

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

PERFORM MISCELLANEOUS BRIDGE MAINTENANCE ACTIVITIES ON VARIOUS BRIDGES IN DISTRICT 1.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.1 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.1 ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)*
 *ROUTINE MAINTENANCE PROJECT

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 AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 6-10, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Christopher A. Hughes
 Christopher A. Hughes, P.E.
 District 01 Deputy Director

Pamela Boratyn
 Pamela Boratyn
 Director, Department of Transportation

D01-BM-FY25

ALLEN, HANCOCK, PAULDING, PUTNAM AND WYANDOT COUNTIES

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LOCATION MAP

SEE SHEET 2 FOR MORE PRECISE LOCATIONS

PROJECT LOCATIONS:

1	ALL-75-20.03	CR 185 OVER IR 75 & NS RR & CR 270
2	ALL-309-0.09	WB SR 309 OVER US 30
3	HAN-103-0.67	SR 103 OVER IR 75
4	HAN-75-9.11	CR 60 OVER IR 75
5	HAN-12-22.52	OVER BRANCH OF PORTAGE RIVER #
6	HAN-15-23.98R	OVER STAHL DITCH
7	HAN-15-23.98L	OVER STAHL DITCH
8	PAU-114-12.42	OVER PRAIRIE CREEK
9	PUT-634-10.27	OVER AUGLAIZE RIVER
10	WYA-23-2.02L	OVER HONEY RUN
11	WYA-23-2.02R	OVER HONEY RUN
12	WYA-199-2.08	OVER REBERS RUN
13	WYA-231-13.81	OVER SPRING BRANCH

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:
 OHIO DEPT. OF TRANSPORTATION, DISTRICT 1
 1885 N MCCULLOUGH ST.
 LIMA, OH 45801

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS	
MGS-1.1	7/16/21	TST-2-21	7/21/23	TC-42.10	10/18/13	800	7/19/2024	WATERWAY PERMIT 12-30-2024
MGS-2.1	1/19/18			TC-42.20	10/18/13	821	4/20/2012	ASBESTOS SURVEY REPORT, 07-25-24
MGS-3.1	1/19/18	DM-4.3	1/15/16	TC-52.10	10/18/13	832	7/19/2024	
MGS-3.3	7/16/21	DM-4.4	1/15/16	TC-52.20	1/15/21	843	1/19/2024	
MGS-4.3	1/18/13			TC-61.30	7/19/24	856	7/21/2023	
MGS-5.3	7/15/16	MT-095.30	7/19/19			921	7/19/2024	
		MT-096.11	7/21/23					
RM-4.2	4/17/20	MT-096.20	7/21/23					
		MT-096.26	1/18/19					
CPP-1-08	7/21/17	MT-097.11	1/20/17					
		MT-101.60	4/21/23					
DS-1-92	7/15/22	MT-101.70	7/19/24					
		MT-101.75	7/21/23					
EXJ-4-87	1/19/24	MT-105.10	1/17/20					
EXJ-6-17	1/19/24							
		TC-41.20	10/18/13					

ENGINEER'S SEAL

TITLE SHEET

DESIGN AGENCY
DESIGNER
MJK
REVIEWER
XXX MM-DD-YY
PROJECT ID
109907
SHEET
P.1
TOTAL
22

D01-BM-FY25

MODEL: Sheet_SurvFI_PAPER SIZE: 34x42 (in.) DATE: 1/13/2025 TIME: 9:50:34 AM USER: cschlatt
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

- DS-1-92 DATED 7/15/22
- TST-2-21 DATED 7/21/23
- EXJ-4-87 DATED 1/19/24
- EXJ-6-17 DATED 1/19/24

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

- 843 DATED 1/19/24
- 856 DATED 7/21/23

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.

DESIGN DATA

CONCRETE CLASS QC2:
COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE REINFORCEMENT:
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI

WORK ON STRUCTURES OVER WATERWAYS

UNLESS COVERED BY THE WATERWAY PERMITS, WORK IS NOT PERMITTED IN THE WATERWAYS. HOWEVER, WORK IS PERMITTED AT THE ABUTMENTS AND AT THE TOPS OF THE BANKS OF THE WATERWAYS. ADDITIONALLY, NO WORK, MATERIALS, EQUIPMENT AND/OR INCIDENTALS ARE PERMITTED WITHIN OR BELOW THE ORDINARY HIGH WATER MARK (OHWM).

IF NEEDED, THE OHWM CAN BE STAKED BY ODOT, DISTRICT 1, PLANNING AND ENGINEERING DEPARTMENT PRIOR TO INITIATING WORK AT THE STRUCTURES OVER WATERWAYS. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AND REQUEST THE OHWM STAKING 14 DAYS PRIOR TO STARTING WORK. THE PROJECT ENGINEER WILL NOTIFY THE DISTRICT ENVIRONMENTAL COORDINATOR AND DISTRICT SURVEY OPERATIONS MANAGER TO REQUEST THE STAKING OF THE OHWM BY ODOT, DISTRICT 1, PLANNING AND ENGINEERING DEPARTMENT.

ALL SPALLING CONCRETE REMOVAL OF MID SPAN, UNDERSIDE DECK SECTIONS SHALL BE DONE IN A MANNOR TO ENSURE THAT NO MATERIALS OR EQUIPMENT ENTER THE WATERWAY.

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

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SPARATELY 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 WILL NOT BE PERMITTED. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING 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.

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.

THIS ITEM INCLUDES THE REMOVAL OF 3'-8"± OF THE EXISTING DECK EDGES AS SHOWN ON THE PLANS FOR WYA-231-13.81. THE EXISTING TRANSVERSE DECK REINFORCING STEEL SHALL REMAIN. THE CONTRACTOR SHALL CHIP ALL EXISTING CONCRETE OFF OF THE EXPOSED REINFORCING STEEL THAT IS TO REMAIN TO CREATE A CLEAN SURFACE TO ENSURE PROPERADHESION OF NEW CONCRETE.

ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT CONCRETE REINFORCEMENT BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. NEW CONCRETE REINFORCEMENT SHALL BE OF THE SAME SIZE, COATING, AND MATERIAL AS THE EXISTING REINFORCEMENT, UNLESS NOTED OTHERWISE IN THE PLANS.

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 512 - TREATING OF BRIDGE DECK WITH SRS, AS PER PLAN

AT STRUCTURES HAN-15-23.98 R; HAN-15-23.98 L; AND HAN-12-22.52 THIS ITEM INCLUDES TREATING OF THE APPROACH SLABS AND DECK.

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

A QUANTITY IS INCLUDING IN THE ESTIMATED QUANTITIES TO REPAIR ANY DETERIORATED AREAS ON THE PIERS, CAPS AND WINGWALLS WITH ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, WHERE THE DEPTH OF PATCH IS EQUAL TO OR LESS THAN 3", AS LOCATED BY AND TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQ FT FOR ITEM 843 - PATCHING CONCRETE STRUCTURE WITH TROWELABLE MORTAR WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

THE CONTRACTOR SHALL SEAL ALL LOCATIONS THAT HAVE QUANTITIES INCLUDED IN THE STRUCTURES GENERAL SUMMARIES FOR THE AREAS ON BRIDGES NOTED IN THE PLANS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQ YD FOR ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - STEEL DRIP STRIP

DRIP STRIPS SHALL CONFORM TO SCD DS-1-92.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

A QUANTITY OF THIS ITEM IS INCLUDED IN THE ESTIMATED QUANTITIES OF EACH STRUCTURE TO REPAIR ANY DETERIORATED AREAS WHERE THE DEPTH OF THE PATCH IS GREATER THAN 3", AS LOCATED BY THE PROJECT ENGINEER.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQ FT FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

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 AND 105.02. 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. COPIES OF THE EXISTING PLANS ARE ON FILE AND AVAILABLE TO BE INSPECTED AT THE DISTRICT 1 OFFICE IN LIMA.

ITEM 516 - RESET BEARING, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY RESET BRIDGE BEARINGS, INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES FARENHEIT. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - RESET BEARING, AS PER PLAN.

JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE IS NOT INCLUDED IN THIS ITEM.

LOCATIONS WITH BEARINGS TO BE RESET ARE:
ALL-75-20.03: PIER 7 BEARING 1
ALL-309-0.09: ALL 4 ON REAR ABUTMENT

DESIGN AGENCY



DESIGNER
CRS

REVIEWER
XXX MM-DD-YY

PROJECT ID
109907

SHEET TOTAL
P.14 | 22

ITEM SPECIAL - PILE ENCASEMENT

ENCASE ALL STEEL H-PILES FOR THE CAPPED PILE PIERS IN CONCRETE CONFORMING TO C&MS 511 (F'C = 4.0 KSI). PROVIDE A CONCRETE SLUMP BETWEEN 6 TO 8 INCHES WITH THE USE OF A SUPERPLASTICIZER. PLACE THE CONCRETE WITHIN A FORM THAT CONSISTS OF POLYETHYLENE PIPE (707.33), OR PVC PIPE (707.42) WHICH SHALL BE LEFT IN PLACE. THE ENCASEMENT SHALL EXTEND FROM 3 FEET BELOW THE FINISHED GROUND SURFACE UP TO THE CONCRETE PIER CAP. POSITION THE PIPE SO THAT AT LEAST 3 INCHES OF CONCRETE COVER IS PROVIDED AROUND THE EXTERIOR OF THE PILE .

THE DEPARTMENT WILL MEASURE PILE ENCASEMENT BY THE NUMBER OF FEET. THE DEPARTMENT WILL DETERMINE THE SUM AS THE LENGTH MEASURED ALONG THE AXIS OF EACH PILE FROM THE BOTTOM OF THE ENCASEMENT TO THE BOTTOM OF THE PIER CAP. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM - SPECIAL, PILE ENCASEMENT.

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 516, STANDARD CONSTRUCTION DRAWING EXJ-4-87, AND STANDARD CONSTRUCTION DRAWING EXJ-6-17, THIS ITEM SHALL ALSO INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR REQUIRED TO REMOVE AND REPLACE THE EXISTING STRIP SEAL AND RETAINERS AS SHOWN IN THE PLANS.

PAYMENT FOR THE WORK ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FT FOR ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN, WHICH SHALL INCLUDE ALL MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM

THIS ITEM IS TO BE USE TO CONFINE THE AREAS OF CONCRETE REPAIRS/PATCHES ON THE HAN-103-0.67 AND HAN-75-9.11 BRIDGES. THE ESTIMATED QUANTITIES FOR THIS ITEM ARE BASED ON ONE LAYER OF COMPOSITE FIBER WRAP, AND IT IS ASSUMED NO FACTORED CAPACITY INCREASE IS NEEDED. HOWEVER, IF THE MANUFACTURER'S RECOMMENDATIONS OR THE PROJECT ENGINEER SPECIFIES OTHERWISE, THE MANUFACTURER'S RECOMMENDATIONS AND/OR THE PROJECT ENGINEER DIRECTION SHALL BE FOLLOWED.

ITEM SPECIAL - PATCHING CONCRETE STRUCTURE ABUTMENT BACKWALL

IN ADDITION TO THE WORK ITEMS REQUIRED IN 519, THIS ITEM WILL INCLUDE, THE CORING OF THE DECK TO PLACE THE CONCRETE, THE DRILLING OF DOWEL HOLES FOR THE PLACEMENT OF EPOXY REINFORCING STEEL AND THE WIDENING OF THE ABUTMENT SEATS AS DETAILED IN THESE PLANS AND DESCRIBED IN THE FOLLOWING NOTE.

PROVIDE A CONCRETE MIX AT A SLUMP THAT ALLOWS THE CONCRETE MIX TO BE PUMPED THROUGH A 4" DIAMETER ACCESS HOLE FROM THE TOP OF THE DECK AND SELF CONSOLIDATE, FILLING THE PATCH LOCATIONS OF THE UNDERSIDE OF THE DECK, THE ABUTMENT SEAT AND VERTICAL ABUTMENT WALL. THE FINAL CONCRETE MIX WILL BE SELF CONSOLIDATING CONCRETE USING AN APPROVED SELF CONSOLIDATING ADMIXTURE.

WHEN PERFORMING THE DISINTEGRATED CONCRETE REMOVAL, PROVIDE PATCHES WITH A MINIMUM DEPTH OF 4 INCHES AND NO GREATER THAN 6 INCHES. AREAS TO BE PATCHED WILL HAVE SQUARED EDGES AND BE ROUGHLY SQUARE OR RECTANGLE IN SHAPE.

AVOID DAMAGING OR DEBONDING THE REINFORCING, OR SHATTERING THE CONCRETE, BEYOND THE AREA TO BE PATCHED.

AFTER LOCATING THE EXISTING REINFORCING STEEL USING A PACHOMETER, DRILL 4" DIAMETER HOLES THROUGH THE BRIDGE DECK MISSING THE REBAR.

DRILL DOWEL HOLES FOR THE INSTALLATION OF THE EPOXY COATED REINFORCING STEEL. INSTALL THE REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. IF AN EXISTING STEEL BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. THE DEPARTMENT WILL PAY FOR THE DOWEL HOLES AND GROUT AT THE UNIT PRICE FOR ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT.

AFTER PLACEMENT OF THE REINFORCING STEEL AND THE DRILLING OF THE HOLES, PUMP THE CONCRETE INTO THE CORE HOLES UNTIL THE PATCH AREAS ARE FILLED AND ALL AIR VOIDS ARE DETERMINED TO HAVE BEEN ELIMINATED.

THE SLAB BRIDGE SEAT WILL ALSO BE WIDENED TO MATCH THE EXISTING ABUTMENT FOOTER WIDTH. REFER TO THE RESPECTIVE STRUCTURE SHEET FOR MORE DETAILS REGARDING THE WIDENING.

PLACE THE CONCRETE THROUGH THE 4" DIAMETER CORE HOLES BY PUMPING AND FREE FALL. ASSURE THE CONCRETE HAS COMPLETELY FILLED THE PATCH VOIDS BEFORE MOVING TO ANOTHER 4" ACCESS HOLE. USE VIBRATION EQUIPMENT TO HELP CONSOLIDATE THE CONCRETE MIX. CONTINUE PLACING THE CONCRETE INTO THE CORE HOLES AND FINISH THE CONCRETE IN THE HOLES LEVEL WITH THE DECK CONCRETE. THIS WORK MUST BE COMPLETED PRIOR TO OVERLAYING THE DECK.

WHEN THE FORMWORK IS REMOVED, THE PROJECT ENGINEER WILL DETERMINE IF THE NEW CONCRETE IS FLUSH WITH THE UNDERSIDE OF THE DECK. IF THERE ARE VOIDS FOUND BETWEEN THE NEW CONCRETE AND THE UNDERSIDE OF THE DECK, THE CONTRACTOR WILL PRESSURE GROUT THE VOIDS UNTIL ALL MATERIAL IS FOUND TO BE IN CONTACT WITH ONE ANOTHER. THE GROUT MATERIAL WILL ACHIEVE AND LEAST 4000 PSI IN 7 DAYS AND CONSIST OF CEMENT AND SAND MEETING ODOT MATERIAL SPECIFICATIONS.

THE DEPARTMENT WILL MEASURE THE NUMBER OF CUBIC YARDS DETERMINED BY THE CALCULATIONS FROM THE PLAN DIMENSION FOR THE ABUTMENT WIDENING WORK. THE DEPARTMENT WILL MEASURE THE NUMBER OF CUBIC YARDS FOR THE PATCHED AREAS BY DETERMINING THE SQUARE YARDAGE OF ACTUAL PATCHED AREAS AND MULTIPLYING BY A DPTH OF 0.167 YARDS TO CALCULATE THE VOLUME OF CUBIC YARDS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY OF CUBIC YARDS.

PAYMENTS FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CU. YD. FOR ITEM SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: ABUTMENT BACKWALL, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK, EXCEPT FOR THE EPOXY COATED REINFORCING STEEL WHICH WILL BE PAID FOR SEPARATELY.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: USING DOWSIL 902 RCS

THIS WORK SHALL CONSIST OF PROVIDING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND SEAL THE EXISTING SLIDING DECK JOINTS.

THE SEALANT SHALL BE DOWSIL 902 RCS OR APPROVED EQUIVALENT.

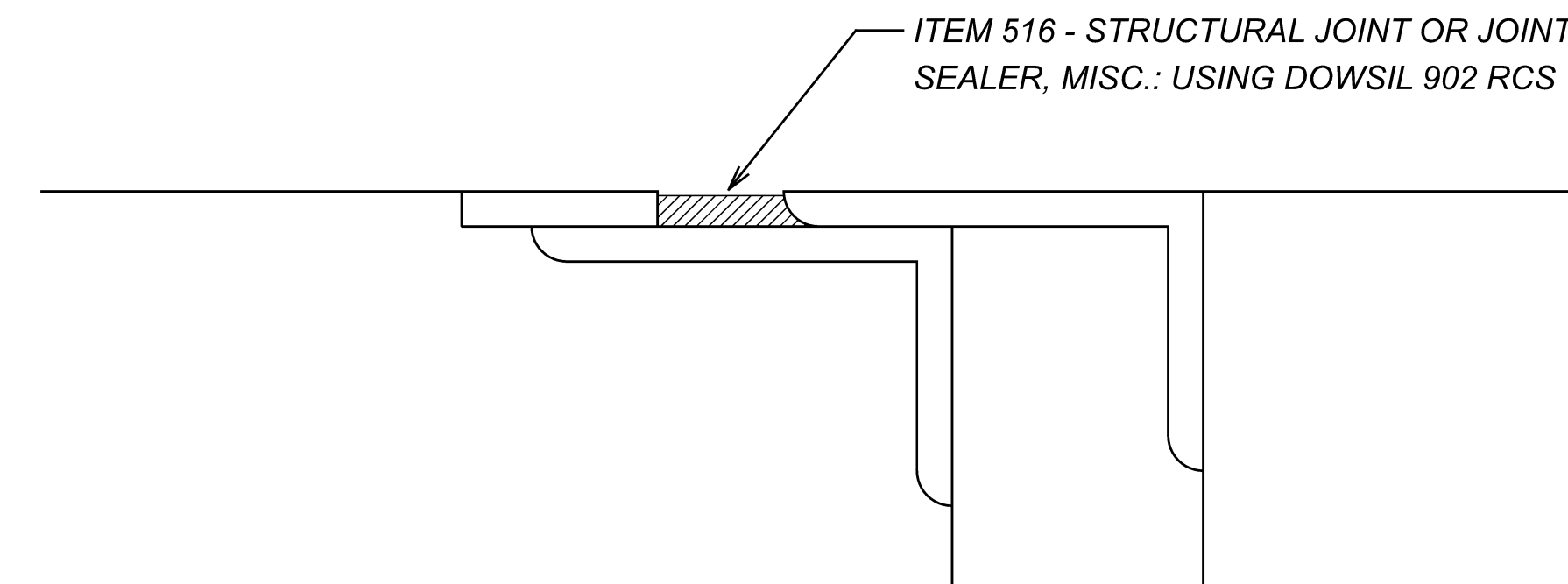
JOINTS SHALL BE THOROUGHLY CLEANED BY ABRASIVE BLASTING AND/OR POWER TOOLS AND WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT OR DELETRIOUS MATTER WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY. JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 P.S.I. SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

AFTER CLEANING AND DRYING, THE JOINT SHALL BE PRIMED WITH CARBOLINE CARBOGUARD OR EQUIVALENT. A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE JOINT.

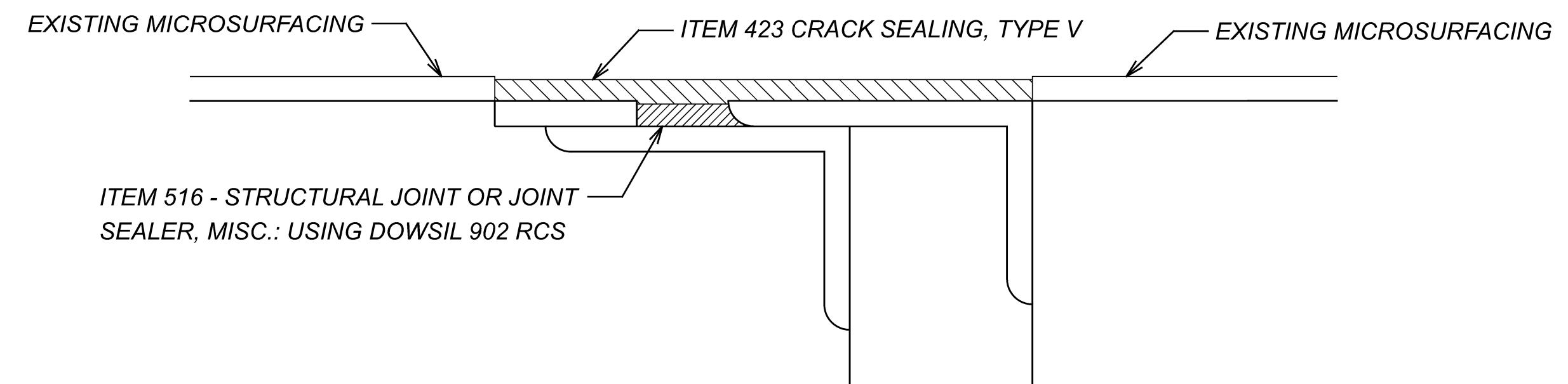
THE SILICONE SEALANT MATERIALS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS, EXCEPT AS MODIFIED BY THESE NOTES. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 60 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR EIGHT HOURS AFTER THE APPLICATION OF THE SEALANT.

PAYMENT FOR ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FT FOR ITEM 516 - STRUCTURAL JOINT OR JOINT SEAL, MISC.: USING DOWSIL 902 RCS, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: USING DOWSIL 902 RCS FOR BRIDGE HAN-103-0.67 CROSS-SECTIONAL VIEW



ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: USING DOWSIL 902 RCS FOR BRIDGE ALL-309-0.09 CROSS-SECTIONAL VIEW



DESIGN AGENCY



DESIGNER
CRS

REVIEWER
XXX MM-DD-YY

PROJECT ID
109907

SHEET TOTAL
P.15 | 22