

LOCATION MAP

LATITUDE: 40° 26' 01" LONGITUDE: -83° 04' 05" (DEL-00229-00.360)
 LATITUDE: 40° 26' 05" LONGITUDE: -83° 03' 35" (DEL-00229-00.930)
 LATITUDE: 40° 26' 03" LONGITUDE: -83° 02' 57" (DEL-00229-01.490)
 LATITUDE: 40° 26' 00" LONGITUDE: -83° 02' 51" (DEL-00229-01.560)
 LATITUDE: 40° 25' 36" LONGITUDE: -83° 02' 16" (DEL-00229-02.298)
 LATITUDE: 40° 25' 03" LONGITUDE: -83° 01' 28" (DEL-00229-03.250)
 LATITUDE: 40° 24' 56" LONGITUDE: -83° 01' 14" (DEL-00229-03.480)



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

DESIGN DESIGNATION

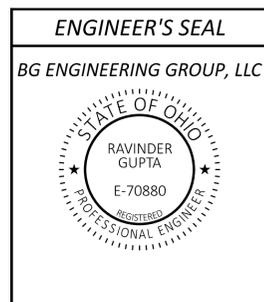
	SLM	SLM
	0.262 - 3.386	3.386 - 6.901
CURRENT ADT (2025)	3600	3600
DESIGN YEAR ADT (2045)	5000	4700
DESIGN HOURLY VOLUME (2045)	650	400
DIRECTIONAL DISTRIBUTION	0.62	0.50
TRUCKS (24 HOUR B&C)	15%	16%
DESIGN SPEED	60 MPH	60 MPH
LEGAL SPEED	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:		
05 MAJOR COLLECTOR (RURAL)		
NHS PROJECT		NO

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBER
SHOULDER WIDTH:	11/07/2024	P.9, P.92, P.122
DESIGN LOADING	11/07/2024	P.84
STRUCTURAL CAPACITY:	11/07/2024	P.97
	11/07/2024	P.110

ADA DESIGN WAIVER: NONE REQUIRED

PLAN PREPARED BY:
 BG ENGINEERING GROUP, LLC
 5960 WILCOX PLACE, SUITE C
 DUBLIN, OHIO, 43016



BEGIN PROJECT
 STA. 17+16.56
 SLM 0.33

END PROJECT
 STA. 179+75.00
 SLM 3.50

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

DEL-229-0.45 AND VARIOUS

MARLBORO TOWNSHIP
 OXFORD TOWNSHIP
 DELAWARE COUNTY

INDEX OF SHEETS:

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MAINTENANCE OF TRAFFIC	P.12-P.21	TRAFFIC CONTROL	P.82-P.83G
GENERAL SUMMARY	P.22-P.25A	STRUCTURES (20 FOOT SPAN AND UNDER)	
SUBSUMMARIES	P.26-P.28	DEL-00229-00.360	P.84-P.96
PLAN AND PROFILES		STRUCTURES (OVER 20 FOOT SPAN)	P.97-P.109
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1.56	P.32	GEOTECHNICAL PROFILE - CULVERT	
2.298	P.33	RIGHT OF WAY	
3.25	P.34		
3.48	P.35-P.36		
CROSS SECTIONS			
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1.56	P.55-P.57		
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3.48	P.66-P.71		

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

Before You Dig

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

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1-19-24	AS-1-15	1-20-23	MT-96.11	7-18-25	TC-41.20	10-18-13	800-2023	1-16-26	WATERWAY PERMITS CONDITIONS 05-19-2025	
		AS-2-15	7-21-23	MT-96.20	7-18-25	TC-41.30	4-21-23	832	7-18-25		
CB-2-2B	7-19-24	CPA-1-08	1-19-24	MT-96.26	1-17-25	TC-42.20	10-18-13	848	7-19-24		
		DS-1-92	7-15-22	MT-97.10	7-18-25	TC-52.10	10-18-13	878	1-16-26		
DM-4.3	1-15-16	EXJ-2-81	7-15-22	MT-99.20	4-19-19	TC-52.20	1-15-21	902	1-16-26		
DM-4.4	1-15-16	GSD-1-19	7-19-24	MT-101.60	1-17-25	TC-61.30	7-19-24	961	4-17-20		
		HW-2.1	7-15-22	MT-101.70	7-19-24	TC-65.10	1-16-26				
MGS-2.1	1-16-26	HW-2.2	7-20-18	MT-101.75	7-21-23	TC-65.11	1-17-25				
MGS-2.3	7-18-25	PCB-91	7-17-20	MT-101.90	7-17-20						
MGS-3.3	1-16-26	SB-1-24	1-16-26	MT-105.10	1-17-20						
MGS-4.2	7-18-25	SICD-2-14	1-15-21								
MGS-4.3	7-18-25	TST-2-21	1-17-25								
MGS-5.3	7-15-16										
MGS-6.1	1-19-18										
RM-1.1	1-16-26										
RM-4.2	1-16-26										

FEDERAL PROJECT NUMBER
 E200 (218)

RAILROAD INVOLVEMENT
 NONE

PROJECT DESCRIPTION
 REHABILITATION OF THE EXISTING STRUCTURES AT 00.360, 00.930, 01.490, & 03.480 AND REPLACEMENT OF THE EXISTING CULVERTS AT 01.560 AND 02.298 AND EXTENDING THE EXISTING CULVERT AT THE 03.250 LOCATION.

EARTH DISTURBED AREAS

DEL-00229-00.360	
PROJECT EARTH DISTURBED AREA:	0.38 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.07 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)
DEL-00229-00.930	
PROJECT EARTH DISTURBED AREA:	0.18 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.05 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)*
* ROUTINE MAINTENANCE PROJECT	
DEL-00229-01.490 AND DEL-00229-01.560	
PROJECT EARTH DISTURBED AREA:	0.36 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.12 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)
DEL-00229-02.298	
PROJECT EARTH DISTURBED AREA:	0.52 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.07 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)
DEL-00229-03.250	
PROJECT EARTH DISTURBED AREA:	0.39 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.07 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)*
* ROUTINE MAINTENANCE PROJECT	
DEL-00229-03.480	
PROJECT EARTH DISTURBED AREA:	0.26 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.07 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)

2023 SPECIFICATIONS

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

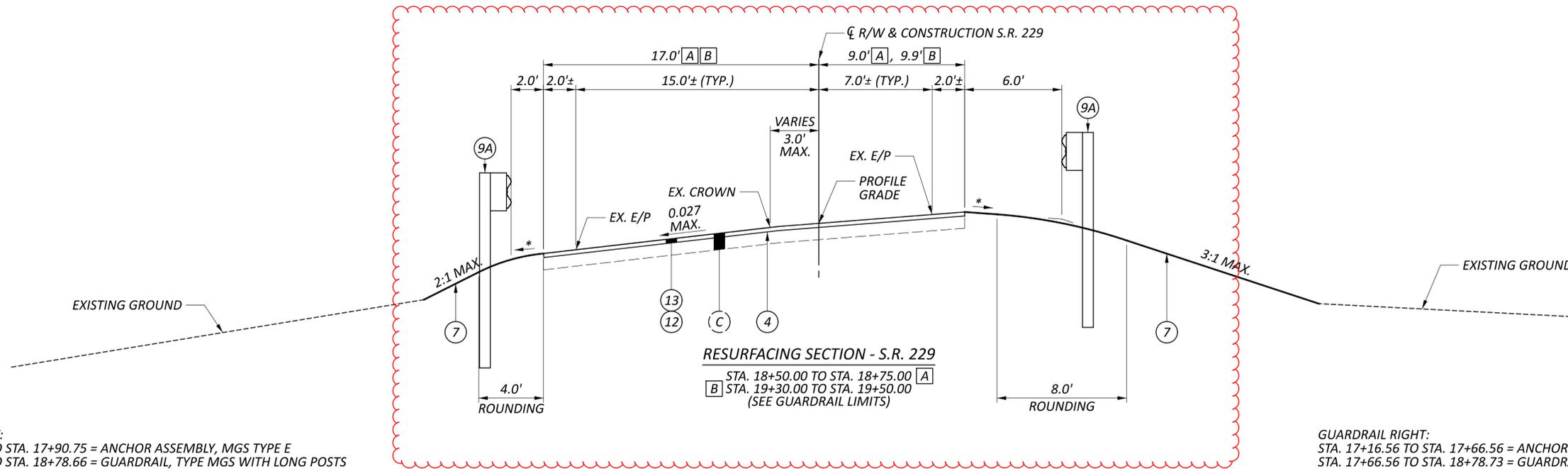
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET P.20A & P.21, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Anthony C. Turowski, P.E.
 District 06 Deputy Director

Pamela Boratyn
 Director, Department of Transportation

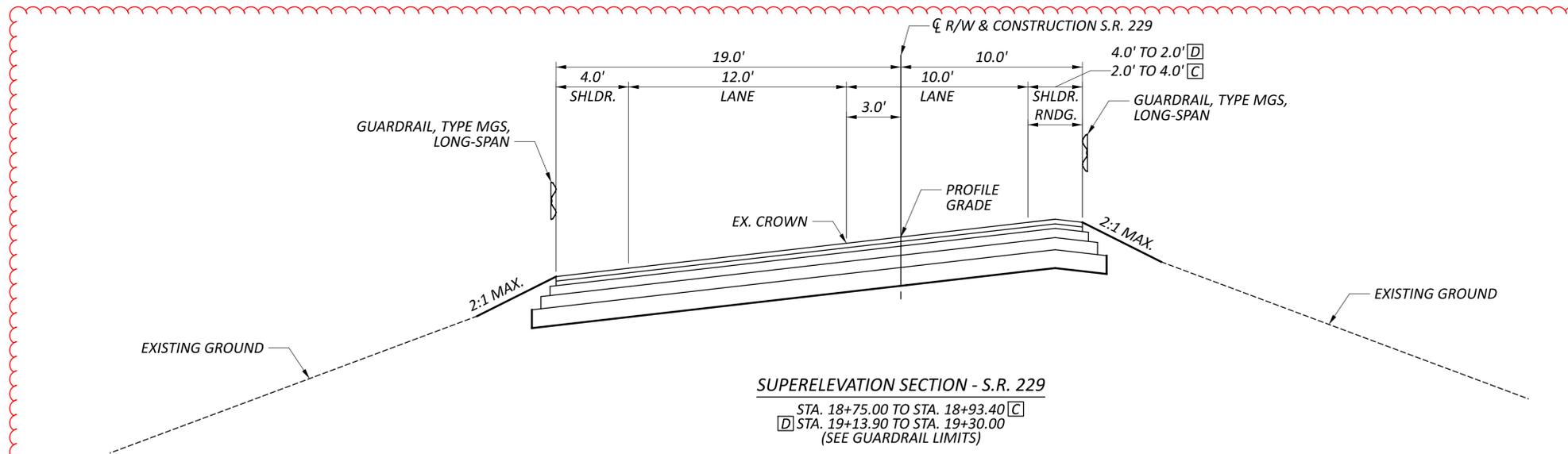
DESIGN AGENCY	BG ENGINEERING GROUP, LLC
DESIGNER	JEP
REVIEWER	RG 02-10-26
PROJECT ID	107754
SHEET	P.1
TOTAL	P.136

* = 0.08

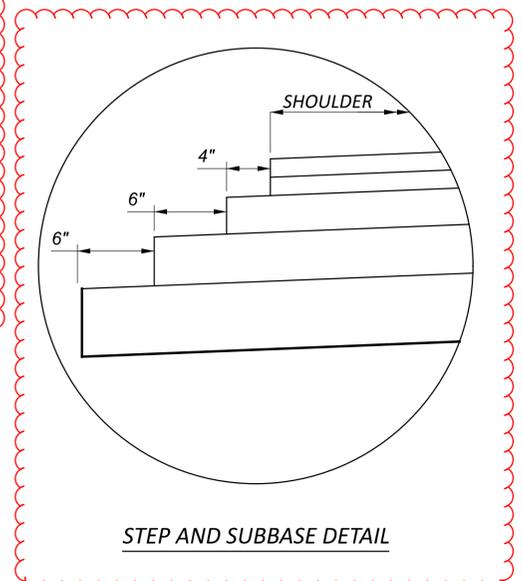


GUARDRAIL LEFT:
 STA. 17+40.75 TO STA. 17+90.75 = ANCHOR ASSEMBLY, MGS TYPE E
 STA. 17+90.75 TO STA. 18+78.66 = GUARDRAIL, TYPE MGS WITH LONG POSTS
 STA. 18+78.66 TO STA. 19+29.08 = GUARDRAIL, TYPE MGS, LONG-SPAN
 STA. 19+29.08 TO STA. 20+55.47 = GUARDRAIL, TYPE MGS WITH LONG POSTS
 STA. 20+55.47 TO STA. 21+06.14 = ANCHOR ASSEMBLY, MGS TYPE E

GUARDRAIL RIGHT:
 STA. 17+16.56 TO STA. 17+66.56 = ANCHOR ASSEMBLY, MGS TYPE E
 STA. 17+66.56 TO STA. 18+78.73 = GUARDRAIL, TYPE MGS WITH LONG POSTS
 STA. 18+78.73 TO STA. 19+28.47 = GUARDRAIL, TYPE MGS, LONG-SPAN
 STA. 19+28.47 TO STA. 20+14.74 = GUARDRAIL, TYPE MGS WITH LONG POSTS
 STA. 20+14.74 TO STA. 20+64.74 = ANCHOR ASSEMBLY, MGS TYPE E



SHOULDER CROSS SLOPE	SHOULDER WIDTH	LANE CROSS SLOPE	LANE WIDTH	CROWN OF PAVEMENT OFFSET FROM CL	STATION	LANE WIDTH	LANE CROSS SLOPE	SHOULDER WIDTH 1	SHOULDER CROSS SLOPE 1	SHOULDER WIDTH 1	SHOULDER CROSS SLOPE 1
0.0785	4.00'	0.0505	12.00'	3.05' LT	18+75.00	10.00'	0.0374	1.50'	0.0155	1.50'	-0.0167
0.0460	4.00'	0.0460	12.00'	3.00' LT	18+93.40	10.00'	0.0460	2.50'	0.0460	6.50'	-0.0160
BRIDGE											
0.0460	4.00'	0.0460	12.00'	3.00' LT	19+13.90	10.00'	0.0460	2.50'	0.0460	6.50'	-0.0160
0.0784	4.00'	0.0533	12.00'	3.00' LT	19+25.00	10.00'	0.0480	1.50'	0.0392	3.70'	-0.0532
0.0930	4.00'	0.0566	12.00'	3.00' LT	19+30.00	10.00'	0.0489	1.50'	0.0362	1.50'	-0.0699



LEGEND

- ① ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (2 LIFTS)
- ② ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449) (VARIABLE THICKNESS)
- ③ ITEM 304 - 6" AGGREGATE BASE
- ④ ITEM 407 - NON-TRACKING TACK COAT (RATE AS PER CM&S TABLE 407.06-1)
- ⑤ ITEM 204 - SUBGRADE COMPACTION
- ⑥ ITEM 304 - 8" AGGREGATE BASE
- ⑦ ITEM 659 - SEEDING AND MULCHING
- ⑧ ITEM 605 - AGGREGATE DRAINS
- ⑨A ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS
- ⑩ ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2
- ⑪ ITEM 526 - 12" REINFORCED CONCRETE APPROACH SLAB
- ⑫ ITEM 441 - 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
- ⑬ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

⑬ 12"± ASPHALT

DEL-229-0.45 AND VARIOUS

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 2/10/2026 TIME: 8:44:21 AM USER: jperchinske P:\Transportation\Worksets\107754_DEL-229-0021\400-Engineering\Roadway\Sheets\107754_GY002.dgn

TYPICAL SECTIONS - 0.36

DESIGN AGENCY

 5560 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER
 JEP

REVIEWER
 RG 9-9-25

PROJECT ID
 107754

SHEET TOTAL
 P.3 | P.136

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

DEL-229-0.36 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-0.93 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-1.49 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-1.56 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-2.298 CONSOLIDATED ELECTRIC COOP., INC. DEL-CO WATER ATTN: CLAY HUEBNER ATTN: DAVE WOLF 5255 STATE ROUTE 95 6773 OLENTANGY RIVER RD MT. GILEAD, OHIO 43338-0111 DELAWARE, OHIO 43015 419-949-2933 740-201-0130 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-3.25 CONSOLIDATED ELECTRIC COOP., INC. DEL-CO WATER ATTN: CLAY HUEBNER ATTN: DAVE WOLF 5255 STATE ROUTE 95 6773 OLENTANGY RIVER RD MT. GILEAD, OHIO 43338-0111 DELAWARE, OHIO 43015 419-949-2933 740-201-0130 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

DEL-229-3.48 FRONTIER COMMUNICATIONS ATTN: CHRIS AVERY 1300 COLUMBUS-SANDUSKY ROAD MARION, OHIO 43302 740-383-0551

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.

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.

SURVEYING PARAMETERS

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

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88 GEOID: GEOID18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2011) ELLIPSOID: GRS80 MAP PROJECTION: LAMBERT CONFORMAL CONIC COORDINATE SYSTEM: OHIO STATE PLANE NORTH ZONE COMBINED SCALE FACTOR: 0.999961291 ORIGIN OF COORDINATE SYSTEM: 0, 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.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 605, AGGREGATE DRAINS 50 FT

CLEARING AND GRUBBING

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

SEEDING AND MULCHING

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

Table with 10 columns for quantities and 10 rows for items: 659, TOPSOIL, 659, SEEDING AND MULCHING, 659, COMMERCIAL FERTILIZER, 659, LIME, 659, WATER. Includes a 'TOTALS' row with values: 0.36, 0.93, 1.49, 1.56, 2.298, 3.25, 3.48, 688, 6180, 0.83, 1.26, 36.

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.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 3 HOUR

ITEM 605 - AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FEET FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE.

Table for DEL-229-0.36 with columns for stationing (18+75, 18+93, 19+14, 19+30) and values (3, 4, 5, 3, 15).

Table for DEL-229-1.56 with columns for stationing (77+25, 77+50, 77+75) and values (8, 11, 10, 29).

Table for DEL-229-2.298 with columns for stationing (13+50, 13+75, 14+00, 14+25, 14+50) and values (10, 10, 10, 10, 10, 70).

Table for DEL-229-3.48 with columns for stationing (176+00, 176+25, 176+50, 176+75, 177+00, 177+25) and values (8, 8, 6, 5, 6, 5, 4, 5, 8, 6, 61).

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS FOR AGGREGATE DRAINS:

605, AGGREGATE DRAINS 175 FT

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.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

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

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE (RIGHT OF WAY) (CONSTRUCTION) LIMITS BY ITEM 611 CONDUIT, TYPE B AS PER PLAN, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 611 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 611, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

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

EROSION CONTROL PADS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS 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 SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- 611, 6" CONDUIT, TYPE E 50 FT
611, 6" CONDUIT, TYPE F 50 FT
611, 8" CONDUIT, TYPE E 50 FT
611, 8" CONDUIT, TYPE F 50 FT
611, 10" CONDUIT, TYPE E 50 FT
611, 10" CONDUIT, TYPE F 50 FT

ITEM 202 - REMOVAL MISC.: MODULAR HEADWALL

REMOVAL OF THE EXISTING MODULAR HEADWALLS LOCATED AT THE OUTLET AND INLET ENDS OF THE EXISTING 36" CMP FOR THE 3.25 SITE SHALL BE PAID FOR UNDER THE LUMP SUM ITEM 202, REMOVAL MISC.: MODULAR HEADWALL. PAYMENT FOR ALL LABOR, EQUIPMENT, AND DISPOSAL OF MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN BELOW.

623, MONUMENT ASSEMBLY, TYPE C 4 EACH

- STA. 111+42.54, 0.00' CL
STA. 129+05.36 0.00' CL
STA. 165+00.00, 0.00' CL
STA. 168+64.80, 0.00' CL

623, RIGHT-OF-WAY MONUMENT, TYPE B 10 EACH

- STA. 114+69.17, 25.00' RT
STA. 114+69.30, 29.95' RT
STA. 163+23.94, 29.90' LT
STA. 163+24.77, 25.00' LT
STA. 163+60.87, 0.00' CL
STA. 163+60.89, 29.99' RT
STA. 163+97.33, 29.72' LT
STA. 163+98.05, 29.73' LT
STA. 164+75.00, 50.00' LT
STA. 165+00.00, 25.00' LT

ITEM 614, MAINTAINING TRAFFIC

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM,

THE OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC, 1980 WEST BROAD STREET COLUMBUS, OHIO 43223

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

LANE CLOSURES AND RESTRICTIONS SHALL ADHERE TO THE TIMES LISTED IN THE LANE VALUE CONTRACT TABLES. THE MAXIMUM ALLOWABLE CLOSURE LENGTH IS 2 MILES AT ANY GIVEN TIME. CLOSURES OR RESTRICTIONS SHALL BE REMOVED FROM THE ROADWAY AT THE END OF WORKING HOURS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR APPROVED BY THE ENGINEER. LANE CLOSURES OR RESTRICTIONS SHALL BE LIMITED TO AREAS WHERE WORK IS BEING PERFORMED. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE CONSTRUCTION INSPECTOR SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE ALLOWED TO BEGIN WORK. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, HIS PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF WORK ZONE TRAFFIC SIGNALS AND A COMBINATION OF EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614, EXCEPT FOR A PERIOD NOT TO EXCEED 30 CONSECUTIVE CALENDAR DAYS FOR THE 0.36 SITE AND 60 CONSECUTIVE CALENDAR DAYS FOR THE 3.48 SITE. WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS P.20A & P.21. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT SHOWN IN THE WINDOW CONTRACT TABLE ON THIS SHEET. THE 0.36 AND 3.48 SITES SHALL NOT BE CONCURRENTLY CLOSED.

CONTRACTOR SHALL CONSIDER THE 1.49 AND 1.56 SITE LOCATIONS TO BE A SINGLE WORK ZONE AND SHALL CONSTRUCT BOTH LOCATIONS SIMULTANEOUSLY.

THE 3.25 SITE SHALL UTILIZE FLAGGERS AS PER SCD MT-97.10 TO PERFORM ALL CONSTRUCTION OPERATIONS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES WHEN CONSTRUCTION ACTIVITIES ARE NOT BEING PERFORMED. FLAGGERS SHALL ALSO BE USED TO COMPLETE THE BRIDGE OVERLAY WORK FOR THE 0.93 STRUCTURE AND SHALL BE LIMITED TO NIGHTTIME AND WEEKEND HOURS ONLY.

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

Table with 2 columns: NEW YEAR'S (OBSERVED), MEMORIAL DAY, FOURTH OF JULY (OBSERVED), LABOR DAY; GENERAL/REGULAR ELECTION DAY (NOV), THANKSGIVING, CHRISTMAS (OBSERVED).

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

Table with 2 columns: DAY OF HOLIDAY OR EVENT, TIME ALL LANES MUST BE OPEN TO TRAFFIC. Rows include SUNDAY, MONDAY, TUESDAY, TUESDAY (GEN/REG ELECTION), WEDNESDAY, THURSDAY, THURSDAY (THANKSGIVING ONLY), FRIDAY, SATURDAY.

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

SPECIAL EVENTS

DELAWARE COUNTY FAIR - LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE DELAWARE COUNTY FAIR 6AM-10PM DAILY ON THE FOLLOWING ROUTES: SR 229 BETWEEN US 23 AND PETERS ROAD (CR 250)

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$100 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY-FOUR (24) HOURS PER DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

Table with 3 columns: ITEM, DURATION OF CLOSURE, SIGN DISPLAYED TO PUBLIC. Rows for ROAD CLOSURES with durations >= 2 WEEKS, > 12 HOURS & < 2 WEEKS, <= 12 HOURS.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD 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 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.

SR 229 WILL BE CLOSED "MMM-DD" FOR 30 DAYS INFO: 1-740-833-8268 W20-H13-60 (0.36 SITE)

SR 229 WILL BE CLOSED "MMM-DD" FOR 60 DAYS INFO: 1-740-833-8268 W20-H13-60 (3.48 SITE)

WINDOW CONTRACT TABLE with columns: DESCRIPTION OF CRITICAL WORK, CALENDAR DAYS TO COMPLETE, DISINCENTIVE \$ PER DAY, WORK WINDOW (START, END). Rows for ALL PROPOSED WORK AT THE 0.36 SITE and ALL PROPOSED WORK AT THE 3.48 SITE.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

- AT THE LIMITS OF THE WORK AREA FOR THE 0.36 SITE ON S.R 229
- AT THE LIMITS OF THE WORK AREA FOR THE 3.48 SITE ON S.R 229

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN ON THE DETOUR PLAN.

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.

SEQUENCE OF CONSTRUCTION ON S.R. 229

THE FOLLOWING IS A SUGGESTED SEQUENCE OF CONSTRUCTION FOR THIS PROJECT:

IT IS THE INTENT OF THE FOLLOWING SEQUENCE OF CONSTRUCTION TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN THE MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC. ALL WORK ZONE OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY PAVEMENT IS OPEN TO TRAFFIC. CONTRACTOR SHALL ERECT ALL TRAFFIC CONTROL DEVICES AND ENSURE THEY ARE IN GOOD WORKING ORDER PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES ON THE BRIDGE. PRIOR TO ERECTING PORTABLE BARRIER, PAVEMENT FOR MAINTAINING TRAFFIC SHALL BE PLACED AS SHOWN, ON SHEET P.15-P.20.

ALL WORK ZONE SIGNING AND STRIPING SHALL BE IN PLACE PRIOR TO ERECTING BARRIER, AS WELL AS THE WORK ZONE TRAFFIC SIGNAL INSTALLATIONS.

THE WORK ZONE TRAFFIC SIGNALS SHALL INITIALLY BE TIMED ACCORDING TO THE SIGNAL PHASING DIAGRAM INCLUDED IN THE PLAN OR AS PROVIDED BY ENGINEER. THE CONTRACTOR SHALL PERIODICALLY MONITOR THE SIGNAL OPERATION TO DETERMINE FAILURE OR INEFFICIENT OPERATION. AT THE BEGINNING OF EACH PHASE, THE ENGINEER SHALL OBSERVE THE INITIAL FUNCTIONING OF THE TIMING PLAN TO ENSURE IT IS WORKING PROPERLY, AND ACCOMPLISHING THE ABOVE STATED INTENT, AS WELL AS AVOIDING UNREASONABLY LONG TRAFFIC QUEUES AT EITHER END. IF NECESSARY, THE TIMING SHALL BE ADJUSTED IF UNREASONABLY LONG TRAFFIC QUEUES ARE OBSERVED ON EITHER SIDE. THE ENGINEER AND CONTRACTOR SHALL MAKE PERIODIC OBSERVATIONS (AT LEAST BI-WEEKLY) TO ENSURE THAT THE SIGNALS ARE CONTINUING TO FUNCTION AS PLANNED. THE CONTRACTOR SHALL COMPLETE ALL WORK AS SHOWN IN THE TABLE:

Table with 3 columns: PROPOSED WORK, COMPLETION DATE, DISINCENTIVE \$ PER DAY. Row for ALL PROPOSED WORK AT 0.93, 1.49, 1.56, 2.298, AND 3.25 SITES with completion date 10/1/2026 and \$2,000.

0.93 SITE

PRE-PHASE: DURING PRE-PHASE, CONSTRUCT ALL TEMPORARY PAVEMENT ALONG THE SOUTHERN SHOULDER TO THE LIMITS SHOWN ON SHEET P.15. CONTRACTOR IS TO MAINTAIN TWO-WAY TRAFFIC USING THE EXISTING PAVEMENT AS WELL AS MAINTAIN ACCESS TO THE "NORTON RUN FISHING AREA AND KAYAK LAUNCH" DRIVE DURING PHASE 1 CONSTRUCTION.

PHASE 1: DURING PHASE 1, TRAFFIC WILL BE SHIFTED TO THE EXISTING PAVEMENT ON THE SOUTH SIDE (EASTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE NORTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.15. INSTALL THE TEMPORARY TRAFFIC SIGNALS AS SHOWN TO BE USED DURING PHASES 1 AND 2. FOR THE DEL-00229-00.930 PART-WIDTH CONSTRUCTION DETAILS, SEE SHEET P.87. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE "NORTON RUN FISHING AREA AND KAYAK LAUNCH" DRIVE. REFER TO SHEET P.14 FOR ADDITIONAL NOTES REGARDING CANOE AND BOATING TRAFFIC TEMPORARY CLOSURES DURING SPECIFIC CONSTRUCTION ACTIVITIES. CONSTRUCT TEMPORARY PAVEMENT ON THE NORTH SIDE OF S.R. 229 TO THE LIMITS SHOWN ON SHEET P.16 TO BE USED DURING PHASE 2.

PHASE 2: DURING PHASE 2, TRAFFIC WILL BE SHIFTED TO THE EXISTING PAVEMENT ON THE NORTH SIDE (WESTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE SOUTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.16. FOR THE DEL-00229-00.930 PART-WIDTH CONSTRUCTION DETAILS, SEE SHEET P.88. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE "NORTON RUN FISHING AREA AND KAYAK LAUNCH" DRIVE. REFER TO SHEET P.14 FOR ADDITIONAL NOTES REGARDING CANOE AND BOATING TRAFFIC TEMPORARY CLOSURES DURING SPECIFIC CONSTRUCTION ACTIVITIES.

PHASE 3: CONTRACTOR SHALL REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES USED IN THE PREVIOUS PHASE PRIOR TO BEGINNING PHASE 3 WORK. FLAGGERS AS PER SCD MT-97.10 SHALL BE USED TO COMPLETE THE BRIDGE OVERLAY AND MISCELLANEOUS WORK. THIS WORK SHALL BE LIMITED TO NIGHTTIME AND WEEKEND CLOSURES ONLY. CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING PRIOR TO ANY CLOSURES AS OUTLINED IN THE "NOTIFICATION OF TRAFFIC RESTRICTIONS" NOTE.

CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES AND RETURN THE FLOW OF TRAFFIC TO THE TYPICAL CONFIGURATION ONCE ALL PROPOSED WORK HAS BEEN COMPLETED. PLACE THE FINAL PAVEMENT MARKINGS PRIOR TO OPENING TRAFFIC FOR S.R. 229.

0.1.49/1.56 SITE

PRE-PHASE:

DURING PRE-PHASE, CONSTRUCT ALL TEMPORARY PAVEMENT ALONG THE SOUTHERN SHOULDER TO THE LIMITS SHOWN ON SHEET P.17. CONTRACTOR IS TO MAINTAIN TWO-WAY TRAFFIC USING THE EXISTING PAVEMENT AS WELL AS MAINTAIN ACCESS TO "GEARHISER ROAD" AND THE FIELD DRIVE ON THE NORTH SIDE OF S.R. 229 DURING PHASE 1 CONSTRUCTION.

PHASE 1:

DURING PHASE 1, TRAFFIC WILL BE SHIFTED TO THE EXISTING PAVEMENT ON THE SOUTH SIDE (EASTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE NORTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.17. INSTALL THE TEMPORARY TRAFFIC SIGNALS AS SHOWN TO BE USED DURING PHASES 1 AND 2. FOR THE DEL-00229-01.490 PART-WIDTH CONSTRUCTION DETAILS, SEE SHEET P.100. THE CONTRACTOR SHALL MAINTAIN ACCESS TO "GEARHISER ROAD" AND THE FIELD DRIVE. CONSTRUCT TEMPORARY PAVEMENT ON THE NORTH SIDE OF S.R. 229 TO THE LIMITS SHOWN ON SHEET P.18 TO BE USED DURING PHASE 2.

PHASE 2:

DURING PHASE 2, TRAFFIC WILL BE SHIFTED TO THE EXISTING PAVEMENT ON THE NORTH SIDE (WESTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE SOUTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.18. FOR THE DEL-00229-00.930 PART-WIDTH CONSTRUCTION DETAILS, SEE SHEET P.101. THE CONTRACTOR SHALL MAINTAIN ACCESS TO "GEARHISER ROAD" AND THE FIELD DRIVE.

CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES AND RETURN THE FLOW OF TRAFFIC TO THE TYPICAL CONFIGURATION ONCE ALL PROPOSED WORK HAS BEEN COMPLETED. PLACE THE FINAL PAVEMENT MARKINGS PRIOR TO OPENING TRAFFIC FOR S.R. 229.

2.298 SITE

PRE-PHASE:

DURING PRE-PHASE, CONSTRUCT ALL TEMPORARY PAVEMENT ALONG THE SOUTHERN SHOULDER TO THE LIMITS SHOWN ON SHEET P.19. CONTRACTOR IS TO MAINTAIN TWO-WAY TRAFFIC USING THE EXISTING PAVEMENT AS WELL AS MAINTAIN ACCESS TO THE ASPHALT AND GRAVEL DRIVES ON THE SOUTH SIDE OF S.R. 229 DURING PHASE 1 CONSTRUCTION.

PHASE 1:

DURING PHASE 1, TRAFFIC WILL BE SHIFTED TO THE EXISTING PAVEMENT ON THE NORTH SIDE (WESTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE SOUTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.19. INSTALL THE TEMPORARY TRAFFIC SIGNALS AS SHOWN TO BE USED DURING PHASES 1 AND 2. CONTRACTOR SHALL COMPLETE ALL ROADWAY AND PROPOSED CULVERT WORK TO THE LIMITS SHOWN DURING THIS PHASE. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE ASPHALT AND GRAVEL DRIVES AT ALL TIME. CONSTRUCT TEMPORARY PAVEMENT ON THE SOUTH SIDE OF S.R. 229 TO THE LIMITS SHOWN ON SHEET P.20 TO BE USED DURING PHASE 2.

PHASE 2:

DURING PHASE 2, TRAFFIC WILL BE SHIFTED TO THE NEWLY CONSTRUCTED PAVEMENT AND EXISTING PAVEMENT ON THE SOUTH SIDE (EASTBOUND) OF S.R. 229 AND REDUCED TO A SIGNALIZED ONE LANE, TWO-WAY TRAFFIC TO ALLOW CONSTRUCTION TO BE PERFORMED ON THE NORTH SIDE OF S.R. 229. THROUGHOUT THE WORK AREA, THE LANE SHALL BE 10.0' WITH 1.0' PORTABLE BARRIER OFFSET AND A 2.0' SHOULDER MAXIMUM. THE CONTRACTOR SHALL INSTALL ALL PORTABLE BARRIER, SIGNS, AND PAVEMENT MARKINGS AS SHOWN ON SHEET P.20. CONTRACTOR SHALL COMPLETE ALL ROADWAY AND PROPOSED CULVERT WORK TO THE LIMITS SHOWN DURING THIS PHASE. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE ASPHALT AND GRAVEL DRIVES AT ALL TIME.

CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES AND RETURN THE FLOW OF TRAFFIC TO THE TYPICAL CONFIGURATION ONCE ALL PROPOSED WORK HAS BEEN COMPLETED. PLACE THE FINAL PAVEMENT MARKINGS PRIOR TO OPENING TRAFFIC FOR S.R. 229.

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.

Table with 3 columns: ITEM, DURATION OF CLOSURE, NOTICE DUE TO PERMITS & PIO. Rows include ROAD CLOSURES, LANE CLOSURES & RESTRICTIONS, and START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES.

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

WORK SITE LIGHTING:

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR, AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

DROPOFFS IN WORK ZONES:

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEET THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

TRUCK MOUNTED ATTENUATOR (TMA) – TWO LANE ROADS

WHEN WORKING IN A CLOSED LANE OR SHOULDER ON A TWO-LANE HIGHWAY WITHOUT TEMPORARY OR PERMANENT TRAFFIC BARRIERS SEPARATING THE WORK AREA FROM THE TRAVELED LANE, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED TO PROTECT EACH WORK AREA IN ACCORDANCE WITH OMUTCD TYPICAL APPLICATION (TA) 4, TA-6 AND TA-17, ALONG WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-97.10. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLAGGERS AND/OR WARNING SIGNS AND DEVICES. FURNISH A TMA THAT IS NCHRP-350 (MANUFACTURED PRIOR TO 1/1/20) OR MASH TL-3 COMPLIANT. THE COST FOR PROVIDING THE TMA SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE REPLACEMENT AND IS TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

ITEM 614 - DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F-01.

DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

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

ITEM 614 - DETOUR SIGNING LUMP SUM

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, LOCAL ROUTES HAVE BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THESE ROUTES ARE SHOWN ON SHEETS P.20A & P.21. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

DURING THE TIME THAT TRAFFIC IS DETOURED, THOSE ROUTES THAT ARE PART OF THE OFFICIAL STATE DETOUR ROUTE THROUGH MUNICIPAL CORPORATIONS, THE CONTRACTOR SHALL MAINTAIN THESE ROUTES IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST, AND STANDING WATER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED STATE AND LOCAL DETOUR ROUTES.

Table with 2 columns: ITEM, QUANTITY. Rows include ITEM 251, ITEM 253, ITEM 441, ITEM 407, ITEM 614, ITEM 617, ITEM 642.

FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS P.15-P.20 AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

Table with 3 columns: PHASE, S.R. 229 EASTBOUND, S.R. 229 WESTBOUND. Rows include MAX. GREEN, EXTENSION, MIN. GREEN, YELLOW, ALL RED.

Table with 4 columns: PHASE, S.R. 229 EASTBOUND, S.R. 229 WESTBOUND, GRAVEL DRIVE. Rows include MAX. GREEN, EXTENSION, MIN. GREEN, YELLOW, ALL RED.

PROVIDE TIMING APPROPRIATE FOR THE SIGNAL LOCATION UNDER CONSIDERATION. TYPICAL FLOW RATES ARE DISPLAYED IN TABLE 697-2 IN THE ODOT TRAFFIC ENGINEERING MANUAL (TEM).

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

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

Table with 2 columns: ITEM, QUANTITY. Rows include ITEM 614, BARRIER REFLECTOR, TYPE 3 (BIDIRECTIONAL) 30 EACH, ITEM 614, OBJECT MARKER, TWO-WAY 30 EACH.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT D06.PIO@DOT.OHIO.GOV, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT D06.MOT@DOT.OHIO.GOV AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION VIA EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

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

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

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

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

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

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

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT101.70.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

Table with 2 columns: ITEM, QUANTITY. Rows include ITEM 614, BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL) 71 EACH, ITEM 614, OBJECT MARKER, TWO-WAY 71 EACH, ITEM 614, INCREASED BARRIER DELINEATION 3580 FEET.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

SHEET NUM.													PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.10	P.13		P.28	P.41	P.48	P.54	P.57	P.61	P.65	P.71	P.99	OFFICE CALCS	01/STR	02/STR						
LS													LS	LS	201	11000	LS	ROADWAY		
			1,787										481	1,306	202	23000	1,787	PAVEMENT REMOVED		
			194											194	202	35100	194	PIPE REMOVED, 24" DIAMETER AND UNDER		
			45											45	202	35200	45	PIPE REMOVED, OVER 24" DIAMETER		
			2,731										1,598	1,133	202	38000	2,731	GUARDRAIL REMOVED		
			1											1	202	58100	1	CATCH BASIN REMOVED		
														LS	202	98000	LS	REMOVAL MISC.: MODULAR WALL	P.10	
				74		70	139	513	140	267			337	866	203	10000	1,203	EXCAVATION		
				68	32	44	131	199	647	18			94	1,045	203	20000	1,139	EMBANKMENT		
													1,796	527	204	10000	1,796	SUBGRADE COMPACTION		
3													1	2	204	45000	3	PROOF ROLLING		
			537.5										75	462.5	606	15050	537.5	GUARDRAIL, TYPE MGS		
			1,537.5										1,125	412.5	606	15100	1,537.5	GUARDRAIL, TYPE MGS WITH LONG POSTS		
			100											100	606	17360	100	GUARDRAIL, TYPE MGS, LONG-SPAN		
			10										2	8	606	26150	10	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	P.11	
			1										1		606	26550	1	ANCHOR ASSEMBLY, MGS TYPE T		
														12		606	34600	12	MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	
4														4	623	38500	4	MONUMENT ASSEMBLY, TYPE C		
10														10	623	40520	10	RIGHT-OF-WAY MONUMENT, TYPE B		
													LS	LS	878	25000	LS	INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		
																		EROSION CONTROL		
			381										252	129	601	32104	381	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC		
			688										171	517	659	00300	688	TOPSOIL		
			6,180										1,534	4,646	659	10000	6,180	SEEDING AND MULCHING		
			0.83										0.2	0.63	659	20000	0.83	COMMERCIAL FERTILIZER		
			1.26										0.31	0.95	659	31000	1.26	LIME		
			36										10	26	659	35000	36	WATER		
													44,280	44,280	832	30000	88,560	EROSION CONTROL		
																		DRAINAGE		
			2.72											2.72	602	20000	2.72	CONCRETE MASONRY		
														86	139	605	31100	225	AGGREGATE DRAINS	
														5	611	00406	5	4" CONDUIT, TYPE F		
50													25	25	611	01400	50	6" CONDUIT, TYPE E		
50													25	25	611	01500	50	6" CONDUIT, TYPE F		
50													25	25	611	02500	50	8" CONDUIT, TYPE E		
													25	25	611	02600	50	8" CONDUIT, TYPE F		
													25	25	611	03600	50	10" CONDUIT, TYPE E		
													25	25	611	03700	50	10" CONDUIT, TYPE F		
			117											117	611	05901	117	15" CONDUIT, TYPE B, AS PER PLAN	P.11	
			5											5	611	10600	5	24" CONDUIT, TYPE C		
														86	611	13201	86	30" CONDUIT, TYPE A, AS PER PLAN	P.11	
																		707.01 METALLIC COATED (ALUMINIZED)		
																		(16 GAUGE, 0.064" MIN.) (ALUMINUM COATED),		
																		706.02 REINFORCED CONCRETE CIRCULAR PIPE,		
																		707.33 CORRUGATED POLYETHYLENE SMOOTH LINED PIPE,		
																		707.65 CORRUGATED POLYPROPYLENE SMOOTH LINED PIPE		
														40	611	16201	40	36" CONDUIT, TYPE A, AS PER PLAN	P.11	
																		707.01 OR 707.02 METALLIC COATED (ALUMINIZED)		
																		(16 GAUGE, 0.064" MIN.) (ALUMINUM COATED)		
														2	611	98470	2	CATCH BASIN, NO. 2-2B		
																		PAVEMENT		
													50	251	01000	50	50	PARTIAL DEPTH PAVEMENT REPAIR (441)		

GENERAL SUMMARY

DESIGN AGENCY

 www.bgengr.com
 5560 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER
 JEP

REVIEWER
 RG 9-9-25

PROJECT ID
 107754

SHEET TOTAL
 P.22 P.136

DEL-229-0.45 AND VARIOUS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 2/10/2026 TIME: 8:45:44 AM USER: jperchinske
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REF. NO.	SHEET NO.	STATION TO STATION		SIDE	202					601		602	606					611								
					PAVEMENT REMOVED SQ YD	PIPE REMOVED, 24" DIAMETER AND UNDER FEET	PIPE REMOVED, OVER 24" DIAMETER FEET	GUARDRAIL REMOVED FEET	CATCH BASIN REMOVED EACH	REMOVAL MISC.: MODULAR WALL 202E98000	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC (2'-6" THICK) CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC (2'-0" THICK) CU YD	CONCRETE MASONRY CU YD	GUARDRAIL, TYPE MGS FEET	GUARDRAIL, TYPE MGS WITH LONG POSTS FEET	GUARDRAIL, TYPE MGS, LONG-SPAN FEET	ANCHOR ASSEMBLY, MGS TYPE E EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2 EACH	CATCH BASIN, NO. 2-2B EACH	4" CONDUIT, TYPE F FEET	15" CONDUIT, TYPE B, AS PER PLAN FEET	24" CONDUIT, TYPE C FEET	30" CONDUIT, TYPE A, AS PER PLAN FEET	36" CONDUIT, TYPE A, AS PER PLAN FEET	
DEL-229-0.36																										
GR-1	P.29	17+16.56	-	20+64.74	RT																					
GR-2	P.29	17+40.75	-	21+06.14	LT																					
R-1	P.29	18+75	-	19+30	LT/RT	179																				
DEL-229-0.93																										
E-1	P.30	43+31	-	43+56	LT/RT																					
E-2	P.30	44+36	-	44+62	LT/RT																					
GR-1	P.30	41+23.97	-	42+50.98	LT																					
GR-2	P.30	41+41.85	-	42+68.99	RT																					
GR-3	P.30	45+23.69	-	47+25.69	LT																					
GR-4	P.30	45+41.61	-	47+43.80	RT																					
DEL-229-1.49																										
E-1	P.31	73+76	-	74+50	RT																					
GR-1	P.31	71+46.13	-	72+47.08	LT																					
GR-2	P.31	71+46.13	-	72+45.02	RT																					
GR-3	P.31	73+72.93	-	75+58.11	LT																					
GR-4	P.31	73+74.97	-	74+77.17	RT																					
DEL-229-1.56																										
D-1	P.32	77+31	-	77+61	LT/RT																					
E-1	P.32	76+90	-	78+00	RT																					
GR-1	P.32	76+87.50	-	78+12.50	RT																					
R-1	P.32	77+25	-	77+75	LT/RT	147																				
DEL-229-2.298																										
D-1	P.33	14+52	-	14+58	LT/RT																					
R-1	P.33	14+47	-	14+54	LT/RT																					
R-2	P.33	12+75	-	16+25	LT/RT	980																				
R-3	P.33	14+52	-	14+58	LT/RT																					
DEL-229-3.25																										
D-1	P.34	163+87			LT/RT																					
GR-1	P.34	162+86.81	-	165+64.94	RT																					
GR-2	P.34	162+46.28	-	165+11.88	LT																					
R-1	P.34	162+94	-	164+70	RT																					
R-2	P.34	163+01	-	164+79	LT																					
DEL-229-3.48																										
E-1	P.36	179+26	-	180+25	RT																					
GR-1	P.35	P.36	176+29.33	-	177+56.05	RT																				
GR-2	P.35	P.36	176+29.12	-	177+56.05	LT																				
GR-3	P.36		179+23.94	-	180+50.76	LT																				
GR-4	P.36		179+23.94	-	180+25.77	RT																				
R-1	P.35	P.36	14+47	-	14+54	LT/RT	316																			
R-2	P.36		12+75	-	16+25	LT/RT	165																			
SUBTOTAL																										
TOTALS CARRIED TO GENERAL SUMMARY						1787	194	45	2731	1	LS	381	298	2.72	537.5	1537.5	100.0	10	1	12	2	5	117	5	86	40

ROADWAY, EROSION CONTROL, AND DRAINAGE SUBSUMMARY

DESIGN AGENCY

 www.bginch.com
 5560 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER
 JEP

REVIEWER
 RG 9-9-25

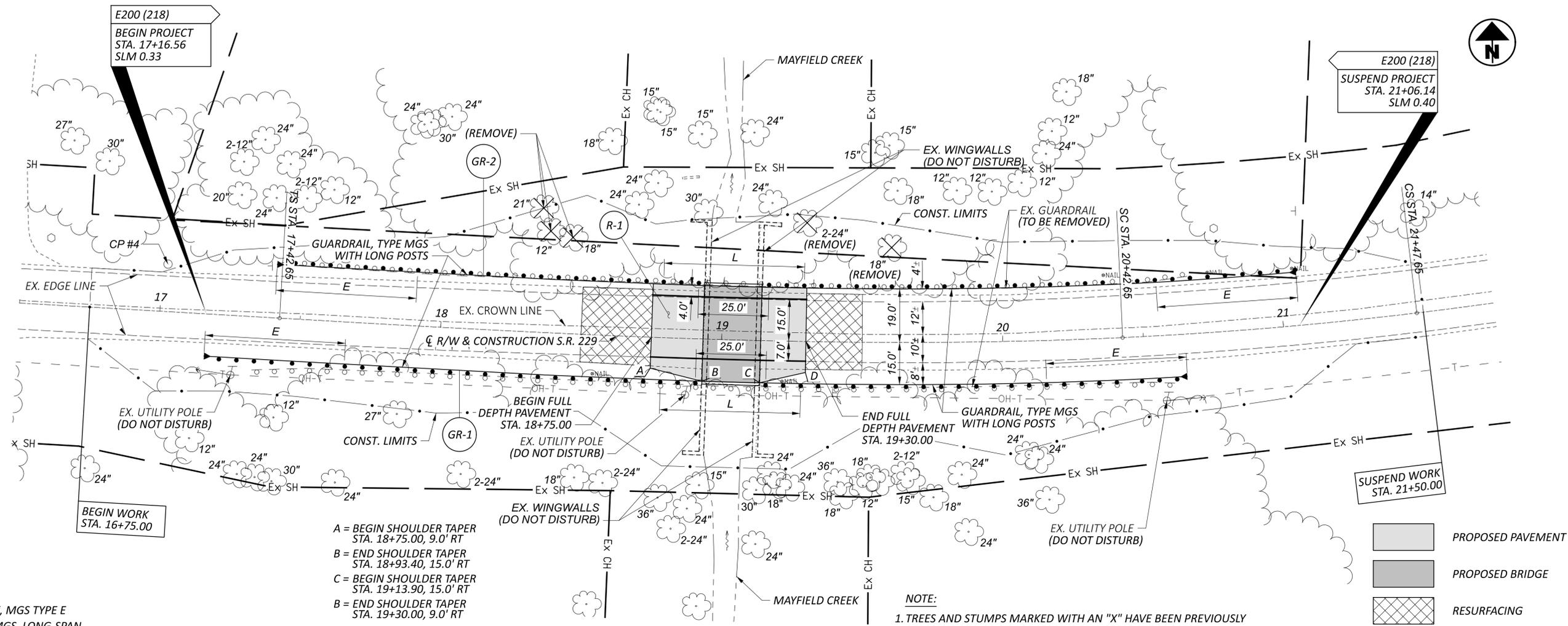
PROJECT ID
 107754

SHEET TOTAL
 P.28 | P.136

SPIRAL DATA
 P.I. = Sta. 19+42.77
 Ls = 300.00'
 $\phi_s = 06^{\circ}00'00''$
 LT = 200.12'
 ST = 100.10'
 x = 299.67'
 y = 10.46'
 k = 149.95'
 p = 2.62'
 C = 299.85'
 Start = Sta. 17+42.65
 End = Sta. 20+42.65
 C.B. = S87°47'08"E

CURVE DATA
 P.I. = Sta. 20+95.18
 $\Delta = 04^{\circ}12'00''$ LT
 Dc = 04'00"00"
 R = 1,432.39'
 T = 52.52'
 L = 105.00'
 E = 0.96'

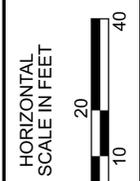
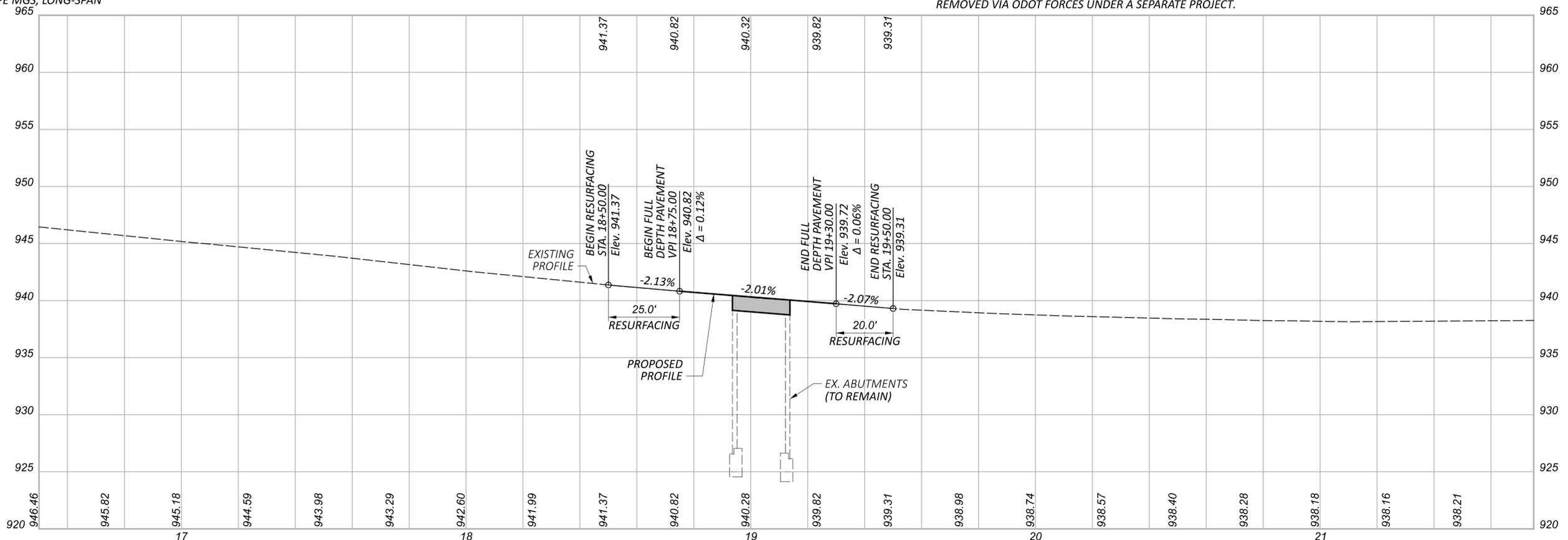
SPIRAL DATA
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 $\phi_s = 06^{\circ}00'00''$
 LT = 200.12'
 ST = 100.10'
 x = 299.12'
 y = 20.92'
 k = 149.95'
 p = 2.62'
 C = 299.85'
 Start = Sta. 21+47.65
 End = Sta. 24+47.65
 C.B. = N80°00'51"E



- A = BEGIN SHOULDER TAPER STA. 18+75.00, 9.0' RT
- B = END SHOULDER TAPER STA. 18+93.40, 15.0' RT
- C = BEGIN SHOULDER TAPER STA. 19+13.90, 15.0' RT
- B = END SHOULDER TAPER STA. 19+30.00, 9.0' RT

E = ANCHOR ASSEMBLY, MGS TYPE E
 L = GUARDRAIL, TYPE MGS, LONG-SPAN

NOTE:
 1. TREES AND STUMPS MARKED WITH AN "X" HAVE BEEN PREVIOUSLY REMOVED VIA ODOT FORCES UNDER A SEPARATE PROJECT.



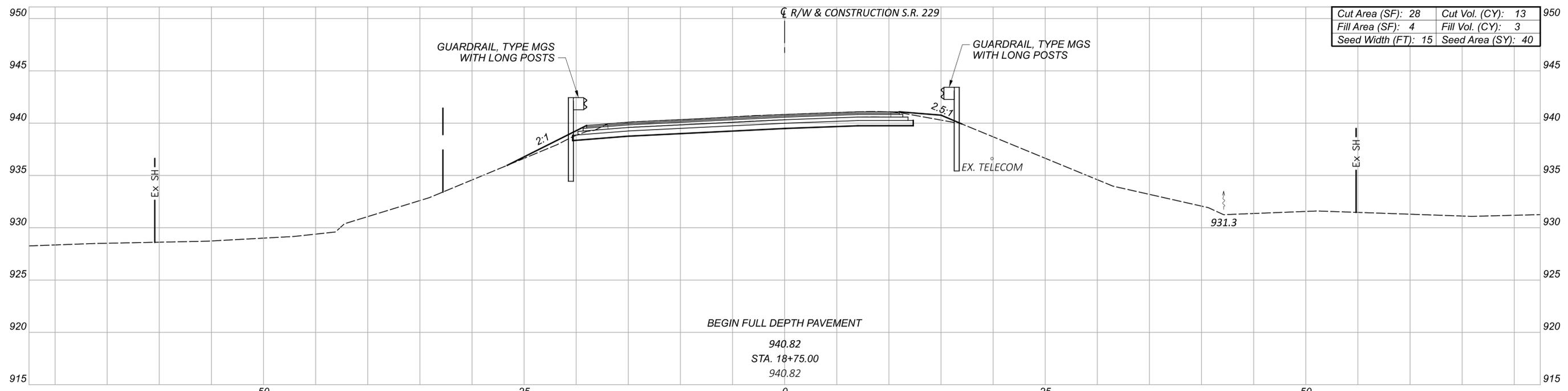
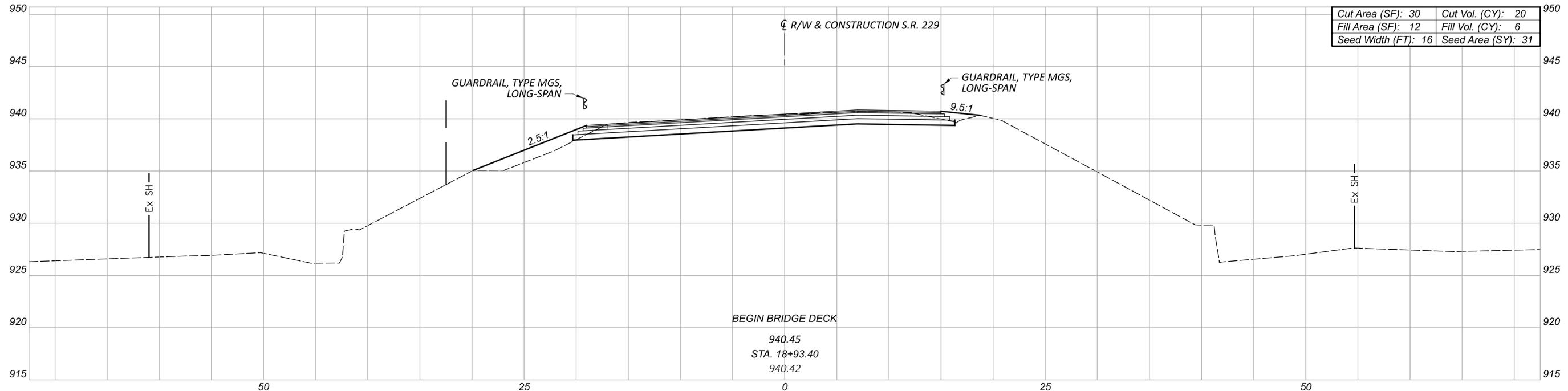
PLAN AND PROFILE - 0.36
 STA. 16+50.00 TO STA. 21+75.00

DESIGN AGENCY
B.G.
 www.bgengr.com
 5960 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER: JEP
 REVIEWER: RG 9-9-25
 PROJECT ID: 107754
 SHEET: P.29 TOTAL: P.136

DEL-229-0.45 AND VARIOUS

MODEL: 18+75.00 [Sheet] PAPER/SCALE: 34x22 (in.) DATE: 2/10/2026 TIME: 8:46:35 AM USER: jperchinske
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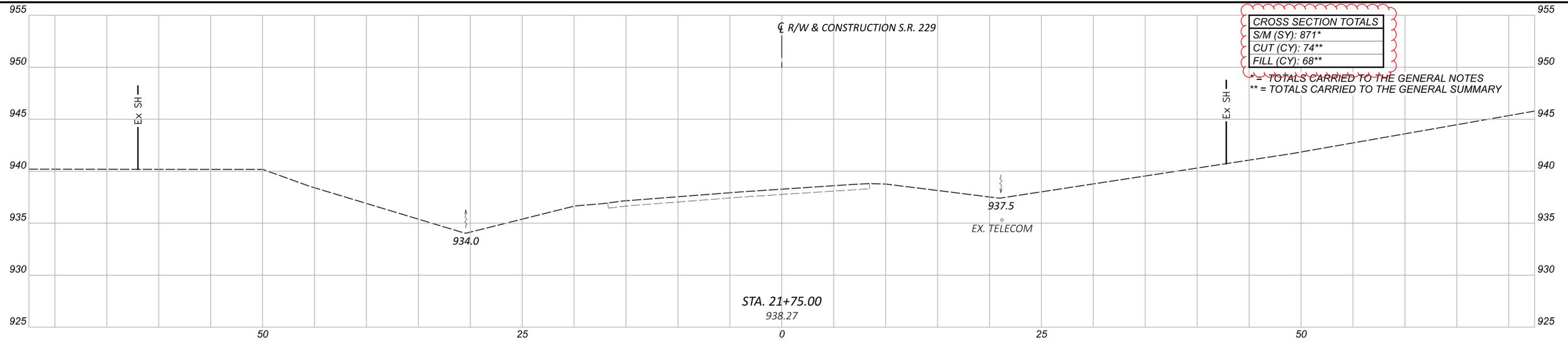


**CROSS SECTIONS - 0.36
 STA. 18+75.00 TO STA. 18+93.40**

DESIGN AGENCY

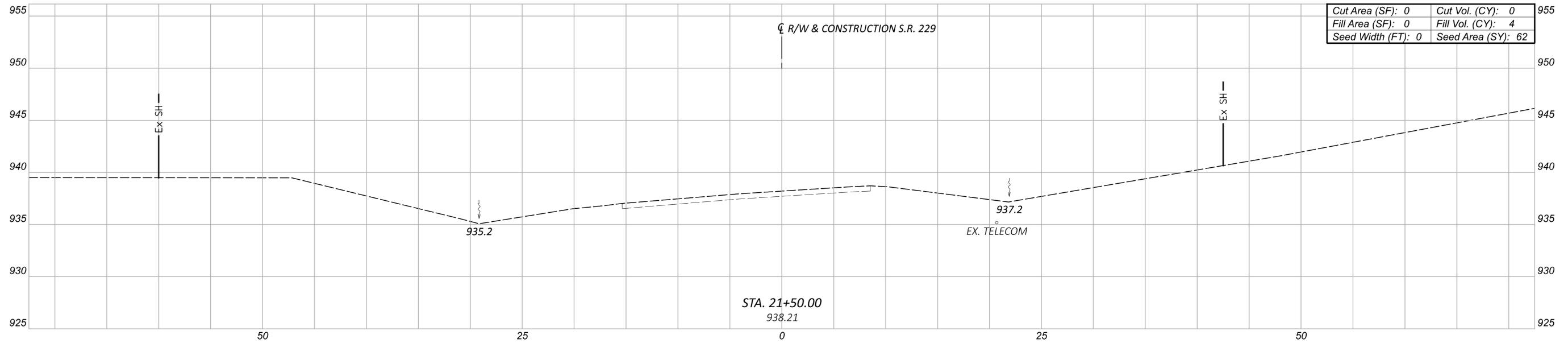
 www.bginchgroup.com
 5560 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016
 DESIGNER
 JEP
 REVIEWER
 RG 10-30-24
 PROJECT ID
 107754

Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.38A	P.136
71	33	9		

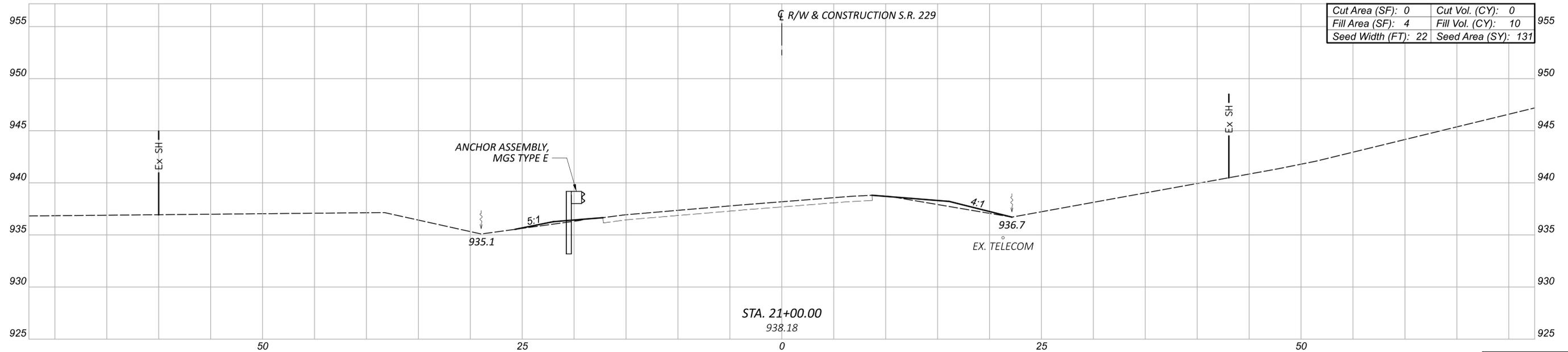


CROSS SECTION TOTALS	
S/M (SY):	871*
CUT (CY):	74**
FILL (CY):	68**

* = TOTALS CARRIED TO THE GENERAL NOTES
 ** = TOTALS CARRIED TO THE GENERAL SUMMARY



Cut Area (SF):	0	Cut Vol. (CY):	0
Fill Area (SF):	0	Fill Vol. (CY):	4
Seed Width (FT):	0	Seed Area (SY):	62



Cut Area (SF):	0	Cut Vol. (CY):	0
Fill Area (SF):	4	Fill Vol. (CY):	10
Seed Width (FT):	22	Seed Area (SY):	131

CROSS SECTIONS - 0.36
 STA. 21+00.00 TO STA. 21+75.00

Sheet Totals		
Seeding	Cut	Fill
193	0	14

DESIGN AGENCY	BG
DESIGNER	JEP
REVIEWER	RG
PROJECT ID	107754
SHEET	P.41
TOTAL	P.136

DEL-229-0.45 AND VARIOUS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 2/10/2026 TIME: 8:47:38 AM USER: jperchinske
 P:\Transportation\WorkSheets\107754_DEL-229-0021\400-Engineering\Traffic\Sheets\107754_TS001.dgn

SHEET NO.	REFERENCE NO.	STATION TO STATION			SIDE	CODE	SIZE (INCHES)	621		626		630				642						
								RPM (YELLOW/YELLOW)	RAISED PAVEMENT MARKER REMOVED	BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL)	BARRIER REFLECTOR, TYPE 3 (BI-DIRECTIONAL)	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN POST REFLECTOR (YELLOW)	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	EDGE LINE, 6', TYPE I	CENTER LINE, TYPE I (DASHED)	CENTER LINE, TYPE I (BROKEN, SOLID)	CENTER LINE, TYPE I (DOUBLE, SOLID)		
							EACH	EACH	EACH	EACH	FEET	EACH	SQ FT	EACH	EACH	MILE	MILE	MILE	MILE			
DEL-229-0.36																						
P.80	BR-1	17+16	-	20+65	RT																	
P.80	BR-2	17+41	-	21+06	LT																	
P.80	CLDS-1	18+50	-	19+50	CL		1	1												0.02		
P.80	ELW-1	18+50	-	19+50	RT															0.02		
P.80	ELW-2	18+50	-	19+50	LT															0.02		
P.80	S-1	17+50			LT	W3-3-36	(36X36)				12.0	1	9.00	2	1							
DEL-229-0.93																						
P.80	BR-3	41+42	-	47+44	RT																	
P.80	BR-4	41+24	-	47+26	LT																	
P.80	CLBS-1	42+43	-	45+50	CL															0.06		
P.80	ELW-3	42+50	-	45+56	RT															0.06		
P.80	ELW-4	42+37	-	45+43	LT															0.06		
DEL-229-1.49																						
P.80	BR-5	71+42	-	74+78	RT																	
P.80	BR-6	71+42	-	75+58	LT																	
P.80	CLDS-2	72+31	-	73+89	CL															0.03		
P.80	ELW-5	72+30	-	73+90	RT															0.03		
P.80	ELW-6	72+31	-	73+89	LT															0.03		
P.80	S-2	69+45			RT	R12-H7-30	(30X30)				11.5		6.25	1	1							
P.80	S-3	75+40			LT	R12-H7-30	(30X30)				11.5		6.25	1	1							
DEL-229-1.56																						
P.80	BR-7	76+89	-	78+13	RT																	
P.80	CLDS-3	77+25	-	77+75	CL		1	1												0.01		
P.80	ELW-7	77+25	-	77+75	RT															0.01		
P.80	ELW-8	77+25	-	77+75	LT															0.01		
DEL-229-2.298																						
P.80	CLD-1	12+75	-	16+25	CL		2	2												0.07		
P.80	ELW-9	12+75	-	16+25	RT															0.07		
P.80	ELW-10	12+75	-	16+25	LT															0.07		
P.81	BR-8	162+87	-	165+95	RT																	
P.81	BR-9	162+46	-	165+12	LT																	
DEL-229-3.48																						
P.81	BR-10	176+29	-	180+26	RT																	
P.81	BR-11	176+29	-	180+51	LT																	
P.81	CLDS-4	176+00	-	180+25	CL		2	2												0.08		
P.81	ELW-11	176+00	-	180+25	RT															0.08		
P.81	ELW-12	176+00	-	180+25	LT															0.08		
SUBTOTAL																						
TOTALS CARRIED TO GENERAL SUMMARY							6	6	18	41	35.0	1	21.5	4	3			0.54	0.07	0.06	0.14	

TRAFFIC CONTROL SUBSUMMARY

DESIGN AGENCY

 www.bgengr.com
 5560 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER
 JEP

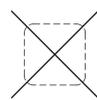
REVIEWER
 RG 10-30-24

PROJECT ID
 107754

SHEET TOTAL
 P.79 | P.136

LEGEND

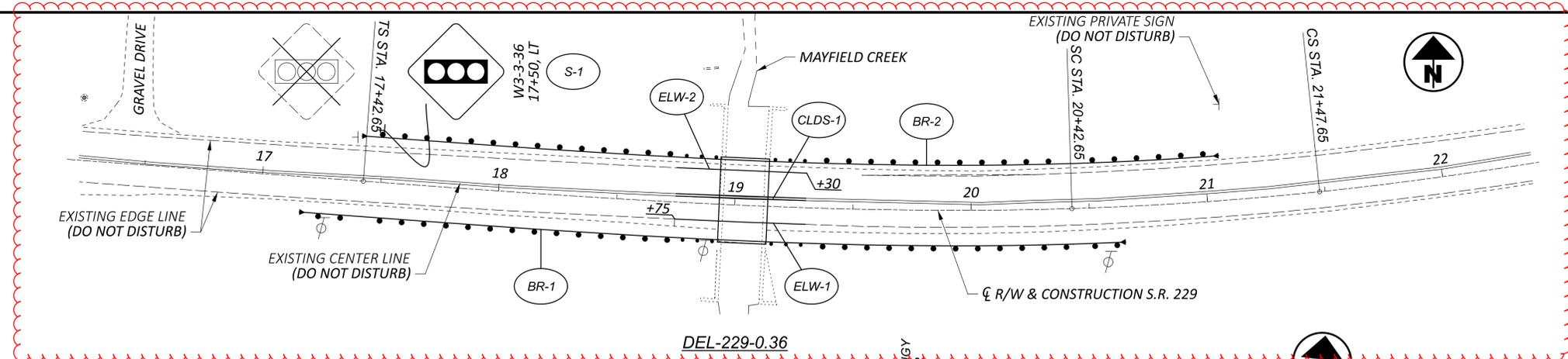
- ITEM 626 - BARRIER REFLECTOR, TYPE 1 (BRIDGE RAILING)
BARRIER REFLECTOR, TYPE 3 (ROADWAY GUARDRAIL)
- ITEM 642 - CENTER LINE, TYPE 1 (DASHED)
- ITEM 642 - CENTER LINE, TYPE 1 (BROKEN, SOLID)
- ITEM 642 - CENTER LINE, TYPE 1 (DOUBLE, SOLID)
- ITEM 642 - EDGE LINE, 6", TYPE 1 (WHITE)
- PROPOSED SIGN



EXISTING SIGN TO BE REMOVED

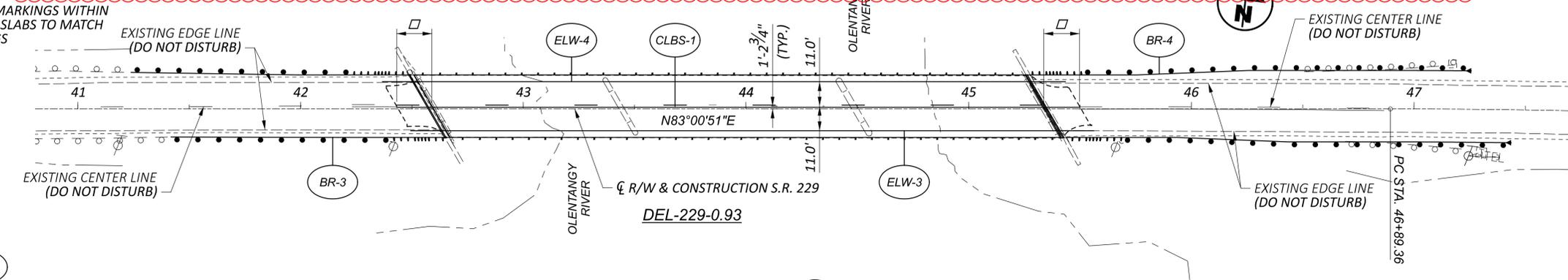


PROPOSED SIGN

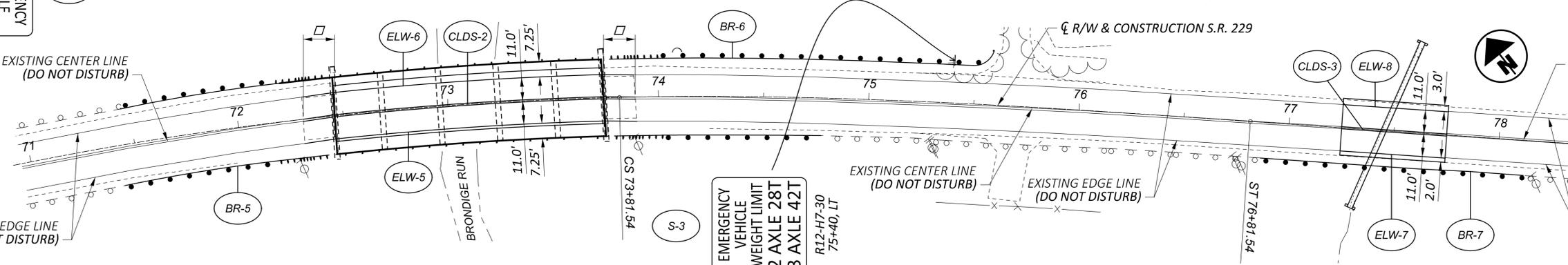
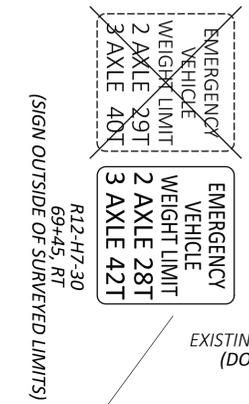


DEL-229-0.36

□ = TAPER PROPOSED PAVEMENT MARKINGS WITHIN THE LIMITS OF THE APPROACH SLABS TO MATCH EXISTING PAVEMENT MARKINGS

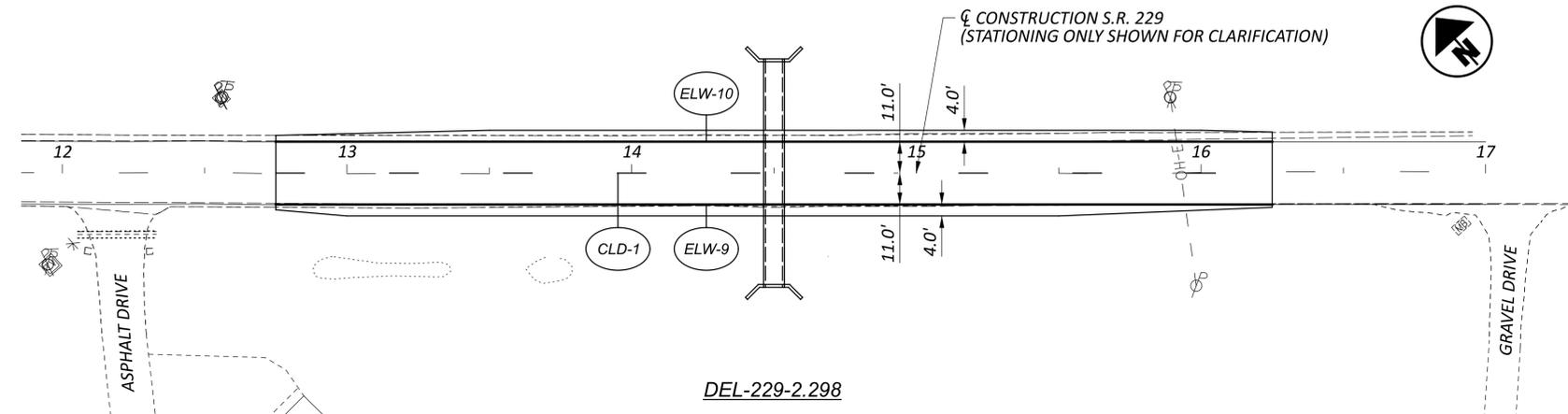


DEL-229-0.93

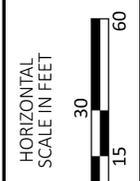


DEL-229-1.49

DEL-229-1.56



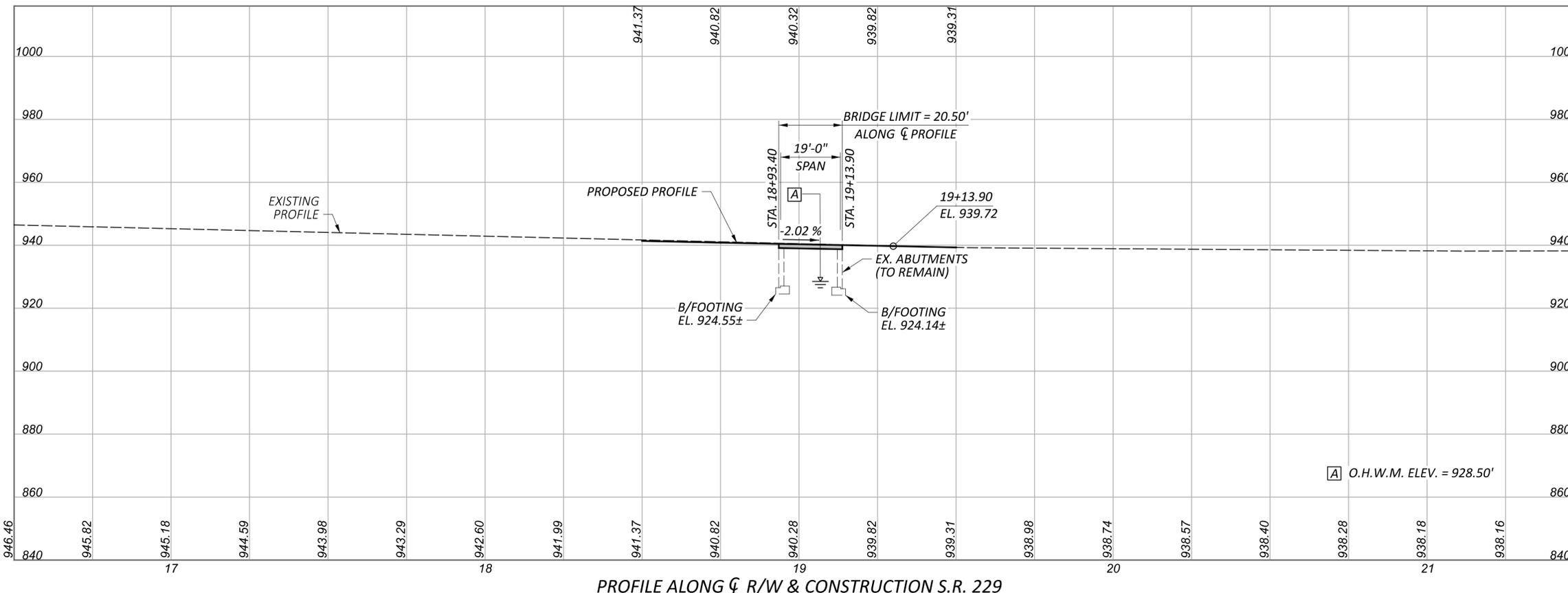
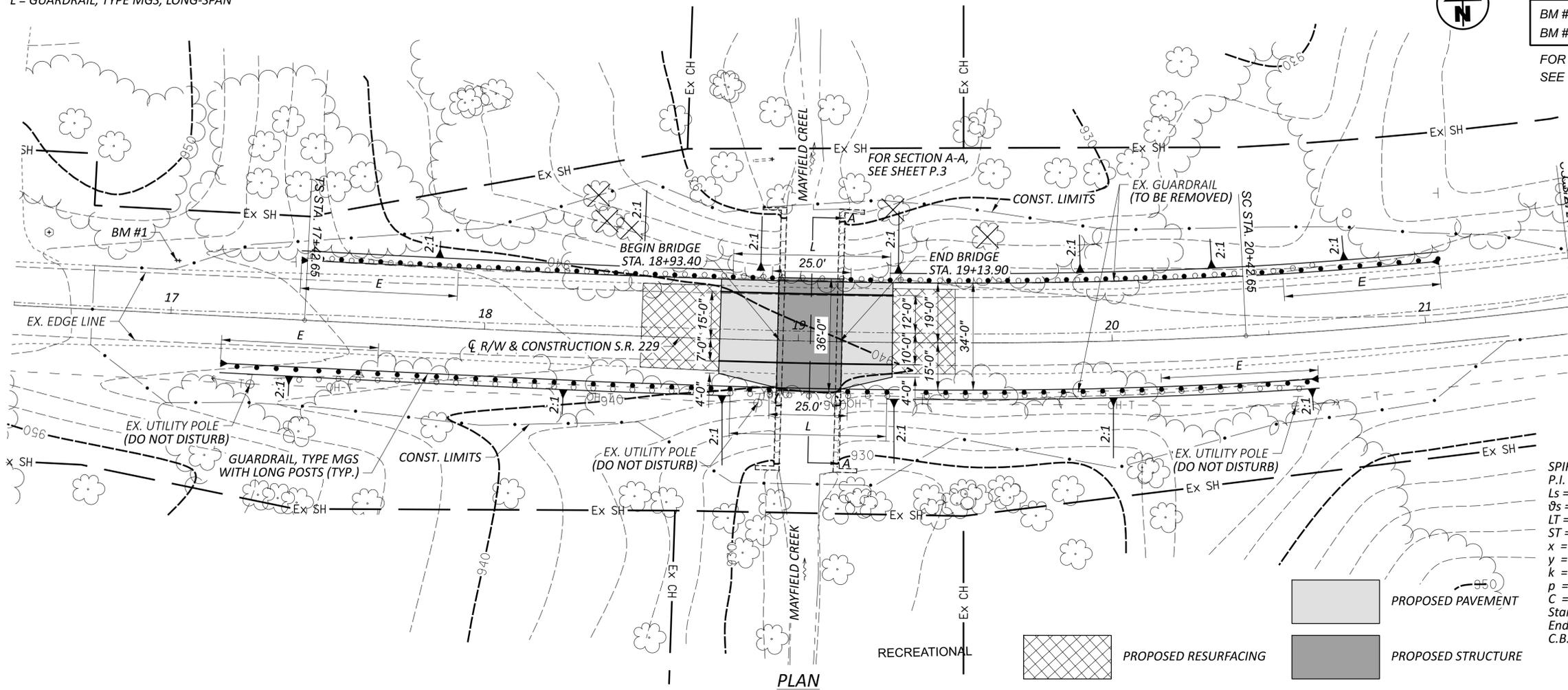
DEL-229-2.298



TRAFFIC CONTROL
 0.36, 0.93, 1.49, 1.56, AND 2.298 SITES

DESIGN AGENCY	BG
DESIGNER	JEP
REVIEWER	RG
PROJECT ID	107754
SHEET	P.80
TOTAL	P.136

E = ANCHOR ASSEMBLY, MGS TYPE E
 L = GUARDRAIL, TYPE MGS, LONG-SPAN



BENCHMARK DATA

BM #1 STA. 17+01.93, ELEV. 944.75, OFFSET 16.85', LT
 BM #2 STA. 21+93.96, ELEV. 937.67, OFFSET 18.05', RT

FOR ADDITIONAL BENCHMARK INFORMATION,
 SEE ROADWAY PLAN SHEET P.29

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
 ACTUAL SLOPES SHALL CONFORM TO PLAN
 CROSS SECTIONS.

DESIGN TRAFFIC:
 2025 ADT = 3600 2025 ADTT = 540
 2045 ADT = 5000 2045 ADTT = 750
 DIRECTIONAL DISTRIBUTION = 62%
 FOR SECTION A-A, SEE SHEET P.3

OHWM:
 WORK TO BE CONDUCTED ABOVE THE OHWM.

PROPOSED WORK
 SEE GENERAL NOTES FOR PROPOSED WORK.

SPIRAL DATA	CURVE DATA	SPIRAL DATA
P.I. = Sta. 19+42.77	P.I. = Sta. 20+95.18	P.I. = Sta. 22+47.76
Ls = 300.00'	Δ = 04°12'00" LT	Ls = 300.00'
θs = 06°00'00"	Dc = 04°00'00"	θs = 06°00'00"
LT = 200.12'	R = 1,432.39'	LT = 200.12'
ST = 100.10'	T = 52.52'	ST = 100.10'
x = 299.67'	L = 105.00'	x = 299.12'
y = 10.46'	E = 0.96'	y = 20.92'
k = 149.95'		k = 149.95'
p = 2.62'		p = 2.62'
C = 299.85'		C = 299.85'
Start = Sta. 17+42.65		Start = Sta. 21+47.65
End = Sta. 20+42.65		End = Sta. 24+47.65
C.B. = S87°47'08"E		C.B. = N80°00'51"E

EXISTING STRUCTURE

TYPE: 17'-0"± CLEAR SPAN CONCRETE SLAB
 BRIDGE

ROADWAY: 35'-6"± (EXISTING) F/F GUARDRAIL

SKEW: 00° 00' 00"

ALIGNMENT: WITHIN A SPIRAL

SUPERELEVATION: VARIES

STRUCTURE FILE NUMBER: 2102706

DATE BUILT: 1951

DISPOSITION: REPLACE SUPERSTRUCTURE

PROPOSED STRUCTURE

TYPE: SINGLE SPAN REINFORCED CONCRETE
 SLAB BRIDGE SUPPORTED ON EXISTING
 ABUTMENTS

SPAN: 17'-0" CLEAR SPAN

ROADWAY: 36'-0" F/F RAILING

VEHICULAR LIVE LOAD: HL93 (SUPERSTRUCTURE)

FUTURE WEARING SURFACE: NONE

SKEW: 00° 00' 00"

ALIGNMENT: WITHIN A SPIRAL

SUPERELEVATION: VARIES

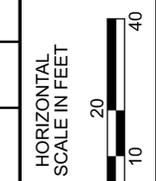
STRUCTURE FILE NUMBER: 2102706

DATE BUILT: 1951

DISPOSITION: TO REMAIN

LATITUDE: 40° 26' 01.34"

LONGITUDE: -83° 04' 04.97"



SITE PLAN
 BRIDGE NO. DEL-00229-00.360
 S.R. 229 OVER MAYFIELD CREEK

SFN 2102706

DESIGN AGENCY

B.G.
 www.bgggroup.com
 5960 WILCOX PLACE, SUITE C
 DUBLIN, OHIO 43016

DESIGNER/CHECKER
 MS RG

REVIEWER
 GTB 02-06-26

PROJECT ID
 107754

SUBSET TOTAL
 1 8

SHEET TOTAL
 P.82 P.136

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

- CPA-1-08 REVISED 01/19/2024
- DS-1-92 REVISED 07/15/2022
- SB-1-24 REVISED 01/16/2026

REFER TO THE FOLLOWING SPECIFICATIONS:

- 800 DATED 01/17/2025

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

- VEHICULAR LIVE LOAD: HL-93 (SUPERSTRUCTURE)
- VEHICULAR LIVE LOAD: S-15-46 (SUBSTRUCTURE)

DESIGN DATA:

- CONCRETE, QC/QA CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
- CONCRETE, CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
- REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI (EPOXY COATED) (SLAB, ABUTMENTS)

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE PLANS, SEE ROADWAY SHEETS.

UTILITIES:

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04*. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE: SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (CONTINUE):

SUBSTRUCTURE CONCRETE REMOVAL:

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN:

INSTALL ADHESIVE ANCHORS/DOWELS ACCORDING TO THE MANUFACTURE'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE ADHESIVE ANCHORS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT PRIOR TO THE INSTALLATION OF THE ANCHORS, CLEAN AND DRY THE HOLES IN A MANNER CONSISTENT WITH THE MANUFACTURE'S REQUIREMENTS FOR DRY CONCRETE.

[HTTPS://ICC-ES.ORG/EVALUATION-REPORT-PROGRAM/REPORTS-DIRECTORY/](https://icc-es.org/evaluation-report-program/reports-directory/)

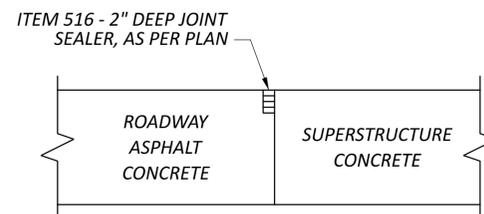
SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

- ADHESIVE ANCHOR/DOWEL SYSTEM OPTION 1 – ICC-ES ESR 4868
- ADHESIVE ANCHOR/DOWEL SYSTEM OPTION 2 – ICC-ES ESR 3298

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN:

A 2" DEEP X 1" WIDE GROOVE SHALL BE SAWCUT OUT OF THE PROPOSED ROADWAY ASPHALT CONCRETE ADJACENT TO THE ENDS OF THE INTEGRAL BACKWALLS (END OF DECK) AFTER THE PROPOSED SUPERSTRUCTURE CONCRETE HAS PROPERLY CURED. EACH GROOVE SHALL BE CLEANED OF FOREIGN MATTER, CURING COMPOUNDS, OIL, GREASE, DIRT, FREE WATER, LAITANCE, ETC. BEFORE APPLYING SEALER. JOINT SEALER (CMS 705.04) SHALL BE USED TO FILL THE GROOVE.

SAWCUTTING AND ALL INCIDENTALS NECESSARY TO COMPLETE THIS WORK ARE INCLUDED IN THE COST OF THIS ITEM.



ABBREVIATIONS:

- ABUT. - ABUTMENT
- ADT - AVERAGE DAILY TRAFFIC
- ADTT - AVERAGE DAILY TRUCK TRAFFIC
- APPR. - APPROACH
- B - BOTTOM
- BM - BENCHMARK
- BOT. OR BTM. - BOTTOM
- BRGS. - BEARINGS
- CL - CENTERLINE
- C/C - CENTER TO CENTER
- C.J. - CONSTRUCTION JOINT
- CLR. - CLEAR
- CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
- CONC. - CONCRETE
- CONSTR. - CONSTRUCTION
- DIA. - DIAMETER
- DIM. - DIMENSION
- DWG. - DRAWING
- E.F. - EACH FACE
- EL. OR ELEV. - ELEVATION
- E/P - EDGE OF PAVEMENT
- EQ. - EQUAL
- EST. - ESTIMATED
- EX. - EXISTING
- F.A. - FORWARD ABUTMENT
- F/F - FACE TO FACE
- F.F. - FAR FACE
- FT. - FOOT OR FEET
- FWD. - FORWARD
- HW - HIGH WATER
- IN. - INCH
- INT. - INTEGRAL
- JT. - JOINT
- LT. - LEFT
- MAX. - MAXIMUM
- MIN. - MINIMUM
- MISC. - MISCELLANEOUS

- N.F - NEAR FACE
- NO. - NUMBER
- N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE
- OHWM - ORDINARY HIGH WATER MARK
- O/O - OUT TO OUT
- P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
- P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
- PG - PROFILE GRADE
- PROP. - PROPOSED
- PSF - POUNDS PER SQUARE FOOT
- P.V.I. - POINT OF VERTICAL INTERSECTION
- Q - FLOW RATE
- R - RADIUS
- R.A. - REAR ABUTMENT
- RCP - ROCK CHANNEL PROTECTION
- REQD. - REQUIRED
- RT. - RIGHT
- R/W - RIGHT OF WAY
- SER. - SERIES
- SHLDR - SHOULDER
- SPA. - SPACE OR SPACES
- STA. - STATION
- STD. - STANDARD
- STR - STRAIGHT
- T - TOP
- T&B - TOP & BOTTOM
- TBR - TO BE REMOVED
- TEMP. - TEMPORARY
- T.O.S. OR T/S - TOP OF SLOPE
- T/T - TOE TO TOE
- TYP. - TYPICAL
- U.N.O. - UNLESS NOTED OTHERWISE
- VAR. - VARIES
- V - VELOCITY

CONSTRUCTION SEQUENCE:

1. CLEAR AND GRUB
2. ERECT TRAFFIC CONTROL DEVICES FOR ROAD CLOSURE
3. PERFORM FULL DEPTH PAVEMENT SAWCUTTING.
4. REMOVE EXISTING PAVEMENT ADJACENT TO BRIDGE (REAR & FWD.)
5. REMOVE EMBANKMENT BEHIND ABUTMENTS TO LIMITS SPECIFIED IN THE PLANS PRIOR TO REMOVING EXISTING SLAB.
6. REMOVE EXISTING PORTIONS OF STRUCTURE TO BE REMOVED.
7. RE-CONSTRUCT ABUTMENT PORTIONS AND SUPERSTRUCTURE.
8. AFTER DECK SLAB HAS CURED, EMBANKMENT CAN BE BACKFILLED.
9. PLACE JOINT SEALS, CONCRETE SEALING AND PERFORM FINAL GRADING AROUND WINGWALLS.
10. PLACE ASPHALT PAVEMENT REAR AND FORWARD OF BRIDGE.
11. STRIPE ROADWAY.
12. INSTALL PROPOSED GUARDRAIL RUNS AND PERFORM BERM WORK.
13. RE-OPEN S.R. 229. IN SEGMENTS, TO TRAFFIC. EITHER TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO OPENING ROADWAY TO TRAFFIC.

PROPOSED WORK:

1. REMOVE ALL EXISTING GUARDRAIL AND REPLACE WITH:
 - GUARDRAIL, TYPE MGS WITH LONG POST
 - GUARDRAIL, TYPE MGS, LONG-SPAN
 - ANCHOR ASSEMBLY, MGS TYPE E ON BOTH APPROACHES.
2. REMOVE DECK AND ABUTMENTS TO LIMITS SPECIFIED IN THE PLANS.
3. CONSTRUCT NEW PORTIONS OF THE SUPERSTRUCTURE AND ABUTMENTS.
4. SEAL CONCRETE SURFACES TO LIMITS SPECIFIED IN THE PLANS.

SFN 2102706	
DESIGN AGENCY BG www.bginfinitygroup.com 5960 WILCOX PLACE, SUITE C DUBLIN, OHIO 43016	
DESIGNER MS	CHECKER GLA
REVIEWER RG 02-06-26	
PROJECT ID 107754	
SUBSET 2	TOTAL 8
SHEET P.83A	TOTAL P.136

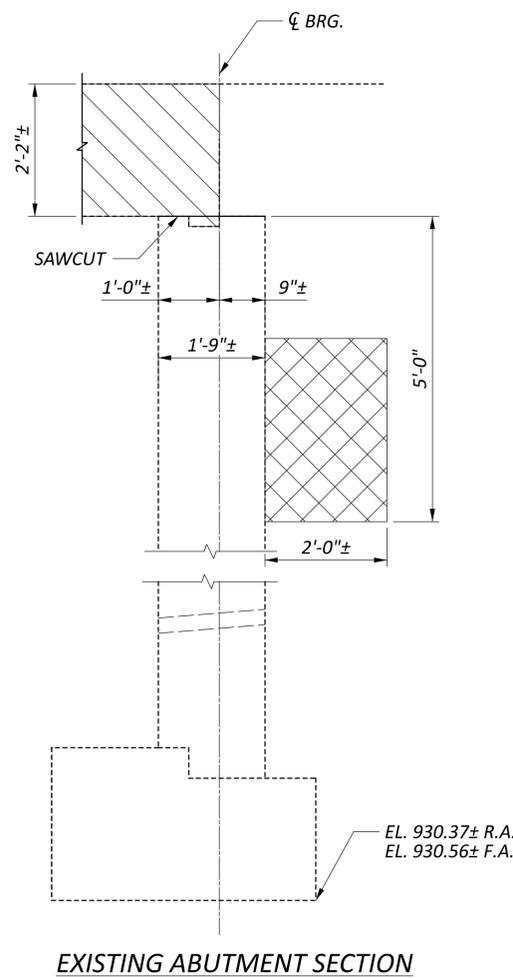
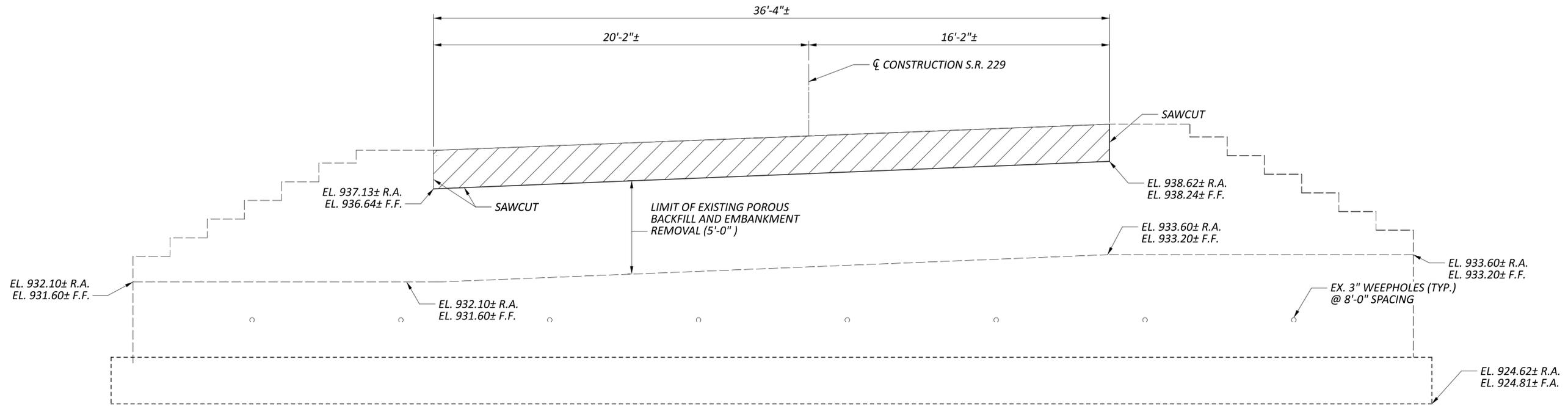
DEL-229-0.45 AND VARIOUS

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ESTIMATED QUANTITIES						CALCULATED BY GLA	CHECKED BY RG		
						DATE 2/5/2026	DATE 2/6/2026		
ITEM	ITEM EXT.	TOTAL	PART.	UNITS	DESCRIPTION	STRUCTURE FILE NUMBER 2102706			
			02/STR			ABUTS.	SUPER.	GENERAL	SHT. REF.
202	11201	LUMP	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN			LUMP	2, 3
202	23500	76	76	SY	WEARING COURSE REMOVED			76	
503	11100	LUMP	LUMP		COFFERDAMS AND EXCAVATION BRACING			LUMP	
503	21100	89	89	CY	UNCLASSIFIED EXCAVATION	89			
509	10000	7663	7663	LB	EPOXY COATED STEEL REINFORCEMENT	762	6901		
509	25000	944	944	LB	UNCOATED STEEL REINFORCEMENT	944			
510	10001	148	148	EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (12" DOWELS)	148			2
511	33412	40	40	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE		40		
511	45710	4	4	CY	CLASS QC1 CONCRETE, ABUTMENT	4			
512	10050	179	179	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	170	9		
516	13200	36	36	SF	1/2" PREFORMED EXPANSION JOINT FILLER	36			
516	13600	30	30	SF	1" PREFORMED EXPANSION JOINT FILLER	30			
516	13900	11	11	SF	2" PREFORMED EXPANSION JOINT FILLER	11			
516	14020	82	82	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	82			
516	31011	72	72	FT	2" DEEP JOINT SEALER, AS PER PLAN	72			2
518	21200	50	50	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	50			
518	22300	32	32	FT	SPECIAL - STEEL DRIP STRIP		32		

ESTIMATED QUANTITIES
BRIDGE NO. DEL-00229-00.360
S.R. 229 OVER MAYFIELD CREEK

SFN	2102706
DESIGN AGENCY	 B.G. www.bginfinitygroup.com
DESIGNER	CHECKER
MS	GLA
REVIEWER	
RG	02-06-26
PROJECT ID	107754
SUBSET	TOTAL
3	8
SHEET	TOTAL
P.83B	P.136



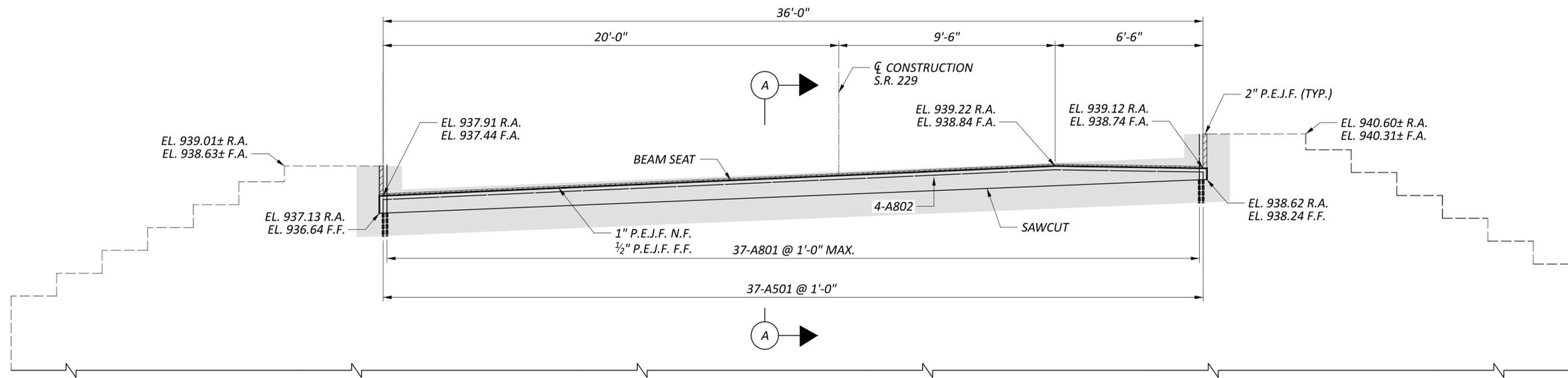
LEGEND:

-  - INDICATES AREA OF THE EXISTING CONCRETE SLAB TO BE REMOVED PER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
-  - INDICATES THE EXISTING BACKFILL TO BE REMOVED

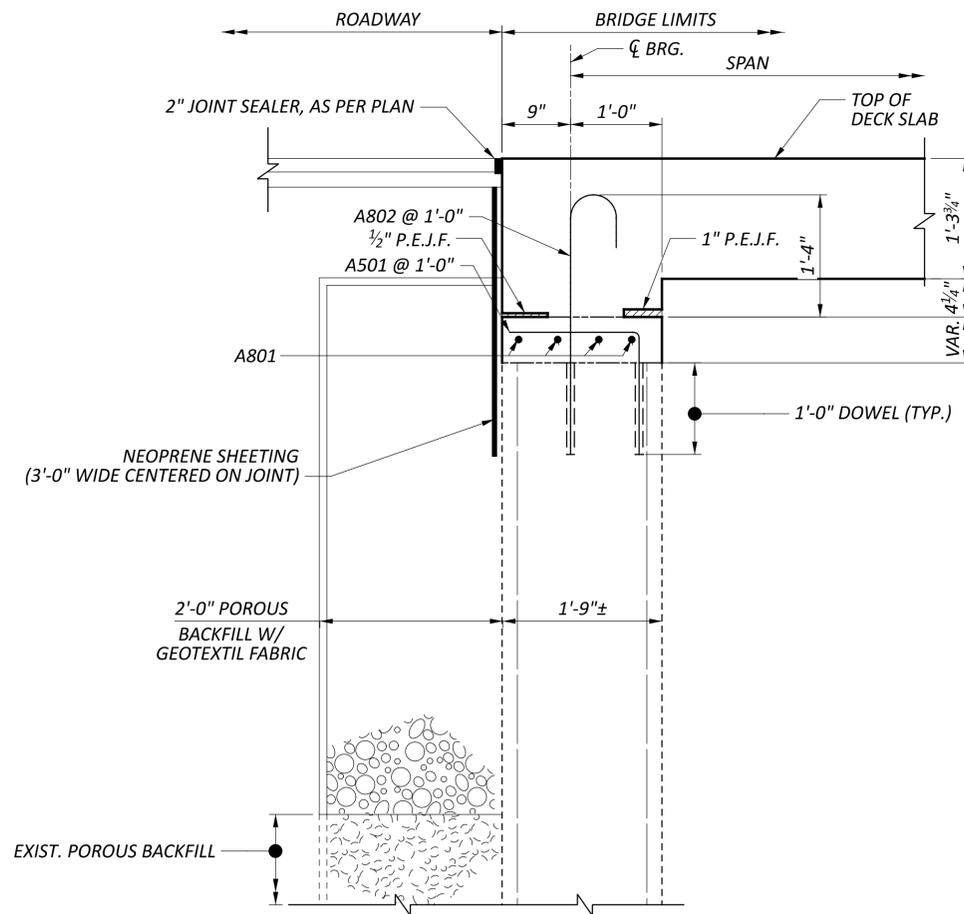
NOTES:

1. REMOVE THE POROUS BACKFILL AND EMBANKMENT TO A MINIMUM DEPTH OF 5 FEET BELOW THE EXISTING SLAB PRIOR TO REMOVAL OF THE EXISTING SUPERSTRUCTURE.
2. CLEAN THE DEBRIS IN EXISTING WEEPHOLES. THE PAYMENT FOR CLEANING THE EXISTING WEEPHOLES WILL BE PAID UNDER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
3. THE REMOVAL LIMITS SHOWN ARE THE MINIMUM AMOUNT NECESSARY TO PERFORM THE PROPOSED WORK. ANY ADDITIONAL REMOVAL PERFORMED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO STARTING REMOVAL. ALL ADDITIONAL REMOVAL SHALL BE REPLACED IN KIND AT NO ADDITIONAL COST TO THE DEPARTMENT.
4. CUT ALL EXISTING REINFORCING STEEL AT REMOVAL LINES AS DIRECTED BY PLANS.
5. DIMENSIONS AND ELEVATIONS SHOWN ARE PER THE EXISTING STRUCTURE PLANS OR AS OBSERVED IN THE FIELD AND SHALL BE CONSIDERED APPROXIMATE.

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DESIGNER	CHECKER
MS	GLA
REVIEWER	RG 02-06-26
PROJECT ID	107754
SUBSET	TOTAL
4	8
SHEET	TOTAL
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ABUTMENT ELEVATION
 (FORWARD ABUTMENT SHOW, REAR ABUTMENT SIMILAR)



SECTION A-A

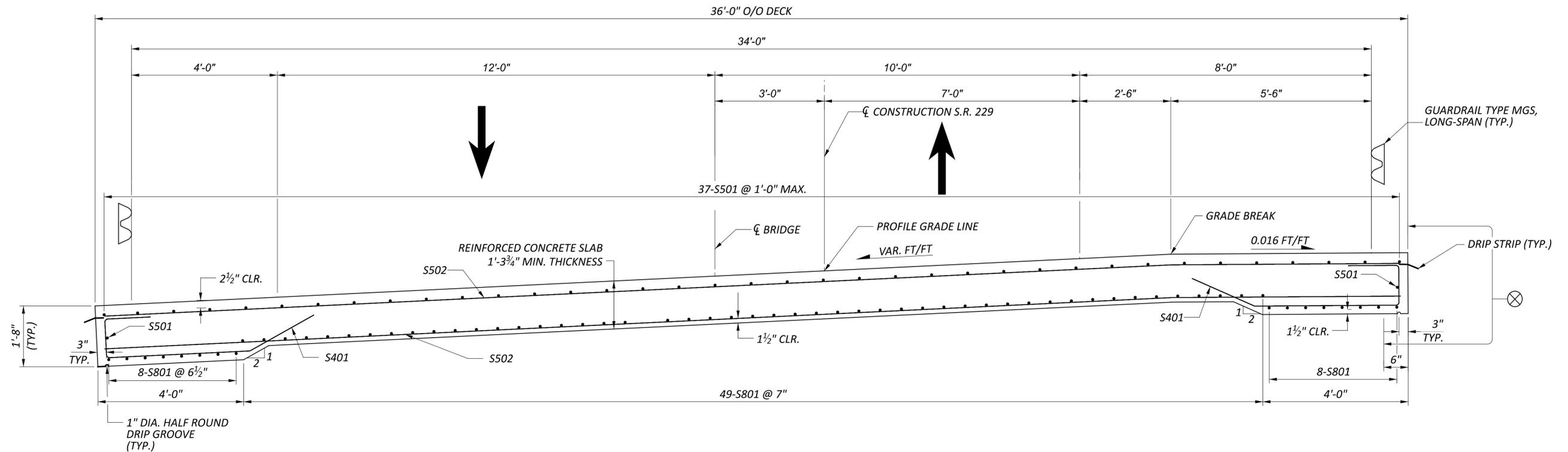
LEGEND:

- NEOPRENE SHEETING

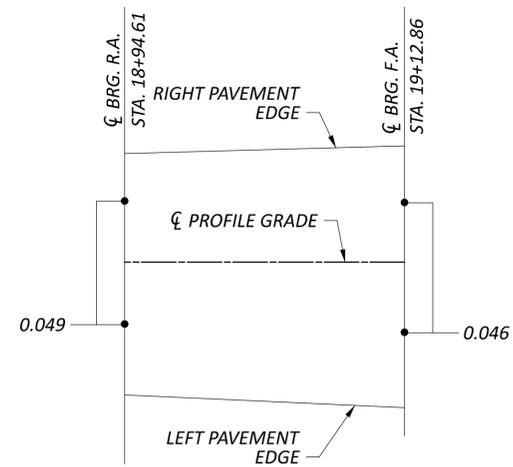
NOTES:

- DO NOT PLACE THE POROUS BACKFILL UNTIL SLAB HAS BEEN PLACED AND CURED.
- PROVIDE NON-EPOXY SEALING ON SUBSTRUCTURE CONCRETE SURFACES TO ORDINARY HIGH WATER MARK ELEVATION.
- THE PROPOSED ELEVATIONS PROVIDED ARE TO BE CONSIDERED APPROXIMATE. THE CONTRACTOR MUST FIELD VERIFY ALL PROPOSED ELEVATIONS AT THE LOCATIONS SHOWN IN THESE PLANS. THE CONTRACTOR IS TO ADJUST THE PROPOSED ELEVATIONS ACCORDINGLY TO MAINTAIN THE EXISTING CROSS SLOPE AND PROFILE IN ORDER TO MATCH UP WITH THE EXISTING BRIDGE ABUTMENT. THE ENGINEER IS TO BE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED ADJUSTMENTS PRIOR TO CONSTRUCTING THE PROPOSED WORK.

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5	8
SHEET	TOTAL
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TRANSVERSE SECTION



PAVEMENT TRANSITION DETAIL

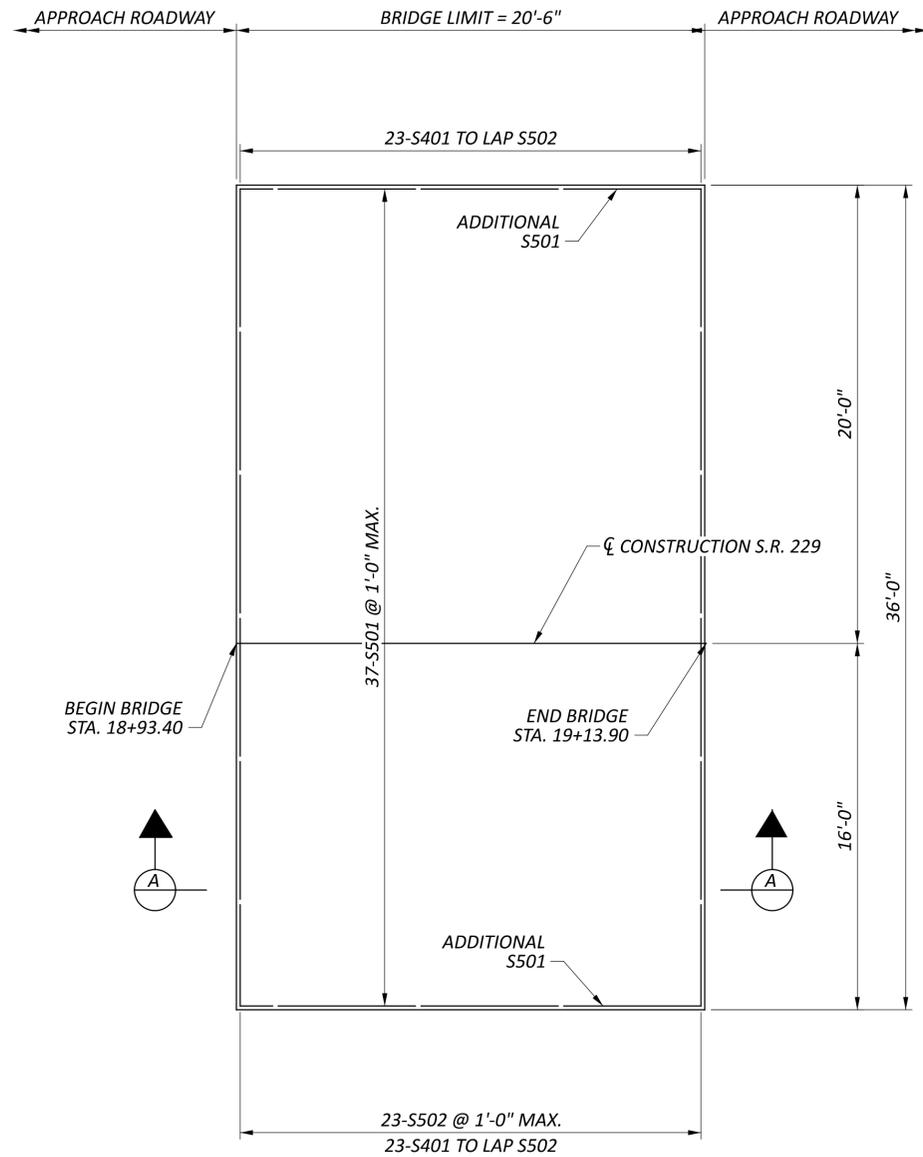
FINISHED DECK ELEVATIONS						
LOCATION	DESCRIPTION	BEGIN BRIDGE	1/4 SPAN 1	1/2 SPAN 1	3/4 SPAN 1	END BRIDGE
LEFT DECK EDGE	STATION	18+93.40	18+98.53	19+03.65	19+08.78	19+13.90
	FINAL DECK ELEVATION	939.58	939.46	939.34	939.22	939.11
PROFILE GRADE	STATION	18+93.40	18+98.53	19+03.65	19+08.78	19+13.90
	FINAL DECK ELEVATION	940.46	940.35	940.25	940.15	940.04
GRADE BREAK	STATION	18+93.40	18+98.53	19+03.65	19+08.78	19+13.90
	FINAL DECK ELEVATION	940.89	940.80	940.70	940.61	940.51
RIGHT DECK EDGE	STATION	18+93.40	18+98.53	19+03.65	19+08.78	19+13.90
	FINAL DECK ELEVATION	940.79	940.69	940.60	940.50	940.41

LEGEND:

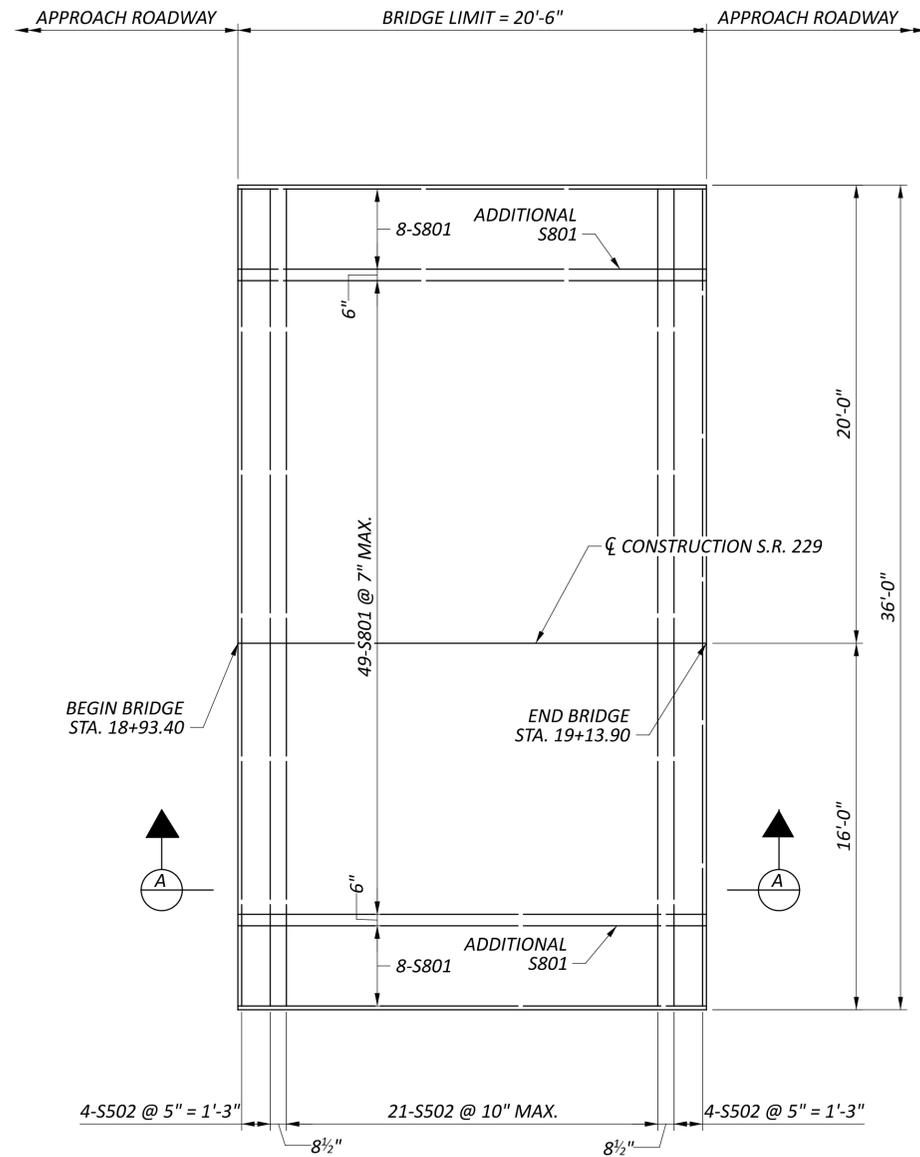
⊗ - SEALING OF CONCRETE SURFACES (NON-EPOXY) (TYP.)

NOTES:

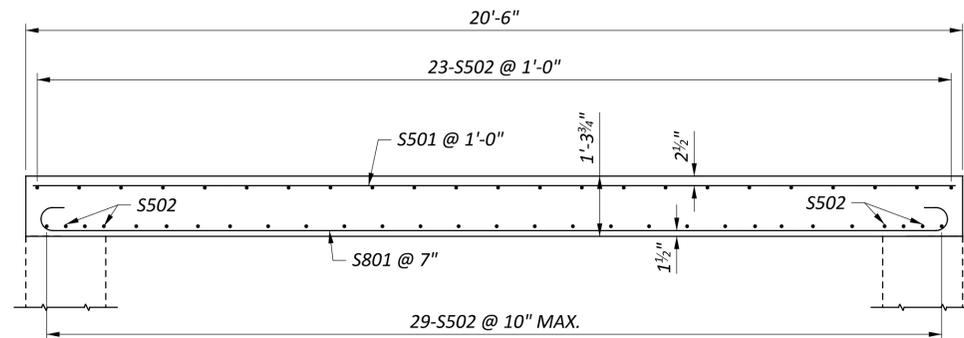
1. FOR ADDITIONAL DRIP STRIP DETAILS, SEE ODOT STD. DWG. DS-1-92.



DECK REINFORCING PLAN - TOP



DECK REINFORCING PLAN - BOTTOM



SECTION A-A

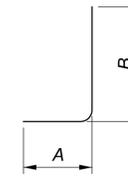
NOTES:

1. SEE STD. DWG. SB-1-24 FOR ADDITIONAL NOTES AND DETAILS.

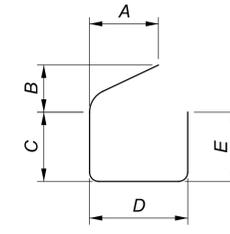
SFN	2102706
DESIGN AGENCY	BG GROUP, INC. www.bggroupp.com 5960 WILCOX PLACE, SUITE C DUBLIN, OHIO 43016
DESIGNER	CHECKER
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7	8
SHEET	TOTAL
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MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
ABUTMENT (60 KSI, EPOXY COATED)											
A801	8		35'-8"	762	STR						
SUBTOTAL				762							
ABUTMENT (60 KSI, BLACK BAR)											
A501	74		2'-5"	187	1	1'-3"	1'-4"				
A802	74		3'-10"	757	16	3'-0"					
SUBTOTAL				944							

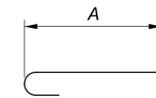
MARK	NUMBER		LENGTH	WEIGHT	TYPE	DIMENSIONS					
	TOTAL					A	B	C	D	E	R
SUPERSTRUCTURE (60 KSI, EPOXY COATED)											
S401	46		7'-10"	241	12	11"	1'-10"	3'-8"	1'-1"	1'-3"	
S501	39		20'-2"	820	STR						
S502	52		35'-8"	1,934	STR						
S801	67		21'-10"	3,906	17	20'-2"					
SUBTOTAL				6,901							



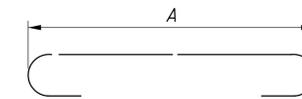
TYPE-1



TYPE-12



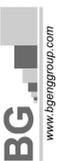
TYPE-16



TYPE 17

NOTES:

- FOR GENERAL NOTES, SEE SHEET 2 / 8 .
- THE LETTER PREFIX INDICATES BAR LOCATION. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE TWO DIGITS WHEN FOUR DIGITS ARE USED INDICATES BAR SIZE NUMBER. ALL REINFORCING IS ASSUMED EPOXY COATED UNLESS OTHERWISE INDICATED BY A LETTER SUFFIX. IF A LETTER SUFFIX IS PROVIDED, IT INDICATES BAR OR BAR COATING TYPE. EXAMPLE: S601
 S: THE LOCATION OF THE BARS IN THE STRUCTURE (SUPERSTRUCTURE)
 6: BAR SIZE DIMENSION NO. 6
 01: SEQUENCE NUMBER
- THE FOLLOWING IS A LIST OF BAR LOCATION PREFIXES:
 S: SUPERSTRUCTURE
 A: ABUTMENT
- BAR DIMENSIONS ARE SHOWN OUT-TO-OUT UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BAR BEND AT THE END OF THE BAR. STRAIGHT BARS ARE INDICATED BY "STR."
- BAR MATERIAL:
 "STL" = GRADE 60 STEEL

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SHEET			
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