

ITEM 614 - MAINTAINING TRAFFIC

1. CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE PROJECT ENGINEER 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.

2. ALL SIGNS, BARRICADES, SIGN SUPPORTS, DRUMS, FLAGGERS, WORK ZONE TRAFFIC SIGNALS AND INCIDENTALS FOR TRAFFIC CONTROL SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN CONFORMANCE WITH THE MOST RECENT REVISIONS, CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD). ALL SIGNS USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE NEW OR LIKE NEW CONDITION SUBJECT TO THE APPROVAL OF THE ENGINEER. DEVICES USED TO MAINTAIN TRAFFIC SHALL BE REMOVED IMMEDIATELY AFTER THE TERMINATION OF SAID WORK. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

3. FOR WORK WHICH IS CONFINED TO THE SHOULDER, TRAFFIC CONTROL SHALL CONFORM TO FIGURES TA-1, TA-3, TA-4, AND TA-6 OF THE OMUTCD AND SCD MT-95.45. IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS AND PROVISIONS OF THE OMUTCD AND FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER HAS THE AUTHORITY TO SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

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 SEPERATELY ITEMIZED IN THE PLAN.

NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT D06.PIO@DOT.OHIO.GOV, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT D06.MOT@DOT.OHIO.GOV AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION VIA EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

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

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

PERMITTED LANE CLOSURES ON FREEWAYS, RAMPS AND CITY STREETS

THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL FREEWAYS SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS. THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL RAMPS AND CITY STREETS SHALL BE MAINTAINED FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING, TAPER AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE.

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 ZONE AND TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, APPLICABLE STANDARD DRAWINGS, AND THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES (CURRENT EDITION).

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.

COORDINATION WITH ADJACENT PROJECTS

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS.

FRA-70/71-12.68/14.86 PROJECT 4R PART 1 (PID 105523)
FRA-71-14.36 PROJECT 6R PART 2 (PID 105523)

COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, COMPENSABLE DELAY PER 108.06.D. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE, NOR SHALL THE COMPLETION DATE BE EXTENDED.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT AND WORKSITE TRAFFIC SUPERVISOR (WTS), AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS

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

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES, ADDED TABLE	RPD	12-04-2023

PRE-MAINTENANCE OF TRAFFIC MEETING

A PRE-MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD (MINIMUM OF 10 WORK DAYS) PRIOR TO WORK BEGINNING OR ANY CHANGE OF PHASING. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER (d06.mot@dot.ohio.gov) AS WELL AS THE CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL. FOR COLUMBUS SECTIONS OF ROADWAY, ALSO INCLUDE THE TEMPORARY CONTROL COORDINATOR (614-645-6269 OR 614-645-5845) FROM THE CITY OF COLUMBUS TRANSPORTATION DIVISION.

WEEKLY MAINTENANCE OF TRAFFIC MEETING

AFTER THE INITIAL PRE-MAINTENANCE OF TRAFFIC MEETING, THE CONTRACTOR SHALL MEET WITH THE PROJECT ENGINEER ON A WEEKLY BASIS TO GO OVER A DETAILED MAINTENANCE OF TRAFFIC REPORT OF AT LEAST 7 CALENDAR DAYS. THIS MEETING SHOULD BE HELD ON THE SAME DAY AND TIME OF EACH WEEK.

THE CONTRACTOR WILL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INFORMATION REQUIRED BY THE NOTIFICATION OF TRAFFIC RESTRICTIONS NOTE PRIOR TO THE MEETING.

IN ADDITION TO THE DETAILED MAINTENANCE OF TRAFFIC REPORT THE CONTRACTOR SHALL GIVE A GENERAL LOOK AHEAD OF AN ADDITIONAL 2 WEEKS OF UPCOMING WORK ACTIVITIES. THIS WILL INCLUDE ANY NOTIFICATION REQUIREMENTS FOR RESTRICTIONS THAT HAVE A DURATION GREATER THAN 12 HOURS.

ITEM 614 - MAINTAINING TRAFFIC (ESTIMATED QUANTITIES)

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B
200 CU. YD.

MAINTENANCE OF FIRE LANE

THE FIRE LANE JUST SOUTH OF I-70/I-71 BETWEEN SHORT STREET AND SECOND STREET SHALL NOT BE UTILIZED FOR CONSTRUCTION EQUIPMENT, ACTIVITIES, OR CONSTRUCTION TRAFFIC. IT SHALL REMAIN CLEAR FOR FIRE DEPARTMENT USE AT ALL TIMES.

WORK APPROVAL

IF THE CONTRACTOR WANTS TO PERFORM ANY WORK OUTSIDE OF THE CURRENT MOT PHASE THIS WILL REQUIRE THE PROJECT ENGINEER'S APPROVAL.

THE CONTRACTOR SHALL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INTENDED WORK TO BE ADDED TO THE CURRENT MOT PHASE FOR APPROVAL. THE INTENDED WORK SHALL NOT BEGIN UNTIL WRITTEN APPROVAL IS PROVIDED.

BRIDGE DESCRIPTION	STRUCTURE #	WORK TYPE	DAYS	CLOSURE/DETOUR TIME ***	# TIMES ALLOWED	DETOUR DETAILS ON SHEETS		
HIGH ST. BRIDGE WESTERN HALF	FRA-70-1405C	DEMOLITION	WEEKEND *	FRI 10PM - MON 5AM	1 **	71 - 74		
HIGH ST. BRIDGE WESTERN HALF IN CONJUNCTION WITH WEST CAP		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5AM	1 **			
HIGH ST. BRIDGE WESTERN HALF		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5AM	1			
HIGH ST. BRIDGE WEST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5AM	1			
HIGH ST. BRIDGE EASTERN HALF		DEMOLITION	WEEKEND *	FRI 10PM - MON 5AM	1 **			
HIGH ST. BRIDGE EASTERN HALF IN CONJUNCTION WITH WEST CAP		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5AM	1 **			
HIGH ST. BRIDGE EASTERN HALF		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5AM	1			
HIGH ST. BRIDGE EAST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5AM	1			
*		THE CONTRACTOR MAY CHOOSE TO COMPLETE THIS WORK OVER THE COURSE OF NIGHTLY CLOSURES (MONDAY THRU SUNDAY) IN LIEU OF A WEEKEND CLOSURE. NIGHTLY CLOSURES SHALL TAKE PLACE BETWEEN 10PM AND 5AM						
**		IF WORK IS PERFORMED VIA NIGHTLY CLOSURES, THE NUMBER OF CLOSURES SHALL BE APPROVED BY THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC.						
***	DISINCENTIVES WILL BE ASSESSED PER LANE PER MINUTE AT THE RATES SHOWN IN THE LANE VALUE CONTRACT TABLE FOR ANY CLOSURE OUTSIDE OF THE CLOSURE/DETOUR TIMES							

SUMMARY OF RAMP/ROAD CLOSURES					
MOT PHASE	ESTIMATED PHASE DURATION	STREET/RAMP	LOCATION	MAXIMUM DURATION	DISINCENTIVE
1	10 Months	315 Ramp	315S to I-70E Ramp	None	None
		Scioto Trail	Bike Trail under 70/71	None	None
2	6 Months	315 Ramp	315S to I-70E Ramp	None	None
		I-70/71	Under High St (EB and WB Closed)	Weekend	*
		Fulton Street	West of High Street	30 Days	\$8,500
		Livingston Ave	West of High Street	30 Days	\$6,000
		Fulton Street	East of High Street	30 Days	\$8,500
Livingston Ave	East of High Street	30 Days	\$6,000		
3	2 Months	315 Ramp	315S to I-70E Ramp	None	None

LANE VALUE CONTRACT TABLE

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE CONTRACT 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 CONTRACT TABLE.

- Notes:**
- 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.
 - The closure durations listed are maximums and shall be consecutive days. Closure, reopening and closing again shall not be permitted.
 - The weekend closures are 10:00PM Friday - 5:00AM Monday.
 - Night or weekend closures only. Night time closures are 10:00PM - 5:00AM. Weekend closures are 10:00PM Friday - 5:00AM Monday.
- * Refer to The Lane Value Contract Table.

ITEM 614 SPECIAL - WORK ZONE TRAFFIC SIGNAL

UNDER THIS ITEM OF WORK, THE CONTRACTOR SHALL FURNISH, INSTALL, RELOCATE, MODIFY AND SUBSEQUENTLY REMOVE: TEMPORARY SIGNAL SUPPORTS, DOWN GUYS, GROUND RODS, SIGNAL CABLE, POWER CABLE, SERVICE CABLE, CONDUIT RISERS, MESSENGER WIRE, SIGNAL HEADS, COVERING OF VEHICULAR SIGNAL HEADS AND A TEMPORARY CONTROLLER AS NEEDED TO RENDER A FULLY FUNCTIONAL TEMPORARY SIGNALIZED INTERSECTION.

AS DETAILED WITHIN, TEMPORARY TRAFFIC SIGNALS OR TRAFFIC SIGNAL MODIFICATIONS TO ACCOMMODATE INDIVIDUAL MAINTENANCE OF TRAFFIC PHASES SHALL BE INSTALLED AT THE INTERSECTIONS LISTED BELOW.

ALL TEMPORARY TRAFFIC SIGNAL EQUIPMENT SHALL COMPLY WITH THE SPECIFICATIONS OUTLINED FOR THE PERMANENT SIGNAL INSTALLATION INCLUDING GROUNDING AND BONDING AND TRAFFIC SIGNAL PLAN AND SPECIFICATION COMPLIANCE. ALL METHODS OF TRAFFIC CONTROL SHALL BE APPROVED BY THE ENGINEER AND SHALL BE IN PLACE AND OPERATING PRIOR TO THE DEACTIVATION AND REMOVAL AND/OR RELOCATION OF ANY EXISTING SIGNAL EQUIPMENT. REFERENCE IS MADE TO THE REQUIREMENTS OF ITEM 614. ALL MODIFICATIONS TO SIGNALIZATION SHALL BE DONE UNDER THE PROTECTION OF A LAW ENFORCEMENT OFFICER. REFERENCE IS MADE TO ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

ANY VEHICULAR TRAFFIC SIGNAL HEAD THAT WILL BE OUT OF OPERATION SHALL BE COVERED IN ACCORDANCE WITH 632.25. ANY EXISTING VEHICULAR OR PEDESTRIAN HEAD THAT IS NOT FUNCTIONAL SHALL BE REMOVED IMMEDIATELY OR COVERED. ANY PEDESTRIAN BUTTONS NOT IN USE SHALL ALSO BE COVERED.

EACH TEMPORARY SIGNAL POLE LOCATION SHALL BE STAKED AND THE LOCATION APPROVED BY THE CITY OF COLUMBUS. THE CONTRACTOR MAY REUSE EXISTING SPAN AND PIGTAILS OR INSTALL NEW AS REQUIRED. THE CONTRACTOR SHALL TRANSFER EXISTING SIGNAL ITEMS AND EXTEND EXISTING CABLE AS NEEDED. WEATHERPROOF CABLE SPLICING IS PERMITTED. DOWN GUYS SHALL BE SPECIFIED FOR ALL TEMPORARY WOOD POLES. ONE DOWN GUY PER POLE SHALL BE USED FOR A LAYOUT THAT CONTAINS A MAXIMUM OF 2 VEHICULAR SIGNAL HEADS PER SPAN. TWO DOWN GUYS PER POLE SHALL BE SPECIFIED FOR 3 OR MORE VEHICULAR SIGNAL HEADS PER SPAN. DOWN GUYS SHALL BE POSITIONED TO COUNTERACT THE MOMENT CREATED BY THE SPAN CONFIGURATION. ANY CHANGE TO THE PLANNED POLE LOCATION OR SPAN CONFIGURATION AS DETAILED IN THE PLAN SHALL BE APPROVED BY THE CITY OF COLUMBUS. THE CONTRACTOR SHALL SUBMIT A DIAGRAM TO THE CITY DOCUMENTING PROPOSED CHANGES.

ITEM 614 SPECIAL - WORK ZONE TRAFFIC SIGNAL (CONTINUED)

INSTALL THE SPAN TO PROVIDE FOR A 5 TO 6 PERCENT SAG FOR WOOD POLES. ATTACH THE SPAN NO CLOSER THAN 2 FT. FROM THE TOP OF THE POLE. THE LOWEST VEHICULAR HEAD IN EACH DIRECTION SHALL BE 16.5 FT. ABOVE PAVEMENT SURFACE WITH THE REMAINING VEHICULAR HEADS MEETING THE REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

THE CONTRACTOR SHALL SHIFT EXISTING SIGNAL HEADS TO ALIGN WITH LANES IN THE INDIVIDUAL MAINTENANCE OF TRAFFIC PHASES. DETAILED HEAD PLACEMENT HAS BEEN PROVIDED FOR EACH PHASE OF WORK IN THE MAINTENANCE OF TRAFFIC PLAN. THIS ITEM SHALL CONSIST OF ADJUSTING THE LOCATION OF TEMPORARY TRAFFIC SIGNAL HEADS FOR EACH PHASE OF CONSTRUCTION INCLUDING UNLASHING AND RELASHING ALL WIRING. ALL TEMPORARY AERIAL WIRING SHALL BE A MINIMUM OF 21 FT. ABOVE THE ROADWAY SURFACE.

VEHICULAR DETECTION SHALL BE MAINTAINED AT ALL TIMES AND DURING ALL PHASES OF CONSTRUCTION USING EITHER EXISTING LOOP DETECTORS OR TEMPORARY VIDEO OR RADAR DETECTION.

LOCATE THE NON-FUSED POWER SUPPLY VOLTAGE (120 VOLT) IN A SEPARATE CONDUIT. IN ADDITION, LOCATE THE LOOP DETECTOR, PUSH BUTTON, AND VIDEO DETECTION CABLES IN A SEPARATE CONDUIT FROM ALL OTHER CABLES.

THIS ITEM OF WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE POWER TO THE TRAFFIC SIGNAL CONTROLLER FROM THE PROPOSED OR EXISTING POWER SOURCES AS DETERMINED BY CONSTRUCTION SEQUENCING.

THIS ITEM OF WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO FURNISH, INSTALL, MODIFY, REMOVE, STORE, ERECT, RELOCATE, ADJUST AND REPAIR TEMPORARY TRAFFIC SIGNAL ITEMS AS DESCRIBED ABOVE.

ALL COSTS FOR THE ABOVE WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 614 WORK ZONE TRAFFIC SIGNAL, AS PER PLAN AND SHALL BE PER EACH INTERSECTION.

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

ITEM 614 - MAINTAINING TRAFFIC

THE FOLLOWING NOTES ARE APPLICABLE TO CITY STREETS ONLY:

ALL TEMPORARY TRAFFIC CONTROL DEVICES (TTC) SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) FOR CONSTRUCTION AND MAINTENANCE OPERATIONS (LATEST EDITION). COPIES ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, 1980 WEST BROAD STREET, COLUMBUS OHIO 43223. ALL DEVICES SHALL COMPLY, FOR CONDITION AND LOCATION, WITH THE CURRENT EDITION OF THE NCHRP 350 CRASH TESTING GUIDELINES.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE TRANSPORTATION DIVISION INSPECTOR. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND THE REMOVAL OF CONFLICTING TRAFFIC CONTROLS, THEIR PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

A FLASHING ARROW PANEL (48" X 96"-TYPE C) SHALL BE USED IN LANE CLOSURES AS PER THE OHIO MANUAL.

ALL TRENCHES WITHIN THE ROAD RIGHT-OF-WAY SHALL BE BACKFILLED DURING NON-WORKING HOURS.

ACCESS FOR PEDESTRIAN AND VEHICULAR TRAFFIC TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

THE CONTRACTOR SHALL CONTACT OHIO UTILITY PROTECTION SERVICE (OUPS) TO LOCATE AND MARK ALL UNDERGROUND TRAFFIC CONTROL CABLES PRIOR TO THE BEGINNING OF ANY WORK WITHIN 450 FEET OF ANY SIGNALIZED INTERSECTIONS) OR WITHIN ANY POSTED AREA WHERE THE DEPARTMENT HAS UNDERGROUND CABLE. THE SIGNAL OPERATION ENGINEER (614-645-6418) SHALL BE NOTIFIED SIX (6) WEEKS IN ADVANCE FOR SIGNAL REVISIONS OR POLE RELOCATIONS.

NO EXCAVATION SHALL BE MADE WITHIN FIVE (5) FEET OF ANY POLE THAT SUPPORTS TRAFFIC SIGNAL DISPLAYS OR SIGNS BY MAST ARM OR SIGNAL SPAN. EXCAVATION WITHIN EIGHT (8) FEET, BUT MORE THAN FIVE (5) FEET SHALL REQUIRE ADDITIONAL SUPPORT (DOWN GUY, HEAD GUY, BASE GUY ETC.). THE CONTRACTOR SHALL CONTACT TRANSPORTATION DIVISION SIGNALS MANAGEMENT PERSONNEL AT 614-645-0423 AT LEAST 48 HOURS (EXCLUDING SATURDAY AND SUNDAY) PRIOR TO THE BEGINNING OF SUCH EXCAVATION, SO THAT THE CITY CAN APPROVE THE STABILIZATION SETUP BY THE CONTRACTOR. STABILIZATION WILL BE DONE BY THE CONTRACTOR AT THE OWNER'S/CONTRACTING AGENCY'S EXPENSE.

WHEN ANY TRAFFIC CONTROL DEVICE, CONDUIT, OR CABLE GETS DAMAGED, THE CONTRACTOR SHALL NOTIFY CITY SIGNALS MANAGEMENT PERSONNEL AT 614-645-7963 BETWEEN 8:00AM AND 4:30PM, MONDAY THROUGH FRIDAY. AT OTHER TIMES OR IF SIGNAL MANAGEMENT PERSONNEL CANNOT BE REACHED, CONTACT TRAFFIC ENGINEERING MAINTENANCE SHOP AT 614-645-7393. LEAVE A MESSAGE ON THE ANSWERING MACHINE IF NECESSARY.

THE ROADWAY SHALL NOT BE OPENED TO NON-CONSTRUCTION TRAFFIC UNTIL THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS APPROVED BY THE ENGINEER, ARE INSTALLED. THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE STOP, YIELD, ONE-WAY, DO NOT ENTER AND RESTRICTED TURN SIGNS. OTHER CRITICAL SIGNS MAY BE NOTED IN THE PLANS AS WELL. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.

THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED OR COVERED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED OR IMPROPERLY PLACED SIGNS.

ALL OVERHEAD CABLE, DOWN GUYS OR BACK GUYS SHALL NOT BLOCK ANY PORTION OF A TRAFFIC SIGNAL, TRAFFIC CONTROL SIGN, OR OTHER TRAFFIC CONTROL DEVICE SUCH THAT VISIBILITY OR OPERATION OF THE TRAFFIC CONTROL DEVICE IS IMPAIRED.

ANY WORK PERFORMED BY THE CITY TRANSPORTATION DIVISION, INCLUDING INSTALLATION, RELOCATIONS, REMOVAL AND/OR REPLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

ITEM 614 - MAINTAINING TRAFFIC (CONT'D)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLATION AND/OR REPLACEMENT OF ALL PERMANENT TRAFFIC CONTROL DEVICES DAMAGED OR REMOVED DURING CONSTRUCTION. PERMANENT TRAFFIC CONTROL NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE REPLACED IMMEDIATELY.

PERMENENT STRIPING OR CLASS I WORK ZONE STRIPING SHALL BE INSTALLED NO LATER THAN FOURTEEN (14) CALENDAR DAYS AFTER THE FINAL PAVING COURSE IS COMPLETED. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE STRIPING CONTRACTOR TO INSURE THE PERMANENT STRIPING IS INSTALLED WITHIN THE FOURTEEN (14) CALENDAR DAY LIMIT.

IF ANY PORTABLE SIGN STANDS ARE LOCATED WITHIN A PEDESTRIAN TRAFFIC AREA DRUMS SHALL BE UTILIZED TO PROTECT AGAINST TRIP HAZARDS. A MINIMUM OF TWO DRUMS PER PORTABLE SIGN STAND SHALL BE USED.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS

A) PROPOSED TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PROPOSED TRAFFIC SIGNAL DEVICES UNDER THE FOLLOWING CONDITIONS FROM THE TIME OF INSTALLATION UNTIL THE DEVICE HAS BEEN ACCEPTED BY THE TRANSPORTATION DIVISION.

THE CONTRACTOR SHALL PROVIDE ONE OR TWO CONTACT PERSONS WHO CAN RECEIVE ALL DEVICE OUT-OF-SERVICE CALLS THAT FALL UNDER THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL DISPATCH MAINTENANCE PERSONNEL TO CORRECT THE PROBLEM. THE CONTRACTOR SHALL PROVIDE THIS DIVISION AND THE PROJECT ENGINEER WITH ADDRESSES AND PHONE NUMBERS OF THESE CONTACT PERSONS. MAINTENANCE PERSONNEL MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS CONTINUOUSLY AVAILABLE TWENTY-FOUR (24) HOURS A DAY AND SEVEN (7) DAYS A WEEK. THE CONTRACTOR SHALL PROVIDE MAINTENANCE SERVICE ENTIRELY WITH HIS PERSONNEL.

THE CONTRACTOR SHALL CORRECT ALL BULB OUTAGES, DEVICE MALFUNCTIONS OF ANY TYPE, INTERNAL CABINET POWER LOSSES, SPAN OR CABLE PROBLEMS AND MISALIGNED OR DAMAGED VEHICULAR OR PEDESTRIAN SIGNAL HEADS WITHIN TWO (2) HOURS AFTER THE CONTRACTOR'S CONTACT PERSON HAS BEEN NOTIFIED OF ANY ONE OF THE ABOVE. IN THE EVENT A NEW SIGNAL DEVICE IS DAMAGED PRIOR TO ACCEPTANCE, THE DAMAGED DEVICE EXCEPT POLES SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THIS DIVISION. ANY DAMAGED CABINET ASSEMBLY DEVICE IF REPAIRED SHALL BE TESTED ONCE AGAIN BY THIS DIVISION BEFORE THE DEVICE CAN BE INSTALLED.

IN THE EVENT OF A LOSS OF POWER TO THE SIGNAL INDICATIONS OTHER THAN AN ELECTRIC COMPANY GENERAL POWER OUTAGE, THE CONTRACTOR AT HIS EXPENSE SHALL IMMEDIATELY TAKE ACTION (WITHIN 30 MINUTES) TO PROPERLY ERECT TEMPORARY STOP SIGN(S) AND PROVIDE POLICE OFFICER(S) TO DIRECT TRAFFIC UNTIL THE SIGNAL IS BACK ON "FLASH" OR OPERATING PROPERLY.

IF A TRAFFIC STRAIN/SUPPORT POLE OR PEDESTAL IS DAMAGED AND THAT DAMAGE CAUSED POLE INSTABILITY, THEN THE CONTRACTOR AT HIS EXPENSE SHALL TAKE IMMEDIATE ACTION (WITHIN 2 HOURS) TO STABILIZE IT. THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING A NEW UNDAMAGED POLE.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS (CONTINUED)

WHERE OUT-OF-SERVICE CALLS ARE THE DIRECT RESULT OF A VEHICULAR ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COLLECTION OF ANY COMPENSATION FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE TO THE CONTRACTOR'S MATERIALS.

WHERE THE CONTRACTOR HAS FAILED TO RESPOND OR CANNOT RESPOND TO AN OUT-OF-SERVICE CALL WITHIN THE TIME PERIOD SPECIFIED ABOVE AT LOCATIONS UNDER HIS RESPONSIBILITY, THIS DIVISION MAY TAKE ACTION AS IT DEEMS NECESSARY TO CORRECT THE SITUATION. THIS ACTION MAY INCLUDE CONTROLLING THE INTERSECTION USING COLUMBUS POLICE OFFICERS, COMPLETELY REMOVING OR REPLACING ANY MALFUNCTIONING TRAFFIC CONTROL DEVICE, AND/OR INSTALLING ANY DEVICE(S) REQUIRED TO RETURN THE INTERSECTION TO REGULAR SIGNAL OPERATION. ALL COSTS ASSOCIATED WITH THESE ACTIONS SHALL BE BILLED DIRECTLY TO THE CONTRACTOR AND NOT INCLUDED IN ITEM 614 MAINTAINING TRAFFIC.

ANY NON-OPERATING VEHICULAR OR PEDESTRIAN SIGNAL HEAD OR PUSHBUTTON SHALL BE COVERED AS REFERENCED TO IN THESE PLANS. ALL SIGNAL HEADS WHILE COVERED SHALL BE DARK BY DISCONNECTING POWER TO THE SIGNAL INDICATIONS. NO COVERED HEAD SHALL BLOCK THE VIEW OF AN OPERATING HEAD. A MINIMUM OF TWO (2) VEHICULAR SIGNAL HEADS PER TRAVELLED DIRECTION (SPACED 8' APART MINIMUM AND 12' MAXIMUM) SHALL BE OPERATING AT ALL TIMES. NO EXCEPTIONS!

B) TEMPORARY CONTROLLER OR TRAFFIC SIGNALS

IN ADDITION TO ITEM 614.10, THE FOLLOWING SHALL APPLY.

IF THE CONTRACTOR IS REQUIRED TO ERECT AND/OR INSTALL ANY TEMPORARY TRAFFIC CONTROL DEVICE OR TEMPORARY SIGNAL/SUPPORT POLE THAT IS NOT SPECIFIED IN THESE PLANS, THEN THE CONTRACTOR SHALL SUBMIT THE DESIGN CHANGE TO THE CITY OF COLUMBUS, TRANSPORTATION DIVISION, FOR APPROVAL PRIOR TO THEIR INSTALLATION. THIS DIVISION ALSO RESERVES THE RIGHT TO MAKE OR HAVE THE CONTRACTOR MAKE CHANGES TO THE TRAFFIC SIGNAL OPERATION.

IF THE CONTRACTOR NEEDS TO INSTALL A TEMPORARY CONTROLLER AND/OR A TSI CABINET ASSEMBLY AT ANY INTERSECTION, THEN THE EQUIPMENT SHALL MEET NEMA STANDARDS TSI-1989 OR TS2-1998 (TYPE 2) AND SHALL BE APPROVED BY THE CITY OF COLUMBUS, TRANSPORTATION DIVISION.

C) EXISTING TRAFFIC SIGNAL DEVICES

THE CITY OF COLUMBUS, TRANSPORTATION DIVISION (ELECTRONICS MAINTENANCE SHOP 614-645-7933), SHALL PERFORM ROUTINE MAINTENANCE ON ALL EXISTING CABINET ASSEMBLY ITEMS ONLY. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL OTHER EXISTING TRAFFIC SIGNAL DEVICES ONCE ANY PROJECT SIGNAL WORK HAS STARTED. IF, IN THE COURSE OF WORK, THE GENERAL CONTRACTOR OR ANY PROJECT SUB-CONTRACTOR CAUSES DAMAGE TO ANY EXISTING TRAFFIC SIGNAL DEVICE OTHER THAN THE CABINET ASSEMBLY, THEN THE CONTRACTOR AT THE CONTRACTOR'S COST SHALL REPAIR AND/OR REPLACE THE DAMAGED DEVICE TO THE SATISFACTION OF THIS DIVISION. DAMAGE TO THE CABINET ASSEMBLY BY ANY PROJECT CONTRACTOR SHALL BE REPAIRED BY THIS DIVISION AND BILLED TO THE GENERAL CONTRACTOR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS, EXCEPT AS NOTED, SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

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

SPECIAL EVENTS

OHIO STATE FAIR - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 11TH AVENUE AND 17TH AVENUE ARE NOT PERMITTED DURING FAIR HOURS FROM 2 HOURS PRIOR TO GATES OPENING TO 2 HOURS FOLLOWING THE END OF THE LAST EVENT INCLUDING BUT NOT LIMITED TO RELATED CONCERTS.

HISTORIC CREW STADIUM EVENTS WITH EXPECTED ATTENDANCE OVER 10,000 - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 11TH AVENUE, 17TH AVENUE, AND HUDSON STREET ARE NOT PERMITTED FROM 2 HOURS PRIOR TO THE START OF THE EVENT (INBOUND AND OUTBOUND) TO 2 HOURS FOLLOWING THE CONCLUSION OF THE EVENT (OUTBOUND ONLY).

OSU HOME FOOTBALL GAME DAYS - LANE, RAMP OR SHOULDER CLOSURES ARE NOT PERMITTED FROM 3 HOURS PRIOR TO KICKOFF TO 3 HOURS FOLLOWING THE CONCLUSION OF THE GAME.

GOOD GUYS NATIONAL & QUARTERHOUSE CONGRESS - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 17TH AVENUE ARE NOT PERMITTED DURING SCHEDULED EVENT HOURS INCLUDING 2 HOURS PRIOR TO SCHEDULED EVENT HOURS.

RED, WHITE & BOOM - DURING THE SCHEDULED EVENT HOURS (12PM ON JULY 3 TO 1AM ON JULY 4) NO WORK SHALL BE PERFORMED AND ALL AVAILABLE LANES SHALL BE OPEN TO TRAFFIC. ALSO, NO CONSTRUCTION ACTIVITY SHALL OCCUR ONE DAY PRECEDING THE EVENT ON THE LOWER SCIOTO BIKEWAY, DODGE PARK AND SCIOTO AUTUBON METRO PARK.

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

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

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

ICE HOUSE VENTURES (PARCEL 9) RESTRICTIONS

THE TEMPORARY EASEMENT GRANTED ON PARCEL 9-T IS TO BE USED ONLY IN CONNECTION WITH THE CONSTRUCTION OF UNDERGROUND DUCT BANKS (ELECTRIC/TELECOM) AND WATER LINE ON PARCEL 9-UV.

ODOT AGREES TO LIMITED WORK ALLOWED ON PARCEL 9-T, INCLUDING ALL RESTORATION AND REPAIR, TO A TOTAL OF FOUR (4) WEEKENDS (7:00 PM FRIDAY - 5:00 AM MONDAY). CONTRACTOR SHALL PROVIDE THE PROPERTY OWNER WITH NOT LESS THAN 48 HOURS NOTICE, BEFORE ENTERING UPON THE PROPERTY.

BY NO LATER THAN 5:00 AM ON EACH MONDAY, CONTRACTOR SHALL HAVE TRENCHES COVERED WITH STEEL PLATES OR BACKFILLED TO FINISHED GRADE WITH ITEM 304, TO ALLOW FOR CIRCULATION AND PARKING ON THE PROPERTY DURING EACH WORK WEEK.

CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE EASEMENT AREA.

MAINTENANCE OF TRAFFIC NOTES

FRA - 70-13.11

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WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.
2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.
3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.
4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.
5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.
7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.
8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.
9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.
11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
 - B. DAILY TTC SETUP AND REMOVAL.
 - C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.

- D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
- E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
- F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN #1) AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORKDAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.

B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.

C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.

2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.

3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.

4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

- A. COLLABORATE WITH ODOT AND SAFETY FORCES;
- B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND
- C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

- A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:
 - I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL
 - II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN
 - III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN
 - IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN
 - V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN
 - VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE
- B. FOLLOWING AN INCIDENT/CRASH:
 - I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
 - II. RECOMMEND ROADWAY REPAIR NEEDS.
 - III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
 - IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

THE TRAFFIC MANAGEMENT CENTER (TMC) CONTACT PERSONNEL ARE THE AM SUPERVISOR TODD SEITER AND PM SUPERVISOR DOMINIC DELCOL. THEY CAN BE REACHED AT 614-387-2438 OR 800-884-4030.

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

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

APPROVED MOT EXCEPTION(S) INCLUDE:
- CLOSURE OF 315SB TO 70EB FOR 4 YEARS TOTAL (3 YEARS FOR 77372 AND 1 YEAR PREVIOUSLY FOR 105523)
- CLOSURE OF 70WB TO 315NB FOR 6 MONTHS IN TOTAL
- MONITOR TRAFFIC CONDITIONS FOR POSSIBLE CONFIGURATION ADJUSTMENTS AT THE 670EB TO 71SB DETOUR RAMP

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

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 01/24/2023 FOR PID 77372" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

NOTIFICATIONS DURING CLOSURE REQUIRED
A DESIGNATED ON-SITE POINT OF CONTACT SHOULD COMMUNICATE WITH THE TMC AS THE STATUS OF THE CLOSURE CHANGES.

- CONTACT THE TMC:
- IF THE CLOSURE IS POSTPONED OR CANCELLED
 - AT THE TIME THE CLOSURE IS IMPLEMENTED
 - AT THE TIME THE CLOSURE IS REMOVED AND ALL LANES RESTORED
 - IF THE CLOSURE WILL NOT BE OPENING ON TIME

CONTACT CAN BE MADE WITH THE TMC IN THE FOLLOWING WAYS:
- PHONE: 1-614-387-2438 OR 1-800-884-4030
- EMAIL: STATEWIDETMC@DOT.OHIO.GOV
- RADIO: XDOT MAIN

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

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MAINTENANCE OF TRAFFIC NOTES

FRA - 70 - 13.11

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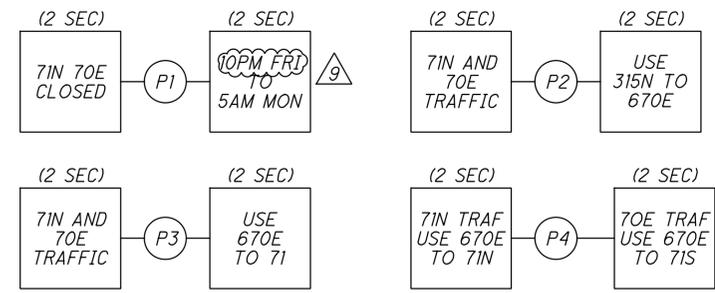
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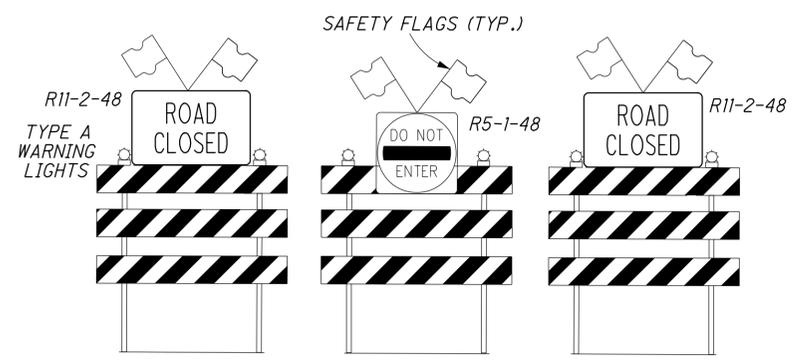
LEGEND

-  WORK AREA
-  PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
-  TYPE 3 BARRICADE WITH SIGNS AND LIGHTS
-  DETOUR ROUTE
-  DETOUR SIGN W/ SUPPORT

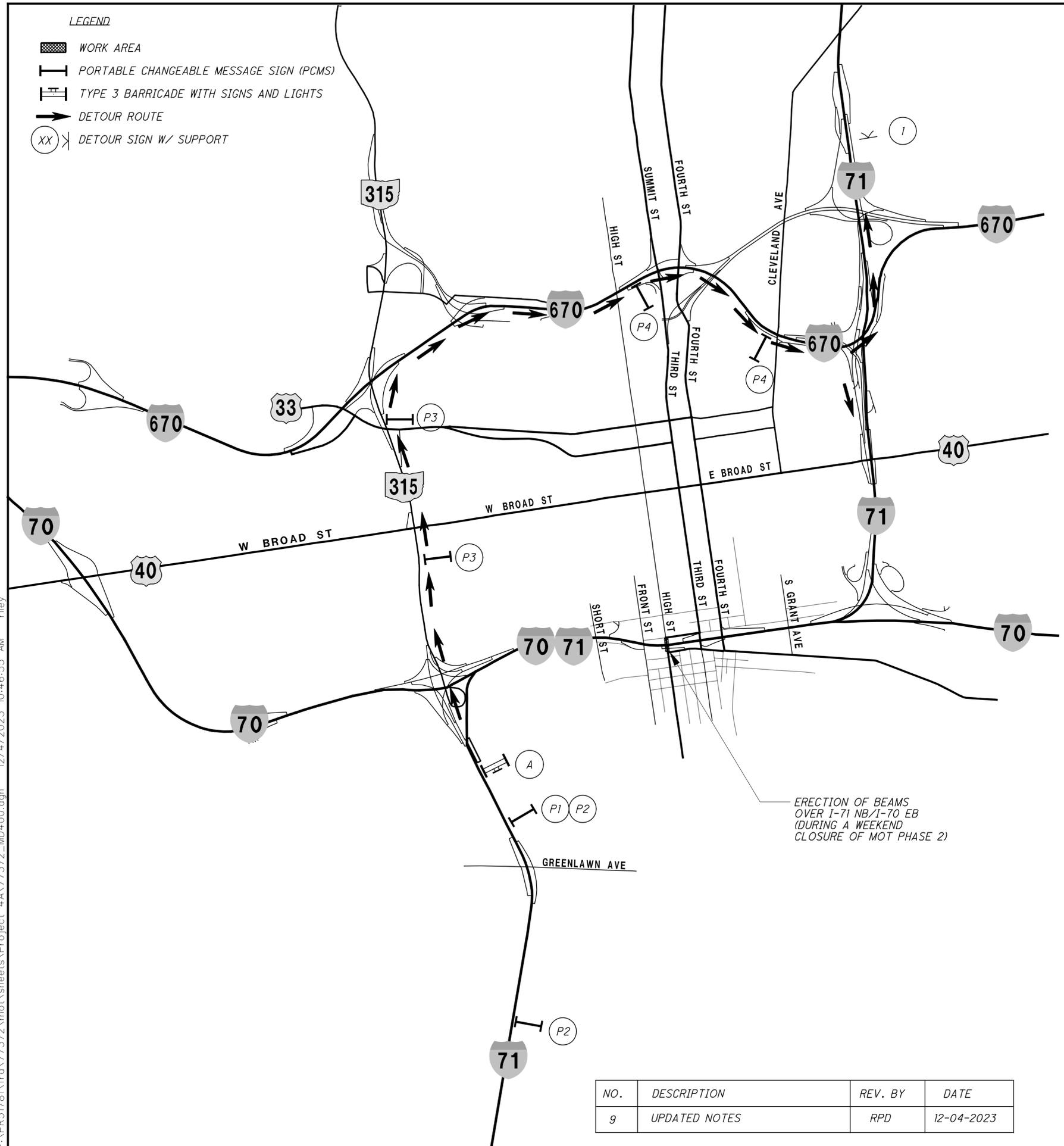
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



SIGNING LEGEND



END
DETOUR
M4-8A-24



NOTES:

1. PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
2. THIS DETOUR SHALL BE IN EFFECT FOR THE BEAM ERECTION OVER I-71NB/I-70EB FOR THE FOLLOWING STRUCTURES: FRA-70-1405C (HIGH STREET) DURING MOT PHASE 2.
3. THE DETOUR SHALL BE LIMITED TO ONLY 10:00 PM FRIDAY - 5:00 AM MONDAY. NO ADDITIONAL LANE CLOSURES ARE PERMITTED.
4. THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
5. FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
6. FOR MAINTENANCE OF TRAFFIC SETUP FOR THE I-71 CLOSURE, SEE SHEETS 86 - 88
7. DETOURS ON THE FOLLOWING SHEETS MAY BE IN PLACE DURING THIS DETOUR. SHEETS: 70 - 74

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

MAINTENANCE OF TRAFFIC DETOUR PLAN

FRA-70-13.11

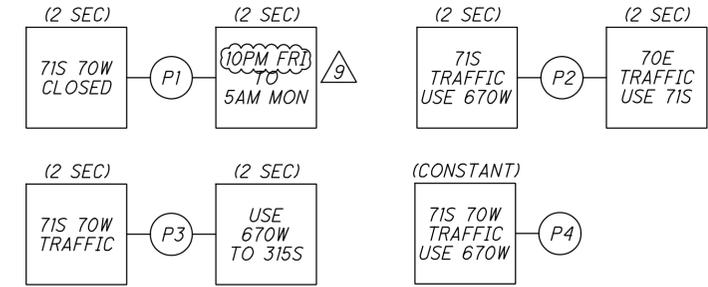
71
1151

LEGEND

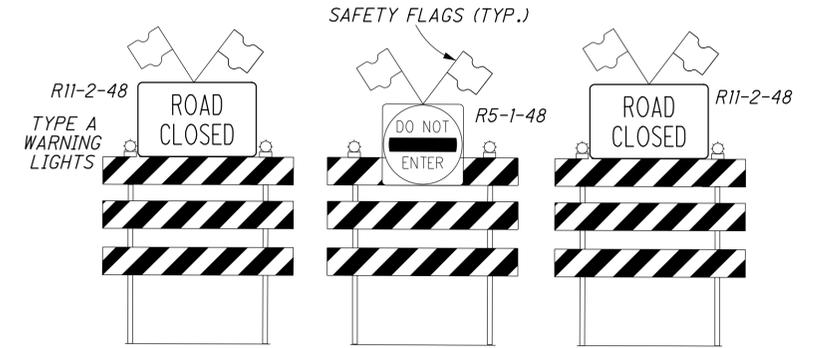
- WORK AREA
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- TYPE 3 BARRICADE WITH SIGNS AND LIGHTS
- DETOUR ROUTE
- DETOUR SIGN WITH SUPPORT

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

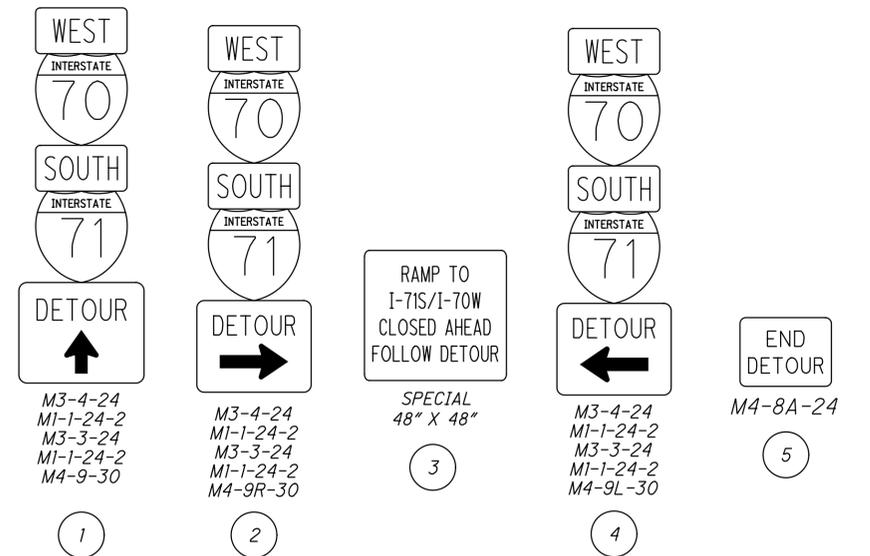
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



SIGNING LEGEND



TYPE 3 BARRICADES (SEE NOTES FOR DETAILS)

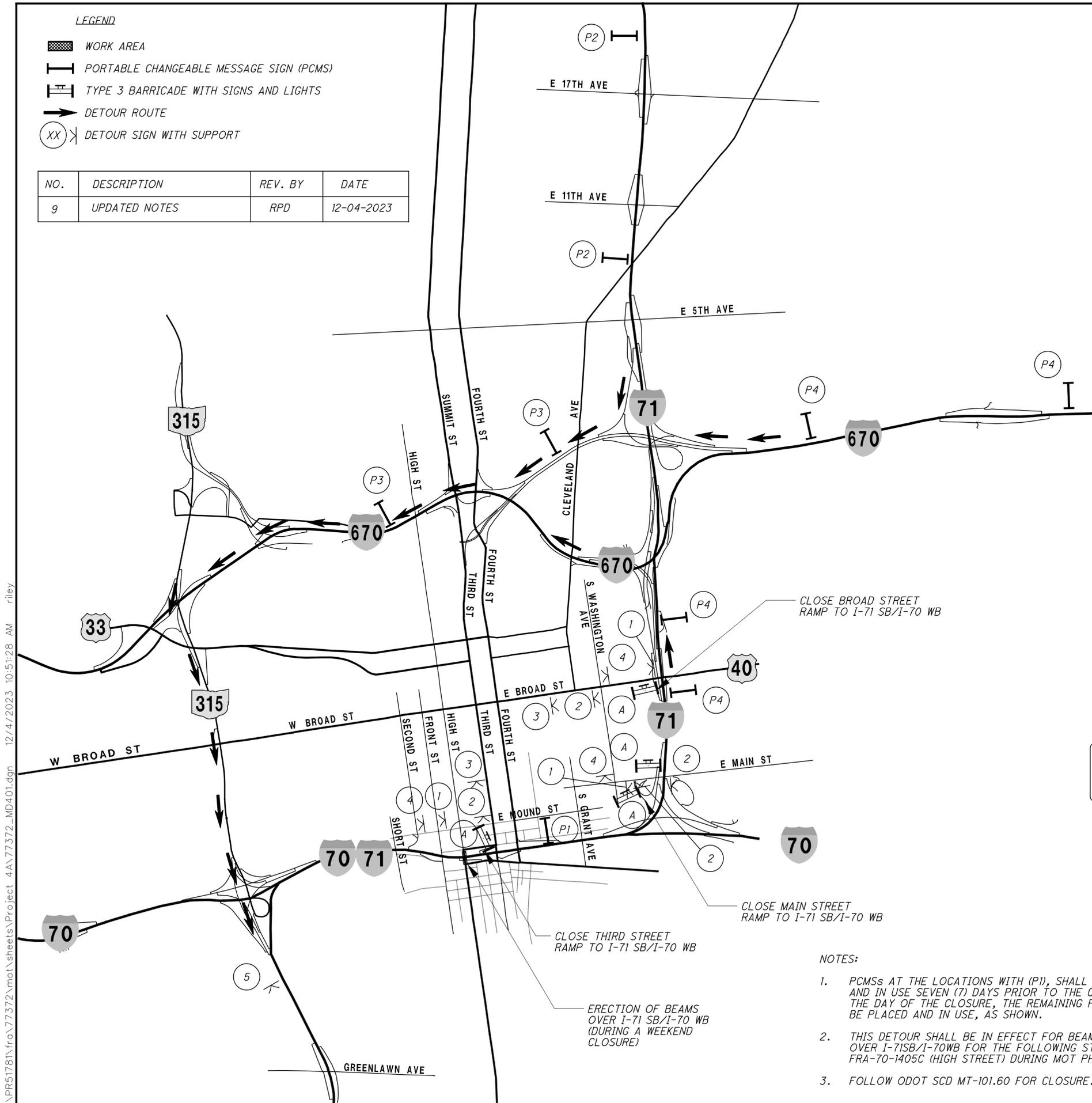


NOTES (CONTINUED):

4. THE DETOUR SHALL BE LIMITED TO A WEEKEND CLOSURE ONLY, (10:00 PM FRIDAY) - 5:00 AM MONDAY. NO ADDITIONAL LANE CLOSURES ARE PERMITTED.
5. THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
6. FOR MAINTENANCE OF TRAFFIC SETUP FOR THE I-71 CLOSURE, SEE SHEETS 93 - 97
7. DETOURS ON THE FOLLOWING SHEETS MAY BE IN PLACE DURING THIS DETOUR. SHEETS: 70 - 74

NOTES:

1. PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
2. THIS DETOUR SHALL BE IN EFFECT FOR BEAM ERECTION OVER I-71SB/I-70WB FOR THE FOLLOWING STRUCTURES: FRA-70-1405C (HIGH STREET) DURING MOT PHASE 2.
3. FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.



MAINTENANCE OF TRAFFIC DETOUR PLAN
I-71S CLOSURE

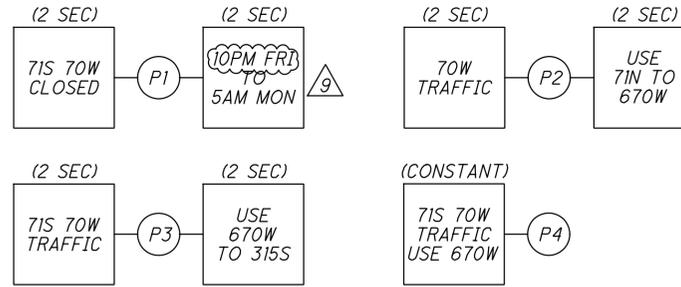
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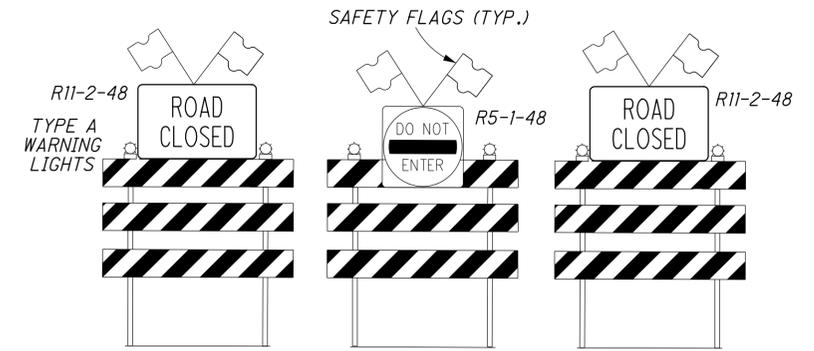
LEGEND

- WORK AREA
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- TYPE 3 BARRICADE WITH SIGNS AND LIGHTS
- DETOUR ROUTE
- DETOUR SIGN WITH SUPPORT

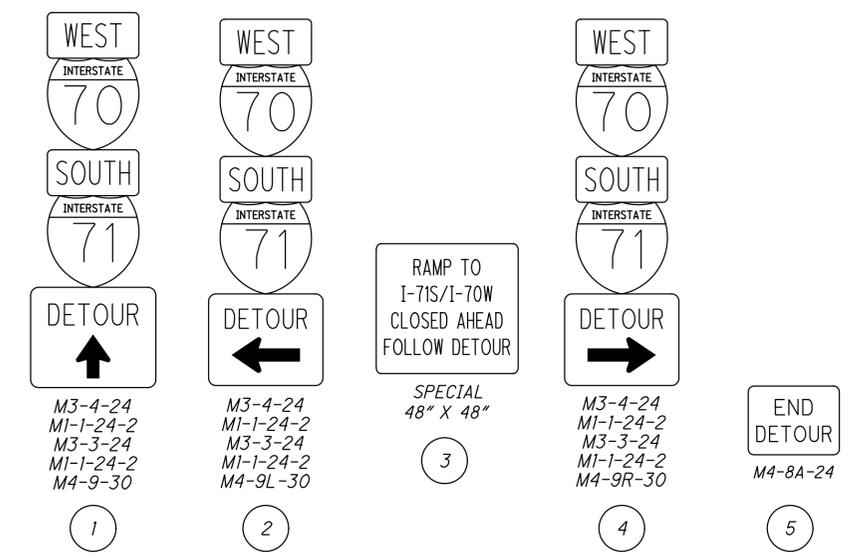
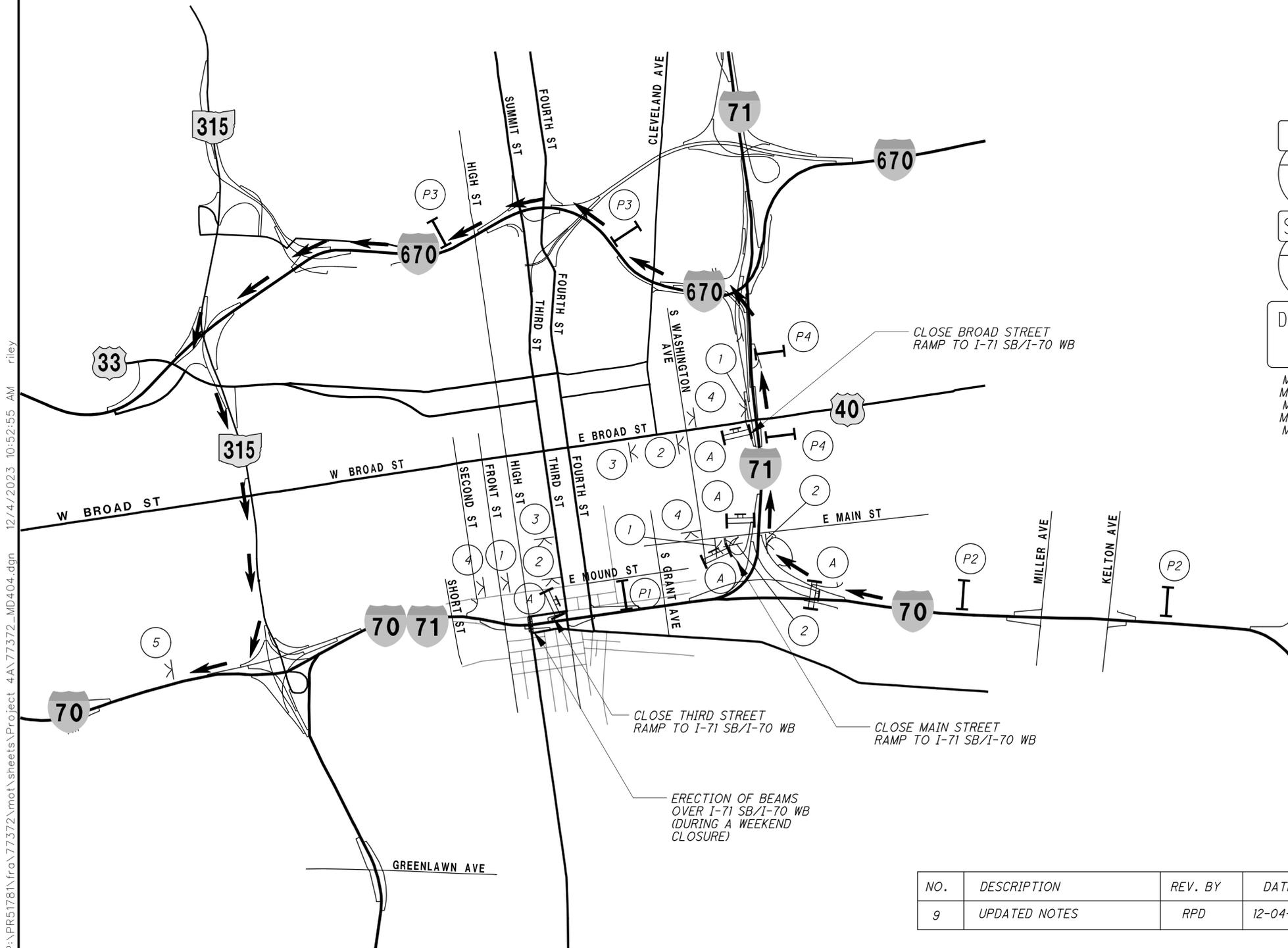
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



SIGNING LEGEND



TYPE 3 BARRICADES (SEE NOTES FOR DETAILS)



NOTES:

1. PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
2. THIS DETOUR SHALL BE IN EFFECT FOR BEAM ERECTION OVER I-71SB/I-70WB FOR THE FOLLOWING STRUCTURES: FRA-70-1405C (HIGH STREET) DURING MOT PHASE 2.
3. THE DETOUR SHALL BE LIMITED TO A WEEKEND CLOSURE ONLY, (10:00 PM FRIDAY) - 5:00 AM MONDAY.
4. THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
5. FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
6. FOR MAINTENANCE OF TRAFFIC SETUP FOR THE I-70 CLOSURE, SEE SHEETS 89 - 92
7. DETOURS ON THE FOLLOWING SHEETS MAY BE IN PLACE DURING THIS DETOUR. SHEETS: 70 - 74

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

MAINTENANCE OF TRAFFIC DETOUR PLAN I-70W CLOSURE

FRA-70-13.11

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LEGEND

- WORK AREA
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- TYPE 3 BARRICADE WITH SIGNS AND LIGHTS
- DETOUR ROUTE
- DETOUR SIGN W/ SUPPORT

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

(2 SEC) 71N 70E CLOSED	(2 SEC) 10PM FRI TO 5AM MON	(2 SEC) 71N AND 70E TRAFFIC	(2 SEC) USE 315N TO 670E
(2 SEC) 71N AND 70E TRAFFIC	(2 SEC) USE 670E TO 71	(2 SEC) 71N TRAF USE 670E TO 71N	(2 SEC) 70E TRAF USE 670E TO 71S
(2 SEC) 70E TRAFFIC	(2 SEC) USE 670E TO 71S	(2 SEC) 70E TRAFFIC	(2 SEC) USE GREENLAWN TO 71N
(2 SEC) ALL TRAFFIC	(2 SEC) MUST USE 71S EXIT		

SIGNING LEGEND

SAFETY FLAGS (TYP.)

TYPE 3 BARRICADES (SEE NOTES FOR DETAILS)

EAST INTERSTATE 70 DETOUR ←
 M3-2-24 M1-1-24-2 M4-9L-30
 1

EAST INTERSTATE 70 DETOUR ↙
 M3-2-24 M1-1-24-2 M4-9L(MOD.)-30
 2

END DETOUR
 M4-8A-24
 3

NOTES:

1. PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
2. THIS DETOUR SHALL BE IN EFFECT FOR BEAM ERECTION OVER I-71NB/I-70EB FOR THE FOLLOWING STRUCTURES: FRA-70-1405C (HIGH STREET) DURING MOT PHASE 2.
3. THE DETOUR SHALL BE LIMITED TO A WEEKEND CLOSURE ONLY, (10:00 PM) FRIDAY - 5:00 AM MONDAY. NO ADDITIONAL LANE CLOSURES ARE PERMITTED.
4. THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
5. FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
6. FOR MAINTENANCE OF TRAFFIC SETUP FOR THE I-70 CLOSURE, SEE SHEETS 82 - 85
7. DETOURS ON THE FOLLOWING SHEETS MAY BE IN PLACE DURING THIS DETOUR. SHEETS: 70 - 74

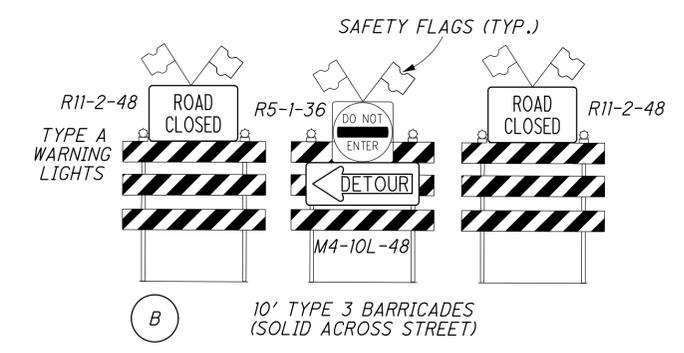
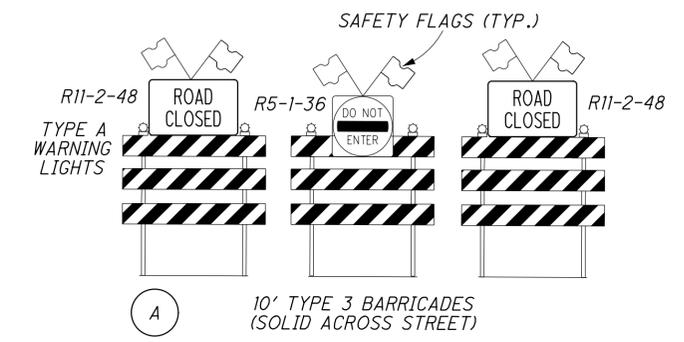
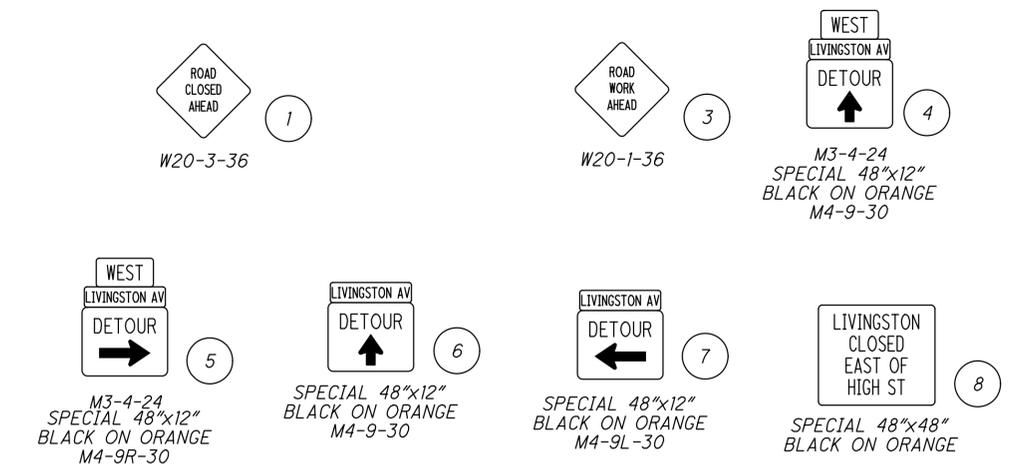
NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

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SIGNING LEGEND



- LEGEND**
- WORK AREA
 - PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
 - TYPE 3 BARRICADE WITH SIGNS AND LIGHTS
 - DETOUR ROUTE
 - DETOUR SIGN W/ SUPPORT
 - INDICATES DIRECTION OF ONE-WAY STREET
 - LIMITS OF STREET CLOSED

- NOTES:**
1. THIS DETOUR SHALL BE LIMITED TO A MAXIMUM DURATION OF 30 DAYS.
 2. THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER AND THE CITY OF COLUMBUS 21 DAYS PRIOR TO IMPLEMENTING THIS CLOSURE.
 3. SEE MAINTENANCE OF TRAFFIC PHASE 2 PLAN SHEETS 123 - 128 FOR DETAILS OF CLOSURE.
 4. DETOURS ON THE FOLLOWING SHEETS MAY BE IN PLACE DURING THIS DETOUR. SHEET: 70 SEE SHEET 55 FOR DISINCENTIVE

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTES	RPD	12-04-2023

SHEET NUMBER					PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
P1/158	P2/37	P3/188	P4/152	P5/13	01/IMS/04	02/IMS/11	05/IMS/14	06/MPO/04	07/NHS/04/COL							08/ENH/04/COL
LS	LS		LS	LS							201	11000	LS	ROADWAY CLEARING AND GRUBBING	P1,P2,P4	
1		1	2								202	20010	4	EACH	HEADWALL REMOVED	
32990	3886	21016	43428								202	23000	101320	SY	PAVEMENT REMOVED	
	9050	3016	18064								202	30000	30130	SF	WALK REMOVED	
	9										202	30200	9	FT	STEPS REMOVED	
		114									202	30600	114	SY	CONCRETE MEDIAN REMOVED	
1406		5525	3687								202	30700	10618	FT	CONCRETE BARRIER REMOVED	
175											202	30701	175	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "4A"	P1
		1280									202	30701	1280	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "6A"	P3
2870	1001	5724	4809	2230							202	32000	16634	FT	CURB REMOVED	
		271									202	32500	271	FT	CURB AND GUTTER REMOVED	
		655									202	32800	655	SY	CONCRETE SLOPE PROTECTION REMOVED	
835	60	2324	2381	54							202	35100	5654	FT	PIPE REMOVED, 24" AND UNDER	
32											202	35201	32	FT	PIPE REMOVED, OVER 24", AS PER PLAN	P1
4722		5283	1745	1647							202	38000	13397	FT	GUARDRAIL REMOVED	
1		4									202	47800	5	EACH	IMPACT ATTENUATOR REMOVED	
4		9	1								202	58000	14	EACH	MANHOLE REMOVED	
13	2	10	13	3							202	58100	41	EACH	CATCH BASIN REMOVED	
		33	13								202	58200	50	EACH	INLET REMOVED	
		1									202	58201	1	EACH	INLET REMOVED, AS PER PLAN	P3
		1									202	58400	1	EACH	INLET ABANDONED	
		3									202	58401	3	EACH	INLET ABANDONED, AS PER PLAN	P4
1		1									202	58500	2	EACH	CATCH BASIN ABANDONED	
		4									202	58501	4	EACH	CATCH BASIN ABANDONED, AS PER PLAN	P4
		323									SPECIAL	20270000	323	FT	FILL AND PLUG EXISTING CONDUIT, 12"	P4
162		50									SPECIAL	20270000	212	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P1,P4
126											SPECIAL	20270000	126	FT	FILL AND PLUG EXISTING CONDUIT, 18"	P1
1047	428	1156	1222								202	75000	3853	FT	FENCE REMOVED	
2		1									202	75250	3	EACH	GATE REMOVED	
		1									202	75255	1	EACH	GATE REMOVED FOR REUSE, AS PER PLAN	P3
		4									202	75610	4	EACH	VALVE BOX REMOVED	
	3	6									202	98100	9	EACH	REMOVAL MISC.: TRASH RECEPTACLES	P2,P4
	2	2									202	98100	2	EACH	REMOVAL MISC.: INSPECTION WELL	P3
1070		1272	428								202	98200	2770	FT	REMOVAL MISC.: PORTABLE BARRIER	P1,P3,P4
1062											202	98200	1062	FT	REMOVAL MISC.: PORTABLE BARRIER WITH VANDAL FENCE	P1
	303										202	98200	303	FT	REMOVAL MISC.: CURB REMOVED FOR STORAGE	P2
		100									202	98200	100	FT	REMOVAL MISC.: MISC CONDUIT	P3
		101									202	98200	101	FT	REMOVAL MISC.: TRENCH DRAIN	P3
	4845	307									202	98400	5152	SF	REMOVAL MISC.: BRICK PAVERS REMOVED	P2,P4
25365	623	44689	44578	1149							203	10000	116404	CY	EXCAVATION	
35175	7648	94130	45546	6658							203	20000	189157	CY	EMBANKMENT	
3977		24962		5561							203	20001	34500	CY	EMBANKMENT, AS PER PLAN	P1,P3,P5
3360											203	35000	3360	CY	GRANULAR EMBANKMENT	
4592											203	35001	4592	CY	GRANULAR EMBANKMENT, AS PER PLAN	P1
		2806									203	35110	2806	CY	GRANULAR MATERIAL, TYPE B	
24917	4558	26743	6606								204	10000	62824	SY	SUBGRADE COMPACTION	
250	975	1923									204	13000	3148	CY	EXCAVATION OF SUBGRADE	
		172									204	13001	172	CY	EXCAVATION OF SUBGRADE, AS PER PLAN	P3
250	975	1923									204	30010	3148	CY	GRANULAR MATERIAL, TYPE B	
28	4	12	32	4							204	45000	80	hour	PROOF ROLLING	
		1									204	45001	1	hour	PROOF ROLLING, AS PER PLAN	P3
500	3868	6338									204	50000	10706	SY	GEOTEXTILE FABRIC	
		1032									204	50001	1032	SY	GEOTEXTILE FABRIC, AS PER PLAN	P3
500	3868	6338									204	51000	10706	SY	GEOGRID	

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED PART 5	CWL	10-2-23
3	REVISED PART 3	CWL	10-23-23
4	REVISED PART 1	CWL	10-30-23
7	REVISED PART 3	CWL	11-20-23
8	REVISED PART 1	CWL	11-20-23
9	REVISED PART 1	CWL	12-2-23

BIG BUILD MASTER GENERAL SUMMARY

FRA-70-13.11

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12/2/2023
9:30:00 AM
CDDTV161STD_USER

SHEET NUMBER						PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P1/161	P2/39	P3/191	P4/156	P5/14		01/IMS/04	02/IMS/11	05/IMS/14	06/MPO/04	08/ENH/04/COL						
															PAVEMENT	
150						150					251	01020	150	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)	P1
		1791				1791					252	01500	1791	FT	FULL DEPTH PAVEMENT SAWING	
		121				121					253	01001	121	SY	PAVEMENT REPAIR, AS PER PLAN	P3
				464				464			254	01000	464	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AVERAGE DEPTH 4.33"	
		170				170					254	01000	170	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 0.25" DEPTH	
		827				827					254	01000	827	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" DEPTH	
	410					370			40		254	01000	410	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" AVG DEPTH	
4717						4717					254	01000	4717	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" AVG DEPTH	
938						938					254	01000	938	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25" AVG DEPTH	
		1406				1406					254	01000	1406	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH	
		238				238					254	01010	238	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, 1.25" DEPTH	
10392		11503	15017	2272		36912	2215	57			302	56000	39184	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
6588	759	9740	1327			17045	1298	29	42		304	20000	18414	CY	AGGREGATE BASE	
		7154				7154					304	20000	7154	CY	AGGREGATE BASE, 6"	
		7				7					304	20000	7	CY	AGGREGATE BASE, 8"	
		331				331					304	20001	331	CY	AGGREGATE BASE, AS PER PLAN, 12"	P3
		36				36					304	20001	36	CY	AGGREGATE BASE, AS PER PLAN, 6"	P3
		176	5			181					305	11010	181	SY	7" CONCRETE BASE, CLASS QC IP	
		947	293			1240					305	12010	1240	SY	8" CONCRETE BASE, CLASS QC IP	
	1709	805	4095			6360			249		305	13010	6609	SY	9" CONCRETE BASE, CLASS QC IP	
20	149	172	317	1426		637			21		407	13900	658	GAL	TACK COAT, 702.13	
6313	101	7621	8726			22744	1344	82	17		407	20000	24187	GAL	NON-TRACKING TACK COAT	
		83				83					441	50000	83	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	75	154				218			11		441	50101	229	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	P2,P4
		9				9					441	50200	9	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
19	88	46	215			355			13		441	50300	368	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
95						95					441	70801	95	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	P1
2482		3551	2977	442		9010	398	44			442	00100	9452	CY	ANTI-SEGREGATION EQUIPMENT	
1732		1336	2054	342		5122	305	37			442	10001	5464	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (446), AS PER PLAN, PG70-22M	P1,P3,P4,P5
		2174	2496	409		6885	366	43			442	10001	7294	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (446), AS PER PLAN "B", PG76-22M	P3
											442	10080	7294	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
71						71					442	22300	71	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)	
		163				163					451	13010	163	SY	8" REINFORCED CONCRETE PAVEMENT, CLASS QC IP	
	274	215				489					SPECIAL	45130000	489	FT	PRESSURE RELIEF JOINT, TYPE A	P2,P4
242		977				1219					452	09010	1219	SY	4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC IP	
			113			113					452	12050	113	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
	167		12			179					452	14011	179	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC IP, AS PER PLAN	P2,P4
	1247		862			2109					452	15010	2109	SY	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC IP	
1748		439		1491		2187	1070	421			609	24510	3678	FT	CURB, TYPE 4-C	
167						167					609	50000	167	SY	4" CONCRETE TRAFFIC ISLAND	
	497		406			903					609	98000	903	FT	CURB, MISC.: COLUMBUS 18" CONCRETE CURB	P2,P4
	402		1222								609	98000	1624	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "A"	P2,P4
			462								609	98000	462	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "B"	P4
	168									168	609	98000	168	FT	CURB, MISC.: COLUMBUS 18" GRANITE CURB "C"	P2
		68				68					609	98000	68	FT	CURB, MISC.: COMBINATION CURB & GUTTER, TYPE MOUNTABLE, AS PER PLAN	P3
		318				318					609	98000	318	FT	CURB, MISC.: COMBINATION CURB & GUTTER, TYPE SPECIAL 8", AS PER PLAN	P3
		555				555					609	98000	555	FT	CURB, MISC.: STRAIGHT 18" CONCRETE CURB, AS PER PLAN	P3
	468		900			1368					SPECIAL	69098100	1368	FT	SAWING AND SEALING CONCRETE JOINTS	P2,P4
14						14					823	10000	14	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448)	
											826	10600	3	CY	ASPHALT CONCRETE SURFACE COURSE, 4 1/2" 12.5MM, (448), FIBER TYPE A	
14107		23840	22749	587		60696		587			872	10000	61283	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)	P3

REV. BY	DATE
CWL	12-2-23
REV. BY	DATE
CWL	
DESCRIPTION	
REVISED PART 3	
NO.	
9	

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED PART 5	CWL	10-2-23
2	REVISED PART 4 609 "B"	CWL	10-12-23
6	REVISED PART 1 ITEM EXT.	CWL	11-10-23
7	REVISED PARTS 3 & 5	CWL	11-20-23
8	REVISED PART 1	CWL	11-20-23

BIG BUILD MASTER GENERAL SUMMARY

FRA-70-13.11

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SHEET NUMBER										PARTICIPATION				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	51	52	164	168	301	304	R/W 6	01/IMS/04											
	LS							LS					201	11000	LS		ROADWAY CLEARING AND GRUBBING	33	
	28		1 32962 1406 175 2870 835 32 4722					1 32990 1406 175 2870 835 32 4722					202	20010	1 32990 1406	EACH SY FT	HEADWALL REMOVED PAVEMENT REMOVED CONCRETE BARRIER REMOVED		
													202	30700	175	FT	CONCRETE BARRIER REMOVED, AS PER PLAN "4A"	39	
													202	32000	2870	FT	CURB REMOVED		
													202	35100	835	FT	PIPE REMOVED, 24" AND UNDER		
													202	35201	32	FT	PIPE REMOVED, OVER 24", AS PER PLAN	39	
													202	38000	4722	FT	GUARDRAIL REMOVED		
													202	47800	1	EACH	IMPACT ATTENUATOR REMOVED		
													202	58000	4	EACH	MANHOLE REMOVED		
													202	58100	13	EACH	CATCH BASIN REMOVED		
													202	58200	4	EACH	INLET REMOVED		
													202	58500	1	EACH	CATCH BASIN ABANDONED		
													SPECIAL	20270000	162	FT	FILL AND PLUG EXISTING CONDUIT, 15"	43	
													SPECIAL	20270000	126	FT	FILL AND PLUG EXISTING CONDUIT, 18"	43	
													202	75000	1047	FT	FENCE REMOVED		
													202	75250	2	EACH	GATE REMOVED		
													202	98200	1070	FT	REMOVAL MISC.: PORTABLE BARRIER	39	
													202	98200	1062	FT	REMOVAL MISC.: PORTABLE BARRIER WITH VANDAL FENCE	39	
													203	10000	25365	CY	EXCAVATION		
													203	20000	35175	CY	EMBANKMENT		
													203	20001	3977	CY	EMBANKMENT, AS PER PLAN	39	
													203	35000	3360	CY	GRANULAR EMBANKMENT		
													203	35001	4592	CY	GRANULAR EMBANKMENT, AS PER PLAN	39	
23954													204	10000	24917	SY	SUBGRADE COMPACTION		
		250											204	13000	250	CY	EXCAVATION OF SUBGRADE		
		250											204	30010	250	CY	GRANULAR MATERIAL, TYPE B		
28													204	45000	28	hour	PROOF ROLLING		
		500											204	50000	500	SY	GEOTEXTILE FABRIC		
		500											204	51000	500	SY	GEOGRID		
432													206	10500	432	TON	CEMENT		
14276													206	11000	14276	SY	CURING COAT		
14276													206	15020	14276	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		
LS													206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		
LS	LS												208	14001	LS		VIBRATION CONTROL AND MONITORING, AS PER PLAN	47	
32													209	60201	32	STA	LINEAR GRADING, AS PER PLAN	38	
													606	15050	3427	FT	GUARDRAIL, TYPE MGS		
													606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)		
													606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T		
													606	35002	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
													606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		
													606	60040	2	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL (60 MPH, 48" WIDTH)	38	
													607	23001	942	FT	FENCE, TYPE CLT, AS PER PLAN "A"		
													607	39994	323	FT	TEMPORARY VANDAL FENCE, TYPE B	39	
1065													608	98000	3187	SF	WALKWAY, MISC.: 6" X 6" CONCRETE PAVERS	303	
132													622	10140	132	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1		
1551													622	10160	1551	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D		
1													622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D		
4													622	25014	4	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1		
1													622	25015	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN "4A"	38	
19													622	25050	19	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		
1													622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "4A"	38	
													622	41111	1933	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN	38	
													22	40500	22	EACH	REFERENCE MONUMENT, TYPE A		
													22	40520	1	EACH	RIGHT-OF-WAY MONUMENT, TYPE B		
LS													SPECIAL	69098400	LS		EMERGENCY ACTION PLAN COORDINATION "4A"	34	
LS													SPECIAL	69098400	LS		WCLPP R/W CONSTRUCTION CAMERA	34	
LS													SPECIAL	69098400	LS		USACE SURVEY AND AS-BUILTS	34	
LS													SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	34	
LS													878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		

4A PART 1 GENERAL SUMMARY

FRA-70-13.11

NO.	DESCRIPTION	REV. BY	DATE
1	REVISED F-1 & R/W SHEET #	CWL	10-2-23
4	UPDATED 202 ITEMS	CWL	10-30-23
8	REL. BIKE PATH DETOUR	CWL	11-20-23
9	REVISED EXCAVATION	CWL	12-2-23

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 12/2/2023
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SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED JCS CHECKED LH
403	404									01/IMS /PV								
26												625	00450	26	EACH	CONNECTION, FUSED PULL APART		
9												625	00470	9	EACH	CONNECTION, UNFUSED BOLTED		
6												625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT		
2												625	10490	2	EACH	LIGHT POLE, CONVENTIONAL, DESIGN ST15B40		
2												625	10490	2	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT18BB40		
4												625	10494	4	EACH	LIGHT POLE, LOW MAST, DESIGN ATLM50		
5												625	10494	5	EACH	LIGHT POLE, LOW MAST, DESIGN STLM50		
36												625	10614	36	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE		
4												625	14200	4	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP		
6,633												625	23200	6,633	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE		
2,244												625	23400	2,244	FT	NO. 10 AWG POLE AND BRACKET CABLE		
1,144												625	24320	1,144	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES		
1,305												625	25400	1,305	FT	CONDUIT, 2", 725.04		
348												625	25600	348	FT	CONDUIT, 2", 725.04		
	309											625	25600	309	FT	CONDUIT, 4", 725.04		
	215											625	25910	215	FT	CONDUIT CLEANED AND CABLES REMOVED		
	47											625	25920	47	FT	CONDUIT, MISC.; CONDUIT REMOVED		401
6												625	26253	6	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-S, 13220-14684 LUM, 480V		401
9												625	26273	9	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN, IES-III, 31000-33900 LUM, 480V		401
5												625	27503	5	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, IES-III-S, 4813-6507 LUM, 480V		401
1,581												625	29000	1,581	FT	TRENCH		
12												625	29920	12	EACH	STRUCTURE JUNCTION BOX		
4												625	29940	4	EACH	BARRIER JUNCTION BOX		
5												625	30700	5	EACH	PULL BOX, 725.08, 18"		
	1											625	31510	1	EACH	PULL BOX REMOVED		
4												625	32000	4	EACH	GROUND ROD		
2												625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM		
1,581												625	36010	1,581	FT	UNDERGROUND WARNING/MARKING TAPE		
2												625	37101	2	EACH	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN		401
	9											625	75400	9	EACH	LIGHT POLE REMOVED		
	14											625	75506	14	EACH	LUMINAIRE REMOVED		
	3											625	75521	3	EACH	LUMINAIRE SUPPORT REMOVED, AS PER PLAN		401
	2											625	75500	2	EACH	LIGHT POLE FOUNDATION REMOVED		
	2,286											625	75550	2,286	FT	DISTRIBUTION CABLE REMOVED		
	4											625	75800	4	EACH	DISCONNECT CIRCUIT		
	LS											SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING		401

NO.	DESCRIPTION	REV. BY	DATE
1.	BARRIER TRANSITION CONDUIT UPDATES FROM 2" TO 4"	WH	2023-12-01
2.	4" BARRIER CONDUIT CLARIFICATION	WH	2023-12-01

4A PART 1 LIGHTING GENERAL SUMMARY

FRA-70-13.11

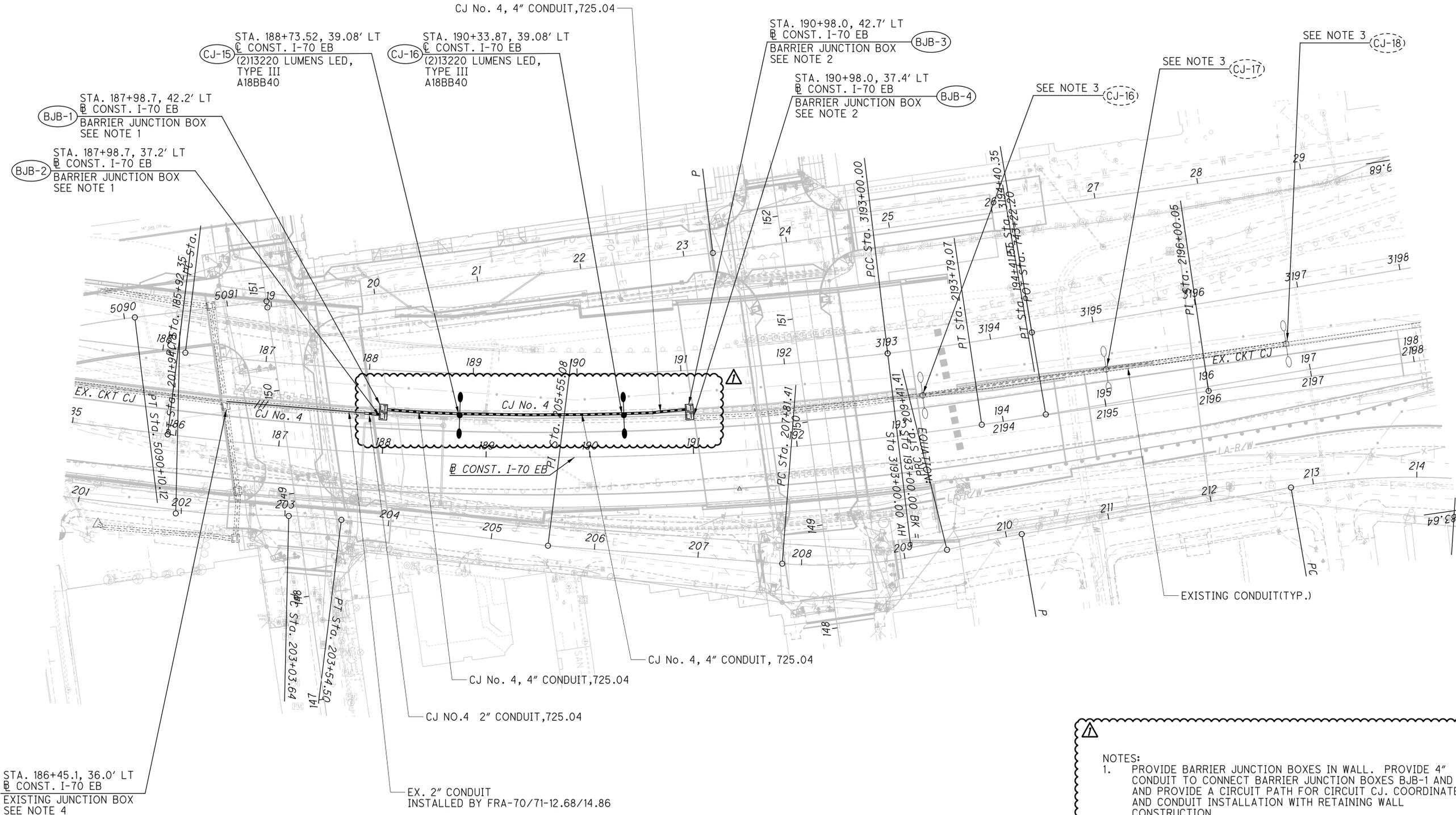
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SHEET NO.	SIDE	ROADWAY	STATION TO STATION	CIRCUIT NODES/ REMOVAL REFERENCE	625	625	625	625	625	625	625	625	625	625	625	625	625	625	
					CONDUIT CLEANED AND CABLES REMOVED	LIGHT POLE REMOVED	LUMINAIRE REMOVED	PULL BOX REMOVED	LUMINAIRE SUPPORT REMOVED, AS PER PLAN	DISTRIBUTION CABLE REMOVED	DISCONNECT CIRCUIT	CONDUIT MISC.: CONDUIT REMOVED	LIGHT POLE FOUNDATION REMOVED	CONDUIT 4", 725-04					
* = MATCH LINE					FT	EACH	EACH	EACH	EACH	FT	EACH	FT	EACH	FT					
406	RT	I.R. 70 EB		BE-17		1	1												
406	RT	I.R. 70 EB		BE-18		1	1												
406	RT	I.R. 70 EB		BE-19		1	1												
406	RT	I.R. 70 EB		BE-20		1	1												
406	RT	I.R. 70 EB		BE-21		1	1												
407	RT	I.R. 70 EB		BE-22		1	1												
407	RT	I.R. 70 EB		R-1				1											
407	RT	I.R. 70 EB		R-2						171		47							
407	LT	I.R. 70 EB		I-H5			1		1										
407	LT	I.R. 70 EB		I-H6			1		1										
407	LT	I.R. 70 EB		I-H7			1		1										
407	LT	I.R. 70 EB		R-3	275						2								
407	LT	I.R. 70 EB		I-H8		1	1												
408	LT	I.R. 70 EB		R-4						591	1								
408	LT	I.R. 70 EB		CJ-15		1	2						1						
408	LT	I.R. 70 EB		R-5						804									
408	LT	I.R. 70 EB		CJ-15A		1	2						1						
408	LT	I.R. 70 EB		R-6						720									
408	LT	I.R. 70 EB		CJ-16							1								
411	LT	I-70 EB	STA. 187+98.7 TO STA. 187+98.7	BJB-2 TO BJB-1									6						
411	LT	I-70 EB	STA. 187+98.7 TO STA. 188+73.52	BJB-1 TO CJ-15									74						
411	LT	I-70 EB	STA. 188+73.52 TO STA. 190+33.87	CJ-15 TO CJ-16									159						
411	LT	I-70 EB	STA. 190+33.87 TO STA. 190+98.0	CJ-16 TO BJB-3									64						
411	LT	I-70 EB	STA. 190+98.0 TO STA. 190+98.0	BJB-3 TO BJB-4									6						
411	LT	I-70 EB	STA. 190+98.0	BJB-4															
TOTALS CARRIED TO LIGHTING GENERAL SUMMARY					275	9	14	1	3	2286	4	47	2	309					

CALCULATED	JCS
	CH
LIGHTING SUBSUMMARY	
FRA-70-13.11	
404 1151	

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- NOTES:**
1. PROVIDE BARRIER JUNCTION BOXES IN WALL. PROVIDE 4" CONDUIT TO CONNECT BARRIER JUNCTION BOXES BJB-1 AND BJB-2 AND PROVIDE A CIRCUIT PATH FOR CIRCUIT CJ. COORDINATE BOX AND CONDUIT INSTALLATION WITH RETAINING WALL CONSTRUCTION.
 2. PROVIDE BARRIER JUNCTION BOXES IN WALL. PROVIDE 4" CONDUIT TO CONNECT BARRIER JUNCTION BOXES BJB-3 AND BJB-4 AND PROVIDE A CIRCUIT PATH FOR CIRCUIT CJ. COORDINATE BOX AND CONDUIT INSTALLATION WITH RETAINING WALL CONSTRUCTION. PROVIDE A 4" CONDUIT STUB FROM EACH JUNCTION BOX OUT THE TOP OF THE BARRIER AND CAP WEATHER-TIGHT FOR FUTURE CONNECTION IN PROJECT FRA-70-14.05.
 3. MAINTAIN EXISTING LIGHTING. DURING CONSTRUCTION, ENSURE TEMPORARY CONNECTION OF POWER FOR CIRCUIT CJ TO EXISTING LIGHTING CIRCUIT. ADJACENT PROJECT MAY FORCE REMOVAL OF POLES CJ-16 AND CJ-17. CONTRACTOR SHALL MAINTAIN CONNECTION TO POLE CJ-18 AND POLES EAST DURING CONSTRUCTION.
 4. PROVIDE NEW CIRCUIT CONDUCTORS BETWEEN EXISTING JUNCTION BOX AND BJB-2. CONNECT TO EXISTING CIRCUIT 'CJ' IN EXISTING JUNCTION BOX.



CALCULATED	JCS	LH
	CHECKED	

**LIGHTING PLAN - I.R. 70
STA. 185+00 TO STA. 195+40**

FRA-70-13.11

ITEM 894 - THERMAL INTEGRITY PROFILER (T.I.P.) TEST

PERFORM INTEGRITY TESTING ON ALL OF THE DRILLED SHAFTS AT THE FORWARD ABUTMENT BY THERMAL INTEGRITY PROFILING (TIP). PERFORM TIP TESTING PER ASTM D7949, "STANDARD TEST METHODS FOR THERMAL INTEGRITY PROFILING OF CONCRETE DEEP FOUNDATIONS," METHOD B, AND PER SUPPLEMENTAL SPECIFICATION 894

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD AS FOLLOWS:

LOCATION	MAX. WHEEL LOAD
POUR 1	2.6 KIPS
POUR 2	2.8 KIPS
POUR 3	3.0 KIPS
POUR 4	2.7 KIPS
POUR 5	2.7 KIPS
POUR 6	2.6 KIPS
POUR 7	2.7 KIPS

A MINIMUM OUT-TO-OUT SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

SEE DECK POUR SEQUENCE PLAN FOR POUR LOCATION AND LIMITS.

STRUCTURE GROUNDING:

FOR STRUCTURE GROUNDING REQUIREMENTS AND DETAILS, SEE LIGHTING PLANS.

ITEM SPECIAL - COVERED WALKWAY SYSTEM:

THIS WORK CONSISTS OF DESIGN, INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF A COVERED PROTECTIVE WALKWAY SYSTEM ALONG PORTIONS OF THE SCIOTO MULTI-USE TRAIL BENEATH THE PROPOSED OVERHEAD BRIDGE DURING CONSTRUCTION. THE COVERED WALKWAY SYSTEM SHALL GENERALLY CONFORM TO THE DETAILS IN THE PLANS WITH RESPECT TO MINIMUM CLEAR WIDTH AND HEIGHT INSIDE THE PROTECTIVE WALKWAY AS WELL AS THE REQUIREMENT FOR A 48" HIGH KICKBOARD WITH ASSOCIATED SPLINTER GUARD. HOWEVER, FINAL DESIGN AND DETAILS OF THE COMPLETE SYSTEM SHALL BE DEVELOPED BY THE CONTRACTOR.

DESIGN OF THE COVERED WALKWAY SYSTEM SHALL CONFORM TO ALL APPLICABLE PORTIONS OF SECTION 2 FALSEWORK WITHIN THE LATEST EDITION OF THE AASHTO "GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS", INCLUDING INTERIM REVISIONS. THESE SECTIONS INCLUDE, BUT ARE NOT LIMITED TO, DRAWINGS, MATERIALS, LOADS AND DESIGN. THE ROOF OF THE WALKWAY SHALL CONSIST OF CLOSELY LAID WOOD PLANKING NOT LESS THAN 2" NOMINAL THICKNESS COVERED BY EXTERIOR GRADE PLYWOOD AND DESIGNED FOR VERTICAL APPLIED LIVE LOAD OF NOT LESS THAN 150 POUNDS PER SQUARE FOOT. ENVIRONMENTAL LOADS SHALL BE AS SPECIFIED IN THE REFERENCED AASHTO GUIDE DESIGN SPECIFICATION. ALL OTHER APPLICABLE OSHA REQUIREMENTS SHALL BE FOLLOWED. SUBMITTAL OF ENGINEERED DRAWINGS SHALL CONFORM TO CMS 501.05.

PAYMENT SHALL BE MADE PER LINEAR FOOT OF MULTI-USE TRAIL TO RECEIVE THE COVERED WALKWAY SYSTEM INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO DESIGN, CONSTRUCT, MAINTAIN AND REMOVE THE SYSTEM AT THE END OF THE PROJECT.

ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE FRA-70-132IR SFN 2504448 BRIDGE WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT AT THE BRIDGE. A COPY OF THE ASBESTOS INSPECTION REPORT IS INCLUDED IN THE PLAN SET FOR THIS PROJECT.

ELECTRONIC SUBMISSION

SUBMIT A COMPLETED ELECTRONIC NOTIFICATION OF DEMOLITION AND RENOVATION FORM (NDRF), APPLICABLE FEES, AND THE ASBESTOS INSPECTION REPORT TO THE OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH. SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT USING THE OEPA BUSINESS CENTER. SUBMIT ONE ELECTRONIC PDF COPY AND ONE HARD COPY OF THE NDRF TO THE ENGINEER. THE ENGINEER WILL PROVIDE ONE COPY TO THE DISTRICT ENVIRONMENTAL STAFF.

HARD COPY SUBMISSION

THE CONTRACTOR MAY SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT. FOLLOW THE MAILING INSTRUCTIONS ON THE NDRF. CHECK WITH THE LOCAL HEALTH DEPARTMENT, COLUMBUS PUBLIC HEALTH, 240 PARSONS AVE. COLUMBUS OH 43215, 614-645-7005 TO DETERMINE IF THEY REQUIRE A HARD COPY SUBMITTAL.

SUBMIT THE COMPLETED NDRF TO OEPA AT LEAST 10 DAYS PRIOR TO DEMOLITION ACTIVITY, RENOVATION ACTIVITY OR BOTH. RETAIN TWO HARD COPIES OF THE NDRF AND SUBMIT ONE COPY TO THE ENGINEER AND EMAIL ONE COPY OF THE ODOT DISTRICT ENVIRONMENTAL COORDINATOR AT MARCI.LININGER@DOT.OHIO.GOV.

BASIS OF PAYMENT

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ABBREVIATIONS

ABUT.	ABUTMENT
BRG.	BEARING
BOT.	BOTTOM
BTWN.	BETWEEN
CONST. JT., C.J.	CONSTRUCTION JOINT
B.S.	BOTH SIDES
N.S.	NEAR SIDE
F.S.	FAR SIDE
SER.	SERIES
TYP.	TYPICAL
EQ.	EQUAL
DIM.	DIMENSION
SPA.	SPACES
EA.	EACH
P.E..J.F.	PREFORMED EXPANSION JOINT FILLER
MIN.	MINIMUM
ADDIT.	ADDITIONAL
FRWD.	FORWARD
SPL.	SPLICE
CLR.	CLEAR
P.C.P.P.	PERFORATED CORRUGATED PLASTIC PIPE
N.P.C.P.P.	NON-PERFORATED CORRUGATED PLASTIC PIPE
SR	SERIES (IN REINFORCING STEEL LIST)
U.N.O.	UNLESS NOTED OTHERWISE

TEMPORARY ACCESS FILL

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, AND PERFORMANCE OF ALL TEMPORARY ACCESS FILL WITHIN THE SCIOTO RIVER AND IS RESPONSIBLE FOR MANAGING ONSITE EROSION, AND DOWNSTREAM SCOUR, PROTECTING THE DOWNSTREAM BRIDGE AND MITIGATING ANY ONSITE OR OFFSITE CONDITIONS RELATED TO OR CAUSED BY THE TEMPORARY ACCESS FILL INSTALLATION.

THE CONTRACTOR SHALL PREPARE A HYDRAULIC MODEL FOR THE TEMPORARY ACCESS FILL DESIGN, PREPARED BY A PROFESSIONAL ENGINEER ACCORDING TO THE REQUIREMENTS OF THE ODOT BRIDGE DESIGN MANUAL AND L&D MANUAL, WHICH ALSO DEMONSTRATES THAT THE TEMPORARY ACCESS FILL HAS SUFFICIENT HYDRAULIC WATERWAY CAPACITY SUCH THAT NO OVERTOPPING OF LEVEES UPSTREAM OF THE TEMPORARY ACCESS FILL OCCURS DURING THE 100 YEAR FLOOD EVENT (DISCHARGE = 75,000 CUBIC FEET PER SECOND). THE TEMPORARY ACCESS FILL PLAN SHALL ADEQUATELY ADDRESS THE POTENTIAL FOR RIVER CHANNEL AND RIVER BANK SCOUR/EROSION THAT CAN BE CAUSED BY TEMPORARILY CONSTRICTING THE FLOW. THE CONTRACTOR SHALL REMOVE THE ACCUMULATION OF GRAVEL AND OTHER DEPOSITS FORMED DOWNSTREAM OF THE CAUSEWAY AS REQUIRED BY ODOT SUPPLEMENT SPECIFICATION 832 AND US ARMY CORPS NATIONWIDE PERMIT NO 3 AND 408 PERMIT TO AVOID REDUCING CHANNEL FLOW CAPACITY AND INCREASING THE SHEAR STRESSES ALONG THE BANKS.

PAYMENT FOR THE CONSTRUCTION, MAINTENANCE AND FINAL REMOVAL INCLUDING, BUT NOT LIMITED TO, ALL TEMPORARY ACCESS FILL DESIGN TASKS AS SPECIFIED HEREIN AND WITHIN THE ODOT SPECIFICATIONS SHALL BE INCLUDED AS AN INCIDENTAL TO THE WORK ITEMS WITHIN THE BOUNDARY OF THE ASSOCIATED AQUATIC RESOURCE.



DESIGN AGENCY
DATE 4-21-23
REVIEWED DGN
STRUCTURE FILE NUMBER 2510016

DRAWN JLH
CHECKED RHC
REVISIONS

GENERAL NOTES
BRIDGE NO. FRA-70-132IR
I-70 E.B. OVER THE SCIOTO RIVER

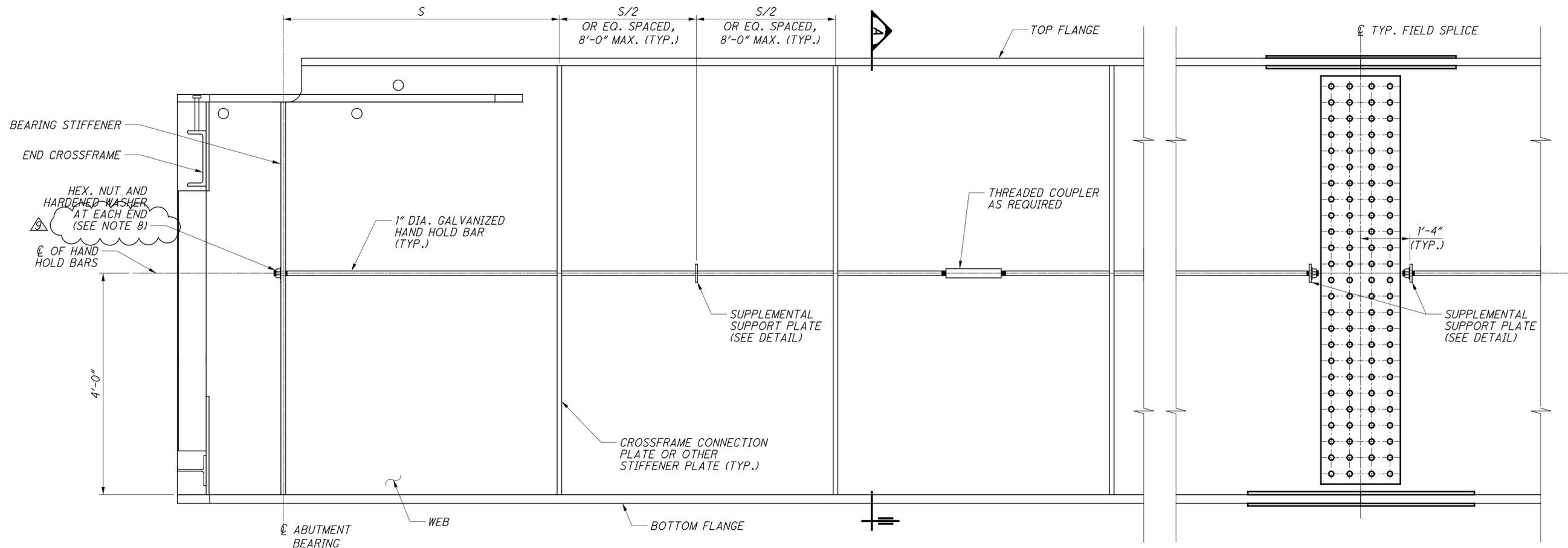
FRA - 70 - 13 - 11
PID No. 77372

12 / 101

435
1151

NO.	DESCRIPTION	REV. BY	DATE
9	ADDED NOTE	CWL	12-2-23

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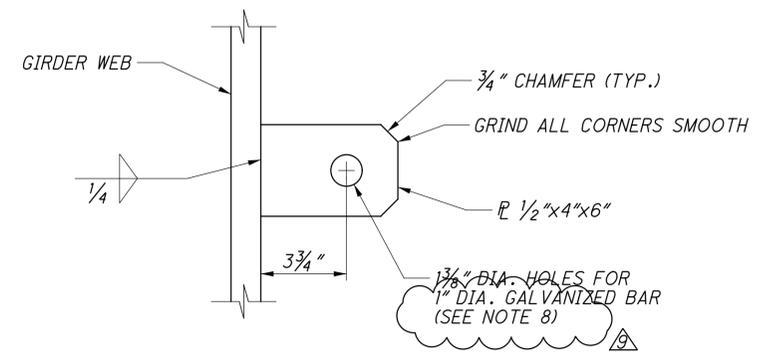


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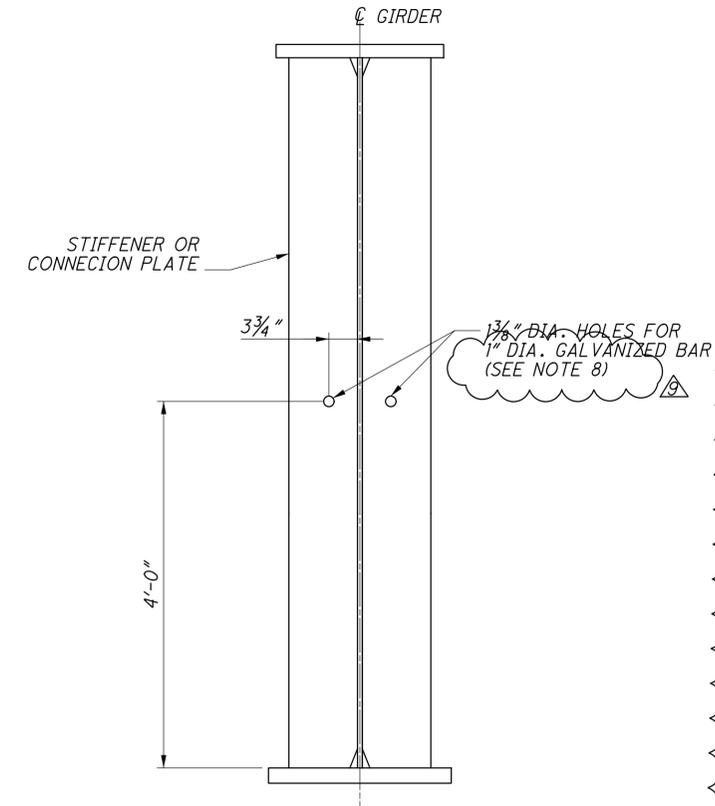
1. HAND HOLD BARS ARE REQUIRED FULL LENGTH OF EACH GIRDER ON BOTH FACES OF THE GIRDER WEB FOR THE INTERIOR GIRDERS AND ON THE INTERIOR FACES OF THE WEB OF THE EXTERIOR GIRDERS. HAND HOLD BARS SHALL BE SHOP-INSTALLED ON GIRDER SEGMENTS.
2. EACH SEGMENT OF HAND HOLD BARS SHALL BE SUPPORTED IN THE MINIMUM OF THREE (3) LOCATIONS.
3. THREAD ONLY THAT PORTION OF THE BAR REQUIRED FOR NUT PLACEMENT. BURR THREADS AFTER SNUG TIGHTENING NUTS.
4. ROUND BARS SHALL CONFORM TO ASTM A36 SPECIFICATION. NUTS AND WASHERS SHALL CONFORM TO ASTM A563 AND F436 SPECIFICATIONS RESPECTIVELY. SUPPLEMENTAL SUPPORT PLATE MATERIAL SHALL MATCH THE GIRDER WEB TO WHICH IT IS ATTACHED.
5. ROUND BARS, NUTS, WASHERS, AND COUPLINGS SHALL BE GALVANIZED PER 711.02 AFTER FABRICATION.
6. GALVANIZED COATINGS DAMAGED IN THE SHOP SHALL BE REPAIRED PER ASTM A780 METHOD A3. GALVANIZED COATINGS DAMAGED IN THE FIELD SHALL BE REPAIRED PER ASTM A780 METHOD A1 AS DIRECTED BY THE ENGINEER.
7. THE FULL COST TO DRILL HOLES IN GIRDER CROSS FRAME CONNECTION AND STIFFENER PLATES, FURNISH, FABRICATE AND INSTALL SUPPLEMENTAL SUPPORT PLATES AND FURNISH, FABRICATE, GALVANIZE AND INSTALL THE HAND HOLD BARS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID PER FOOT FOR ITEM 513 - STRUCTURAL STEEL, MISC.: HAND HOLD BARS.
8. AT ALL LOCATIONS ADJACENT TO A SCUPPER WHERE THE GALVANIZED HAND HOLD BAR PASSES THROUGH A CROSSFRAME CONNECTION PLATE OR HAND HOLD BAR SUPPORT PLATE A POLYMER FLANGED SLEEVE SHALL BE INSTALLED ON THE HAND HOLD BAR PREVENTING CONTACT BETWEEN THE PLATE AND HAND HOLD BAR. THE POLYMER FLANGED SLEEVE SHALL BE IGUS RFI-1620-24 OR APPROVED EQUAL WITH A MINIMUM TEMPERATURE RATING BELOW -30 DEGREES AND MAXIMUM TEMPERATURE RATING ABOVE 180 DEGREES.

PARTIAL GIRDER ELEVATION (N.T.S.)

S = SPACING BETWEEN ADJACENT PLATES (BEARING STIFFENER PLATE, CROSSFRAME CONNECTION PLATE, INTERMEDIATE STIFFENER PLATE OR PIER JACKING STIFFENER PLATE). PROVIDE SUPPLEMENTAL SUPPORT PLATE TO TERMINATE HAND HOLD BARS AT GIRDER END DIAPHRAGM LOCATIONS (NOT SHOWN).



SUPPLEMENTAL SUPPORT PLATE DETAIL



SECTION A
TYP. ALL STIFFENERS AND CONNECTION PLATES INTERIOR GIRDER SHOWN

NO.	DESCRIPTION	REV. BY	DATE
8	SHEET ADDED	GTP	11-22-23
9	NOTE ADDED	CWL	12-2-23

01-2012-2012048 VFR-77372-STRUCTURES VFR-77372-1321R SHEETS 070-1321RSD016.DGN
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DESIGN AGENCY
GPD GROUP
GPD GROUP, INC. 1000 WILLOWDALE DRIVE, SUITE 200, COVINGTON, LA 70021
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DATE 11-22-23
REVIEWED DGN
STRUCTURE FILE NUMBER 2510016
DESIGNED GTP
CHECKED TJW
DRAWN GTP
REVISED

HAND HOLD BAR DETAILS
 BRIDGE NO. FRA-70-1321R
 I-70 E.B. OVER THE SCIOTO RIVER

FRA-70-13-11
PID No. 77372

59A/101
 475A
 1151

GROUNDING AND BONDING

REQUIREMENTS OF THE CURRENT EDITION OF THE CMSC AND THE CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1. ALL NON-CURRENT CARRYING METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR AT THE TRAFFIC SIGNAL CONTROLLER CABINET OR POWER METER CABINET, AS NOTED BELOW.

A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04)/POLYVINYL CHLORIDE CONDUITS (725.051) AND POLYETHYLENE CONDUITS (725.052) IN ADDITION TO THE CONDUCTORS SPECIFIED.

B. METAL PULL BOX FRAMES SHALL BE BONDED BY ATTACHMENT OF THE EQUIPMENT GROUNDING CONDUCTOR TO THE FRAME AS ILLUSTRATED ON SCD 4021 THROUGH 4023.

C. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE PROVIDED AS SHOWN IN THE DETAILS.

D. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS SHALL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT UNLESS OTHERWISE DIRECTED BY THE CITY.

2. CONDUITS.

A. THE 725.04 CONDUIT SHALL HAVE HEAVY DUTY GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.

B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.

C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3. WIRE FOR GROUNDING AND BONDING.

A. USE INSULATED COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SHALL BE AS FOLLOWS:

- I. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
- II. THE INSULATION SHALL BE GREEN WITH TWO (2) YELLOW STRIPES (TRACERS).
- III. SPLICES IN THE GROUNDING AND BONDING CABLE SHALL NOT BE PERMITTED IN PULL BOXES.

4. GROUND ROD.

A. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED COPPER.

GROUNDING AND BONDING (CONT.)

5. POWER SERVICE.

A. AT THE TRAFFIC SIGNAL CABINET, THE GROUNDING ELECTRODE CONDUCTOR (GROUND WIRE) FROM THE CABINET NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS UNSPLICED CONDUCTOR.

B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE MAIN POWER SERVICE IN THE CONTROLLER CABINET.

C. POWER SERVICE DISCONNECT SWITCHES ARE NOT USED BETWEEN THE SECONDARY SIDE OF THE TRANSFORMER SUPPLYING POWER SERVICE AND THE CONTROLLER CABINET.

D. A POWER SERVICE MAIN CIRCUIT BREAKER IS USED IN THE CONTROLLER CABINET BETWEEN THE SECONDARY SIDE OF THE TRANSFORMER SUPPLYING POWER SERVICE AND THE CONTROLLER CABINET.

GROUNDING AND BONDING SHALL BE CONSIDERED INCIDENTAL TO ITEM 625, NO. 4 AWG 600 VOLT DISTRIBUTION CABLE, AS PER PLAN.
3/1/18

ITEM 625, NO. 4 AWG 600 VOLT DISTRIBUTION CABLE, AS PER PLAN

INSULATED CABLE SHALL BE USED FOR THE GROUND WIRE (GND) WHERE INDICATED FOR SYSTEM GROUNDING AND BONDING. THE JACKET OF THE GND WIRE SHALL BE GREEN WITH TWO YELLOW STRIPES/TRACERS. THIS GND WIRE SHALL BE SEPARATE FROM THE GROUND ROD WIRE, BUT SHALL BE CONNECTED TO THE SAME GROUNDING BOLT USED FOR THE GROUND ROD WIRE ATTACHMENT AT THE POLE. THE GND WIRE SHALL BE TAGGED AS "GND SYS" AT ALL POLE LOCATIONS, PULL BOXES, AND CONTROL CABINETS.
10/6/15

ITEM 625 BRACKET ARM, 8', AS PER PLAN

BRACKET ARMS SHALL BE AS DETAILED ON THE MAST ARM ORIENTATION AND POLE FABRICATION DETAILS SHEET AND SHALL MEET THE REQUIREMENTS SPECIFIED IN THE CITY OF COLUMBUS MIS-104 DRAWING EXCEPT AS MODIFIED WITHIN.

ALL PAINTED ITEMS SHALL BE COATED TO MATCH THE MAST ARM TRAFFIC SIGNAL SUPPORTS.

THE COATING COLOR ON BOTH STEEL AND ALUMINUM PRODUCTS SHALL MATCH EACH OTHER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT BOTH THE PRODUCT MANUFACTURERS MATCH COATING COLORS SO THAT AN EXCELLENT LOOKING END PRODUCT IS ACHIEVED.

PAYMENT SHALL BE AS PER ITEM 625.
7/23/18

ITEM 625 CONDUIT MISC.: (BY SIZE), FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE

IN ADDITION TO THE REQUIREMENTS OF 625.12, THIS CONDUIT IS INTENDED FOR ATTACHMENT TO BRIDGES OR STRUCTURE AS INDICATED IN THE PLANS.

THE CONDUIT SHALL BE IRON PIPE SIZE (IPS) REINFORCED THERMOSETTING RESIN CONDUIT (RTRC), LISTED BY UNDERWRITERS LABORATORIES, UL, STANDARD UL 1684, AND SHALL COMPLY WITH NEMA STANDARD NUMBER TC 14-2002. THE CONDUIT SHALL HAVE A NOMINAL WALL THICKNESS OF 0.070 INCHES AND SHALL BE GRAY IN COLOR. THE CONDUIT INSTALLED SHALL BE THREADED, TWENTY (20)-FOOT SECTIONS. EPOXY ADHESIVE SHALL BE APPLIED TO THE CONDUIT ENDS WHEN JOINING SECTIONS OF CONDUIT. CONDUIT EXPANSION JOINTS AND OTHER CONDUIT FITTINGS SHALL BE INSTALLED AS PER THE CONDUIT MANUFACTURER'S RECOMMENDATIONS.

THE CONDUIT SHALL BE ATTACHED BENEATH THE BRIDGE DECK, ATTACHED TO THE CROSS FRAMES, OR ATTACHED TO VERTICAL SURFACES BEHIND THE WALLS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. STANDARD CLAMP TYPE CONDUIT HANGERS SHALL BE USED. STRAP HANGERS ARE NOT ACCEPTABLE. BRIDGE ATTACHMENT HARDWARE AND SUPPORT SPACING USED SHALL CONFORM TO THE CONDUIT MANUFACTURER'S RECOMMENDATIONS. ALL HANGERS AND HANGER HARDWARE SHALL BE GALVANIZED AND ON THE ODOT QPL. ALL HANGER COMPONENT SURFACES IN CONTACT WITH THE CONDUIT SHALL BE MADE FROM FIBERGLASS. HOLES FOR EXPANSION ANCHORS SHALL BE DRILLED AS PER 510.03. EXPANSION ANCHORS SHALL BE SET WITH EPOXY ADHESIVE. THREAD ADHESIVE SHALL BE USED ON BOTH THE ANCHOR BOLT MACHINE SCREW AND THE CONDUIT CLAMP SCREW AND NUT. CONDUIT RACK, FITTINGS, AND HARDWARE ASSOCIATED WITH THE DUCT BANK AND ATTACHMENTS TO THE BRIDGE SHALL BE INCLUDED WITH THE BRIDGE ITEM FOR THE DUCT BANK COMPLETE.

REFER TO ODOT SCD HL-30.32 FOR EXPANSION/DEFLECTION FITTINGS AT THE END OF THE BRIDGE ABUTMENT. EXPANSION/DEFLECTION FITTINGS USED SHALL CONFORM TO THE CONDUIT MANUFACTURER'S RECOMMENDATIONS AND SHALL BE APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL INSTALL NON-ORGANIC FIBERGLASS PULL TAPE WITH A MINIMUM 1800 FT./LBS. TENSION STRENGTH IN THE CONDUIT. THE COST FOR THE PULL TAPE AND ITS INSTALLATION SHALL BE INCIDENTAL TO THE COST OF THIS PAY ITEM.

FLEXIBLE METAL CONDUIT AND FITTINGS AS MANUFACTURED BY LIQUATITE, DELIKON, OR APPROVED EQUAL SHALL BE USED WHEN DIRECTED BY THE ENGINEER TO CONNECT THE STANDARD FIBERGLASS REINFORCED CONDUIT TO THE STANDARD CONDUIT. THE FLEXIBLE METAL CONDUIT SHALL BE WATERPROOF AND GRAY IN COLOR. THE FLEXIBLE METAL CONDUIT AND FITTINGS SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA
2145 AIRPARK DRIVE
SPRINGFIELD, OHIO 45503
(937)-325-7305

OSBURN ASSOCIATES, INC
11931 STATE ROUTE 93N
LOGAN, OHIO 43138
(740) 385-6869

ITEM 625 CONDUIT MISC.: (BY SIZE), FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE (CONT.)

THE WORK AS DESCRIBED WILL BE MEASURED AS THE NUMBER OF LINEAR FEET OF CONDUIT FURNISHED AND INSTALLED FROM END TO END, AND SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS, INCLUDING ALL JOINTS, COUPLINGS, FITTINGS, ADAPTERS AND ACCESSORIES ASSOCIATED WITH THE FIBERGLASS CONDUIT, NECESSARY TO COMPLETE THE WORK SPECIFIED.

ITEM 625 LIGHTING, MISC.: LUMINAIRE, LED, 83 W, TEARDROP (BLACK)

LUMINAIRES INSTALLED ON COMBINATION TRAFFIC SIGNAL SUPPORTS SHALL BE PER CITY OF COLUMBUS MIS-801 EXCEPT THE VOLTAGE SOURCE SHALL BE 120 VAC. THE LUMINAIRE HOUSING SHALL BE COATED TO MATCH ITS RESPECTIVE COMBINATION SIGNAL SUPPORT.

PAYMENT SHALL BE AS PER ITEM 625.
7/23/18

ITEM 625 TRENCH, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 625.13, THE INSTALLATION DEPTH OF THE PROPOSED CONDUIT SHALL CORRELATE TO THE DEPTH OF THE PULL BOX STRUCTURE SERVICING THE CONDUIT RUN. CONDUIT ENTERING 18 INCH PULL BOXES SHALL BE 24 INCHES DEEP. CONDUIT ENTERING 27 INCH PULL BOXES SHALL BE 30 INCHES DEEP. CONDUIT ENTERING 32 INCH PULL BOXES SHALL BE 30 TO 36 INCHES DEEP. CONDUIT ENTERING 48 INCH PULL BOXES SHALL BE 39 INCHES DEEP. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MODIFY THE DEPTH OF THE CONDUIT TO ACCOMMODATE THE VARIOUS TERMINATION DEPTHS AND UTILITY CONFLICTS. SHARP CHANGES IN CONDUIT ELEVATION WILL NOT BE PERMITTED. IF BOTH ENDS OF A CONDUIT RUN ENTER THE SAME SIZE STRUCTURE, THEN THE ENTIRE LENGTH OF CONDUIT SHALL BE PLACED AT THAT DEPTH. IF THE TWO ENDS ENTER DIFFERENT DEPTH STRUCTURES, THE CHANGE IN ELEVATION SHALL BE MADE OVER THE ENTIRE LENGTH OF THE CONDUIT RUN. TRENCH UNDER PROPOSED ROADWAYS SHALL HAVE A MINIMUM OVERALL DEPTH OF 36 INCHES AND OR A MINIMUM DEPTH OF 24 INCHES UNDER THE FINAL PAVEMENT SUBGRADE, WHICHEVER IS DEEPEST. INCIDENTAL TO THIS ITEM IS THE REPAIR OF SIDEWALK, ROADWAY, BRICK, CURB, CURB RAMPS, AND LANDSCAPING.
5/17/16

ITEM 625 LIGHTING, MISC.: PHOTO CELL

THE CONTRACTOR SHALL INSTALL PHOTO CELLS AS SHOWN IN THE PLANS AND PER CITY OF COLUMBUS ITEM 1001, MIS-600, MIS-601, AND MIS-602.

PAYMENT SHALL BE AT THE CONTRACT BID PRICE FOR EACH ITEM 625 LIGHTING, MISC.: PHOTO CELL AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, CABLE, WIRING, CONNECTIONS, APPURTENANCES, TESTED AND ACCEPTED.
7/6/18

NO.	DESCRIPTION	REV. BY	DATE
9	REVISED NOTE	CWL	12-2-23

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CALCULATED
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TRAFFIC SIGNAL NOTES

FRA-70-14.05C

129
395

Z:\2013 pro\13-003-06 ODOT FRA-70-13 -4A GPD\CAD\Projects\FRA\105596\lighting\sheets\105596\N002.dgn 04-DEC-2023 12:37PM Jordan.Steele

SPECIFICATIONS

UNLESS NOTED OTHERWISE, CONSTRUCTION SHALL CONFORM TO THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2016 EDITION OR LATEST VERSION, WHICHEVER IS MORE RECENT.

PADLOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH CMS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

CONDUIT EXPANSION AND DEFLECTION

EXPANSION FITTINGS SHALL BE OZ TYPE AX, CROUSE HINDS TYPE XJG, APPLETON TYPE AX, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL PROVIDE EITHER 4 OR 8 INCHES (100 OR 200 MILLIMETERS) TOTAL MOVEMENT AS SPECIFIED BY THE PLAN DETAILS AND SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS. DEFLECTION COUPLINGS SHALL BE OZ TYPE DX, CROUSE HINDS TYPE XD, APPLETON TYPE DF, OR EQUAL APPROVED BY THE ENGINEER. EACH DEFLECTION COUPLING SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS.

ITEM 625 - LIGHTING MISC: DECORATIVE LIGHTING CONTROL CABINET

ITEMS "LIGHTING MISC" SHALL CONSIST OF A CONTROL CABINET AND LIGHTING CONTROL HARDWARE AS DETAILS ON SHEET 185 TO 187

PAYMENT WILL BE MADE AT UNIT BID UNDER SPECIAL ITEM "LIGHTING MISC: DECORATIVE LIGHTING CONTROL CABINET SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625 - LIGHTING MISC: DECORATIVE LIGHTING POWER SERVICE

ITEMS "LIGHTING MISC" SHALL CONSIST OF A POWER SERVICE CENTER CABINET AND POWER SERVICE HARDWARE AS DETAILS ON SHEET 185 TO 187

THE 100AMP 240V SINLE PHASE METER IS FM2S BY ITRON PART#SSISID ATTACHED TO SINGLE POSITION METER SOCKET BY ANCHOR PART#URS1304-E. ALL ASSEMBLY SHALL BE INSTALLED ON HINGE SIDE OF CONTROLLER. THE METER AND METER ASSEMBLY SHALL BE INSTALLED PRIOR TO ENERGIZING THE CONTROLLER.

METER SOCKET AND COVER SHALL BE GROUNDED PER NEC SPECIFICATIONS.

THE REQUIRED ARC FLASH LABEL SHALL BE AFFIXED TO THE FACE OF THE METER SOCKET.

PAYMENT WILL BE MADE AT UNIT BID UNDER SPECIAL ITEM "LIGHTING MISC: DECORATIVE LIGHTING POWER SERVICE SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625 - LIGHTING MISC.: SERVICE TO DECORATIVE LIGHTING

LIGHTING MISC.: SERVICE TO DECORATIVE LIGHTING, AS PER PLAN SHALL PROVIDE A COMPLETE ELECTRICAL SYSTEM FOR THE DECORATIVE LED LIGHTING SYSTEM, EXCEPT FOR LUMINAIRES. ALL POWER CONTROL ENCLOSURES, POWER CONTROL HARDWARE, 24VDC POWER DRIVERS, CONDUIT, CONDUIT GROUNDING, MOUNTINGS, FITTINGS, JUNCTION BOXES, DISCONNECT SWITCHES, POWER CABLES AND WIRING AND ANY OTHER EQUIPMENT OR INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION ARE INCLUDED AS PART OF THE LIGHTING MISC.: SERVICE TO DECORATIVE LIGHTING.

ALL LABOR AND COORDINATION REQUIRED TO INSTALL THE DECORATIVE LED LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO CONCEALING CONDUIT BEHIND OR IN STRUCTURAL ELEMENTS, SECURING CONDUIT, BOXES, DISCONNECT SWITCHES TO WALLS OR STRUCTURES AND COORDINATING FOR THE CASTING OF JUNCTION BOXES IN WALLS OR OTHER STRUCTURES SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND SHALL BE INCLUDED AS PART OF THE SERVICE TO DECORATIVE LIGHTING.

PULL BOXES AND STRUCTURE JUNCTION BOXES UTILIZED IN SERVICE OF THE DECORATIVE LIGHTING SYSTEM SHALL BE LABELED WITH 'LIGHTING' ON THE COVER OF THE PULL BOX.

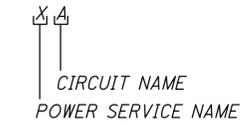
PAYMENT WILL BE MADE AT THE UNIT BID PRICE UNDER CMS ITEM 625 "LIGHTING MISC.: SERVICE TO DECORATIVE LIGHTING" FOR EACH DECORATIVE LIGHTING SYSTEM INSTALLED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625 MISC.: FIBER OPTIC CABLE, 24 STRAND

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED FOR THE INSTALLATION, CONNECTORIZATION, AND SPLICING OF THE SPECIFIED COMMUNICATIONS CABLES. THE 24-STRAND CABLE SHALL BE CORNING PART NUMBER 024EU4-T410ID20 OR APPROVED BY CITY OF COLUMBUS DOT

DECORATIVE LIGHTING LEGEND	
L1 	LUMINAIRE, DECORATIVE, RECESSED WALL LIGHT, 3.8W, 329 LUMENS, 240V, APP RECESSED WALL LIGHT WITH HOUSING CAST INTO PRECAST PLANTER WALLS, WITH INTEGRAL DRIVER. BEGA MODEL #33 166, 3.8W, 240V
L2 	LUMINAIRE, DECORATIVE, LED SEAT WALL LIGHT, 3W/FT, 121 LUMENS PER FEET, 24V DC, APP LED LIGHT FIXTURE, MOUNTED TO UNDERSIDE OF PRECAST SEATWALL, WITH REMOTE DRIVER IN QUAZITE PULL BOX (LOCATION AS NOTED). KENDO M WET, MODEL #KMW-XX-30K-SO-F-FC-BK/PDCU-W-3X96W-24 OR PDCU-W-96W-24 (AS NOTED)
	8" X 8" X 12" PLANTER PULL BOX, 725.06, UNLESS NOTED OTHERWISE,
	11"x18"x12" PLANTER PULL BOX, 725.06, WITH SEAT WALL LIGHTING FIXTURE EXTERIOR POWER PDCU-W
	WET RATED 8"x6"x4" WALL JUNCTION BOX
	PROPOSED LIGHTING CONDUIT, 725.04, (SIZE AS NOTED) WITH LIGHTING CIRCUIT CONDUCTORS (SIZE AS NOTED). LABEL INDICATES CIRCUIT NAME AND CONDUCTOR SIZE.
	CAT 6 CABLES IN 1" CONDUIT OR 2" CONDUIT, 725.04 (AS NOTED)

POWER SERVICE INFORMATION



ITEM 625 - RGBW AESTHETIC SCREEN WALL LIGHTING

THIS ITEM CONSISTS OF SUPPLYING, INSTALLING, TESTING, AND PROVIDING TRAINING FOR AN AESTHETIC LIGHTING , ACCORDING TO THE DETAILS SHOWN IN THE PLANS.

ITEM 625 RGBW AESTHETIC LIGHTING SYSTEM IS PAID FOR BY EACH INSTANCE (TYPICALLY EACH SIDE OF SCREENWALL STRUCTURE TO BE LIGHTED), AND INCLUDES THE FOLLOWING ITEMS: CAT6 WIRING, LEADER CABLES AND JUMPER CABLES WIRING, CONDUIT AND FITTINGS, DATA INJECTORS, COMMUNICATION AND WIRELESS LINKS.

TRAINING:

THE CONTRACTOR SHALL ARRANGE A MINIMUM ONE-DAY (4-7 CONTACT HOURS) TRAINING SESSION ON THE OPERATION OF THE SYSTEM. COMPLEX SYSTEMS MAY REQUIRE MORE THAN ONE DAY.

TESTING:

1. MAXIMUM LUMINANCE TEST:
USING A PHOTOMETER MEASURING IN UNITS OF CD/M², DEMONSTRATE TO THE ENGINEER DURING NIGHT TESTING THAT THE PROGRAMMED, OPERATIONAL LIGHTING SYSTEM MEETS THE MAXIMUM SURFACE LUMINANCE CRITERIA:
AESTHETIC LIGHTING SYSTEM WITH A SOFTWARE OR HARDWARE LIMIT TO THE WHITE-LIGHT SURFACE LUMINANCE OF NO MORE THAN 100 CD/M² IN URBAN/SUBURBAN AREAS AREAS AT ANY POINT OF AN ILLUMINATED SURFACE OVER OR DIRECTLY ADJACENT TO THE ROADWAY.

2. BURN-IN TEST:
FOLLOWING THE MAXIMUM LUMINANCE TEST, OPERATE THE SYSTEM FOR AT LEAST FOURTEEN DAYS WITHOUT ANY MAINTENANCE INTERVENTION.

SEE ODOT TEM 1142-26 FOR MORE INFORMATION & REQUIREMENT.

ITEM 625 MISC.: PULL BOX 11"x18"

PULL BOX SHALL BE SIMILAR IN MATERIAL AND SPECIFICATION TO ODOT 725.06, EXCEPT THE DIMENSIONS SHALL BE 11"x18"x12".

ITEM 625 MISC.: PULL BOX 13"x24"

PULL BOX SHALL BE SIMILAR IN MATERIAL AND SPECIFICATION TO ODOT 725.06, EXCEPT THE DIMENSIONS SHALL BE 13"x24"x18".

ITEM 625 - LIGHTING MISC.: SERVICE TO FRONT STREET BRIDGE TRELLIS LIGHTING

THIS ITEM SHALL CONTINUE TO PROVIDE A COMPLETE ELECTRICAL WORK THAT WAS NON-PERFORMED ON 4R/6R FOR THE FRONT STREET BRIDGE TRELLIS DECORATIVE LED LIGHTING SYSTEM, EXCEPT FOR LUMINAIRES.

ALL LABOR AND COORDINATION REQUIRED TO INSTALL THIS DECORATIVE LED LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO CONCEALING CONDUIT BEHIND OR IN STRUCTURAL ELEMENTS, SECURING CONDUIT, BOXES, DISCONNECT SWITCHES TO WALLS OR STRUCTURES AND COORDINATING FOR THE CASTING OF JUNCTION BOXES IN WALLS OR OTHER STRUCTURES SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND SHALL BE INCLUDED AS PART OF THE SERVICE TO DECORATIVE LIGHTING.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE UNDER CMS ITEM 625 "LIGHTING MISC.: SERVICE TO FRONT STREET BRIDGE TRELLIS LIGHTING" FOR EACH TRELLIS INSTALLED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.



CALCULATED
JCS
CHECKED
LH

ODOT - DECORATIVE LIGHTING GENERAL NOTES

FRA - 70-14.05C

SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED	JCS CHECKED	LH
180	172									01/IMS/04	06/MPO/04	08/ENH/04/COL									
12											12		625	00480	12	EACH	CONNECTION, UNFUSED PERMANENT				
816											816		625	23200	816	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE				
834											834		625	23306	834	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE				
447											447		625	25100	447	FT	CONDUIT, 1", 725.04				
188											188		625	25300	188	FT	CONDUIT, 1-1/2", 725.04				
273											273		625	25400	273	FT	CONDUIT, 2", 725.04				
470											470		625	29000	470	FT	TRENCH				
4											4		625	31600	4	EACH	PULL BOX, MISC.:725.06, 11"x18"			178	
8											8		625	31600	8	EACH	PULL BOX, MISC.:725.06, 13"x24"			178	
1										1			625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM				
908											908		625	36010	908	FT	UNDERGROUND WARNING/MARKING TAPE				
1											1		625	98000	1	EACH	LIGHTING, MISC.:DECORATIVE LIGHTING CONTROL CABINET			178	
3											3		625	98000	3	EACH	LIGHTING, MISC.:SERVICE TO FRONT STREET BRDIGE TRELLIS LIGHTING			178	
1											1		625	98000	1	EACH	LIGHTING, MISC.:DECORATIVE LIGHTING POWER SERVICE			178	
	7									7			625	98000	7	EACH	LIGHTING, MISC.:FOUNDATION REMOVAL (MIS-900)			172	
	4										4		625	98000	4	EACH	LIGHTING, MISC.:LUMINAIRE, LED, TEARDROP (480V) (MIS-801)			172	
	4										4		625	98000	4	EACH	LIGHTING, MISC.:POLE TO BE WIRED, 3 WIRE (MIS-501)			172	
	4										4		625	98000	4	EACH	LIGHTING, MISC.:POLE, DOWNTOWN (MIS-308)			172	
	5										5		625	98000	5	EACH	LIGHTING, MISC.:PULL BOX, 13"x24", MIS-54			172	
	1										1		625	98000	1	EACH	LIGHTING, MISC.:PULL BOX, 17"x30", MIS-54, AS PER PLAN			172	
2											2		625	98000	2	EACH	LIGHTING, MISC.:RGBW AESTHETIC SCREENWALL LIGHTING			178	
	1										1		625	98000	1	EACH	LIGHTING, MISC.:RISER, STREET LIGHT CIRCUIT, AS PER PLAN (MIS-56)			172	
4											4		625	98000	4	EACH	LIGHTING, MISC.:SERVICE TO DECORATIVE LIGHTING			178	
	1										1		625	98000	1	EACH	LIGHTING, MISC.:STREET LIGHT FOUNDATION, 6', DOWNTOWN (MIS-203)			172	
	436									436			625	98100	436	FT	LIGHTING, MISC.:2-INCH CONDUIT, CONCRETE ENCASED (MIS-700)			172	
	142									142			625	98100	142	FT	LIGHTING, MISC.:3-INCH RIGID STEEL WITH 2-INCH CONDUIT INSERT (MIS-702)			172	
1,430											1,430		625	98100	1,430	FT	LIGHTING, MISC.:CAT6 CABLE, OUTDOOR RATED			178	
	77										77		625	98100	77	FT	LIGHTING, MISC.:UNDERGROUND CIRCUIT, 2 WIRE (MIS-403)			172	
	439										439		625	98100	439	FT	LIGHTING, MISC.:UNDERGROUND CIRCUIT, 3 WIRE (MIS-404)			172	
											LS		625	98200	LS		LIGHTING, MISC.:EXISTING OVERHEAD SYSTEM REMOVAL (MIS-901)			172	
											LS		625	98200	LS		LIGHTING, MISC.:EXISTING UNDERGROUND SYSTEM REMOVAL (MIS-902)			172	
											LS		625	98200	LS		LIGHTING, MISC.:MAINTAIN EXISTING LIGHTING			172A	

Z:\2013\proj\13-003-06 ODOT FRA-70-13 -4A GPD\CAD\Projects\FRA\105596\lighting\sheets\105596.L001.dgn 04-DEC-2023 12:37PM Jordan Steele

FRA - 70 - 14.05C 4H PART 2 LIGHTING GENERAL SUMMARY - ODOT

NO.	DESCRIPTION	REV. BY	DATE
1.	PAY ITEM UPDATES	WH	2023-12-01

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATION" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

STANDARD DRAWINGS

REFER TO THE FOLLOWING ODOT STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED:	7-17-15
AS-2-15	REVISED:	1-18-19
EXJ-4-87	REVISED:	1-19-18
GSD-1-19	REVISED:	1-15-21
PCB-91	REVISED:	7-17-20

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED	1-20-23
867	DATED	4-15-22
894	DATED	4-16-21

DESIGN DATA

OPERATIONAL IMPORTANCE: A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN LOADING

HL-93
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT

DESIGN STRESSES

MASS CONCRETE CLASS QC4 - COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFTS)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2 1/2" CONCRETE COVER
CLASS QC2 CONCRETE

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING 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 UNCERTANTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

CONSTRUCTION CONSTRAINTS:

FILL THE VOID CREATED BY EXCAVATION FOR THE ABUTMENT FOOTING WITH TYPE B GRANULAR MATERIAL, 703.16.C. AFTER THE FOOTING AND THE BREASTWALL HAVE BEEN CONSTRUCTED, FILL THE VOID BEHIND EACH ABUTMENT UP TO THE BEAM SEAT ELEVATION AND FROM THE BEAM SEAT UP ON A 1:1 SLOPE TO THE SUBGRADE ELEVATION PRIOR TO CONSTRUCTING THE BACK WALL AND SETTING THE GIRDERS ON THE ABUTMENT.

STRUCTURE GROUNDING

GROUND THE PROPOSED BRIDGE ACCORDING TO THE REQUIREMENTS OF ODOT STD. DWG. HL-50.21 - STRUCTURE GROUNDING. THE FOLLOWING BRIDGE COMPONENTS SHALL BE CONNECTED TO THE GROUNDING SYSTEM: ALL STRUCTURAL STEEL, UTILITY SUPPORTS, AND LIGHT POLES.

NO.	DESCRIPTION	REV. BY	DATE
6	NOTE REVISED	RSN	11-5-23
7	NOTES REVISED	CWL	11-17-23

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTION OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.31 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 IN.

A MAXIMUM SPACING OF OVERHANG FALSEWORK OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDLE OF 65 IN.

FOUNDATION BEARING RESISTANCE

REAR ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 5.24 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 7.41 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 18.09 KIPS PER SQUARE FOOT.

PIER FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 3.93 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 5.26 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 16.42 KIPS PER SQUARE FOOT.

FORWARD ABUTMENT FOUNDATION, AS DESIGNED PRODUCE A MAXIMUM FACTORED LOAD OF 620 KIPS AT EACH DRILLED SHAFT. THIS LOAD IS RESISTED BY TIP RESISTANCE ONLY. THE FACTORED RESISTANCE DEVELOPED BY THE DRILLED SHAFT TIP IS 1,023 KIPS.

ITEM 503-COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN SHOWN ON THE HIGH STREET PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATION. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH CMS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN. ALL SHORING BEYOND THE LATERAL LIMITS OF THE HIGH STREET BRIDGE SHALL BE INCLUDED FOR PAYMENT WITH THE CAPS.

ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN

FINISH TOP OF BACKWALL IN LOCATIONS ADJACENT TO SIDEWALKS WITH A BUFF WASH FINISH PER THE STRUCTURE AESTHETIC PLANS.

AFTER CONDUITS ARE PLACED THROUGH THE UTILITY BLOCKOUTS IN THE ABUTMENT BACKWALLS, FILL THE VOIDS USING NON-SHRINK MORTAR CONFORMING TO CMS 705.22.

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK, AS PER PLAN:

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

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

SEE STRUCTURE AESTHETIC PLANS FOR DETAILS.

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT

THE COLOR FOR THE IZEU FINISH COAT FOR ALL STRUCTURAL STEEL SHALL BE FEDERAL COLOR No. 17038 (BLACK)

ABBREVIATIONS

ABUT.	ABUTMENT	SPA.	SPACES
BRG.	BEARING	EA.	EACH
BOT.	BOTTOM	P.E.J.F.	PREFORMED EXPANSION JOINT FILLER
BTWN.	BETWEEN	MIN.	MINIMUM
CONST. JT., C.J.	CONSTRUCTION JOINT	ADDIT.	ADDITIONAL
B.S.	BOTH SIDES	FRWD.	FORWARD
N.S.	NEAR SIDE	SPL.	SPLICE
F.S.	FAR SIDE	CLR.	CLEAR
SER.	SERIES	P.C.P.P.	PERFORATED CORRUGATED PLASTIC PIPE
TYP.	TYPICAL	N.P.C.P.P.	NON-PERFORATED CORRUGATED PLASTIC PIPE
EQ.	EQUAL		
DIM.	DIMENSION		

NO.	DESCRIPTION	REV. BY	DATE
9	NOTES REVISED	CWL	12-2-23

ITEM 524 - DRILLED SHAFTS, 96" DIAMETER, ABOVE BEDROCK WITH QC/QA, AS PER PLAN

THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS PER ITEM 524 EXCEPT THE FOLLOWING: THE COARSE AGGREGATE SIZE FOR ALL DRILLED SHAFTS SHALL BE A MAXIMUM OF NO. 8.

ALL DRILLED SHAFTS SHALL BE CONSTRUCTED FULL DEPTH FROM THE REQUIRED BOTTOM ELEVATION TO THE PROPOSED TOP PLAN ELEVATION USING THE TEMPORARY CASING CONSTRUCTION METHOD OF HOLE EXCAVATION AS DETAILED IN C&MS 524.04.C. NO OTHER METHODS OF HOLE EXCAVATION SHALL BE PERMITTED.

THE CONSTRUCTION TOLERANCE FOR TANGET SHAFT INSTALLATION UNDER SECTION 524.14 SHALL BE WITHIN 1/2" OF THE PLAN LOCATION IN THE HORIZONTAL PLANE AT THE PLAN ELEVATION FOR THE TOP OF THE SHAFT.

THE DRILLED SHAFT CAP AND P.E.J.F. JOINTS SHALL BE ACCURATELY PLACED ACCORDING TO THE DESIGN PLAN. IF THE LOCATIONS OF THE INSTALLED DRILLED SHAFTS VARY FROM THE DESIGN PLAN AND RESULT IN THE P.E.J.F. IN THE DRILLED SHAFT CAP FALLING OVER A DRILLED SHAFT INSTEAD OF BETWEEN SHAFTS, ALL VERTICAL SHAFT BARS INTERFERING WITH, OR CROSSING, THE CAP JOINT SHALL BE CUT FLUSH WITH THE TOP OF THE DRILLED SHAFT SO THAT BOTH SIDES OF THE CAP ARE NOT TIED TOGETHER BY SHAFT REINFORCING STEEL. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO CUTTING ANY REINFORCING STEEL. THE DEPARTMENT WILL CONSIDER THIS WORK AS INCIDENTAL AND SHALL BE INCLUDED WITH ITEM 524 FOR PAYMENT.

ITEM 524-DRILLED SHAFTS, MISC.: CSL TESTING, 96" DIAMETER SHAFT

PERFORM INTEGRITY TESTING ON ONE OF THE DRILLED SHAFTS AT THE FORWARD ABUTMENT BY CROSSHOLE SONIC LOGGING (CSL). PERFORM CSL TESTING PER ASTM D6760, "STANDARD TEST METHOD FOR INTEGRITY TESTING OF CONCRETE DEEP FOUNDATIONS BY ULTRASONIC CROSSHOLE TESTING," AND PER THE PROJECT SPECIAL PROVISIONS

ITEM 894 - THERMAL INTEGRITY PROFILER (T.I.P.) TEST

PERFORM INTEGRITY TESTING ON ALL OF THE DRILLED SHAFTS AT THE FORWARD ABUTMENT BY THERMAL INTEGRITY PROFILING (TIP). PERFORM TIP TESTING PER ASTM D7949, "STANDARD TEST METHODS FOR THERMAL INTEGRITY PROFILING OF CONCRETE DEEP FOUNDATIONS," METHOD B, AND PER SUPPLEMENTAL SPECIFICATION 894

**ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS DUCT BANK COMPLETE
ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS (DEPARTMENT OF TECH)
DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: ODOT DUCT BANK COMPLETE**

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY CITY OF COLUMBUS, CITY OF COLUMBUS (DEPARTMENT OF TECH), AND ODOT DUCT BANK COMPLETE EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE CONDUIT RACK, FITTINGS, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. FIBERGLASS CONDUIT AND ASSOCIATED FITTINGS AND COUPLINGS SHALL BE INCLUDED WITH ITEM 625 FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

SUPPORT RACK, ACCESSORIES, ETC. SHALL BE FURNISHED BY THE SAME MANUFACTURER AND BE DESIGNED TO WORK TOGETHER AS A SYSTEM WITH THE FIBERGLASS CONDUIT. STEEL CONDUIT THROUGH ABUTMENT WALLS SHALL BE HOT-DIPPED GALVANIZED SCHEDULE 40 PIPE. GROUT USED AT ABUTMENT BACKWALLS SHALL BE NONSHRINK, NON-METALLIC TYPE.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA
2145 AIRPARK DRIVE
SPRINGFIELD, OHIO 45503
(937)-325-7305

OSBURN ASSOCIATES, INC
11931 STATE ROUTE 93N
LOGAN, OHIO 43138
(740) 385-6869

THE GALVANIZED STEEL SPLIT CASING PIPE SHALL BE FURNISHED BY:

PITTSBURGH PIPE & SUPPLY CORP.
170 HAMPTON AVENUE
SAINT LOUIS, MO 63139
1 (800) 325-2653
OR APPROVED EQUAL.

INSTALLATION:

INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS & INDUSTRY STANDARDS.

BASIS OF PAYMENT

THE DEPARTMENT WILL PAY LUMP SUM FOR ALL WORK, LABOR, MATERIAL, EQUIPMENT, & INCIDENTALS TO INSTALL A COMPLETE DUCT BANK FOR "ITEM SPECIAL - STRUCTURES: DUCT BANK COMPLETE"

ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS

THIS BID ITEM CONSISTS OF PRECAST PANELS MANUFACTURED AND CONSTRUCTED IN ACCORDANCE WITH THIS SPECIFICATION AND DESIGNED IN ACCORDANCE WITH THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY AASHTO, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN STRESSES:

CONCRETE - COMPRESSIVE STRENGTH 4.0 KSI
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

MATERIALS - CONCRETE:

THE CONCRETE FOR THE WALL SECTIONS SHALL BE COMPOSED OF PORTLAND CEMENT, FINE & COARSE AGGREGATES, ADMIXTURES, AND WATER. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION C150, TYPE I, II, OR III. THE AIR ENTRAINING ADMIXTURE SHALL CONFORM TO AASHTO M154. THE CONCRETE SHALL CONTAIN 6% ±2% ENTRAINED AIR, AND SLUMP SHALL BE MAINTAINED WITHIN THE RANGE OF 1" TO 4". THE SLUMP MAY BE INCREASED TO 7" PROVIDED THE INCREASE IS ACHIEVED BY THE ADDITION OF A CHEMICAL WATER-REDUCING ADMIXTURE APPROVED BY THE ENGINEER.

MATERIALS - REINFORCING AND HARDWARE:

REINFORCEMENT SHALL CONSIST OF WELDED WIRE FABRIC CONFORMING TO ASTM A185 OR A497, OR DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM A615, A616, OR A617, GRADE 60. ALL ANGLES AND PLATES SHALL BE ASTM A36 STEEL.

SHOP DRAWING REQUIREMENTS:

THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AS PER CMS 501.04. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING:
- ALL STRUCTURAL DESIGN AND LOADING INFORMATION.
- A PLAN VIEW.
- ALL ELEVATION VIEWS.
- ALL DIMENSIONS.

MANUFACTURING SHALL NOT BEGIN UNTIL WRITTEN APPROVAL OF THE SUBMITTED SHOP DRAWINGS HAS BEEN RECEIVED.

TESTING AND INSPECTION:

ACCEPTABILITY OF THE CONCRETE FOR THE PRECAST PANELS WILL BE DETERMINED ON THE BASIS OF COMPRESSION TESTS, CERTIFICATIONS, AND VISUAL INSPECTION. THE CONCRETE STRENGTH REQUIREMENTS FOR THE PRECAST PANELS SHALL BE CONSIDERED ATTAINED REGARDLESS OF CURING AGE WHEN COMPRESSION TEST RESULTS INDICATE STRENGTH WILL CONFORM TO 28-DAY SPECIFICATIONS AS STATED BELOW. THE MANUFACTURER SHALL FURNISH FACILITIES AND PERFORM ALL NECESSARY SAMPLING AND TESTING IN AN EXPEDITIOUS AND SATISFACTORY MANNER. PANELS UTILIZING TYPE I OR II CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL WHEN 7-DAY INITIAL STRENGTHS EXCEED 85% OF 28-DAY REQUIREMENTS. PANELS UTILIZING TYPE III CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL PRIOR TO 28 DAYS ONLY WHEN COMPRESSION STRENGTH TEST RESULTS INDICATE THAT THE STRENGTH EXCEEDS THE 28-DAY SPECIFICATION.

MANUFACTURE:

THE AGGREGATES, CEMENT, AND WATER SHALL BE PROPORTIONED AND MIXED IN A BATCH MIXER TO PRODUCE A HOMOGENEOUS CONCRETE MEETING THE STRENGTH REQUIREMENTS OF THESE NOTES. THE PROPORTION OF PORTLAND CEMENT IN THE MIXTURE SHALL NOT BE LESS THAN 564 POUNDS PER CUBIC YARD OF CONCRETE.

THE WALL SECTIONS SHALL BE CURED FOR A SUFFICIENT LENGTH OF TIME SO THAT THE CONCRETE WILL DEVELOP THE SPECIFIED COMPRESSIVE STRENGTH IN 28 DAYS OR LESS. ANY ONE OF THE METHODS OF CURING OR COMBINATION THEREOF SHALL BE USED:

STEAM CURING - THE SECTIONS MAY BE LOW PRESSURE, STEAM CURED BY A SYSTEM THAT WILL MAINTAIN A MOIST ATMOSPHERE.

WATER CURING - THE SECTIONS MAY BE WATER CURED BY ANY METHOD THAT WILL KEEP THE SECTIONS MOIST.

THE FORMS USED IN MANUFACTURE SHALL BE SUFFICIENTLY RIGID AND ACCURATE TO MAINTAIN THE SECTION DIMENSIONS WITHIN THE PERMISSIBLE VARIATIONS GIVEN IN THESE NOTES. ALL CASTING SURFACES SHALL BE OF SMOOTH MATERIAL.

THE WALL SECTIONS SHALL BE STORED IN SUCH A MANNER TO PREVENT CRACKING OR DAMAGES.

MANUFACTURE (CONTINUED):

THE FRONT FACE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A SMOOTH CONCRETE FINISH AND INCORPORATE THE PATTERNS SHOWN IN THE STRUCTURE AESTHETIC DETAIL PLANS. CAULKING BETWEEN PRECAST PANELS SHALL BE IN ACCORDANCE WITH THE PLAN DETAILS. THE BACK SIDE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A UNIFORM SURFACE FINISH AND SHALL BE ROUGH SCREED TO ELIMINATE OPEN POCKETS OF AGGREGATE AND SURFACE DISTORTIONS IN EXCESS OF 1/4".

ALL PANELS SHALL BE MANUFACTURED WITH ALL PANEL DIMENSIONS WITHIN 1/4"

COMPRESSIVE STRENGTH:

ACCEPTANCE OF THE CONCRETE PANELS WITH RESPECT TO COMPRESSIVE STRENGTH WILL BE DETERMINED ON THE BASIS OF PRODUCTION LOTS. A PRODUCTION LOT IS DEFINED AS A GROUP OF PANELS THAT WILL BE REPRESENTED BY A SINGLE COMPRESSIVE STRENGTH SAMPLE AND WILL CONSIST OF EITHER 6 PANELS OR A SINGLE DAY'S PRODUCTION, WHICHEVER IS LESS.

DURING THE PRODUCTION OF THE CONCRETE PANELS, THE MANUFACTURER WILL RANDOMLY SAMPLE THE CONCRETE IN ACCORDANCE WITH ASTM C172. A SINGLE COMPRESSIVE STRENGTH SAMPLE, CONSISTING OF A MINIMUM OF FOUR CYLINDERS, WILL BE RANDOMLY SELECTED FOR EVERY PRODUCTION LOT.

CYLINDERS FOR COMPRESSIVE STRENGTH TESTS SHALL BE 6" DIA. X 1'-0" SPECIMENS PREPARED IN ACCORDANCE WITH ASTM C31. FOR EVERY COMPRESSIVE STRENGTH SAMPLE, A MINIMUM OF 2 CYLINDERS WILL BE CURED IN THE SAME MANNER AS THE PANELS AND TESTED AT APPROXIMATELY 7 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A TEST RESULT WHICH WILL DETERMINE THE INITIAL STRENGTH OF THE CONCRETE. IN ADDITION, 2 CYLINDERS SHALL BE CURED IN ACCORDANCE WITH ASTM C31 AND TESTED AT 28 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE TWO CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A COMPRESSIVE STRENGTH TEST RESULT WHICH WILL DETERMINE THE COMPRESSIVE STRENGTH OF THE PRODUCTION LOT.

IF THE INITIAL STRENGTH TEST RESULTS INDICATE A COMPRESSIVE STRENGTH IN EXCESS OF 4,000 PSI, THEN THESE TEST RESULTS WILL BE UTILIZED AS THE COMPRESSIVE STRENGTH TEST RESULT FOR THE PRODUCTION LOT AND THE REQUIREMENT FOR TESTING AT 28 DAYS WILL BE WAIVED FOR THAT PARTICULAR PRODUCTION LOT.

ACCEPTANCE OF A PRODUCTION LOT WILL BE MADE IF THE COMPRESSIVE STRENGTH TEST RESULT IS GREATER THAN OR EQUAL TO 4,000 PSI. IF THE RESULT IS LESS THAN 4,000 PSI, THE ACCEPTANCE OF THE PRODUCTION LOT WILL BE BASED ON ITS MEETING THE FOLLOWING THREE ACCEPTANCE CRITERIA:
- 90% OF THE COMPRESSIVE STRENGTH TEST RESULTS FOR THE OVERALL PRODUCTION SHALL EXCEED 4,000 PSI.
- THE AVERAGE OF ANY SIX CONSECUTIVE COMPRESSIVE STRENGTH TEST RESULTS SHALL EXCEED 4,000 PSI.
- NO INDIVIDUAL COMPRESSIVE STRENGTH TEST RESULT SHALL FALL BELOW 3,600 PSI.

IN THE EVENT THAT A PRODUCTION LOT FAILS TO MEET THE SPECIFIED COMPRESSIVE STRENGTH REQUIREMENTS, THE PRODUCTION LOT SHALL BE REJECTED. SUCH REJECTION SHALL PREVAIL UNLESS THE MANUFACTURER, AT HIS OWN EXPENSE, OBTAINS AND SUBMITS EVIDENCE ACCEPTABLE TO THE ENGINEER THAT THE STRENGTH AND QUALITY OF THE CONCRETE PLACED WITHIN THE PANELS OF THE PRODUCTION LOT IS ACCEPTABLE. IF SUCH EVIDENCE CONSISTS OF TESTS MADE ON CORES TAKEN FROM THE PANELS WITHIN THE PRODUCTION LOT, THE CORES SHALL BE OBTAINED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS OF ASTM C42.

REJECTION:

PANELS SHALL BE SUBJECT TO REJECTION BECAUSE OF FAILURE TO MEET ANY OF THE REQUIREMENTS SPECIFIED ABOVE. IN ADDITION, ANY OR ALL OF THE FOLLOWING DEFECTS MAY BE SUFFICIENT CAUSE FOR REJECTION:
- DEFECTS THAT INDICATE IMPERFECT MOLDING.
- DEFECTS INDICATING HONEYCOMBED OR OPEN TEXTURED CONCRETE.
- DEFECTS IN THE PHYSICAL CHARACTERISTICS OF THE CONCRETE, SUCH AS BROKEN OR CHIPPED CONCRETE.
- STAINED FORM FACE, DUE TO EXCESS FORM OIL OR OTHER CONTAMINATIONS.
- SIGNS OF AGGREGATE SEGREGATION.
- BROKEN OR CRACKED CORNERS.
- LIFTING INSERTS NOT USABLE.
- EXPOSED REINFORCING STEEL.
- INSUFFICIENT CONCRETE COMPRESSIVE STRENGTH.

REJECTION (CONTINUED):

THE ENGINEER WILL DECIDE IF AN ATTEMPT MAY BE MADE TO REPAIR A DEFECTIVE PANEL. THE CONTRACTOR OR MANUFACTURER SHALL MAKE THE REPAIRS. IF THE REPAIRS ARE MADE TO THE ENGINEER'S SATISFACTION, THE PANEL WILL BE ACCEPTABLE.

MARKING:

THE DATE OF MANUFACTURE, THE PRODUCTION LOT NUMBER, AND THE PIECE MARK SHALL BE CLEARLY SCRIBED ON THE BACK SURFACE OF EACH PANEL.

WALL ERECTION:

PANELS ARE HANDLED BY MEANS OF A LIFTING DEVICE CONNECTED TO THE LIFTING INSERT WHICH IS CAST INTO THE UPPER EDGE OR BACK SIDE OF THE PANELS. ALL PANELS SHALL BE BRACED TO RESIST THE TEMPORARY CONSTRUCTION LOADS INCLUDING WIND LOADS, PRIOR TO FOOTING CONSTRUCTION.

PAYMENT:

PAYMENT FOR ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS COVERS ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE AND SHALL ALSO INCLUDE ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE ELASTOMERIC BEARING PADS, STEEL CONNECTION ANGLES/PLATES, NEOPRENE FILLER, POLYURETHANE SEALANT, AND 1" P.E.J.F. ABOVE THE TOP OF THE PANELS AS SHOWN IN THE PLANS.

ITEM SPECIAL-STRUCTURES: LUMEN COMMUNICATION DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: AT&T DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: AEP DUCT BANK COMPLETE

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY LUMEN COMMUNICATION, AT&T AND AEP EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE EXTRA HEAVY WALL (XHW) FIBERGLASS CONDUIT, CONDUIT RACK, FITTING, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, EXPANSION JOINT COUPLING, THREADED ADAPTERS, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, PULL BOX SUPPORTS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

CONDUIT, FITTINGS SUPPORT RACK, ACCESSORIES, ETC. SHALL BE FURNISHED BY THE SAME MANUFACTURER AND BE DESIGNED TO WORK TOGETHER AS A SYSTEM. CONDUIT SHALL MEET OR EXCEED THE LATEST REQUIREMENTS OF UL 1684, FOR EXTRA HEAVY WALL REINFORCED THERMOSETTING RESIN CONDUIT (RTRC) AND FITTINGS, AND NEMA TC14-2002. A TWO-COMPONENT EPOXY ADHESIVE SHALL BE SUPPLIED BY THE SAME MANUFACTURER OF THE CONDUIT AND FITTINGS TO RETAIN ALL UL LISTINGS. STEEL CONDUIT THROUGH ABUTMENT WALLS SHALL BE HOT-DIPPED GALVANIZED SCHEDULE 40 PIPE. GROUT USED AT ABUTMENT BACKWALLS SHALL BE NONSHRINK, NON-METALLIC TYPE.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA OSBURN ASSOCIATES, INC
2145 AIRPARK DRIVE 11931 STATE ROUTE 93N
SPRINGFIELD, OHIO 45503 LOGAN, OHIO 43138
(937)-325-7305 (740) 385-6869

THE GALVANIZED STEEL SPLIT CASING PIPE SHALL BE FURNISHED BY: PITTSBURGH PIPE & SUPPLY CORP.
170 HAMPTON AVENUE
SAINT LOUIS, MO 63139
1 (800) 325-2653
OR APPROVED EQUAL.

INSTALLATION:

INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS & INDUSTRY STANDARDS.

BASIS OF PAYMENT

THE DEPARTMENT WILL PAY LUMP SUM FOR ALL WORK, LABOR, MATERIAL, EQUIPMENT, & INCIDENTALS TO INSTALL A COMPLETE DUCT BANK FOR "ITEM SPECIAL - STRUCTURES: DUCT BANK COMPLETE"

ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORTS

WORK TO BE PERFORMED UNDER THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING THE TEMPORARY UTILITY POLES TO SUPPORT THE AT&T AND LUMEN TELECOMMUNICATION LINES DURING CONSTRUCTION.

ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CMS 524. ALL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH CMS 513.

PAYMENT: THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE TEMPORARY UTILITY POLES. AT&T AND LUMEN ARE RESPONSIBLE FOR SUPPORTING THE EXISTING LINES ON THE TEMPORARY POLES. PAYMENT FOR THIS WORK IS THE RESPONSIBILITY OF AT&T. ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE LUMP SUM CONTRACT BID PRICE FOR ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORTS. FOR ADDITIONAL INFORMATION, SEE SHEET [8/55].

ITEM 625 - LIGHT POLE ANCHOR BOLTS, MISC.: LIGHT POLE AND PEDESTRIAN POLE ANCHOR BOLT ASSEMBLIES EMBEDDED IN CONCRETE BRIDGE DECK

FURNISH ONE ANCHOR BOLT ASSEMBLY FOR EACH LIGHT POLE AND PEDESTRIAN POLE MOUNTED ON THE BRIDGE. EACH ASSEMBLY INCLUDES A STEEL PLATE AND ALL STEEL ANCHOR RODS, LEVELING RODS, NUTS, AND WASHERS AS SHOWN ON THE DRAWINGS OR AS REQUIRED FOR INSTALLATION. FABRICATE THE ASSEMBLY IN ACCORDANCE WITH CMS 513 AND 730. GALVANIZE THE ASSEMBLY AFTER FABRICATION IN ACCORDANCE WITH CMS 711.02. ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO INSTALL EACH POLE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 625 - LIGHT POLE ANCHOR BOLTS, MISC.: LIGHT POLE AND PEDESTRIAN POLE ANCHOR BOLT ASSEMBLIES EMBEDDED IN CONCRETE BRIDGE DECK.

ASBESTOS ABATEMENT AND NOTIFICATION

ASBESTOS SURVEYS OF THE FRA-71-1405C BRIDGE SCHEDULED FOR REPLACEMENT WAS CONDUCTED BY CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALISTS. COPIES OF THE ASBESTOS INSPECTION REPORTS ARE INCLUDED IN THE PLAN SET FOR THIS PROJECT.

THE ASBESTOS SURVEYS DETERMINED THAT 65 SQUARE FEET OF ASBESTOS CONTAINING MATERIAL IS PRESENT ON THE BRIDGE DECK IN EXCESS OF THE ALLOWABLE REGULATORY LIMITS AND REQUIRES ABATEMENT.

ADDITIONALLY, 4,213 SQUARE FEET OF ASBESTOS CONTAINING TRANSITE UTILITY PIPE AND 540 SQUARE FEET OF ASBESTOS CONTAINING PIPE RACK WAS IDENTIFIED UNDER THE BRIDGE DECK. THIS PIPE WILL BE SUPPORTED AND REMAIN IN PLACE DURING THE BRIDGE DEMOLITION AND RECONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE ASBESTOS CONTAINING MATERIAL IS PROTECTED AND NOT DISTURBED THROUGHOUT THE PROJECT BY PROVIDING ADEQUATE SHIELDING TO PREVENT THE DISTURBANCE OF THE ASBESTOS MATERIAL. FOLLOWING THE RELOCATION OF THE UTILITIES IN THIS PIPE, THE PIPE AND PIPE RACK WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

THE CONTRACTOR SHALL ENSURE THAT ASBESTOS CONTAINING MATERIALS DO NOT BECOME FRIABLE (BROKEN UP OR DISPERSED) AND THAT NO VISIBLE FIBER EMISSIONS WILL OCCUR. ADDITIONALLY, THE REMOVAL AND DISPOSAL OF THE ASBESTOS CONTAINING MATERIAL SHALL COMPLY WITH CHAPTER 3745-20 OF THE OHIO ADMINISTRATIVE CODE, THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AND APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS (29 CFR 1926.1101).

THE CONTRACTOR SHALL SUBMIT A COMPLETED ELECTRONIC NOTIFICATION OF DEMOLITION AND RENOVATION FORM (NDRF), APPLICABLE FEES, AND THE ASBESTOS INSPECTION REPORT TO THE OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH. SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT USING THE OEPA BUSINESS CENTER. SUBMIT ONE ELECTRONIC PDF COPY TO THE ENGINEER. THE ENGINEER WILL PROVIDE ONE COPY TO THE DISTRICT ENVIRONMENTAL COORDINATOR AT MARCI.LININGER@DOT.OHIO.GOV.

BASIS OF PAYMENT THE CONTRACTOR SHALL FURNISH ALL THE FEES, LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE OEPA NOTIFICATION OF DEMOLITION AND RENOVATION FORM AND PROPERLY REMOVE, ENCAPSULATE, HANDLE, TRANSPORT AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID OF LUMP SUM.

PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN.

NO.	DESCRIPTION	REV. BY	DATE
9	NOTES REVISED	CWL	12-2-23

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DESIGNED	CHECKED	DGN	RHC
DRAWN	RFV	REVISED	
REVIEWED	TJW	DATE	4-21-23
STRUCTURE FILE NUMBER	2510024		

GENERAL NOTES
BRIDGE NO. FRA-70-1405C
S. HIGH STREET (U.S. 23D) OVER I-70/71

FRA-70-14.05C
PID No. 105596

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ITEM	EXT.	TOTAL	PARTICIPATION			UNITS	DESCRIPTION	ABUTMENT	PIER	SUPER-STRUCTURE	GENERAL	REFERENCE SHEET NO.
			01/IMS/04	02/IMS/11	09/IMS/17/COL							
202	11003	LS		LS			STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					5
202	22900	400		400		SY	APPROACH SLAB REMOVED				400	
202	23500	1,932		1,932		SY	WEARING COURSE REMOVED				1,932	
503	11101	LS		LS			COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					4
503	21100	2,175		2,175		CY	UNCLASSIFIED EXCAVATION	1,518	657			
509	10000	318,451		318,451		LB	EPOXY COATED REINFORCING STEEL	86,021	84,244	148,186		
511	34446	544		544		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			544		
511	41012	252		252		CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		252			
511	44113	572		572		CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	572				4
511	46512	532		532		CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	374	158			
511	51513	98		98		CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK, AS PER PLAN			98		4
512	10050	640		640		SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	13		627		
512	10100	1,071		1,071		SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	744	327			
512	33000	42		42		SY	TYPE 2 WATERPROOFING	42				
513	10200	12,292	12,292			LB	STRUCTURAL STEEL MEMBERS, LEVEL UF (COC, COC DOT, AND ODOT DUCT BANK SUPPORT)			12,292		
513	10200	12,292			12,292	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF (AT&T DUCT BANK SUPPORT)			12,292		
513	10200	11,837			11,837	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF (AEP DUCT BANK SUPPORT)			11,837		
513	10280	639,400			639,400	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4			639,400		
513	20000	6,090			6,090	EACH	WELDED STUD SHEAR CONNECTORS			6,090		
514	00060	32,100		32,100		SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			32,100		
514	00066	32,100		32,100		SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			32,100		
516	10010	166		166		FT	ARMORLESS PREFORMED JOINT SEAL				166	
516	11210	189		189		FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			189		
516	13600	1,215		1,215		SF	1" PREFORMED EXPANSION JOINT FILLER	464	751			
516	13900	189		189		SF	2" PREFORMED EXPANSION JOINT FILLER		189			
516	44101	10		10		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 9 1/2" x 1'-4" x 2.67" PAD WITH 10 1/2" x 1'-10" BEVELED PLATE, AS PER PLAN			10		32
516	44101	10		10		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 10 1/2" x 1'-5" x 2.67" PAD WITH 11 1/2" x 1'-10" BEVELED PLATE, AS PER PLAN			10		32
516	44201	10		10		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 1'-5" x 2'-2" x 3.21" PAD WITH 1'-6" x 2'-11" BEVELED PLATE, AS PER PLAN			10		32
518	21200	146		146		CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	146				
518	40000	290		290		FT	6" PERFORATED CORRUGATED PLASTIC PIPE	290				
524	95533	1,056		1,056		FT	DRILLED SHAFTS, 96" DIAMETER, ABOVE BEDROCK WITH QC/QA, AS PER PLAN	1,056				4
524	95100	1		1		EACH	DRILLED SHAFTS, MISC.: CSL TESTING, 96" DIAMETER SHAFT	1				4
526	25011	196		196		SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				196	49
526	30011	216		216		SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN				216	49
526	90031	170		170		FT	TYPE C INSTALLATION, AS PER PLAN				170	49
622	10160	185		185		FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D		185			
622	25050	2		2		EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		2			
625	10620	5		5		EACH	LIGHT POLE ANCHOR BOLTS, MISC.: LIGHT POLE AND PEDESTRIAN POLE ANCHOR BOLT ASSEMBLIES EMBEDDED IN CONCRETE BRIDGE DECK			5		5
867	00100	LS		LS			TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL					
894	10000	12		12			THERMAL INTEGRITY PROFILER (T.I.P.) TEST	12				
SPECIAL	53000200	LS		LS			STRUCTURES: LUMEN COMMUNICATION DUCT BANK COMPLETE					5
SPECIAL	53000200	LS	LS				STRUCTURES: CITY OF COLUMBUS DUCT BANK COMPLETE					4
SPECIAL	53000200	LS	LS				STRUCTURES: CITY OF COLUMBUS (DEPARTMENT OF TECH) DUCT BANK COMPLETE					4
SPECIAL	53000200	LS	LS				STRUCTURES: ODOT DUCT BANK COMPLETE					4
SPECIAL	53000200	LS		LS			STRUCTURES: AT&T DUCT BANK COMPLETE					5
SPECIAL	53000200	LS		LS			STRUCTURES: TEMPORARY UTILITY SUPPORTS					5
SPECIAL	53000200	LS		LS			STRUCTURES: AEP DUCT BANK COMPLETE					5
SPECIAL	53000600	2,866		2,866		SF	STRUCTURES: PRECAST FACADE PANELS	2,866				5

CALCULATED: RHC
 DATE: 6-25-20
 CHECKED: MOJ
 DATE: 6-26-20



DESIGN AGENCY
 DATE 4-21-23
 STRUCTURE FILE NUMBER 2510024

DESIGNED
 MOJ
 CHECKED
 RHC

REVIEWED
 DGN
 STRUCURE FILE NUMBER 2510024

DRAWN
 MOJ
 REVISED

ESTIMATED QUANTITIES
 BRIDGE NO. FRA-70-1405C
 S. HIGH STREET (U.S. 23D) OVER I-70/71

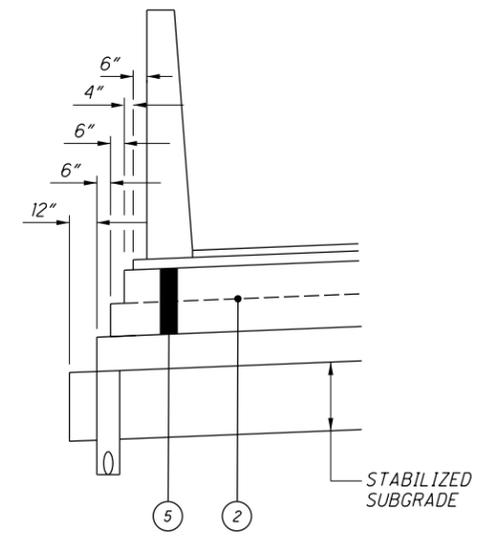
NO. DESCRIPTION
 3 QUANTITY REVISED
 7 ADDED QC/QA
 9 REVISED NOTES

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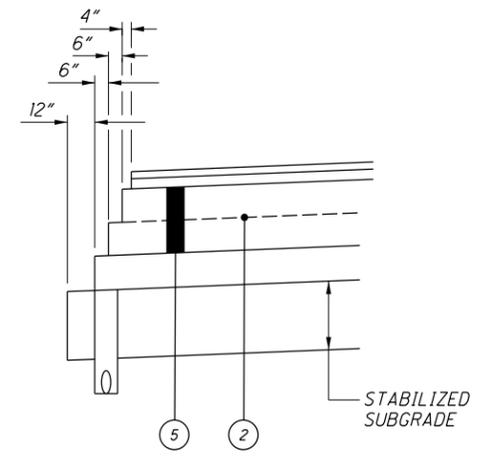
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 11-17-23
 12-2-23

FRA-70-14.05C
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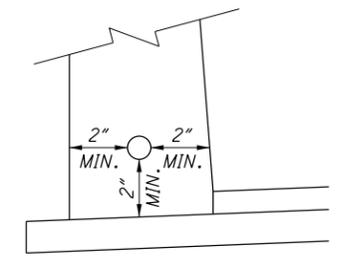
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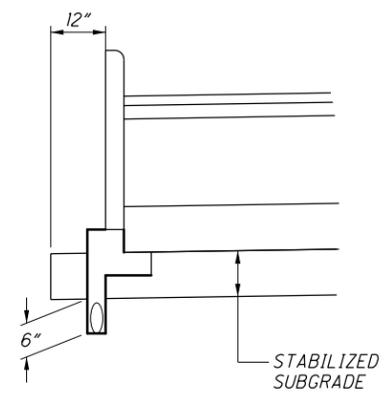
**FREWAY AND RAMPS
TYPICAL STEP DETAIL WITH BARRIER**
APPLIES TO EITHER SIDE
N.T.S.



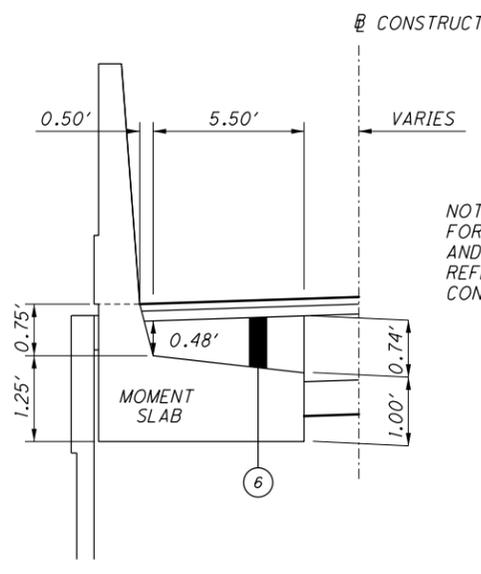
**FREWAY AND RAMPS
TYPICAL STEP DETAIL WITHOUT BARRIER**
APPLIES TO EITHER SIDE
N.T.S.



**2" STEEL RACEWAYS IN
TYPE D BARRIER**
N.T.S.

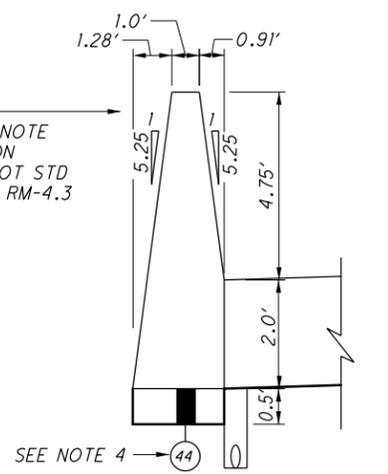


**CITY STREETS
TYPICAL STEP DETAIL WITH CURB**
APPLIES TO EITHER SIDE
N.T.S.



302 OVER MOMENT SLAB DETAIL
N.T.S.

NOTE:
FOR MISSING NOTE
AND DIMENSION
REFER TO ODOT STD
CONSTR. DWG RM-4.3



TYPE C1 BARRIER, A.P.P. "A"
N.T.S.

LEGEND

PROPOSED

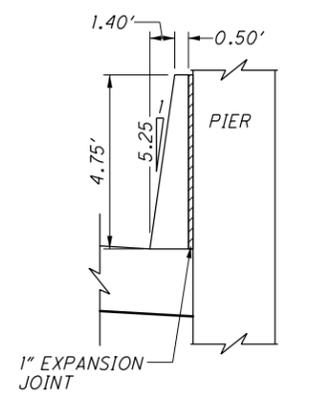
- ① ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (446), AS PER PLAN
- ② ITEM 407 - NON-TRACKING TACK COAT (RATE PER C&MS TABLE 407.06)
- ③ ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 mm, TYPE A, (446)
- ④ ITEM 305 - 9" CONCRETE BASE, CLASS OC IP
- ⑤ ITEM 302 - 10.5" ASPHALT CONCRETE BASE (449), PG64-22 (2 LIFTS)
- ⑥ ITEM 302 - ASPHALT CONCRETE BASE (449), PG64-22 (THICKNESS PER DETAIL THIS SHEET)
- ⑦ ITEM 304 - 6" AGGREGATE BASE
- ⑧ ITEM 204 - SUBGRADE COMPACTION
- ⑨ ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG64-22
- ⑩ ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) PG64-22
- ⑪ ITEM 305 - 8" CONCRETE BASE, CLASS OC IP
- ⑫ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH
- ⑬ ITEM 605 - 4" SHALLOW PIPE UNDERDRAINS
- ⑭ ITEM 407 - TACK COAT, 702.13
- ⑮ ITEM 605 - 4" BASE PIPE UNDERDRAINS
- ⑯ ITEM 606 - GUARDRAIL, TYPE MGS
- ⑰ ITEM 608 - 4" CONCRETE WALK (8" AT DRIVES & CURB RAMPS, SEE MISC. DETAILS)
- ⑱ ITEM 609 - CURB, TYPE 4-C
- ⑲ ITEM 609 - CURB, MISC.: COLUMBUS 18" CONCRETE CURB, AS PER PLAN
- ⑳ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN
- ㉑ ITEM 601 - 6" CONCRETE SLOPE PROTECTION
- ㉒ ITEM 613 - LOW STRENGTH MORTAR BACKFILL
- ㉓ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C
- ㉔ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (SEE NOTE 3)
- ㉕ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1
- ㉖ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B
- ㉗ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- ㉘ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN "A"
- ㉙ ITEM 659 - SEEDING AND MULCHING, CLASS 1
- ㉚ ITEM 826 - ASPHALT CONCRETE SURFACE COURSE 442 12.5mm, (448), FIBER A (2 LIFTS)
- ㉛ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1
- ㉜ ITEM 690 - SPECIAL - 4" PIPE UNDERDRAIN
- ㉝ 42" PARAPET (ON APPROACH SLAB)
- ㉞ ITEM 442 - 1.5" ASPHALT SURFACE COURSE, 12.5mm, TYPE A (446), 76-22M, AS PER PLAN "B"
- ㉟ ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
- ㊱ ITEM 204 - GRANULAR MATERIAL, 703.16, TYPE B
- ㊲ ITEM 204 - 6" EXCAVATION OF SUBGRADE, AS PER PLAN
- ㊳ ITEM 204 - GEOTEXTILE FABRIC, AS PER PLAN
- ㊴ ITEM 304 - 12" AGGREGATE BASE, AS PER PLAN
- ㊵ ITEM 452 - 4" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC IP
- ㊶ ITEM 204 - PROOF ROLLING
- ㊷ ITEM 204 - PROOF ROLLING, AS PER PLAN
- ㊸ ITEM 608 - WALKWAY, MISC.: 6" X 6" CONCRETE PAVERS (FOR DETAIL, SEE SHEET 391)
- ㊹ ITEM 601 - RIPRAP, WITH GROUT, AS PER PLAN (FOR DETAIL, SEE SHEET 387)

- ⑤④ ITEM 206 - CEMENT STABILIZED SUBBASE, 12 INCHES DEEP
- ⑤⑤ ITEM 659 - SEEDING AND MULCHING, CLASS 2
- ⑤⑥ ITEM 659 - SEEDING AND MULCHING, CLASS 3B
- ⑤⑦ ITEM 304 - 4" AGGREGATE BASE
- ⑤⑧ ITEM 305 - 6" CONCRETE BASE, CLASS OC IP
- ⑥③ ITEM 511 - 9" CLASS OC1 CONCRETE, SUBSTRUCTURE, AS PER PLAN
- ⑥⑧ ITEM 601 - TIED CONCRETE BLOCK MAT, TYPE 1
- ⑥⑨ ITEM 442 - 4.5" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5mm, TYPE A, (446), (2 LIFTS)
- ⑦① ITEM 203 - GRANULAR MATERIAL, TYPE B

EXISTING

- (A) ASPHALT CONCRETE
- (K) CONCRETE WALK
- (M) UNDERDRAIN
- (O) EXISTING BARRIER
- (P) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (R) 3" BITUMINOUS AGGREGATE BASE
- (S) 7" AGGREGATE BASE
- (T) CURB
- (U) GUARDRAIL TYPE 5
- (V) PORTLAND CEMENT CONCRETE BASE
- (W) AGGREGATE BASE
- (X) REINFORCED CONCRETE APPROACH SLAB

- NOTES:
1. VOID REDUCING ASPHALT MEMBRANE (VRAM) SHALL BE USED FOR ITEM 442, ASPHALT CONCRETE SURFACE COURSE PER SUPPLEMENTAL SPECIFICATION 872.
 2. FOR THE FOLLOWING RAMPS, ITEM 442, SURFACE COURSE SHALL REQUIRE A PG76-22M BINDER. THE PAY SHALL BE ITEM 442, ASPHALT SURFACE COURSE, 12.5mm, TYPE A (446), 76-22M, AS PER PLAN "B"
- TRANS 1-70 WB (WEST)
- TRANS RAMP D3N
- RAMP D7
 3. THE WIDTH OF THE BARRIER TOP SHALL BE 6" EQUALING A TOTAL BARRIER WIDTH OF 1.40' WITH A 1" PREFORMED FILLER "C&MS 705.03" EXPANSION JOINT, BETWEEN BARRIER AND PIER. SEE DETAIL BELOW.
 4. GRANULAR MATERIAL COST IS INCLUDED IN THE CONSTRUCTION COST FOR THE BARRIER.



TYPE D BARRIER, A.P.P.
N.T.S.

NO.	DESCRIPTION	REV. BY	DATE
9	LEGEND REVISED	TAZ	12/05/23

CALCULATED
CHECKED

TYPICAL SECTIONS LEGEND

FRA-70-13.10

13
702

WEEKLY MAINTENANCE OF TRAFFIC MEETING

AFTER THE INITIAL PRE-MAINTENANCE OF TRAFFIC MEETING, THE CONTRACTOR SHALL MEET WITH THE PROJECT ENGINEER ON A WEEKLY BASIS TO GO OVER A DETAILED MAINTENANCE OF TRAFFIC REPORT OF AT LEAST 7 CALENDAR DAYS. THIS MEETING SHOULD BE HELD ON THE SAME DAY AND TIME OF EACH WEEK.

THE CONTRACTOR WILL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INFORMATION REQUIRED BY THE NOTIFICATION OF TRAFFIC RESTRICTIONS NOTE PRIOR TO THE MEETING.

IN ADDITION TO THE DETAILED MAINTENANCE OF TRAFFIC REPORT THE CONTRACTOR SHALL GIVE A GENERAL LOOK AHEAD OF AN ADDITIONAL 2 WEEKS OF UPCOMING WORK ACTIVITIES. THIS WILL INCLUDE ANY NOTIFICATION REQUIREMENTS FOR RESTRICTIONS THAT HAVE A DURATION GREATER THAN 12 HOURS.

PRE-MAINTENANCE OF TRAFFIC MEETING

A PRE-MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD (MINIMUM 14 WORK DAYS) PRIOR TO WORK BEGINNING OR ANY CHANGE OF PHASING. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER (d06.mot@dot.ohio.gov) AS WELL AS THE CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL. FOR COLUMBUS SECTIONS OF ROADWAY, ALSO INCLUDE THE TEMPORARY CONTROL COORDINATOR (614-645-6269 OR 614-645-5845) FROM THE CITY OF COLUMBUS TRANSPORTATION DIVISION.

PERMITTED LANE CLOSURES ON FREEWAYS, RAMPS AND CITY STREETS

THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL FREEWAYS SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS. THE EXISTING NUMBER OF LANES IN EACH DIRECTION ON ALL RAMPS AND CITY STREETS SHALL BE MAINTAINED FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING, TAPER AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE.

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 ZONE AND TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, APPLICABLE STANDARD DRAWINGS, AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

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.

LANE VALUE CONTRACT TABLE

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE CONTRACT 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 CONTRACT TABLE.

LANE VALUE CONTRACT TABLE (DURING CONSTRUCTION)						
Section (SLM)	Existing Number of Lanes per Direction	Lane closures are NOT permitted:				Disincentive Amounts per minute per lane
		Lane Reduction	Mon to Fri	Sat	Sun	
FRA-70						
Broad Street (11.21) to Central Avenue (11.98)	3	3 to 2	5AM-9AM & 2PM-6PM	No Restriction	No Restriction	\$230
		3 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$230
Central Avenue (11.98) to Glenwood Avenue (12.41)	3	3 to 2	5AM-9AM & 2PM-6PM	No Restriction	No Restriction	\$230
		2 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$230
Glenwood Avenue (12.41) to Souder Ave (12.82)	3	3 to 2	5AM-9PM	7AM-9AM & 1PM-7PM	7AM-9AM & 1PM-7PM	\$360
		2 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$360
Souder Ave (12.82) to Scioto River (13.41)	2	2 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$555
		3 to 2	5AM-9PM	7AM-9AM & 1PM-7PM	7AM-9AM & 1PM-7PM	\$370
Scioto River (13.41) to Short Street (13.73)	3	3 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$370
		3 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$360
Short Street (13.73) to Grant Avenue (14.56)	3	3 to 1	5AM-11PM	5AM-10PM	5AM-10PM	\$360
		3 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$360
Grant Avenue (14.56) to Champion Avenue (15.60) (WB)	2	2 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$540
		2 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$540
18th Street (15.24) to Alum Creek Drive (17.00) (EB)	4	4 to 3	5AM-9AM & 2PM-7PM	No Restriction	No Restriction	\$270
		4 to 2	8AM-8PM	11AM-7PM	11AM-7PM	\$270
		4 to 1	5AM-Midnight	7AM-Midnight	7AM-Midnight	\$270
Champion Avenue (15.60) to Alum Creek Drive (17.00) (WB)	4	4 to 3	5AM-9PM	No Restriction	No Restriction	\$265
		4 to 2	5AM-8PM	9AM-7PM	9AM-7PM	\$265
		4 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$265
Alum Creek Drive (17.00) to College Avenue (18.67) (EB)	4	4 to 3	5AM-7PM	No Restriction	No Restriction	\$250
		4 to 2	8AM-8PM	11AM-7PM	11AM-7PM	\$250
		4 to 1	5AM-Midnight	7AM-Midnight	7AM-Midnight	\$250
Alum Creek Drive (17.00) to College Avenue (18.67) (WB)	3	3 to 2	5AM-8PM	9AM-7PM	9AM-7PM	\$335
		3 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$335
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						
FRA-71						
Frank Road (12.79) to I-70 (15.26)	4	4 to 3	6AM-7PM	7AM-9AM & 2PM-6PM	7AM-9AM & 2PM-6PM	\$335
		4 to 2	5AM-7PM	7AM-9AM & 2PM-7PM	7AM-9AM & 2PM-7PM	\$335
		4 to 1	5AM-11PM	6AM-11PM	6AM-10PM	\$335
I-70-West Split (15.26) to I-70-East Split (16.83)	See corresponding section on I-70 (SLM 13.43 to 14.78)					
I-70-East Split (16.83) to Main Street (17.13)	2	2 to 1	5AM-10PM	6AM-10PM	6AM-10PM	\$455
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						
FRA-315						
I-70 (0.00) to Rich Street (0.59)	2	2 to 1	5AM-10PM	6AM-9PM	6AM-9PM	\$205
Rich Street (0.59) to US 33-Spring Street (1.34)	3	3 to 2	5AM-7PM	7AM-9AM & 3PM-6PM	7AM-9AM & 3PM-6PM	\$235
		3 to 1	5AM-10PM	6AM-9PM	6AM-9PM	\$235
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						

NOTE: ALL LANES MUST BE OPEN BY 5AM ON WEEKDAYS, MONDAY THROUGH FRIDAY.

NO.	DESCRIPTION	REV. BY	DATE
9	TABLES REVISED	KJF	11/30/23

LANE VALUE CONTRACT TABLE (POST-CONSTRUCTION)						
Section (SLM)	Existing Number of Lanes per Direction	Lane closures are NOT permitted:				Disincentive Amounts per minute per lane
		Lane Reduction	Mon to Fri	Sat	Sun	
FRA-70						
Broad Street (11.21) to Central Avenue (11.98)	3	3 to 2	5AM-9AM & 2PM-6PM	No Restriction	No Restriction	\$230
		3 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$230
Central Avenue (11.98) to Glenwood Avenue (12.41)	3	3 to 2	5AM-9AM & 2PM-6PM	No Restriction	No Restriction	\$230
		2 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$230
Glenwood Avenue (12.41) to Souder Ave (12.82)	3	3 to 2	5AM-9PM	7AM-9AM & 1PM-7PM	7AM-9AM & 1PM-7PM	\$360
		2 to 1	5AM-10PM	6AM-8PM	6AM-8PM	\$360
Souder Ave (12.82) to Scioto River (13.41)	2	2 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$555
		3 to 2	5AM-9PM	7AM-9AM & 1PM-7PM	7AM-9AM & 1PM-7PM	\$370
Scioto River (13.41) to Front Street (13.95) (WB)	3	3 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$370
		4 to 3	5AM-7PM	7AM-9AM & 2PM-7PM	8AM-9AM & 2PM-7PM	\$235
Scioto River (13.41) to Front Street (13.95) (EB)	4	4 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$235
		4 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$235
Front Street (13.95) to Grant Avenue (14.56) (WB)	5	5 to 4	5AM-7PM	No Restriction	No Restriction	\$285
		5 to 3	5AM-8PM	9AM-7PM	9AM-7PM	\$285
		5 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$285
Front Street (13.95) to Third Street (14.19) (EB)	5	5 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$285
		5 to 4	5AM-7PM	No Restriction	No Restriction	\$285
		5 to 3	5AM-8PM	9AM-7PM	9AM-7PM	\$285
Third Street (14.19) to S. Grant Avenue (14.56) (EB)	4	5 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$285
		5 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$285
		4 to 3	5AM-9AM & 2PM-7PM	4PM-6PM	4PM-6PM	\$235
Grant Avenue (14.56) to Champion Avenue (15.60) (WB)	2	4 to 2	5AM-9PM	6AM-10PM	6AM-10PM	\$235
		4 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$235
Grant Avenue (14.56) to 18th Street (15.24) (EB)	2	2 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$540
		2 to 1	5AM-11PM	6AM-10PM	6AM-10PM	\$540
18th Street (15.24) to Alum Creek Drive (17.00) (EB)	4	4 to 3	5AM-9AM & 2PM-7PM	No Restriction	No Restriction	\$270
		4 to 2	8AM-8PM	11AM-7PM	11AM-7PM	\$270
		4 to 1	5AM-Midnight	7AM-Midnight	7AM-Midnight	\$270
Champion Avenue (15.60) to Alum Creek Drive (17.00) (WB)	4	4 to 3	5AM-9PM	No Restriction	No Restriction	\$265
		4 to 2	5AM-8PM	9AM-7PM	9AM-7PM	\$265
		4 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$265
Alum Creek Drive (17.00) to College Avenue (18.67) (EB)	4	4 to 3	5AM-7PM	No Restriction	No Restriction	\$250
		4 to 2	8AM-8PM	11AM-7PM	11AM-7PM	\$250
		4 to 1	5AM-Midnight	7AM-Midnight	7AM-Midnight	\$250
Alum Creek Drive (17.00) to College Avenue (18.67) (WB)	3	3 to 2	5AM-8PM	9AM-7PM	9AM-7PM	\$335
		3 to 1	5AM-11PM	6AM-11PM	6AM-11PM	\$335
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						
FRA-71						
Frank Road (12.79) to I-70 (15.26)	4	4 to 3	6AM-7PM	7AM-9AM & 2PM-6PM	7AM-9AM & 2PM-6PM	\$335
		4 to 2	5AM-7PM	7AM-9AM & 2PM-7PM	7AM-9AM & 2PM-7PM	\$335
		4 to 1	5AM-11PM	6AM-11PM	6AM-10PM	\$335
I-70-West Split (15.26) to I-70-East Split (16.83) (NB)	See corresponding section on I-70 (SLM 13.43 to 14.78)					
I-70-West Split (15.26) to Front Street (13.95) (SB)	2	2 to 1	5AM-10PM	6AM-10PM	6AM-10PM	\$455
Front Street (13.95) to I-70-East Split (16.83) (SB)	See corresponding section on I-70 (WB) (SLM 13.95 to 14.78)					
I-70-East Split (16.83) to Main Street (17.13)	2	2 to 1	5AM-10PM	6AM-10PM	6AM-10PM	\$455
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						
FRA-315						
I-70 (0.00) to Sullivant Street (0.49)	2	2 to 1	5AM-10PM	6AM-9PM	6AM-9PM	\$205
Sullivant Street (0.49) to US 33-Spring Street (1.34)	3	3 to 2	5AM-7PM	7AM-9AM & 3PM-6PM	7AM-9AM & 3PM-6PM	\$235
		3 to 1	5AM-10PM	6AM-9PM	6AM-9PM	\$235
Short term shoulder closures are NOT permitted 5AM-9AM and 3PM-6PM Monday-Friday.						

PLOT.CEL
 ms consultants, inc.
 msconsultants.com
 Ohio DOT Workspace
 7071 East Interchange 6A
 Columbus, OH 43230
 www.msconsultants.com
 Batchplot Spec: \\msconsultants.com\files\production\03\60\06634_6A\standards\plots\batchplot.dwg
 Pen Table: N:\03\60\06634_6A\standards\tables\l8r.ms_std_06634_6A_Plan_View.tbl
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TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.

2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.

3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.

4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

- A. COLLABORATE WITH ODOT AND SAFETY FORCES;
- B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND
- C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

- A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:
 - I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL
 - II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN
 - III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN
 - IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

B. FOLLOWING AN INCIDENT/CRASH:

- I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
- II. RECOMMEND ROADWAY REPAIR NEEDS.
- III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
- IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

- RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

- RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY THE ENGINEER.

AN ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY.

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEMS FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKERS ON CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON TO CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

ESTIMATED QUANTITIES OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER HAVE BEEN PROVIDED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARIES AND CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE PAVEMENT MARKING, MISC.: ROUTE SHIELDS

THIS ITEM SHALL COMPLY WITH ODOT SUPPLEMENTAL SPECIFICATION 814 AND SHALL INCLUDE THE REMOVAL OF THE ROUTE SHIELD MARKINGS UPON COMPLETION OF THE PROJECT, IF APPLICABLE.



APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

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

- SR 315 SB TO I-70 EB RAMP CLOSURE - 36 MONTHS (18 MONTHS FOR PROJECT 4A AND 18 MONTHS FOR PROJECT 6A).
- I-70 WB TO SR 315 NB RAMP CLOSURE - 6 MONTHS.
- I-71 SB MAINLINE CLOSURE FOR TIE-IN PAVING - 2 NIGHTS.
- I-70 WB MAINLINE CLOSURE FOR CONTRAFLOW AND RESTORATION TO NORMAL ALIGNMENT - 2 WEEKENDS.
- I-70 EB MAINLINE CLOSURE FOR CONTRAFLOW AND RESTORATION TO NORMAL ALIGNMENT - 2 WEEKENDS.
- MONITOR TRAFFIC CONDITIONS FOR POSSIBLE CONFIGURATION ADJUSTMENTS AT THE I-670 EB TO I-71 SB RAMP.

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

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 01/24/2023 FOR PID 77372" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

NOTIFICATIONS DURING CLOSURE REQUIRED

A DESIGNATED ON-SITE POINT OF CONTACT SHOULD COMMUNICATE WITH THE TMC AS THE STATUS OF THE CLOSURE CHANGES.

- CONTACT THE TMC:
 - IF THE CLOSURE IS POSTPONED OR CANCELLED
 - AT THE TIME THE CLOSURE IS IMPLEMENTED
 - AT THE TIME THE CLOSURE IS REMOVED AND ALL LANES RESTORED
 - IF THE CLOSURE WILL NOT BE OPENING ON TIME

- CONTACT CAN BE MADE WITH THE TMC IN THE FOLLOWING WAYS:
 - PHONE: 1-614-387-2438 OR 1-800-884-4030
 - EMAIL: STATEWIDETMC@DOT.OHIO.GOV
 - RADIO: XDOT MAIN

NO.	DESCRIPTION	REV. BY	DATE
5	NOTE REVISED	KWR	11/6/23
9	NOTE REVISED	KJF	11/30/23

CALCULATED TAG CHECKED JML
 MAINTENANCE OF TRAFFIC - GENERAL NOTES
 FRA-70-13.10
 51
 702
 ms consultants, inc.

TEMPORARY ROAD NAME	DESCRIPTION	PHASE IN	PHASE OUT
TR-1D	TEMP CROSSOVER (WEST END)	1	3
TR-1E	TEMP CROSSOVER (EAST END)	1	3

DISINCENTIVE AMOUNTS FOR TYPICAL ROAD CLOSURES AND LANE RESTRICTIONS						
ACTIVITY	AFFECTED ROADWAY(S)	RESTRICTION TYPE	SHEETS	RESTRICTION TIME	TIMES	DISINCENTIVE
BEAM PLACEMENT OVER SR 315 SB TO I-71 SB MAINLINE	SR 315 SB TO I-71 SB MAINLINE	ROAD CLOSURE	65-69	10PM TO 5AM DAILY	5	SEE LANE VALUE CONTRACT TABLE
BEAM PLACEMENT OVER I-71 NB TO I-70 WB RAMP	I-71 NB TO I-70 WB RAMP	ROAD CLOSURE	70-73	10PM TO 5AM DAILY	5	SEE LANE VALUE CONTRACT TABLE
BEAM PLACEMENT OVER I-71 NB TO SR 315 NB MAINLINE	I-71 NB TO SR 315 NB MAINLINE	ROAD CLOSURE	74-80	10PM TO 5AM DAILY	5	SEE LANE VALUE CONTRACT TABLE FOR FRA-315
SWITCH TRAFFIC TO CROSSOVER AND SWITCH TRAFFIC BACK TO NORMAL ALIGNMENT	I-70 EB MAINLINE	ROAD CLOSURE	81-86	10PM FRIDAY TO 5AM MONDAY	2	SEE LANE VALUE CONTRACT TABLE
SWITCH TRAFFIC TO CROSSOVER AND SWITCH TRAFFIC BACK TO NORMAL ALIGNMENT	I-70 WB MAINLINE	ROAD CLOSURE	92-98	10PM FRIDAY TO 5AM MONDAY	2	SEE LANE VALUE CONTRACT TABLE
OVERHEAD SIGN SUPPORT PLACEMENT				10PM TO 5AM DAILY	2	
MOT TIE-IN PAVING	I-70 WB TO I-71 SB (I-71 MAINLINE)	ROAD CLOSURE	99	10PM TO 5AM DAILY	2	SEE LANE VALUE CONTRACT TABLE

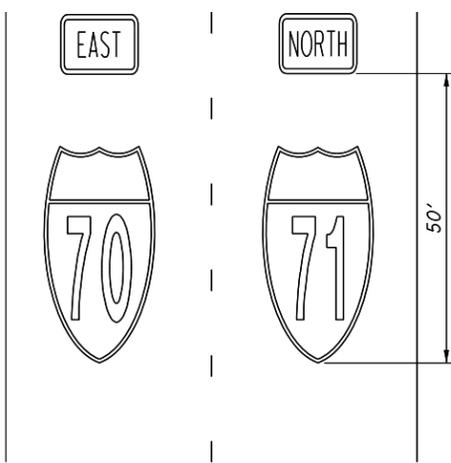
ADDITIONAL DISINCENTIVES FOR EACH PHASE CAN BE FOUND ON THEIR RESPECTIVE "PHASE SUMMARY" SHEET.



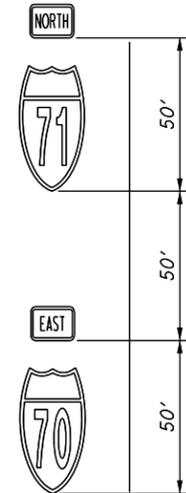
ELONGATED ROUTE SHIELDS FOR PAVEMENT MARKINGS (PAVEMENT TATTOOS)

INTERSTATE AND ROUTE SHIELDS USAGE

SINGLE SHIELD PER LANE



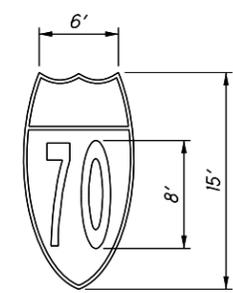
VERTICALLY STACKED SHIELDS (FOR DIVERGING LANES)



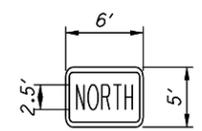
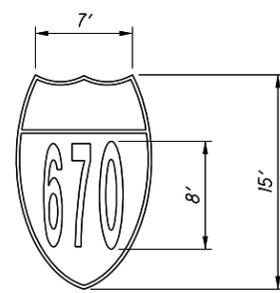
STANDARD SIZES OF SHIELDS

SINGLE SHIELD PER LANE:

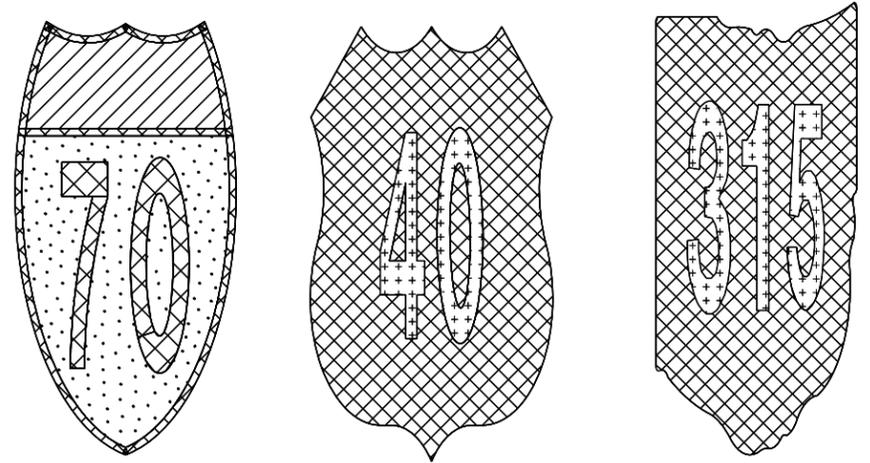
TWO DIGITS



THREE DIGITS



STANDARD COLOR OF SHIELDS



- RED
- BLUE
- WHITE
- BLACK

NOTES:

1. INTERSTATE AND ROUTE SHIELDS PAVEMENT MARKINGS SHOULD BE DURABLE, HIGH SKID RESISTANT, AND RETROREFLECTIVE.
2. THE MARKINGS MUST BE CAPABLE OF CONFORMING TO PAVEMENT CONTOURS, BREAKS, AND FAULTS THROUGH THE ACTION OF TRAFFIC AT NORMAL PAVEMENT TEMPERATURES.
3. THE MARKINGS SHALL HAVE RESEALING CHARACTERISTICS, SUCH THAT IT IS CAPABLE OF FUSING WITH ITSELF.
4. THE MARKINGS SHALL NOT HAVE MINIMUM AMBIENT ROAD TEMPERATURE REQUIREMENTS FOR APPLICATION, STORAGE, OR HANDLING.
5. THE MATERIAL MUST BE ABLE TO BE APPLIED TO ASPHALT AND CONCRETE SURFACES WITHOUT PREHEATING THE APPLICATION SURFACE TO A SPECIFIC TEMPERATURE.
6. THE MATERIAL MUST BE CAPABLE OF BEING AFFIXED TO GREEN CONCRETE (CONCRETE THAT HAS SET BUT NOT APPRECIABLY HARDENED).
7. THE MATERIAL SHALL NOT REQUIRE THE PORTLAND CEMENT CONCRETE APPLICATION AREAS TO BE CURED OR DRIED OUT.
8. THE A MATERIAL MUST BE CAPABLE OF BEING AFFIXED TO BITUMINOUS AND PORTLAND CEMENT CONCRETE PAVEMENT BY THE USE OF THE HEAT OF A PROPANE TORCH, INFRARED HEATER, OR BLUE-FLAME HEATER.
9. THE PAVEMENT SHALL BE CLEAN, DRY AND FREE OF DEBRIS BEFORE MATERIAL IS APPLIED.
10. THE MATERIAL MUST BE RESISTANT TO DETERIORATION DUE TO EXPOSURE TO SUNLIGHT, WATER, SALT OR ADVERSE WEATHER CONDITION AND IMPERVIOUS TO OIL AND GASOLINE.
11. THE TOP SURFACE OF THE MATERIAL SHALL HAVE REGULARLY SPACED INDENTS.

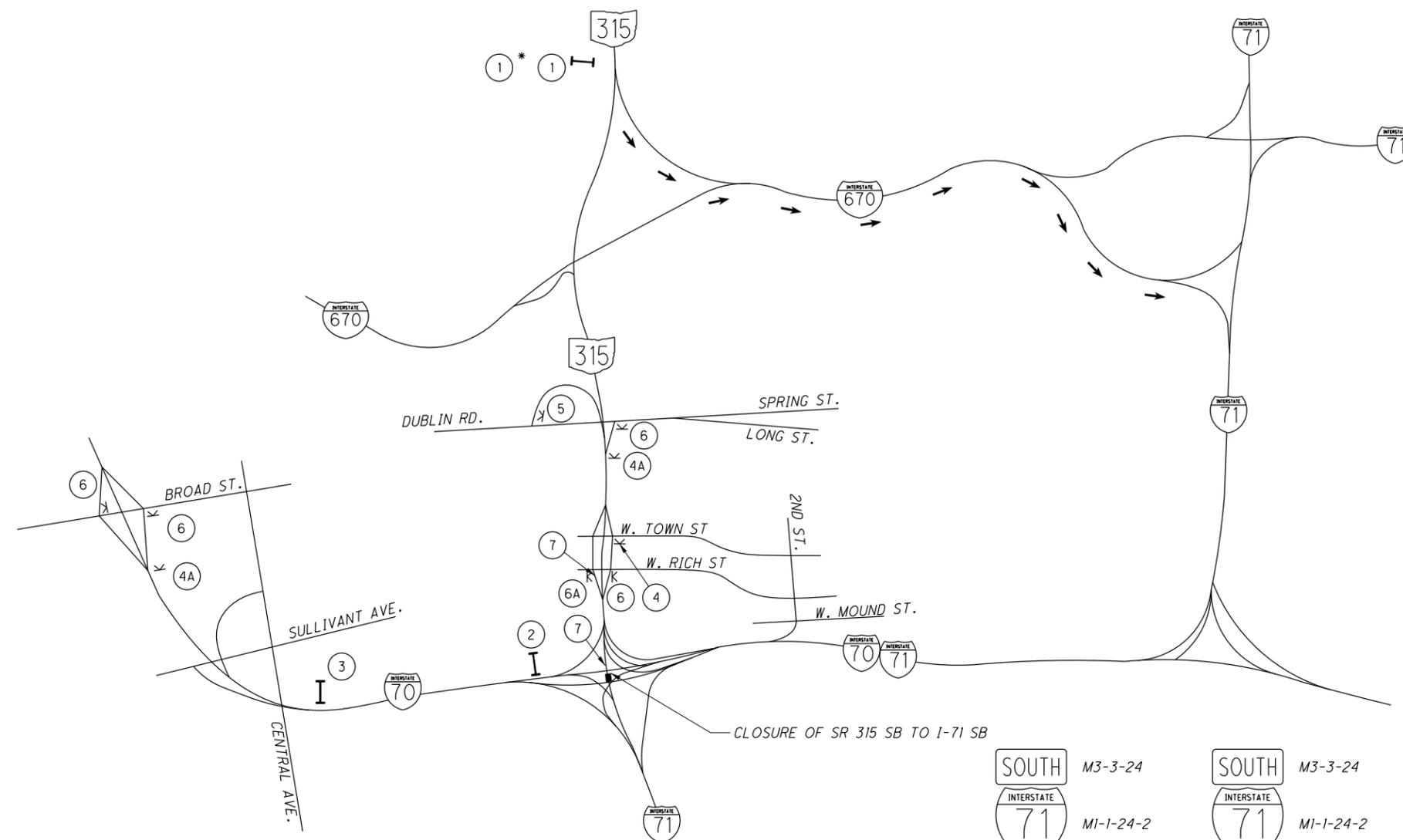
NO.	DESCRIPTION	REV. BY	DATE
9	TABLE REVISED	KJF	11/30/23

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TAG
CHECKED
JML

MAINTENANCE OF TRAFFIC - GENERAL NOTES

FRA-70-13.10

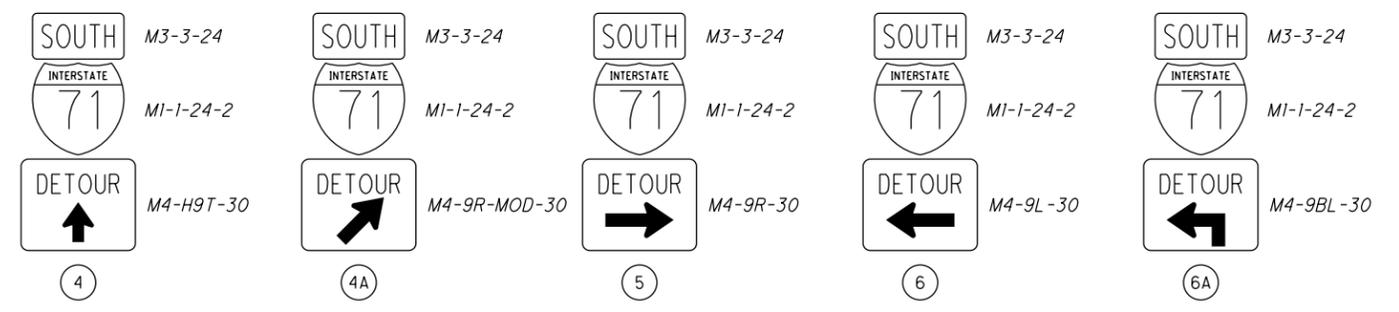
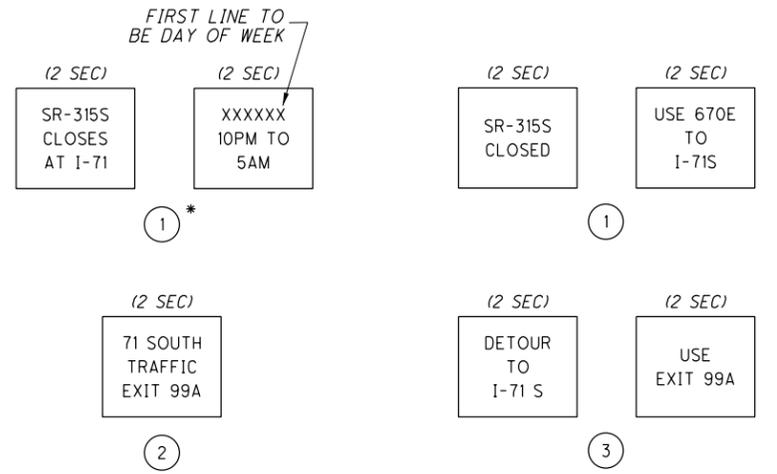
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LEGEND

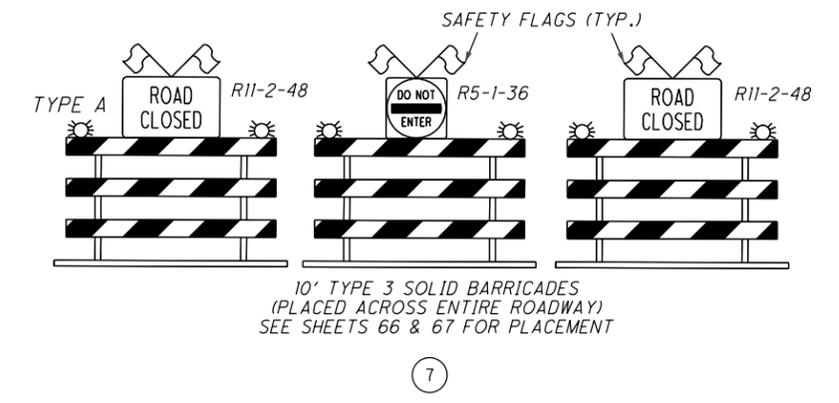
- I PORTABLE CHANGEABLE MESSAGE SIGN
- K WORK ZONE SIGN W/SUPPORT
- ≡ TYPE 3 BARRICADES W/ SIGN
- ← FLOW ARROWS

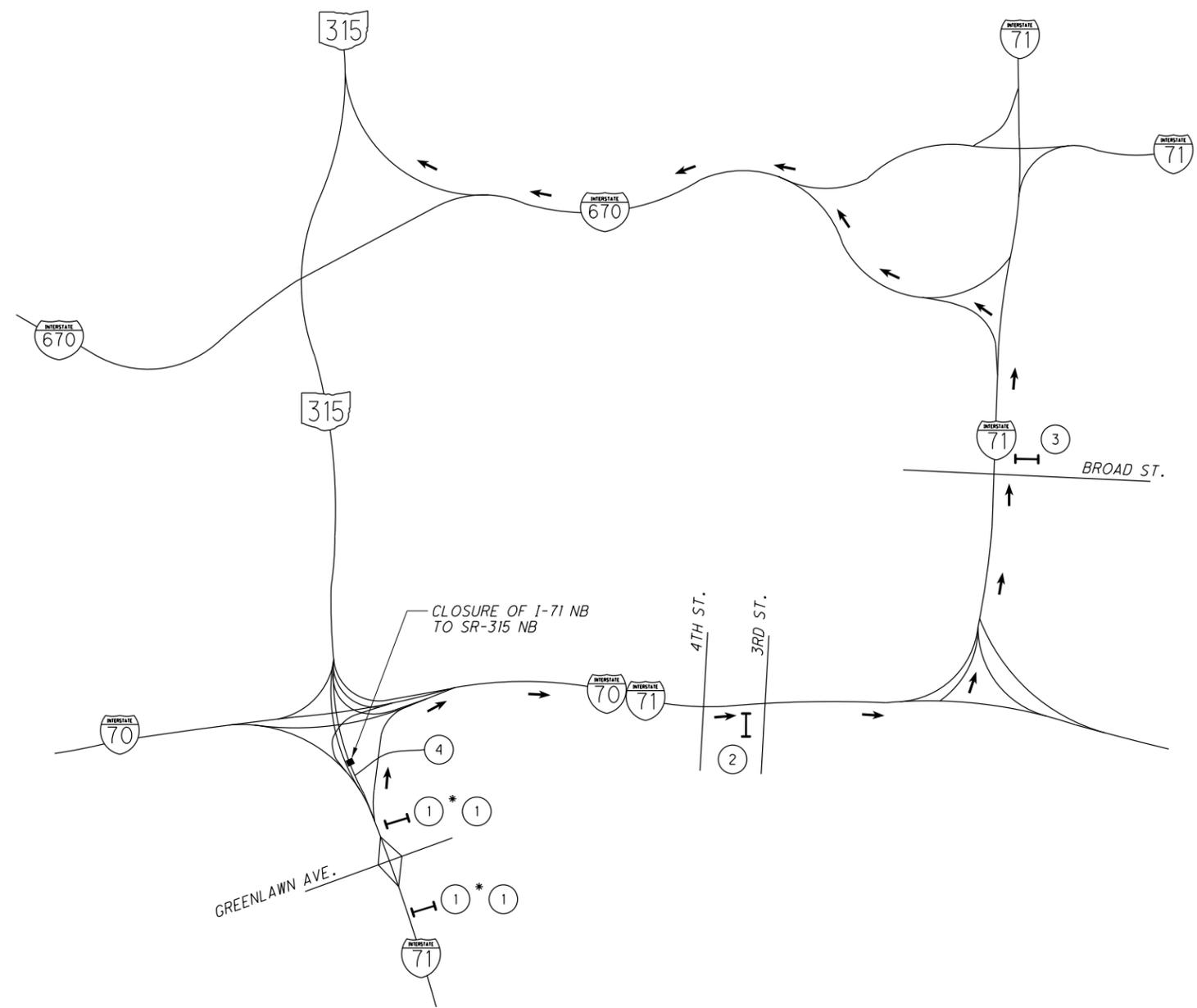
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS



NOTES:

1. PCMS AT LOCATIONS WITH ①* SHALL BE PLACED FIVE (5) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF CLOSURE, USE MESSAGES AS SHOWN ON PCMS ①, ② & ③.
 2. SEE SHEETS 66-69 FOR MAINTENANCE OF TRAFFIC SET-UP TO CLOSE SR 315 SB/I-71 SB MAINLINE.
 3. THIS DETOUR SHALL BE UTILIZED DURING THE REMOVAL OR INSTALLATION OF BEAMS ON STRUCTURES, REMOVAL OR INSTALLATION OF OVERHEAD SIGN SUPPORT TRUSSES, OVERHEAD SIGN SUPPORT CANTILEVERS, OVERHEAD SIGNS OR OVERLAYS, OR AS DIRECTED BY THE ENGINEER TO COMPLETE OTHER CONSTRUCTION ACTIVITIES WHICH CANNOT BE COMPLETED THROUGH THE USE OF SINGLE LANE OR SHOULDER CLOSURES AND WHICH REQUIRE CLOSURE OF S.R. 315 SB/I-71 SB MAINLINE AND SHALL ONLY BE PERMITTED FROM 10:00 P.M. TO 5:00 A.M., DAILY.
- * FOR CLOSURES THAT WILL REQUIRE PCMS TO BE PLACED MORE THAN 7 DAYS IN ADVANCE CONTACT THE DWZTM FOR MESSAGE TO BE DISPLAYED



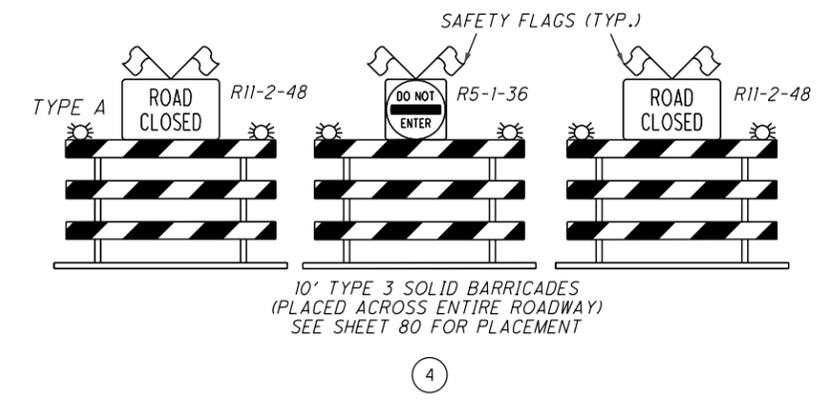
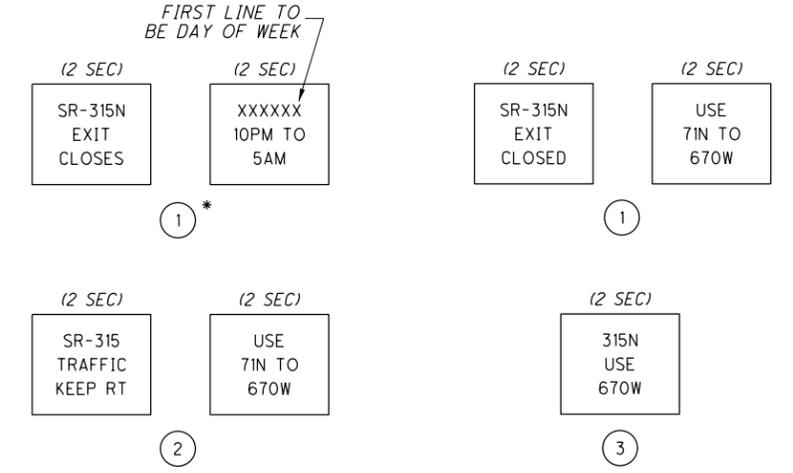


LEGEND

- I PORTABLE CHANGEABLE MESSAGE SIGN
- K WORK ZONE SIGN W/SUPPORT
- ≡ TYPE 3 BARRICADES W/ SIGN
- ← FLOW ARROWS



MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS

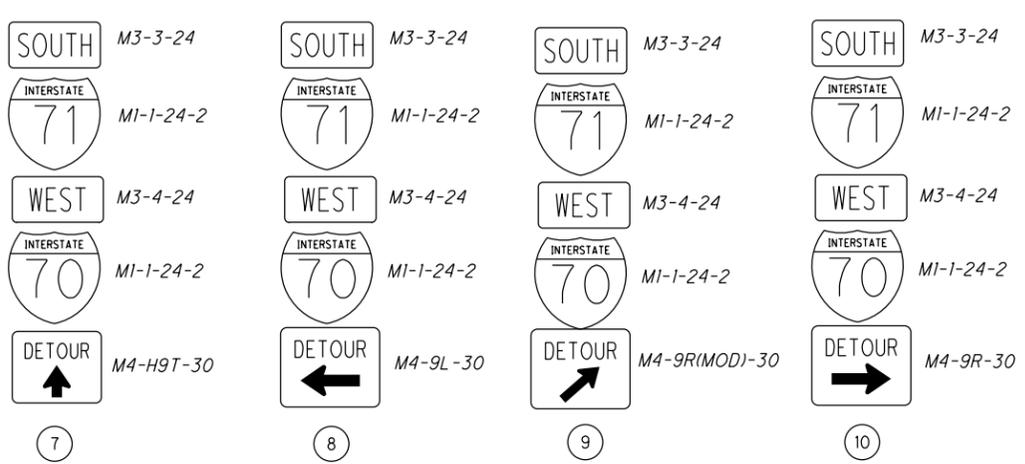
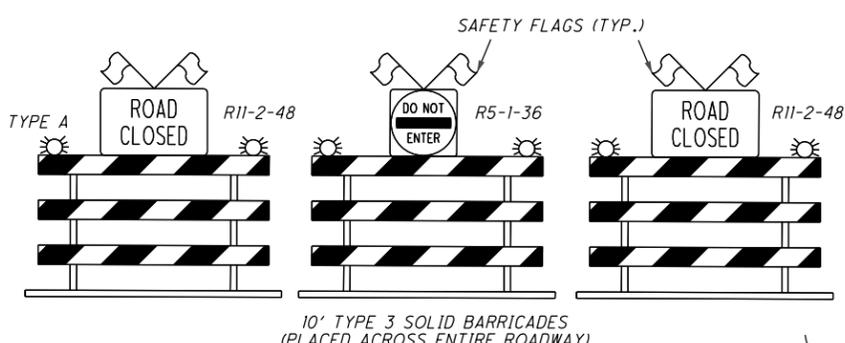
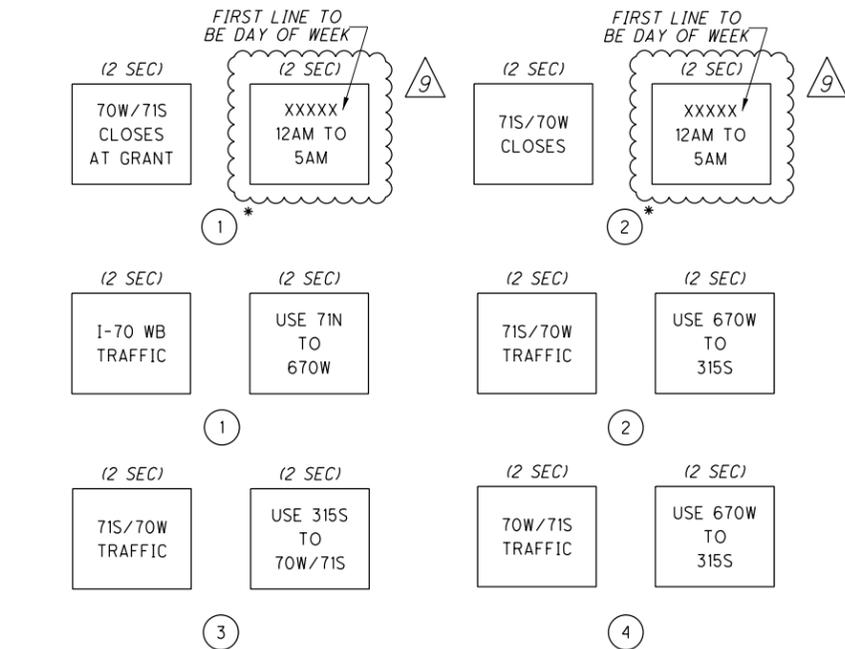


NOTES:

1. PCMS AT LOCATIONS WITH ①* SHALL BE PLACED FIVE (5) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF CLOSURE, USE MESSAGES AS SHOWN ON PCMS ①, ② & ③.
 2. SEE SHEETS 75-80 FOR MAINTENANCE OF TRAFFIC SET-UP TO CLOSE I-71 NB/SR 315 NB MAINLINE.
 3. THIS DETOUR SHALL BE UTILIZED DURING THE REMOVAL OR INSTALLATION OF BEAMS ON STRUCTURES, REMOVAL OR INSTALLATION OF OVERHEAD SIGN SUPPORT TRUSSES, OVERHEAD SIGN SUPPORT CANTILEVERS, OVERHEAD SIGNS OR OVERLAYS, OR AS DIRECTED BY THE ENGINEER TO COMPLETE OTHER CONSTRUCTION ACTIVITIES WHICH CANNOT BE COMPLETED THROUGH THE USE OF LANE OR SHOULDER CLOSURES AND WHICH REQUIRE CLOSURE OF I-71 NB MAINLINE AND SHALL ONLY BE PERMITTED FROM 10:00 P.M. TO 5:00 A.M., DAILY.
- * FOR CLOSURES THAT WILL REQUIRE PCMS TO BE PLACED MORE THAN 7 DAYS IN ADVANCE CONTACT THE DWZTM FOR MESSAGE TO BE DISPLAYED

NO.	DESCRIPTION	REV. BY	DATE
9	NOTE REVISED	KJF	11/30/23

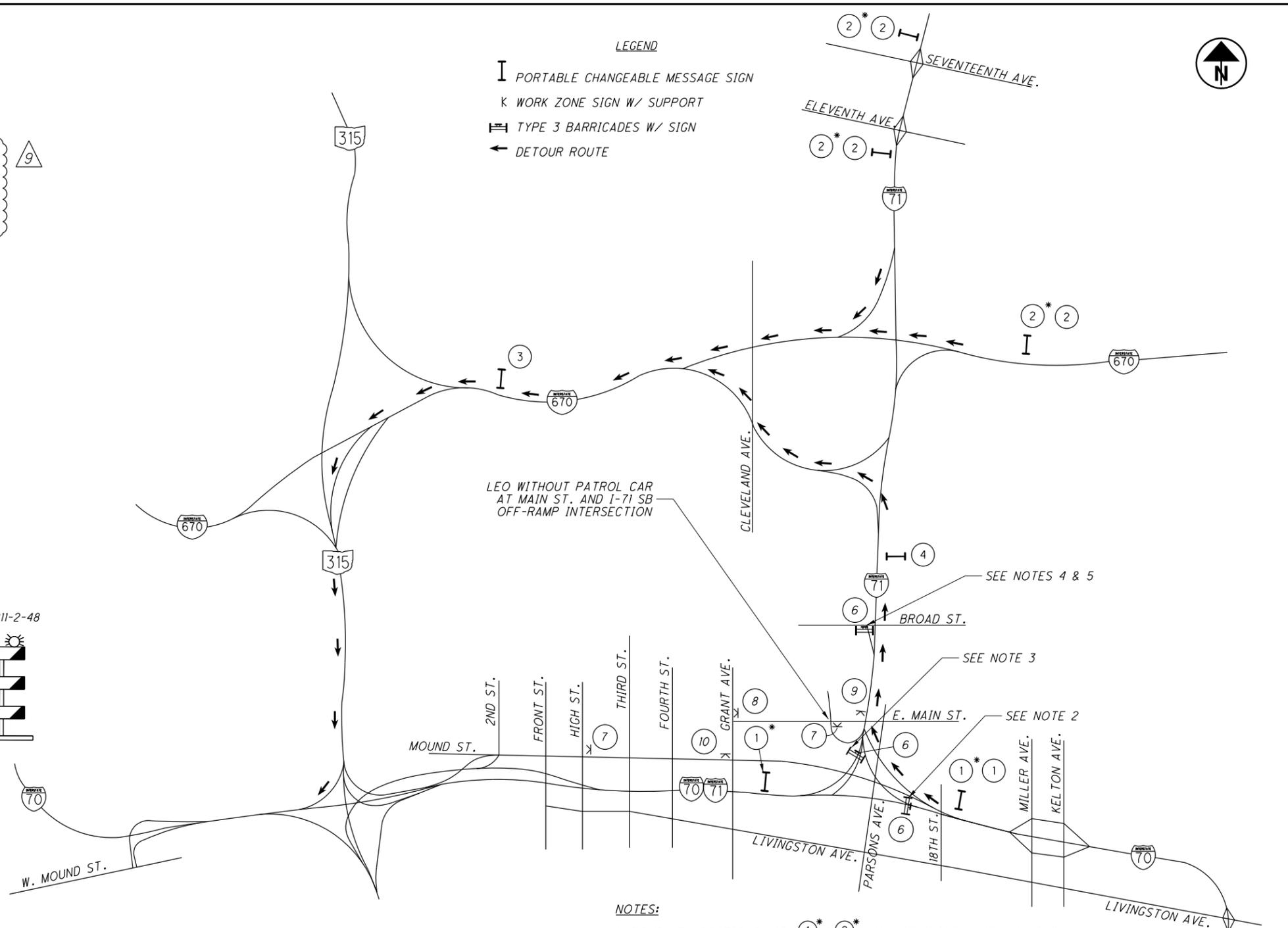
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS



NO.	DESCRIPTION	REV. BY	DATE
9	NOTE REVISED	KJF	11/30/23
9	SIGN MESSAGE REVISED	KJF	11/30/23

LEGEND

- I PORTABLE CHANGEABLE MESSAGE SIGN
- K WORK ZONE SIGN W/ SUPPORT
- ≡ TYPE 3 BARRICADES W/ SIGN
- ← DETOUR ROUTE

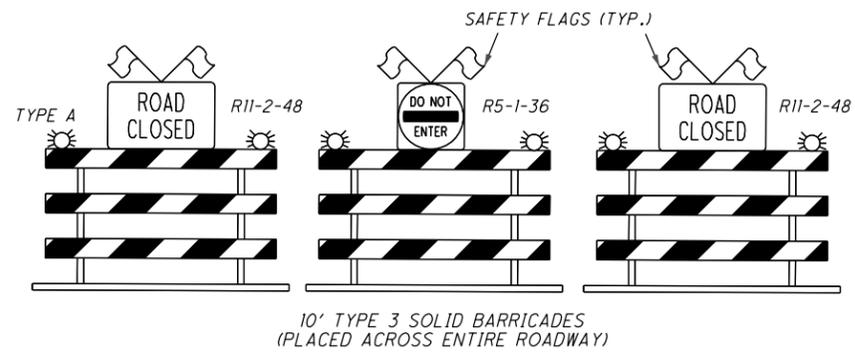
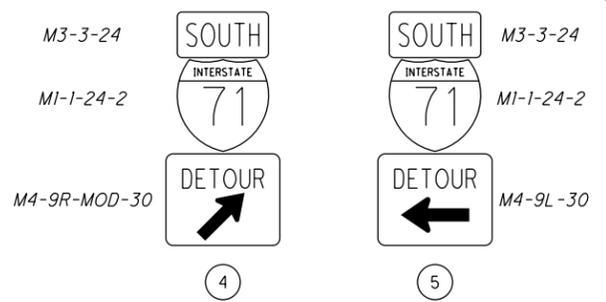
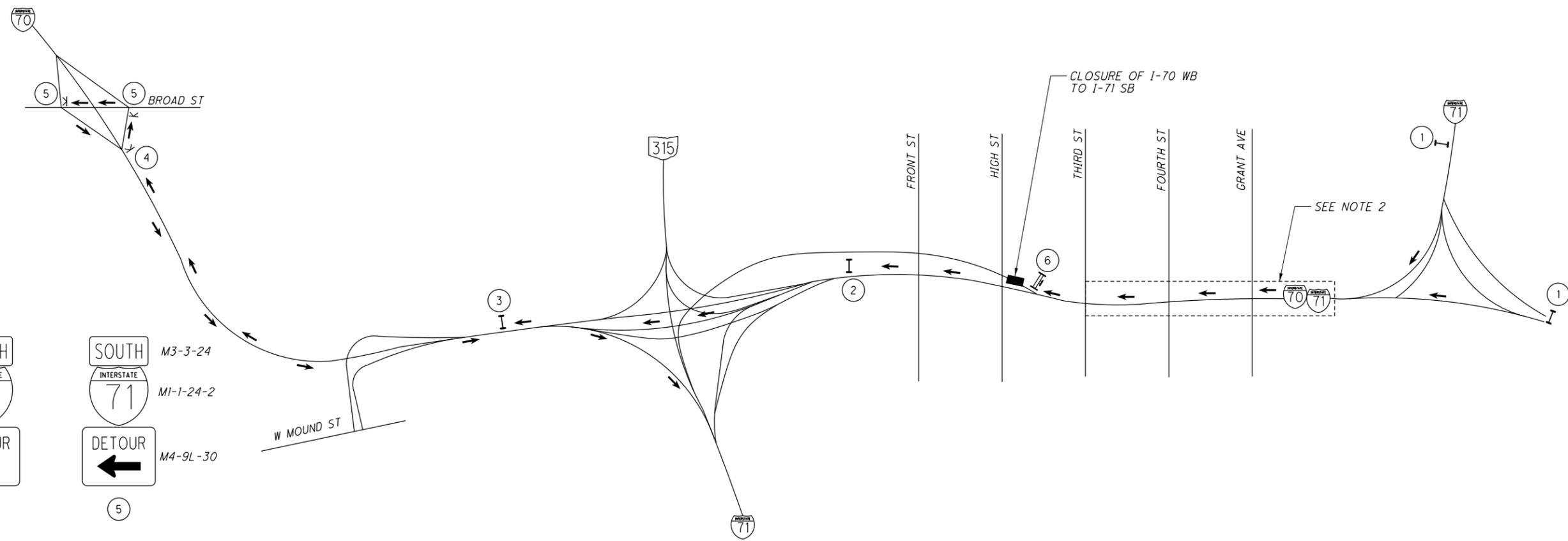
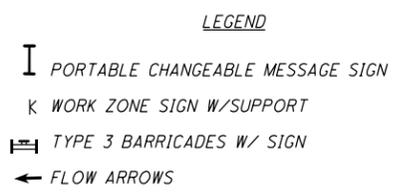
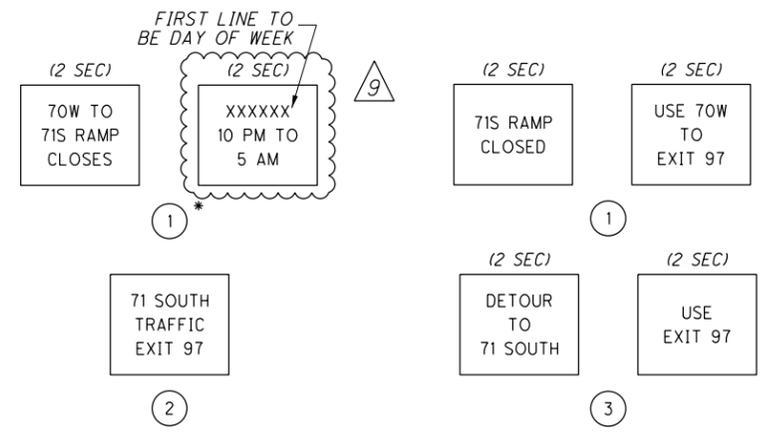


LEO WITHOUT PATROL CAR AT MAIN ST. AND I-71 SB OFF-RAMP INTERSECTION

NOTES:

- PCMS AT LOCATIONS WITH ①* & ②* SHALL BE PLACED FIVE (5) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF CLOSURE, USE MESSAGES AS SHOWN ON PCMS ①, ②, ③ & ④.
- SEE SHEETS 98 - 98D FOR MAINTENANCE OF TRAFFIC SET-UP ON I-70 WB, EAST OF THE CLOSURE POINT.
- SEE SHEETS 93 - 97 FOR MAINTENANCE OF TRAFFIC SET-UP ON I-71 SB, NORTH OF THE CLOSURE POINT.
- THIS DETOUR SHALL BE UTILIZED WHEN SWITCHING TRAFFIC FROM THE EXISTING ALIGNMENT TO THE CONTRAFLOW CONDITION USING THE CROSSOVERS AND WHEN SWITCHING TRAFFIC FROM THE CONTRAFLOW CONDITION TO THE FINAL ALIGNMENT. THIS DETOUR SHALL ONLY BE PERMITTED FROM 10:00 P.M. FRIDAY TO 5:00 A.M. MONDAY FOR THIS ACTIVITY.
- THIS DETOUR SHALL BE UTILIZED DURING THE INSTALLATION OF OVERHEAD SIGN SUPPORT TRUSSES, OVERHEAD SIGN SUPPORT CANTILEVERS, OVERHEAD SIGNS OR OVERLAYS, OR AS DIRECTED BY THE ENGINEER TO COMPLETE OTHER CONSTRUCTION ACTIVITIES WHICH CANNOT BE COMPLETED THROUGH THE USE OF SINGLE LANE OR SHOULDER CLOSURES AND WHICH REQUIRE CLOSURE OF I-70 WB. THIS DETOUR SHALL ONLY BE PERMITTED FROM MIDNIGHT TO 5:00 A.M. DAILY FOR THIS ACTIVITY.

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS



10' TYPE 3 SOLID BARRICADES (PLACED ACROSS ENTIRE ROADWAY)

NOTES:

1. PCMS AT LOCATIONS WITH (1)* SHALL BE PLACED FIVE (5) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF CLOSURE, USE MESSAGES AS SHOWN ON PCMS (1).
2. MERGE I-17 SB TO I-70 WB IN ACCORDANCE WITH MT-95.30.
3. THIS DETOUR SHALL BE UTILIZED DURING THE PAVING OF I-70 WB MOT ROADWAY TIE-IN OR AS DIRECTED BY THE ENGINEER TO COMPLETE OTHER CONSTRUCTION ACTIVITIES WHICH CANNOT BE COMPLETED THROUGH THE USE OF SINGLE LANE OR SHOULDER CLOSURES AND WHICH REQUIRE CLOSURE OF I-70 WB TO I-71 SB AND SHALL ONLY BE PERMITTED FROM 10:00 P.M. TO 5:00 A.M., DAILY.

NO.	DESCRIPTION	REV. BY	DATE
9	SIGN MESSAGE REVISED	KJF	11/30/23

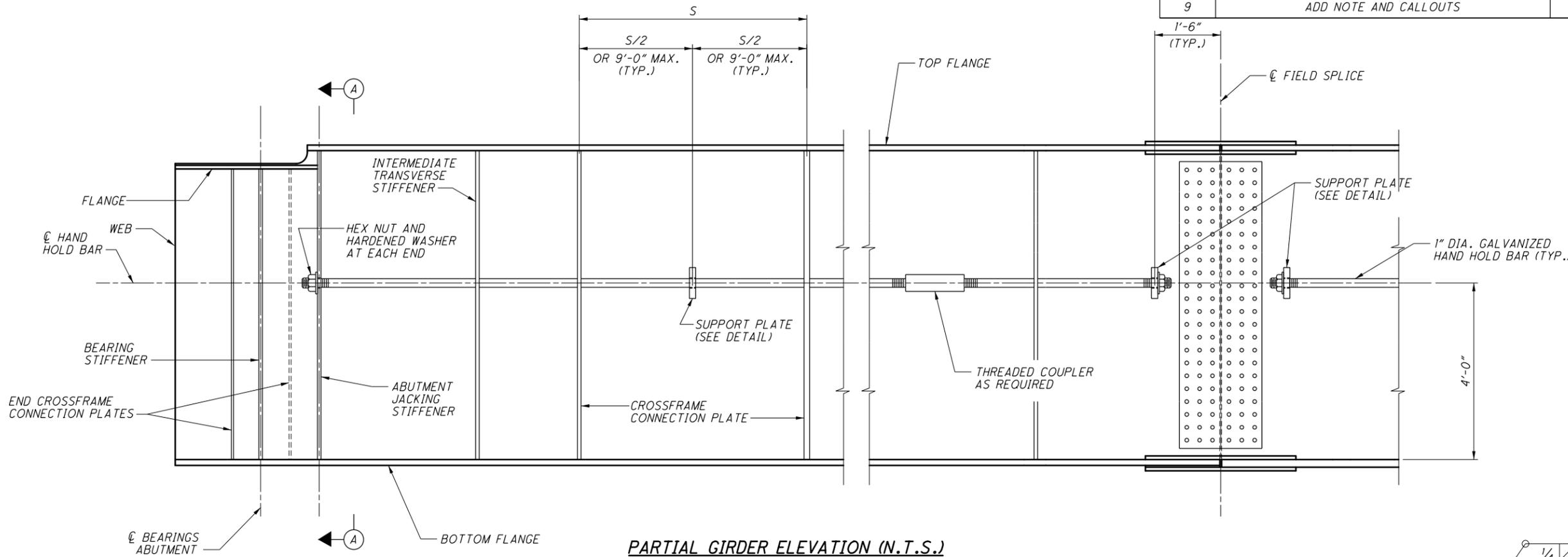
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TYPICAL DETOUR - I-70 WB TO I-71 SB CLOSURE

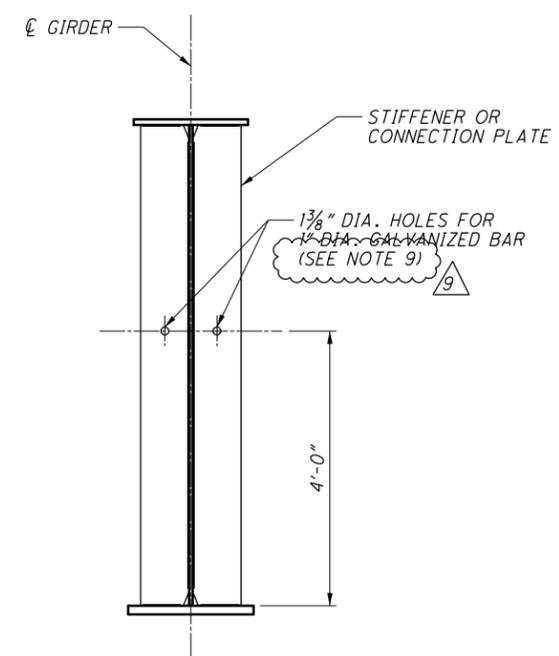
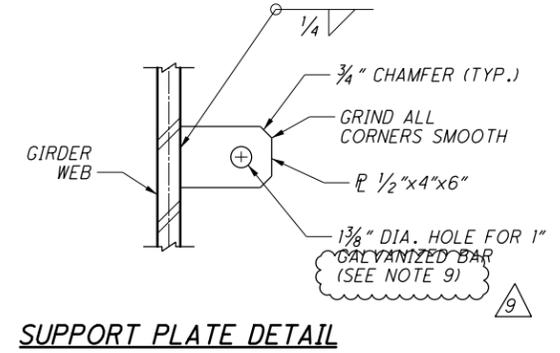
FRA-70-13.10

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NO.	DESCRIPTION	REV. BY	DATE
9	ADD NOTE AND CALLOUTS	ATM	12/1/23



PARTIAL GIRDER ELEVATION (N.T.S.)
(S = SPACING BETWEEN ADJACENT CROSSFRAME CONNECTION PLATES, PIER BEARING STIFFENERS, JACKING STIFFENERS, OR INTERMEDIATE TRANSVERSE STIFFENERS)



SECTION A-A
 TYPICAL ALL STIFFENERS AND CONNECTION PLATES
 (INTERIOR GIRDER SHOWN)

NOTES:

- HAND HOLD BARS ARE REQUIRED ON BOTH FACES OF THE GIRDER WEB FOR THE INTERIOR GIRDERS AND ON THE INTERIOR FACE OF WEB FOR THE FASCIA GIRDERS.
- EACH SECTION OF HAND HOLD BAR SHALL BE SUPPORTED IN A MINIMUM OF THREE (3) LOCATIONS.
- THREAD ONLY THAT PORTION OF THE BAR REQUIRED FOR NUT PLACEMENT.
- BURR THREADS AFTER SNUG TIGHTENING NUTS.
- BARS, NUTS AND WASHERS SHALL BE GALVANIZED PER 711.02 AFTER FABRICATION.
- GALVANIZED COATINGS DAMAGED IN THE SHOP SHALL BE REPAIRED PER ASTM A780 METHOD A3. GALVANIZED COATINGS DAMAGED IN THE FIELD SHALL BE REPAIRED PER ASTM A780 METHOD A1 AS DIRECTED BY THE ENGINEER.
- FOR FRAMING PLAN, SEE SHEET [27/58].
- FOR CROSSFRAME CONNECTION PLATE, JACKING STIFFENER DETAILS, AND ADDITIONAL NOTES, SEE SHEETS [29/58] AND [30/58].
- AT ALL LOCATIONS ADJACENT TO A SCUPPER WHERE THE GALVANIZED HAND HOLD BAR PASSES THROUGH A CROSSFRAME CONNECTION PLATE OR HAND HOLD BAR SUPPORT PLATE A POLYMER FLANGED SLEEVE SHALL BE INSTALLED ON THE HAND HOLD BAR PREVENTING CONTACT BETWEEN THE PLATE AND THE HAND HOLD BAR. THE POLYMER FLANGED SLEEVE SHALL BE IGUS RFI-1620-24 OR APPROVED EQUAL WITH A MINIMUM TEMPERATURE RATING BELOW -30 DEGREES AND MAXIMUM TEMPERATURE ABOVE 180 DEGREES. PAYMENT FOR ALL NECESSARY LABOR AND MATERIALS SHALL BE INCIDENTAL TO ITEM 513 - STRUCTURAL STEEL MEMBERS, HYBRID GIRDER, LEVEL SIX (6) FABRICATION, AS PER PLAN.

DESIGN AGENCY
ms consultants, inc.
 2221 Schrock Road
 Columbus, Ohio 43229

DESIGNED SUR JKH
 CHECKED JKH

DRAWN KRM
 REVISED ---

REVIEWED WER
 DATE 3/06/23
 STRUCTURE FILE NUMBER 2510027

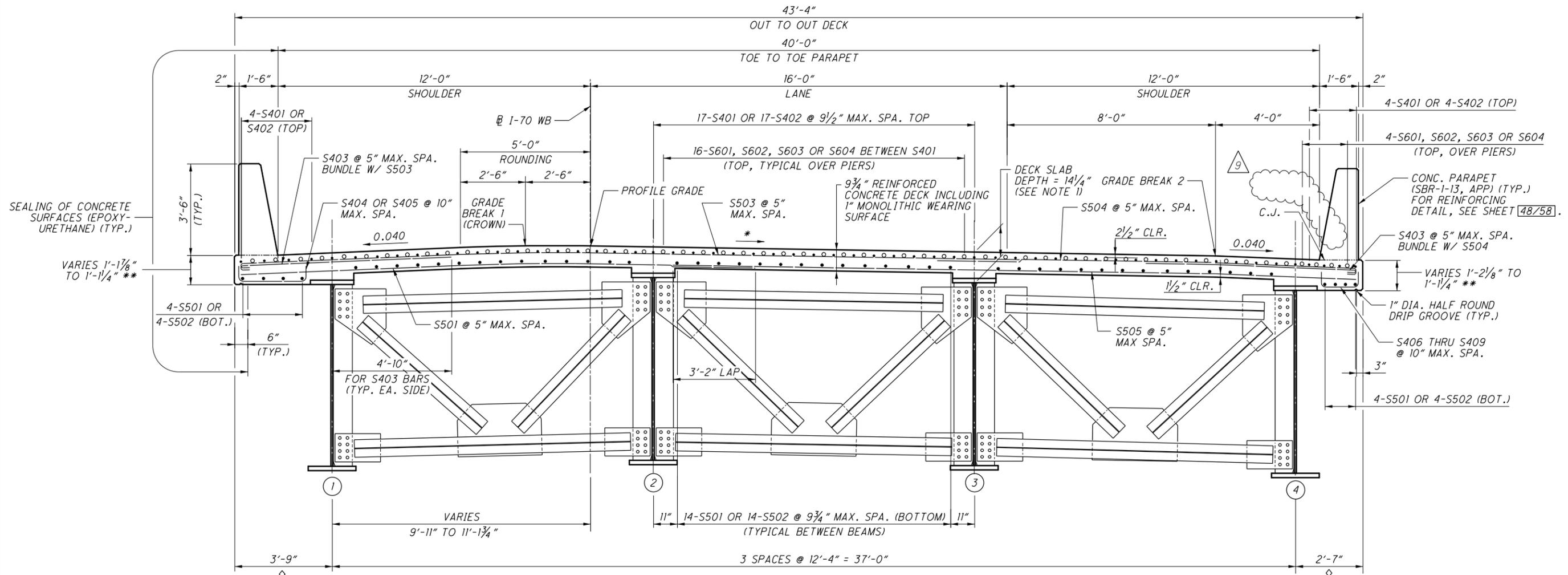
HAND HOLD ROD DETAILS
 BRIDGE NO. FRA-70-1322L
 I-70 WB OVER SCIOTO RIVER

FRA-70-13-10
 PID No. 77372

32/58

504
 702

ms consultants, inc.



TRANSVERSE SECTION
(SCUPPERS NOT SHOWN)

NOTES

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4 1/2" AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE OF 9". DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE IS ±3".

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.
2. FOR SCUPPER DETAILS, SEE SHEETS [51/58] THRU [53/58].
3. FOR DECK PLAN, SEE SHEETS [40/58] AND [41/58].
4. FOR CROSSFRAME AND SHEAR STUD DETAILS, SEE SHEET [31/58].
5. FOR PAVEMENT CROSS-SLOPE TRANSITION DETAILS, SEE SHEET [42/58].

LEGEND

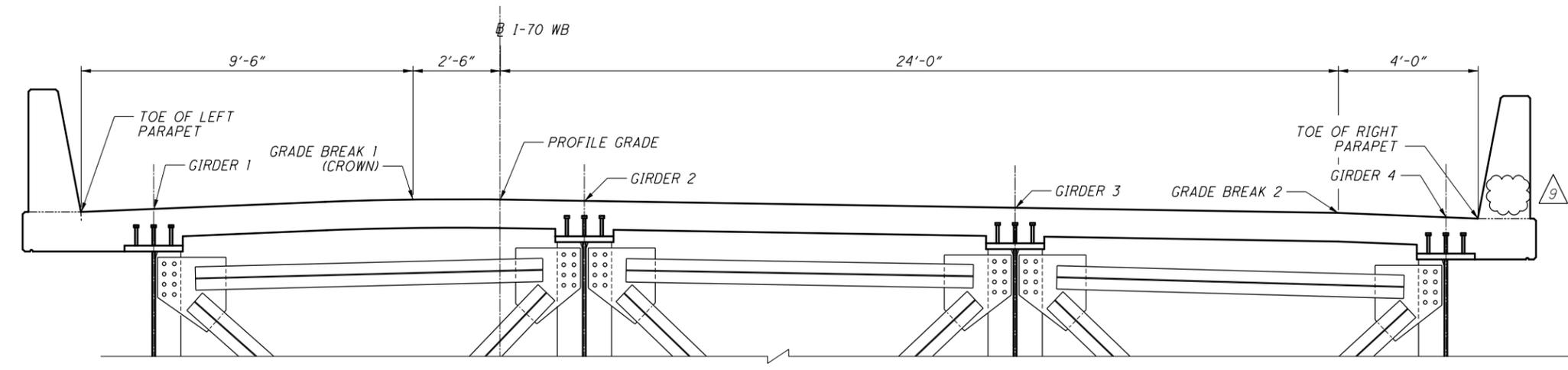
- * CROSS SLOPE VARIES, SEE PAVEMENT TRANSITION DETAILS ON SHEET [42/58] FOR DETAILS.
- ◇ STA. 149+85.83 TO STA. 158+37.85. SEE DECK LAYOUT TABLES, THIS SHEET, FOR ADDITIONAL OVERHANG DIMENSIONS.
- ** OVERHANG THICKNESS 1'-9 3/4" AT DROP SLAB LOCATIONS

DECK LAYOUT TABLE (OVERHANGS)							
OFFSETS FROM CENTERLINE OF EXTERIOR BEAM TO EDGE OF DECK SLAB (MEASURE PERPENDICULAR TO CENTERLINE OF BEAM)							
SPAN 1							
	0.0 L	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L TO PIER 1
GIRDER 1	N/A	3'-4 5/8"	3'-7"	3'-8 1/2"	3'-9"	3'-9"	3'-9"
GIRDER 4	3'-10 3/8"	3'-5 5/8"	3'-1 7/8"	2'-10 7/8"	2'-8 3/4"	2'-7 3/8"	2'-7"

DECK LAYOUT TABLE (OVERHANGS)			
OFFSETS FROM CENTERLINE OF EXTERIOR BEAM TO EDGE OF DECK SLAB (MEASURE PERPENDICULAR TO CENTERLINE OF BEAM)			
SPAN 2		SPAN 3	SPAN 4
0.1 L TO PIER 2		0.1 L TO PIER 3	0.1 L TO PIER 4
GIRDER 1	3'-9"	3'-9"	3'-9"
GIRDER 4	2'-7"	2'-7"	2'-7"

DECK LAYOUT TABLE (OVERHANGS)						
OFFSETS FROM CENTERLINE OF EXTERIOR BEAM TO EDGE OF DECK SLAB (MEASURE PERPENDICULAR TO CENTERLINE OF BEAM)						
SPAN 5						
	PIER 4 TO 0.5 L	0.6 L	0.7 L	0.8 L	0.9 L	1.0 L
GIRDER 1	3'-9"	3'-8 1/8"	3'-6 1/4"	3'-3 1/4"	2'-11 1/4"	2'-6 1/4"
GIRDER 4	2'-7"	2'-7"	2'-7"	2'-7 7/8"	2'-9 5/8"	N/A





TYPICAL CROSS SECTION

SCREED ELEVATIONS - SPAN 1

LOCATION		CL BRG. R.A.	0.10 L	0.20 L	0.30 L	0.40 L	0.50 L	0.60 L	FS1	0.70 L	0.80 L	0.90 L
TOE OF LEFT PARAPET	STATION	149+22.75	149+38.42	149+54.09	149+69.77	149+85.44	150+01.17	150+16.90	150+27.06	150+32.63	150+48.36	150+64.09
	ELEVATION	730.99	731.28	731.56	731.82	732.05	732.25	732.44	732.56	732.61	732.79	732.99
GRADE BREAK 1 (CROWN)	STATION	149+15.57	149+31.18	149+46.80	149+62.41	149+78.02	149+93.64	150+09.27	150+20.17	150+24.89	150+40.52	150+56.14
	ELEVATION	731.27	731.56	731.83	732.09	732.32	732.53	732.71	732.83	732.89	733.06	733.25
PROFILE GRADE	STATION	149+13.68	149+29.27	149+44.87	149+60.47	149+76.06	149+91.66	150+07.26	150+18.35	150+22.85	150+38.45	150+54.05
	ELEVATION	731.16	731.45	731.74	732.00	732.24	732.45	732.64	732.76	732.82	732.99	733.18
GRADE BREAK 2	STATION	148+95.28	149+10.73	149+26.19	149+41.63	149+57.08	149+72.53	149+87.96	150+00.95	150+03.29	150+18.63	150+33.97
	ELEVATION	730.03	730.39	730.73	731.05	731.35	731.63	731.88	732.08	732.12	732.33	732.52
TOE OF RIGHT PARAPET	STATION	148+92.17	149+07.60	149+23.02	149+38.45	149+53.87	149+69.29	149+84.72	149+98.05	150+00.02	150+15.31	150+30.60
	ELEVATION	729.82	730.17	730.51	730.83	731.13	731.41	731.66	731.87	731.90	732.12	732.31

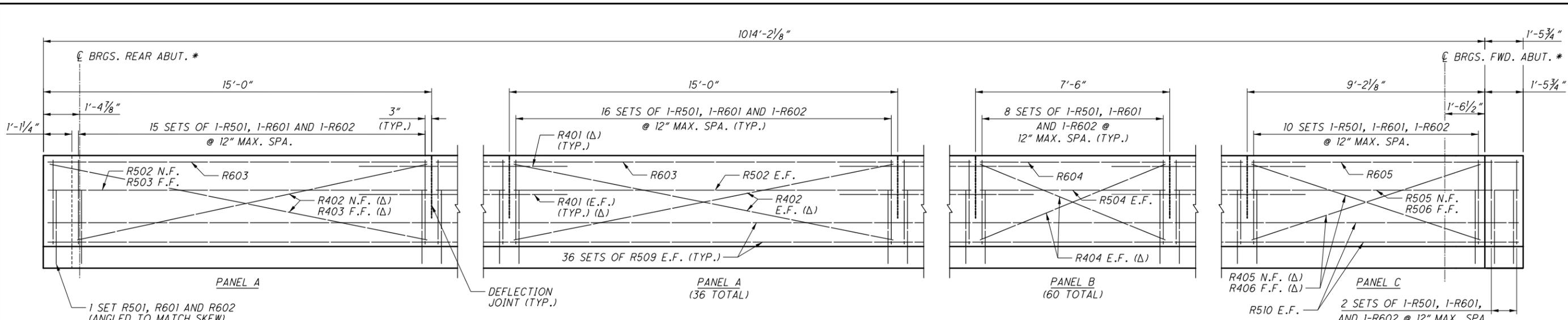
SCREED ELEVATIONS - SPAN 2

LOCATION		CL PIER 1	0.10 L	FS2	0.20 L	FS2	0.30 L	0.40 L	0.50 L	0.60 L	0.70 L	FS3	0.80 L	0.90 L
TOE OF LEFT PARAPET	STATION	150+79.82	151+02.29	N/A	151+24.76	151+26.99	151+47.22	151+69.69	151+92.15	152+14.62	152+37.09	152+50.49	152+59.55	152+82.02
	ELEVATION	733.21	733.60	N/A	734.03	734.08	734.47	734.86	735.19	735.46	735.68	735.80	735.89	736.14
GRADE BREAK 1 (CROWN)	STATION	150+71.77	150+94.09	N/A	151+16.41	151+17.51	151+38.74	151+61.06	151+83.38	152+05.71	152+28.03	152+41.01	152+50.35	152+72.68
	ELEVATION	733.47	733.85	N/A	734.27	734.29	734.70	735.08	735.42	735.70	735.93	736.05	736.15	736.39
PROFILE GRADE	STATION	150+69.65	150+91.93	N/A	151+14.22	151+15.01	151+36.50	151+58.79	151+81.08	152+03.36	152+25.65	152+38.51	152+47.93	152+70.22
	ELEVATION	733.40	733.78	N/A	734.20	734.22	734.62	735.01	735.34	735.62	735.85	735.97	736.07	736.32
GRADE BREAK 2	STATION	150+49.29	150+71.22	150+91.05	150+93.14	N/A	151+15.07	151+37.00	151+58.92	151+80.85	152+02.78	152+14.55	152+24.70	152+46.63
	ELEVATION	732.73	733.08	733.45	733.49	N/A	733.90	734.28	734.61	734.89	735.13	735.24	735.35	735.59
TOE OF RIGHT PARAPET	STATION	150+45.89	150+67.76	150+87.06	150+89.63	N/A	151+11.49	151+33.36	151+55.22	151+77.09	151+98.96	152+10.56	152+20.82	152+42.69
	ELEVATION	732.52	732.87	733.23	733.28	N/A	733.69	734.07	734.40	734.68	734.91	735.03	735.13	735.37

NOTES:

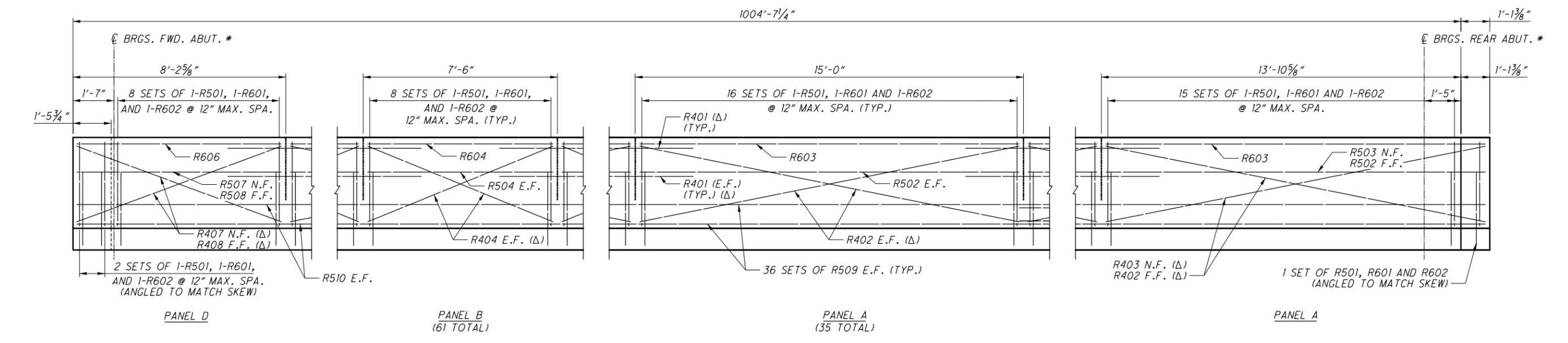
- SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
- SEE SHEET 46/58 FOR SCREED ELEVATION LOCATION PLAN.

NO.	DESCRIPTION	REV. BY	DATE
9	CONDUIT REMOVED FROM BARRIER	ACW	12/1/23



LEFT PARAPET ELEVATION

DIMENSIONS ALONG INSIDE FACE OF BARRIER UPSTATION



RIGHT PARAPET ELEVATION

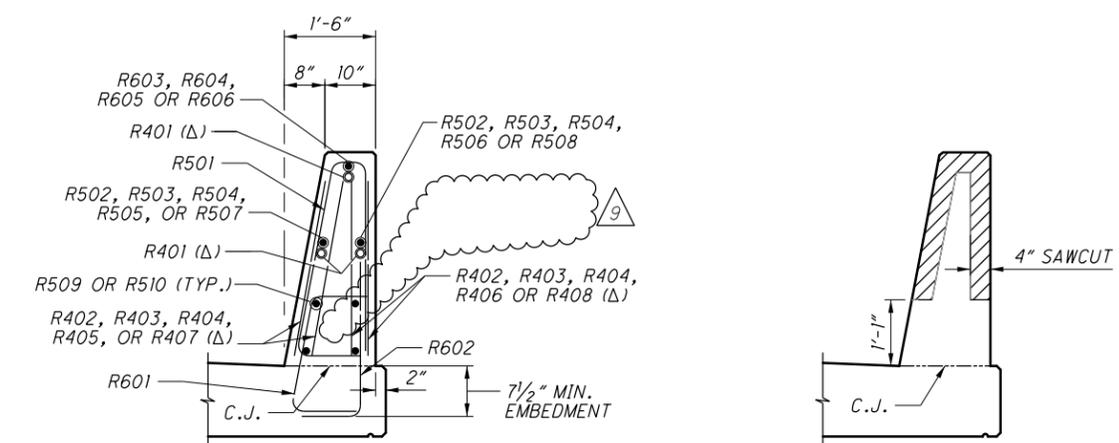
DIMENSIONS ALONG INSIDE FACE OF BARRIER UPSTATION

LEGEND:

- * DRAWN TO REPRESENT CL AT INSIDE FACE OF BARRIER
- Δ USE NO. 4 GLASS FIBER REINFORCING POLYMER (G.F.R.P.) FOR HORIZONTAL REINFORCING BAR R401 AND STIFFENING BARS R402 THROUGH R408 (SEE NOTE 5)

NOTES:

- FOR ADDITIONAL NOTES AND PARAPET DETAILS, SEE STANDARD BRIDGE DRAWING SBR-1-13.
- SEE SHEETS 40/58 AND 41/58 FOR DECK REINFORCING PLAN AND CRACK CONTROL JOINT SPACING.
- SEE SHEETS 54/58 AND 55/58 FOR PARAPET ON APPROACH SLAB.
- SEE SHEETS 49/58 AND 50/58 FOR EXPANSION JOINT DETAILS.
- PAYMENT FOR DIAGONAL GLASS FIBER REINFORCED POLYMER STIFFENING BARS IS INCIDENTAL TO COST OF ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.



PARAPET SECTION

DEFLECTION JOINT DETAIL

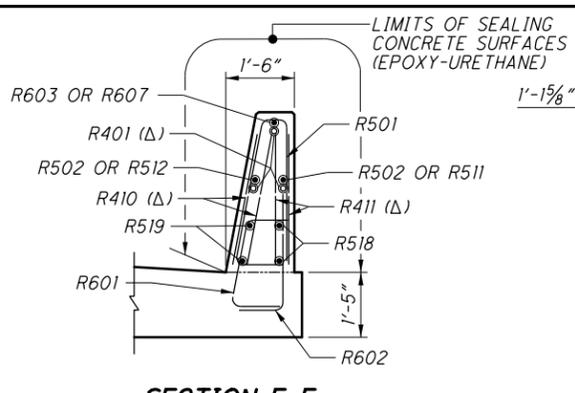
MINIMUM LAP LENGTHS:

#5 BARS = 2'-1"

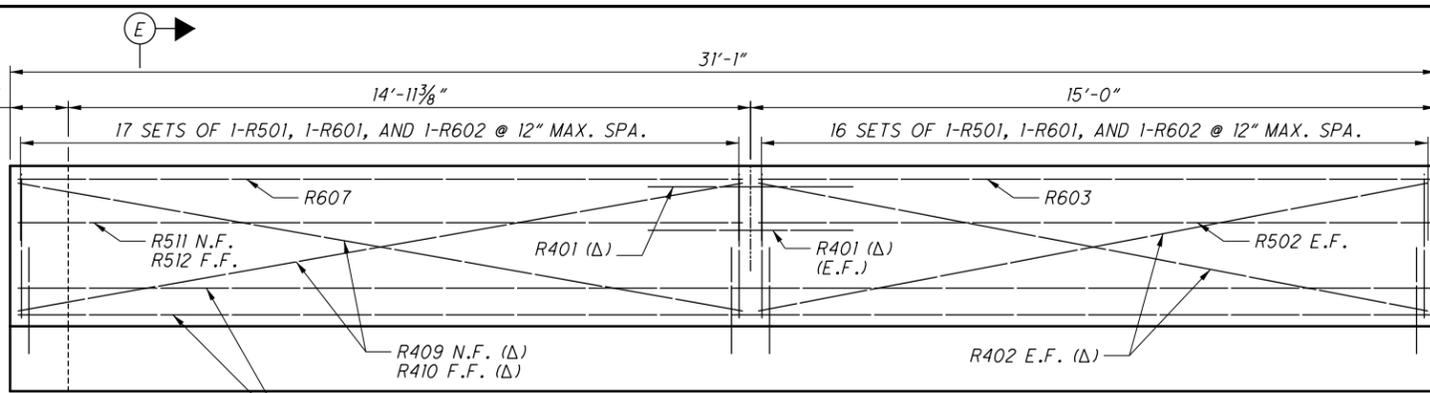
PARAPET GFRP REINFORCEMENT			
BAR MARK	TOTAL NUMBER	LENGTH	TYPE
R401	582	4'-6"	ST
R402	288	14'-10"	ST
R403	4	13'-9"	ST
R404	484	7'-8"	ST
R405	2	9'-2"	ST
R406	2	10'-7"	ST
R407	2	8'-3"	ST
R408	2	6'-11"	ST

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED CONDUIT & CALLOUT	ACW	12/1/23

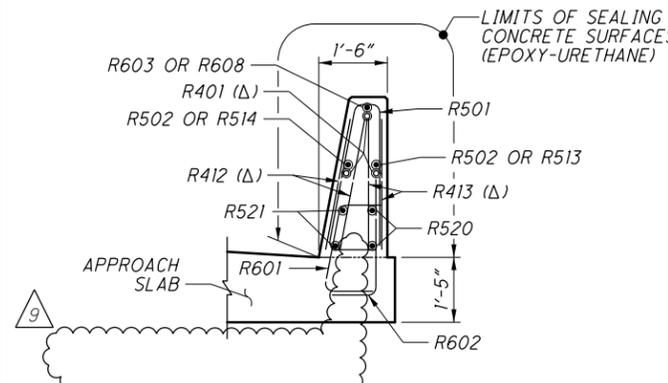
PLOT.CEL
 ms consultants, inc.
 ms consultants, inc.
 Ohio DOT Workspace
 70171 East Interchange 6A
 Columbus, OH 43229
 www.msconsultants.com
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 View: FENCE - VIEW
 By: white
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 11/30/2023
 File: \\msconsultants.com\files\production\03\60\06634_6A\structures\FRA070-1322L\sheet\070-1322L.MD005.dgn



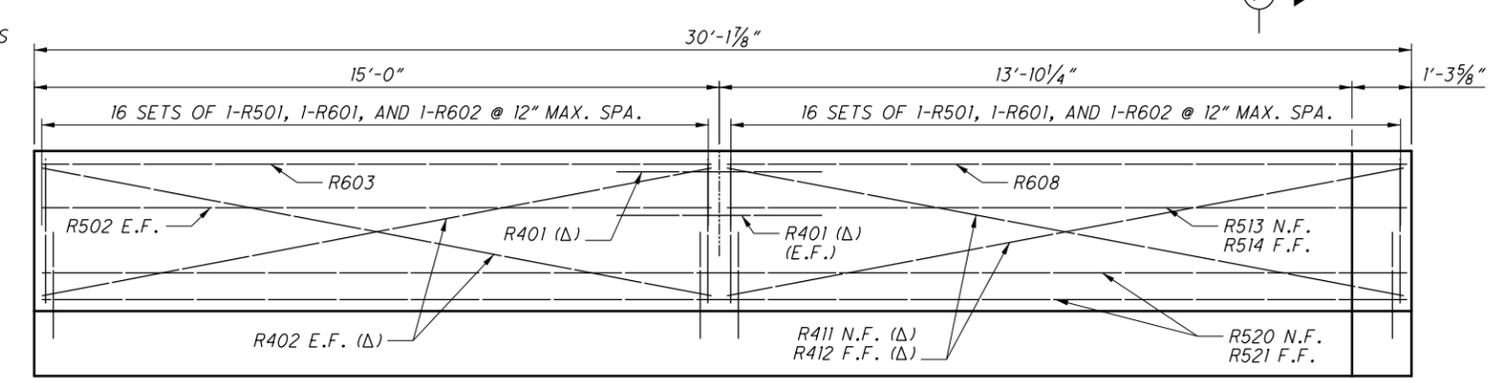
SECTION E-E
 (APPROACH SLAB REINFORCEMENT NOT SHOWN)



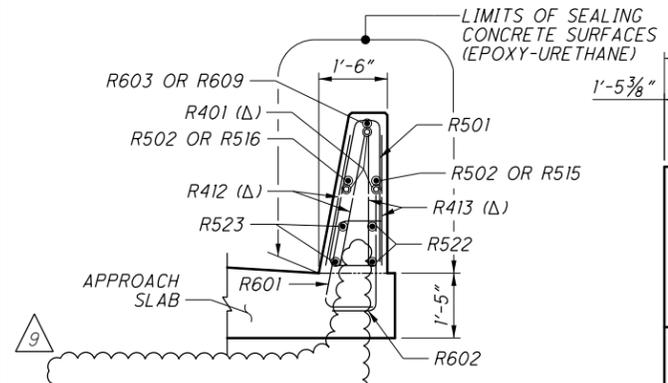
VIEW A-A
 (REAR APPROACH SLAB, LEFT PARAPET ELEVATION)



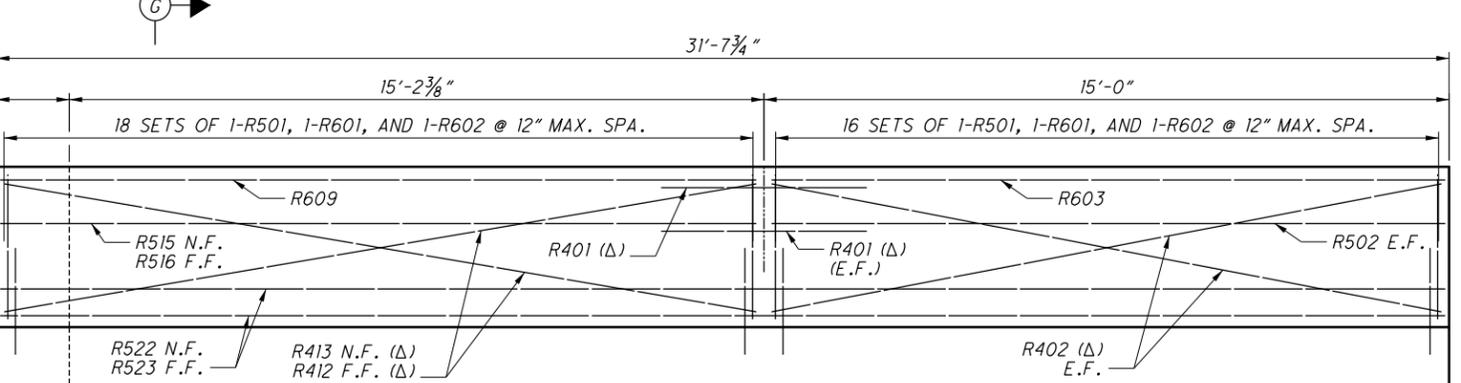
SECTION F-F
 (APPROACH SLAB REINFORCEMENT NOT SHOWN)



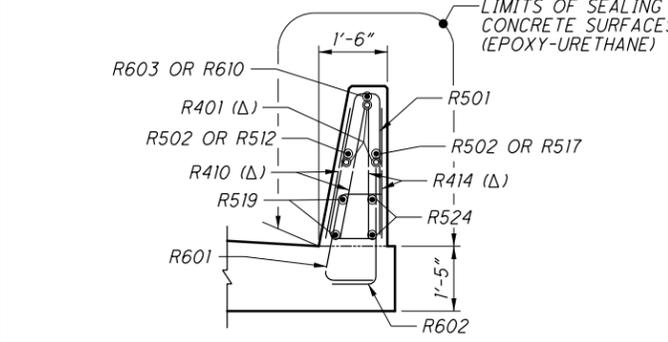
VIEW B-B
 (REAR APPROACH SLAB, RIGHT PARAPET ELEVATION)



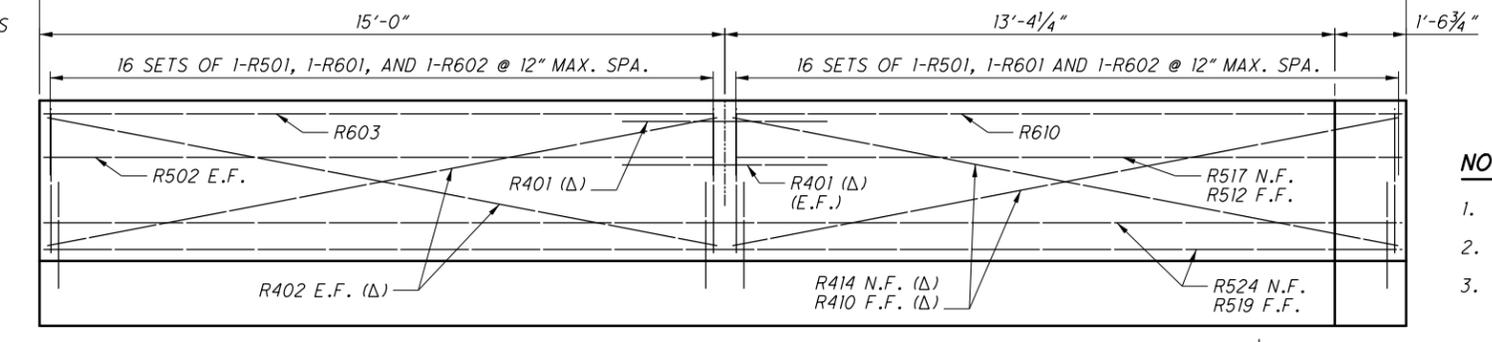
SECTION G-G
 (APPROACH SLAB REINFORCEMENT NOT SHOWN)



VIEW C-C
 (FORWARD APPROACH SLAB, RIGHT PARAPET ELEVATION)



SECTION H-H
 (APPROACH SLAB REINFORCEMENT NOT SHOWN)



VIEW D-D
 (FORWARD APPROACH SLAB, LEFT PARAPET ELEVATION)

LEGEND:

Δ USE NO. 4 GLASS FIBER REINFORCING POLYMER (G.F.R.P.) FOR HORIZONTAL REINFORCING BAR R401 AND STIFFENING BARS R409 THROUGH R414 (SEE NOTE 3)

PARAPET GFRP REINFORCEMENT			
BAR MARK	TOTAL NUMBER	LENGTH	TYPE
R401	12	4'-6"	ST
R402	16	14'-10"	ST
R409	2	16'-0"	ST
R410	4	14'-9"	ST
R411	2	13'-9"	ST
R412	4	15'-0"	ST
R413	2	16'-7"	ST
R414	2	13'-3"	ST

MIN. REBAR LAP
 #5 = 2'-5"

NOTES:

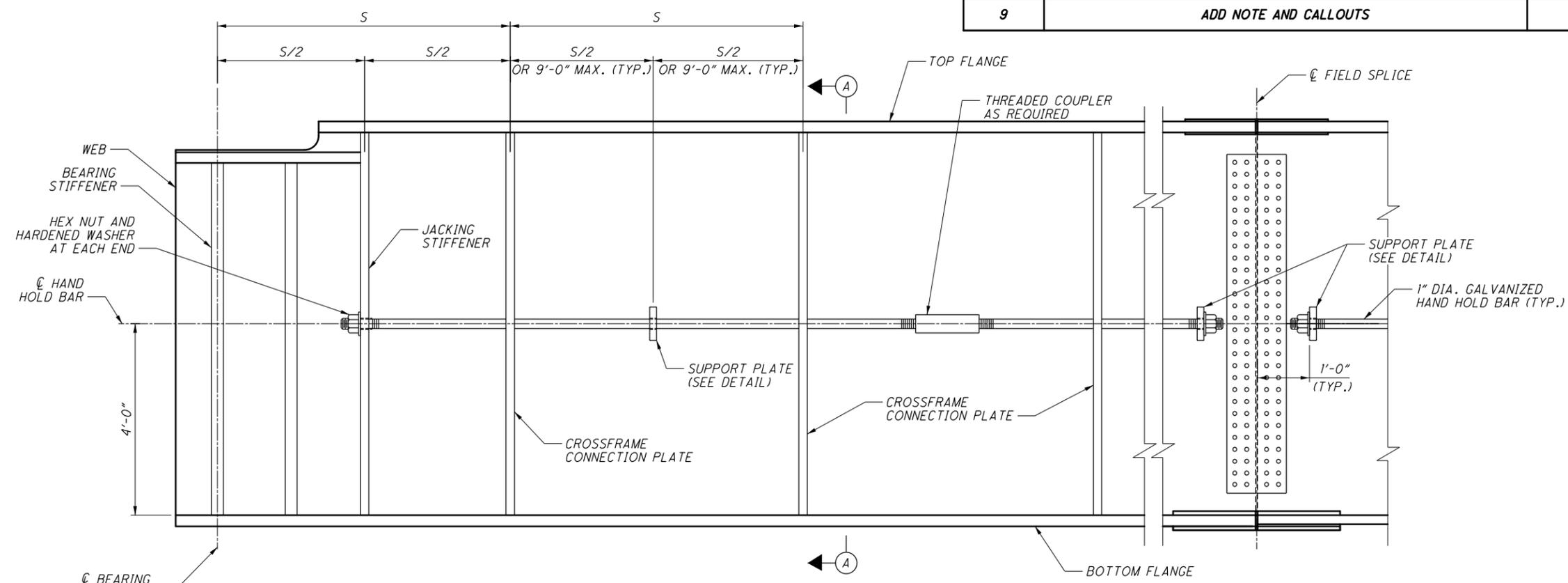
- FOR ADDITIONAL PARAPET DETAILS, SEE STD. DWG. SBR-1-13
- FOR APPROACH SLAB PLAN, SEE SHEET [54/58].
- PAYMENT FOR DIAGONAL GLASS FIBER REINFORCED POLYMER STIFFENING BARS IS INCIDENTAL TO COST OF ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED CONDUIT/CALLOUT	ACW	12/1/23

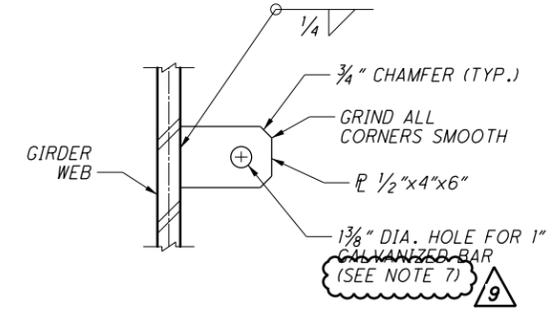
DESIGN AGENCY
 ms consultants, inc.
 2221 Schrock Road
 Columbus, Ohio 43229
 DATE
 3/06/23
 STRUCTURE FILE NUMBER
 2510027
 DRAWN
 KRM
 CHECKED
 RSW
 DESIGNED
 TVB
 REVISIONS

APPROACH SLAB DETAILS (2 OF 2)
 BRIDGE NO. FRA-70-1322L
 I-70 WB OVER SCIOTO RIVER
FRA-70-13.10
 PID No. 77372
 55/58
 527
 702
 ms consultants, inc.

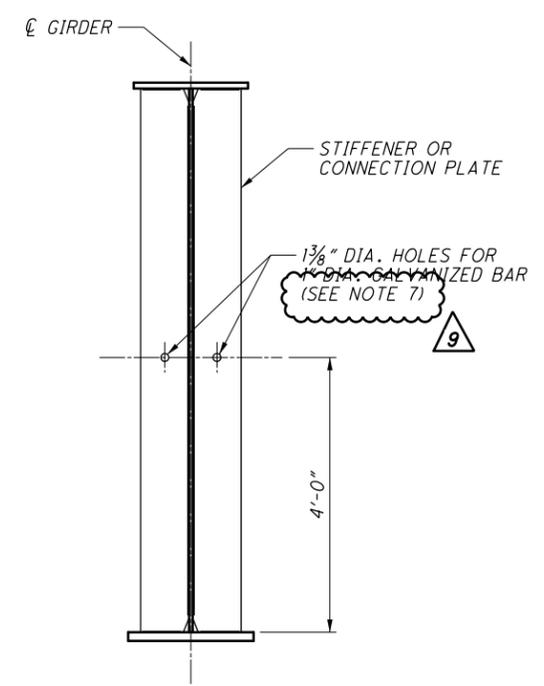
NO.	DESCRIPTION	REV. BY	DATE
9	ADD NOTE AND CALLOUTS	ATM	12/1/23



PARTIAL GIRDER ELEVATION (N.T.S.)
(S = SPACING BETWEEN CROSSFRAME CONNECTION PLATES OR BETWEEN BEARING STIFFENERS AND CROSSFRAME CONNECTION PLATES)



SUPPORT PLATE DETAIL



SECTION A-A
 (TYPICAL ALL STIFFENERS AND CONNECTION PLATES)
 (INTERIOR GIRDER SHOWN)

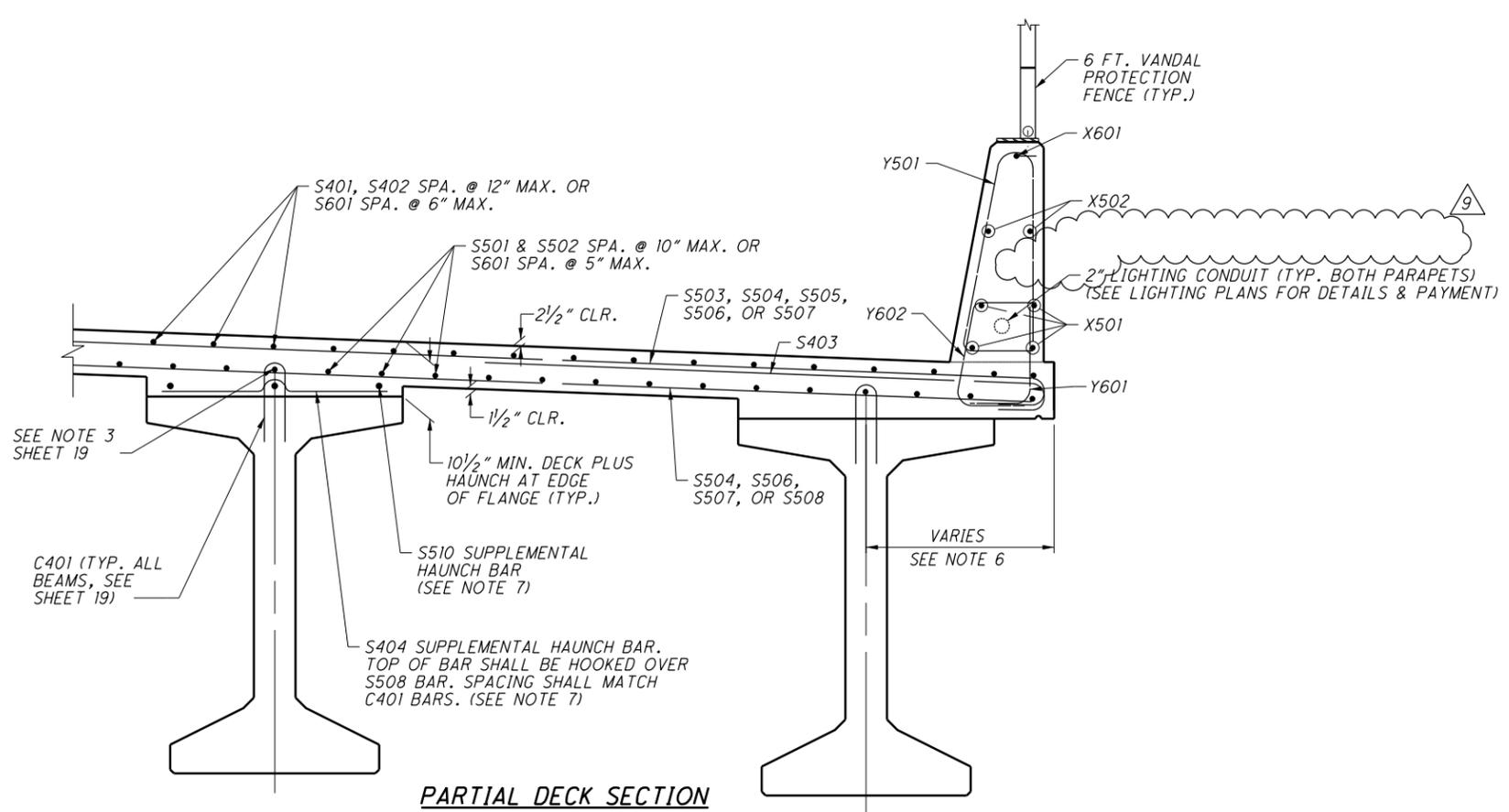
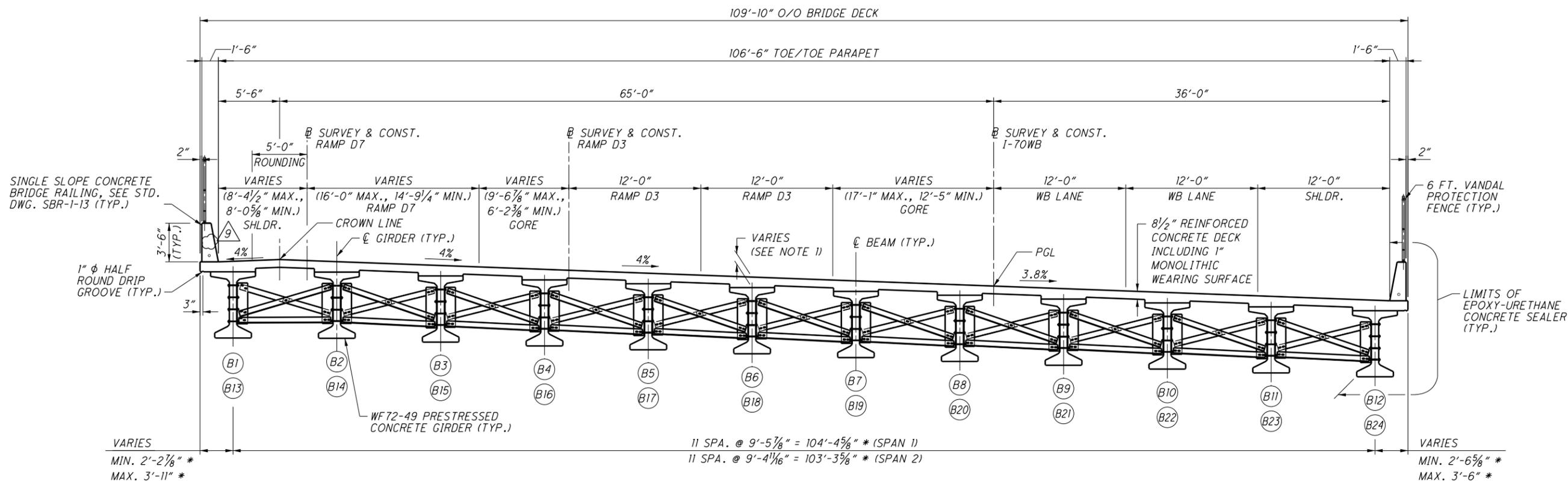
NOTES:

- HAND HOLD BARS ARE REQUIRED ON BOTH FACES OF THE GIRDER WEB FOR THE INTERIOR GIRDERS AND ON THE INTERIOR FACE OF WEB FOR THE FASCIA GIRDERS.
- EACH SECTION OF HAND HOLD BAR SHALL BE SUPPORTED IN A MINIMUM OF THREE (3) LOCATIONS.
- THREAD ONLY THAT PORTION OF THE BAR REQUIRED FOR NUT PLACEMENT.
- BURR THREADS AFTER SNUG TIGHTENING NUTS.
- BARS, NUTS AND WASHERS SHALL BE GALVANIZED PER 711.02 AFTER FABRICATION.
- GALVANIZED COATINGS DAMAGED IN THE SHOP SHALL BE REPAIRED PER ASTM A780 METHOD A3. GALVANIZED COATINGS DAMAGED IN THE FIELD SHALL BE REPAIRED PER ASTM A780 METHOD A1 AS DIRECTED BY THE ENGINEER.
- AT ALL LOCATIONS ADJACENT TO A SCUPPER WHERE THE GALVANIZED HAND HOLD BAR PASSES THROUGH A CROSSFRAME CONNECTION PLATE OR HAND HOLD BAR SUPPORT PLATE A POLYMER FLANGED SLEEVE SHALL BE INSTALLED ON THE HAND HOLD BAR PREVENTING CONTACT BETWEEN THE PLATE AND THE HAND HOLD BAR. THE POLYMER FLANGED SLEEVE SHALL BE IGUS RFI-1620-24 OR APPROVED EQUAL WITH A MINIMUM TEMPERATURE RATING BELOW -30 DEGREES AND MAXIMUM TEMPERATURE ABOVE 180 DEGREES. PAYMENT FOR ALL NECESSARY LABOR AND MATERIALS SHALL BE INCIDENTAL TO ITEM 513 - STRUCTURAL STEEL MEMBERS, HYBRID GIRDER, LEVEL SIX (6) FABRICATION, AS PER PLAN.

9

9

070_1358L15001.dgn Sheet 12/21/2023 8:19:00 AM CH_OD0Tcadd_PDF.pltcfgr 89464_Pen_BW.tbl Martin.Pierce@jacobs.com



LEGEND

(B#) BEAM DESIGNATION

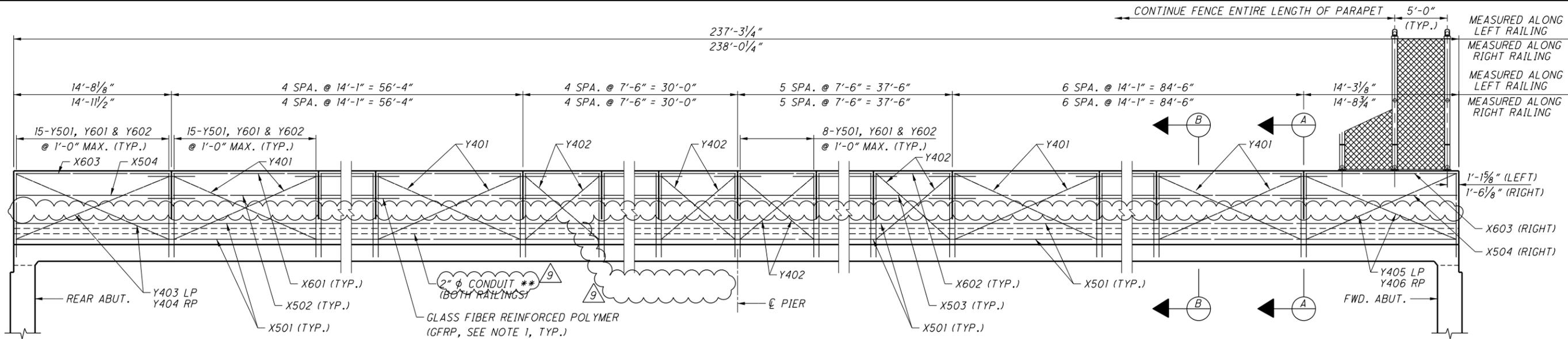
NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&M 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS. SEE SHEET 20 FOR TOPPING THICKNESS TABLE.
2. FOR DECK PLAN, SEE SHEET 24.
3. FOR RAILING DETAILS, SEE SHEET 28.
4. FOR 6 FT. VANDAL PROTECTION FENCE DETAIL, REFER TO STD. DWG. VPF-1-90. ALL ANCHORAGE SHALL BE CAST-IN-PLACE.
5. CONDUITS TO CLEAR CONSTRUCTION JOINT BY 1" MIN., AND OTHER CONDUITS BY 2" MIN.
6. FOR OVERHANG DIMENSIONS, SEE SHEET 25.
7. SUPPLEMENTAL HAUNCH BARS SHALL BE PROVIDED IN REGIONS WHERE HAUNCH THICKNESS (MEASURED AT BEAM CENTERLINE) IS GREATER THAN 4 INCHES. SEE DECK PLAN FOR LOCATIONS WHERE THEY ARE REQUIRED.

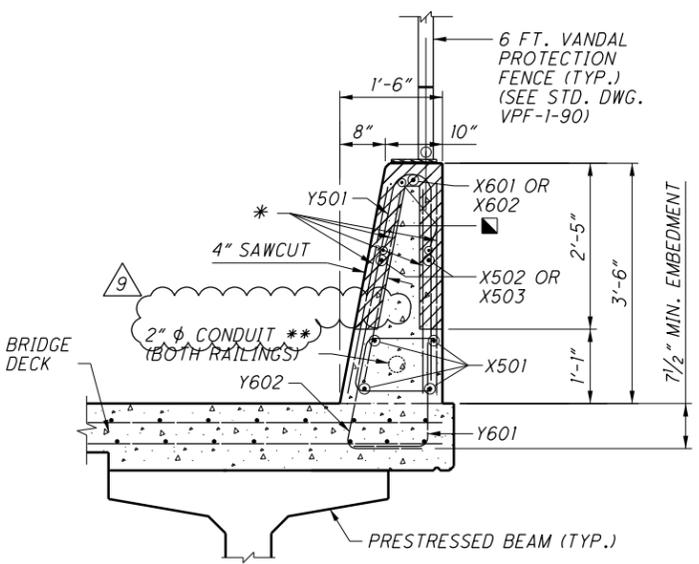
NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23

DESIGN AGENCY 1103 Schrock Road, Suite 400 Columbus, Ohio 43229	DATE 5/15	REVIEWED JTC	STRUCTURE FILE NUMBER 2510028
DESIGNED ZNG	CHECKED VS	DRAWN JBA	REVISED
TRANSVERSE SECTION BRIDGE NO. FRA-070-1358L I-70 WB OVER CSX AND NS RAILROAD			
FRA-70-13.10 PID No. 89464			
23 / 32			
(623) (702)			

070_1358LRA001.dgn Sheet 12/2/2023 7:52:32 AM CH_ODOTcadd_PDF.pltctg 89464_Pen_BW.tbl Martin.Pierce@jacobs.com

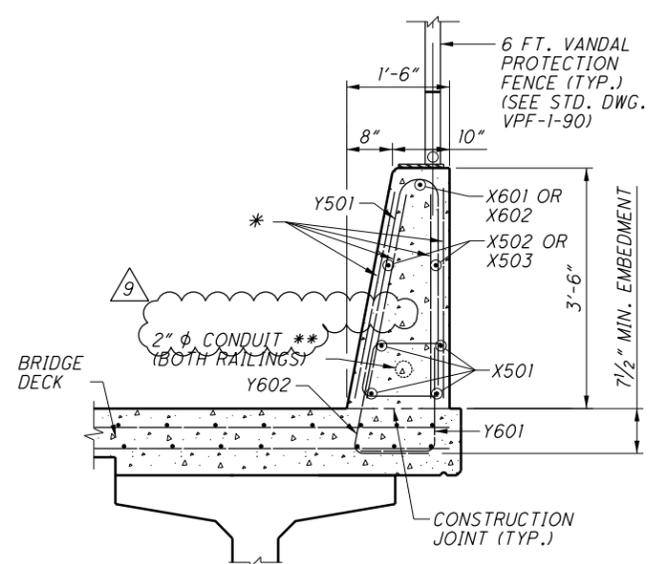


RAILING ELEVATION

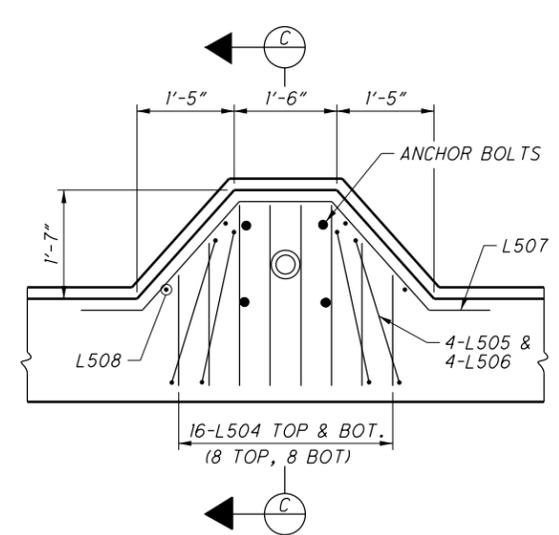


SECTION A-A

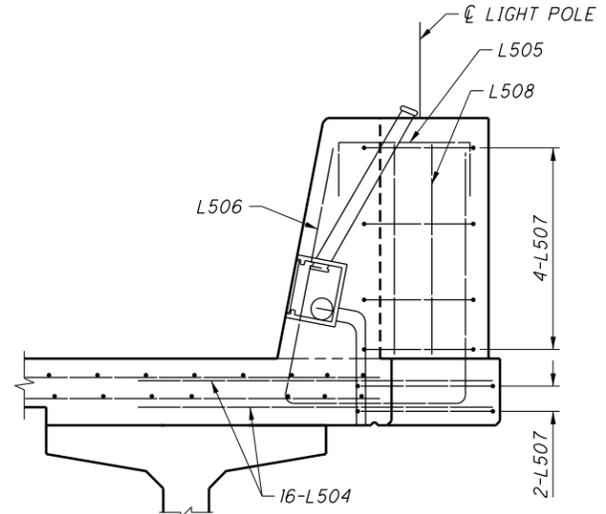
* = Y401 OR Y402
OR Y403 OR Y404
OR Y405 OR Y406



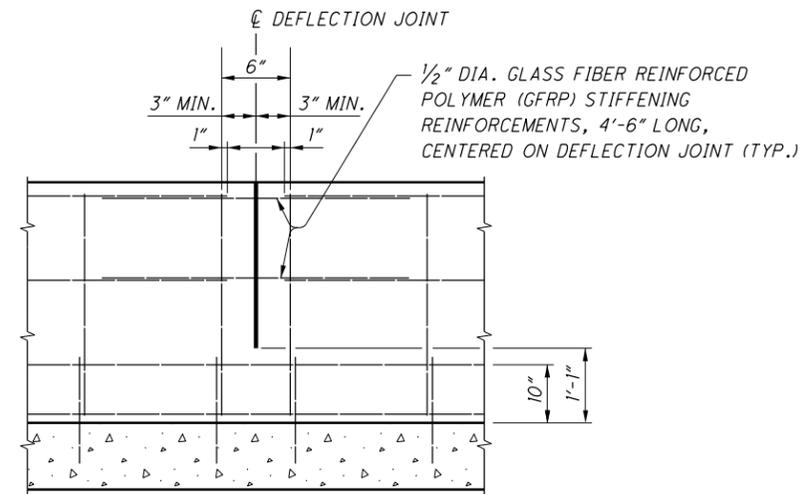
SECTION B-B



LIGHT POLE PILASTER DETAILS

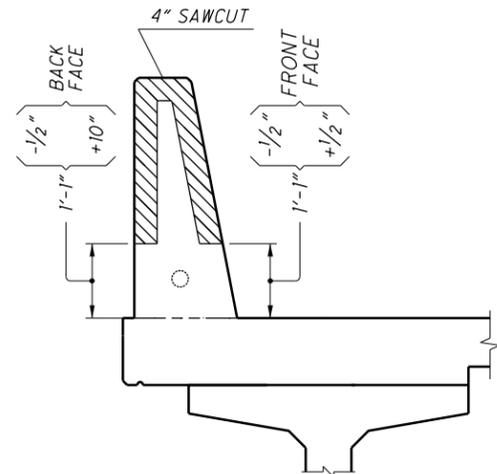


SECTION C-C



JOINT ELEVATION

GFRP REBAR STIFFENING DETAIL AT DEFLECTION JOINTS FOR 42" SINGLE SLOPE CONCRETE BRIDGE RAILING (SEE NOTE 1)



SECTION AT DEFLECTION JOINT

LEGEND:

- = 1/2" DIA. GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCEMENT
- ** LIGHTING CONDUIT, SEE LIGHTING SHEETS FOR DETAILS AND PAYMENT

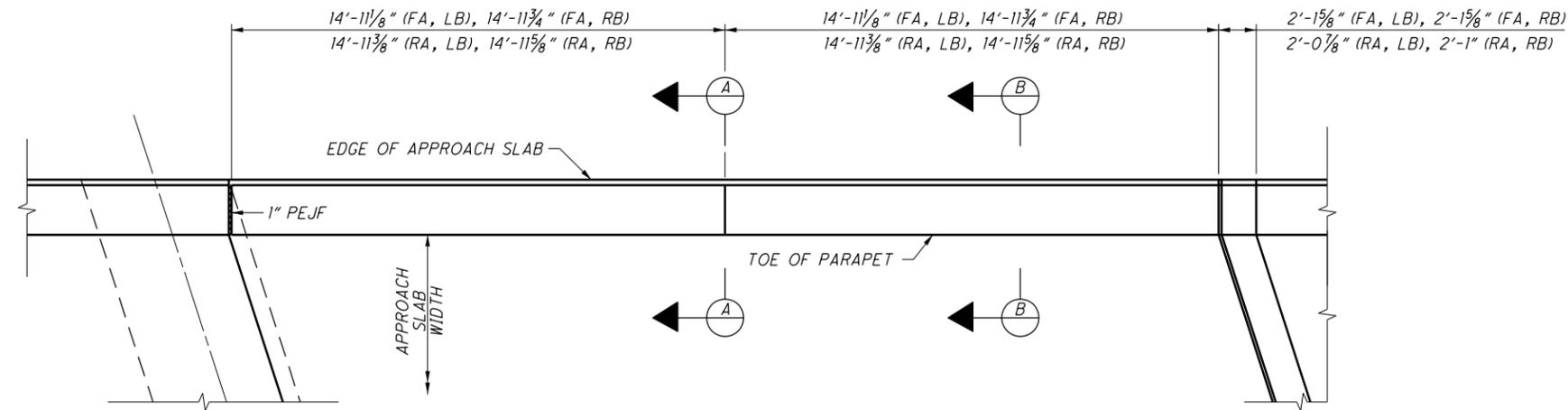
NOTES:

1. PAYMENT FOR 1/2" DIA. GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCEMENT SHALL BE INCLUDED WITH CONTRACT PRICE FOR ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.
2. LIMITS OF SAWCUT IS SHOWN IN SECTION A-A. THE 4" SAWCUT DEPTH IS THE MINIMUM REQUIRED. HOWEVER, THE CONTRACTOR HAS AN OPTION TO PERFORM FULL DEPTH SAWCUT.
3. SEE STANDARD DRAWING SBR-1-13 FOR ADDITIONAL DETAILS NOT SHOWN, NOTES REGARDING INSTALLATION AND SEALING OF DEFLECTION JOINTS, AND FOR NOTES AND PAYMENT DETAILS.
4. MINIMUM REQUIRED LAP LENGTHS:
#5 BAR = 2'-5"
5. SEE TRANSVERSE SECTION, SHEET 23 FOR SEALING LIMITS.

DESIGN AGENCY ch2m 1103 Schrock Road, Suite 400 Columbus, Ohio 43229	DATE 5/15	REVIEWED JTC	DRAWN JBA	DESIGNED ZNG	CHECKED VS	STRUCTURE FILE NUMBER 2510028	RAILING ELEVATION, PLAN, SECTIONS AND NOTES BRIDGE NO. FRA-70-1358L 1-70 WB OVER CSX AND NS RAILROAD
							FRA-70-13.10 PID No. 89464
							28 / 32
							(628) 702

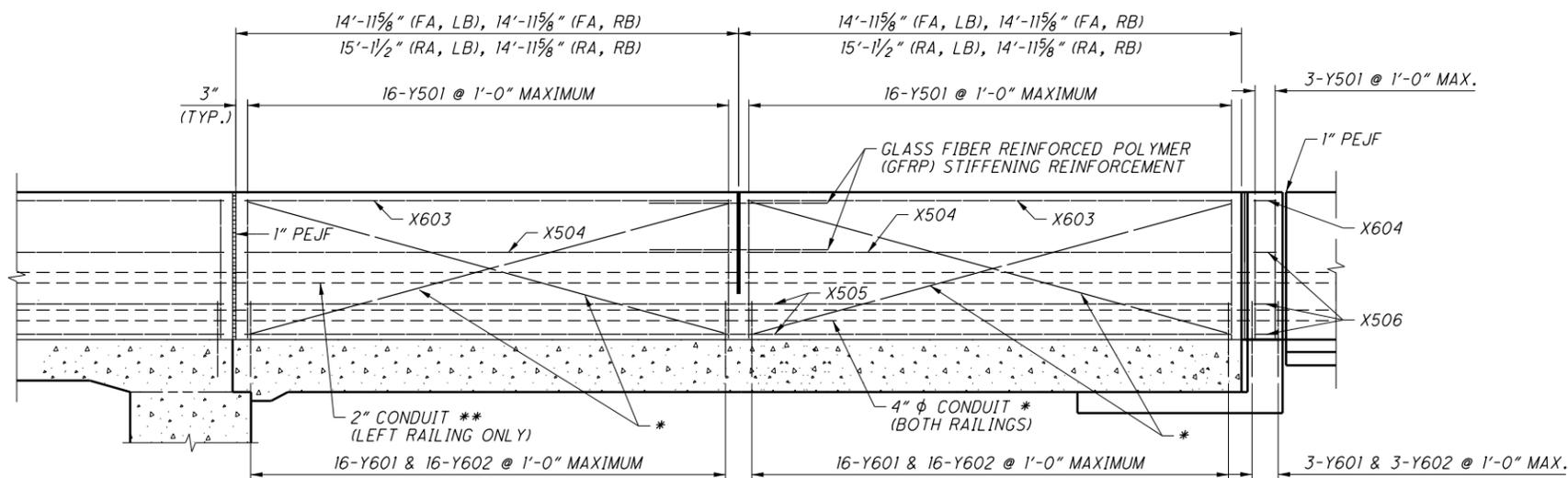
NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23

070_1358LMD002.dgn Sheet 12/2/2023 8:08:35 AM CH_ODOTcadd_PDF.pltcf 89464_Pen_BW.tbl Martin.Pierce@jacobs.com



PLAN VIEW

(FORWARD ABUTMENT, LEFT BARRIER SHOWN, OTHER BARRIERS SIMILAR)



* = Y404 FOR FA, LB & RB; RA, RB Y407 FOR RA, LB

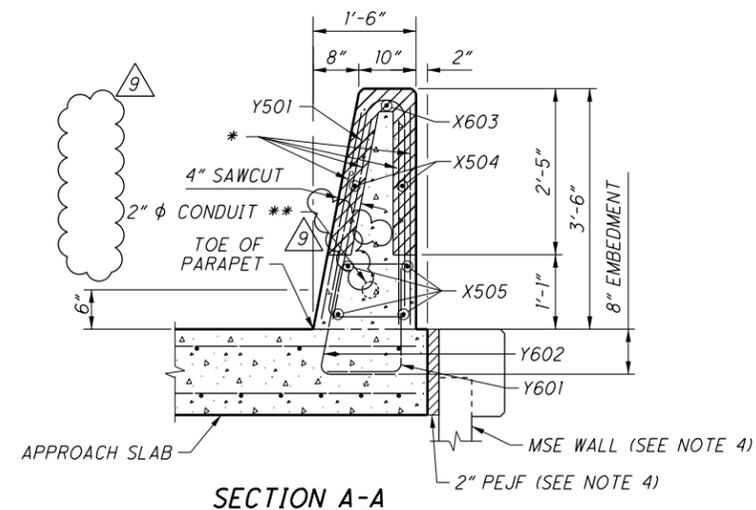
BARRIER ELEVATION

(FORWARD ABUTMENT, LEFT BARRIER SHOWN, OTHER BARRIERS SIMILAR)

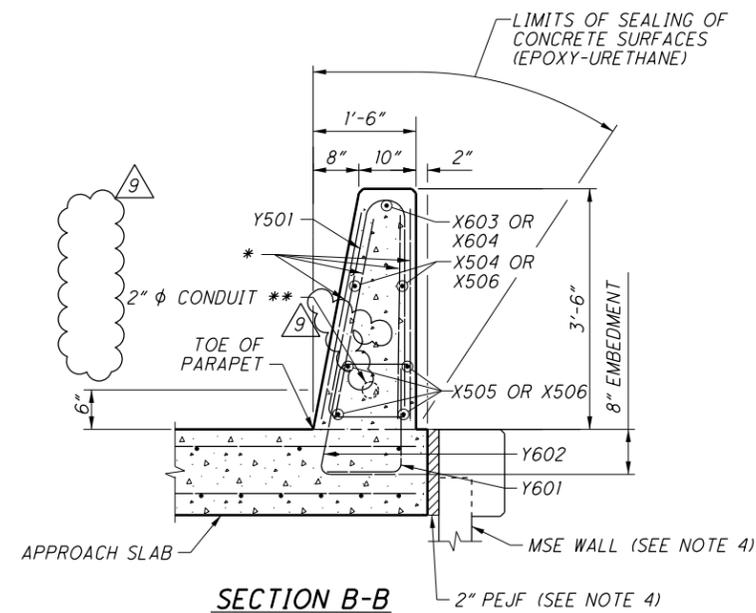
MARK	LENGTH	TYPE	MATERIAL
Y401	14'-1"	STR	GFRP
Y402	7'-6"	STR	GFRP
Y403	14'-8"	STR	GFRP
Y404	15'-0"	STR	GFRP
Y405	14'-3"	STR	GFRP
Y406	14'-9"	STR	GFRP

NOTE: FOR INFORMATION ONLY. REINFORCING IN THIS TABLE IS INCIDENTAL TO ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23



SECTION A-A



SECTION B-B

LEGEND:

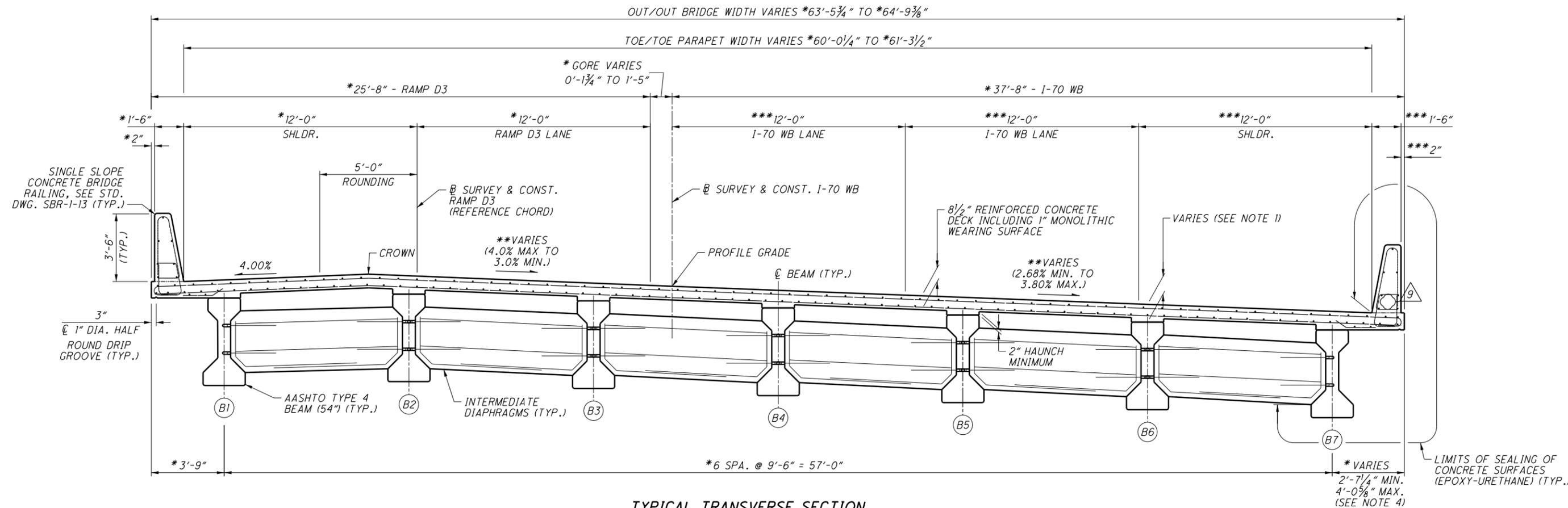
RA = REAR ABUTMENT
 FA = FORWARD ABUTMENT
 LB = LEFT BARRIER
 RB = RIGHT BARRIER

** LIGHTING CONDUIT, SEE LIGHTING SHEETS FOR DETAILS AND PAYMENT

NOTES:

- LIMITS OF SAWCUT IS SHOWN IN SECTION A-A. THE 4" SAWCUT DEPTH IS THE MINIMUM REQUIRED. HOWEVER, THE CONTRACTOR HAS AN OPTION TO PERFORM FULL DEPTH SAWCUT.
- SEE STANDARD DRAWING SBR-1-13 FOR ADDITIONAL DETAILS NOT SHOWN, NOTES REGARDING INSTALLATION AND SEALING OF DEFLECTION JOINTS, AND FOR OTHER APPLICABLE NOTES.
- MINIMUM REQUIRED LAP LENGTHS:
 #5 BAR = 2'-5"
- SEE MSE WALL PLANS FOR DETAILS AND PAYMENT.

070_13731_T5001.dgn Sheet 12/21/2023 7:35:12 AM CH_OD0Tcadd_PDF.pltclg 89464_Pen_BW.tbl Martin.Pierce@jacobs.com

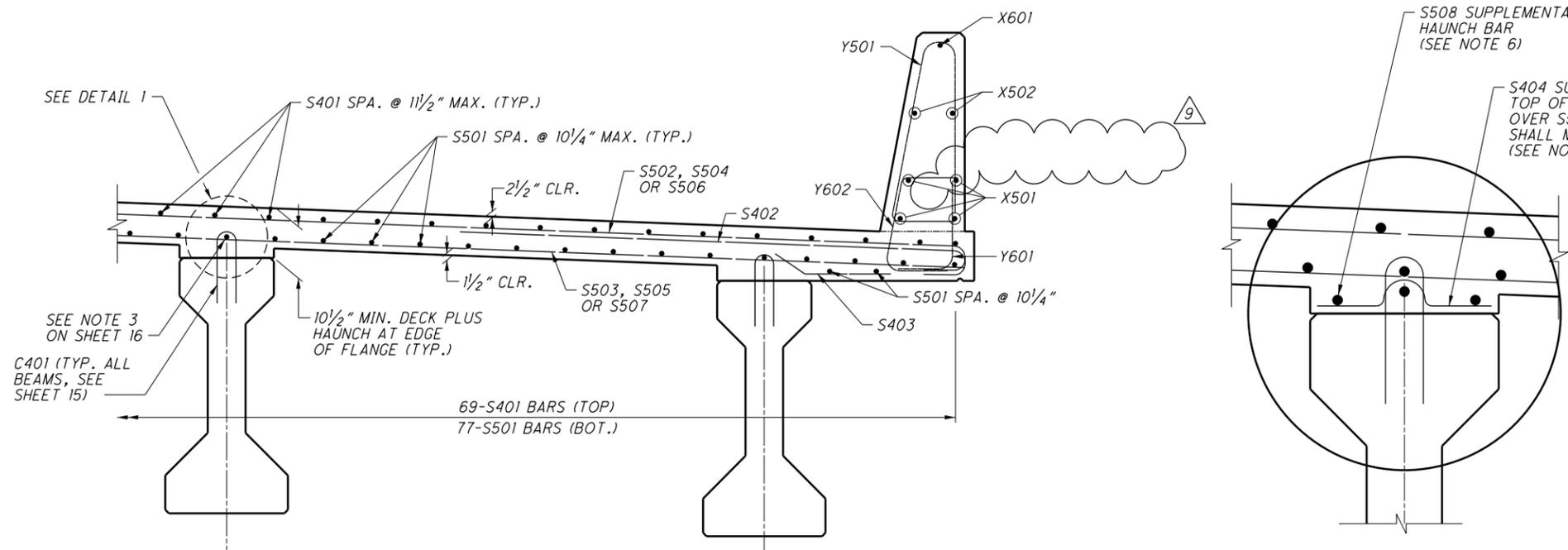


TYPICAL TRANSVERSE SECTION

- * MEASURED NORMAL TO \perp RAMP D3.
- ** BETWEEN \perp BEARINGS.
- *** MEASURED NORMAL TO \perp I-70 WB.

LEGEND

(B#) BEAM DESIGNATION



PARTIAL DECK SECTION

DETAIL 1

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS. SEE SHEET 17 FOR TOPPING THICKNESS TABLE.
2. FOR DECK PLAN, SEE SHEET 21.
3. FOR RAILING DETAILS, SEE SHEET 23.
4. FOR ADDITIONAL OVERHANG DIMENSIONS, SEE SHEET 22.
5. CONDUITS TO CLEAR CONSTRUCTION JOINT BY 1" MIN.
6. SUPPLEMENTAL HAUNCH BARS SHALL BE PROVIDED IN REGIONS WHERE HAUNCH THICKNESS (MEASURED AT BEAM CENTERLINE) IS GREATER THAN 4 INCHES. SEE DECK PLAN FOR LOCATIONS WHERE THEY ARE REQUIRED.

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23

TRANSVERSE SECTION
 BRIDGE NO. FRA-070-1373L
 I-70 WB OVER SHORT STREET

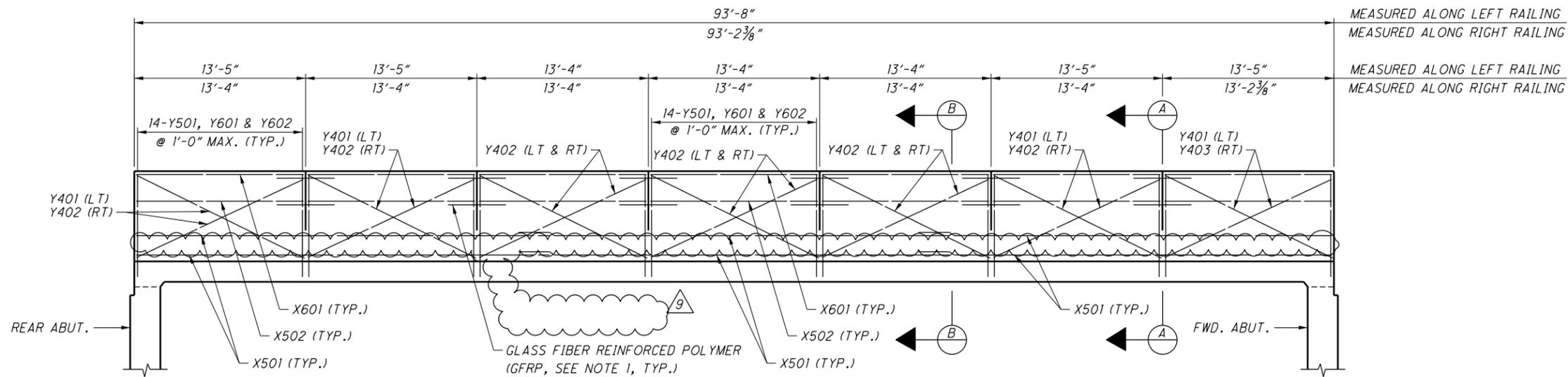
FRA-70-13.10
 PID No. 89464

20/27
 652
 702

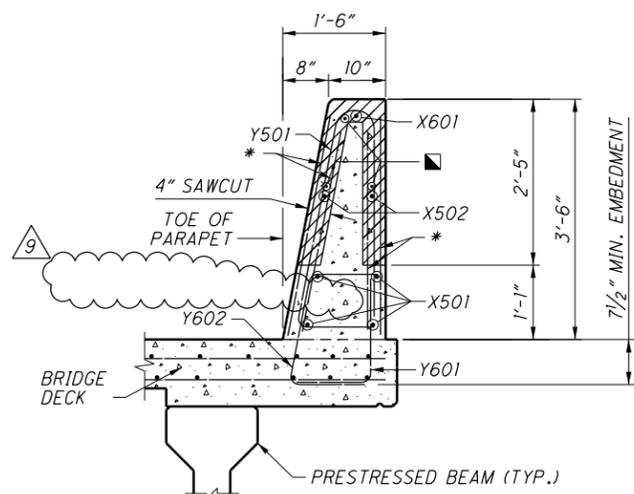
DESIGN AGENCY
ch2m
 2 Easton Oval, Suite 500
 Columbus, Ohio 43219

DATE 6/21
 REVIEWED DGS
 STRUCTURE FILE NUMBER 2510029
 DRAWN JTC
 CHECKED FBW

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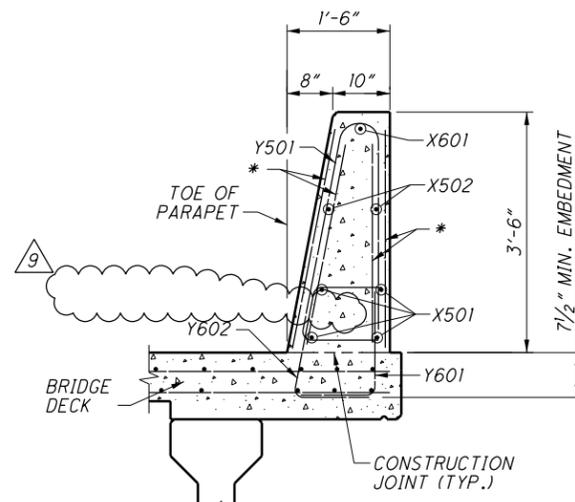


RAILING ELEVATION



SECTION A-A

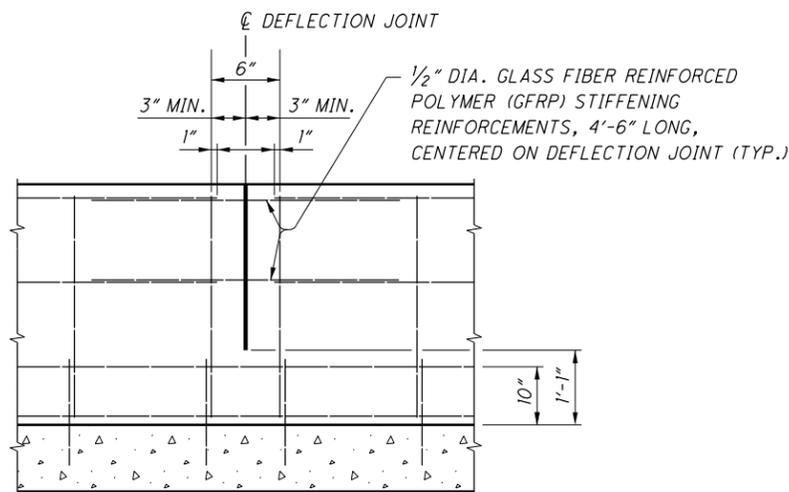
* = Y401 OR Y402 OR Y403



SECTION B-B

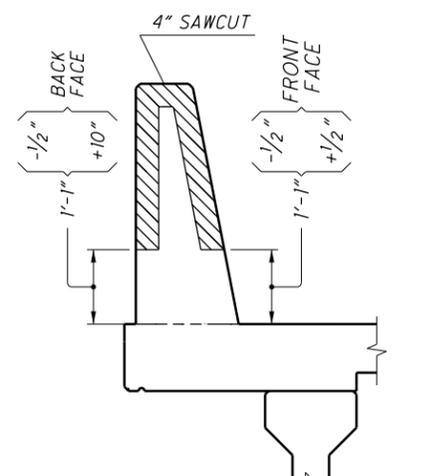
LEGEND:

■ = 1/2" DIA. GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCEMENT



JOINT ELEVATION

GFRP REBAR STIFFENING DETAIL AT DEFLECTION JOINTS (SEE NOTE 1)



SECTION AT DEFLECTION JOINT

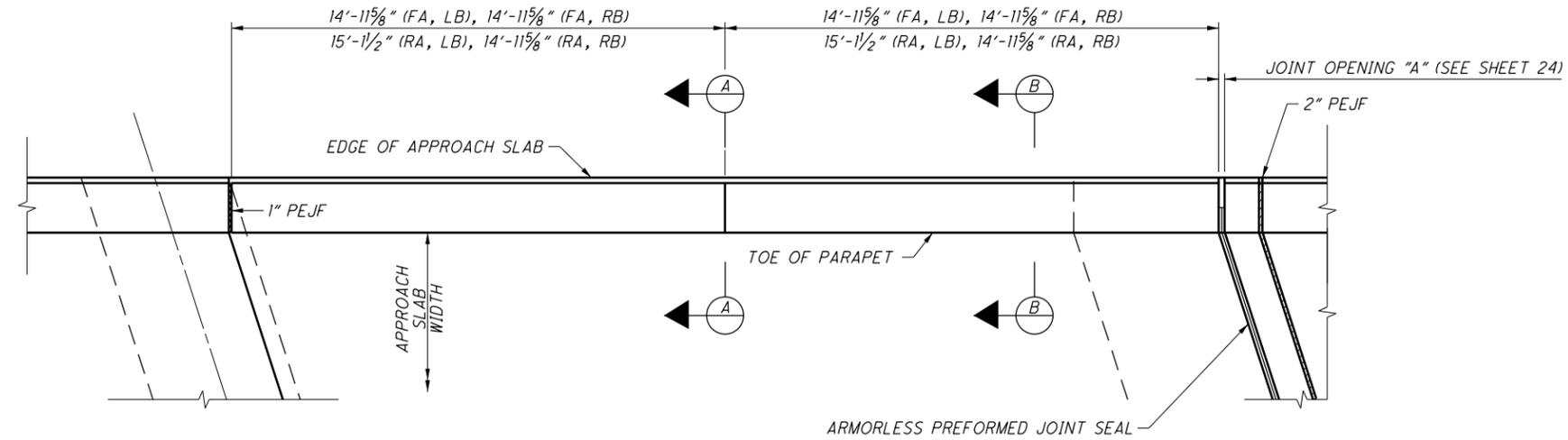
NOTES:

- PAYMENT FOR 1/2" DIA. GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCEMENT SHALL BE INCLUDED WITH CONTRACT PRICE FOR ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN. SEE SHEET 24 FOR TABLE.
- LIMITS OF SAWCUT IS SHOWN IN SECTION A-A. THE 4" SAWCUT DEPTH IS THE MINIMUM REQUIRED. HOWEVER, THE CONTRACTOR HAS AN OPTION TO PERFORM FULL DEPTH SAWCUT.
- SEE STANDARD DRAWING SBR-1-13 FOR ADDITIONAL DETAILS NOT SHOWN, NOTES REGARDING INSTALLATION AND SEALING OF DEFLECTION JOINTS, AND FOR NOTES AND PAYMENT DETAILS.
- MINIMUM REQUIRED LAP LENGTHS:
#5 BAR = 2'-5"
- SEE TRANSVERSE SECTION, SHEET 20 FOR SEALING LIMITS.

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23

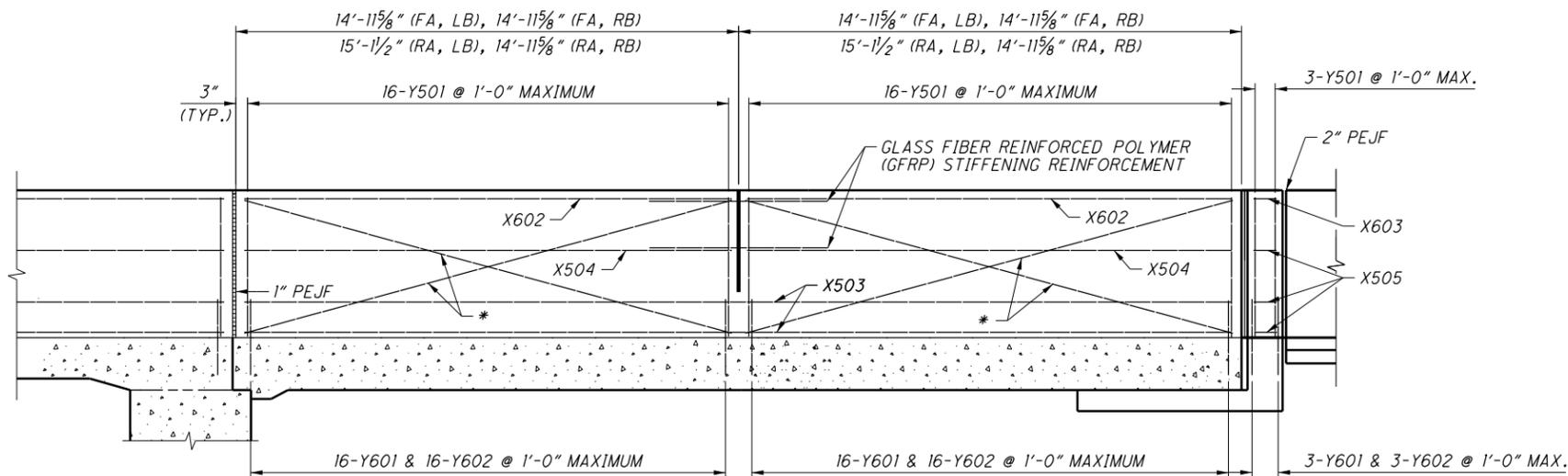
DESIGN AGENCY: **ch2m**
 2 Easton Oval, Suite 500
 Columbus, Ohio 43219
 DATE: 6/21
 REVIEWED: DGS
 STRUCTURE FILE NUMBER: 2510029
 DRAWN: JTC
 CHECKED: FBW
 DESIGNED: JTC
 PARAPET ELEVATION AND DETAILS I
 BRIDGE NO. FRA-070-1373L
 I-70 WB OVER SHORT STREET
 FRA-70-13.10
 PID No. 89464
 23/27
 655
 702

070_13731MD002.dgn Sheet 12/2/2023 7:47:28 AM CH_ODOTcadd_PDF.pltcf 89464_Pen_BW.tb Martin.Pierce@jacobs.com



PLAN VIEW

(FORWARD ABUTMENT, LEFT BARRIER SHOWN, OTHER BARRIERS SIMILAR)



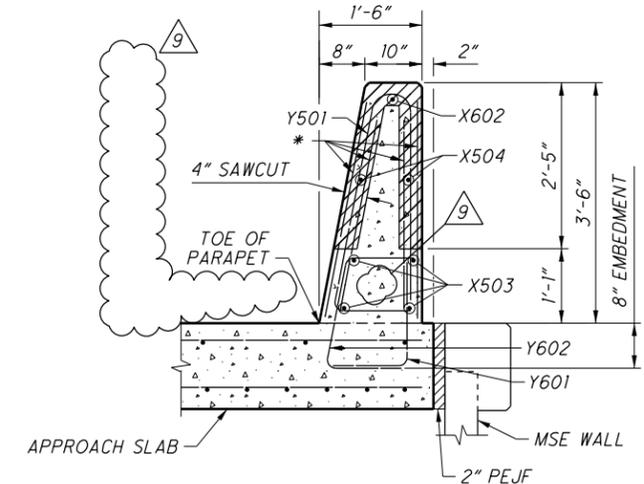
BARRIER ELEVATION

(FORWARD ABUTMENT, LEFT BARRIER SHOWN, OTHER BARRIERS SIMILAR)

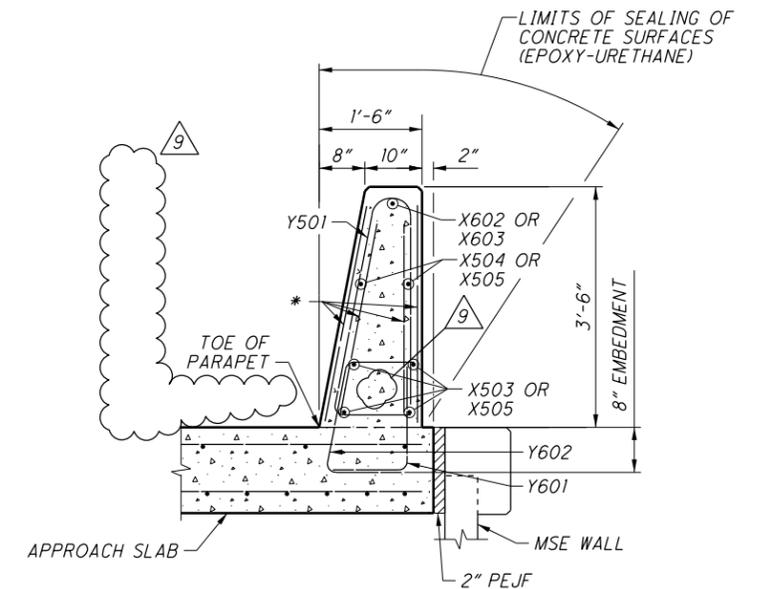
* = Y404 FOR FA, LB & RB; RA, RB
Y405 FOR RA, LB

MARK	LENGTH	TYPE	MATERIAL
Y401	13'-5"	STR	GFRP
Y402	13'-4"	STR	GFRP
Y403	13'-2"	STR	GFRP
Y404	15'-0"	STR	GFRP
Y405	15'-2"	STR	GFRP

NOTE: FOR INFORMATION ONLY. REINFORCING IN THIS TABLE IS INCIDENTAL TO ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN



SECTION A-A



SECTION B-B

LEGEND:

RA = REAR ABUTMENT
FA = FORWARD ABUTMENT
LB = LEFT BARRIER
RB = RIGHT BARRIER

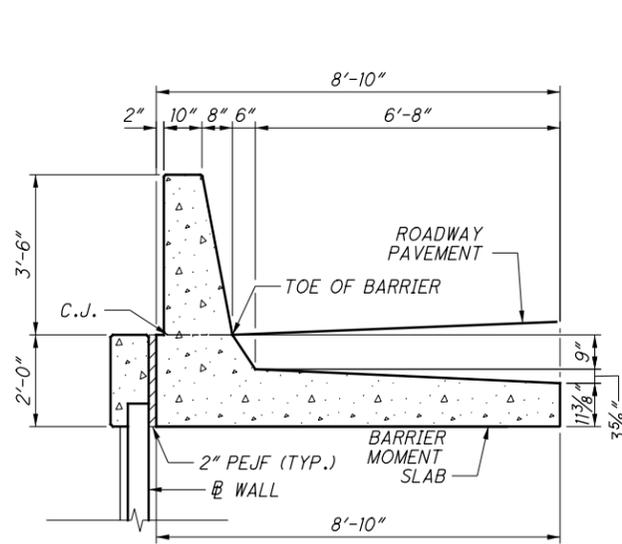
NOTES:

- LIMITS OF SAWCUT IS SHOWN IN SECTION A-A. THE 4" SAWCUT DEPTH IS THE MINIMUM REQUIRED. HOWEVER, THE CONTRACTOR HAS AN OPTION TO PERFORM FULL DEPTH SAWCUT.
- SEE STANDARD DRAWING SBR-1-13 FOR ADDITIONAL DETAILS NOT SHOWN, NOTES REGARDING INSTALLATION AND SEALING OF DEFLECTION JOINTS, AND FOR OTHER APPLICABLE NOTES.
- MINIMUM REQUIRED LAP LENGTHS:
#5 BAR = 2'-5"

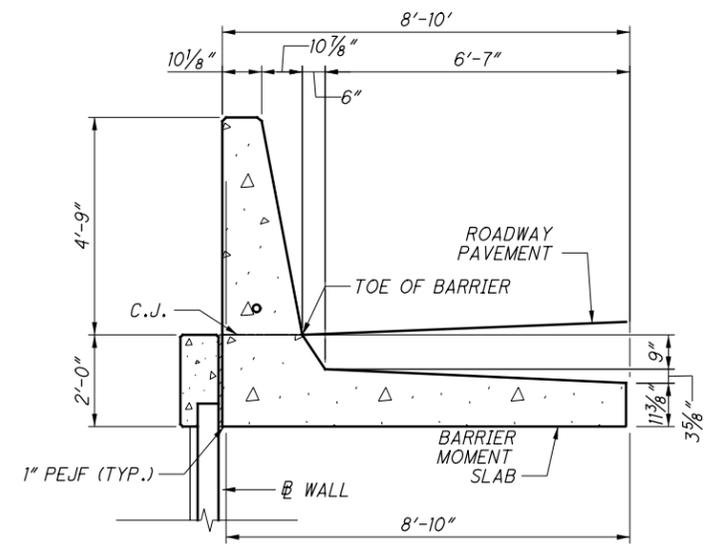
NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED A CONDUIT FROM BARRIER	MRP	12/1/23

DESIGN AGENCY: **ch2m**
 2 Easton Oval, Suite 500
 Columbus, Ohio 43219
 DATE: 6/21
 REVIEWED: DGS
 DRAWN: JTC
 CHECKED: FBW
 STRUCTURE FILE NUMBER: 2510029
PARAPET ELEVATION AND DETAILS II
 BRIDGE NO. FRA-070-1373L
 I-70 WB OVER SHORT STREET
FRA-70-13-10
 PID No. 89464
 24 / 27
 656
 702

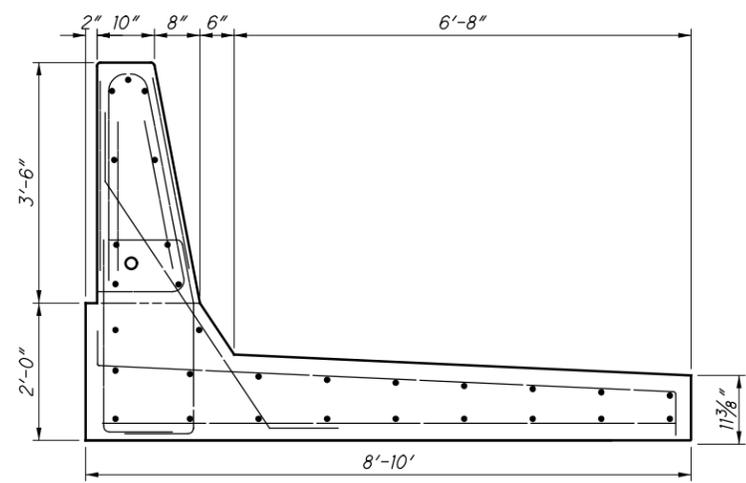
G:\projects\2013\W-13-072_FRA-70-13-10_6A\89464_structures_wall_OE3\sheets\105588_0e3wd006.dgn 11/29/2023 11:49:26 AM meets



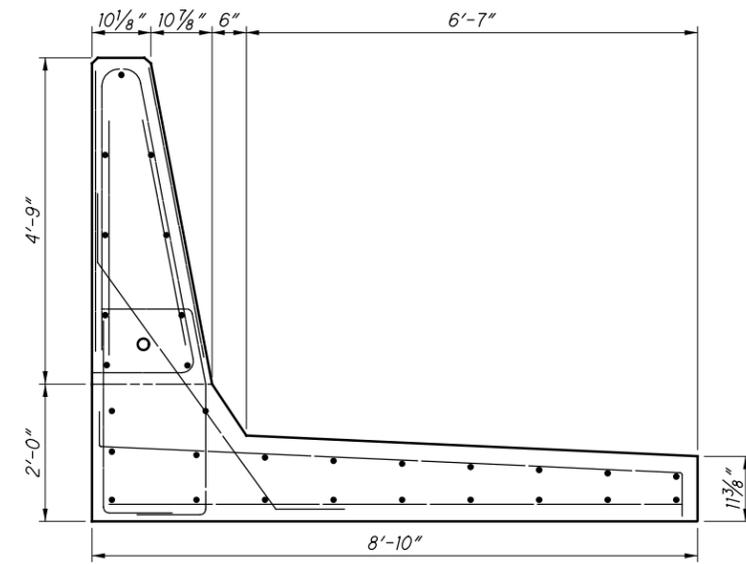
MOMENT SLAB DETAIL
(42" AS PER PLAN)



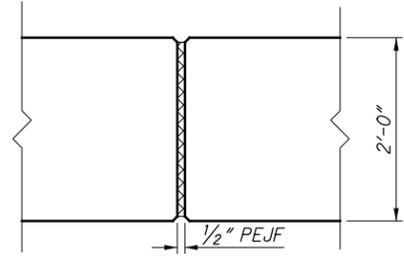
MOMENT SLAB DETAIL
(57" AS PER PLAN)



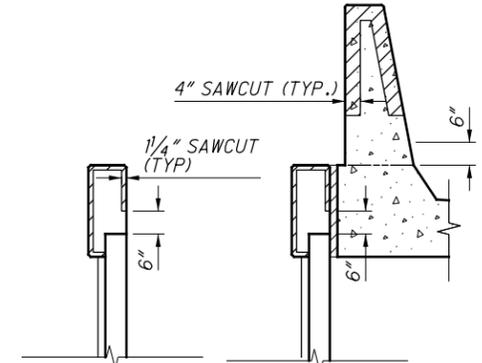
MOMENT SLAB REBAR
(42" AS PER PLAN)



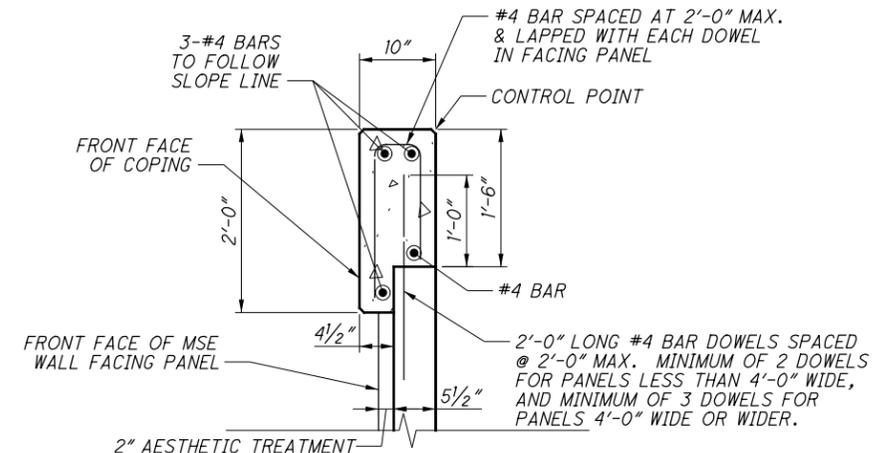
MOMENT SLAB REBAR
(57" AS PER PLAN)



COPING EXPANSION JOINTS



SAWCUT DETAILS
SEE SBR-1-13 FOR ADDITIONAL DETAILS



COPING DETAIL

LEGEND:

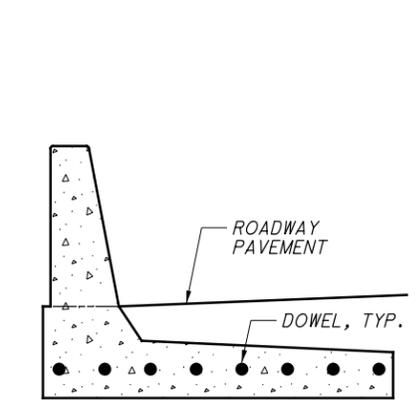
- * LIMITS OF ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) SEAL ALL EXPOSED SURFACES EXTENDING 10'-0" VERTICAL FROM GROUND LINE
 - # GRADING SLOPES AWAY FROM BARRIER. SEE WALL PLAN SHEETS AND ROADWAY CROSS SECTIONS FOR MORE INFORMATION.
- MINIMUM LAP LENGTHS:
 #5 LAP LENGTH = 2'-5"
 #6 LAP LENGTH = 2'-11"

NOTES:

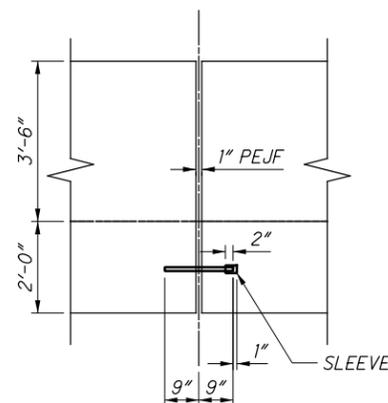
1. TRAFFIC BARRIER & MOMENT SLAB ARE INCIDENTAL TO ITEM - 511, CLASS QC2 CONCRETE, MISC: PARAPET INCLUDING SLEEPER SLAB WITH QC/QA.
2. CONTROL JOINT: SAWCUT 1/4" DEEP CONTROL JOINTS ALONG THE PERIMETER AS SHOWN ON THIS SHEET AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE AND ALIGNED ON ALL FACES OF THE BARRIER. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4".

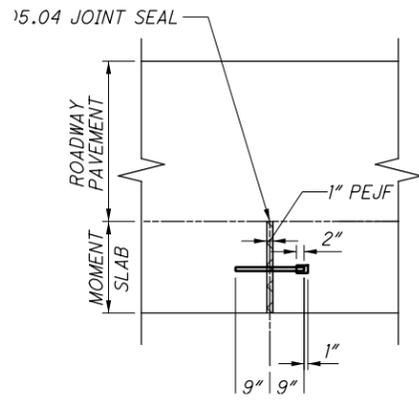
SEAL THE PERIMETER OF THE CONTROL JOINT TO A MINIMUM DEPTH OF 1" WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO C920, TYPE S. LEAVE THE BOTTOM 1/2" OF BOTH THE INSIDE AND OUTSIDE FACES OF THE BARRIER UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.
3. SAWCUT CONTROL JOINTS SHALL HAVE A MINIMUM SPACING OF 6' AND A MAXIMUM SPACING OF 15'. SEE PLANS FOR BARRIER CONTROL JOINT LOCATIONS.
4. FOR ABBREVIATIONS LEGEND, SEE SHEET 660
5. FOR LOCATIONS OF CIP BARRIER TO RECEIVE 2" LIGHTING CONDUIT, SEE HIGHWAY LIGHTING PLANS. FOR ADDITIONAL CIP BARRIER CONDUIT DETAILS AND NOTES, SEE STD. DWG. HL-20.14.
6. FOR LOCATIONS OF JUNCTION BOXES AND LIGHTING CONDUIT IN CIP BARRIER, SEE LIGHTING PLANS.
7. COPING EXPANSION JOINT SHALL BE SPACED NO MORE THAN 20 FEET APART AND ALIGNED WITH JOINTS BETWEEN FACING PANELS.



EXPANSION JOINT SECTION



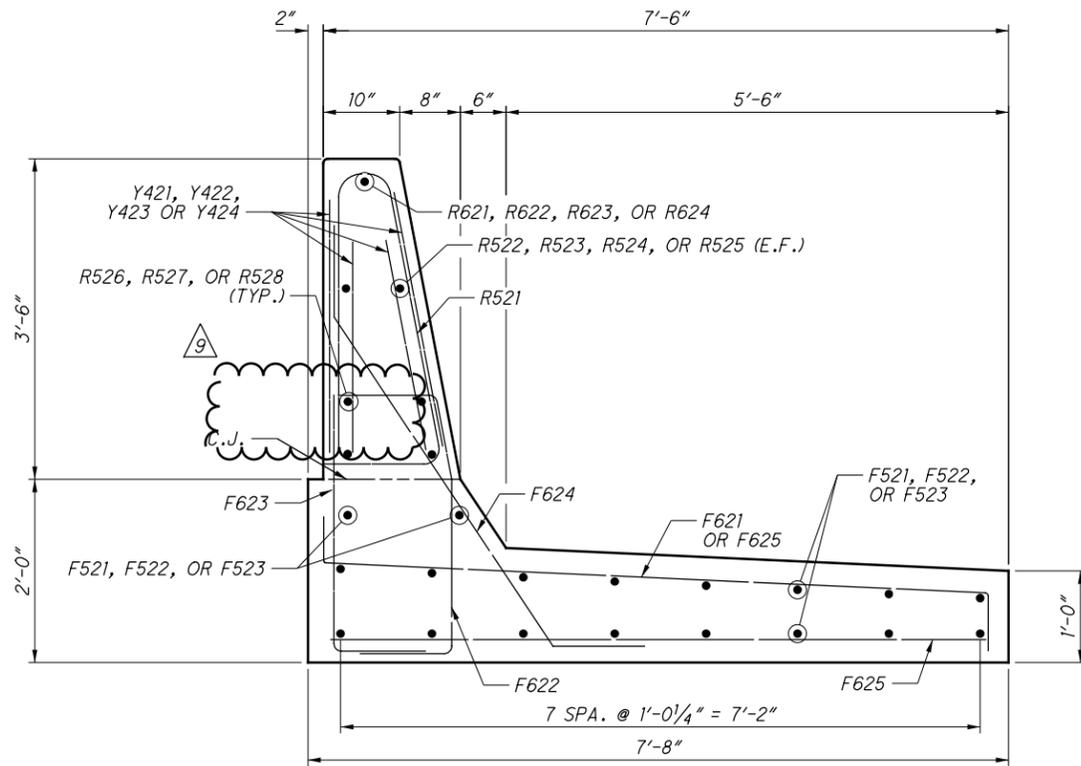
EXPANSION JOINT DETAIL
(AT PARAPET)



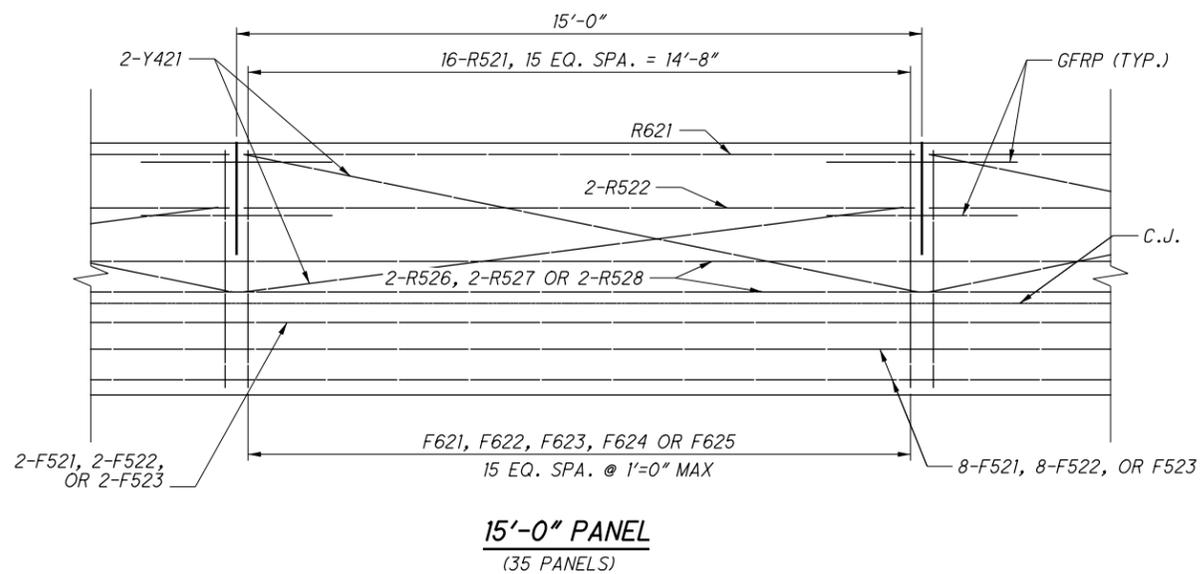
EXPANSION JOINT DETAIL
(AT PAVEMENT)

NO.	DESCRIPTION	REV. BY	DATE
9	UPDATED NOTE	MMS	11-30-23

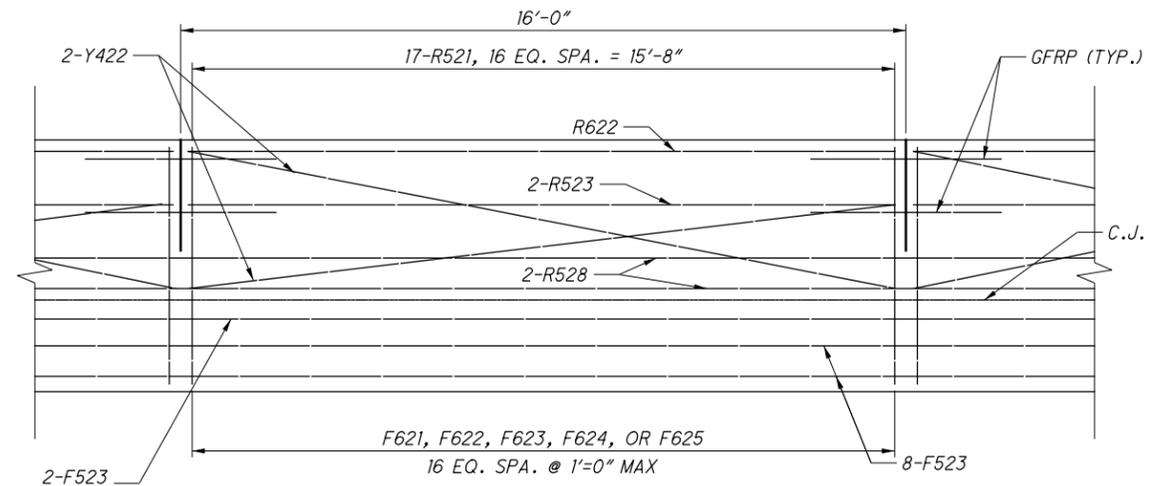
G:\projects\2013\W-13-072_FRA-70-13.10_6A\89464_structures\wall_OE4_6A\sheets\105588_OE4_WD014.dgn 11/29/2023 11:49:27 AM meets



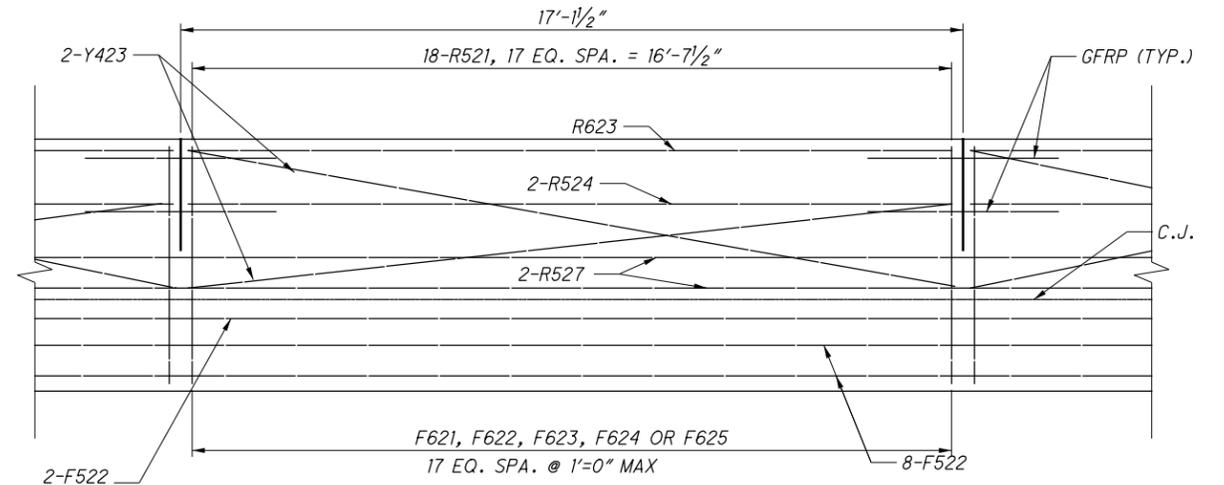
MOMENT SLAB SECTION DETAIL



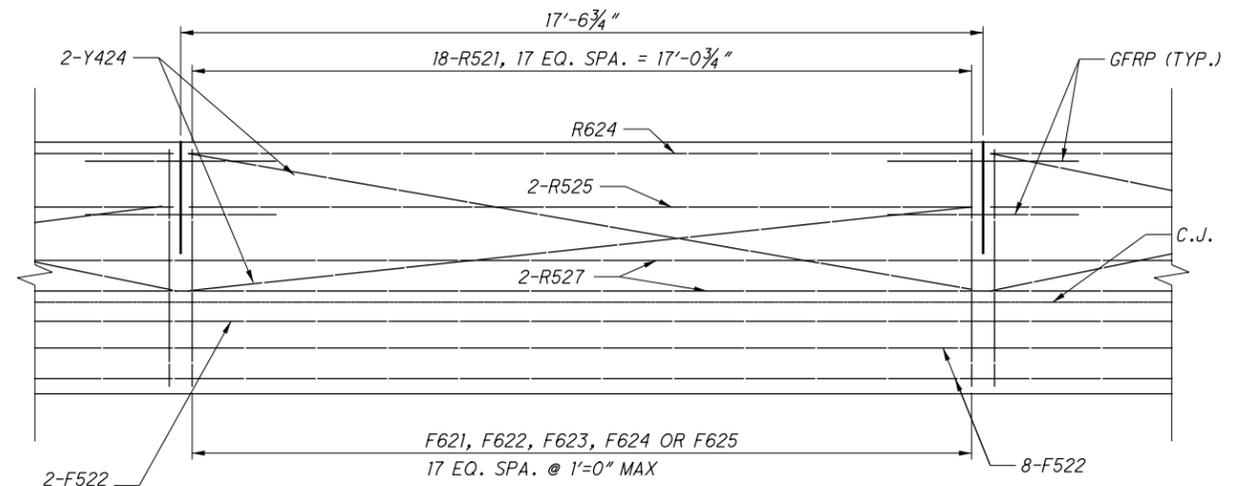
15'-0" PANEL
(35 PANELS)



16'-0" PANEL
(1 PANEL)



17'-1/2" PANEL
(1 PANEL)



17'-6 3/4" PANEL
(1 PANEL)

NOTE:

1. A TOTAL OF 66 GFRP STIFFENING REINFORCEMENT BARS, 1/2" DIA. X 4'-6" LONG, ARE REQUIRED FOR THE WALL E4 MOMENT SLAB.

NO.	DESCRIPTION	REV. BY	DATE
9	REMOVED 2" CONDUIT	MMS	11-30-23

SEQUENCE OF CONSTRUCTION

PRE PHASE 1 (NOT SHOWN)

PRE PHASE 1 WORK INCLUDES THE INSTALLATION OF ALL TEMPORARY PAVEMENT NECESSARY FOR PHASE 1 INCLUDING ALL LONGITUDINAL JOINT AND PAVEMENT REPAIRS ON I-70/I-71. NECESSARY LANE CLOSURES SHALL BE PERFORMED PER MOT SCD-95.32. TRAFFIC SHALL BE MAINTAINED BY THE USE OF THE EXISTING TRAFFIC PATTERN. ALL SINGLE AND/OR DOUBLE LANE CLOSURES REQUIRED SHALL BE IN ACCORDANCE PER THE LANE VALUE CONTRACT TABLE AND ALL APPLICABLE ODOT MAINTENANCE OF TRAFFIC STANDARD CONSTRUCTION DRAWINGS.

PHASE 1

PHASE 1 WORK INCLUDES THE REMOVAL OF THE 3RD AND 4TH ST BRIDGE DECKS, NORTH ABUTMENTS AND THE OUTSIDE I-70WB/I-71SB IMPROVEMENTS INCLUDING THE INSTALLATION OF RETAINING WALLS 4W16, 4W17, 4W18 BETWEEN FULTON ST. AND I-70WB/I-71SB. WORK ALSO INCLUDES THE INSTALLATION OF 3RD AND 4TH STREET NORTH BRIDGE ABUTMENTS AND PIERS IN THE WORK ZONE.

- 1. THE CONTRACTOR SHALL MAINTAIN THREE I-70WB/I-71SB LANES. I-70EB/I-71NB TRAFFIC WILL REMAIN IN THE EXISTING TRAFFIC PATTERN.
2. I-70/I-71 SHALL BE CLOSED AND DETOURED PER THE TABLE ON SHEET 48 FOR DEMOLITION, BEAM ERECTION, AND DECK POUR FOR THE 3RD AND 4TH STREET BRIDGES (FOR ALL PHASES OF CONSTRUCTION).

THE OVERHEAD TRUSS NORTH SIDE FOUNDATION AND ASSOCIATED BARRIER WALL LOCATED FROM STA. 205+45 TO STA. 206+55 WILL BE CONSTRUCTED IN PHASE 5.

PHASE 2

PHASE 2 WORK INCLUDES THE CENTER PORTION OF I-70/I-71 INCLUDING THE REMOVAL OF THE EXISTING 3RD AND 4TH ST CENTER BRIDGE PIERS, CONSTRUCTION OF NEW CENTER MEDIAN PIERS, FULL DEPTH PAVEMENT AND MEDIAN WALL, AND CROSSOVER CONSTRUCTION FOR PHASE 3.

- 1. THE CONTRACTOR SHALL MAINTAIN THREE I-70WB/I-71SB LANES ON PREVIOUSLY CONSTRUCTED PAVEMENT, AS WELL AS THREE I-70EB/I-71NB LANES ON EXISTING PAVEMENT.

MEDIAN WALL AND SHOULDER CONSTRUCTION SHALL BE SUSPENDED BETWEEN THE BEGIN OF THE PROJECT AND 198+26 AND BETWEEN STATIONS 210+00 AND 217+00 FOR THE CROSSOVER IN PHASES 3-3B. I-70WB/I-71SB TRAFFIC WILL REMAIN IN THIS CONFIGURATION THROUGH THE END OF PHASE 3B.

PHASE 3

PHASE 3 WORK INCLUDE THE CENTER PORTION OF I-70EB/I-71NB PAVEMENT. PHASES 3, 3A AND 3B UTILIZE CONTRAFLOW.

- 1. THE I-70WB/I-71SB LANES SHALL REMAIN IN THE SAME TRAFFIC PATTERN AS PHASE 2. TWO I-70EB/I-71NB LANES SHALL BE SHIFTED TO THE PREVIOUSLY CONSTRUCTED I-70WB/I-71SB PAVEMENT VIA CROSSOVER #1. ONE SINGLE I-70WB/I-71SB LANE SHALL BE MAINTAINED FOR LOCAL TRAFFIC.

PHASE 3A

PHASE 3A WORK INCLUDES ALL REMAINING FULL DEPTH PAVEMENT ON THE OUTSIDE OF I-70EB/I-71NB, REMOVAL AND CONSTRUCTION OF THE REMAINING 3RD AND 4TH STREET PIERS AND ABUTMENTS IN THE WORK ZONE AND THE INSTALLATION OF RETAINING WALLS 4W14 AND 4W15 BETWEEN I-70 EB/I-71 NB AND LIVINGSTON AVE.

- 1. TRAFFIC SHALL BE MAINTAINED PER THE PHASE 3 TRAFFIC PATTERN, EXCEPT ONE EB/NB LANE SHALL BE SHIFTED TO THE INSIDE OF THE I-70EB/I-71NB PAVEMENT.

PHASE 3B

PHASE 3B INCLUDES THE REMAINING FULL DEPTH PAVEMENT IN RAMP N1/N4 GORE AREA.

- 1. TRAFFIC SHALL BE MAINTAINED PER THE PHASE 3A TRAFFIC PATTERN, EXCEPT IN THE GORE AREA OF THE RAMP N1/N4.

PHASE 3C (NOT SHOWN)

PHASE 3C WORK INCLUDES THE REMOVAL OF CROSSOVER TEMPORARY PAVEMENT AND THE PREVIOUSLY SUSPENDED MEDIAN WALL FROM PHASE 2.

- 1. THE I-70WB/I-71SB TRAFFIC SHALL REMAIN IN THE SAME TRAFFIC PATTERN AS PHASE 2. THE I-70EB/I-71NB TRAFFIC SHALL BE RETURNED TO THE PHASE 2 TRAFFIC PATTERN.

PRE PHASE 4A

PRE PHASE 4A WORK INCLUDES THE INSTALLATION OF ALL TEMPORARY PAVEMENT AND SIGNALS NECESSARY FOR PHASE 4A. TRAFFIC SHALL BE MAINTAINED AS PER CITY OF COLUMBUS MOT SCD 1510.

SEQUENCE OF CONSTRUCTION (CONT.)

PHASE 4A/4B/4C

PHASE 4A INCLUDES THE COMPLETION OF THE 3RD AND 4TH ST BRIDGE BEAMS AND DECK CONSTRUCTION AND THE OUTSIDE PORTION OF THE FULTON STREET IMPROVEMENT. I-70/I-71 TRAFFIC SHALL FOLLOW THE PROPOSED PERMANENT TRAFFIC PATTERN. ALL NORTH APPROACH SLABS SHALL BE COMPLETED BEFORE THE START OF PHASE 4B.

PHASE 4B INCLUDES THE REMAINING INSIDE PORTION OF THE FULTON STREET IMPROVEMENTS. THE CONTRACTOR MAY COMPLETE PHASE 4B FULTON STREET WORK CONCURRENTLY WITH PHASE 4A BRIDGE DECK WORK PROVIDED THAT ALL APPROACH SLABS FOR THE 3RD AND 4TH STREET BRIDGES ARE COMPLETED IN ORDER TO ENSURE THE PHASE 4B MAINTENANCE TRAFFIC PATTERN CAN BE IMPLEMENTED.

PHASE 4C INCLUDES THE COMPLETION OF THE REMAINING PORTION OF THE FULTON STREET IMPROVEMENTS, INCLUDING THE NORTHEAST CORNER OF THE FULTON AND 3RD AND THE NORTHWEST CORNER OF THE FULTON AND 4TH.

PHASES 4A, 4B & 4C SHALL BE PERFORMED CONCURRENTLY WITH PHASE 5 WORK ON I-70/I-71.

PHASE 5 (NOT SHOWN)

PHASE 5 OF CONSTRUCTION CONSISTS OF PLACING THE FINAL ASPHALT PAVEMENT SURFACE COURSE AND FINAL PAVEMENT MARKINGS. PLACEMENT OF THE SURFACE COURSE AND FINAL PAVEMENT MARKINGS SHALL BE RESTRICTED TO NIGHTTIME HOURS BETWEEN 9PM - 6AM. DURING PLACEMENT OF THE FINAL SURFACE COURSE, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE ODOT STANDARD CONSTRUCTION DRAWING MT-95.30. DURING FINAL PAVEMENT MARKING OPERATIONS, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-99.60

THE PROPOSED SIGNAGE SHALL BE CONSTRUCTED. DURING THIS OPERATION, ALL FINAL PROPOSED TRAFFIC PATTERNS SHALL BE MAINTAINED AND THE SHOULDERS SHALL BE CLOSED IN ACCORDANCE WITH THE ODOT STANDARD CONSTRUCTION DRAWING MT-95.45. DURING THE ERECTION OF THE OVERHEAD SIGN TRUSSES, ALL LANES OF MAINLINE TRAFFIC MAY BE CLOSED FOR SHORT DURATIONS BETWEEN MIDNIGHT - 5AM, PER ODOT SCD MT-99.60.

ITEM 614 - MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

- 1. A MINIMUM OF 3 LANES OF TRAFFIC IN EACH DIRECTION ON THE FREEWAY SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.
2. ONLY DURING OFF-PEAK PERIODS (IE ANY PERIOD SPECIFIED IN THE LATEST AVAILABLE PERMITTED LANE CLOSURE SHCHEDULE (PLCS)) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
3. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
4. ALL SIGNS, BARRICADES, SIGN SUPPORTS, DRUMS, FLAGGERS, WORK ZONE TRAFFIC SIGNALS AND INCIDENTALS FOR TRAFFIC CONTROL SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN CONFORMANCE WITH THE MOST RECENT REVISIONS, CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD). ALL SIGNS USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE NEW OR LIKE NEW CONDITION SUBJECT TO THE APPROVAL OF THE ENGINEER. DEVICES USED TO MAINTAIN TRAFFIC SHALL BE REMOVED IMMEDIATELY AFTER THE TERMINATION OF SAID WORK. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.
5. ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE ODOT STANDARD CONSTRUCTION DRAWING MT-101.80 SHALL BE PAID FOR UNDER ITEM 614 - MAINTAINING TRAFFIC.
6. FOR WORK WHICH IS CONFINED TO THE SHOULDER, TRAFFIC CONTROL SHALL CONFORM TO FIGURES TA-1, TA-3, TA-4, AND TA-6 OF THE OMUTCD AND SCD MT-95.45. IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS AND PROVISIONS OF THE OMUTCD AND FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER HAS THE AUTHORITY TO SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

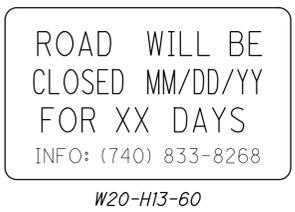
ITEM 614 - MAINTAINING TRAFFIC (CONT.)

7. NOTICE OF CLOSURE SIGNS, W20-H13, SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE table with columns: ITEM, DURATION OF CLOSURE, SIGN DISPLAY TO PUBLIC, NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN SHALL DISPLAY THE PHONE NUMBER OF THE DISTRICT 6 PUBLIC INFORMATION CONSTRUCTION LINE, (740) 833-8268, WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION.



8. NO FULL DEPTH BRIDGE RECONSTRUCTION SHALL BE PERFORMED OVER AN OPEN LANE. A SAFETY NET OR PLATFORM SHALL BE REQUIRED TO PROTECT THE ROADWAY DURING THE REMOVAL OF THE EXISTING CONCRETE PARAPET AND DECK. THE CONTRACTOR SHALL PROVIDE A SAFETY NET OR PLATFORM OF SUITABLE STRENGTH ON THE UNDERSIDE OF THE DECK. THE DESIGN OF THE NET OR PLATFORM SHALL CONFORM WITH OSHA REQUIREMENTS AND MEET THE REQUIREMENTS OF C&MS 501.05 AND SHALL REMAIN IN PLACE UNTIL THE WORK HAS BEEN COMPLETED AND ACCEPTED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN AND SAFETY NET OR PLATFORM DESIGN THAT MEETS THE REQUIREMENTS OF C&MS 501.05. THE SUBMITTAL SHALL BE IN WRITING TO THE DISTRICT CONSTRUCTION ADMINISTRATOR WITH A COPY TO THE PROJECT ENGINEER.

ALL LANES OF TRAFFIC BELOW THE RECONSTRUCTED BRIDGES SHALL BE OPENED TO TRAFFIC AT ALL TIMES WITH THE FOLLOWING EXCEPTIONS:

- (A.) DECK REMOVAL, FALSEWORK ERECTION AND REMOVAL, REPAIR OF PARAPET, AND/OR REPAIR/PAINTING OF STRUCTURAL STEEL
STRUCTURE FRA-70-1405C AND FRA-033-1747C: ALL WORK ON THIS BRIDGE WHICH REQUIRES LANE CLOSURES BELOW ON I-70/I-71 SHALL ONLY BE PERMITTED WHEN THE LANES BELOW ARE CLOSED DURING PHASES 1, 2 AND 3 PER THE DETAILED PLANS.
(B.) SHORT DURATION CLOSURE NOTES:
(1.) CLOSURES SHALL ONLY BE PERMITTED FOR THE REMOVAL AND ERECTION OF THE BEAMS.
(2.) CLOSURES SHALL ONLY BE PERMITTED BETWEEN MIDNIGHT AND 5 AM. ANY OTHER NON-PEAK TIMES SHALL BE APPROVED BY THE ENGINEER.
(3.) CLOSURES SHALL BE IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING MT-99.60.

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

ITEM 614 - MAINTAINING TRAFFIC (CONT.)

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

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

Table with columns: DAY OF HOLIDAY OR SPEC. EVENT, TIME ALL LANES MUST BE OPEN TO TRAFFIC

SPECIAL EVENTS

OHIO STATE FAIR - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 11TH AVENUE AND 17TH AVENUE ARE NOT PERMITTED DURING FAIR HOURS FROM 2 HOURS PRIOR TO GATES OPENING TO 2 HOURS FOLLOWING THE END OF THE LAST EVENT INCLUDING BUT NOT LIMITED TO RELATED CONCERTS.

HISTORIC CREW STADIUM EVENTS WITH EXPECTED ATTENDANCE OVER 10,000 - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 11TH AVENUE, 17TH AVENUE, AND HUDSON STREET ARE NOT PERMITTED FROM 2 HOURS PRIOR TO THE START OF THE EVENT (INBOUND AND OUTBOUND) TO 2 HOURS FOLLOWING THE CONCLUSION OF THE EVENT (OUTBOUND ONLY).

OSU HOME FOOTBALL GAME DAYS - LANE, RAMP OR SHOULDER CLOSURES ARE NOT PERMITTED FROM 3 HOURS PRIOR TO KICKOFF TO 3 HOURS FOLLOWING THE CONCLUSION OF THE GAME.

GOOD GUYS NATIONAL & QUARTERHOUSE CONGRESS - LANE AND SHOULDER CLOSURES ON I-71 BETWEEN I-70 AND SR 161 AND RAMP CLOSURES TO AND FROM 17TH AVENUE ARE NOT PERMITTED DURING SCHEDULED EVENT HOURS INCLUDING 2 HOURS PRIOR TO SCHEDULED EVENT HOURS.

RED, WHITE & BOOM - DURING THE SCHEDULED EVENT HOURS (12PM ON JULY 3 TO 1AM ON JULY 4) NO WORK SHALL BE PERFORMED AND ALL AVAILABLE LANES SHALL BE OPEN TO TRAFFIC. ALSO, NO CONSTRUCTION ACTIVITY SHALL OCCUR ONE DAY PRECEDING THE EVENT ON THE LOWER SCIOTO BIKEWAY, DODGE PARK AND SCIOTO AUTUBON METRO PARK.

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

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

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

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 SEPERATELY ITEMIZED IN THE PLAN.

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/ RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED ON THIS SHEET. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF CRITICAL WORK.

Table with columns: NO., DESCRIPTION, REV. BY, DATE

CALCULATED
DSM
CHECKED
AKF

MAINTENANCE OF TRAFFIC NOTES

FRA-70-14.05

41
855

01:29:15:2015:02:15:5776:FRA-70-14.05:15:01:AM:000TV81STD:USER

ITEM 614 - MAINTAINING TRAFFIC (CONT.)

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE.

LANE VALUE CONTRACT TABLE			
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
3 LANES OF IR 70/71 FROM 13MM TO 15MM	11 PM - 5 AM	PER MIN./ PER LANE	\$390
RAMP Q4 - RAMP FROM E. MAIN ST.	11 PM - 5 AM	PER MIN./ PER LANE	\$65
RAMP Q1 - I-71 SOUTH	11 PM - 5 AM	PER MIN./ PER LANE	\$495
RAMP N4 - I-71 NORTH	11 PM - 5 AM	PER MIN./ PER LANE	\$495
RAMP N1 - RAMP TO PARSONS	11 PM - 5 AM	PER MIN./ PER LANE	\$30
RAMP C5 TO I-70E	PRIOR TO PHASE 3, AFTER PHASE 4B	PER MIN./ PER LANE	\$1,090

ITEM 614 - MAINTAINING TRAFFIC (CITY TRAFFIC COLUMBUS)

THE FOLLOWING NOTES ARE APPLICABLE TO CITY STREETS ONLY:

ALL TEMPORARY TRAFFIC CONTROL DEVICES (TTC) SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) FOR CONSTRUCTION AND MAINTENANCE OPERATIONS (LATEST EDITION). COPIES ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, 1980 WEST BROAD STREET, COLUMBUS OHIO 43223. ALL DEVICES SHALL COMPLY, FOR CONDITION AND LOCATION, WITH THE CURRENT EDITION OF THE NCHRP 350 CRASH TESTING GUIDELINES.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE TRANSPORTATION DIVISION INSPECTOR. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND THE REMOVAL OF CONFLICTING TRAFFIC CONTROLS, THEIR PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

A FLASHING ARROW PANEL (48" X 96"-TYPE C) SHALL BE USED IN LANE CLOSURES AS PER THE OHIO MANUAL.

ALL TRENCHES WITHIN THE ROAD RIGHT-OF-WAY SHALL BE BACKFILLED DURING NON-WORKING HOURS.

ACCESS FOR PEDESTRIAN AND VEHICULAR TRAFFIC TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

THE TRANSPORTATION DIVISION SHALL LOCATE AND MARK ALL UNDERGROUND TRAFFIC CONTROL CABLES. THE TRAFFIC ENGINEERING GROUP SHALL BE NOTIFIED (614-645-7393; FAX 614-645-5967) AT LEAST TWO WORKING DAYS PRIOR TO THE BEGINNING OF ANY WORK WITHIN 450 FEET OF ANY SIGNALIZED INTERSECTION OR WITHIN ANY POSTED AREA WHERE THE DIVISION HAS UNDER-GROUND CABLE. THE SIGNALS MANAGEMENT PERSONNEL (614-645-0423; CELL 614-419-4501) SHALL BE NOTIFIED SIX WEEKS IN ADVANCE FOR SIGNAL REVISIONS OR POLE RELOCATIONS.

NO EXCAVATION SHALL BE MADE WITHIN FIVE (5) FEET OF ANY POLE THAT SUPPORTS TRAFFIC SIGNAL DISPLAYS OR SIGNS BY MAST ARM OR SIGNAL SPAN. EXCAVATION WITHIN EIGHT (8) FEET, BUT MORE THAN FIVE (5) FEET SHALL REQUIRE ADDITIONAL SUPPORT (DOWN GUY, HEAD GUY, BASE GUY ETC.). THE CONTRACTOR SHALL CONTACT TRANSPORTATION DIVISION SIGNALS MANAGEMENT PERSONNEL AT 614-645-0423 AT LEAST 48 HOURS (EXCLUDING SATURDAY AND SUNDAY) PRIOR TO THE BEGINNING OF SUCH EXCAVATION, SO THAT THE CITY CAN APPROVE THE STABILIZATION SETUP BY THE CONTRACTOR. STABILIZATION WILL BE DONE BY THE CONTRACTOR AT THE OWNER'S/CONTRACTING AGENCY'S EXPENSE.

ITEM 614 - MAINTAINING TRAFFIC (CITY TRAFFIC COLUMBUS) (CONT.)

WHEN ANY TRAFFIC CONTROL DEVICE, CONDUIT, OR CABLE GETS DAMAGED, THE CONTRACTOR SHALL NOTIFY CITY SIGNALS MANAGEMENT PERSONNEL AT 614-645-7963 BETWEEN 8:00AM AND 4:30PM, MONDAY THROUGH FRIDAY. AT OTHER TIMES OR IF SIGNAL MANAGEMENT PERSONNEL CANNOT BE REACHED, CONTACT TRAFFIC ENGINEERING MAINTENANCE SHOP AT 614-645-7393. LEAVE A MESSAGE ON THE ANSWERING MACHINE IF NECESSARY.

THE ROADWAY SHALL NOT BE OPENED TO NON-CONSTRUCTION TRAFFIC UNTIL THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS APPROVED BY THE ENGINEER, ARE INSTALLED. THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE STOP, YIELD, ONE-WAY, DO NOT ENTER AND RESTRICTED TURN SIGNS. OTHER CRITICAL SIGNS MAY BE NOTED IN THE PLANS AS WELL. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.

THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED OR COVERED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED OR IMPROPERLY PLACED SIGNS.

ALL OVERHEAD CABLE, DOWN GUYS OR BACK GUYS SHALL NOT BLOCK ANY PORTION OF A TRAFFIC SIGNAL, TRAFFIC CONTROL SIGN, OR OTHER TRAFFIC CONTROL DEVICE SUCH THAT VISIBILITY OR OPERATION OF THE TRAFFIC CONTROL DEVICE IS IMPAIRED.

ANY WORK PERFORMED BY THE CITY TRANSPORTATION DIVISION, INCLUDING INSTALLATION, RELOCATIONS, REMOVAL AND/OR REPLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLATION AND/OR REPLACEMENT OF ALL PERMANENT TRAFFIC CONTROL DEVICES DAMAGED OR REMOVED DURING CONSTRUCTION. PERMANENT TRAFFIC CONTROL NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE REPLACED IMMEDIATELY.

PERMANENT STRIPING OR CLASS I WORK ZONE STRIPING SHALL BE INSTALLED NO LATER THAN FOURTEEN (14) CALENDAR DAYS AFTER THE FINAL PAVING COURSE IS COMPLETED. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE STRIPING CONTRACTOR TO INSURE THE PERMANENT STRIPING IS INSTALLED WITHIN THE FOURTEEN (14) CALENDAR DAY LIMIT.

IF ANY PORTABLE SIGN STANDS ARE LOCATED WITHIN A PEDESTRIAN TRAFFIC AREA DRUMS SHALL BE UTILIZED TO PROTECT AGAINST TRIP HAZARDS. A MINIMUM OF TWO DRUMS PER PORTABLE SIGN STAND SHALL BE USED.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS (CITY TRAFFIC COLUMBUS)

A) PROPOSED TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PROPOSED TRAFFIC SIGNAL DEVICES UNDER THE FOLLOWING CONDITIONS FROM THE TIME OF INSTALLATION UNTIL THE DEVICE HAS BEEN ACCEPTED BY THE TRANSPORTATION DIVISION.

THE CONTRACTOR SHALL PROVIDE ONE OR TWO CONTACT PERSONS WHO CAN RECEIVE ALL DEVICE OUT-OF-SERVICE CALLS THAT FALL UNDER THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL DISPATCH MAINTENANCE PERSONNEL TO CORRECT THE PROBLEM. THE CONTRACTOR SHALL PROVIDE THIS DIVISION AND THE PROJECT ENGINEER WITH ADDRESSES AND PHONE NUMBERS OF THESE CONTACT PERSONS. MAINTENANCE PERSONNEL MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS CONTINUOUSLY AVAILABLE TWENTY-FOUR (24) HOURS A DAY AND SEVEN (7) DAYS A WEEK. THE CONTRACTOR SHALL PROVIDE MAINTENANCE SERVICE ENTIRELY WITH HIS PERSONNEL.

THE CONTRACTOR SHALL CORRECT ALL BULB OUTAGES, DEVICE MALFUNCTIONS OF ANY TYPE, INTERNAL CABINET POWER LOSSES, SPAN OR CABLE PROBLEMS AND MISALIGNED OR DAMAGED VEHICULAR OR PEDESTRIAN SIGNAL HEADS WITHIN TWO (2) HOURS AFTER THE CONTRACTOR'S CONTACT PERSON HAS BEEN NOTIFIED OF ANY ONE OF THE ABOVE. IN THE EVENT A NEW SIGNAL DEVICE IS DAMAGED PRIOR TO ACCEPTANCE, THE DAMAGED DEVICE EXCEPT POLES SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THIS DIVISION. ANY DAMAGED CABINET ASSEMBLY DEVICE IF REPAIRED SHALL BE TESTED ONCE AGAIN BY THIS DIVISION BEFORE THE DEVICE CAN BE INSTALLED.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS (CITY TRAFFIC COLUMBUS) (CONT.)

IN THE EVENT OF A LOSS OF POWER TO THE SIGNAL INDICATIONS OTHER THAN AN ELECTRIC COMPANY GENERAL POWER OUTAGE, THE CONTRACTOR AT HIS EXPENSE SHALL IMMEDIATELY TAKE ACTION (WITHIN 30 MINUTES) TO PROPERLY ERECT TEMPORARY STOP SIGN(S) AND PROVIDE POLICE OFFICER(S) TO DIRECT TRAFFIC UNTIL THE SIGNAL IS BACK ON "FLASH" OR OPERATING PROPERLY.

IF A TRAFFIC STRAIN/SUPPORT POLE OR PEDESTAL IS DAMAGED AND THAT DAMAGE CAUSED POLE INSTABILITY, THEN THE CONTRACTOR AT HIS EXPENSE SHALL TAKE IMMEDIATE ACTION (WITHIN 2 HOURS) TO STABILIZE IT. THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING A NEW UNDAMAGED POLE.

WHERE OUT-OF-SERVICE CALLS ARE THE DIRECT RESULT OF A VEHICULAR ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COLLECTION OF ANY COMPENSATION FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE TO THE CONTRACTOR'S MATERIALS.

WHERE THE CONTRACTOR HAS FAILED TO RESPOND OR CANNOT RESPOND TO AN OUT-OF-SERVICE CALL WITHIN THE TIME PERIOD SPECIFIED ABOVE AT LOCATIONS UNDER HIS RESPONSIBILITY, THIS DIVISION MAY TAKE ACTION AS IT DEEMS NECESSARY TO CORRECT THE SITUATION. THIS ACTION MAY INCLUDE CONTROLLING THE INTERSECTION USING COLUMBUS POLICE OFFICERS, COMPLETELY REMOVING OR REPLACING ANY MALFUNCTIONING TRAFFIC CONTROL DEVICE, AND/OR INSTALLING ANY DEVICE(S) REQUIRED TO RETURN THE INTERSECTION TO REGULAR SIGNAL OPERATION. ALL COSTS ASSOCIATED WITH THESE ACTIONS SHALL BE BILLED DIRECTLY TO THE CONTRACTOR AND NOT INCLUDED IN ITEM 614 MAINTAINING TRAFFIC.

ANY NON-OPERATING VEHICULAR OR PEDESTRIAN SIGNAL HEAD OR PUSHBUTTON SHALL BE COVERED AS REFERENCED TO IN THESE PLANS. ALL SIGNAL HEADS WHILE COVERED SHALL BE DARK BY DISCONNECTING POWER TO THE SIGNAL INDICATIONS. NO COVERED HEAD SHALL BLOCK THE VIEW OF AN OPERATING HEAD. A MINIMUM OF TWO (2) VEHICULAR SIGNAL HEADS PER TRAVELLED DIRECTION (SPACED 8' APART MINIMUM AND 12' MAXIMUM) SHALL BE OPERATING AT ALL TIMES. NO EXCEPTIONS!

B) TEMPORARY CONTROLLER OR TRAFFIC SIGNALS

IN ADDITION TO ITEM 614.10, THE FOLLOWING SHALL APPLY.

IF THE CONTRACTOR IS REQUIRED TO ERECT AND/OR INSTALL ANY TEMPORARY TRAFFIC CONTROL DEVICE OR TEMPORARY SIGNAL/SUPPORT POLE THAT IS NOT SPECIFIED IN THESE PLANS, THEN THE CONTRACTOR SHALL SUBMIT THE DESIGN CHANGE TO THE CITY OF COLUMBUS, TRANSPORTATION DIVISION, FOR APPROVAL PRIOR TO THEIR INSTALLATION. THIS DIVISION ALSO RESERVES THE RIGHT TO MAKE OR HAVE THE CONTRACTOR MAKE CHANGES TO THE TRAFFIC SIGNAL OPERATION.

IF THE CONTRACTOR NEEDS TO INSTALL A TEMPORARY CONTROLLER AND/OR A TSI CABINET ASSEMBLY AT ANY INTERSECTION, THEN THE EQUIPMENT SHALL MEET NEMA STANDARDS TSI-1989 OR TS2-1998 (TYPE 2) AND SHALL BE APPROVED BY THE CITY OF COLUMBUS, TRANSPORTATION DIVISION.

C) EXISTING TRAFFIC SIGNAL DEVICES

THE CITY OF COLUMBUS, TRANSPORTATION DIVISION (ELECTRONICS MAINTENANCE SHOP 614-645-7933), SHALL PERFORM ROUTINE MAINTENANCE ON ALL EXISTING CABINET ASSEMBLY ITEMS ONLY. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL OTHER EXISTING TRAFFIC SIGNAL DEVICES ONCE ANY PROJECT SIGNAL WORK HAS STARTED. IF, IN THE COURSE OF WORK, THE GENERAL CONTRACTOR OR ANY PROJECT SUB-CONTRACTOR CAUSES DAMAGE TO ANY EXISTING TRAFFIC SIGNAL DEVICE OTHER THAN THE CABINET ASSEMBLY, THEN THE CONTRACTOR AT THE CONTRACTOR'S COST SHALL REPAIR AND/OR REPLACE THE DAMAGED DEVICE TO THE SATISFACTION OF THIS DIVISION. DAMAGE TO THE CABINET ASSEMBLY BY ANY PROJECT CONTRACTOR SHALL BE REPAIRED BY THIS DIVISION AND BILLED TO THE GENERAL CONTRACTOR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS, EXCEPT AS NOTED, SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

D) TEMPORARY SIGNALS DUE TO MATERIAL DELIVERY DELAYS

IN THE EVENT THAT PROPOSED SIGNAL ERECTION IS DELAYED DUE TO DELAYED MATERIAL DELIVERY, THE CONTRACTOR SHALL ERECT A TEMPORARY SIGNAL AS APPROVED BY THE CITY OF COLUMBUS. ALL MATERIAL, LABOR, AND INCIDENTALS FOR THE REQUIRED TEMPORARY SIGNAL SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE PROJECT OR CITY OF COLUMBUS.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS (CITY TRAFFIC COLUMBUS) (CONT.)

IF THE CONTRACTOR IS REQUIRED TO ERECT AND/OR INSTALL ANY TEMPORARY TRAFFIC CONTROL DEVICE OR TEMPORARY SIGNAL/SUPPORT POLE THAT IS NOT SPECIFIED IN THESE PLANS, THEN THE CONTRACTOR SHALL SUBMIT THE DESIGN CHANGE TO THE CITY OF COLUMBUS, TRANSPORTATION DIVISION, FOR APPROVAL PRIOR TO THEIR INSTALLATION. THIS DIVISION ALSO RESERVES THE RIGHT TO MAKE OR HAVE THE CONTRACTOR MAKE CHANGES TO THE TRAFFIC SIGNAL OPERATION.

IF THE CONTRACTOR NEEDS TO INSTALL A TEMPORARY CONTROLLER AND/OR A TSI CABINET ASSEMBLY AT ANY INTERSECTION, THEN THE EQUIPMENT SHALL MEET NEMA STANDARDS TSI-1989 OR TS2-1998 (TYPE 2) AND SHALL BE APPROVED BY THE CITY OF COLUMBUS, TRANSPORTATION DIVISION.

ITEM 614 - WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES WHICH ARE NOT PROTECTED BY GUARDRAIL OR PORTABLE BARRIER SHALL BE LOCATED OUTSIDE THE CLEAR ZONE, AND SHOULD BE LOCATED AT LEAST 30 FEET (PREFERABLY 40 FEET) FROM THE EDGE OF PAVEMENT WHEN POSSIBLE. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

ITEM 614 - WORK ZONE CROSSOVER LIGHTING SYSTEM 2 EACH

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKERS ON PERMANENT CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON PERMANENT CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF PROVIDING, MAINTAINING, AND SUBSEQUENTLY REMOVING ROADS AND APPURTENANCES, AND PAVEMENTS FOR MAINTAINING TRAFFIC, PER ODOT CMS 615.

PART 1 AND PART 2 MAINTENANCE OF TRAFFIC SEQUENCE

THE CONTRACTOR SHALL REFERENCE THE PART 1 PLANS FOR THE OVERALL MOT SEQUENCING TABLE BETWEEN THE PART 1 AND PART 2 MOT PLANS.

NO.	DESCRIPTION	REV. BY	DATE
9	REVISED SPECIAL EVENTS	CWL	12-2-23

ITEM 614 - WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE R11-H5a-48 SIGN SHALL BE MOUNTED ON 2 NO. 3 POSTS LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 10 EACH

ITEM 614 - DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01 UNLESS OTHERWISE SPECIFIED IN THE PLANS.

DETOUR SIGNING SHALL PROVIDED DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.

- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.

- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.

- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.

- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).

- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.

- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.

- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS, AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - DETOUR SIGNING LS

ITEM 622 - PORTABLE BARRIER, UNANCHORED, AS PER PLAN

THE CONTRACTOR SHALL INSTALL GLARE SHIELDS ON PORTABLE BARRIER WITH OPPOSING TRAFFIC RUNNING ON EACH SIDE OF THE BARRIER.

THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622 - PORTABLE BARRIER, UNANCHORED, AS PER PLAN.

WEEKLY MAINTENANCE OF TRAFFIC MEETING

AFTER THE INITIAL PRE-MAINTENANCE OF TRAFFIC MEETING, THE CONTRACTOR SHALL MEET WITH THE PROJECT ENGINEER ON A WEEKLY BASIS TO GO OVER A DETAILED MAINTENANCE OF TRAFFIC REPORT OF AT LEAST 7 CALENDAR DAYS. THIS MEETING SHOULD BE HELD ON THE SAME DAY AND TIME OF EACH WEEK.

THE CONTRACTOR WILL PROVIDE TO THE PROJECT ENGINEER A WRITTEN DETAIL OF THE INFORMATION REQUIRED BY THE NOTIFICATION OF TRAFFIC RESTRICTIONS NOTE PRIOR TO THE MEETING.

IN ADDITION TO THE DETAILED MAINTENANCE OF TRAFFIC REPORT THE CONTRACTOR SHALL GIVE A GENERAL LOOK AHEAD OF AN ADDITIONAL 2 WEEKS OF UPCOMING WORK ACTIVITIES. THIS WILL INCLUDE ANY NOTIFICATION REQUIREMENTS FOR RESTRICTIONS THAT HAVE A DURATION GREATER THAN 12 HOURS.

PRE-MAINTENANCE OF TRAFFIC MEETING

A PRE-MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD (MINIMUM 14 WORK DAYS) PRIOR TO WORK BEGINNING OR ANY CHANGE OF PHASING. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER (d06.mot@dot.ohio.gov) AS WELL AS THE CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL. FOR COLUMBUS SECTIONS OF ROADWAY, ALSO INCLUDE THE TEMPORARY CONTROL COORDINATOR (614-645-6269 OR 614-645-5845) FROM THE CITY OF COLUMBUS TRANSPORTATION DIVISION.

COORDINATION WITH ADJACENT PROJECTS

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS.

- FRA-70/71-12.68/14.86 PROJECT 4R PART 1 (PID 105523)
- FRA-71-14.36 PROJECT 6R PART 2 (PID 105523)

COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, NON-COMPENSABLE DELAY PER 108.06.B. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT AND WORKSITE TRAFFIC SUPERVISOR (WTS), AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM

ESTIMATED QUANTITIES

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR TEMPORARY PAVEMENT MARKINGS PLACED ON THE PROPOSED SURFACE COURSE IN THE PERMANENT TRAFFIC PATTERN PRIOR TO THE INSTALLATION OF THE PERMANENT PAVEMENT MARKINGS. TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED PER THE REQUIREMENTS OF 614.11, AS DIRECTED BY THE ENGINEER.

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	<u>6.24</u> MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	<u>4.46</u> MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	<u>5427</u> FT
ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	<u>8872</u> FT
ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT	<u>80</u> FT
ITEM 614 - WORK ZONE ARROW, CLASS III, 642 PAINT	<u>2</u> EACH

NO.	DESCRIPTION	DATE	REV. BY
5	ADDED NOTE	AKF	11-1-23
9	REVISED NOTE	CWL	12-2-23

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC.
CLASS B, APP. TYPE 1:
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC.
CLASS B, APP. TYPE 2:
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC.
CLASS B, APP. TYPE 3:
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC.
CLASS B, APP. TYPE 4:

THIS ITEM SHALL BE UTILIZED FOR THE PAVEMENT REPAIRS NEEDED DURING THIS CONSTRUCTION PROCESS. ALL AREAS TO BE REPAIRED SHALL BE LOCATED BY THE ENGINEER. IT IS LIKELY THAT REPAIRS WILL BE NEEDED PRIOR TO EACH PHASE SWITCH. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AS WELL AS ALL LONGITUDINAL SLOPES. THE TYPE OF REPAIR SHALL BE DETERMINED BY THE PROJECT ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR MAINTENANCE OF TRAFFIC FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

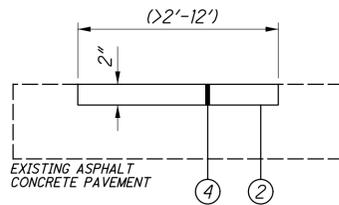
TYPE 1 - IS TO BE USED WHEN YOU NEED TO MILL & FILL AN AREA OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 2 FEET.

TYPE 2 - IS TO BE USED FOR FIXING THE LONGITUDINAL JOINT ISSUES OF VARYING LENGTH AND HAVE A CONSISTENT WIDTH OF 2 FEET.

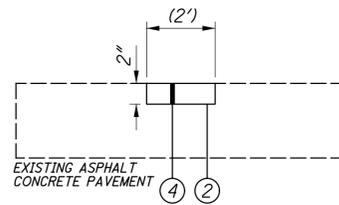
TYPE 3 - IS TO BE USED FOR DEEPER REPAIRS OF VARYING LENGTH AND WILL HAVE AN AVERAGE WIDTH OF NOT LESS THAN 4 FEET.

TYPE 4 - IS TO BE USED FOR COMPOSITE PAVEMENT REPAIRS OF VARYING LENGTH AND WILL HAVE AN AVERAGE WIDTH OF NOT LESS THAN 3 FEET.

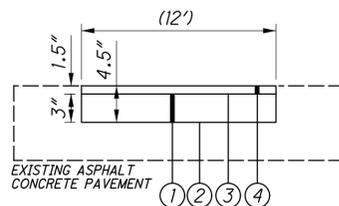
ALL COSTS ASSOCIATED WITH REMOVING AND REPLACING PAVEMENT AND TACK COAT FOR THE REPAIRS SHALL BE INCIDENTAL TO ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN.



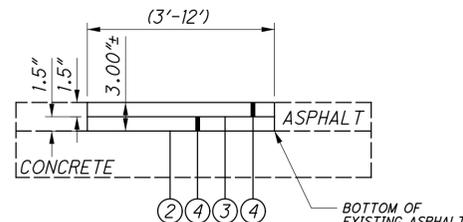
TYPE 1 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 1



TYPE 2 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 2



TYPE 3 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 3



TYPE 4 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 4

LEGEND:

- ① ITEM 301 - ASPHALT CONCRETE BASE, PG64-22
- ② ITEM 407 - TACK COAT @ 0.075 PER SQ. YD.
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE @ 0.05 PER SQ. YD.
- ④ ITEM 441 - TYPE 1 (AS DESCRIBED IN CMS 615.05)

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 1 = 200 S.Y.
 ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 2 = 200 S.Y.
 ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 3 = 200 S.Y.
 ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 4 = 200 S.Y.

MAINTENANCE OF TRAFFIC FOR MAKING PAVEMENT REPAIRS

PROVIDE LANE CLOSURES PER ALL APPLICABLE MAINTENANCE OF TRAFFIC STANDARD CONSTRUCTION DRAWINGS A MINIMUM OF 24 HOURS PRIOR TO PERFORMING PAVEMENT REPAIRS TO ALLOW THE ENGINEER TO IDENTIFY AND MARK THE AREAS OF THE PAVEMENT IN NEED OF REPAIRS

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, LEO HOURS, AND INCIDENTALS NEEDED TO PERFORM THE ABOVE LISTED WORK IS CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

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

APPROVED MOT EXCEPTION(S) INCLUDE:
 - CLOSURE OF 315SB TO 70EB FOR 4 YEARS IN TOTAL (3 YEARS FOR 77372 AND 1 YEAR PREVIOUSLY FOR 105523)
 - CLOSURE OF 70WB TO 315NB FOR 6 MONTHS IN TOTAL
 - MONITOR TRAFFIC CONDITIONS FOR POSSIBLE CONFIGURATION ADJUSTMENTS AT THE 670EB TO 71SB DETOUR RAMP

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

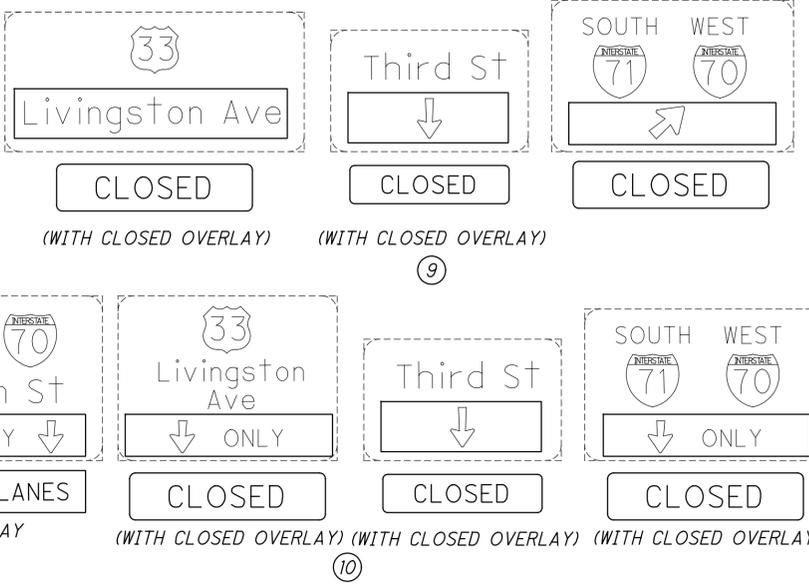
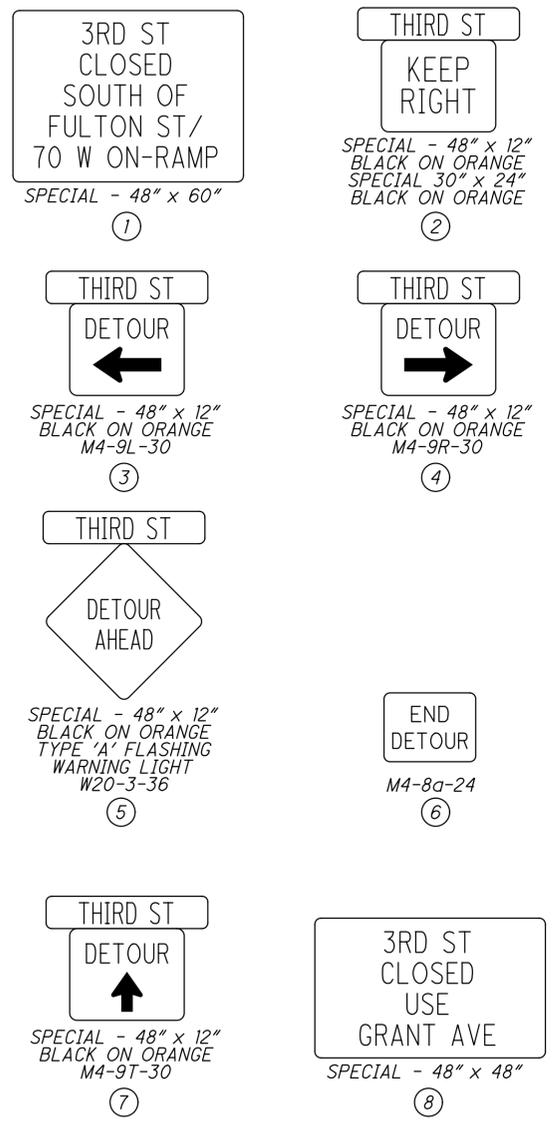
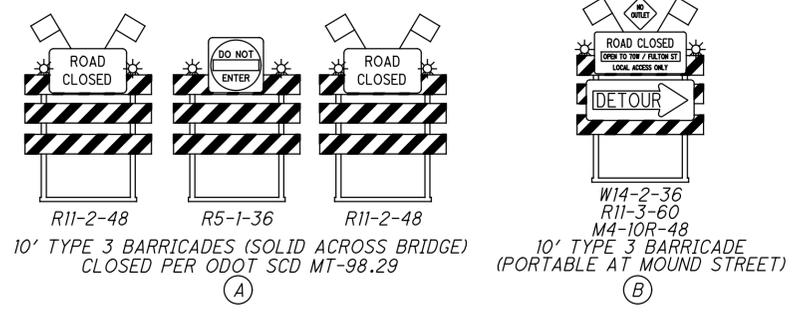
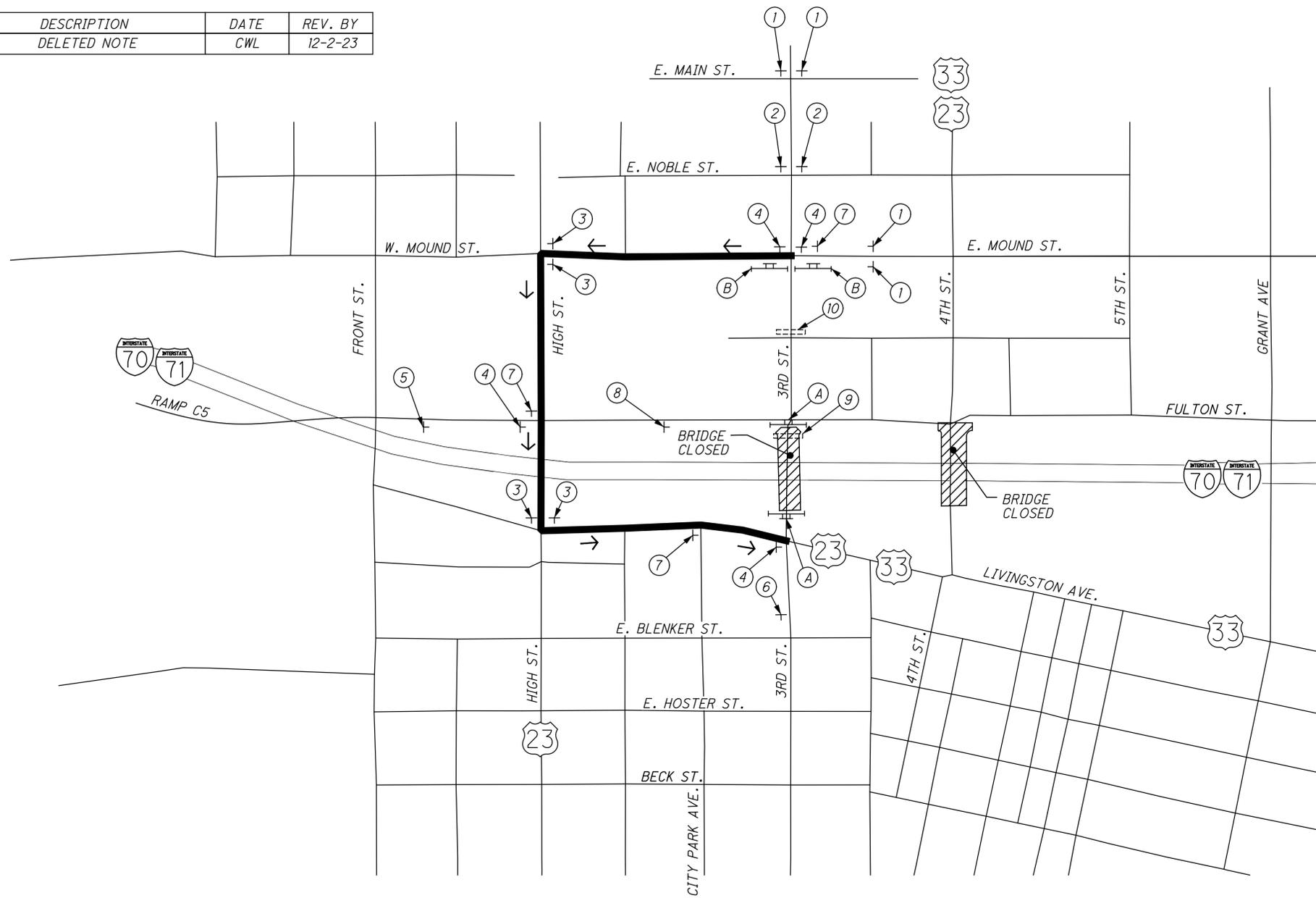
IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 1/24/23 FOR PID 77372" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

SUMMARY OF RAMP/ROAD CLOSURES				
MOT PHASE	STREET	LOCATION	MAX DURATION	DISINCENTIVE
1	FULTON/3RD ST RAMP	FULTON/3RD STREET INTERSECTION	PERMANENT	N/A
1 THRU 4B	3RD ST	3RD STREET BRIDGE	DURATION OF PROJECT	N/A
1 THRU 4B	4TH ST	4TH STREET BRIDGE	DURATION OF PROJECT	N/A
1, 4A, AND 4B	I-70/71	BETWEEN 315 & 70/71 INTERCHANGE AND EAST 70/71 INTERCHANGE	SEE TABLE ON THIS SHEET	***

BRIDGE DESCRIPTION	STRUCTURE #	WORK TYPE	DAYS	CLOSURE/DETOUR TIME***	# TIMES ALLOWED	DETOUR DETAILS ON SHEETS
3RD ST. BRIDGE	FRA-33-1747C	DEMOLITION	WEEKEND *	FRI 10PM - MON 5 AM	1**	69 - 72
		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5 AM	2**	
		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1	
		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1	
3RD ST. BRIDGE EAST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1	
3RD ST. BRIDGE WEST CAP		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1	
4TH ST. BRIDGE	FRA-23-1075C	DEMOLITION	WEEKEND *	FRI 10PM - MON 5 AM	1**	69 - 72
		BEAM ERECTION	WEEKEND *	FRI 10PM - MON 5 AM	1**	
		DECK POUR	NIGHTTIME CLOSURE	FRI 10PM - MON 5 AM	1	
*	THE CONTRACTOR MAY CHOOSE TO COMPLETE THIS WORK OVER THE COURSE OF NIGHTLY CLOSURES (MONDAY THRU SUNDAY) IN LIEU OF A WEEKEND CLOSURE. NIGHTLY CLOSURES SHALL TAKE PLACE BETWEEN 10PM AND 5AM.					
**	IF WORK IS PERFORMED VIA NIGHTLY CLOSURES, THE NUMBER OF CLOSURES REQUIRED SHALL BE APPROVED BY THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC.					
***	DISCINCENTIVES WILL BE ASSESSED PER LANE PER MINUTE AT THE RATES SHOWN IN THE LANE VALUE CONTRACT TABLE FOR ANY CLOSURE OUTSIDE OF THE CLOSURE/DETOUR TIMES					

NO.	DESCRIPTION	DATE	REV. BY
9	DELETED NOTE	CWL	12-2-23



NOTE:
CONTRACTOR TO BAG ALL CONFLICTING SIGNAL HEADS
AT THE 3RD/LIVINGSTON INTERSECTION.

FOR 4TH ST. DETOUR PLAN, SEE SHEET 68.



LEGEND	
+	SIGN
— —	TYPE 3 BARRICADE
▨	CLOSURE AREA
—	DETOUR ROUTE

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NO.	DESCRIPTION	DATE	REV. BY
9	DELETED NOTE	CWL	12-2-23

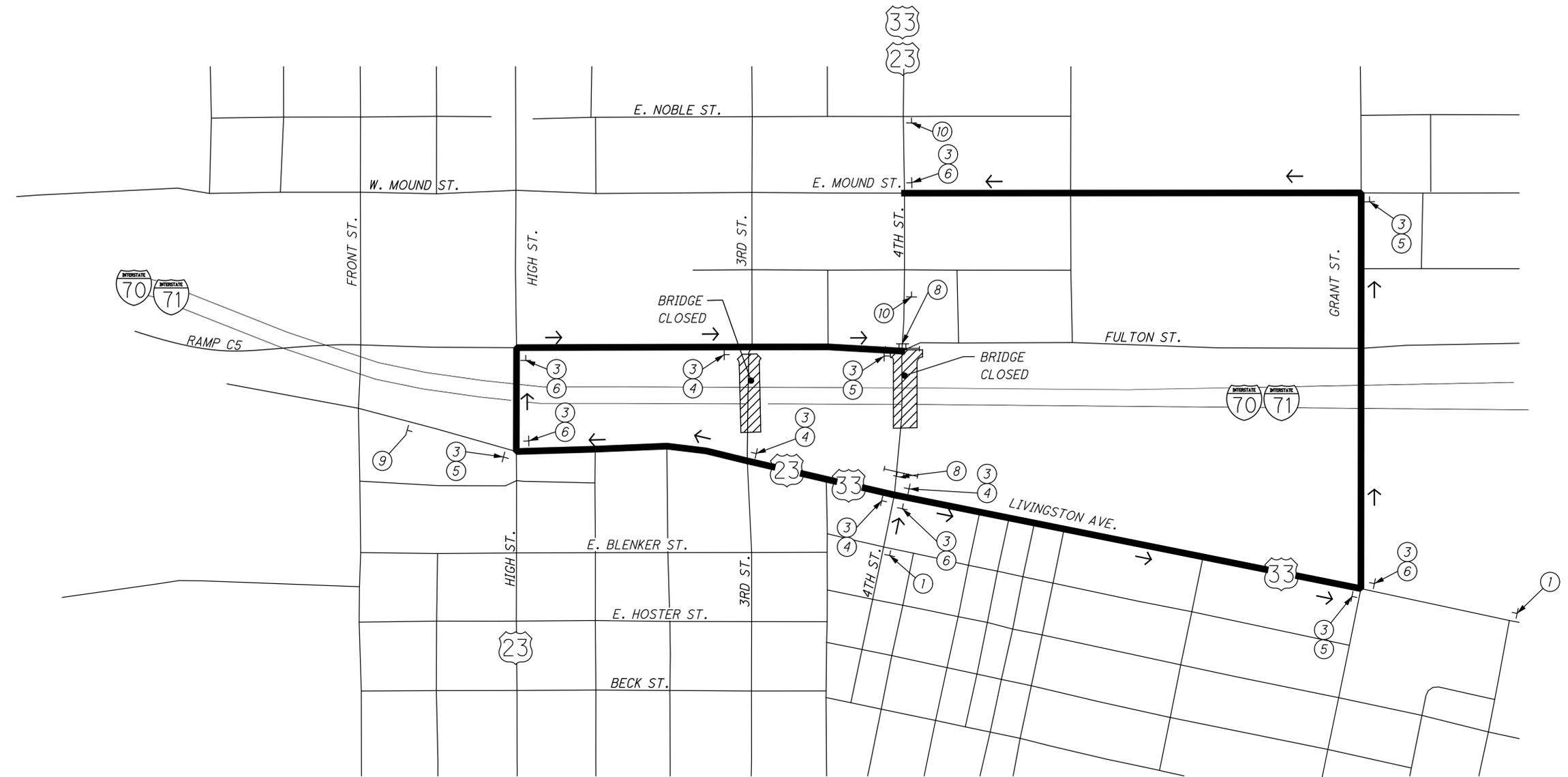


NOT TO SCALE

CALCULATED
MSS
CHECKED
KRM

4TH STREET DETOUR PLAN
PHASES 1-5

FRA-70-14.05



NOTE:
CONTRACTOR TO BAG ALL CONFLICTING SIGNAL HEADS
AT THE 4TH/LIVINGSTON INTERSECTION.



4TH ST
CLOSED AT
LIVINGSTON
USE GRANT
SPECIAL - 48" x 48"

①

FOURTH ST
SPECIAL - 36" x 12"

③

DETOUR
↑
M4-H9T-30

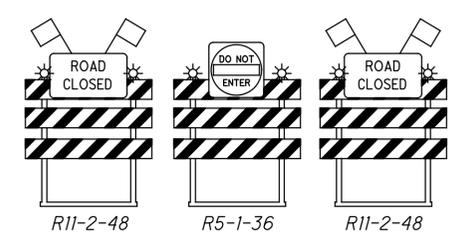
④

DETOUR
←
M4-9L-30

⑤

DETOUR
→
M4-9R-30

⑥



⑧

4TH ST
CLOSED AT
LIVINGSTON
USE HIGH ST.
SPECIAL - 48" x 48"

⑨

END
DETOUR
M4-8a-24
⑩



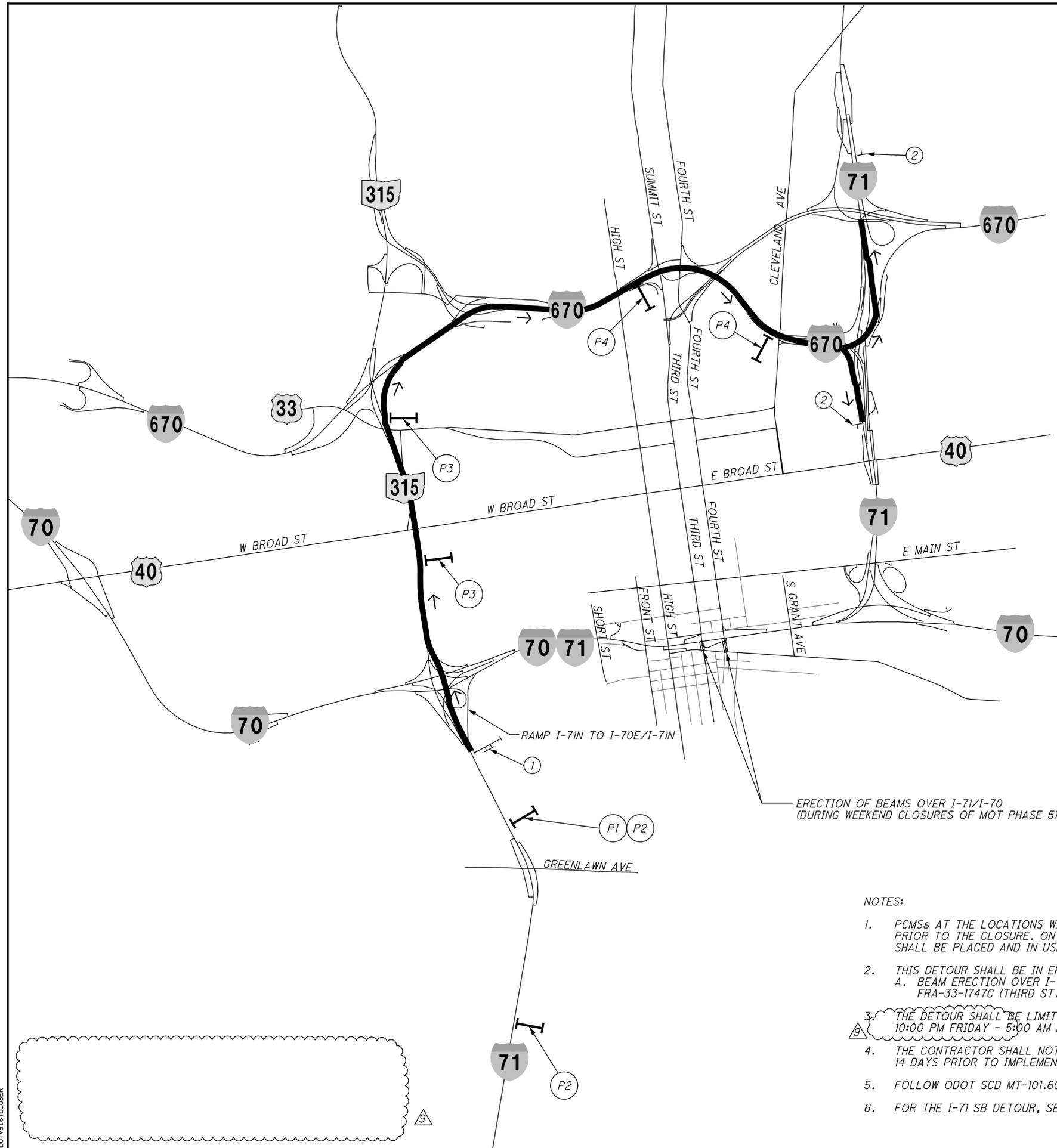
NOT TO SCALE

LEGEND	
↑	SIGN
▬	TYPE 3 BARRICADE
▨	CLOSURE AREA
—	DETOUR ROUTE

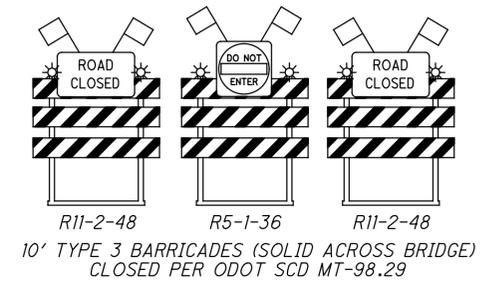
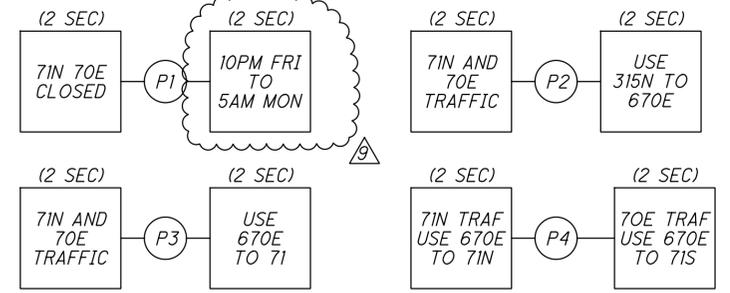
FOR 3RD ST. DETOUR PLAN, SEE SHEET 67.

01-2015-2015370 VFA 96053 NOT SHEETS 960530002.DGN
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MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



NO.	DESCRIPTION	DATE	REV. BY
9	DELETED NOTE / REV TIME	CWL	12-2-23

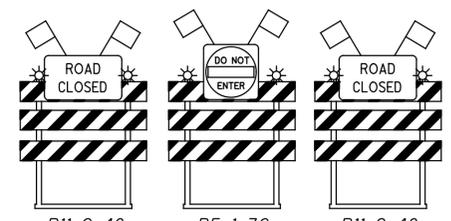
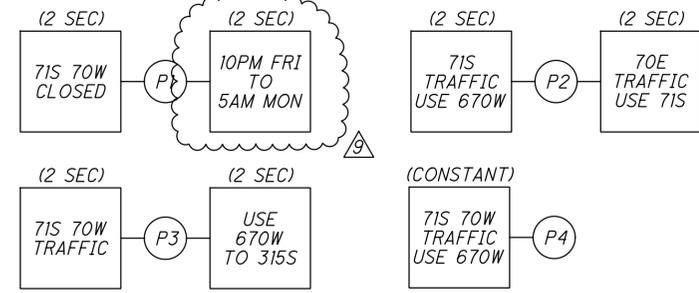
NOTES:

- PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
- THIS DETOUR SHALL BE IN EFFECT FOR THE CONSTRUCTION OF THE FOLLOWING:
 - BEAM ERECTION OVER I-70/I-71 FOR THE FOLLOWING STRUCTURES: FRA-33-1747C (THIRD ST.), FRA-23-1075C (FOURTH ST.).
- THE DETOUR SHALL BE LIMITED TO WEEKEND CLOSURES ONLY, 10:00 PM FRIDAY - 5:00 AM MONDAY.
- THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
- FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
- FOR THE I-71 SB DETOUR, SEE SHEET 70

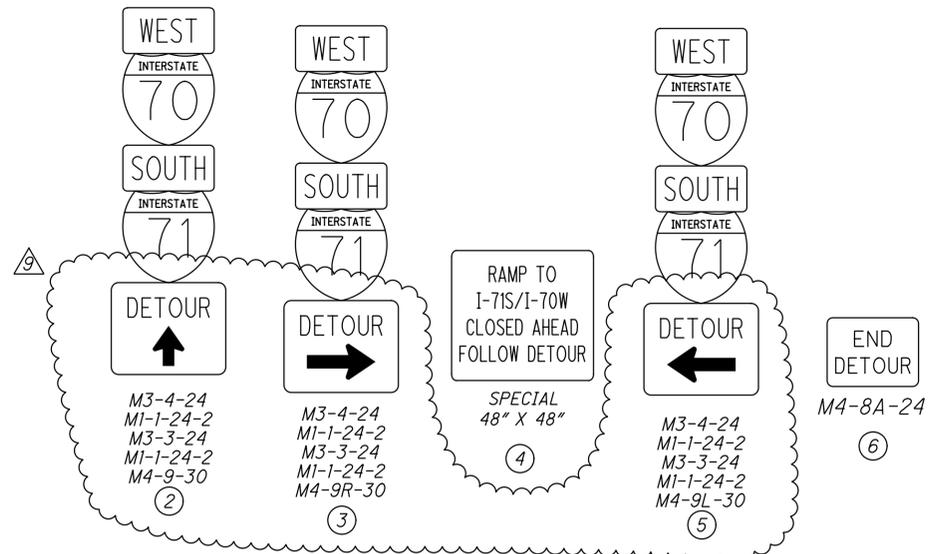
LEGEND	
	SIGN
	TYPE 3 BARRICADE
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	CLOSURE AREA
	DETOUR ROUTE

NO.	DESCRIPTION	DATE	REV. BY
9	DEL NOTE/REV TIME & SIGNS	CWL	12-2-23

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



10' TYPE 3 BARRICADES (SOLID ACROSS BRIDGE)
CLOSED PER ODOT SCD MT-98.29



NOTES:

- PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
- THIS DETOUR SHALL BE IN EFFECT FOR THE CONSTRUCTION OF THE FOLLOWING:
A. BEAM ERECTION OVER I-70/I-71 FOR THE FOLLOWING STRUCTURES:
FRA-33-1747C (THIRD ST.), FRA-23-1075C (FOURTH ST.).
- THE DETOUR SHALL BE LIMITED TO WEEKEND CLOSURES ONLY, 10:00 PM FRIDAY - 5:00 AM MONDAY.
- THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
- FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
- FOR THE I-71 NB DETOUR, SEE SHEET 69

ERECTION OF BEAMS OVER I-71 SB/I-70 WB (DURING WEEKEND CLOSURES)

LEGEND	
T	SIGN
	TYPE 3 BARRICADE
I	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
▨	CLOSURE AREA
—	DETOUR ROUTE



CALCULATED
DSM
CHECKED
KRM

MAINTENANCE OF TRAFFIC DETOUR - PHASE 1 - 4C
I-71S CLOSURE

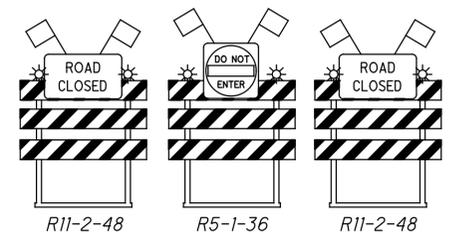
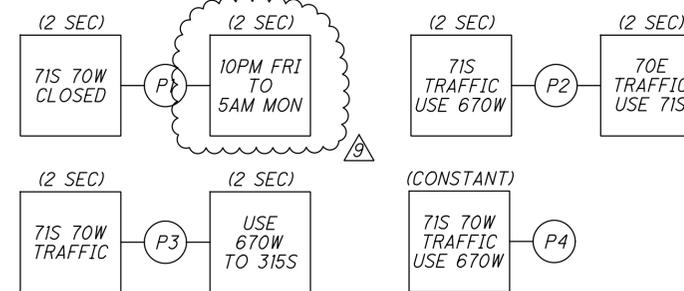
FRA-70-14.05



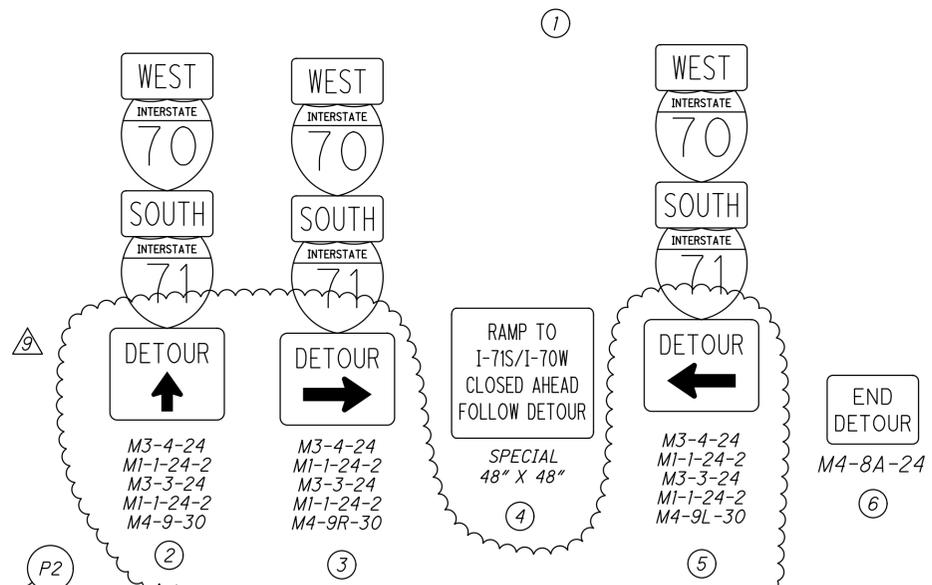
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NO.	DESCRIPTION	DATE	REV. BY
9	DEL NOTE/REV TIME & SIGNS	CWL	12-2-23

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



10' TYPE 3 BARRICADES (SOLID ACROSS BRIDGE) CLOSED PER ODOT SCD MT-98.29



NOTES:

- PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
- THIS DETOUR SHALL BE IN EFFECT FOR THE CONSTRUCTION OF THE FOLLOWING:
A. BEAM ERECTION OVER I-70/I-71 FOR THE FOLLOWING STRUCTURES:
FRA-33-1747C (THIRD ST.), FRA-23-1075C (FOURTH ST.).
- THE DETOUR SHALL BE LIMITED TO WEEKEND CLOSURES ONLY, 10:00 PM FRIDAY - 5:00 AM MONDAY.
- THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
- FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
- FOR I-70 EB DETOUR, SEE SHEET 72

ERECTION OF BEAMS OVER I-71 SB/I-70 WB (DURING WEEKEND CLOSURES)

LEGEND	
	SIGN
	TYPE 3 BARRICADE
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	CLOSURE AREA
	DETOUR ROUTE

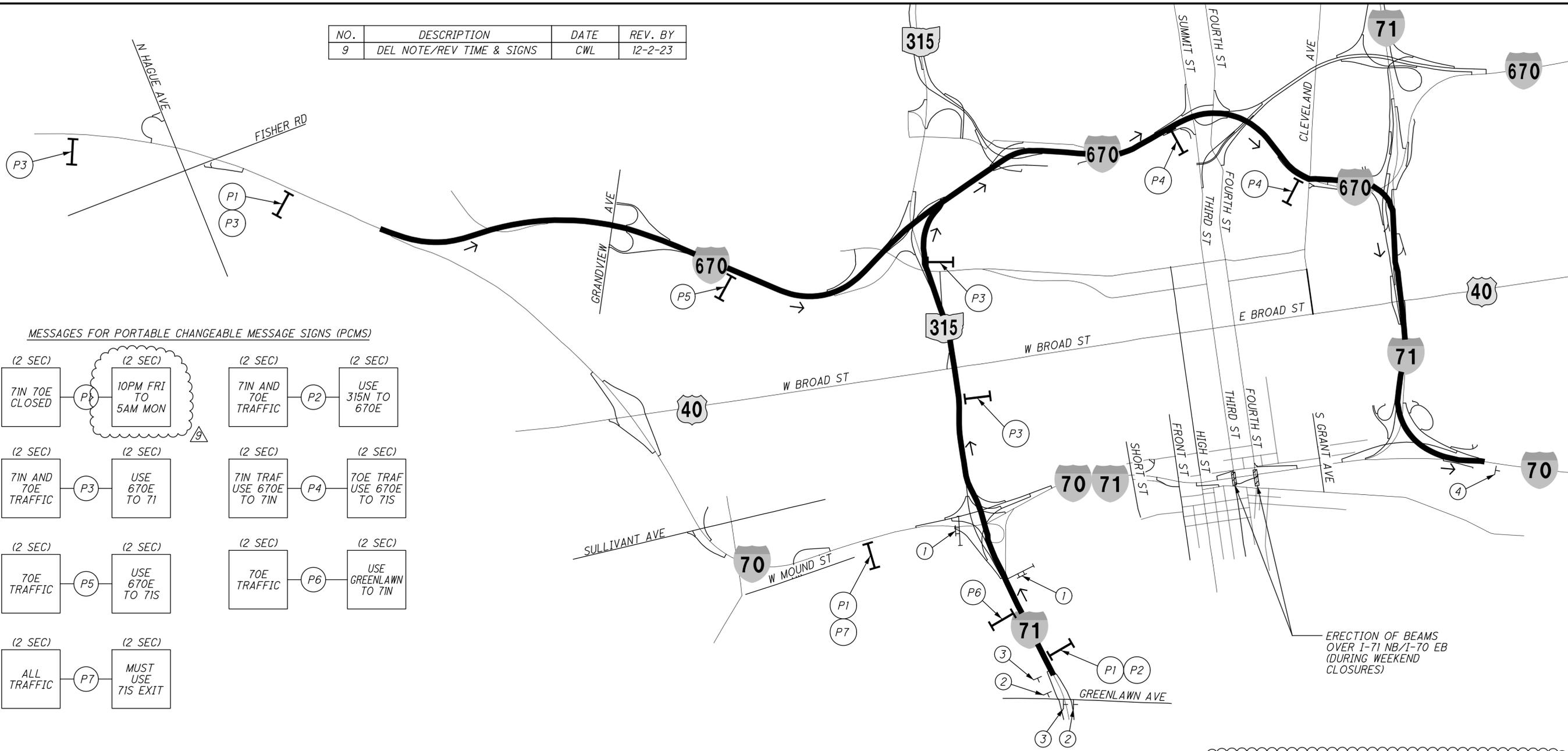
MAINTENANCE OF TRAFFIC DETOUR - PHASE 1 - 4C I-70W CLOSURE

FRA-70-14.05

71
855

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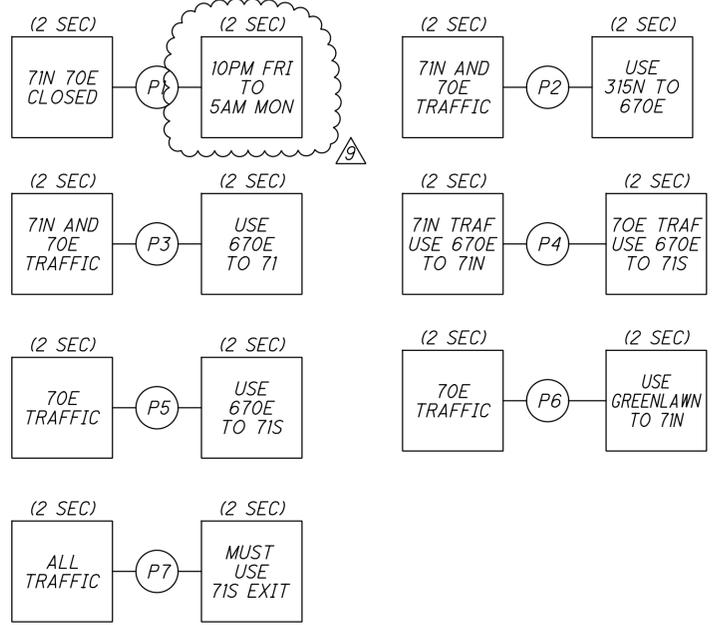
NO.	DESCRIPTION	DATE	REV. BY
9	DEL NOTE/REV TIME & SIGNS	CWL	12-2-23



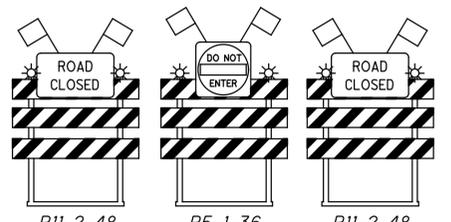
MAINTENANCE OF TRAFFIC CLOSURE - PHASE 1 - 4C
I-70E CLOSURE

FRA-70-14.05
72
855

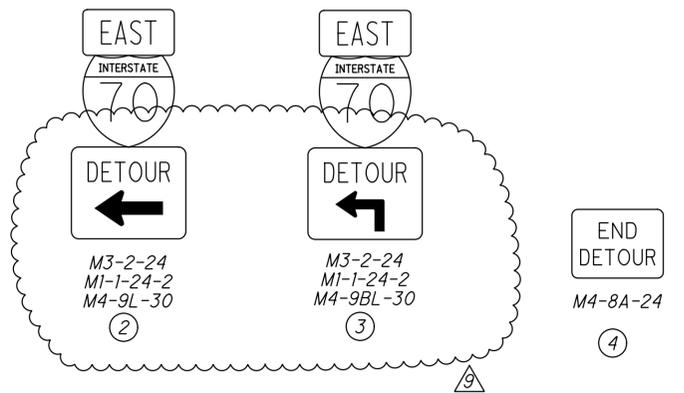
MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



ERECTOR OF BEAMS OVER I-71 NB/I-70 EB (DURING WEEKEND CLOSURES)



10' TYPE 3 BARRICADES (SOLID ACROSS BRIDGE) CLOSED PER ODOT SCD MT-98.29



NOTES:

- PCMSs AT THE LOCATIONS WITH (P1), SHALL BE PLACED AND IN USE SEVEN (7) DAYS PRIOR TO THE CLOSURE. ON THE DAY OF THE CLOSURE, THE REMAINING PCMSs SHALL BE PLACED AND IN USE, AS SHOWN.
- THIS DETOUR SHALL BE IN EFFECT FOR THE CONSTRUCTION OF THE FOLLOWING:
 - A. BEAM ERECTION OVER I-70/I-71 FOR THE FOLLOWING STRUCTURES: FRA-33-1747C (THIRD ST.), FRA-23-1075C (FOURTH ST.).
- THE DETOUR SHALL BE LIMITED TO WEEKEND CLOSURES ONLY, 10:00 PM FRIDAY - 5:00 AM MONDAY.
- THE CONTRACTOR SHALL NOTIFY THE ODOT WORK ZONE TRAFFIC MANAGER 14 DAYS PRIOR TO IMPLEMENTING THIS DETOUR.
- FOLLOW ODOT SCD MT-101.60 FOR CLOSURE.
- FOR I-70W DETOUR, SEE SHEET 71

LEGEND	
	SIGN
	TYPE 3 BARRICADE
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	CLOSURE AREA
	DETOUR ROUTE

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ITEM 625 CONDUIT MISC.: (BY SIZE), FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE

IN ADDITION TO THE REQUIREMENTS OF 625.12, THIS CONDUIT IS INTENDED FOR ATTACHMENT TO BRIDGES OR STRUCTURE AS INDICATED IN THE PLANS.

THE CONDUIT SHALL BE IRON PIPE SIZE (IPS) REINFORCED THERMOSETTING RESIN CONDUIT (RTRC), LISTED BY UNDERWRITERS LABORATORIES, UL, STANDARD UL 1684, AND SHALL COMPLY WITH NEMA STANDARD NUMBER TC 14-2002. THE CONDUIT SHALL HAVE A NOMINAL WALL THICKNESS OF 0.070 INCHES AND SHALL BE GRAY IN COLOR. THE CONDUIT INSTALLED SHALL BE THREADED, TWENTY (20)-FOOT SECTIONS. EPOXY ADHESIVE SHALL BE APPLIED TO THE CONDUIT ENDS WHEN JOINING SECTIONS OF CONDUIT. CONDUIT EXPANSION JOINTS AND OTHER CONDUIT FITTINGS SHALL BE INSTALLED AS PER THE CONDUIT MANUFACTURER'S RECOMMENDATIONS.

THE CONDUIT SHALL BE ATTACHED BENEATH THE BRIDGE DECK, ATTACHED TO THE CROSS FRAMES, OR ATTACHED TO VERTICAL SURFACES BEHIND THE WALLS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. STANDARD CLAMP TYPE CONDUIT HANGERS SHALL BE USED. STRAP HANGERS ARE NOT ACCEPTABLE. BRIDGE ATTACHMENT HARDWARE AND SUPPORT SPACING USED SHALL CONFORM TO THE CONDUIT MANUFACTURER'S RECOMMENDATIONS. ALL HANGERS AND HANGER HARDWARE SHALL BE GALVANIZED AND ON THE ODOT QPL. ALL HANGER COMPONENT SURFACES IN CONTACT WITH THE CONDUIT SHALL BE MADE FROM FIBERGLASS. HOLES FOR EXPANSION ANCHORS SHALL BE DRILLED AS PER 510.03. EXPANSION ANCHORS SHALL BE SET WITH EPOXY ADHESIVE. THREAD ADHESIVE SHALL BE USED ON BOTH THE ANCHOR BOLT MACHINE SCREW AND THE CONDUIT CLAMP SCREW AND NUT. CONDUIT RACK, FITTINGS, AND HARDWARE ASSOCIATED WITH THE DUCT BANK AND ATTACHMENTS TO THE BRIDGE SHALL BE INCLUDED WITH THE BRIDGE ITEM FOR THE DUCT BANK COMPLETE.

REFER TO ODOT SCD HL-30.32 FOR EXPANSION/DEFLECTION FITTINGS AT THE END OF THE BRIDGE ABUTMENT. EXPANSION/DEFLECTION FITTINGS USED SHALL CONFORM TO THE CONDUIT MANUFACTURER'S RECOMMENDATIONS AND SHALL BE APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL INSTALL NON-ORGANIC FIBERGLASS PULL TAPE WITH A MINIMUM 1800 FT./LBS. TENSION STRENGTH IN THE CONDUIT. THE COST FOR THE PULL TAPE AND ITS INSTALLATION SHALL BE INCIDENTAL TO THE COST OF THIS PAY ITEM.

FLEXIBLE METAL CONDUIT AND FITTINGS AS MANUFACTURED BY LIQUATITE, DELIKON, OR APPROVED EQUAL SHALL BE USED WHEN DIRECTED BY THE ENGINEER TO CONNECT THE STANDARD FIBERGLASS REINFORCED CONDUIT TO THE STANDARD CONDUIT. THE FLEXIBLE METAL CONDUIT SHALL BE WATERPROOF AND GRAY IN COLOR. THE FLEXIBLE METAL CONDUIT AND FITTINGS SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA
2145 AIRPARK DRIVE
SPRINGFIELD, OHIO 45503
(937)-325-7305

OSBURN ASSOCIATES, INC
11931 STATE ROUTE 93N
LOGAN, OHIO 43138
(740) 385-6869

ITEM 625 CONDUIT MISC.: (BY SIZE), FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE (CONT.)

THE WORK AS DESCRIBED WILL BE MEASURED AS THE NUMBER OF LINEAR FEET OF CONDUIT FURNISHED AND INSTALLED FROM END TO END, AND SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS, INCLUDING ALL JOINTS, COUPLINGS, FITTINGS, ADAPTERS AND ACCESSORIES ASSOCIATED WITH THE FIBERGLASS CONDUIT, NECESSARY TO COMPLETE THE WORK SPECIFIED.

ITEM 625 CONDUIT, MISC.: ENCASED INTERCONNECT CONDUIT BANK (BY SIZE), TC-2, SCH 40

IN ADDITION TO THE REQUIREMENTS OF 625.12, ANY CONDUIT WITHOUT A SPACER ABOVE IT (I.E. ANY TOP ROW CONDUIT) SHALL BE WIRE-WRAPPED TO THE SPACER BENEATH IT IN ORDER TO BE HELD IN PLACE.

A NUMBER 10 GAUGE, STRANDED COPPER, POLYESTER OR CROSS LINKED POLYETHYLENE (XLPE) INSULATED TRACING WIRE SHALL BE INSTALLED IN THE 1-1/2" CONDUIT. THE WIRE INSULATION SHALL BE RESISTANT TO MOISTURE ABSORPTION AND ABRASIVE ACTIONS. THE TRACING WIRE JACKET SHALL BE ORANGE; NO OTHER JACKET COLOR IS ALLOWED. THE TRACING WIRE SHALL ENTER A PULLBOX THROUGH THE 1-1/2" CONDUIT AND SHALL BE ROUTED AROUND THE INSIDE PERIMETER OF THE PULLBOX TO THE OTHER SIDE AND THEN EXIT THE OPPOSING 1-1/2" CONDUIT. THE TRACING WIRE SHALL BE CONTINUOUSLY RUN BETWEEN PULLBOXES (ABSOLUTELY NO SPLICES EXCEPT IN A PULLBOX). CONDUIT THAT BRANCHES OFF THE MAIN CONDUIT RUN SHALL HAVE ITS TRACING WIRE TERMINATED IN A PULLBOX OR CONTROLLER CABINET. THE WIRE SHALL BE TAGGED AS "TRACING WIRE", COILED (3 FEET IN LENGTH) AND LEFT DISCONNECTED AT EACH END (OPEN CIRCUIT).

ENCASED CONDUIT BANK SHALL BE ORIENTED AS REPRESENTED IN THE PLANS AND INSTALLED AS SHOWN IN SCD 4001.

THE COST FOR THE TRACING WIRE AND ITS INSTALLATION SHALL BE INCIDENTAL TO THE COST OF THIS PAY ITEM.
5/17/16

NO.	DESCRIPTION	REV. BY	DATE
9	REVISED NOTE	CWL	12-2-23

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12/2/2023 12:49:51 PM
ODOT\B15TD\USER

CALCULATED
BEB
CHECKED
KMG

TRAFFIC INTERCONNECT NOTES

FRA - 70 - 14.05

448
855

3555 - E

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SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
482	483	484	485	504						01/IMS/ 04	06/MPO/ 04	08/ENH/ 04/COL						
18	24									42			625	00450	42	EACH	CONNECTION, FUSED PULL APART	
6	12	6								18	6		625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
													625	00470	18	EACH	CONNECTION, UNFUSED BOLTED	
	3									3			625	10490	3	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A10B40	
	3									3			625	10490	3	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT15B20	
9	6									15			625	10490	15	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A18BB40	
4										4			625	10614	4	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	
	3									3			625	14100	3	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
8	6									14			625	14300	14	EACH	MEDIAN LIGHT POLE FOUNDATION, 8' DEEP	
	3									3			625	14501	3	EACH	LIGHT POLE FOUNDATION, AS PER PLAN, TYPE B BARRIER	492
		408									408		625	22990	408	FT	NO. 6 AWG 600 VOLT DISTRIBUTION CABLE	
6,015	4,575									10,590			625	23200	10,590	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
2,538	2,637									5,175			625	23400	5,175	FT	NO. 10 AWG POLE AND BRACKET CABLE	
	371									371			625	24320	371	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
		116									116		625	25300	116	FT	CONDUIT, 1-1/2", 725.04	
140										140			625	25600	140	FT	CONDUIT, 4", 725.04	
	114									114			625	25500	114	FT	CONDUIT, 3", 725.04	
18	18									36			625	26252	36	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), IES-III-S, 13220-14684 LUM, 480V	480
18	14									32			625	27503	32	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, IES-III-S, 4813-6507 LUM, 480V	480
	465	116								465	116		625	29000	581	FT	TRENCH	
	1									1			625	29900	1	EACH	JUNCTION BOX	
2	1									3			625	29930	3	EACH	MEDIAN JUNCTION BOX	
	2									2			625	29940	2	EACH	BARRIER JUNCTION BOX	
		2									2		625	31600	2	EACH	PULL BOX, MISC.:17"x30", 725.06	480
8	12									20			625	32000	20	EACH	GROUND ROD	
2										2			625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM	
		1									1		625	34001	1	EACH	POWER SERVICE, AS PER PLAN	480
	465	116								465	116		625	36010	581	FT	UNDERGROUND WARNING/MARKING TAPE	
2	2									4			625	37100	4	EACH	SERVICE TO UNDERPASS LIGHTING	
										LS			SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	480
			13							13			625	75400	13	EACH	LIGHT POLE REMOVED	
			13							13			625	75500	13	EACH	LIGHT POLE FOUNDATION REMOVED	
			26							26			625	75506	26	EACH	LUMINAIRE REMOVED	
		2									2		625	98000	2	EACH	LIGHTING, MISC.: SERVICE TO DECORATIVE LIGHTING	480
				6						6			625	98000	6	EACH	LIGHTING, MISC.:PULL BOX, 17"x30", MIS-54-APP	504
				3						3			625	98000	3	EACH	LIGHTING, MISC.: PULL BOX, 13"x24", MIS-54	504
				16						16			625	98000	16	EACH	LIGHTING, MISC.: DECORATIVE FIBERGLASS POLE, MIS-307	504
				6						6			625	98000	6	EACH	LIGHTING, MISC.: 4' STREET LIGHT FOUNDATION, MIS-200	504
				10							10		625	98000	10	EACH	LIGHTING, MISC.: STREET LIGHT FOUNDATION, 6', DOWNTOWN, MIS-203	504
				10							10		625	98000	10	EACH	LIGHTING, MISC.: DOWNTOWN POLE, MIS-308	504
				26						26			625	98000	26	EACH	LIGHTING, MISC.: 3-WIRE POLE TO BE WIRED, MIS-501	504
				10							10		625	98000	10	EACH	LIGHTING, MISC.: TEARDROP LED LUMINAIRE (480V), MIS-801	504
				16						16			625	98000	16	EACH	LIGHTING, MISC.: ACORN LED LUMINAIRE, MIS-802	504
				5						5			625	98000	5	EACH	LIGHTING, MISC.: FOUNDATION REMOVAL, MIS-900	504
				6						6			625	98000	6	EACH	LIGHTING, MISC.: STRUCTURE JUNCTION BOX	504
				122						122			625	98100	122	FT	LIGHTING, MISC.: 2-WIRE UNDERGROUND CIRCUIT, MIS-403	504
				3,077						3,077			625	98100	3,077	FT	LIGHTING, MISC.: 3-WIRE UNDERGROUND CIRCUIT, MIS-404	504
				2,680						2,680			625	98100	2,680	FT	LIGHTING, MISC.: 2-INCH CONDUIT, CONCRETE ENCASED, MIS-700	504
				LS						LS			625	98200	LS		LIGHTING, MISC.: EXISTING OVERHEAD SYSTEM REMOVAL, MIS-901	504
				LS						LS			625	98200	LS		LIGHTING, MISC.: EXISTING UNDERGROUND SYSTEM REMOVAL, MIS-902	504

NO.	DESCRIPTION	REV. BY	DATE
1.	BARRIER TRANSITION CONDUIT UPDATES FROM 2" TO 4"	WH	2023-12-01
2.	4" BARRIER CONDUIT CLARIFICATION	WH	2023-12-01

CALCULATED TRL CHECKED JCS
ODOT - 4B PART 4 LIGHTING GENERAL SUMMARY
FRA - 70 - 14.05

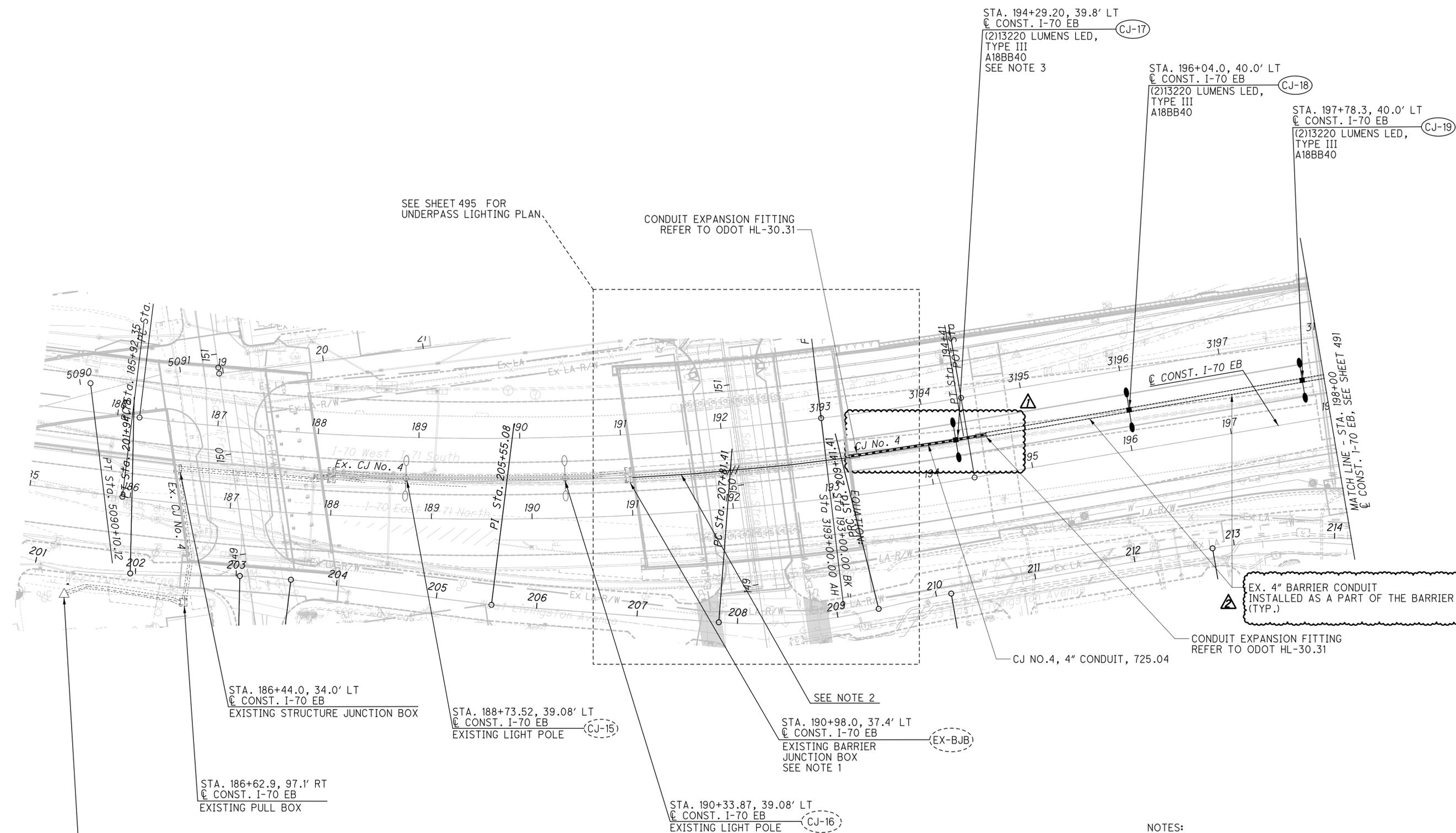
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CALCULATED TRL CHECKED JCS

0 50 100
25
HORIZONTAL SCALE IN FEET

ODOT - LIGHTING PLAN - I.R. 70
STA. 185+00 TO STA. 198+00

FRA-70-14.05



- NOTES:
- CONNECT NEW CIRCUIT CONDUCTORS TO EXISTING CIRCUIT CJ IN EXISTING BARRIER JUNCTION BOX.
 - PROVIDE CIRCUIT CONDUCTORS IN EXISTING 4" BARRIER CONDUIT INSTALLED BY OTHERS. SEE RM-4.3.
 - PROVIDE (4) ANCHOR BOLTS ON STRUCTURE FOR LIGHT POLE PILASTER.

STA. 185+46.7, 102.5' RT
C CONST. I-70 EB
EXISTING POWER SERVICE 'C'

STA. 186+62.9, 97.1' RT
C CONST. I-70 EB
EXISTING PULL BOX

STA. 186+44.0, 34.0' LT
C CONST. I-70 EB
EXISTING STRUCTURE JUNCTION BOX

STA. 188+73.52, 39.08' LT
C CONST. I-70 EB
EXISTING LIGHT POLE (CJ-15)

STA. 190+33.87, 39.08' LT
C CONST. I-70 EB
EXISTING LIGHT POLE (CJ-16)

STA. 190+98.0, 37.4' LT
C CONST. I-70 EB
EXISTING BARRIER JUNCTION BOX
SEE NOTE 1 (EX-BJB)

STA. 194+29.20, 39.8' LT
C CONST. I-70 EB
(2)13220 LUMENS LED, TYPE III A18BB40
SEE NOTE 3 (CJ-17)

STA. 196+04.0, 40.0' LT
C CONST. I-70 EB
(2)13220 LUMENS LED, TYPE III A18BB40 (CJ-18)

STA. 197+78.3, 40.0' LT
C CONST. I-70 EB
(2)13220 LUMENS LED, TYPE III A18BB40 (CJ-19)

EX. 4" BARRIER CONDUIT INSTALLED AS A PART OF THE BARRIER (TYP.)

CONDUIT EXPANSION FITTING REFER TO ODOT HL-30.31

CJ NO.4, 4" CONDUIT, 725.04

SEE NOTE 2

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EX. 4" BARRIER CONDUIT
INSTALLED AS A PART OF THE BARRIER
(TYP.)

STA. 210+51.5, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS, LED
TYPE III
A18BB40 (CJ-26)

STA. 210+68.3, 39.9' LT
C. CONST. I-70 EB
MEDIAN JUNCTION BOX (MJB-3)

STA. 212+03.8, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS, LED
TYPE III
A18BB40 (CJ-27)

STA. 213+60.5, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS, LED
TYPE III
A18BB40 (CJ-28)

STA. 215+16.4, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS, LED
TYPE III
A18BB40 (CJ-29)

STA. 216+66.3, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS, LED
TYPE III
A18BB40 (CJ-30)

EX. 4" BARRIER CONDUIT
INSTALLED AS A PART OF THE BARRIER
(TYP.)

STA. 218+09.1, 40.0' LT
C. CONST. I-70 EB
(2)13220 LUMENS LED
TYPE III
A18BB40 (CJ-31)

MATCH LINE - STA. 210+00
C. CONST. I-70 EB, SEE SHEET 491

CJ No. 4
C. CONST. I-70 EB

PT. STA. 862+74.76
PC STA. 865+43.25

STA. 863+85.1, 15.7' RT
RAMP N1
13220 LUMENS, LED
TYPE III
AT15B20 (CJ-35)

STA. 863+73.6, 09.0' RT
RAMP N1
BARRIER JUNCTION BOX (BJB-2) (JB-11)
JUNCTION BOX
SEE NOTE 1

STA. 862+13.8, 9.7' RT
RAMP N1
13220 LUMENS, LED
TYPE III
A10B40
SEE NOTE 2 (CJ-34)

STA. 211+82.5, 57.7' RT
C. CONST. I-70 EB
13220 LUMENS, LED
TYPE III
A10B40
SEE NOTE 2 (CJ-33)

STA. 210+65.2, 57.7' RT
C. CONST. I-70 EB
BARRIER JUNCTION BOX (BJB-1)

STA. 210+35.0, 57.7' RT
C. CONST. I-70 EB
13220 LUMENS, LED
TYPE III
A10B40
SEE NOTE 2 (CJ-32)

STA. 867+34.8, 15.7' RT
RAMP N1
13220 LUMENS, LED
TYPE III
AT15B20 (CJ-37)

STA. 865+52.6, 15.7' RT
RAMP N1
13220 LUMENS, LED
TYPE III
AT15B20 (CJ-36)

CALCULATED TRL CHECKED JCS

HORIZONTAL SCALE IN FEET

ODOT - LIGHTING PLAN - I.R. 70
STA. 210+00 TO STA. 221+00

FRA-70-14.05

- NOTES:
1. PROVIDE BARRIER JUNCTION BOX. RUN CONDUIT VERTICALLY FROM BARRIER JUNCTION BOX INTO 8X8" JUNCTION BOX. CORE DRILL THROUGH RETAINING WALL 30" BELOW GRADE ON OPPOSITE SIDE.
 2. PROVIDE LIGHT POLE FOUNDATION, 24"x8' DEEP, MODIFIED FOR TYPE B BARRIER.

ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS

THIS BID ITEM CONSISTS OF PRECAST PANELS MANUFACTURED AND CONSTRUCTED IN ACCORDANCE WITH THIS SPECIFICATION AND DESIGNED IN ACCORDANCE WITH THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY AASHTO, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN STRESSES:

CONCRETE - COMPRESSIVE STRENGTH 4.0 KSI
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

MATERIALS - CONCRETE:

THE CONCRETE FOR THE WALL SECTIONS SHALL BE COMPOSED OF PORTLAND CEMENT, FINE & COARSE AGGREGATES, ADMIXTURES, AND WATER. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION C150, TYPE I, II, OR III. THE AIR ENTRAINING ADMIXTURE SHALL CONFORM TO AASHTO M154. THE CONCRETE SHALL CONTAIN 6% ±2% ENTRAINED AIR, AND SLUMP SHALL BE MAINTAINED WITHIN THE RANGE OF 1" TO 4". THE SLUMP MAY BE INCREASED TO 7" PROVIDED THE INCREASE IS ACHIEVED BY THE ADDITION OF A CHEMICAL WATER-REDUCING ADMIXTURE APPROVED BY THE ENGINEER.

MATERIALS - REINFORCING AND HARDWARE:

REINFORCEMENT SHALL CONSIST OF WELDED WIRE FABRIC CONFORMING TO ASTM A185 OR A497, OR DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM A615, A616, OR A617, GRADE 60. ALL ANGLES AND PLATES SHALL BE ASTM A36 STEEL.

SHOP DRAWING REQUIREMENTS:

THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURE. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING:
- ALL STRUCTURAL DESIGN AND LOADING INFORMATION.
- A PLAN VIEW.
- ALL ELEVATION VIEWS.
- ALL DIMENSIONS.

MANUFACTURING SHALL NOT BEGIN UNTIL WRITTEN APPROVAL OF THE SUBMITTED SHOP DRAWINGS HAS BEEN RECEIVED.

TESTING AND INSPECTION:

ACCEPTABILITY OF THE CONCRETE FOR THE PRECAST PANELS WILL BE DETERMINED ON THE BASIS OF COMPRESSION TESTS, CERTIFICATIONS, AND VISUAL INSPECTION. THE CONCRETE STRENGTH REQUIREMENTS FOR THE PRECAST PANELS SHALL BE CONSIDERED ATTAINED REGARDLESS OF CURING AGE WHEN COMPRESSION TEST RESULTS INDICATE STRENGTH WILL CONFORM TO 28-DAY SPECIFICATIONS AS STATED BELOW. THE MANUFACTURER SHALL FURNISH FACILITIES AND PERFORM ALL NECESSARY SAMPLING AND TESTING IN AN EXPEDITIOUS AND SATISFACTORY MANNER. PANELS UTILIZING TYPE I OR II CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL WHEN 7-DAY INITIAL STRENGTHS EXCEED 85% OF 28-DAY REQUIREMENTS. PANELS UTILIZING TYPE III CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL PRIOR TO 28 DAYS ONLY WHEN COMPRESSION STRENGTH TEST RESULTS INDICATE THAT THE STRENGTH EXCEEDS THE 28-DAY SPECIFICATION.

MANUFACTURE:

THE AGGREGATES, CEMENT, AND WATER SHALL BE PROPORTIONED AND MIXED IN A BATCH MIXER TO PRODUCE A HOMOGENEOUS CONCRETE MEETING THE STRENGTH REQUIREMENTS OF THESE NOTES. THE PROPORTION OF PORTLAND CEMENT IN THE MIXTURE SHALL NOT BE LESS THAN 564 POUNDS PER CUBIC YARD OF CONCRETE.

THE WALL SECTIONS SHALL BE CURED FOR A SUFFICIENT LENGTH OF TIME SO THAT THE CONCRETE WILL DEVELOP THE SPECIFIED COMPRESSIVE STRENGTH IN 28 DAYS OR LESS. ANY ONE OF THE METHODS OF CURING OR COMBINATION THEREOF SHALL BE USED:

STEAM CURING - THE SECTIONS MAY BE LOW PRESSURE, STEAM CURED BY A SYSTEM THAT WILL MAINTAIN A MOIST ATMOSPHERE.

WATER CURING - THE SECTIONS MAY BE WATER CURED BY ANY METHOD THAT WILL KEEP THE SECTIONS MOIST.

THE FORMS USED IN MANUFACTURE SHALL BE SUFFICIENTLY RIGID AND ACCURATE TO MAINTAIN THE SECTION DIMENSIONS WITHIN THE PERMISSIBLE VARIATIONS GIVEN IN THESE NOTES. ALL CASTING SURFACES SHALL BE OF SMOOTH MATERIAL.

THE WALL SECTIONS SHALL BE STORED IN SUCH A MANNER TO PREVENT CRACKING OR DAMAGES.

MANUFACTURE (CONTINUED):

THE FRONT FACE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A SMOOTH CONCRETE FINISH AND INCORPORATE THE PATTERNS SHOWN IN THE STRUCTURE AESTHETIC DETAIL PLANS. CAULKING BETWEEN PRECAST PANELS SHALL BE IN ACCORDANCE WITH THE PLAN DETAILS. THE BACK SIDE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A UNIFORM SURFACE FINISH AND SHALL BE ROUGH SCREEDED TO ELIMINATE OPEN POCKETS OF AGGREGATE AND SURFACE DISTORTIONS IN EXCESS OF 1/4".

ALL PANELS SHALL BE MANUFACTURED WITH ALL PANEL DIMENSIONS WITHIN 1/4"

COMPRESSIVE STRENGTH:

ACCEPTANCE OF THE CONCRETE PANELS WITH RESPECT TO COMPRESSIVE STRENGTH WILL BE DETERMINED ON THE BASIS OF PRODUCTION LOTS. A PRODUCTION LOT IS DEFINED AS A GROUP OF PANELS THAT WILL BE REPRESENTED BY A SINGLE COMPRESSIVE STRENGTH SAMPLE AND WILL CONSIST OF EITHER 6 PANELS OR A SINGLE DAY'S PRODUCTION, WHICHEVER IS LESS.

DURING THE PRODUCTION OF THE CONCRETE PANELS, THE MANUFACTURER WILL RANDOMLY SAMPLE THE CONCRETE IN ACCORDANCE WITH ASTM C172. A SINGLE COMPRESSIVE STRENGTH SAMPLE, CONSISTING OF A MINIMUM OF FOUR CYLINDERS, WILL BE RANDOMLY SELECTED FOR EVERY PRODUCTION LOT.

CYLINDERS FOR COMPRESSIVE STRENGTH TESTS SHALL BE 6" DIA. X 1'-0" SPECIMENS PREPARED IN ACCORDANCE WITH ASTM C31. FOR EVERY COMPRESSIVE STRENGTH SAMPLE, A MINIMUM OF 2 CYLINDERS WILL BE CURED IN THE SAME MANNER AS THE PANELS AND TESTED AT APPROXIMATELY 7 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A TEST RESULT WHICH WILL DETERMINE THE INITIAL STRENGTH OF THE CONCRETE. IN ADDITION, 2 CYLINDERS SHALL BE CURED IN ACCORDANCE WITH ASTM C31 AND TESTED AT 28 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE TWO CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A COMPRESSIVE STRENGTH TEST RESULT WHICH WILL DETERMINE THE COMPRESSIVE STRENGTH OF THE PRODUCTION LOT.

IF THE INITIAL STRENGTH TEST RESULTS INDICATE A COMPRESSIVE STRENGTH IN EXCESS OF 4,000 PSI, THEN THESE TEST RESULTS WILL BE UTILIZED AS THE COMPRESSIVE STRENGTH TEST RESULT FOR THE PRODUCTION LOT AND THE REQUIREMENT FOR TESTING AT 28 DAYS WILL BE WAIVED FOR THAT PARTICULAR PRODUCTION LOT.

ACCEPTANCE OF A PRODUCTION LOT WILL BE MADE IF THE COMPRESSIVE STRENGTH TEST RESULT IS GREATER THAN OR EQUAL TO 4,000 PSI. IF THE RESULT IS LESS THAN 4,000 PSI, THE ACCEPTANCE OF THE PRODUCTION LOT WILL BE BASED ON ITS MEETING THE FOLLOWING THREE ACCEPTANCE CRITERIA:
- 90% OF THE COMPRESSIVE STRENGTH TEST RESULTS FOR THE OVERALL PRODUCTION SHALL EXCEED 4,000 PSI.
- THE AVERAGE OF ANY SIX CONSECUTIVE COMPRESSIVE STRENGTH TEST RESULTS SHALL EXCEED 4,000 PSI.
- NO INDIVIDUAL COMPRESSIVE STRENGTH TEST RESULT SHALL FALL BELOW 3,600 PSI.

IN THE EVENT THAT A PRODUCTION LOT FAILS TO MEET THE SPECIFIED COMPRESSIVE STRENGTH REQUIREMENTS, THE PRODUCTION LOT SHALL BE REJECTED. SUCH REJECTION SHALL PREVAIL UNLESS THE MANUFACTURER, AT HIS OWN EXPENSE, OBTAINS AND SUBMITS EVIDENCE ACCEPTABLE TO THE ENGINEER THAT THE STRENGTH AND QUALITY OF THE CONCRETE PLACED WITHIN THE PANELS OF THE PRODUCTION LOT IS ACCEPTABLE. IF SUCH EVIDENCE CONSISTS OF TESTS MADE ON CORES TAKEN FROM THE PANELS WITHIN THE PRODUCTION LOT, THE CORES SHALL BE OBTAINED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS OF ASTM C42.

REJECTION:

PANELS SHALL BE SUBJECT TO REJECTION BECAUSE OF FAILURE TO MEET ANY OF THE REQUIREMENTS SPECIFIED ABOVE. IN ADDITION, ANY OR ALL OF THE FOLLOWING DEFECTS MAY BE SUFFICIENT CAUSE FOR REJECTION:
- DEFECTS THAT INDICATE IMPERFECT MOLDING.
- DEFECTS INDICATING HONEYCOMBED OR OPEN TEXTURED CONCRETE.
- DEFECTS IN THE PHYSICAL CHARACTERISTICS OF THE CONCRETE, SUCH AS BROKEN OR CHIPPED CONCRETE.
- STAINED FORM FACE, DUE TO EXCESS FORM OIL OR OTHER CONTAMINATIONS.
- SIGNS OF AGGREGATE SEGREGATION.
- BROKEN OR CRACKED CORNERS.
- LIFTING INSERTS NOT USABLE.
- EXPOSED REINFORCING STEEL.
- INSUFFICIENT CONCRETE COMPRESSIVE STRENGTH.

REJECTION (CONTINUED):

THE ENGINEER WILL DECIDE IF AN ATTEMPT MAY BE MADE TO REPAIR A DEFECTIVE PANEL. THE CONTRACTOR OR MANUFACTURER SHALL MAKE THE REPAIRS. IF THE REPAIRS ARE MADE TO THE ENGINEER'S SATISFACTION, THE PANEL WILL BE ACCEPTABLE.

MARKING:

THE DATE OF MANUFACTURE, THE PRODUCTION LOT NUMBER, AND THE PIECE MARK SHALL BE CLEARLY SCRIBED ON THE BACK SURFACE OF EACH PANEL.

WALL ERECTION:

PANELS ARE HANDLED BY MEANS OF A LIFTING DEVICE CONNECTED TO THE LIFTING INSERT WHICH IS CAST INTO THE UPPER EDGE OR BACK SIDE OF THE PANELS. ALL PANELS SHALL BE BRACED TO RESIST THE TEMPORARY CONSTRUCTION LOADS INCLUDING WIND LOADS, PRIOR TO FOOTING CONSTRUCTION.

PAYMENT:

PAYMENT FOR ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS COVERS ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE AND SHALL ALSO INCLUDE ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE ELASTOMERIC BEARING PADS, STEEL CONNECTION ANGLES/PLATES, NEOPRENE FILLER, POLYURETHANE SEALANT, AND 1" P.E.J.F. ABOVE THE TOP OF THE PANELS AS SHOWN IN THE PLANS.

ITEM SPECIAL -STRUCTURES: AEP DUCT BANK COMPLETE

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY AEP EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE EXTRA HEAVY WALL (XHW) FIBERGLASS CONDUIT, CONDUIT RACK, FITTING, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, EXPANSION JOINT COUPLING, THREADED ADAPTERS, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

CONDUIT, FITTINGS, SUPPORT RACK, ACCESSORIES, ETC. SHALL BE FURNISHED BY THE SAME MANUFACTURER AND BE DESIGNED TO WORK TOGETHER AS A SYSTEM. CONDUIT SHALL MEET OR EXCEED THE LATEST REQUIREMENTS OF UL 1684, FOR EXTRA HEAVY WALL REINFORCED THERMOSETTING RESIN CONDUIT (RTRC) AND FITTINGS, AND NEMA TC14-2002. A TWO-COMPONENT EPOXY ADHESIVE SHALL BE SUPPLIED BY THE SAME MANUFACTURER OF THE CONDUIT AND FITTINGS TO RETAIN ALL UL LISTINGS. STEEL CONDUIT THROUGH ABUTMENT WALLS SHALL BE HOT-DIPPED GALVANIZED SCHEDULE 40 PIPE. GROUT USED AT ABUTMENT BACKWALLS SHALL BE NONSHRINK, NON-METALLIC TYPE.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA 2145 AIRPARK DRIVE SPRINGFIELD, OHIO 45503 (937)-325-7305
OSBURN ASSOCIATES, INC 11931 STATE ROUTE 93N LOGAN, OHIO 43138 (740) 385-6869

THE GALVANIZED STEEL SPLIT CASING PIPE SHALL BE FURNISHED BY:

PITTSBURGH PIPE & SUPPLY CORP. 170 HAMPTON AVENUE SAINT LOUIS, MO 63139 1 (800) 325-2653 OR APPROVED EQUAL.

INSTALLATION:

INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS & INDUSTRY STANDARDS.

BASIS OF PAYMENT

THE DEPARTMENT WILL PAY LUMP SUM FOR ALL WORK, LABOR, MATERIAL, EQUIPMENT, & INCIDENTALS TO INSTALL A COMPLETE DUCT BANK FOR "ITEM SPECIAL - STRUCTURES: DUCT BANK COMPLETE"

NO.	DESCRIPTION	DATE	REV. BY
9	REVISED NOTES	12-2-23	CWL

ABBREVIATIONS

ABUT.	ABUTMENT
BRG.	BEARING
BOT.	BOTTOM
BTWN.	BETWEEN
CONST. JT., C.J.	CONSTRUCTION JOINT
B.S.	BOTH SIDES
N.S.	NEAR SIDE
F.S.	Far SIDE
SER.	SERIES
TYP.	TYPICAL
EQ.	EQUAL
DIM.	DIMENSION
SPA.	SPACES
EA.	EACH
P.E.J.F.	PREFORMED EXPANSION JOINT FILLER
MIN.	MINIMUM
ADDIT.	ADDITIONAL
FRWD.	FORWARD
SPL.	SPLICE
CLR.	CLEAR
P.C.P.P.	PERFORATED CORRUGATED PLASTIC PIPE
N.P.C.P.P.	NON-PERFORATED CORRUGATED PLASTIC PIPE

**ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS DUCT BANK COMPLETE
ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS (DEPARTMENT OF TECH) DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: ODOT DUCT BANK COMPLETE**

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY CITY OF COLUMBUS, CITY OF COLUMBUS (DEPARTMENT OF TECH), AND ODOT DUCT BANK COMPLETE EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE CONDUIT RACK, FITTINGS, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. FIBERGLASS CONDUIT AND ASSOCIATED FITTINGS AND COUPLINGS SHALL BE INCLUDED WITH ITEM 625 FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

SUPPORT RACK, ACCESSORIES, ETC. SHALL BE FURNISHED BY THE SAME MANUFACTURER AND BE DESIGNED TO WORK TOGETHER AS A SYSTEM WITH THE FIBERGLASS CONDUIT. STEEL CONDUIT THROUGH ABUTMENT WALLS SHALL BE HOT-DIPPED GALVANIZED SCHEDULE 40 PIPE. GROUT USED AT ABUTMENT BACKWALLS SHALL BE NONSHRINK, NON-METALLIC TYPE.

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01-2015-2015370-FRA-96055-STRUCTURES-FRA093-1747C-SHEETS-023-1174CON001.DGN
12/2/2023 11:17:17 PM ODOT\181STD\JSEB

DESIGN AGENCY: **GPD GROUP**
 1800 Waterford Drive, Columbus, OH 43240
 (614) 231-1234
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DESIGNED	RHC	CHECKED	DJC
DRAWN	RPR	REVISED	
REVIEWED	DGN	STRUCTURE FILE NUMBER	2501554
DATE	4-21-23		

GENERAL NOTES - 2
 BRIDGE NO. FRA-33-1747C
 S. 3RD STREET (U.S. 33) OVER I-70/71

FRA-70-14.05
 PID No. 96053

4 / 42
 562
 855

ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS

THIS BID ITEM CONSISTS OF PRECAST PANELS MANUFACTURED AND CONSTRUCTED IN ACCORDANCE WITH THIS SPECIFICATION AND DESIGNED IN ACCORDANCE WITH THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY AASHTO, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN STRESSES:

CONCRETE - COMPRESSIVE STRENGTH 4.0 KSI
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

MATERIALS - CONCRETE:

THE CONCRETE FOR THE WALL SECTIONS SHALL BE COMPOSED OF PORTLAND CEMENT, FINE & COARSE AGGREGATES, ADMIXTURES, AND WATER. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION C150, TYPE I, II, OR III. THE AIR ENTRAINING ADMIXTURE SHALL CONFORM TO AASHTO M154. THE CONCRETE SHALL CONTAIN 6% ±2% ENTRAINED AIR, AND SLUMP SHALL BE MAINTAINED WITHIN THE RANGE OF 1" TO 4". THE SLUMP MAY BE INCREASED TO 7" PROVIDED THE INCREASE IS ACHIEVED BY THE ADDITION OF A CHEMICAL WATER-REDUCING ADMIXTURE APPROVED BY THE ENGINEER.

MATERIALS - REINFORCING AND HARDWARE:

REINFORCEMENT SHALL CONSIST OF WELDED WIRE FABRIC CONFORMING TO ASTM A185 OR A497, OR DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM A615, A616, OR A617, GRADE 60. ALL ANGLES AND PLATES SHALL BE ASTM A36 STEEL.

SHOP DRAWING REQUIREMENTS:

THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURE. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING:
- ALL STRUCTURAL DESIGN AND LOADING INFORMATION.
- A PLAN VIEW.
- ALL ELEVATION VIEWS.
- ALL DIMENSIONS.

MANUFACTURING SHALL NOT BEGIN UNTIL WRITTEN APPROVAL OF THE SUBMITTED SHOP DRAWINGS HAS BEEN RECEIVED.

TESTING AND INSPECTION:

ACCEPTABILITY OF THE CONCRETE FOR THE PRECAST PANELS WILL BE DETERMINED ON THE BASIS OF COMPRESSION TESTS, CERTIFICATIONS, AND VISUAL INSPECTION. THE CONCRETE STRENGTH REQUIREMENTS FOR THE PRECAST PANELS SHALL BE CONSIDERED ATTAINED REGARDLESS OF CURING AGE WHEN COMPRESSION TEST RESULTS INDICATE STRENGTH WILL CONFORM TO 28-DAY SPECIFICATIONS AS STATED BELOW. THE MANUFACTURER SHALL FURNISH FACILITIES AND PERFORM ALL NECESSARY SAMPLING AND TESTING IN AN EXPEDITIOUS AND SATISFACTORY MANNER. PANELS UTILIZING TYPE I OR II CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL WHEN 7-DAY INITIAL STRENGTHS EXCEED 85% OF 28-DAY REQUIREMENTS. PANELS UTILIZING TYPE III CEMENT SHALL BE CONSIDERED ACCEPTABLE FOR PLACEMENT IN THE WALL PRIOR TO 28 DAYS ONLY WHEN COMPRESSION STRENGTH TEST RESULTS INDICATE THAT THE STRENGTH EXCEEDS THE 28-DAY SPECIFICATION.

MANUFACTURE:

THE AGGREGATES, CEMENT, AND WATER SHALL BE PROPORTIONED AND MIXED IN A BATCH MIXER TO PRODUCE A HOMOGENEOUS CONCRETE MEETING THE STRENGTH REQUIREMENTS OF THESE NOTES. THE PROPORTION OF PORTLAND CEMENT IN THE MIXTURE SHALL NOT BE LESS THAN 564 POUNDS PER CUBIC YARD OF CONCRETE.

THE WALL SECTIONS SHALL BE CURED FOR A SUFFICIENT LENGTH OF TIME SO THAT THE CONCRETE WILL DEVELOP THE SPECIFIED COMPRESSIVE STRENGTH IN 28 DAYS OR LESS. ANY ONE OF THE METHODS OF CURING OR COMBINATION THEREOF SHALL BE USED:

STEAM CURING - THE SECTIONS MAY BE LOW PRESSURE, STEAM CURED BY A SYSTEM THAT WILL MAINTAIN A MOIST ATMOSPHERE.

WATER CURING - THE SECTIONS MAY BE WATER CURED BY ANY METHOD THAT WILL KEEP THE SECTIONS MOIST.

THE FORMS USED IN MANUFACTURE SHALL BE SUFFICIENTLY RIGID AND ACCURATE TO MAINTAIN THE SECTION DIMENSIONS WITHIN THE PERMISSIBLE VARIATIONS GIVEN IN THESE NOTES. ALL CASTING SURFACES SHALL BE OF SMOOTH MATERIAL.

THE WALL SECTIONS SHALL BE STORED IN SUCH A MANNER TO PREVENT CRACKING OR DAMAGES.

MANUFACTURE (CONTINUED):

THE FRONT FACE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A SMOOTH CONCRETE FINISH AND INCORPORATE THE PATTERNS SHOWN IN THE STRUCTURE AESTHETIC DETAIL PLANS. CAULKING BETWEEN PRECAST PANELS SHALL BE IN ACCORDANCE WITH THE PLAN DETAILS. THE BACK SIDE OF THE REINFORCED CONCRETE PANELS SHALL HAVE A UNIFORM SURFACE FINISH AND SHALL BE ROUGH SCREED TO ELIMINATE OPEN POCKETS OF AGGREGATE AND SURFACE DISTORTIONS IN EXCESS OF 1/4".

ALL PANELS SHALL BE MANUFACTURED WITH ALL PANEL DIMENSIONS WITHIN 1/4"

COMPRESSIVE STRENGTH:

ACCEPTANCE OF THE CONCRETE PANELS WITH RESPECT TO COMPRESSIVE STRENGTH WILL BE DETERMINED ON THE BASIS OF PRODUCTION LOTS. A PRODUCTION LOT IS DEFINED AS A GROUP OF PANELS THAT WILL BE REPRESENTED BY A SINGLE COMPRESSIVE STRENGTH SAMPLE AND WILL CONSIST OF EITHER 6 PANELS OR A SINGLE DAY'S PRODUCTION, WHICHEVER IS LESS.

DURING THE PRODUCTION OF THE CONCRETE PANELS, THE MANUFACTURER WILL RANDOMLY SAMPLE THE CONCRETE IN ACCORDANCE WITH ASTM C172. A SINGLE COMPRESSIVE STRENGTH SAMPLE, CONSISTING OF A MINIMUM OF FOUR CYLINDERS, WILL BE RANDOMLY SELECTED FOR EVERY PRODUCTION LOT.

CYLINDERS FOR COMPRESSIVE STRENGTH TESTS SHALL BE 6" DIA. X 1'-0" SPECIMENS PREPARED IN ACCORDANCE WITH ASTM C31. FOR EVERY COMPRESSIVE STRENGTH SAMPLE, A MINIMUM OF 2 CYLINDERS WILL BE CURED IN THE SAME MANNER AS THE PANELS AND TESTED AT APPROXIMATELY 7 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A TEST RESULT WHICH WILL DETERMINE THE INITIAL STRENGTH OF THE CONCRETE. IN ADDITION, 2 CYLINDERS SHALL BE CURED IN ACCORDANCE WITH ASTM C31 AND TESTED AT 28 DAYS. THE AVERAGE COMPRESSIVE STRENGTH OF THESE TWO CYLINDERS, WHEN TESTED IN ACCORDANCE WITH ASTM C39, WILL PROVIDE A COMPRESSIVE STRENGTH TEST RESULT WHICH WILL DETERMINE THE COMPRESSIVE STRENGTH OF THE PRODUCTION LOT.

IF THE INITIAL STRENGTH TEST RESULTS INDICATE A COMPRESSIVE STRENGTH IN EXCESS OF 4,000 PSI, THEN THESE TEST RESULTS WILL BE UTILIZED AS THE COMPRESSIVE STRENGTH TEST RESULT FOR THE PRODUCTION LOT AND THE REQUIREMENT FOR TESTING AT 28 DAYS WILL BE WAIVED FOR THAT PARTICULAR PRODUCTION LOT.

ACCEPTANCE OF A PRODUCTION LOT WILL BE MADE IF THE COMPRESSIVE STRENGTH TEST RESULT IS GREATER THAN OR EQUAL TO 4,000 PSI. IF THE RESULT IS LESS THAN 4,000 PSI, THE ACCEPTANCE OF THE PRODUCTION LOT WILL BE BASED ON ITS MEETING THE FOLLOWING THREE ACCEPTANCE CRITERIA:
- 90% OF THE COMPRESSIVE STRENGTH TEST RESULTS FOR THE OVERALL PRODUCTION SHALL EXCEED 4,000 PSI.
- THE AVERAGE OF ANY SIX CONSECUTIVE COMPRESSIVE STRENGTH TEST RESULTS SHALL EXCEED 4,000 PSI.
- NO INDIVIDUAL COMPRESSIVE STRENGTH TEST RESULT SHALL FALL BELOW 3,600 PSI.

IN THE EVENT THAT A PRODUCTION LOT FAILS TO MEET THE SPECIFIED COMPRESSIVE STRENGTH REQUIREMENTS, THE PRODUCTION LOT SHALL BE REJECTED. SUCH REJECTION SHALL PREVAIL UNLESS THE MANUFACTURER, AT HIS OWN EXPENSE, OBTAINS AND SUBMITS EVIDENCE ACCEPTABLE TO THE ENGINEER THAT THE STRENGTH AND QUALITY OF THE CONCRETE PLACED WITHIN THE PANELS OF THE PRODUCTION LOT IS ACCEPTABLE. IF SUCH EVIDENCE CONSISTS OF TESTS MADE ON CORES TAKEN FROM THE PANELS WITHIN THE PRODUCTION LOT, THE CORES SHALL BE OBTAINED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS OF ASTM C42.

REJECTION:

PANELS SHALL BE SUBJECT TO REJECTION BECAUSE OF FAILURE TO MEET ANY OF THE REQUIREMENTS SPECIFIED ABOVE. IN ADDITION, ANY OR ALL OF THE FOLLOWING DEFECTS MAY BE SUFFICIENT CAUSE FOR REJECTION:
- DEFECTS THAT INDICATE IMPERFECT MOLDING.
- DEFECTS INDICATING HONEYCOMBED OR OPEN TEXTURED CONCRETE.
- DEFECTS IN THE PHYSICAL CHARACTERISTICS OF THE CONCRETE, SUCH AS BROKEN OR CHIPPED CONCRETE.
- STAINED FORM FACE, DUE TO EXCESS FORM OIL OR OTHER CONTAMINATIONS.
- SIGNS OF AGGREGATE SEGREGATION.
- BROKEN OR CRACKED CORNERS.
- LIFTING INSERTS NOT USABLE.
- EXPOSED REINFORCING STEEL.
- INSUFFICIENT CONCRETE COMPRESSIVE STRENGTH.

REJECTION (CONTINUED):

THE ENGINEER WILL DECIDE IF AN ATTEMPT MAY BE MADE TO REPAIR A DEFECTIVE PANEL. THE CONTRACTOR OR MANUFACTURER SHALL MAKE THE REPAIRS. IF THE REPAIRS ARE MADE TO THE ENGINEER'S SATISFACTION, THE PANEL WILL BE ACCEPTABLE.

MARKING:

THE DATE OF MANUFACTURE, THE PRODUCTION LOT NUMBER, AND THE PIECE MARK SHALL BE CLEARLY SCRIBED ON THE BACK SURFACE OF EACH PANEL.

WALL ERECTION:

PANELS ARE HANDLED BY MEANS OF A LIFTING DEVICE CONNECTED TO THE LIFTING INSERT WHICH IS CAST INTO THE UPPER EDGE OR BACK SIDE OF THE PANELS. ALL PANELS SHALL BE BRACED TO RESIST THE TEMPORARY CONSTRUCTION LOADS INCLUDING WIND LOADS, PRIOR TO FOOTING CONSTRUCTION.

PAYMENT:

PAYMENT FOR ITEM SPECIAL - STRUCTURES: PRECAST FACADE PANELS COVERS ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE AND SHALL ALSO INCLUDE ALL LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE ELASTOMERIC BEARING PADS, STEEL CONNECTION ANGLES/PLATES, NEOPRENE FILLER, POLYURETHANE SEALANT, AND 1" P.E.J.F. ABOVE THE TOP OF THE PANELS AS SHOWN IN THE PLANS.

**ITEM SPECIAL -STRUCTURES: AT&T DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: AEP DUCT BANK COMPLETE**

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY AT&T DUCT BANK COMPLETE AND AEP EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE EXTRA HEAVY WALL (XHW) FIBERGLASS CONDUIT, CONDUIT RACK, FITTING, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, EXPANSION JOINT COUPLING, THREADED ADAPTERS, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

CONDUIT, FITTINGS SUPPORT RACK, ACCESSORIES, ETC. SHALL BE FURNISHED BY THE SAME MANUFACTURER AND BE DESIGNED TO WORK TOGETHER AS A SYSTEM. CONDUIT SHALL MEET OR EXCEED THE LATEST REQUIREMENTS OF UL 1684, FOR EXTRA HEAVY WALL REINFORCED THERMOSETTING RESIN CONDUIT (RTRC) AND FITTINGS, AND NEMA TC14-2002. A TWO-COMPONENT EPOXY ADHESIVE SHALL BE SUPPLIED BY THE SAME MANUFACTURER OF THE CONDUIT AND FITTINGS TO RETAIN ALL UL LISTINGS. STEEL CONDUIT THROUGH ABUTMENT WALLS SHALL BE HOT-DIPPED GALVANIZED SCHEDULE 40 PIPE. GROUT USED AT ABUTMENT BACKWALLS SHALL BE NONSHRINK, NON-METALLIC TYPE.

BRIDGE CONDUIT AND ACCESSORIES SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR APPROVED EQUAL.

UNITED FIBERGLASS OF AMERICA OSBURN ASSOCIATES, INC
2145 AIRPARK DRIVE 11931 STATE ROUTE 93N
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1 (800) 325-2653
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INSTALLATION:

INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS & INDUSTRY STANDARDS.

BASIS OF PAYMENT

THE DEPARTMENT WILL PAY LUMP SUM FOR ALL WORK, LABOR, MATERIAL, EQUIPMENT, & INCIDENTALS TO INSTALL A COMPLETE DUCT BANK FOR "ITEM SPECIAL - STRUCTURES: DUCT BANK COMPLETE"

NO.	DESCRIPTION	DATE	REV. BY
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ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORTS

WORK TO BE PERFORMED UNDER THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING THE TEMPORARY UTILITY POLES TO SUPPORT THE AT&T TELECOMMUNICATION LINES DURING CONSTRUCTION.

ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CMS 524. ALL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH CMS 513.

PAYMENT: THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE TEMPORARY UTILITY POLES. AT&T IS RESPONSIBLE FOR SUPPORTING THE EXISTING LINES ON THE TEMPORARY POLES. PAYMENT FOR THIS WORK IS THE RESPONSIBILITY OF AT&T. ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE LUMP SUM CONTRACT BID PRICE FOR ITEM SPECIAL - STRUCTURES: TEMPORARY UTILITY SUPPORTS.

**ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS DUCT BANK COMPLETE
ITEM SPECIAL-STRUCTURES: CITY OF COLUMBUS (DEPARTMENT OF TECH)
DUCT BANK COMPLETE
ITEM SPECIAL -STRUCTURES: ODOT DUCT BANK COMPLETE**

GENERAL:

THIS WORK INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL A COMPLETE DUCT BANK FOR USE BY CITY OF COLUMBUS, CITY OF COLUMBUS (DEPARTMENT OF TECH), AND ODOT DUCT BANK COMPLETE EXTENDING ACROSS THE BRIDGE AND THROUGH EACH ABUTMENT WALL, AS SHOWN IN THE PLANS. THE INSTALLATION SHALL INCLUDE CONDUIT RACK, FITTINGS, GALVANIZED STEEL SPLIT CASING PIPE SLEEVE, GALVANIZED STEEL CONDUIT THROUGH ABUTMENT WALLS, AND ALL OTHER INCIDENTALS AND GROUT TO COMPLETE THE INSTALLATION. FIBERGLASS CONDUIT AND ASSOCIATED FITTINGS AND COUPLINGS SHALL BE INCLUDED WITH ITEM 625 FIBERGLASS REINFORCED, ATTACHED TO STRUCTURE. STRUCTURAL STEEL SUPPORT MEMBERS CONNECTED TO BRIDGE BEAMS ARE PAID UNDER ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL UF. ADJACENT BURIED CONDUIT CONNECTED TO THE GALVANIZED STEEL CONDUIT AT BRIDGE APPROACH AREAS ARE PAID UNDER SEPARATE ITEMS.

MATERIALS

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THE DEPARTMENT WILL PAY LUMP SUM FOR ALL WORK, LABOR, MATERIAL, EQUIPMENT, & INCIDENTALS TO INSTALL A COMPLETE DUCT BANK FOR "ITEM SPECIAL - STRUCTURES: DUCT BANK COMPLETE"

ABBREVIATIONS

ABUT.	ABUTMENT	SPA.	SPACES
BRG.	BEARING	EA.	EACH
BOT.	BOTTOM	P.E.J.F.	PREFORMED
BTWN.	BETWEEN		EXPANSION
CONST. JT., C.J.	CONSTRUCTION JOINT	MIN.	JOINT FILLER
B.S.	BOTH SIDES	ADDIT.	MINIMUM
N.S.	NEAR SIDE	FRWD.	ADDITIONAL
F.S.	FAR SIDE	SPL.	FORWARD
SER.	SERIES	CLR.	SPLICE
TYP.	TYPICAL	P.C.P.P.	CLEAR
EQ.	EQUAL		PERFORATED
DIM.	DIMENSION	N.P.C.P.P.	CORRUGATED
			NON-PERFORATED
			CORRUGATED
			PLASTIC PIPE