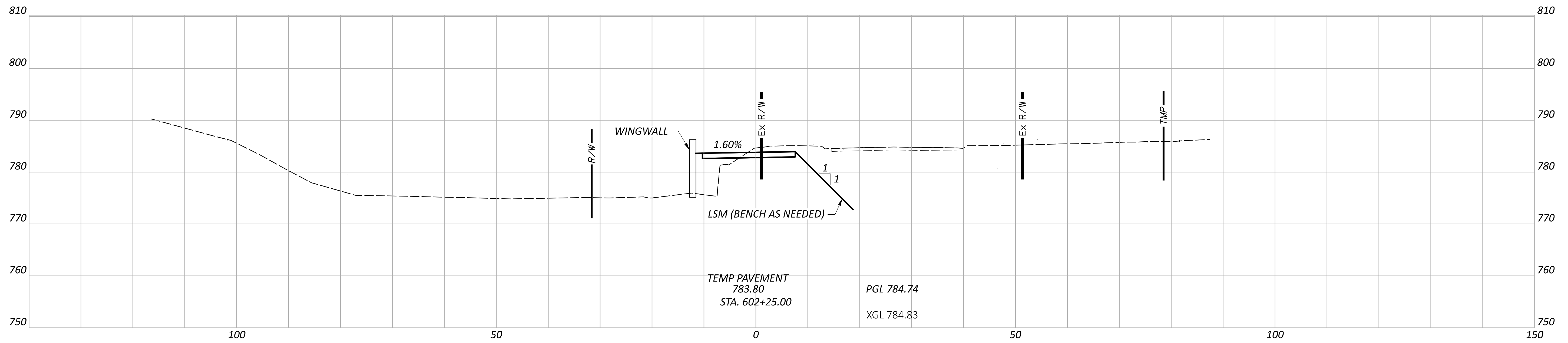
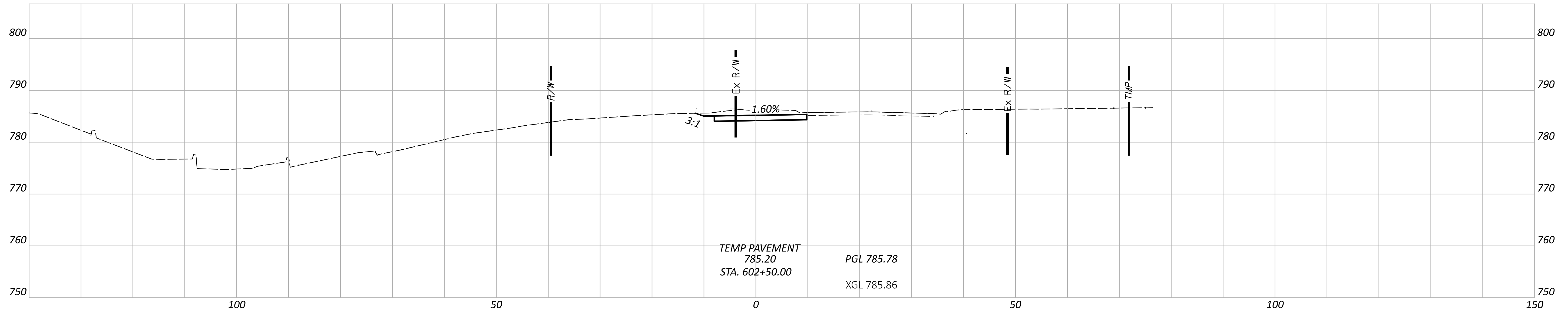
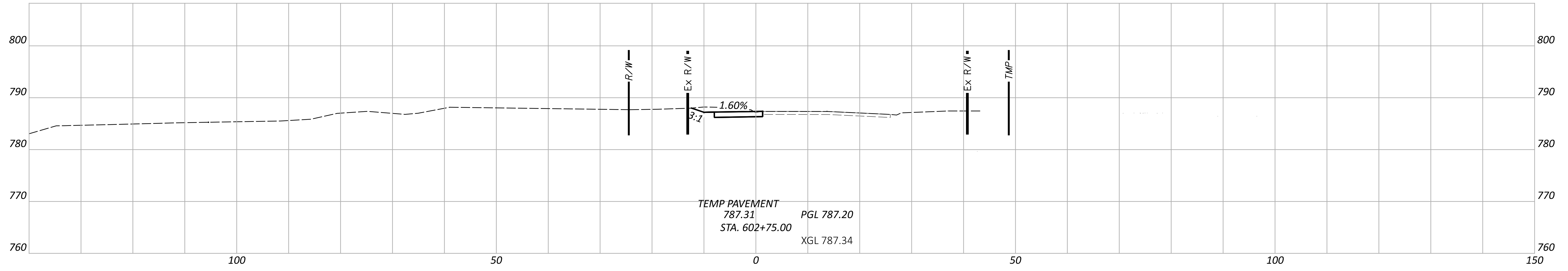
SHEET TOTAL

P.14 38



MAINTENANCE OF TRAFFIC STAGE 3 CROSS SECTIONS
 STA 601+50 TO STA 602+00

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.15	38



MAINTENANCE OF TRAFFIC STAGE 3 CROSS SECTIONS
 STA 602+25 TO STA 602+75

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET	TOTAL
P.16	38

SHEET NUM.											PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
OFFICE	25											ITEM	EXT	TOTAL			SHEET	
CALCS																	NO.	
	335											511	46512	335	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		
	12											511	46612	12	CY	CLASS QC1 CONCRETE WITH QC/QA, HEADWALL		
	134											512	10100	134	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
	142											512	33000	142	SY	TYPE 2 WATERPROOFING		
	295											512	33010	295	SY	TYPE 3 WATERPROOFING		
	71											516	13600	71	SF	1" PREFORMED EXPANSION JOINT FILLER		
	45											518	21200	45	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		
	64											518	39800	64	FT	4" PERFORATED CORRUGATED PLASTIC PIPE		
	9											518	39900	9	FT	4" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		
	72											611	70001	72	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (26' SPAN x 7'-2" RISE)	31/38	
	38											SPECIAL	69012050	38	SY	REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	25/38	
																INCIDENTALS		
LS												614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	6	
LS												SPECIAL	62399000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
LS												624	10000	LS		MOBILIZATION		

GENERAL SUMMARY

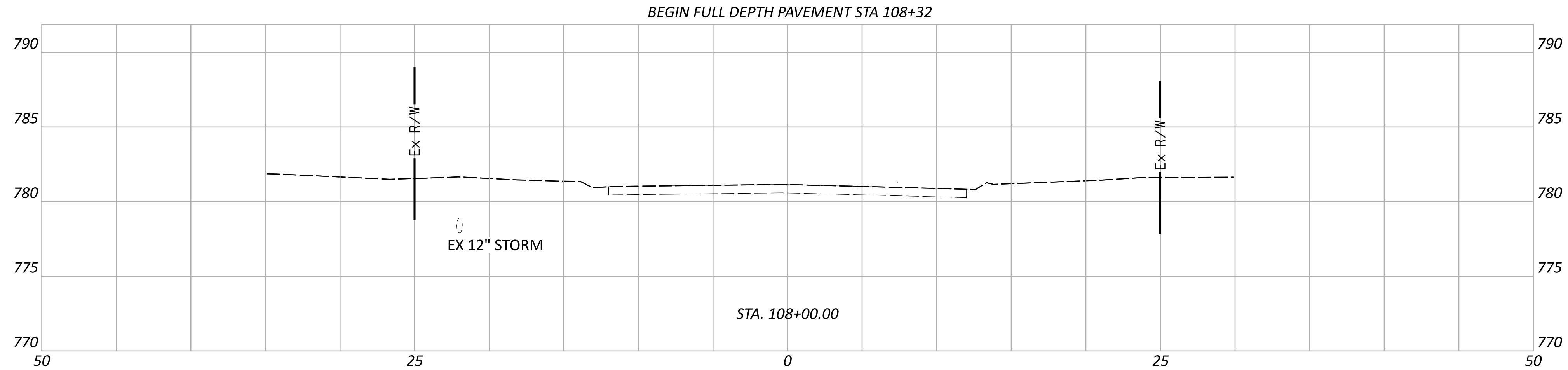
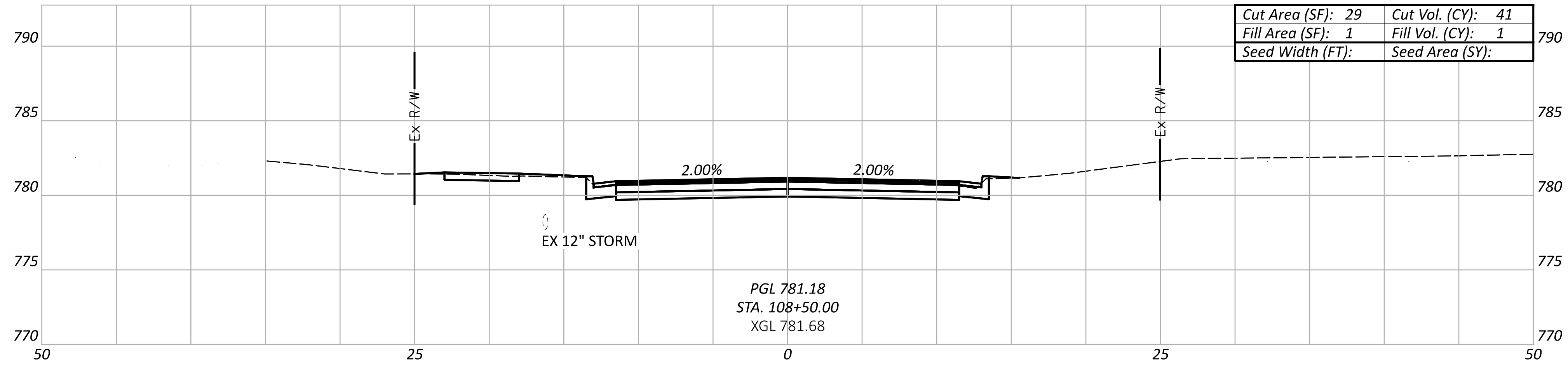
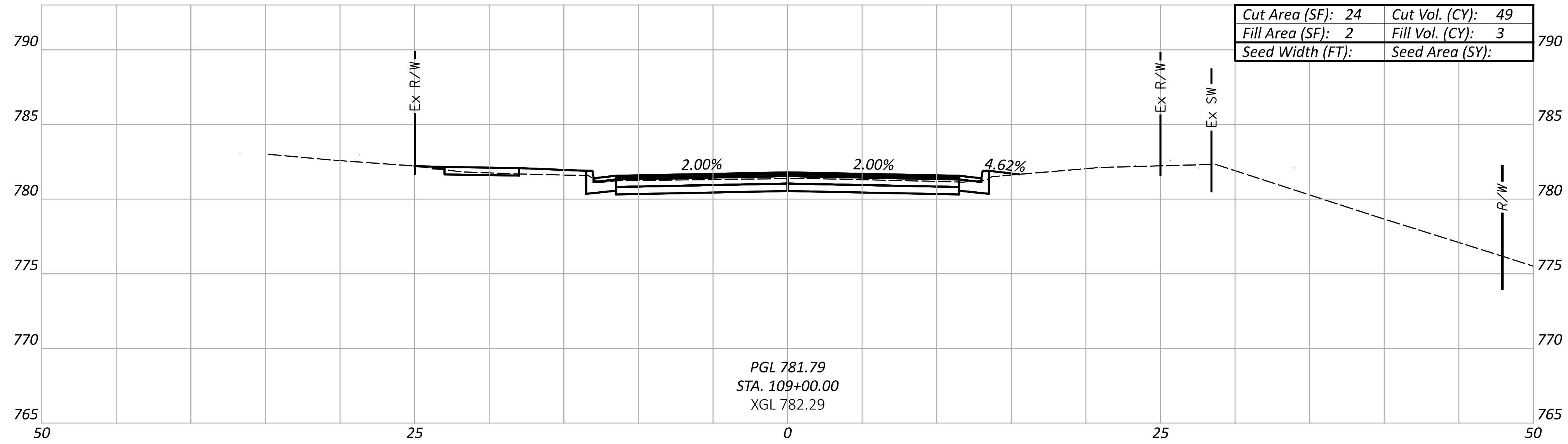
DESIGN AGENCY
STRUCTUREPOINT
INC.

DESIGNER
DMS

REVIEWER
AJL 10/27/23

PROJECT ID
116037

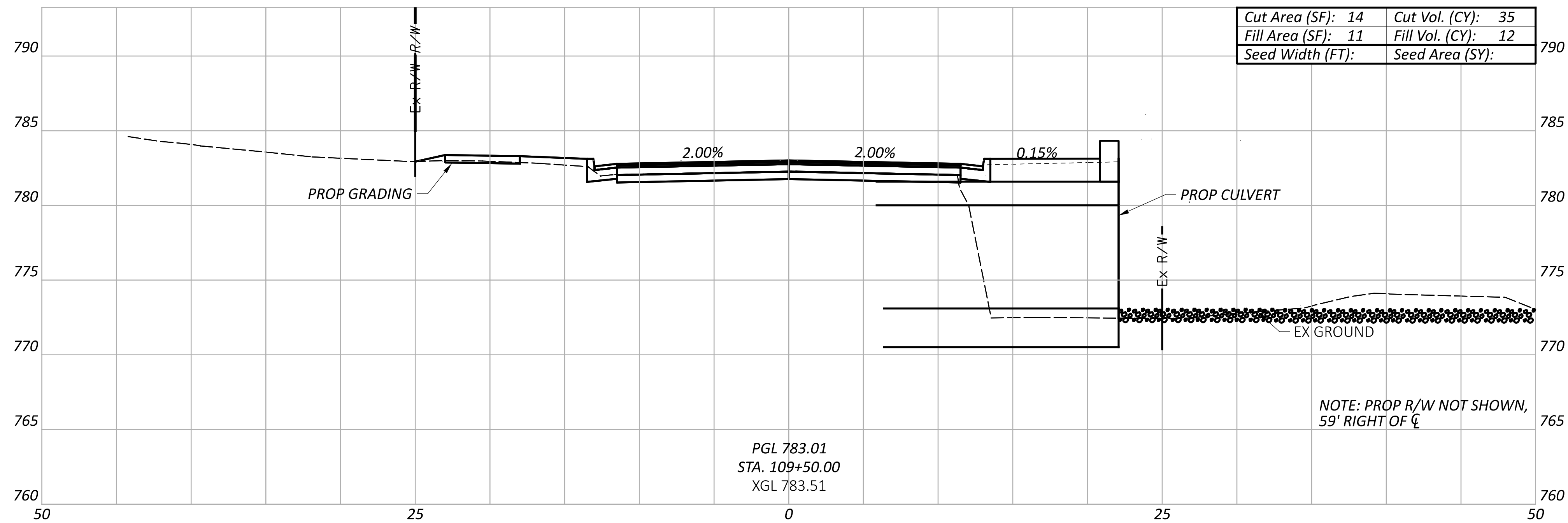
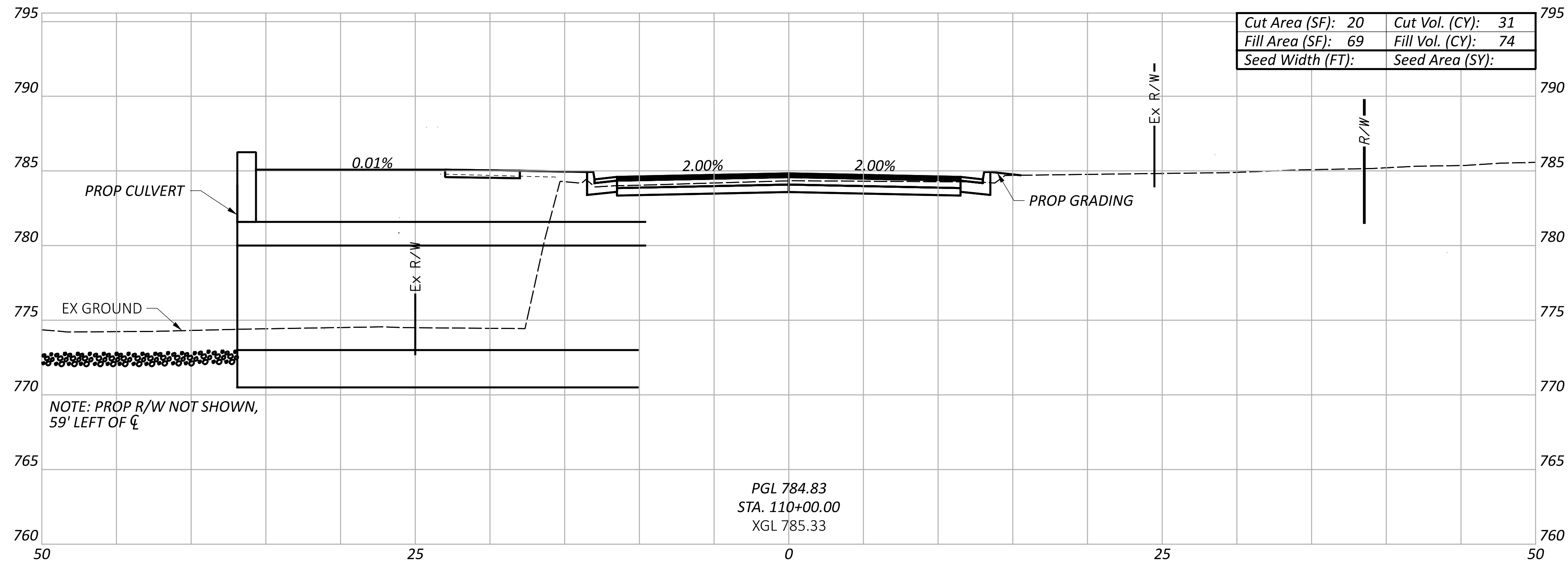
SHEET TOTAL
P.18 | 38



CROSS SECTIONS
 STA 108+00 TO STA 109+00

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET TOTAL	P.20 38

Sheet Totals		
Seeding	Cut	Fill



CROSS SECTIONS
 STA 109+50 TO STA 110+00

DESIGN AGENCY



DESIGNER

DMS

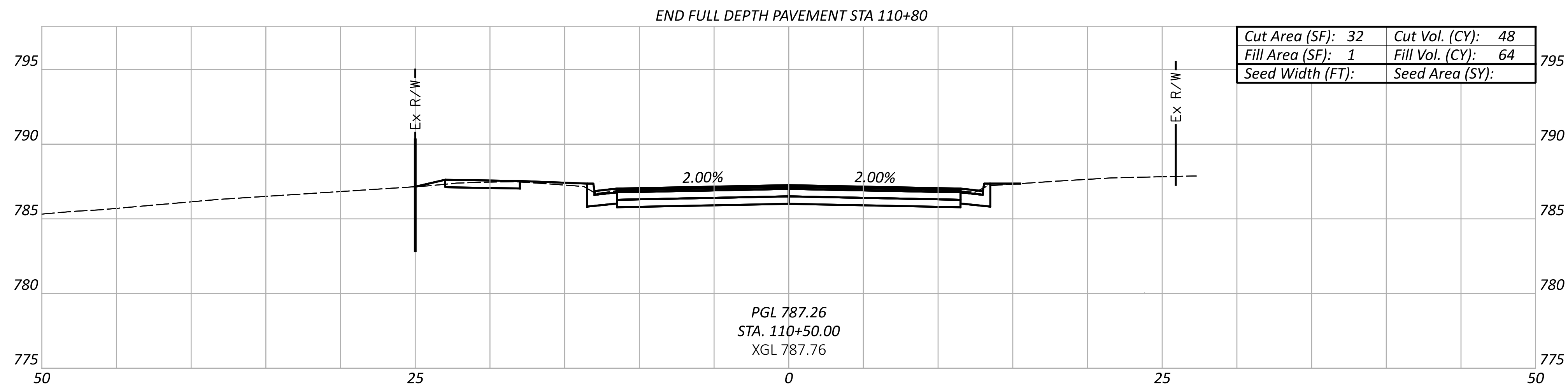
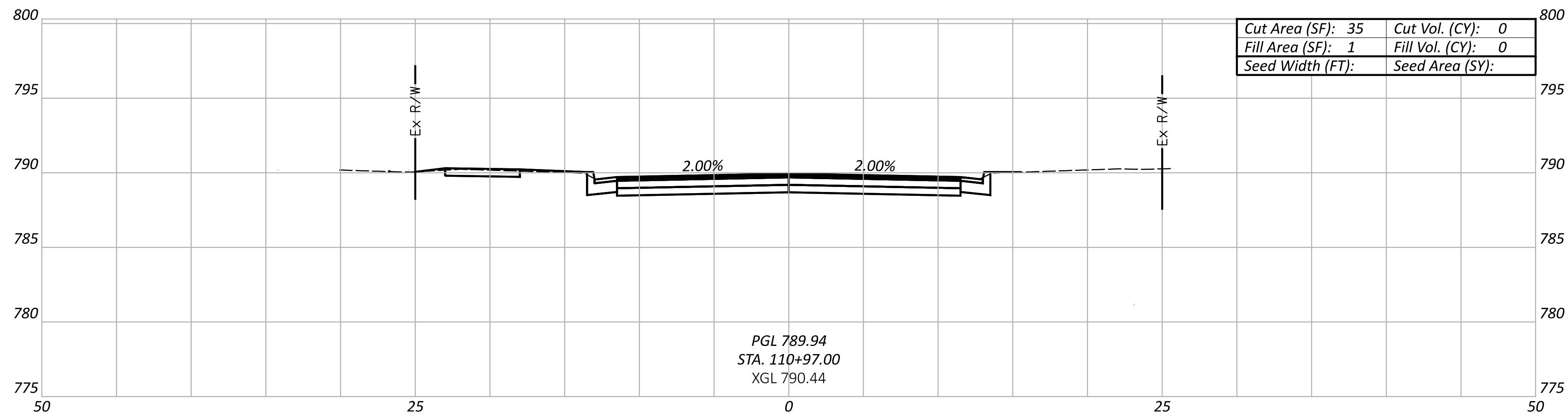
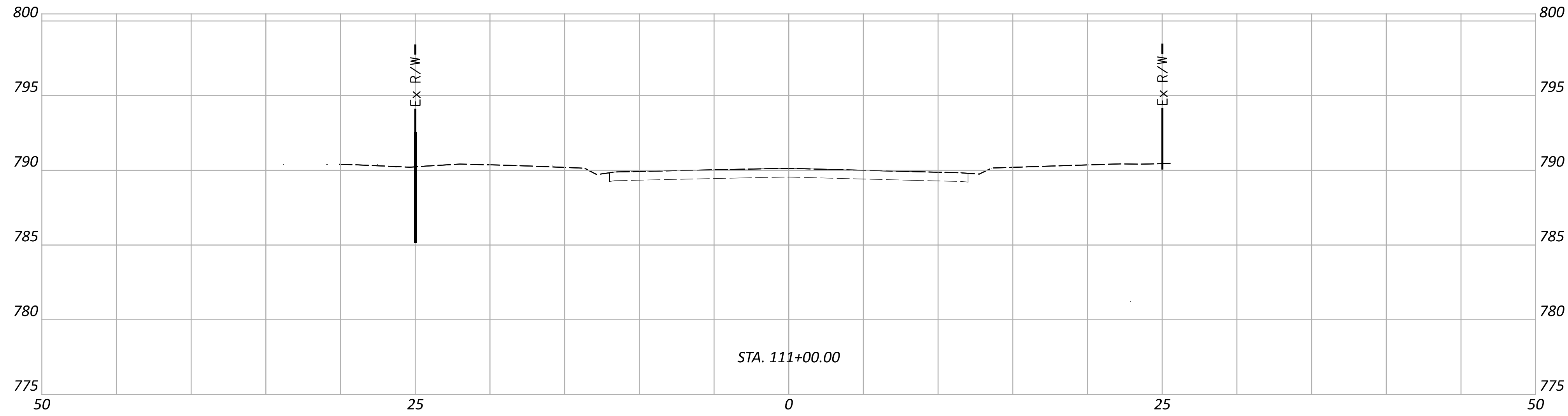
REVIEWER

AJL 10/27/23

PROJECT ID

116037

Sheet Totals			TOTAL
Seeding	Cut	Fill	P.21 38
	124	261	



CROSS SECTIONS
 STA 110+50 TO STA 111+00

DESIGN AGENCY



DESIGNER

DMS

REVIEWER

AJL 10/27/23

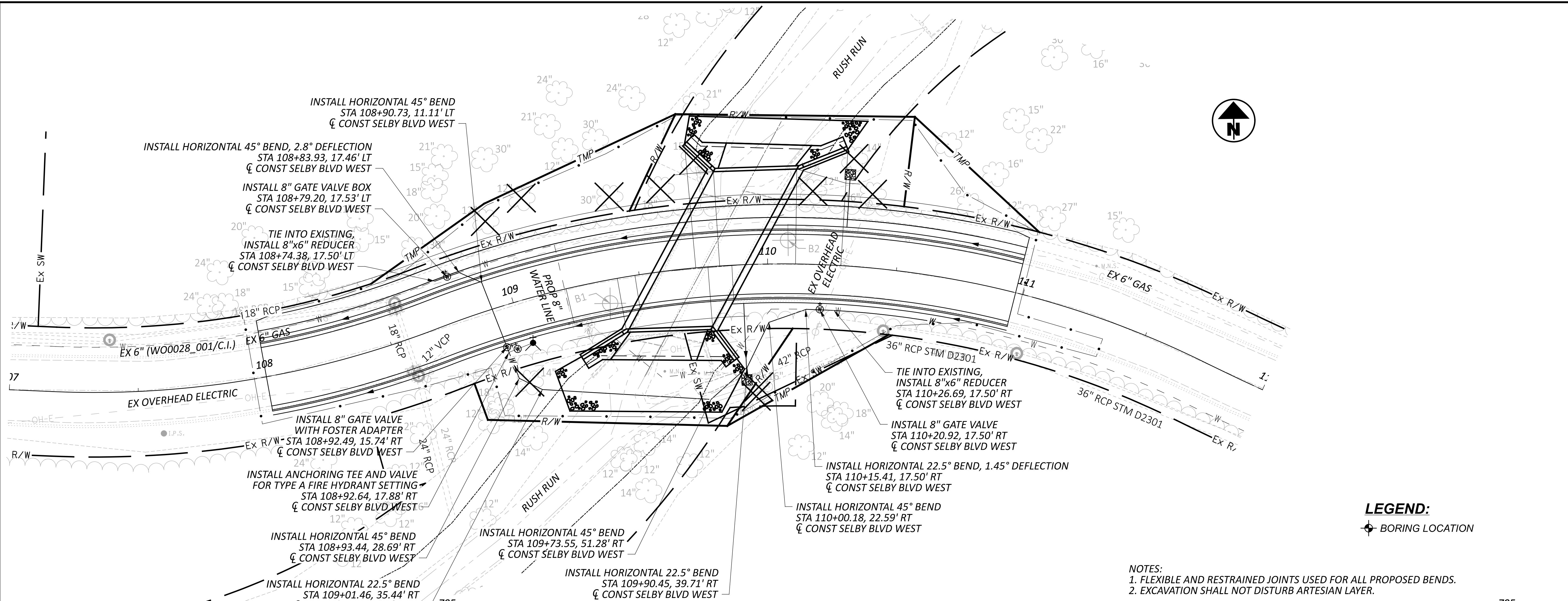
PROJECT ID

116037

Sheet Totals

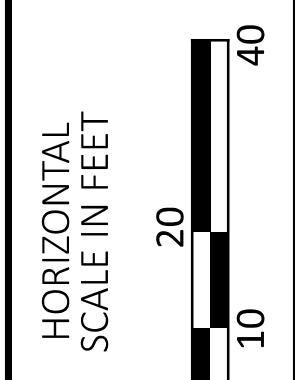
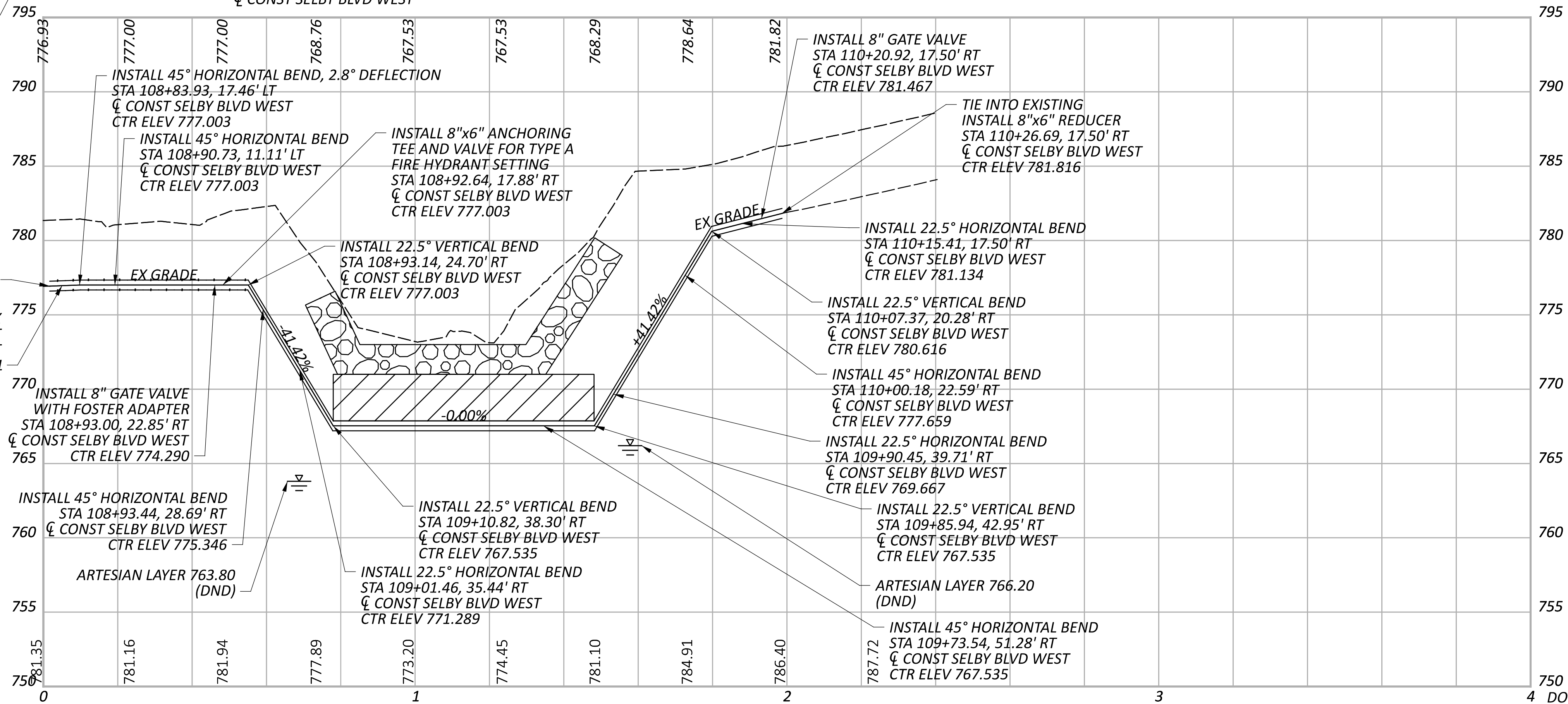
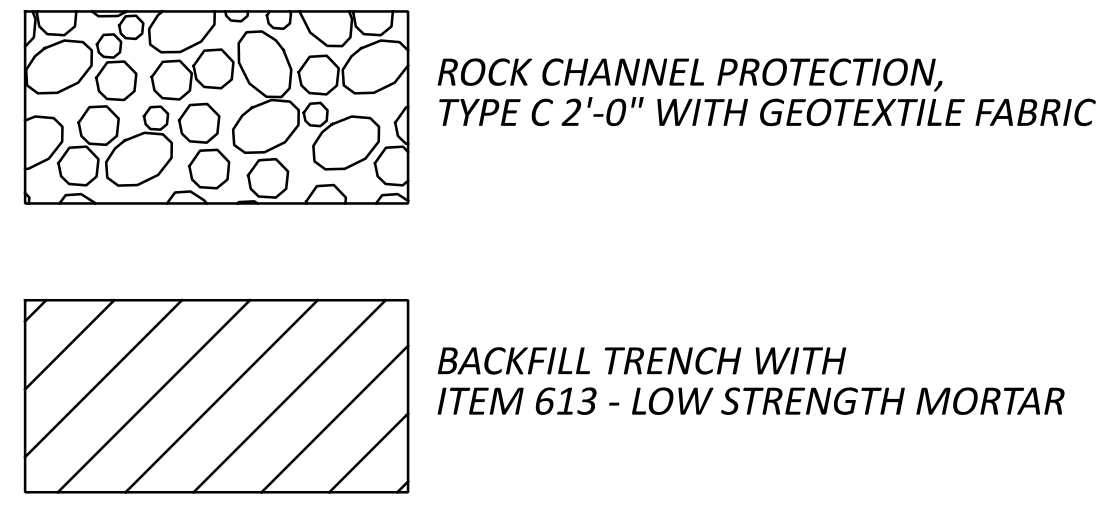
Seeding	Cut	Fill
	83	95

SHEET	TOTAL
P.22	38



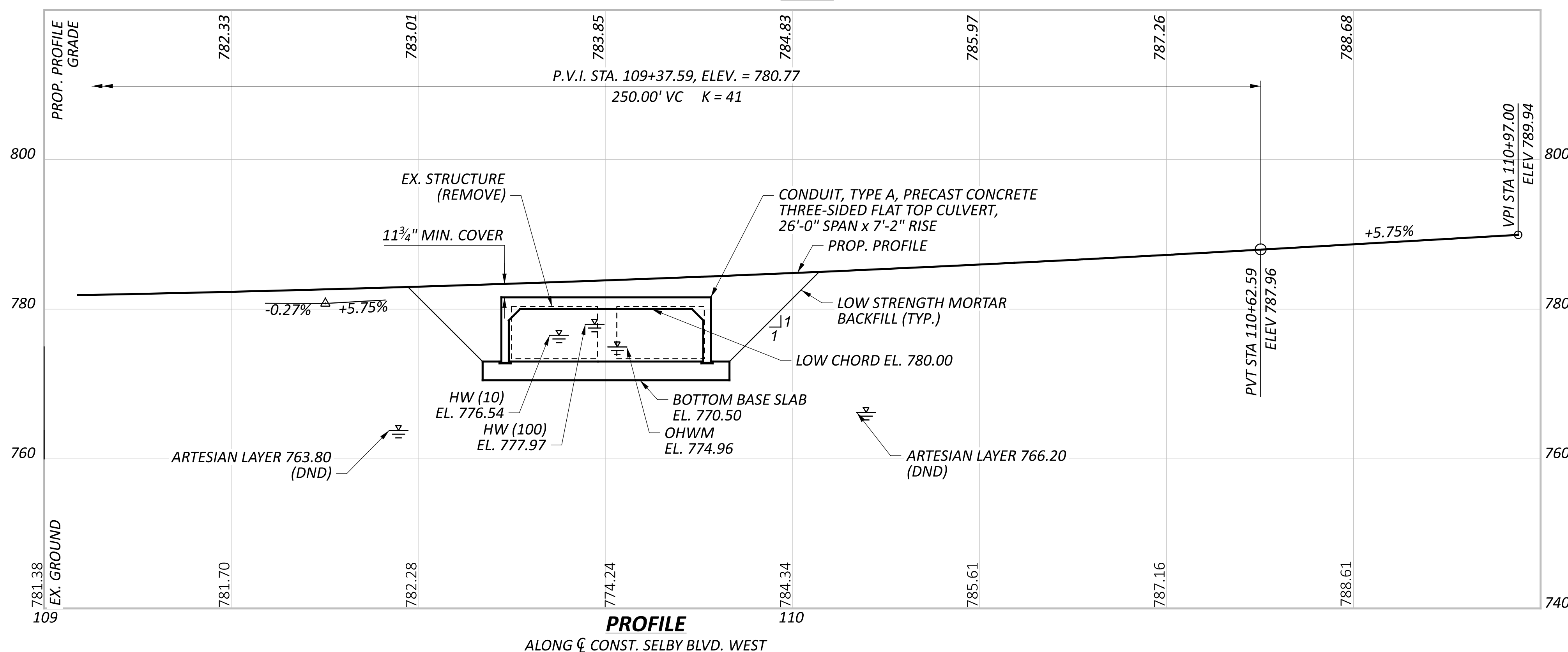
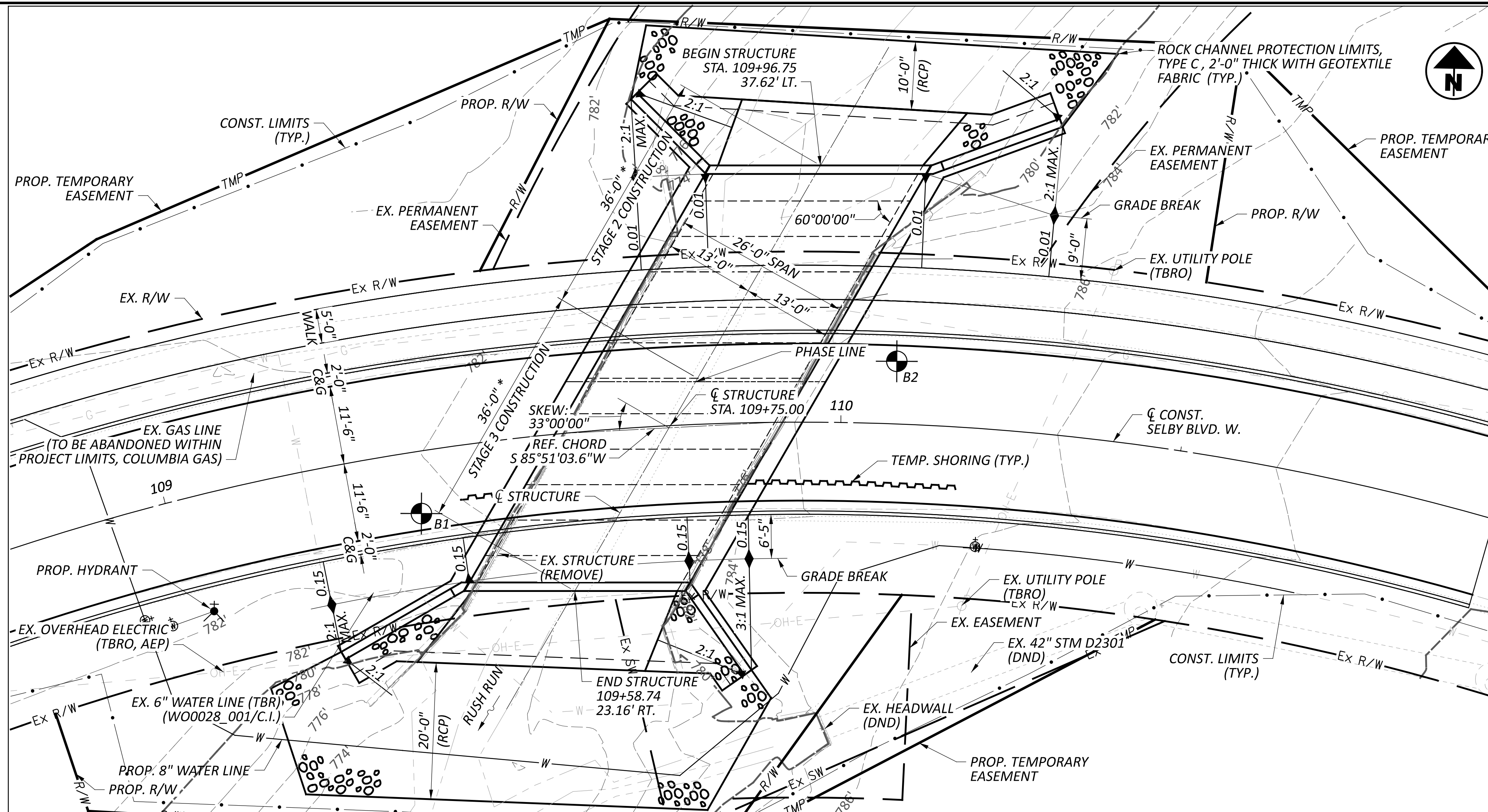
LEGEND:
 BORING LOCATION

NOTES:
 1. FLEXIBLE AND RESTRAINED JOINTS USED FOR ALL PROPOSED BENDS.
 2. EXCAVATION SHALL NOT DISTURB ARTESIAN LAYER.



WATER LINE PROFILE

DESIGN AGENCY	STRUCTUREPOINT
DESIGNER	DMS
REVIEWER	AJL 10/27/23
PROJECT ID	116037
SHEET TOTAL	P.23 38



FOR BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET 2 / 38.

NOTES

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
- REFERENCE CHORD IS LOCATED AT THE INTERSECTIONS OF ϕ CONSTRUCTION SELBY BLVD. W. AND THE INSIDE FACES OF THE 3-SIDED FLAT TOP CULVERT WALLS.

LEGEND:

- \diamond BORING LOCATION
- * - PLUS FIT-UP
- C&G - CURB AND GUTTER
- DND - DO NOT DISTURB
- TBR - TO BE RELOCATED BY OTHERS
- TBR - TO BE RELOCATED

HYDRAULIC DATA:

DRAINAGE AREA = 2.42 SQ. MILES
 Q (10) = 411 CFS V (10) = 4.55 FT/S
 Q (100) = 790 CFS V (100) = 5.03 FT/S
 EXISTING STRUCTURE WATERWAY OPENING = 175± SF
 PROPOSED STRUCTURE WATERWAY OPENING = 210 SF
 STRUCTURE CLEARS THE 10 YEAR DESIGN HW BY 3.46'

EXISTING STRUCTURE	
TYPE:	TWIN PRECAST REINFORCED CONCRETE BOX CULVERTS
SPANS:	12'-0" SPAN X 8'-0" RISE
ROADWAY:	27'-0"± FACE/FACE CURB
LOADING:	ASTM C850, INTERSTATE, < 2' COVER
SKEW:	32°30'00"± LEFT FORWARD TO THE REFERENCE LINE
WEARING SURFACE:	BITUMINOUS
APPROACH SLABS:	NONE
ALIGNMENT:	TANGENT (ON REFERENCE LINE)
CROWN:	0.016±
STRUCTURE FILE NUMBER:	2561100
DATE BUILT:	1982
DISPOSITION:	TO BE REMOVED

PROPOSED STRUCTURE	
TYPE:	PRECAST REINFORCED CONCRETE THREE-SIDED FLAT TOP CULVERT
SPANS:	26'-0" SPAN (MEASURED NORMAL TO ϕ STRUCTURE) X 7'-2" RISE
ROADWAY:	26'-0" F/F CURB
LOADING:	HL-93
SKEW:	33°00'00" TO REFERENCE CHORD
FUTURE WEARING SURFACE:	0.060 KSF
APPROACH SLABS:	NONE
ALIGNMENT:	TANGENT (ON REFERENCE CHORD)
COORDINATES:	LATITUDE N 40°04'39.52" LONGITUDE W 83°01'16.05"

CULVERT PLAN & PROFILE
 FRA-SELBY-00.198
 SELBY BLVD. W. OVER RUSH RUN

SFN	2561101
DESIGN AGENCY	STRUCTUREPOINT
DESIGNER	CHECKER
ABD	SJF
REVIEWER	
JCS	08/22/23
PROJECT ID	116037
SUBSET	TOTAL
1	9
SHEET	TOTAL
P.24	38

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
 FUTURE WEARING SURFACE (FWS) OF 0.06 KSF

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (FOOTINGS, WINGWALLS, HEADWALLS, AND BASE SLAB)

CONCRETE REINFORCEMENT:
 EPOXY COATED STEEL REINFORCEMENT- MINIMUM YIELD STRENGTH 60 KSI

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

THREE-SIDED STRUCTURE WALL AND TOP SLAB THICKNESS:

THE WALL AND TOP SLAB THICKNESSES SHOWN IN THE PLANS WERE OBTAINED FROM THE MANUFACTURERS AT THE TIME THE PLANS WERE PREPARED. IF THE WALL AND/OR TOP SLAB THICKNESS OF THE CULVERT PROPOSED IS DIFFERENT FROM WHAT IS SHOWN IN THE PLANS, A MARKED COPY OF THE PROJECT PLANS, INCLUDING ALL PLAN NOTES AND DETAILS SHOWING ALL ITEMS AFFECTED BY THE DIFFERENT CULVERT DIMENSIONS, SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. ALL WORK REQUIRED TO ACCOMMODATE ANY REVISED DIMENSIONS SHALL BE AT NO EXTRA COST TO THE CITY.

FOUNDATION BEARING RESISTANCE:

THE BASE SLAB, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.15 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.67 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 2.1 KIPS PER SQUARE FOOT.

POROUS BACKFILL WITH GEOTEXTILE FABRIC:

2'-0" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12" BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC TYPE A SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN UP 6" ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

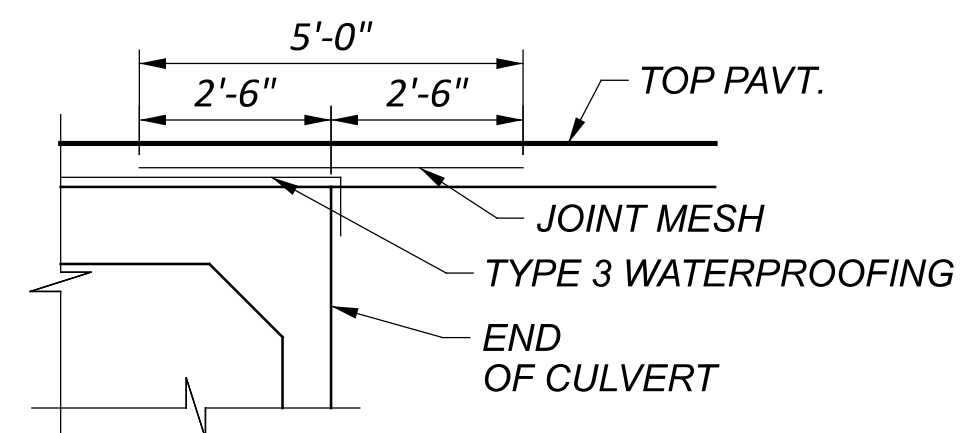
PERFORMED EXPANSION JOINT FILLER:

PERFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO C&MS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE BASE SLAB BETWEEN THE SIDES OF THE CULVERT AND THE ENDS OF THE WINGWALLS. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PERFORMED EXPANSION JOINT FILLER.

ITEM SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS:

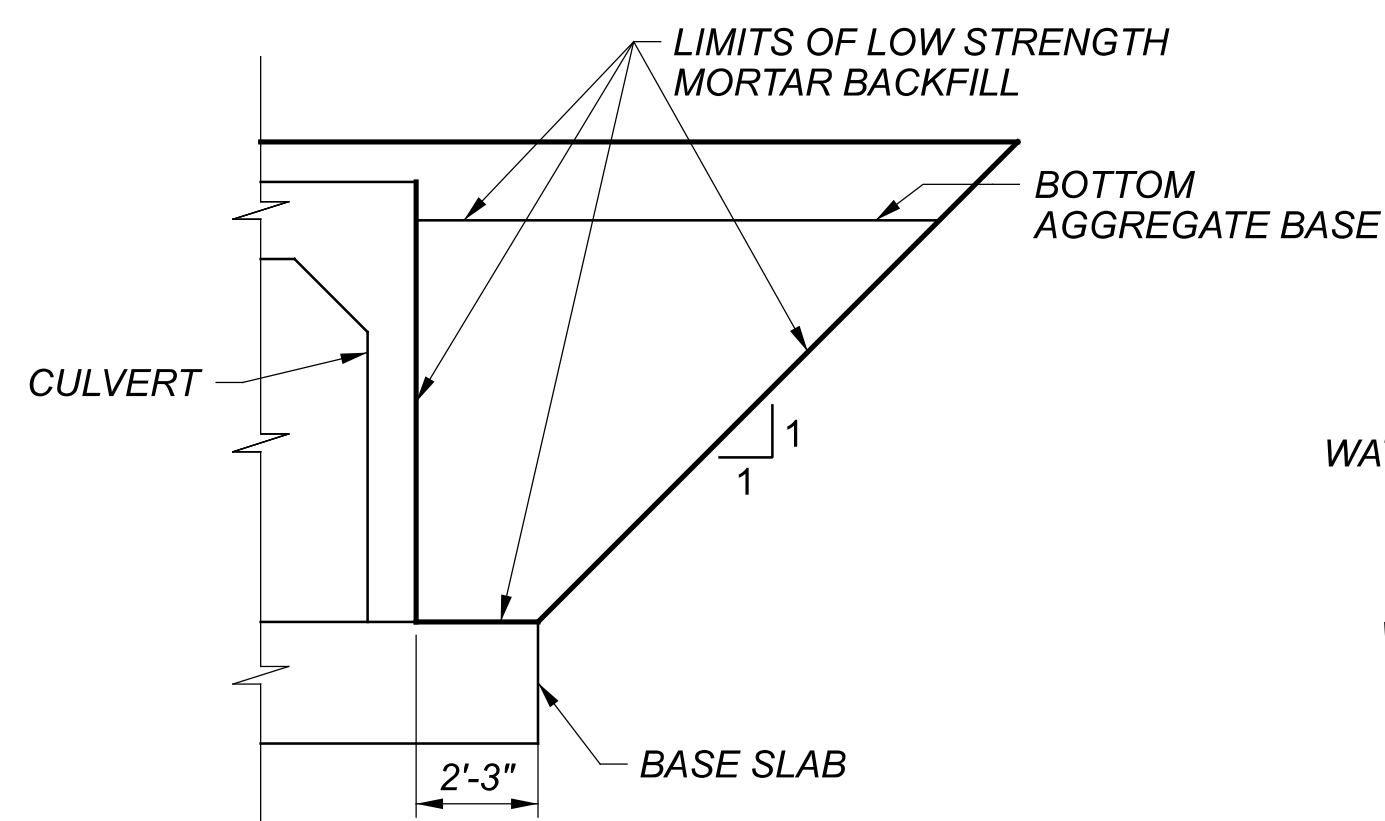
THIS ITEM SHALL BE USED TO REINFORCE TRANSVERSE JOINTS. PLACE REINFORCING MESH ON PROPOSED SURFACE AS SHOWN IN THE DETAIL BELOW, 5' WIDE, ALONG THE ENTIRE LENGTH OF THE CULVERT ON BOTH SIDES. APPLY TACK COAT BENEATH REINFORCING MESH PER MANUFACTURER'S SPECIFICATIONS.

REINFORCING MATERIAL SHALL BE GLASGRID CG200 OR EQUIVALENT AND SHALL BE PLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND THIS NOTE. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS.



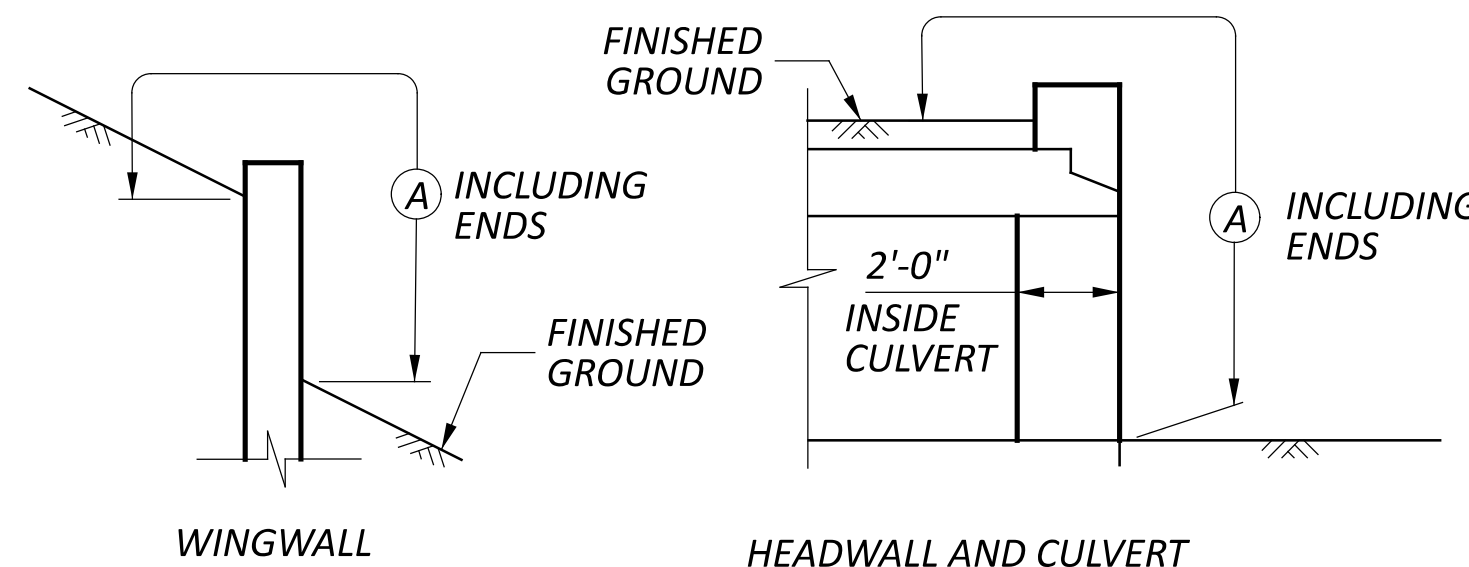
LOW STRENGTH MORTAR BACKFILL:

PLACE LOW STRENGTH MORTAR BACKFILL AS SHOWN IN THE DETAIL BELOW FOR THE FULL LENGTH OF THE CULVERT ON BOTH SIDES. EXCAVATION REQUIRED FOR LOW STRENGTH MORTAR BACKFILL PLACEMENT IN EXCESS OF WHAT IS INCLUDED WITH ITEM 202 SHALL BE INCLUDED WITH ITEM 611 FOR PAYMENT.



SEALING OF FORESLOPE WALL AND WINGWALLS:

ALL EXPOSED FORESLOPE WALL AND WINGWALL CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER. THE LIMITS SHALL BE AS SHOWN IN THE DIAGRAMS BELOW. PAYMENT FOR THE EPOXY-URETHANE SEALER SHALL BE PER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).



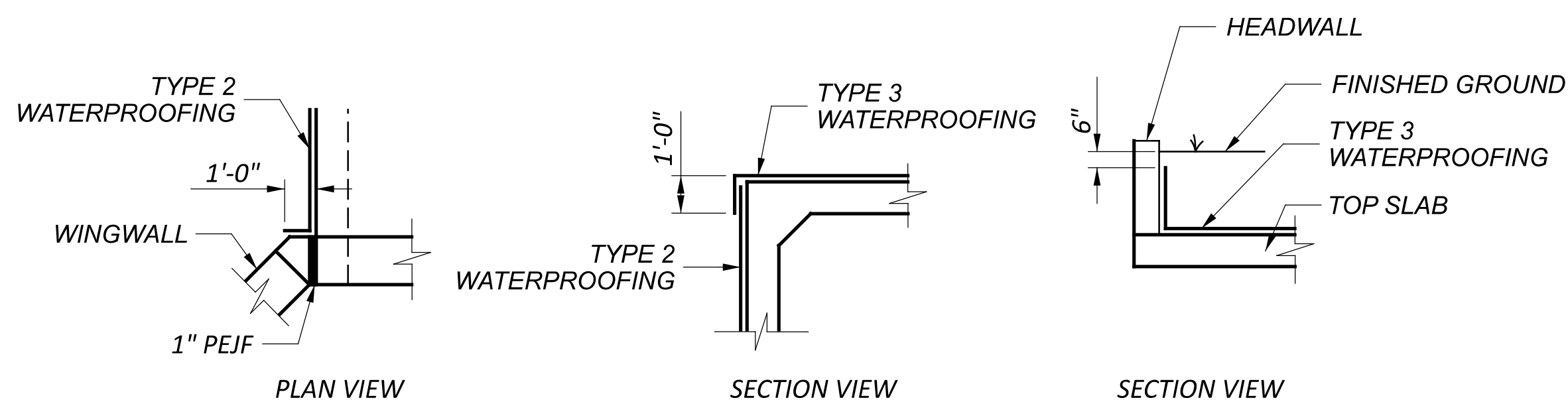
LIMITS OF ITEM 512-SEALING CONCRETE SURFACES

(A) - SEAL ENTIRE CONCRETE SURFACE AREA

WATERPROOFING:

TYPE 2 WATERPROOFING, PER C&MS 512 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

TYPE 3 WATERPROOFING, PER C&MS 512 AND 711.29, SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 3 WATERPROOFING.



WATERPROOFING DETAILS

ESTIMATED QUANTITIES

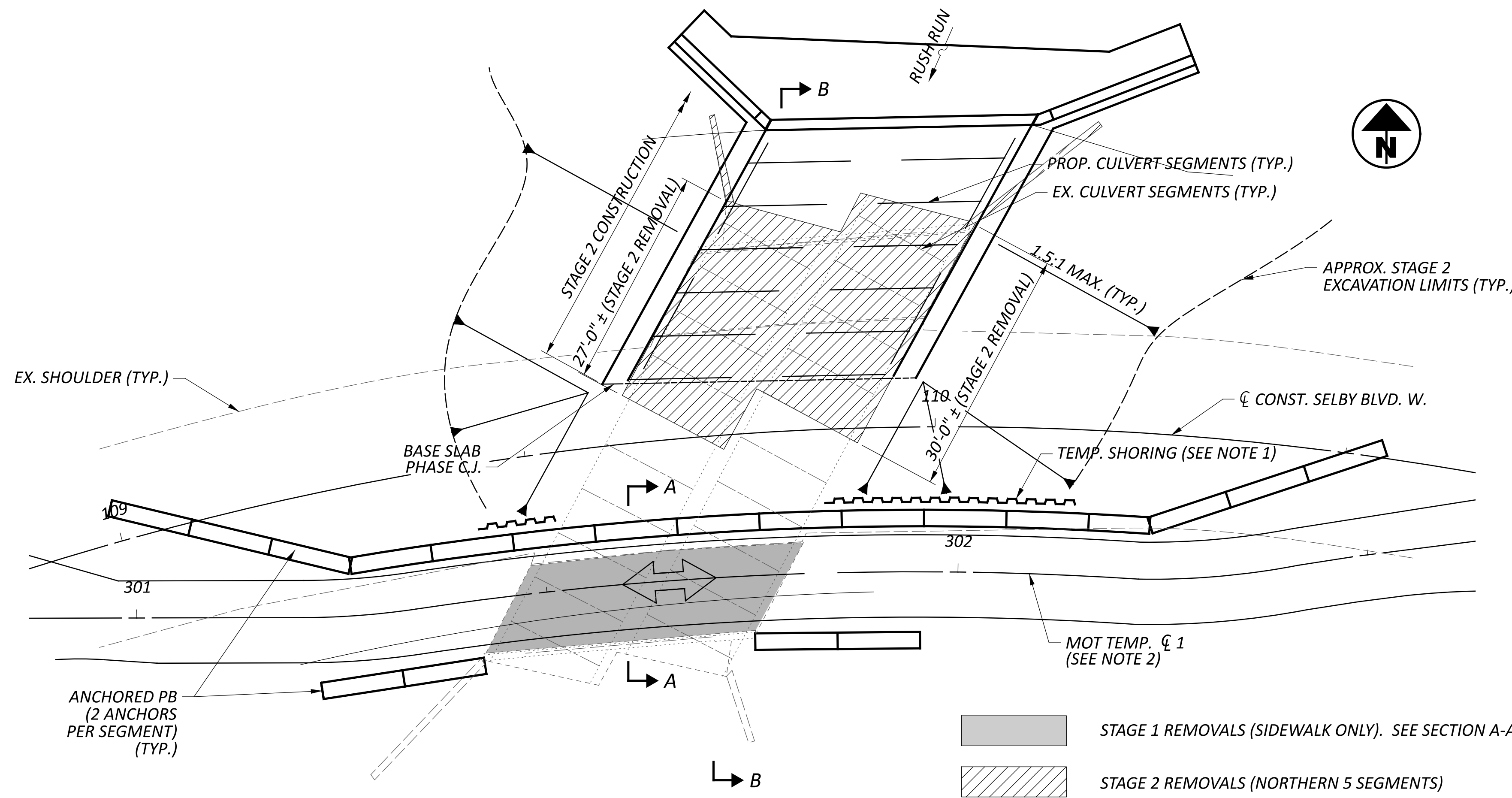
BY: VEH DATE: 08/08/2023
 CHECK: JCS DATE: 08/22/2023

ITEM	EXT	TOTAL	UNIT	DESCRIPTION	SHEET
202	11002		LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN	
503	11100		LS	COFFERDAMS AND EXCAVATION BRACING	
503	21300		LS	UNCLASSIFIED EXCAVATION	
509	10000	39873	LB	EPOXY COATED STEEL REINFORCEMENT	
511	46012	33	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
511	46512	335	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
511	46612	12	CY	CLASS QC1 CONCRETE WITH QC/QA, HEADWALL	
512	10100	134	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33000	142	SY	TYPE 2 WATERPROOFING	
512	33010	295	SY	TYPE 3 WATERPROOFING	
516	13600	71	SF	1" PERFORMED EXPANSION JOINT FILLER	
518	21200	45	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
518	39800	64	FT	4" PERFORATED CORRUGATED PLASTIC PIPE	
518	39900	9	FT	4" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
601	32204	170	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
611	70001	72	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (26' SPAN X 7'-2" RISE)	8/9
613	41200	171	CY	LOW STRENGTH MORTAR BACKFILL	
690	12050	38	SY	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	2/9

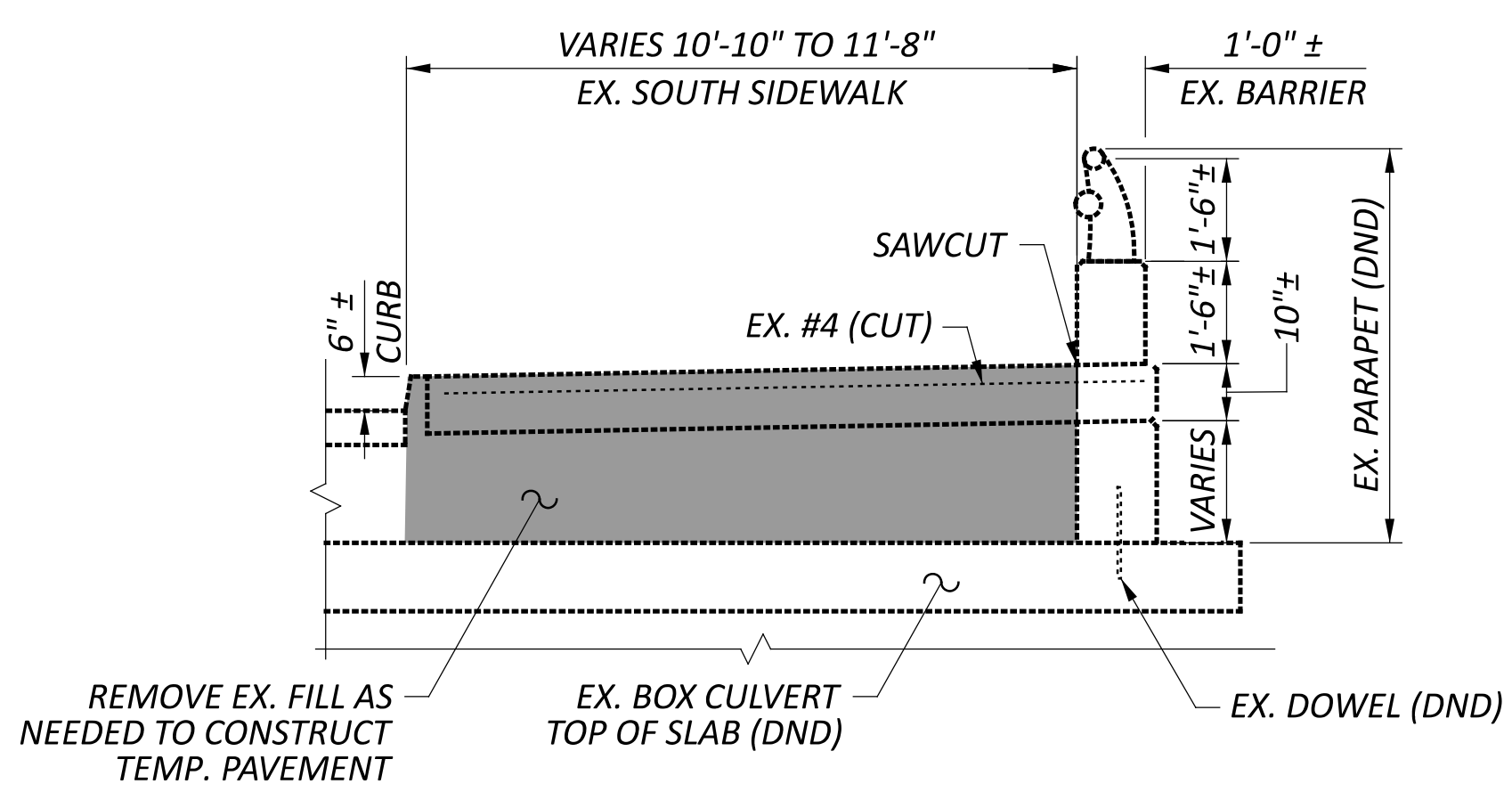
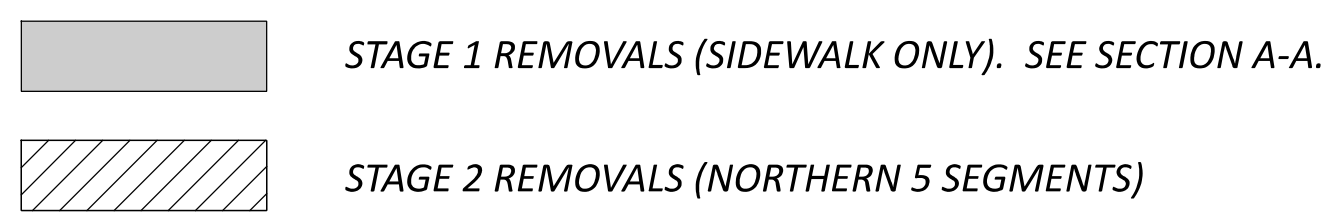
ABBREVIATION LIST:

THE FOLLOWING STANDARD ABBREVIATIONS ARE USED THROUGHOUT THE BRIDGE PLANS.

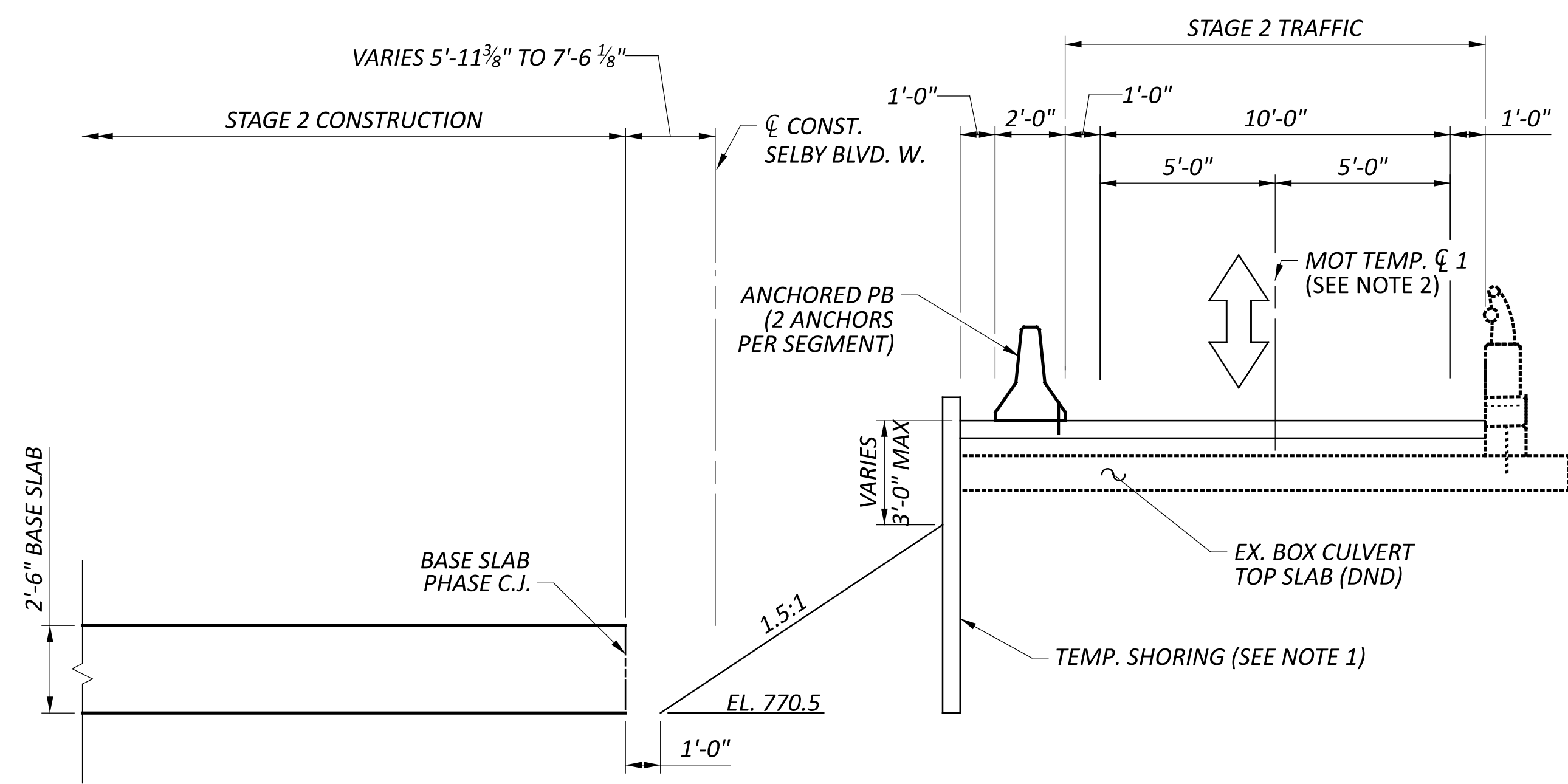
- BOTT. = BOTTOM
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEARANCE
- CONST. = CONSTRUCTION
- DIA. = DIAMETER
- DND = DO NOT DISTURB
- EL. = ELEVATION
- E.F. = EACH FACE
- EX. = EXISTING
- F.F. = FRONT FACE
- INV. = INVERT
- MAX. = MAXIMUM
- M.C. = MECHANICAL CONNECTOR
- MIN. = MINIMUM
- MOT = MAINTENANCE OF TRAFFIC
- N.F. = NEAR FACE
- PB = PORTABLE BARRIER
- P/C = PRECAST
- P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
- PEJF = PERFORMED EXPANSION JOINT FILLER
- PROP. = PROPOSED
- R.F. = REAR FACE
- SPA. = SPACED
- STM = STORM
- TYP. = TYPICAL



PLAN



SECTION A-A
(STAGE 1 REMOVALS)

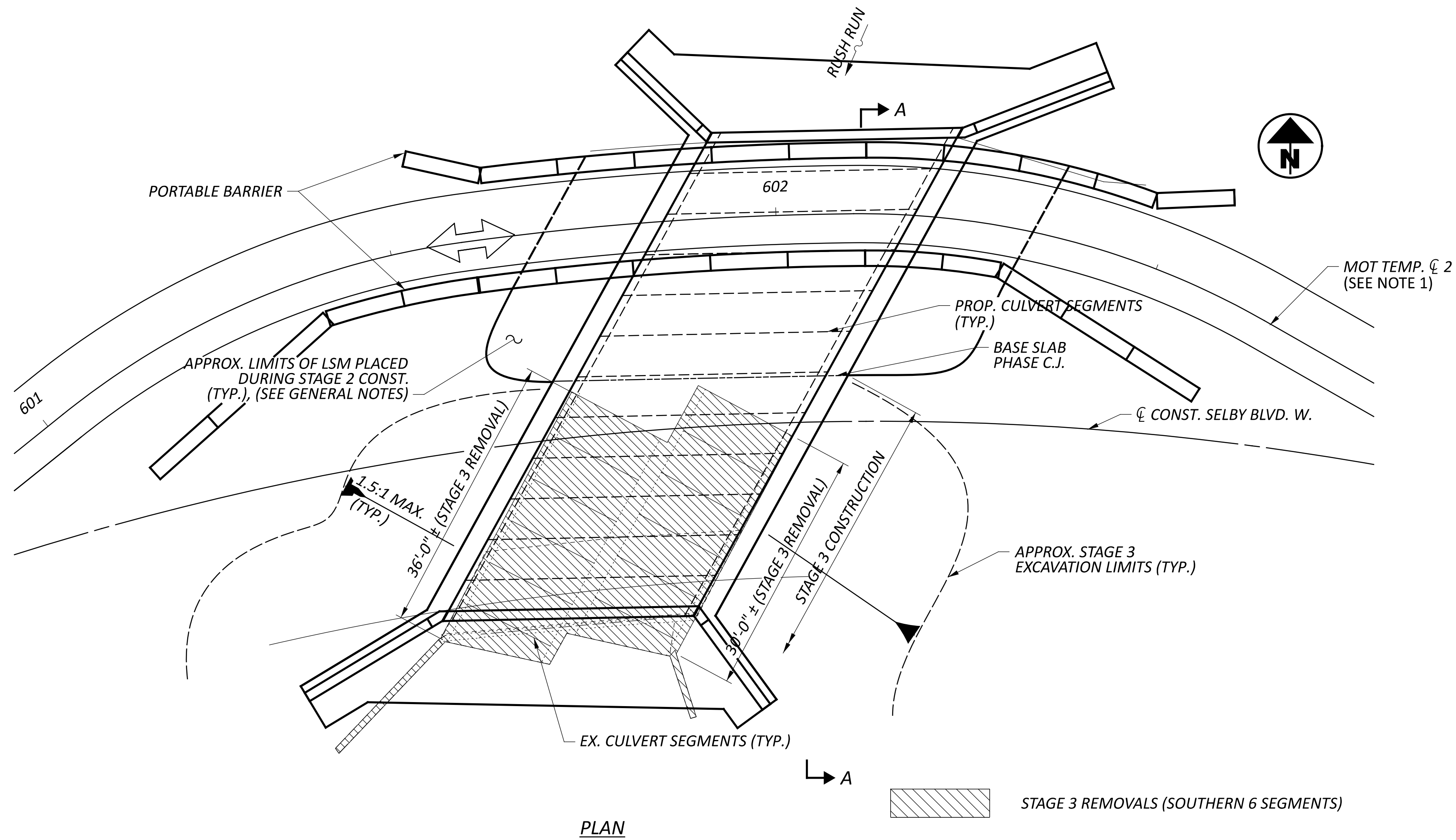


SECTION B-B
(STAGE 2 CONSTRUCTION AND TRAFFIC)

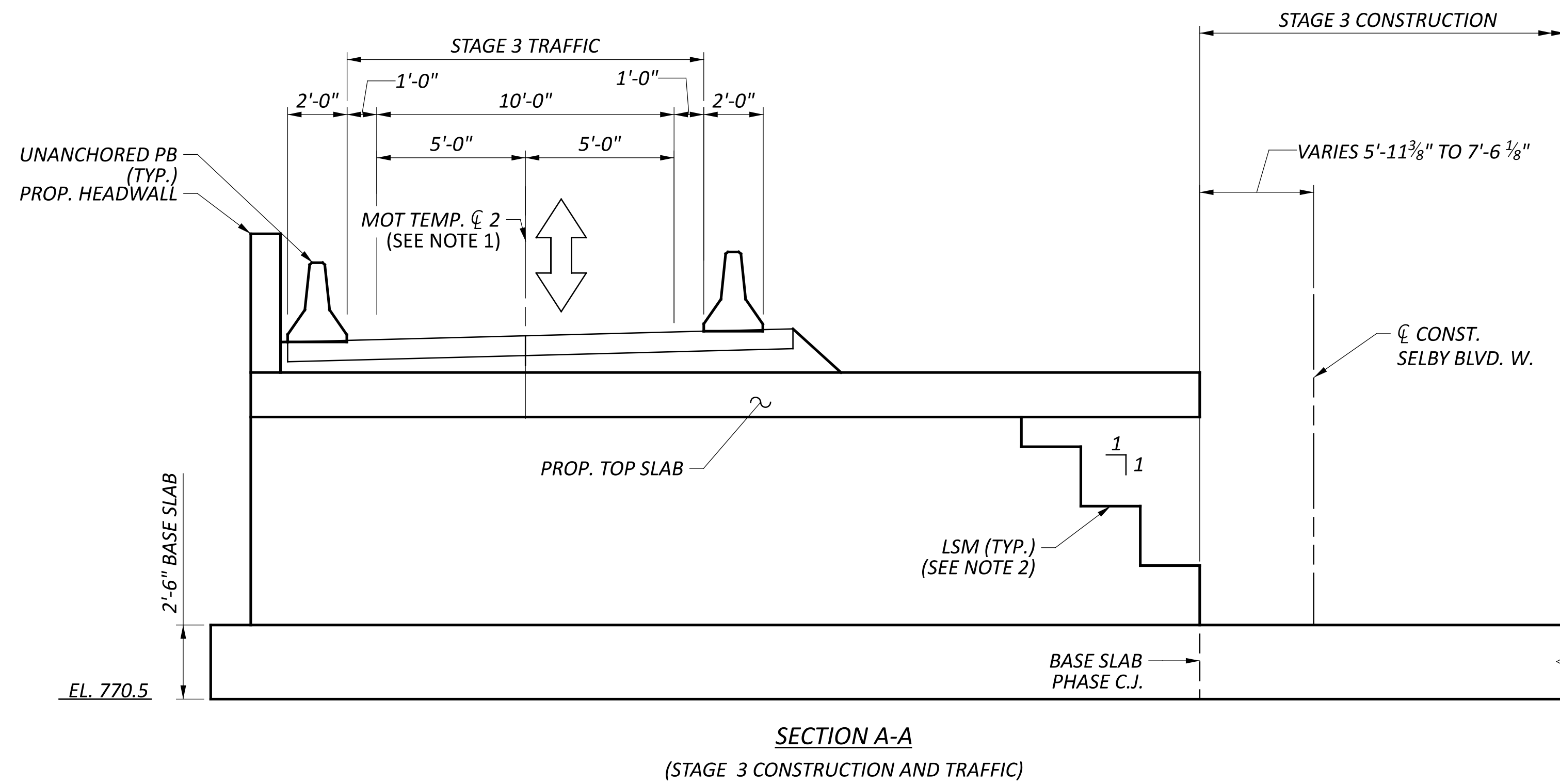
NOTES:

1. STAGE 2 TEMPORARY SHORING SHALL NOT PENETRATE BELOW ELEVATION 770.50.
2. FOR ADDITIONAL MOT AND TEMPORARY PAVEMENT DETAILS, SEE SHEETS [8/38] & [13/38].

SFN	2561101
DESIGN AGENCY	STRUCTUREPOINT INC.
DESIGNER	CHECKER
SJF	JCS
REVIEWER	
JCS	08/22/23
PROJECT ID	116037
SUBSET	TOTAL
3	9
SHEET	TOTAL
P.26	38



PLAN



SECTION A-A
 (STAGE 3 CONSTRUCTION AND TRAFFIC)

NOTES:

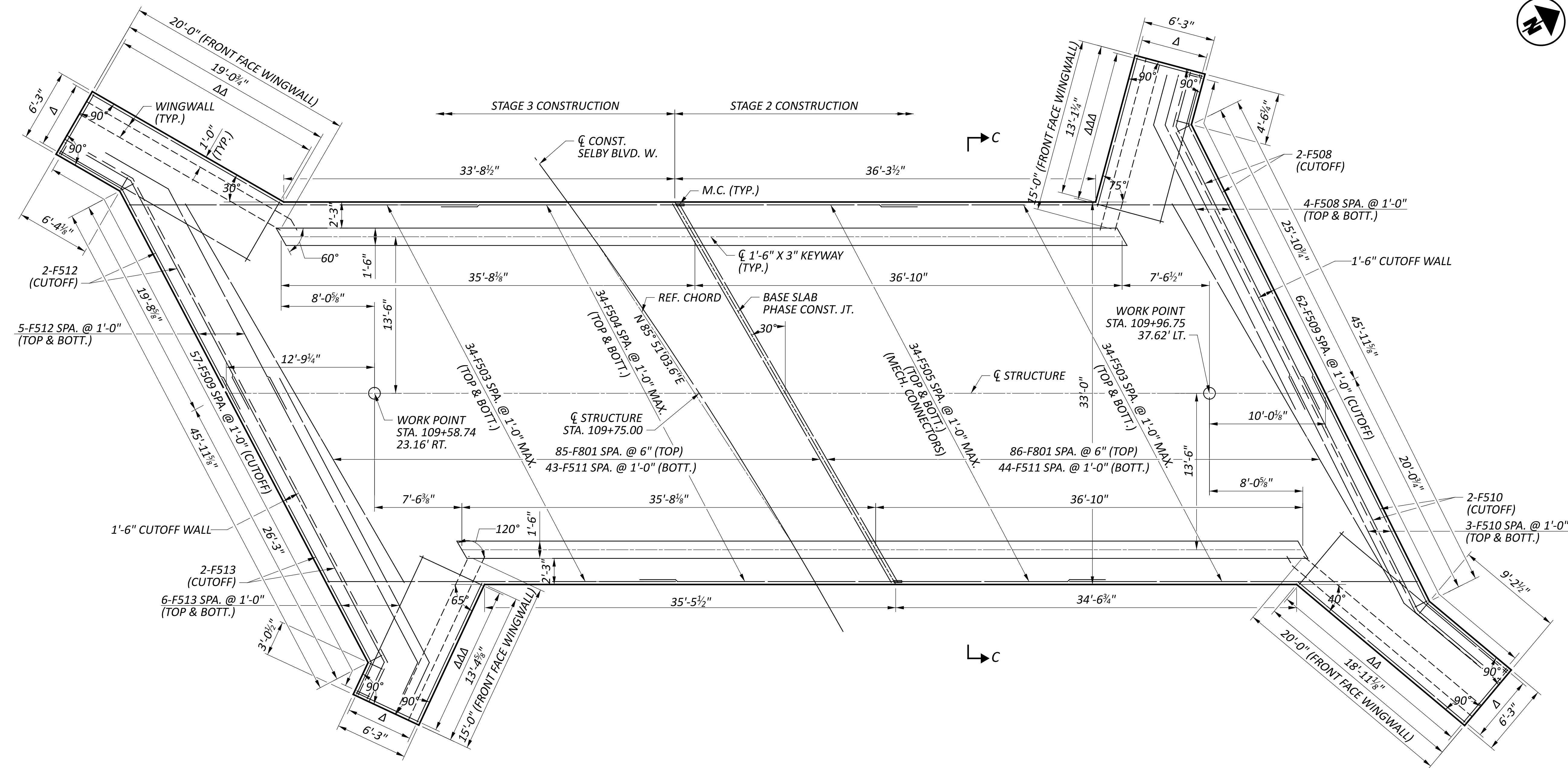
1. FOR ADDITIONAL MOT AND TEMPORARY PAVEMENT DETAILS, SEE SHEETS [8/38] & [13/38].
2. BENCH LSM AS NEEDED TO MAINTAIN 1:1 SLOPE.

SFN	2561101
DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	CHECKER
SJF	JCS
REVIEWER	JCS
PROJECT ID	116037
SUBSET	TOTAL
4	9
SHEET	TOTAL
P.27	38

LEGEND:

- Δ 7-F506 SPA. @ 1'-0" MAX. (TOP & BOTT.)
- ΔΔ 20-F507 SPA. @ 1'-0" MAX. (TOP)
38-F601 SPA. @ 6" MAX. (BOTT.)
- ΔΔΔ 14-F507 SPA. @ 1'-0" MAX. (TOP)
27-F601 SPA. @ 6" MAX. (BOTT.)

MIN. BAR LAP	
#5	3'-1"



BASE SLAB PLAN

NOTES:

1. FOR SECTION C-C, SEE SHEET 8/9.

BASE SLAB PLAN
 FRA-SELBY-00.198
 SELBY BLVD. W. OVER RUSH RUN

SFN
2561101

DESIGN AGENCY



DESIGNER ABD CHECKER SJF

REVIEWER

JCS 08/22/23

PROJECT ID

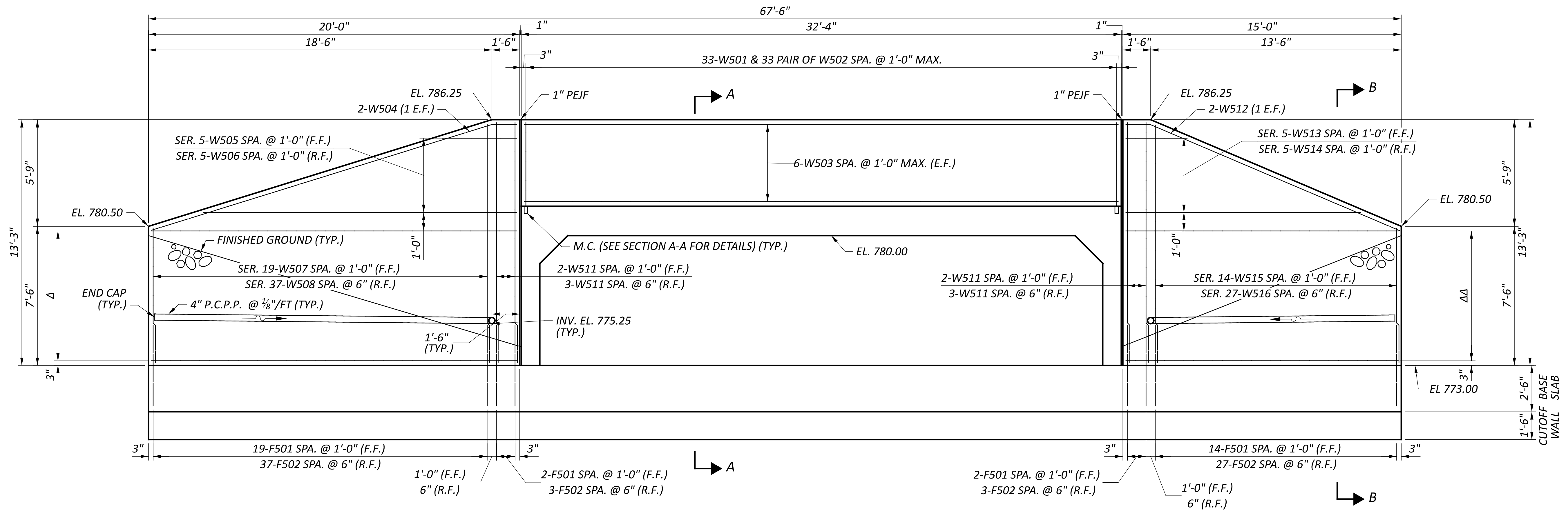
116037

SUBSET TOTAL

5 9

SHEET TOTAL

P.28 38



INLET HEADWALL ELEVATION
 (ALONG FRONT FACE OF WINGWALLS)

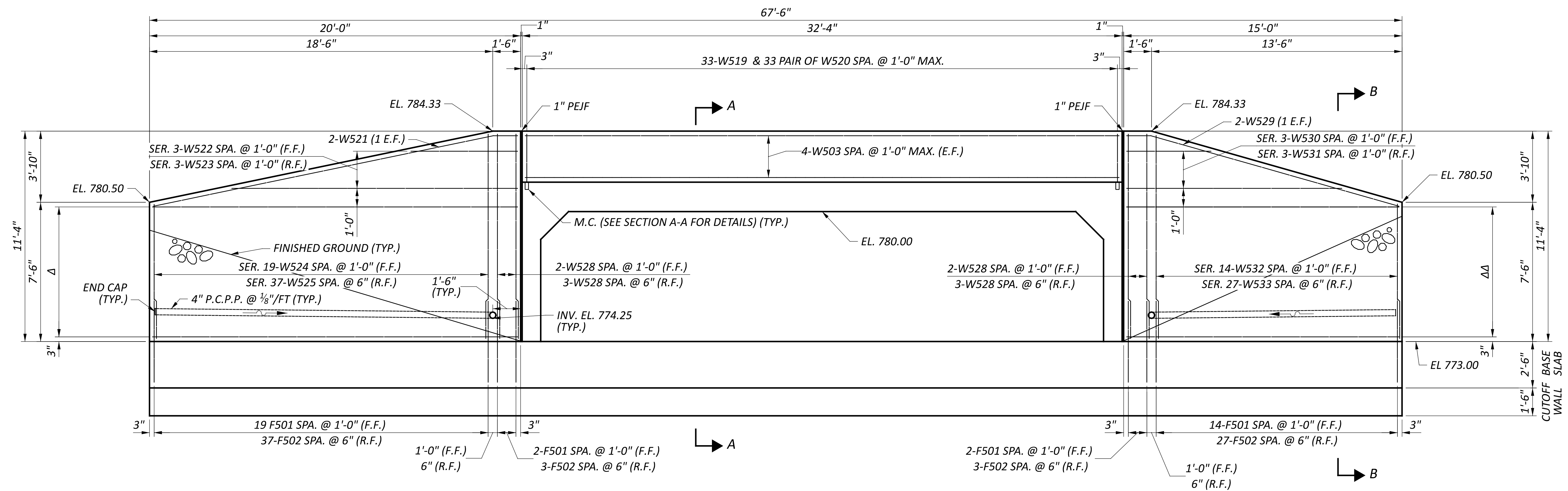
LEGEND:

- Δ 8-W509 SPA. @ 1'-0" (F.F.)
8-W510 SPA. @ 1'-0" (R.F.)
- ΔΔ 8-W517 SPA. @ 1'-0" (F.F.)
8-W518 SPA. @ 1'-0" (R.F.)

NOTES:

1. FOR SECTIONS A-A AND B-B, SEE SHEET 8/9.

SFN 2561101	
DESIGN AGENCY AMERICAN STRUCTUREPOINT INC.	
DESIGNER ABD	CHECKER SJF
REVIEWER JCS 08/22/23	
PROJECT ID 116037	
SUBSET 6	TOTAL 9
SHEET P.29	TOTAL 38



OUTLET HEADWALL ELEVATION
 (ALONG FRONT FACE OF WINGWALLS)

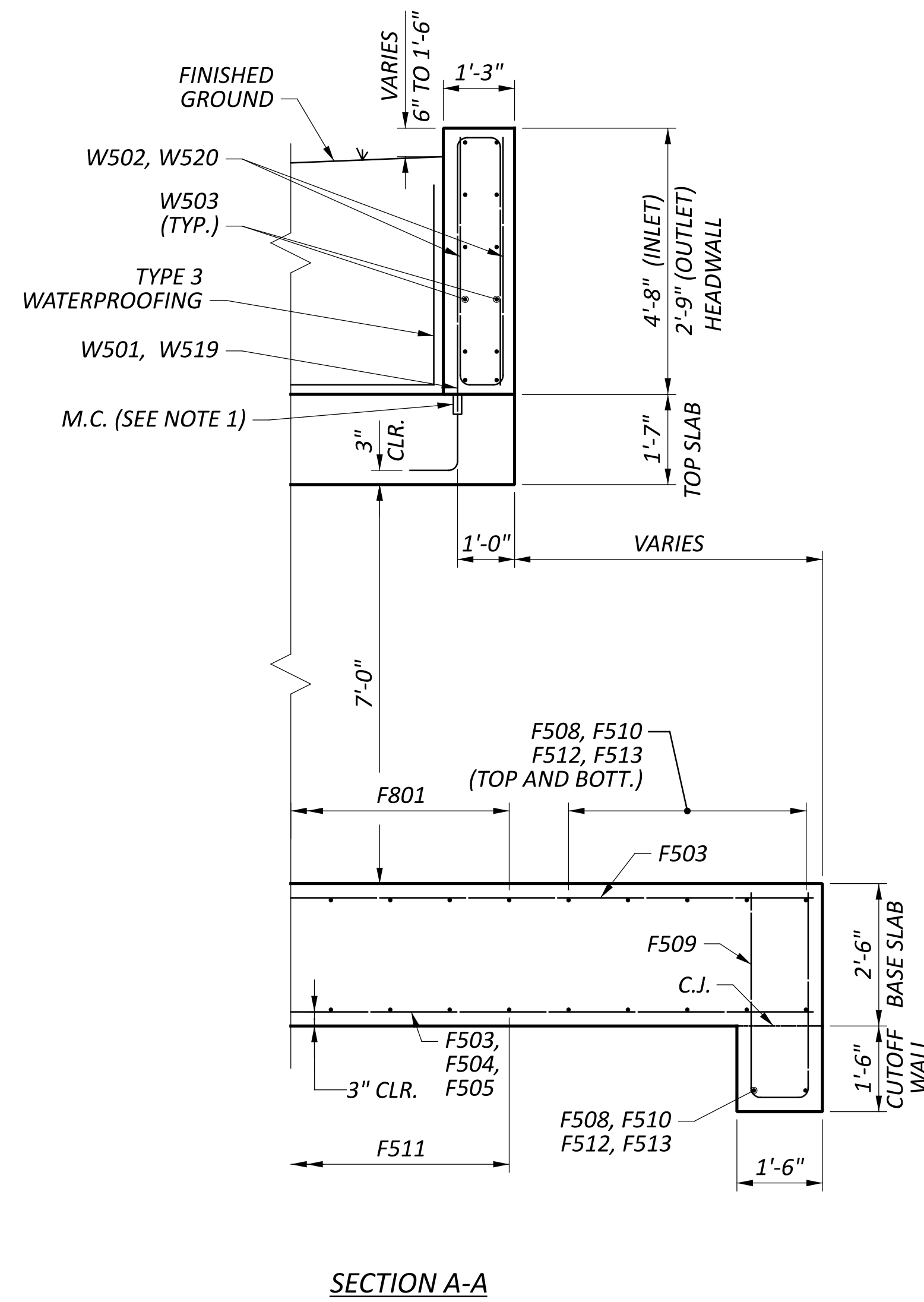
LEGEND:

- Δ 8-W526 SPA. @ 1'-0" (F.F.)
8-W527 SPA. @ 1'-0" (R.F.)
- ΔΔ 8-W534 SPA. @ 1'-0" (F.F.)
8-W535 SPA. @ 1'-0" (R.F.)

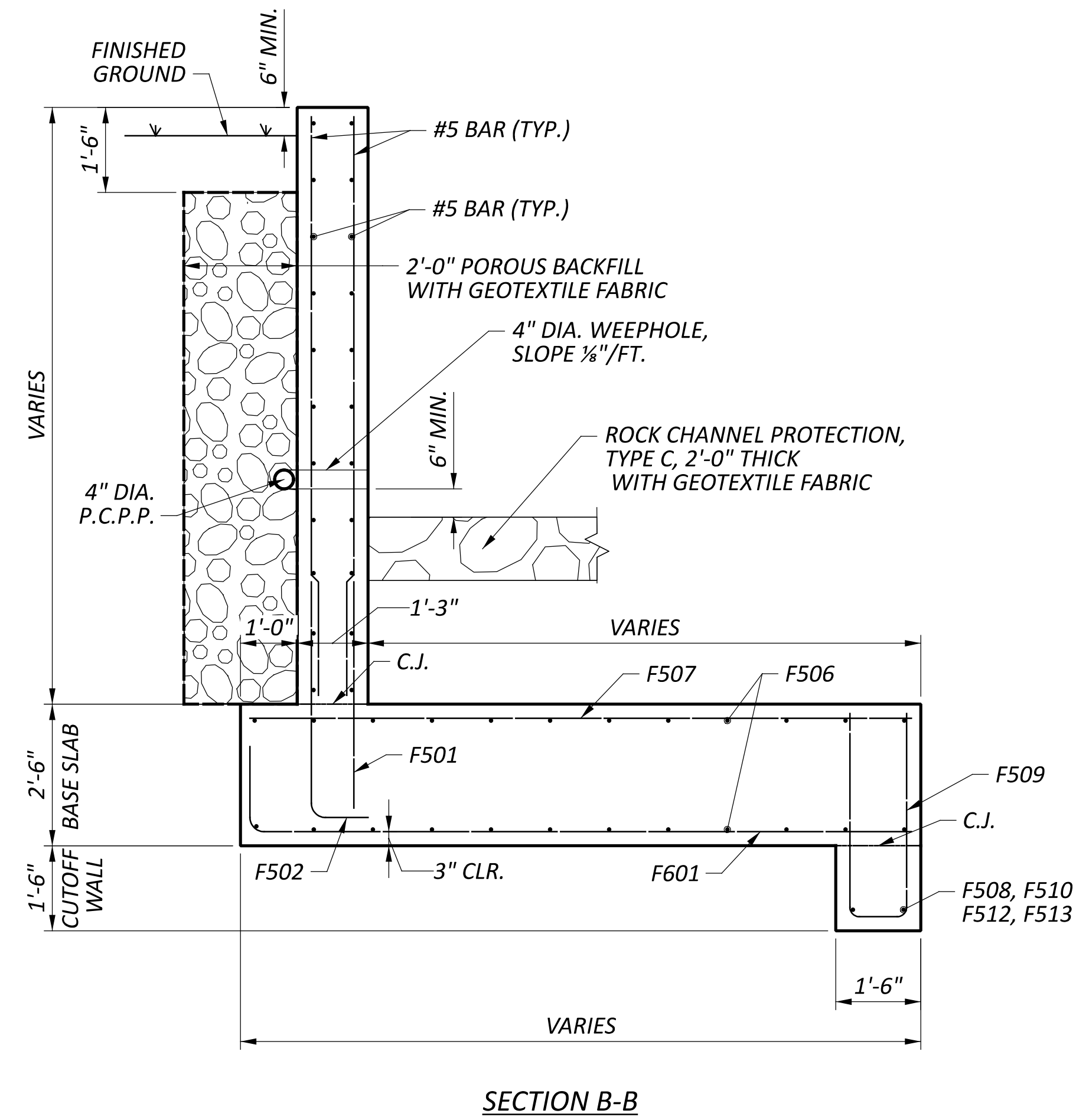
NOTES:

FOR SECTIONS A-A AND B-B, SEE SHEET 8/9.

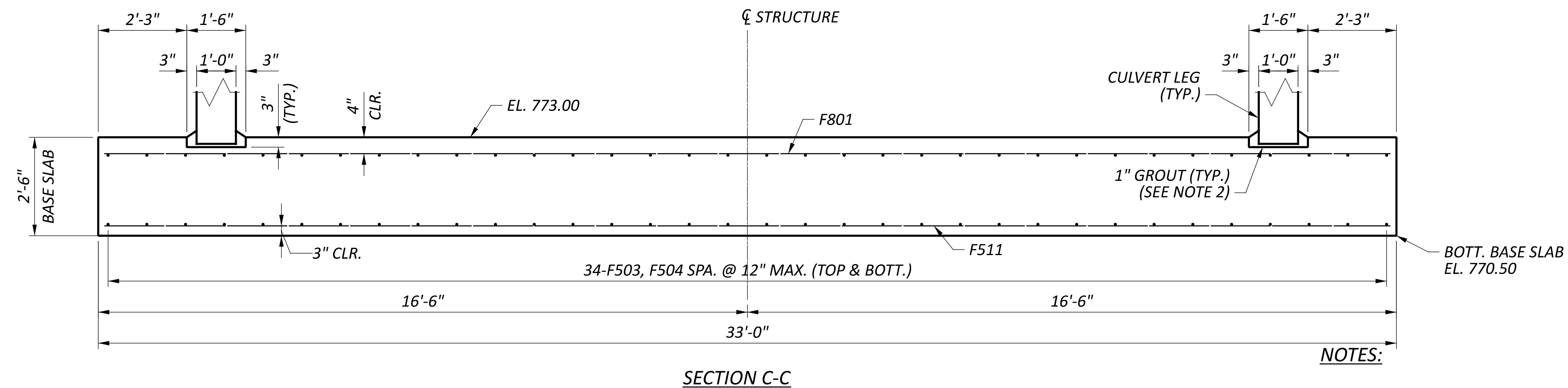
SFN	2561101
DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	CHECKER
ABD	SJF
REVIEWER	
JCS	08/22/23
PROJECT ID	116037
SUBSET	TOTAL
7	9
SHEET	TOTAL
P.30	38



SECTION A-A



SECTION B-B



SECTION C-C

MIN. BAR LAP	
#5	3'-1"

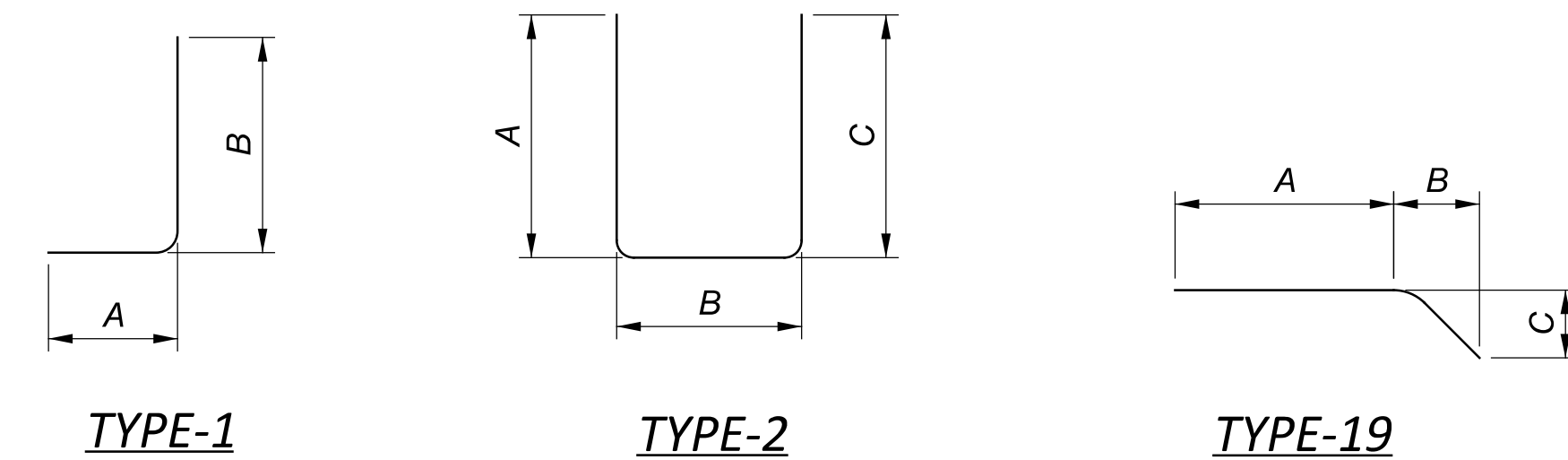
- NOTES:
- CONTRACTOR SHALL COORDINATE WITH THE SUPPLIER REGARDING CASTING OF REINFORCEMENT INTO THE PRECAST THREE-SIDED FLAT TOP CULVERT SEGMENTS. ALL WORK REQUIRED TO ACCOMMODATE THE PROPOSED REINFORCING SHALL BE INCLUDED FOR PAYMENT WITH ITEM 611, CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (26' SPAN x 7'-2" RISE), AS PER PLAN. SEE ROADWAY STANDARD DRAWING MGS-2.4 FOR ADDITIONAL INFORMATION.
 - PAYMENT FOR GROUT SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR ITEM 611, CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (26' SPAN x 7'-2" RISE), AS PER PLAN.

SFN	2561101
DESIGN AGENCY	STRUCTUREPOINT INC.
DESIGNER	ABD
CHECKER	SJF
REVIEWER	JCS
PROJECT ID	116037
SUBSET	8
TOTAL	9
SHEET	P.31
TOTAL	38

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL				A	B	C	D	E	R
BASE SLAB										
F501	74	5'-5"	418	STR						
F502	140	6'-3"	913	1	1'-0"	5'-5"				
F503	136	30'-0"	4255	STR						
* F504	68	20'-3"	1436	STR						
* F505	68	20'-9"	1472	STR						
F506	56	18'-9"	1095	STR						
F507	68	5'-11"	420	STR						
F508	10	28'-10"	301	19	24'-1"	3'-7"	3'-2"			
F509	119	7'-11"	983	2	3'-6"	1'-2"	3'-6"			
F510	8	30'-10"	257	19	21'-10"	8'-3"	3'-7"			
F511	87	37'-8"	3418	STR						
F512	12	24'-5"	306	19	18'-3"	5'-3"	3'-4"			
F513	14	30'-7"	447	19	27'-8"	2'-4"	1'-9"			
F601	130	7'-3"	1416	1	1'-6"	5'-11"				
F801	171	37'-8"	17197	STR						
SUB-TOTAL			34,334							

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL				A	B	C	D	E	R
INLET HEADWALL										
* W501	33	4'-6"	155	STR						
W502	66	9'-4"	642	2	4'-4"	0'-11"	4'-4"			
W503	12	32'-0"	401	STR						
W504	2	20'-5"	43	19	19'-2"	1'-2"	0'-4 1/2"			
	1 SR	3'-11"								
W505	OF	TO	54	STR						3'-2 3/4"
	5	16'-10"								
	1 SR	4'-10"			4'-3"					
W506	OF	TO	59	19	TO	0'-7"	0'-2 1/2"			3'-2 3/4"
	5	17'-9"			17'-2"					
	1 SR	7'-2"								
W507	OF	TO	198	STR						0'-3 3/4"
	19	12'-10"								
	1 SR	7'-2"								
W508	OF	TO	386	STR						0'-2"
	37	12'-10"								
W509	8	19'-8"	164	STR						
W510	8	20'-5"	170	19	19'-10"	0'-7"	0'-2 1/2"			
W511	10	12'-11"	135	STR						
W512	2	15'-9"	33	19	14'-7"	1'-1"	0'-6"			
	1 SR	3'-3"								
W513	OF	TO	41	STR						2'-4"
	5	12'-7"								
	1 SR	3'-6"								
W514	OF	TO	43	STR						2'-4"
	5	12'-10"								
	1 SR	7'-2"								
W515	OF	TO	145	STR						0'-5 1/4"
	14	12'-9"								
	1 SR	7'-2"								
W516	OF	TO	280	STR						0'-2 1/4"
	27	12'-9"								
W517	8	14'-8"	122	STR						
W518	8	14'-11"	124	STR						
SUB-TOTAL			3,195							

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL				A	B	C	D	E	R
OUTLET HEADWALL										
W503	8	32'-0"	267	STR						
* W519	33	2'-5"	83	STR						
W520	66	5'-4"	184	2	2'-4"	0'-11"	2'-4"			
W521	2	20'-0"	42	19	18'-8"	1'-3"	0'-3"			
	1 SR	5'-8"								
W522	OF	TO	33	STR						4'-10"
	3	15'-4"								
	1 SR	6'-10"			6'-2"					
W523	OF	TO	37	19	TO	0'-7"	0'-4"			4'-10"
	3	16'-6"			15'-10"					
	1 SR	7'-2"								
W524	OF	TO	180	STR						0'-2 1/2"
	19	11'-0"								
	1 SR	7'-2"								
W525	OF	TO	351	STR						0'-1 1/4"
	37	11'-0"								
W526	8	19'-8"	164	STR						
W527	8	20'-4"	170	19	19'-8"	0'-7"	0'-4"			
W528	10	11'-0"	115	STR						
W529	2	15'-1"	31	19	13'-10"	1'-3"	0'-4"			
	1 SR	4'-6"								
W530	OF	TO	25	STR						3'-6 1/2"
	3	11'-7"								
	1 SR	4'-11"								
W531	OF	TO	27	STR						3'-6 1/2"
	3	12'-0"								
	1 SR	7'-2"								
W532	OF	TO	132	STR						0'-3 1/2"
	14	10'-11"								
	1 SR	7'-2"								
W533	OF	TO	255	STR						0'-1 3/4"
	27	10'-11"								
W534	8	14'-8"	122	STR						
W535	8	15'-1"	126	STR						
SUB-TOTAL			2,344							
TOTAL			39,873							



NOTES:

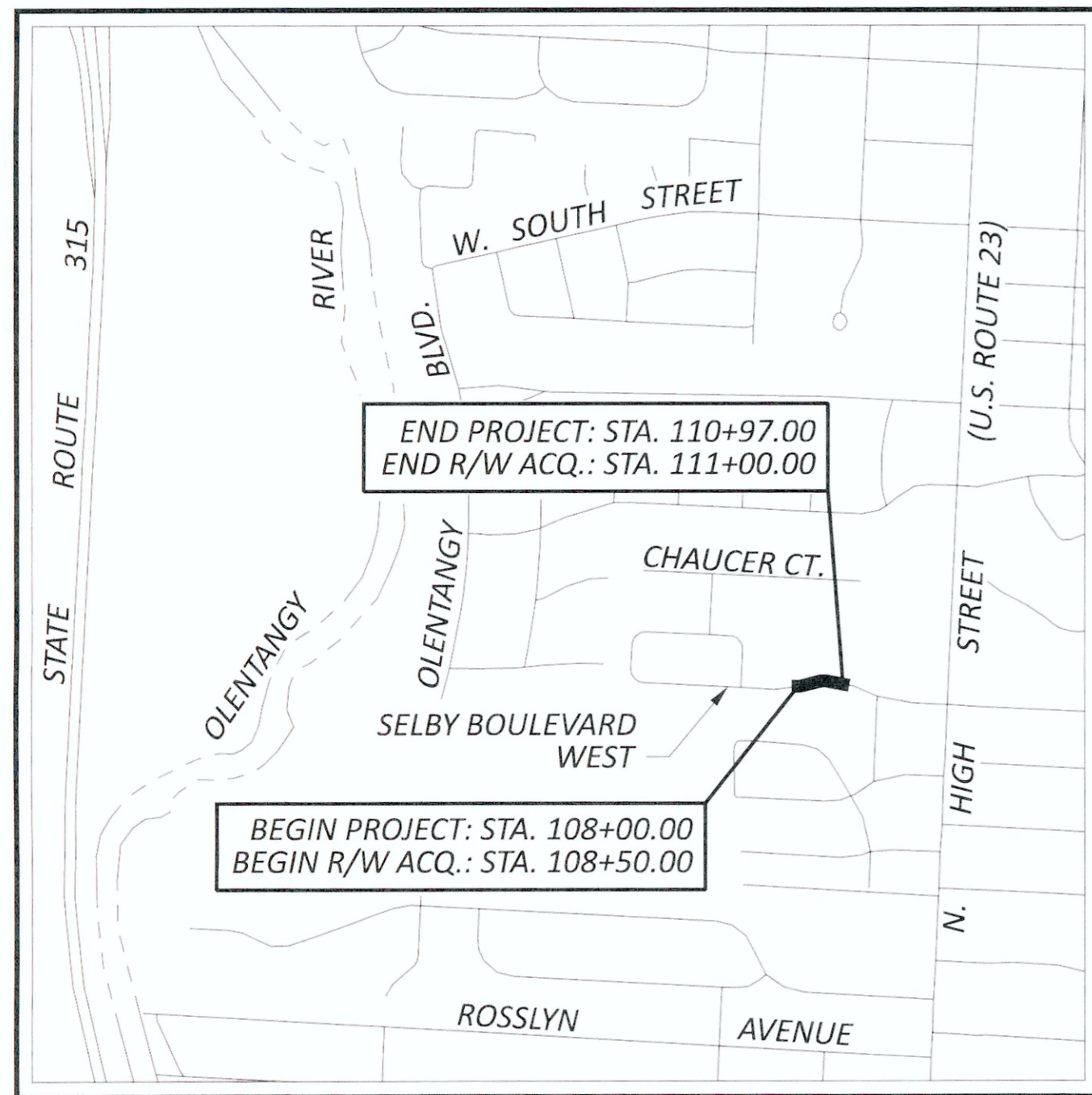
ALL REINFORCING STEEL SHALL BE EPOXY COATED, GRADE 60

THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. "R" INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

LEGEND:

* = REINFORCING BAR UTILIZES A THREADED INSERT / MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE TOP OF PRECAST CULVERT OR FACE OF BASE SLAB. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF THREADED INSERT/MECHANICAL CONNECTOR FURNISHED. COORDINATION WITH THE CULVERT SUPPLIER AND/OR ANY END PREPARATION TO ACCOMMODATE THE PROPOSED REINFORCING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.

SFN	2561101
DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	CHECKER
JTW	VEH
REVIEWER	JCS 08/22/23
PROJECT ID	116037
SUBSET	TOTAL
9	9
SHEET	TOTAL
P.32	38



LOCATION MAP

LATITUDE: 40°04'40"N LONGITUDE: 83°01'15"W



RIGHT OF WAY LEGEND SHEET

FRA - SELBY BLVD WEST BRIDGE

STATE OF OHIO, COUNTY OF FRANKLIN,
CITY OF WORTHINGTON,
LOT 24, QUARTER TOWNSHIP 3, TOWNSHIP 2, RANGE 18
UNITED STATES MILITARY LANDS

UTILITIES:

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERICAN ELECTRIC POWER
PAUL PAXTON, ENGINEERING LIASON COORDINATOR
777 HOPEWELL DR, HEATH, OH 43056
OFFICE: 740-348-5322
AEP SOLUTION CENTER: 800-277-2177
ALSO COPY:
AEP TELECOM
UNA BLANUSA
ohfiberrelocate@aep.com

BREEZELINE - COLUMBUS
3675 CORPORATE DR, COLUMBUS, OH 43231
ADD BOTH:
DL_CMHFR@ATLANTICBB.com
jborreson@breezeline.com

COLUMBIA GAS OF OHIO - COLUMBUS
ROB CALDWELL, LEADER FIELD ENGINEERING
3550 JOHNNY APPLESEED CT, COLUMBUS, OH 43231
OFFICE: 614-818-2104
CELL: 614-370-1906
CUSTOMER SERVICE: 1-800-344-4077
DAMAGER PREVENTION: 1-866-632-6243
columbiagas_columbuseng@nisource.com
ALSO COPY: rcaldwell@nisource.com

MCI
757 COMMERCE CT, LEWIS CENTER, OH 43035
CELL: 614-593-6685 (MAURICE JONES)
CELL: 614-816-0361 (BOB DILLOW)
vz.net.columbus@verizon.com
brian.ansel@verizon.com
ALSO COPY:
terry.shumate@verizonwireless.com
john.cornell@verizonwireless.com
michael.hennon@verizonwireless.com
michael.bondy@verizonwireless.com
sven.christianson@verizonwireless.com

AT&T - OHIO
DONALD G. MARSHALL JR., MANAGER OSP PLANNING
111 N 4TH ST, COLUMBUS, OH 43215
CELL: 614-216-2396
AT&T REPAIR SERVICES: 888-611-4466
DAMAGE PREVENTION: 937-296-3929
G01553@att.com

COLUMBUS DIVISION OF WATER
910 DUBLIN RD, COLUMBUS, OH 43215
OFFICE: 614-645-7788

PROJECT DESCRIPTION

EXISTING TWIN 12' x 8' CULVERTS REPLACED WITH A PRECAST 26' x 7' CONCRETE THREE-SIDED FLAT-TOP STRUCTURE.

FEDERAL PROJECT NUMBER

E220083

PROJECT CONTROL

STATE PLANE GRID: OHIO SOUTH
PROJECT ADJUSTMENT FACTOR: 1.0000241577

TYPES OF TITLE LEGEND:

WD = WARRANTY DEED FEE SIMPLE
T = TEMPORARY EASEMENT

INDEX OF SHEETS:

LEGEND SHEET	1
RIGHT-OF-WAY PLAN SHEET	2

CHARTER COMM
3760 INTERCHANGE RD, COLUMBUS, OH 43204
DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM

WORTHINGTON - CITY OF (SEWER)
6550 N HIGH ST, WORTHINGTON, OH 43085

WORTHINGTON - CITY OF (TRAFFIC)
380 HIGHLAND AVE, WORTHINGTON, OH 43085

WORTHINGTON - CITY OF (WATER)
380 HIGHLAND AVE, WORTHINGTON, OH 43085

FIRM NAME : AMERICAN STRUCTUREPOINT, INC.

R/W DESIGNER: JONATHAN B. YOUMANS / MICHAEL W. MAYES

R/W REVIEWER: BRIAN P. BINGHAM / MICHAEL J. WARD

FIELD REVIEWER: ALAN WESTCOTT

PRELIMINARY FIELD REVIEW DATE: 01/17/2023

OWNERSHIP UPDATED BY: MICHAEL W. MAYES

DATE COMPLETED: 10/26/2023

FIELD REVIEWER: ALAN WESTCOTT

FINAL FIELD REVIEW DATE: 04/17/2023

FINAL R/W PLAN DATE: 10/26/2023

UNDERGROUND UTILITIES

**Contact Two Working Days
Before You Dig**



OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

NOTES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

CONVENTIONAL SYMBOLS

Center Line	Tree Line (Ex)
General Ease. (Ex)	Gas Line (Ex)
Right of Way (Ex)	Overhead Telecom Line (Ex)
Right of Way (Pr)	Overhead Cable Line (Ex)
Sewer Ease. (Ex)	Overhead Electric Line (Ex)
Temporary Right of Way (Pr)	Water Line (Ex)
Construction Limits	Water Line (Pr)
Curb (Ex)	Property Line Symbol
Curb (Pr)	Dead Man
Ditch / Creek (Ex)	Fire Hydrant (Pr)
Fence Line (Ex)	High Water Mark
Edge of Pavement (Pr)	Power Pole (Ex)
Edge of Shoulder (Ex)	Power & Light Pole (Ex)
Sidewalk (Ex)	Power & Telephone Pole (Ex)
Sidewalk (Pr)	Water Valve (Ex)
	Water Valve (Pr)



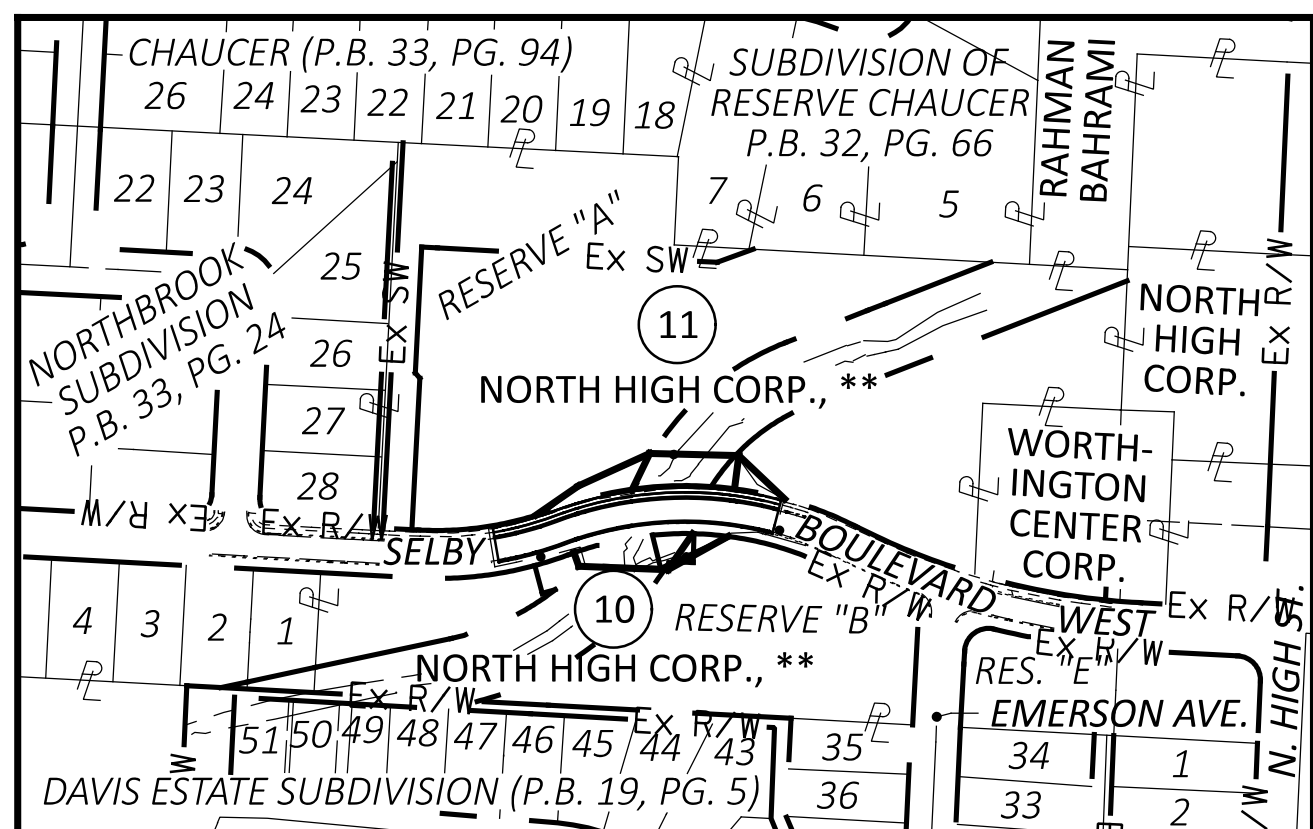
I, Michael J. Ward, P.S. have conducted a survey of the existing conditions for the City of Worthington in October, 2022. The results of that survey are contained herein. See the Survey Parameters note affixed to these plans for the horizontal and vertical survey parameters used for this project. As a part of this project, I have reestablished the locations of the existing boundary lines, the existing center line of Right of Way and the existing Right of Way limits as necessary for the property takes contained herein. As a part of this project I have established the proposed boundary lines, calculated the Gross Take, present road occupied (PRO), Net Take and Net Residue herein. As a part of this work, right of way monuments will be set at the locations shown herein per the Memorandum of Understanding between the Board of Registration for Engineers and Surveyors and the Ohio Department of Transportation dated 9-22-2010. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted. The words "I and my" as used herein are to mean that either myself or someone working under my direct supervision.

Michael J. Ward, Professional Land Surveyor No. 8808,

Date: 10/26/23

SURVEYORS SEAL

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	JBY/MMW
REVIEWER	MJW
PROJECT ID	116037
SUBSET	TOTAL
1	2
SHEET	TOTAL
P.33	38



PROPERTY MAP
(SCALE: 1" = 200')

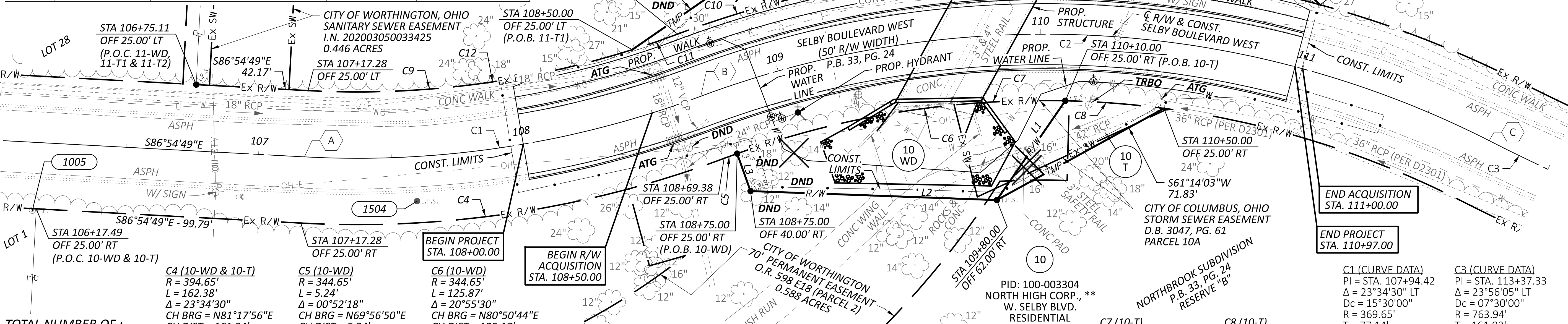
BASIS FOR BEARINGS:

ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY. BEARINGS DESCRIBED HEREON ARE BASED ON THE BEARING OF SOUTH 86 DEGREES 54 MINUTES 49 SECONDS EAST FOR THE CENTERLINE OF RIGHT-OF-WAY FOR SELBY BOULEVARD WEST BETWEEN NORTHBROOK DRIVE WEST AND NORTHBROOK DRIVE EAST, AS MEASURED FROM GRID NORTH, REFERENCED TO THE OHIO STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) AND THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), AS ESTABLISHED UTILIZING A GPS SURVEY AND A NGS OPUS SOLUTION.

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE FOLLOWING: NORTHBROOK SUBDIVISION PLAT (P.B. 33, PG. 24)

POINT #	NORTHING	EASTING	STATION (CL R/W SELBY)	OFFSET	DESCRIPTION
1005	757088.930	1822310.935	106+16.05	25.64' RT	3/4" IRON PIPE FOUND (S69°12'26"W - 1.58' FROM NW PROPERTY)
1504	757092.401	1822455.822	107+58.74	16.80' RT	5/8" IRON PIN SET W/ "ASI CONTROL POINT" CAP

PARCEL	GROSS TAKE AREA (ACRES)	EASEMENT AREA (ACRES)	DUAL USAGE AREA (ACRES)	OUTSIDE DUAL USAGE AREA (ACRES)
10-WD	0.073	0.588 (PERMANENT)	0.072	0.001
		0.035 (c) (STORM SEWER)	0.020	0.053
		0.026 (c) (PERMANENT & STORM)	0.020	0.053
10-T	0.017	0.588 (PERMANENT)	0.007	0.010
		0.035 (c) (STORM SEWER)	0.014	0.003
		0.026 (c) (PERMANENT & STORM)	0.006	0.011
11-WD	0.076	0.775 (PERMANENT)	0.063	0.013



TOTAL NUMBER OF:
 1 OWNERSHIP 0 TOTAL TAKES
 5 PARCELS 0 OWNERSHIPS W/ STRUCTURES INVOLVED

SUMMARY OF ADDITIONAL RIGHT-OF-WAY REQUIRED

PARCEL NO.	PROPERTY OWNER	OWNER'S RECORD	AUDITOR'S PARCEL NO.	AUDITOR'S RECORD AREA (AC.)	TOTAL P.R.O. (AC.)	GROSS TAKE (AC.)	P.R.O. IN TAKE (AC.)	NET TAKE (AC.)	STRUCTURE	NET RESIDUE (AC.)		REMARKS
										LEFT	RIGHT	
1-9	NOT USED											
10-WD	NORTH HIGH CORP., **	D.B. 2143, PG. 370	100-003304	2.193	0.000	0.073	0.000	0.073	---	2.120	+1 TREES	
10-T			100-003304	2.193	0.000	0.017	0.000	0.017	---		+2 TREES; TO PERFORM GRADING	
11-WD	NORTH HIGH CORP., **	D.B. 2143, PG. 370	100-003303	4.936	0.000	0.076	0.000	0.076	---	4.860	+5 TREES	
11-T1			100-003303	4.936	0.000	0.042	0.000	0.042	---		+3 TREES; TO PERFORM GRADING	
11-T2			100-003303	4.936	0.000	0.021	0.000	0.021	---		NO REMOVAL ITEMS; TO PERFORM GRADING	

** A CORPORATION DULY INCORPORATED UNDER THE LAWS OF THE STATE OF OHIO

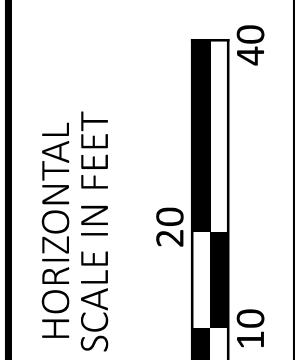
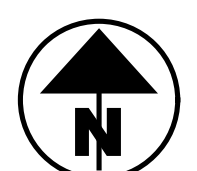
GRANTEE:
 ALL RIGHT OF WAY ACQUIRED IN THE NAME OF CITY OF WORTHINGTON, OHIO

NET TAKE = GROSS TAKE - PRO IN TAKE
 NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE
 NOTE: ALL TEMPORARY PARCELS TO BE OF 6 MONTH DURATION.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.

NOTE: POWER POLES LABELED AS "TRBO" ARE TO BE REMOVED BY AMERICAN ELECTRIC POWER.

STATE OF OHIO, COUNTY OF FRANKLIN, CITY OF WORTHINGTON
 LOT 24, QUARTER TOWNSHIP 3, TOWNSHIP 2, RANGE 18
 UNITED STATES MILITARY LANDS



ROCK CHANNEL PROTECTION

MONUMENT LEGEND

- I.P.S. 5/8"x30" REBAR SET WITH A CAP INSCRIBED "ASI FIRM 1648"
- ⊙ P.F. IRON PIPE FOUND

- C9 (11-T1)**
R = 344.65'
L = 123.74'
Δ = 20°34'18"
CH BRG = N82°48'02"E
CH DIST = 123.08'
- C10 (11-T1)**
R = 394.65'
L = 86.08'
Δ = 12°29'48"
CH BRG = S75°45'35"W
CH DIST = 85.91'
- C11 (11-T1)**
R = 344.65'
L = 18.07'
Δ = 03°00'12"
CH BRG = S71°00'47"W
CH DIST = 18.06'
- C12 (11-WD & 11-T2)**
R = 344.65'
L = 141.81'
Δ = 23°34'30"
CH BRG = N81°17'56"E
CH DIST = 140.81'
- C13 (11-WD)**
R = 394.65'
L = 86.08'
Δ = 12°29'48"
CH BRG = N75°45'35"E
CH DIST = 85.91'
- C14 (11-WD)**
R = 394.65'
L = 106.76'
Δ = 15°30'00"
CH BRG = S89°45'29"W
CH DIST = 106.44'
- C15 (11-T2)**
R = 394.65'
L = 192.84'
Δ = 27°59'48"
CH BRG = N83°30'35"E
CH DIST = 190.93'
- C16 (11-T2)**
R = 394.65'
L = 53.38'
Δ = 07°45'00"
CH BRG = N78°37'01"W
CH DIST = 53.34'

- L4 (11-WD & 11-T1):** N26°03'58"E - 41.49'
- L5 (11-WD):** S88°41'31"E - 92.80'
- L6 (11-WD & 11-T2):** S07°30'29"W - 35.00'

RIGHT-OF-WAY PLAN SHEET
 SELBY BOULEVARD WEST STA. 106+00.00 TO STA. 112+00.00

DESIGN AGENCY	STRUCTUREPOINT
DESIGNER	JBY/MWM
REVIEWER	MJW 10/26/23
PROJECT ID	116037
SUBSET	TOTAL
2	2
SHEET	TOTAL
P.34	38

REV. BY	DATE	DESCRIPTION
FIELD REVIEW BY:	A. WESTCOTT	DATE: 04/17/2023
OWNERSHIP VERIFIED BY:	M.W. MAYES	DATE: 10/26/2023
DATE COMPLETED: 10/26/2023		

- C1 (CURVE DATA)**
PI = STA. 107+94.42
Δ = 23°34'30" LT
Dc = 15°30'00"
R = 369.65'
T = 77.14'
L = 152.10'
E = 7.96'
- C2 (CURVE DATA)**
PI = STA. 110+31.78
Δ = 47°26'05" RT
Dc = 15°30'00"
R = 369.65'
T = 162.40'
L = 306.03'
E = 34.10'
- C3 (CURVE DATA)**
PI = STA. 113+37.33
Δ = 23°56'05" LT
Dc = 07°30'00"
R = 763.94'
T = 161.93'
L = 319.13'
E = 16.97'
- C7 (10-T)**
R = 344.65'
L = 131.11'
Δ = 21°47'48"
CH BRG = N80°24'35"E
CH DIST = 130.32'
- C8 (10-T)**
R = 344.65'
L = 37.30'
Δ = 06°12'00"
CH BRG = S85°35'31"E
CH DIST = 37.28'
- L1 (10-WD & 10-T):** S34°34'39"W - 45.46'
- L2 (10-WD):** N87°54'24"W - 92.80'
- L3 (10-WD):** N19°37'01"W - 15.00'

PROJECT DESCRIPTION

THE FRA-W. SELBY ROAD PROJECT IS LOCATED AT THE BRIDGE CARRYING W. SELBY BLVD OVER RUSH RUN ABOUT 650 FT WEST OF NORTH HIGH ST. IN THE CITY OF WORTHINGTON, OHIO. THE PROJECT CONSISTS OF THE REPLACEMENT OF THE EXISTING CULVERT CARRYING W. SELBY BLVD. OVER RUSH RUN.

HISTORIC RECORDS

A HISTORIC RECORD SEARCH WAS PERFORMED THROUGH ODOT TIMS; HOWEVER, NO RELEVANT REPORT/PLANS WERE AVAILABLE FOR REVIEW WITHIN THE PROJECT LIMITS. THEREFORE, HISTORIC BORINGS ARE NOT REFERENCED.

GEOLOGY

THE PROJECT SITE IS LOCATED WITHIN THE COLUMBUS LOWLAND TILL PLAINS, A SUBDIVISION OF THE SOUTHERN OHIO LOAMY TILL PLAIN. THE GEOLOGY WITHIN THIS REGION IS DESCRIBED AS WISCONSINAN-AGE TILL THAT IS HIGH LIME IN THE WEST TO MEDIUM-LIME IN THE EAST. THE GEOLOGY IS ALSO DESCRIBED AS CONTAINING EXTENSIVE OUTWASH IN SCIOTO VALLEY OVERLYING DEEP DEVONIAN- TO MISSISSIPPIAN-AGE CARBONATE ROCKS, SHALES, AND SILTSTONES.

RECONNAISSANCE

FIELD RECONNAISSANCE WAS CONDUCTED ON DECEMBER 15, 2022. THE LAND USE OF MOST OF THE PROJECT AREA CONSISTS OF WOODLAND AND RESIDENTIAL PROPERTIES. THE EXISTING CULVERT CARRYING W SELBY BLVD. OVER RUSH RUN IS A TWIN CONCRETE BOX CULVERT WHICH CARRIES ONE LANE OF TRAFFIC IN EACH DIRECTION ON AN EARTHEN EMBANKMENT ABOVE THE CULVERT WITH AN ASPHALT PAVEMENT ROADWAY. THE EXISTING EMBANKMENT SLOPES APPEARED TO BE IN GOOD CONDITION WITH FEW SIGNS OF INSTABILITY. THE EXISTING EMBANKMENTS SLOPES APPEARED TO BE AT GRADES RANGING 2 HORIZONTAL AND 1 VERTICAL (2H:1V) TO 1.5H:1V. THE EXISTING EMBANKMENTS WERE POORLY PROTECTED WITH ROCKS. OVERALL, THE CULVERT APPEARED TO BE IN POOR CONDITION WITH STRUCTURAL WEAR OBSERVED ON THE UNDERSIDE OF THE BOX CULVERT, INLET/OUTLET OF THE CULVERT AND WINGWALLS. MAJOR SPALLING, CRACKING, AND DISINTEGRATION OF CONCRETE LEADING TO EXPOSED REBAR WAS OBSERVED AT BOTH THE INLET AND OUTLET OF THE CULVERT. OVERALL, THE PAVEMENT AT THE SITE WAS OBSERVED TO BE IN GOOD CONDITION WITH ALMOST NO SIGNS OF WEAR.

SUBSURFACE EXPLORATION

SUBSURFACE EXPLORATION WAS CONDUCTED BETWEEN DECEMBER 1, 2022, AND DECEMBER 5, 2022 AND INCLUDED 2 BORINGS DRILLED TO DEPTHS BETWEEN 26.5 FT AND 28 FT BGS. BORINGS WERE DRILLED USING A CME 55T TRUCK-MOUNTED DRILLING RIG UTILIZING 3.25-INCH (INNER DIAMETER) HOLLOW STEM AUGERS. SOIL SAMPLES FOR ROADWAY BORINGS WERE RECOVERED AT 2.5 FT INTERVALS TO 13.5 FT BGS, THEN CONTINUOUSLY DRILLED TO BETWEEN 20 AND 22.5 FT, THEN AT 5.0- FT INTERVALS DRILLED TO END OF BORING (EOB) USING AN 18-INCH SPLIT SPOON SAMPLER (AASHTO T-206). THE SOIL SAMPLES OBTAINED FROM THE EXPLORATION PROGRAM WERE VISUALLY OBSERVED IN THE FIELD BY THE NEAS FIELD REPRESENTATIVE AND PRESERVED FOR REVIEW BY A GEOLOGIST AND POSSIBLE LABORATORY TESTING. STANDARD PENETRATION TESTS (SPT) WERE CONDUCTED USING A CME AUTO HAMMER THAT HAS BEEN CALIBRATED TO BE 63.4% EFFICIENT (INDICATED ON THE BORING LOGS) ON JANUARY 24, 2022.

EXPLORATION FINDINGS

AT THE PROJECT SITE, THE NATURAL OVERBURDEN SOILS CONSIST OF PRIMARILY COHESIVE MATERIALS TO THE ELEVATIONS BETWEEN 765.1 AND 766.6 FT AMSL AND INCLUDED SANDY SILT (A-4a) AND SILT AND CLAY (A-6a). THE SOILS OF THIS STRATUM CAN BE DESCRIBED AS HAVING A VERY STIFF TO HARD CONSISTENCY BASED ON UNCONFINED COMPRESSIVE STRENGTHS (ESTIMATED BY MEANS OF HAND PENETROMETER) BETWEEN APPROXIMATELY 2.25 AND 4.50 TON PER SQUARE FOOT (TSF) AND N60 VALUES BETWEEN 4 AND 17 BLOWS PER FOOT (BPF). NATURAL MOISTURE CONTENTS OF THE FINE-GRAINED TILL SOILS RANGED FROM 11 TO 18 PERCENT IN MOISTURE. BASED ON ATTERBERG LIMITS TEST PERFORMED ON REPRESENTATIVE SAMPLES OF THE NATURAL TILL SOILS, THE LIQUID AND PLASTIC LIMITS RANGED FROM 27 TO 32 PERCENT AND 16 TO 19 PERCENT, RESPECTIVELY. GRANULAR SOILS WERE ENCOUNTERED AT THE PROJECT SITE PRIMARILY BELOW THE COHESIVE SOIL LAYER INCLUDES GRAVEL AND/OR STONE FRAGMENTS (A-1-a), STONE FRAGMENTS WITH SAND (A-1-B), GRAVEL AND/OR STONE FRAGMENTS WITH SAND, SILT, AND CLAY (A-2-6), AND COARSE AND FINE SAND (A-3a). THE NON-COHESIVE SOILS ARE DESCRIBED AS LOOSE TO VERY DENSE IN COMPACTNESS CORRELATING TO N60 VALUES BETWEEN 7 AND MORE THAN 50 BPF. NATURAL MOISTURE CONTENTS OF THE NON-COHESIVE TILL SOILS RANGED FROM 8 TO 26 PERCENT IN MOISTURE. BEDROCK WAS NOT ENCOUNTERED IN EITHER OF THE STRUCTURE BORINGS PERFORMED. GROUNDWATER WAS ENCOUNTERED DURING DRILLING IN BOTH STRUCTURE BORINGS (B-001 AND B-002) PERFORMED AT 18 FT AND 18.5 FT BGS (ELEVATION 763.8 FT AND 766.2 FT AMSL), RESPECTIVELY. AN ARTESIAN AQUIFER WITH A FLOW RATE THAT INCREASED AS DRILLING CONTINUED WAS ENCOUNTERED IN BOTH BORINGS STARTING AT THE FIRST ENCOUNTER OF GROUNDWATER (ELEVATION 763.8 FT AND 766.2 FT AMSL). THE BOTTOM OF THE AQUIFER COULD NOT BE ASCERTAINED AS IT WAS BELOW THE TERMINATED DEPTHS OF BOTH BORINGS.

SPECIFICATIONS

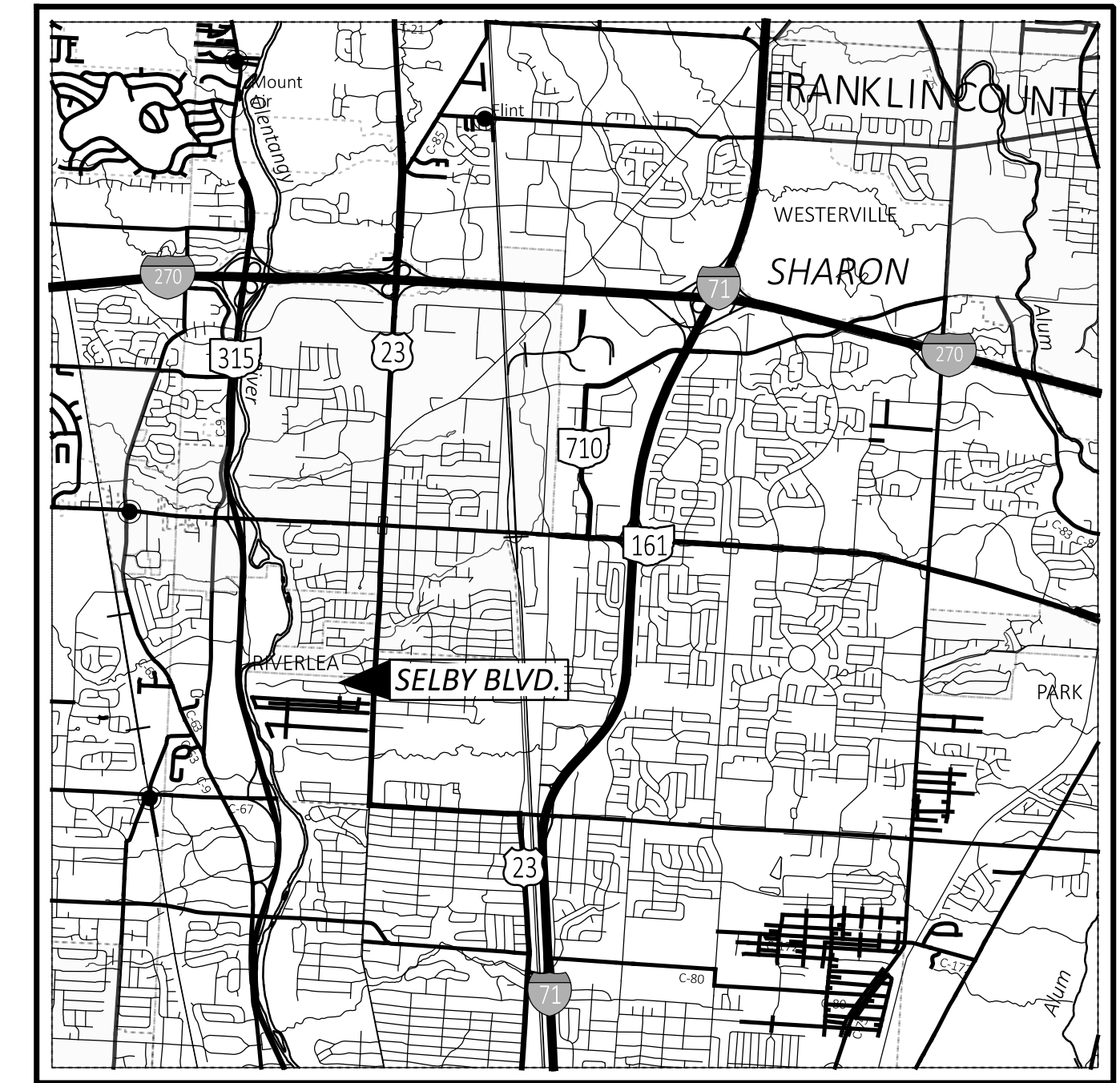
THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JANUARY 2007.

AVAILABLE INFORMATION

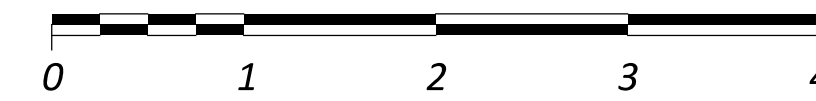
THE GEOTECHNICAL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE SOIL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

LEGEND

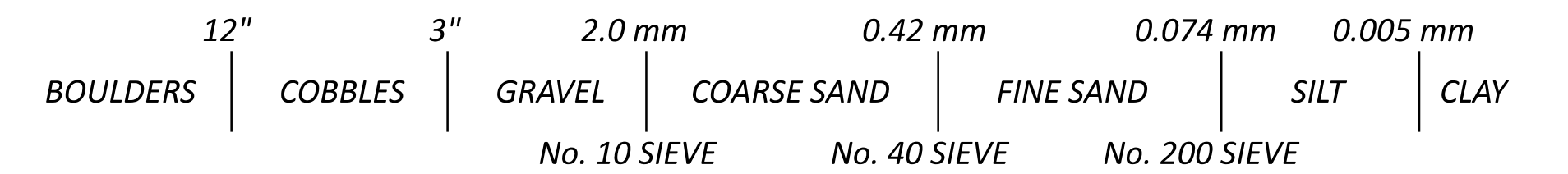
DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
GRAVEL AND/OR STONE FRAGMENTS	A-1-a	1	5
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	0	1
GRAVEL AND/OR STONE FRAGMENTS WITH SAND, SILT & CLAY	A-2-6	1	0
COARSE AND FINE SAND	A-3a	0	2
SILT AND CLAY	A-6a	11	3
	TOTAL	13	11
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
BORING LOCATION - PLAN VIEW.			
DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
WC	INDICATES WATER CONTENT IN PERCENT.		
N ₆₀	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.		
X/Y/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y/D"= NUMBER OF BLOWS (UNCORRECTED) FOR D INCHES OF PENETRATION AT REFUSAL.		
W	INDICATES FREE WATER ELEVATION.		
SS	INDICATES A SPLIT SPOON SAMPLE.		
NP	INDICATES A NON-PLASTIC SAMPLE.		



LOCATION MAP
SCALE IN MILES



PARTICLE SIZE DEFINITIONS



INDEX OF SHEETS

LOCATION FROM STA. TO STA.	PLAN VIEW SHEET	PROFILE SHEET	CROSS SECTION	STRUCTURE INCLUDED	
				BRIDGE NO.	SFN
SELBY BLVD.	2	2	-	-	-
BORING LOGS, SHEET 3 AND SHEET 4					

FRA-SELBY-00.198

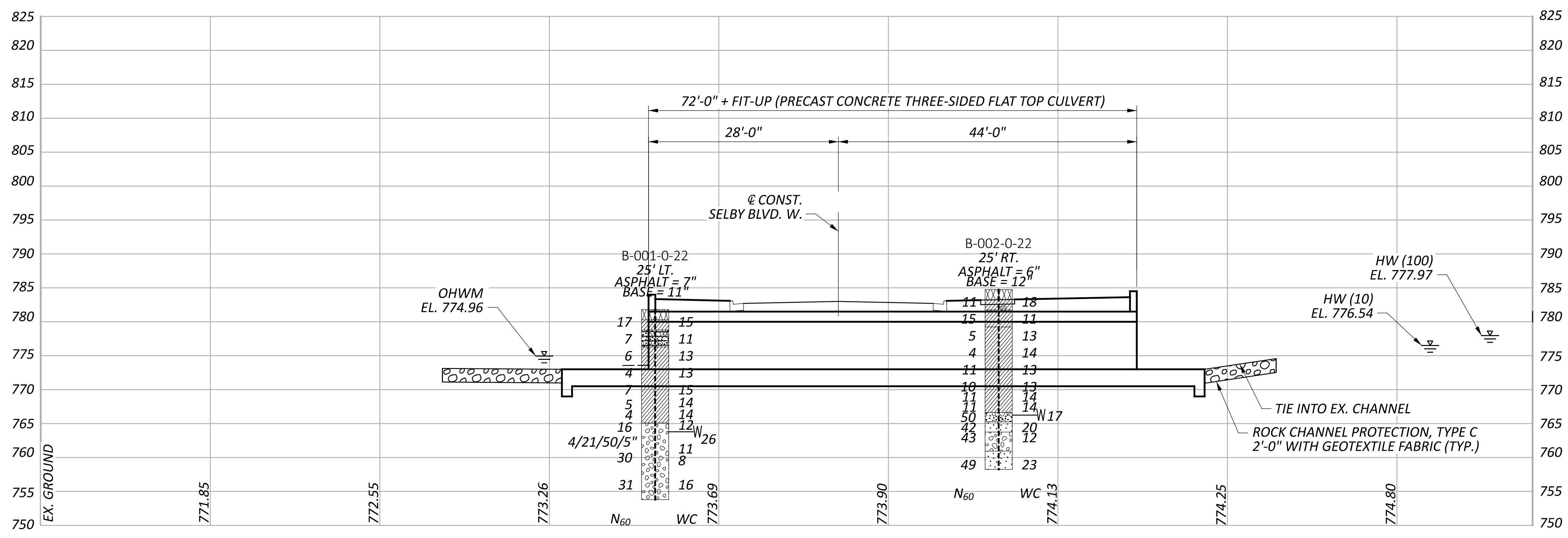
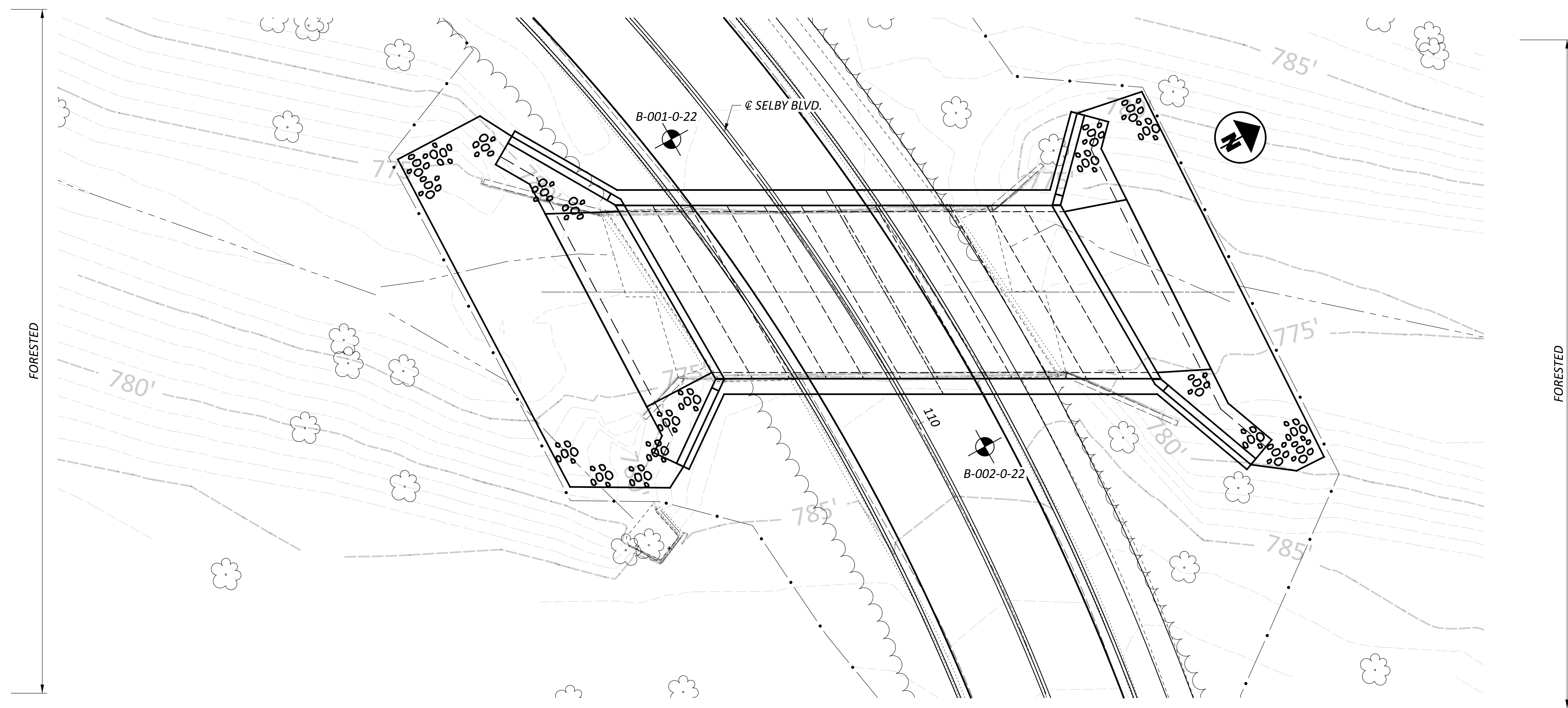
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GEOTECHNICAL PROFILE - CULVERT
FRA-SELBY-00.198 CARRYING WEST SELBY BLVD. OVER RUSH RUN



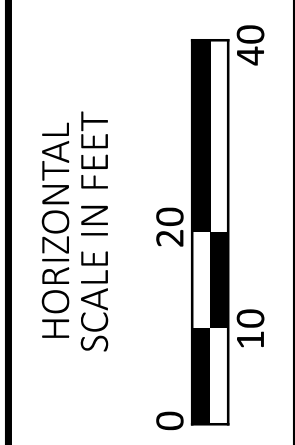
DESIGNER	DT
REVIEWER	MH 05-25-23
PROJECT ID	116037
SUBSET	TOTAL 1 4
SHEET	TOTAL P.35 38

RECON. - 12/15/2022, EB
DRILLING - 12/1/22 - 12/5/22, JL
DRAWN - 05/2/22, DT
REVIEWED - MH, 05-18-23



FORESTED

FORESTED



GEOTECHNICAL PROFILE - CULVERT
 FRA-SELBY-00.198 CARRYING WEST SELBY BLVD. OVER RUSH RUN

DESIGN AGENCY	
FEAS <small>Feasibility Engineering & Assessment Services Inc.</small>	
DESIGNER	DT
REVIEWER	MH 05-25-23
PROJECT ID	116037
SUBSET	TOTAL
2	4
SHEET	TOTAL
P.36	38

FRA-SELBY-00.198

MODEL: Sheet_SurvFt_PAPER SIZE: 34x22 (in.) DATE: 10/20/2023 TIME: 8:19:17 AM USER: dtarawneh
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STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 8/23 11:52 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\FRA-SELBY RD BRIDGE\GINT FILES\FRA-SELBY RD BRIDGE.GPJ

PROJECT: FRA-SELBY RD BRIDGE TYPE: BRIDGE	DRILLING FIRM / OPERATOR: NEAS / J/L SAMPLING FIRM / LOGGER: NEAS / J/L	DRILL RIG: CME 55T HAMMER: CME AUTOMATIC	STATION / OFFSET: 109+39.7 RT. ALIGNMENT: CLP SELBY ROAD			EXPLORATION ID B-001-0-22								
			ELEVATION: 781.8 (MSL) EOB: 28.0 ft. LAT / LONG: 40.077600, -83.021250											
PID: 116037 SFN: 12/1/22	DRILLING METHOD: 3.25" HSA	REC SAMPLE ID	REC (%)	SPT/ RQD	N ₆₀	HP (tsf)	GR	GRADATION (%)			ATTERBERG	ODOT CLASS (g)	HOLE SEALED	
START: 12/1/22	END: 12/2/22	DEPTH	ELEV.	MATERIAL DESCRIPTION AND NOTES										
7.0" ASPHALT AND 11.0" BASE (DRILLERS DESCRIPTION)														
HARD, BROWN, SILT AND CLAY, SOME SAND, LITTLE GRAVEL, DAMP														
LOOSE BROWN AND GRAY, GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY, DAMP														
VERY STIFF, GRAY, SILT AND CLAY, SOME SAND, TRACE TO LITTLE GRAVEL AND STONE FRAGMENTS, DAMP														
MEDIUM DENSE TO VERY DENSE, GRAY, GRAVEL AND STONE FRAGMENTS, SOME SAND, TRACE SILT, TRACE CLAY, MOIST TO WET														
@18.0': ENCOUNTERED ARTESIAN AQUIFER. ARTESIAN FLOW RATE INCREASED WITH DEPTH.														
CONTINUED DRILLING TO 28.0' AS AN ATTEMPT TO GET BELOW THE CONFINED AQUIFER BUT WAS UNSUCCESSFUL.														
AUGERED THROUGH EXISTING BOREHOLE TO 25.0' ON 12/2/22 AND ENCOUNTERED A NOTABLY HIGHER ARTESIAN FLOW RATE THAN ON 12/1/22.														
NOTES: ARTESIAN GROUNDWATER ENCOUNTERED AT 18.0'. ABANDONMENT METHODS: MATERIALS: QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS BENTONITE POWDER; POURED 6 BAGS HOLE PLUG														



DESIGNER	DT
REVIEWER	MH
PROJECT ID	116037
SUBSET	TOTAL
3	4
SHEET	TOTAL
P.37	38

GEOTECHNICAL PROFILE - CULVERT
FRA-SELBY-00.198 CARRYING WEST SELBY BLVD. OVER RUSH RUN
BORING LOG B-001-0-22

