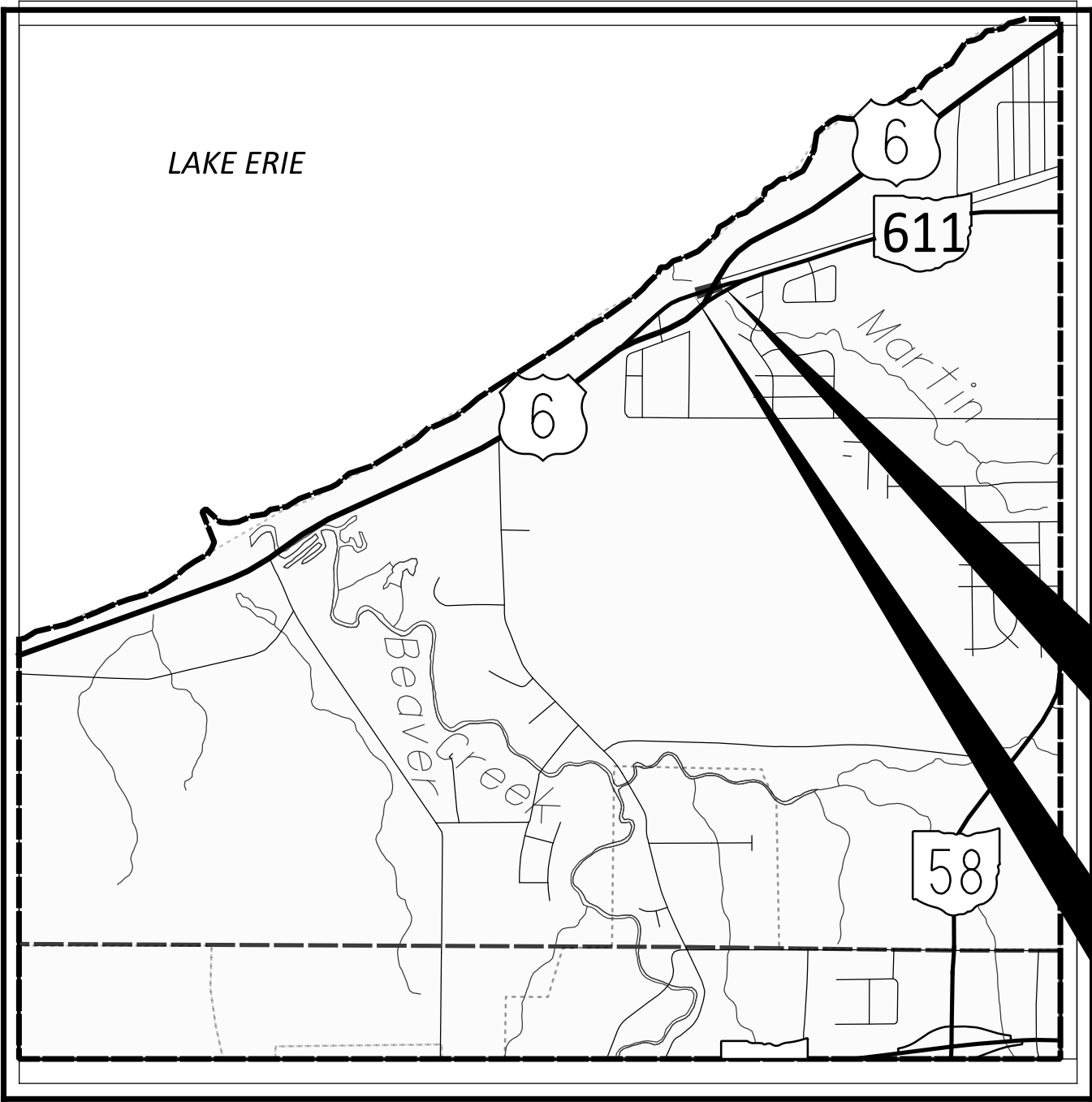




LOCATION MAP

LATITUDE: 41°26'51"N LONGITUDE: 82°13'24"W

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

DESIGN DESIGNATION	S.R.611	U.S.6
CURRENT ADT (2027)	2,694	7,362
DESIGN YEAR ADT (2047)	4,041	---
DESIGN HOURLY VOLUME (2047)	404	---
DIRECTIONAL DISTRIBUTION	1.00	---
TRUCKS (24 HOUR B&C)	500	---
DESIGN SPEED	45	45
LEGAL SPEED	45	45
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN MINOR ARTERIAL	PRINCIPAL ARTERIAL
NHS PROJECT	NO	YES

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

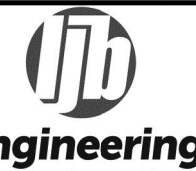
UNDERGROUND UTILITIES

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:

LJB Inc.
2500 Newmark Drive
Miamisburg, OH 45342
(866) 552-3536 | LJBinc.com

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

LOR-006/611-06.86/VAR

BRIDGE AND CULVERT REHABILITATION

CITY OF LORAIN

LORAIN COUNTY

INDEX OF SHEETS:

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FEDERAL PROJECT NUMBER

E191(136)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REHABILITATE THE SR-611 BRIDGE OVER US-6, AND THE CORRUGATED METAL PIPE (CMP) CULVERTS THAT CARRY MARTINS RUN BENEATH SR-611 AND US-6, OUTLETING INTO LAKE ERIE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.34 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	0.44 ACRES
	NO NOI REQUIRED

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

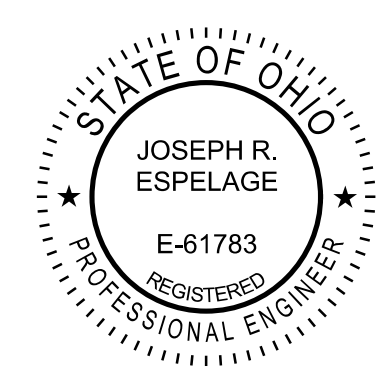
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

Robert Weaver
District 03 Deputy Director

Pamela Boratyn
Director, Department of Transportation

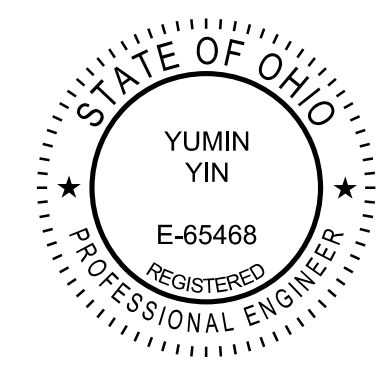
ENGINEER'S SEAL

ROADWAY

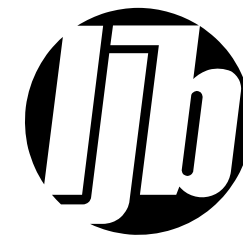


ENGINEER'S SEAL

BRIDGE



STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
AS-1-15	1/20/23	HL-50.21	7/15/22	MT-98.21	7/21/23	TC-41.20	10/18/13	S.S. 800	1/16/26
AS-2-15	7/21/23			MT-98.28	1/17/20	TC-42.20	10/18/13	S.S. 821	4/20/12
		HW-2.1	7/15/22	MT-99.20	4/19/19	TC-52.10	10/18/13	S.S. 832	7/18/25
BP-3.1	1/19/24	HW-2.2	7/20/18	MT-99.60	7/19/24	TC-52.20	1/15/21	S.S. 833	1/16/26
BP-5.1	1/16/26			MT-101.60	1/17/25	TC-61.30	7/19/24	S.S. 846	4/17/15
		MGS-2.1	1/16/26	MT-101.70	7/19/24	TC-72.20	1/16/26	S.S. 902	1/16/26
CB-3A	1/16/26	MGS-3.1	1/16/26	MT-101.75	7/21/23			S.S. 921	7/19/24
		MGS-3.2	7/18/25	MT-101.80	1/17/20	VPF-1-24	7/19/24		
DM-1.1	1/17/25	MGS-4.3	7/18/25	MT-105.10	1/17/20				
DM-4.3	1/15/16								
DM-4.4	1/15/16	MT-95.30	7/18/25	RM-4.2	1/16/26				
		MT-95.40	7/18/25						
EXJ-4-87	1/19/24	MT-95.45	7/21/23	SBR-1-20	7/19/24				
		MT-95.50	7/21/17						
GSD-1-19	7/19/24	MT-98.20	4/19/19						



ITEM 614, MAINTAINING TRAFFIC

THIS PROJECT WILL INVOLVE THE REHABILITATION OF THE RAMP BRIDGE AND EXISTING CULVERT. THE DECK WORK WILL BE DONE UNDER A DETOUR. THE ABUTMENT AND PIER WORK WILL BE DONE USING LANE CLOSURES UNDER THE BRIDGE ALONG U.S. 6. ACCESS TO THE INLET OF THE CULVERT WILL BE FROM THE U.S. 6 EASTBOUND RAMP TO S.R. 611.

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 CURRENT EDITION WITH THE LATEST REVISIONS. 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.

CONSTRUCTION PHASING

1. CLOSE WESTBOUND S.R. 611 RAMP, DETOUR AS SHOWN IN THESE PLANS.
2. CONSTRUCT REHABILITATION OF BRIDGE
A: CLOSE THE OUTSIDE (RIGHT) LANES OF U.S. 6 (EB &WB) UNDER THE BRIDGE, CONSTRUCT PORTIONS OF THE BRIDGE AS SHOWN IN THESE PLANS.
B: CLOSE THE INSIDE (LEFT) LANES OF U.S. 6 (EB &WB) UNDER THE BRIDGE, CONSTRUCT THE PORTION OF THE BRIDGE AS SHOWN.
PHASE 2A AND 2B TO BE CONSTRUCTED CONCURRENTLY WITH PHASE 1
3. CONSTRUCT THE REHABILITATION OF THE TWIN CULVERTS.
A. CLOSE THE OUTSIDE (RIGHT) LANE OF THE EASTBOUND RAMP FROM S.R. 611 TO U.S. 6
B. ACCESS THE CULVERT FROM THE RAMP TO THE INLETS.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

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.

Removed \$2,500/day disincentive statement

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 120 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 7. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H14) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

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

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN) CONT.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDER DAYS*
	>12 HOURS & < 2 WEEKS	7 CALENDER DAYS*
	<12 HOURS	2 BUSINESS DAYS*

*PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H14 SIGN LISTS THE NAME OF THE DEPARTMENT I.E. "THE OHIO DEPARTMENT OF TRANSPORTATION"

ITEM 614, MAINTAINING TRAFFIC (ESTIMATED QUANTITIES)

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410,	TRAFFIC COMPACTED SURFACE, TYPE A OR B	50 CU. YD.
ITEM 410,	TRAFFIC COMPACTED SURFACE, TYPE C	50 CU. YD.
ITEM 614,	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	50 CU. YD.
ITEM 614,	WORK ZONE EDGE LINE, CLASS I, 6"	0.34 MILE
ITEM 614,	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	770 FT
ITEM 614,	WORK ZONE DOTTED LINE, CLASS I	139 FT
ITEM 616,	WATER	2 M. GAL.
ITEM 622,	PORTABLE BARRIER, UNANCHORED	140 FT

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

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.

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.

ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) 1 EACH

ITEM 614, DETOUR SIGNING

THE FOLLOWING QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR THE CONTRACTOR TO PROVIDE THE DETOUR SIGNING AS SHOW AS PER C&MS 614.06(B):

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

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

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

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

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

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION;
AND, AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:
THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
THE ACTIVE WORK AREA Laterally CLOSEST TO THE OPEN TRAVELED LANE; OR
OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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

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

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

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 100 HOURS

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

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

ITEM 614, MAINTAINING TRAFFIC (SHORT TERM CLOSURES)

THE CONTRACTOR SHALL PROVIDE SHORT TERM CLOSURES ON U.S. 6 PER STANDARD CONSTRUCTION DRAWING PER MT-99.60 FOR THE REMOVAL OF THE EXISTING BRIDGE DECK AND INSTALLATION OF ASSOCIATED FALSEWORK. SHORT TERM CLOSURES ARE PERMITTED BETWEEN 8:00PM AND 6:00AM.

DESIGN AGENCY



DESIGNER

JRE

REVIEWER

DWS 02/13/26

PROJECT ID

102655

SHEET

TOTAL

4

52

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 7/22/2026 TIME: 12:13:22 PM USER: SSapkola
Q:\ODOT D3\012728A.00 - LOR-6611-686\VAR PID 102655\102655\400-Engineering\Roadway\Sheets\102655 GG001.dgn

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 7/22/2026 TIME: 12:13:22 PM USER: SSapkota

Revised General Summary group headings

DESIGN AGENCY



SS

REVIEWER

DWS 02/13/26

102655

SHEET	TOTAL
18	5

Revised General Summary group headings



GENERAL NOTES:

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS
REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

833 DATED 01/16/2026

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO 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

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93

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.

REVIEW OF DRAINAGE FACILITIES

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

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

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

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

PROVISIONS OF CMS ITEM 503 SHALL APPLY EXCEPT AS MODIFIED HEREIN. THE REPAIR SITE IS LOCATED IN AN EXISTING CULVERT WHICH EXPERIENCES SIGNIFICANT FLOW DURING WET WEATHER. ALL FLOW FROM WET WEATHER EVENTS MUST BE PERMITTED TO PASS THROUGH ONE CELL OF THE WORK OPERATIONS BY USING AN INFLATABLE PIPE PLUG, OR ANY APPROVED ALTERNATIVE METHOD, BETWEEN THE TWO CMP CELLS AND DEWATERING

ALL MATERIALS (INCLUDING THE COST FOR THE INFLATABLE PLUG OR ANY APPROVED ALTERNATIVE METHOD BETWEEN THE TWO CMP CELLS AND DEWATERING), FLOW BYPASS, LABOR, SUBMITTALS, AND INCIDENTALS REQUIRED FOR THE PERFORMANCE OF WORK AS DETAILED HEREIN AND IN THESE PLANS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 503 - COFFERDAMS AND EXCAVATIONS BRACING, AS PER PLAN.

ITEM 611 - RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK, SHALL BE PROVIDED WITH THE UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE, THE LOCATION, TYPE, SIZE AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 704.41 NON-PERFORATED, 704.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

PAYMENT FOR ALL LABOR AND MATERIALS WILL BE PERFORMED BY CHANGE ORDER.

ITEM 833 - CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ARCH, AS PER PLAN (161" SPAN X 101" RISE)

THIS WORK CONSISTS OF CONDUIT LINING WITH SPRAY APPLIED, FACTORY BLENDED CEMENTITIOUS, GEOPOLYMER, OR RESIN-BASED MATERIAL. SPRAY APPLY CEMENTITIOUS OR GEOPOLYMER MATERIAL BY CENTRIFUGAL CASTING FOR CONDUITS EQUAL TO OR LESS THAN 120-INCHES IN DIAMETER OR SPAN. HAND SPRAY LINER TO CONDUITS THAT CANNOT BE CENTRIFUGALLY CAST. THE TERM "HOST PIPE" REFERS TO CONDUIT BEING RENEWED WITH THE SPRAY APPLIED STRUCTURAL LINER SYSTEM.

THE LINER SHALL HAVE A MINIMUM DESIGN THICKNESS OF 3". THE DESIGN THICKNESS SHALL BE MEASURED FROM THE TOP OF CORRUGATION PROFILE. THE CONTRACTOR SHALL PROVIDE DESIGN CALCULATIONS USING A MINIMUM 3" DESIGN THICKNESS OF THE PROPOSED LINEAR. ALL OTHER DESIGN REQUIREMENTS SHALL MEET SUPPLEMENTAL SPECIFICATION 833.

THE CONTRACTOR SHALL HAND APPLY THE LINER. THIS WORK SHALL ALSO INCLUDE ALL LABOR AND MATERIALS TO PATCH HOLES AND GAPS IN THE HOST PIPE WITH AN APPROVED HYDRAULIC CEMENT OR THE SAME CEMENTITIOUS OR GEOPOLYMER BASED MATERIAL TO BE USED FOR THE LINER TO PROVIDE A SOLID CONTINUOUS SURFACE ON WHICH TO SPRAY. COMPLETELY STOP WATER INFILTRATION IN TO THE HOST PIPE.

APPLY CEMENTITIOUS OR GEOPOLYMER MATERIAL TO THE MINIMUM THICKNESS MEASURED FROM THE CREST OF THE CORRUGATIONS FOR ALL CORRUGATED CONDUITS. APPLY THE LINING MATERIAL TO THE THICKNESS ELEVATION IN ORDER TO CREATE A UNIFORM INTERNAL SURFACE WITHOUT CORRUGATIONS. IF NECESSARY TO ACHIEVE A UNIFORM INTERNAL SURFACE, COMPLETELY FILL THE CORRUGATION VALLEYS FIRST.

PAYMENT FOR CONDUIT RENEWAL INCLUDES EXCAVATION, BACKFILL, ENCASEMENT, PREPARATION, INSPECTIONS, AND ALL OTHER WORK REQUIRED TO COMPLETE THE SPECIFIED ITEMS.

ITEM SPECIAL - PIPE CLEANOUT

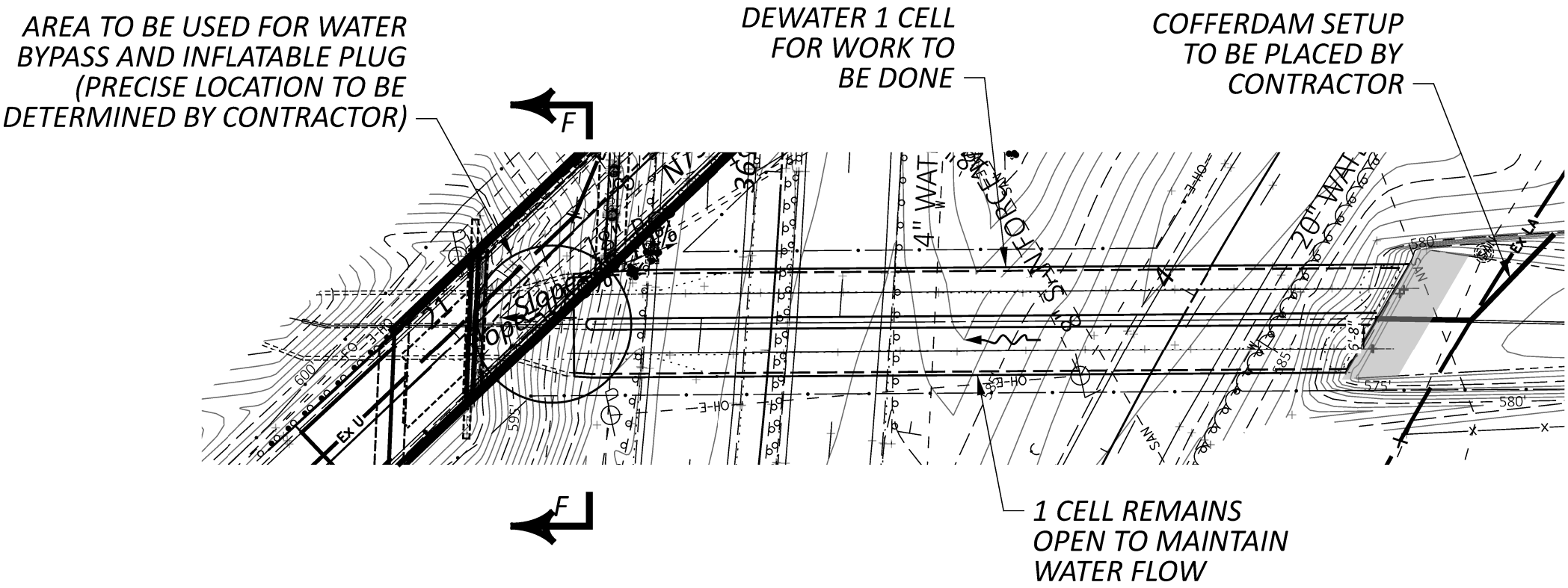
THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER.

CLEANOUT OF THE PIPE IS PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL, PIPE CLEANOUT. THIS PRICE INCLUDES THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

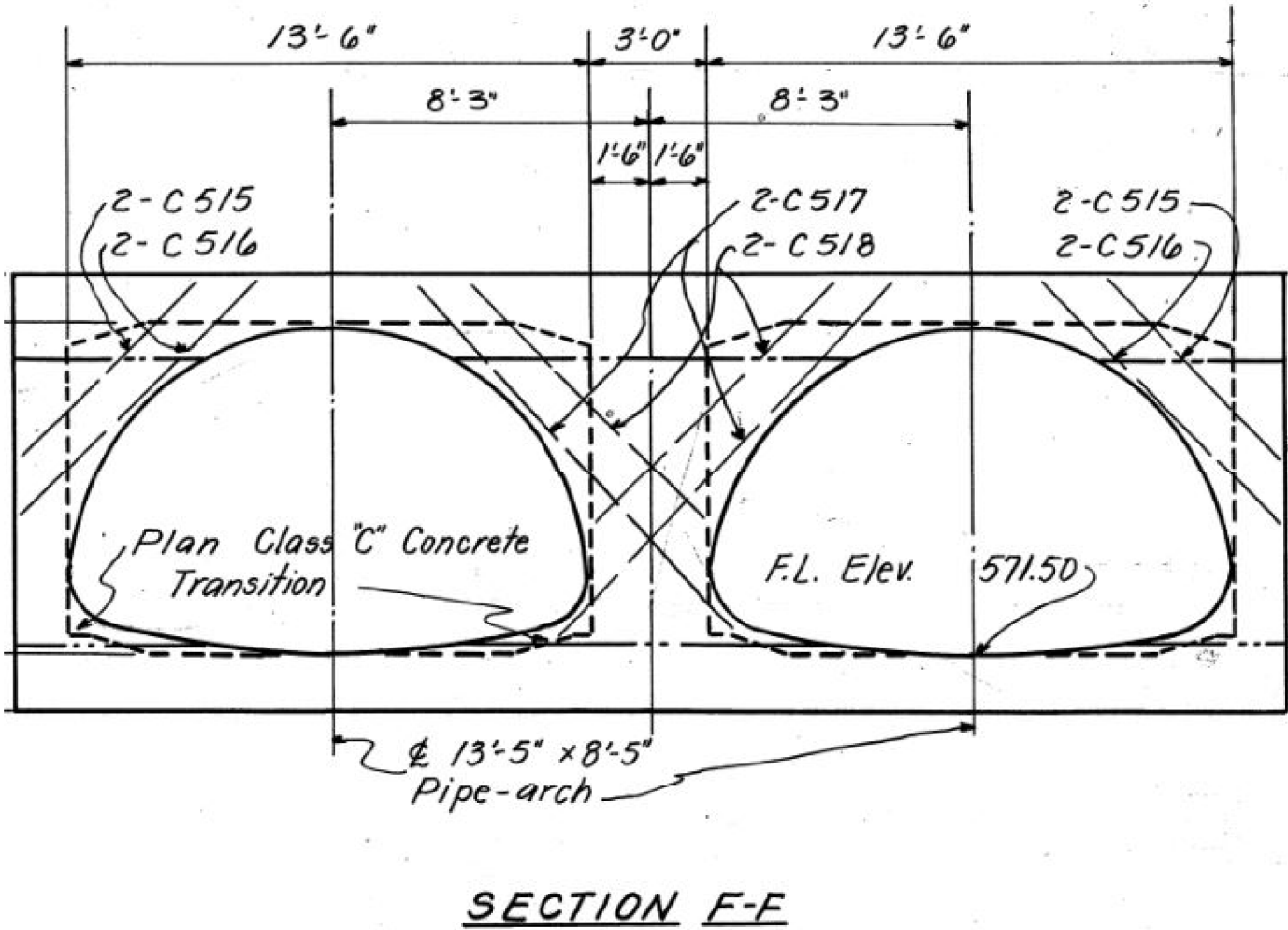
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE TABLE BELOW FOR THE WORK NOTED ABOVE:

ITEM SPECIAL, PIPE CLEANOUT, OVER 48".

Removed hand troweling requirement
from Item 833 note



TWIN CULVERT PLAN



02/NHS	01/S<2	ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN SHEET NUMBER
	1	503	11101	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				1	2 / 3
248	200	SPECIAL	20270130	448	FT	PIPE CLEANOUT OVER 48"				448	2 / 3
248	200	833	12001	448	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ARCH, AS PER PLAN (161" SPAN X 101" RISE)				448	2 / 3

CALCULATED BY: JML
CHECKED BY: YRY

GENERAL NOTES
BRIDGE NO. LOR-006-0686 AND LOR-611-0005
U.S.R. 6 AND S.R. 611 OVER MARTIN RUN

SFN 4707435

SFN 4707532

DESIGN AGENCY

DESIGNER JML

CHECKER YRY

REVIEWER

DWS 02/13/26

PROJECT ID 102655

SUBSET 2

TOTAL 3

SHEET 29

TOTAL 52



LEGEND

- 15'-1" TEMPORARY MINIMUM VERTICAL CLEARANCE (TO BE MAINTAINED)

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS STEEL BEAM SUPERSTRUCTURE
(EXISTING BEAMS) WITH A COMPOSITE CONCRETE DECK
AND CONCRETE ABUTMENTS AND PIERS

SPANS: 51'-11"±, 65'-9"±, 65'-3"±, 52'-3"± C/C BEARINGS

ROADWAY: 27'-2" TOE/TOE PARAPET

LOADING: HL-93 (NO FWS)

SKEW: 46°00'00" LEFT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30' LONG (TYPE A INSTALLATION AS-1-15, AS-2-15)

ALIGNMENT: TANGENT

CROWN: $\frac{3}{16}$ "/FT (SUPERELEVATED)

DECK AREA: 7,423 SF

COORDINATES: LATITUDE 41°26'50.56"
LONGITUDE -82°13'24.16"

SITE PLAN
BRIDGE NO. LOR-611D-0009L
S.R. 611 W.B. OVER U.S. 6

GENERAL NOTES:

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED 1-20-2023
AS-2-15	REVISED 7-21-2023
EXJ-4-87	REVISED 1-19-2024
GSD-1-19	REVISED 7-19-2024
HL-50.21	REVISED 7-15-2022
SBR-1-20	REVISED 7-19-2024
VPF-1-90	REVISED 7-19-2024

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS
S.S. 846 REVISED 4-17-2015

DESIGN SPECIFICATIONS

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

OPERATIONAL IMPORTANCE

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

DESIGN LOADING

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.0 KIPS/SQ.FT.

DESIGN DATA (FOR NEW COMPONENTS)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
CONCRETE REINFORCEMENT:
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI
(ALL SUPERSTRUCTURE AND SUBSTRUCTURE EXCEPT GFRP REINFORCEMENT IN BRIDGE RAILING)
STRUCTURAL STEEL - ASTM A709 GRADE 50 KSI - YIELD STRENGTH 50 KSI

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

DECK PROTECTION METHOD

EPOXY COATED STEEL REINFORCEMENT
2½" CONCRETE COVER

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.

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.50 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION; THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE.

ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

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

OR

ASBESTOS PROGRAM OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL, AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT [THE ODOT 3 OFFICE, 906 CLARK AVENUE, ASHLAND, OHIO 44805].

BASIS FOR PAYMENT - THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

DESCRIPTION: 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 DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING CONCRETE REINFORCEMENT 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 CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

MAXIMUM REMOVAL LIMITS: SOUND THE CONCRETE TO DETERMINE THE LIMITS OF THE CONCRETE TO BE REMOVED AND COMPARE THESE LIMITS TO THE AREAS SHOWN IN THE PLANS. IF NEW AREAS ARE DISCOVERED OR IF THE DIMENSIONS OF THE PLAN AREAS INCREASE BY MORE THAN 25% IN ANY DIRECTION, DOCUMENT THE AREAS AND NOTIFY THE ENGINEER FOR EVALUATION TWO WEEKS PRIOR TO REMOVAL. THE ENGINEER WILL DETERMINE IF PATCHING IN DISCRETE SECTIONS/STAGES IS NEEDED OR IF THE INSTALLATION OF TEMPORARY FALSEWORK IS REQUIRED.

DECK REMOVAL: THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS-FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING BEGINS, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF CONCRETE REINFORCEMENT IN THE DECK SLAB. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL BEAM STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, 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 STEEL REINFORCEMENT 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.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT HYDRAULIC HOE-RAM TYPE HAMMERS. 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 CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE CONTRACTOR SHALL PREPARE AND PROVIDE PLANS, IN ACCORDANCE WITH C&MS 501.05, FOR ANY TEMPORARY SUPPORT FOR EXCAVATION. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENTS FOR PROVIDING A DESIGN.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM SHALL BE USED FOR REMOVAL OF MATERIAL AROUND THE ABUTMENT WALLS AND FOR INSTALLATION OF THE POROUS BACKFILL AS SHOWN ON THE ABUTMENT REMOVAL SECTIONS DETAILS.

PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 509, EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE STEEL REINFORCEMENT DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 709.00.

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

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL CONCRETE REINFORCEMENT ACCORDING TO ITEM 510 USING EPOXY GROUT, CMS 705.20. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.

ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM:
PROPOSED INTERMEDIATE AND END CROSSFRAMES

SFN	
4707508	
DESIGN AGENCY	
	
DESIGNER	CHECKER
SS	YRY
REVIEWER	
DWS 02/13/26	
PROJECT ID	
102655	
SUBSET	TOTAL
2	21
SHEET	TOTAL
33	52

ITEM	EXTENSION	QUANTITY 02/NHS/10	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN SHEET NUMBER
202	11203	1	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	2 / 21
202	22900	133	SQ YD	APPROACH SLAB REMOVED				133	
202	23500	777	SQ YD	WEARING COURSE REMOVED (4.25" THICK)			644	133	
503	11101	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				1	2 / 21
503	21301	1	LUMP	UNCLASSIFIED EXCAVATION, AS PER PLAN				1	2 / 21
509	10001	93,146	POUND	EPOXY COATED REINFORCING STEEL, AS PER PLAN	8,802	2,854	81,490		2 / 21
509	30020	9,174	FT	NO. 4 DEFORMED GFRP BARS				9,174	
510	10001	412	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	250	162			2 / 21
511	34447	211	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			211		3 / 21, 15 / 21
511	34450	90	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			90		
511	43210	11	CU YD	CLASS QC1 CONCRETE, PIER		11			
511	45710	31	CU YD	CLASS QC1 CONCRETE, ABUTMENT	31				
512	10100	939	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	121	318	500		
512	10600	55	FT	CONCRETE REPAIR BY EPOXY INJECTION	55				
512	74000	439	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	121	318			
513	10201	8,200	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			8,200		2 / 21
513	20000	3,036	EACH	WELDED STUD SHEAR CONNECTORS			3,036		
514	00050	9,407	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			9,407		
514	00056	9,407	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			9,407		
514	00060	9,407	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			9,407		
514	00066	9,407	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			9,407		
514	00504	16	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			16		
514	10000	5	EACH	FINAL INSPECTION REPAIR			5		
516	11210	61	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			61		
516	44101	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x14"x2 5/8")			12		18 / 21
516	44201	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12"x12"x3 5/8")			8		18 / 21
516	47001	1	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				1	3 / 21
518	21200	52	CU YD	POROUS BACKFILL WITH GEOTEXTILE FABRIC	52				
518	40000	134	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	134				
518	40010	18	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	18				
SPECIAL	51900100	1,174	SQ FT	COMPOSITE FIBER WRAP SYSTEM (SEE PROPOSAL NOTE)		1,174			9 / 21
519	11101	40	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		40			3 / 21
526	30010	203	SQ YD	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				203	
526	90010	61	FT	TYPE A INSTALLATION				61	
601	20010	204	CY	CRUSHED AGGREGATE SLOPE PROTECTION	204				
601	21050	4	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT				4	
607	39900	475	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			475		
611	99710	2	EA.	PRECAST REINFORCED CONCRETE OUTLET				2	
625	33001	1	EA.	STRUCTURE GROUNDING SYSTEM, AS PER PLAN	1				3 / 21
846	00110	25	CU FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				25	

CALCULATED BY: SS 02 / 2024
CHECKED BY: YRY 07 / 2026

ESTIMATED QUANTITIES
BRIDGE NO. LOR-611D-0009L
S.R. 611 W.B. OVER U.S. 6

SFN
4707508
DESIGN AGENCY



DESIGNER
SS

CHECKER
YRY

REVIEWER
DWS 02/13/26

PROJECT ID
102655

SUBSET
4

TOTAL
21

SHEET
35

TOTAL
52