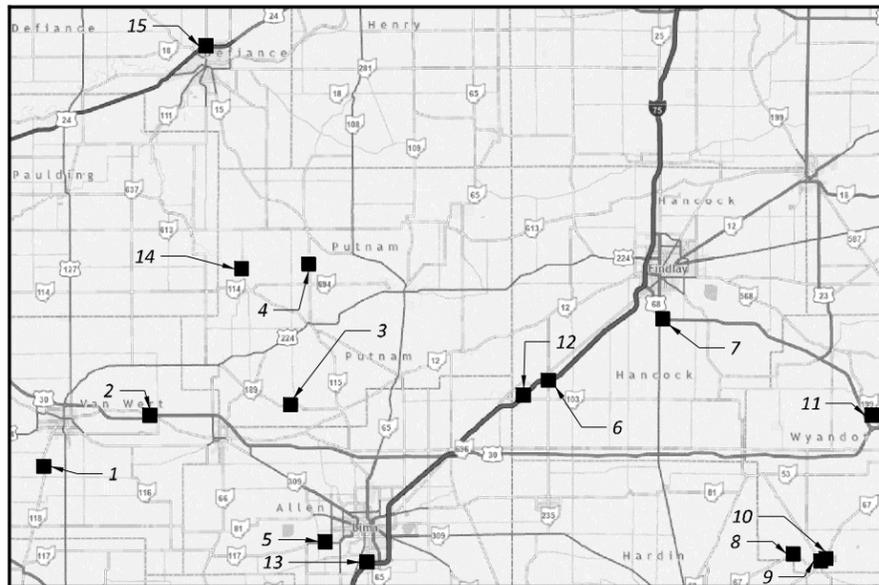


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

D01-BM-FY24

ALLEN, DEFIANCE, HANCOCK, PUTNAM, VAN WERT AND WYANDOT COUNTIES



LOCATION MAP
LATITUDE: 40°50'45" LONGITUDE: 83°52'30"

PROJECT LOCATIONS:

1	VAN-118-5.98	OVER TOWN CREEK
2	VAN-30-20.41	CR 418 OVER US 30
3	PUT-189-7.39	OVER LEATHERWOOD DITCH
4	PUT-115-14.31	OVER BLANCHARD RIVER
5	ALL-117-12.41	OVER OTTAWA RIVER
6	HAN-75-3.78	SR 235 OVER IR 75
7	HAN-15-17.91 L	OVER CSX/CONRAIL RR
8	WYA-67-1.09	OVER LITTLE TYMOCHTEE CREEK
9	WYA-37-9.23	OVER TYMOCHTEE CREEK
10	WYA-67-4.18	OVER BRANCH OF TYMOCHTEE CREEK
11	WYA-199-8.21	OVER LITTLE TYMOCHTEE CREEK
12	HAN-75-1.22 L	OVER CR 33 & ABANDONED RR
13	ALL-75-3.29	MCCLAIN RD OVER IR75
14	PUT-634-10.21	OVER AUGLAIZE RIVER
15	DEF-24-6.97	SR 66 OVER US 24

INDEX OF SHEETS:

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STRUCTURE (OVER 20 FOOT SPAN)	

ALL-75-3.29	15-16
VAN-30-20.41	16A-16B
PUT-115-14.31	16C
PUT-189-7.39	17-18

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

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

EARTH DISTURBED AREAS

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

*ROUTINE MAINTENANCE PROJECT

LIMITED ACCESS

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

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 3-9 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Christopher A. Hughes
Christopher A. Hughes, P.E.
District 1 Deputy Director

Jack Marchbanks
Jack Marchbanks, PhD
Director, Department of Transportation

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig

OHIO811.org
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
OHIO DEPT. OF TRANSPORTATION, DISTRICT 1
1885 N. MCCULLOUGH ST.
LIMA, OHIO 45801

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS	
MGS-1.1	7/16/21	TST-2-21	7/21/23	TC-42.10	10/18/13	800	7/21/23	WATERWAY PERMIT
MGS-2.1	1/19/18			TC-42.20	10/18/13	821	4/20/12	12/12/23
MGS-3.1	1/19/18	DM-4.3	1/15/16	TC-52.10	10/18/13	832	7/21/23	
MGS-3.3	7/16/21	DM-4.4	1/15/16	TC-52.20	1/15/21	843	10/18/19	
MGS-4.3	1/18/13			TC-61.30	7/19/19	846	4/17/15	
MGS-5.3	7/15/16	MT-095.30	7/19/19			848	1/15/21	
		MT-096.11	7/21/23	HL-30.11	7/21/23	858	4/20/18	
RM-4.2	4/17/20	MT-096.20	7/21/23	HL-30.21	4/17/20	921	4/20/12	
		MT-096.26	1/18/19	HL-30.22	1/15/21			
CPP-1-08	7/21/17	MT-097.11	1/20/17	HL-50.21	7/15/22			
		MT-101.60	4/21/23					
DS-1-92	7/15/22	MT-101.70	4/21/23	ITS-14.10	4/21/23			
		MT-101.75	7/21/23					
EXI-4-87	7/21/23	MT-105.10	1/17/20					
				TC-41.20	10/18/13			

ENGINEER'S SEAL

ERIC J. SCHECKELHOFF
E-63356
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

Digitally signed by Eric Schickelhoff
Date: 2024.02.25 19:55:56-05'00'

TITLE SHEET

DESIGN AGENCY	
DESIGNER	MJK
REVIEWER	EJS
PROJECT ID	107768
SHEET	P.1
TOTAL	18

D01-BM-FY24

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 2/2/2024 TIME: 12:03:16 PM USER: eschecke pwc:\ohio\dot-pw-bentley.com\dot-pw-02\Documents\01 Active Projects\District 01\D01107768\400-Eng\line\fig\Roadway\Sheets\107768_GT001.dgn

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER, OR ADJACENT TO, THE WORK AREA.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 25 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT AERONAUTICAL STUDY NUMBER ___ IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
OBSTRUCTION EVALUATION GROUP
10101 HILLWOOD PARKWAY
FORT WORTH, TX 76177
FAX: (817) 222-5920
HTTP://CEAAA.FAA.GOV

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235

PERSONAL PROTECTION EQUIPMENT (PPE)

THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF SECTIONS XXIV AND XXXIV OF THE OHIO DEPARTMENT OF TRANSPORTATION SAFETY & HEALTH STANDARD OPERATING PROCEDURE 220-006(SP) EFFECTIVE: NOVEMBER 1, 2018 (EXCEPT AS AMENDED BELOW) AND ALL SUBSEQUENT UPDATES POSTED AT THE FOLLOWING WEBSITE:

HTTP://WWW.DOT.STATE.OH.US/POLICY/POLICIESANDSOPS/POLICIES/220-006(SP).PDF

AMENDMENTS TO THE REQUIREMENTS OF THIS DOCUMENT ARE: XXIV.

HEAD PROTECTION (HARD HATS):

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR APPROPRIATE HEAD PROTECTION. ALL HARD HATS MUST MEET OR EXCEED ANSI Z89.1-2009 TYPE 1, CLASS E-G REQUIREMENTS. XXXIV.

SAFETY APPAREL AND VEST (HIGH VISIBILITY):

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR A HIGH VISIBILITY SAFETY VEST THAT MEETS THE PERFORMANCE CLASS II OR CLASS III REQUIREMENTS OF THE ANSI/ISEA 107-2015 PUBLICATION ENTITLED "AMERICAN NATIONAL STANDARD FOR HIGH-VISIBILITY SAFETY APPAREL AND ACCESSORIES." WORKERS MAY WEAR AN ANSI CLASS II OR ANSI CLASS III AP-PROVED RAIN SUIT, JACKET OR OTHER APPAREL WITHOUT A SAFETY VEST OVER IT.

ITEM SPECIAL - PIPE CLEANOUT, OVER 48"

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

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

ESTIMATED QUANTITIES ARE SHOWN ON THE TABLE ON THIS SHEET AND ARE INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK.

CONTACT INFORMATION

THE CONTRACTOR SHALL NOT BEGIN WORK ON THE FIELD PAVING IN A COUNTY UNTIL CONTACTING THE COUNTY MANAGER AND PROJECT ENGINEER. BELOW IS A CONTACT LIST FOR COUNTY MANAGERS:

ALLEN COUNTY			
CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
BRIAN RADER	DEPARTMENT MANAGER	(419) 999-6717	-
JASON DICKMAN	TRANSPORT MGR1	(419) 999-6715	-
ANDREW WITA	TRANSPORT MGR2	(419) 999-6712	-

DEFIANCE COUNTY

CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
JASON HOSCHAK	DEPARTMENT MANAGER	(419) 999-6711	(419) 438-4615
BRITNI RIVERS	TRANSPORT MGR2	(419) 999-6722	(419) 250-3403
JEFFREY HOLTSBERRY	TRANSPORT MGR2	(419) 999-6728	(419) 549-7781

HANCOCK COUNTY

CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
DEIDRA MILLER	DEPARTMENT MANAGER	(419) 999-6731	-
JAMES HEACOCK	TRANSPORT MGR3	(419) 999-6738	-
TODD NOIROT	TRANSPORT MGR1	(419) 999-6732	(419) 549-6019

PUTNAM COUNTY

CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
PAUL LEHMAN	DEPARTMENT MANAGER	(419) 999-6761	(419) 231-2811
LARRY SCHROEDER	TRANSPORT MGR2	(419) 999-6762	(419) 549-2579
KENNETH WILLIAMSON	TRANSPORT MGR2	(419) 999-6768	(419) 231-2888

VAN WERT COUNTY

CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
KYLE FIELDS	DEPARTMENT MANAGER	(419) 999-6771	-
BRYAN HOERSTEN	TRANSPORT MGR2	(419) 999-6778	(419) 549-2635
PATRICK MCCONN	TRANSPORT MGR2	(419) 999-6772	(419) 605-8508

WYANDOT COUNTY

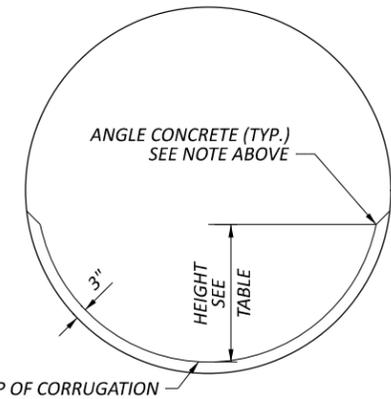
CONTACT	TITLE	OFFICE NUMBER	CELL NUMBER
MATTHEW CLAY	DEPARTMENT MANAGER	(419) 999-6781	-
MARK YOST	TRANSPORT MGR1	(419) 999-6788	(419) 549-6072
GEENA SNOW	TRANSPORT MGR2	(419) 999-6782	(419) 294-7651

ITEM 611 - FIELD PAVING EXISTING PIPE

THE EXISTING PIPES DESIGNATED TO BE FIELD PAVED SHALL BE COMPLETED ACCORDING TO CMS 611.11 AND SHALL BE PAVED TO THE HEIGHT MEASURED FROM THE TOP OF INVERT OF THE PIPE TO THAT LISTED IN THE LOCATION SPECIFIC TABLE LISTED BELOW. IF DURING LAYOUT IT IS NOTED THAT THE SPECIFIED HEIGHT STOPS AT THE BOTTOM OF A ROW OF BOLTS, EXTEND THE PAVING TO COVER THE EXISTING BOLTS BY 3". ANY ADDITIONAL MATERIAL REQUIRED TO EXTEND THE FIELD PAVING SHALL BE INCIDENTAL TO THE WORK. CARE SHALL BE TAKEN TO ANGLE THE TOP OF THE CONCRETE ENSURE NO WATER OR DEBRIS WILL COLLECT AT THIS LOCATION. EXISTING FENCE MAY NEED TO BE TEMPORARILY RELOCATED TO GAIN ACCESS TO THE PIPES. REMOVAL AND REERECTION OF THE FENCE, AS NEEDED, SHALL BE INCLUDED IN THE UNIT COST FOR ITEM 611 - FIELD PAVING EXISTING PIPE AND SHALL BE USED ONLY AS REQUIRED.

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 1 OFFICE IN LIMA, OH. EXISTING PLANS MAY ALSO BE INSPECTED AT THE OFFICE OF CONTRACTS FTP SITE FOR THE PROJECT.



STRUCTURE NO. 8803218			
PROJECT LOCATIONS	SIZE AND TYPE	HEIGHT	LENGTH
WYA-199-08.21 (REAR BARREL)	96" CMP	36"	80
ITEM SPECIAL - PIPE CLEANOUT, OVER 48"			80 FT
ITEM 611 - FIELD PAVING			

NOTE: ESTIMATED QUANTITY CARRIED TO GENERAL SUMMARY

ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 606 AND STANDARD CONSTRUCTION DRAWING MGS-3.3, THIS ITEM REQUIRES THE USE OF STEEL POSTS. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING STEEL POSTS SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 606, MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN

ITEM 606 - GUARDRAIL, TYPE MGS, WITH LONG POSTS, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 606, THIS ITEM REQUIRES STEEL POSTS AND COMPOSITE OR POLYMER ALTERNATIVE BLOCKOUTS. THE BLOCKOUTS SHALL BE FROM THE APPROVED PRODUCTS LIST THAT IS MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING AND INSTALLED PER CMS 606 AND ALL PERTINENT STANDARD DRAWINGS. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING STEEL POSTS AND APPROVED ALTERNATIVE MGS BLOCKOUTS SHALL BE INCLUDED IN THE UNIT BIDS FOR ITEM 606, GUARDRAIL, TYPE MGS, WITH LONG POSTS, AS PER PLAN.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.



ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ENVIRONMENTAL COMMITMENTS

ODOT WILL ACQUIRE ALL NECESSARY WATERWAY PERMITS PRIOR TO THE START OF CONSTRUCTION. CONDITIONS OF THESE PERMITS WILL BE PROVIDED IN THE CONTRACT AS SPECIAL PROVISIONS. ODOT WILL PROVIDE THE WATERWAY PERMITS TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL THE SPECIAL PROVISIONS OF THE WATERWAY PERMITS THROUGHOUT THE DURATION OF THE CONTRACT.

EROSION CONTROL

THE QUANTITY BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR EROSION CONTROL.

ITEM 832 EROSION CONTROL 1200 EACH

STRUCTURE GROUNDING SYSTEM (PUT-189-7.39)

DUE TO THE STEEL RAILING, THIS STRUCTURE REQUIRES A GROUNDING SYSTEM CONFORMING TO SCD NUMBER HL-50.21. USE ALTERNATE METHOD AT ABUTMENTS, DETAIL B. ALL COSTS NECESSARY TO CONSTRUCT THIS SYSTEM ARE PAID PER EACH WITH ITEM 625 - STRUCTURE GROUNDING SYSTEM.

ITEM:	UNIT:	DESCRIPTION:
625E33000	EACH	STRUCTURE GROUNDING SYSTEM (4 TOTAL, 1 AT EACH END OF BRIDGE/RAILING)

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

IN ADDITION TO CMS 253, THE THIS ITEM IS FOR PAVEMENT REPAIRS ADJACENT TO APPROACH SLABS (PUT-189-7.39) AND OTHER AREAS AS PER THE DIRECTION OF THE PROJECT ENGINEER. THE BUILD UP OF THE PAVEMENT REPAIR COVERED BY THIS ITEM SHALL BE PER THE DETAILS SHOWN ON PLAN SHEET 17.

THE QUANTITY BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR ITEM 253 - PAVEMENT REPAIR, AS PER PLAN.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 20 SY

GENERAL NOTES

DESIGN AGENCY



DESIGNER

MJK

REVIEWER

XXX MM-DD-YY

PROJECT ID

107768

SHEET TOTAL

P.2A 18

ITEM 614 - WORK ZONE PAVEMENT MARKING

WORK ZONE PAVEMENT MARKING SHALL BE COMPLETE AND IN PLACE ON ALL NEW PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 614 - WORK ZONE CENTER LINE, CLASS II = 0.81 MILE

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

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

NEW YEAR'S (OBSERVED) GENERAL/REGULAR ELECTION DAY (NOV)

TOTAL SOLAR ECLIPSE (4/8/24) THANKSGIVING

CHRISTMAS (OBSERVED)

MEMORIAL DAY

FOURTH OF JULY (OBSERVED)

LABOR DAY

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 MONDAY THROUGH 6:00AM 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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN1 127).

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.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER = 12 MGAL

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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 PORTABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) _____ 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 ALL TRAFFIC.

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.

ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. 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 12 SIGN MONTHS (ASSUMING 2 PCMS SIGN(S) FOR 6 MONTH(S))

COORDINATING MAINTENANCE OF TRAFFIC WITH ADJACENT PROJECTS

DURING THE CONSTRUCT/ON OF THIS PROJECT, OTHER CONSTRUCTION PROJECTS WILL BE ONGOING:

- PID NO. 113032(DEF 127/18/66/281 VAR. - RESURFACING)
- PID NO. 114926 (HAN/WYA-US 30-12.22/0.00 - PAVEMENT REPAIR PROJECT)
- PID NO. 112280 (HAN-US 68/SR 15 INTERCHANGE)
- PID NO. 107873 (HAN/WYA-US68/SR15/US23-VAR.-MICROSURFACING PROJECT).

THE CONTRACTOR SHALL COORDINATE MAINTENANCE OF TRAFFIC WITH THE CONTRACTORS OF THESE OTHER PROJECTS.

THE CONTRACTOR SHALL COOPERATE WITH THE CONTRACTORS FOR THESE PROJECTS IN A MANNER TO NOT HINDER THE PROGRESS OR COMPLETION OF THE WORK BEGIN PERFORMED BY EACH OTHER. THE TIMING OF THESE PROJECT SHALL BE COORDINATED TO ALLOW FOR COMPLETION OF EACH PROJECTS WORK AS DEFINED IN THE CONSTRUCTION PLANS AND RELATED BID DOCUMENTS.

DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE	DISINCENTIVE \$ PER DAY	WORK WINDOW	
			START	END
CLOSURE OF ROADWAY FOR WORK ON PUT-115-14.31	30	\$5,000	COMPLETED CONTRACT	COMPLETION DATE
CLOSURE OF ROADWAY FOR WORK ON PUT-189-7.39	45	\$1,500	COMPLETED CONTRACT	COMPLETION DATE
CLOSURE OF ROADWAY FOR WORK ON WYA-37-9.23	30	\$7,500	COMPLETED CONTRACT	COMPLETION DATE
CLOSURE OF ROADWAY FOR WORK ON WYA-67-1.08	30	\$1,500	COMPLETED CONTRACT	COMPLETION DATE
CLOSURE OF ROADWAY FOR WORK ON WYA-67-4.17	30	\$3,000	COMPLETED CONTRACT	COMPLETION DATE
CLOSURE OF LANE FOR WORK ON HAN-SR 15-17.19 L	7	\$10,000	COMPLETED CONTRACT	COMPLETION DATE

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
2 LANES OF SB HAN-IR 75 FROM MM 0 TO MM 3	6 AM - 9 PM	EACH HOUR	10,000

DESIGN AGENCY



DESIGNER

MJK

REVIEWER

XXX MM-DD-YY

PROJECT ID

107768

SHEET

P.4

TOTAL

18

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
2	2A	3	4	12	12A	15	18	OFFICE CALCS.	01/NFP/13	02/IMS/13								
											LS	LS	202	11202	LS		STRUCTURE REPAIR (PUT-189-0739, SFN: 6901387)	
											147	147	202	38500	147	FT	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN	
											9,363	9,363	509	10001	9,363	LB	BRIDGE RAILING REMOVED	
											94	94	509	20001	94	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	13
											31	31	511	34410	31	CY	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN	13
											44	44	512	10100	44	SY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
											33	33	512	10300	33	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
											77	77	516	31000	77	FT	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
											154.3	154.3	517	70100	154.3	FT	JOINT SEALER	
											177	177	SPECIAL	51822300	177	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	
											243	243	519	11100	243	SF	STEEL DRIP STRIP	DS-1-92
											2,308	2,308	SPECIAL	53000300	2,308	LB	PATCHING CONCRETE STRUCTURE	
											344	344	848	10200	344	SY	STRUCTURES WELDED WIRE REINFORCEMENT	13
											404	404	848	20000	404	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, (T=7")	
											10	10	848	30200	10	CY	SURFACE PREPARATION USING HYDRODEMOLITION, (T=1")	
											17	17	848	50000	17	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
											LS	LS	848	50100	LS		HAND CHIPPING	
											2	2	848	50200	2	CY	TEST SLAB	
											404	404	848	50300	404	SY	FULL-DEPTH REPAIR	
																	WEARING COURSE REMOVED, ASPHALT, (T=6")	
											85.15	85.15	516	01301	85.15	FT	STRUCTURE REPAIR (PUT-634-1027, SFN: 6901956)	
																	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN	14
											170	170	SPECIAL	50771200	170	FT	STRUCTURE REPAIR (VAN-118-0598, SFN: 8101868)	
																	PILE ENCASEMENT	14
											250	250	509	20001	250	LB	STRUCTURE REPAIR (VAN-418-1701, SFN: 8104239)	
											20	20	512	10600	20	FT	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN	13
											269	269	SPECIAL	51900100	269	SF	CONCRETE REPAIR BY EPOXY INJECTION	
											461	461	519	11101	461	SF	COMPOSITE FIBER WRAP SYSTEM	PN 519
											92	92	843	50000	92	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	13
											56	56	846	00110	56	CF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
											10	10	516	45305	10	EACH	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
											LS	LS	516	47001	LS		STRUCTURE REPAIR (WYA-37-0923, SFN: 8801657)	
											36	36	519	11101	36	SF	REFURBISH BEARING DEVICE, AS PER PLAN	14
											36	36	843	50000	36	SF	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	14
																	PATCHING CONCRETE STRUCTURE, AS PER PLAN	13
																	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
											93	93	512	10600	93	FT	STRUCTURE REPAIR (WYA-67-0109, SFN: 8801983)	
											34	34	519	11101	34	SF	CONCRETE REPAIR BY EPOXY INJECTION	
											555	555	858	10000	555	SY	PATCHING CONCRETE STRUCTURE, AS PER PLAN	13
																	THIN POLYMER EPOXY OVERLAY	
											70	70	512	10600	70	FT	STRUCTURE REPAIR (WYA-67-0418, SFN: 8802025)	
											19	19	519	11101	19	SF	CONCRETE REPAIR BY EPOXY INJECTION	
											342	342	858	10000	342	SY	PATCHING CONCRETE STRUCTURE, AS PER PLAN	13
																	THIN POLYMER EPOXY OVERLAY	
																	MAINTENANCE OF TRAFFIC	
											60	60	253	02000	60	CY	PAVEMENT REPAIR	
											60	60	407	10000	60	GAL	TACK COAT	
											30	30	441	70000	30	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
											56	56	614	11110	56	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
											12	12	614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
											0.81	0.81	614	21800	0.81	MLE	WORK ZONE CENTER LINE, CLASS II	
											12	12	616	10000	12	MGAL	WATER	
											150	150	617	10100	150	CY	COMPACTED AGGREGATE	
																	INCIDENTALS	
											LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
											LS	LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
EJS

REVIEWER
XXX MM-DD-YY

PROJECT ID
107768

SHEET TOTAL
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

- DS-1-92 DATED 7/15/22
- ST-2-21 DATED 7/21/23
- CPP-1-08 DATED 7/21/17

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

- 848 DATED 1/15/21
- 843 DATED 10/18/19
- 858 DATED 4/20/18

DESIGN SPECIFICATIONS

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

DESIGN DATA

CONCRETE CLASS QC2:
COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

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

DECK PROTECTION METHOD (PUT-189-07.39)

- EPOXY COATED STEEL REINFORCEMENT - C&MS 709.00
- MINIMUM CONCRETE COVER OF 2.5"
- CLASS QC2 CONCRETE
- SUPERPLASTICIZED DENSE CONCRETE OVERLAY
- STAINLESS STEEL DRIP STRIPS

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION FROM ENTERING THE WATERWAY/RIVER. ANY MATERIAL THAT DOES ENTER THE WATERWAY/RIVER SHALL BE IMMEDIATELY REMOVED.

WORK ON STRUCTURES OVER WATERWAYS

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

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

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

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

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING CONCRETE REINFORCEMENT TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION:
SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

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

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

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT CONCRETE REINFORCEMENT BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING STEEL REINFORCEMENT 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, COATING, AND MATERIAL AT NO COST TO THE DEPARTMENT.

FINISHING EQUIPMENT SUPPORT PLAN

THE CONTRACTOR IS HEREBY ADVISED THAT HE/SHE SHALL NOT BE PERMITTED TO USE THE EXISTING OR PROPOSED RAILING TO SUPPORT THE FINISHING EQUIPMENT. THE CONTRACTOR SHALL SUBMIT TO THE DISTRICT CONSTRUCTION ENGINEER FOR APPROVAL BY THE DIRECTOR A PLAN DETAILING THE METHOD TO BE USED TO SUPPORT THE FINISHING EQUIPMENT. THIS PLAN SHALL BE SUBMITTED AND APPROVED PRIOR TO THE PLACING OF PROPOSED DECK OVERLAY.

STRUCTURE GROUNDING SYSTEM

DUE TO THE STEEL RAILING, THIS STRUCTURE REQUIRES A GROUNDING SYSTEM CONFORMING TO SCD NUMBER HL-50.21. ALL COSTS NECESSARY TO CONSTRUCT THIS SYSTEM ARE PAID PER EACH WITH ITEM 625 - STRUCTURE GROUNDING SYSTEM.

ITEM SPECIAL - STRUCTURE, MISC.: WELDED WIRE REINFORCEMENT

DESCRIPTION: THIS WORK CONSISTS OF FURNISHING AND PLACING GALVANIZED DEFORMED WELDED WIRE OF THE TYPE AND SIZE DESIGNATED IN THE PLANS. ALSO INCLUDE ALL SECURING MATERIALS AND SUPPORTS FOR HANDLING, SHIPPING, GALVANIZING AND PLACEMENT IN THE BRIDGE DECK.

MATERIALS: FURNISH MATERIALS CONFORMING TO THE REQUIREMENTS OF ASTM A497 AND CMS 709.12.

SHOP DRAWINGS: PRIOR TO FABRICATING THE WELDED WIRE REINFORCEMENTS PROVIDE SHOP DRAWINGS ACCORDING TO CMS 501.04. INCLUDE DRAWINGS CONTAINING ALL NECESSARY FABRICATION DETAILS, MATERIAL LISTS, MATERIAL DESIGNATIONS, AND MANUFACTURER'S LITERATURE FOR ANY SECURING MATERIALS.

FABRICATION: FABRICATOR IS TO CONFORM TO SUPPLEMENTAL SPECIFICATION 1068. FABRICATION TOLERANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318.

MATERIAL IDENTIFICATION: SHIP REINFORCEMENT BUNDLES, TAGGED AND MARKED IN ACCORDANCE WITH THE CRSI "MANUAL OF STANDARD PRACTICE".

HANDLING AND STORAGE: STORE REINFORCEMENT ABOVE GROUND ON PLATFORMS, SKIDS, OR OTHER SUPPORTS AND PROTECT THE REINFORCEMENT AS PRACTICAL FROM MECHANICAL INJURY AND SURFACE DETERIORATION CAUSED BY EXPOSURE TO CONDITIONS PRODUCING RUST. GALVANIZED REINFORCEMENT SHALL BE HANDLED AND STORED BY METHODS THAT WILL NOT DAMAGE THE COATING. BUNDLES SHALL NOT BE DROPPED OR DRAGGED. PRIOR TO PLACEMENT OF DECK CONCRETE, ALL REINFORCEMENT SHALL BE FREE FROM DIRT OR OTHER MATERIALS THAT MIGHT REDUCE BOND. WIRE REINFORCEMENTS THAT ARE FIELD CUT AND/OR DAMAGED SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780 METHOD A1 OR A3.

PLACEMENT: ACCURATELY PLACE STEEL REINFORCEMENT AS SHOWN AND NOTED IN THE PLANS AND FIRMLY HOLD THE REINFORCEMENT IN POSITION DURING THE PLACING AND FINISHING OF THE OVERLAY MATERIAL. WELDING TO THE MATS WILL NOT BE PERMITTED. PROVIDE GALVANIZED OR PLASTIC COATED TIE WIRES, CHAIRS, SUPPLEMENTARY BARS (TIE-DOWN BARS), SIDE FORM SPACERS AND OTHER APPROVED DEVICES. PROVIDE COVER TO THE REINFORCEMENT AS SHOWN ON THE PLANS. REINFORCEMENT MATS SHALL BE PLACED, INSPECTED, AND APPROVED BY THE ENGINEER BEFORE PLACING OF OVERLAY MATERIAL BEGINS.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THE WELDED WIRE REINFORCEMENT BY THE NUMBER OF POUNDS REQUIRED. WEIGHT OF WELDS AND GALVANIZING NOT INCLUDED IN PAY WEIGHT.

BASIS OF PAYMENT: PAYMENT FOR THIS WORK INCLUDES GALVANIZING THE MATS, PREPARATION OF SHOP DRAWINGS AND ALL ACCEPTED WELDED WIRE REINFORCEMENT INCLUDING MATS AND SINGLE WIRES COMPLETE IN PLACE.

ITEM:	UNIT:	DESCRIPTION:
ITEM SPECIAL	POUND	STRUCTURE, MISC.: WELDED WIRE REINFORCEMENT

ITEM 509 - EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN

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

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

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

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

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

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

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

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

THE NON-EPOXY (CLEAR) SEALER SHALL BE USED ON THE FOLLOWING SURFACES ACCORDING TO THE DETAILS IN PLANS:

1. ABUTMENT AND WINGWALL FACES.
2. PIERS.
3. DECK AND PARAPETS.
4. TOWER FACES.

PAYMENT FOR SEALING SURFACES OF ITEMS 1, 2, 3, AND 4 SHALL BE INCLUDED IN THIS ITEM 512.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

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

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

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

DESIGN AGENCY



DESIGNER
RJM

REVIEWER
XXX MM-DD-YY

PROJECT ID
107768

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

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

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD. COPIES OF THE EXISTING PLANS ARE ON FILE AND AVAILABLE TO BE INSPECTED AT THE DISTRICT 1 OFFICE IN LIMA.

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS, AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES FARENHEIT, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM SPECIAL - PILE ENCASEMENT

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

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

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 516 AND STANDARD CONSTRUCTION DRAWING EXJ-4-87, THIS ITEM SHALL ALSO INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR REQUIRED TO REMOVE THE EXISTING STRIP SEAL AND CLEAN THE EXISTING STEEL RETAINER FOR INSTALLATION OF THE REPLACEMENT STRIP SEAL.

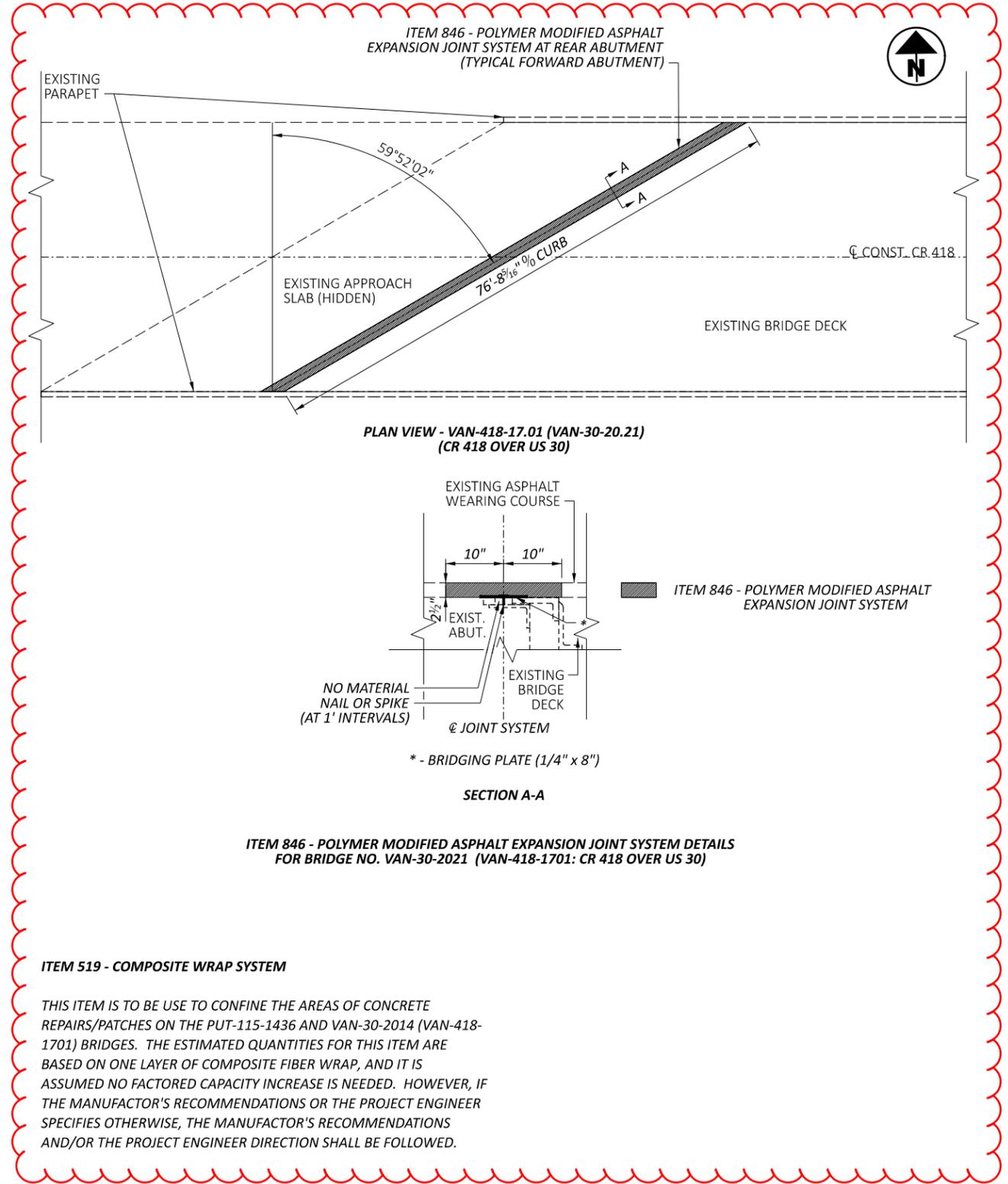
PAYMENT FOR THE WORK ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FT FOR ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSION, AS PER PLAN, WHICH SHALL INCLUDE ALL MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC: PRECOMPRESSED EXPANSION JOINT FILLER, AS PER PLAN

FOR THE ALL-117-12.41 STRUCTURE, IN ADDITION TO THE REQUIREMENTS OF ITEM 516 AND STANDARD CONSTRUCTION DRAWINGS EXS-2-81 AND EXS-3-82, THIS ITEM SHALL ALSO INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR REQUIRED TO REMOVE THE EXISTING COMPRESSION SEAL AND CLEAN THE EXISTING STEEL RETAINER FOR INSTALLATION OF THE REPLACEMENT COMPRESSION SEAL.

FOR THE HAN-75-1.22L STRUCTURE, IN ADDITION TO THE REQUIREMENTS OF ITEM 516 AND STANDARD CONSTRUCTION DRAWINGS EXS-2-81 AND EXS-3-82, THIS ITEM SHALL ALSO INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR REQUIRED TO REMOVE THE EXISTING COMPRESSION SEAL AND CLEAN THE EXISTING ARMOR STEEL FOR INSTALLATION OF THE REPLACEMENT EMSEAL COMPRESSION JOINT OR EQUAL. THE REPLACEMENT EMSEAL COMPRESSION JOINT OR EQUAL SHALL BE SIZED TO ACCOMMODATE 3 INCHES OF MOVEMENT AND ADHERE TO THE SIDE OF THE EXISTING ARMOR STEEL. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING OPENING AND SIZE OF SEAL BASED ON MANUFACTURER'S RECOMMENDATION.

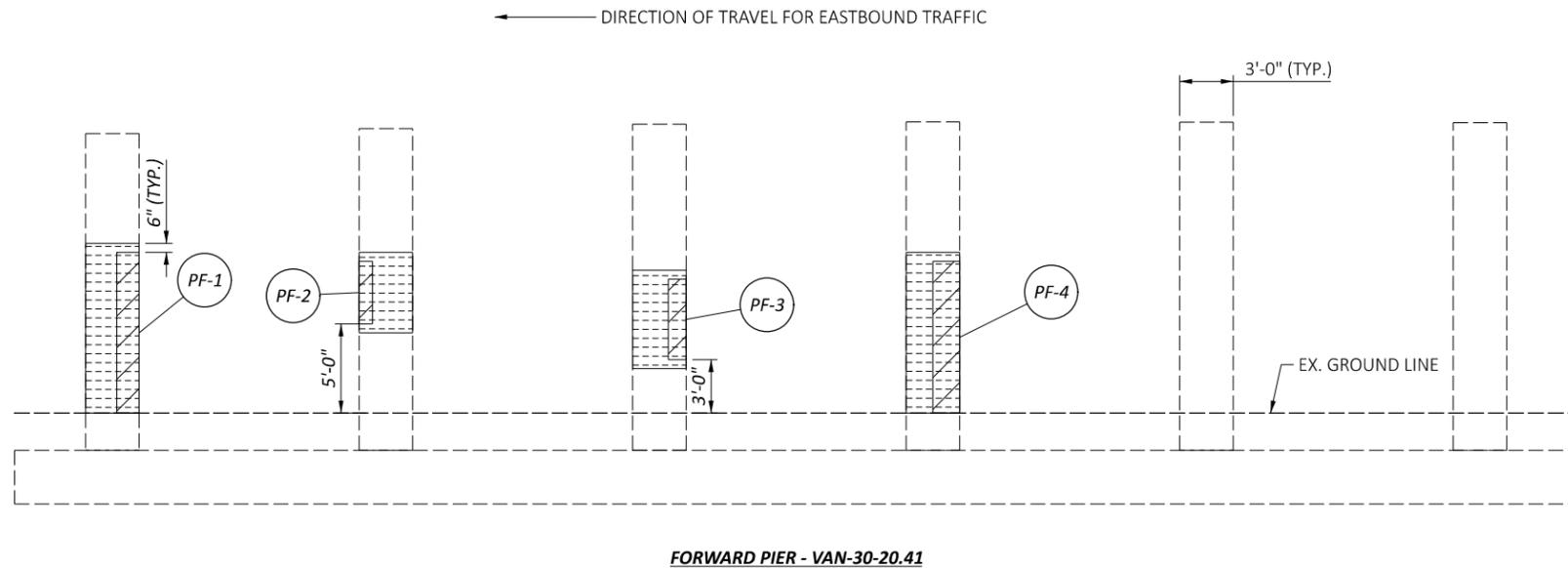
PAYMENT FOR THE WORK ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FT FOR ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC: PRECOMPRESSED EXPANSION JOINT FILLER, AS PER PLAN, WHICH SHALL INCLUDE ALL MATERIAL, EQUIPMENT, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.



ITEM 519 - COMPOSITE WRAP SYSTEM

THIS ITEM IS TO BE USE TO CONFINE THE AREAS OF CONCRETE REPAIRS/PATCHES ON THE PUT-115-1436 AND VAN-30-2014 (VAN-418-1701) BRIDGES. THE ESTIMATED QUANTITIES FOR THIS ITEM ARE BASED ON ONE LAYER OF COMPOSITE FIBER WRAP, AND IT IS ASSUMED NO FACTORED CAPACITY INCREASE IS NEEDED. HOWEVER, IF THE MANUFACTOR'S RECOMMENDATIONS OR THE PROJECT ENGINEER SPECIFIES OTHERWISE, THE MANUFACTOR'S RECOMMENDATIONS AND/OR THE PROJECT ENGINEER DIRECTION SHALL BE FOLLOWED.

DESIGN AGENCY	
DESIGNER	RJM
REVIEWER	XXX MM-DD-YY
PROJECT ID	107768
SHEET	TOTAL
P.14	18

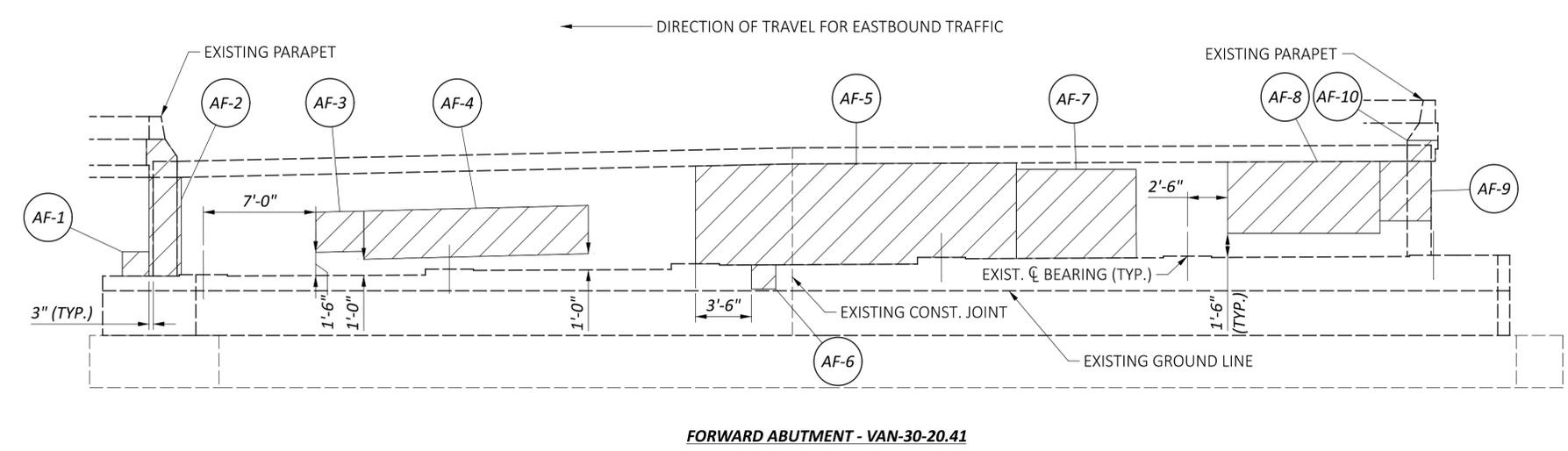


PROPOSED LEGEND	
	ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (2'-6" x 9'-0" AROUND RADIUS)
	ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (1'-6" x 3'-6" AROUND RADIUS)
	ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (2'-0" x 4'-6" AROUND RADIUS)
	ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-0" x 8'-6" AROUND RADIUS)
	ITEM 519 PATCHING AREA
	ITEM 519 - COMPOSITE FIBER WRAP SYSTEM AREA (SEE NOTE)

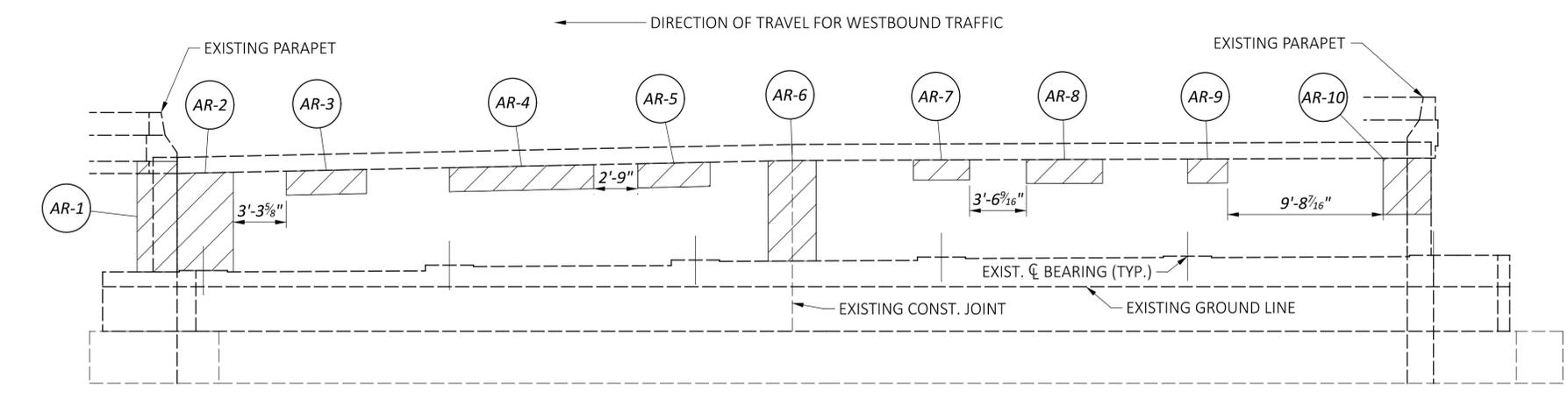
NOTE: A COMPOSITE FIBER WRAP SYSTEM SHALL BE USED TO ENCASE THE CONCRETE PATCHES ONCE CURED. THE WRAP SHALL ENCASE THE ENTIRE CIRCUMFERENCE OF THE COLUMN AND PROVIDE ENOUGH DEPTH TO COVER THE PATCHED AREA, PLUS AN ADDITIONAL 6" FROM THE TOP AND BOTTOM EDGES OF THE PATCHES (DISREGARD THE BOTTOM EDGE IF THERE IS LESS THAN 6" OF CLEARANCE BETWEEN THE EXISTING GROUND LINE AND THE BOTTOM EDGE).

AN ESTIMATED QUANTITY OF 20 FT OF ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER IN AREAS WHERE ITEM 519 - COMPOSITE WRAP SYSTEM IS APPLIED.





FORWARD ABUTMENT - VAN-30-20.41



REAR ABUTMENT - VAN-30-20.41

FORWARD ABUTMENT PROPOSED LEGEND

- AF-1 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (1'-8" x 1'-6")
 - AF-2 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (2'-0" x 8'-6")*
 - AF-3 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-0" x 2'-6")
 - AF-4 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (14'-0" x 3'-0")
 - AF-5 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (20'-0" x 6'-0")
 - AF-6 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (1'-6" x 1'-6")
 - AF-7 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (7'-6" x 5'-6")
 - AF-8 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (9'-6" x 4'-6")
 - AF-9 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-3" x 3'-9")
 - AF-10 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (1'-11" x 1'-4")*
- ITEM 519 PATCHING AREA

* - REFER TO STD. DWG. BR-1-67 SHEET 1 FOR PARAPET DIMENSIONS

REAR ABUTMENT PROPOSED LEGEND

- AR-1 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (2'-6" x 6'-11")
 - AR-2 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-6" x 6'-2")
 - AR-3 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (5'-0" x 1'-6")
 - AR-4 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (9'-0" x 1'-6")
 - AR-5 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (4'-6" x 1'-6")
 - AR-6 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-0" x 6'-3")
 - AR-7 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-6" x 1'-3")
 - AR-8 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (4'-9" x 1'-6")
 - AR-9 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (2'-6" x 1'-6")
 - AR-10 ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN (3'-0" x 3'-6")
- ITEM 519 PATCHING AREA

ABUTMENT PATCHING DETAILS
BRIDGE NO. VAN-30-20.41
CR 418 OVER US 30

DESIGN AGENCY



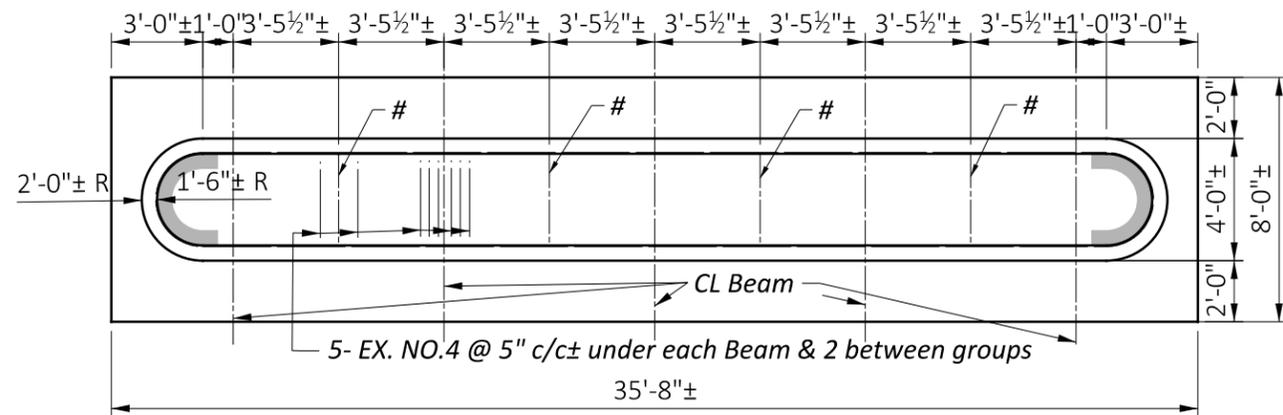
DESIGNER
MJK

REVIEWER

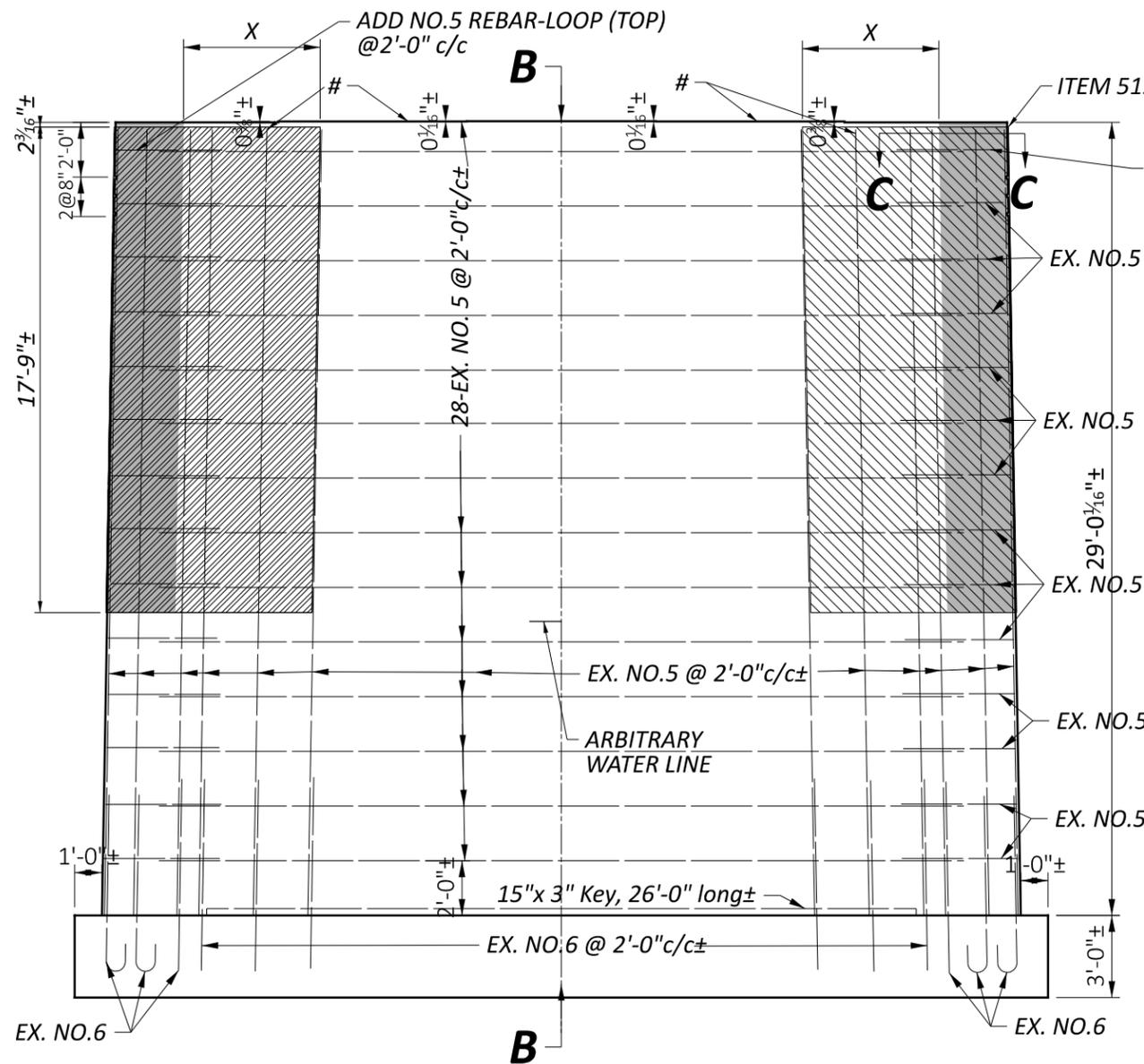
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PROJECT ID
107768

SHEET TOTAL
P.16B | 18

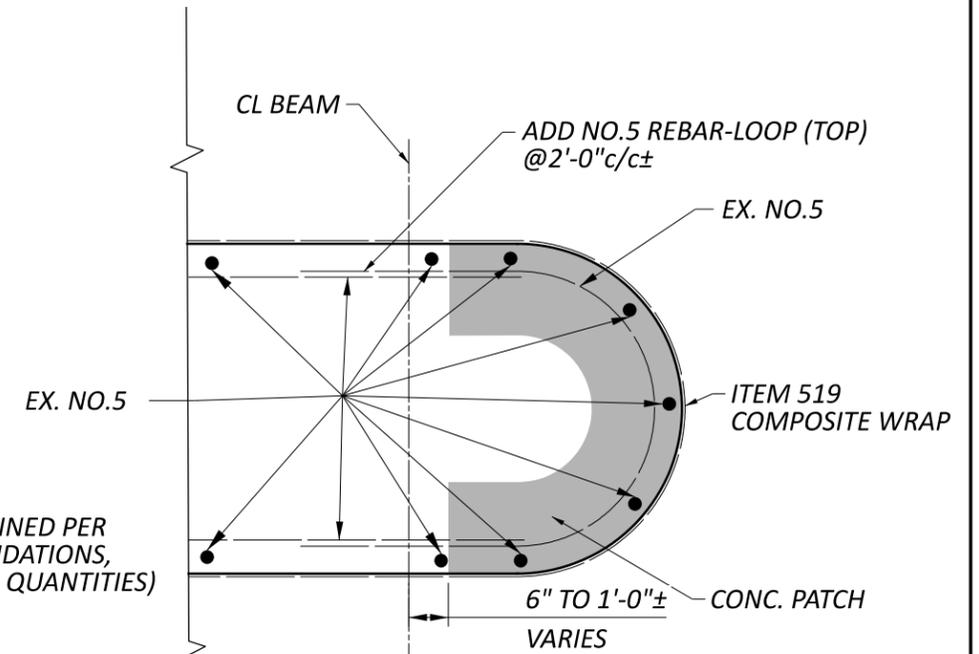


PLAN - PIERS



Section B-B

- EDGE OF BEARING/BEAM SEAT
 "X" - OVERLAP DIMENSION DETERMINED PER MANUFACTURER'S RECCOMENDATIONS, (ASSUME 5'-0" FOR ESTIMATED QUANTITIES)



Section C-C

- ITEM 519 - PATCHING CONCRETE STRUCTURE (DEPTH OF PATCH VARIES FROM 3" TO 12")
- ITEM 519 - COMPOSITE FIBER WRAP SYSTEM (PLACE OVER AREAS PATCHED)

NOTE: AN ESTIMATED QUANTITY OF 40 FT OF ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION IS PROVIDE FOR USE AS DIRECTED BY THE ENGINEER IN THE AREAS WHERE ITEM 519 - COMPOSITE WRAP SYSTEM IS APPLIED.

SFN 0201723	
DESIGN AGENCY	
DESIGNER	CHECKER
KRH	EJS
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	
107768	
SUBSET	TOTAL
1	1
SHEET	TOTAL
16C	18