



FOR LOCATION MAPS
AND DESIGN DESIGNATIONS
SEE LOCATION MAP SHEETS

LOCATION MAP

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

D05 FY2026 BRIDGE REHAB EAST

COSHOCTON, GUERNSEY, AND MUSKINGUM COUNTIES

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REHABILITATION OF BRIDGES PRIOR TO RESURFACING:
DECK PATCHING, DECK SEALING, VARIOUS SUBSTRUCTURE
AND SUPERSTRUCTURE REPAIRS, SPOT PAINTING,
AND BRIDGE CLEANING

EARTH DISTURBED AREAS

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

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

Jason L. Sturgeon
 Jason L. Sturgeon, P.E.
 District 05 Deputy Director

Pamela Boratyn
 Pamela Boratyn
 Director, Department of Transportation

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:
 OHIO DEPARTMENT
 OF TRANSPORTATION
 DISTRICT 5

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	MT-99.30	1/17/20	800-2023	1/17/25
BP-9.1	1/18/19	MT-101.70	7/19/24	808	7/19/24
		MT-101.75	7/21/23	832	7/19/24
MGS-1.1	1/17/25	MT-102.10	7/21/23	843	1/19/24
MGS-2.1	1/17/25	MT-102.20	4/19/19	908	1/17/25
MGS-3.1	1/19/18	MT-102.30	10/16/15		
MGS-3.2	1/18/13	MT-104.10	1/19/24		
MGS-6.1	1/19/18	MT-105.10	1/17/20		
PCB-91	7/17/20	TC-61.30	7/19/24		
SBR-3-20	7/19/24	TC-65.10	1/17/14		
		TC-65.11	1/17/25		
MT-95.30	7/19/19				
MT-95.45	7/21/23				
MT-95.50	7/21/17				
MT-97.10	4/19/19				

ASBESTOS SURVEY REPORT
 05-01-2025

ENGINEER'S SEAL

DESIGN AGENCY	
DESIGNER	MHK
REVIEWER	JKS 02/14/25
PROJECT ID	121867
SHEET	P.1
TOTAL	62

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND/OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT: D05.PIO@dot.state.oh.us

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT: brian.bosch@dot.state.oh.us

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT: hauling.permits@dot.state.oh.us

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES

VILLAGE OF NEW CONCORD CONTACT

BRIDGE NO. MUS-83-1.38 IS LOCATED IN THE VILLAGE OF NEW CONCORD. CONTACT THE VILLAGE AT (740) 826-7671 OR INFO@NEWCONCORD-OH.GOV IF NECESSARY.

UTILITY OWNERSHIP

UTILITY CONFLICTS NOT EXPECTED AND LOCATIONS NOT SURVEYED. USE CAUTION AROUND AERIAL UTILITIES AND UTILIZE "CALL BEFORE YOU DIG" PRIOR TO ANY EXCAVATION.

GENERAL PROVISIONS

THE CONTRACTOR'S ATTENTION IS CALLED TO ALL OF SECTION 100 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION.

MOBILIZATION

THE CONTRACTOR SHALL ON ANY CONTRACT FOR WHICH HIS BID EXCEEDS \$50,000.00 INCLUDE AN AMOUNT TO COVER ANY APPLICABLE EXPENDITURES REFERRED TO UNDER ITEM 624 OF THE 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS. PAYMENT SHALL BE THE LUMP SUM BID PRICE FOR ITEM 624, MOBILIZATION.

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.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK 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 FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

REMOVED MATERIALS

ALL REMOVED MATERIALS EXCEPT AS NOTED ELSEWHERE IN THE PLANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY THE CONTRACTOR FROM THE JOB SITE.

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.

CONTRACTOR COORDINATION

THE CONTRACTOR FOR THIS PROJECT SHALL COORDINATE WITH THE CONTRACTOR FOR RESURFACING PROJECT GUE-70-9.43 (PID 101012, PROJECT NUMBER 240578). THAT PROJECT IS ANTICIPATED TO AFFECT MAINTENANCE OF TRAFFIC FOR WORK ON BRIDGES GUE-70-12.75 L&R.

LOCATION OF GUARDRAIL

THE LOCATION OF THE GUARDRAIL RUNS AS SHOWN IN THE PLANS ARE SUBJECT TO ADJUSTMENTS PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

ENVIRONMENTAL NOTE

THIS PROJECT INVOLVES WORK OVER VARIOUS STREAMS AND WATERWAYS LISTED AND SHOWN ON THE LOCATION MAPS AND PLAN SHEETS. ALL WORK IS PROHIBITED FROM OCCURRING BELOW THE OHWM IN ANY STREAM FLOWING UNDER THE LISTED STRUCTURES. DO NOT PLACE ANY TEMPORARY OR PERMANENT FILL WITHIN THE JURISDICTIONAL BOUNDARIES OF ALL STREAMS, WETLANDS, AND JURISDICTIONAL DITCHES DURING THE CONSTRUCTION OF THIS PROJECT, INCLUDING SCAFFOLDING OR BRACING. DO NOT PLACE ANY EQUIPMENT WITHIN THE JURISDICTIONAL BOUNDARY OF ANY WATERWAY. IF DEBRIS ENTERS THE WATERWAY DURING CONSTRUCTION, REMOVE THE DEBRIS IMMEDIATELY USING EQUIPMENT STAGED OUTSIDE THE JURISDICTIONAL BOUNDARY.

INSPECTION FOR BATS AND NESTING BIRDS

PRIOR TO THE START OF DEMOLITION ACTIVITIES THE CONTRACTOR SHALL INSPECT THE UNDERSIDE OF THE BRIDGE FOR THE PRESENCE OF BATS AND/OR NESTING BIRDS. IF ANY BATS OR NESTING BIRDS ARE OBSERVED THE CONTRACTOR SHALL NOTIFY THE DISTRICT 5 PLANNING DEPARTMENT: NICOLE HAFER-LIPSTREU @ (740) 323-5103 (NICOLE.HAFERLIPSTREU@DOT.OHIO.GOV), OR BRIAN TATMAN @ (740) 323-5191 (BRIAN.TATMAN@DOT.OHIO.GOV) PRIOR TO STARTING ANY DEMOLITION WORK.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT WITH A TRUNK 3" OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, WITH A MINIMUM HEIGHT OF 13 FEET. THE CONTRACTOR SHALL REMOVE ONLY THE TREES NECESSARY TO COMPLETE THE PROJECT.

OEPA NOTIFICATION OF DEMOLITION AND RENOVATION

AN ASBESTOS SURVEY FOR THE BRIDGE SCHEDULED FOR DEMOLITION WORK WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. A COPY OF THE ASBESTOS SURVEY REPORT FOR THE BRIDGE HAS BEEN INCLUDED IN THE PLAN PACKAGE FOR THIS PROJECT. THE ASBESTOS SURVEY REPORT DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS. A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED BY THE ASBESTOS HAZARD EVALUATION SPECIALIST, HAS BEEN INCLUDED AT THE END OF THE ASBESTOS SURVEY REPORT. THE CONTRACTOR SHALL COMPLETE NECESSARY SECTIONS OF THE FORM AND SUBMIT IT WITH A COPY OF THE ASBESTOS SURVEY REPORT AND APPLICABLE NOTIFICATION FEE TO:

ASBESTOS PROGRAM
OHIO EPA, DAPC
PO BOX 1049
COLUMBUS OH 43216-1049

OR ONLINE AT THE OHIO EPA'S WEBSITE

AT LEAST 10 WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION WORK.

BASIS FOR PAYMENT: THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENTS FOR THIS WORK SHALL BE INCIDENTAL TO THE ITEM 202 STRUCTURE REMOVAL ITEM(S) IN THE PLAN. A MINIMUM NESHAP NOTIFICATION FEE OF \$75.00 WILL BE REQUIRED.

ITEM 659 SEEDING AND MULCHING, CLASS 2

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

ITEM 659 - SEEDING AND MULCHING, CLASS 2	1500 SQ. YD.
ITEM 659 - COMMERCIAL FERTILIZER	0.21 TON
ITEM 659 - LIME	0.32 ACRES
ITEM 659 - WATER	8.1 M. GAL.

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

ITEM 209 RESHAPING UNDER GUARDRAIL

ITEM 209 RESHAPING UNDER GUARDRAIL INCLUDES RESHAPING UNDER BOTH EXISTING AND PROPOSED GUARDRAIL AT BRIDGES GUE-70-12.75 L&R FROM STA. 395+00 TO STA. 398+00. A QUANTITY OF 2 STA. HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 209 BORROW

10 CY OF ITEM 209 BORROW IS CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE OF CONSTRUCTING ITEM 209 RESHAPING UNDER GUARDRAIL.

ITEM 407 NON TRACKING TACK COAT

THE RATE OF APPLICATION OF ITEM 407 NON TRACKING TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.06 GAL/SY FOR INTERMEDIATE COURSE FOR ESTIMATING PURPOSES ONLY. SEE MOT NOTES AND BRIDGE DETAILS FOR ESTIMATED QUANTITIES.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449)

THIS ITEM SHALL BE USED TO REPLACE THE WEARING COURSE AND FILL IN RUMBLE STRIPS FOR MAINTAINING TRAFFIC AT BRIDGES GUE-70-12.75 L&R. SEE MOT NOTES AND BRIDGE DETAIL SHEETS FOR ESTIMATED QUANTITIES.

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI
REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60 KSI
GFRP - C&MS 705.28 (MODULUS 8700KSI)

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 CMS 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.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:
PCB-91 DATED: 07-17-20
SBR-3-20 DATED: 07-19-24

REFERENCE

EXISTING BRIDGE PLANS MAY BE INSPECTED AND ARE PROVIDED WITH THIS PROJECT'S BIDDING DOCUMENTS.

DESIGN SPECIFICATIONS

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

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SUBSTRUCTURE)

THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PREP THE ABUTMENTS OF BRIDGE NO. GUE-77-1548L FOR PROPOSED CONCRETE WORK (REMOVAL OF AGGREGATE SLOPE PROTECTION, LOOSE CONCRETE ON ABUTMENT FACES, ETC). CONCRETE SHALL BE REMOVED USING HAND TOOLS AND THE REMAINING CONCRETE SURFACE SHALL BE AIR BLASTED CLEAN TO REMOVE ANY LOOSE MATERIAL. INSPECTION OF THE REMOVALS BY THE ENGINEER SHALL BE PERFORMED BEFORE PLACEMENT OF REINFORCEMENT, FORMS, OR CONCRETE. PAYMENT FOR THIS WORK WILL BE AT THE LUMP SUM CONTRACT BID PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SUBSTRUCTURE).

ITEM 202 - REMOVAL, MISC.: CATTLE FENCE

THERE IS A CATTLE FENCE ATTACHED TO THE SUPERSTRUCTURE OF BRIDGE NO. MUS-83-11.34. CONTRACTOR SHALL SPEAK TO THE NEARBY PROPERTY OWNER AND REQUEST REMOVAL OF THE FENCE. IF THE OWNER DOES NOT REMOVE THE FENCE, THE CONTRACTOR SHALL DETACH THE FENCE FROM THE BRIDGE AS NEEDED TO PERFORM WORK. DO NOT ENTER THE STREAM TO REMOVE FENCE. REATTACHMENT AFTER COMPLETING THE WORK IS NOT REQUIRED. THE ENGINEER SHALL APPROVE THE REMOVAL PLAN OF CATTLE FENCE BEFORE REMOVAL TAKES PLACE.

THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO REMOVE THE CATTLE FENCE. PAYMENT FOR THIS WORK WILL BE AT THE LUMP SUM CONTRACT BID PRICE FOR ITEM 202 - REMOVAL, MISC.: CATTLE FENCE.

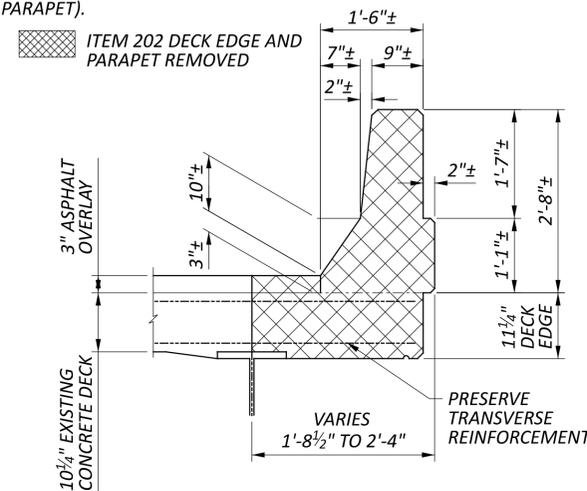
ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

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

1 ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (DECK EDGE AND PARAPET)

THIS WORK CONSISTS OF THE REMOVAL OF THE PARAPET AND DECK EDGE AS SHOWN ON THIS SHEET AND THE BRIDGE DETAIL SHEETS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED IN THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING PARAPET REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED I.E. EXISTING BRIDGE DECK, EXISTING RESTEEL, AND EXISTING BEAMS. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 85-POUND CLASS. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

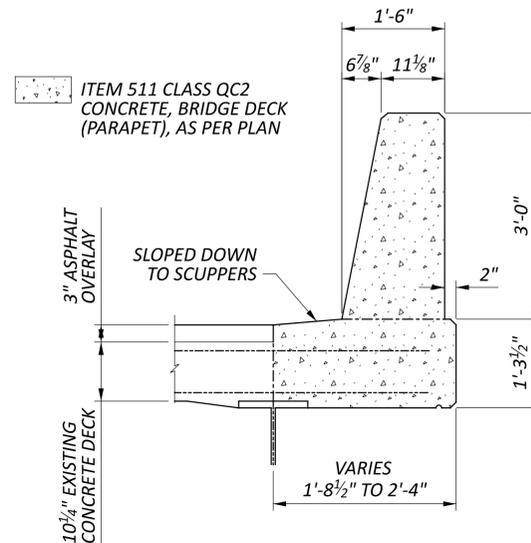
THE DEPARTMENT WILL MEASURE QUANTITY OF REMOVALS ON A CUBIC YARD BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (DECK EDGE AND PARAPET).



1 ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN

THIS WORK CONSISTS OF CONSTRUCTING THE PROPOSED PARAPETS AND DECK EDGES AS SHOWN BELOW AND IN THE BRIDGE DETAILS.

THE DEPARTMENT WILL MEASURE QUANTITY ON A CUBIC YARD BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE BID FOR ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN.



ITEM 614 MAINTAINING TRAFFIC

TWO-WAY TRAFFIC SHALL BE MAINTAINED AS PER THE DETAIL SHEETS AND SPECIFICATIONS AND AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS LATEST REVISION. IN ADDITION, THE FOLLOWING REQUIREMENTS SHALL APPLY:

FOR LOCATIONS ON S.R. 83, S.R. 93, S.R. 541, AND INTERSTATE OVERHEADS, A MINIMUM OF ONE LANE OF TRAFFIC MUST BE MAINTAINED AT ALL TIMES.

FOR LOCATIONS ON I.R. 70 AND I.R. 77, MAINTAIN TRAFFIC ACCORDING TO THE PERMITTED LANE CLOSURE SCHEDULE (PLCS).

FOR STRUCTURES GUE-70-12.75 L&R, MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION ACCORDING TO THE PERMITTED LANE CLOSURE SCHEDULE (PLCS) AND AS SHOWN IN THE DETAILS ON THE FOLLOWING SHEETS.

LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS LISTED ON THE TITLE SHEET, IN CONSIDERATION OF THE TRAFFIC FLOW. LANE CLOSURES SHALL ONLY OCCUR DURING CONTRACTOR WORK HOURS.

LENGTH AND DURATION OF LANE CLOSURES 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.

THE CONTRACTOR WILL HAVE ON SITE AND IN WORKING AND/OR SUITABLE CONDITION; ALL EQUIPMENT, TOOLS, LABORERS, LEOS, TRAFFIC CONTROL DEVICES, AND INCIDENTALS NECESSARY TO EFFICIENTLY PERFORM THE CLOSURE BEFORE INITIALIZING THE LANE CLOSURE.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY, AS PER 614.03 (C).

THE PLANS INDICATE THE MINIMUM SIGNAGE WHICH MUST BE INSTALLED AND/OR MAINTAINED DURING ALL PHASES OF CONSTRUCTION. EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

THE ENGINEER SHALL RECORD INSTALLATION AND REMOVAL OF PROPOSED SIGNS, COVERED OR REMOVED AND UNCOVERED OR REERECTED SIGNS IN THE PROJECT DIARY.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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 PLANS.

ITEM 614 WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING NON-GATING IMPACT ATTENUATORS. FURNISH IMPACT ATTENUATORS FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

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

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED ATTENUATOR 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, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL ATTENUATOR SYSTEM, INCLUDING ALL BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE, AND GRADING NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 614 WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)..... **2 EA**

SEQUENCE OF OPERATIONS (GUE-70-12.75 L&R):

PRE-WORK PHASE:

- 1) UTILIZING NECESSARY TRAFFIC CONTROL DEVICES, CLOSE THE OUTSIDE DRIVING LANE OF I.R. 70 EASTBOUND AND THE INSIDE PASSING LANE OF I.R. 70 WESTBOUND AND MAINTAIN TRAFFIC BY USE OF THE OPEN LANES.
- 2) FILL IN THE RUMBLE STRIPS ON THE SHOULDERS WITH ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (449) TO ALLOW FOR MAINTAINING TRAFFIC ON THE SHOULDERS.

WORK PHASE:

- 1) SET UP TRAFFIC CONTROL AS SHOWN ON MOT SHEETS.
- 2) WORK PHASE SHALL INCLUDE:
 - REMOVAL AND CONSTRUCTION OF EXISTING LOW SIDE DECK EDGES AND PARAPETS.
 - REMOVAL OF NECESSARY GUARDRAIL AND BRIDGE TERMINAL ASSEMBLIES. INSTALLATION OF PROPOSED GUARDRAIL AND ASSOCIATED ASSEMBLIES.
 - REPLACEMENT OF ASPHALT WEARING COURSE.
 - COMPLETION OF ALL OTHER WORK AS DESIGNATED IN THESE PLANS.

POST-WORK PHASE:

- 1) RESTORE I.R. 70 TO PRE-CONSTRUCTION OPERATING CONDITION, INCLUDING:
 - REMOVE ALL TEMPORARY/ WORK ZONE TRAFFIC CONTROL DEVICES (I.E. PAVEMENT MARKINGS, RAISED PAVEMENT MARKERS).
 - PLACE ALL PERMANENT PAVEMENT MARKINGS.
 - REPLACE PERMANENT RAISED PAVEMENT MARKERS.
 - RESTORE SHOULDER RUMBLE STRIPS.

GENERAL:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC. (REFER TO MAINTAINING TRAFFIC NOTES FOR RESTRICTIONS).

IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATIVE METHODS FOR THE MAINTENANCE OF TRAFFIC. PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE ENGINEER.

ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE OPENING ANY LANES TO TRAFFIC.

LANE VALUE - I.R. 70

LANE CLOSURES WILL ONLY BE IMPLEMENTED AT THE TIMES LISTED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S ROADWAY ENGINEERING WEB SITE, TRAFFIC CONTROL SECTION, "PERMITTED LANE CLOSURE SCHEDULE (PLCS)" PAGE.

THE PERMITTED CLOSURE TIMES LISTED ON THE WEBSITE, 14 CALENDAR DAYS PRIOR TO THE BID LETTING DATE, WILL BE IN EFFECT FOR THIS PROJECT. NO WORK WITHIN ACTIVE TRAVEL LANES OR WHICH WILL SLOW TRAFFIC IS PERMITTED AT ANY OTHER TIMES.

WHEN NECESSARY, LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS.

THE CONTRACTOR MAY CLOSE ONE LANE IN BOTH EASTBOUND AND WESTBOUND DIRECTIONS. THE TRAFFIC CLOSURES WILL BE BETWEEN THE HOURS INDICATED ON THE O.D.O.T. WEB SITE, SHOULD THE CONTRACTOR CLOSE THE LANES BEFORE THE ALLOWABLE TIME AND/OR FAIL TO RE-OPEN ALL LANES TO TRAFFIC, BY THE ALLOWABLE TIME. A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE AND PROPOSAL NOTE 127 WILL BE ASSESSED.

LANE VALUE CONTRACT TABLE - I.R. 70

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
1 LANE OF GUE I.R. 70 FROM MM 12.25 TO 17.50 EB AND WB	O.D.O.T. WEB SITE: PERMITTED LANE CLOSURE TIMES	EACH MINUTE	\$225

ITEM 614 - MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC**10 CY**

ITEM 614 - MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

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

EASTER
MEMORIAL DAY
FOURTH OF JULY
LABOR DAY

PAUL BUNYAN SHOW (10/3-10/5)
THANKSGIVING
CHRISTMAS
NEW YEARS

THE PERIOD OF TIME THAT THE LANES ARE 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	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM TUESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING)	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$75 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

ITEM 614 - WORK ZONE INCREASED PENALTIES SIGN

R11-H5a-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO THE TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE SIGNS (R11-H5a-48) ON THE MAINLINE SHALL BE DUAL-MOUNTED. THE SIGNS SHALL BE PLACED BETWEEN THE "ROAD WORK AHEAD" SIGN (W20-1) AND THE NEXT SIGN IN THE SEQUENCE.

THE R11-H5a-48 SIGNS SHALL BE MOUNTED ON TWO NO. 3 POSTS WHEN LOCATED IN THE CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS, AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - WORK ZONE INCREASED PENALTIES SIGN.....**2 EA**

WORK ZONE SPEED ZONE (WZSZ)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISIONS HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WORK ZONE REVISION NUMBER(S)	COUNTY-ROUTE-SECTION(S)	DIRECTION(S)
WZ-30798	GUE-70-12.49 TO 13.01	EB AND WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRECONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW, AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

(WZSZS USING DSL SPEED LIMIT ASSEMBLIES SHALL BE IN ACCORDANCE WITH THE NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.)

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 808 DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY..... **4 SNMT**
(ASSUMING **2 DSL SIGN ASSEMBLIES** FOR 2 MONTHS)

REMOVAL OF EXISTING PORTABLE CONCRETE BARRIER

BRIDGE NO. GUE-70-1275L CURRENTLY HAS PORTABLE CONCRETE BARRIER BLOCKING OFF THE DAMAGED DECK EDGE. CONTRACTOR SHALL COORDINATE WITH ROADWAY SERVICES MANAGER DOUG RIFFLE (DOUGLAS.RIFFLE@DOT.OHIO.GOV OR 740-323-5270) FOR PICKUP BY ODOT CREWS OR DELIVERY TO THE GARAGE OF IN-PLACE PORTABLE BARRIER. THIS WORK IS INCLUDED FOR PAYMENT IN ITEM 614 - MAINTAINING TRAFFIC.

SHEET NUMBER											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
20	21	27	32	34	37	43	49	55	59		01/NFP/47	EXT	TOTAL				
STRUCTURE REPAIR (SFN 3006212 OR GUE-541-08.40)																	
1,041											1,041	512	10301	1,041	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
		76									76	SPECIAL	51900100	76	SF	COMPOSITE FIBER WRAP SYSTEM	6
52											52	519	12300	52	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
	19										19	843	50001	19	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
STRUCTURE REPAIR (SFN 3003329 OR GUE-77-15.48L)																	
											LS	202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SUBSTRUCTURE)	5
			5,098								5,098	509	26000	5,098	LB	GALVANIZED STEEL REINFORCEMENT	
			256								256	510	10001	256	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	5
			27								27	511	71100	27	CY	CONCRETE, MISC.: HIGH EARLY STRENGTH PUMPED SELF CONSOLIDATING CONCRETE	6
STRUCTURE REPAIR (SFN 3001024 OR GUE-70-6.55L)																	
				300							300	SPECIAL	51275500	300	SY	SEALING: LIQUID FLEXIBLE SEALANT	6
STRUCTURE REPAIR (SFN 3001059 OR GUE-70-6.55R)																	
				300							300	SPECIAL	51275500	300	SY	SEALING: LIQUID FLEXIBLE SEALANT	6
STRUCTURE REPAIR (SFN 3001083 OR GUE-70-7.35)																	
						151					151	SPECIAL	51900100	151	SF	COMPOSITE FIBER WRAP SYSTEM	6
	38										38	843	50001	38	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
STRUCTURE REPAIR (SFN 3001474 OR GUE-70-12.32L)																	
2,664											2,664	512	10301	2,664	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
53											53	519	12300	53	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR (SFN 3001504 OR GUE-70-12.32R)																	
2,664											2,664	512	10301	2,664	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
53											53	519	12300	53	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
STRUCTURE REPAIR (SFN 3001539 OR GUE-70-12.75L)																	
						30					30	202	11301	30	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (DECK EDGE AND PARAPET)	5
						1					1	202	47000	1	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
						4,029					4,029	509	26000	4,029	LB	GALVANIZED STEEL REINFORCEMENT	
						2,178.17					2,178.17	509	30020	2,178.17	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
						39					39	511	34449	39	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN	5
STRUCTURE REPAIR (SFN 3001563 OR GUE-70-12.75R)																	
						30					30	202	11301	30	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (DECK EDGE AND PARAPET)	5
						1					1	202	47000	1	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
						4,029					4,029	509	26000	4,029	LB	GALVANIZED STEEL REINFORCEMENT	
						2,178.17					2,178.17	509	30020	2,178.17	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
						39					39	511	34449	39	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN	5
STRUCTURE REPAIR (SFN 3001628 OR GUE-70-13.34)																	
805											805	512	10301	805	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
											663	514	27700	663	SF	FIELD PAINTING, MISC.: MAIN AND SECONDARY MEMBERS	6
											164	516	31011	164	FT	2" DEEP JOINT SEALER, AS PER PLAN	6
40											40	519	12300	40	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
								2			2	SPECIAL	53000400	2	EACH	STRUCTURES: CLEANING OF BRIDGE JOINTS	51
								2			2	SPECIAL	53000400	2	EACH	STRUCTURES: CLEANING OF BRIDGE SEATS	51
								18			18	SPECIAL	53000400	18	EACH	STRUCTURES: CLEANING OF DRAINAGE SYSTEMS	51
STRUCTURE REPAIR (SFN 3001687 OR GUE-70-16.56L)																	
											439	514	27700	439	SF	FIELD PAINTING, MISC.: MAIN AND SECONDARY MEMBERS	6
											226	519	11101	226	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER COLUMNS)	6
											80	843	50001	80	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6

DESIGN AGENCY

 DESIGNER
MHK
 REVIEWER
JKS 02/14/25
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226

663
164

663
164

663
164

439

439

439

SHEET NUMBER											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	20	21	59	62					01/NFP/47	EXT	TOTAL				
				226							439	514	27700	439	SF	STRUCTURE REPAIR (SFN 3001717 OR GUE-70-16.56R) FIELD PAINTING, MISC.: MAIN AND SECONDARY MEMBERS	6
				86							226	519	11101	226	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER COLUMNS)	6
											80	843	50001	80	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
			875								875	512	10301	875	SY	STRUCTURE REPAIR (SFN 3001741 OR GUE-70-17.30) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			18								18	519	12300	18	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
			1,078								1,078	512	10301	1,078	SY	STRUCTURE REPAIR (SFN 6003842 OR MUS-83-01.38) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			22								22	519	12300	22	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
			196								196	512	10301	196	SY	STRUCTURE REPAIR (SFN 6003885 OR MUS-83-07.16) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			68								68	516	31011	68	FT	2" DEEP JOINT SEALER, AS PER PLAN	6
			26								26	519	12300	26	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
			42								42	512	10301	42	SY	STRUCTURE REPAIR (SFN 6003966 OR MUS-83-09.22) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			4								4	519	12300	4	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
				80							80	843	50001	80	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
LS											LS	202	98000	LS		STRUCTURE REPAIR (SFN 6004008 OR MUS-83-11.34) REMOVAL MISC.: CATTLE FENCE	5
			491								491	512	10301	491	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			25								25	519	12300	25	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
				36							36	843	50001	36	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
			52								52	512	10301	52	SY	STRUCTURE REPAIR (SFN 6004024 OR MUS-83-11.67) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN	6
			5								5	519	12300	5	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
				52							52	843	50001	52	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	6
						8					8	SPECIAL	51275500	8	SY	STRUCTURE REPAIR (SFN 6004059 OR MUS-83-14.34) SEALING LIQUID FLEXIBLE SEALANT	6
											38	519	11101	38	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN (BOX BEAM JOINTS)	6
			500								500	614	11110	500	HOUR	MAINTENANCE OF TRAFFIC LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	2										2	614	12380	2	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
	2										2	614	12484	2	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		826									826	614	12800	826	EACH	WORK ZONE RAISED PAVEMENT MARKER	
	10										10	614	13000	10	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		26									26	614	13310	26	EACH	BARRIER REFLECTOR, TYPE 1 (ONE WAY)	
		3									3	614	13312	3	EACH	BARRIER REFLECTOR, TYPE 2 (ONE WAY)	
		29									29	614	13350	29	EACH	OBJECT MARKER, ONE WAY	
		12									12	614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
		0.16									0.16	614	20560	0.16	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
		0.38									0.38	614	21550	0.38	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
		2.4									2.4	614	22360	2.4	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
		1.06									1.06	614	22360	1.06	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
		6,320									6,320	614	23000	6,320	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"	
		384									384	622	41100	384	FT	PORTABLE BARRIER, UNANCHORED	
		336									336	622	41110	336	FT	PORTABLE BARRIER, ANCHORED	
	4										4	808	18700	4	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
											LS	614	11000	LS		INCIDENTALS MAINTAINING TRAFFIC	
											LS	624	10000	LS		MOBILIZATION	

DESIGN AGENCY

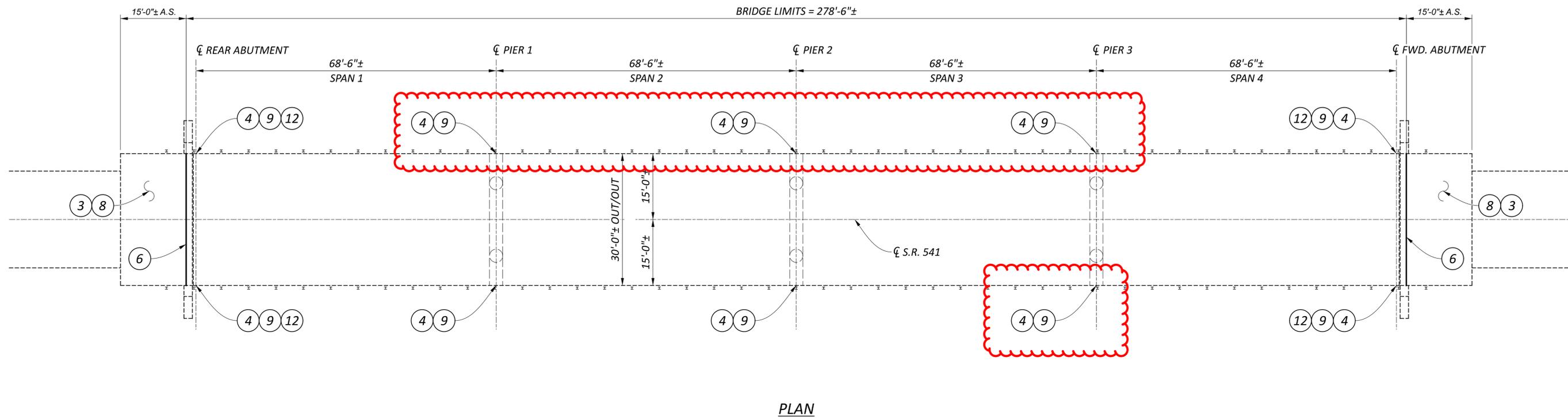
 DESIGNER
 MHK
 REVIEWER
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PROJECT LOCATIONS						BRIDGE DATA				BRIDGE					PAVEMENT MARKINGS						
										512		516	519		614			642			
LOCATION	COUNTY	ROUTE	BRIDGE NUMBER	SFN	FEATURES INTERSECTED	BRIDGE DECK		APPROACH SLABS		SEALING CONCRETE BRIDGE DECKS WITH HMW/M, AS PER PLAN	2" DEEP JOINT SEALER	PATCHING CONCRETE BRIDGE DECK - TYPE B	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	EDGE LINE, 6"	LANE LINE, 6"	CENTERLINE			
						LENGTH	WIDTH	LENGTH	WIDTH										BRIDGE DECK	APPROACH SLAB	MILE
						FEET	FEET	FEET	FEET	SQ YD	SQ YD	FEET	AREA %	SQ YD	MILE	MILE	MILE	MILE	MILE	MILE	MILE
1	COS	SR 93	0.23	1601768	WHITE EYES CREEK	134	32	25	32	476	178	64	5%	33		0.03	0.07	0.07	0.03		
2	COS	SR 541	33.36	1602578	WILLS CREEK			15	30		100	60	5%	5		0.01	0.01	0.01	0.01		
3	GUE	SR 541	1.58	3006034	BIRDS RUN	118.52	32			421			10%	42		0.02	0.04	0.04	0.02		
4	GUE	SR 541	3.72	3006069	WILLS CREEK	199.5	28.5			632			5%	32		0.04	0.08	0.08	0.04		
5	GUE	SR 541	7.46	3006158	WILLS CREEK	275.5	26.17			801			5%	40		0.05	0.10	0.10	0.05		
6	GUE	SR 541	8.40	3006212	IR 77	250.5	31	25	32	863	178		5%	52		0.06	0.11	0.11	0.06		
11	GUE	IR 70	12.32L	3001474	SR 265	448.08	53.5			2664			2%	53	0.08		0.17	0.17	0.08		
12	GUE	IR 70	12.32R	3001504	SR 265	448.08	53.5			2664			2%	53	0.08		0.17	0.17	0.08		
15	GUE	IR 70	13.34	3001628	TR 55 (ARROWHEAD RD)	252	24	25	24	672	133	48	5%	40							
18	GUE	IR 70	17.30	3001741	CR 73 (COUNTY HOME RD)	286.4	27.5			875			2%	18		0.05	0.11	0.11	0.05		
19	MUS	SR 83	1.38	6003842	CUOH RR AND CROOKED CREEK	294.04	33			1078			2%	22		0.06	0.11	0.11	0.06		
20	MUS	SR 83	7.16	6003885	TRIB OF WHITE EYES CREEK	22.5	34	15	34	85	113	68	10%	20		0.01	0.02	0.02	0.01		
21	MUS	SR 83	9.22	6003966	BRANCH OF WHITE EYES CREEK	12.5	30.17			42			10%	4		0.01	0.01	0.01	0.01		
22	MUS	SR 83	11.34	6004008	WHITE EYES CREEK	92	33.5	20	33.5	342	149		5%	25		0.03	0.05	0.05	0.03		
23	MUS	SR 83	11.67	6004024	BRANCH OF WHITE EYES CREEK	15.5	30.17			52			10%	5		0.01	0.01	0.01	0.01		
						SUB-TOTAL				11667	851	240	443		0.16	0.38	1.06	1.06	0.16	0.38	
						TOTAL				12518											

DECK SEALING AND PAVEMENT MARKING DATA

PROJECT LOCATIONS						ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN		ITEM 519 - SPECIAL - PATCHING CONCRETE STRUCTURE (FULL DEPTH BRIDGE DECK)	ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	PATCHING LOCATIONS
LOCATION	COUNTY	ROUTE	BRIDGE NUMBER	SFN	FEATURES INTERSECTED	BOX BEAM JOINTS	PIER COLUMNS			
						SQ FT	SQ FT			
1	COS	SR 93	0.23	1601768	WHITE EYES CREEK				52	DECK EDGES AND DIAPHRAGM CORNERS AS NEEDED (EST. 10% OF DECK EDGE AND DIAPHRAGM FACE AREA)
2	COS	SR 541	33.36	1602578	WILLS CREEK	26			16	BOX BEAM T-JOINTS (SEE BRIDGE SHEETS FOR DETAILS) BACKWALLS AT BEAM ENDS (EST. 4'-2'X2' PATCHES ON BACKWALL FACES)
3	GUE	SR 541	1.58	3006034	BIRDS RUN			11		AS NEEDED (EST. 5% OF DECK AREA)
6	GUE	SR 541	8.40	3006212	IR 77				19	PIER 3 COLUMN 2 (EST. 50% OF COMPOSITE FIBER WRAP AREA SHOWN ON BRIDGE SHEETS)
10	GUE	IR 70	7.35	3001083	CR 346				38	PIER 1 COLUMN 1 AND 3 (EST. 25% OF COMPOSITE FIBER WRAP AREA SHOWN ON BRIDGE SHEETS)
16	GUE	IR 70	16.56L	3001687	US 40/SR 285		226		80	PIER COLUMNS AS NEEDED AT GROUND LINE (SEE BRIDGE SHEETS) DECK CORNERS (EST. 10' LENGTH AND 2' DECK EDGE THICKNESS AT ALL CORNERS)
17	GUE	IR 70	16.56R	3001717	US 40/SR 285		226		80	PIER COLUMNS AS NEEDED AT GROUND LINE (SEE BRIDGE SHEETS) DECK CORNERS (EST. 10' LENGTH AND 2' DECK EDGE THICKNESS AT ALL CORNERS)
21	MUS	SR 83	9.22	6003966	BRANCH OF WHITE EYES CREEK				80	DECK EDGES (EST. 100% OF DECK EDGE)
22	MUS	SR 83	11.34	6004008	WHITE EYES CREEK				36	DECK EDGES (EST. 20% OF DECK EDGE)
23	MUS	SR 83	11.67	6004024	BRANCH OF WHITE EYES CREEK				52	DECK EDGES (EST. 50% OF DECK EDGE)
24	MUS	SR 83	14.34	6004059	WILLS CREEK					BOX BEAM T-JOINTS (SEE BRIDGE DETAIL SHEETS)
TOTAL						64	452	11	453	





PLAN

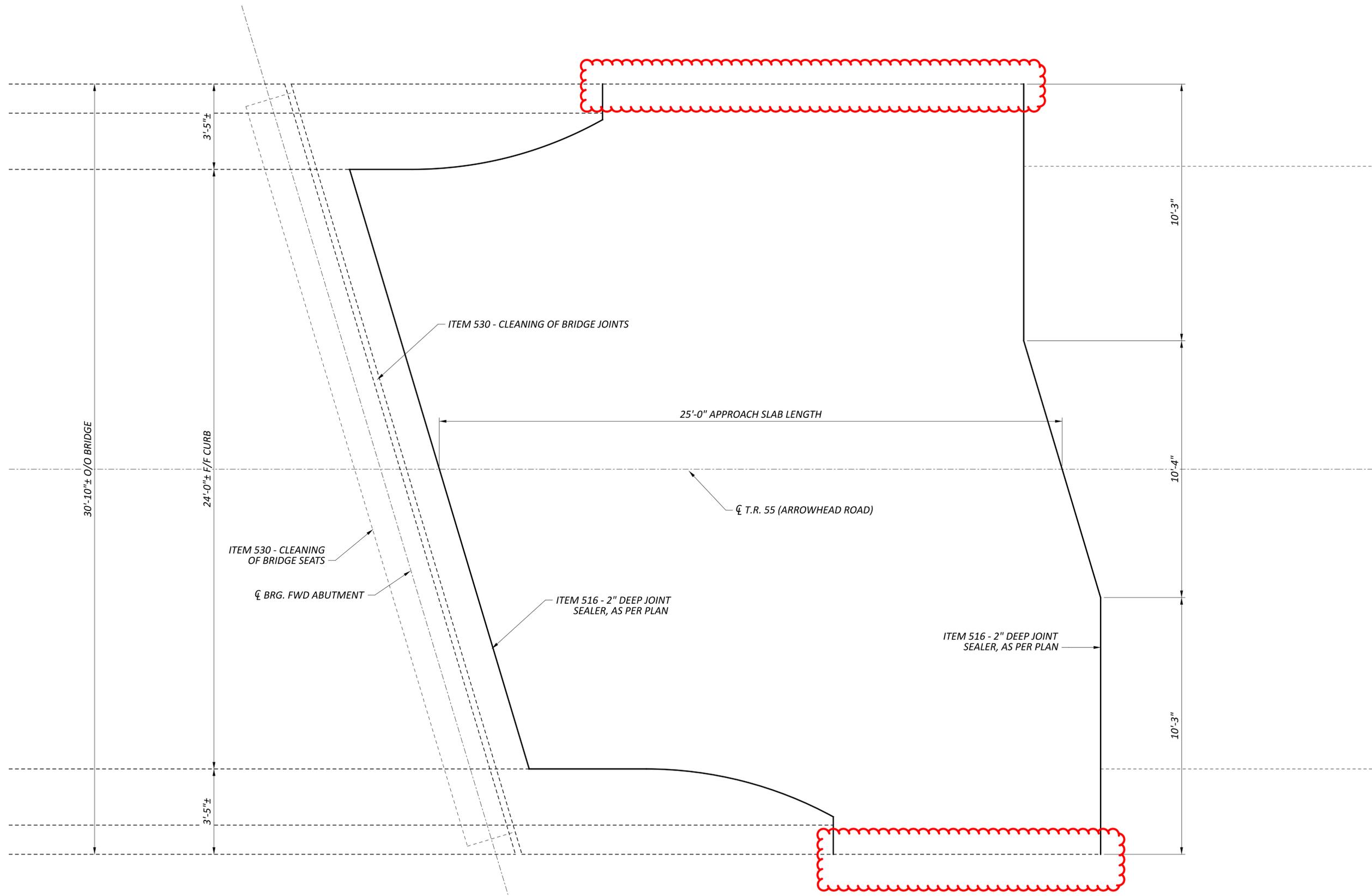
- ③ ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN
- ④ ITEM 512 - SPECIAL - SEALING: LIQUID FLEXIBLE SEALANT
- ⑥ ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN
- ⑧ ITEM 519 - PATCHING BRIDGE DECKS, TYPE B
- ⑨ ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (BOX BEAM JOINTS)
- ⑫ ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

EXISTING STRUCTURE	
TYPE: PRESTRESSED CONCRETE BOX BEAMS ON REINFORCED CONCRETE SUBSTRUCTURE	
SPANS: 68'-6"±, 68'-6"±, 68'-6"±, 68'-6"± C/C BEARINGS	
ROADWAY: 30'-0"± F/F GUARDRAILS	
LOADING: HS20-44 & ALTERNATE MILITARY LOADING	
SKEW: NONE	
WEARING SURFACE: ASPHALT CONCRETE (2.5"± MIN.)	
APPROACH SLABS: AS-1-81 (15'-0"± LONG)	
ALIGNMENT: TANGENT	
CROWN: 0.0156± FT/FT	
STRUCTURE FILE NUMBER: 1602578	
DATE BUILT: 1994	
DISPOSITION: PATCH AND SEAL APPROACH SLABS, APPLY SEALER TO EXPANSION JOINTS, PATCH BOX BEAM T-JOINTS, PATCH BACKWALLS AS NEEDED	

GENERAL PLAN
 BRIDGE NO. COS-541-3336
 S.R. 541 OVER WILLS CREEK

SFN 1602578	
DESIGN AGENCY	
DESIGNER	CHECKER
MHK	TAG
REVIEWER	
JKS 02/14/25	
PROJECT ID	
121867	
SUBSET	TOTAL
1	41
SHEET	TOTAL
P.22	62

ITEM 512 - SPECIAL - SEALING: LIQUID FLEXIBLE SEALANT											
DESCRIPTION	#		L		H				C.F.		SQ YD
BEAM T-JOINTS AT PIERS	4	x	4		x 2.5		x		÷ 9	=	4.4
ABUTMENT BEAM ENDS	2	x	2.0833		x 2.5		x		÷ 9	=	1.2
		x			x		x		÷ 9	=	
TOTAL CARRIED TO GENERAL SUMMARY =											6
ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN											
DESCRIPTION	#		L						C.F.		FT
APPROACH SLAB/BACKWALL JOINT	2	x	30		x		x		÷ 1	=	60.0
		x			x		x		÷ 1	=	
TOTAL CARRIED TO GENERAL SUMMARY =											60
ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (BOX BEAM JOINTS)											
DESCRIPTION	#		L		H				C.F.		SQ FT
BEAM ENDS	4	x	1.5		x 1		x		÷ 1	=	6.0
OVER PIERS (TOP OF T JOINT)	6	x	3		x 0.833		x		÷ 1	=	15.0
OVER PIERS (BOTTOM OF T JOINT)	6	x	0.5		x 1.6667		x		÷ 1	=	5.0
		x			x		x		÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =											26
ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN											
DESCRIPTION	#		L		H				C.F.		SQ FT
BACKWALLS AT BEAM ENDS	4	x	2		x 2		x		÷ 1	=	16.0
		x			x		x		÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =											16



FORWARD APPROACH SLAB PLAN

NOTES

- ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN APPLIED TO EXTERIOR PERIMETER OF BOTH APPROACH SLABS. FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR (SAME DIMENSIONS).

APPROACH SLAB PLAN
 BRIDGE NO. GUE-70-1334
 T.R. 55 OVER I-70

SFN
 3001628

DESIGN AGENCY



DESIGNER	CHECKER
MHK	TAG

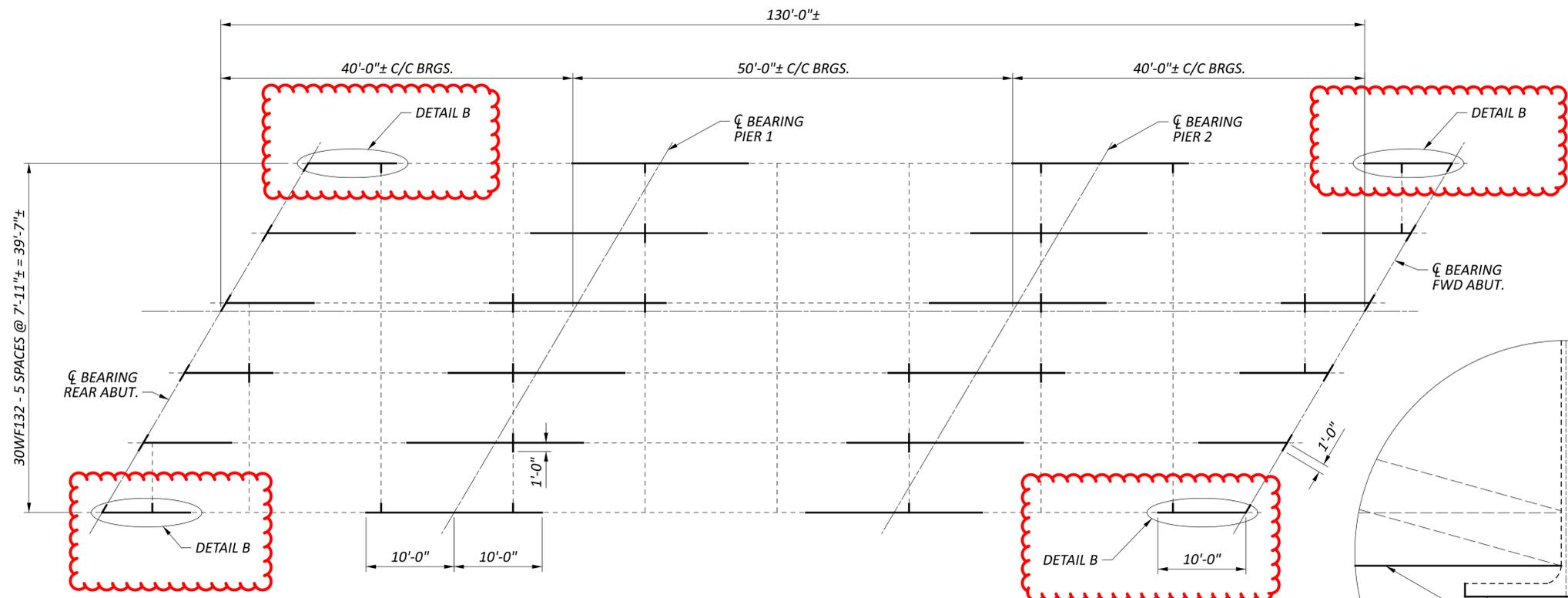
REVIEWER	
JKS	02/14/25

PROJECT ID	
121867	

SUBSET	TOTAL
32	41

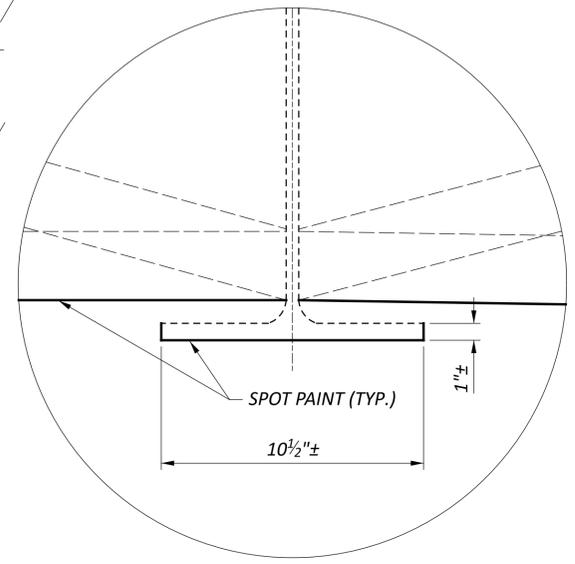
SHEET	TOTAL
P.53	62

ITEM 514 - FIELD PAINTING, MISC: MAIN AND SECONDARY MEMBERS												
DESCRIPTION	#		L		W				C.F.			SQ FT
SPANS 2 & 3 BOTTOM FLANGES	4	x	150	x	1.1042	x			÷	1	=	662.5
		x		x		x			÷	1	=	
TOTAL CARRIED TO GENERAL SUMMARY =												663
ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN												
DESCRIPTION	#		L						C.F.			FT
REAR APPROACH SLAB	1	x	82	x		x			÷	1	=	82.0
FORWARD APPROACH SLAB	1	x	82	x		x			÷	1	=	82.0
		x		x		x			÷	1	=	
TOTAL CARRIED TO GENERAL SUMMARY =												164
ITEM 530 - SPECIAL - STRUCTURES: CLEANING OF BRIDGE JOINTS												
DESCRIPTION	#								C.F.			EACH
REAR AND FORWARD	2	x		x		x			÷	1	=	2.0
		x		x		x			÷	1	=	
TOTAL CARRIED TO GENERAL SUMMARY =												2
ITEM 530 - SPECIAL - STRUCTURES: CLEANING OF BRIDGE SEATS												
DESCRIPTION	#								C.F.			EACH
REAR AND FORWARD	2	x		x		x			÷	1	=	2.0
		x		x		x			÷	1	=	
TOTAL CARRIED TO GENERAL SUMMARY =												2.0
ITEM 530 - SPECIAL - STRUCTURES: CLEANING OF DRAINAGE SYSTEMS												
DESCRIPTION	#								C.F.			EACH
BULB ANGLE GUTTERS	2	x		x		x			÷	1	=	2.0
SCUPPERS	12	x		x		x			÷	1	=	12.0
ABUTMENT PIPE DRAINS	4	x		x		x			÷	1	=	4.0
		x		x		x			÷	1	=	
TOTAL CARRIED TO GENERAL SUMMARY =												18.0

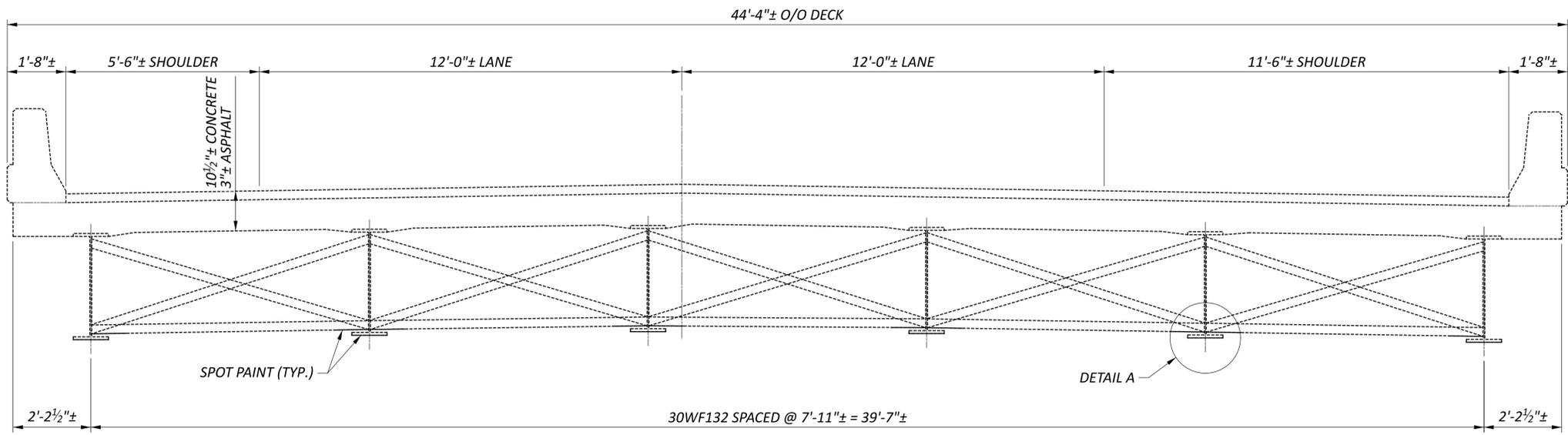


EXISTING FRAMING PLAN
 GUE-70-1656R SHOWN, GUE-70-1656L MIRRORED

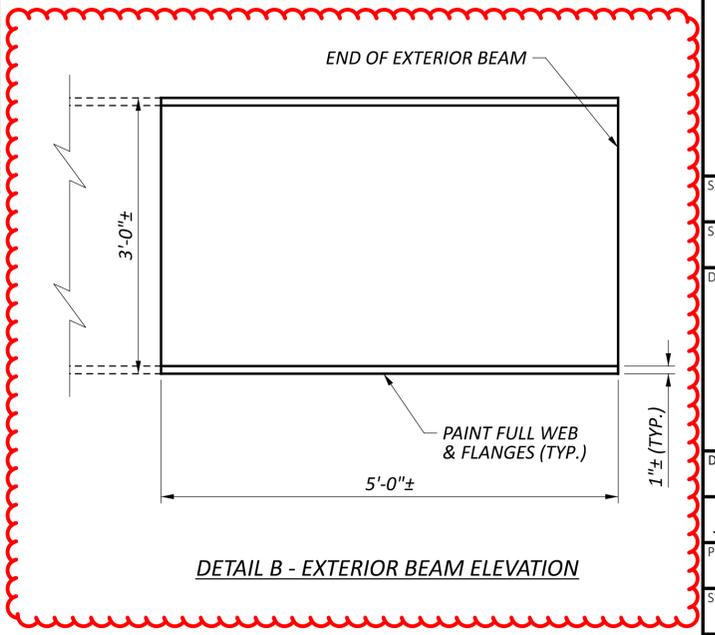
NOTE:
 SPOT PAINT BOTTOM FLANGE OF BEAMS AND CROSSFRAMES OVER SUBSTRUCTURES AS DIRECTED BY THE ENGINEER.



DETAIL A



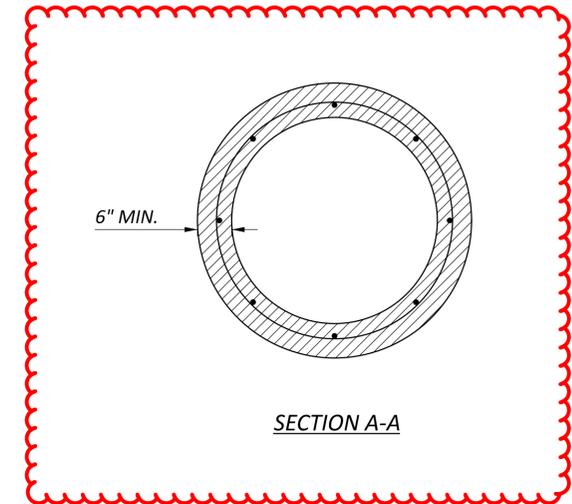
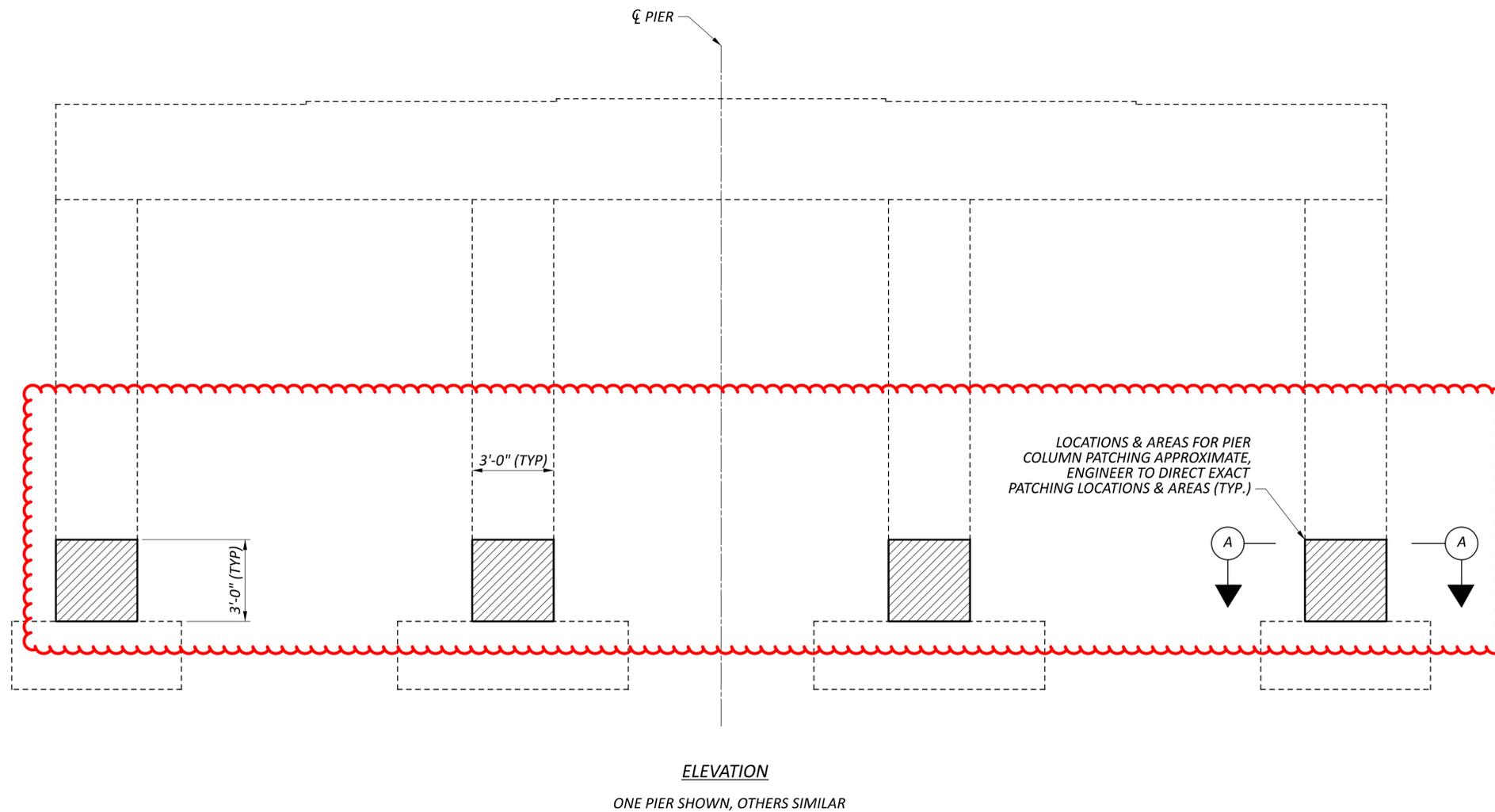
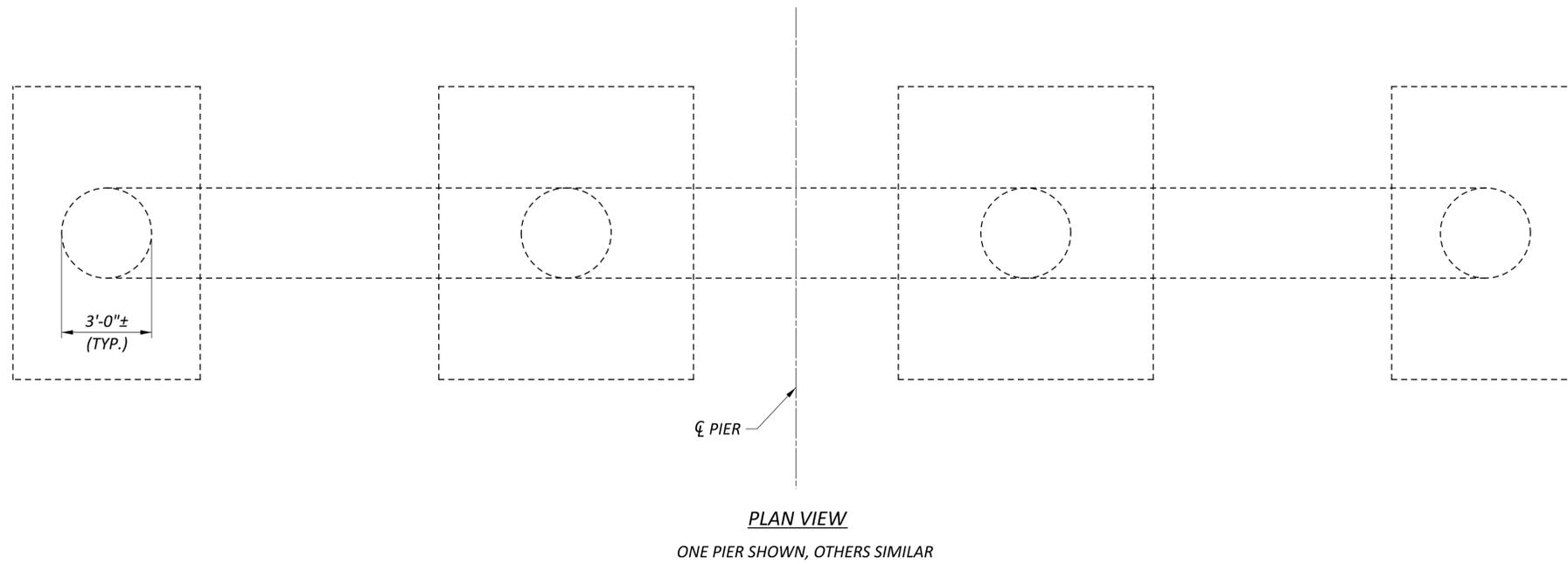
EXISTING TRANSVERSE SECTION
 GUE-70-1656R SHOWN, GUE-70-1656L MIRRORED



DETAIL B - EXTERIOR BEAM ELEVATION

TRANSVERSE SECTION
 BRIDGE NOS. GUE-70-1656 L&R
 I-70 OVER US-40 & SR-285

DESIGNER	CHECKER
MHK	TAG
REVIEWER	
JKS	02/14/25
PROJECT ID	121867
SUBSET	TOTAL
36	41
SHEET	TOTAL
P.57	62



 **ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER COLUMNS)**

NOTE:
 1. PATCH PIERS AT GROUND LINE AS DIRECTED BY THE ENGINEER, ESTIMATED 100% OF LOWER PIER COLUMN AS SHOWN.



ITEM 514 - FIELD PAINTING, MISC: MAIN AND SECONDARY MEMBERS												
DESCRIPTION	#		L		W					C.F.		SQ FT
GUE-70-1656L BOTTOM FLANGES	6	x	60		x 1.0417					÷ 50%	=	187.5
GUE-70-1656L CROSSFRAMES	13	x	2		x 0.25					÷ 75%	=	4.9
GUE-70-1656L END CROSSFRAMES	10	x	2		x 0.25					÷ 75%	=	3.8
WEBS/FLANGES AT BEAM ENDS	8	x	5		x 8.0834					÷ 75%	=	242.5
TOTAL CARRIED TO GENERAL SUMMARY =												439
ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER COLUMNS)												
DESCRIPTION	#		CIRC.		H					C.F.		SQ FT
GUE-70-1656L PIER BASES	8	x	9.42		x 3					÷ 1	=	226.1
		x			x					÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =												226
ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN												
DESCRIPTION	#		L		H					C.F.		SQ FT
GUE-70-1656L DECK CORNERS	4	x	10		x 2					÷ 1	=	80.0
		x			x					÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =												80

ITEM 514 - FIELD PAINTING, MISC: MAIN AND SECONDARY MEMBERS												
DESCRIPTION	#		L		W					C.F.		SQ FT
GUE-70-1656R BOTTOM FLANGES	6	x	60		x 1.0417					÷ 50%	=	187.5
GUE-70-1656R CROSSFRAMES	13	x	2		x 0.25					÷ 75%	=	4.9
GUE-70-1656R END CROSSFRAMES	10	x	2		x 0.25					÷ 75%	=	3.8
WEBS/FLANGES AT BEAM ENDS	8	x	5		x 8.0834					÷ 75%	=	242.5
		x			x					÷	=	
TOTAL CARRIED TO GENERAL SUMMARY =												439
ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER COLUMNS)												
DESCRIPTION	#		CIRC.		H					C.F.		SQ FT
GUE-70-1656R PIER BASES	8	x	9.42		x 3					÷ 1	=	226.1
		x			x					÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =												226
ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN												
DESCRIPTION	#		L		H					C.F.		SQ FT
GUE-70-1656R DECK CORNERS	4	x	10		x 2					÷ 1	=	80.0
		x			x					÷ 1	=	
TOTAL CARRIED TO SUBSUMMARY =												80