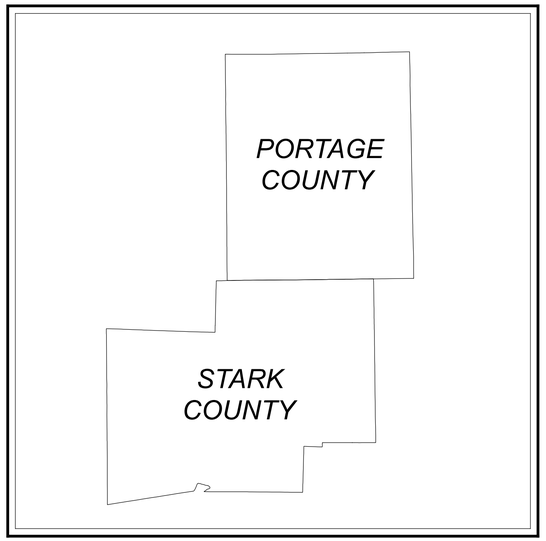
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

POR/STA-CULVERTS-FY2023

DEERFIELD, HIRAM, MANTUA,
AND RAVENNA TOWNSHIPS
PORTAGE COUNTY

JACKSON AND TUSCARAWAS TOWNSHIPS
STARK COUNTY



LOCATION MAP

LATITUDE: 41°59'21" N LONGITUDE: 81°15'53" W

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

DESIGN DESIGNATION

SEE SHEETS P.2 - P.3

INDEX OF SHEETS:

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

CULVERT REPAIR IN PORTAGE AND STARK COUNTIES AT 6 LOCATIONS.

EARTH DISTURBED AREAS

SEE SHEETS P.2-P.3

2019 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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS P.8 - P.14.

DISTRICT DEPUTY DIRECTOR

GERY NOIROT, P.E.

DIRECTOR, DEPARTMENT OF TRANSPORTATION

JACK MARCHBANKS, PH.D.

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 4 - PLANNING AND ENGINEERING
2088 S. ARLINGTON RD.
AKRON, OH 44306

STANDARD CONSTRUCTION DRAWINGS

BP-2.2	*1/15/21*	*MGS-4.2*	*7/19/13*	*TC-41.20*	*10/18/13*		
BP-3.1	*1/21/22*	*MGS-5.2*	*7/15/16*	*TC-42.20*	*10/18/13*		
BP-5.1	*7/15/22*	*MGS-5.3*	*7/15/16*	*TC-52.10*	*10/18/13*		
				TC-52.20	*1/15/21*		
CB-2-2A, 2B, 2C	*1/20/23*	*MH-3*	*7/16/21*	*TC-61.30*	*7/19/19*		
CB-2-3, 2-4	*1/20/23*			*TC-65.10*	*1/17/14*		
CB-3A	*7/16/21*	*HW-2.1*	*7/20/18*	*TC-65.11*	*7/15/22*		
		HW-2.2	*7/20/18*				
DM-1.1	*7/17/20*						
DM-3.1	*1/18/13*	*MT-95.31*	*7/19/19*				
DM-4.3	*1/15/16*	*MT-95.32*	*4/19/19*				
DM-4.4	*1/15/16*	*MT-95.50*	*7/21/17*				
		MT-97.10	*4/19/19*				
MGS-1.1	*7/16/21*	*MT-99.20*	*4/19/19*				
MGS-2.1	*1/19/18*	*MT-101.60*	*1/17/20*				
MGS-2.3	*1/20/23*	*MT-105.10*	*1/17/20*				

SUPPLEMENTAL SPECIFICATIONS		***SPECIAL PROVISIONS***
800-2019	*SEE PROPOSAL*	*WPC 3/13/2023*
821	*4/20/12*	
832	*7/15/22*	
874	*4/17/20*	
921	*4/20/12*	

ENGINEER'S SEAL

STATE OF OHIO
ELIZABETH M. STOBER
62380
REGISTERED
PROFESSIONAL ENGINEER
2023.04.18 13:46:14-04'00'

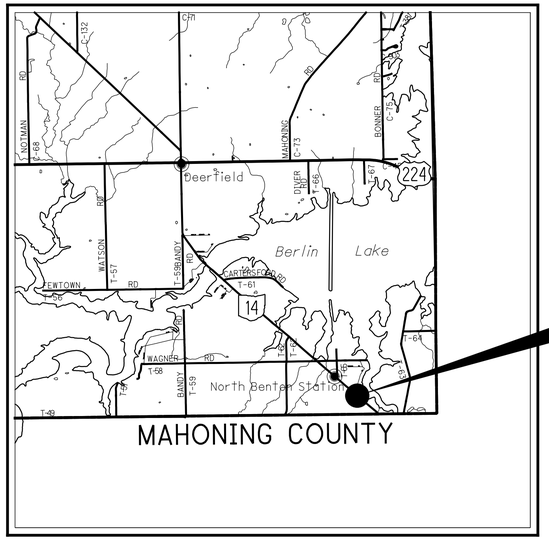
TITLE SHEET

DESIGN AGENCY

DESIGNER CMW
REVIEWER MJP 01-20-23
PROJECT ID 106200
SHEET P.1 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:38:31 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GT001.dgn



POR-14-2848

LATITUDE: 40°59'26" N LONGITUDE: 81°01'03" W

DESIGN DESIGNATION

CURRENT ADT (2021)	3,769
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	8%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH "APPROVED 8/21/22"

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.06 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)

POR-44-1533

LATITUDE: 41°11'09" N LONGITUDE: 81°14'47" W

DESIGN DESIGNATION

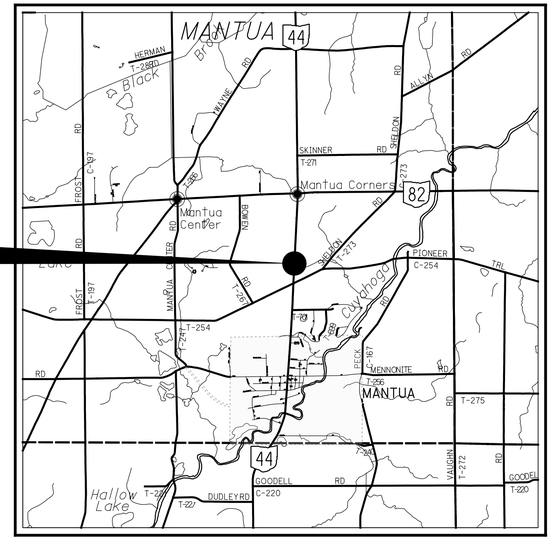
CURRENT ADT (2021)	8,013
DIRECTIONAL DISTRIBUTION	63%
TRUCKS (24 HOUR B&C)	8%
DESIGN SPEED	50 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH "APPROVED 9/1/22"

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.07 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)



POR-44-2349

LATITUDE: 41°18'01" N LONGITUDE: 81°13'21" W

DESIGN DESIGNATION

CURRENT ADT (2021)	6,486
DESIGN ADT (2043)	7,200
DIRECTIONAL DISTRIBUTION	63%
TRUCKS (24 HOUR B&C)	8%
DESIGN SPEED	50 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH, SHOULDER WIDTH "APPROVED 9/1/22"

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.14 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)

LOCATION MAP

DESIGN AGENCY

DESIGNER
CMW

REVIEWER
MJP 01-20-23

PROJECT ID
106200

SHEET P.2 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet1 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:38:51 AM USER: mpalagan
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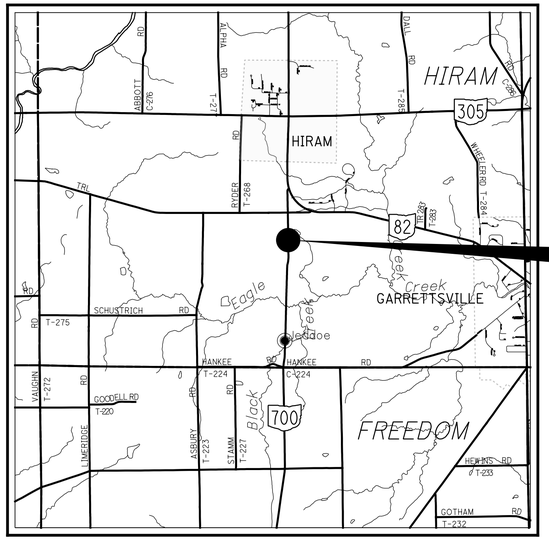
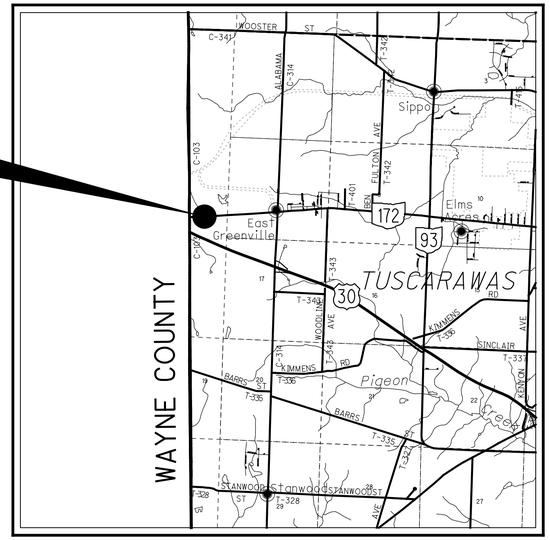


POR-700-0401

LATITUDE: 41°17'30" N LONGITUDE: 81°08'39" W

PROJECT LOCATION
STA-172-0025

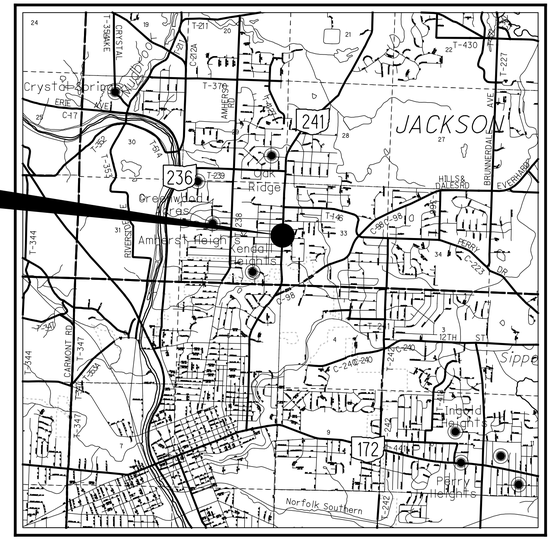
PROJECT LOCATION
POR-700-0401



STA-172-0025

LATITUDE: 40°47'55" N LONGITUDE: 81°38'37" W

PROJECT LOCATION
STA-241-1175



STA-241-1175

LATITUDE: 40°49'42" N LONGITUDE: 81°30'09" W

DESIGN DESIGNATION

CURRENT ADT (2021)	1,731
DIRECTIONAL DISTRIBUTION	51%
TRUCKS (24 HOUR B&C)	5%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MAJOR COLLECTOR	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH "APPROVED 9/1/22"

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.05 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)

DESIGN DESIGNATION

CURRENT ADT (2021)	4,169
DIRECTIONAL DISTRIBUTION	59%
TRUCKS (24 HOUR B&C)	9%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH, SHOULDER WIDTH "APPROVED 8/21/22"

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.01 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)

DESIGN DESIGNATION

CURRENT ADT (2021)	11,796
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	45 MPH
LEGAL SPEED	40 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.07 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOT REQUIRED)

LOCATION MAP

DESIGN AGENCY

DESIGNER
CMW

REVIEWER
MJP 01-20-23

PROJECT ID
106200

SHEET P.3 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet 2 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:38:53 AM USER: mpalagan
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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

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

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

AQUA OHIO (STARK COUNTY)
ATTN: ZACH TALLMADGE
6650 SOUTH AVE.
BOARDMAN, OH 44512
330-397-0776 (P) 814-490-5755 (C)
ztallmadge@aquaamerica.com
MMontgomery@aquaamerica.com

AT&T (OHIO BELL)
ATTN: STEVEN HYLTON
50 W. BOWERY ST. (6TH FLOOR)
AKRON, OH 44308
330-384-3055 (P) 330-631-7485 (C)
sh1513@att.com

CENTURYLINK / LUMEN
ATTN: DOUG HOLLOWAY
4000 CHESTER AVE.
CLEVELAND, OH 44103
216-426-6010 (P) 216-906-6284 (C)
doug.holloway@lumen.com
relocations@lumen.com

COLUMBIA GAS OF OHIO
ATTN: CHRIS ROBINSON
1020 W. STATE ST.
SALEM, OH 44460
330-829-1809 (P) 419-957-6633 (C)
crobison@nisource.com

COLUMBIA GAS OF OHIO (TRANSMISSION)
ATTN: RUSS JOHNSON
589 NORTH STATE ROAD
MEDINA, OH 44256
330-721-4163 (P) 330-410-4379 (C)
Russell_johnson@tcenergy.com
Us_crossings@tcenergy.com

DOMINION ENERGY
ATTN: MICAH RISACHER
320 SPRINGSIDE DRIVE SUITE 320
AKRON, OH 44333
330-664-2638 (P) 440-371-1533 (C)
Micah.J.Risacher@dominionenergy.com

DIVERSIFIED GAS & OIL PLC
ATTN: JEFF SHEPHERD
1026A COOKSON AVE SE
NEW PHILADELPHIA OH 44663
740-485-1839 CELL
jshepherd@dgoc.com

EVERSTREAM
ATTN: GIO REILLO
1228 EUCLID AVE. SUITE 250
CLEVELAND, OH 44115
216-905-0780
greillo@everstream.net

FRONTIER COMMUNICATIONS MINERVA AREA (VERIZON)
ATTN: LARRY WENDELL
1121 TUSCARAWAS AVE. NW
NEW PHILADELPHIA, OH 44663
330-364-0510 (P) 330-933-9215 (C)
Lawrence.w.wendell@ftr.com

MASSILLON CABLE
ATTN: JEREMY LEHMAN
444 W. MILLTOWN ROAD
WOOSTER, OH 44691
330-804-2019 (P) 330-465-1569 (C)
jlehman@MCTVOhio.com

OHIO EDISON
ATTN: AMANDA TURNER
1910 W. MARKET ST (BUILDING 1)
AKRON, OH 44313
330-436-4093 (O) 330-388-5291 (C)
turnera@firstenergycorp.com

PORTAGE COUNTY WATER RESOURCES
ATTN: JONATHAN VENCE
449 SOUTH MERIDIAN STREET
P.O. BOX 1217
RAVENNA, OH 44266-1217
(330) 297-3677
jvence@portageco.com

STARK COUNTY METRO SEWER DISTRICT
ATTN: JIM TROIKE, PE
P.O. BOX 9972
CANTON, OH 44711-0972
330-451-2314
jftroike@starkcountyohio.gov

WINDSTREAM
ATTN: RAMON FRENCH
205 S. HAMBDEN STREET
CHARDON, OH 44024
440-285-5537
ramon.french@windstream.com

ITEM SPECIAL - AS-BUILT CONSTRUCTION RECORD DRAWINGS

PRIOR TO FINAL ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL FURNISH THE DEPARTMENT FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING PLANS. THE FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL INCLUDE ALL RED-LINED CHANGES. RED-LINE CHANGE SHALL BE DENOTED UTILIZING CLOUDING IN MICROSTATION (OR OTHER CAD SOFTWARE) OR CLOUDING IN PDF EDITING SOFTWARE. THE AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL HAVE A SIGNED VERIFICATION ON THE TITLE SHEET FROM THE CONTRACTOR INDICATING THAT ALL RED-LINED AND FIELD CHANGES HAVE BEEN INCORPORATED INTO AS-BUILT CONSTRUCTION RECORD-DRAWINGS.

THE CONTRACTORâ€™S VERIFICATION STATEMENT INDICATES ALL KNOWN FIELD MODIFICATIONS MADE HAVE BEEN INCLUDED IN THE FORMAL RECORD-DRAWING. THE CONTRACTOR'S VERIFICATION STATEMENT SHALL BE SIGNED BY THE CONTRACTOR'S PROJECT MANAGER (OR ACCEPTABLE REPRESENTATIVE).

IN ADDITION TO THE INFORMATION SHOWN ON THE CONSTRUCTION PLANS, THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL SHOW THE FOLLOWING:

1. ALL DEVIATIONS FROM THE ORIGINAL APPROVED CONSTRUCTION PLANS WHICH RESULT IN A CHANGE OF LOCATION, MATERIAL, TYPE OR SIZE OF WORK.
2. ANY UTILITIES, PIPES, WELLHEADS, ABANDONED PAVEMENTS, FOUNDATIONS OR OTHER MAJOR OBSTRUCTIONS DISCOVERED AND REMAINING IN PLACE WHICH ARE NOT SHOWN, OR DO NOT CONFORM TO LOCATIONS OR DEPTHS SHOWN IN THE PLANS. UNDERGROUND FEATURES SHALL BE SHOWN AND LABELED ON THE RECORD-DRAWING PLAN IN TERMS OF STATION, OFFSET AND ELEVATION.
3. THE FINAL OPTION AND SPECIFICATION NUMBER SELECTED FOR THOSE ITEMS WHICH ALLOW SEVERAL MATERIAL OPTIONS UNDER THE SPECIFICATION (E.G., CONDUIT).
4. CHANGES TO THE PAY ITEMS AND FINAL QUANTITIES AS PAID SHALL BE SHOWN ON THE GENERAL SUMMARY AND SUBSUMMARIES.
5. ADDITIONAL PLAN SHEETS MAY BE NEEDED IF NECESSARY TO SHOW WORK NOT INCLUDED IN THE CONSTRUCTION PLANS. IF ADDITIONAL PLAN SHEETS ARE NEEDED, THEY ARE REQUIRED TO BE PREPARED IN CONFORMANCE WITH THE LOCATION AND DESIGN MANUAL, VOLUME 3, SECTION 1200 - PLAN PREPARATION.

NOTATION SHALL ALSO BE MADE OF LOCATIONS AND THE EXTENT OF USE OF MATERIALS, OTHER THAN SOIL, FOR EMBANKMENT CONSTRUCTION (ROCK, BROKEN CONCRETE WITHOUT REINFORCING STEEL, ETC.).

THE PLAN INDEX SHALL SHOW THE PLAN SHEETS WHICH HAVE CHANGES APPEARING ON THEM.

TWO COPIES OF THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL BE DELIVERED TO THE PROJECT ENGINEER FOR APPROVAL UPON COMPLETION OF THE PHYSICAL WORK BUT PRIOR TO THE REQUEST FOR FINAL PAYMENT. AFTER THE DEPARTMENT HAS APPROVED THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS, THE ASSOCIATED ELECTRONIC FILES SHALL BE DELIVERED TO THE DISTRICT CAPITAL PROGRAMS ADMINISTRATOR. ACCEPTANCE OF THESE PLANS AND DELIVERY OF THE ASSOCIATED ELECTRONIC FILES IS REQUIRED PRIOR TO THE WORK BEING ACCEPTED AND THE FINAL ESTIMATE APPROVED.

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE PROJECT ENGINEER.

DRAINAGE DISCHARGE CONTINUANCE

FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT ORSWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN ACCORDANCE WITH SCD DM-3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING, OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611, INSPECTION WELL.

FURNISH A WELL GRADED TRANSITION BETWEEN THE DITCH AND THE SWALE WHEN OUTLETTING A SWALE TO A DITCH. THE COST FOR THE GRADED TRANSITION IS INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN.

FURNISH AN EROSION CONTROL PAD AS SHOWN IN SCD DM-1.1 WHEN OUTLETTING A CONDUIT TO A DITCH. THE COST FOR THE EROSION CONTROL PAD IS INCLUDED IN ITEM 611, CONDUIT, MISC: TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED HOLE OR A CURB SECTION WITH A HOLE WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING, OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC.: TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC.: TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

DOCUMENTATION
THE CONTRACTOR SHALL FURNISH WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE DISTRICT R/W PERMIT OFFICE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, PID, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE R/W, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE WAS LOCATED, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611, CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE OR ITEM 203, EMBANKMENT AS PER PLAN.

DRAINAGE DISCHARGE CONTINUANCE REMOVAL
THE ENGINEER MAY REQUIRE THE NEWLY INSTALLED DRAINAGE DISCHARGE CONTINUANCE TO BE REMOVED.

REMOVE THE NEWLY INSTALLED CONDUIT AND ANY EXISTING CONDUIT TO THE RIGHT OF WAY LINE. FOR CONDUIT THAT OUTLETS THROUGH THE CURB RESTORE THE CURB BY FILLING THE HOLE WITH CLASS QC 1 CONCRETE OR REPLACE THE CURB SECTION. FOR CONDUIT THAT OUTLETS TO A STORM SEWER OR DRAINAGE STRUCTURE LEAVE 6 INCHES PROTRUDING OUTSIDE OF THE CONDUIT. PLUG THE PROTRUDING CONDUIT WITH EITHER A MANUFACTURED CAP OR CLASS QC 1 CONCRETE. FOR CONDUIT THAT OUTLETS TO THE DITCH REMOVE THE EROSION CONTROL PAD. RESTORE ALL AREAS AS REQUIRED. PLUG THE EXISTING CONDUIT REGARDLESS OF SIZE AT THE RIGHT OF WAY LINE WITH CLASS QC 1 CONCRETE AND RESTORE ALL AREAS AS REQUIRED. ALL COSTS ARE INCLUDED IN ITEM 202, REMOVAL MISC. CONDUIT.

DAM THE SWALE THAT OUTLETS TO THE DITCH AT THE R/W AS DIRECTED BY THE ENGINEER. ALL COSTS ARE INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN.

REMOVE THE INSPECTION WELL AND RESTORE ALL AREAS AS REQUIRED. THE COST IS INCLUDED IN ITEM 202, REMOVAL MISC. INSPECTION WELL.

CONDUIT MATERIAL TYPES
THE FOLLOWING CONDUIT MATERIAL TYPES ARE PERMITTED: 707.33, 707.41 NON- PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, AND 707.52 SDR35.
PAY ITEMS
EACH OF THE PAY ITEMS LISTED BELOW FOR CONDUIT MISCELLANEOUS TYPES B, C, E AND F FOR DRAINAGE DISCHARGE CONTINUANCE INCLUDE CONDUIT SIZES 2 INCH TO 10 INCH. THERE IS NO COST DIFFERENTIATION FOR SIZE IN THESE PAY ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE DRAINAGE DISCHARGE CONTINUANCE:

FOR EACH OF THE 6 LOCATIONS:
ITEM 611, 1 EACH INSPECTION WELL
ITEM 611, 10 FT.CONDUIT, MISC TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE
ITEM 611, 10 FT.CONDUIT, MISC TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE
ITEM 611, 10 FT.CONDUIT, MISC TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE
ITEM 611, 10 FT.CONDUIT, MISC TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE
ITEM 202, 10 FT. REMOVAL MISC CONDUIT
ITEM 202, 1 EACH REMOVAL MISC INSPECTION WELL
ITEM 203, 3 CUBIC YARD EMBANKMENT AS PER PLAN

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

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.

GENERAL NOTES

DESIGN AGENCY

DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SHEET P.4 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet 1 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:06 AM USER: mpalegan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200400-EngineeringRoadway\Sheets\106200_GN001.dgn

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

PROVIDE CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. FURNISH A STUB MEETING THE REQUIREMENTS OF 707 WITH A MINIMUM LENGTH OF 2 FEET AND A MINIMUM WALL THICKNESS OF 0.064 INCHES.

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THOROUGHLY CLEAN AND REGALVANIZE OR OTHERWISE SUITABLY REPAIR THE FIELD WELDED JOINT, IF USED. MEET WELDING REQUIREMENTS OF 513.21.

PROVIDE A MASONRY COLLAR PER STANDARD CONSTRUCTION DRAWING DM-1.1, TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS USED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, IS INCLUDED IN THE CONTRACT PRICE FOR ITEM 611 OR 522.

FARM DRAINS

PROVIDE UNOBSTRUCTED OUTLETS TO ALL FARM DRAINS ENCOUNTERED DURING CONSTRUCTION. REPLACE EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY WITHIN THE CONSTRUCTION LIMITS WITH ITEM 611,
CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

OUTLET EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES INTO THE ROADWAY.

DITCH USING ITEM 611, TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION IS ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. INTERCEPT LATERAL FIELD TILES WHICH CROSS THE ROADWAY WITH ITEM 611, TYPE E CONDUIT, AND CARRY IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS IS DETERMINED BY THE ENGINEER AND PAYMENT MADE ON FINAL MEASUREMENTS.

PROVIDE EROSION CONTROL PADS AT THE OUTLET END OF ALL FARM DRAINS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES IS INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:
FOR EACH OF THE 6 LOCATIONS:
611 12" CONDUIT, TYPE B 10 FT.
611 12" CONDUIT, TYPE E 10 FT.
611 12" CONDUIT, TYPE F 10 FT.
601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER 1 CU. YD.

ASPHALT PAVING LIMITATION

THE CONTRACTOR SHALL NOT PLACE ASPHALT (ASPHALT SURFACE COURSE, ASPHALT INTERMEDIATE COURSE, ASPHALT CONCRETE BASE COURSE, ETC.) BETWEEN NOVEMBER 1ST AND APRIL 1ST WHEN SUBMITTING THEIR INITIAL BAR CHART PROGRESS SCHEDULE TO THE DISTRICT CONSTRUCTION ENGINEER (DCE) AS SPECIFIED IN CMS SECTION 108.02A. THIS LIMITATION SHALL ALSO INCLUDE INITIAL BASE LINE SCHEDULES AND ALL UPDATES IF A CPM SCHEDULE IS REQUIRED.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

WETLANDS IMPACTS/AVOIDANCE - POR-44-1533 AND POR-44-2349

THIS PROJECT WILL IMPACT WETLANDS AT THE POR-44-15.33 AND POR-44-2349 CULVERT LOCATIONS. ALL EXCAVQATION, FILL AND GRADING OPERATIONS SHALL BE PERFORMED WITHIN THE PROJECT CONSTRUCTION LIMITS AS DEMARCATED IN THE PLAN. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT THE REMAINING WETLAND AREAS BEYOND THE CONSTRUCTION LIMITS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS WITHIN WETLAND AREAS.

THE CONTRACTOR SHALL STAGE ALL EQUIPMENT AND MATERIALS AWAY FORM THE IDENTIFIED WETLANDS AND STREAMS TO THE EXTENT PRACTICABLE. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS AND/OR WETLANDS.

TO PROTECT AND DELINEATE THE EXISTING UNIMPACTED WETLAND AREAS, A QUANTITY OF ITEM 832 CONSTRUCTION FENCE AND A QUANTITY OF ITEM 832 PERIMETER FILTER FABRIC FENCE HAVE BEEN INCLUDED IN THE GENERAL SUMMARY. THE CONSTRUCTION FENCE AND PERIMETER FILTER FABRIC FENCE SHALL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS AT THE POR-44-1533 AND POR-44-2349 CULVERT LOCATIONS BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES WITHIN THE LIMITS AND ADJACENT AREA, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES. THE CONSTRUCTION FENCE AND PERIMETER FILTER FABRIC FENCE SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION AND SHALL BE REMOVED BY THE CONTRACTOR UPON PROJECT COMPLETION.

PAYMENT FOR ITEM 832 CONSTRUCTION FENCE AND ITEM 832 PERIMETER FILTER FABRIC FENCE WILL BE MADE UNDER ITEM 832, EROSION CONTROL.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

CONSTRUCTION NOISE (STA-241-1175)

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 7PM AND 7AM. 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.

ENDANGERED BAT HABITAT REMOVAL - POR-14-2848, POR-44-2349 AND STA-241-1175 CULVERT LOCATIONS

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 AT THE POR-14-2848, POR-44-2349 AND STA-241-1175 CULVERT LOCATIONS FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR AT THE ABOVE LISTED CULVERT LOCATIONS 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.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

GENERAL NOTES

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SHEET P.5 TOTAL 53

POR/STA-CULVERTS-FY2023

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pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200400-Engineering\Roadway\Sheets\106200_GN001.dgn

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

2. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

3. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

4. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.

5. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

6. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

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, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERNS CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP-RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISS-ING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A PORTABLE CHANGEABLE MESSAGE SIGN, THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCE OF 800 FEET AND 650 FEET RESPECTIVELY.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHALL BE LOCATED. IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF. ADDITIONALLY WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE LINE PRESENTATION FORMATS WITH UP TO OF SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.07. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THEIR USE. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

614 PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN, 16 SIGN MONTH
ASSUMING 4 SIGNS FOR 4 MONTHS

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD & RAMP CLOSURE	>= 2WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

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MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:26 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\MOT\Sheets\106200_MN001.dgn

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

IN GENERAL LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 50 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) POR-14-28.48

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.8. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $5,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) POR-44-15.33

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.9. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $3,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) POR-44-23.49

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.10. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $3,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) POR-700-4.01

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS P.11-P.12. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $3,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) STA-172-0.25

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.13. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $5,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) STA-241-11.77

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.14. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $8,000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

INTERIM START DATE (POR-14-28.48)

NO WORK SHALL BEGIN AT LOCATION POR-14-28.48 UNTIL SEPTEMBER 5, 2023, OR LATER. SHOULD THE CONTRACTOR BEGIN ANY WORK AT THIS LOCATION BEFORE THIS DATE, A DISINCENTIVE OF $5,000 PER DAY SHALL BE ASSESSED.

INTERIM COMPLETION DATE (POR-44-23.49)

ALL WORK SHALL BE COMPLETE AT LOCATION POR-44-23.49 NO LATER THAN AUGUST 26, 2023. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL WORK AT THIS LOCATION BY THIS DATE, A DISINCENTIVE OF $5,000 PER DAY SHALL BE ASSESSED.

CONFLICTING WORK LOCATIONS

THE DETOURS AT LOCATIONS POR-44-1533 AND POR-44-2349 SHALL NOT OCCUR AT THE SAME TIME.

THE DETOURS AT LOCATIONS POR-44-2349 AND POR-700-0400 SHALL NOT OCCUR AT THE SAME TIME.

DRIVEWAY ACCESS (POR-44-1533)

THE DRIVE AT STA. 68+00 SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER IF DRIVE ACCESS IS RESTRICTED DURING CONSTRUCTION.

DETOUR NOTIFICATION [ODOT]

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN EACH DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SEPARATE LUMP SUM BIDS ARE REQUESTED FOR EACH DETOUR ROUTE. PAYMENT FOR ALL WORK AND COSTS ASSOCIATED WITH EACH DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR THE RESPECTIVE DETOUR ROUTE AS A BID FOR ITEM 614, DETOUR SIGNING (SUPPLEMENTAL DESCRIPTION).

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SHEET P.7 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet 2 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:33 AM USER: mpalagan
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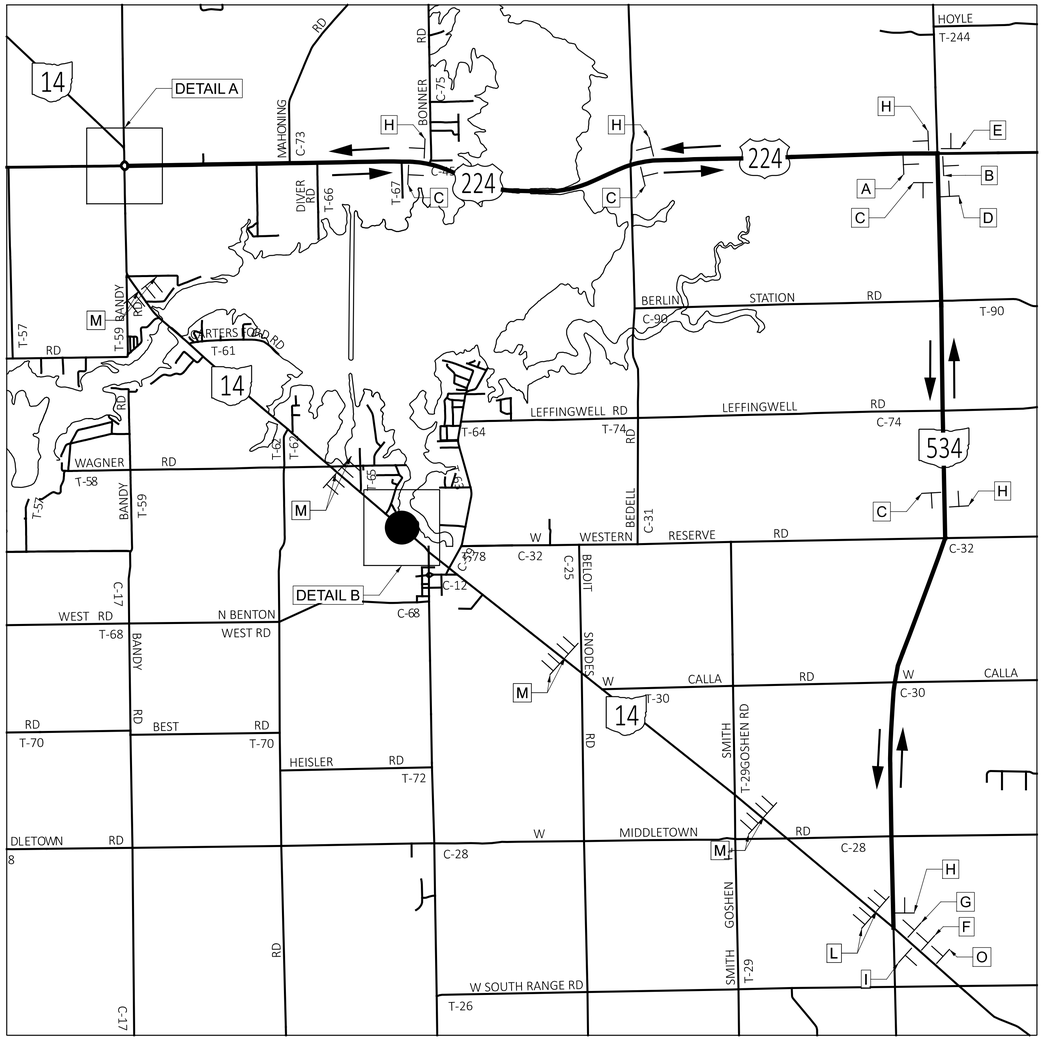


DETOUR ROUTE FOR: SR 14

DETOUR ROUTE: US 224 / SR 534

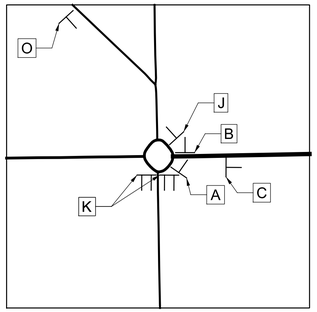
CLOSED AS PER SCD MT-101.60

NOT TO SCALE

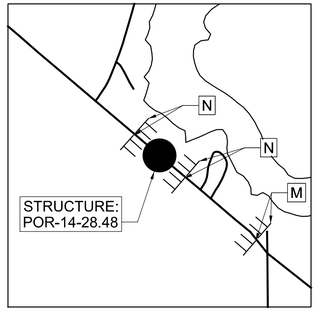
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

DETAIL A



DETAIL B



A
DETOUR *M4-8-24*
EAST *M3-2-24*
14 *M1-5-24-2*
M5-1-21

B
DETOUR *M4-8-24*
EAST *M3-2-24*
14 *M1-5-24-2*
M6-1-21

C
DETOUR *M4-8-24*
EAST *M3-2-24*
14 *M1-5-24-2*
M6-3-21

D
DETOUR *M4-8-24*
WEST *M3-4-24*
14 *M1-5-24-2*
M5-1-21

E
DETOUR *M4-8-24*
WEST *M3-4-24*
14 *M1-5-24-2*
M6-1-21

F
DETOUR *M4-8-24*
WEST *M3-4-24*
14 *M1-5-24-2*
M5-1-21

G
DETOUR *M4-8-24*
WEST *M3-4-24*
14 *M1-5-24-2*
M6-1-21

H
DETOUR *M4-8-24*
WEST *M3-4-24*
14 *M1-5-24-2*
M6-3-21

I
END DETOUR *M4-8a-24*
EAST *M3-2-24*
14 *M1-5-24-2*

J
END DETOUR *M4-8a-24*
WEST *M3-4-24*
14 *M1-5-24-2*

K #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*
DETOUR *M4-10L-48*

L #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*
DETOUR *M4-10R-48*

M #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*

N #
ROAD CLOSED *R11-2-48*

O
DETOUR 1500 FT *W20-2-36*

DETOUR PLAN - POR-14-28.48

DESIGN AGENCY

DESIGNER CMW

REVIEWER LOB 01-20-23

PROJECT ID 106200

SHEET P.8 TOTAL 53

POR/STA-CULVERTS-FY2023

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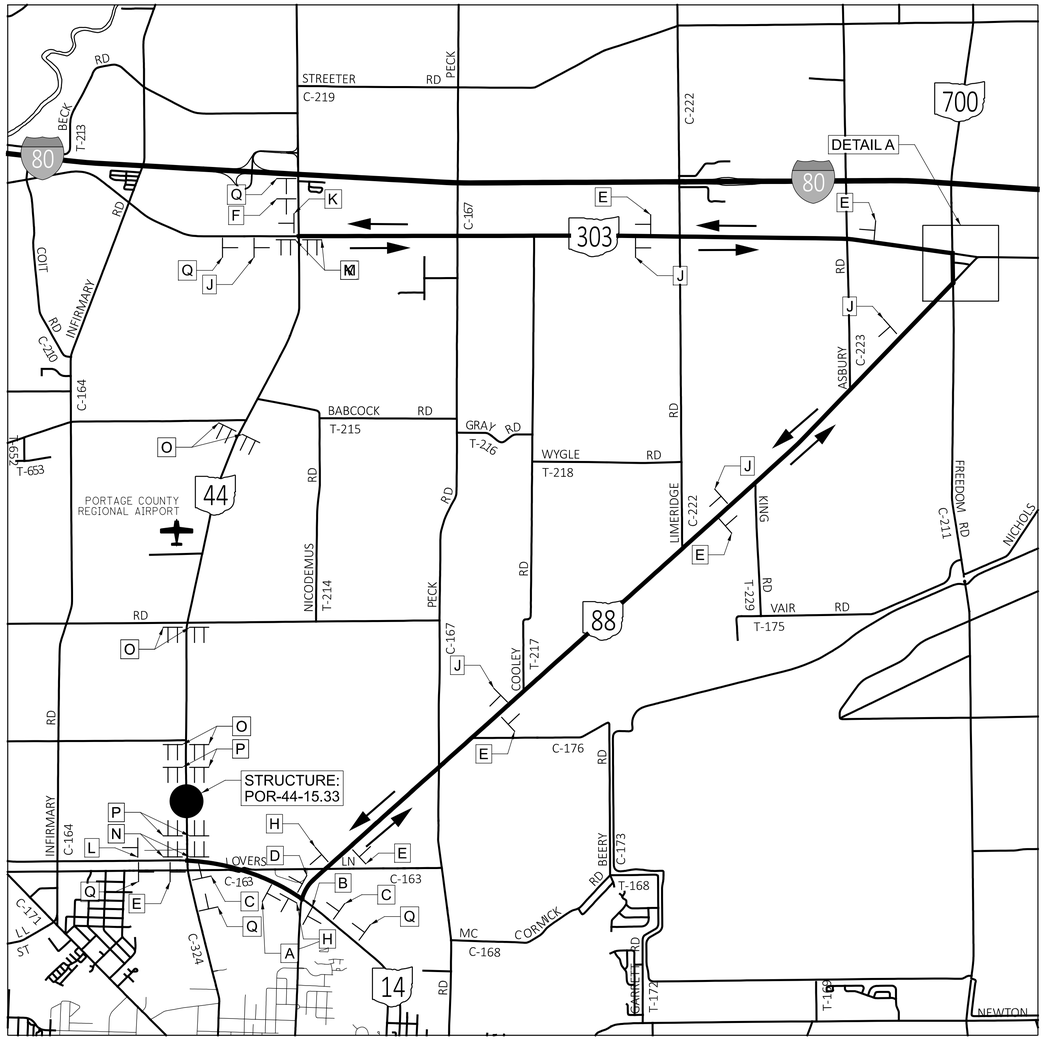

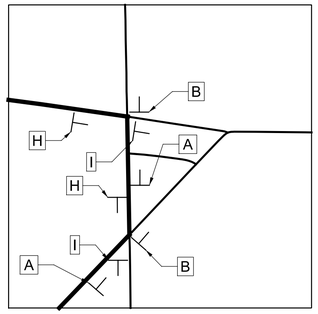

DETOUR ROUTE FOR: SR 44

DETOUR ROUTE: SR 14 / SR 88 / SR 700 / SR 303

CLOSED AS PER SCD MT-101.60

NOT TO SCALE

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

 # ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

A
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M5-1-21

B
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-1-21

C
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M5-1-21

D
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-1-21

E
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-3-21

F
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M5-1-21

G
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-1-21

H
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M5-1-21

I
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-1-21

J
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-3-21

K
END DETOUR *M4-8a-24*
NORTH *M3-1-24*
44 *M1-5-24-2*

L
END DETOUR *M4-8a-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*

M #
ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a-60
DETOUR *M4-10L-48*

N #
ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a-60
DETOUR *M4-10R-48*

O #
ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a-60

P #
ROAD CLOSED
R11-2-48

Q
DETOUR
1500 FT
W20-2-36

DETOUR PLAN -POR-44-15.33

DESIGN AGENCY

DESIGNER CMW

REVIEWER LOB 01-20-23

PROJECT ID 106200

SHEET P.9 TOTAL 53

POR/STA-CULVERTS-FY2023

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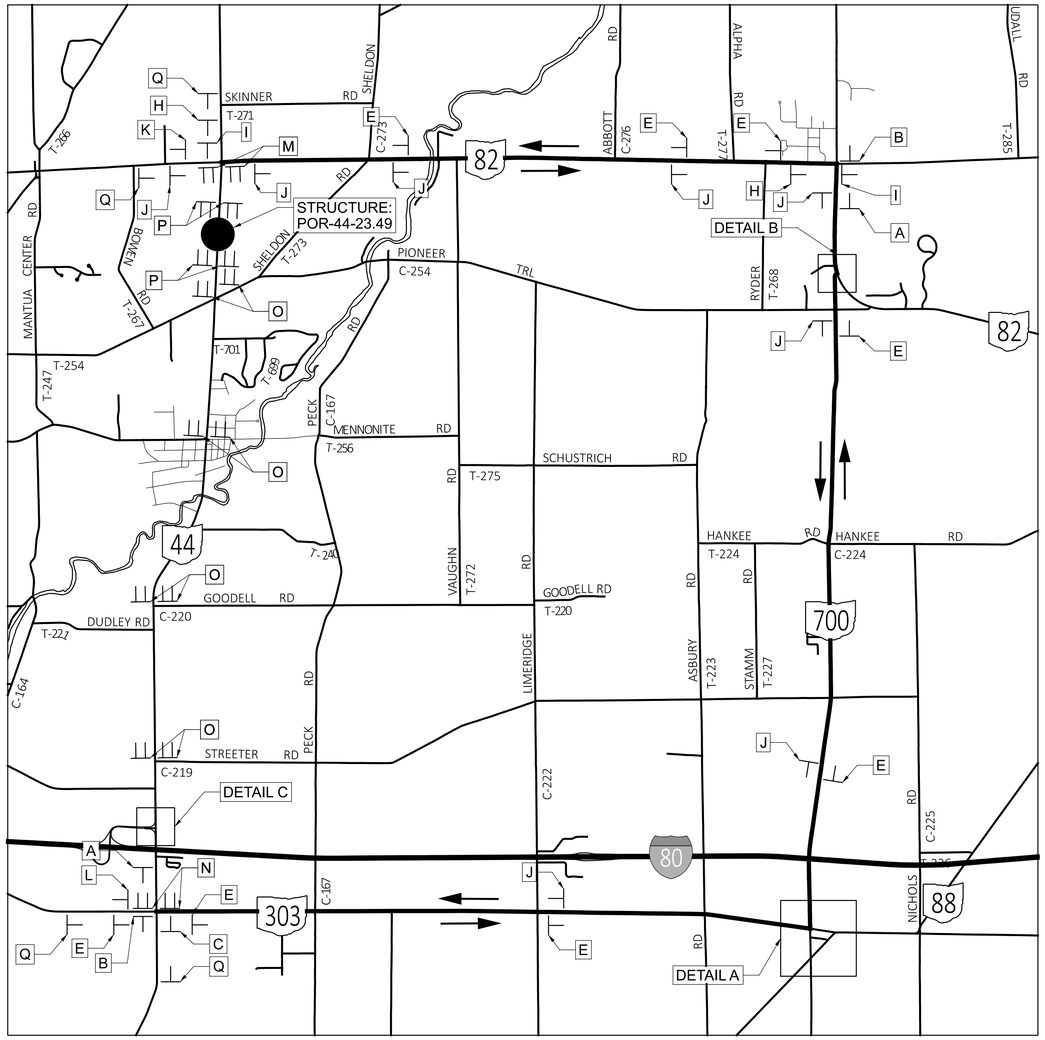


DETOUR ROUTE FOR: SR 44

DETOUR ROUTE: SR 303 / SR 700 / SR 82

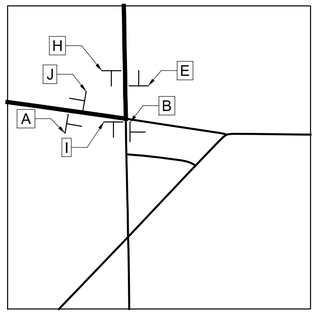
CLOSED AS PER SCD MT-101.60

NOT TO SCALE

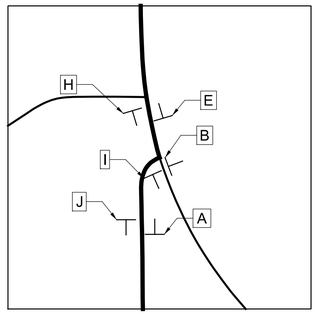
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

 # ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

DETAIL A



DETAIL B



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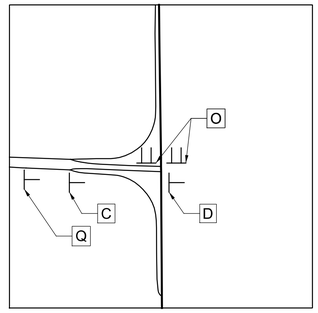

A
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M5-1-21

B
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-1-21

C
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M5-1-21

D
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-1-21

E
DETOUR *M4-8-24*
NORTH *M3-1-24*
44 *M1-5-24-2*
M6-3-21

F
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M5-1-21

G
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-1-21

H
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M5-1-21

I
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-1-21

J
DETOUR *M4-8-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*
M6-3-21

K
END DETOUR *M4-8a-24*
NORTH *M3-1-24*
44 *M1-5-24-2*

L
END DETOUR *M4-8a-24*
SOUTH *M3-3-24*
44 *M1-5-24-2*

M #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*
DETOUR *M4-10L-48*

N #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*
DETOUR *M4-10R-48*

O #
ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY *R11-3a-60*

P #
ROAD CLOSED *R11-2-48*

Q
DETOUR 1500 FT *W20-2-36*

DETOUR PLAN - POR-44-23.49

DESIGN AGENCY

DESIGNER CMW
REVIEWER LOB 01-20-23
PROJECT ID 106200
SHEET P.10 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: POR-44-2349 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:49 AM USER: mpalagan
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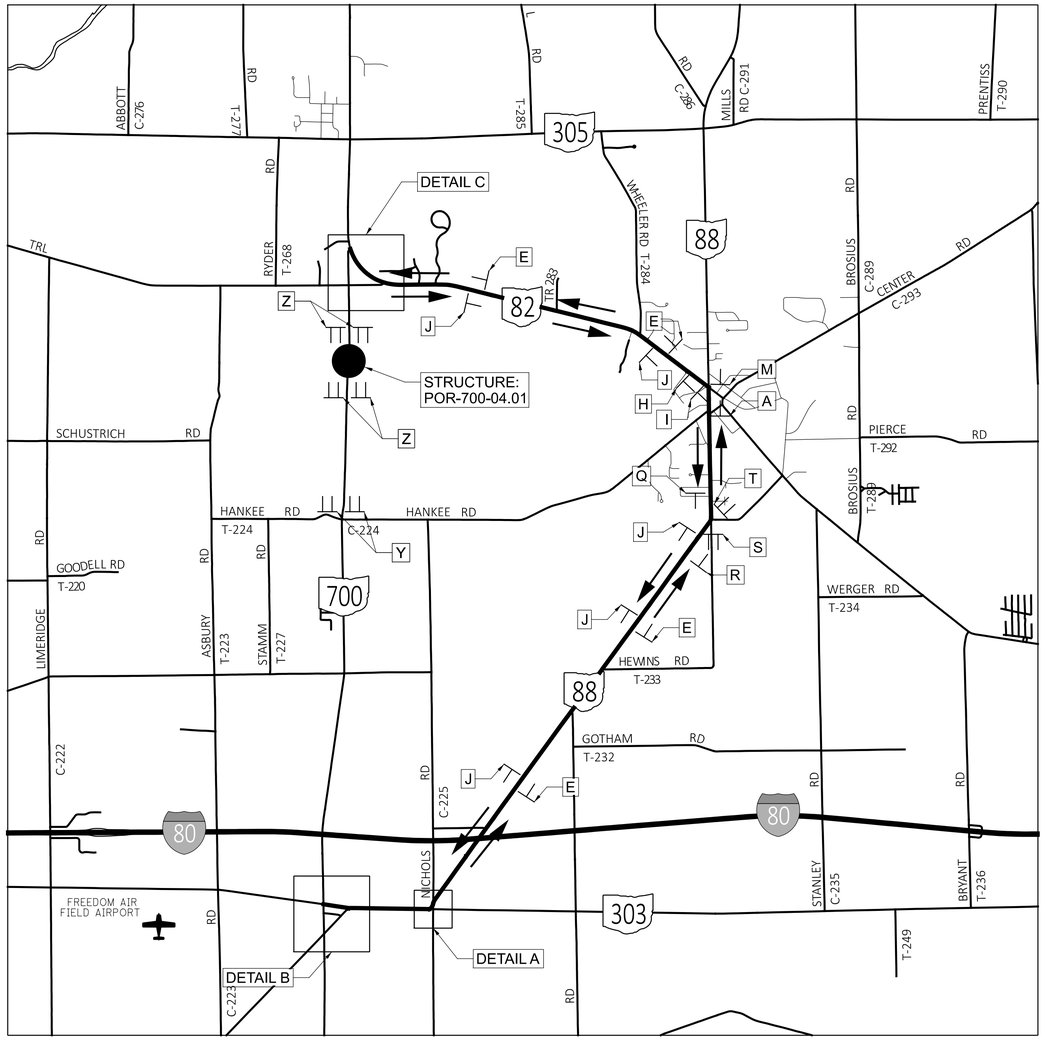


DETOUR ROUTE FOR: SR 700

DETOUR ROUTE: SR 303 / SR 88 / SR 82

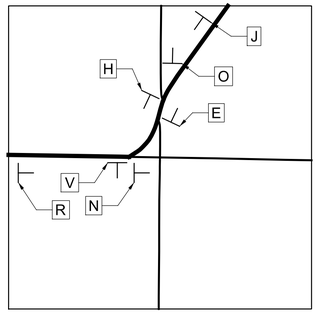
CLOSED AS PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

 # ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

NOT TO SCALE

DETAIL A



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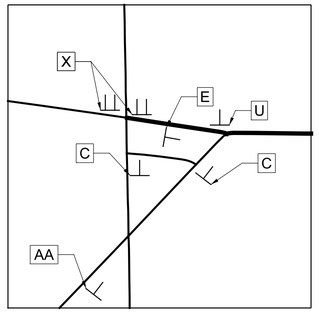

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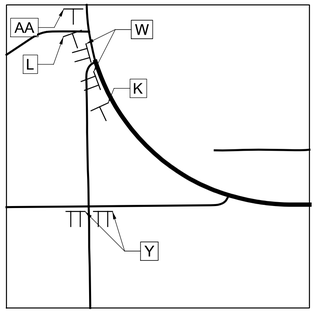


A

B

C

D

E

F

G

H

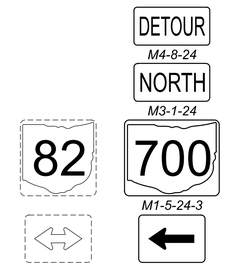
I

J

K

L

M



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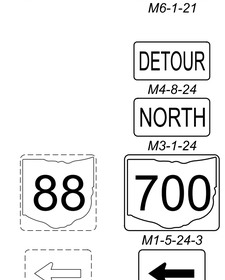

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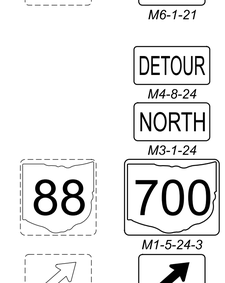


DETOUR PLAN - POR-700-04.00

DESIGN AGENCY

DESIGNER CMW

REVIEWER LOB 01-20-23

PROJECT ID 106200

SHEET P.11 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: POR-700-0401 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:50 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\MOT\Sheets\106200_MD001.dgn

P

U

Q

V

R

W
#

X
#

S

Y
#

T

Z
#

AA

POR/STA-CULVERTS-FY2023

MODEL: POR-700-0401 Sheet 2 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:51 AM USER: mpallagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\MOT\Sheets\106200_MD001.dgn

DETOUR PLAN - POR-700-04.00

DESIGN AGENCY

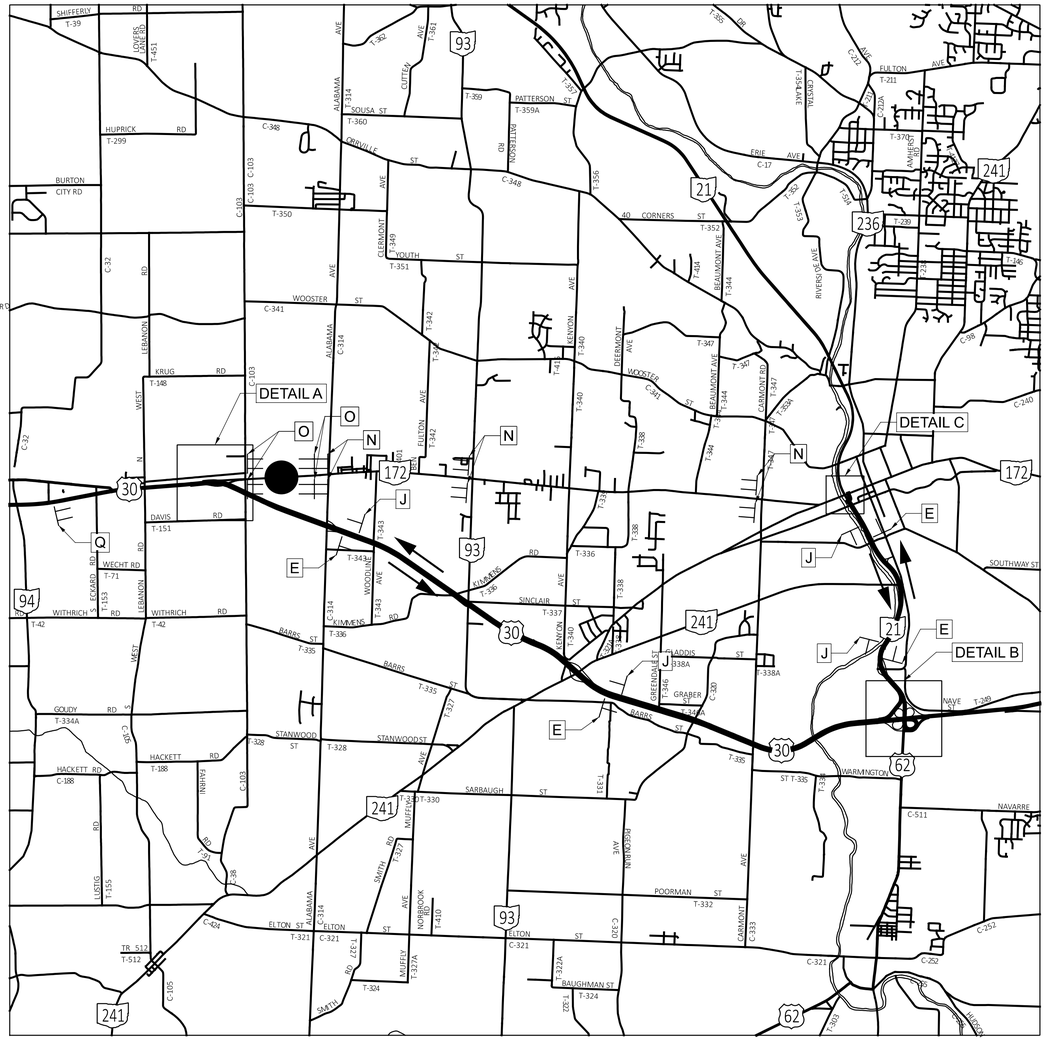
DESIGNER
CMW

REVIEWER
LOB 01-20-23

PROJECT ID
106200

SHEET
P.12

TOTAL
53



DETOUR ROUTE FOR: SR 172

DETOUR ROUTE: US 30 / SR 21

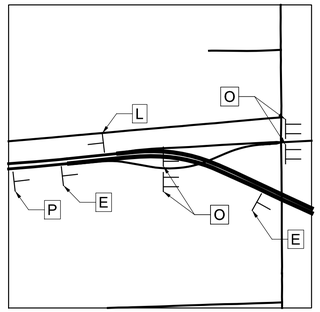
CLOSED AS PER SCD MT-101.60

NOT TO SCALE

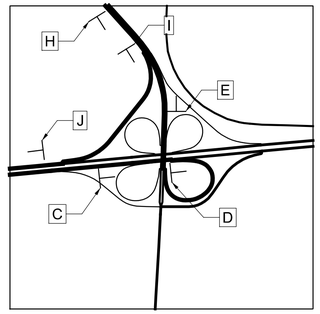
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

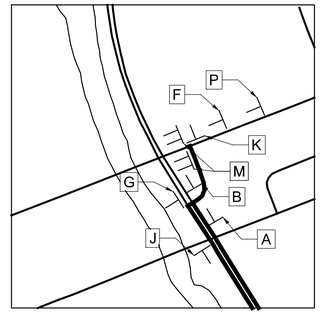
DETAIL A



DETAIL B



DETAIL C



A

DETOUR
M4-8-24
EAST
M3-2-24
172
M1-5-30-3

M5-1-21

B

DETOUR
M4-8-24
EAST
M3-2-24
172
M1-5-30-3

M6-1-21

C

DETOUR
M4-8-24
EAST
M3-2-24
172
M1-5-30-3

M5-2-21

D

DETOUR
M4-8-24
EAST
M3-2-24
172
M1-5-30-3

M6-2-21

E

DETOUR
M4-8-24
EAST
M3-2-24
172
M1-5-30-3

M6-3-21

F

DETOUR
M4-8-24
WEST
M3-4-24
172
M1-5-30-3

M5-1-21

G

DETOUR
M4-8-24
WEST
M3-4-24
172
M1-5-30-3

M6-1-21

H

DETOUR
M4-8-24
WEST
M3-4-24
172
M1-5-30-3

M5-2-21

I

DETOUR
M4-8-24
WEST
M3-4-24
172
M1-5-30-3

M6-2-21

J

DETOUR
M4-8-24
WEST
M3-4-24
172
M1-5-30-3

M6-3-21

K

END DETOUR
M4-8a-24
EAST
M3-2-24
172
M1-5-30-3

L

END DETOUR
M4-8a-24
WEST
M3-4-24
172
M1-5-30-3

M #

ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a-60

DETOUR
M4-10L-48

N #

ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a-60

O #

ROAD CLOSED
R11-2-48

P

DETOUR
1500 FT
W20-2-36

Q

PCMS

DETOUR PLAN - STA-172-00.25

DESIGN AGENCY

DESIGNER CMW

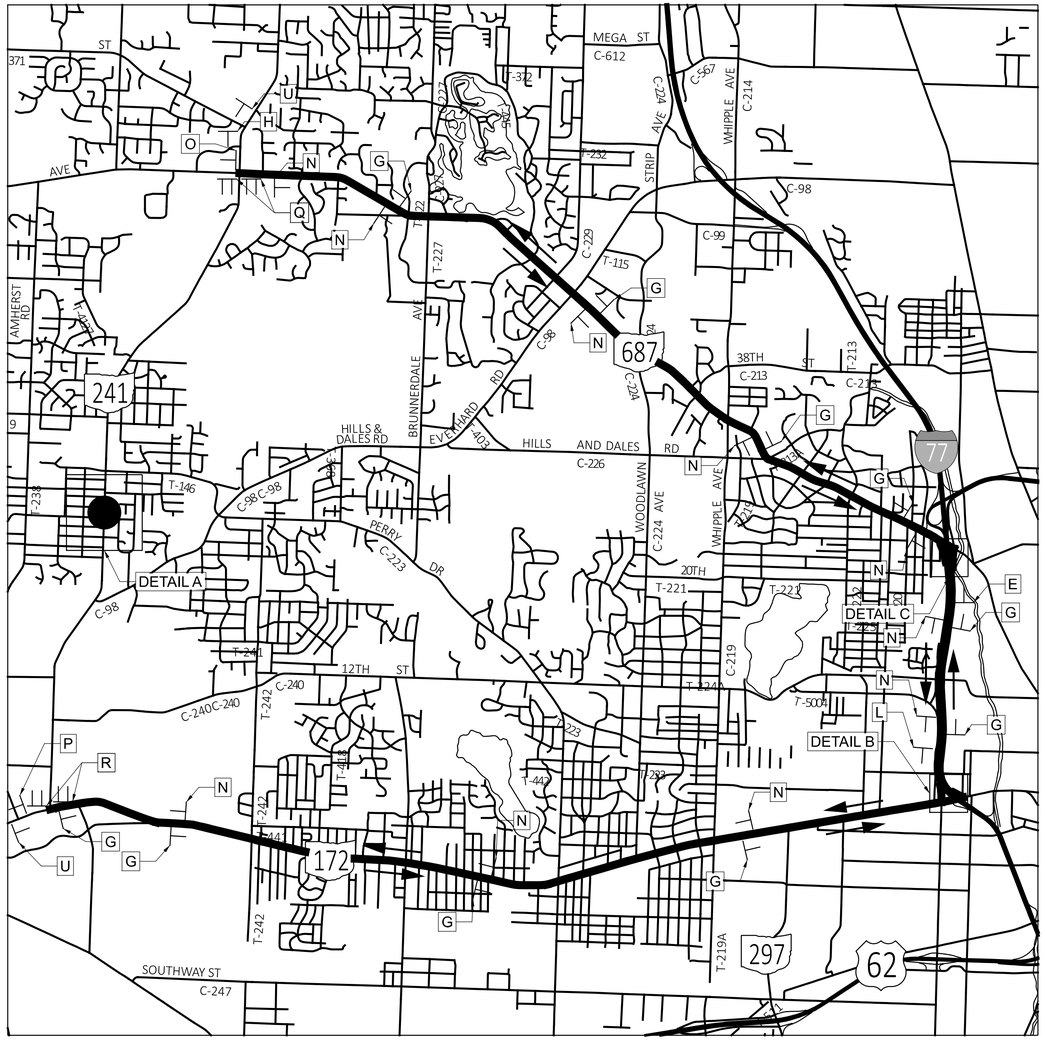
REVIEWER LOB 01-20-23

PROJECT ID 106200

SHEET P.13 | TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: STA-172-0025 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:53 AM USER: mpalegan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\MOT\Sheets\106200_MD001.dgn



DETOUR ROUTE FOR: SR 241

DETOUR ROUTE: SR 172 / IR 77 / SR 687

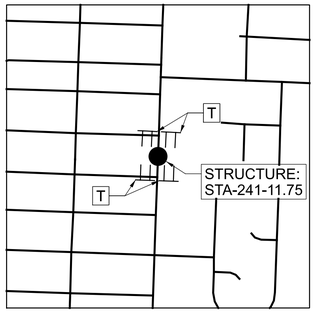
CLOSED AS PER SCD MT-101.60

NOT TO SCALE

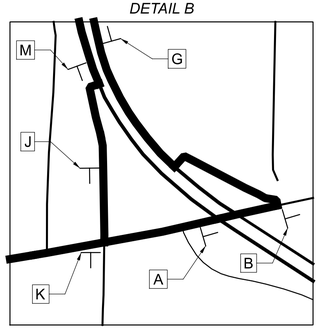
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

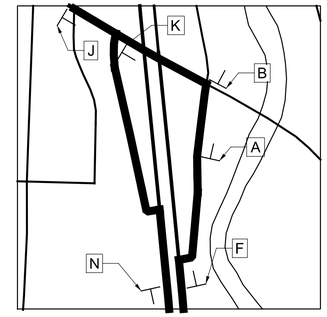
DETAIL A



DETAIL B



DETAIL C



A
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M5-1-21

E
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M5-2-21

I
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M6-1-21

M
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M6-2-21

Q #
ROAD CLOSED MILES AHEAD
LOCAL TRAFFIC ONLY R11-3a-60
DETOUR M4-10L-48

B
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M6-1-21

F
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M6-2-21

J
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M5-1-21

N
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M6-3-21

R #
ROAD CLOSED MILES AHEAD
LOCAL TRAFFIC ONLY R11-3a-60
DETOUR M4-10L-48

S #
ROAD CLOSED MILES AHEAD
LOCAL TRAFFIC ONLY R11-3a-60

C
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M5-1-21

G
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M6-3-21

K
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M6-1-21

O
END DETOUR M4-8a-24
NORTH M3-1-24
241 M1-5-24-3

T #
ROAD CLOSED R11-2-48

U
DETOUR 1500 FT W20-2-36

P
END DETOUR M4-8a-24
SOUTH M3-3-24
241 M1-5-24-3

D
DETOUR M4-8-24
NORTH M3-1-24
241 M1-5-24-3
M6-1-21

H
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M5-1-21

L
DETOUR M4-8-24
SOUTH M3-3-24
241 M1-5-24-3
M5-2-21

DETOUR PLAN - STA-241-11.77

DESIGN AGENCY

DESIGNER CMW
REVIEWER LOB 01-20-23
PROJECT ID 106200
SHEET P.14 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: STA-241-1175 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:39:54 AM USER: mpallagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\MOT\Sheets\106200_MD001.dgn

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	7	22	28	34	40	45	52	53		01/NFP/04	02/NFP/04						
																		ROADWAY	
	LUMP											LUMP		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS (POR-14-2848)	5
	LUMP											LUMP		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS (POR-44-1533)	5
	LUMP											LUMP		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS (POR-44-2848)	5
	LUMP											LUMP		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS (POR-700-0400)	5
	LUMP											LUMP		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS (STA-241-1177)	5
					LS	LS	LS					LUMP		202	11000	LS		STRUCTURE REMOVED	
				104	135	116	64	90	108			617		202	23000	617	SY	PAVEMENT REMOVED	
								40				40		202	32000	40	FT	CURB REMOVED	
				84				47	56			131	56	202	35100	187	FT	PIPE REMOVED, 24" AND UNDER	
					34	25	48	10	158			173	102	202	35200	275	FT	PIPE REMOVED, OVER 24"	
								1				1		202	58000	1	EACH	MANHOLE REMOVED	
								2	3			2	3	202	58100	5	EACH	CATCH BASIN REMOVED	
6												6		202	98100	6	EACH	REMOVAL MISC.: INSPECTION WELL	4
60												60		202	98200	60	FT	REMOVAL MISC.: CONDUIT	4
				62	88	100	37		17			304		203	10000	304	CY	EXCAVATION	
				14	138	80	70		39			341		203	20000	341	CY	EMBANKMENT	
18												18		203	20001	18	CY	EMBANKMENT, AS PER PLAN	4
				104	135	116	64	90	108			617		204	10000	617	SY	SUBGRADE COMPACTION	
				38	363	188						589		606	15100	589	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
				2								2		606	26050	2	EACH	ANCHOR ASSEMBLY, MGS TYPE B (MASH 2016)	
					3	1						4		606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
					3	1						4		606	26550	4	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
LUMP												LUMP		SPECIAL	69020010	LS		AS-BUILT CONSTRUCTION PLANS	4
				LUMP								LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (POR-14-2848)	22
					LUMP							LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (POR-44-1533)	28
						LUMP						LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (POR-44-2349)	34
							LUMP					LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (POR-700-0400)	40
								LUMP				LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (STA-172-0025)	45
									LUMP			LUMP		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION (STA-241-1175)	52
																		EROSION CONTROL	
						5						5		601	11000	5	SY	RIPRAP, TYPE D	
						9			6			9	6	601	32104	15	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	
	6											6		601	32200	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
				4	3		3					10		601	32204	10	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
				11	21	40	16		47			135		659	00300	135	CY	TOPSOIL	
				95	187	362	140		425			1,209		659	10000	1,209	SY	SEEDING AND MULCHING	
				0.01	0.03	0.05	0.02		0.06			0.17		659	20000	0.17	TON	COMMERCIAL FERTILIZER	
				0.02	0.04	0.07	0.03		0.08			0.24		659	31000	0.24	ACRE	LIME	
				0.26	0.5	2	0.4		1.14			4.3		659	35000	4.3	MGAL	WATER	
												10,000		832	30000	10,000	EACH	EROSION CONTROL	
																		DRAINAGE	
				1	2		1		1	1		4	2	602	20000	6	CY	CONCRETE MASONRY	
	60											60		611	04400	60	FT	12" CONDUIT, TYPE B	
							36	5	37			41	37	611	04600	78	FT	12" CONDUIT, TYPE C	
	60											60		611	05100	60	FT	12" CONDUIT, TYPE E	
	60											60		611	05200	60	FT	12" CONDUIT, TYPE F	
								42				42		611	05900	42	FT	15" CONDUIT, TYPE B	
				84								84		611	10400	84	FT	24" CONDUIT, TYPE B	
							66					66		611	13400	66	FT	30" CONDUIT, TYPE B	
							12					12		611	13600	12	FT	30" CONDUIT, TYPE C	
					63							63		611	16200	63	FT	36" CONDUIT, TYPE A, 706.02, 707.04, 707.33	
								10	57			67		611	16400	67	FT	36" CONDUIT, TYPE B	
									126				126	611	16600	126	FT	36" CONDUIT, TYPE C	
						87						87		611	19200	87	FT	42" CONDUIT, TYPE A, 706.02, (707.01 OR 707.02) ALUMINIZED, 707.33	
60												60		611	97400	60	FT	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	4
60												60		611	97400	60	FT	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	4

GENERAL SUMMARY

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SHEET P.15 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet 1 PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:40:08 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GG001.dgn

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	7	22	28	34	40	45	52	53		01/NFP/04	02/NFP/04						
																		DRAINAGE	
60												60		611	97400	60	FT	CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	4
60												60		611	97400	60	FT	CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	4
								2				2		611	98180	2	EACH	CATCH BASIN, NO. 3A	
							1					1		611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
							1					1		611	98510	1	EACH	CATCH BASIN, NO. 2-3	
									2				2	611	98540	2	EACH	CATCH BASIN, NO. 2-4	
								1				1		611	99574	1	EACH	MANHOLE, NO. 3	
									1				1	611	99655	1	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	52
6												6		611	99720	6	EACH	INSPECTION WELL	
																		PAVEMENT	
				122	145	52	96	147	126			688		252	01500	688	FT	FULL DEPTH PAVEMENT SAWING	
				433	435	445	577	289	466			2,645		254	01000	2,645	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T = 3")	
				33	49	34	19	36	42			213		301	56000	213	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				18	25	23	14	16	20			116		304	20000	116	CY	AGGREGATE BASE	
				58	70	35	78	34	70			345		407	20000	345	GAL	NON-TRACKING TACK COAT	
					26				23			49		408	10001	49	GAL	PRIME COAT, AS PER PLAN	5
				37	36	50	48	25	39			235		441	70101	235	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN	5
								40				40		609	26000	40	FT	CURB, TYPE 6	
					4				4			8		617	10101	8	CY	COMPACTED AGGREGATE, AS PER PLAN	5
																		TRAFFIC CONTROL	
				15	15	15	15	15				75		630	02100	75	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
				2	2	2	2	2				10		630	80100	10	SF	SIGN, FLAT SHEET, 730.20	
					2			2				4		630	84900	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
					2			2				4		630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
				0.01	0.06	0.06	0.06		0.04			0.23		642	00104	0.23	MILE	EDGE LINE, 6", TYPE 1	
								0.02				0.02		642	00204	0.02	MILE	LANE LINE, 6", TYPE 1	
				0.01	0.03	0.03	0.03	0.01	0.02			0.13		642	00300	0.13	MILE	CENTER LINE, TYPE 1	
																		RETAINING WALLS (XXX)	
				LS								LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-14-2848)	
					LS							LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-44-1533)	
						LS						LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-44-2349)	
							LS					LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-700-0400)	
								LS				LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (STA-172-0025)	
									LS			LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (STA-241-1177)	
																		MAINTENANCE OF TRAFFIC	
			50									50		614	11110	50	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (POR-14-2848)	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (POR-44-1533)	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (POR-44-2349)	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (POR-700-0400)	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (STA-172-0025)	
		LUMP										LUMP		614	12420	LS		DETOUR SIGNING (STA-241-1177)	
		20										20		614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		16										16		614	18601	16	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
																		INCIDENTALS	
												LUMP		614	11000	LS		MAINTAINING TRAFFIC	
												4		619	16010	4	MNTH	FIELD OFFICE, TYPE B	
												LUMP		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LUMP		624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

POR/STA-CULVERTS-FY2023

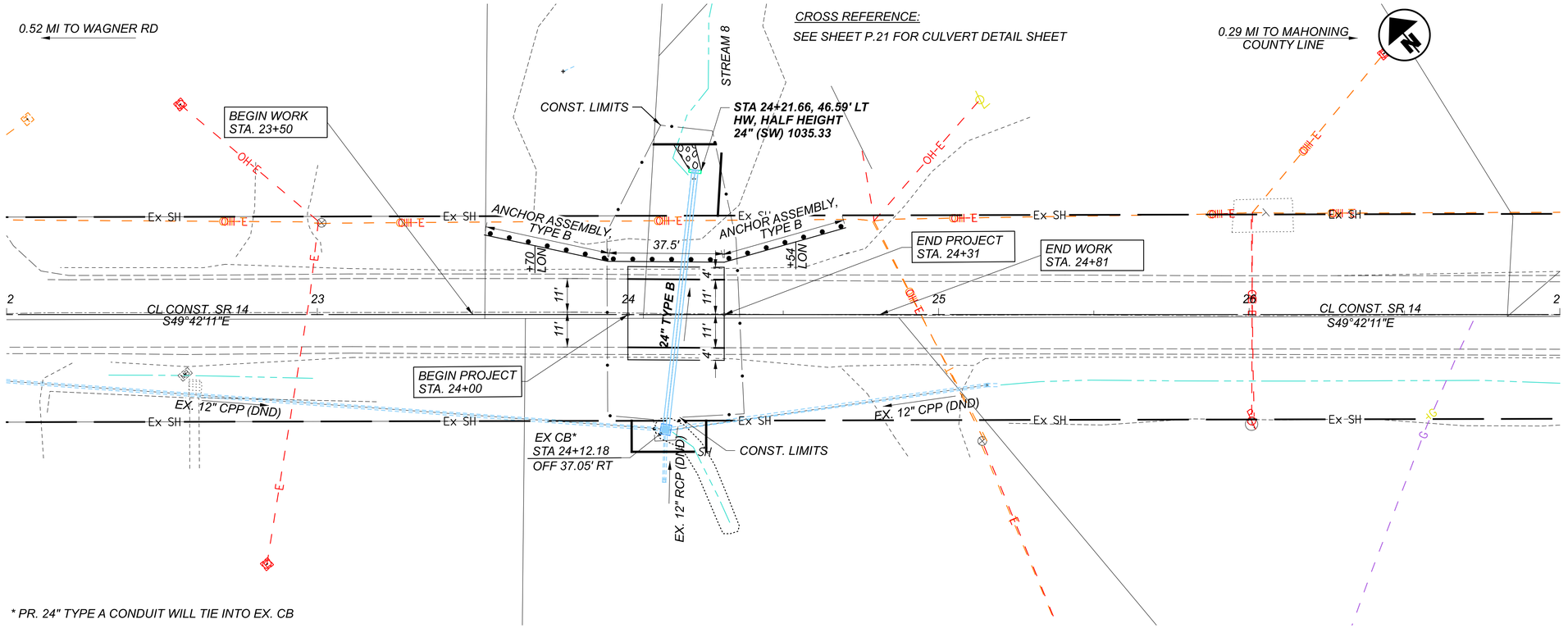
DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SHEET P.16 TOTAL 53



HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 14
STA. 22+00 - STA. 27+00

POR/STA-CULVERTS-FY2023

MODEL: CLX_14 - Plan [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 04:16:26 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GP101.dgn

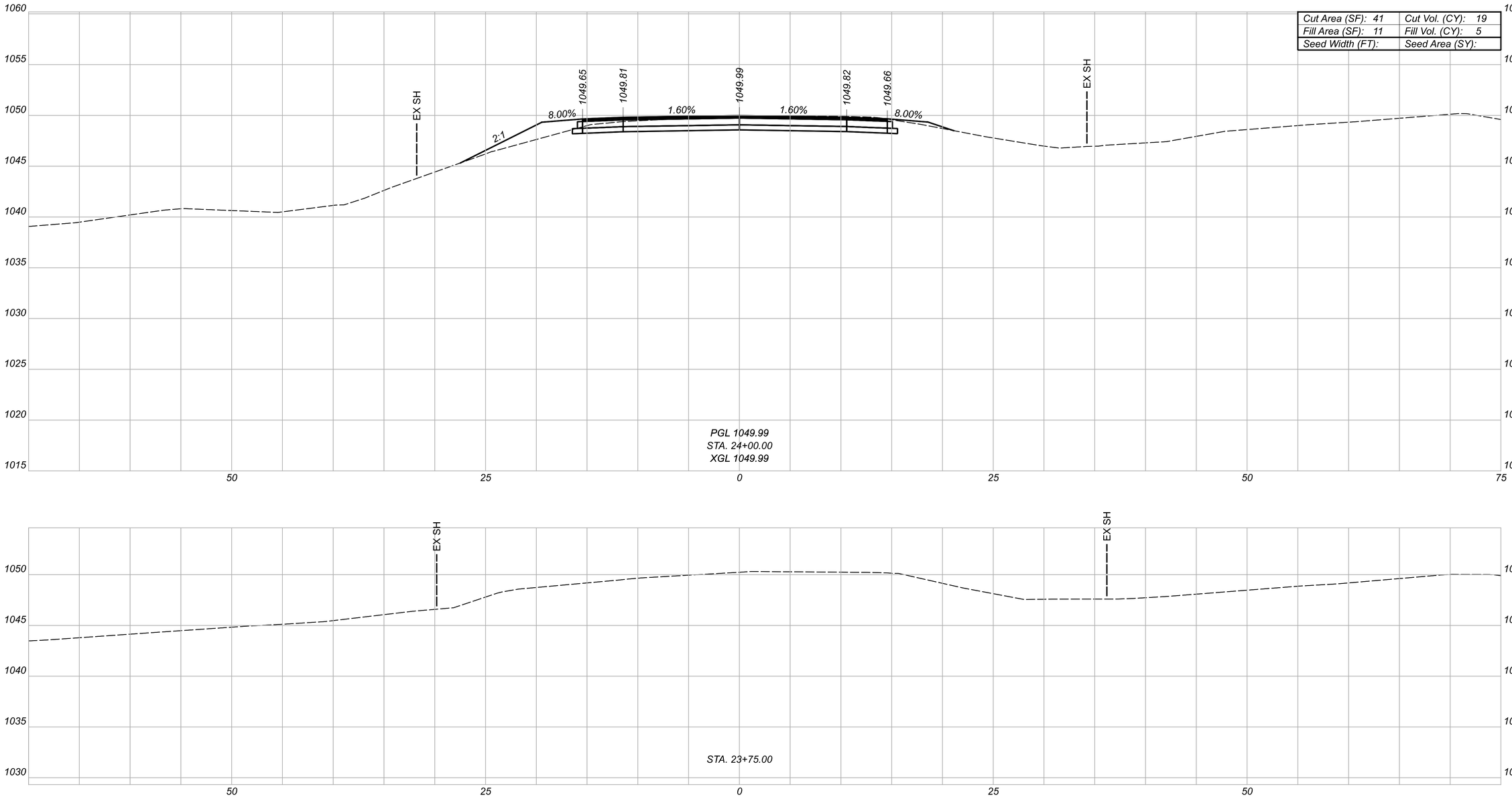
DESIGN AGENCY

DESIGNER KMB

REVIEWER MJP 01-20-23

PROJECT ID 106200

SHEET P.17 TOTAL 53



Cut Area (SF): 41	Cut Vol. (CY): 19
Fill Area (SF): 11	Fill Vol. (CY): 5
Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 14
STA. 23+75.00 - STA. 24+00.00

POR/STA-CULVERTS-FY2023

MODEL: CLX_I4 - 23+75.00 [Sheet] PAPERSIZE: 34x22 (in) DATE: 4/18/2023 TIME: 10:41:51 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_XS101.dgn

Sheet Totals		
Seeding	Cut	Fill
-	19	5

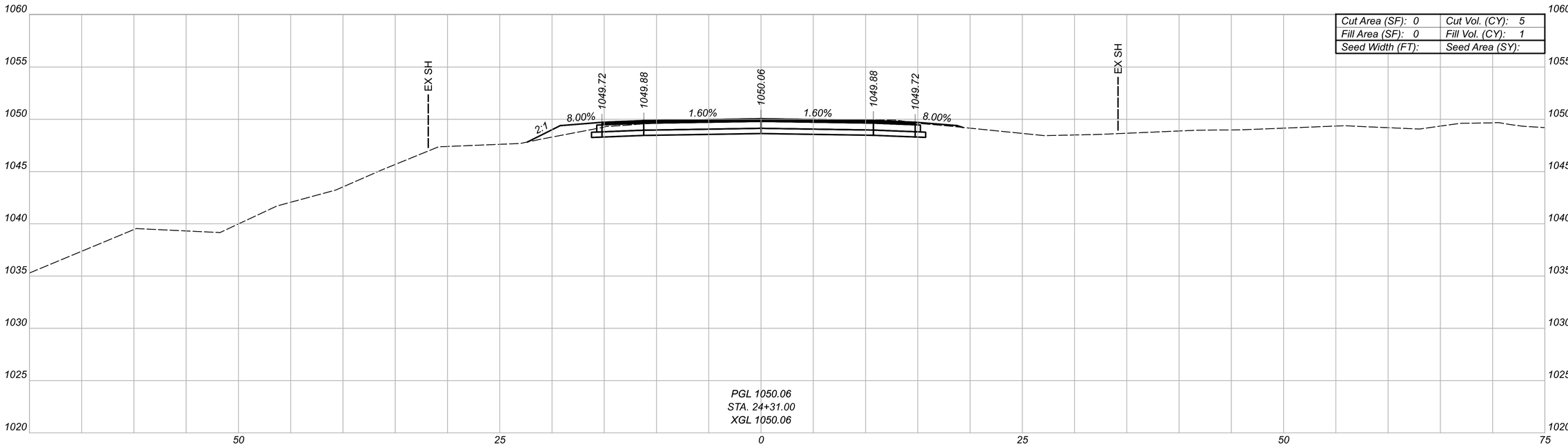
DESIGN AGENCY

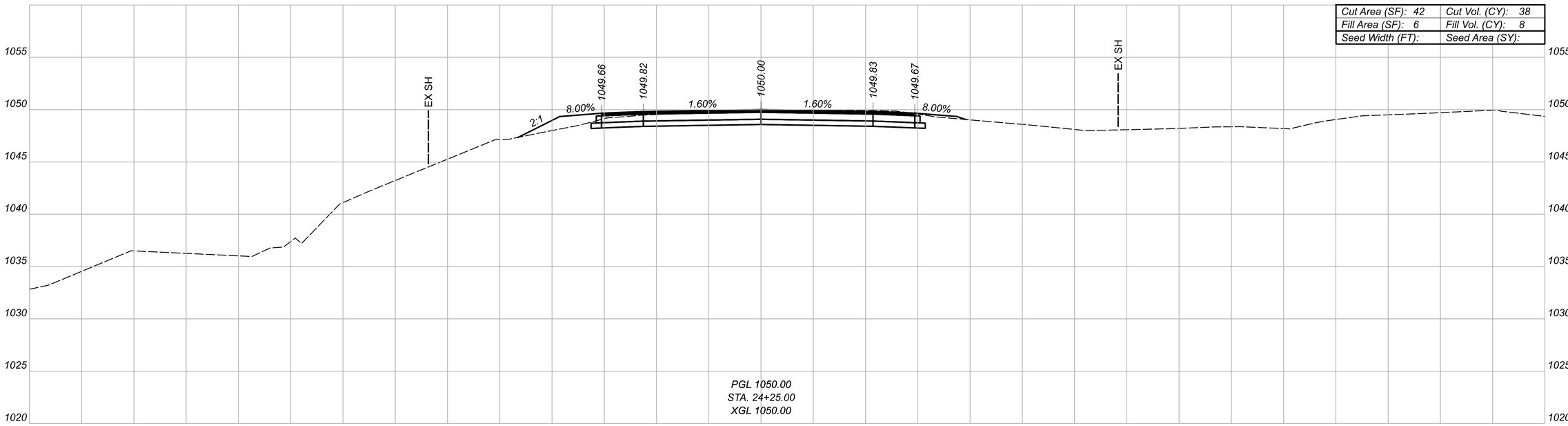
DESIGNER: KMB

REVIEWER: MJP 01-20-23

PROJECT ID: 106200

SHEET: P.18 | TOTAL: 53





CROSS SECTIONS - SR 14
STA. 24+50.00

POR/STA-CULVERTS-FY2023

MODEL: CLX_I4 - 24+25.00 [Sheet] PAPERSIZE: 34x22 (In.) DATE: 4/18/2023 TIME: 10:41:56 AM USER: mpalagan
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DESIGN AGENCY

DESIGNER
KMB

REVIEWER
MJP 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	43	9

SHEET P.20

TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLX_I4 - 24+50.00 (Sheet) PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:42:02 AM USER: mpalagan
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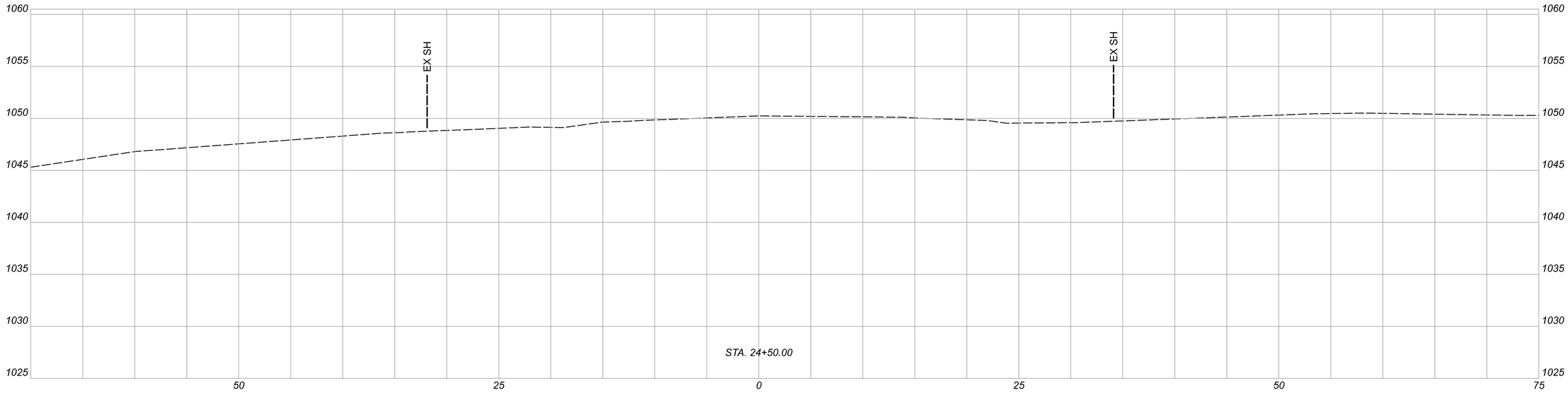


CROSS SECTIONS - SR 14
STA. 24+25.00 - STA. 24+31.00

DESIGN AGENCY

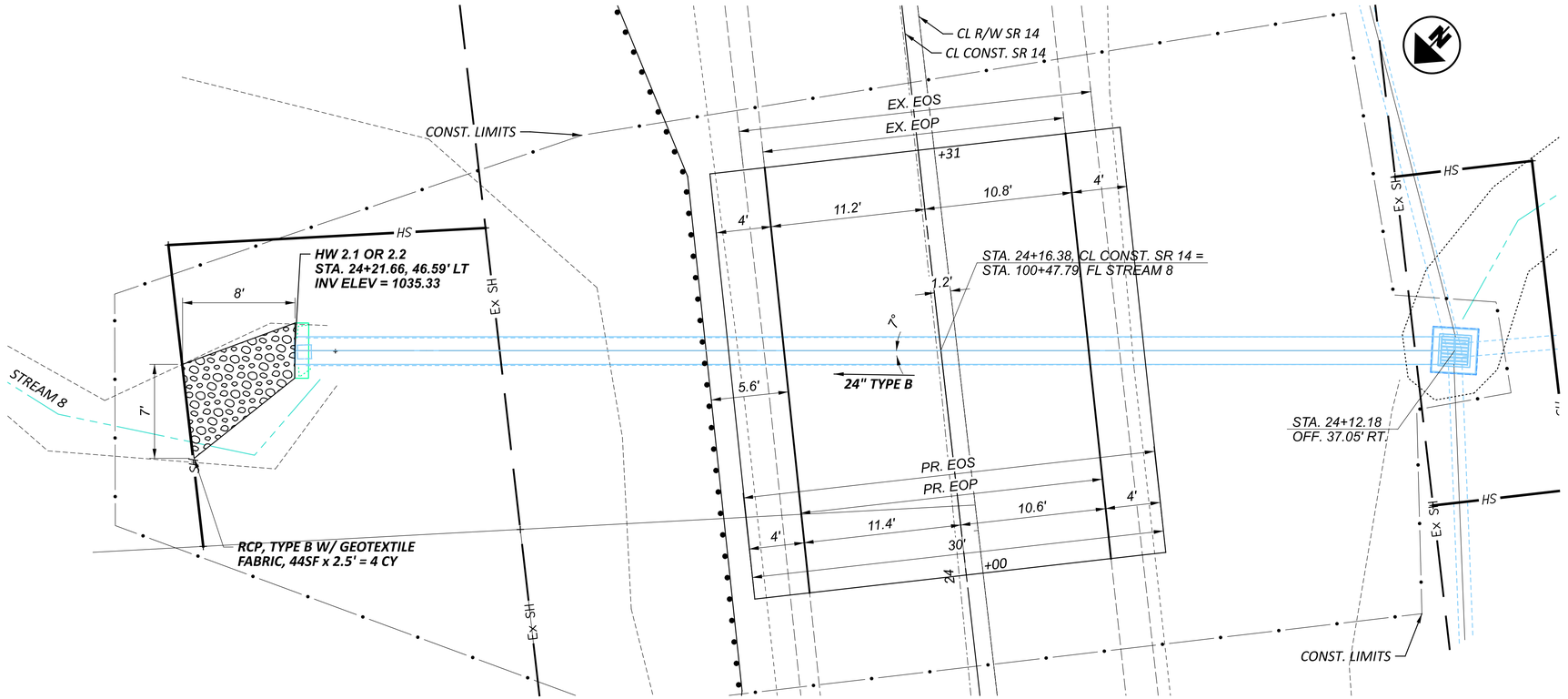
DESIGNER
KMB

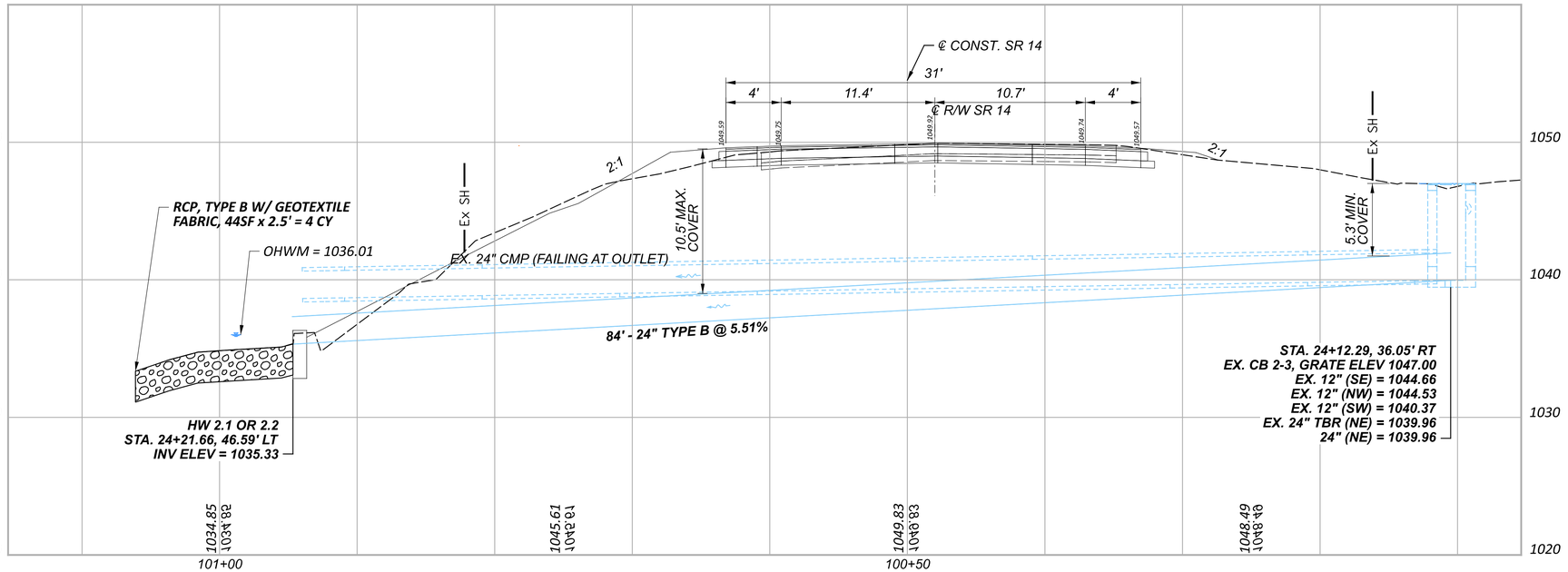
REVIEWER
MJP 01-20-23

PROJECT ID
10600

Sheet Totals		
Seeding	Cut	Fill
-	-	-

SHEET P.19 TOTAL 53





HYDRAULIC DATA

DRAINAGE AREA = 21.2 ACRES
Q (10) = 35.2 CFS V (10) = 16.15 FT/S
Q (25) = 42.9 CFS V (25) = 16.65 FT/S
ORDINARY HIGH WATER MARK: 1036.01 FT
DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 2
pH: 8

EXISTING CULVERT

TYPE: 24" CMP
SKEW: 7° LF
ALIGNMENT: TANGENT
DATE BUILT: UNKNOWN
CONDITION: TO BE REMOVED AND REPLACED
CFN: 1867561

PROPOSED CULVERT

TYPE: 24" CONDUIT, TYPE B
SKEW: 7° LF
ALIGNMENT: TANGENT
HEADWALL: HALF HEIGHT, PER SCD HW 2.1 OR 2.2
CFN: 1989157

HORIZONTAL SCALE IN FEET
0 2.5 5 10

CULVERT DETAIL
POR-14-2848

DESIGN AGENCY

DESIGNER KMB
REVIEWER MJP 01-20-23
PROJECT ID 106200
SUBSET 5 TOTAL 6
SHEET P.21 TOTAL 53

POR/STA-CULV-FY2023

MODEL: CLP_1 - Plan 2 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:42:29 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DC101.dgn

SURVEYING PARAMETERS

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

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011) EPOCH 2010.00
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC 2 STANDARD PARALLEL
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.999895241
ORIGIN OF COORDINATE SYSTEM: 0,0 AT LAT N 39° 27' 01.76097", LONG W 89° 28' 32.98476'

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 SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTORâ€™S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSESD SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS: POR-14-2848

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 24+00 TO. STA 24+31 (SR 14)

ITEM 202 - PAVEMENT REMOVED	104 SY
ITEM 204 - SUBGRADE COMPACTION	104 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	122 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=11")	33 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=6")	18 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	6 GAL

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 23+50 TO STA. 24+81

ITEM 254 - PAVEMENT PLANING (T=3")	433 SQ. YD.
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	52 GAL.
441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22 (TWO 1 1/2" LIFTS)	37 CU. YD.

THE ABOVE QUANTITIES ARE BASED ON A RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS AND A LENGTH OF 50' ON EACH SIDE OF THE REQUIRED TRENCH WIDTH FOR INSTALLATION AND/OR REMOVAL.

EXCAVATION AND EMBANKMENT

THE FOLLOWING QUANTITIES HAVE BEEN TAKEN FROM SHEETS P.18 - P.19 AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION	62 CY
ITEM 204 - EMBANKMENT	14 CY

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - EDGE LINE, 6", TYPE 1	0.01 MI
ITEM 642 - CENTER LINE, TYPE 1	0.01 MI

SEEDING AND MULCHING

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

659, TOPSOIL	11 CU. YD.
659, SEEDING AND MULCHING	95 SQ. YD.
659, COMMERCIAL FERTILIZER	0.01 TON
659, LIME	0.02 ACRES
659, WATER	0.26 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.

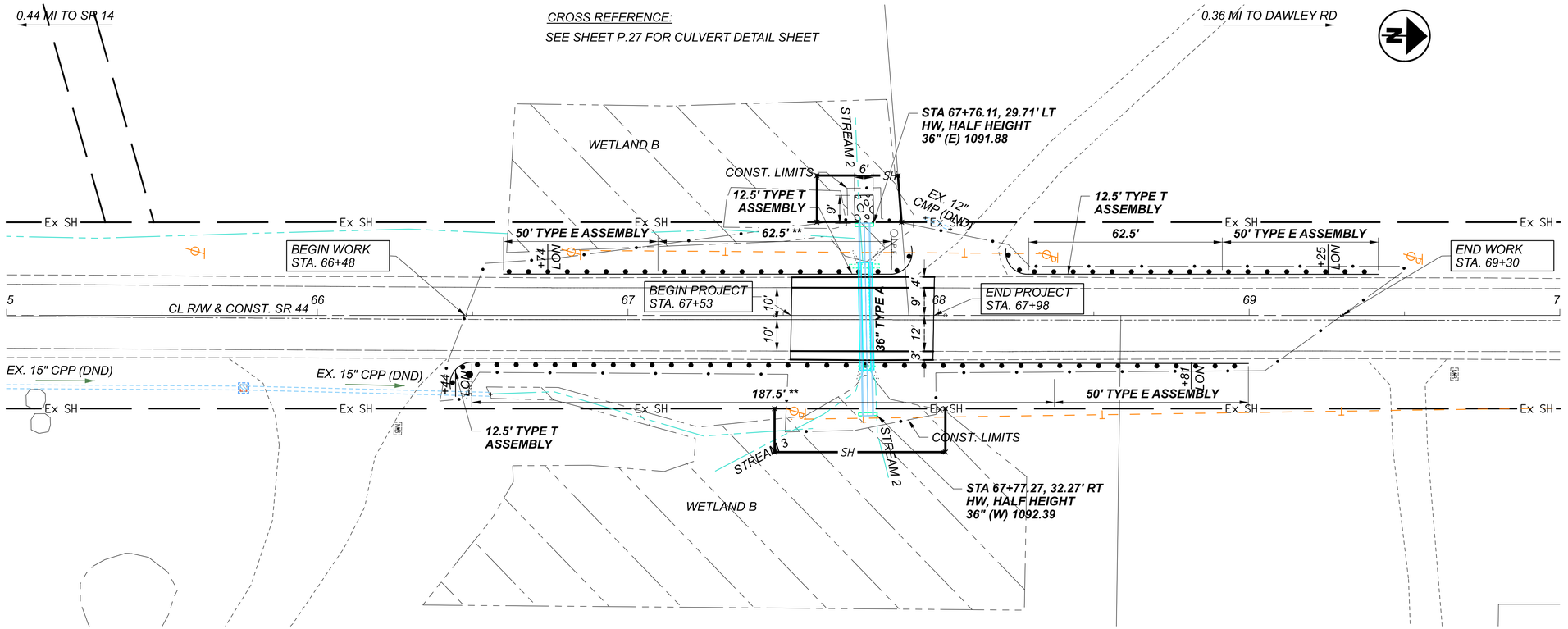
REF NO.	SHEET NO.	STATION TO STATION					202 PIPE REMOVED, 24" AND UNDER (FT)	503 COFFERDAMS AND EXCAVATION BRACING (POR-14-2848)	601 ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC (CY)	602 CONCRETE MASONRY (CY)	606 GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	606 ANCHOR ASSEMBLY, MGS TYPE B (MASH 2016) (EACH)	611 24" CONDUIT, TYPE B (FT)			
D-1		24+12.18	RT	TO	24+21.66	LT	84	LUMP	4	0.46	37.5	2	84			
TOTALS CARRIED TO GENERAL SUMMARY							84	LS	4	1	38	2	84			

DRAINAGE NOTES - POR-14-2848

DESIGN AGENCY

DESIGNER KMB
REVIEWER MJP 01-20-23
PROJECT ID 106200
SHEET P.22 TOTAL 53

POR/STA-CULV-FY2023



HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 44
STA. 65+00 - STA. 70+00

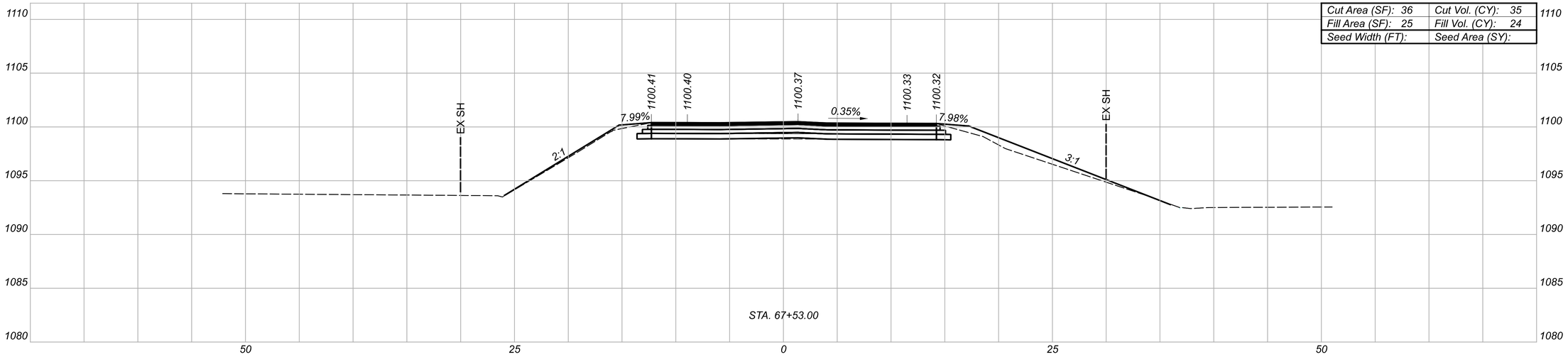
DESIGN AGENCY

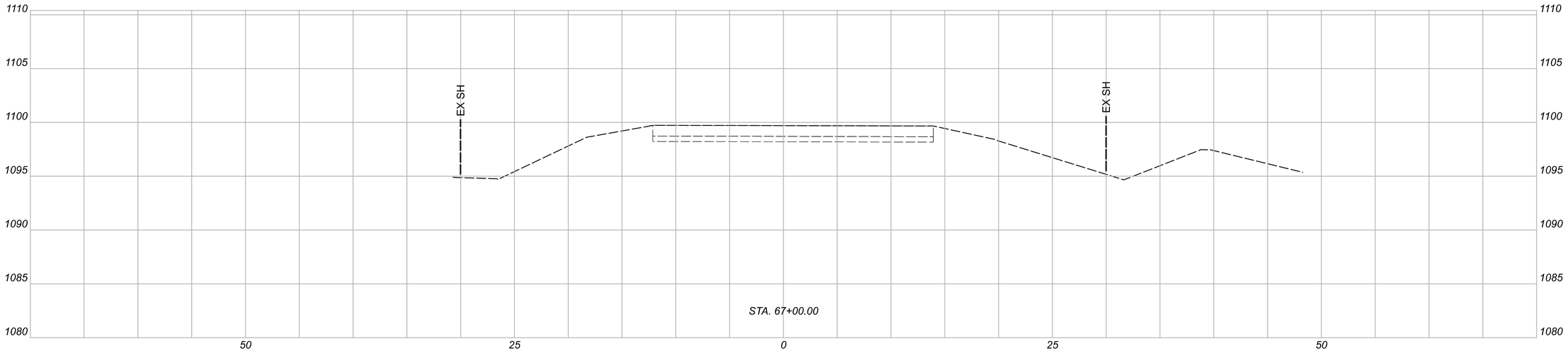
DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 1 TOTAL 6
SHEET P.23 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CL44 - Plan (ESheet) PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:43:23 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GP201.dgn

Cut Area (SF): 36	Cut Vol. (CY): 35
Fill Area (SF): 25	Fill Vol. (CY): 24
Seed Width (FT):	Seed Area (SY):





CROSS SECTIONS - SR 44
STA. 67+00 - STA. 67+53

DESIGN AGENCY

DESIGNER
MJP

REVIEWER
EMS 01-20-23

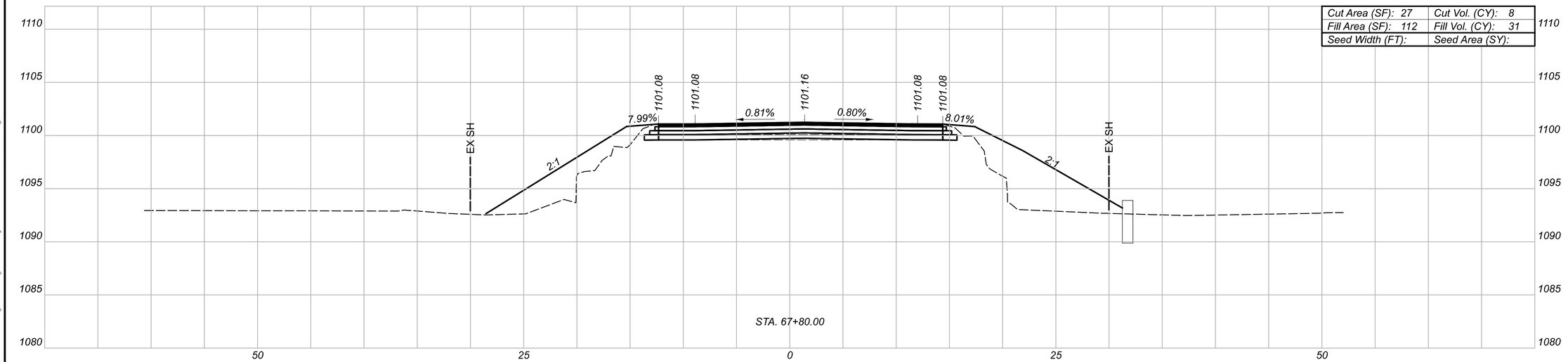
PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	35	24

SHEET P.24 TOTAL 53

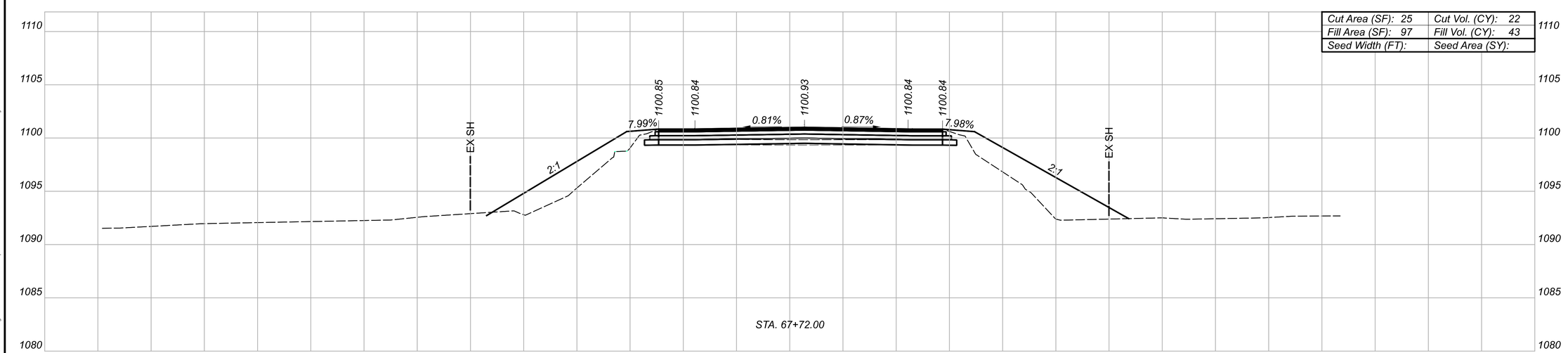
POR/STA-CULVERTS-FY2023

MODEL: CL44 - 67+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:44:02 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_XS201.dgn



Cut Area (SF): 27	Cut Vol. (CY): 8
Fill Area (SF): 112	Fill Vol. (CY): 31
Seed Width (FT):	Seed Area (SY):

STA. 67+80.00



Cut Area (SF): 25	Cut Vol. (CY): 22
Fill Area (SF): 97	Fill Vol. (CY): 43
Seed Width (FT):	Seed Area (SY):

STA. 67+72.00

CROSS SECTIONS - SR 44
STA. 67+72 - 67+80

Sheet Totals		
Seeding	Cut	Fill
-	30	74

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SHEET P.25 | TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CL44 - 67+72.00 [Sheet] PAPERSIZE: 34x22 (in) DATE: 4/18/2023 TIME: 10:44:12 AM USER: mpalagan
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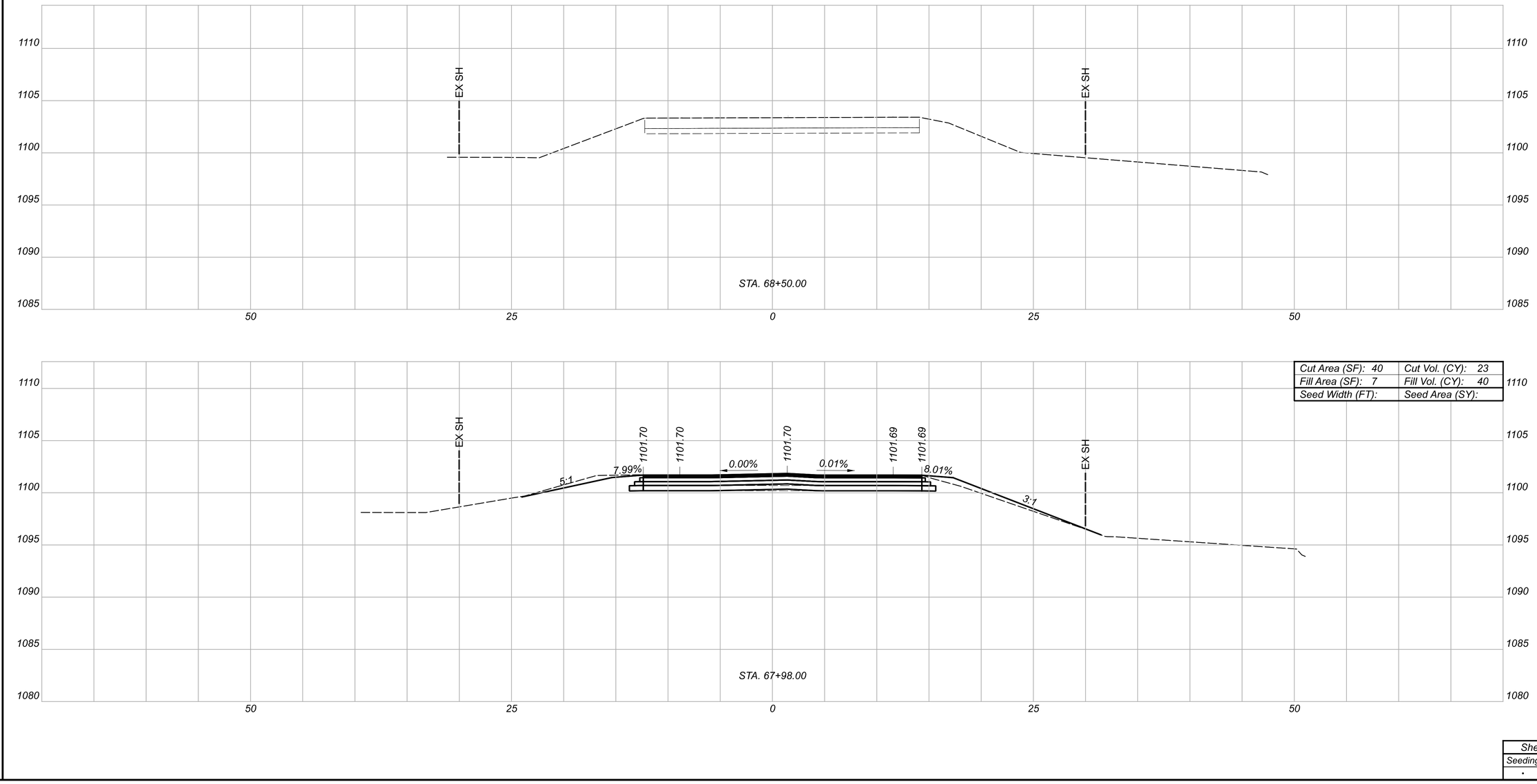


Cut Area (SF): 40	Cut Vol. (CY): 23
Fill Area (SF): 7	Fill Vol. (CY): 40
Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 44
STA. 67+98 - STA. 68+50

POR/STA-CULVERTS-FY2023

MODEL: CL44 - 67+98.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:44:18 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_XS201.dgn

Sheet Totals		
Seeding	Cut	Fill
-	23	40

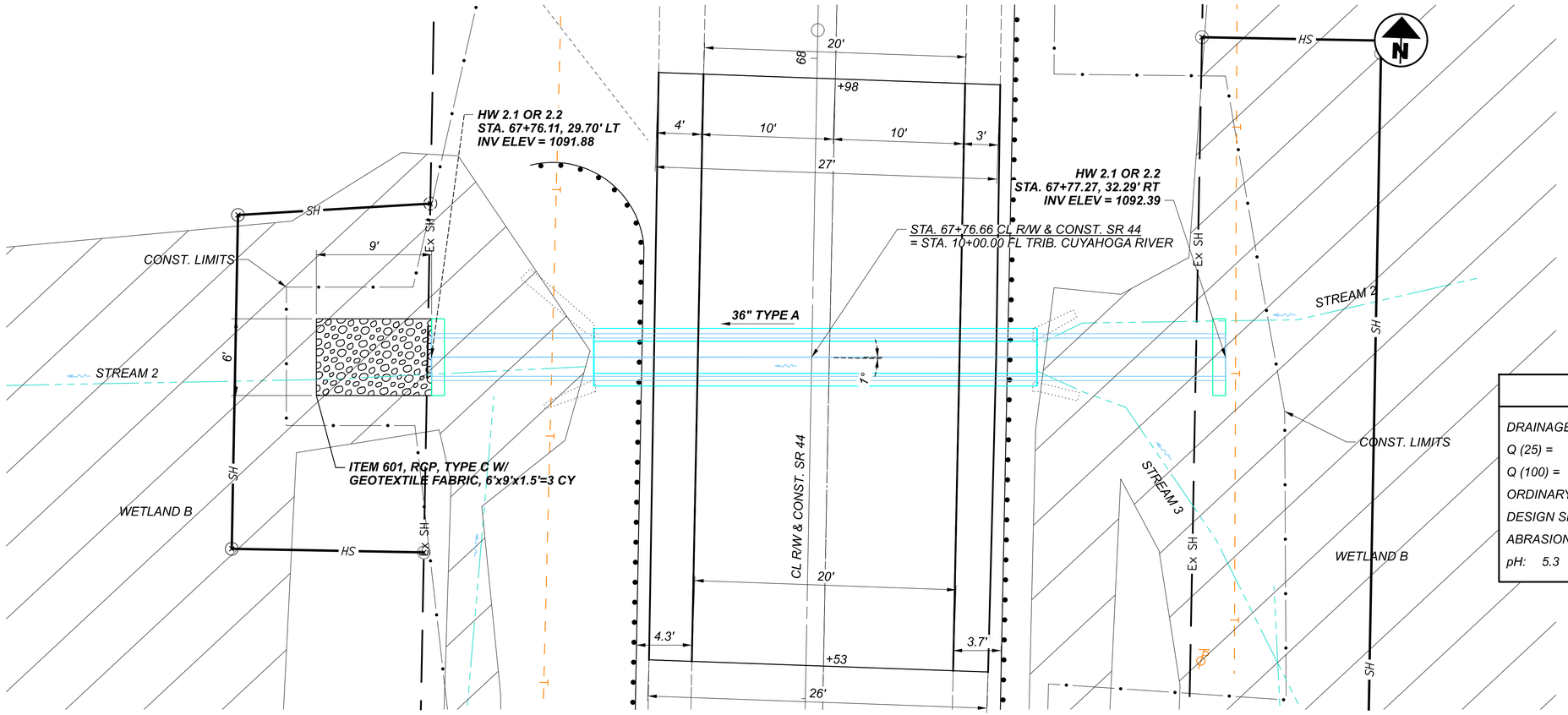
DESIGN AGENCY

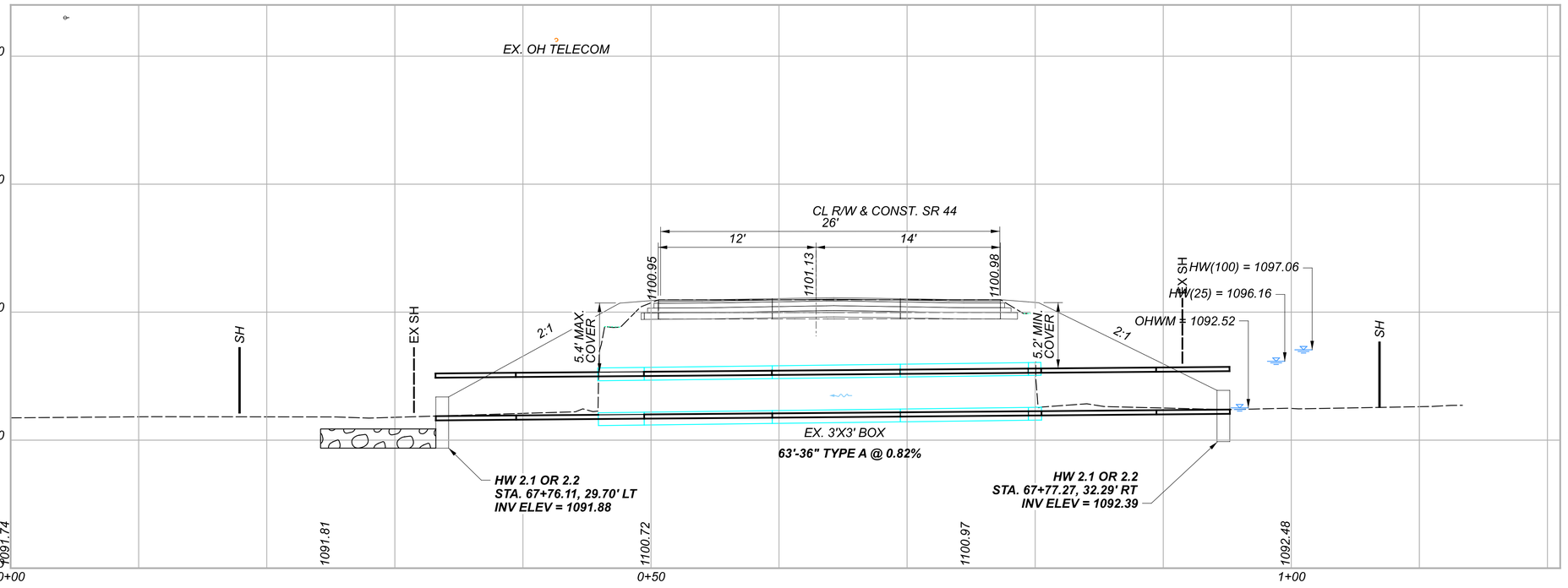
DESIGNER
MJP

REVIEWER
EMS 01-20-23

PROJECT ID
106200

SHEET P.26 | TOTAL 53





HYDRAULIC DATA

DRAINAGE AREA = 26.47 ACRES

Q (25) = 40.4 CFS V (25) = 9.01 FT/S HW (25) = 1096.16 FT

Q (100) = 49.1 CFS V (100) = 9.50 FT/S HW (100) = 1097.06 FT

ORDINARY HIGH WATER MARK: 1092.52 FT

DESIGN SERVICE LIFE: 75 YEARS

ABRASION LEVEL: 1

pH: 5.3

EXISTING STRUCTURE

TYPE: 3' X 3' CONCRETE BOX

SKEW: NONE

ALIGNMENT: TANGENT

DATE BUILT: 1915?

DISPOSITION: TO BE REMOVED AND REPLACED

CFN: 1867576

PROPOSED STRUCTURE

TYPE: 36" TYPE A, 706.02, 707.04, 707.33

SKEW: 1° RF

ALIGNMENT: TANGENT

CFN: 1989158

HORIZONTAL SCALE IN FEET
0 2.5 5 10

CULVERT DETAIL - POR-44-1533
OVER TRIBUTARY CUYAHOGA RIVER

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

SUBSET 5 TOTAL 6

SHEET P.27 TOTAL 53

POR-STA-CULVERTS-FY2023

MODEL: SCL1 - Plan (ESheet) PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:44:53 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DC201.dgn

SURVEYING PARAMETERS

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

PROJECT CONTROL

POSITIONING METHOD: STATIC
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 2018

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH ZONE (3401)
COMBINED SCALE FACTOR: 0.99989247
ORIGIN OF SCALE (X,Y): EASTING (X): 0, NORTHING (Y): 0

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 SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSESD SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS:
POR-44-1533 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 67+53 TO. STA 67+98 (SR 44)

ITEM 202 - PAVEMENT REMOVED	135 SY
ITEM 204 - SUBGRADE COMPACTION	135 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	145 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=12")	49 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=6")	25 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	18 GAL

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 67+03 TO STA. 68+48 (SR 44)

ITEM 254 - PAVEMENT PLANING (T=3") 435 SQ. YD.	
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	52 GAL
ITEM 408 - PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	26 GAL
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22 (TWO 1 ½" LIFTS)	36 CY
ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN (T=2")	4 CY

THE ABOVE QUANTITIES ARE BASED ON RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS FOR INSTALLATION AND/OR REMOVAL.

PROPOSED FULL DEPTH PAVEMENT WILL RE-ESTABLISH THE NORMAL CROWN AT 1.60%. THE CONTRACTOR SHALL TRANSITION THE PAVEMENT DURING RESURFACING TO TIE INTO EXISTING PAVEMENT'S CROWN.

EXCAVATION AND EMBANKMENT

THE FOLLOWING QUANTITY HAS BEEN TAKEN FROM SHEETS P.24-P.26 AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION	88 CY
ITEM 203 - EMBANKMENT	138 CY

SEEDING AND MULCHING

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

659, TOPSOIL, 21 CY
659, SEEDING AND MULCHING, 187 SY
659, COMMERCIAL FERTILIZER, 0.03 TON
659, LIME, 0.04 ACRES
659, WATER, 0.5 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.

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - EDGE LINE, 6", TYPE 1	0.06 MI
ITEM 642 - CENTER LINE, TYPE 1	0.03 MI

REF NO.	SHEET NO.	STATION TO STATION					202	202	503	601	602	606	606	606	611
							STRUCTURE REMOVED	PIPE REMOVED, OVER 24"	COFFERDAMS AND EXCAVATION BRACING (POR-44-1533)	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	CONCRETE MASONRY	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	36" CONDUIT, TYPE A, 706.02, 707.04, 707.33
								FT		CY	CY	FT	EACH	EACH	FT
D-1		67+77.27	RT	TO	67+76.11	LT	LUMP	34	LUMP	3	1.2	362.5	3	3	63
TOTALS CARRIED TO GENERAL SUMMARY							LS	34	LS	3	2	363	3	3	63

DRAINAGE NOTES
POR-44-15.33
OVER TRIB. CUYAHOGA RIVER

DESIGN AGENCY

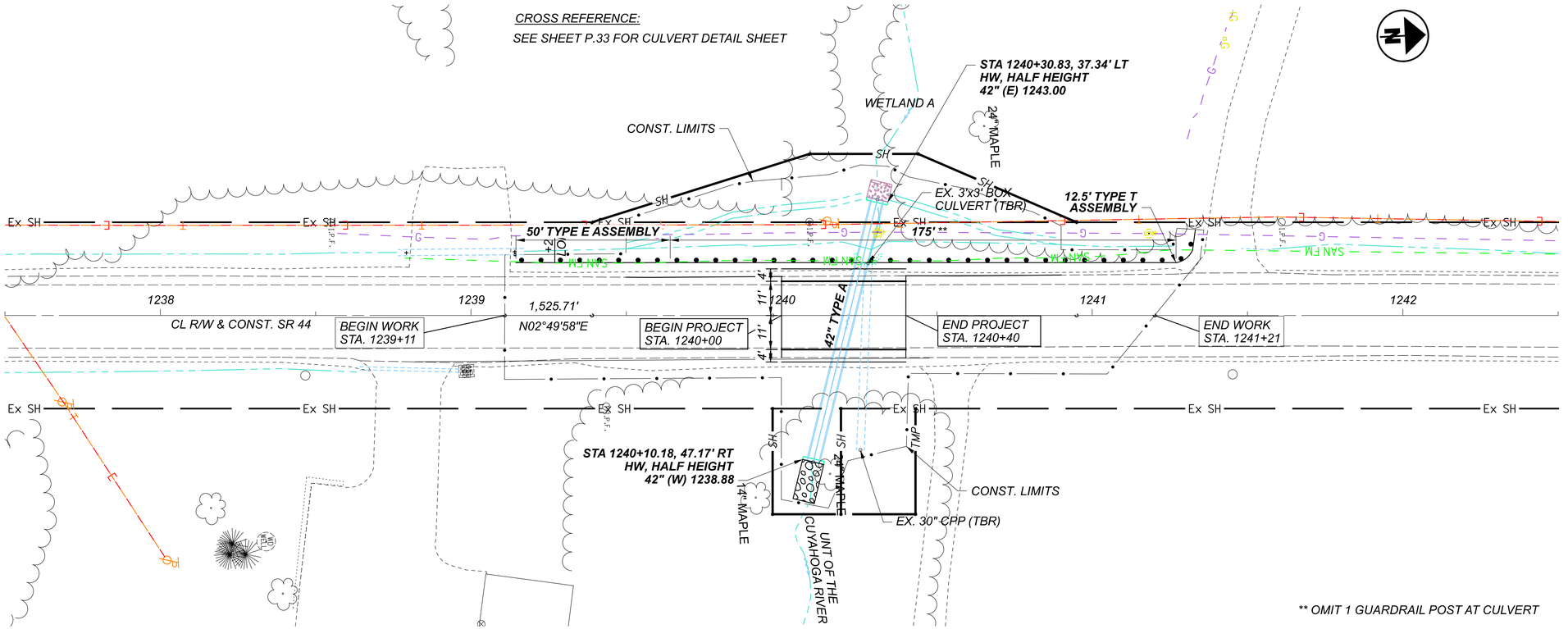
DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 6 TOTAL 6
SHEET P.28 TOTAL 53

POR/STA-CULV-FY2023

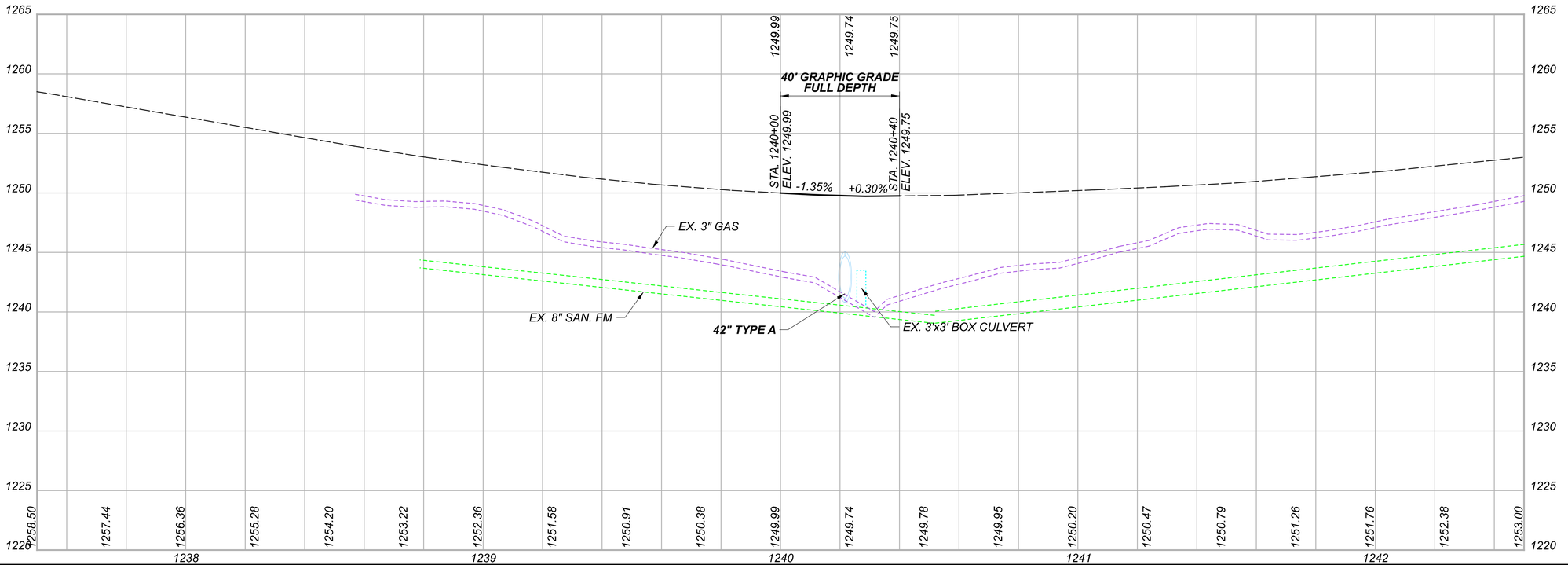
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:45:19 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DN201.dgn

MODEL: CLX_S44 - Plan [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:45:49 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GP302.dgn

CROSS REFERENCE:
SEE SHEET P.33 FOR CULVERT DETAIL SHEET



** OMIT 1 GUARDRAIL POST AT CULVERT



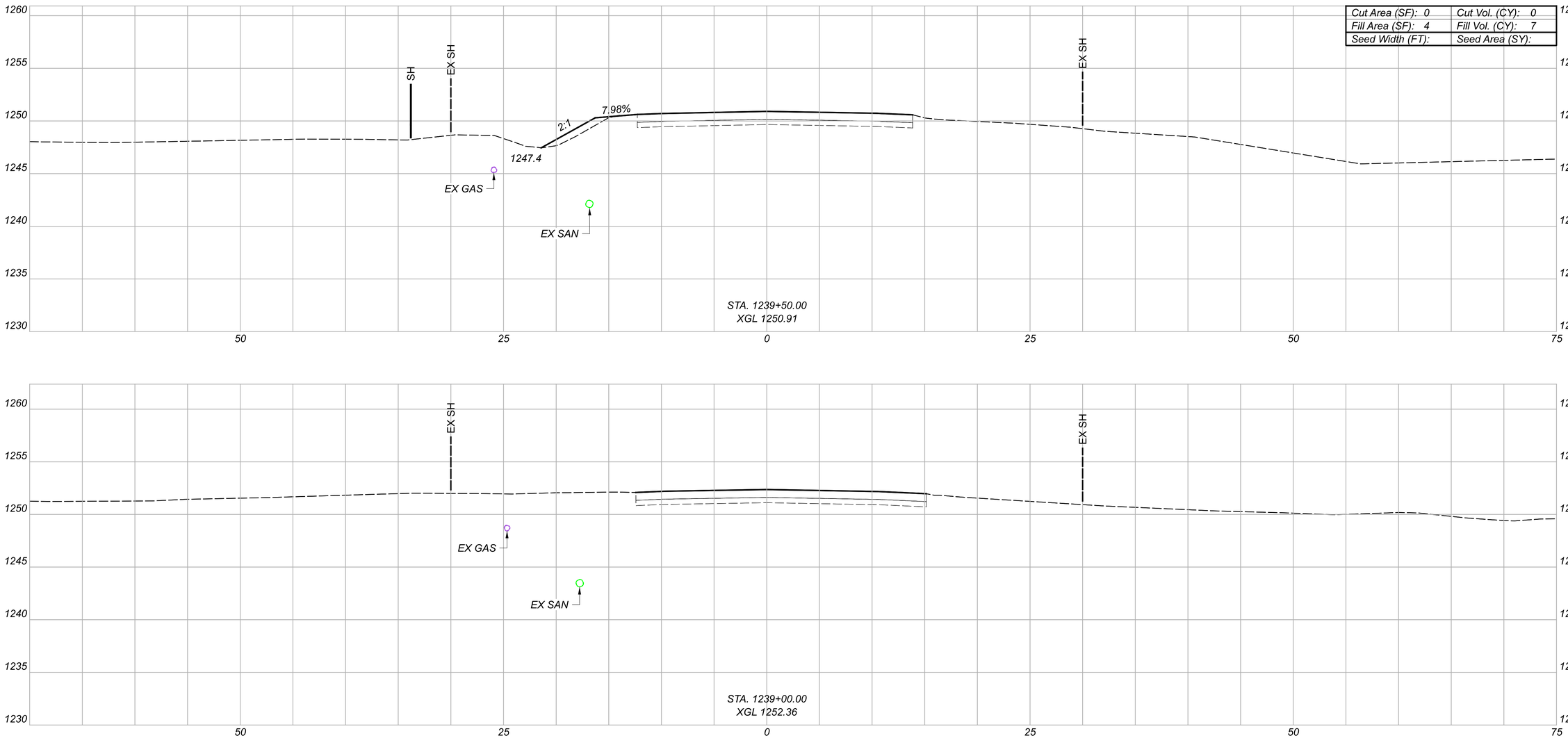
HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 44
STA. 1237+50 - STA. 1242+50

DESIGN AGENCY

DESIGNER AJN
REVIEWER MJP 01-20-23
PROJECT ID 106200
SHEET P.29 TOTAL 53

POR/STA-CULVERTS-FY2023



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Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 44
STA.1239+00.00 TO STA. 1239+50.00

DESIGN AGENCY

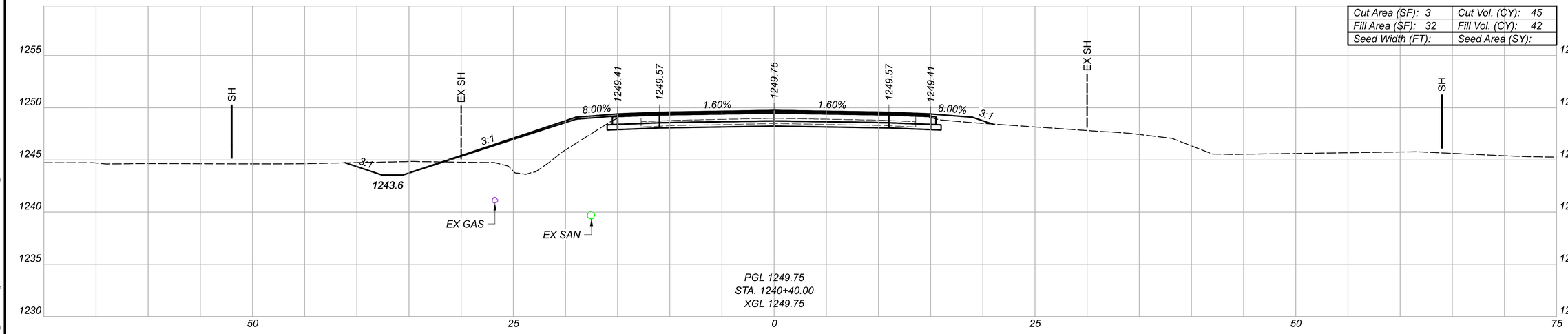
DESIGNER AJN

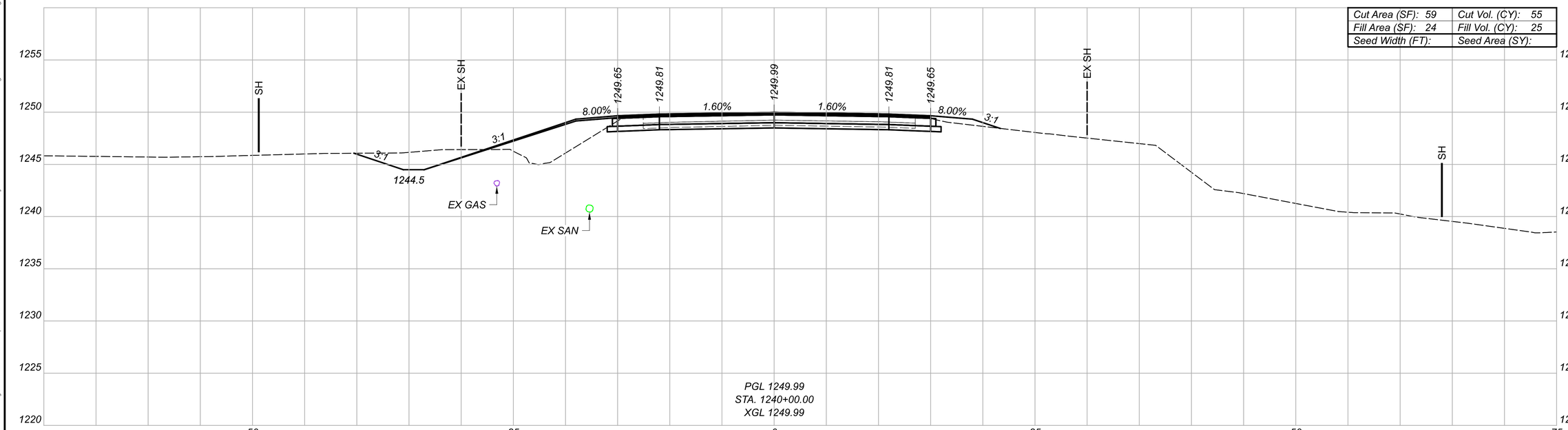
REVIEWER MJP 01-20-23

PROJECT ID 106200

Sheet Totals		
Seeding	Cut	Fill
-	-	7

SHEET P.30 TOTAL 53





CROSS SECTIONS - SR 44
STA.1240+00.00 TO STA. 1240+40.00

POR/STA-CULVERTS-FY2023

MODEL: CLX_S44 - 1240+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:46:20 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_XS301.dgn

Sheet Totals		
Seeding	Cut	Fill
-	160	67

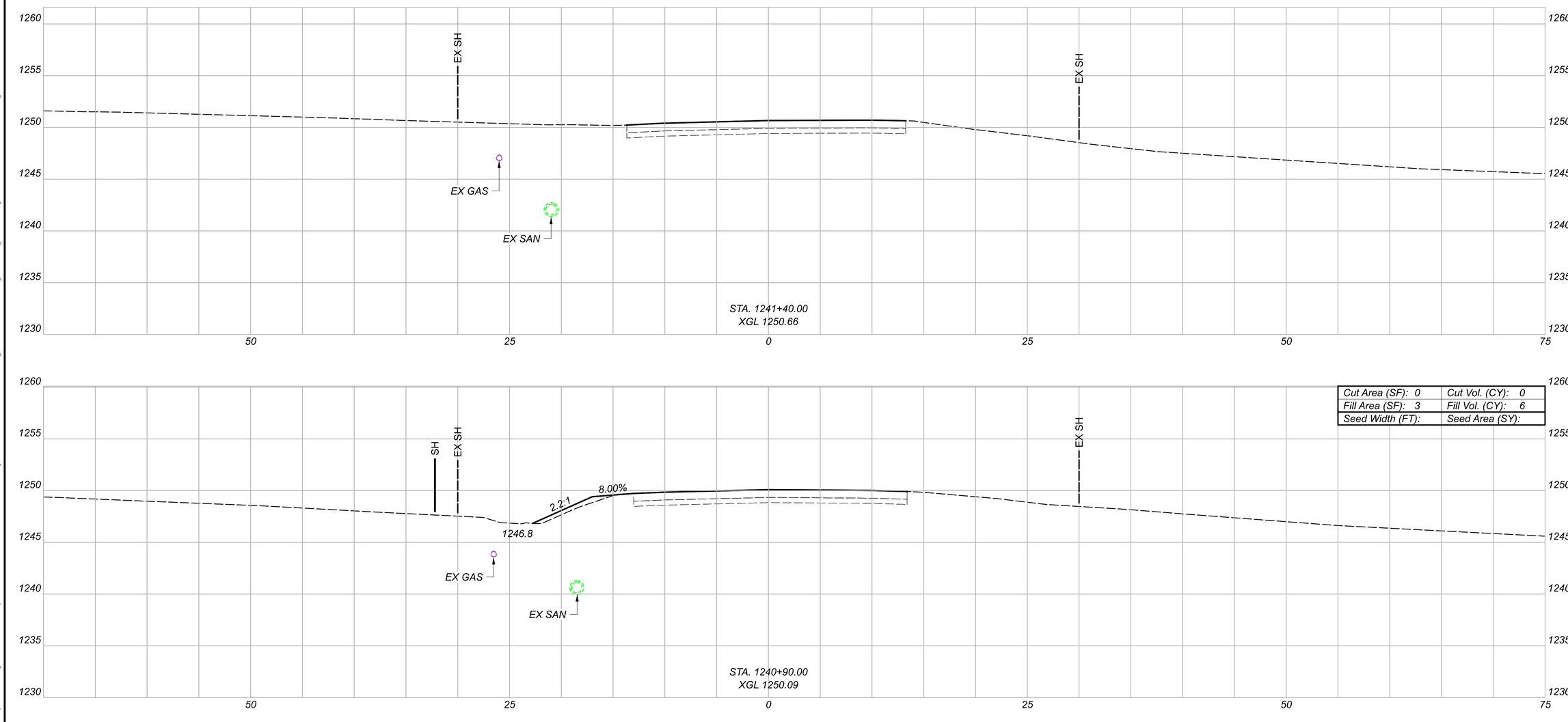
DESIGN AGENCY

DESIGNER: AJN

REVIEWER: MJP 01-20-23

PROJECT ID: 106200

SHEET: P.31 | TOTAL: 53



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Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 44
STA. 1240+90.00 TO STA. 1241+40.00

DESIGN AGENCY

DESIGNER
AJN

REVIEWER
MJP 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	-	6

SHEET P.32 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLX_S44 - 1240+90.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:46:25 AM USER: mpalagan
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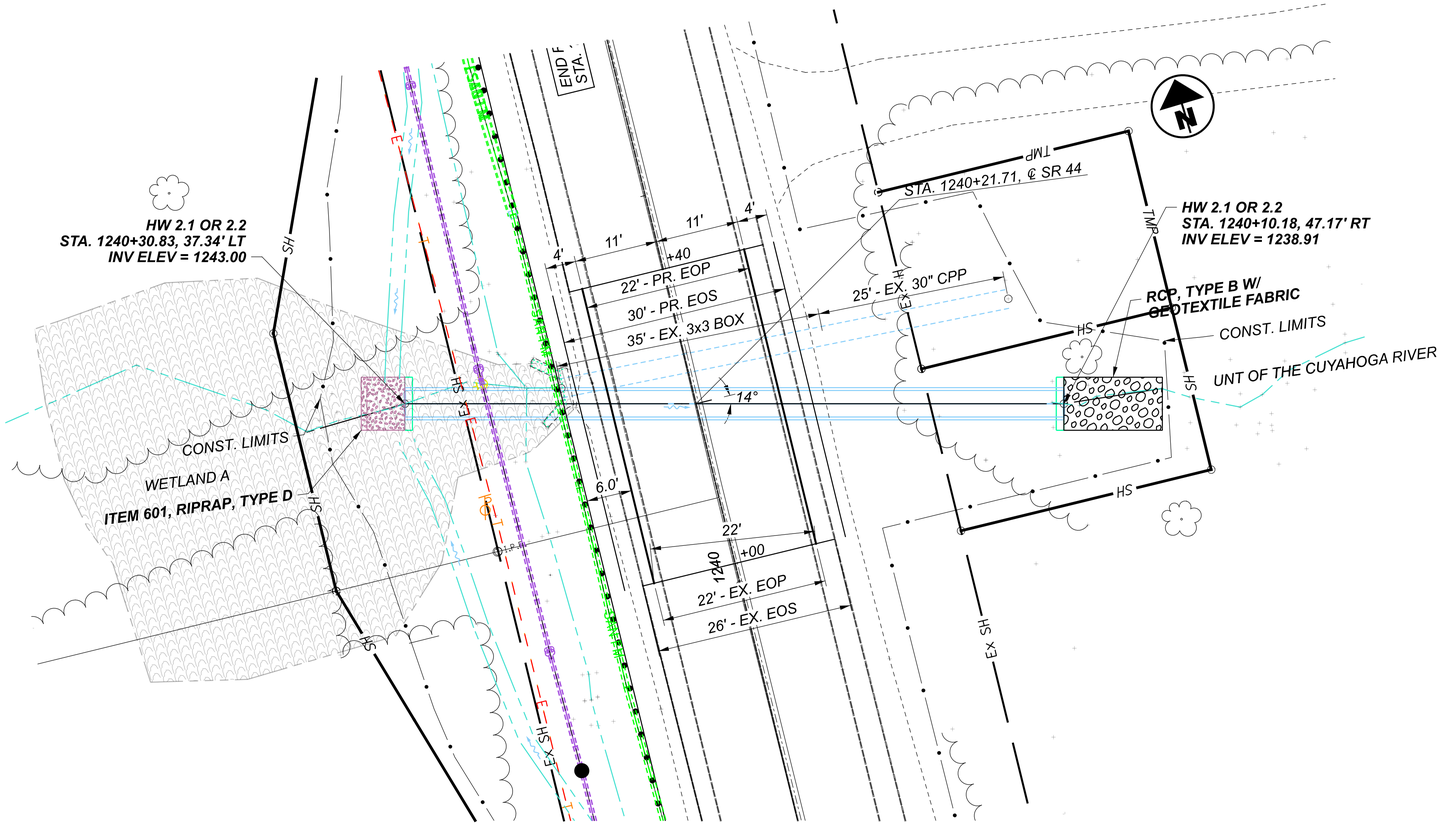
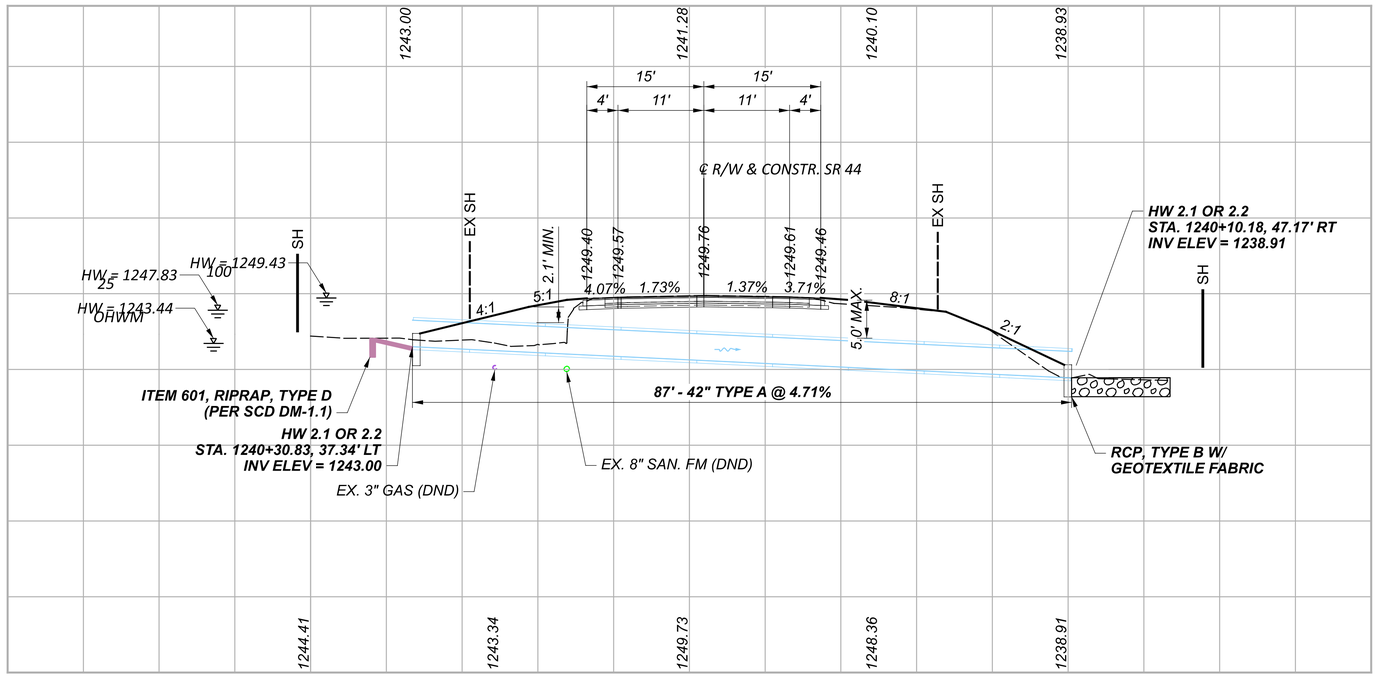




HYDRAULIC DATA

DRAINAGE AREA = 25.60 ACRES

Q (25) = 49.2 CFS	*V (25) = 5.47 FT/S*	*HW (25) = 1247.83 FT*
Q (100) = 78.6 CFS	*V (100) = 8.73 FT/S*	*HW (100) = 1249.43 FT*

ORDINARY HIGH WATER MARK: 1243.44 FT

DESIGN SERVICE LIFE: 75 YEARS

ABRASION LEVEL: 1

pH: 8

EXISTING STRUCTURE

TYPE: 3'X3' CONCRETE BOX AND 30" CPP

SKEW: NONE

ALIGNMENT: TANGENT

DATE BUILT: 1914

CONDITION: TO BE REMOVED AND REPLACED

CFN: 1809296

PROPOSED STRUCTURE

TYPE: 42" TYPE A, 706.02, (707.01 OR 707.02) ALUMINIZED, 707.33

SKEW: 14° LF

ALIGNMENT: TANGENT

CFN: 1989159

HEADWALLS: HALF HEIGHT

HORIZONTAL SCALE IN FEET
0 5 10 20

CULVERT DETAIL - SR 44
POR-44-23.49

DESIGN AGENCY

DESIGNER AJN
REVIEWER MJP 01-20-23
PROJECT ID 106200
SUBSET 5 TOTAL 6
SHEET P.33 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLP_1 - Plan (Sheet) PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:46:53 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DC30l.dgn

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET ___ 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: ODOT VRS
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011) epoch 2010.00
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC 2 STANDARD PARALLEL
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.99989238
ORIGIN OF COORDINATE SYSTEM: 0,0 AT LAT N 39° 27' 01.76097", LONG W 89° 28' 32.98476'

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.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS:
POR-44-2349

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTORâ€™S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSESD SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 1240+00 TO. STA 1240+40 (SR 44)

ITEM 202 - PAVEMENT REMOVED	116 SY
ITEM 204 - SUBGRADE COMPACTION	116 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	52 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=4.5", 2 LIFTS)	34 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=6")	23 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	8 GAL
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (TWO 1 ½" LIFTS)	12 CY

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 1239+50 TO STA. 1240+90

ITEM 254 - PAVEMENT PLANING (T=3")	445 SQ. YD.
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	27 GAL.
441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22 (TWO 1 1/2" LIFTS)	38 CU. YD.

THE ABOVE QUANTITIES ARE BASED ON A RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS AND A LENGTH OF 50' ON EACH SIDE OF THE REQUIRED TRENCH WIDTH FOR INSTALLATION AND/OR REMOVAL.

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - EDGE LINE, 6", TYPE 1	0.06 MI
ITEM 642 - CENTER LINE, TYPE 1	0.03 MI

SEEDING AND MULCHING

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

659, TOPSOIL	40 CU. YD.
659, SEEDING AND MULCHING	362 SQ. YD.
659, COMMERCIAL FERTILIZER	0.05 TON
659, LIME	0.07 ACRES
659, WATER	2 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.

EXCAVATION AND EMBANKMENT

THE FOLLOWING QUANTITIES HAS BEEN TAKEN FROM SHEETS P.30 - P.32 AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203- EXCAVATION	100 CY
ITEM 203- EMBANKMENT	80 CY

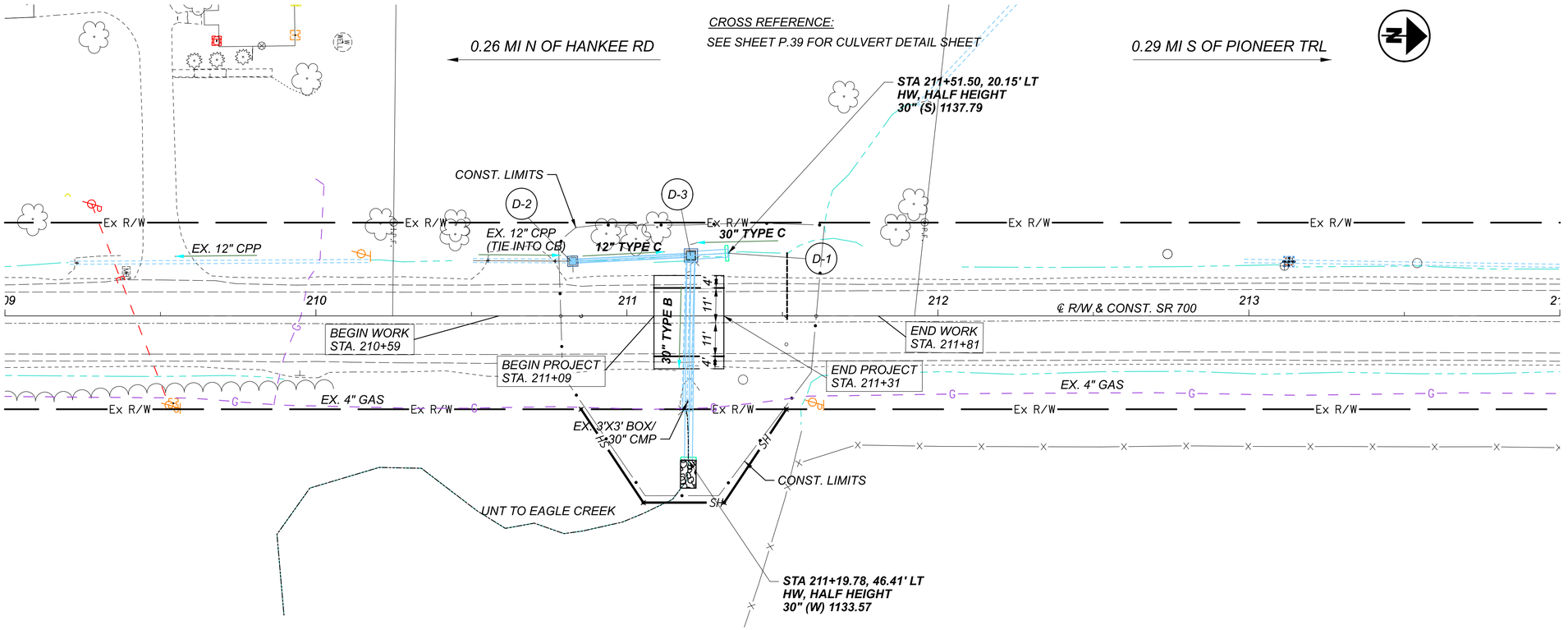
REF NO.	SHEET NO.	STATION TO STATION				202 STRUCTURE REMOVED	202 PIPE REMOVED, OVER 24"		503 COFFERDAMS AND EXCAVATION BRACING (POR-44-2349)		601 RIPRAP, TYPE D	601 ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC		606 GUARDRAIL, TYPE MGS WITH LONG POSTS		606 ANCHOR ASSEMBLY, MGS TYPE E, (MASH 2016)	606 ANCHOR ASSEMBLY, MGS TYPE T		611 42" CONDUIT, TYPE A, 706.02, (707.01 OR 707.02) ALUMINIZED, 707.33
							FT				SY	CY		FT		EACH	EACH		FT
D-1		1240+30.83	LT	TO	1240+10.18	RT	LUMP	25		LUMP	5	9		187.5		1	1		87
TOTALS CARRIED TO GENERAL SUMMARY							LS	25		LS	5	9		188		1	1		87

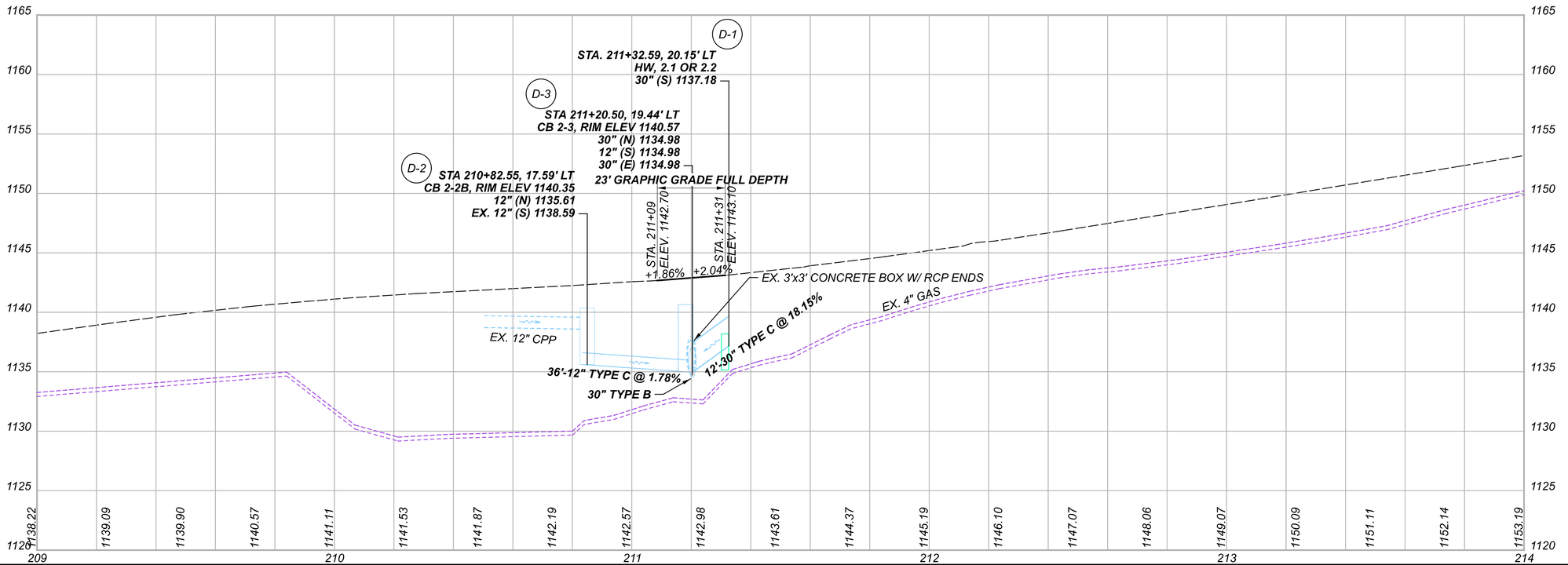
DRAINAGE NOTES - POR-44-23.49

DESIGN AGENCY

DESIGNER AJN
REVIEWER MJP 01-20-23
PROJECT ID 106200
SHEET P.34 TOTAL 53

POR/STA-CULVERTS-FY2023





HORIZONTAL
SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 700
STA. 209+00.00 - STA. 214+00.00

DESIGN AGENCY

DESIGNER
JAR

REVIEWER
MJP 01-20-23

PROJECT ID
106200

SHEET P.35 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLX_I - Plan I(Sheet) PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:47:53 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Roadway\Sheets\106200_GP401.dgn

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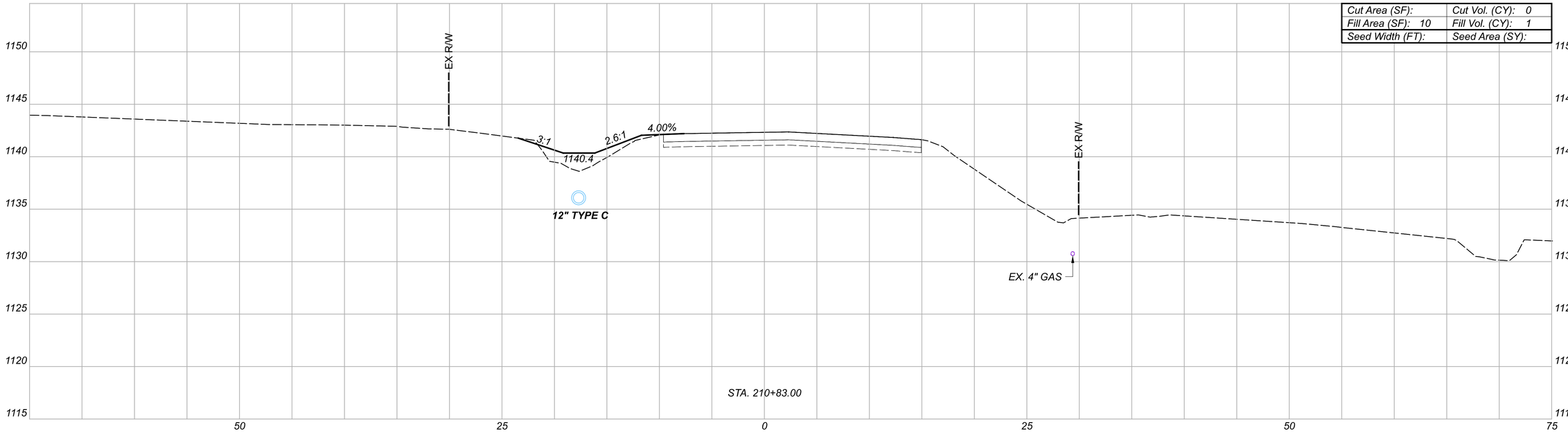

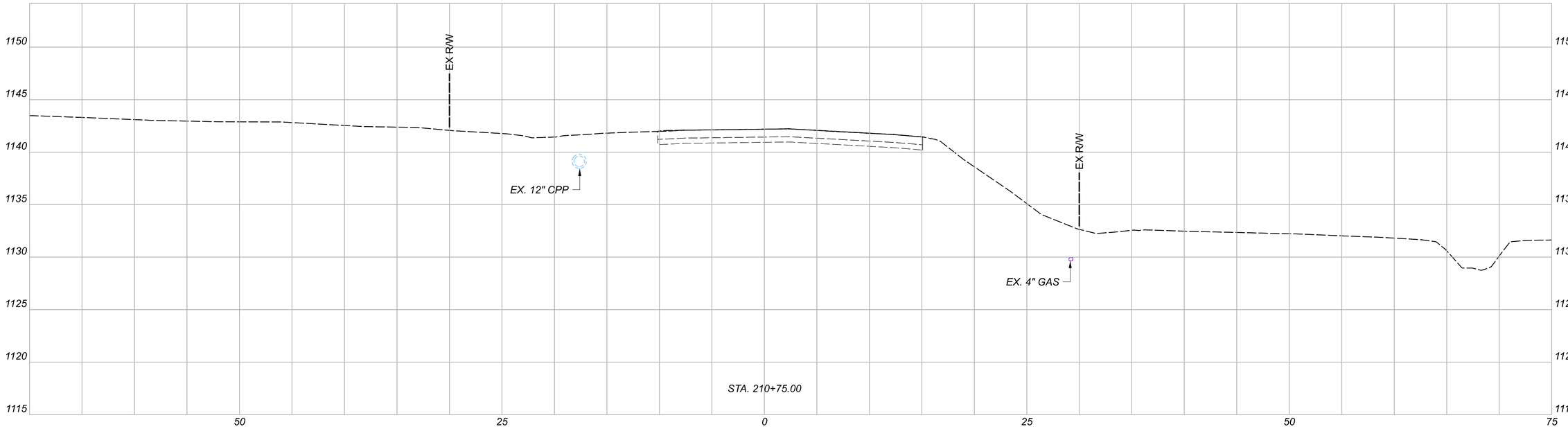

CROSS SECTIONS - SR 700
STA 210+75.00 TO 210+83.00

Sheet Totals		
Seeding	Cut	Fill
-	0	1

DESIGN AGENCY

DESIGNER JAR

REVIEWER MJP 01-20-23

PROJECT ID 106200

SHEET P.36 | TOTAL 53

POR/STA-CULV-FY2023

MODEL: CLX_1 - 210+75.00-1[Sheet] PAPERSIZE: 34x22 (In.) DATE: 4/18/2023 TIME: 10:48:26 AM USER: mpalagan
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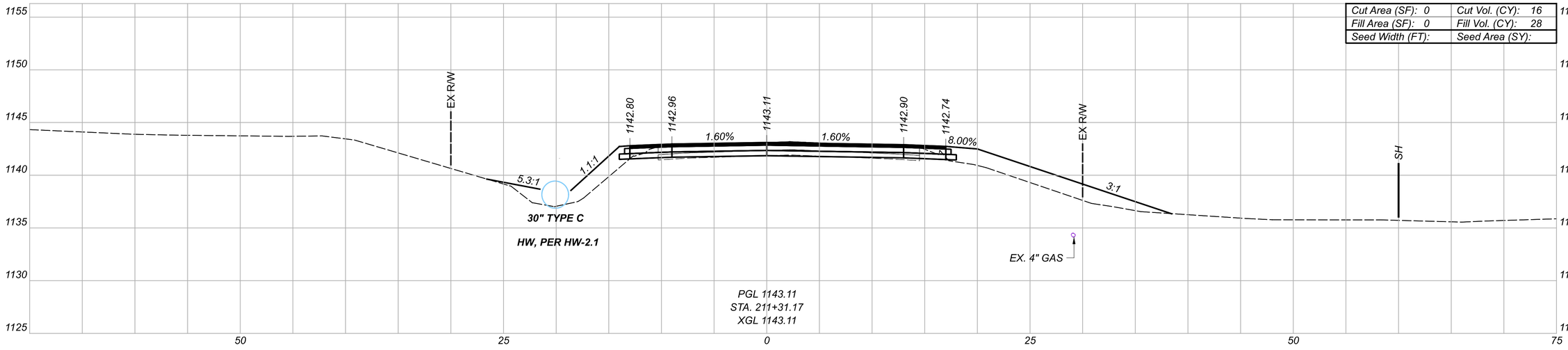

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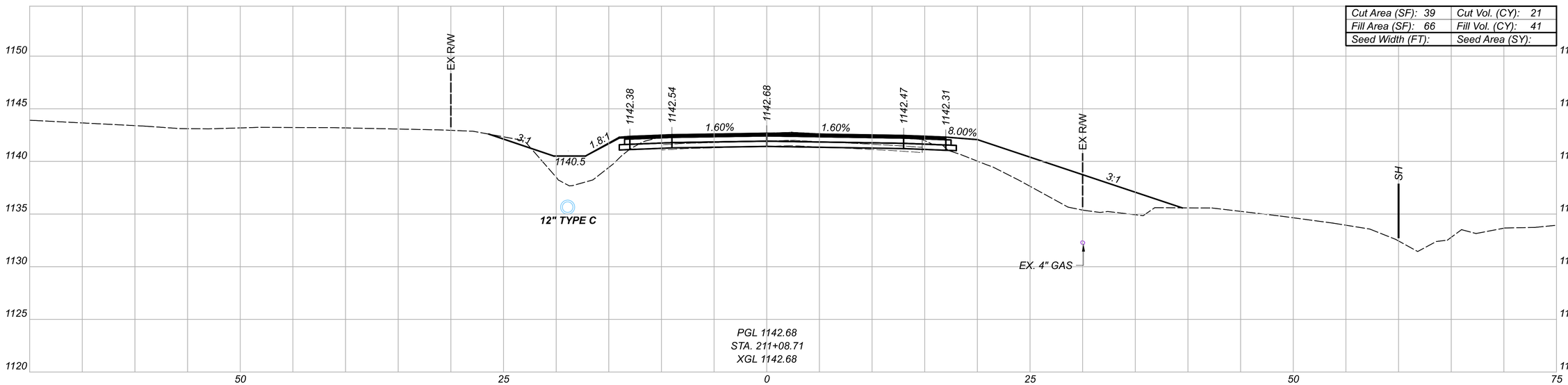

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Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 700
STA 211+08.72 TO 211+31.17

DESIGN AGENCY

DESIGNER
JAR

REVIEWER
MJP 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	37	69

SHEET P.37 TOTAL 53

POR/STA-CULV-FY2023

MODEL: CLX_1 - 2IN-08.72 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:48:32 AM USER: mpalagan
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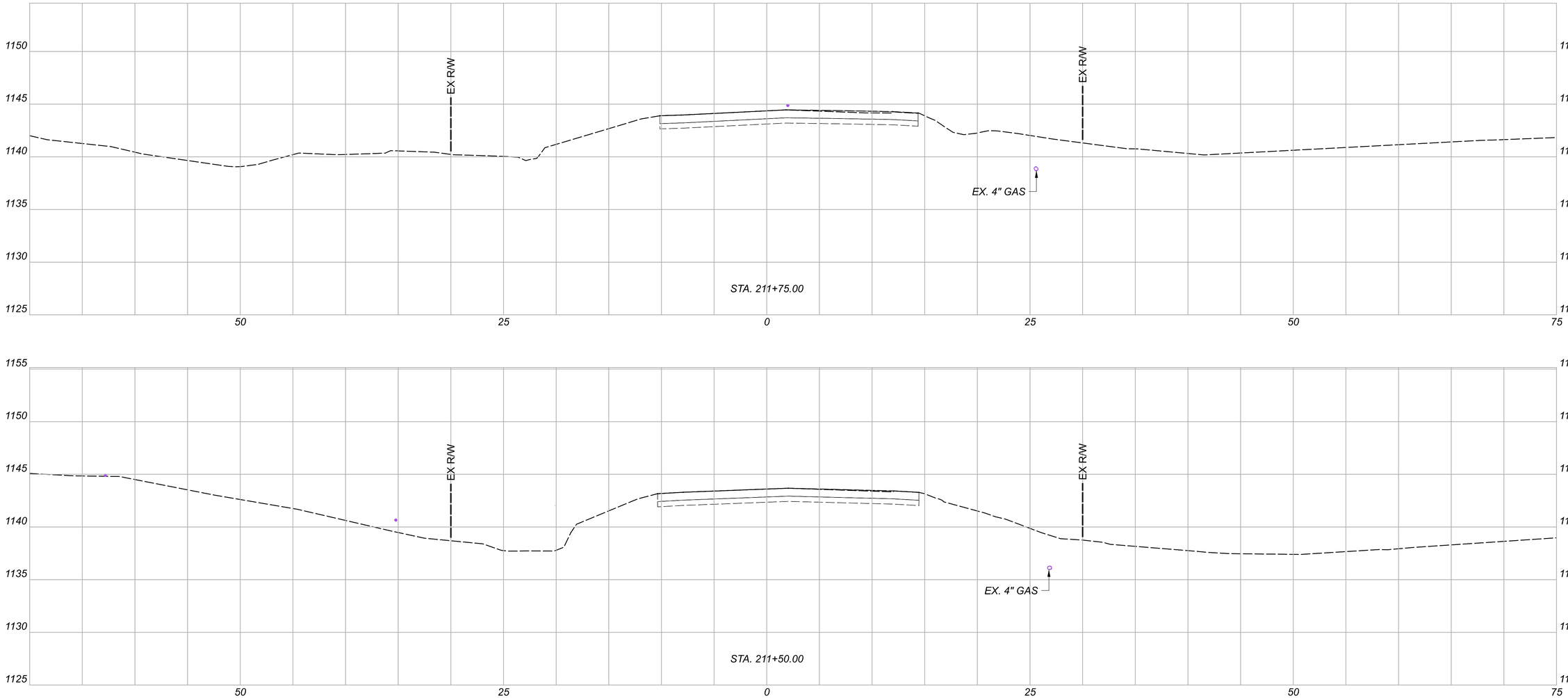

POR/STA-CULV-FY2023

MODEL: CLX_I - 211+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:48:37 AM USER: mpalagan
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CROSS SECTIONS - SR 700
STA 211+50.00 TO 211+75.00

DESIGN AGENCY

DESIGNER
JAR

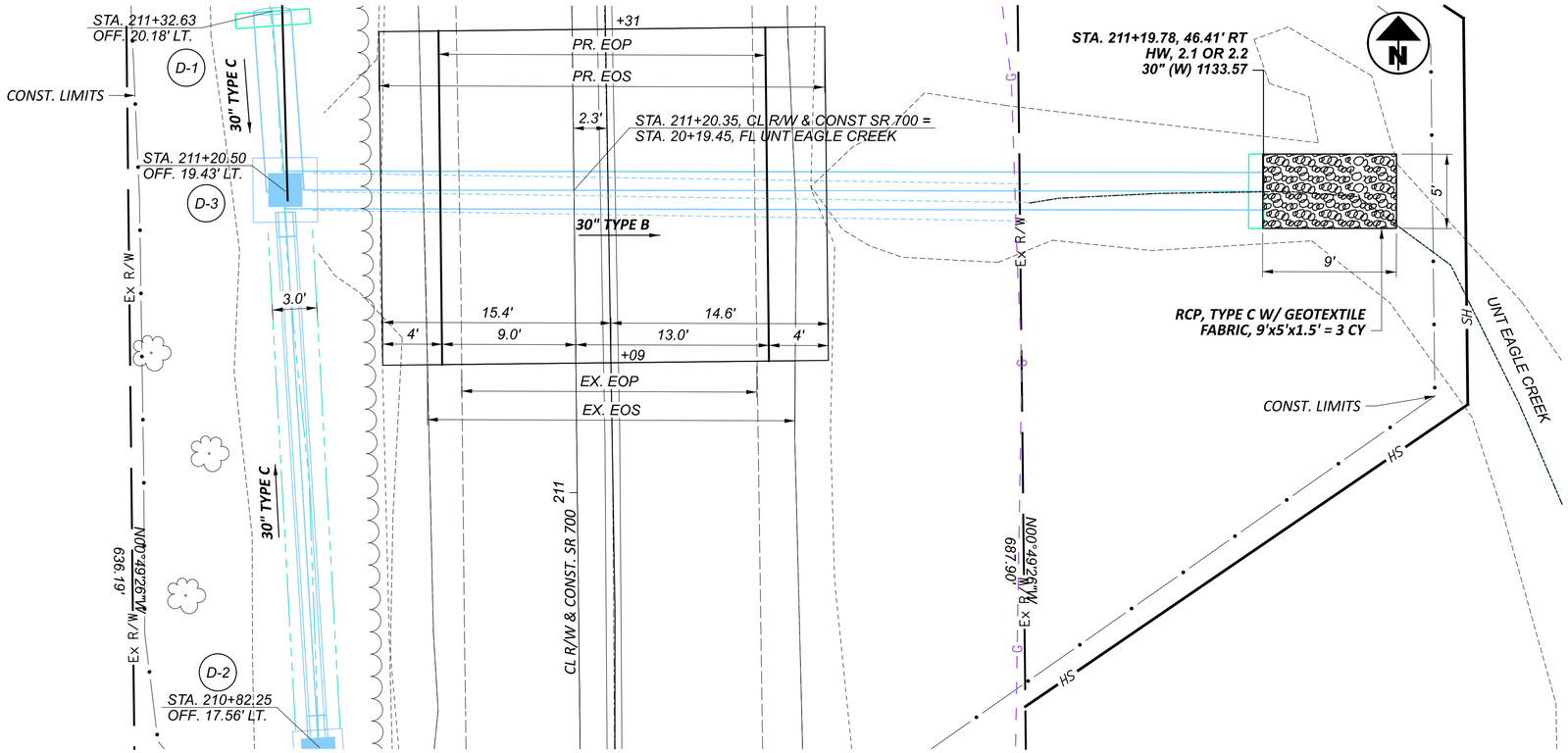
REVIEWER
MJP 01-20-23

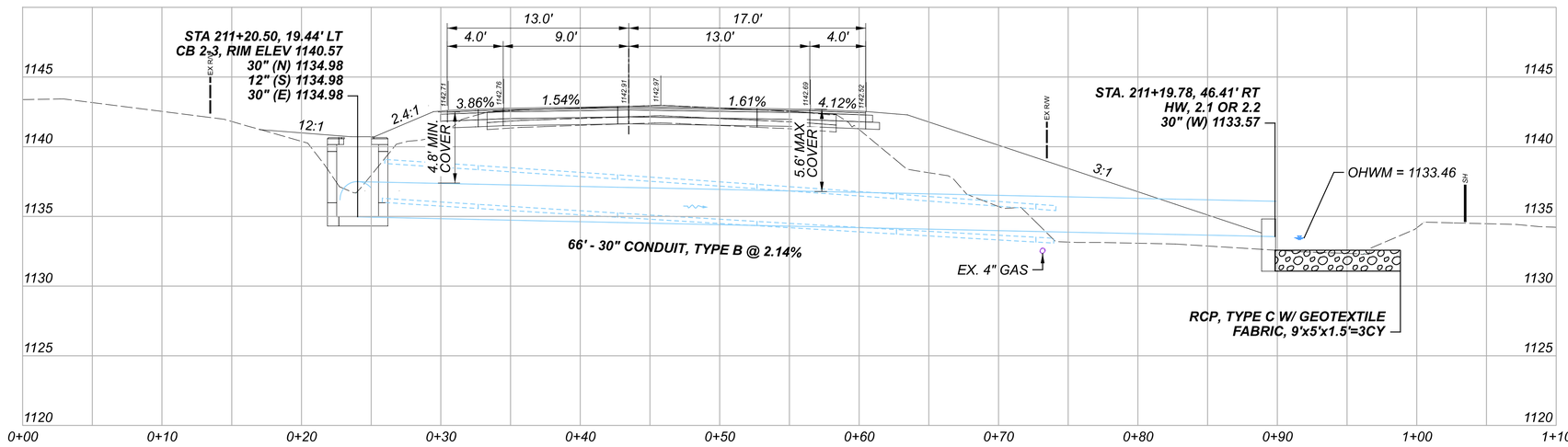
PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	-	-

SHEET
P.38

TOTAL
53





HYDRAULIC DATA (D-1)

DRAINAGE AREA = 12.56 ACRES
Q (25) = 16.16 CFS HW (25) = 1138.54 FT
Q (100) = 19.75 CFS HW (100) = 1138.69 FT
ORDINARY HIGH WATER MARK: 1133.46 FT
DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 3
pH: 8

HYDRAULIC DATA (D-3)

DRAINAGE AREA = 13.24 ACRES
Q (25) = 16.83 CFS V (25) = 9.88 FT/S
Q (100) = 20.57 CFS V (100) = 10.33 FT/S
DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 3
pH: 8

EXISTING CULVERT

TYPE: 3'x3' CONCRETE BOX W/ 30" RCP ENDS
SKEW: 0°
ALIGNMENT: TANGENT
DATE BUILT: 1930
DISPOSITION: TO BE REMOVED AND REPLACED
CFN: 1847098

PROPOSED STRUCTURE

TYPE: 30" TYPE B, 706.02, 707.33
SKEW: 0°
ALIGNMENT: TANGENT
HEADWALLS: HALF-HEIGHT PER HW-2.1
CFN: 1989161

HORIZONTAL SCALE IN FEET
0 2.5 5 10

CULVERT DETAIL
POR-700-0400

DESIGN AGENCY

DESIGNER JAR
REVIEWER MJP 01-20-23
PROJECT ID 106200
SUBSET 5 TOTAL 6
SHEET P.39 TOTAL 53

POR/STA-CULV-FY2023

MODEL: CLP_1 - Plan 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:49:02 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DC401.dgn

SURVEYING PARAMETERS

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

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011) epoch 2010.00
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC 2 STANDARD PARALLEL
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.999897
ORIGIN OF COORDINATE SYSTEM: 0,0 AT LAT N 39° 40', LONG W 82° 30'

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 SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS:

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 210+08.71 TO. STA 210+31.17 (SR 700)

ITEM 202 - PAVEMENT REMOVED	64 SY
ITEM 204 - SUBGRADE COMPACTION	64 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	96 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=8")	19 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=5")	14 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	8 GAL

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

EXCAVATION AND EMBANKMENT

THE FOLLOWING QUANTITY HAS BEEN TAKEN FROM SHEETS P.24-P.26 AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION	37 CY
ITEM 203 - EMBANKMENT	70 CY

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 210+58.71 TO STA. 211+81.17 (SR 700)

ITEM 254 - PAVEMENT PLANING (T=3")	577 SQ. YD.
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	70 GAL.
441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22 (TWO 1 1/2" LIFTS)	48 CU. YD.

THE ABOVE QUANTITIES ARE BASED ON A RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS AND A LENGTH OF 50' ON EACH SIDE OF THE REQUIRED TRENCH WIDTH FOR INSTALLATION AND/OR REMOVAL.

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - EDGE LINE, 6", TYPE 1	0.06 MI
ITEM 642 - CENTER LINE, TYPE 1	0.03 MI

SEEDING AND MULCHING

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

659, TOPSOIL	16 CU. YD.
659, SEEDING AND MULCHING	140 SQ. YD.
659, COMMERCIAL FERTILIZER	0.02 TON
659, LIME	0.03 ACRES
659, WATER	0.4 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.

REF NO.	SHEET NO.	STATION TO STATION						202 STRUCTURE REMOVED	202 PIPE REMOVED, OVER 24"	503 COFFERDAMS AND EXCAVATION BRACING (POR-700-0400)	601 ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	602 CONCRETE MASONRY	611 12" CONDUIT, TYPE C	611 30" CONDUIT, TYPE B	611 30" CONDUIT, TYPE C	611 CATCH BASIN, NO. 2-2B	611 CATCH BASIN, NO. 2-3
									FT		CY	CY	FT	FT	FT	EACH	EACH
D-1		211+32.63	LT	TO	211+20.50	LT		LUMP	48	LUMP		0.21			12		
D-2		210+82.25	LT	TO	211+20.50	LT							36			1	
D-3		211+20.50	LT	TO	211+19.78	RT					3	0.60		66			1
TOTALS CARRIED TO GENERAL SUMMARY								LS	48	LS	3	1	36	66	12	1	1

DRAINAGE NOTES - POR-700-0400

DESIGN AGENCY

DESIGNER JAR

REVIEWER MJP 01-20-23

PROJECT ID 106200

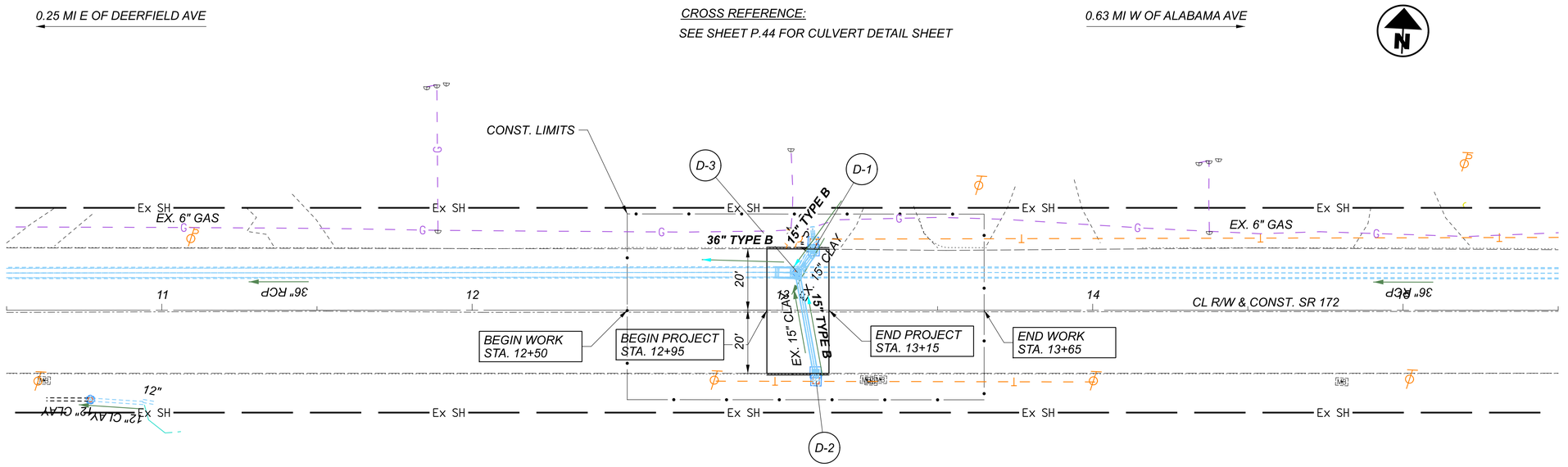
SHEET P.40 TOTAL 53

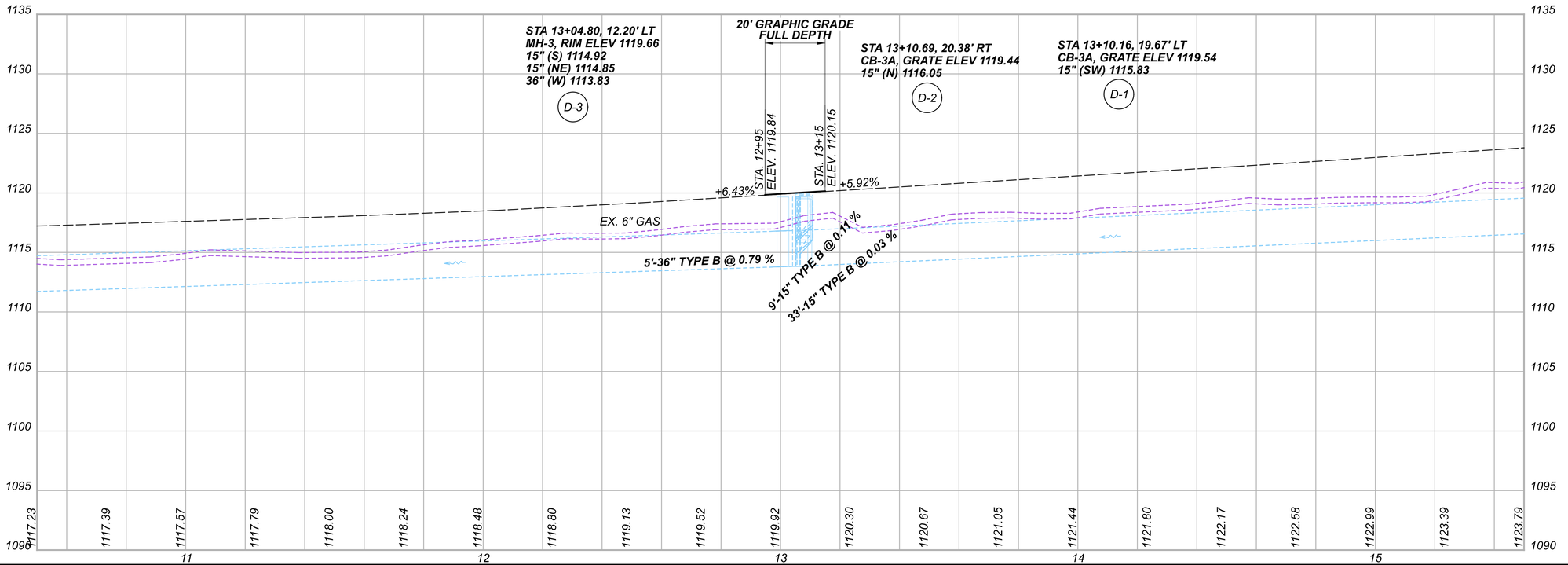
POR/STA-CULVERTS-FY2023

0.25 MI E OF DEERFIELD AVE

CROSS REFERENCE:
SEE SHEET P.44 FOR CULVERT DETAIL SHEET

0.63 MI W OF ALABAMA AVE





HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 172
STA. 11+00 - STA. 16+00

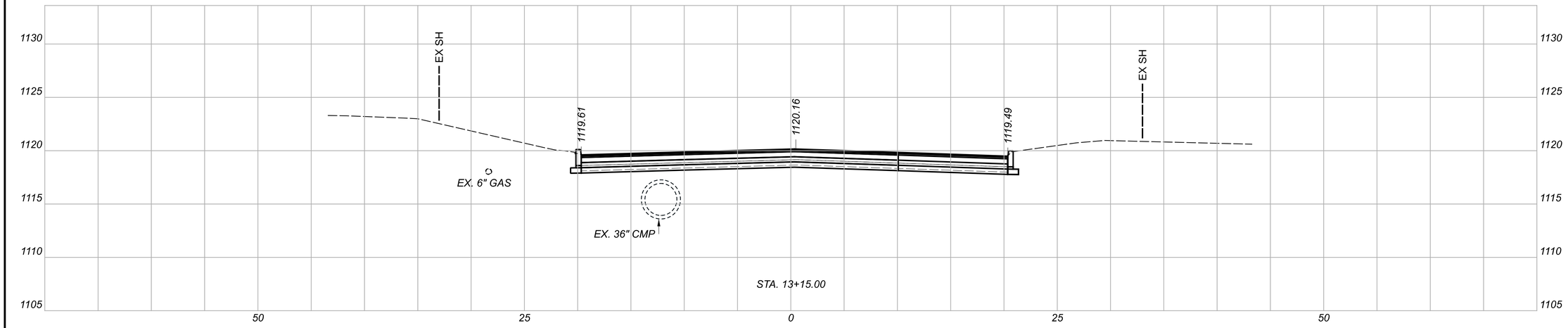
DESIGN AGENCY

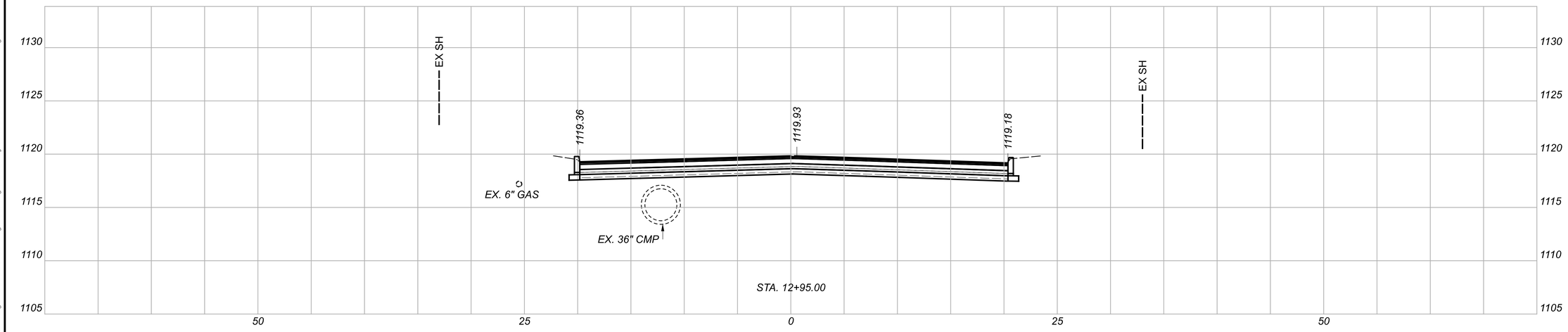
DESIGNER
MJP

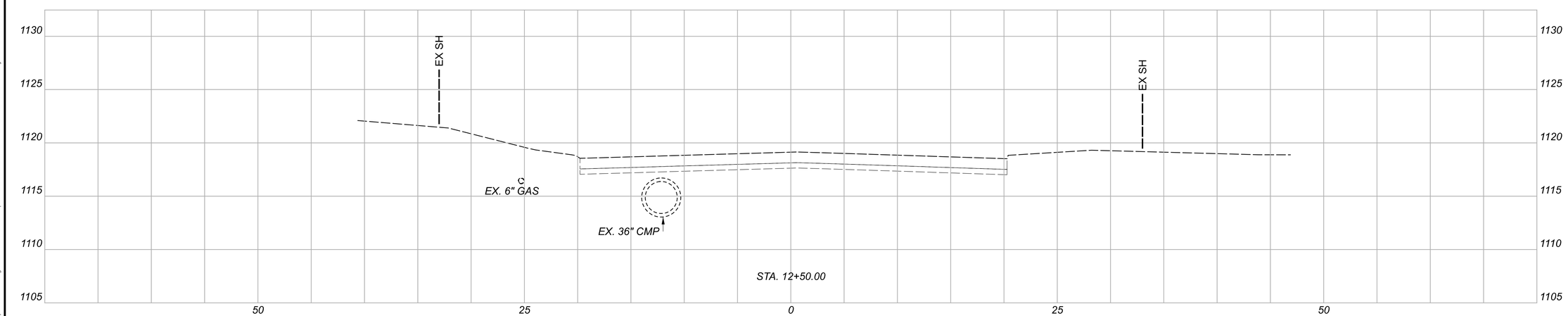
REVIEWER
EMS 01-20-23

PROJECT ID
106200

SHEET P.41 TOTAL 53







POR/STA-CULVERTS-FY2023

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CROSS SECTIONS - SR 172
STA. 12+50 - 13+15

DESIGN AGENCY

DESIGNER
MJP

REVIEWER
EMS 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	-	-

SHEET P.42 | TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLXRW72S - 13+50.00 [Sheet] PAPERSIZE: 34x22 (In.) DATE: 4/18/2023 TIME: 10:50:50 AM USER: mpalagan
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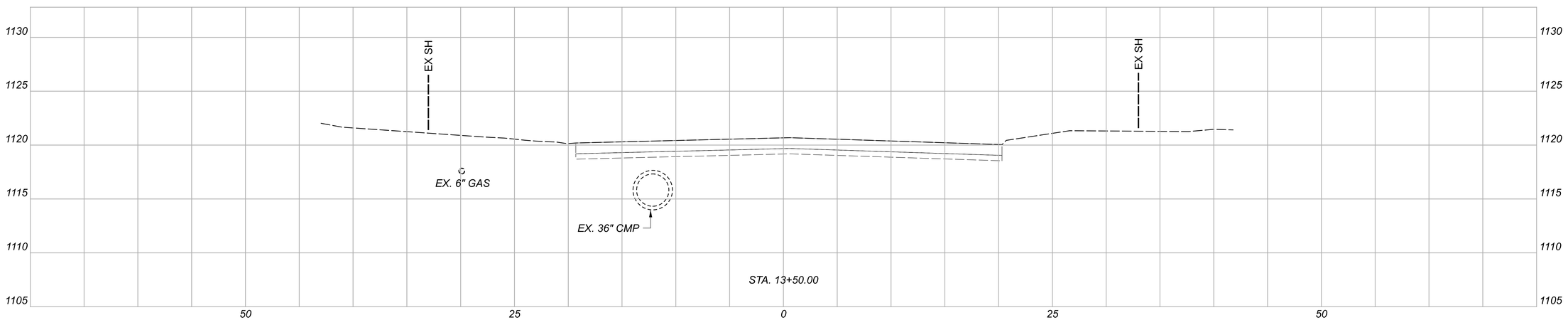


CROSS SECTIONS - SR 172
STA. 13+50

DESIGN AGENCY

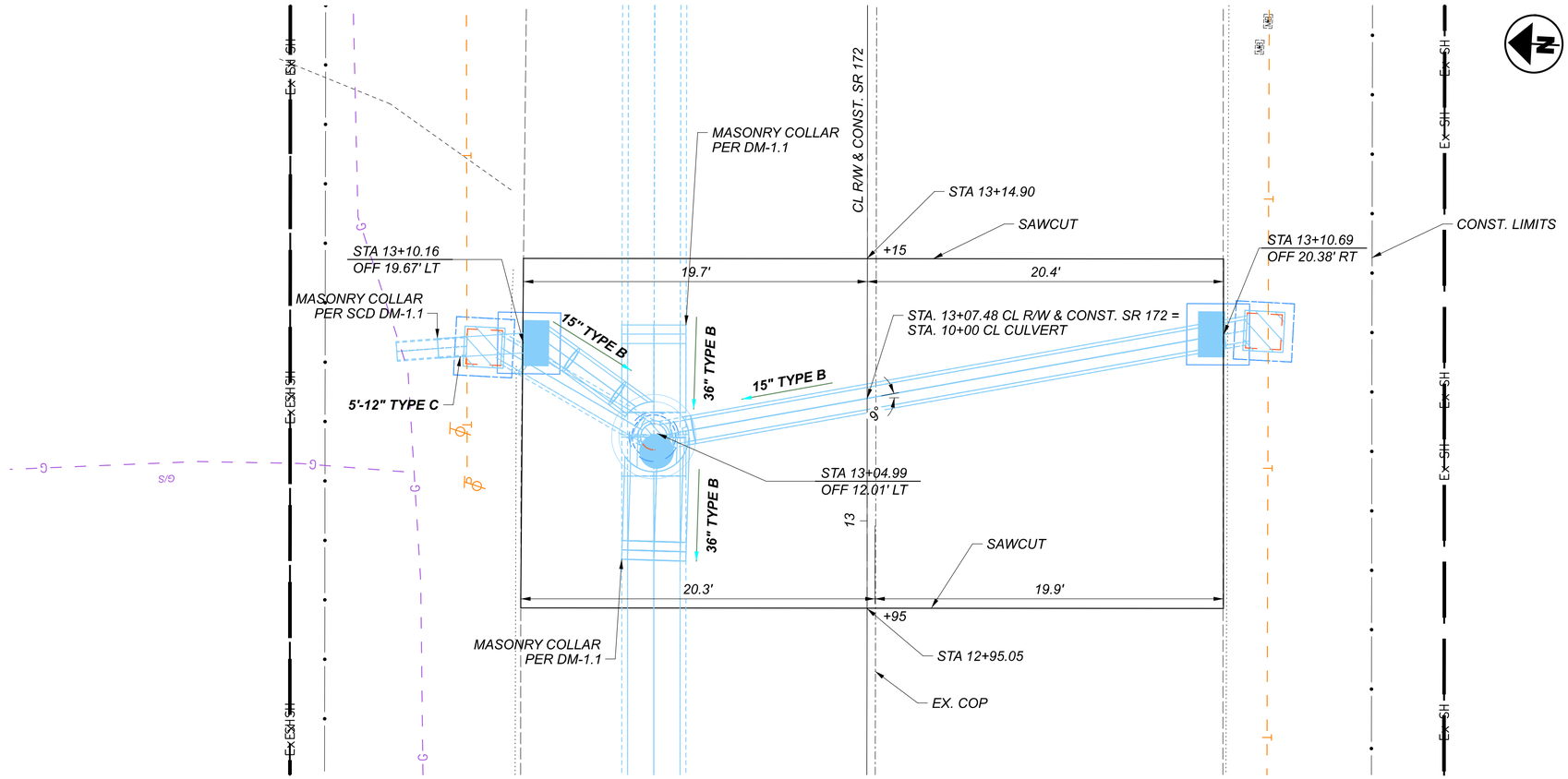
DESIGNER
MJP

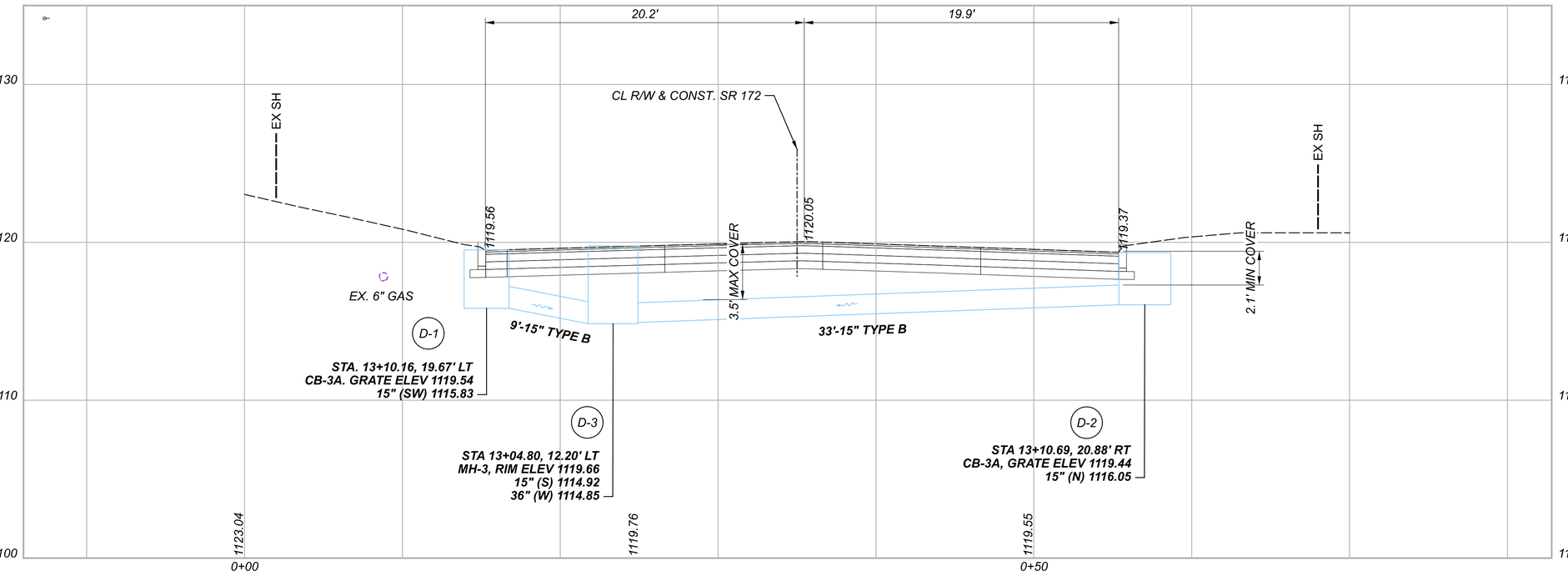
REVIEWER
EMS 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	-	-

SHEET P.43 | TOTAL 53





HYDRAULIC DATA (D-1)

DRAINAGE AREA = 1.76 ACRES
Q (10) = 2.74 CFS V (10) = 11.96 FT/S
Q (25) = 2.93 CFS V (25) = 12.20 FT/S

DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 1
pH: 7

HYDRAULIC DATA (D-2)

DRAINAGE AREA = 0.30 ACRES
Q (10) = 0.02 CFS V (10) = 1.63 FT/S
Q (25) = 0.17 CFS V (25) = 3.47 FT/S

DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 1
pH: 7

EXISTING STRUCTURE

TYPE: 15" RCP
SKEW: 9° RF
ALIGNMENT: TANGENT
DATE BUILT: 1930?
CONDITION: TO BE REMOVED AND REPLACED
CFN: 1832237 (36') / 1988888 (11')

PROPOSED STRUCTURE

TYPE: 15" CONDUIT, TYPE B

SKEW: 9° RF
ALIGNMENT: TANGENT
CFN: 1989107 (33') / 1989160 (9')

HORIZONTAL SCALE IN FEET
0 2 4 8

CULVERT DETAIL STA-172-0025

DESIGN AGENCY

DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 4 TOTAL 5
SHEET P.44 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Unnamed Plan - Plan 1[Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:51:37 AM USER: mpalagan
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SURVEYING PARAMETERS

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

PROJECT CONTROL

POSITIONING METHOD: STATIC
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 2018

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH ZONE (3401)
COMBINED SCALE FACTOR: 0.99990164
ORIGIN OF SCALE (X,Y): EASTING (X): 0, NORTHING (Y): 0

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 SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSESD SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS:
STA-172-0025 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 12+95 TO. STA 13+15 (SR 172)

ITEM 202 - PAVEMENT REMOVED	90 SY
ITEM 202 - CURB REMOVED	40 FT
ITEM 204 - SUBGRADE COMPACTION	90 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	147 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=14.5")	36 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=6")	16 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	16 GAL
ITEM 609 - CURB, TYPE 6	40 FT

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 12+75 TO STA. 13+40 (SR 172)

ITEM 254 - PAVEMENT PLANING (T=3")	289 SQ. YD.
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	18 GAL
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22 (TWO 1 ½" LIFTS)	25 CY

THE ABOVE QUANTITIES ARE BASED ON RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS FOR INSTALLATION AND/OR REMOVAL

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - LANE LINE, TYPE 1	0.02 MI
ITEM 642 - CENTER LINE, TYPE 1	0.01 MI

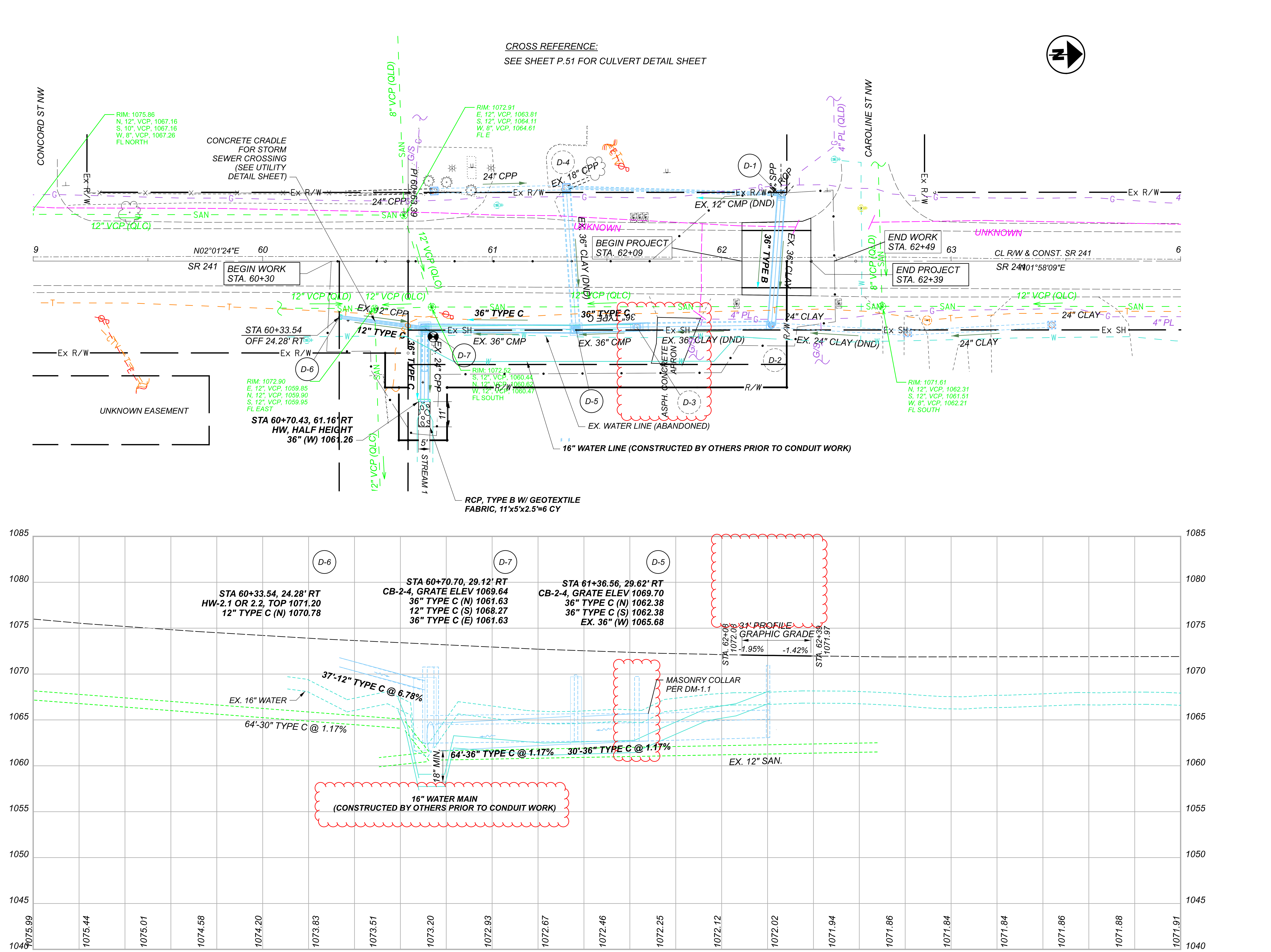
REF NO.	SHEET NO.	STATION TO STATION					202	202	202	202	503	611	611	611	611	611
							PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	MANHOLE REMOVED	CATCH BASIN REMOVED	COFFERDAMS AND EXCAVATION BRACING (STA-172-0025)	12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	36" CONDUIT, TYPE B	CATCH BASIN, NO. 3A	MANHOLE, NO. 3
							FT	FT	EACH	EACH		FT	FT	FT	EACH	EACH
D-1		13+10.16	LT	TO	13+04.80	LT	11			1	LUMP	5	9		1	
D-2		13+12.70	RT	TO	13+04.80	LT	36			1			33		1	
D-3		13+04.80	LT	TO				10	1					10		1
TOTALS CARRIED TO GENERAL SUMMARY							47	10	1	2	LS	5	42	10	2	1

DRAINAGE NOTES
STA-172-0025
OVER UNNAMED TRIBUTARY NEWMAN CREEK

DESIGN AGENCY

DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 5 TOTAL 5
SHEET P.45 TOTAL 53

POR/STA-CULVERTS-FY2023



CROSS REFERENCE:
SEE SHEET P.51 FOR CULVERT DETAIL SHEET
CONCORD ST NW
CAROLINE ST NW
CONCRETE CRADLE FOR STORM SEWER CROSSING (SEE UTILITY DETAIL SHEET)
RIM: 1075.86
N, 12", VCP, 1067.16
S, 10", VCP, 1067.16
W, 8", VCP, 1067.26
FL NORTH
RIM: 1072.91
E, 12", VCP, 1063.81
S, 12", VCP, 1064.11
W, 8", VCP, 1064.61
FL E
8" VCP (QLD)
24" CPP
EX. 18" CPP
EX. 12" CMP (DND)
4" PL (QLD)
BEGIN PROJECT STA. 62+09
END WORK STA. 62+49
END PROJECT STA. 62+39
BEGIN WORK STA. 60+30
SR 241
N02°01'24"E
CL R/W & CONST. SR 241
N01°58'09"E
UNKNOWN
12" VCP (QLC)
12" VCP (QLD)
EX. 12" CPP
36" TYPE C
12" TYPE C
36" TYPE B
EX. 36" CLAY
EX. 36" CMP
EX. 36" CLAY (DND)
EX. 24" CLAY (DND)
24" CLAY
EX. 24" CPP
STA 60+33.54
OFF 24.28' RT
RIM: 1072.90
E, 12", VCP, 1059.85
N, 12", VCP, 1059.90
S, 12", VCP, 1059.95
FL EAST
RIM: 1079.52
S, 12", VCP, 1060.44
N, 12", VCP, 1060.62
W, 12", VCP, 1060.47
FL SOUTH
RIM: 1071.61
N, 12", VCP, 1062.31
S, 12", VCP, 1061.51
W, 8", VCP, 1062.21
FL SOUTH
UNKNOWN EASEMENT
STA 60+70.43, 61.16' RT
HW, HALF HEIGHT
36" (W) 1061.26
ASPH. CONCRETE APRON
EX. WATER LINE (ABANDONED)
16" WATER LINE (CONSTRUCTED BY OTHERS PRIOR TO CONDUIT WORK)
STREAM 1
RCP, TYPE B W/ GEOTEXTILE FABRIC, 11'x5'x2.5'=6 CY
D-1 D-2 D-3 D-4 D-5 D-6 D-7
STA 60+33.54, 24.28' RT
HW-2.1 OR 2.2, TOP 1071.20
12" TYPE C (N) 1070.78
STA 60+70.70, 29.12' RT
CB-2-4, GRATE ELEV 1069.64
36" TYPE C (N) 1061.63
12" TYPE C (S) 1068.27
36" TYPE C (E) 1061.63
STA 61+36.56, 29.62' RT
CB-2-4, GRATE ELEV 1069.70
36" TYPE C (N) 1062.38
36" TYPE C (S) 1062.38
EX. 36" (W) 1065.68
31' PROFILE GRAPHIC GRADE
STA. 62+08 1072.08
STA. 62+39 1071.97
-1.95%
-1.42%
37'-12" TYPE C @ 6.78%
EX. 16" WATER
64'-30" TYPE C @ 1.17%
64'-36" TYPE C @ 1.17%
30'-36" TYPE C @ 1.17%
18" MIN.
MASONRY COLLAR PER DM-1.1
EX. 12" SAN.
16" WATER MAIN (CONSTRUCTED BY OTHERS PRIOR TO CONDUIT WORK)
1085 1080 1075 1070 1065 1060 1055 1050 1045 1040
1075.99 1075.44 1075.01 1074.58 1074.20 1073.83 1073.51 1073.20 1072.93 1072.67 1072.46 1072.25 1072.12 1072.02 1071.94 1071.86 1071.84 1071.84 1071.86 1071.88 1071.91
59 60 61 62 63 64

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - SR 241
STA. 59+00 - STA. 64+00

DESIGN AGENCY

DESIGNER: MJP
REVIEWER: EMS 01-20-23
PROJECT ID: 106200
SHEET P.46 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLXRW241S - Plan 1-3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:52:45 AM USER: mpalagan
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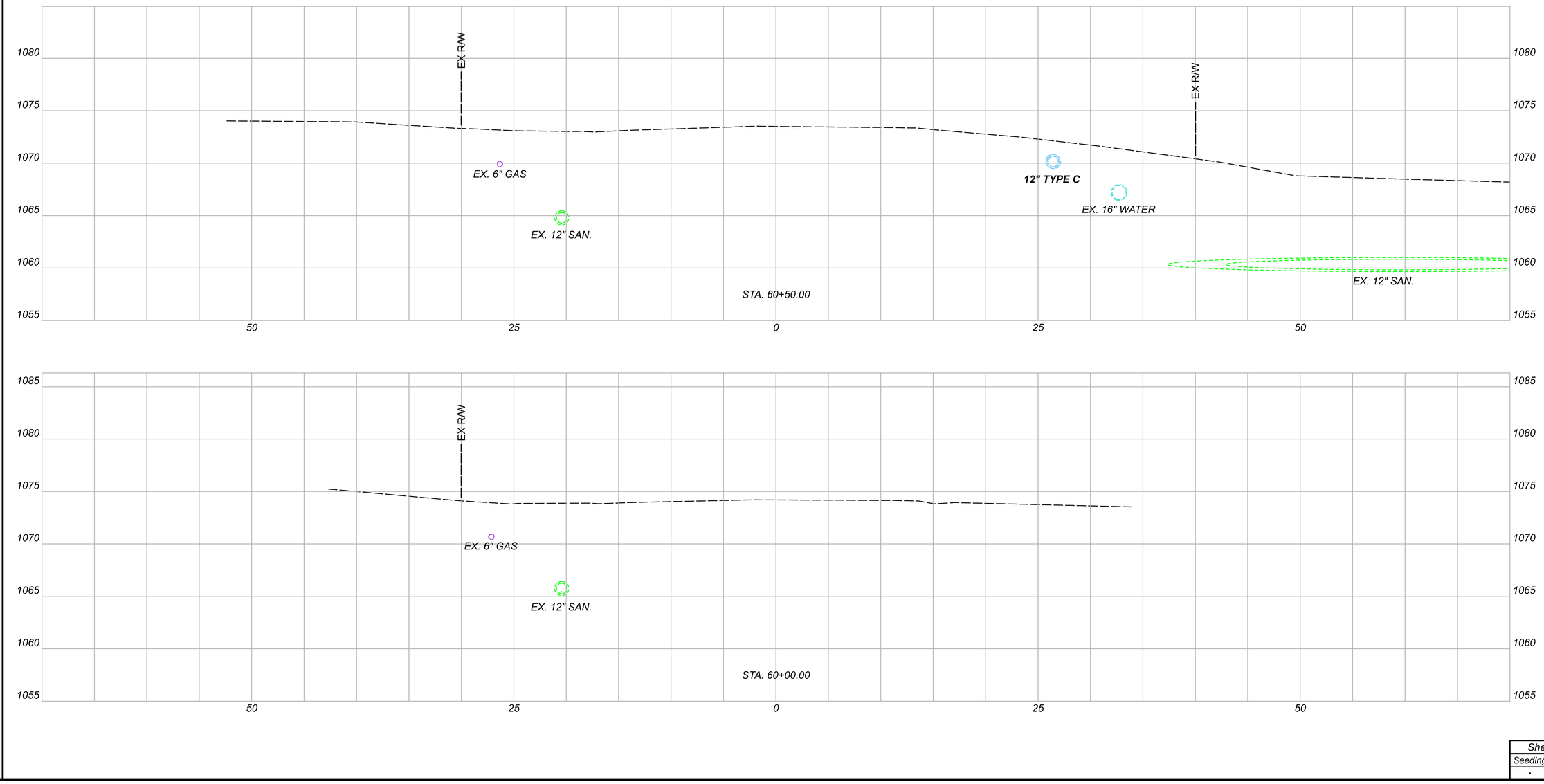

POR/STA-CULVERTS-FY2023

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CROSS SECTIONS - SR 241
SR 241 - STA. 60+00 - STA. 60+50

DESIGN AGENCY

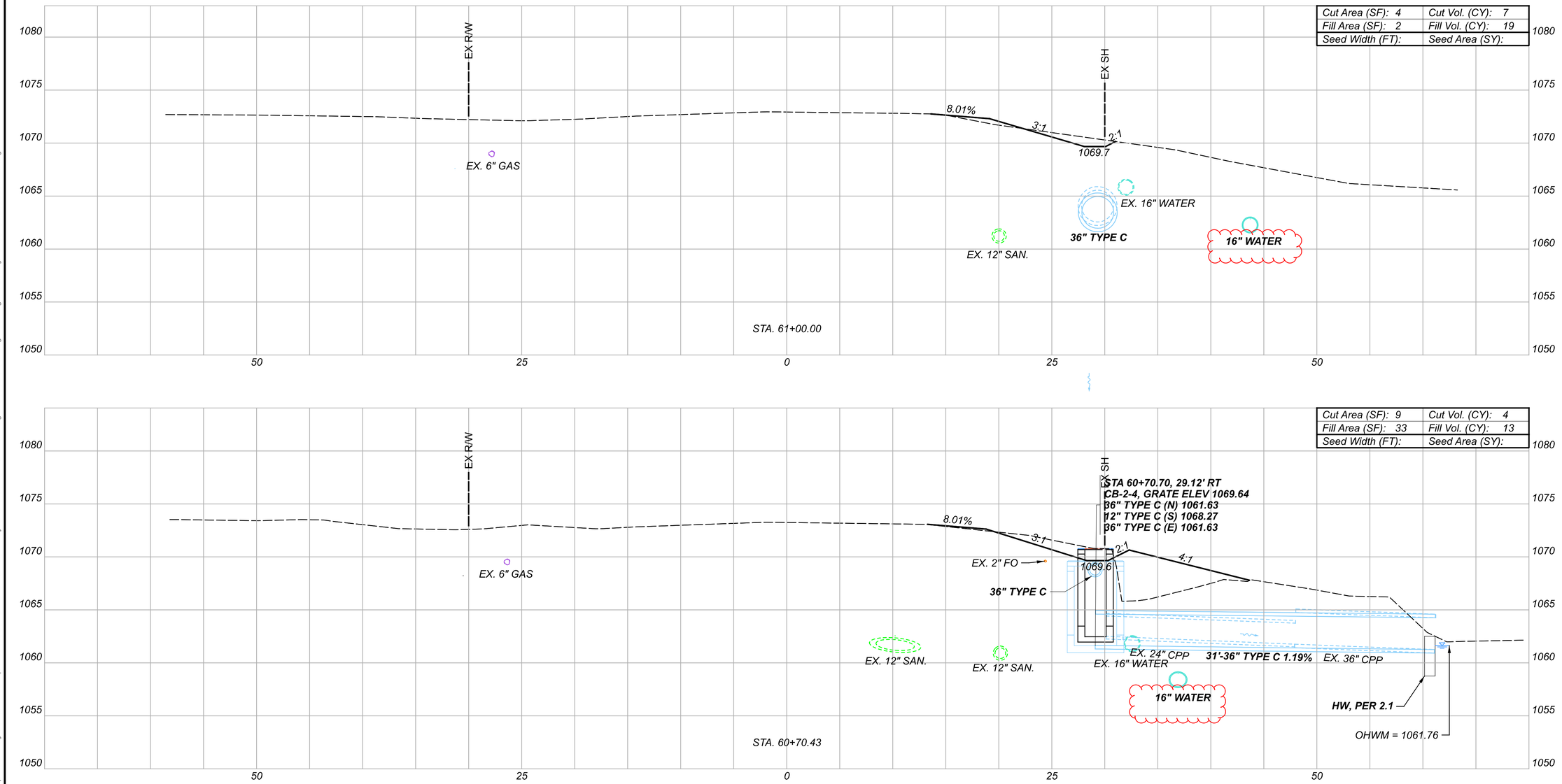
DESIGNER
MJP

REVIEWER
EMS 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	-	-

SHEET P.47 TOTAL 53



POR/STA-CULVERTS-FY2023

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CROSS SECTIONS - SR 241
SR 241 - STA. 60+70 - STA. 61+00

DESIGN AGENCY

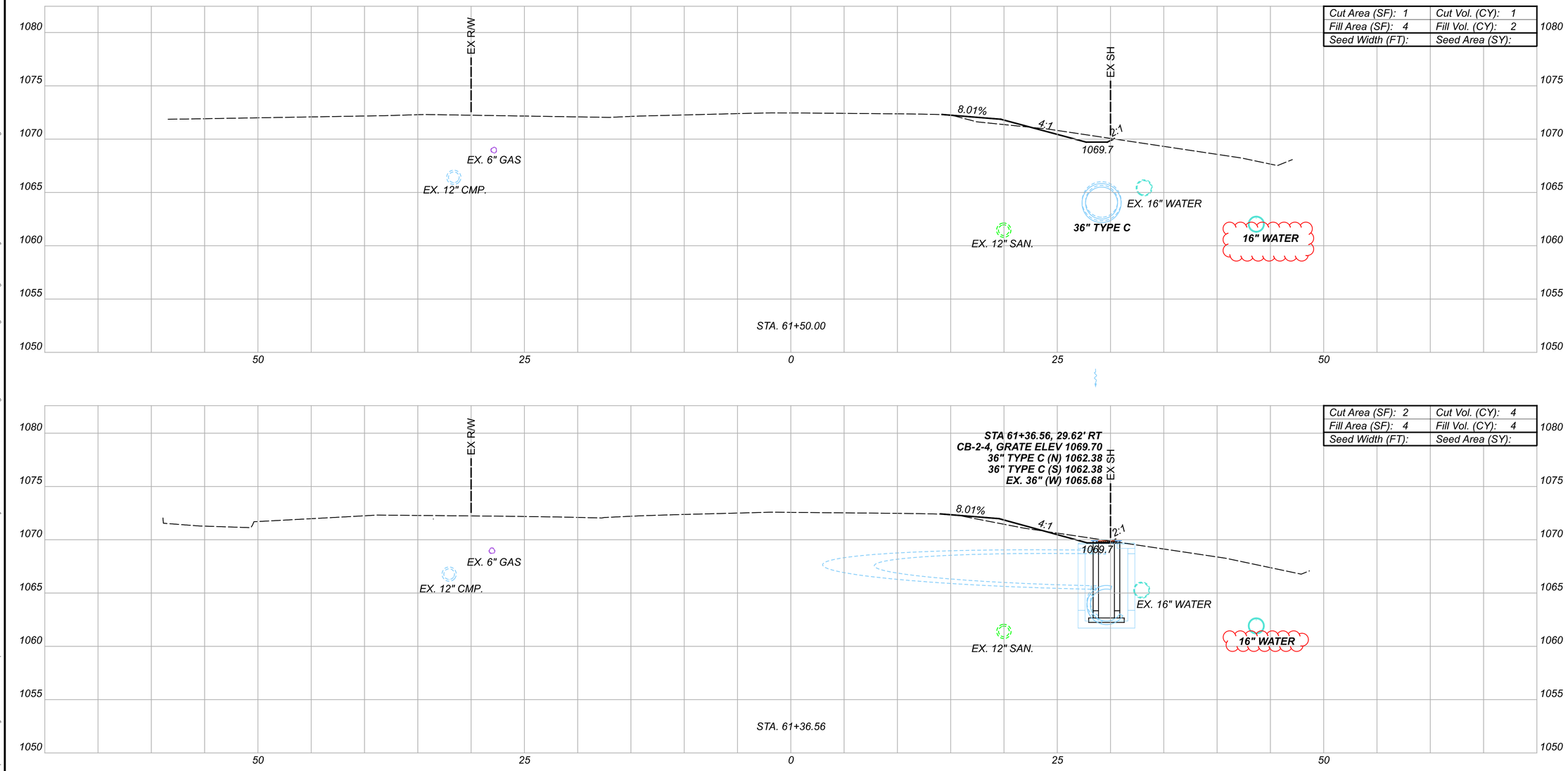
DESIGNER
MJP

REVIEWER
EMS 01-20-23

PROJECT ID
106200

Sheet Totals		
Seeding	Cut	Fill
-	11	32

SHEET P.48 | TOTAL 53



CROSS SECTIONS - SR 241
SR 241 - STA. 61+37 - STA. 61+50

Sheet Totals		
Seeding	Cut	Fill
-	5	6

DESIGN AGENCY

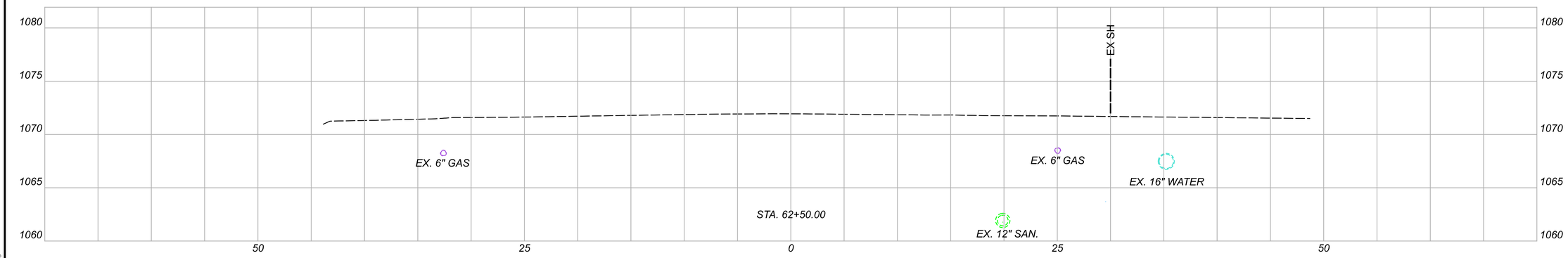
DESIGNER MJP

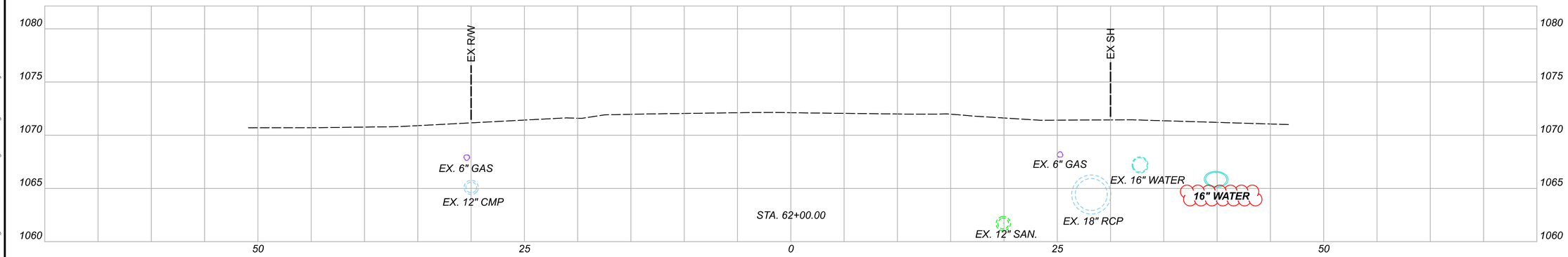
REVIEWER EMS 01-20-23

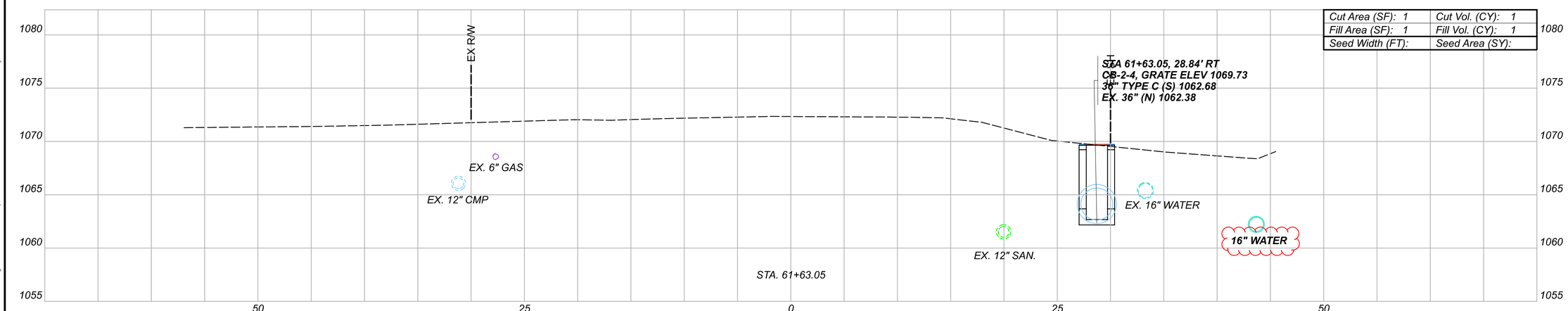
PROJECT ID 106200

SHEET P.49

TOTAL 53







Cut Area (SF): 1	Cut Vol. (CY): 1
Fill Area (SF): 1	Fill Vol. (CY): 1
Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - SR 241
SR 241 - STA. 61+63 - STA. 62+50

DESIGN AGENCY

DESIGNER MJP

REVIEWER EMS 01-20-23

PROJECT ID 106200

Sheet Totals		
Seeding	Cut	Fill
-	1	1

SHEET P.50 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: CLXRW24IS - 61+63.05 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:53:48 AM USER: mpalagan
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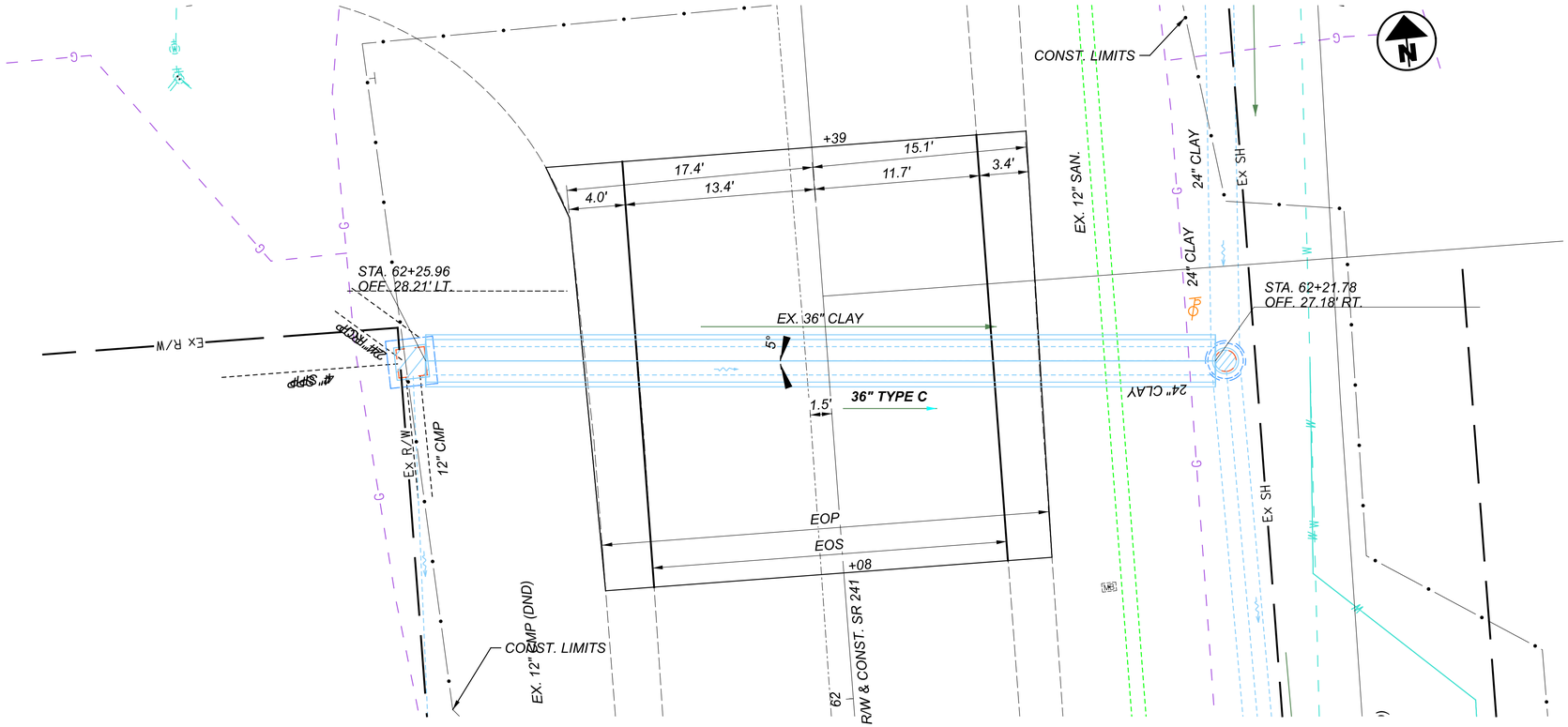

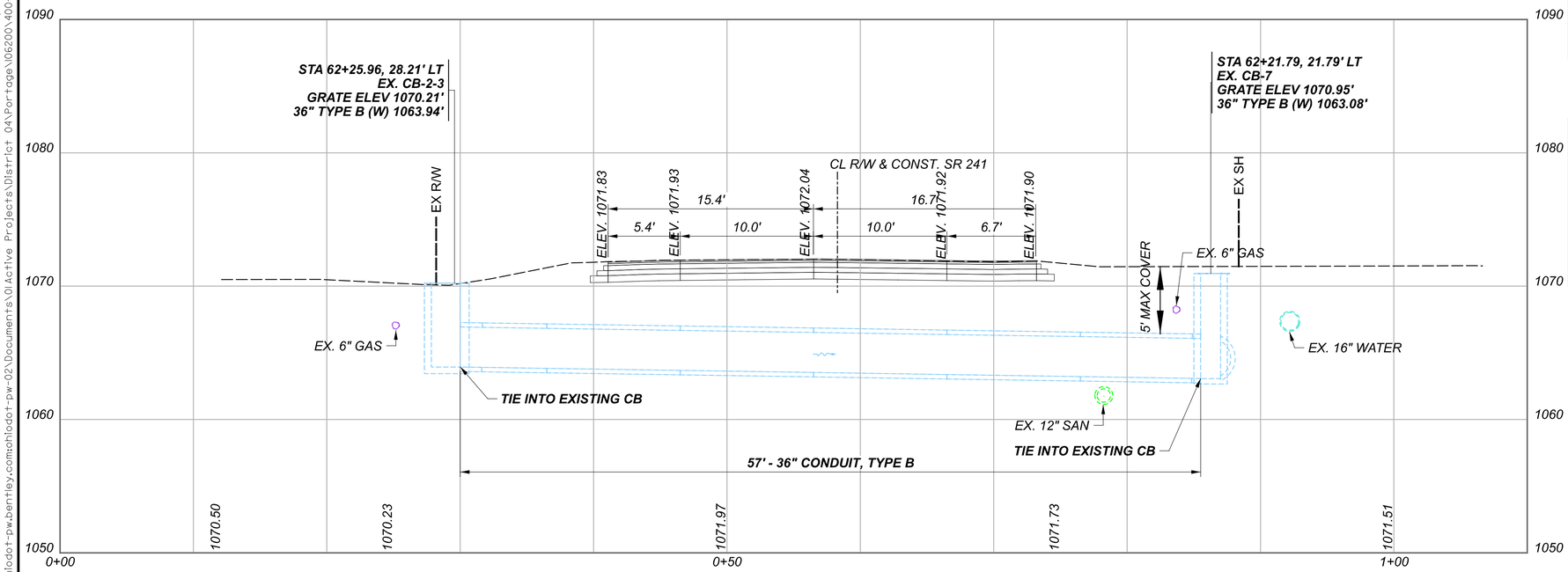

HYDRAULIC DATA

DRAINAGE AREA = 3.75 ACRES
Q (10) = 5.6 CFS V (10) = 6.04 FT/S
Q (25) = 6.8 CFS V (25) = 6.40 FT/S
DESIGN SERVICE LIFE: 75 YEARS
ABRASION LEVEL: 1
pH: 8

EXISTING STRUCTURE

TYPE: 36" CLAY
SKEW: 5° LF
ALIGNMENT: TANGENT
DATE BUILT: UNKNOWN
CONDITION: TO BE REMOVED AND REPLACED
CFN: 1833633

PROPOSED STRUCTURE

TYPE: 36" CONDUIT, TYPE B, 706.02, (707.01 OR 707.02) ALUMINIZED, 707.33
SKEW: 5° LF
ALIGNMENT: TANGENT
CFN: 1989656

HORIZONTAL SCALE IN FEET
0 2.5 5 10

CULVERT DETAIL - STA-241-1177 OVER UNNAMED TRIBUTARY

DESIGN AGENCY

DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 6 TOTAL 7
SHEET P.51 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Unnamed Plan - Plan [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:54:19 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 04\Portage\106200\400-Engineering\Drainage\Sheets\106200_DC601.dgn

SURVEYING PARAMETERS

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

PROJECT CONTROL

POSITIONING METHOD: STATIC
MONUMENT TYPE: B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 2018

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011) (EPOCH 2010)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH ZONE (3401)
COMBINED SCALE FACTOR: 0.99990105
ORIGIN OF COORDINATE SYSTEM: EASTING (X): 0 NORTHING (Y): 0

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 SPECIAL - SURVEY CONTROL VERIFICATION (STA-241-1175)

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSESD SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
   a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
   b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN THE PLAN
   c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS:
STA-241-1177 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

STA. 62+08 TO. STA 62+39 (SR 241)

ITEM 202 - PAVEMENT REMOVED	108 SY
ITEM 204 - SUBGRADE COMPACTION	108 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	126 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=4.5", 2 LIFTS)	28 CY
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) (T=3")	14 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (T=6")	20 CY
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	14 GAL

THE ABOVE QUANTITIES ARE BASED ON THE PAVEMENT WIDTHS GIVEN IN THE PLANS.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

RESURFACING AFTER PIPE INSTALLATION

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE COMPLETION OF THE CULVERT OR STRUCTURE PLACEMENT. THIS WORK DOES NOT HAVE TO BE COMPLETE DURING THE DETOUR PERIOD.

STA. 61+58 TO STA. 62+89 (SR 241)

ITEM 254 - PAVEMENT PLANING (T=3") 466 SQ. YD.	
ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL/SY	56 GAL
ITEM 408 - PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	23 GAL
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (TWO 1 ½" LIFTS)	39 CY
ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN (T=2")	4 CY

THE ABOVE QUANTITIES ARE BASED ON RESURFACING THE WIDTH OF THE PAVEMENT AND SHOULDERS FOR INSTALLATION AND/OR REMOVAL.

EXCAVATION AND EMBANKMENT

THE FOLLOWING QUANTITY HAS BEEN TAKEN FROM SHEETS P.47 - P.50 AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION	17 CY
ITEM 203 - EMBANKMENT	39 CY

SEEDING AND MULCHING

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

659, TOPSOIL	47 CU. YD.
659, SEEDING AND MULCHING	425 SQ. YD.
659, COMMERCIAL FERTILIZER	0.06 TON
659, LIME	0.08 ACRES
659, WATER	1.14 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.

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - EDGE LINE, 6", TYPE 1	0.04 MI
ITEM 642 - CENTER LINE, TYPE 1	0.02 MI

ITEM 611 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN

THIS QUANTITY WILL BE USED TO ADJUST THE SANITARY MANHOLE TO SHOULDER GRADE AT STATION 60+73.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

611, MANHOLE ADJUSTED TO GRADE, 1 EACH

REF NO.	SHEET NO.	STATION TO STATION						202	202	202	503	601	602	611	611	611	611
								PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	CATCH BASIN REMOVED	COFFERDAMS AND EXCAVATION BRACING (STA-241-1177)	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	CONCRETE MASONRY	12" CONDUIT, TYPE C	36" CONDUIT, TYPE B	36" CONDUIT, TYPE C	CATCH BASIN, NO. 2-4
								FT	FT	EACH		CY	CY	FT	FT	FT	EACH
D-1		61+63.05	LT	TO	61+36.55	RT			56		LUMP				57		
D-3		61+63.05	RT	TO	61+36.55	RT			25	1						30	
D-5		61+36.55	RT	TO	60+70.70	RT			64	1						64	1
D-6		60+33.54	RT	TO	60+70.70	RT		37					0.21	37			
D-7		60+70.70	RT	TO	60+70.43	RT		19	13	1		6	0.60			32	1
TOTALS CARRIED TO GENERAL SUMMARY								56	158	3	LS	6	1	37	57	126	2

DRAINAGE NOTES - SR 241
STA-241-1177

DESIGN AGENCY

DESIGNER MJP
REVIEWER EMS 01-20-23
PROJECT ID 106200
SUBSET 7 TOTAL 7
SHEET P.52 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:54:46 AM USER: mpalagan
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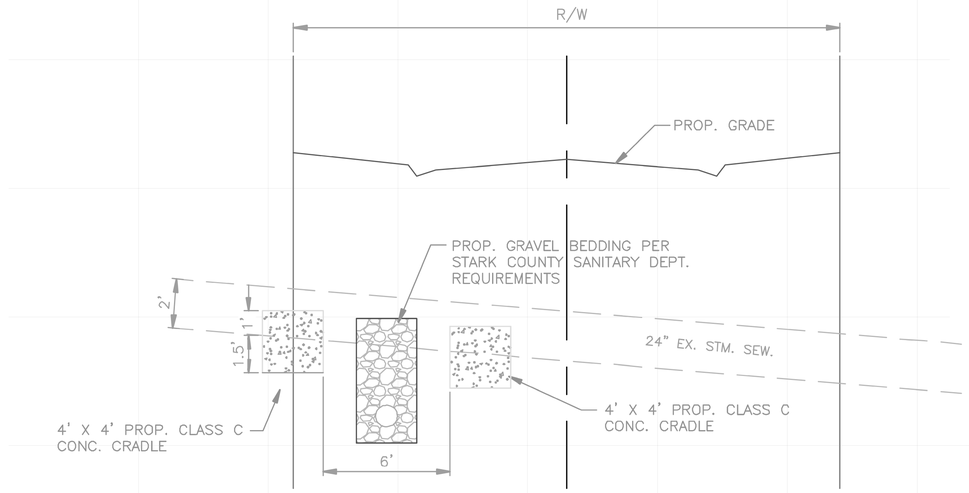
STORM SEWERS OVER SANITARY SEWERS

WHEN STORM SEWERS CROSS OVER SANITARY SEWERS WITH LESS THAN 12" EDGE TO EDGE VERTICAL CLEARANCE, THE STORM SEWER SHALL BE SUPPORTED ON EACH SIDE OF THE SANITARY SEWER BY POURED IN PLACE CONCRETE CRADLES WITH THE NEAR FACES NO LESS THAN 1 FOOT AND NO MORE THAN 3 FEET FROM THE EDGES OF THE SANITARY SEWER.

STANDARD DRAWING PER STARK COUNTY SANITARY ENGINEER'S OFFICE. TO BE USED AT INTERSECTION OF PROPOSED 12" TYPE C (D-6) AND EX. 12" SANITARY SEWER.

THE FOLLOWING PAY ITEMS HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 602, CONCRETE MASONRY, 1 CY



UTILITY PIPE CROSSING DETAIL

NOT TO SCALE

UTILITY DETAILS - STA-241-1175
SANITARY SEWER CRADLE - STA. 60+50

DESIGN AGENCY

DESIGNER MJP

REVIEWER PD 01-20-23

PROJECT ID 106200

SHEET P.53 TOTAL 53

POR/STA-CULVERTS-FY2023

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/18/2023 TIME: 10:55:13 AM USER: mpalagan
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01Active Projects\District 04\Portage\106200\400-Engineering\Utilities\Sheets\106200_UD601.dgn