SEE SHEETS 2 AND 3 FOR LOCATION MAPS

LOCATION MAP

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

D06 BRIDGE REPAIR FY17

INDEX OF SHEETS:

TITLE SHEET LOCATION MAPS 2-3 GENERAL NOTES MAINTENANCE OF TRAFFIC NOTES 5-6 MAINTENANCE OF TRAFFIC DETAILS GENERAL SUMMARY RESURFACING DETAILS STRUCTURES (20' AND OVER) 10-32A, 33-35A, 36

PROJECT DESCRIPTION

PARAPET, DECK EDGE, AND PIER REPAIRS FOR THE FOLLOWING BRIDGES: DEL-23-1087, FRA-23-5.17, FRA-71-2446R, FRA-71-2446L, MAR-4-1163, MAR-4D-0050 FRA-315-0217, FRA-70-1241, FRA-70-1248

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

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.

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DE-TOURS WILL BE PROVIDED AS INDICATED ON SHEETS 5-6/35.

NHS PROJECT N/A

DESIGN EXCEPTIONS

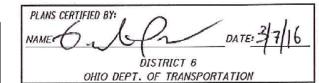
NONE

UNDERGROUND UTILITIES					
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.					
OHIO Utilities Protection SERVICE (Non-members must be called directly)					
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988					

PLAN PREPARED BY:



		STANDARD	CONSTRUCTION DRAWINGS		LEMENTAL FICATIONS	SPECIAL PROVISIONS
	BR-1-13	1/17/14 MT-95.30 7/18/14		800	04/15/16	
	PCB-91	1/18/13 MT-95.31 7/18/14		832	01/17/14	
		MT-95.40 7/18/14		848	07/17/15	
ENGINEERS SEAL:		MT-98.10 7/18/14				
ENGINEERS SEAL.		MT-98.20 7/18/14				
MILLIA.		MT-98.29 7/19/13				
WITE OF		MT-99.30 1/16/15				
STATE OF THE		MT-101.60 7/19/13				
JEFFREY JEFFREY		MT-101.70 1/17/14				
HIPP JR.		MT-101.90 7/17/15				
E-79642		MT-102.20 7/18/14				
JEFFREY HIPP JR. E-79642 **RE-79642						
ONAL ENDAY						
"Innaming						
SIGNED: VE						
DATE: <u>MARĆH 3, 2016</u>						



DISTRICT DEPUTY DIRECTOR

APPROVED_ DATE_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

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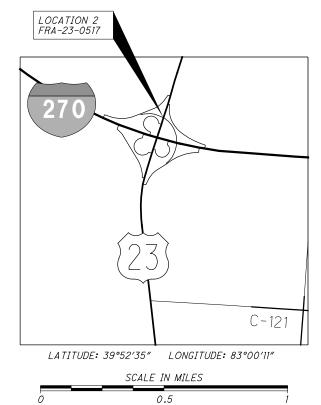
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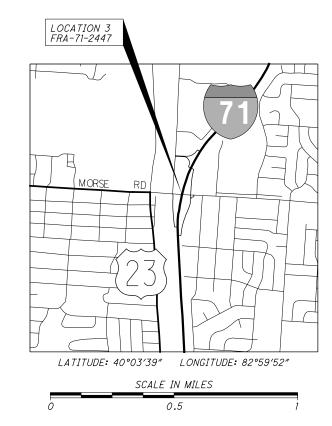
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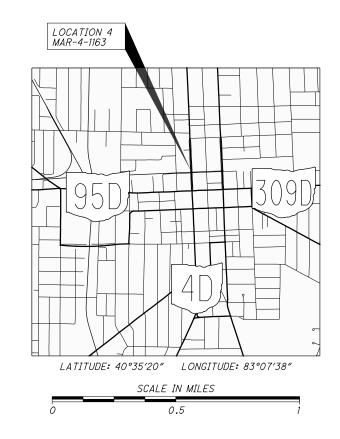
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DESIGN DESIGNATION US 23

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CURRENT ADT (2017)	33.000
DESIGN YEAR ADT (2037)	,
DESIGN HOURLY VOLUME (2037)	3,200
DIRECTIONAL DISTRIBUTION	0.50
TRUCKS (24 HOUR B&C)	0.10
DESIGN SPEED	55
LEGAL SPEED	55
DESIGN FUNCTIONAL CLASSIFICATION: URBAN PRINCIPAL ARTERIAL	
ONDAN FRINCIFAL ARTERIAL	

0.5

DESIGN DESIGNATION OLENTANGY AVE

CURRENT ADT (2017) DESIGN YEAR ADT (2037)	•
	•
DESIGN HOURLY VOLUME (2037)	440
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS (24 HOUR B&C)	0.03
DESIGN SPEED	25
LEGAL SPEED	25
DESIGN FUNCTIONAL CLASSIFICATION: LOCAL ROAD	

DESIGN DESIGNATION US 23

CURRENT ADT (2017)	24,000
DESIGN YEAR ADT (2037)	28,000
DESIGN HOURLY VOLUME (2037)	2,800
DIRECTIONAL DISTRIBUTION	0.70
TRUCKS (24 HOUR B&C)	0.08
DESIGN SPEED	50
LEGAL SPEED	50
DESIGN FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL	

DESIGN DESIGNATION I-270

DESIGN YEAR ADT (2037)	'
DESIGN FUNCTIONAL CLASSIFICATION: INTERSTATE	

DESIGN DESIGNATION I-71

CURRENT ADT (2017)	124,000
DESIGN YEAR ADT (2037)	125,000
DESIGN HOURLY VOLUME (2037)	11,000
DIRECTIONAL DISTRIBUTION	0.57
TRUCKS (24 HOUR B&C)	0.09
DESIGN SPEED	65
LEGAL SPEED	65
DESIGN FUNCTIONAL CLASSIFICATION: INTERSTATE	

DESIGN DESIGNATION MORSE RD

CURRENT ADT (2017) 22,000 DESIGN YEAR ADT (2037) 27,100 DESIGN HOURLY VOLUME (2037) 2,439 DIRECTIONAL DISTRIBUTION 0.60 TRUCKS (24 HOUR B&C) 0.03 DESIGN SPEED 35 LEGAL SPEED 35 DESIGN FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL		
DESIGN HOURLY VOLUME (2037)	CURRENT ADT (2017)	22,000
DIRECTIONAL DISTRIBUTION	DESIGN YEAR ADT (2037)	27,100
TRUCKS (24 HOUR B&C) 0.03 DESIGN SPEED 35 LEGAL SPEED 35 DESIGN FUNCTIONAL CLASSIFICATION:	DESIGN HOURLY VOLUME (2037)	2,439
DESIGN SPEED35 LEGAL SPEED35 DESIGN FUNCTIONAL CLASSIFICATION:	DIRECTIONAL DISTRIBUTION	0.60
LEGAL SPEED 35 DESIGN FUNCTIONAL CLASSIFICATION:	TRUCKS (24 HOUR B&C)	0.03
DESIGN FUNCTIONAL CLASSIFICATION:	DESIGN SPEED	<i>35</i>
	LEGAL SPEED	<i>35</i>

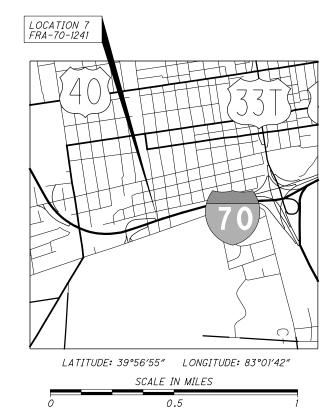
DESIGN DESIGNATION SR 4

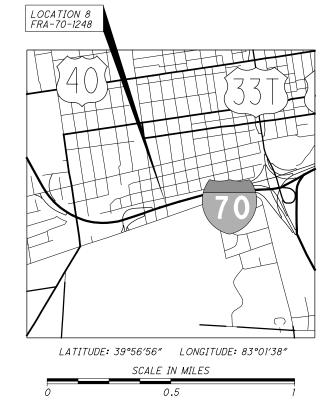
CURRENT ADT (2017)	3,300
DESIGN YEAR ADT (2037)	3,400
DESIGN HOURLY VOLUME (2037)	410
DIRECTIONAL DISTRIBUTION	1.00
TRUCKS (24 HOUR B&C)	0.18
DESIGN SPEED	25
LEGAL SPEED	25
DESIGN FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL	

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LOCATION 6 FRA-315-0217 315 LATITUDE: 39°58'39" LONGITUDE: 83°01'16" SCALE IN MILES





DESIGN DESIGNATION SR 4

CURRENT ADT (2017)	6,100 550 1.00 0.05
DESIGN FUNCTIONAL CLASSIFICATION: URBAN PRINCIPAL ARTERIAL	

0.5

DESIGN DESIGNATION SR 315

CURRENT ADT (2017)	122,000
DESIGN YEAR ADT (2037)	136,000
DESIGN HOURLY VOLUME (2037)	14,000
DIRECTIONAL DISTRIBUTION	0.50
TRUCKS (24 HOUR B&C)	0.04
DESIGN SPEED	<i>55</i>
LEGAL SPEED	<i>55</i>
DESIGN FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL- OTHER FREEWAYS	

0.5

DESIGN DESIGNATION I-670

DESIGN YEAR ADT (2037)	CURRENT ADT (2017)	87,000
DIRECTIONAL DISTRIBUTION	DESIGN YEAR ADT (2037)	119,000
TRUCKS (24 HOUR B&C) 0.06 DESIGN SPEED 55 LEGAL SPEED 55 DESIGN FUNCTIONAL CLASSIFICATION:	DESIGN HOURLY VOLUME (2037)	11,000
DESIGN SPEED 55 LEGAL SPEED 55 DESIGN FUNCTIONAL CLASSIFICATION:	DIRECTIONAL DISTRIBUTION	0.56
LEGAL SPEED 55 DESIGN FUNCTIONAL CLASSIFICATION:	TRUCKS (24 HOUR B&C)	0.06
DESIGN FUNCTIONAL CLASSIFICATION:	DESIGN SPEED	55
	LEGAL SPEED	55

DESIGN DESIGNATION I-70

CURRENT ADT (2017)	73,000
DESIGN YEAR ADT (2037)	73,000
DESIGN HOURLY VOLUME (2037)	6,600
DIRECTIONAL DISTRIBUTION	0.55
TRUCKS (24 HOUR B&C)	0.12
DESIGN SPEED	65
LEGAL SPEED	65
DESIGN FUNCTIONAL CLASSIFICATION: INTERSTATE	

DESIGN DESIGNATION GLENWOOD AVE

CURRENT ADT (2017) DESIGN YEAR ADT (2037) DESIGN HOURLY VOLUME (2037) DIRECTIONAL DISTRIBUTION TRUCKS (24 HOUR B&C) DESIGN SPEED LEGAL SPEED DESIGN FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR	5,400 540 0.60 0.03

DESIGN DESIGNATION I-70

CURRENT ADT (2017).		87,000
DESIGN YEAR ADT (2	037)	87,000
DESIGN HOURLY VOL	UME (2037)	7,800
DIRECTIONAL DISTRI	BUTION	0.54
TRUCKS (24 HOUR B&	(C)	0.10
DESIGN SPEED		65
LEGAL SPEED		65
DESIGN FUNCTIONAL INTERSTATE	CLASSIFICATION:	

DESIGN DESIGNATION CYPRESS AVE

CURRENT ADT (2017)	4,500
DESIGN YEAR ADT (2037)	5,400
DESIGN HOURLY VOLUME (2037)	540
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS (24 HOUR B&C)	0.03
DESIGN SPEED	25
LEGAL SPEED	25
DESIGN FUNCTIONAL CLASSIFICATION: LOCAL ROAD	

GENERAL

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

UTILITIES

THERE ARE NO KNOWN UNDERGROUND OR OVERHEAD UTILITIES WITHIN THE CONSTRUCTION LIMITS. THE FOLLOWING IS THE CONTACT INFORMATION FOR THE ODOT DISTRICT 6 LIGHTING CONDUIT LOCATED IN THE PARAPET AT BRIDGES FRA-70-1241 AND FRA-70-1248. REFER TO SHEET 10/36 FOR REMOVAL AND REPLACEMENT PROCEDURE.

ODOOT TRAFFIC (D6)

DAVE CARLIN TRAFFIC ENGINEER 400 EAST WILLIAM ST DELAWARE, OH 43015 740.833.8267

WATER QUALITY PROTECTION:

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALT OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITHIN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE (E.G. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

ITEM 201: CLEARING AND GRUBBING, AS PER PLAN

FOR THE PURPOSE OF CLEARING TREE BRANCHES HANGING OVER THE PARAPET ON BRIDGE FRA-315-021, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. THE CONTRACTOR SHALL CLEAR ANY BRANCHES OR TREES THAT INTERFERE WITH THE PROPOSED PARAPET WORK. CLEARING AND GRUBBING CAN ONLY BE PERFORMED FROM SEPTEMBER 30^{TH} TO APRIL 1^{ST} , 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.

COOPERATION WITH RAILROAD

CSXT REQUIRES THAT THE CONTRACTOR SUBMIT AND RECEIVE ACCEPTANCE OF A COMPREHENSIVE MEANS, METHODS, & SCHEDULE CONSTRUCTION SUBMISSION PRIOR TO UNDERTAKING THE WORK FOR:

- A. DECK & PARAPET DEMOLITION SHIELD DESIGN FOR WORK IN THE RR SPANS (SEE CSX TRANSPORTATION CRITERIA FOR OVERHEAD BRIDGES SECTION VII)
- B. DECK & PARAPET DEMOLITION IN THE RR SPANS (SEE CSX TRANSPORTATION – CRITERIA FOR OVERHEAD BRIDGES SECTION VII)
- C. ENHANCEMENTS & REPAIRS AT PIER 5, 6, 8 & 9.

CSXT WILL REQUIRE FULL-TIME RAILROAD FLAGGING FOR CONSTRUCTION ASSOCIATED WITH THE TASKS DESCRIBED ABOVE, AND ANY OTHER CONSTRUCTION TASKS REQUIRING CONTRACTOR WORK WITHIN THE RAILROAD SPANS, THAT REQUIRES THE USE OF THE CSX ATGRADE CROSSINGS FOR CONSTRUCTION TASKS, THAT HAS THE POTENTIAL TO OBSTRUCT CSXT OPERATIONS OR ANY WORK WITHIN 50 FEET OF THE TRACK. ANY TEMPORARY HORIZONTAL CONSTRUCTION CLEARANCES PROPOSED SHALL BE SUBJECT TO THE APPROVAL OF CSXT. TYPICALLY, REDUCTIONS IN CLEARANCE FOR CONSTRUCTION ARE NOT PERMITTED. NO TEMPORARY VERTICAL CONSTRUCTION CLEARANCES WILL BE ACCEPTED FOR THIS PROJECT.

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GENERAL:

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC, 1980 WEST BROAD STREET COLUMBUS. OHIO 43223.

ITEM 614 - MAINTAINING TRAFFIC

BRIDGE DEL-23-1087

MAINTAIN MINIMUM OF ONE LANE ON OLENTANGY AVE BELOW THE BRIDGE. ALL LANES ON US 23 NB WILL BE MAINTAINED EXCEPT FOR SHOULDER CLOSURE AS REQUIRED FOR THE WORK ACCORDING TO STANDARD DRAWING 95.40.

BRIDGE FRA-23-0517

MAINTAIN TRAFFIC ALONG US 23 BELOW THE BRIDGE ACCORDING TO STANDARD DRAWING MT-95.30. THE CONTRACTOR MAY ONLY CLOSE/SHIFT AS PERMITTED ON LANE VALUE TABLE.

BRIDGE FRA-71-2446L AND FRA-71-2446R

MAINTAIN TRAFFIC ALONG MORSE RD BELOW BRIDGE ACCORDING TO STANDARD DRAWING 95.31. MAINTAIN TRAFFIC ON BRIDGE WITH SHOULDER CLOSURES ACCORDING TO MT-95.30. ACCESS TO SINCLAIR RD FROM MORSE RD SHALL BE MAINTAINED AT ALL TIMES.

BRIDGE MAR-4-1163

MAINTAIN TRAFFIC ALONG SR 4 OVER BRIDGE ACCORDING TO STANDARD DRAWING 95.30.

BRIDGE MAR-4D-0050

MAINTAIN TRAFFIC ALONG SR 4 OVER BRIDGE ACCORDING TO STANDARD DRAWING 95.30.

BRIDGE FRA-315-0217

FOR THE PURPOSE OF PERFORMING THE REQUIRED WORK, THE RAMP FROM GOODALE ST TO 315 N WILL BE CLOSED AND DETOURED ACCORDING TO STANDARD DRAWINGS MT-98.29 AND MT-98.10. THE RAMP FROM I-670 W TO 315 N WILL ALSO BE TEMPORARILY CLOSED ACCORDING TO STANDARD DRAWINGS MT-98.29 AND MT-98.10. DETOUR ROUTES AND ALLOWABLE CLOSURE TIMES ARE DETAILED IN THE RAMP CLOSURE TABLE.

BRIDGE FRA-70-1241

NO WORK SHALL BE DONE ON BRIDGES FRA-70-1241 AND FRA-70-1248 SIMULTANEOUSLY. TRAFFIC ON I-70 WB AND EB SHALL BE MAINTAINED ACCORDING TO STANDARD DRAWING MT-95.41. THE CONTRACTOR MAY ONLY CLOSE/SHIFT AS PERMITTED ON LANE VALUE TABLE. DURING PROPOSED WORK, GLENWOOD AVE WILL BE CLOSED TO TRAFFIC ACCORDING TO STANDARD DRAWING MT-101.60 AND DETOURED THROUGH CYPRESS AVE.

BRIDGE FRA-70-1248

NO WORK SHALL BE DONE ON BRIDGES FRA-70-1241 AND FRA-70-1248 SIMULTANEOUSLY. TRAFFIC ON I-70 WB AND EB SHALL BE MAINTAINED ACCORDING TO STANDARD DRAWING MT-95.41. THE CONTRACTOR MAY ONLY CLOSE/SHIFT AS PERMITTED ON LANE VALUE TABLE. DURING PROPOSED WORK, CYPRESS AVE WILL BE CLOSED TO TRAFFIC ACCORDING TO STANDARD DRAWING MT-101.60 AND DETOURED THROUGH GLENWOOD AVE.

ITEM 614 – MAINTENANCE OF TRAFFIC (INTERIM COMPLETION DATE):

AN INTERIM COMPLETION DATE OF OCTOBER 31, 2016 HAS BEEN ESTABLISHED ON THIS PROJECT. ALL WORK ON BRIDGES FRA-23-5.17, FRA-71-2446R, FRA-71-2446L, MAR-4-1163, FRA-70-1241, AND FRA-70-1248 SHALL BE COMPLETED BY OCTOBER 31, 2016. A DISINCENTIVE IN THE AMOUNT OF \$1,500 WILL BE ASSESED FOR EACH CALENDAR DAY BEYOND THIS INTERIM DATE.

CONTACTOR IS NOT PROHIBITED FROM COMPLETING OTHER WORK BY THE INTERIM COMPLETION DATE WITHIN THE 2016 CONSTRUCTION SEASON. IN THE EVENT THE CONTACTOR CHOOSES TO COMLETE MORE WORK THAN LISTED ABOVE, THOSE ITEMS OF WORK SHALL BE FULLY COMPLETED ALONG WITH SUBSEQUENT ITEMS OF WORK.

MAINTENANCE OF TRAFFIC (HOLIDAYS AND SPECIAL EVENTS): NO WORK SHALL BE PERFORMED AND ATLEAST 2 THROUGH LANES

NO WORK SHALL BE PERFORMED AND ATLEAST 2 THROUGH LANES (EACH DIRECTION) SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING HOLIDAYS:

CHRISTMAS FOURTH OF JULY
NEW YEARS LABOR DAY
MEMORIAL DAY THANKSGIVING

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

DAY OF HOLIDAY OR	TIME ALL LANES MUST BE OPEN TO
EVENT	TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM
	WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM
	THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM
	FRIDAY
THURSDAY	12:00N TUESDAY THROUGH 6:00 AM
(THANKSGIVING ONLY)	MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM
	MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

RAMP CLOSURE TABLE:

	Ramp Closures													
Primary Route	Secondary	Ramp	Movement	Ramp Closures are NOT Permitted		Primary Detour Route	Secondary Detour Route							
	Route	Designation		Mon-Fri	Sat-Sun									
315	Goodale St	۸	Goodale St to	5AM-	8AM-7PM	GOODALE ST TO US 23 N TO I-670 W TO	GOODALE ST TO 3RD ST S TO I-70 W TO 315 N							
315	Goodale St	А	315 N	7PM 8AIVI-7PIVI		315 N	GOODALE ST TO SRD ST S TO 1-70 W TO 3151							
215	40	В	I-670 W to 315 N	5AM-	8AM-7PM	I-670 W TO GRANDVIEW AVE TO US 33	I-670 W TO 315 S TO US 62 TO 315 N							
315	40	В	1-0/0 W (0.312 W	7PM	OAIVI-/PIVI	W TO I-670 E TO US 315 N	1-0/0 M IO 212 2 IO 02 05 IO 312 M							

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. 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 SHOULD LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	DURATION OF	NOTIFICATION DUE			
	CLOSURE	TO DISTRICT 6			
		COMMUNICATIONS OFFICE			
	>= 2 WFFKS	14 BUSINESS DAYS PRIOR			
RAMP		TO CLOSURE			
AND	> 12 HOURS	7 BUSINESS DAYS PRIOR			
ROAD	AND < 2 WEEKS	TO CLOSURE			
CLOSURES	< 12 HOURS	2 BUSINESS DAYS PRIOR			
		TO CLOSURE			

	>= 2 WFFKS	7 BUSINESS DAYS PRIOR
LANE	2 11 2 11 6	TO CLOSURE
CLOSURES/	< 2 WEEKS	2 BUSINESS DAYS PRIOR
RESTRICTIONS	- 2 772270	TO CLOSURE

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

USE OF WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZERS SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE, WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZERS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETRO REFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZERS SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETRO REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZERS SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS. WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZERS SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS:

USE OF LEOS BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE PROJECT ENGINEER. LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER 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:

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. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEO'S AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEO. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THEIR RESPECTIVE DUTIES, PLACEMENT AND WILL RESOLVE ANY ISSUES BETWEEN THE TWO PARTIES THAT MAY ARISE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE SERVICES WITH:

THE CITY OF DELAWARE 1-740-362-1111
THE OHIO HIGHWAY PATROL 1-614-466-2660

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

LAW ENFORCEMENT OFFICERS (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. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A L.E.O. ARE INCLUDED WITHIN THE BID UNIT PRICE FOR ITEM-614 LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE = 64 HOUR

ITEM 614, MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED):

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER, AND SHALL FOLLOW UNAUTHORIZED LANE USE CHART. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

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ITEM 614, MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED):

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER, AND SHALL FOLLOW UNAUTHORIZED LANE USE CHART. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM.

THE OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC, 1980 WEST BROAD STREET COLUMBUS, OHIO 43223

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE CONSTRUCTION INSPECTOR SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE ALLOWED TO BEGIN WORK. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, HIS PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 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 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TRUCK MOUNTED ATTENUATOR (TMA):

WHEN WORKING IN A CLOSED LANE OR SHOULDER ON A MULTILANE HIGHWAY WITHOUT POSITIVE PROTECTION, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED TO PROTECT EACH WORK AREA IN ACCORDANCE WITH STANDARD DRAWINGS MT-95.30, MT-95.31, MT-95.32 OR OMUTCD TYPICAL APPLICATION (TA) 4 AND TA-6. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLASHING ARROW PANEL AT THE BEGINNING OF THE MERGE TAPER. THE TMA SHALL MEET NCHRP 350 TEST LEVEL 3 CRITERIA FOR STANDARD AND OPTIONAL TESTS AT 100 KM/H (62 MPH) FOR DESIGN IMPACTS. THE COST FOR PROVIDING THE TMA SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE REPLACEMENT AND IS TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

SHORT DURATION RAMP CLOSURES:

FOR THE PURPOSE OF PERFORMING THE REQUIRED WORK, RAMPS MAY BE CLOSED AND DETOURED IN ACCORDANCE WITH ITEM 614 – MAINTAINING TRAFFIC NOTE IF APPROVED BY THE ENGINEER. RAMP CLOSURES ARE SUBJECT TO DISINCENTIVES.

FOR ALL RAMP CLOSURES LASTING MORE THAN 12 HOURS BUT LESS THAN 60 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

- A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS
 (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN
 DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED
 DETOUR ROUTE.
- POSITIVE GUIDANCE ALONG THE DETOUR ROUTE WITH DETOUR SIGNS (M4-9 SERIES) IN ACCORDANCE WITH THE DETOUR SIGNS NOTE.

FOR ALL RAMP CLOSURES LASTING LESS THAN 12 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:

A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS
(PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN
DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED
DETOUR ROUTE.

WHEN CLOSING ENTRANCE RAMPS, CORRESPONDING LEAD-IN LANES AND TURN LANES SHALL ALSO BE CLOSED.

IF A DESIGNATED DETOUR ROUTE IS NOT PROVIDED IN THE PLANS, TRAFFIC SHALL BE DIRECTED TO THE NEXT INTERCHANGE, IF AVAILABLE, TO TURN AROUND. IF THE USE OF THE NEXT INTERCHANGE IS NOT POSSIBLE, AN ALTERNATIVE DETOUR ROUTE SHALL BE PROVIDED BY THE ENGINEER.

ITEM 614 -PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN:

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED, CHANGEABLE MESSAGE SIGNS, ON SITE, TO BE USED AS DIRECTED AT THE INTERSTATE LOCATIONS.

THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. ONLY CLASS I OR II SIGNS WILL BE PERMITTED. EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TEMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLE SHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PLACEMENT OF THE PCMS'S SHALL BE AS DIRECTED BY THE ENGINEER.

SIGN ACTIVATION SHALL BE 7 DAYS PRIOR TO CONSTRUCTION INITIATION OR AS DIRECTED BY THE ENGINEER. OPERATION AND MAINTENANCE 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 WILL BE OFF, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9 INCHES BY 15 INCHES MINIMUM, FACING 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 TROUBLE SHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NEEDED. 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 SHOULD BE SUPPORTED, BUT NORMALLY, NOT MORE THAT TWO MESSAGE PHASES SHOULD BE EMPLOYED, ALTHOUGH THREE PHASES MAY BE USED IN UNUSUAL CONDITIONS. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE

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 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 614.03. 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 A FAILURE. ANY FAILURE SHALL NOT RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATIONS AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN, AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITIES AS OUTLINED IN 104.04. PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT BID PRICE PER MONTH FOR EACH ITEM 614- PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND 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 (CONTINUED):

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN = 2 SNMT

LANE VALUE:

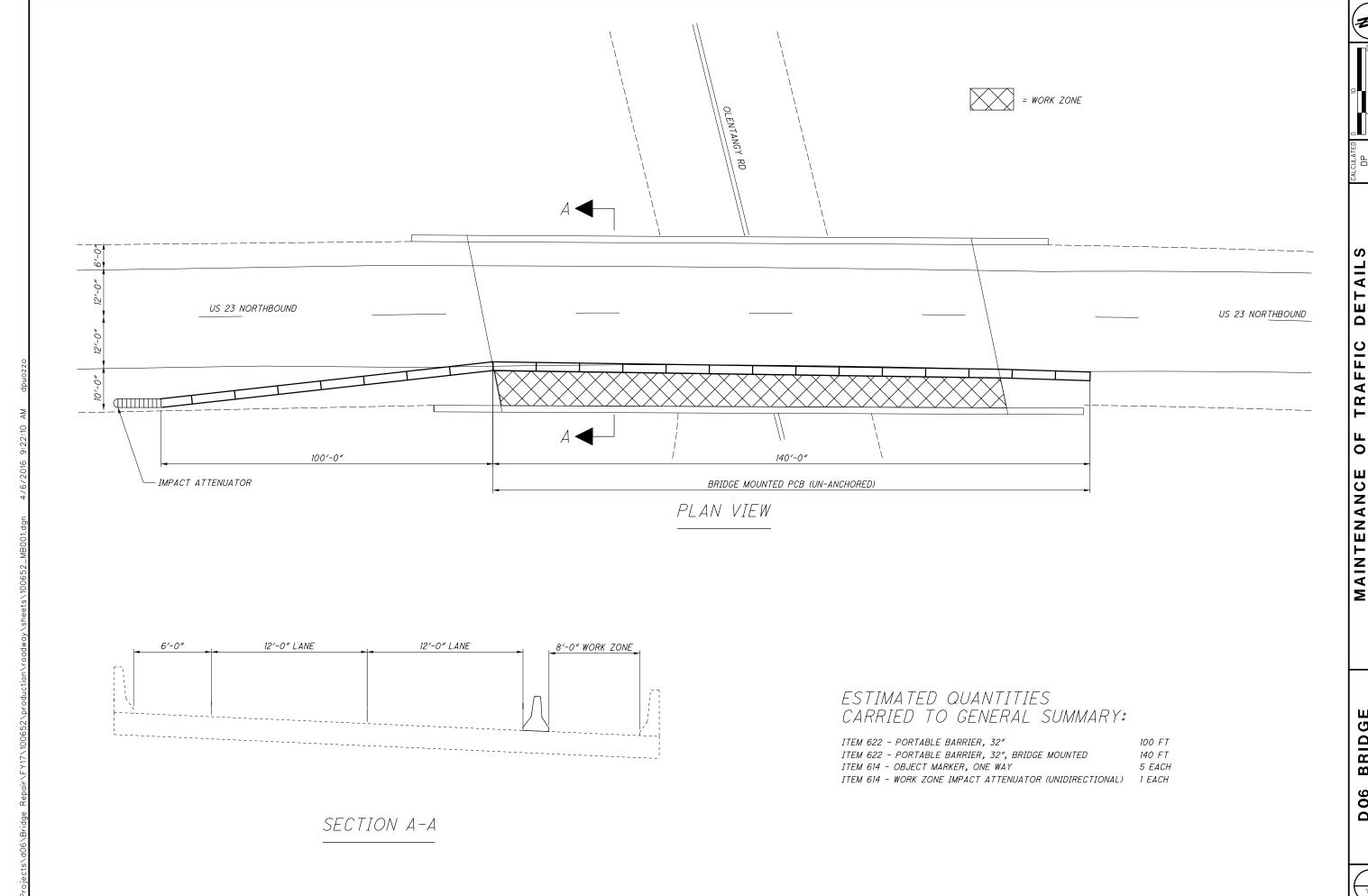
THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE TABLE FOR EACH UNIT OF TIME A LANE/SHOULDER/RAMP IS CLOSED BY THE CONTRACTOR'S ACTION WHILE NOT OTHERWISE PERMITTED BY THE LANE VALUE TABLE.

LANE VALUE TABLE:

Section (SLM)	Existing Number of	La	Lane closures are NOT permitted:									
` ′	Through	Lane	Mon to Fri	Sat	Sun	minute per						
	Lanes per	Reduction				lane						
	DEL-23											
SR 315 (8.77) to Coover Road (15.60)	2 2 to 1 6AM-9AM & No Restriction No Restriction											

Section	Existing	Lar	Lane closures are permitted anytime								
(SLM)	Number of Lanes per	Lane Reduction	Mon to Fri	Sat	Sun	Amounts per minute per					
FRA-23											
Rathmell Road (4.18) to Greenlaw n Avenue (9.60)	2	2 to 1	6AM-9AM & 3PM-7PM	No Restriction	No Restriction	\$75					

Section	Existing	L	ane closures ar	e NOT permitte	d:	Disincentive
(SLM)	Number of	Lane	Mon to Fri	Sat	Sun	Amounts per
, ,	Lanes per	Reduction				minute per
		•	FRA-70			
Central	4	4 to 3	No Restriction	No Restriction	No Restriction	\$100
Avenue						
(11.98) to		4 to 2	5AM-9AM &	No Restriction	No Restriction	\$100
Glenw ood			2PM-6PM			
Avenue		4 to 1	5AM-9PM	6AM-8PM	6AM-8PM	\$100
Glenw ood	2	2 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$200
Avenue						
(12.41) to						
SR 315						
(13.43)						



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DETAILS ENTANGY

TRAFFIC OVER OLE OVER MAINTENANCE OI BRIDGE DEL-23-0517

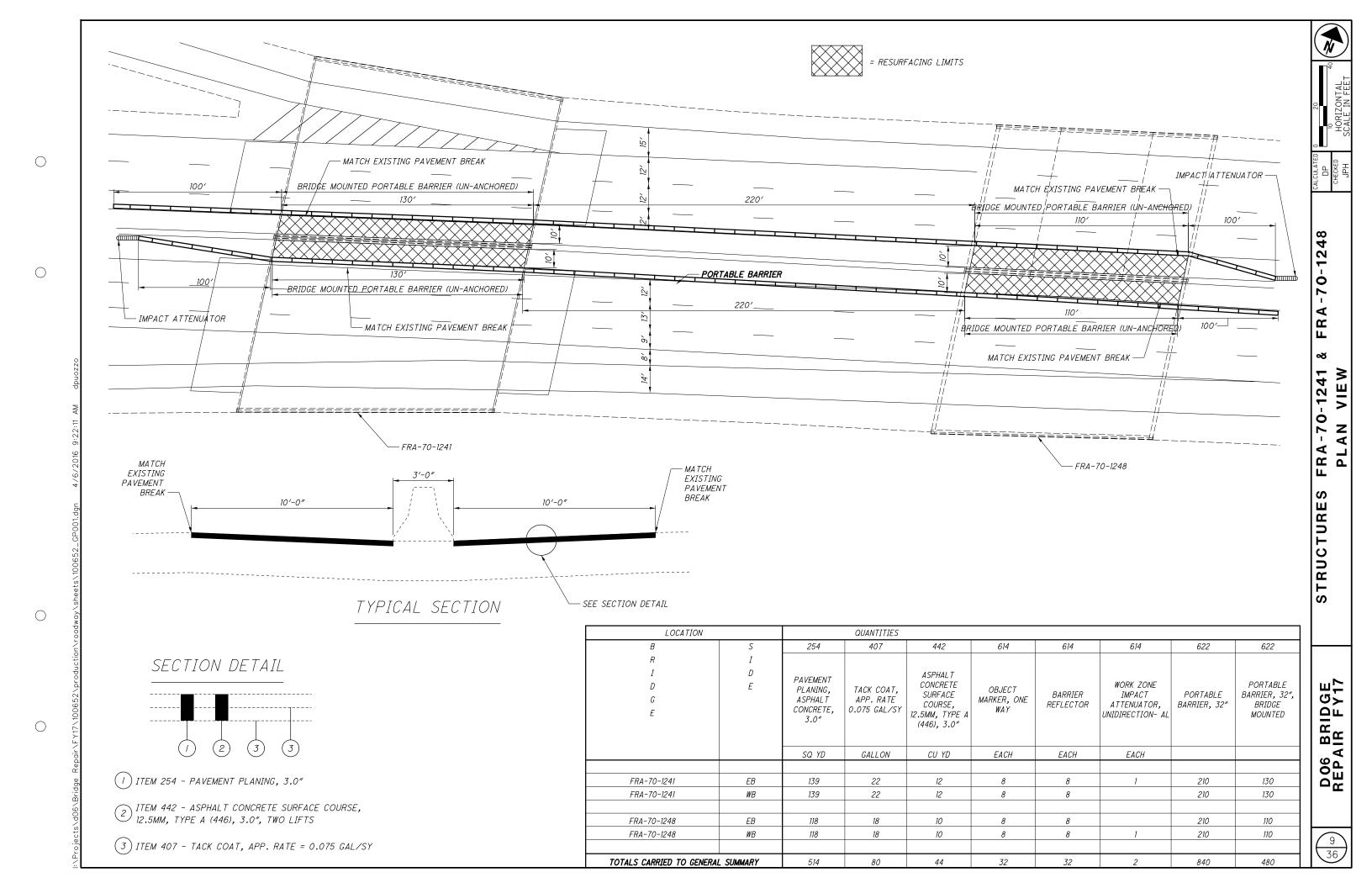
DOG BRIDGE REPAIR FY17

SHEET NUMBER			PART.		ITEM	ITEM GRAND UNIT	DESCRIPTION		ALCULATED DP CHECKED										
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REFER TO THE FOLLOWING STANDARD DRAWING(S):

BR-1-13 DATED: 01/17/14

PCB-91 DATED: 01/18/13

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S): 848 DATED: 07/17/15

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THESE STRUCTURES CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION 2002, AND THE ODOT BRIDGE DESIGN MANUAL, 2004.

DESIGN DATA:

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CONCRETE QC2 – 4500 PSI (PARAPET REPAIRS)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60.000 PSI

EXISTING STRUCTURE VERIFICATION

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 A CTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER

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 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 USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. 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 REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND [41 KILOGRAM] CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

ITEM 517 – RAILING, MISC.: PARAPET REPAIR:

THIS PAY ITEM IS INTENDED TO REMOVE THE EXISTING CONCRETE SEALER, REMOVE AND REPLACE THE TOP 8" OF THE EXISTING BRIDGE PARAPET AS SHOWN, FOR THE FULL LENGTH OF THE EXISTING PARAPET, PER CMS 519. REMOVE EXISTING REINFORCING STEEL ABOVE THE SAW CUT.

PROVIDE 9" DEEP VERTICAL DOWEL HOLES, ON 1'-0" C/C SPACING PER CMS 510. GROUT A 1'-2" LONG #6 RESTEEL BAR INTO EACH DOWEL HOLE, USING NON-SHRINK, NON-METALLIC GROUT. A LONGITUDINAL #6 BAR SHALL BE PLACED AS SHOWN FOR THE FULL LENGTH OF THE PARAPET REPAIR. FIELD SPLICE THE LONGITUDINAL BAR AS PER CMS 509.07. ALL REINFORCING STEEL SHALL CONFORM TO CMS 509. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

REPLACE THE CONCRETE REMOVED FROM THE PARAPET WITH QC2 CONCRETE PER CMS 511. THE CONCRETE SHALL MATCH THE SHAPE OF THE SECTION OF PARAPET REMOVED AS PART OF THIS PAY ITEM. PLACE VERTICAL JOINTS TO COINCIDE WITH EXISTING VERTICAL JOINTS IN THE PARAPET.

SEAL THE REBUILT PARAPET WITH EPOXY URETHANE SEALER AS PER CMS 512. THE LIMITS OF THE SEALING SHALL INCLUDE ALL AREAS SHOWN, FOR THE FULL LENGTH OF THE PARAPET REPAIR.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 517 BRIDGE RAILING REBUILT, AS PER PLAN.

ITEM 519, SPECIAL – PATCHING CONCRETE STRUCTURE MISC.: SUPERPLASTICIZED DENSE CONCRETE OVERLAY

THIS WORK SHALL CONSIST OF REMOVING ALL LOOSE AND DISINTEGRATED CONCRETE, PREPARING THE SURFACE, PLACING FORMS, AND PLACING CONCRETE PATCHES, INCLUDING CURING OF SAME, OF PORTIONS OF THE BRIDGE DECK AS DETAILED IN SHEET 17/36. MATERIAL USED FOR THE PATCH SHALL CONFORM TO SUPPLEMENTAL SPEC 848.06. NEW CONCRETE SURFACES SHALL BE SEALED WITH HMWM RESIN.

SEALING OF CONCRETE SURFACES WITH HMWM RESIN SHALL BE CONSIDERED INCIDENTAL TO ITEM 519, SPECIAL – PATCHING CONCRETE STRUCTURE MISC.: SUPERPLASTICIZED DENSE CONCRETE OVERLAY.

ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN

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 VACCUUM ABRASIVE BLASTING.

ITEM 530, SPECIAL - STRUCTURES MISC.: NETTING:

DESCRIPTION:

THIS WORK SHALL CONSIST OF INSTALLATION OF A STRUCTURAL NETTING DEBRIS CONTAINMENT SYSTEM AROUND PARAPETS OF STRUCTURES, TO PROTECT TRAFFIC BELOW FROM SPALLING CONCRETE. THE NETTING SHALL NOT DECREASE BRIDGE VERTICAL CLEARANCE BY MORE THAN 1".

DESIGN:

THE FOLLOWING BRIDGE DEBRIS CONTAINMENT, OR EQUIVALENT SHALL BE USED:

INCORD ROC-BLOC BRIDGE SAFETY N-820H STRUCTURAL NETTING WITH WS70 LINER.

NETTING SPECIFICATIONS FOR N-820H ARE AS FOLLOWS:

STYLE	RASCHEL KNOTLESS NETTING
CORD DIAMETER	3/16 INCH
MESH SIZE	2 ½ INCH SQUARE OPENING
LOAD TEST, MAX	6000 LB
WEIGHT	0.0528 LT/SQ FT
MELTING POINT	320° F
UV	EXTRA UV STABILIZERS ADDED
COLOR	SAND OR LIGHT GREY

InCord 226 Upton Road Colchester, CT 06415 860-537-1414

MEASUREMENT AND PAYMENT:

THIS ITEM WILL BE PAID FOR BY SQUARE YARD INSTALLED AND ACCEPTED. BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PROVIDE AND INSTALL STRUCTURAL NETTING DEBRIS CONTAINMENT SYSTEM.

ITEM, SPECIAL - STRUCTURE MISC.: DEBRIS CONTAINMENT NETTING

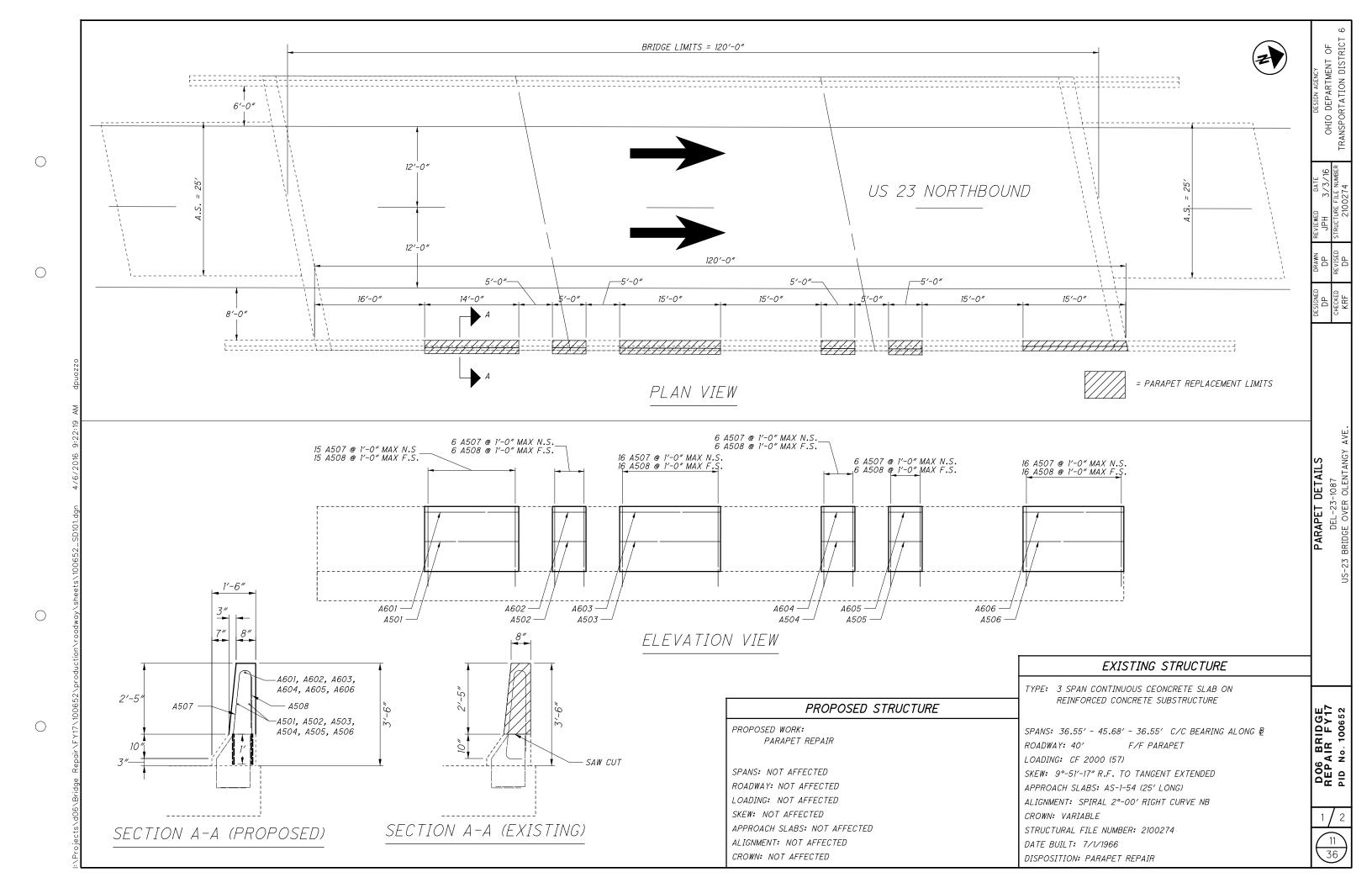
ITEM 530 SPECIAL – STRUCTURE MISC.: DE-ENERGIZE, REMOVE, REPLACE EXISTING CONDUIT IN PARAPET:

THIS ITEM INCLUDES DE-ENERGIZING, REMOVING AND REPLACING THE EXISTING ELECTRICAL CONDUIT WITHIN THE MEDIAN PARAPET OF STRUCTURES FRA-70-1241 AND FRA-70-1248. REMOVAL AND REPLACEMENT IS ONLY REQUIRED WITHIN THE PARAPET REPAIR LIMITS. THIS WORK SHALL BE COORDINATED WITH ODOT D6. THE CONTRACTOR IS REQUIRED TO KEEP THE HIGHWAY LIGHTING OPERATING DURING THE PROJECT.

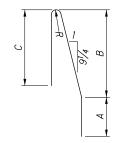
THE CONTRACTOR IS REQUIRED TO PROVIDE CONDUITS MATCHING THE EXISTING AND PROVIDE TWO #2 CONDUCTORS BETWEEN THE FIRST LIGHT POLES ON EACH SIDE OF BOTH BRIDGES. IN ADDITION TO THIS, THREE FUSED SPLICE KITS (ONE FOR EACH BRIDGE) WILL BE REQUIRED.

THIS ITEM IS TO BE PAID FOR ON A LINEAR FOOT BASIS AND SHALL INCLUDE ALL COSTS ASSOCIATED WITH COMPLETING THIS ITEM OF

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT



									DIMENSION	IS	·	·	
MARK	NUMBER REQ'D	LENGTH	WEIGHT	TYPE	Α	В	С	D	Ε	F	G	R	INC.
					PARAPET	S							
A501	2	13' - 8"	29	STR									
A502	2	4' - 8"	10	STR									
A503	2	14' - 8"	31	STR									
A504	2	4' - 8"	10	STR									
A505	2	4' - 8"	10	STR									
A506	2	14' - 8"	31	STR									
A507	65	5′ - 3″	356	22	1' - 0"	2' - 3"	2' - 3"					1.5"	
A508	65	3' - 0"	204	STR									
A601	1	13' - 8"	21	STR									
A602	1	4' - 8"	8	STR									
A603	1	14' - 8"	23	STR									
A604	1	4' - 8"	8	STR									
A605	1	4' - 8"	8	STR									
A606	1	14' - 8"	23	STR									
PARAPET S	CUB-TOTAL		772	(CA	ARRIED TO	THIS SHEET)						



<u>TYPE-22</u>

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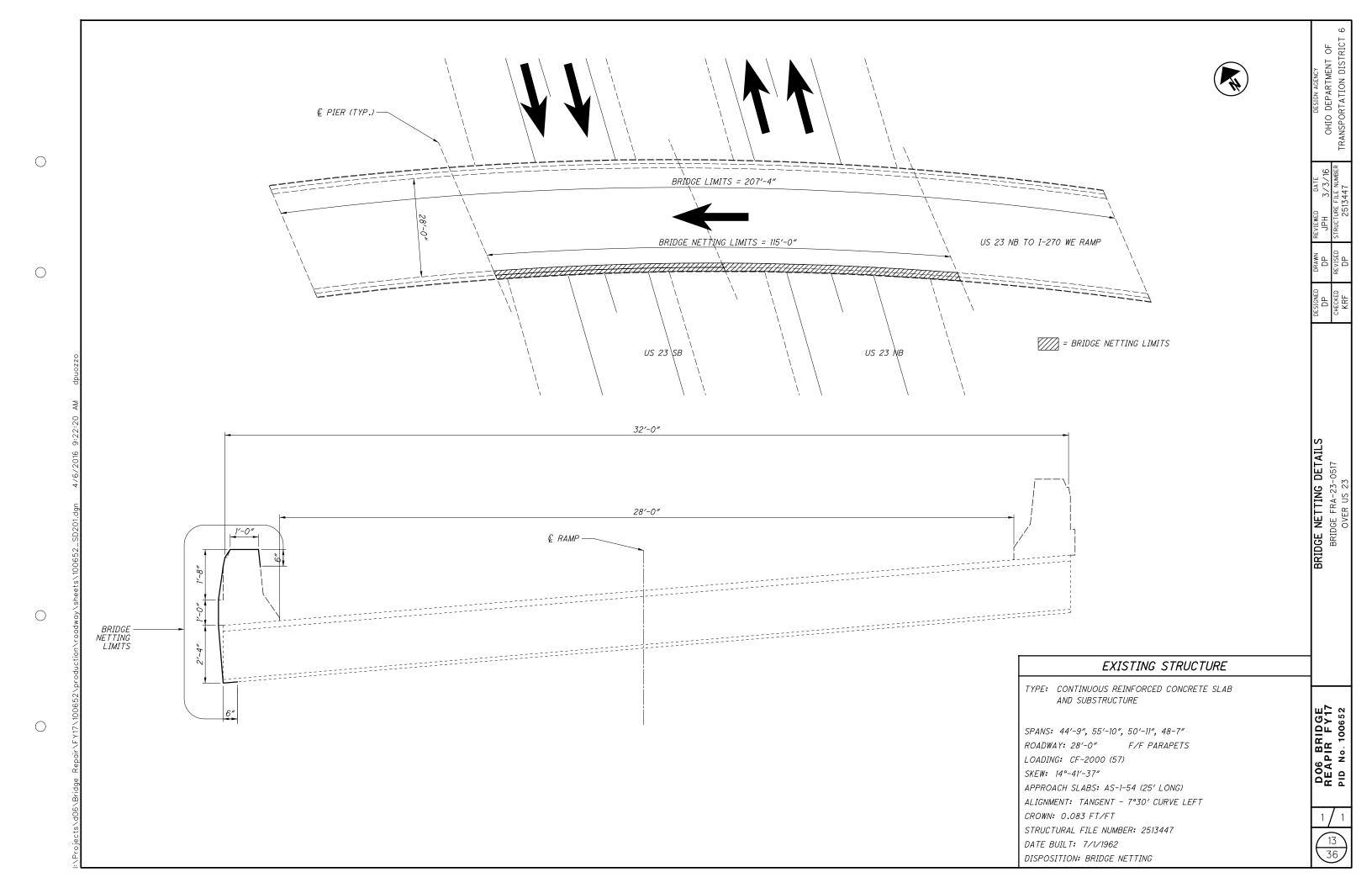
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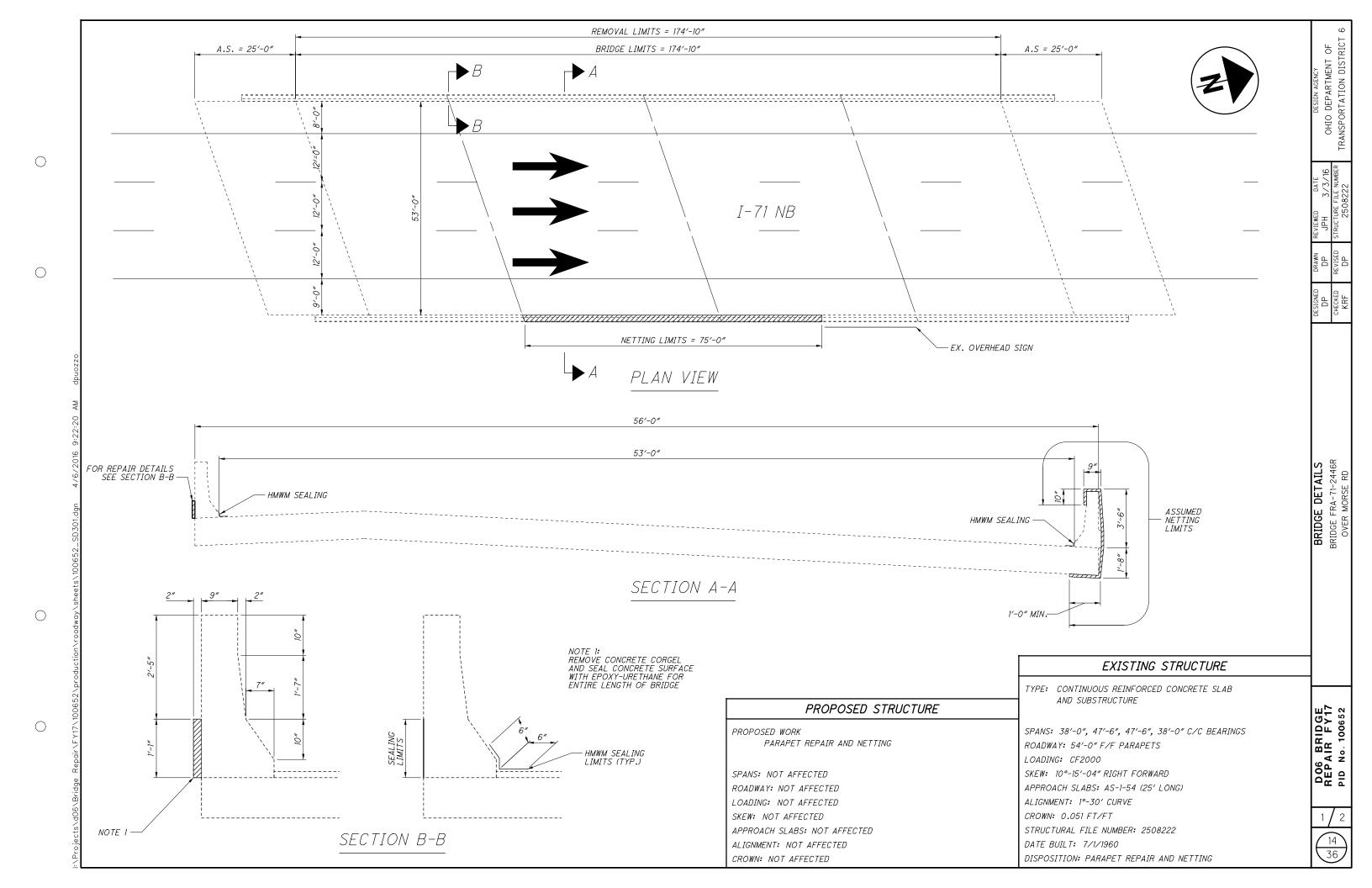
DOG BRIDGE REPAIR FY17 PID No. 100652

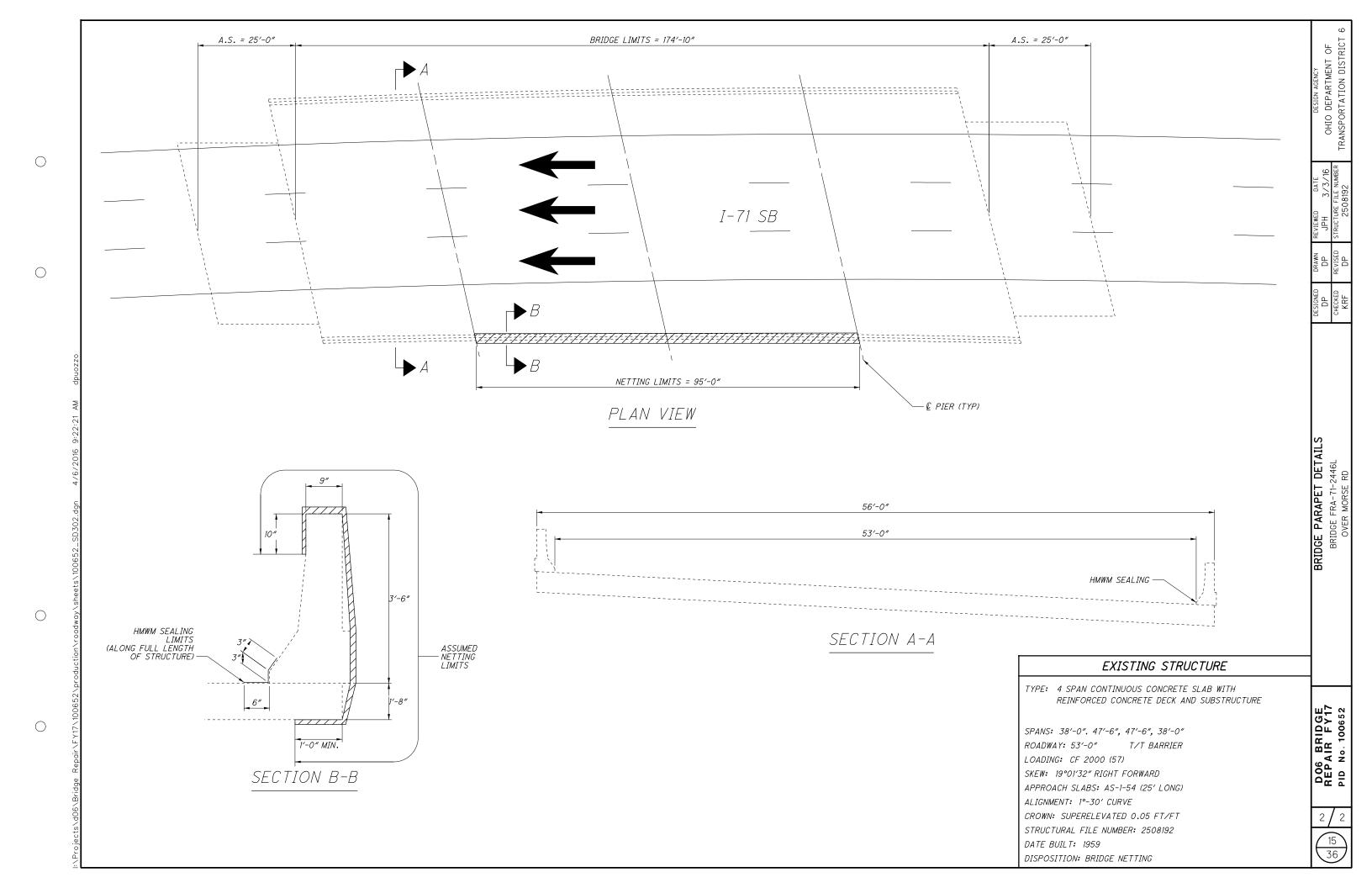
REINFORCING STEEL LIST
BRIDGE DEL-23-1087
BRIDGE OVER OLENTANGY AVE

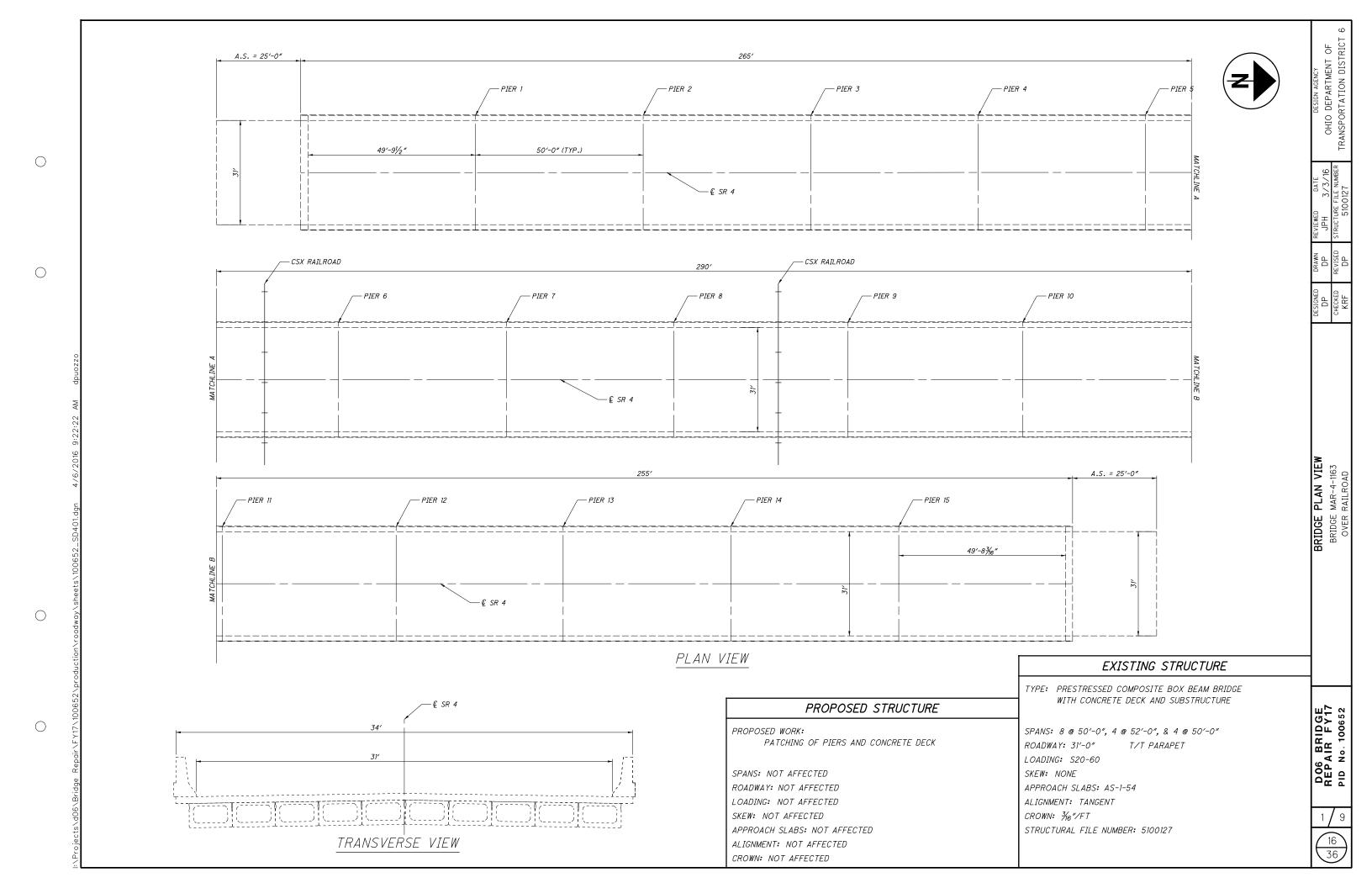
DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 6

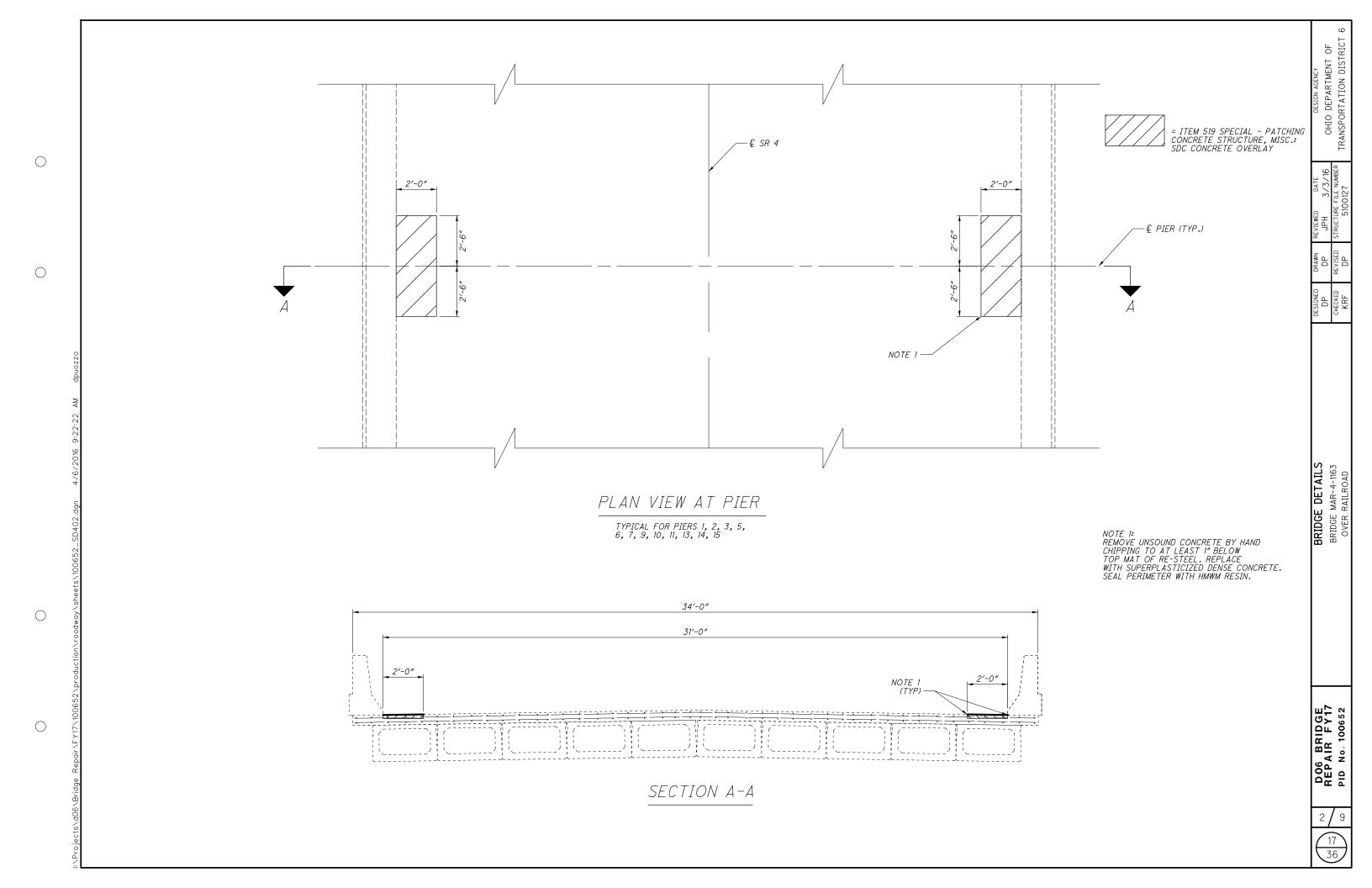


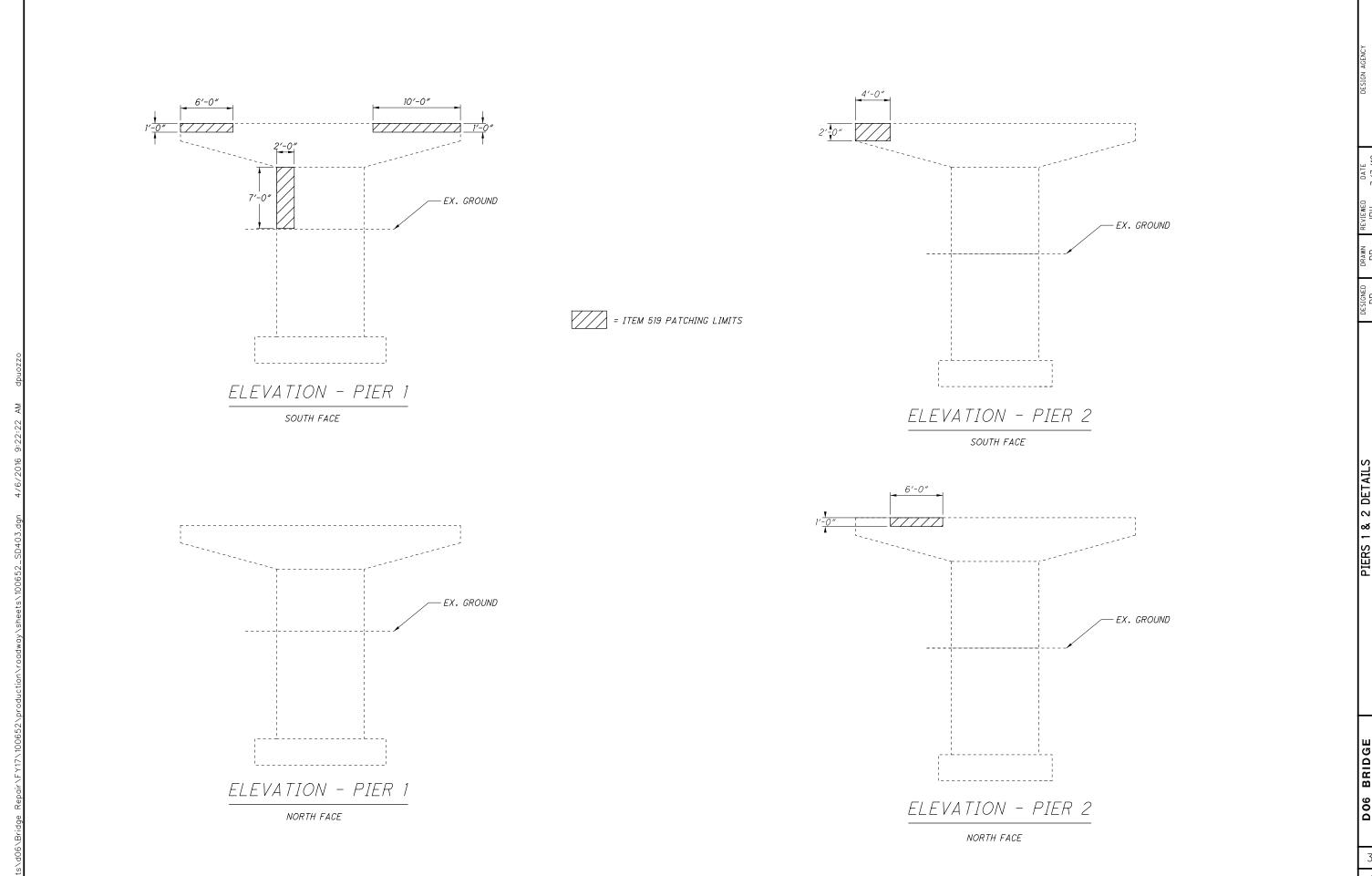








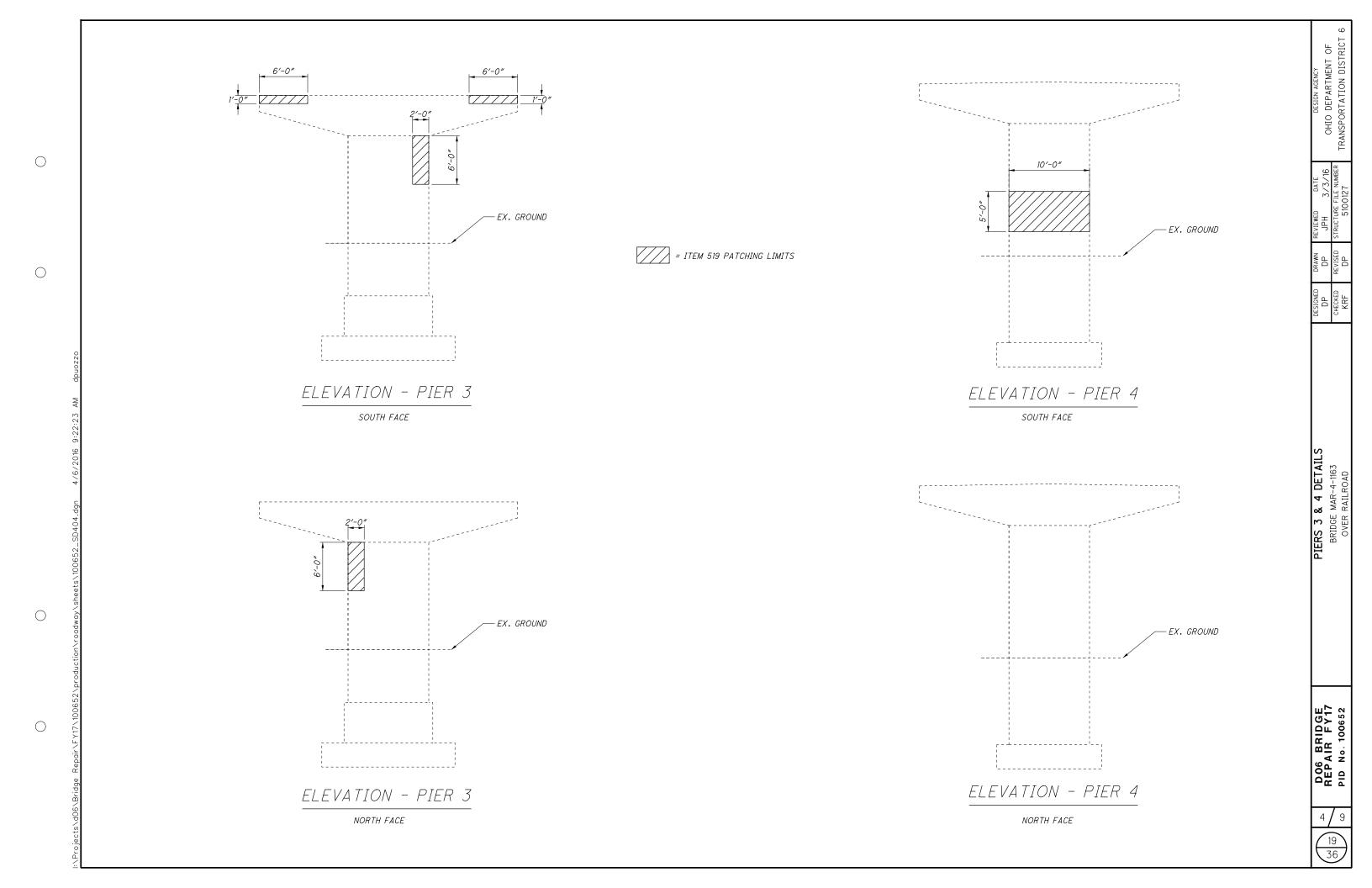


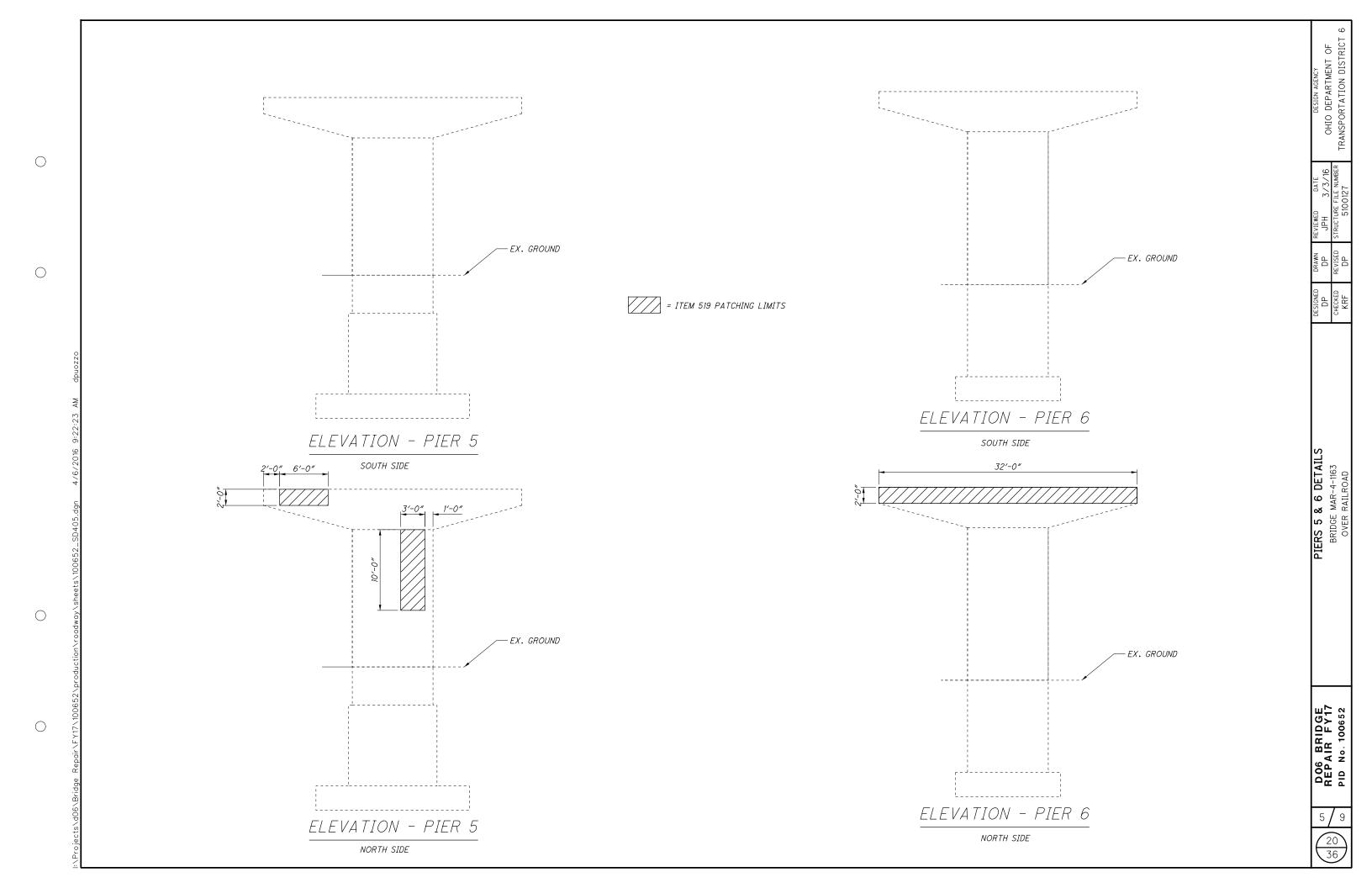


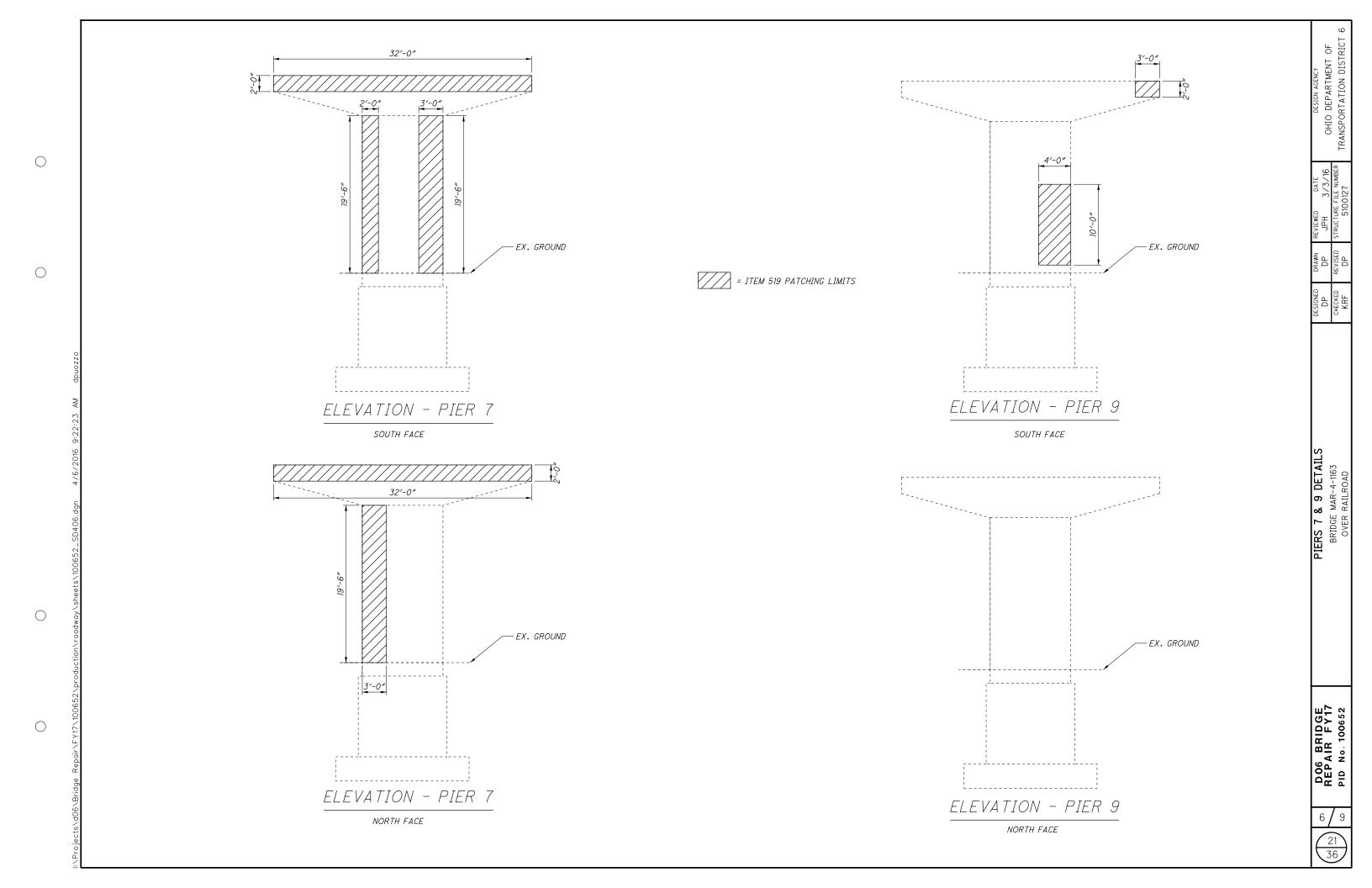
EPAIR FY17 D No.100652

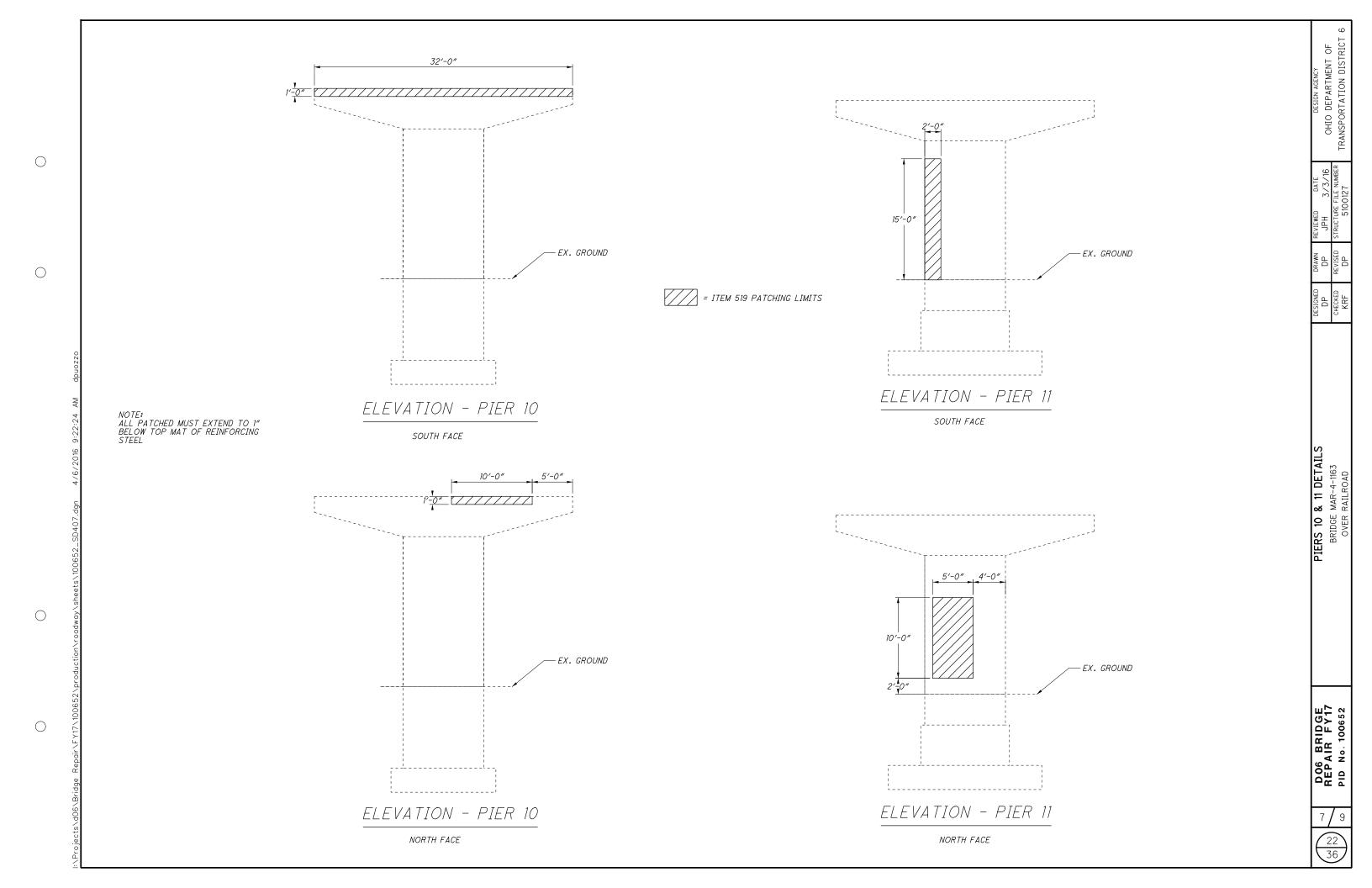
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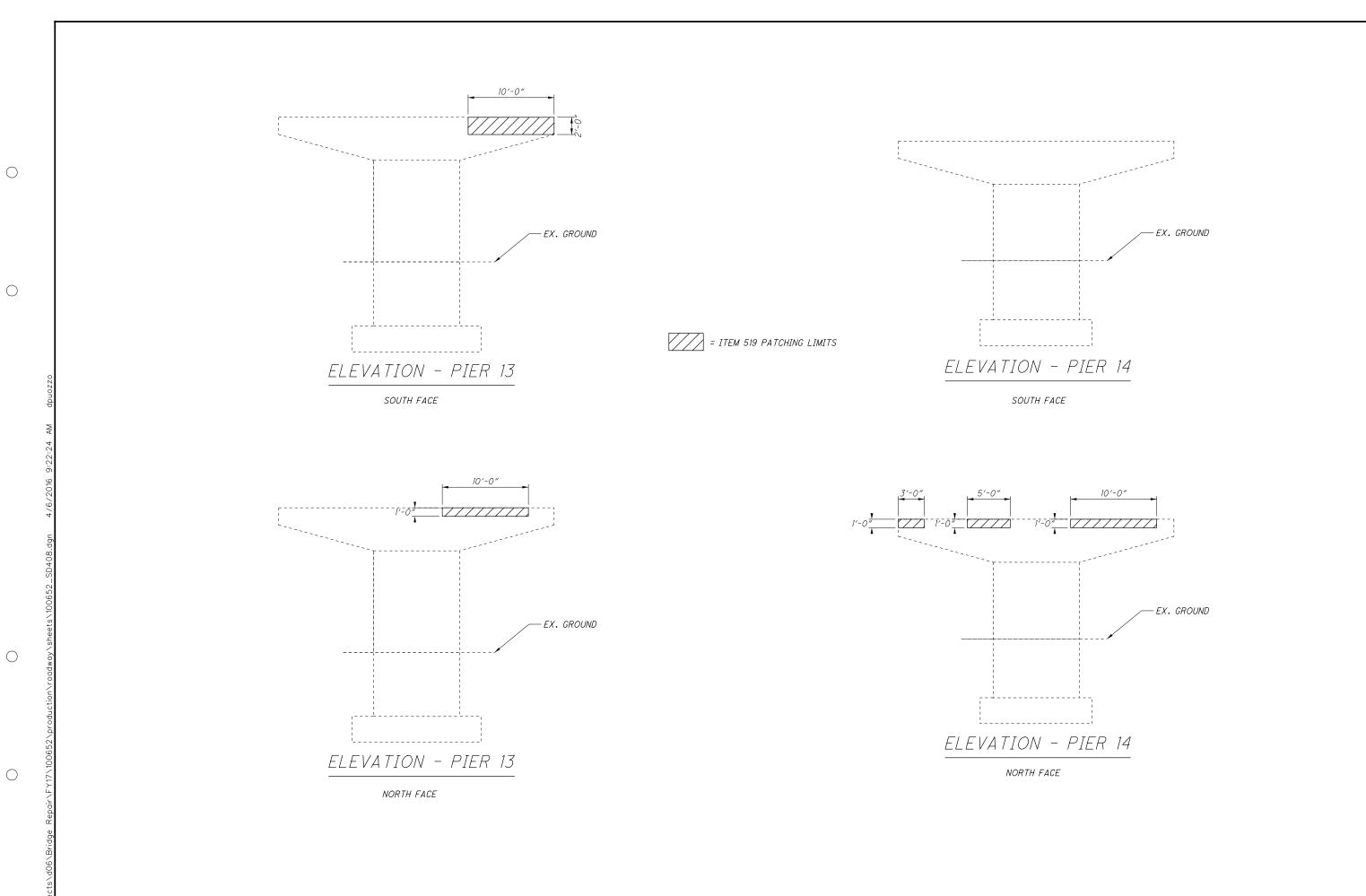
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				ES	STIMATED QUANTIT	TIES												
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	PIER 7	PIER 9	PIER 10	PIER 11	PIER 12	PIER 13	PIER 14	PIER 15
519	11600	240	SF	SPECIAL - PATCHING CONCRETE STRUCTURE, MISC: SDC CONCRETE OVERLAY	20	20	20		20	20	20	20	20	20		20	20	20
512	10000	82	SY	SEALING OF CONCRETE SURFACES	3	2	4	6	5	7	32	5	5	9		3	2	
519	11101	736	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	30	14	36	50	42	64	284	46	42	80		30	18	

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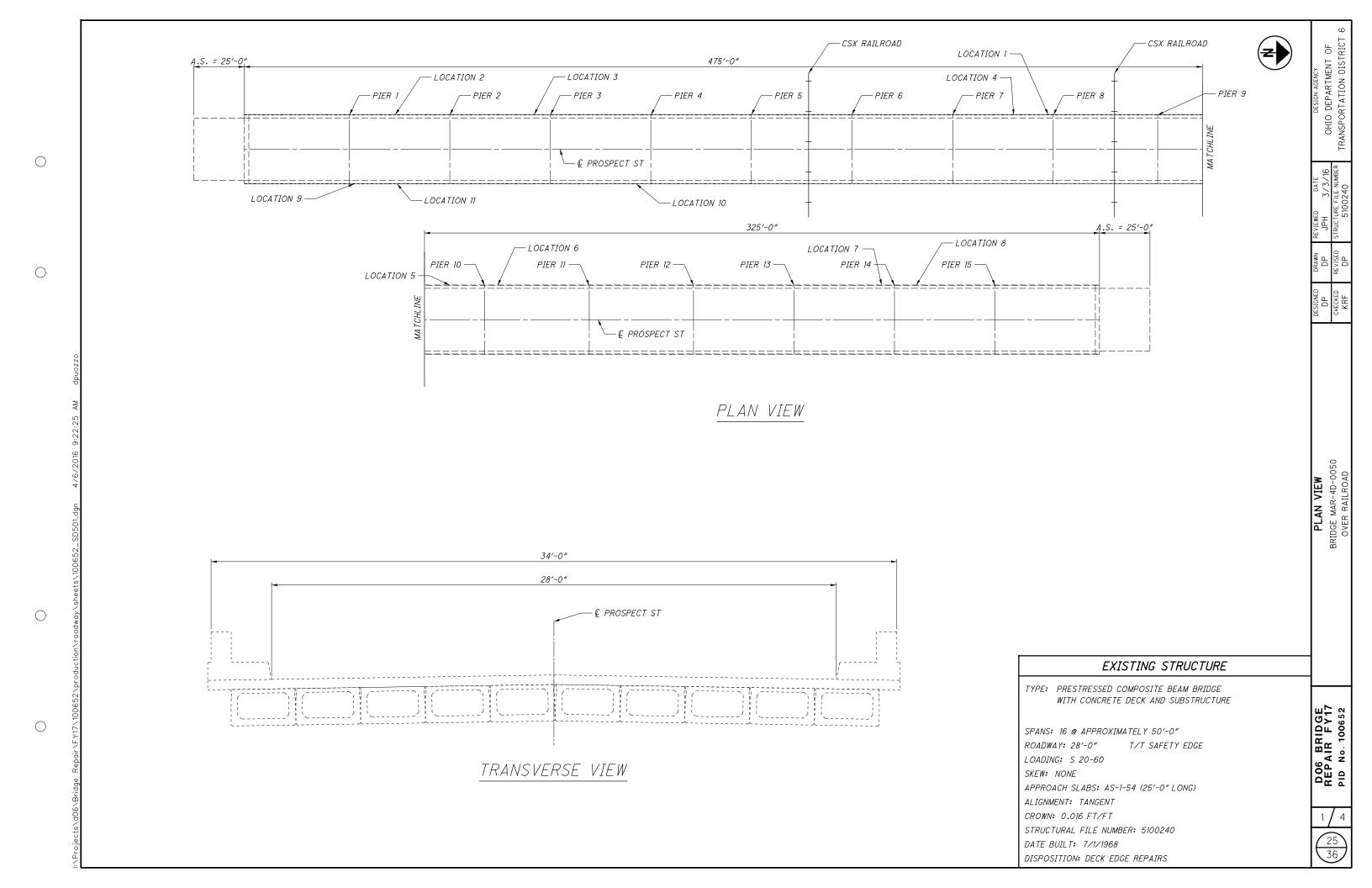
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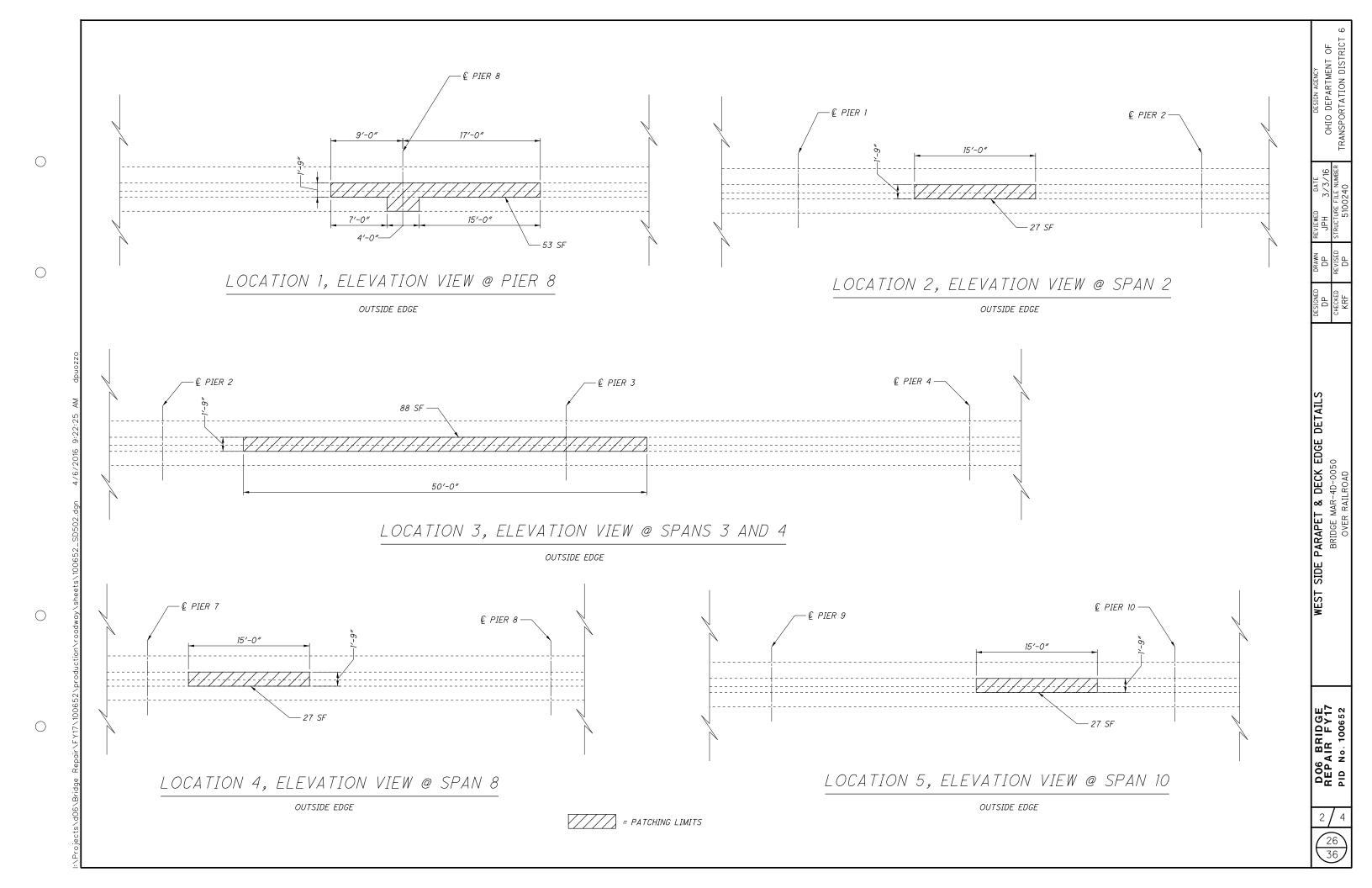
DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 6

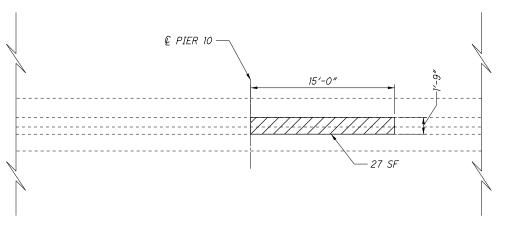
ESTIMATED QUANTITIES
BRIDGE MAR-4-1163
OVER RAILROAD

DOG BRIDGE REPAIR FY17 PID No. 100652



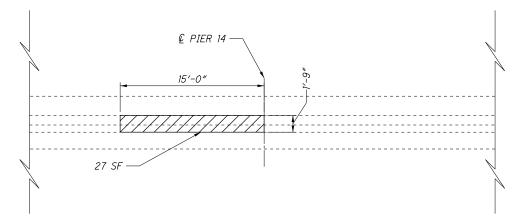






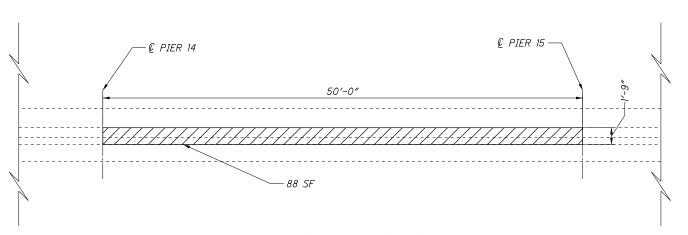
LOCATION 6, ELEVATION VIEW @ PIER 10

OUTSIDE EDGE



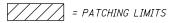
LOCATION 7, ELEVATION VIEW @ PIER 14

OUTSIDE EDGE



LOCATION 8, ELEVATION VIEW @ SPAN 15

OUTSIDE EDGE

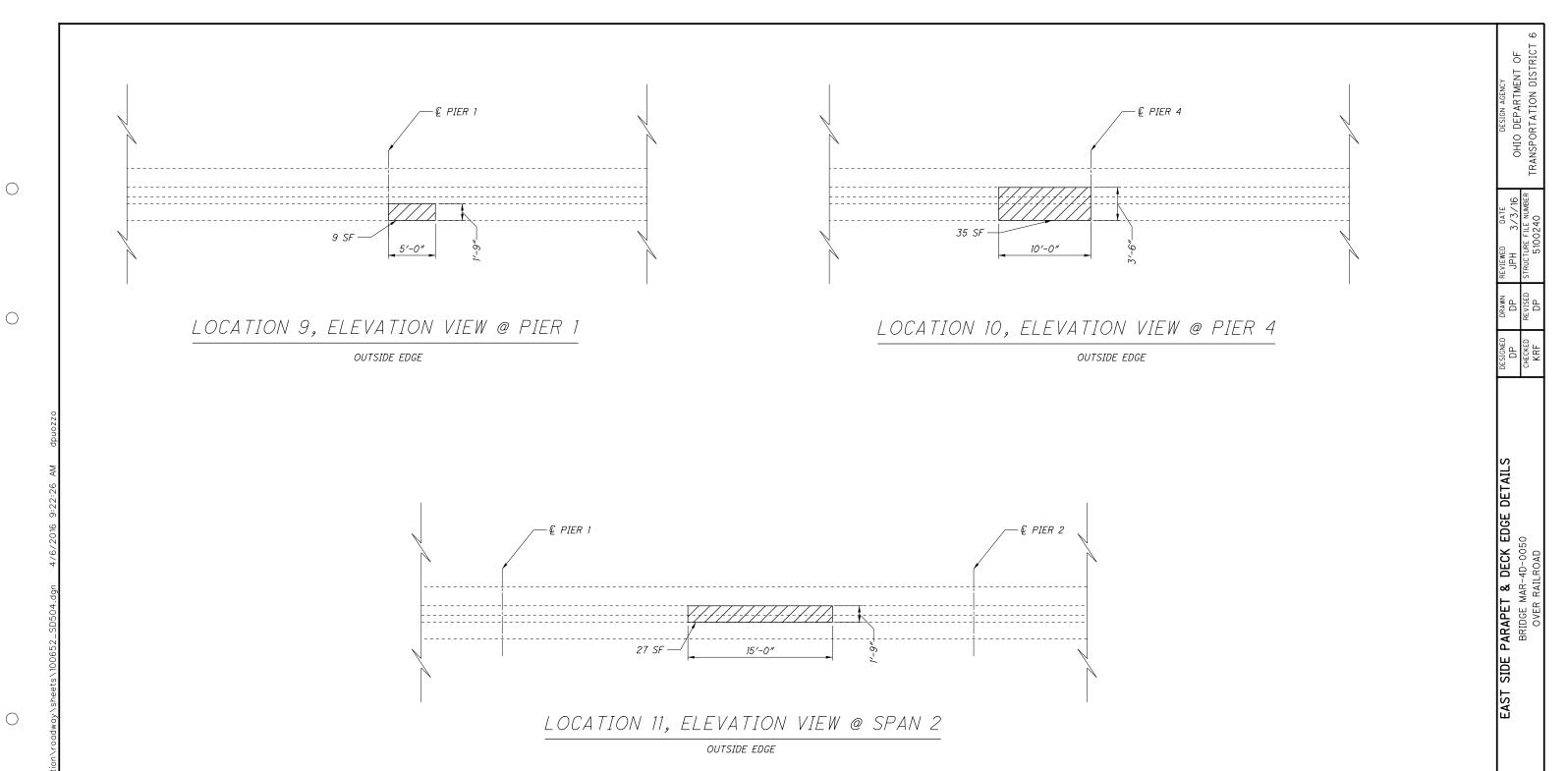


ojects/d06\Bridge Repair\FY17\100652\production\roadway\sheets\100652_SD503.dgn 4/6/2016

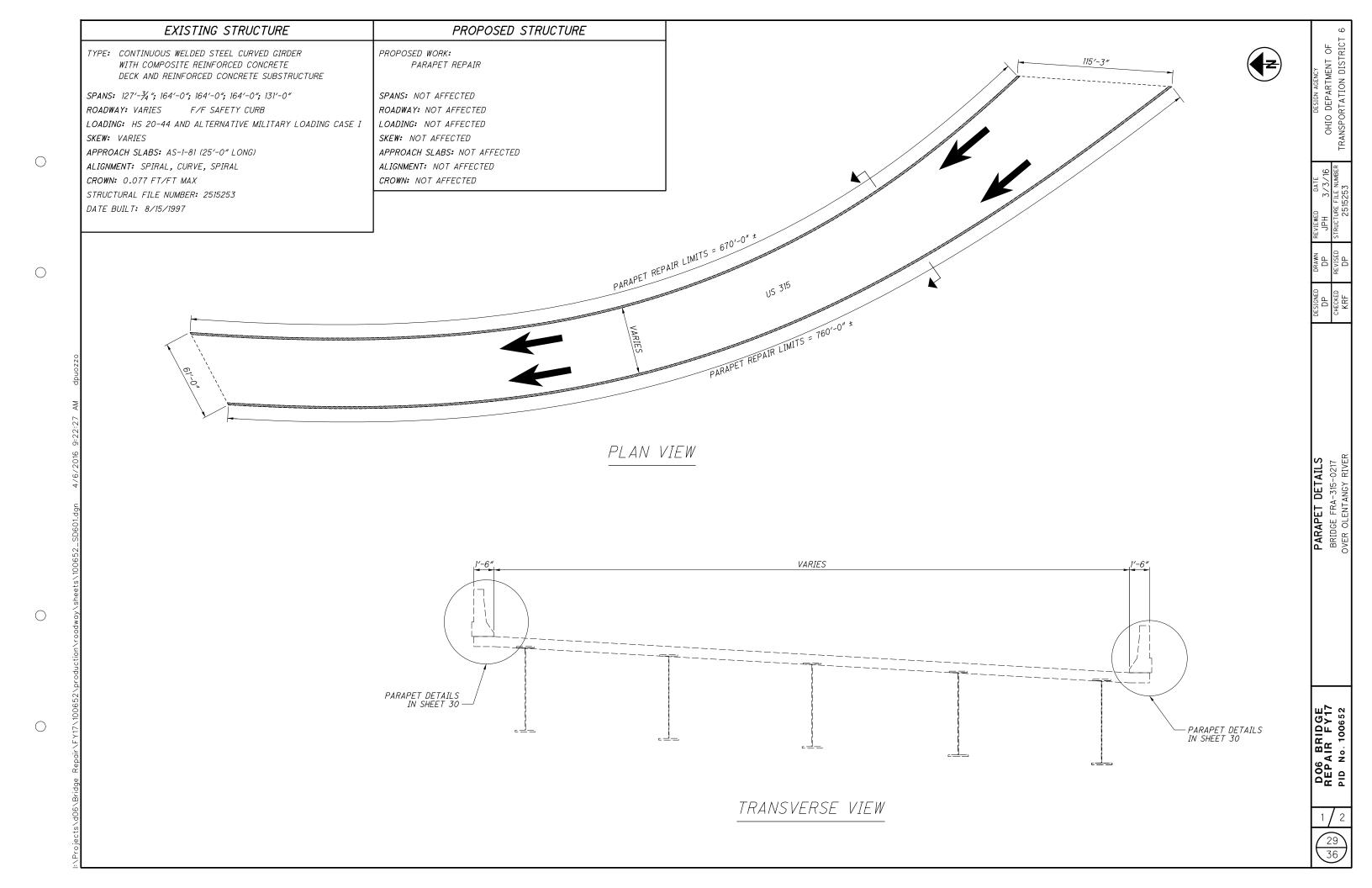
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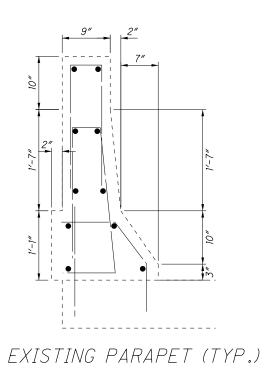
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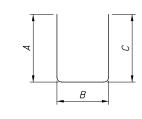


= PATCHING LIMITS



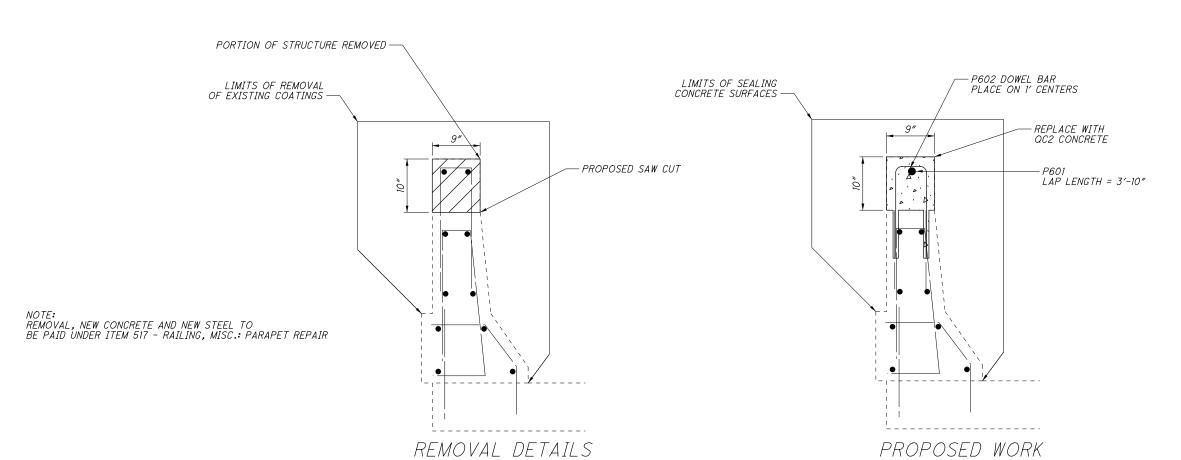


	NUMBER							L	DIMENSION	ONS					
MARK	REQ'D	LENGTH	WEIGHT	TYPE	Α	В	С	D	Ε	F	G	R	INC.		
						PARAPE1	-								
P601	68	25' - 0"	2553	STR											
P602	1432	3' - 4"	7174	2	1′ - 6″	5″	1' - 6"								
PARAPET :	SUB-TOTAL		9,727	FOR ESTIM	ATION PURF	OSES ONL	γ								



DESIGN AGENCY
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TRANSPORTATION DISTRICT 6

<u> TYPE-2</u>



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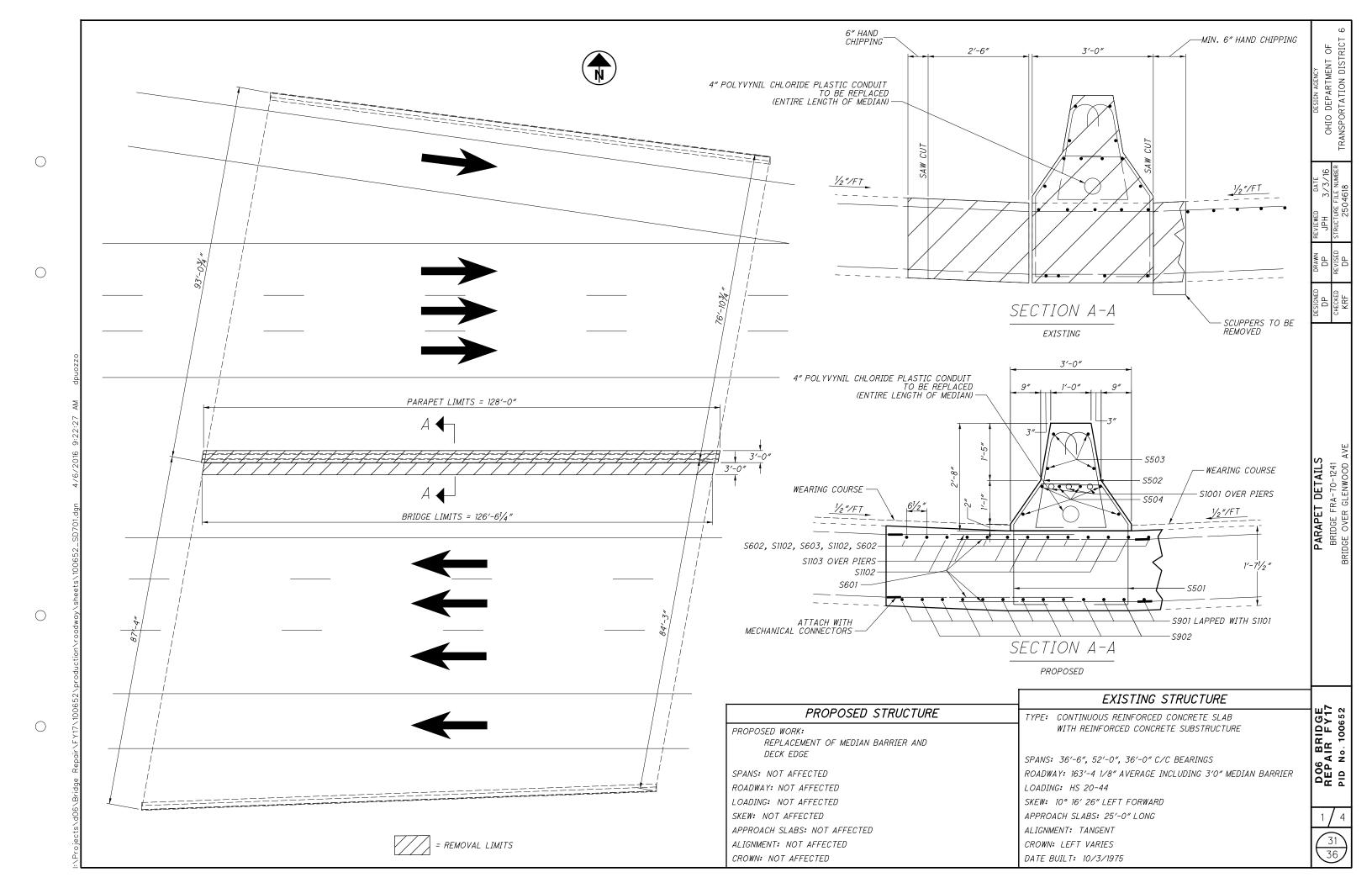
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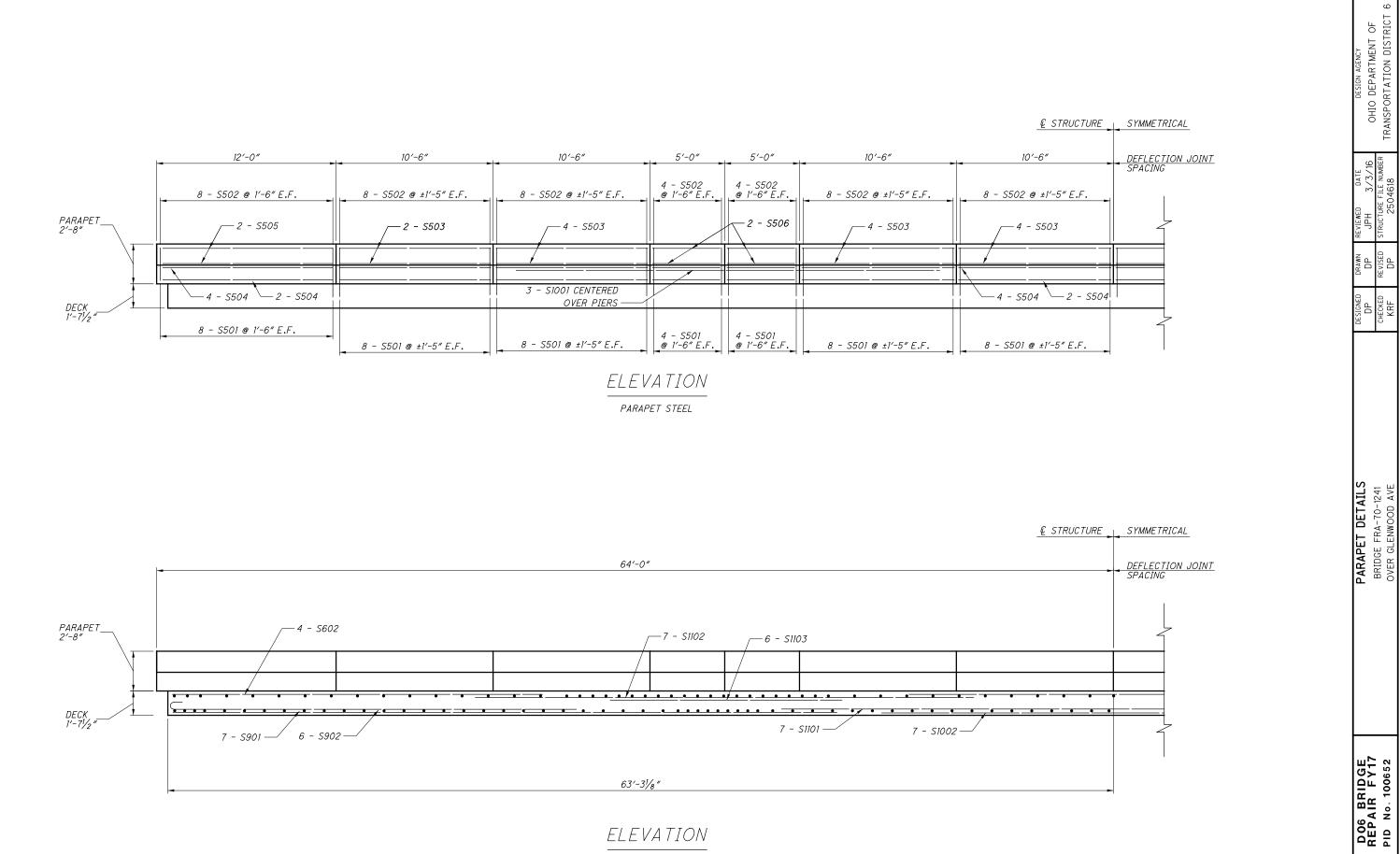
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DOG BRIDGE REPAIR FY17 PID No. 100652

PARAPET DETAILS & STEEL COUNT BRIDGE FRA-315-0217 OVER OLENTANGY RIVER



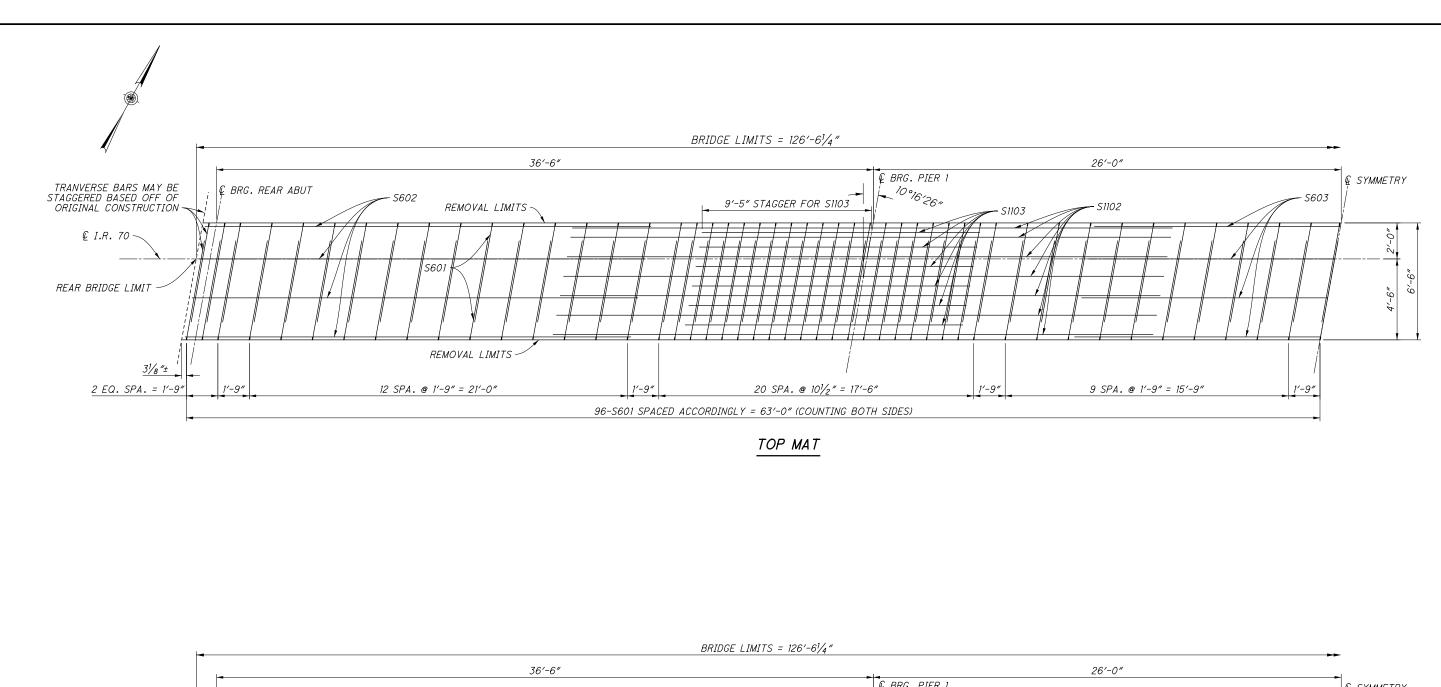


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ELEVATION DECK STEEL



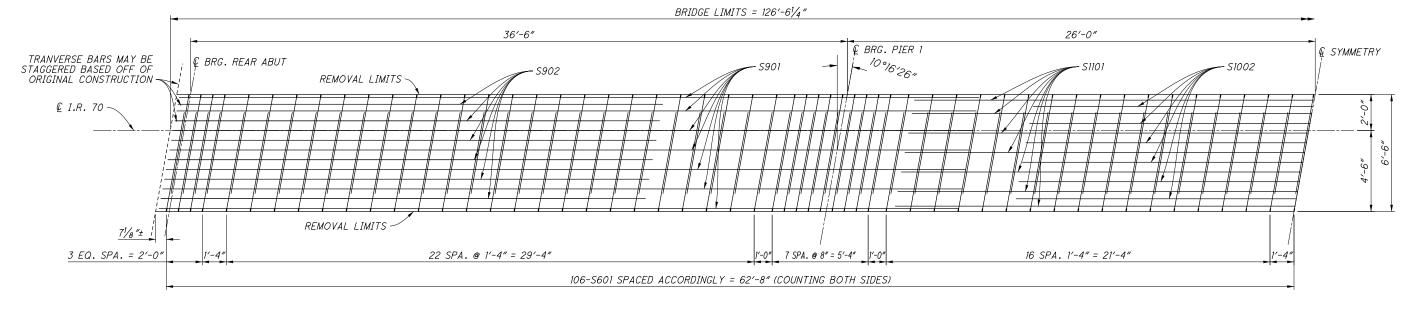
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DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 6

SLAB REINFORCING STEEL DETAILS
BRIDGE FRA-70-1241
OVER GLENWOOD AVE

DOG BRIDGE REPAIR FY17 PID No. 100652

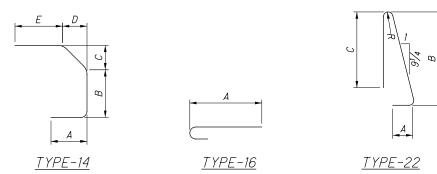


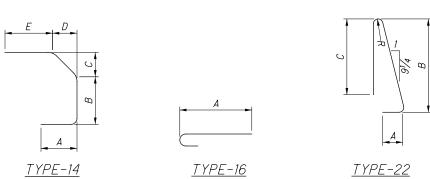
BOTTOM MAT

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ESTIMATED QUANTITIES											
ITEM	ITEM EXTENSION TOTAL UNIT DESCRIPTION										
						L					
202	11301	72	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	23	49					
509	10000	<i>16,584</i>	LB	EPOXY COATED REINFORCING STEEL	2,881	13,703					
511	33416	72	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	23	49					
530	1300	128	FT	SPECIAL * STRUCTURE MISC: DE-ENERGIZE, REMOVE, REPLACE EXISTING CONDUIT IN PARAPET	128						

	NUMBER				DIMENSIONS											
MARK	REQ'D	LENGTH	WEIGHT	TYPE	Α	В	С	D	Ε	F	G	R	INC.			
						PARAPET										
S501	192	4' - 0"	801	14	9"	9″	11.5"	1' - 7.5"	8″							
S502	192	3' - 8"	734	22	6"	2' - 5"	7.5"					2.25"				
S503	32	10' - 2"	339	STR												
S504	24	33' - 4"	834	STR												
S505	8	11' - 4"	95	STR												
S506	16	4' - 8"	78	STR												
S601	404	5' - 7"	3388	STR												
S602	8	24' - 9"	297	STR												
S603	4	27' - 4"	164	STR												
S901	14	44 - 5"	2114	STR												
S902	12	28' - 2"	1149	16	26′ - 11″											
S1001	6	26' - 0"	671	STR												
S1002	6	31' - 2"	800	STR												
C1101	7	44' - 5"	1050	CTD												
S1101	<u>'</u>		1652	STR												
S1102	14	33' - 4"	2479	STR				1					-			
S1103	12	15' - 5"	988	STR								+				
ARAPET S	UB-TOTAL	<u> </u>	16,584	TOTAL CA	L RRIED TO SI	IRSHMMARY										



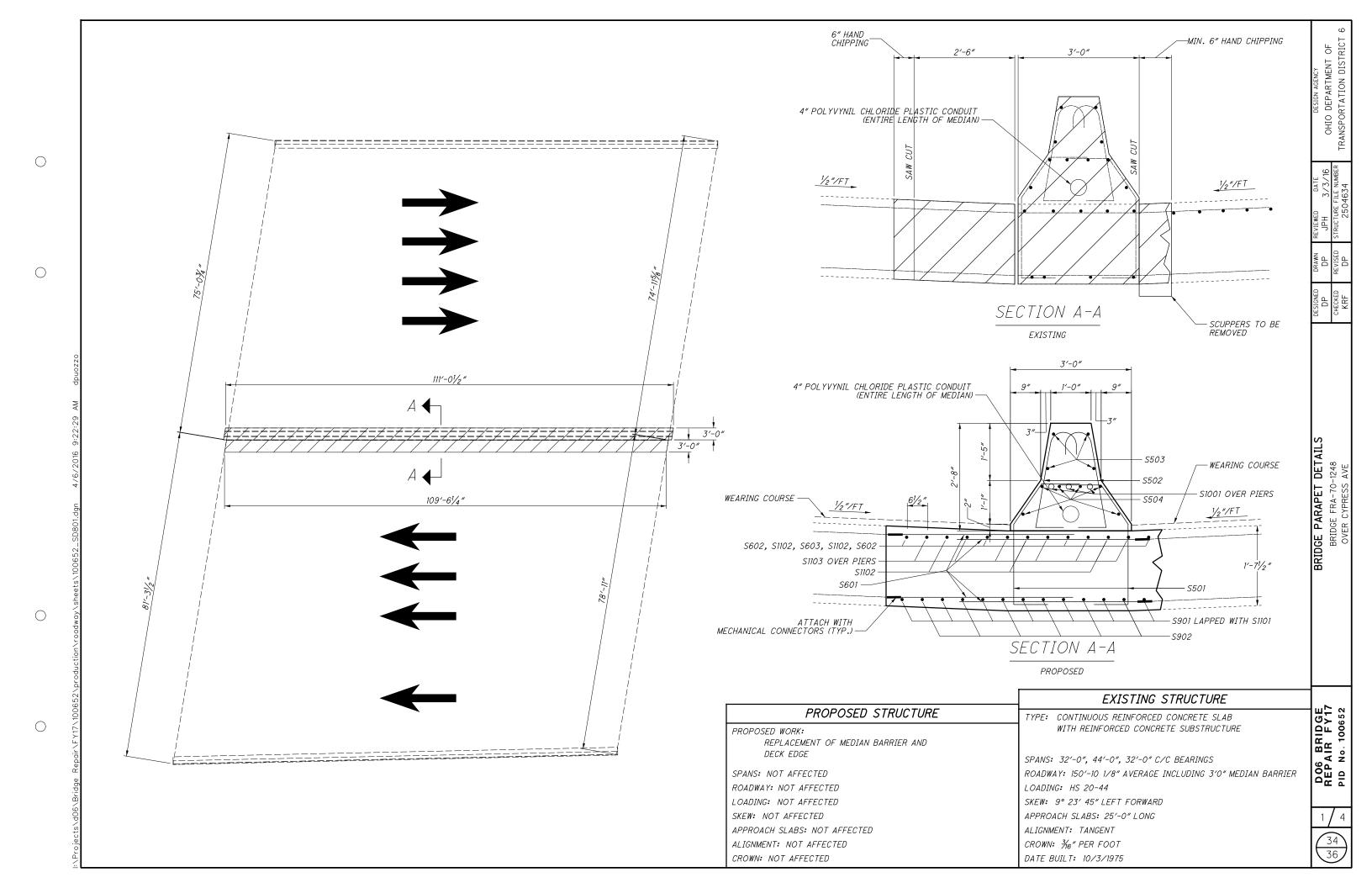


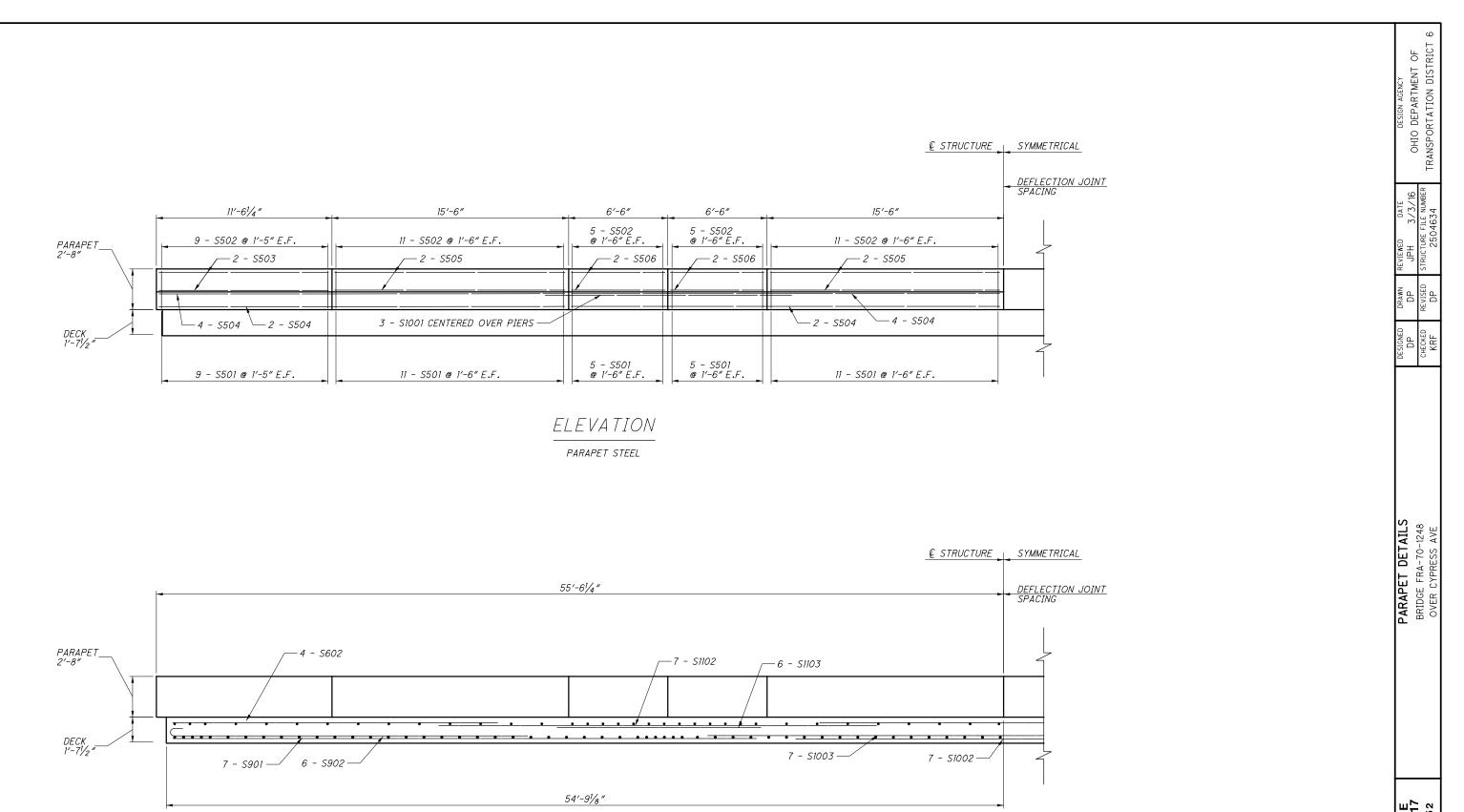


ESTIMATED QUANTITIES & STEEL LIST BRIDGE FRA-70-1241 OVER GLENWOOD AVE

DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 6







ELEVATION DECK STEEL

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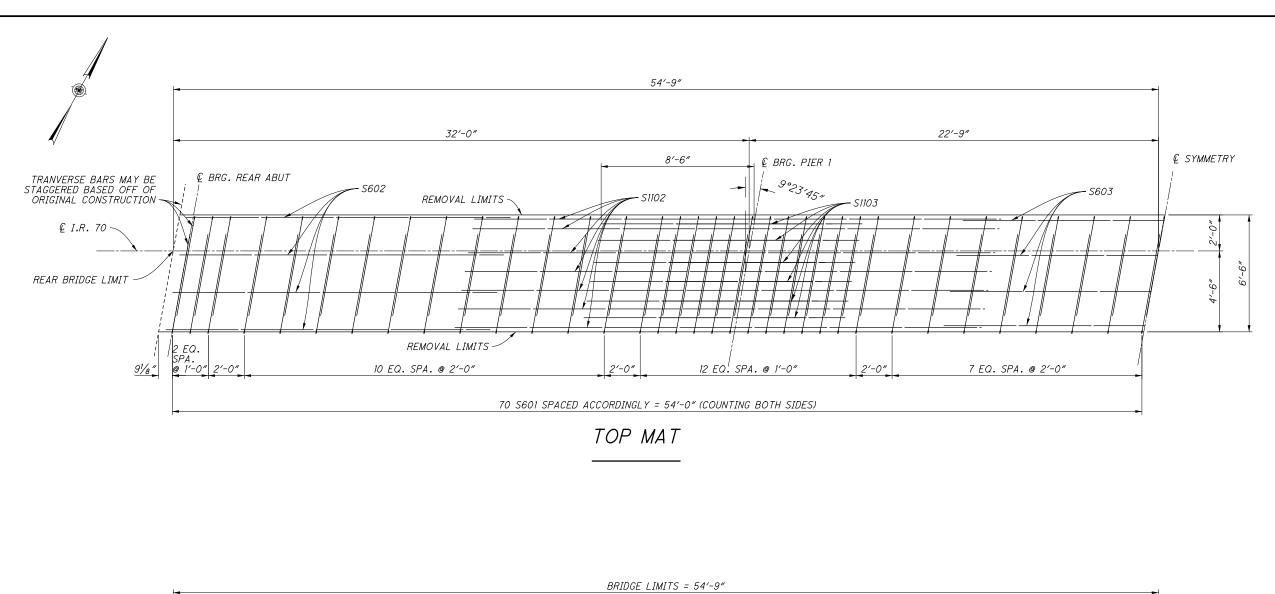
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DOG BRIDGE REPAIR FY17 PID No. 100652

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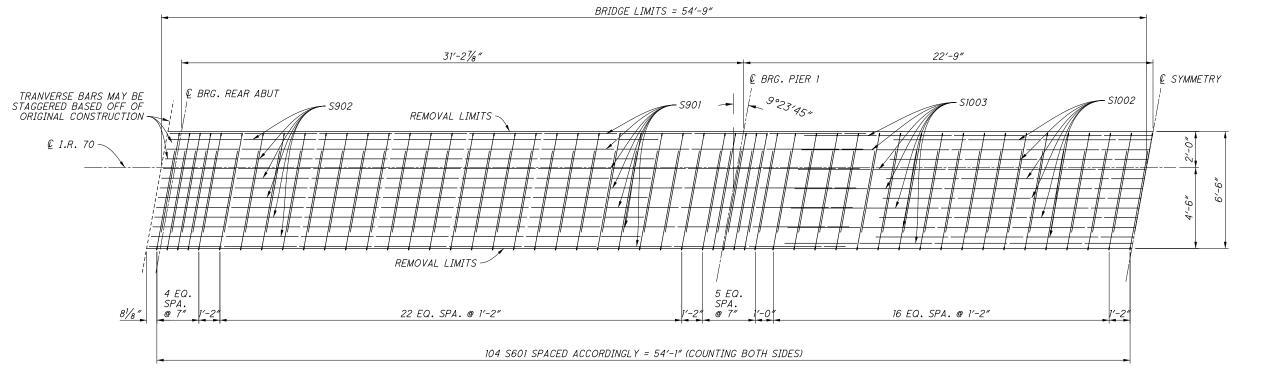
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DESIGN AGENCY
OHIO DEPARTMENT OF
TRANSPORTATION DISTRICT 6

SLAB REINFORCING STEEL DETAILS
BRIDGE FRA-70-1248
OVER CYPRESS AVE

DOG BRIDGE REPAIR FY17 PID No. 100652



BOTTOM MAT

	NUMBER							D	IMENSIOI	VS			
MARK	REQ'D	LENGTH	WEIGHT	TYPE	Α	В	С	D	Ε	F	G	R	INC.
						PARAPET							
S501	164	4' - 0"	684	14	9″	9″	11.5"	1' - 7.5"	8″				
S502	164	3' - 8"	627	22	6"	2' - 5"	7.5"					2.25"	
S503	8	11' - 0"	89	STR									
S504	24	28' - 10'	722	STR									
S505	16	15' - 2"	253	STR									
S506	16	6' - 2"	103	STR									
S601	344	5' - 7"	2885	STR									
S602	8	18' - 0"	216	STR									
S603	4	22' - 4"	134	STR									
S901	14	38' - 8"	1841	STR									
S902	12	27' - 1"	1108	16	25' - 10"								
S1001	6	24' - 0"	620	STR									
S1002	6	27' - 6"	710	STR									
S1003	7	28' - 8"	863	STR									
S1102	14	29' - 3"	2176	STR									
S1103	12	14' - 6"	924	STR									
PARAPET S	SUB-TOTAL		13,955	TOTAL CAL	RRIED TO S	JB-SUMMARY	,	'					

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