D05 FY2026 BRIDGE REHAB WEST

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

D05 FY2026 BRIDGE REHAB WEST

FAIRFIELD, LICKING, KNOX, 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 SUPERSTRCUTRE REPAIRS, SPOT PAINTING, AND BRIDGE CLEANING

EARTH DISTURBED AREAS

2023 SPECIFICATIONS

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

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS

AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC

WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY

N/A ACRES

INDEX OF SHEETS:

TITLE SHEET LOCATION MAPS GENERAL NOTES MAINTENANCE OF TRAFFIC GENERAL SUMMARY DECK SEALING CALCULATIONS CONCRETE PATCHING CALCULATIONS STRUCTURE REPAIR DETAILS KNO-62-1428 (SFN 4202104) KNO-62-2192 (SFN 4202317) LIC-13-1477 (SFN 4500369) LIC-13-1735 (SFN 4500423) LIC-16-1968 (SFN 4503481) MUS-70-0198 L&R (SFN 6002315 & 6002374) 34-37 MUS-70-0460 (SFN 6002463) 41-43 MUS-60-1401 (SFN 6001777) 44-46

Addendum 002

District 05 Deputy Director

THIS IMPROVEMENT.

Director, Department of Transportation

DESIGN EXCEPTIONS

ADA DESIGN WAIVERS

UNDERGROUND UTILITIES Contact Two Working Days

Before You Dig

FOR LOCATION MAPS

AND DESIGN DESIGNATIONS

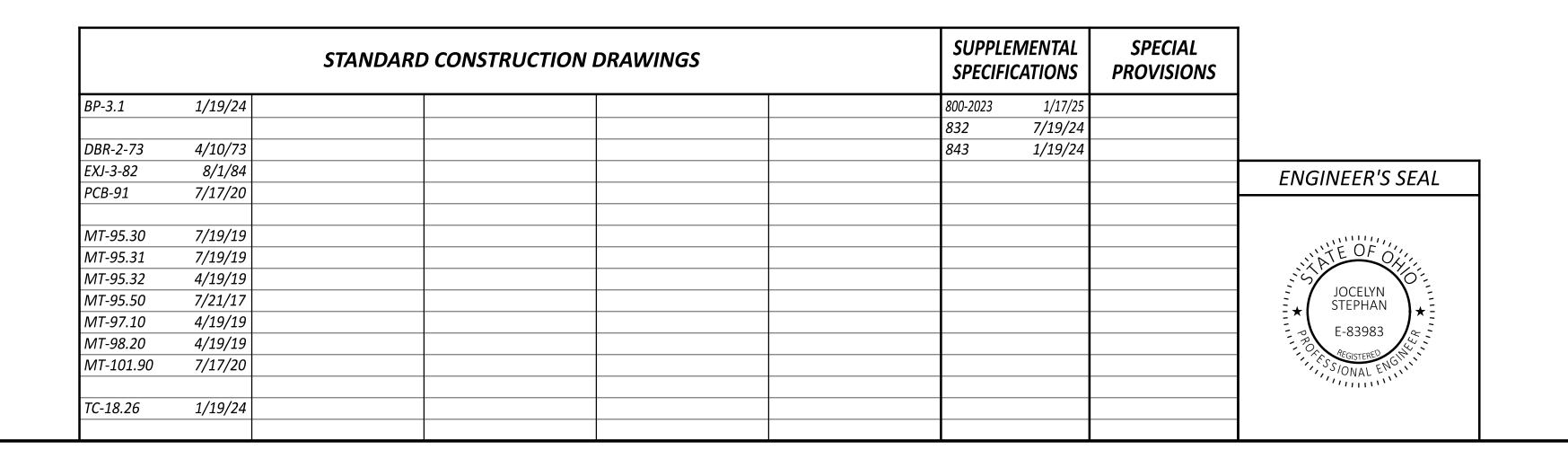
SEE LOCATION MAP SHEETS

LOCATION MAP

OHIO 811.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



ESIGN AGENCY

ESIGNER MHK JKS 02/20/2! ROJECT ID 122661

ITEM 511 - CLASS QC2 CONCRETE, MISC: ACCELERATING **ADMIXTURE**

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH ACCELERATING ADMIX-TURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HOURS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCU-MENTATION THAT THE MIX WILL ACHIEVE THE REQUIRED STRENGTH IN THE SPECIFIED TIME.

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING **CONDITIONS AND REVISIONS:**

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI. DRYING METHODS INTRODUCING EXTERNAL HEAT (I.E. WEED BURNERS, TORCHES) WILL NOT BE PERMITTED.

SEAL ALL EXPOSED CONSTRUCTION JOINTS WITH HMWM SEALER *AS PER CMS 511.19.*

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CUBIC FOOT CONTRACT PRICE BID FOR ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE.

ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN

THIS WORK CONSISTS OF SEALING CONCRETE DECKS WITH HMWM RESIN AS PER CMS 512.04 AND 705.15. THE CONTRACTOR SHALL EN-SURE ALL DIRT AND DEBRIS IS CLEARED FROM THE BRIDGE AND EXPAN-SION JOINTS PRIOR TO SEALING. PERMANENT PAVEMENT MARKINGS AND EXISTING COATING DO NOT NEED TO BE REMOVED PRIOR TO SEALING THE BRIDGE DECK. PERMANENT PAVEMENT MARKINGS WILL BE REMOVED DURING THE PREP FOR PERMANENT PAVEMENT MARKING. ALL OTHER REPAIR WORK SHALL BE DONE PRIOR TO SEALING THE BRIDGE DECK. THE CONTRACTOR SHALL ENSURE THAT THE SEALER IS NOT APPLIED TO THE EXPANSION JOINTS OF THE BRIDGE. THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 512 -SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN.

ITEM 512 - TREATING CONCRETE BRIDGE DECKS WITH GRAVITY-FED RESIN, AS PER PLAN

THIS WORK CONSISTS OF SEALING CONCRETE SIDEWALKS ON BRIDGE NO. KNO-62-17.80 SFN 4202236 WITH GRAVITY-FED RESIN AS PER CMS 512.06 AND 705.25. THE CONTRACTOR SHALL ENSURE ALL DIRT AND DEBRIS IS CLEARED FROM THE SIDEWALK AND EXPANSION JOINTS PRIOR TO SEALING. ALL OTHER REPAIR WORK SHALL BE DONE PRIOR TO SEALING THE SIDEWALK. THE CONTRACTOR SHALL ENSURE THAT THE SEALER IS NOT APPLIED TO THE EXPANSION JOINTS OF THE BRIDGE. THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 512 - TREATING CONCRETE BRIDGE DECKS WITH GRAVITY-FED RESIN, AS PER PLAN.

ITEM 513 - STRUCTURAL STEEL MISC: REPAIR OF DAMAGED MEMBER, CRACK ARREST HOLE

AN ESTIMATED QUANTITY IS PROVIDED IN THE PLANS FOR DRILLING A CRACK ARREST HOLE ON THE FORWARD END OF BEAM 4 ON BRIDGE NO. MUS-70-2.99L SFN 6002404 AS DIRECTED BY THE ENGINEER. PROVIDE COPE HOLE ACCORDING TO PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. GRIND THE HOLE SMOOTH ACCORDING TO CMS 513.19. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL MISC: REPAIR OF DAMAGED MEMBER, CRACK ARREST HOLE: EACH.

ITEM 513 - STRUCTURAL STEEL MISC: REPAIR OF DAMAGED SECONDARY MEMBER, FILLET WELDING

THIS WORK CONSISTS OF REWELDING END CROSSFRAMES IN BAY 3 FORWARD OF BRIDGE NO. MUS-70-0198L SFN 6002315. PREPARE THE DAMAGED MATERIAL FOR WELDING, PERFORMING 5/16 INCH FILLET WELDS ACCORDING TO ITEM 513 USING APPROVED ELECTRODES, PRO-CEDURES AND WELDERS. WELD EACH SECONDARY MEMBER ACCOR-DING TO PLAN DETAILS. MAGNETIC PARTICLE INSPECT ALL FILLET WELDS ACCORDING TO CMS 513.25B. THE ENGINEER MAY OBTAIN TECHNICAL ASSISTANCE FROM THE OFFICE OF MATERIALS MANAGEMENT. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIP-MENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL MISC., REPAIR OF DAMAGED SECONDARY MEMBER, FILLET WELDING: FOOT.

ITEM 514 - FIELD PAINTING, MISC.: MAIN AND SECONDARY MEMBERS

THIS ITEM SHALL INCLUDE PAINTING AS WELL AS THE SURFACE PREPAR-ATION OF THE MAIN AND SECONDARY MEMBERS IN THE FIELD AS SHOWN IN THESE PLANS. THE PAINT MAY BE APPLIED BY BRUSH ACCOR-DING TO 514.17E. SOLVENT CLEAN AND ABRASIVELY CLEAN THE MAIN AND SECONDARY MEMBERS AS PER SSPC-SP 1 AND SSPC-SP 3, RESPEC-TIVELY, PRIOR TO APPLYING PAINT. THE SURFACE SHALL BE FREE OF ALL LOOSE RUST, MOISTURE, OIL, GREASE, DIRT AND OTHER FOREIGN MATERIAL NEEDED TO ENSURE ADEQUATE ADHESION. APPLY 1 COAT OF SHERWIN WILLIAMS EPOXY MASTIC ALUMINUM II OR APPROVED EQUAL (4 TO 6 MILS) ACCORDING TO MANUFACTURERS RECOMMEN-DATIONS. CONTAIN AND REMOVE ALL WASTE PER CMS 514. FOLLOW 514.06 FOR WORK LIMITATIONS. FOLLOW CMS 514.07 FOR PROTECTION OF PERSONS AND PROPERTY. ALL LABOR, EQUIPMENT, MATERIAL AND RESOURCES NEEDED TO COMPLETE THE FIELD PAINTING IS INCLUDED IN THE CONTRACT BID PRICE FOR FIELD PAINTING, MISC: MAIN AND SECONDARY MEMBERS, SQUARE FOOT.

THE FINISH COAT COLOR SHALL BE: AMS-STD-595A GREEN 14325

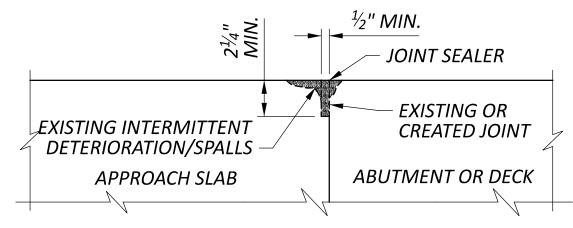
ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL

FURNISH MATERIAL CONFORMING TO 705.11. THE SEAL (MODEL 3" BEJS) CONFIGURATION SHOULD BE SIMILAR TO THE DETAILS SHOWN HERIN. ACCEPTED MANUFACTURES ARE: EMSEAL JOINT SYSTEM LTD. OR AN APPROVED EQUIVALENT. INSTALL THE SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE. FURNISH SEALS IN ONE CONTINOUS PIECE UNLESS APPROVED BY THE ENGINEER.

PAYMENT: MEASUREMENT OF THE EXPANSION JOINT FOR PAYMENT PURPOSES SHALL BE ALONG THE CENTERLINE OF THE STEEL JOINT. PAYMENT SHALL BE PER FOOT OF ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL AND INCLUDE ALL LABOR, REMOVAL OF EXISTING JOINT SEAL, MATERIALS AND INCIDENTALS NEEDED TO CONSTRUCT THE JOINT AS SHOWN.

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

PERFORM THE FOLLOWING WORK AFTER ALL SEALING HAS BEEN PER-FORMED ON THE BRIDGE DECK. FOR THE LOCATIONS PROVIDED REMOVE ANY COMPRESSION SEAL, FOREIGN MATERIAL, AND DEBRIS FROM THE EXISTING JOINT BETWEEN THE APPROACH SLAB AND ABUTMENT BACK-WALL. IF ONLY A SAWCUT EXISTS AT THIS LOCATION, PERFORM A NEW SAWCUT TO ESTABLISH A 1/2" WIDE BY 2 1/4" DEEP JOINT ALONG THIS INTERFACE. ONCE THE JOINT HAS BEEN OPENED OR CREATED. AIRBLAST THOROUGHLY PRIOR TO PLACEMENT OF HOT APPLIED JOINT SEALER AS PER 705.04 AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516 - 2" JOINT SEALER, AS PER PLAN.



<u>ABUTMENT SECTION</u>

ITEM 517 - RAILING, MISC.: DBR GUARDRAIL SECTION ITEM 517 - RAILING, MISC.: DBR POST ASSEMBLY

THESE ITEMS SHALL BE USED TO REPLACE DAMAGED RAILING COMPO-NENTS ON BRIDGE NO. LIC-13-2220 SFN 4500520. SEE STANDARD DRAWING DBR-2-73 DATED 4-10-73 FOR FABRICATION DETAILS FOR DBR GUARDRAIL SECTION AND POST ASSEMBLY.

THE DEPARTMENT WILL MEASURE THE RAILING SECTIONS ON A LINEAR FOOT BASIS AND THE POST ASSEMBLY AS AN "EACH" ITEM. BID PRICE SHALL INCLUDE ALL MATERIALS, TOOLS, LABOR, AND EQUIPMENT TO INSTALL REPLACEMENT RAILING COMPONENTS.

ITEM 519 - PATCHING BRIDGE DECKS, TYPE B

THIS ITEM SHALL CONFORM TO PROPOSAL NOTE 512 ALONG WITH THE FOLLOWING REQUIREMENTS.

ALL BRIDGE DECK PATCHING SHALL USE COMMERCIAL GRADE QUIKCRETE FAST SET DOT MIX EXTENDED OR APPROVED EQUAL. THE MATERIAL SHALL BE PLACED AT A MINIMUM DEPTH OF FOUR (4) INCHES AND CURED PER MANUFACTURES RECOMMENDATIONS.

FOR LOCATIONS WITH PERMITTED LANE CLOSURE RESTRICTIONS: THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF **400 PSI**. ONE HOUR BEFORE THE PERMITTED LANE CLOSURE PERIOD ENDS, CONTRACTOR SHALL DRY THE NEW CONCRETE SURFACE AND APPLY A MEMBRANE CURING COMPOUND. DRYING METHODS INTRODUCING EXTERNAL HEAT (I.E. WEED BURNERS, TORCHES) WILL NOT BE PERMITTED.

ALL LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER. THE INTENT OF THE WORK IS TO CORRECT HEAVILY DETER-IORATED SURFACE ZONES (I.E. FAILED CONCRETE/ASPHALT PATCHES, MAP-CRACKED DETERIORATED AREAS, SPALLED/OPEN POTHOLES, ÉTC.) AND NOT TO CORRECT ALL UNSOUND AREAS OF THE BRIDGE DECK/ OVERLAY AND APPROACH SLABS.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT AND MATERIAL WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 519 -PATCHING CONCRETE BRIDGE DECKS, TYPE B

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (ABUTMENTS)

REMOVAL OF UNSOUND CONCRETE SHALL BE PERFORMED AS SPECIFIED IN CMS 519.03. CONCRETE SHALL BE REMOVED AND REPLACED AT A **DEPTH OF 6". PATCHING LOCATIONS SHALL BE VERIFIED AND PERFOR-**MED AS DIRECTED BY THE ENGINEER.

PERFORM WORK CAREFULLY DURING REMOVALS TO PROTECT PORTIONS THAT ARE TO REMAIN, I.E. STEEL BEAMS, REINFORCING STEEL. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 85 POUND CLASS. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF WORK ON A SQUARE FOOT BASIS AND INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK FOR PAYMENT WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (ABUTMENTS).

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

REMOVAL OF UNSOUND CONCRETE SHALL BE PERFORMED AS SPECIFIED IN CMS 519.03. CONCRETE SHALL BE REMOVED AND REPLACED AT A **DEPTH OF 6". PATCHING LOCATIONS SHALL BE VERIFIED AND PERFOR-**MED AS DIRECTED BY THE ENGINEER.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF WORK ON A SQUARE FOOT BASIS AND INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK FOR PAYMENT WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER CAPS).

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

REMOVAL OF UNSOUND CONCRETE SHALL BE PERFORMED AS SPECIFIED IN CMS 519.03. CONCRETE SHALL BE REMOVED AND REPLACED **AT A DEPTH OF 6". PATCHING LOCATIONS SHALL BE VERIFIED AND PERFOR-**MED AS DIRECTED BY THE ENGINEER.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF WORK ON A SQUARE FOOT BASIS AND INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK FOR PAYMENT WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN (PIER STEMS).

ITEM 530 - SPECIAL - STRUCTURES: BRIDGE CLEANING SEE PLAN INSERT SHEETS FOR NOTES AND DETAILS.

ITEM 630 - REMOVAL OF STRUCTURE MOUNTED SIGN AND REERECTION, AS PER PLAN

THIS WORK CONSISTS OF REMOVING THE STRUCTURE MOUNTED SIGNS ON BRIDGE NO. LIC-16-19.68 AND REERECTING THEM AFTER PARAPET TOP REPLACEMENT. MOUNTING HARDWARE CAST INTO CONCRETE THAT IS TO REMAIN MAY BE LEFT IN PLACE. HARDWARE THAT MUST BE REMOVED WITH THE CONCRETE PARAPET CAN BE REUSED IF IN GOOD CONDITION SUBJECT TO THE APPROVAL OF THE ENGINEER. IF HARDWARE IS NOT IN GOOD CONDITION, REPLACE IT WITH PARTS DETAILED IN ARCHIVED STANDARD DRAWING TC-18.26.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO REMOVE AND REERECT THE SIGN.

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

THE CONTRACTOR SHALL REPAIR DETERIORATED AREAS, WHERE THE DEPTH OF PATCH IS $1\frac{1}{2}$ " TO 3", AS LOCATED BY AND TO THE SATISFAC-TION OF THE ENGINEER ACCORDING TO ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR AND THE DETAILS SHOWN IN THESE PLANS. AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY SHEET FOR BIDDING PURPOSES. THE FINAL PAY-MENT SHALL BE FOR THE ACTUAL AMOUNT PERFORMED AS DIRECTED BY THE ENGINEER.

PAYMENT FOR 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 WORK.

ESIGN AGENCY



MHK REVIEWER JKS 02/20/2! ROJECT ID

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ESIGNER

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