

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

PRE-US 35-2.62

JACKSON, WASHINGTON TOWNSHIP

PREBLE COUNTY

FEDERAL PROJECT NUMBER

E150(963)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

RESURFACING A PORTION OF US 35 IN PREBLE COUNTY BETWEEN I-70 AND THE CITY OF EATON. RETROFIT GUARDRAIL ON BRIDGE PRE-35-0860 AND REPLACE THE ASPHALT SURFACE COURSE WITH THE SAME TREATMENT AS THE APPROACH ROADWAY. REPLACE END SECTION OF 4 BOX CULVERT, RETROFIT GUARDRAIL, PATCH AND SEAL EDGES OF CONCRETE BOX AT PRE-35-0817.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: =1.78 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: =N/A ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: = N/A (NOI NOT REQUIRED)*
 *ROUTINE MAINTENANCE PROJECT

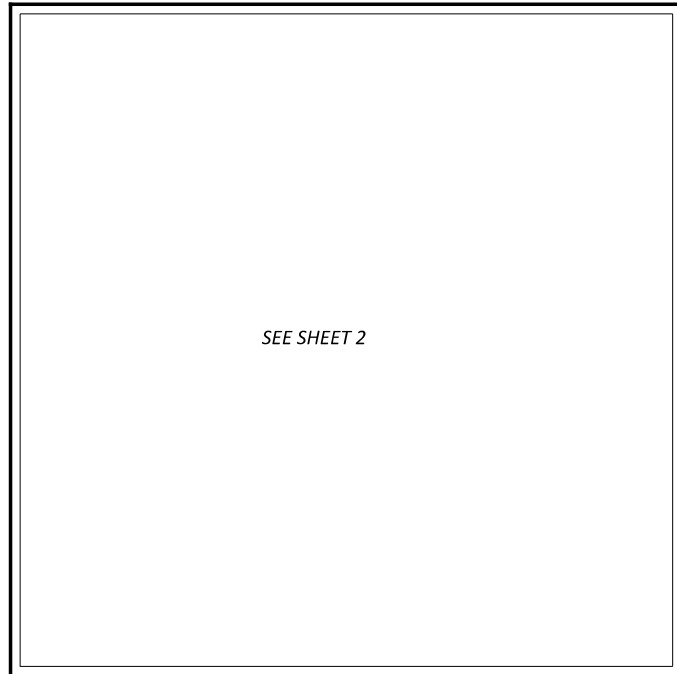
2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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

Tammy K. Campbell
 District Deputy Director

Jack Marchbanks
 Jack Marchbanks, PhD
 Director, Department of Transportation



LOCATION MAP

LATITUDE: 39°45'36" LONGITUDE: -84°44'25"

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

DESIGN DESIGNATION

CURRENT ADT (2024)	5700
DESIGN YEAR ADT (2036)	7500
DESIGN HOURLY VOLUME (2036)	1100
DIRECTIONAL DISTRIBUTION	71.6%
TRUCKS (24 HOUR B&C)	12%
DESIGN SPEED	60
LEGAL SPEED	55
DESIGN FUNCTIONAL CLASSIFICATION:	
04 MINOR ARTERIAL (RURAL), 04 MINOR ARTERIAL (URBAN)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

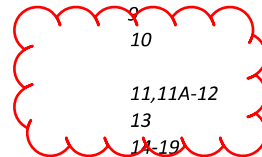
OHIO811.org
 Before You Dig

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

PLAN PREPARED BY:
 ODOT DISTRICT 8 ENGINEERING
 505 S. STATE ROUTE 741
 LEBANON, OHIO 45036

INDEX OF SHEETS:

TITLE SHEET	1
LOCATION MAP	2
GENERAL NOTES	3
MAINTENANCE OF TRAFFIC	4
GENERAL SUMMARY	5
PAVEMENT CALCULATIONS	6
PAVEMENT MARKINGS	7
GUARDRAIL QUANTITIES	8
CURB RAMP QUANTITIES	9
CURB RAMP DETAILS	10
STRUCTURES	
PRE-US 35-8.17	11,11A-12
PRE-US 35-8.60	13
PLAN INSERT SHEETS	14-19



STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/21/22	MT-96.11	7/21/23	800-2023	7/21/2023
BP-4.1	7/19/13	MT-96.20	7/21/23	832	7/15/22
BP-7.1	1/20/23	MT-96.26	1/18/19	843	10/18/19
		MT-97.10	4/19/19	872	1/21/22
MGS-1.1	7/16/21	MT-97.12	1/20/17	874	4/17/20
MGS-2.1	1/19/18			875	1/18/19
				878	1/21/22
MGS-4.3	1/18/13			961	4/17/20
MGS-5.3	7/15/16	TC-61.30	7/19/19		
		TC-64.10	1/20/23		
RM-4.2	4/17/20	TC-65.10	1/17/14		
		TC-65.11	7/15/22		
DBR-2-73	7/19/02	TC-71.10	4/26/23		
DBR-3-11	7/15/11				
PCB-91	7/17/20				

ENGINEER'S SEAL	ENGINEER'S SEAL
ROADWAY SHEETS 1-10, 16-19 	BRIDGE SHEETS 11-13

TITLE SHEET

DESIGN AGENCY



DESIGNER	JED
REVIEWER	JDO 6/12/23
PROJECT ID	100648
SHEET	TOTAL
P.1	19

PRE-US 35-2.62

MODEL: Sheet_SurvF1 PAPER SIZE: 17x11 (in.) DATE: 11/3/2023 TIME: 10:14:13 AM USER: jdv64 pwc\ohiodot-pw-bentley.com\shido-pw-02\Documents\01 Active Projects\District 08\Preble\100648\400-Engineering\Roadway\Sheets\100648_GT001.dgn

CONTINGENCY QUANTITIES

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". THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DIRECTION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

PERMANENT PAVEMENT MARKINGS

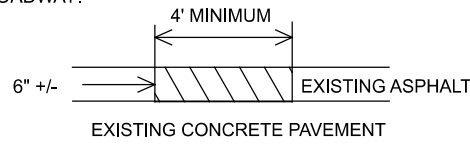
THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF THE RESURFACING OPERATION. THIS WILL BE NECESSARY TO ASSURE THE CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS (EXCEPT WHERE NOTED). FOR CENTER LINE MARKINGS, THE CONTRACTOR SHALL INSTALL THE PASSING/NO PASSING ZONE MARKINGS ACCORDING TO THE CURRENT CENTER LINE LOGS AVAILABLE AT <http://www.dot.state.oh.us/Divisions/Operations/Traffic/miscellaneous/Pages/CenterlinePassingandNoPassingZoneLogs.aspx> PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

ITEM 623- CONSTRUCTION LAYOUT STAKES, AS PER PLAN

PRIOR TO THE START OF ROADWAY OPERATION, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 500' FEET INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMIPERMANENT CONDITION.

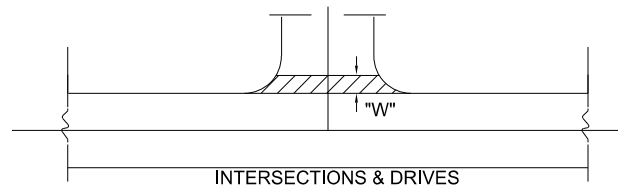
ITEM 253- PAVEMENT REPAIR (A)

AN ESTIMATED QUANTITY OF 750 CU YDS OF ITEM 253- PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY.



EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 6" INCHES OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS, DO NOT DISTURB EXISTING CONCRETE PAVEMENT. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

INTERSECTIONS AND DRIVES



INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES. INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER, DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' "W" MEASURED FROM EDGE OF PAVED SHOULDER.

PERFORM WORK PER SPECIFIED OFFSET LIMITS UNLESS THERE IS AN EXISTING JOINT LOCATED CLOSER TO THE EDGE OF PAVED SHOULDER, IN WHICH CASE END WORK AT SAID JOINT, EXCEPT WHERE NOTED BELOW.

ITEM 254- PAVEMENT PLANING, ASPHALT CONCRETE

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE SURFACE COURSE ON US 35 PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$3,600 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

ADJUST DEPTH OF PLANING AT NECESSARY BRIDGE APPROACH SLABS. PLANE PAVEMENT TO PROVIDE SMOOTH TRANSITIONS AT BRIDGE(S).

ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

THIS WORK SHALL CONSIST OF RECONSTRUCTING MANHOLES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE. IN ADDITION TO THE REQUIREMENTS OF CMS SECTION 611.10C, REPAIR ALL ADJACENT DETERIORATED AND CRACKED CONCRETE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE AS PER PLAN..... 2 EACH.

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN

THIS WORK SHALL CONSIST OF RECONSTRUCTING CATCH BASIN TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE. IN ADDITION TO THE REQUIREMENTS OF CMS SECTION 611.10C, REPAIR ALL ADJACENT DETERIORATED AND CRACKED CONCRETE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE AS PER PLAN..... 6 EACH.

GUARDRAIL INSTALLATION

THIS PROJECT REQUIRES THE INSTALLATION OF NEW GUARDRAIL POSTS. SURVEY WORK HAS NOT BEEN PERFORMED EVERYWHERE ON THIS PROJECT, NOR HAVE THE UTILITY LOCATIONS BEEN CONFIRMED IN THE FIELD. IN ADDITION TO CMS 105.07, IF, DURING THE COURSE OF INSTALLING ANY NEW GUARDRAIL COMPONENT, IT IS DETERMINED THAT A UTILITY CONFLICT MAY RESULT, THE CONTRACTOR IS TO NOTIFY THE PROJECT ENGINEER IMMEDIATELY. UTILITIES ARE NOT TO BE RELOCATED AS A RESULT OF THIS OPERATION. ADJUSTMENTS TO THE PROPOSED GUARDRAIL WILL ACCOMMODATE THE EXISTING UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE GUARDRAIL VIA MEANS THAT WOULD BE COMPLIANT WITH THE IMPACTED UTILITY'S SAFETY GUIDELINES AS WELL AS STILL MEETING ODOT'S DESIGN CRITERIA. ANY MINOR ADJUSTMENTS MADE TO THE PROPOSED GUARDRAIL INSTALLATIONS SHALL BE INCIDENTAL TO PAY ITEM 606.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POST AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE INDICATED ABOVE.

CONSTRUCTION NOISE

THE PROJECT WILL COMPLY WITH ALL LOCAL NOISE ORDINANCES

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 REBOUNDABLE RETRO REFLECTIVE SHEETING, PER CMS 730.191.

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.

CULVERT PLAN DETAILS

SOME CULVERT PLAN DETAILS ARE IN METRIC UNITS

ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN

THIS PAY ITEM SHALL INCLUDE THE COST TO FURNISH AND INSTALL ALL GUARDRAIL COMPONENTS(NORMAL AND EXTRA) OF THE 25' LONG BRIDGE TERMINAL ASSEMBLY, TYPE 4 AS SEEN ON THE PLAN INSERT SHEET

ITEM 202 - BRIDGE TERMINAL ASSEMBLY REMOVED

THIS PAY ITEM IS TO INCLUDE REMOVAL OF ALL EXTRA GUARDRAIL COMPONENTS IN EXCESS OF NORMAL GUARDRAIL WITHIN THE LIMITS OF THE BRIDGE TERMINAL ASSEMBLY

DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN

RETROFIT THE EXISTING BRIDGE RAIL ON THE BRIDGGE PER DBR-3-11. IN ADDITION TO WHAT IS REQUIRED BY STANDARD DRAWING THE EXISTING POST MAY BE RE-USED, BUT THE TUBLAR BACK-UP AND W-RAIL SHALL BE REPLACED. PAYMENT FOR THE MATERIALS AND LABOR ASSOCIATED WITH THE WORK STATED ABOVE SHALL BE INCLUDED IN ITEM 517-DEEP BEAM RAIL, APP FOR PAYMENT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), PWL, 2024, AS PER PLAN

ALL REQUIREMENTS OF C&MS ITEM 442 APPLY EXCEPT AS SHOW.

DENISTY ACCEPTANCE - FOLLOW THE REQUIREMENTS OF 446 DENSITY ACCEPTANCE, EXCEPTS AS MODIFIED BELOW.

OBTAIN 6-INCH DIAMETER CORES FOR EACH LOT .

THE PWL CALCULATOR, LOCATED ON THE ODOT WEBSITE AT THE OFFICE OF CONSTRUCTION ADMINISTRATION, WILL BE USED TO DETERMINE THE LOT PWL AND THE LOT AASHTO PAY FACTORS.

THE DEPARTMENT WILL DETERMINE THE PAY FACTOR FOR EACH LOT CORED BY THE FOLLOWING TABLES.

LOWER SPECIFICATION LIMIT	SURFACE WITH 3 JOINT CORES PAY FACTOR CRITERIA	PAY FACTOR (PF)
92%	IF AVE DENSITY IS ≥ 92.4% AND PWL ≥ 80	PF = 1 OR AASHTO OR WHICHEVER IS GREATER
	IF 80 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE
92.6%	IF AVE DENSITY IS ≥ 93% AND PWL ≥ 80	PF = 1 OR AASHTO OR WHICHEVER IS GREATER
	IF 80 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE
91%	IF AVE DENSITY IS ≥ 91.4% AND PWL ≥ 80	PF = 1 OR AASHTO OR WHICHEVER IS GREATER
	IF 80 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE
91.6%	IF AVE DENSITY IS ≥ 92% AND PWL ≥ 80	PF = 1 OR AASHTO OR WHICHEVER IS GREATER
	IF 80 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

ITEM 621- RAISED PAVEMENT MARKINGS

ITEM 621- RPM, Y/Y.....554 EA

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 621- RPM554 EA
ITEM 621- RPM REMOVED.....554 EA

DESIGN AGENCY



DESIGNER
JED

REVIEWER
JDO 6/12/23

PROJECT ID
100648

SHEET TOTAL
P.3 | 19

MAINTENANCE OF TRAFFIC

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 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
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 CALENDAR 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 PATTERN 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.

CONTACT THE FOLLOWING:
 DISTRICT PUBLIC INFORMATION OFFICER BY EMAIL AT DOT.D08.PIO@DOT.OHIO.GOV
 DISTRICT PERMIT SECTION BY EMAIL AT D08.PERMITS@DOT.OHIO.GOV
 CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT ONE LANE OF TWO-WAY TRAFFIC USING FLAGGERS MAY BE MAINTAINED DURING WORKING HOURS, BY USE OF THE EXISTING PAVEMENT.

PRE-35-0818:
 MAINTAIN 1-12' LANE OF TWO-WAY TRAFFIC USING TEMPORARY PORTABLE TRAFFIC SIGNALS PER MT-96.11.
 THE ESTIMATED QUANTITIES IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY ON THIS SHEET HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT THIS LOCATION.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

- NEW YEAR'S (OBSERVED)
- GENERAL REGULAR ELECTION DAY (NOV)
- TOTAL SOLAR ECLIPSE (4/8/24)
- THANKSGIVING MEMORIAL DAY
- CHRISTMAS (OBSERVED)
- FOURTH OF JULY (OBSERVED)
- (OTHER HOLIDAY OR SPECIAL EVENT)
- LABOR DAY

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

DAY OF HOLIDAY OR EVENT TIME ALL LANES MUST BE OPEN TO TRAFFIC

SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY	6:00 AM WEDNESDAY THROUGH (THANKSGIVING ONLY) 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$35 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

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

ITEM 614- WORK ZONE MARKINGS

THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS OR PERMANENT MARKINGS UPON COMPLETION OF THE ASPHALT SURFACE COURSE PRIOR TO OPENING THE ROADWAY TO TRAFFIC.

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

SURFACE COURSE

ITEM 614-WORK ZONE CENTER LINE, CLASS I, 642 PAINT -	7.34 MILES
ITEM 614-WORK ZONE EDGE LINE 6", CLASS III, 642 PAINT -	14.68 MILES
ITEM 614-WORK ZONE STOP LINE , CLASS III, 642 PAINT -	12 FEET
ITEM 614-WORK ZONE RAILROAD SYMBOL, CLASS III, 642 PAINT -	1 EACH

SURFACE COURSE (AFTER CENTER LINE RUMBLES INSTALLED)

ITEM 614-WORK ZONE CENTER LINE, CLASS III, 642 PAINT -	7.34 MILES
--	------------

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

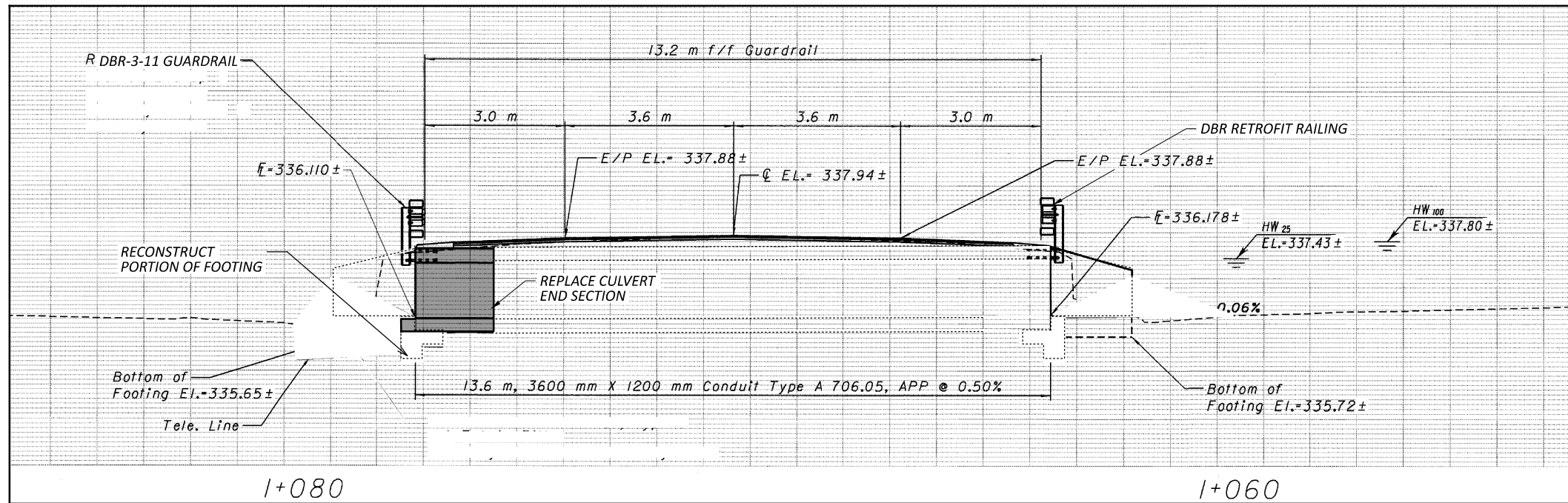
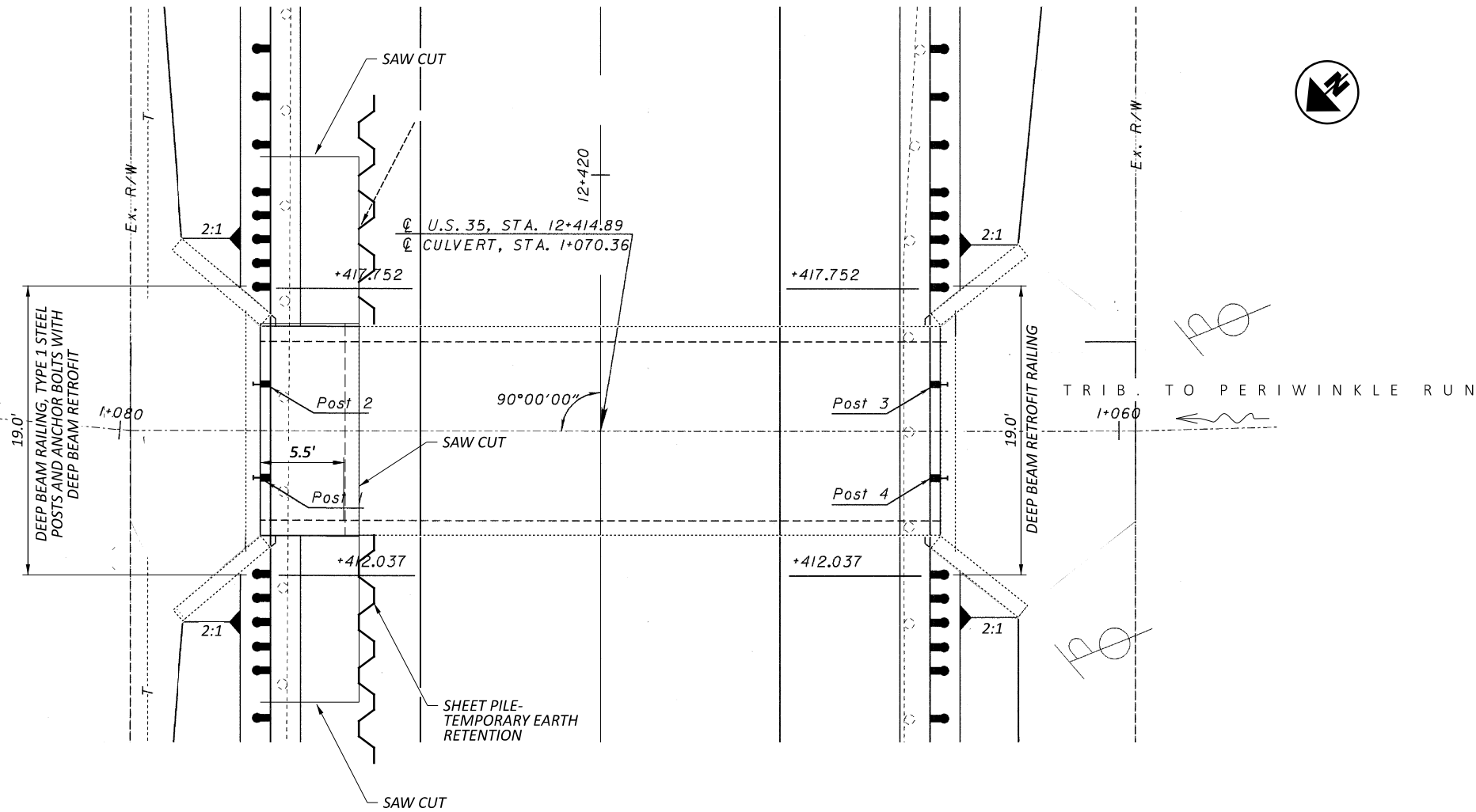
THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

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.

MAINTANANCE OF TRAFFIC SUBSUMMARY

STATION (METERS)	SIDE	LENGTH (FEET)	614							622	
			WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (BI-DIR.)	BARRIER REFLECTOR, TYPE 1 (BI-DIR.)	BARRIER REFLECTOR, TYPE 5 (BI-DIR.)	OBJECT MARKER, TWO-WAY	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE)	WORK ZONE STOP LINE, CLASS I, 642 PAINT	PORTABLE BARRIER, UNANCHORED	
FROM	TO		EACH	EACH	EACH	EACH	MILE	MILE	FT	FT	
12+222.76	12+375.20	CL	500.0					0.10	12		
12+375.20	12+405.69	LT	100.0	2	4		4		0.02	100.0	
12+375.20	12+405.69	RT	100.0			4			0.02		
12+405.69	12+423.98	LT	60.0		3		3		0.01	60.0	
12+405.69	12+423.98	RT	60.0			3			0.01		
12+423.98	12+454.46	LT	100.0	2	4		4		0.02	100.0	
12+423.98	12+454.46	RT	100.0			4			0.02		
12+454.46	12+606.90	CL	500.0					0.10	12		
TOTALS CARRIED TO GENERAL SUMMARY				4	11	11	11	0.2	0.10	24	260

DESIGN AGENCY	
DESIGNER	JED
REVIEWER	JDO 6/12/23
PROJECT ID	100648
SHEET TOTAL	P.4 19



CULVERT PROFILE

HYDRAULIC DATA

DRAINAGE AREA = 132 Hectares
 Q (25) = 8.4 M³/S V (25) = 3.8 M/S
 Q (100) = 11.2 M³/S V (100) = 4.0 M/S



EXISTING STRUCTURE

TYPE: 12' X 4' PRECAST REINFORCED CONCRETE BOX
 SPANS: 11.8 FT F/F CULVERT
 ROADWAY: 43.3 FT F/F GUARDRAIL
 LOADING: HS 20-44 AND THE ALTERNATE MILITARY LOADING
 SKEW: TANGENT
 WEARING SURFACE: BITUMINOUS CONCRETE
 ALIGNMENT: TANGENT
 CROWN: 0.016
 STRUCTURE FILE NUMBER: 6800130
 DATE BUILT: 1996
 DISPOSITION: OUTLET END BOX CULVERT SECTION TO BE REPLACED

PROPOSED WORK

1. REPLACE THE EAST SECTION OF PRECAST BOX CULVERT WITH A NEW CAST IN PLACE BOX CULVERT SECTION.
2. REPAIR REMAINING PORTIONS OF CULVERT INTERIOR WHERE SPALLING HAS OCCURRED WITH TROWELABLE MORTAR PER SS 843.
3. SEAL CULVERT ENDS AND WINGWALLS CONCRETE SURFACES WITH EPOXY URETHANE SEALER PER CMS 512.
4. RETROFIT THE RAILING ON THE WEST SIDE PER DBR-3-11. RAILING ON THE EAST SIDE SHALL BE NEW. UPGRADE APPROACH GUARDRAIL AS NECESSARY TO MEET MGS SPECIFICATIONS.
5. MILL AND FILL THE SURFACE COURSE ONLY ON THE STRUCTURE.

NOTES

1. VARIOUS INFORMATION ON THE CULVERT PLAN, CULVERT PROFILE AND HYDRAULIC DATA TABLE ON THIS SHEET WERE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. SOME CULVERT PLAN DIMENSIONS ARE SHOWN IN METRIC UNITS.

SITE PLAN
 BRIDGE No.: PRE-35-8.18
 US 35 OVER TRIBUTARY TO PERIWINKLE RUN

SFN
 6800130
 DESIGN AGENCY



DESIGNER	CHECKER
GTF	JED
REVIEWER	
JDO 6/12/23	
PROJECT ID	
100648	
SUBSET	TOTAL
1	3
SHEET TOTAL	
P.11	19

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STANDARD DRAWING CONFORMS TO "LRFD BRIDGE DESIGN SPECIFICATION" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND THE 2020 OHIO BRIDGE DESIGN MANUAL.

DESIGN DATA: THE FOLLOWING DESIGN DATA IS ASSUMED:

CONCRETE - COMPRESSIVE STRENGTH 4000 PSI - FOOTING
COMPRESSIVE STRENGTH 4500 PSI - CULVERT

REINFORCING STEEL - GRADE 60 MINIMUM YIELD STRENGTH
60,000 PSI (ALL REINFORCING SHALL BE EPOXY COATED)

DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN
INSTALL GALVANIZED DOWEL BARS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR BLACK REBAR 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, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

HILTI HIT-HY 200 ADHESIVE ANCHORS
(ICC-ES REPORT ESR-3187)

DEWALT PURE110+ EPOXY ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-3298)

SIMPSON STRONG-TIE SET-3G EPOXY ADHESIVE ANCHORS
(ICC-ES REPORT ESR-4057)

ATC ULTRABOND HS-1CC ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-4094)

THE MANUFACTURER'S INSTALLATION INSTRUCTION PUBLISHED IN THE ICC-ES REPORTS FOR ACCEPTABLE PRODUCTS ARE AVAILABLE AT:

<https://icc-es.org/evaluation-report-program/>

ITEM 611 - CONDUIT, MISC.: GRANULAR STRUCTURAL BACKFILL, 703.11

STRUCTURAL BACKFILL TYPE 1 CONSISTING OF CRUSHED CARBONATE STONE, THAT MEETS THE GRADATIONS OF ITEM 304 SHALL BE PLACED AS SHOWN IN THE DETAIL BELOW. QUANTITY SHALL BE BASED ON A TRENCH LENGTH OF 92 FEET MEASURED ALONG THE CENTERLINE OF THE CULVERT. PAYMENT FOR STRUCTURAL BACKFILL TYPE 1 AND THE EXCAVATION REQUIRED FOR THE PLACEMENT OF THE STRUCTURAL BACKFILL SHALL BE INCLUDED IN ITEM 611 FOR PAYMENT.

NEW CULVERT BOX SECTION:

POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN 1'-6" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12" BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN 6" ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

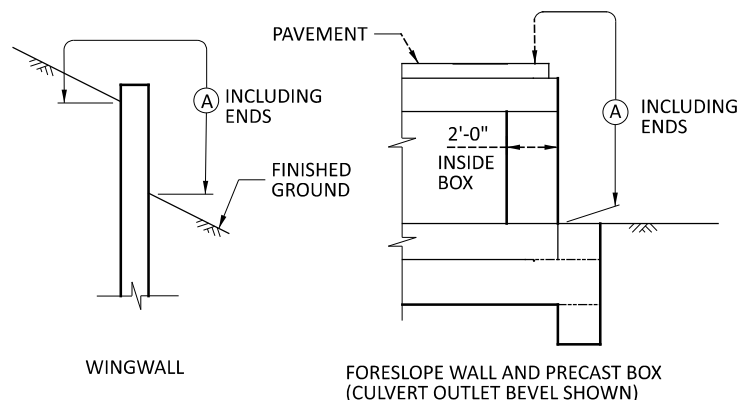
SEALING OF CULVERT BOX FACES AND WINGWALLS: ALL EXPOSED CULVERT BOX FACES AND WINGWALL CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER. THE LIMITS SHALL BE AS SHOWN IN THE DIAGRAMS BELOW. PAYMENT FOR THE EPOXY-URETHANE SEALER SHALL BE PER ITEM 512 - SEALING OF CONCRETE SURFACES.

PREFORMED EXPANSION JOINT FILLER: PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE FOOTING BETWEEN THE SIDES OF THE BOX CULVERT AND THE ENDS OF THE WINGWALL. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

WATERPROOFING: TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

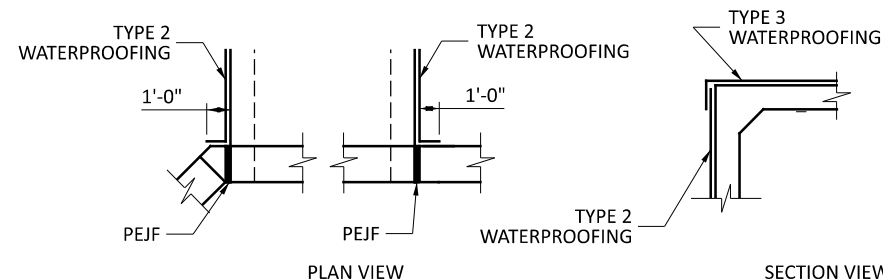
SINCE PAVEMENT WILL BE PLACED DIRECTLY ON TOP OF THE NEW CULVERT SECTION, TYPE 3 WATERPROOFING, PER CMS 512.10 AND 711.29 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CULVERT SECTION AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 3 WATERPROOFING.

EXTEND TYPE 2 AND 3 WATERPROOFING 1 FOOT BEYOND THE SECTION JOINT OF NEW AND EXISTING SECTIONS.



LIMITS OF ITEM 512-SEALING CONCRETE SURFACES

(A) - SEAL ENTIRE CONCRETE SURFACE AREA

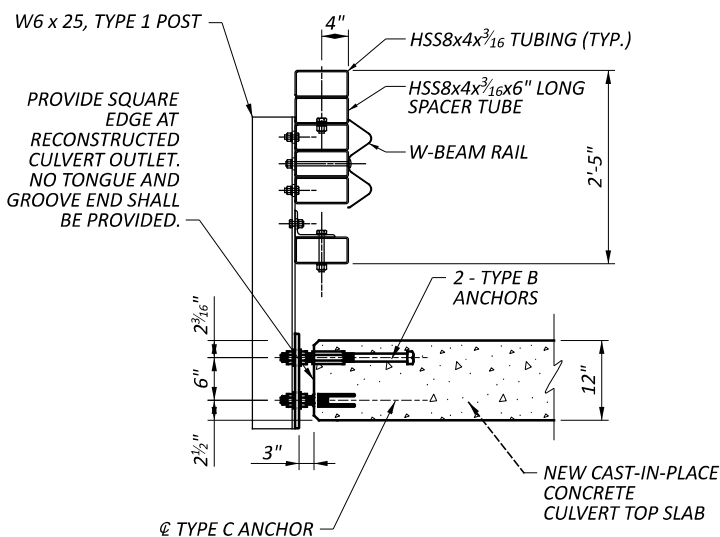
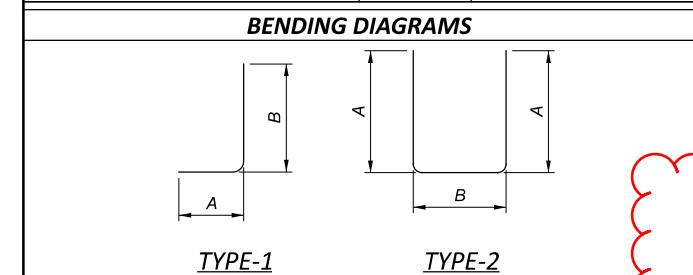


WATERPROOFING DETAILS

BASIS OF PAYMENT: ALL LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO CONSTRUCT THE FOOTING, CUTOFF WALL, WINGWALLS AND FORESLOPE WALL SHALL BE INCLUDED WITH ITEM 511 - CLASS QC1 CONCRETE, RETAINING/WINGWALL - INCLUDING FOOTING). PAYMENT FOR REINFORCING STEEL SHALL BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL.

ESTIMATED QUANTITIES (PLAN SPLIT 04/STR/04)				
ITEM	ITEM EXT	TOTAL	UNIT	DESCRIPTION
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED
202	23000	11	SQ. YD.	PAVEMENT REMOVED
503	11101	LUMP		COFFERDAMS AND EXCAVATION BRACING
503	21300	LUMP		UNCLASSIFIED EXCAVATION
509	10001	1646	LB.	EPOXY COATED STEEL REINFORCEMENT
510	10001	13	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN
511	46510	0.5	CU. YD.	CLASS QC1 CONCRETE, FOOTING
511	33412	0.5	CU. YD.	CLASS QC2 CONCRETE, SUPERSTRUCTURE
512	74001	18	SQ. YD.	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES
512	10101	36	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	33001	9	SQ. YD.	TYPE 2 WATERPROOFING, AS PER PLAN
512	33011	32	SQ. YD.	TYPE 3 WATERPROOFING, AS PER PLAN
516	13600	13	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER
517	72300	18.75	LIN. FT.	RAILING (DEEP BEAM RAILING WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS AND ANCHOR BOLTS)
517	75600	18.75	LIN. FT.	DEEP BEAM BRIDGE RETROFIT RAILING
518	21201	3.24	CU. YD.	POROUS BACKFILL WITH GEOTEXTILE FABRIC
843	50000	3.24	SQ. YD.	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR
878	25000	LUMP		INSPECTION AND COMPACTION TESTING OF UNBOUNDED MATERIALS

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS	
					A	B
REINFORCING STEEL LIST						
X501	14	10'-0"	146	STR		
X502	22	5'-2"	119	STR		
X602	28	12'-9"	536	STR		
Y501	14	4'-6"	66	STR		
Y601	28	17'-0"	715	2	5'-10"	5'-8"
F501	15	2'-4"	37	1	0'-8"	1'-10"
F502	2	12'-9"	27	STR		
SUB-TOTAL			1,646			



CULVERT TOP - PARTIAL TRANSVERSE SECTION

SEE DBR-3-11 AND DBR-2-73 FOR ADDITIONAL DETAILS

PRE-US 35-2.62

MODEL: Sheet_SurvFt_PAPER SIZE: 17x11 (in.) DATE: 11/3/2023 TIME: 10:19:51 AM USER: idavis4
p:\v\h\odor-pw\benitey.com\ohio\odor-pw-02\Documents\01_Active Projects\08\Prebid\100648\100-Engineering\Structures\SFN_6800130_Sheets\100648_SFN_6800130_SN001.dgn

STRUCTURE NOTES
BRIDGE No.: PRE-35-8.18
US 35 OVER TRIBUTARY TO PERIWINKLE RUN

SFN 6800130

DESIGN AGENCY



DESIGNER GTF

REVIEWER CAH 6/12/23

PROJECT ID 100648

SUBSET TOTAL 2 3

SHEET TOTAL P.11A 19