164+06.08

LOCATION MAP

LATITUDE: 39°16'59" LONGITUDE: -84°46'60"



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

DESIGN DESIGNATION SEE SHEET 2 CURRENT ADT () DESIGN YEAR ADT () DESIGN HOURLY VOLUME () DIRECTIONAL DISTRIBUTION TRUCKS (24 HOUR B&C) DESIGN SPEED LEGAL SPEED DESIGN FUNCTIONAL CLASSIFICATION:

NHS PROJECT .

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE





ENGINEER'S SEAL SHEETS 110-178 JONATHAN PATRICK CARROLL 02/20/2023 ENGINEER'S SEAL SHEET 109, ADD. 3

CK-CS

02/20/2023

ENGINEER'S SEAL

SHEETS 1-108

PE-74012

02/20/2023

SIGNED:

STATE OF OHIO **DEPARTMENT OF TRANSPORTATION**

HAM-SR 562-0.54

HAMILTON COUNTY CITY OF CINCINNATI, CITY OF NORWOOD

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HAM-562-0065

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1-15

STANDARD CONSTRUCTION DRAWINGS **PROVISIONS** 1/21/22 MGS-5.3 7/15/16 ITS-14.11 7/16/21 TC-61.30 7/19/19 800-2023 SEE PROPOSAL ASBESTOS BP-5.1 1/17/14 SOUNTE INSPECTION 7/15/22 MGS-6.1 1/19/18 ITS-14.50 4/15/22 TC-65.10 1/20/23 TC-12.31 10/19/18 REPORT 12/29/22 4/20/12 ASBESTOS 7/15/22 INSPECTION 3P-7.1 1/21/22 TC-15.116 7/16/21 TC-65.11 7/15/22 813 BP-9.1 1/18/19 RM-4.2 4/17/20 MT-95.30 7/19/19 TC-21.11 7/16/21 TC-71.10 7/15/22 821 MT-95.31 7/19/19 TC-21.21 1/20/23 TC-72.20 7/20/18 832 7/15/22 REPORT 5/23/2023 1/15/16 EXJ-2-81 7/15/22 MT-95.32 4/19/19 TC-21.50 4/17/20 TC-74.10 1/20/23 847 1/15/21 DM-4.4 1/15/16 EXJ-4-87 1/20/23 MT-95.45 1/17/20 TC-22.20 1/17/14 1/15/2 GSD-1-19 1/15/21 MT-98.10 1/17/20 TC-41.10 7/19/13 1/18/19 MC-9.3 10/30/92 SBR-1-20 1/20/23 MT-98.20 4/19/19 TC-41 20 10/18/13 1/21/22 MT-98.29 1/17/20 TC-41.30 10/18/13 7/15/22 1/20/23 MT-98.30 7/16/21 TC-41.40 10/18/13 4/16/2 MGS-2.1 1/19/18 HL-20.14 4/17/20 MT-99.20 4/19/19 TC-42.10 10/18/13 4/20/12 MGS-3.1 1/19/18 HL-30.11 1/15/21 MT-99.50 1/17/20 TC-42.20 10/18/13 MGS-3.2 1/18/13 HL-30.32 4/17/20 MT-101.60 1/17/20 TC-51.11 1/15/16 MGS-4.2 7/19/13 HL-30.33 1/21/22 MT-105.10 1/17/20 TC-51.12 1/15/16 1/18/13 HL-50.21 7/15/22

SUPPLEMENTAL

SPECIAL

FEDERAL PROJECT NUMBER

E200303

RAILROAD INVOLVEMENT

INDIANA & OHIO

PROJECT DESCRIPTION

RESURFACING THE NORWOOD LATERAL (SR 562) IN HAMILTON COUNTY. REHABILITATE MAINLINE BRIDGES OF SR 562 BY REPLACING JOINTS. PAINTING, SEALING, AND REPLACING BARRIERS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: ESTIMATED CONTRACTOR EARTH DISTURBED AREA: NOTICE OF INTENT EARTH DISTURBED AREA:

2.1 ACRES 0.5 ACRES N/A (NOI NOT REQUIRED)* MAITENENCE 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 REQUIRE THE PART-TIME CLOSING OF THE HIGHWAY TO TRAFFIC, AS NOTED ON SHEETS 19, 20 & 28, DURING WHICH TIME DETOURS WILL BE PROVIDED AS SHOWN HEREIN, PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES



DIRECTOR, DEPARTMENT OF

TRANSPORTATION

LDW IWL 11/21/22 102886

562-0. HAM-SR

ITEM 614, MAINTAINING TRAFFIC

DIRECTIONAL DETOURS (WESTBOUND/EASTBOUND) SHALL BE IMPLEMENTED TO COMPLETE THE WORK ON SR 562. ONLY ONE DIRECTION (WESTBOUND OR EASTBOUND) MAY BE CLOSED AT A

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD AND RAMP CLOSURES IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME

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.

| | NOTICE OF CLO | SURE SIGN TIME TABLE |
|----------|---------------|--------------------------|
| | DURATION OF | |
| ITEM | CLOSURE | SIGN DISPLAYED TO PUBLIC |
| | >= 2 WEEKS | 14 CALENDAR DAYS PRIOR |
| RAMP & | | TO CLOSURE |
| ROAD | > 12 HOURS & | 7 CALENDAR DAYS PRIOR |
| CLOSURES | < 2 WEEKS | TO CLOSURE |
| | < 12 HOURS | 2 BUSINESS DAYS PRIOR |
| | | TO CLOSURE |

SR 562 WILL BE CLOSED MM/DD/YY FOR # DAYS INFO: 513-933-6600

W20-H13-60

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-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION SHOWN ON THE

SIGN BLANKS USED TO COVER SIGNS ARE REQUIRED TO BE

DURING THE DIRECTIONAL CLOSURE, ALL WORK IN THAT DIRECTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME INCLUDING BUT NOT LIMITED TO THE BRIDGE WORK, PAVEMENT REPAIRS, RESURFACING, FINAL MARKINGS AND

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

CONCRETE MEDIAN BARRIER REPLACEMENT

REMOVING, GRADING AND INSTALLING THE REPLACEMENT BARRIER IS SUBJECT TO THE APPROVAL OF THE ENGINEER. A PORTABLE BARRIER IS NEEDED ONLY ON THE SIDE OF SR-562 OPEN TO TRAFFIC.

WHERE TRAFFIC IS MAINTAINED, CLOSE THE SHOULDER PER MT-95.45. STAGE WORK FROM THE SIDE OF THE ROAD BEING DETOURED. MAINTAIN POSITIVE PROTECTION UNTIL THE MEDIAN BARRIER IS RESTORED.

THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO

COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE: DIRECTIONAL CLOSURES OF SR-562. THE WORK WILL BE COMPLETED IN TWO PHASES. EASTBOUND SR-562 WILL BE CLOSED FROM I-75 TO I-71 PER A+B CONTRACT TABLE. DETOURS ARE PROVIDED IN THE PLANS. UPON COMPLETION OF THE WORK EASTBOUND LANES WILL BE REOPENED. WESTBOUND SR-562 WILL BE CLOSED FROM PADDOCK ROAD TO I-71 PER A+B CONTRACT TABLE. DETOURS ARE PROVIDED IN THE PLANS. UPON COMPLETION OF THE WORK WESTBOUND LANES WILL BE

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A
MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF
EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER, CITY OF CINCINNATI, AND CITY OF NORWOOD AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) ERFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE 'EXCEPTION REQUEST APPROVAL DATED 8/12/2021 FOR PID 102886' IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET 19 OF THE PLAN.
PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO

OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY. ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 31.5 SIGN MONTH, ASSUMING 9 PCMS SIGNS FOR 0.5 MONTHS (PRE-CLOSURE), 4 PCMS SIGNS FOR 3 MONTHS (WB CLOSED), AND 5 PCMS SIGNS FOR 3 MONTHS (EB CLOSED).

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

- 1) DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS
- 2) 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

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:

- 1) 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
- 2) FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

A) ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY, AND

B) AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION, AND, C) 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:

- 1) THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER, OR
- 2) THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE, OR
- 3) 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

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

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

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 320 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

5/23/23 - Revised MOT Sequence



WB 02/20/2

102886

16 | 178

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS.@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

| | NOTIFICATION TIN | NE TABLE |
|-----------------|------------------|------------------------|
| ITEM | DURATION OF | NOTICE DUE TO |
| | CLOSURE | PERMITS & PIO |
| | >= 2 WEEKS | 21 CALENDAR DAYS PRIOR |
| RAMP & | | TO CLOSURE |
| ROAD | > 12 HRS & | 14 CALENDAR DAYS PRIOR |
| CLOSURES | < 2 WEEKS | TO CLOSURE |
| | < 12 HOURS | 4 BUSINESS DAYS PRIOR |
| | | TO CLOSURE |
| LANE | >= 2 WEEKS | 14 CALENDAR DAYS PRIOR |
| CLOSURES & | | TO CLOSURE |
| RESTRICTIONS | < 2 WEEKS | 5 BUSINESS DAYS PRIOR |
| | | TO CLOSURE |
| START OF | | |
| CONSTRUCTION | N/A | 14 CALENDAR DAYS PRIOR |
| & TRAFFIC | | TO IMPLEMENTATION |
| PATTERN CHANGES | | |

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE

m

SEQUENCE OF CONSTRUCTION

PROPOSAL

SEGMENT 2 - CRITICAL WORK

ON SR 562 WESTBOUND

THE EASTBOUND CLOSURE IS TO BE COMPLETED FIRST
FOLLOWED BY THE WESTBOUND CLOSURE. THIS SEQUENCE HAS
BEEN COORDINATED WITH THE ADJACENT PROJECT PID 77889
AND IS NOT PERMITTED TO BE MODIFIED. THE CLOSURE
SEQUENCE MUST BE PERFORMED DURING OVERNIGHT HOURS.
LOCAL RAMPS CAN BE CLOSED AT 8 PM OR LATER, INTERSTATE
RAMPS CAN BE CLOSED AT 9 PM OR LATER. THE CLOSURE
SEQUENCE AND DETOUR SIGNING SHALLBE COMPLETED NO
LATER THAN 6 AM THE FOLLOWING MORNING.

A+B BIDDING WITH MULTIPLE SECTIONS AND FLEXIBLE START WINDOW CONTRACT TABLE

USE THE FOLLOWING INFORMATION IN COMBINATION WITH THE PROPOSAL NOTE A + B BIDDING WITH MULTIPLE SECTIONS AND FLEXIBLE START WINDOW CONTRACT:
THE CONTRACTOR WILL BID THE NUMBER OF CALENDAR DAYS TO COMPLETE EACH CONTRACT SEGMENT AS LISTED IN THE

75

| CONTRACT SEGMENT - MINIMUM MAXIMUM INCENTIVE/DISINCENTIVE MAXIMUM WORK WINDOWS LOCATION OF CRITICAL WORK DAYS DAYS SEGMENT 1 - CRITICAL WORK ON SR 562 EASTBOUND MAXIMUM INCENTIVE \$ START END SEGMENT 2 - CRITICAL WORK ON SR 562 EASTBOUND TO SHOW THE PROPERTY 1, 2024 JUNE 1, 2 | | | | | | | | | | | |
|---|---------------------------|---|---------|---------|-----------|---------------|-----|-----------|---------------------------------------|---------------|--------------|
| SEGMENT 1 - CRITICAL WORK 3 75 90 S 50,000 S 300,000 FEBRUARY 1, | CONTRACT SEGMENT - | N | MUMININ | MAXIMUM | INCENTIVE | /DISINCENTIVE | MA | MUMIXA | WORK W | /[[| NDOWS |
| 50 000 \$ 300 000 \ \frac{7}{1000 \ 12} | LOCATION OF CRITICAL WORK | 6 | DAYS | DAYS | \$ P | ER DAY | INC | ENTIVE \$ | START | 7 | END |
| | | 3 | 75 | 90 | \$ | 50,000 | \$ | 300,000 | · · · · · · · · · · · · · · · · · · · | <u>م</u> ح | JUNE 1, 2024 |

50,000 \$ 300,000

NOTE 1: CRITICAL WORK IS DEFINED AS ALL WORK EXCEPT ITEM 512(.03) SEALING OF CONCRETE SURFACES USING EPOXY URETHANE SEALERS, ITEM 514 PAINTING OF STRUCTURAL STEEL, WORK ASSOCIATED WITH PN 420/555, ITEM 621 RAISED PAVEMENT MARKERS, AND ITEM 642/644/646 PAVEMENT MARKINGS.

NOTE 2: ANY OTHER WORK REQUIRING A LANE CLOSURE ON SR 562 IS CONSIDERED CRITICAL WORK.

NOTE 3: BOTH WESTBOUND AND EASTBOUND PROPOSED SIGN TRUSS FOUNDATIONS LOCATED IN THE MEDIAN CONCRETE BARRIER SHALL BE PERFORMED DURING SEGMENT 1.

NOTE 4: LANE CLOSURES BEFORE AND AFTER THE A+B WINDOW SHALL BE IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE.

NOTE 5: RAMP CLOSURES AT THE I-71 AND I-75 INTERCHANGE WITH SR 562 ARE CONSIDERED PART OF THE DIRECTIONAL CLOSURE. THE DIRECTIONAL CLOSURE WINDOW BEGINS WHEN ONE OF THE RAMPS IS CLOSED AND ENDS WHEN BOTH OF THE RAMPS ARE REOPENED.

LANE VALUE CONTRACT TABLE

| DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE \$ PER TIME UNIT |
|--|------------------------------------|-----------|-------------------------------|
| ALL LANES AND RAMPS ON SR 562 OPEN TO TRAFFIC | 06:00 - 20:00 | 1 MINUTE | \$ 325 |
| ALL LANES ON PADDOCK ROAD AND READING ROAD OPEN TO TRAFFIC | 06:00 - 21:00 | 1 MINUTE | \$ 120 |
| ALL LANES ON TENNESSEE AVE/ROSS AVE | 06:00 - 09:00 AND 15:00 - 19:00 | 1 MINUTE | \$ 40 |

NOTES:

COMPLETION SEPTEMBER

16, 2024

OF SEGMENT 🔭

1)MAINTAIN A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.

2) RAMPS ARE NOT PERMITTED TO BE CLOSED TO TRAFFIC.

3)FOR DIRECTIONAL DETOUR CONSTRAINTS, SEE THE A+B BIDDING AND WINDOW CONTRACT TABLE.

CONTRACTOR COORDINATION NOTE

THE CITY OF NORWOOD HAS PLANNED MAINTENANCE WORK (CLEARING AND GRUBBING, DITCH CLEARING) ALONG SR 562 THAT WILL BE PERFORMED DURING THE SR 562 CLOSURE. THIS WORK WILL TAKE APPOXIMATELY 5 DAYS. THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE CITY OF NORWOOD AND ITS CONTRACTOR TO AVOID IMPACTING THE A+B CRITICAL PATH.

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

THE FOLLOWING HOLIDAY/SPECIAL EVENT RESTRICTIONS APPLY TO SHORT TERM LANE CLOSURES AND THE CLOSURE SEQUENCE OF THE DIRECTIONAL CLOSURE. ONCE THE ROAD HAS CLOSED, THE CONTRACTOR IS NOT REQUIRED TO REOPEN THE ROADWAY FOR THE LISTED HOLIDAYS/EVENTS.

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

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

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

| DAY OF HOLIDAY OR SPECIAL EVENT | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|------------------------------------|--|
| SUNDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |
| MONDAY | 12:00N FRIDAY THROUGH 6:00 AM TUESDAY |
| MONDAY (TOTAL SOLAR ECLIPSE) | 12:00N FRIDAY THROUGH 6:00 AM WEDNESDAY |
| TUESDAY | 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY |
| TUESDAY (GEN./REG. ELECTION) | 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY |
| WEDNESDAY | 12:00N TUESDAY THROUGH 6:00 AM THURSDAY |
| THURSDAY | 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY |
| THURSDAY (THANKSGIVING ONLY) | 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY |
| FRIDAY | 12:00N THURSDAY THROUGH 6:00 AM MONDAY |
| SATURDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614, WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT, 5.03 MILE ITEM 614, WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT, 13.03 MILE ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 8", 642 PAINT, 400 FT ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT, 7860 FT ITEM 614, WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT, 7581 FT ITEM 614, WORK ZONE DOTTED LINE, CLASS 1, 12", 642 PAINT, 2060 FT ITEM 614, WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS 1, 642 PAINT, 2110 FT ITEM 614, WORK ZONE STOP LINE, CLASS 1, 642 PAINT, 302 FT ITEM 614, WORK ZONE CROSSWALK LINE, CLASS 1, 12", 642 PAINT, 479 FT ITEM 614, WORK ZONE ARROW, CLASS 1, 6', 642 PAINT, 32 EA ITEM 614, WORK ZONE ARROW, CLASS 1, 6', 642 PAINT (WRONG WAY), 4 EA

DESIGNER
LDW

REVIEWER

JWB 02/20/23

PROJECT ID

102886

| | | | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 614 | 622 | 642 | 644 | 644 | |
|--|--|-------------|--|---|----------------|---------------------------------------|------------------------|-------------------------------------|---|--|---|--|--|--|--|---|--|---|--|--|---|--|---|---------------------------------|-------------------------------|---------------|-----------------|--|
| SHEET NO. | LOCATION | PHASE | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) | DETOUR SIGNING | BARRIER REFLECTOR, TYPE 1, ONE WAY | OBJECT MARKER, ONE WAY | PORTABLE CHANGEABLE MESSAGE SIGN | WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I | WORK ZONE EDGE LINE, CLASS I, 6", 873 | WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I | WORK ZONE DOTTED LINE, CLASS I, 6", 873 | WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT | WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT | WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT | WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT | WORK ZONE DOTTED LINE, CLASS I, 12", 642 PAINT | WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT | WORK ZONE STOP LINE, CLASS I, 642 PAINT | WORK ZONE CROSSWALK LINE CLASS I, 12", 642 PAINT | WORK ZONE ARROW, CLASS I, 6', 642 PAINT | WOFK ZONE ARROW, CLASS I, 642 PAINT, (WRONG WAY) | PORTABLE BARRIER, UNANCHORED | CHANNELIZING LINE, 8", TYPE 1 | LANE LINE, 6" | DOTTED LINE, 6" | |
| - | | | HOUR | EACH | LS | EACH | EACH | SNMT | MILE | MILE | FT | FT | MILE | MILE | FT | FT | FT | FT | FT | FT | FT | EA | EA | FT | FT | MILE | FT | 4 |
| 16-17 | MOT NOTES | N/A | 320 | | | | | 31.5 | | | | | 5.03 | 13.03 | 400 | 7860 | 7581 | 2060 | 2110 | 302 | 479 | 32 | 4 | | | | | - |
| 20-23 | DETOUR PLAN | WB CLOSURE | | | LS | | | | | | | | | | | | | | | | | | | | | | | _ |
| 24 | READING RD | WB CLOSURE | | | | | | | | 0.011 | | | | | | | | | | | | | | | | | | _ |
| 25 | NORWOOD AVE | WB CLOSURE | | | | | | | 0.073 | | 150 | | | | | | | | | | | | | | 400 | | | - A |
| 26 | I-71 RAMPS | WB CLOSURE | | | | | | | | 0.318 | | 215 | | | | | | | | | | | | | | 0.041 | 889 | 1 5 |
| 27 | ALAMO AVE | WB CLOSURE | | | | | | | | 0.061 | | | | | | | | | | | | | | | | | | SUBSUMMARY |
| | | | | | 10 | | | | | 0.001 | | | | | | | | | | | | | | | | | | SUE |
| 28-31 | | EB CLOSURE | | | LS | | | | | | | | | | | | | | | | | | | | | | | 1 |
| 32 | I-75 RAMPS | EB CLOSURE | | | | | | | | 0.286 | | | | | | | | | | | | | | | | | 845 | TRAFFIC |
| 33 | READING RD | EB CLOSURE | | | | | | | | 0.013 | | | | | | | | | | | | | | | | | | |
| | MEDIAN BARRIER REPLACEMENTS | | | | | | | | | | | | | | | | | | | | | | | | | | | В |
| N/A | SIGN AT 52+17.8 PB START STA. 51+67 TO 53+37 | EB CLOSURE | 3 | 1 | | 5 | 5 | | | | | | | | | | | | | | | | | 170 | | | | <u> </u> |
| | SIGN AT 74+12.7 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | MAINTENANCE |
| N/A | PB START STA. 73+62 TO 75+12 | EB CLOSURE | 3 | 1 | | 4 | 4 | | | | | | | | | | | | | | | | | 150 | | | | |
| A//A | SIGN AT 100+99.2 PB START STA. 100+49 TO 102+19 | EB CLOSURE | 3 | 1 | | | E | | | | | | | | | | | | | | | | | 170 | | | | |
| N/A | | EB CLUSURE | 3 | 1 | | 5 | 5 | | | | | | | | | | | | | | | | | 170 | | | | ∮ |
| N/A | SIGN AT 112+75.3 PB START STA. 112+00 TO 113+50 | EB CLOSURE | 3 | 1 | | 4 | 4 | | | | | | | | | | | | | | | | | 150 | | | | - |
| | SIGN AT 136+35.0 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | - |
| N/A | PB START STA. 135+85 TO 136+75 | EB CLOSURE | 3 | 1 | | 3 | 3 | | | | | | | | | | | | | | | | | 90 | | | | - |
| | SIGN AT 162+01.5 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | _ |
| N/A | PB START STA. 161+40 TO 163+20 | EB CLOSURE | 3 | 1 | | 5 | 5 | | | | | | | | | | | | | | | | | 180 | | | | - |
| N/A | SIGN AT 168+67.7 PB START STA. 168+17 TO 169+87 | EB CLOSURE | 3 | 1 | | 5 | 5 | | | | | | | | | | | | | | | | | 170 | | | | 1 |
| 1.dgn | T B OTALL OTAL 100 TH TO 100 TO | LE OLOGONIL | 3 <u>A</u> | , | | | | | | | | | | | | | | | | | | | | 170 | | | | 1 |
| SER: Jb | | | | | | | | | | | | | | | | | | | | | | | | | | | | _ |
| 0 PM U | | | | | | | | | | | | | | | | | | | | | | | | | | | | - |
| 12:26:2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| TIME: | | | | | | | | | | | | | | | | | | | | | | | | | | | | DESIGN AGENCY |
| 19/2023 ingineer | | | | | | | | | | | | | | | | | | | | | | | | | | | | v |
| ATE: 5/ 36/400-E | | | | | | | | | | | | | | | | | | | | | | | | | | | | ORD, MURPHY & C.C. OHIO 45066 RAO, OHIO 45066 9r.com |
| (in.) D4 41102886 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2-0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | DESIGNER SERVICES OF THE CRAW SPRINGS OF THE C |
| ERSIZE: | | | | | | | | | | | | | | | | | | | | | | | | | | | | AEE |
| - シス - シス | | | | | | | | | | | | | | | | | | | | | | | | | | | | JWB 02/20/2 |
| MODEL: She | | | | | | | | | | | | | | | | | | | | | | | | | | | | PROJECT ID 102886 |
| TC P P P | OTALS CARRIED TO GENERAL S | SUMMARY | 320 | 7 | LS | 31 | 31 | 32 | 0.073 | 0.690 | 150 | 215 | 5.03 | 13.03 | 400 | 7860 | 7581 | 2060 | 2110 | 302 | 479 | 32 | 4 | 1080 | 400 | 0.04 | 1734 | SHEET TOTAL 178 |

| | | | SHE | ET NUM. | | | PART. | | | ITEM | GRAND | | DESCRIPTION SEE SHEET | | |
|-----------------------|--------------|---------------|-----|---------|-----------|--------------|---------------|--|----------------|-------------------|---------------|--------------|---|-----------------|----------------------------------|
| | 113 | 141 | | | 01/NHS/05 | 02/NHS/14 | 03/NHS/14 | 04/SAF/ 21 05/SAF/ 21/NORW | - ITEM | EXT | TOTAL | UNIT | DESCRIPTION NO. | | |
| | 11 012 | | | | | 11 012 | | | F12 | 10201 | 11.012 | LD | STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN | 112 | 1 |
| | 11,813 20 | | | | | 11,813 20 | | | 513 513 | 10201 21001 | 11,813 | LB | TRIMMING OF BEAM END, AS PER PLAN | 112 | - |
| | 174 | | | | | 174 | | | 516 | 10501 | 20 174 | EACH FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN | 112 112 | 1 |
| | 172 | | | | | 172 | | | 516 | 11211 | 172 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN | 112 | 1 |
| | | | | | | | | | | | | | | |] |
| | 10 | | | | | 10 | | | 516 | 44201 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN | 112 | 1 |
| | 10 | | | | | 10 | | | 516 | 44201 | 10 | EACH | (BEARING 12"x12"x3.018" AND LOAD PLATE 13"x13"x1.5") ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN | 112 | 4 |
| | 10 | | | | | 10 | | | 210 | 44201 | 10 | EACH | (BEARING 12"x12"x3.151" AND LOAD PLATE 13"x13"x1.5") | 112 | 1 |
| | LS | | | | | LS | | | 516 | 47001 | LS | | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | 112 | 1 |
| | | | | | | | | | | | | | | |] |
| | 20 | | | | | 20 | | | 519 | 11101 | 20 | SF | PATCHING CONCRETE STRUCTURE, AS PER PLAN | 112 | 4 |
| | 17 1,242 | | | | | 17 | | | 519 SPECIAL | 12300 53013000 | 17 1,242 | SY SF | PATCHING CONCRETE BRIDGE DECK - TYPE B FORM LINER | 112 | - |
| | 432 | | | | | 432 | | | 625 | 25400 | 432 | FT | CONDUIT, 2", 725.04 | + 112 | 1 |
| | | | | | | 1 | | | | | | | | 1 | 1 |
| | 22 | | | | | 22 | | | 625 | 29000 | 22 | FT | TRENCH | | |
| | 74 | | | | | 74 | | | 625 | 29002 | 74 | FT | TRENCH, 24" DEEP | | 4 |
| | 2 | | | | | 1 2 | | | 625 625 | 29940 | 2 | EACH EACH | BARRIER JUNCTION BOX | + | 4 . |
| | 1 | | | | | 1 | | | 625 | 30710 35011 | 1 | EACH | PULL BOX, 725.08, 32" REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | 112 | ∤ ≿ |
| | | | | | | | | | 023 | 33011 | | | | 1 | SUMMARY |
| l | 4 | | | | | 4 | | | 625 | 39520 | 4 | EACH | PULL BOX CLEANED | |] ≧ |
| | LS | | | | | LS | | | 625 | 98200 | my | · | LIGHTING MISC: (RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN) | ~~~~ | |
| | LS | | | | | LS | | | SPECIAL | 69098400 | LS | Lunium . | MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIAL | 112 | \mathbb{R}^{\vee} \mathbb{R} |
| | 434 40 | | | + + | | 434 | | | 809 | 24500 10000 | 40 | SY | CONDUIT, 4", MULTICELL, HOPE WITH 4 = 1"INNERDUCTS (RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN) MICRO SILICA MODIFIED CONCRETE OVERLAY (2 1/4") | + | |
| | 40 | | | | | 40 | | | 047 | 10000 | 40 | 31 | WHICH SILICA WOUTHED CONCRETE OVERLAN (2.174.) | + | ERAL |
| | 1 | | | | | 1 | | | 847 | 20000 | 1 | СҮ | MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY | | 1 造 |
| | LS | | | | | LS | | | 847 | 30000 | LS | | TEST SLAB | | GEN |
| | 40 | | | | | 40 | | | 847 | 30400 | 40 | SY | EXISTING CONCRETE OVERLAY REMOVED | | 1 5 |
| | 1 | | | | | 1 | | | 847 | 50000 | 1 | SY | HAND CHIPPING | + | 4 |
| | | | | | | | | | | | | | STRUCTURE OVER 20 FOOT SPAN (SFN 3113914) | + | 1 |
| | | | | | | | LS | | 202 | 11201 | LS | | PORTIONS OF STRUCTURE REMOVED, AS PER PLAN | 138 | 1 |
| | | 130 | | | | | 130 | | 202 | 30700 | 130 | FT | CONCRETE BARRIER REMOVED | | |
| | | 67,336 | | | | | 67,336 | | 509 | 25001 | 67,336 | LB | UNCOATED STEEL REINFORCEMENT, AS PER PLAN | 138 | 4 |
| | | 600 42,748 | | | | | 600 42,748 | | 509 509 | 20001 30020 | 600 42,748 | LB FT | CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN NO. 4 DEFORMED GFRP REINFORCEMENT 509E30020 NO. 4 GFRP DEFORMED BARS | 138 | 4 |
| | | 42,740 | | | | | 42,740 | | 309 | 30020 | 42,740 | Г | NO. 4 DEFONIVED GFRF REINFORCEIVENT 303E30020 NO. 4 GFRF DEFONIVED BARS | + | 1 |
| | | 6,046 | | | | | 6,046 | | 510 | 09951 | 6,046 | EACH | DOWEL HOLES WITH CEMENT GROUT, AS PER PLAN | 138 | 1 |
| | | 4 | | | | | 4 | | 510 | 10000 | 4 | EACH | DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT | | |
| | | 27 | | | | | 27 | | 511 | 34410 | 27 | СҮ | CLASS QC2 CONCRETE, SUPERSTRUCTURE | | _ |
| | | 426 | | | | | 426 | | 511 | 34448 | 426 | CY | CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET) | | 4 |
| | | 14 | | + + | | | 14 | | 511 | 45710 | 14 | СҮ | CLASS QC1 CONCRETE, ABUTMENT | + | 1 |
| | | 15 | | | | | 15 | | 511 | 53012 | 15 | СУ | CLASS QC2 CONCRETE, MISC.:(CONCRETE BARRIER) | 169 | 1 |
| ngb. | | 4,082 | | | | | 4,082 | | 512 | 10100 | 4,082 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | | |
| ckner G103 | | 13,250 | | | | | 13,250 | | 513 | 10201 | 13,250 | LB | STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN | 139 | |
| nbrii 36_G | | 12 | | | | | 12 | | 513 | 21001 | 12 | EACH | TRIMMING OF BEAM END, AS PER PLAN | 146 | 4 |
| JSER 1028 | | LS | | + | | | LS | | 513 | 95020 | LS | | STRUCTURAL STEEL, MISC.:(PIER CAP REPAIRS) | 139 | 1 |
| PM L | | 401 | | | | | 401 | | 516 | 11211 | 401 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN | 139 | 1 |
| :6:27 ay\St | | 16 | | | | | 16 | | 516 | 13600 | 16 | SF | 1" PREFORMED EXPANSION JOINT FILLER | | 1 |
| E: 1:2 oadw | | 11 | | | | | 11 | | 516 | 44201 | 11 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN: | 139 | |
| TIM ing/R | | 10 | | | | | 40 | | F4.6 | 44204 | 10 | 54611 | (BEARING 3.607" x 14" x 11" AND LOAD PLATE 1 ½" x 15" x 12") | 120 | DESIGN AGENCY |
| /2023 gineer | | 10 | | | | | 10 | | 516 | 44201 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN: (PEADING 4.097" v 14" v 12 ½" AND LOAD PLATE 1" v 12 ½" | 139 | |
| 5/23, 0-Eng | | | | | | | | | | | | | (BEARING 4.087" x 14" x 12 ½" AND LOAD PLATE 1" x 15" x 13 ½" | + | MURPH WARD 045066 |
| 7 2ATE: 86'40 | | | | | | | LS | | 516 | 47001 | LS | | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | 139 | CRD, MICONO. |
| .52 | | | | | | | LS | | 518 | 63300 | LS | | STRUCTURE DRAINAGE, MISC.: CLEAN & REPAIR EXISTING BRIDGE DRAINAGE SYSTEM | 139 | YFOR SOR BOR 12/2 |
| O054\\ | | 68 | | | | | 68 | | SPECIAL | 51900100 | 68 | SF | COMPOSITE FIBER WRAP SYSTEM | 153 | CRAW CRAW SPRING SPRING |
| 52- E 17x M562(| | 296 | | + | | | 296 | | 519 SPECIAL | 11101 51912610 | 296 | SF | PATCHING CONCRETE STRUCTURE, AS PER PLAN CONCRETE BEDAIR BY EDOYY INJECTION INCLUDING SUPERCE DEFRADATION | 140 151&153 | DESIGNER |
| SSIZE | | 6,377 | | + + | | | 22 6,377 | | SPECIAL | 53000600 | 6,377 | FT SF | CONCRETE REPAIR BY EPOXY INJECTION INCLUDING SURFACE PREPARATION STRUCTURESTIMBER SUBDECK | 151&153 | NCB |
| ₩ 298-00 | | 5,577 | | | | | 3,377 | | JI LCIAL | 3300000 | 5,5,7 | 3, | | 1 173 | REVIEWER JWL 02/20 |
| 1-S | | 6 | | | | | 6 | | 601 | 34300 | 6 | CY | ROCK CHANNEL PROTECTION, TYPE D WITHOUT FILTER | | PROJECT ID |
| SIL: She | | 41 | | \bot | | | 41 | | 622 | 10160 | 41 | FT | CONCRETE BARRIER, SINGLE SLOPE, TYPE D | | 102886 |
| HA | | 2 | | + | | | 2 | | 622 | 25000 | 2 | EACH | CONCRETE BARRIER END SECTION, TYPE D | + | SHEET TOTA 37 1 |
| <u>-</u> ≥ ∷ | | 3,001 | | | | 1 | 3,001 | | 625 | 25400 | 3,001 | FT | CONDUIT, 2", 725.04 | | 3/ |

| | | S | HEET NUM. | | | _ | PART. | | | ITEM | ITEM | GRAND | UNIT | DESCRIPTION | SEE SHEET | т |
|----------|-----------------|---|-----------|-----|----------|-----------|-----------------|------------|--------------------|------------|----------------|-----------------|--------------|--|------------------------|--------------|
| 18 | 141 | | | | 01/NHS/0 | 02/NHS/14 | 03/NHS/14 | 04/SAF/ 21 | 05/SAF/ 21/NORW | | EXT | TOTAL | | | NO. | _ |
| | 12 | | | | | | 12 | | | 625 | 29000 | 12 | FT | TRENCH | | |
| | | | | | | | | | | | | | | | | |
| | 129 | | | | | | 129 | | | 625 | 29002 | 129 | FT | TRENCH, 24" DEEP | | |
| | 2 | | | | | | 14 | | | 625 625 | 29940 30711 | 14 | EACH EACH | BARRIER JUNCTION BOX PULL BOX, 725.08, 32", AS PER PLAN | 140 | - |
| | 11 | | | | | | 11 | | | 625 | 35011 | 11 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | 140 | \dashv |
| | 3 | | | | | | 3 | | | 625 | 39520 | 3 | EACH | PULL BOX CLEANED | 1.0 | 1 |
| | | | | | | | | | | | | | | | | |
| | LS | | | | | | LS | | ~~ | 625 | 98200 | mbm | | LIGHTING, MISC, (RESTORE EXISTING LIGHTING CIRCUIT) | ~~~~ ¹⁴⁰ ~~ | - |
| | LS | | | | | | LS | | سا | SPECIAL | 69098400 | LS | **** | MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIAL | 140 | سلد |
| | 1,409 12,332 | | | | | | 1,409 12,332 | | | 848 | 24500 10201 | 1,409 12,332 | SY | CONDOIN, 4°, MULTICECL, HIPPE WITH 4 – 1° INNERDOCTS SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 ¾" THICK) | 140 | + |
| | 12,332 | | | | | | 12,332 | | | 848 | 20000 | 12,332 | SY | SURFACE PREPARATION USING HYDRODEMOLITION SURFACE PREPARATION USING HYDRODEMOLITION | 140 | ┨ |
| | | | | | | | | | | 0.0 | | | | | | 1 |
| | 14 | | | | | | 14 | | | 848 | 30200 | 14 | CY | SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY | | |
| | 245 | | | | | | 245 | | | 848 | 50000 | 245 | SY | HAND CHIPPING | | 4 |
| | LS | | | | | | LS | | | 848 | 50100 | LS | 6)/ | TEST SLAB | | 4 |
| | 2 12,228 | | | | | | 12,228 | | | 848 848 | 50200 50320 | 2 12,228 | CY SY | FULL-DEPTH REPAIR EXISTING CONCRETE OVERLAY REMOVED | | - |
| | 12,220 | | | | | | 12,220 | | | 040 | 30320 | 12,228 | 31 | ENSTING CONCRETE OVERLAN REMIOVED | | 1 |
| | | | | | | | | | | | | | | MAINTENANCE OF TRAFFIC | | 1 |
| 320 | | | | | 320 | | | | | 614 | 11110 | 320 | HOUR | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | | |
| 7 | | | | | 7 | | | | | 614 | 12380 | 7 | EACH | WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) | | |
| LS | | | | | LS | | | | | 614 | 12420 | LS | 54011 | DETOUR SIGNING | | 4 |
| 31 31 | | | | | 31 31 | | | | | 614 614 | 13310 13350 | 31 31 | EACH EACH | BARRIER REFLECTOR, TYPE 1, ONE WAY OBJECT MARKER, ONE WAY | | - |
| 31 | | | | | 31 | | | | | 014 | 13330 | 31 | EACH | ODJECT WARNER, ONE WAT | | 1 |
| 32 | | | | | 32 | | | | | 614 | 18600 | 32 | SNMT | PORTABLE CHANGEABLE MESSAGE SIGN | | 1 |
| 0.07 | | | | | 0.07 | | | | | 614 | 22210 | 0.07 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I | | |
| 0.69 | | | | | 0.69 | | | | | 614 | 22326 | 0.69 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 873 | | |
| 150 | | | | | 150 | | | | | 614 | 24402 | 150 | FT | WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I | | 4 |
| 215 | | | | | 215 | | | | | 614 | 24122 | 215 | FT | WORK ZONE DOTTED LINE, CLASS I, 6", 873 | | 4 |
| 5.03 | | | | | 5.03 | | | | | 614 | 20110 | 5.03 | MILE | WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT | | - |
| 13.03 | | | | | 13.03 | | | | | 614 | 22110 | 13.03 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT | | 1 |
| 400 | | | | | 400 | | | | | 614 | 23200 | 400 | FT | WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT | | 1 |
| 7,860 | | | | | 7,860 | | | | | 614 | 23210 | 7,860 | FT | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT | | |
| 7,581 | | | | | 7,581 | | | | | 614 | 24202 | 7,581 | FT | WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT | | 4 |
| 2,060 | | | | | 2,060 | + | | | | 614 | 24200 | 2.000 | FT | WORK ZONE DOTTED LINE CLASS LASH CAS DAINT | | 4 |
| 2,110 | | | | | 2,000 | | | | | 614 | 24208 25200 | 2,060 2,110 | FT FT | WORK ZONE DOTTED LINE, CLASS I, 12", 642 PAINT WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT | | - |
| 302 | | | | | 302 | | | | | 614 | 26200 | 302 | FT | WORK ZONE STOP LINE, CLASS I, 642 PAINT | | 1 |
| 479 | | | | | 479 | | | | | 614 | 27050 | 479 | FT | WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT | | |
| 32 | | | | | 32 | | | | | 614 | 30200 | 32 | EACH | WORK ZONE ARROW, CLASS I, 642 PAINT,6' | | |
| | | | | | | | | | | 611 | 20000 | | 51011 | WORK TOUR LODGE OF CASE OF CAS | | 4 |
| 1,080 | | | | | 1,080 | | | | | 614 622 | 30200 41100 | 1,080 | EACH FT | WORK ZONE ARROW, CLASS I, 642 PAINT,(WRONG WAY) PORTABLE BARRIER, UNANCHORED | | + |
| 400 | | | | | 400 | | | | | 642 | 00400 | 400 | FT | CHANNELIZING LINE, 8", TYPE 1 | | 1 |
| 0.04 | | | | | 0.04 | | | | | 644 | 00204 | 0.04 | MILE | LANE LINE, 6" | | 1 |
| 1,734 | | | | | 1,734 | | | | | 644 | 01510 | 1,734 | FT | DOTTED LINE, 6" | |] |
| | | | | | | | | | | | | | | | | 4 |
| | | | | | | + | | 1 | - | C1.4 | 11000 | 10 | | INCIDENTALS MAINTAINING TRAFFIC | | 4 |
| | | | | + | LS 24 | + | - | + | - | 614 619 | 11000 16020 | LS 24 | MNTH | MAINTAINING TRAFFIC FIELD OFFICE, TYPE C | | + |
| | | | | + | LS | + | | + | | 623 | 10000 | LS | 14114111 | CONSTRUCTION LAYOUT STAKES AND SURVEYING | | 1 |
| | | | | 1 1 | LS | 1 | | 1 | | 624 | 10000 | LS | | MOBILIZATION | | 1_ |
| | | | | | LS | | | | | SPECIAL | 69098400 | LS | | CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION | 15 | DESI |
| | | | | | | | | 1 | | | | | | | |] [|
| | | | | | | + | - | 1 | - | | | | | ADDENDUM 2 | | 3 |
| | | | | + | | + | - | + | - | | | | | ADDENDUM 3 STRUCTURE OVER 20 FOOT SPAN (SFN 3113841) | | \dashv (|
| | | | | + | | + | | | | | | | | SEE BRIDGE ESTIMATED QUANTITIES SHEET 5 / 15 | | ┨ _ |
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HAM-SR 562-0.54

HORIZONTAL SCALE IN FEET

47 | 178

HAM-SR 562-0.54

HORIZONTAL SCALE IN FEET

INSTALL DOWEL BARS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR BLACK REBAR PUBLISHED IN THE S

562-01.

NOTES HAM-006

GENERAL

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TTK | BMG

IBD 10/5/22

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EADING

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THE HOLES FOR THE DOWEL BARS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT. PRIOR TO THE INSTALLATION OF THE ANCHORS, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

(ICC-ES REPORT ESR-3187)

DEWALT PURE110+ EPOXY ADHESIVE ANCHOR SYSTEM

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

DUE TO RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE QPL OR ELECT TO SUBSTITUTE BRIDGE COTE XL-70 W/ SILANE THAT IS LISTED ON THE APPROVED NOISE SUPPLIER LIST UNDER APPROVED SEALERS FOR NOISE BARRIERS.

APPROVEDNOISESUPPLIERSLIST.PDF(OHIO.GOV)

CONCRETE REINFORCEMENT, AS PER PLAN REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE

ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING

ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT CONCRETE REINFORCEMENT BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING STEEL REINFORCEMENT BARS WHICH ARE TO BE INCORPORATED INTO NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW CONCRETE REINFORCEMENT OF THE SAME SIZE AND COATING AND MATERIAL AT NO COST TO THE DEPARTMENT.

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS.

ICC-ES REPORTS LISTED BELOW.

WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

HILTI HIT-HY 200 ADHESIVE ANCHORS

(ICC-ES REPORT ESR-3298)

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

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

THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES REPORTS FOR ACCEPTABLE PRODUCTS ARE AVAILABLE AT: WWW.ICC-ES.ORG/EVALUATION-REPORT-PROGRAM/REPORTS-

AS PER PLAN

IF BRIDGE COTE XL-70 W/ SILANE IS CHOSEN, MEET THE REQUIREMENTS OF THE BRIDGE COTE ZL-70 W/ SILANE TECHNICAL DATA SHEET WITH THE EXCEPTION OF THE SURFACE PREPARATION THAT WILL STILL FOLLOW THE REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

EXJ-2-81 REVISED 7/15/22 EXJ-4-87 REVISED 7/15/22 GSD-1-19 REVISED 1/15/21 SBR-1-20 REVISED 7/17/20

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS

800 DATED 7/15/22 809 DATED 7/15/22 847 DATED 1/15/21

REFER TO THE FOLLOWING HIGHWAY LIGHTING STANDARD DRAWINGS.

REVISED 1/15/21 HI -20 11 HL-20.14 REVISED 4/17/20 HL-30.11 REVISED 1/15/21 REVISED 4/17/20

REFER TO THE FOLLOWING INTELLIGENT TRANSPORTATION SYSTEM STANDARD DRAWINGS

ITS-14.50 REVISED 1/21/22

DESIGN SPECIFICATIONS

PROPOSED COMPONENTS OF THIS STRUCTURE CONFORM 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.

OPERATIONAL IMPORTANCE

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

DESIGN LOADING

DESIGN LOADING INCLUDES: VEHICULAR LIVE LOAD: HS20-44 FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT

DESIGN DATA

CONCRETE CLASS QC2: COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC SCC: COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1: COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT: UNCOATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI

GFRP - CMS 705.28 (MODULUS = 8700 KSI)

STEEL H-PILES - ASTM A572: YIELD STRENGTH 50 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 YIFI D STRENGTH 50 KSI

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS, SEE ROADWAY PLANS.

PLANS OF EXISTING BRIDGE

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE FOR REFERENCE BY CONTACTING THE OHIIO DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE.

UTILITY LINES

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOVLED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. SEE ROADWAY PLANS FOR ADDITIONAL COORDINATION NOTES.

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 EXIST-ING 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.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

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THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPERATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL THE EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO 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 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.

SEE REMOVAL PLAN SHEETS 7 / 26 THRU 10 / 26 FOR ADDITIONAL DETAILS.

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

THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. THE UTILITIES ON THE PIERS (LIGHTING) SHALL BE REMOVED FOR PATCHING AND SEALING WORK, THEN REPLACED TO THE ORIGINAL LOCATION AFTER ALL PIER WORK IS COMPLETE. ALL NECESSARY LABOR AND ANY MATERIALS SHALL BE INCLUDED ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE

BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC

FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED

CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS

ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS

SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING

BOX BEAM, I-BEAM, STEEL BEAM, STEEL GIRDER, ETC.), THE

BUT NOT EXCEED 90 POUNDS UNLESS APPROVED BY THE

DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G.,

FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.)

TO THE EXISTING STRUCTURAL MEMBERS, PERFORM WORK

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

PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE

OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE

JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO

REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN

METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING

FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY

AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT

MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED

OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE

HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT

THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC

HYDRAULIC HOE-RAM TYPE HAMMERS. THE WEIGHT OF THE HAMMER

CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON

SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES

THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES

REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWELS

BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN

CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE

REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST.

MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER

STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL

DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND

ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED

ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING

OR GOUGING THE PRIMARY STRUCTURAL MEMBERS.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE

HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS.

PERFORMING REPAIR.

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

HAM-562-0.540

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

THE FOLLOWING SURFACES SHALL BE SEALED WITH EPOXY-URETHANE SEALER. THE COLOR SHALL BE FEDERAL COLOR NUMBER 17778 (LIGHT NEUTRAL). THE SURFACE TO BE SEALED SHALL HAVE SURFACE PREPARATION PER CMS 512.03 (F) INCLUDING THE REMOVAL OF ANY EXISTING COATINGS. REMOVAL OF EXISTING COATING SHALL BE PAID FOR UNDER ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES.

- 1. ALL EXPOSED SURFACES OF THE DECK OVERHANG, BRIDGE RAILING ON ABUTMENT WINGWALLS AND MEDIAN PARAPET AS SHOWN IN THE PLANS.
- 2. THE ABUTMENT BACKWALLS, BEAM SEATS AND FACE OF THE BREASTWALL TO THE GROUND LINE.
- 3. THE PIER CAP SIDES, BOTTOM, ENDS AND THE TOTAL SURFACE OF OF THE COLUMNS TO THE GROUND LINE.

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 MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN \$1078. 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 \$1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: END CROSS FRAME: L4x4x3/8" AND 1/2" GUSSET PLATE

THIS STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN THE FIELD USING SYSTEM OZEU. MATCH THE EXISTING PAINT COLOR AS CLOSE AS POSSIBLE TO THE EXISTING PAINT SYSTEM. ALL WORK, MATERIALS AND COST TO PAINT THE NEW STRUCTURAL STEEL SHALL BE INCLUDED IN THIS PAY ITEM.

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

THE CONTRACTOR SHALL FIELD VERIFY THE TOE OF THE EXISTING BARRIERS AT THE EXISTING JOINT AND PROVIDE ELEVATIONS TO THE JOINT FABRICATOR TO CONFIRM THE EXISTING DECK CROSS SLOPE AT EACH JOINT. THE CONTRACTOR SHALL ALSO FIELD VERIFY THE PLAN VIEW DIMENSIONS PRIOR TO JOINT FABRICATION. IF UPON FIELD VERIFICATION. THE DIMENSIONS VARY FROM WHAT IS SHOWN. THE JOINT SHALL MATCH THE INFORMATION FOUND IN THE FIELD. ALL LABOR, MATERIAL, AND INCIDENTALS TO FIELD VERIFY SHALL BE INCLUDED IN THE APPROPIATE PAY ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN OR ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRRESSION SEAL, AS PER PLAN.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE,

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 JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPERATION 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 SEPERATE FROM THE DECK FOR THE DISTANCE OF THE SEPERATION IN ACCORDANCE WITH C&MS 512.07.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN (CONT.)

THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A 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.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

THE QUANTITY GIVEN IN THE ESTIMATED QUANTITY TABLE HAS BEEN ESTIMATED FROM FIELD INSPECTION AND ORIGINAL PLANS. THE ACTUAL AREA OF PATCHING SHALL BE DETERMINED BY THE FIELD ENGINEER. PAYMENT SHALL BE MADE PER SQ. FT. AT THE PRICE BID FOR THE ACTUAL AREA PATCHED AND SHALL INCLUDE ALL COST FOR LABOR, MATERIALS AND EQUIPMENT.

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 STEEL REINFORCEMENT. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM BLASTING.

REMOVE THE FORMS WITHIN 24 HOURS AFTER PLACING CONCRETE AND FINISH ALL EXPOSED SURFACES BY RUBBING TO MATCH THE SURROUNDING SURFACE. APPLY MEMBRANE CURING ACCORDING TO 511.14, METHOD B, IMMEDIATELY AFTER RUBBING THE SURFACES.

AFTER CURING AND BEFORE FINAL ACCEPTANCE, SOUND ALL PATCHED AREAS. REMOVE AND REPLACE ALL UNSOUND OR VISIBLY CRACKED AREAS.

ITEM 530 - SPECIAL - FORM LINER

A FORMLINER IN ACCORDANCE WITH CMS 508.03 SHALL BE USED TO PRODUCE THE ARCHITECTURAL SURFACES ON ALL PROPOSED SBR-1-20 BRIDGE RAILING ACCORDING TO THE LIMITS SHOWN IN THE PLANS. THE FORMLINER USED TO PRODUCE THE ARCHITECTURAL SURFACE TEXTURE SHALL BE AS FOLLOWS, OR AN EQUAL FORMLINER MATERIAL APPROVED BY THE ENGINEER. THE FORMLINER SHALL HAVE A MAXIMUM RELIEF OF 1.5".

ARCHITECTURAL POLYMERS PATTERN # 204 – ARCHITECTURAL RIB RELIEF - 1.5" DEEP

CUSTOMROCK ARCHITECTURAL CONCRETE FORMLINERS PATTERN # 206 – FRACTURED FIN RELIEF - 1.43" DEEP 2" O.C.

FITZGERALD ARCHITECTURAL CONCRETE FORMLINERS: PATTERN # 16959 – WALNUT FIN RELIEF - 1.5" DEEP

SIKA ARCHITECTURAL CONCRETE FORMLINERS: PATTERN # 367 – FRACTURED RIB VA-DOT RELIEF - 1-3/8" DEEP. 2" O.C.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE FORMLINERS BY THE NUMBER OF SQUARE FEET. THE DEPARTMENT WILL DETERMINE THE AREA OF THE FORMLINER FROM NOMINAL PLAN DIMENSIONS.

ITEM 530 - SPECIAL - FORM LINER (CONT.)

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR FALSEWORK, STRUCTURAL FORMWORK, FURNISHING, PLACING, CONSOLIDATING, FINISHING AND CURING CONCRETE FOR THE BRIDGE RAILING SEPARATELY. PAYMENT FOR ITEM SPECIAL, FORMLINER INCLUDES ALL MATERIAL AND LABOR REQUIRED TO PRODUCE THE TEXTURED CONCRETE SURFACES SHOWN ON THE PLANS AND DESCRIBED HEREIN.

ITEM 625 - REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND RE-ERECTING THE EXISTING LIGHT POLE ON THE BRIDGE.

THE EXISTING LIGHT POLE ON THE BRIDGE SHALL BE CAREFULLY REMOVED AND PLACED IN STORAGE AT A LOCATION SELECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE LIGHT POLE SHALL BE REMOVED PRIOR TO STRUCTURE DEMOLITION. THE LIGHT POLE SHALL BE CLEANED AND REPAIRS NEEDED FOR THE POLE TO BE IN GOOD SERVICEABLE CONDITION MADE. THE EXISTING POLE NUMBER DECAL SHALL BE REMOVED IF IT IS IN POOR CONDITION OR THE POLE NUMBER HAS CHANGED. A POLE NUMBER DECAL SHALL B SUPPLIED AND APPLIED IF THE EXISTING DECAL IS REMOVED OR

NEW ANCHOR BOLTS SHALL BE FURNISHED AS PART OF THIS ITEM.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625. REMOVE AND RE-ERECT EXISTING LIGHT POLE, AS PER PLAN FOR EACH POLE INSTALLED AND SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS TO COMPLETE THIS ITEM IN A WORKMANLIKE MANNER.

ITEM 625 - LIGHTING MISC.: RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF DISCONNECTING, REMOVING AND RECONNECTING THE EXISTING LIGHTING CIRCUIT AS A RESULT OF THE PROPOSED BRIDGE WORK.

THE EXISTING LIGHTING CIRCUIT SHALL BE DISCONNECTED AND REMOVED AS PART OF THE CONDUIT REMOVAL SHOWN IN THE PLANS. THE CIRCUIT IS TO BE REPLACED IN KIND UTILIZING THE PROPOSED CONDUIT IN THE BRIDGE RAILING AND THE EXISTING JUNCTION BOXES RESULTING IN A FULLY RESTORED AND FUNCTIONING COMPLETE LIGHTING CIRCUIT.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHTING MISC.: RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN. THIS WORK WILL INCLUDE ALL CABLES. CONNECTIONS AND OTHER MATERIALS, HARDWARE AND LABOR TO MATCH THE EXISTING LIGHTING CIRCUIT.

ASBESTOS ABATEMENT

AN ASBESTOS SURVEY FOR SFN 3113884 SCHEDULED FOR RENOVATION WORK WAS CONDUCTED BY A LICENSED ASBESTOS HAZARD EVALUATION 5 SPA. - SPACES SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS.

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ELECTRONIC SUBMISSION:

THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

(GO TO THE OEPA EBUSINESS CENTER AND SUBMIT THE DNRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

ASBESTOS ABATEMENT (CONT.)

HARD COPY SUBMISSION:

THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING:

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ASBESTOS PROGRAM ASBESTOS PROGRAM OHIO EPA, DAPC OHIO EPA, DAPC P.O. BOX 1049 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43216-1049 COLUMBUS, OH 43215

IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO OEPA THEY ARE RESPONSIBLE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

BASIS OF PAYMENT:

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690, ITEM SPECIAL - MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS.....LUMP SUM

ABBREVIATIONS

ABUT. - ABUTMENT

ADT - AVERAGE DAILY TRAFFIC

ADTT - AVERAGE DAILY TRUCK TRAFFIC

BRG. - BEARING

BM - BENCHMARK C/C - CENTER TO CENTER

€ - CENTERLINE

CLR. - CLEAR

CMS OR C&MS- CONSTRUCTION & MATERIALS SPECIFICATIONS

CONST. - CONSTRUCTION

ø - DIAMETER

DWG. - DRAWING

E.F. - EACH FACE

EL. OR ELEV. - ELEVATION

EQ. - EQUAL

EX. - EXISTING

F.F. - FAR FACE

FWD. - FORWARD FWS - FUTURE WEARING SURFACE

LT. - LEFT

MAX. - MAXIMUM

MSC - MICRO-SILICA CONCRETE

MGS - MIDWEST GUARDRAIL SYSTEM

MIN. - MINIMUM

N.F. - NEAR FACE

O/O - OUT TO OUT

REQ'D - REQUIRED

RT. - RIGHT SER. - SERIES

SHLDR. - SHOULDER

SQ. - SQUARE

SF - SQUARE FEET

STD. - STANDARD

STA. - STATION T/T - TOE TO TOE

TYP. - TYPICAL

U.N.O. - UNLESS NOTED OTHERWISE

5/23/23 - Added Asbestos Abatement Notes

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| SFN |
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| 3113884 |
| DESIGN AGENCY |
| - |

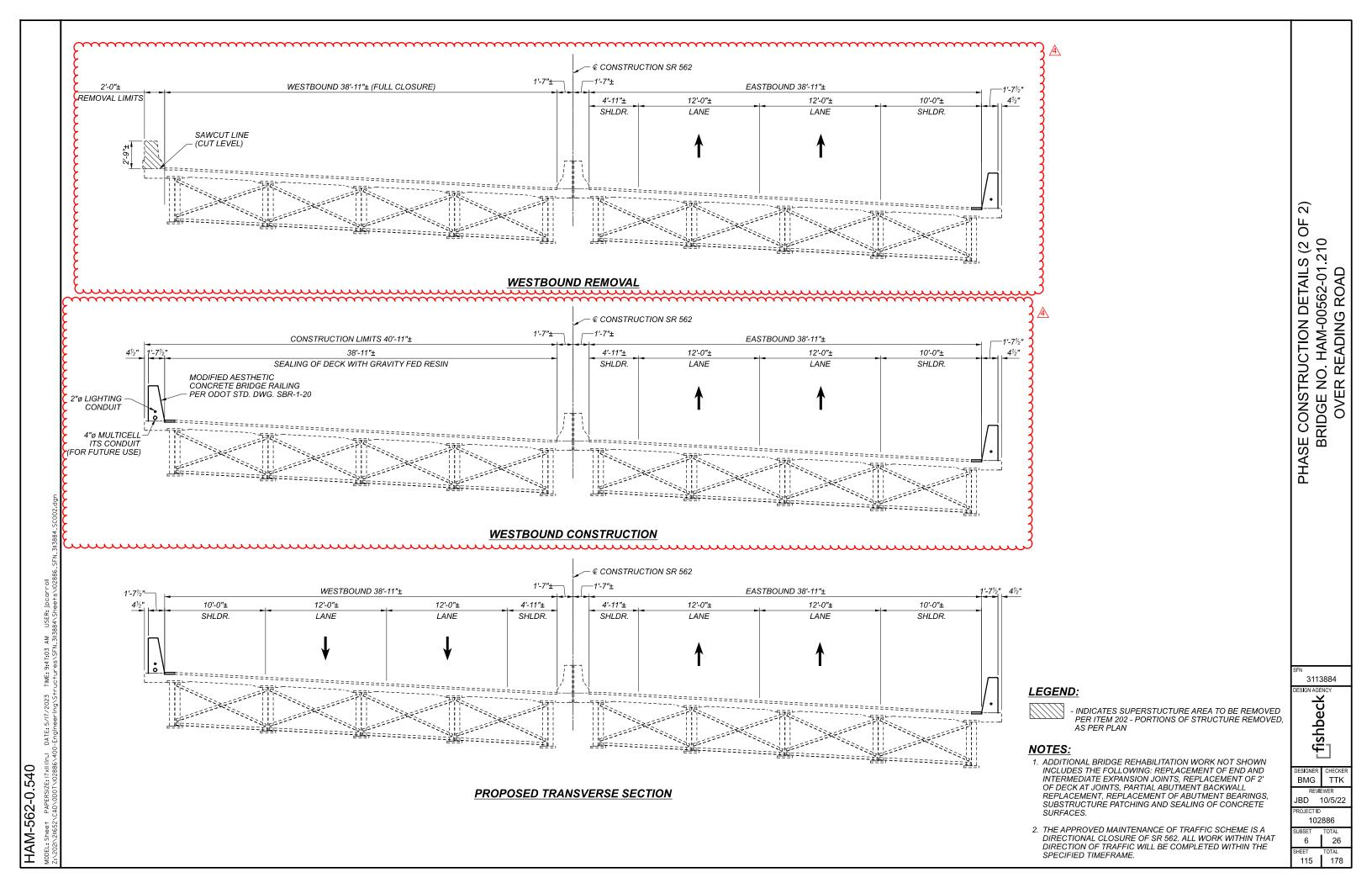
| Lfishbeck | | | | | |
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| DESIGNER | CHECKER | | | | |
| BMG | TTK | | | | |
| REVI | EWER | | | | |
| | 10/5/22 | | | | |
| PROJECT ID | | | | | |
| 102886 | | | | | |

SUBSET TOTAL
4 26

SHEET TOTAL
113 178

| M | ADE BY: BMG | DATE: | 9/6/2022 | ESTIMATED QUANTITIES | | | | | |
|----------------|-------------|--------------------|-------------------------|---|----------------|------|--------|------|-------------------------------|
| CHEC | KED BY: TLC | DATE: | 9/8/2022 | ESTIMATED QUANTITIES | | | | ST | RUCTURAL FILE NUMBER: 3113884 |
| ITEM | EXTENSION | TOTAL 02/NHS/14 | UNIT | DESCRIPTION | ABUT. | PIER | SUPER. | GEN. | REFERENCE SHEET NO. |
| 202 | 11201 | LUMP | LS | PORTIONS OF STRUCTURE REMOVED, AS PER PLAN | | | | LUMP | 2/26 |
| | | | | | | | | | |
| 509 | 25001 | 13,775 | LB | UNCOATED STEEL REINFORCEMENT, AS PER PLAN | 284 | | 13,491 | | 2/26 |
| 509 | 20001 | 400 | LB | CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN | 100 | | 300 | | 2/26 |
| 509 | 30020 | 6,149 | FT | NO. 4 DEFORMED GFRP REINFORCEMENT | | | 6,149 | | |
| | | | | | | | | | |
| 510 | 09951 | 892 | EACH | DOWEL HOLES WITH CEMENT GROUT, AS PER PLAN | 120 | | 772 | | 2/26 |
| | | | | | | | | | |
| 511 | 34410 | 31 | CY | CLASS QC2 CONCRETE, SUPERSTRUCTURE | | | 31 | | |
| 511 | 34461 | 72 | CY | CLASS QC SCC CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN | | | 72 | | 17/26 & 18/26 |
| 511 | 45710 | 13 | CY | CLASS QC1 CONCRETE, ABUTMENT | 13 | | | | |
| | | | | | | | | | |
| 512 | 10101 | 1,122 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN | 165 | 376 | 581 | | 2/26 & 3/26 |
| 512 | 73500 | 1,544 | SY | TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN | | | 1,544 | | |
| 512 | 74000 | 824 | SY | REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES | 176 | 376 | 272 | | |
| | | | | | | | | | |
| 513 | 10201 | 11,813 | LB | STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN | | | 11,813 | | 3/26 |
| 513 | 21001 | 20 | EACH | TRIMMING OF BEAM END, AS PER PLAN | | | 20 | | 9/26 |
| | | | | | | | | | |
| 516 | 10501 | 174 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN | | | 174 | | 3/26 |
| 516 | 11211 | 172 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN | | | 172 | | 3/26 |
| 516 | 44201 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING 12"x12"x3.018" AND LOAD PLATE 13"x13"x1.5") | 10 | | | | 24/26 |
| 516 | 44201 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING 12"x12"x3.151" AND LOAD PLATE 13"x13"x1.5") | 10 | | | | 23/26 |
| 516 | 47001 | LUMP | LS | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | | | | LUMP | 3/26 |
| | | | | | | | | | |
| 519 | 11101 | 20 | SF | PATCHING CONCRETE STRUCTURE, AS PER PLAN | 20 | | | | 3/26 |
| 519 | 12300 | 17 | SY | PATCHING CONCRETE BRIDGE DECK - TYPE B | | | 17 | | 25/26 |
| | | | | | | | | | |
| SPECIAL | 51913000 | 1,242 | SF | FORMLINER | | | 1,242 | | 3/26 |
| | | | | | | | | | |
| 625 | 25400 | 432 | FT | CONDUIT, 2", 725.04 | | | | 432 | |
| 625 | 29000 | 22 | FT | TRENCH | | | | 22 | |
| 625 | 29002 | 74 | FT | TRENCH, 24" DEEP | | | | 74 | |
| 625 | 29940 | 1 | EACH | BARRIER JUNCTION BOX | | | | 1 | |
| 625 | 30710 | 2 | EACH | PULL BOX, 725.08, 32" | | | | 2 | |
| 625 | 35011 | 1 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | | | | 1 | 3/26 & 19/26 |
| 625 | 39520 | 4 | EACH | PULL BOX CLEANED | | | | 4 | |
| 625 | 98200 | LUMP | LS | LIGHTING, MISC.: (RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN) | | | | LUMP | 3/26 |
| \sim | mm | \sim | \sim | | \sim | m | \sim | m | m |
| SPECIAL | 69098400 | LUMP | | MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS | | | | LUMP | 3/26 |
| uuu | www | uuu | $\overline{\mathbf{u}}$ | | min | www | www | mm | |
| 809 | 24500 | 434 | FT | CONDUIT, 4", MULTICELL, HDPE WITH 4 – 1" INNERDUCTS | | | | 434 | |
| | | | | | | | | | |
| 847 | 10000 | 40 | SY | MICRO SILICA MODIFIED CONCRETE OVERLAY (2 1/4") | | | 40 | | |
| 847 | 20000 | 1 | CY | MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY | | | 1 | | |
| 847 | 30000 | LUMP | LS | TEST SLAB | | | | LUMP | |
| 847 | 30400 | 40 | SY | EXISTING CONCRETE OVERLAY REMOVED (2 1/4") | | | 40 | | |
| 847 | 50000 | 1 | SY | HAND CHIPPING | | | 1 | | |

▲ 5/23/23 - Added Asbestos Abatement Quantity



STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

EXJ-4-87 REVISED 7/15/22 GSD-1-19 REVISED 1/15/21 SBR-1-20 REVISED 7/17/20

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

 800
 DATED
 7/15/22

 809
 DATED
 7/15/22

 848
 DATED
 1/15/21

REFER TO THE FOLLOWING HIGHWAY LIGHTING STANDARD DRAWINGS:

HL-20.11 REVISED 1/15/21 HL-20.14 REVISED 4/17/20 HL-30.11 REVISED 1/15/21 HL-30.31 REVISED 4/17/20

REFER TO THE FOLLOWING INTELLIGENT TRANSPORTATION SYSTEMS STANDARD DRAWINGS:

ITS-14.50 REVISED 1/21/22

DESIGN SPECIFICATIONS

PROPOSED COMPONENTS OF THIS STRUCTURE CONFORM 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.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO 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 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC2 & QC3: COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1:

COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT.

UNCOATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI

GFRP - C&MS 705.28 (MODULUS = 8700 KSI)

STEEL H-PILES - ASTM A572: YIELD STRENGTH 50 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 YIELD STRENGTH 50 KSI

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS, SEE ROADWAY PLANS.

PLANS OF EXISTING BRIDGE

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE FOR REFERENCE BY CONTACTING THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE.

UTILITY LINES

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. SEE ROADWAY PLANS FOR ADDITIONAL COORDINATION NOTES

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.

CONSTRUCTION CLEARANCE

MAINTAIN A CONSTRUCTION CLEARANCE OF 25 FEET HORIZONTALLY FROM THE CENTER OF THE TRACKS AND 23 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 6 FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

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 THE EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO 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 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.

SEE REMOVAL PLAN SHEETS 9 / 43 THROUGH 15 / 43 FOR ADDITIONAL DETAILS.

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 (PRESTRESSED BOX BEAM, I-BEAM, STEELBEAM, STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT 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 THE 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.

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 EXPOSEDREINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGNMATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING CONCRETE 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 PLACEPNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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

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. REPLACE ALL EXISTING STEEL REINFORCEMENT BARS WHICH ARE TO BE INCORPORATED INTO NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW CONCRETE REINFORCEMENT OF THE SAME SIZE AND COATING AND MATERIAL AT NO COST TO THE DEPARTMENT.

ITEM 509 - UNCOATED STEEL REINFORCEMENT, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR
FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS,
AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES
AND BAR SPACINGS.

ITEM 510 - DOWEL HOLES WITH CEMENT GROUT, AS PER PLAN

INSTALL DOWEL BARS ACCORDING TO THE MANUFACTURER'S
INSTALLATION INSTRUCTIONS FOR BLACK REBAR PUBLISHED IN THE
ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE DOWEL BARS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT. PRIOR TO THE INSTALLATION OF THE ANCHORS, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

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

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

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

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

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

WWW.ICC-ES.ORG/EVALUATION-REPORT-PROGRAM/REPORTS-DIRECTORY

ITEM 511 - CLASS QC3 CONCRETE, MISC: PARAPET

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE MACRO-SYNTHETIC, AND CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE

499.03, CLASS QC 3 MEETING A DESIGN STRENGTH OF 4,500 PSI, WITH MACRO-SYNTHETIC FIBERS WITH MODIFICATION PER 511.02 FIBERS FOR CONCRETE ASTM C 1116, TYPE III CORROSION INHIBITOR 515.15

THE CLASS QC3 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA: WATER/CEMENT RATIO = 0.40 MAXIMUM; MINIMUM 4 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.5 IN. MAX., MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

3113914
DESIGN AGENCY

DESIGNER CHECK
JPC TLC

| DESIGNER | CHECKER | JPC | TLC | | TLC

ASBESTOS ABATEMENT (CONT.)

(GO TO THE OEPA EBUSINESS CENTER AND SUBMIT THE DNRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

HARD COPY SUBMISSION:

THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING:

m

ASBESTOS PROGRAM ASBESTOS PROGRAM OHIO EPA, DAPC OHIO EPA, DAPC P.O. BOX 1049 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43216-1049 COLUMBUS, OH 43215

IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO OEPA THEY ARE RESPONSIBLE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

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562-01. FNUF

D. HAM-009 ROSS AVE

BRIDGE OVE

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IBD 10/5/22

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JPC

BASIS OF PAYMENT:

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690, ITEM SPECIAL - MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS.....LUMP SUM

ABBREVIATIONS

ABUT. - ABUTMENT

ADT - AVERAGE DAILY TRAFFIC

ADTT - AVERAGE DAILY TRUCK TRAFFIC BRG. - BEARING

BM - BENCHMARK

BTWN. - BETWEEN

BTA - BRIDGE TERMINAL ASSEMBLY

C/C - CENTER TO CENTER

€ - CENTERLINE

CLR. - CLEAR

CMS OR C&MS - CONSTRUCTION & MATERIALS SPECIFICATIONS

CONST. - CONSTRUCTION

ø - DIAMETER

DWG. - DRAWING

E.F. - EACH FACE

EL. OR ELEV. - ELEVATION

EQ. - EQUAL

EX. - EXISTING

F.F. - FAR FACE FWD. - FORWARD

FWS - FUTURE WEARING SURFACE

JT. - JOINT

LT. - LEFT

MAX. - MAXIMUM

MGS - MIDWEST GUARDRAIL SYSTEM

MIN. - MINIMUM

N.F. - NEAR FACE

O/O - OUT TO OUT

PEJF - PREFORMED EXPANSION JOINT FILLER

RT. - RIGHT

SER. - SERIES

SQ. - SQUARE

√ SF - SQUARE FEET STD. - STANDARD

STA. - STATION

T/T - TOE TO TOE

🕽 TYP. - TYPICAL

√ U.N.O. - UNLESS NOTED OTHERWISE

V - VELOCITY

VPI - VERTICAL POINT OF INTERSECTION

√4 5/23/23 - Added Asbestos Abatement Notes

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

THE QUANTITY GIVEN IN THE ESTIMATED QUANTITY TABLE HAS BEEN ESTIMATED FROM FIELD INSPECTION AND ORIGINAL PLANS. THE ACTUAL AREA OF PATCHING SHALL BE DETERMINED BY FIELD ENGINEER. PAYMENT SHALL BE MADE PER SQ. FT. AT THE PRICE BID FOR THE ACTUAL AREA PATCHED AND SHALL INCLUDE ALL COST FOR LABOR, MATERIALS, AND EQUIPMENT.

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 STEEL REINFORCEMENT. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER. ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM BLASTING.

REMOVE THE FORMS WITHIN 24 HOURS AFTER PLACING CONCRETE AND FINISH ALL EXPOSED SURFACES BY RUBBING TO MATCH THE SURROUNDINGS SURFACE, APPLY MEMBRANE CURING ACCORDING TO 511.14, METHOD B, IMMEDIATELY AFTER RUBBING THE SURFACES.

AFTER CURING AND BEFORE FINAL ACCEPTANCE, SOUND ALL PATCHED AREAS. REMOVE AND REPLACE ALL UNSOUND OR VISIBLY CRACKED AREAS.

ITEM 625 - REMOVE AND REERECT EXISTING LIGHT POLE,

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND RE-ERECTING THE EXISTING LIGHT POLE ON THE BRIDGE

THE EXISTING LIGHT POLE ON THE BRIDGE SHALL BE CAREFULLY REMOVED AND PLACED IN STORAGE AT A LOCATION SELECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE LIGHT POLE SHALL BE REMOVED PRIOR TO STRUCTURE DEMOLITION. THE LIGHT POLE SHALL BE CLEANED AND REPAIRS NEEDED FOR THE POLE TO BE IN GOOD SERVICEABLE CONDITION MADE. THE LIGHT HEAD SHALL BE REPLACED WITH LED ACCORDING TO THE TRAFFIC PLANS, SHEET 102, AND PAID FOR UNDER ITEM 625, REMOVAL OF LUMINAIRE AND REERECTION, AS PER PLAN. THE EXISTING POLE NUMBER DECAL SHALL BE REMOVED IF IT IS IN POOR CONDITION OR THE POLE NUMBER HAS CHANGED. A POLE NUMBER DECAL SHALL BE SUPPLIED AND APPLIED IF THE EXISTING DECAL IS REMOVED OR MISSING.

NEW ANCHOR BOLTS SHALL BE FURNISHED AS PART OF THIS ITEM.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625. REMOVE AND RE-ERECT EXISTING LIGHT POLE, AS PER PLAN FOR EACH POLE INSTALLED AND SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS TO COMPLETE THIS ITEM IN A WORKMANLIKE MANNER.

ITEM 625 - LIGHTING MISC.: RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF DISCONNECTING, REMOVING AND RECONNECTING THE EXISTING LIGHTING CIRCUIT AS A RESULT OF THE PROPOSED BRIDGE WORK

THE EXISTING LIGHTING CIRCUIT SHALL BE DISCONNECTED AND REMOVED AS PART OF THE CONDUIT REMOVAL SHOWN IN THE PLANS. THE CIRCUIT IS TO BE REPLACED IN KIND UTILIZING THE PROPOSED CONDUIT IN THE BRIDGE RAILING AND THE EXISTING JUNCTION BOXES RESULTING IN A FULLY RESTORED AND FUNCTIONING COMPLETE LIGHTING CIRCUIT.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHTING MISC.: RESTORE EXISTING LIGHTING CIRCUIT, AS PER PLAN. THIS WORK WILL INCLUDE ALL CABLES. CONNECTIONS AND OTHER MATERIALS. HARDWARE AND LABOR TO MATCH THE EXISTING LIGHTING

ITEM 625 - PULL BOX, 725.08, 32", AS PER PLAN

THE PROPOSED PULL BOX LOCATED AT STATION 79+45 SHALL BE INSTALLED AT GROUND LEVEL OUTSIDE THE BARRIER AND EXISTING RETAINING WALL. INSTALLATION SHALL BE AS SHOWN IN THE STANDARD CONSTRUCTION DRAWING ITS-14.50. ADDITIONAL 4" DIAMETER MULTICELL CONDUIT REQUIRED TO EXTEND THE CONNECTION FROM GROUND LEVEL TO THE BARRIER MOUNTED JUNCTION BOX SHALL BE SECURELY ATTACHED TO THE FACE OF THE RETAINING WALL BY MEANS OF MECHANICAL ANCHORS WITH MAXIMUM SPACING OF 2'-0". PROVIDE ADEQUATE SWEEP OF CONDUIT TO AVOID DAMAGE OF FUTURE FIBER OPTIC CABLE INSTALLATION. PAYMENT FOR ALL MATERIAL, LABOR, AND EQUIPMENT NECESSARY FOR INSTALLATION SHALL BE INCLUDED IN UNIT PRICE BID FOR ITEM 625 - PULL BOX, 725.08, 32", AS PER PLAN.

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN

THIS ITEM SHALL CONFORM TO SS 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS

THE OVERLAY MATERIAL SHALL MEET THE FOLLOWING CRITERIA: MINIMUM 4 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.25 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO "BALLING" OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY BALLING OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI. A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AN ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.5 AND 2.25 INCHES IN LENGTH. FIBERS WITH AN ASPECT RATIO GREATER THAN 60 REQUIRE A BLOWER TO INHIBIT BALLING AND MATTING OF FIBERS (ACI 544.3R-08). STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE.

USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 4.0 LBS/CY OF CONCRETE. DETERMINE THE FINAL PROPOSED DOSAGE RATE THROUGH MIX TESTING. ENSURE THE FIBER REINFORCED CONCRETE MEETS OR EXCEEDS A MINIMUM EQUIVALENT FLEXURAL STRENGTH RATIO OF 25% ACCORDING TO ASTM C 1609. MACRO-SYNTHETIC FIBERS ARE TO BE USED AS AN ADMIXTURE TO CONTROL CRACKING AND IS NOT TO BE USED TO SUPPLEMENT OR REPLACE REINFORCING STEEL IN THE DESIGN. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER.

UTILIZE A LABORATORY REGULARLY INSPECTED BY THE CEMENT AND CONCRETE REFERENCE LABORATORY (CCRL) OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, OR OTHER APPROVED REFERENCE LABORATORY, TO PERFORM THE TESTING. BEFORE USE. SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE ADMIXTURES DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS.

THE FOLLOWING PAY ITEMS HAVE BEEN ASSUMED AND SHALL ALSO INCLUDE THE MACRO-SYNTHETIC FIBERS SPECIFIED WITHIN, WHERE APPLICABLE:

-ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY

-ITEM 848 - FULL DEPTH REPAIR ITEM 848 - HAND CHIPPING

RAILROAD COORDINATION

THE CONTRACTOR SHALL NOTIFY GENESSE & WYOMING PUBLIC PROJECTS DEPARTMENT 30 DAYS PRIOR TO THE START OF CONSTRUCTION.

GENESSE & WYOMING FLAGGING SERVICES WILL BE REQUIRED FOR ALL WORK WITHIN GENESSE & WYOMING RIGHT-OF-WAY OR ANY OTHER WORK THAT HAS A "POTENTIAL TO FOUL".

THE CONTRACTOR MUST NOT USE THE RAILROAD RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE RAILROAD'S RIGHT-OF-WAY MUST REMAIN CLEAR AT ALL TIMES THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT THE RAILROAD TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF OPERATING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL TRAFFIC IS NOT DELAYED OR OTHERWISE IMPACTED DUE TO THE WORK BEING PERFORMED.

ALL WORK PERFORMED ON, ABOVE, OR ADJACENT TO THE RAILROAD PROPERTY SHALL BE IN ACCORDANCE WITH THE PUBLIC PROJECT MANUAL, CURRENT EDITION, WORK PLANS SHALL BE SUBMITTED FOR REVIEW TO THE RAILROAD FOR TASKS RELATED TO SITE ACCESS, SOIL AND WATER MANAGEMENT, BALLAST PROTECTION, EXCAVATION, HOISTING, DEMOLITION SHIELD, SEALING CONTAINMENT, JACKING, CLEARING AND GRUBBING, DECK OVERLAY REMOVAL, AND ALL OTHER WORK THAT POTENTIALLY AFFECTS RAILROAD PROPERTY OR OPERATIONS. ALL WORK PLANS SHALL BE PREPARED AND SUBMITTED TO THE RAILROAD IN ADHERENCE WITH THE PUBLIC PROJECT MANUAL, SECTION 1.11 CONSTRUCTION SUBMISSION CRITERIA.

THE CONTRACTOR WILL BE REQUIRED TO REACH OUT TO GENESSE & WYOMING REAL ESTATE FOR A RIGHT OF ENTRY APPLICATION AND AGREEMENT FOR WORK TO TAKE PLACE ON THE GENESSE & WYOMING RIGHT-OF-WAY. THE WEBSITE FOR RIGHT OF ENTRY INFORMATION IS AS FOLLOWS: HTTPS://WWWW.GWRR/COM/REAL-ESTATE/ACCESSING -PROPERTY

THE CONTRACTOR AND THE AGENCY MUST PROVIDE INSURANCE TO THE RAILROAD AS THIS WILL BE DETERMINED AT THIS LOCATION BASED ON THE SCOPE OF IMPACT PER SECTION 1.06 OF THE PUBLIC PROJECT

ASBESTOS ABATEMENT

AN ASBESTOS SURVEY FOR SFN 3113914 SCHEDULED FOR RENOVATION SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE

ELECTRONIC SUBMISSION:

THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT

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HAM-562-0.540



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| TLC | BMV | | | | | |
| REVI | EWER | | | | | |
| JBD ⁻ | 10/5/22 | | | | | |
| PROJECT ID | | | | | | |
| 102 | 886 | | | | | |
| SUBSET | TOTAL | | | | | |
| 6 | 43 | | | | | |
| SHEET | TOTAL | | | | | |
| 141 | 178 | | | | | |

| | MADE BY: TLC CKED BY: JPC | DATE: 9 DATE: 9 | 9/23/2022 9/29/2022 | ESTIMATED QUANTITIES | | | | s | TRUCTURAL FILE NUMBER: 311391 |
|------------|------------------------------|--------------------|------------------------|---|------------|--------|----------------|---------|-------------------------------|
| ITEM | EXTENSION | TOTAL 03/NHS/14 | UNIT | DESCRIPTION | ABUT. | PIER | SUPER. | GEN. | REFERENCE SHEET NO. |
| 202 | 11201 | LUMP | LS | PORTIONS OF STRUCTURE REMOVED, AS PER PLAN | | | | LUMP | 3/43 |
| 202 | 30700 | 130 | FT | CONCRETE BARRIER REMOVED | | | | 130 | |
| 500 | 05004 | 00.004 | | UNIQUATED OFFICIACIONE AND ADDED DUAN | 045 | | 07.004 | | 0/40 |
| 509 509 | 25001 20001 | 68,201 600 | LB LB | UNCOATED STEEL REINFORCEMENT, AS PER PLAN CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN | 315 100 | | 67,021 500 | | 3/43 3/43 |
| 509 | 30020 | 42,748 | FT | NO. 4 DEFORMED GFRP REINFORCEMENT | 100 | | 42,748 | | |
| 309 | 30020 | 72,770 | | NO. 7 DET ONNIED OF NEITH ONCEMENT | | | 72,770 | | |
| 510 | 09951 | 6,154 | EACH | DOWEL HOLES WITH CEMENT GROUT, AS PER PLAN | 62 | | 5,984 | | 3/43 |
| 510 | 10000 | 4 | EACH | DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT | 4 | | | | |
| | | | | | | | | | |
| 511 | 34410 | 27 | CY | CLASS QC2 CONCRETE, SUPERSTRUCTURE | | | 27 | | |
| 511 | 45710 | 14 | CY | CLASS QC1 CONCRETE, ABUTMENT | | | 426 | | |
| 511 | 53012 | 15 | CY | CLASS QC2 CONCRETE, MISC.: (CONCRETE BARRIER) | 14 | | 45 | | 0/40.0.4/40 |
| 511 | 53041 | 426 | CY | CLASS QC3 CONCRETE, MISC.: PARAPET | | | 15 | | 3/43 & 4/43 |
| 512 | 10101 | 4.082 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN | 220 | 730 | 3.132 | | 4/43 |
| 512 | 10101 | 7,002 | 01 | OLINEITO OF CONTONETE CONTINUED EL ONT-CINETTINIED, NOT ENTENIE | 220 | 730 | 5,152 | | 7/70 |
| 513 | 10201 | 13.250 | LB | STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN | | | 13,250 | | 4/43 |
| 513 | 21001 | 12 | EACH | TRIMMING OF BEAM END, AS PER PLAN | | | 12 | | 11/43 |
| 513 | 95020 | LUMP | LS | STRUCTURAL STEEL, MISC.: (PIER CAP REPAIRS) | | LUMP | | | 4/43 |
| | | | | | | | | | |
| 516 | 11211 | 401 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN | | | 401 | | 4/43 |
| 516 | 13600 | 16 | SF | 1" PREFORMED EXPANSION JOINT FILLER | 9 | | 7 | | |
| 516 | 44201 | 11 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING 3.607" x 14" x 11" AND LOAD PLATE 1 1/2" x 15" x 12") | 11 | | | | 37/43 |
| 516 | 44201 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING 4.087" x 14" x 12 1/2" AND LOAD PLATE 1" x 15" x 13 1/2") | 10 | | 111140 | | 37/43 |
| 516 | 47001 | LUMP | LS | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | | | LUMP | | 4/43 |
| 518 | 63300 | LUMP | LS | STRUCTURE DRAINAGE, MISC.: (CLEAN & REPAIR EXISTING BRIDGE DRAINAGE SYSTEM) | | | LUMP | | 4/43 |
| 376 | 03300 | LOWF | LO | STRUCTURE DRAINVAGE, MISC (CLEAN & REPAIR EXISTING BRIDGE DRAINVAGE STSTEM) | | | LOWF | | |
| SPECIAL | 51900100 | 68 | SF | COMPOSITE FIBER WRAP SYSTEM | | 68 | | | 18/43 |
| 519 | 11101 | 296 | SF | PATCHING CONCRETE STRUCTURE. AS PER PLAN | 110 | 186 | | | 5/43 |
| SPECIAL | 51912610 | 22 | FT | CONCRETE REPAIR BY EPOXY INJECTION INCLUDING SURFACE PREPARATION | 18 | 4 | | | 16/43 & 18/43 |
| | | | | | | | | | |
| SPECIAL | 53000600 | 6,377 | SF | STRUCTURES (TIMBER SUBDECK) | | | | 6,377 | 8/43 |
| | | | | | | | | | |
| 601 | 34300 | 6 | CY | ROCK CHANNEL PROTECTION, TYPE D WITHOUT FILTER | | | | 6 | |
| 000 | 10100 | 44 | СТ | COMODETE DARRIED CHICAGO COPE TARE D | | | | 44 | |
| 622 622 | 10160 25000 | 2 | FT EACH | CONCRETE BARRIER, SINGLE SLOPE, TYPE D CONCRETE BARRIER END SECTION. TYPE D | | | | 2 | |
| 022 | 25000 | 2 | EAUT | CONCRETE BARRIER EIND SECTION, TIPE D | | | | 2 | |
| 625 | 25400 | 3.001 | FT | CONDUIT, 2", 725.04 | | | | 3.001 | |
| 625 | 29000 | 12 | FT | TRENCH | | | | 12 | |
| 625 | 29002 | 129 | FT | TRENCH, 24" DEEP | | | | 129 | - |
| 625 | 29940 | 14 | EACH | BARRIER JUNCTION BOX | | | | 14 | |
| 625 | 30711 | 2 | EACH | PULL BOX, 725.08, 32", AS PER PLAN | | | | 2 | 5/43 |
| 625 | 35011 | 11 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | | | | 11 | 5/43 & 34/43 |
| 625 | 39520 | 3 | EACH | PULL BOX CLEANED | | | | 3 | |
| 625 | 98200 | LUMP | LS | LIGHTING, MISC.: (RESTORE EXISTING LIGHTING CIRCUIT) | | | <u> </u> | LUMP | 5/43 |
| SPECIAL | 69098400 | LUMP | \sim | MICC - WORK INVOLVINIC ACCECTOR CONTAINING MATERIALS | m | \sim | \overline{m} | LUMP | 5/43 |
| SPECIAL | | | | MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS | ***** | | | | |
| 809 | 24500 | 1,409 | FT | CONDUIT. 4". MULTICELL, HDPE WITH 4 – 1" INNERDUCTS | | | | 1.409 | |
| | 2,000 | ., 100 | | | | | | .,,,,,, | |
| 848 | 10201 | 12,332 | SY | SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 3/4" THICK) | | | 12,332 | | 5/43 & 26/43 |
| 848 | 20000 | 12,332 | SY | SURFACE PREPARATION USING HYDRODEMOLITION | | | 12,332 | | |
| 848 | 30200 | 14 | CY | SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY | | | 14 | | |
| 848 | 50000 | 245 | SY | HAND CHIPPING | | | 245 | | |
| 848 | 50100 | LUMP | LS | TEST SLAB | | | | LUMP | |
| 848 | 50200 | 2 | CY | FULL-DEPTH REPAIR | | | 2 | | |
| 848 | 50320 | 12,228 | SY | EXISTING CONCRETE OVERLAY REMOVED (2 1/4" NOMINAL THICKNESS) | | 1 | 12,228 | | |

€ CONSTRUCTION SR 562

HAM-562-0.540





JPC BMV JBD 10/5/22 102886 8 43

143 | 178

INDICATES EXISTING BRIDGE RAILING TO BE REMOVED AS PER ITEM 202 - BRIDGE RAILING REMOVED, AS PER PLAN.

LEGEND:

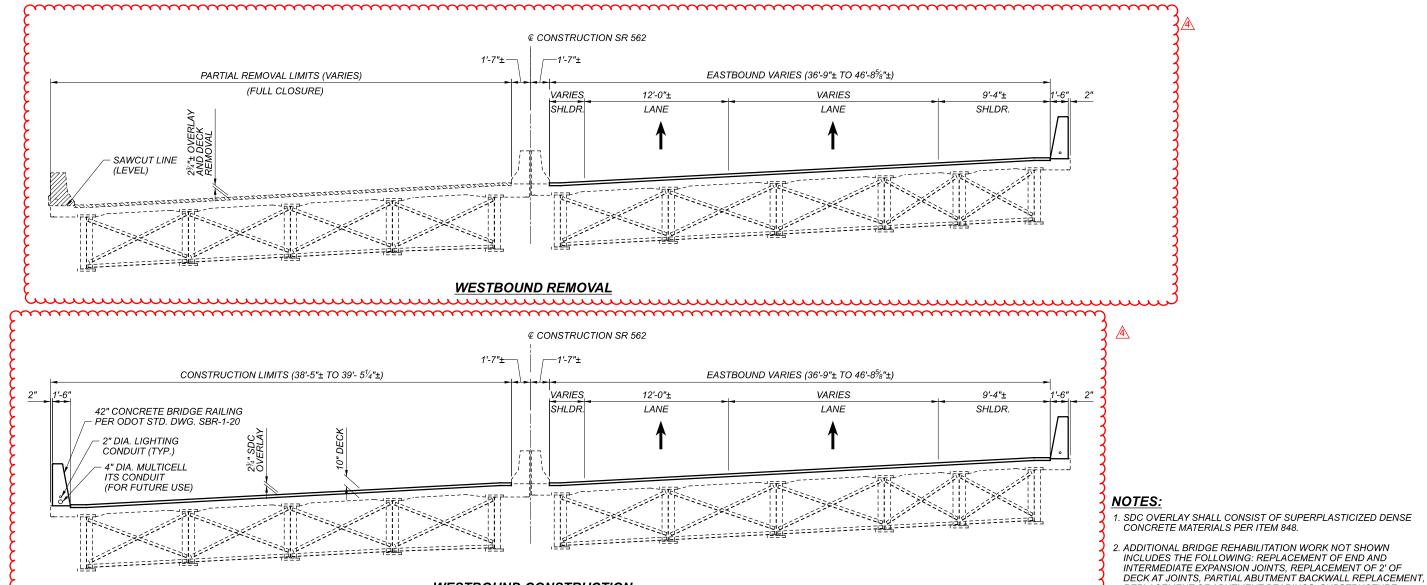
- INDICATES EXISTING CONCRETE OVERLAY AND DECK REMOVAL AREA AS PER ITEM 848 - CONCRETE REMOVAL BY HYDRODEMOLITION.

REPLACEMENT OF ABUTMENT BEARINGS, SUBSTRUCTURE PATCHING AND WRAPPING WITH FRP. REPAIR OF MEDIAN BARRIER IN THE EASTBOUND DIRECTION, REPLACEMENT OF WESTBOUND APPROACH CONCRETE RAILING, AND REPAIR

3. THE APPROVED MAINTENANCE OF TRAFFIC SCHEME IS A DIRECTIONAL CLOSURE OF SR 562. ALL WORK WITHIN THAT DIRECTION OF TRAFFIC WILL BE COMPLETED WITHIN THE

OF THE BRIDGE DRAINAGE SYSTEM.

SPECIFIED TIMEFRAME.



WESTBOUND CONSTRUCTION

€ CONSTRUCTION SR 562 WESTBOUND VARIES (36'-9"± TO 37'-91/4"±) EASTBOUND VARIES (36'-9"± TO 46'-85/8"±) 9'-4"± 12'-0"± **VARIES** VARIES 12'-0"± **VARIES** 9'-4"± SHLDR. LANE LANE SHLDR SHLDR LANE LANE SHLDR.

PROPOSED TRANSVERSE SECTION

HAM-562-0.540

BM #1 STA. 37+36.13, ELEV. 587.529, OFFSET 176.673' LT BM #2 STA. 37+56.50, ELEV. 574.164, OFFSET 101.099' RT HORIZONTAL SCALE IN FEET 0 20

GENERAL PLAN HAM-00562-00.650 OVER PADDOCK ROAD

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS STEEL BEAMS WITH NON-COMPOSITE
REINFORCED CONCRETE DECK AND REINFORCED CONCRETE
SUBSTRUCTURE

JODSTROCTOR

SPANS: 55'-0", 85'-0", 55'-0" ROADWAY: 2 X 39'-4" TOE/TOE OF PARAPETS

LOADING: HS20-44 CASE II AND ALTERNATE MILITARY LOADING

SKEW: VARIE

HAM-SR 562-0.54 ADDENDUM

WEARING SURFACE: 1¹/₄" LATEX MODIFIED CONCRETE OVERLAY

APPROACH SLABS: AS-1-81, 20'-0" LONG
ALIGNMENT: 2°30'00" CURVE RIGHT
SUPERELEVATION: 0.041 FT/FT
STRUCTURE FILE NUMBER: 3113841
DATE BUILT: 1957 DATE WIDENED: 1985

DISPOSITION: TO BE REHABILITATED

NOTES

- 1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
- 2. DIMENSIONS ARE PER EXISTING PLANS AND SURVEY DATA.
- 3. FOR ADDITIONAL PROPOSED ROADWAY WORK REFER TO THE ROADWAY PLANS.

DESIGN TRAFFIC:

2024 ADT = 66,500 2024 ADTT = 6,650 2036 ADT = 77,000 2036 ADTT = 7,700 DIRECTIONAL DISTRIBUTION = 51%

PROPOSED WORK

- 1. REMOVE AND REPLACE EXISTING END STRIP SEAL EXPANSION JOINTS. REPLACE END CROSS FRAMES AND DIAPHRAGMS.
- 2. REPLACE TOP OF BACKWALL DOWN TO THE APPROACH SLAB SEAT, 2' OF THE EXISTING REINFORCED CONCRETE DECK AT EACH JOINT.
- 3. REPLACE EXISTING ROCKER BEARINGS AT EACH ABUTMENT WITH ELASTOMERIC BEARING ASSEMBLIES.
- 4. PATCH EXISTING CONCRETE SUBSTRUCTURE UNITS.
- 5. REPAIR IDENTIFIED AREAS OF APPROACH SLABS AND DECK, SEAL ENTIRE DECK WITH GRAVITY FED RESIN.
- 6. PAINTING STRUCTURAL STEEL
- 7. SEAL IDENTIFIED AREAS OF THE SUPERSTRUCTURE AND SUBSTRUCTURE WITH EPOXY URETHANE SEALER.



GENERAL NOTES:

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

DATED/REVISED 01-19-18 FXI-4-87 DATED/REVISED 01-15-21 GSD-1-19

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

55800 **REVISED** 01-21-22

<u>DESIGN SPECIFICATIONS:</u>
THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION FOR STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

<u>OPERATIONAL IMPORTANCE</u>
A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING: HS20-44 (SUPERSTRUCTURE) FUTURE WEARING SURFACE (FWS) 0.060 KSF

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 - GRADE 60, MINIMUM YIELD STRENGTH 60 KSI

EXIST. STRUCTURAL STEEL - ASTM A36

MINIMUM YIELD STRENGTH 36 KSI

<u>DECK PROTECTION METHOD:</u> EPOXY COATED REINFORCING STEEL

2-1/2 INCH CONCRETE COVER

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SEALING DECK WITH GRAVITY FED RESIN

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.

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MÁNNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS WORK SHALL INCLUDE 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 PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES.

THE CONTRACTOR MUST REVIEW THE STRUCTURE WHEN PREPARING HIS BID. THE CONTRACTOR WILL REVIEW THE CONDITION OF THE STRUCTURE TO DETERMINE WHAT DEBRIS WILL FALL FROM THE STRUCTURE DURING REMOVAL. THE CONTRACTOR WILL DETERMINE THE CORRESPONDING COST TO CLEAN-UP ANY AND ALL DEBRIS WHICH FALLS FROM THE STRUCTURE DURING ANY REMOVAL OPERATION. THE COST TO CLEAR AND CLEAN-UP ALL DEBRIS DURING REMOVAL SHALL BE INCLUDED WITH THE BID FOR THIS ITEM OF WORK. NO ADDITIONAL COST WILL BE RECOGNIZED TO CLEAN DEBRIS RESULTING FROM THE STRUCTURE REMOVAL OPERATION.

PERFORM WORK CAREFULLY DURING REMOVAL OPERATIONS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. IN THIS RESPECT, THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE, OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF THE 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 DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND 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 DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

DECK CONCRETE REMOVAL:

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 (PRESTRESSED BOX BEAM, I-BEAM, 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 DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

SUBSTRUCTURE CONCRETE REMOVAL:

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. 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 REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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.

NO PART OF THE STRUCTURE SHALL BE SUBJECTED TO UNIT STRESSES THAT EXCEED 136.5% OF ALLOWABLE UNIT STRESSES AS DEFINED IN THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DUE EITHER TO DEMOLITION, ERECTION, OR CONSTRUCTION METHODS, OR TO THE USE OR MOVEMENT OF DEMOLITION OR ERECTION EQUIPMENT ON OR ACROSS THE STRUCTURE. SUBMIT STRUCTURAL ANALYSIS COMPUTATIONS, BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, SHOWING THE ALLOWABLE STRESSES AND THE MAXIMUM STRESSES PRODUCED BY THE REMOVAL METHODS OR EQUIPMENT TO THE DIRECTOR AT LEAST 20 DAYS BEFORE CONSTRUCTION BEGINS.

CUT LINE CONSTRUCTION JOINT PREPARATION

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, 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 REINFORCING STEEL 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

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, AS PER PLAN

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 REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW CONCRETE REINFORCEMENT OF THE SAME SIZE AND COATING AND MATERIAL AT NO COST TO THE DEPARTMENT.

<u>ITEM 509 - UNCOATED STEEL REINFORCEMENT, AS PER PLAN</u> IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLAN, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS.

<u>ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE),</u> <u>AS PER PLAN</u> THE FOLLOWING SURFACES SHALL BE SEALED WITH EPOXY-URETHANE

SEALER. THE COLOR SHALL BE FEDERAL COLOR NUMBER 17778 (LIGHT NEUTRAL). THE SURFACE TO BE SEALED SHALL HAVE SURFACE PREPARATION PER CMS 512.03 (F) INCLUDING THE REMOVAL OF ANY EXISTING COATINGS. REMOVAL OF EXISTING COATING SHALL BE PAID FOR UNDER ITEM 512 - REMOVAL OF EXISTING COATINGS FROM

- 1. ALL EXPOSED SURFACES OF THE DECK OVERHANG, BRIDGE RAILING ON ABUTMENT WINGWALLS AND MEDIAN PARAPET AS SHOWN IN THE PLANS.
- 2. THE ABUTMENT BACKWALLS, BEAM SEATS AND FACE OF THE BREASTWALL TO THE GROUND LINE.
 3. THE PIER CAP SIDES, BOTTOM, ENDS AND THE TOTAL SURFACE OF
- THE COLUMNS TO THE GROUND LINE.

DUE TO THE RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE QPL OR ELECT TO SUBSTITUTE BRIDGE COTE XL-70 W/SILANE THAT IS LISTED ON THE APPROVED NOISE SUPPLIER LIST UNDER APPROVED SEALERS FOR NOISE BARRIERS. APPROVEDNOISESUPPLIERSLIST.PDF (OHIO.GOV)

IF BRIDGE COTE XL-70 W/SILANE IS CHOSEN, MEET THE REQUIREMENTS OF THE BRIDGE COTE XL-70 W/SILANE TECHNICAL DATA SHEET WITH THE EXCEPTION OF THE SURFACE PREPARATION THAT WILL STILL FOLLOW THE REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE

REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATE MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER

<u> ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN</u>

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: END CROSS FRAME: $L4x4x^{3/8}$ " AND $\frac{1}{2}$ " GUSSET PLATE

THIS STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN THE FIELD USING SYSTEM OZEU. MATCH THE EXISTING PAINT COLORS AS CLOSE AS POSSIBLE TO THE EXISTING PAINT SYSTEM. ALL WORK, MATERIALS AND COST TO PAINT THE NEW STRUCTURAL STEEL SHALL BE INCLUDED IN THIS PAY ITEM.

<u> ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE,</u>

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING EXECUTION 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 THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT 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 A 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

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING
ELASTOMERIC STRIP SEAL, AS PER PLAN
THE CONTRACTOR SHALL FIELD VERIFY THE TOE OF THE EXISTING
BARRIERS AT THE EXISTING JOINT AND PROVIDE ELEVATIONS TO THE JOINT FABRICATOR TO CONFIRM THE EXISTING DECK CROSS SLOPE AT EACH JOINT. THE CONTRACTOR SHALL ALSO FIELD VERIFY THE PLAN VIEW DIMENSIONS PRIOR TO JOINT FABRICATION. IF UPON FIELD VERIFICATION, THE DIMENSIONS VARY FROM WHAT IS SHOWN, THE JOINT SHALL MATCH THE INFORMATION FOUND IN THE FIELD.
ALL LABOR, MATERIAL, AND INCIDENTALS TO FIELD VERIFY SHALL BE
INCLUDED IN THE APPROPRIATE PAY ITEM 516, STRUCTURAL EXPANSION
JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.

<u>ITEM 514 - FIELD PAINTING STRUCTURAL STEEL</u>
PAINT ALL STRUCTURAL STEEL WITH SYSTEM OZEU PER CMS 708.02. THE FINISH COAT SHALL BE FEDERAL COLOR FS595C 14223 (GREEN).

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: THE QUANTITY GIVEN IN THE ESTIMATED QUANTITY TABLE HAS BEEN ESTIMATED FROM FIELD INSPECTION AND ORIGINAL PLANS. THE ACTUAL AREA OF PATCHING SHALL BE DETERMINED BY THE FIELD ENGINEER. PAYMENT SHALL BE MADE PER SQ. FT. AT THE PRICE BID FOR THE ACTUAL AREA PATCHED AND SHALL INCLUDE ALL COST FOR LABOR, MATERIALS AND EQUIPMENT.

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 WTIH CONTAINMENT, OR VACUUM BLASTING.

REMOVE THE FORMS WITHIN 24 HOURS AFTER PLACING CONCRETE AND FINISH ALL EXPOSED SURFACES BY RUBBING TO MATCH THE SURROUNDING SURFACE. APPLY MEMBERANE CURING ACCORDING TO 511.17, METHOD B, IMMEDIATELY AFTER RUBBING THE SURFACES.

AFTER CURING AND BEFORE FINAL ACCEPTANCE, SOUND ALL PATCHED AREAS. REMOVE AND REPLACE ALL UNSOUND OR VISIBLY CRACKED AREAS.



ORC 11/21/22

102886

DRC

3113841

5/23/23 - Removed Asbestos Test from Structure Removal Note

GENERAL NOTES (CONT.):

ITEM 625 - REMOVE AND RE-ERECT EXISTING LIGHT POLE,

THIS ITEM WILL INCLUDE DISCONNECTING EXISTING POWER SERVICE FROM LIGHTS, REMOVAL AND STORAGE OF EXISTING POLES AND LUMINAIRES, RE-ERECTING POLES AND LUMINAIRES, CONNECTION TO EXISTING STRUCTURE GROUNDING SYSTEM AND RECONNECTION OF POWER SERVICE.

POWER LINE WORK SHALL BE COORDINATED WITH DUKE ENERGY.

ANCHORS INSTALLED IN PILASTERS SHALL BE DONE IN ACCORDANCE WITH SCD HL-20.14 WITH BOLT SIZE AND PATTERN

PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REMOVE AND RE-ERECT POLES SHALL BE INCLUDED IN THE PER UNIT PRICE FOR ITEM 625 - REMOVE AND RE-ERECT EXISTING LIGHT POLES, AS PER PLAN.

<u>ITEM 519 - SPECIAL - CONCRETE REPAIR BY EPOXY INJECTION</u> <u>INCLUDING SURFACE PREPARATION</u>

THE QUANTITY GIVEN IN THE ESTIMATED QUANTITY TABLE HAS BEEN ESTIMATED FROM FIELD INSPECTIONS. THE ACTUAL QUANTITY OF CRACK REPAIRS SHALL BE DETERMINED BE THE

ANTICIPATED CRACK REPAIR LOCATIONS INCLUDE REAR ABUTMENT STEM AND BACKWALL IN BAYS 2, 3, 4 AND 7, AND FORWARD ABUTMENT STEM AT THE WIDENING JOINT.

PAYMENT SHALL BE MADE PER LINEAR FOOT AT THE PRICE BID FOR THE ACTUAL QUANTITY REPAIRED AND SHALL INCLUDE ALL COST FOR LABOR, MATERIALS AND EQUIPMENT.

ASBESTOS ABATEMENT

AN ASBESTOS SURVEY FOR SFN 3113841 SCHEDULED FOR RENOVATION WORK WAS CONDUCTED BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING

ELECTRONIC SUBMISSION:

THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION THE THE DISTRICT EVIRONMENTAL STAFF AND ON HARD COPY TO THE PROJECT ENGINEER.

(GO TO THE OEPA EBUSINESS CENTER AND SUBMIT THE DNRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

HARD COPY SUBMISSION

THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING

ASBESTOS PROGRAM OHIO FPA DAPC P.O. BOX 1049

COLUMBUS, OHIO 43216-1049

OR ASBESTOS PROGRAM OHIO FPA DAPC 50 W. TOWN ST., SUITE 7002

COLUMBUS, OHIO 43215

IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO OEPA THEY ARE RESPONSIBILE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT EVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

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690, ITEM SPECIAL - MISC. : WORK INVOLVING ASBESTOS CONTAINING MATERIALS

APPROX. - APPROXIMATELY

BOTT - BOTTOM BRG. - BFARING

BTW. - BETWEEN C.I.P. - CAST-IN-PLACE

C.J. - CONSTRUCTION JOINT

C/C - CENTER TO CENTER

CLR. - CLEARANCE

CONSTR. - CONSTRUCTION DIA. - DIAMETER

DWG. - DRAWING

E.B. - EASTBOUND

E.F. - EACH FACE EA. - EACH

EL. OR ELEV. - ELEVATION EMB. - EMBEDMENT

EQ. - EQUAL EX. - EXISTING

EXIST. - EXISTING

EXP. - EXPANSION

F.A. - FORWARD ABUTMENT

F.F. - FAR FACE

JT. - JOINT M.S.C. - MICROSILICA MODIFIED CONCRETE

MAX. - MAXIMUM MID. - MIDDLE

MIN. - MINIMUM

N.F. - NEAR FACE

N.P.C.P.P. - NON-PERFORATED CORRUGATED

PLASTIC PIPE NO. - NUMBER

P.C.P.P. - PERFORATED CORRUGATED

PLASTIC PIPE

P.E.J.F. - PREFORMED EXPANSION JOINT FILLER

PCB - PORTABLE CONCRETE BARRIER

R.A. - REAR ABUTMENT REQ'D. - REQUIRED

SPA. - SPACE(D) OR SPACING

SQ. - SQUARE

STA. - STATION

STD. DWG. OR SCD - STANDARD CONSTRUCTION DRAWING

STR. - STRAIGHT

T&B - TOP AND BOTTOM

T.B.D. - TO BE DETERMINED

TEMP - TEMPORARY

TYP.L - TYPICAL

U.N.O. - UNLESS NOTED OTHERWISE

W.B. - WESTBOUND

GENERAL NOTES (2 OF 2) HAM-00562-00.650 OVER PADDOCK ROAD $\overline{2}$

3113841 CRAWFORD, MURPHY & TILLY, INC.
TILLY, INC.
SPRINGEDOUE WARD
SPRINGEDONE ONLE WARD
WWW, CRIBINGED CO. MNM DRC DRC 11/21/22 102886

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|-------|--|------------|-------|---|---------------------------------------|---|---|---|---------|--------------|
| ITEM | EXT. | TOTAL | UNIT | DESCRIPTION | | MENTS | - PIERS | SUPER. | GENERAL | REF. SHEET |
| // LW | LX1. | 02/NHS/BR | ONIT | DESCRIPTION | REAR | FWD. | | | GENERAL | KET . STILLT |
| 202 | 11201 | LUMP | LS | PORTIONS OF STRUCTURE REMOVED. AS PER PLAN | | | | 1 | LUMP | 2/14 |
| 202 | 11201 | LOWI | | TOKTIONS OF STRUCTURE REMOVED, AST EXTERN | | | | | LOWI | 2/14 |
| 509 | 25001 | 2.593 | LB | UNCOATED STEEL REINFORCEMENT, AS PER PLAN | 96 | 97 | 1 | 2400 | | 2/14 |
| 509 | 20001 | 400 | LB | CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN | 100 | 100 | | 200 | | 2/14 |
| | | | | | | | | | | |
| 511 | 34410 | 10 | CY | CLASS QC2 CONCRETE, SUPERSTRUCTURE | | | | 10 | | |
| 511 | 34448 | 4 | CY | CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET) | | | | 4 | | |
| 511 | 45710 | 12 | CY | CLASS QC1 CONCRETE, ABUTMENT | 6 | 6 | | 1 | | |
| | | | | | | | | | | |
| 512 | 10101 | 897 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN | 58 | 58 | | 781 | | 2/14 |
| 512 | 73500 | 1,883 | SY | TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN | | | | 1883 | | |
| 512 | 74000 | 897 | SY | REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES | 58 | 58 | | 781 | | |
| | | | | | | | | | | |
| 513 | 10201 | 6,980 | LB | STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN | | | | 6980 | | 2/14 |
| | | | | | | | | | | |
| 514 | 00050 | 25,574 | SF | SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL | | | | 25574 | | |
| 514 | 00056 | 26,803 | SF | FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT | | | | 26803 | | |
| 514 | 00060 | 26,803 | SF | FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT | | | | 26803 | | |
| 514 | 00066 | 26,803 | SF | FIELD PAINTING STRUCTURAL STEEL, FINISH COAT | | | | 26803 | | |
| | | | | | | | | | | |
| 514 | 00504 | 40 | MNHR | GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL | | | | 40 | | |
| 514 | 10000 | 23 | EACH | FINAL INSPECTION REPAIR | | | | 23 | | |
| | 11011 | 470 | | OTRUCTURAL EVRANCION JOHNT WOULDING ELACTOMERIO OTRUROFAL AO RED RIAM | | | | 170 | | 0.444 |
| 516 | 11211 | 170 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN | 40 | 40 | 1 | 170 | | 3/14 |
| 516 | 44201 | 24 LUMP | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING 13"x12"x3.128", LOAD PLATE 14"x13"x1.5) JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN | 12 | 12 | - | | LUMP | 11 / 14 |
| 516 | 47001 | LUMP | LS | JACKING AND TEMPORART SUPPORT OF SUPERSTRUCTURE, AS PER PLAIN | | | | + | LUMP | 2/14 |
| 519 | 11101 | 6 | SF | PATCHING CONCRETE STRUCTURE. AS PER PLAN | | | 6 | + | | 3/14 |
| 519 | 12300 | 9 | SY | PATCHING CONCRETE BRIDGE DECK - TYPE B | | | 0 | + | q | 3714 |
| 519 | 12610 | 20 | FT | SPECIAL - CONCRETE REPAIR BY EPOXY INJECTION INCLUDING SURFACE PREPARATION | 10 | 10 | + | 1 | - | 3/14 |
| 010 | 12010 | 20 | '' | OF EATHER OF CHARLES IN THE CONTINUE OF THE CONTINUE OF THE CHARLES | 10 | 10 | 1 | 1 | | 37.17 |
| 625 | 35011 | 1 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | + | | + | + | 1 | 3/14 |
| 020 | 00011 | , | LAGIT | TALINOVE AND RELICEOF EXISTING EIGHT FOLE, AST EXTERN | | | *************************************** | | | 37 14 |
| 690 | 98400 | LUMP | LS | SPECIAL - MISC.: WORK INVOLVING ASBESTOS CONTAING MATERIALS | , , , , , , , , , , , , , , , , , , , | *************************************** | *************************************** | *************************************** | LUMP | 3/14 |
| | I | LOWI | 1 | of Lorine - Wilde. Work involving Appear to Convining Wartenance | | | | | LOWII | |