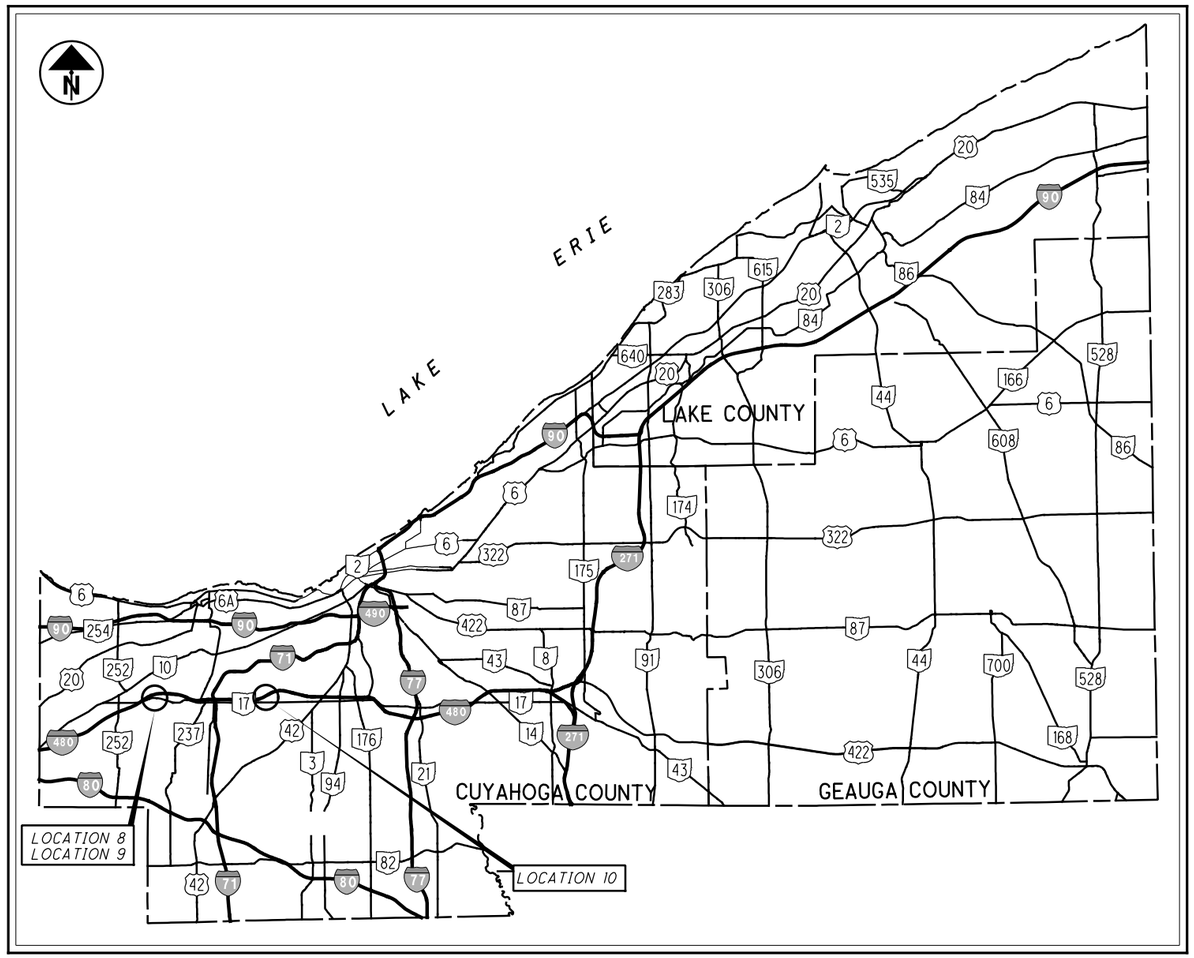

LOCATION MAP

LATITUDE: 41°24'54" N LONGITUDE: 81°36'54" W

(NOTE: FOR COORDINATES PER LOCATION, SEE SHEET 2

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

D12-BH-FY2021(A) MISC(8-10) PART 2

FOR PART 1, SEE D12-BH-FY2021(A) MISC (1-7)

LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	CITY	TOWNSHIP	VILLAGE
8	CUY-480-0612	1814168	FAIRVIEW PARK		
9	CUY-480-0616	1814176	FAIRVIEW PARK		
10	CUY-480-1075	1812912	CLEVELAND		

INDEX OF SHEETS:

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF VARIOUS REPAIRS INCLUDING VANDAL FENCE REPLACMENT, BEARING REPAIRS, CONCRETE REPAIRS AND STEEL REPAIRS.

THIS IS A MAINTENANCE PROJECT.

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

2019 SPECIFICATIONS

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

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

APPROVED _____

DATE 1/6/21 DISTRICT DEPUTY DIRECTOR

APPROVED _____

DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES

Contact Two Working Days Before You Dig

OHIO811.org Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764

(Non-members must be called directly)

PLAN PREPARED BY:

CARPENTER MARTY transportation

6612 SINGLETREE DRIVE COLUMBUS, OH 43229

614.656.2424 * WWW.CMTRAN.COM

ENGINEERS SEAL:

FOR STRUCTURES OVER 20' SPAN

STATE OF OHIO — SHANE THOMAS KALINOSKI 73569 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Shane Kalinoski

DATE: 10/29/2020

ENGINEERS SEAL:

FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20' SPAN

STATE OF OHIO — TONY W. GRIESHOP 70196 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Tony W Grieshop

DATE: 10/29/2020

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
		SEE PART 1			SEE PART 1	SEE PART 1

FEDERAL PROJECT NO. NON-FEDERAL

PID NO. 103162

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT CSX

D12-BH-FY2021(A) MISC PID NO. 103162

1 / 74

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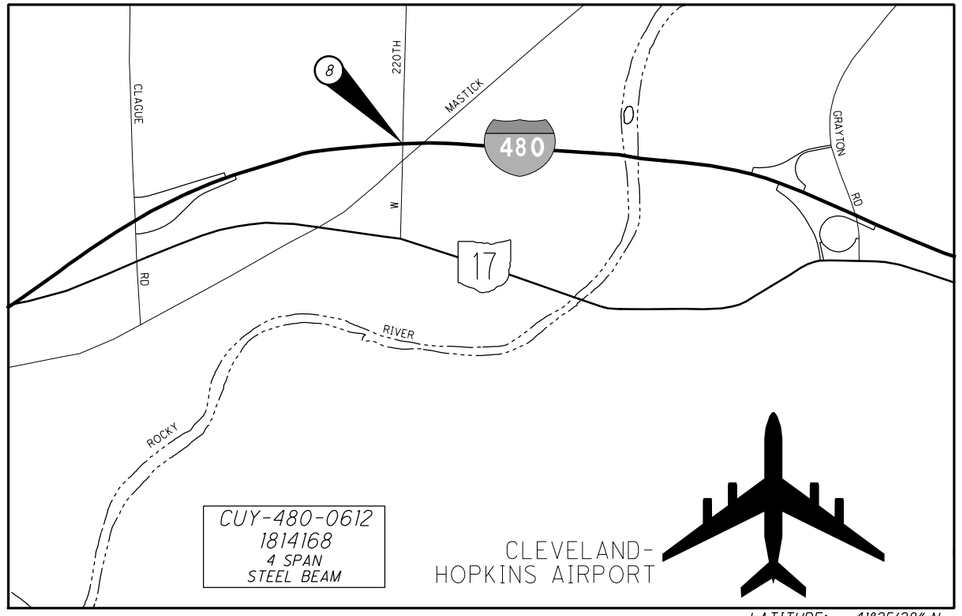
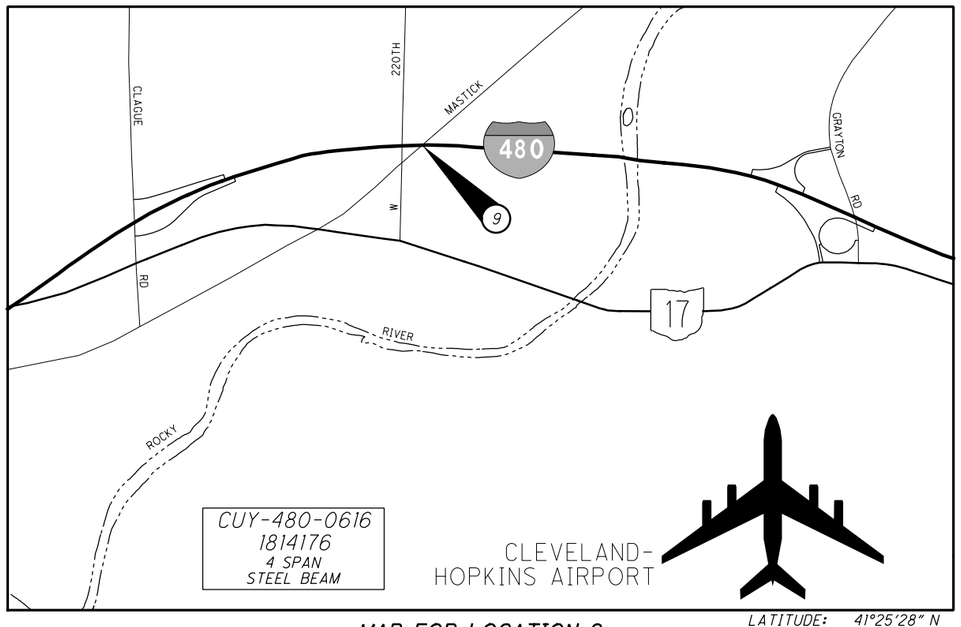


MAP FOR LOCATION 8

LATITUDE: 41°25'28" N
LONGITUDE: 81°51'53" W

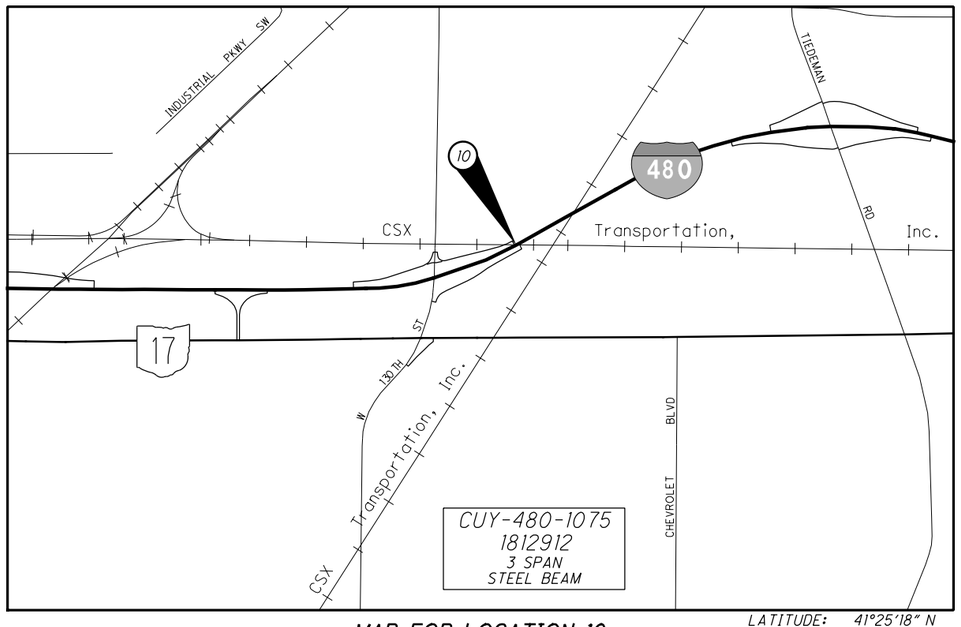
PROPOSED WORK ⓘ
- PATCH CONCRETE DECK AND PARAPET
- REPLACE VANDAL PROTECTION FENCE
- INSTALL TIMBER SUBDECKING



MAP FOR LOCATION 9

LATITUDE: 41°25'28" N
LONGITUDE: 81°51'51" W

PROPOSED WORK ⓘ
- PATCH CONCRETE DECK AND PARAPET
- REPLACE VANDAL PROTECTION FENCE
- FIBER WRAP PIER COLUMS



MAP FOR LOCATION 10

LATITUDE: 41°25'18" N
LONGITUDE: 81°46'36" W

PROPOSED WORK ⓘ
- REPLACE EXPANSION JOINTS
- REPLACE APPROACH SLABS
- REPLACE END CROSSFRAMES
- REPLACE ABUTMENT BEARINGS
- PATCH DECK AND PARAPETS

ⓘ WORK SHOWN IS REPRESENTATIVE AND DOES NOT INCLUDE ALL WORK REQUIRED.

CALCULATED | CHECKED

LOCATION MAPS

D12-BH-FY2021(A) MISC
PID NO. 103162

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

COMMUNICATIONS
AT&T OHIO
13630 LORAIN AVE. 2ND FLOOR
CLEVELAND, OH 44111
ATTN: JAMES JANIS
PHONE: (216) 476-6142
FAX: (216) 476-6013

WIDE OPEN WEST
105 BLAZE INDUSTRIAL PARKWAY
BEREA, OH 44017
ATTN: BOB HAMMOND
PHONE: (440) 625-0349

VERIZON (MCI)
12300 RIDGE ROAD
NORTH ROYALTON, OH 44133
ATTN: DAN ARZ
PHONE: (440) 457-4832

MASTEC UTILITY SERVICES
7300 NORTHFIELD ROAD
WALTON HILLS, OH 44146
ATTN: MICHAEL SHONCE
PHONE: (216) 212-2490

COX COMMUNICATIONS
12221 PLAZA DRIVE
PARMA, OH 44130
ATTN: CRAIG SMITH
PHONE: (216) 535-3356

SIGNALS
CITY OF CLEVELAND, DIVISION OF TRAFFIC ENGINEERING
601 LAKESIDE AVENUE, RM 25
CLEVELAND, OH 44114
ATTN: ANDREW R. CROSS
PHONE: (216) 644-3197

WATER
CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVENUE
CLEVELAND, OH 44114
ATTN: FRED ROBERTS
PHONE: (216) 664-2444, X75590
FAX: (216) 664-2838

GAS
DOMINION ENERGY OHIO
320 SPRINGSIDE DR, SUITE 320
AKRON, OH 44333
ATTN: MICAH J. RISACHER
PHONE: (330) 664-2409

BP OIL
4421 BRADLEY ROAD
CLEVELAND, OH 44109
ATTN: DAN PLEVNY
PHONE: (216) 906-6374

BUCKEYE PARTNERS, L.P.
FIVE TEK PARK
9999 HAMILTON BOULEVARD
BREINIGSVILLE, PA 18031
ATTN: DAVID JONES
PHONE: (610) 904-4409

SEWER
CITY OF CLEVELAND, DIVISION OF WATER POLLUTION CONTROL
12302 KIRBY ROAD
CLEVELAND, OH 44108
ATTN: RACHID ZOGHAIB
PHONE: (216) 664-3785

NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORSD)
3900 EUCLID AVENUE
CLEVELAND, OH 44115
ATTN: MARY MACIEJOWSKI
PHONE: (216) 881-6600, X6466

ELECTRIC
CEI, FIRST ENERGY
6896 MILLER ROAD #101
BRECKSVILLE, OH 44141
ATTN: JOHN M. ZASSICK
PHONE: (440) 546-8706

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

IF ANY UTILITIES ARE DAMAGED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND THE APPROPRIATE UTILITY OWNER(S).

PROFILE AND ALIGNMENT

THE INTENT OF THE PROPOSED PAVEMENT IS TO UTILIZE THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT UNLESS OTHERWISED DETAILED IN THE PLANS.

CLEARING AND GRUBBING, AS PER PLAN

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING. THIS ITEM SHALL INCLUDE TRIMMING BACK ALL TREE BRANCHES AND BRUSH WHICH ARE WITHIN 10'-0" OF ANY LOCATION TO HAVE A PAINTED OR SEALED SURFACE. ANY COMPLETE TREE REMOVALS REQUIRED FOR CONSTRUCTION ACCESS ARE TO BE APPROVED BY THE ENGINEER.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO SECTIONS 102.05, 105.02, AND 513.04 OF THE 2019 CONSTRUCTION AND MATERIAL SPECIFICATIONS.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURES BY THE CONTRACTOR.

THE EXISTING STRUCTURE PLANS MAY BE REVIEWED AT THE:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 12 OFFICE
5500 TRANSPORTATION BOULEVARD
GARFIELD HEIGHTS, OH 44125
OR

HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/CONTRACTADMIN/CONTRACTS/PAGES/DESIGNFILES.ASPX

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED DURING NON-WORKING HOURS AS APPROVED BY THE ENGINEER. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

RESTRICTION TIMES:

7:00PM TO 8:00AM MONDAY THROUGH SATURDAY
ALL-DAY SUNDAYS
ALL HOLIDAYS

WORK LIMITS

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

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HER/HIS OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.08 OF THE 2019 CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

STAGING AREA ON/WITHIN STATE RIGHT-OF-WAY

THERE ARE NO SPECIFIC AREAS GIVEN IN THE PLANS FOR THE CONTRACTOR TO USE AS STAGING AREA(S). IF THE CONTRACTOR WANTS TO USE AN AREA(S) FOR STAGING, REGARDLESS IF IT FALLS WITHIN THE PROJECT LIMITS OR NOT, THE CONTRACTOR IS TO CONTACT MELVIN STAFFORD AT 216-584-2137 AT DISTRICT 12 IN ORDER TO APPLY FOR A PERMIT PER SECTION 107.02 OF THE C&MS. IF A PERMIT IS GRANTED, ALL CONDITIONS OF THE PERMIT SHALL BE MET IN ADDITION TO THE REQUIREMENTS OF 104.04 OF THE C&MS, AT NO COST TO THE STATE. IF THE PROJECT ENGINEER DEEMS THAT ALL THE CONDITIONS OF THE PERMIT WERE NOT MET, THEN 10% OF THE CONTRACT BID AMOUNT FOR MOBILIZATION HALL BE WITHHELD UNTIL ALL CONDITIONS OF THE PERMIT ARE SATISFIED.

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC THE CONTRACTOR'S ATTENTION IS DIRECTED TO C&MS 614.035. IN ADDITION, THE FOLLOWING PROVISIONS SHALL APPLY:

- ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN THIRTY DAYS.
- ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE STATE.

RESTORATION AND CLEAN UP

RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO THAT EXISTING THE WORK WAS STARTED PER C&MS 104.04.

REMOVE ANY BROKEN GLASSWARE FOUND BY CREWS IN THE WORK AREA. DISPOSE OF ANY BROKEN GLASS IN REGULAR RUBBISH DISPOSAL UNITS. DISPOSE OF ALL REMOVED MATERIALS OFF OF THE RIGHT OF WAY AND PARK PROPERTY. PAYMENT FOR RESTORATION WORK IS INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

LIMITS OF OPERATIONS

THE CONTRACTOR'S ACTIVITIES AND WORK SCHEDULE SHALL BE CONSTRAINED BY THE FOLLOWING LIMITATIONS:

1. MAINTENANCE OF TRAFFIC RESTRICTIONS (REFER TO THE MAINTENANCE OF TRAFFIC SHEETS IN THIS PLAN).

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

PORTIONS OF THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF:

34' AT BRIDGE 8 (CUY-480-0612)
37' AT BRIDGE 9 (CUY-480-0616)
42' AT BRIDGE 10 (CUY-480-1075)

IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

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

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

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV

EXISTING PAVEMENT MARKINGS

ANY EXISTING PAVEMENT MARKINGS, INCLUDING RAISED PAVEMENT MARKINGS, THAT ARE AFFECTED BY THE PROPOSED WORK SHALL BE REPLACED IN-KIND. PAYMENT FOR THE NEW PAVEMENT MARKINGS IS AS LISTED IN THE PLANS.

EARTHWORK FOR PROJECT TRANSITION

A CONTINGENCY OF ITEM 203 - EMBANKMENT AND ITEM 203 - EXCAVATION IS BEING PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO TRANSITION THE EARTHWORK INTO THE EXISTING AT THE BEGIN/END OF THE PROJECT.

ITEM 203 - EXCAVATION	100 CY
ITEM 203 - EMBANKMENT	100 CY

CALCULATED KDW
CHECKED TWG

GENERAL NOTES

D12-BH-FY2021(A) MISC
PID NO. 103162

ITEM 832 - EROSION CONTROL

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK SUPPLEMENTAL SPECIFICATION 832:

ITEM 832 - EROSION CONTROL	10000 EACH

TRAFFIC CONTROL - CUY-480-0612

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR REPLACING THE EXISTING PAVEMENT MARKINGS ON W. 220TH STREET FOLLOWING THE COMPLETION OF THE PROJECT:

ITEM 642 - EDGE LINE, 4", TYPE 1	0.07 MILE
ITEM 642 - CENTER LINE, TYPE 1	0.15 MILE
ITEM 642 - CHANNELIZING LINE, 8", TYPE 1	238 FT
ITEM 642 - STOP LINE, TYPE 1	32 FT
ITEM 642 - TRANSVERSE/DIAGONAL, TYPE 1	380 FT
ITEM 642 - LANE ARROW, TYPE 1	3 EACH
ITEM 642 - WORD ON PAVEMENT, 72", TYPE 1	1 EACH

TRAFFIC CONTROL - CUY-480-0616

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE REMOVAL AND REERECTION OF EXISTING SIGNS THAT WILL BE AFFECTED BY THE VANDAL FENCING INSTALLATION ON MASTICK ROAD BRIDGE. THESE SIGNS SHALL BE INSTALLED ON NEW POSTS.

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST	30 FT
ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	3 EACH
ITEM 630 - REMOVAL OF GROUND POST SUPPORT AND DISPOSAL	2 EACH

TRAFFIC CONTROL - CUY-480-1075

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR REPLACING THE EXISTING PAVEMENT MARKINGS ON I.R. 480 FOLLOWING THE COMPLETION OF THE PROJECT:

ITEM 646 - EDGE LINE, 6"	0.29 MILE
ITEM 646 - LANE LINE, 6"	0.52 MILE
ITEM 646 - CHANNELIZING LINE, 12",	448 FT
ITEM 646 - DOTTED LINE, 6"	179 FT

PAVEMENT RESTORATION FOR APPROACH SLAB REPLACEMENT

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR THE PAVEMENT RESTORATION OF THE MAINLINE PAVEMENT AND SHOULDERS FOLLOWING THE APPROACH SLAB REPLACEMENT AT LOCATION 10: CUY-480-1075:

ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT	383 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	686 FT

THE ABOVE QUANTITY IS BASED ON A PAVEMENT RESTORATION WIDTH OF FIVE FEET PERPENDICULAR TO THE BRIDGE SKEW AND LENGTH OF THE LENGTH OF THE APPROACH SLAB ALONG THE BRIDGE SKEW. PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATE ABOVE AT NO ADDITIONAL COST.

APPROACH SLAB REPLACEMENT

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR THE APPROACH SLAB REPLACEMENT AT LOCATION 10: CUY-480-1075:

ITEM 204 - SUBGRADE COMPACTION	1839 SY
ITEM 304 - AGGREGATE BASE	307 CY

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATE ABOVE AT NO ADDITIONAL COST.

CONTIGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

ITEM SPECIAL - SITE ACCESS

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROVIDE ACCESS TO THE SLOPE EROSION REPAIR, DRAINAGE CLEANOUT, PIER COLUMN SCOUR REPAIR, AND DRAINAGE REPAIR LOCATIONS:

LOCATION 1 (CUY-480-0612): ACCESS ALONG MAINLINE SHOULDER FROM STA. 422+00± TO STA. 425+00±.

LOCATION 2 (CUY-480-0616): ACCESS ALONG MAINLINE SHOULDER FROM STA. 424+00± TO STA. 428+00±.

LOCATION 3 (CUY-480-1075): ACCESS ALONG MAINLINE SHOULDER FROM STA. 591+00± TO STA. 598+00±.

THIS ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, EARTHWORK, CLEARING AND GRUBBING, FENCE WORK, GUARDRAIL, SIGN REMOVAL AND REERECTION, CRUSHED AGGREGATE SLOPE PROTECTION, ETC. TEMPORARY EROSION CONTROL ITEMS SHALL BE PAID FOR PER ITEM 832. THIS ITEM SHALL INCLUDE ALL RESTORATION WORK NECESSARY TO RESTORE ANY DISTURBED AREAS TO AS GOOD AS OR BETTER THAN THEIR ORIGINAL CONDITION. WHEN ACCESSING THE SPECIFIC LOCATIONS AND SLOPES 3:1 OR STEEPER ARE ENCOUNTERED, THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO PREVENT FUTURE EROSION PROBLEMS.

ALL SLOPES 3:1 OR STEEPER SHALL HAVE ITEM 670-SLOPE PROTECTION INSTALLED. ALL DISTURBED VEGETATED DITCHES SHALL HAVE ITEM 670-DITCH EROSION PROTECTION INSTALLED. ALL DISTURBED ROCK CHANNEL PROTECTION AND PAVED GUTTERS SHALL BE REPLACED PER THE CURRENT SPECIFICATIONS UNDER THIS ITEM, AT NO ADDITIONAL COST TO THE STATE.

THIS ITEM SHALL ALSO INCLUDE SEEDING, FERTILIZING, AND WATERING PER ITEM 659 FOR ALL DISTURBED AREAS. IT SHALL ALSO INCLUDE THE ADDITION OF 3 INCHES OF TOPSOIL FOR ALL DISTURBED AREAS. THE CONTRACTOR SHALL ENSURE A GOOD STAND OF GRASS AS DESCRIBED PER 659.23. THE COST OF ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS AS APPROVED BY THE ENGINEER FOR THE SLOPE EROSION REPAIR AND DRAINAGE REPAIR LOCATIONS, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL - SITE ACCESS.

GENERAL NOTES

ITEM 614 - MAINTAINING TRAFFIC

GENERALLY, THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AS TO MAKE THE PROPOSED REPAIR WITH A MINIMUM OF HAZARD, DELAY, AND INCONVENIENCE TO THE MOTORISTS USING THE HIGHWAY AFFECTED BY THE WORK ZONE UNDER THIS CONTRACT. IN ADDITION TO THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING SPECIFIC PROVISIONS ARE MANDATORY.

I. NOTIFICATION

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 FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER BY EMAIL AT (D12.PUBLIC.INFROMATION@DOT.OHIO.GOV)

DISTRICT PERMIT SECTION BY EMAIL AT (DISTRICT12.PERMITS@DOT.OHIO.GOV)

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY EMAIL AT (HAULING.PERMITS@DOT.OHIO.GOV)

CITY OF CLEVELAND, ANDREW CROSS BY PHONE AT (216) 664-3197 OR EMAIL AT ACROSS@CITY.CLEVELAND.OH.US

CITY OF FAIRVIEW PARK, SHAWN LEININGER BY PHONE AT (440) 333-2200 OR EMAIL AT SHAWN.LEININGER@FAIRVIEWPARK.ORG

FAIRVIEW HOSPITAL BY PHONE AT (216) 476-7000

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	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 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 UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

II. LANE CLOSURE RESTRICTIONS

1. LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST WHICH IS LOCATED ON THE ODOT WEBSITE: HTTP://WWW.DOT.STATE.OH.US/DISTRICTS/D12/HIGHWAYMANAGEMENT/PAGES/PERMITTEDLANECLOSURES.ASPX THE LATEST REVISION AT 14 DAYS PRIOR TO THE BID DATE SHALL BE IN EFFECT FOR THIS PROJECT.
2. UNLESS OTHERWISE NOTED, EXIT AND ENTRANCE RAMP LANES SHALL REMAIN OPEN AT ALL TIMES AND EXHIBIT A MINIMUM WIDTH OF ELEVEN (11) FEET.
3. MAINTENANCE OF TRAFFIC SHALL FOLLOW THE INSTRUCTION OF THE STANDARD CONSTRUCTION DRAWINGS LISTED ON THE TITLE SHEET AND THE LATEST REVISION OF THE OMUTCD.
4. PEDESTRIAN TRAFFIC SHALL BE PERMITTED AND ACCOMMODATED ON AT LEAST ONE SIDE AT A TIME AT LOCATIONS WHERE PEDESTRIAN TRAFFIC IS CURRENTLY MAINTAINED.
5. ALL DRIVES AND SIDE STREETS SHALL BE MAINTAINED AT ALL TIMES.

NOTWITHSTANDING THE ABOVE, NO LANE CLOSURES SHALL OCCUR DURING THE PERIOD BEGINNING AT 12:00 NOON ON THE DAY PRECEDING AND CONTINUING UNTIL NOON ON THE FOLLOWING LEGAL HOLIDAYS AND HOLIDAY WEEKENDS SUCH AS MEMORIAL DAY, FOURTH OF JULY, AND LABOR DAY. FURTHERMORE, NO LANE CLOSURES ARE TO BE IMPLEMENTED OR IN PLACE DURING INCREASED TRAFFIC VOLUMES CAUSED BY SPECIAL EVENTS OR WHEN THE ENGINEER DEEMS THE CLIMATOLOGICAL CONDITIONS TOO HAZARDOUS.

LOCATION 8 (CUY-480-0612)
W 220TH STREET OVER I-480:

THE CONTRACTOR SHALL PERFORM WORK IN TWO PHASES OF CONSTRUCTION FOR W 220TH STREET.

PHASE 1:
THE FIRST PHASE SHALL COMPLETE THE BACKWALL REPAIR, VANDAL FENCE REPLACEMENT, AND DECK REPAIR ON THE EAST SIDE OF THE BRIDGE. TRAFFIC SHALL SHIFTED TO WEST SIDE OF THE BRIDGE AND TWO 10' LANES SHALL BE PROVIDED. ALL TURNING MOVEMENTS SHALL BE MAINTAINED AT THE MASTICK ROAD INTERSECTION. PEDESTRIAN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 12.

PHASE 2:
THE SECOND PHASE SHALL COMPLETE THE BACKWALL REPAIR, VANDAL FENCE REPLACEMENT, AND DECK REPAIR ON THE WEST SIDE OF THE BRIDGE. TRAFFIC SHALL BE SHIFTED TO THE EAST SIDE OF THE BRIDGE. ALL TURNING MOVEMENTS SHALL BE MAINTAINED AT THE MASTICK ROAD INTERSECTION. PEDESTRIAN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 12.

THE BACKWALL REPAIR ON THE WEST SIDE OF THE BRIDGE SHALL BE COMPETED IN TWO SUBPHASES. ONCE THE SECTION OF BACKWALL WITHIN THE EXISTING SOUTHBOUND RIGHT LANE IS REPAIRED, SOUTHBOUND TRAFFIC SHALL BE DIVERTED TO THIS FAR OUTSIDE LANE IN ORDER TO COMPLETE THE BACKWALL REPAIR IN THE EXISTING SOUTHBOUND LEFT TURN LANE. THIS DIVERSION SHALL ONLY BE TEMPORARY AND DURING ACTIVE WORKING HOURS. FLAGGERS SHALL BE UTILIZED TO HELP GUIDE VEHICLES DURING THIS SHORT TERM DIVERSION. STEEL PLATES SHALL BE UTILIZED AS NECESSARY TO COVER REPAIRED AREAS SO THAT LANES CAN BE REOPENED TO TRAFFIC.

DURING THE INSTALLATION OF THE TIMBER SUBDECKING AND VANDAL FENCE, TRAFFIC ON I-480 SHALL BE MAINTAINED AND LANE CLOSURES SHALL FOLLOW THE PERMITTED LANE CLOSURE TIMES.

LOCATION 9 (CUY-480-0616)
MASTICK ROAD OVER I-480:

THE CONTRACTOR SHALL PERFORM THE WORK ON THIS BRIDGE BY CLOSING MASTICK ROAD TO TRAFFIC. VEHICULAR AND PEDESTRIAN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEETS 13 AND 14.

DURING THE INSTALLATION OF THE VANDAL FENCE, TRAFFIC ON I-480 SHALL BE MAINTAINED AND LANE CLOSURES SHALL FOLLOW THE PERMITTED LANE CLOSURE TIMES.

LOCATION 10 (CUY-480-1075)
I-480 OVER CSX RAILROAD:

THE CONTRACTOR SHALL PERFORM WORK IN THREE PHASES OF CONSTRUCTION FOR I-480. THE EXIT AND ENTRANCE RAMP TO W 130TH STREET SHALL BE CLOSED FOR THE DURATION OF THIS WORK. TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 21.

PHASE 1:
THE PARAPET PATCHING, APPROACH SLAB REPLACEMENT, AND EXPANSION JOINT REPLACEMENT SHALL BE COMPLETED ON THE OUTSIDE OF EACH BRIDGE. TRAFFIC SHALL BE SHIFTED TO THE INSIDE OF THE ROADWAY AND THE WORK AREA SHALL BE PROTECTED BY PORTABLE BARRIER. WORK ZONE SIGNING APPROACHING AND WITHIN THE WORK AREA SHALL BE AS PER SCD MT-102.10.

PHASE 2:
THE APPROACH SLAB REPLACEMENT, EXPANSION JOINT REPLACEMENT, AND DECK PATCHING SHALL BE COMPLETED ON THE MIDDLE SECTION OF EACH BRIDGE. THE FOUR LANES OF I-480 IN EACH DIRECTION SHALL BE SPLIT. THE TWO EASTBOUND AND WESTBOUND OUTSIDE LANES SHALL BE SHIFTED TO THE OUTSIDE OF THE ROADWAY WHILE THE TWO INSIDE LANES FOR EACH DIRECTION SHALL REMAIN IN THEIR PHASE 1 LOCATION. THE WORK AREA SHALL BE PROTECTED BY PORTABLE BARRIER. WORK ZONE SIGNING APPROACHING AND WITHIN THE WORK AREA SHALL BE AS PER SCD MT-95.72.

PHASE 3:
THE APPROACH SLAB REPLACEMENT, EXPANSION JOINT REPLACEMENT, AND DECK PATCHING SHALL BE COMPLETED ON THE INSIDE SECTION OF THE BRIDGE. THE TWO OUTSIDE LANES SHALL REMAIN IN THEIR LOCATION FROM THE PREVIOUS PHASE AND THE TWO INSIDE LANES SHALL BE SHIFTED TOWARDS THE OUTSIDE. THE WORK AREA SHALL BE PROTECTED BY PORTABLE BARRIER. WORK ZONE SIGNING ON THE APPROACH AND WITHIN THE WORK AREA SHALL BE AS PER SCD MT-102.10

III. MAINTENANCE OF TRAFFIC SYSTEMS

1. WHEN REQUIRED

   WHENEVER ANY PART OF THE TRAVELED SURFACE IS BEING WORKED UPON OR IS OTHERWISE NOT SUITABLE FOR SAFE AND CONVENIENT USE BY VEHICLES, TRAFFIC CONTROL DEVICES SUFFICIENT TO PROTECT SUCH AREAS TO ASSURE THE SAFE AND CONVENIENT PASSAGE OF VEHICULAR TRAFFIC SHALL BE INSTALLED AND MAINTAINED. SUCH TRAFFIC CONTROL DEVICES AND THE MANNER IN WHICH THEY ARE USED SHALL BE CONSISTENT WITH THESE PLANS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, HEREINAFTER REFERRED TO AS THE "MANUAL". THE TRAFFIC CONTROL DEVICE SYSTEM SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL FOR EACH PARTICULAR SITUATION. WHENEVER THE ENGINEER DEEMS IT NECESSARY ESPECIALLY WHERE A GRADE, CURVE, OR MERGE CONDITIONS EXISTS, HE MAY DIRECT THAT ADDITIONAL OR ALTERNATIVE DEVICES BE USED.

2. CONDITIONS

   DURING ALL PARTS OF THIS PROJECT FLAGGERS, SIGNING, BARRICADES, FLASHING ARROWS, ETC. SHALL BE LOCATED AS INDICATED IN THE "MANUAL" OR AS SHOWN IN THE STANDARD DRAWINGS.

3. ADVANCE WARNING SIGNS

   ALL ADVANCE WARNING SIGNS FOR ANY CONDITIONS WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

4. FLAGGERS

   AT LEAST ONE FLAGGER IS REQUIRED FOR CLOSURE. THE CONTRACTOR SHALL FURNISH ADDITIONAL FLAGGERS AS DIRECTED BY THE ENGINEER.

5. PROTECTION OF PUBLIC

   PERSONAL CARS SHALL NOT BE PARKED WITHIN THE RIGHT OF WAY.

6. FAILURE TO COMPLY

   IF THERE IS ANY FAILURE TO COMPLY WITH PROVISIONS OF THE "MANUAL", THE HIGHWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE HIGHWAY, IN THE VICINITY OF THE WORK AREA, IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF THIS CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

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IV. MAINTENANCE OF TRAFFIC MATERIALS

1. SIGNS

SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES ARE TO BE AS PROVIDED IN THE "MANUAL", OR IN DESIGN DRAWINGS PROVIDED BY THE DEPARTMENT OF TRANSPORTATION. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT.

2. SIGN SUPPORT

SIGN SUPPORTS SHALL BE OF SUFFICIENT SIZE AND MASS AS TO SUPPORT THE SIGNS AT THE APPROPRIATE HEIGHT. SUPPORTS SHALL BE AS SHOWN ON THE STANDARD DRAWINGS.

3. FLASHING ARROW REQUIREMENT

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORISTS SHALL BE WARNED AND DIRECTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW PANEL FOR EACH LANE CLOSED. THE CONTRACTOR SHALL REFER TO SUPPLEMENTAL SPECIFICATION 821, 921 AND THE PROVISIONS SET FORTH IN THE "MANUAL" FOR ALL INFORMATION REGARDING FURNISHING, MAINTAINING, AND USE OF FLASHING ARROW PANELS.

4. DRUMS

DRUMS SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE "MANUAL". ALL COSTS FOR INSTALLING, MAINTAINING, AND SUBSEQUENT REMOVAL OF SAID DRUMS IS TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

5. CONES

CONES, IF UTILIZED, ARE TO BE LOCATED AS SHOWN IN THE "MANUAL" AND THE STANDARD DRAWINGS.

6. BARRIER

PORTABLE BARRIER IF NECESSARY IS TO BE LOCATED AS SHOWN IN THE "MANUAL" AND THE STANDARD DRAWINGS.

7. FLASHERS

FLASHERS SHALL BE 12 VOLT BATTERY-OPERATED MODELS WITH 7 INCH DIAMETER YELLOW LENSES ILLUMINATED BY RAPID INTERMITTENT FLASHERS OF SHORT DURATION AND ARE TO BE PLACED ON ALL SIGNS AT ALL TIMES AS REQUIRED BY THE "MANUAL" AND THE STANDARD CONSTRUCTION DRAWINGS.

8. FLOODLIGHTING

FLOODLIGHTING OF THE WORKSITE FOR OPERATIONS CONDUCTED DURING THE NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND ENGINEER SHALL DRIVE THROUGH THE WORKSITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

9. WORK VEHICLES

ALL WORK VEHICLES LICENSED TO OPERATE ON THE HIGHWAY, SHALL BE EQUIPPED WITH A FLASHING, ROTATING, OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF ONE-QUARTER MILE IN BRIGHT SUNLIGHT AND SHALL BE OPERATED WITH LIGHTED HEAD AND TAIL LAMPS. THE AMBER LIGHT SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND WHILE TRAVELING TO AND FROM THE WORK ZONE WHENEVER THE VEHICLE SPEED IS BELOW THE POSTED LEGAL LIMIT. VEHICLE HAZARD LIGHTS DO NOT SATISFY THIS REQUIREMENT. ALL OTHER EQUIPMENT SHALL BE EQUIPPED WITH A FLASHING, ROTATING, OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF ONE-QUARTER MILE IN BRIGHT SUNLIGHT. THE AMBER LIGHT SHALL BE IN OPERATION WHILE THE EQUIPMENT IS WITHIN THE WORK ZONE.

V. PAYMENT

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

MAINTENANCE OF TRAFFIC SCHEME

THE CONTRACTOR SHALL DEVISE A SIMPLE MAINTENANCE OF TRAFFIC SCHEME, WHICH SHALL BE DEVISED BY THE WORKSITE TRAFFIC SUPERVISOR (SCHEME MAY BE A HAND SKETCH) AND PRESENT IT TO THE DISTRICT WORK ZONE TRAFFIC CONTROL ENGINEER AND PROJECT ENGINEER FOR ACCEPTANCE AT LEAST TWO WEEKS PRIOR TO IMPLEMENTATION. IN GENERAL, THE METHODS FOR MAINTAINING TRAFFIC THAT THE CONTRACTOR PROPOSES TO USE FOR CONDUCTING THE REQUIRED WORK IN A SAFE AND EFFICIENT MANNER CAN BE SHOWN BY HAND SKETCHES AS NECESSARY. THE MAINTENANCE OF TRAFFIC SCHEME SHALL BE IN CONFORMANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST REVISION) THE REFERENCED STANDARD CONSTRUCTION DRAWINGS, THE ATTACHED MAINTENANCE OF TRAFFIC SHEETS, AND THE SPECIFICATIONS. THE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL THE MAINTENANCE OF TRAFFIC SCHEME HAS BEEN ACCEPTED.

IF DURING THE PROJECT THE ENGINEER DETERMINES THAT THE APPROVED MAINTENANCE OF TRAFFIC PLAN IS NOT PERFORMING AS DESIRED, THE WORK SHALL BE SUSPENDED UNTIL THE PROBLEM IS RESOLVED TO THE SATISFACTION OF THE ENGINEER AND THE MAINTENANCE OF TRAFFIC PLAN IS REVISED ACCORDINGLY. ANY COSTS OR DELAYS INCURRED AS A RESULT OF THE FAILURE OF THE SATISFACTION OF THE ENGINEER SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.

PAYMENT FOR ALL THE ITEMS REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THESE REQUIREMENTS IS INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614-MAINTAINING TRAFFIC.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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

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

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

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

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

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

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

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN....24 SIGN MONTH, ASSUMING 3 PCMS SIGNS FOR 8 MONTHS

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

MAINTENANCE OF TRAFFIC CONTROL ZONES

TEMPORARY PAVEMENT MARKINGS AT THE LOCATIONS DETAILED IN THE PLANS OR SPECIFIED IN THE STANDARD DRAWINGS. WHEN THE CONTRACTOR IS NOTIFIED OF DEFICIENCIES HE SHALL CORRECT THE DEFICIENCIES AS SOON AS POSSIBLE, PREFERABLY WITHIN 12 HOURS AND NO LATER THAN 24 HOURS.

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ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24 " WIDE HAZARDS (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)
ITEM 614, OBJECT MARKER, ONE WAY

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ITEM 614, WORK ZONE RAISED PAVEMENT MARKERS

RAISED PAVEMENT MARKERS IN WORK ZONES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKER. 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.

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

AN ESTIMATED QUANTITY OF ITEM 614, WORK ZONE RAISED PAVEMENT MARKER HAS BEEN PROVIDED IN MAINTENANCE OF TRAFFIC SUBSUMMARY AND CARRIED TO THE GENERAL SUMMARY.

ITEM 621, RAISED PAVEMENT MARKERS REMOVED, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING RAISED PAVEMENT MARKER REFLECTORS FROM THE EXISTING RAISED PAVEMENT MARKERS PRIOR TO MAINTENANCE OF TRAFFIC PHASES 1 OF LOCATION 10: CUY-480-1075 (I-480 OVER CSX RAILROAD). THE REFLECTORS SHALL BE REPLACED AFTER THE LANES HAVE BEEN PLACED IN THEIR PRECONSTRUCTION LOCATION

ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO REMOVE THE EXISTING RAISED PAVEMENT MARKER REFLECTORS SHALL BE INCLUDED WITH ITEM 621 RAISED PAVEMENT MARKER REMOVED, AS PER PLAN.

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

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G. DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
- WHEN CONSTRUCTION VEHICLES ARE ENTERING/ EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

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

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS 100 HOURS.

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS.

ITEM 614, WORK ZONE PAVEMENT MARKING, MISC.: REMOVABLE, NON-REFLECTIVE PREFORMED BLACKOUT TAPE

THIS ITEM SHALL CONFORM TO CMS 614.11 WORK ZONE PAVEMENT MARKING REQUIREMENTS WITH THE EXCEPTION THAT THE MARKING MATERIAL SHALL BE BLACKOUT TAPE CONFORMING TO SUPPLEMENTAL SPECIFICATION 987. THE BLACKOUT TAPE SHALL BE MANUFACTURED BY A SUPPLIER ON ODOT'S QUALIFIED PRODUCTS LIST FOR THIS ITEM. PAYMENT FOR THIS ITEM SHALL BE MADE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 614 WORK ZONE PAVEMENT MARKING, MISC.: REMOVABLE, NON-REFLECTIVE PREFORMED BLACKOUT TAPE AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, MAINTAIN, AND REMOVE THIS ITEM.

THE CONTACTOR SHALL INSTALL A SINGLE CONTINUOUS PIECE OF BLACKOUT TAPE TO COVER THE EXISTING EDGE LINES AND LANE LINES AS INDICATED IN THE PLANS.

CALCULATED NAU CHECKED TWG

MAINTENANCE OF TRAFFIC GENERAL NOTES

D12-BH-FY2021(A) MISC
PID NO. 103162

ITEM 614, 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 # 11 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.

EXTRA ADVANCE WARNING SIGNS

AN EXTRA ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20-5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED WARNING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE EXTRA ADVANCE WARNING SIGNS GROUPS AS SHOWN ON TRAFFIC SCD MT-95.50 AT THE FOLLOWING DISTANCES IN ADVANCE OF THE LANE TAPERS WITH THE APPROPRIATE W16-3A DISTANCE PLATES:

1. LOCATION 10: CUY-480-1075 (I-480 OVER CSX RAILROAD) LANE TAPER STATION: 574+70±, PHASE 1 THRU 3 (I-480 ED); PROVIDE SIGN GROUPS AT 2 MILES, 3 MILES, AND 4 MILES.

2. LOCATION 10: CUY-480-1075 (I-480 OVER CSX RAILROAD) LANE TAPER STATION: 609+75±, PHASE 1 THRU 3 (I-480 WB); PROVIDE SIGN GROUPS AT 2 MILES, 3 MILES, AND 4 MILES.

THE CONTRACTOR SHALL HAVE AN ADDITIONAL EXTRA ADVANCE WARNING SIGN GROUP (6 SIGNS AND 2 DISTANCE PLATES) AVAILABLE FOR USE WHEN DIRECTED BY THE ENGINEER. THE DISTANCE PLATES FOR THIS GROUP SHALL BE ABLE TO BE MODIFIED IN THE FIELD TO SHOW APPROPRIATE WHOLE MILES TO THE LANE TAPER.

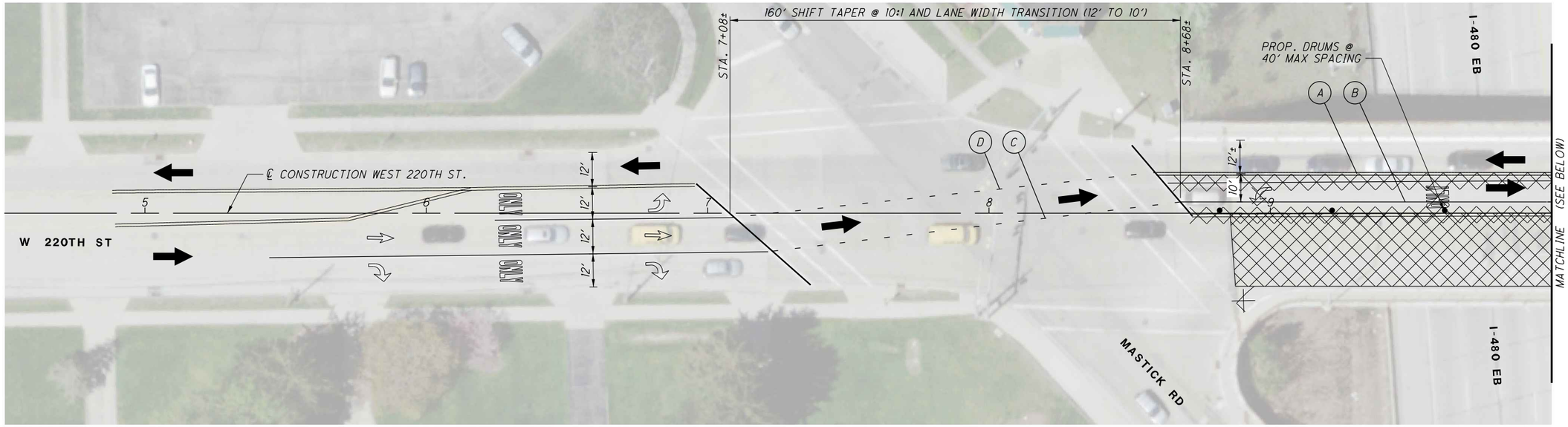
PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

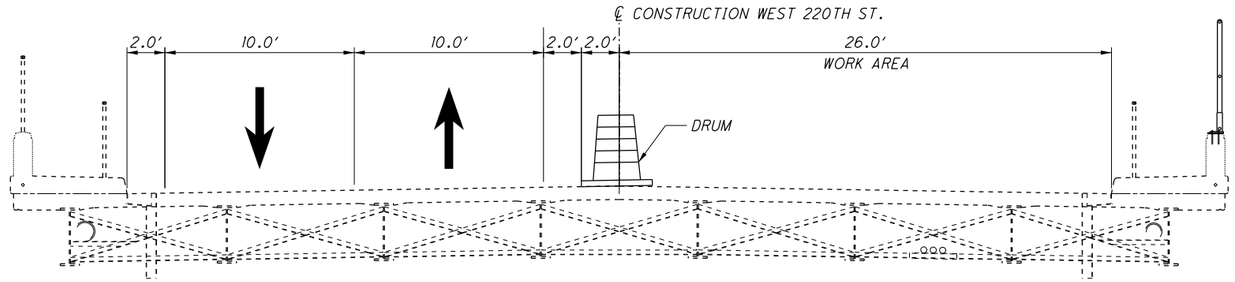
STATION		SIDE	614														615	621		622				
			INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE-WAY	OBJECT MARKER, ONE WAY	WORK ZONE CENTER LINE, CLASS 1, 740.06, TYPE 1	WORK ZONE EDGE LINE, CLASS 1, 6", 740.06, TYPE 1	WORK ZONE DOTTED LINE, CLASS 1, 6", 740.06, TYPE 1		WORK ZONE ARROW, CLASS 1, 740.06, TYPE 1	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT		WORK ZONE CHANNELIZING LINE, CLASS 1, 8", 642 PAINT	WORK ZONE PAVEMENT MARKINGS, MISC.: REMOVABLE, NON-REFLECTIVE PREFORMED BLACKOUT TAPE	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	RPM REFLECTOR	RAISED PAVEMENT MARKER REMOVED, AS PER PLAN	PORTABLE BARRIER, "Y" CONNECTOR	PORTABLE BARRIER, UNANCHORED		
FROM	TO		FT	EACH	EACH	EACH	EACH	MILE	MILE	FT		EACH	MILE		FT	FT	SY	EACH	EACH	EACH	FT		
									W	Y	W		Y	W									
CUY-480-0612 PHASE 1																							
PAVEMENT MARKING																							
7+00±	13+75±	LT/RT						740	508	152	148					1150							
CUY-480-0612 PHASE 2																							
PAVEMENT MARKING																							
5+87±	13+75±	LT/RT						689	515	176	189	6				570							
CUY-480-1075 PHASE 1																							
PAVEMENT MARKING																							
571+70±	610+00±	RT											3230	3230	11490	17950		102	102				
575+25±	612+75±	LT											3150	3150	9450	15750		99	99				
RAISED PAVEMENT MARKERS																							
571+70±	610+00±	RT			965																		
575+25±	612+75±	LT			945																		
BARRIER																							
590+60±	597+95±	RT		1		15	15														710		
591+75±	602+00±	LT		1		21	21														1000		
INCREASED BARRIER DELINEATION (MEDIAN BARRIER)																							
574+70±	607+00±	RT	800																				
578+25±	609+75±	LT	880																				
PAVEMENT FOR MAINTAINING TRAFFIC																							
586+25±	590+25±	RT															191						
587+50±	591+92±	LT															105						
CUY-480-1075 PHASE 2																							
PAVEMENT MARKING																							
571+70±	610+00±	RT											3230	6460	5030								
575+25±	612+75±	LT											3150	6300	4950								
RAISED PAVEMENT MARKERS																							
571+70±	610+00±	RT			652																		
575+25±	612+75±	LT			636																		
BARRIER																							
590+95±	597+85±	RT		1		15	15													1	690		
590+95±	597+45±	RT				14	14														630		
591+75±	598+85±	LT		1		30	30													1	1400		
CUY-480-1075 PHASE 3																							
PAVEMENT MARKING																							
571+70±	610+00±	RT											3230		8260								
575+25±	612+75±	LT											3150		8100								
RAISED PAVEMENT MARKERS																							
571+70±	610+00±	RT			489																		
575+25±	612+75±	LT			477																		
BARRIER																							
589+70±	597+50±	RT		1		17	17														780		
592+45±	600+25±	LT		1		17	17														780		
TOTALS			1680	6	4164	129	129	1429	1023	328	337	6	19140	19140	47280	35420	296	201	201	2	5990		
CONVERTED TO MILES								0.27	0.19				3.63	3.63									
TOTALS CARRIED TO GENERAL SUMMARY			1680	6	4164	129	129	0.27	0.19	665		6	7.26		47280	35420	296	201	201	2	5990		

CALCULATED KDW
CHECKED TWG

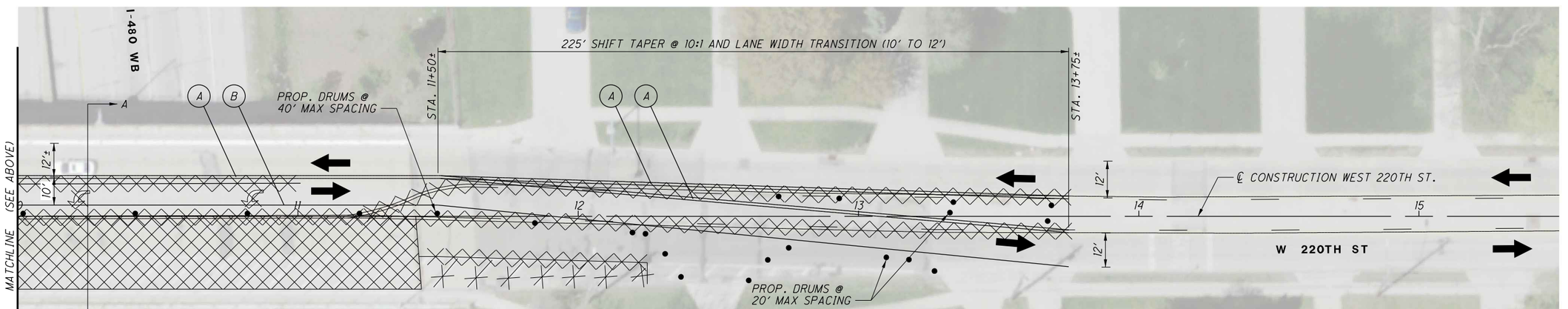
MAINTENANCE OF TRAFFIC SUBSUMMARY

D12-BH-FY2021(A) MISC
PID NO. 103162





TYPICAL SECTION A-A



LEGEND

- WORK AREA
- DRUMS
- DIRECTION OF TRAVEL
- REMOVE EXISTING MARKINGS

(A) WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I (DOUBLE SOLID)

(B) WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I (WHITE)

(C) WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I (WHITE)

(D) WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I (YELLOW)

(E) WORK ZONE ARROW, CLASS I, 740.06, TYPE I

NOTES

1. ACCESS TO RESIDENTIAL DRIVES SHALL BE MAINTAINED AT ALL TIMES.
2. SEE SHEET 9 FOR ESTIMATED QUANTITIES.
3. SEE SCD MT-102.20 FOR ADDITIONAL DETAILS.

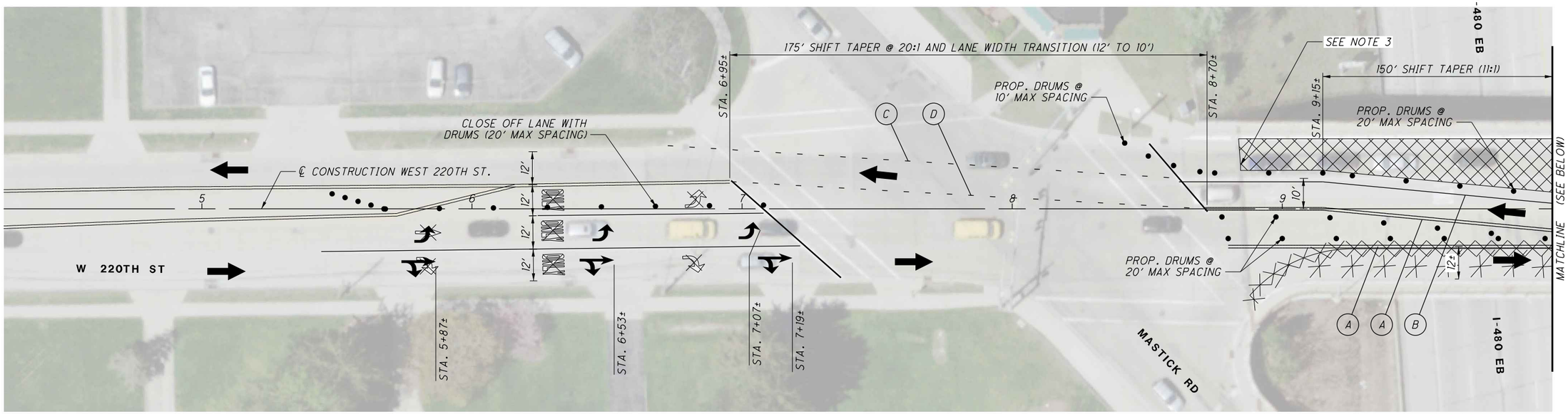
N

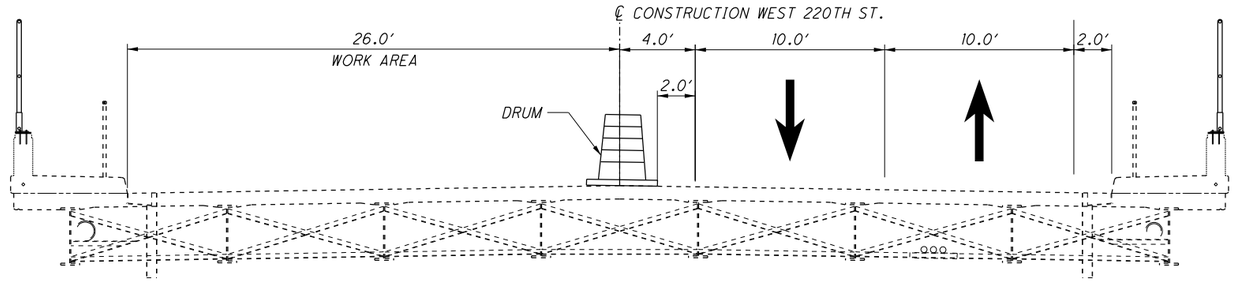
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KDW
CHECKED TWG

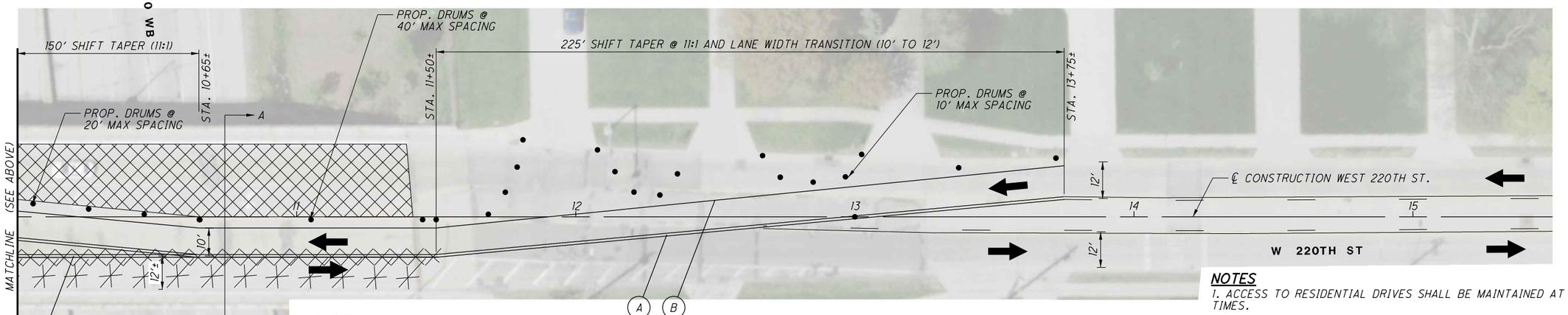
MAINTENANCE OF TRAFFIC PLAN
CUY-480-0612 - PHASE 1

D12-BH-FY2021(A) MISC
PID NO. 103162





TYPICAL SECTION A-A



LEGEND

- WORK AREA
- DRUMS
- DIRECTION OF TRAVEL
- REMOVE PAVEMENT MARKINGS

(A) WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I (DOUBLE SOLID)

(B) WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I (WHITE)

(C) WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I (WHITE)

(D) WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I (YELLOW)

(E) WORK ZONE ARROW, CLASS I, 740.06, TYPE I

NOTES

1. ACCESS TO RESIDENTIAL DRIVES SHALL BE MAINTAINED AT ALL TIMES.

2. SEE SHEET 9 FOR ESTIMATED QUANTITIES.

3. THE BACKWALL REPAIR ON THE LEFT SIDE OF THE BRIDGE SHALL BE COMPLETED IN TWO SUBPHASES. TRAFFIC SHALL BE MAINTAINED AS SHOWN TO THE REPAIR THE SECTION IN THE EXISTING RIGHT LANE. TRAFFIC SHALL THEN BE DIVERTED TO THE FAR OUTSIDE LANE WHILE THE BACKWALL IN THE EXISTING LEFT TURN LANE IS REPAIRED. FLAGGERS SHALL BE UTILIZED TO HELP GUIDE VEHICLES DURING THIS SHORT TERM DIVERSION. STEEL PLATES SHALL BE USED TO PROTECT THE REPAIRED AREA AND TO MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES. TRAFFIC SHALL BE RESTORED AS SHOWN ON THIS SHEET AT THE CONCLUSION OF THE BACKWALL REPAIR IN THE SOUTHBOUND LANES.

HORIZONTAL SCALE IN FEET
0 10 20 40

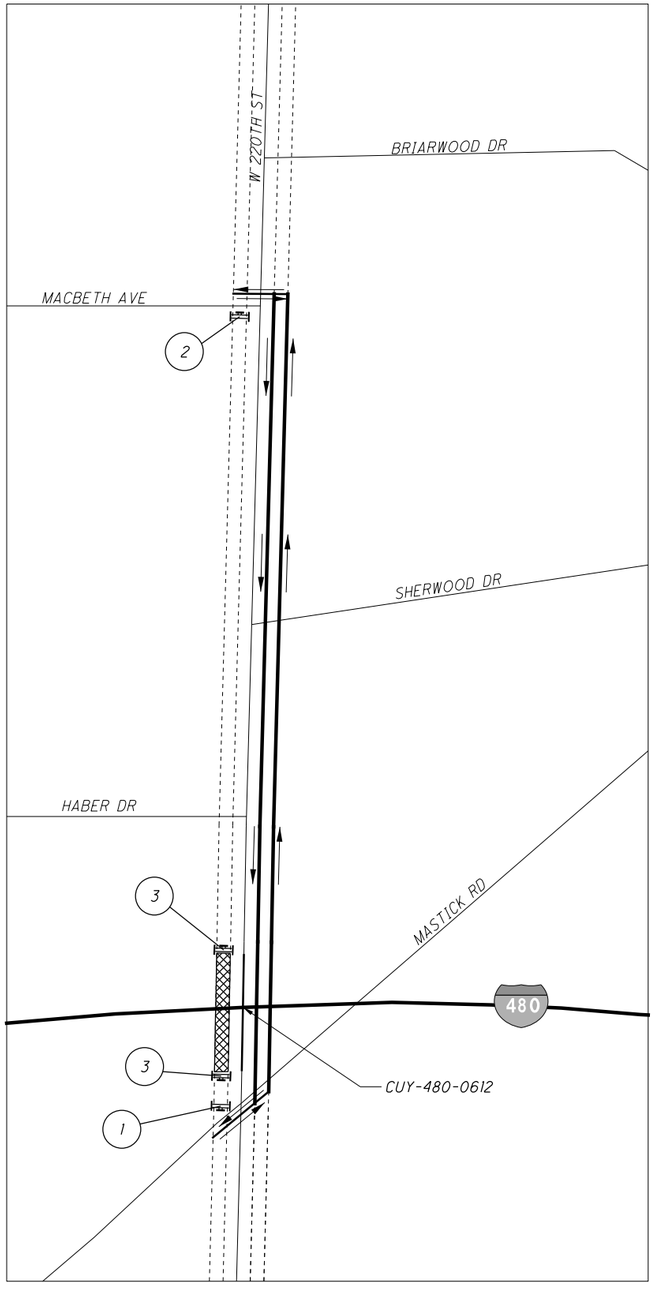
CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-0612 - PHASE 2

D12-BH-FY2021(A) MISC
PID NO. 103162

11
74

PHASE 1



1

SIDEWALK CLOSED AHEAD

CROSS HERE

R9-11R-24
TYPE 1 BARRICADE

2

SIDEWALK CLOSED AHEAD

CROSS HERE

R9-11L-24
TYPE 1 BARRICADE

3

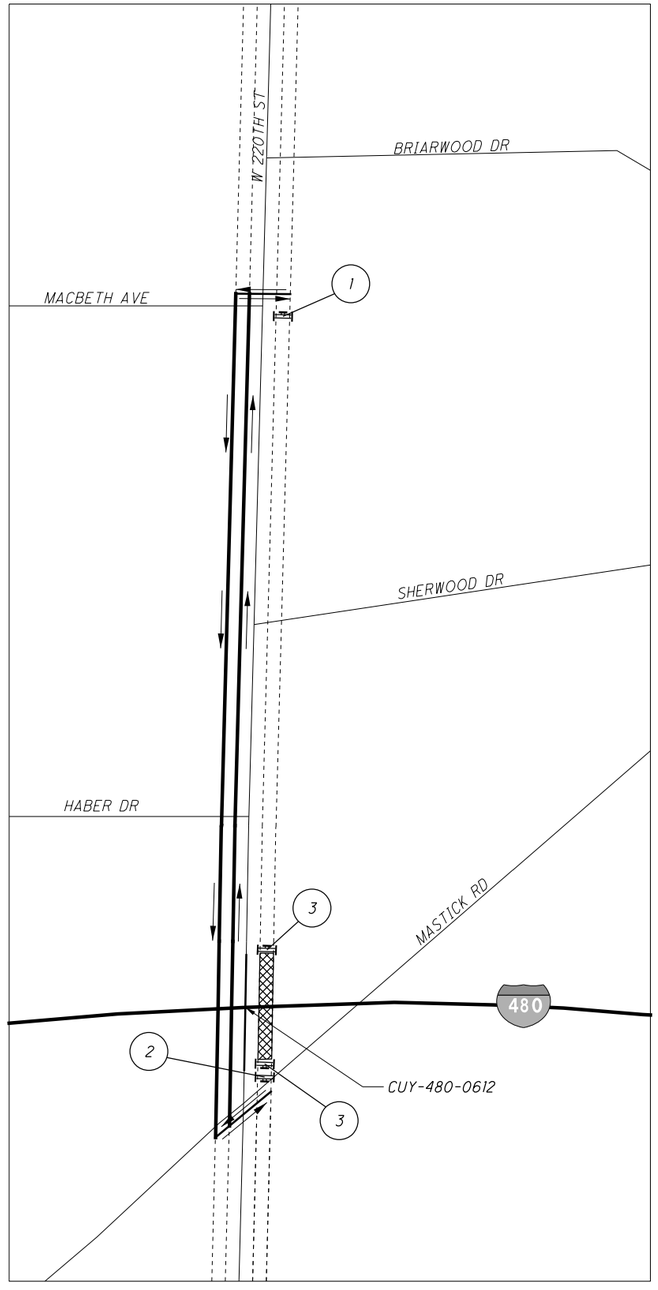
SIDEWALK CLOSED

R9-9-30
TYPE 1 BARRICADE

LEGEND

- TYPE 1 BARRICADE
- CLOSURE AREA
- DETOUR ROUTE

PHASE 2



NOTE

FOR ADDITIONAL DETAILS SEE SCD MT-110.10.

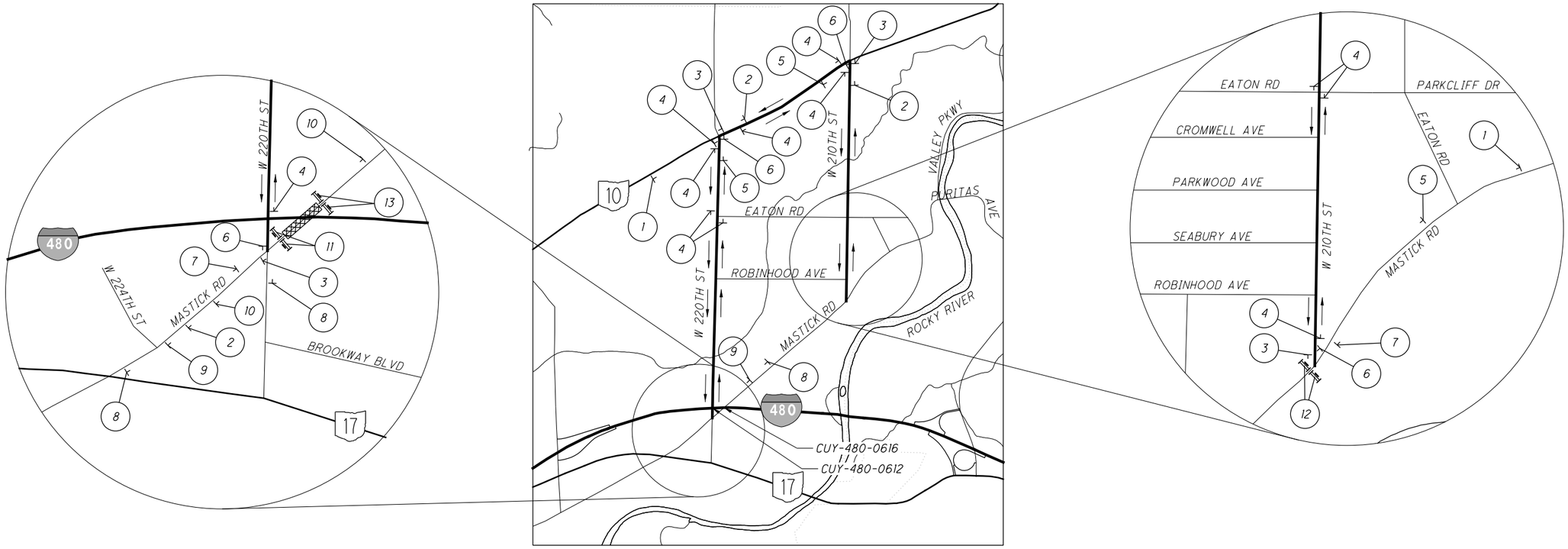
NOT TO SCALE

CALCULATED MTJ
CHECKED TWG

MAINTENANCE OF TRAFFIC
W 220TH ST PEDESTRIAN DETOUR PLAN

D12-BH-FY2021(A) MISC
PID NO. 103162

12
74



1 — DETOUR AHEAD
W20-2-48

2 — DETOUR / MASTICK RD
M4-8-24
D3-1-VAR
M5-1L-21

3 — DETOUR / MASTICK RD
M4-8-24
D3-1-VAR
M6-1L-21

4 — DETOUR / MASTICK RD
M4-8-24
D3-1-VAR
M6-3-21

5 — DETOUR / MASTICK RD
M4-8-24
D3-1-VAR
M5-1R-21

6 — DETOUR / MASTICK RD
M4-8-24
D3-1-VAR
M6-1R-21

7 — MASTICK RD / END DETOUR
D3-1-VAR
M4-8A-24

8 — TYPE A WARNING LIGHT
ROAD WORK AHEAD
W20-1-48

9 — TYPE A WARNING LIGHT
ROAD CLOSED AHEAD
1000 FEET
W20-3-48
W16-2P-30

10 — ROAD CLOSED AHEAD
500 FEET
W20-3-48
W16-2P-30

11 — TYPE B WARNING LIGHT
ROAD CLOSED
DETOUR
R11-2-48
M4-10L-48
TYPE 3 BARRICADE

12 — TYPE B WARNING LIGHT
BRIDGE OUT
0.6 MILES AHEAD
LOCAL TRAFFIC ONLY
DETOUR
R11-3B-60
M4-10R-48
TYPE 3 BARRICADE

13 — TYPE B WARNING LIGHT
ROAD CLOSED
R11-2-48
TYPE 3 BARRICADE

LEGEND
- TYPE 3 BARRICADE
- CLOSURE AREA
- DETOUR ROUTE

NOT TO SCALE

CALCULATED MTJ
CHECKED TWG

MAINTENANCE OF TRAFFIC
MASTICK RD DETOUR PLAN

D12-BH-FY2021(A) MISC
PID NO. 103162

13
74

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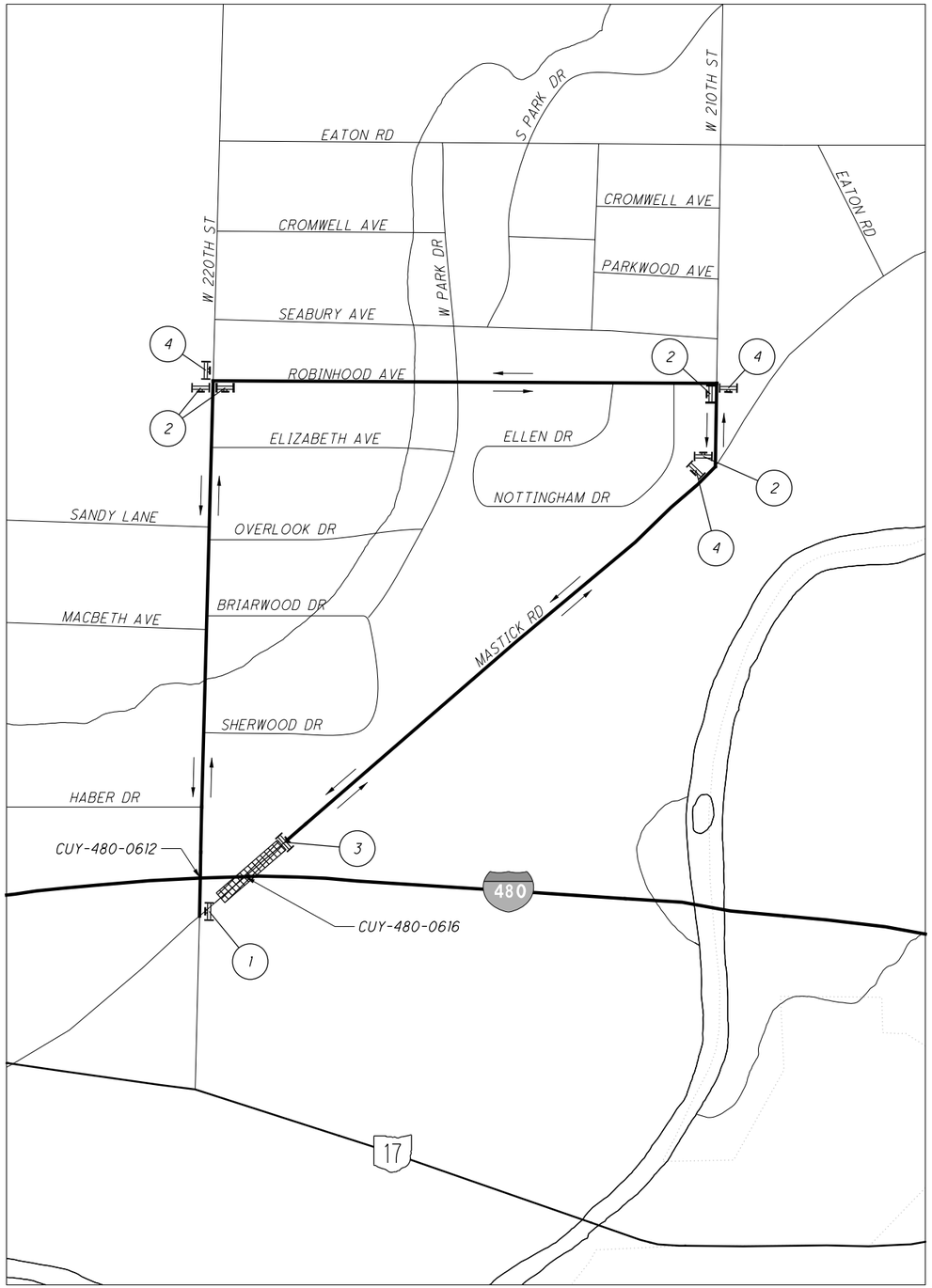

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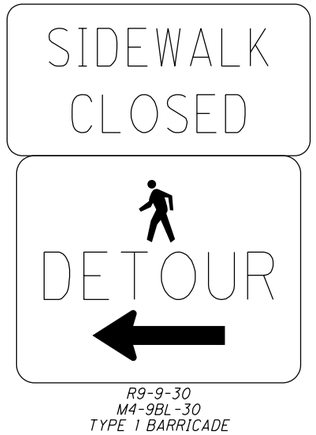
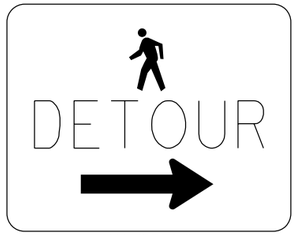


R9-9-30
M4-9BL-30
TYPE I BARRICADE

2

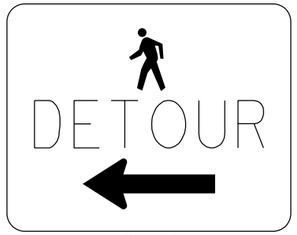


M4-9BR-30
TYPE I BARRICADE

3

R9-9-30
TYPE I BARRICADE

4



R9-9-30
M4-9BL-30
TYPE I BARRICADE

LEGEND

TYPE I BARRICADE

CLOSURE AREA

DETOUR ROUTE

NOTE

FOR ADDITIONAL DETAILS SEE SCD MT-110.10.

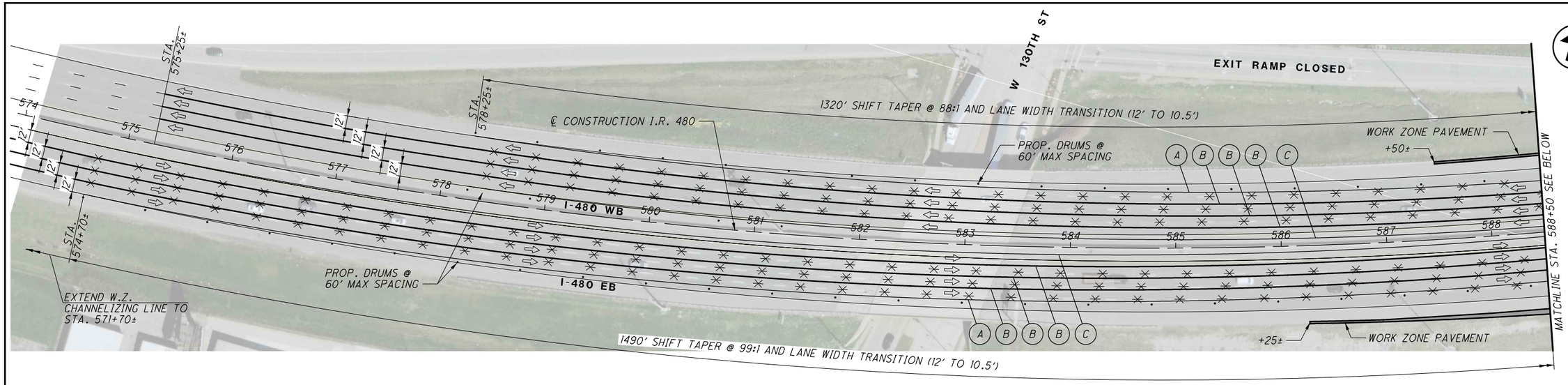
NOT TO SCALE

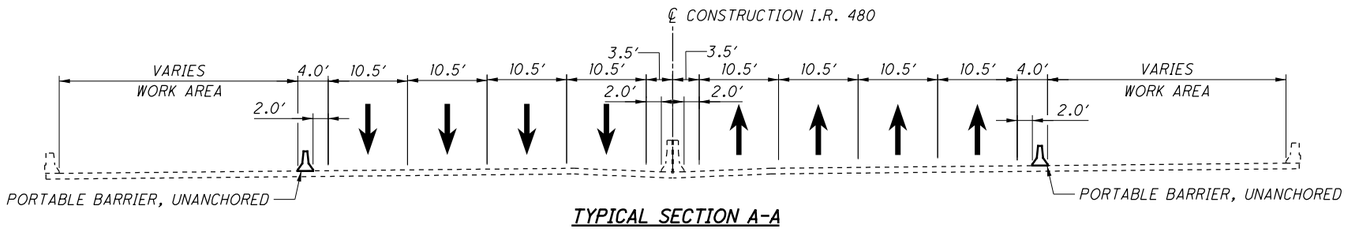
CALCULATED MTJ CHECKED TWG

MAINTENANCE OF TRAFFIC
MASTICK RD PEDESTRIAN DETOUR PLAN

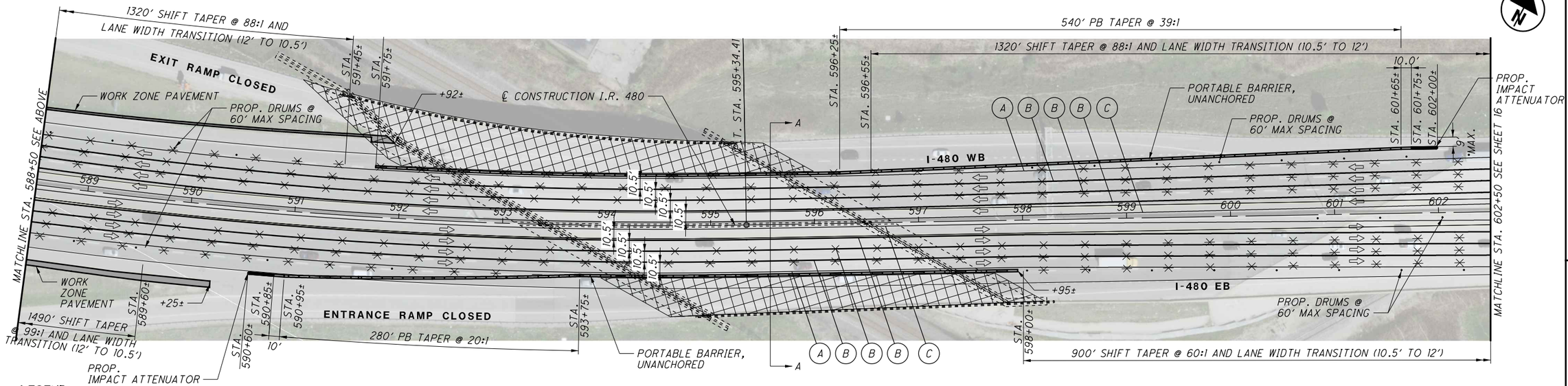
D12-BH-FY2021(A) MISC
PID NO. 103162

14
74





TYPICAL SECTION A-A



LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PORTABLE BARRIER, UNANCHORED
- PORTABLE BARRIER, "Y" CONNECTOR
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- DIRECTION OF TRAVEL
- (A) WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)
- (B) WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
- (C) WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW)
- WORK ZONE PAVEMENT MARKING PLACED IN PREVIOUS PHASE
- WORK ZONE PAVEMENT MARKING, MISC.: REMOVABLE, NON-REFLECTIVE PREFORMED BLACKOUT TAPE

NOTES

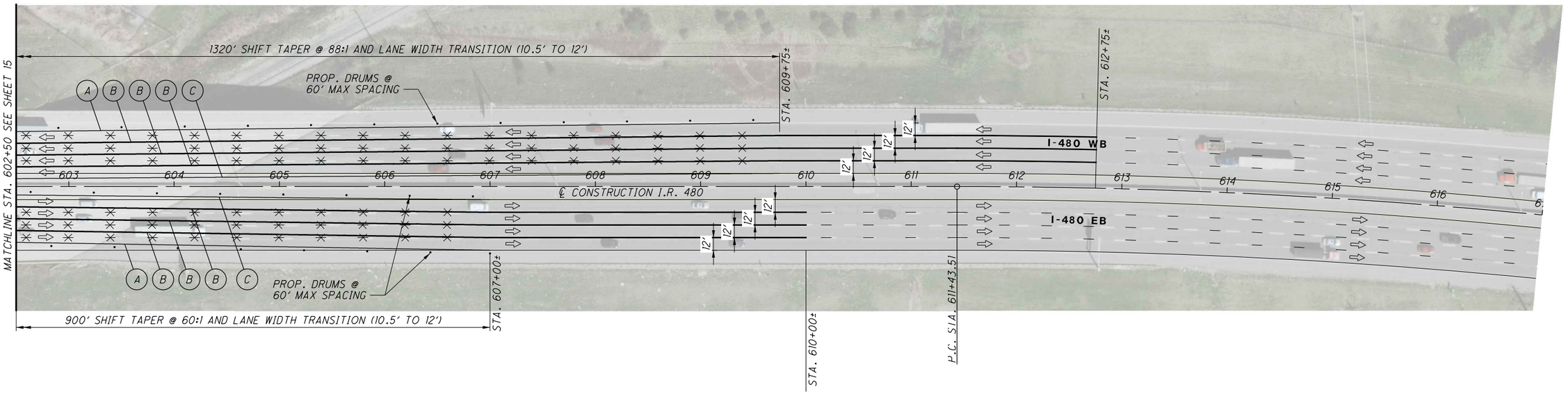
1. SEE MT-102.10 FOR ADDITIONAL DETAILS.
2. SEE SHEET 9 FOR ESTIMATED QUANTITIES.

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 1

D12-BH-FY2021(A) MISC
PID NO. 103162



LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PORTABLE BARRIER, UNANCHORED
- PORTABLE BARRIER, "Y" CONNECTOR
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- DIRECTION OF TRAVEL
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NOTES

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2. SEE SHEET 9 FOR ESTIMATED QUANTITIES.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 1

D12-BH-FY2021(A) MISC
PID NO. 103162

16
74

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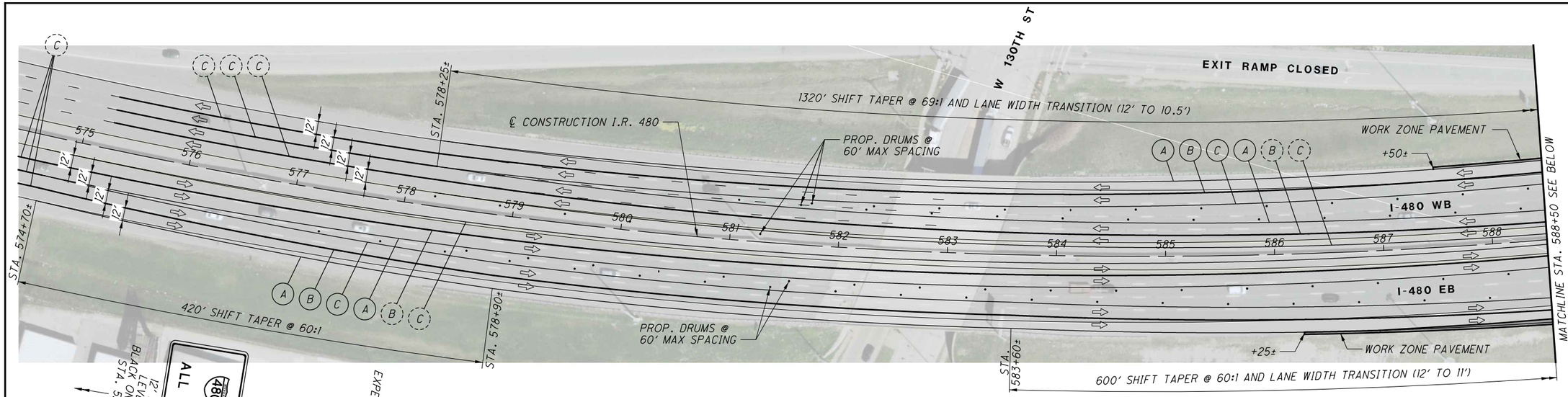
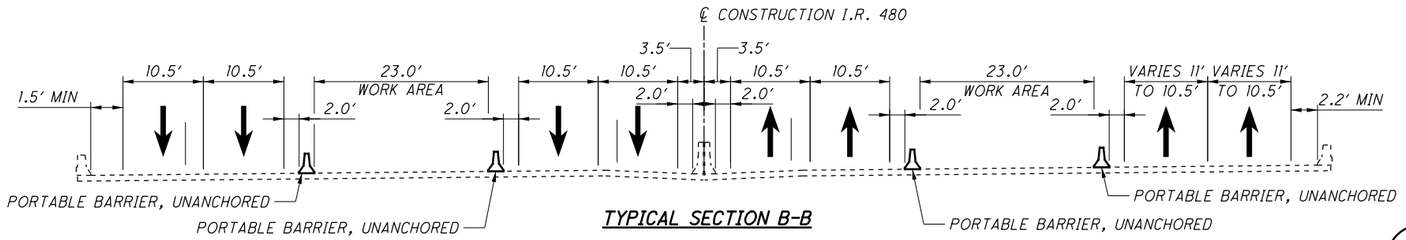
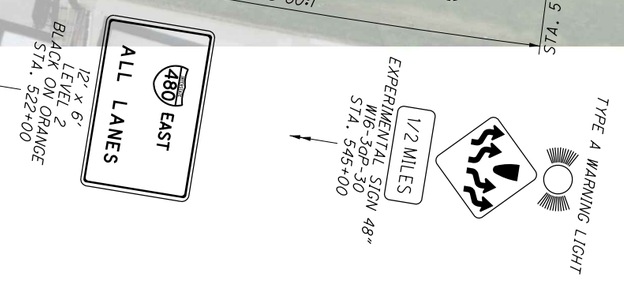
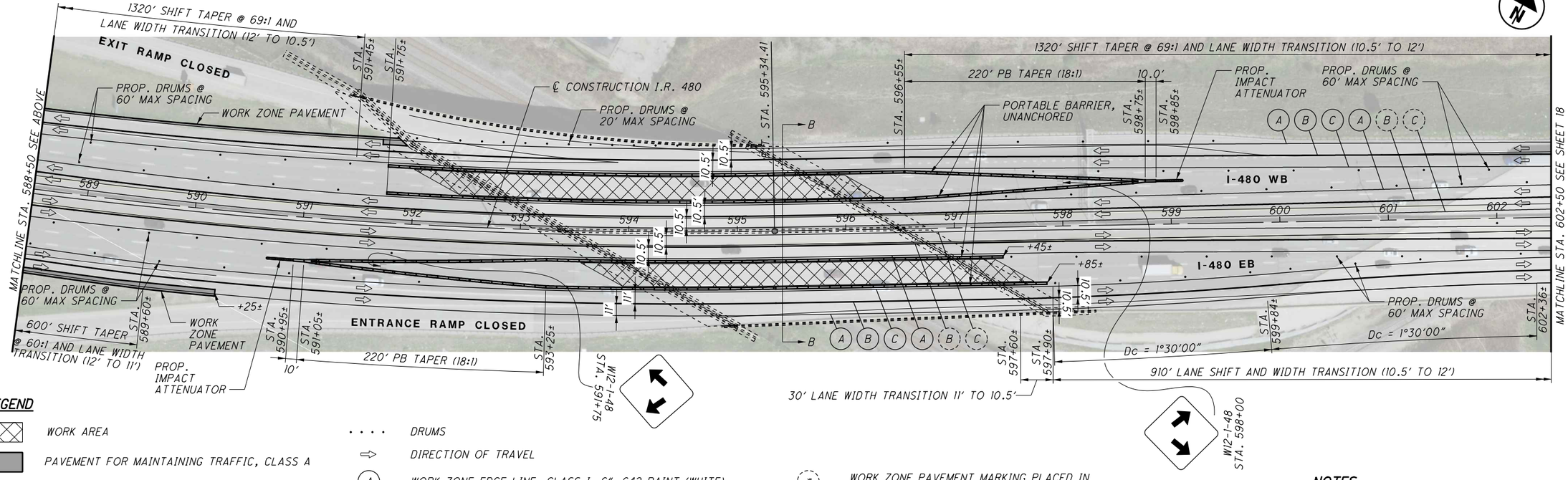




TYPICAL SECTION B-B





LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PORTABLE BARRIER, UNANCHORED
- PORTABLE BARRIER, "Y" CONNECTOR
- WORK ZONE IMPACT ATTENUATOR
- DRUMS
- DIRECTION OF TRAVEL
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NOTES

1. SEE MT-95.72 FOR ADDITIONAL DETAILS.
2. SEE SHEET 9 FOR ESTIMATED QUANTITIES.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 2
D12-BH-FY2021(A) MISC
PID NO. 103162

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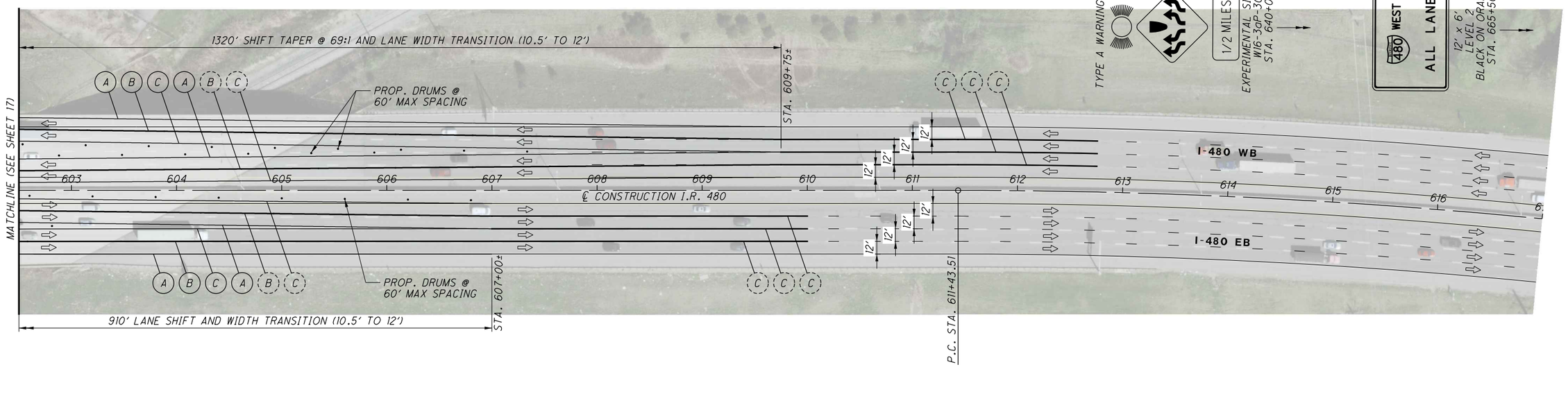

LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PORTABLE BARRIER, UNANCHORED
- PORTABLE BARRIER, "Y" CONNECTOR
- WORK ZONE IMPACT ATTENUATOR
- . . . . DRUMS
- ⇨ DIRECTION OF TRAVEL
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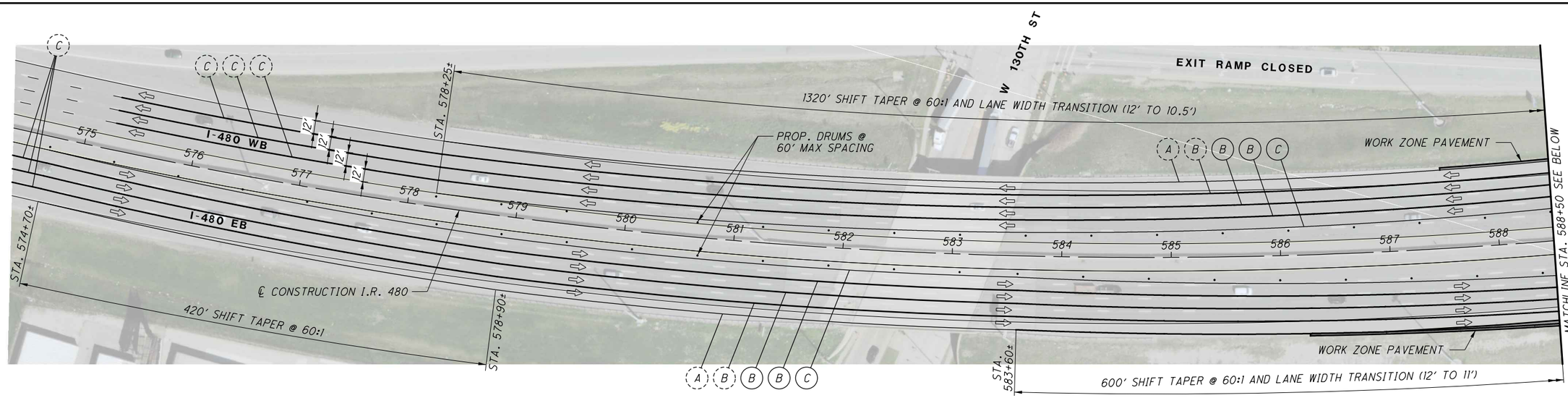
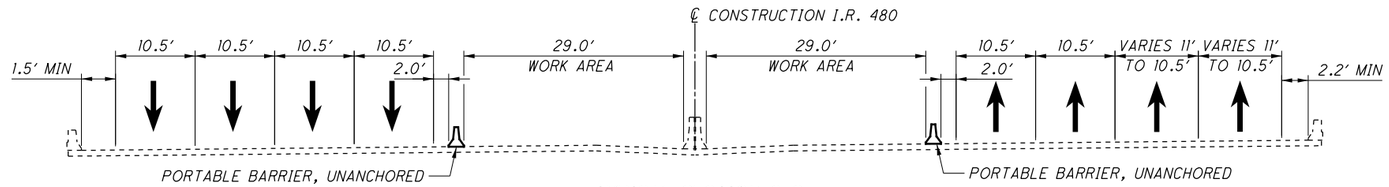
0 25 50 100

CALCULATED KDW
CHECKED TWG

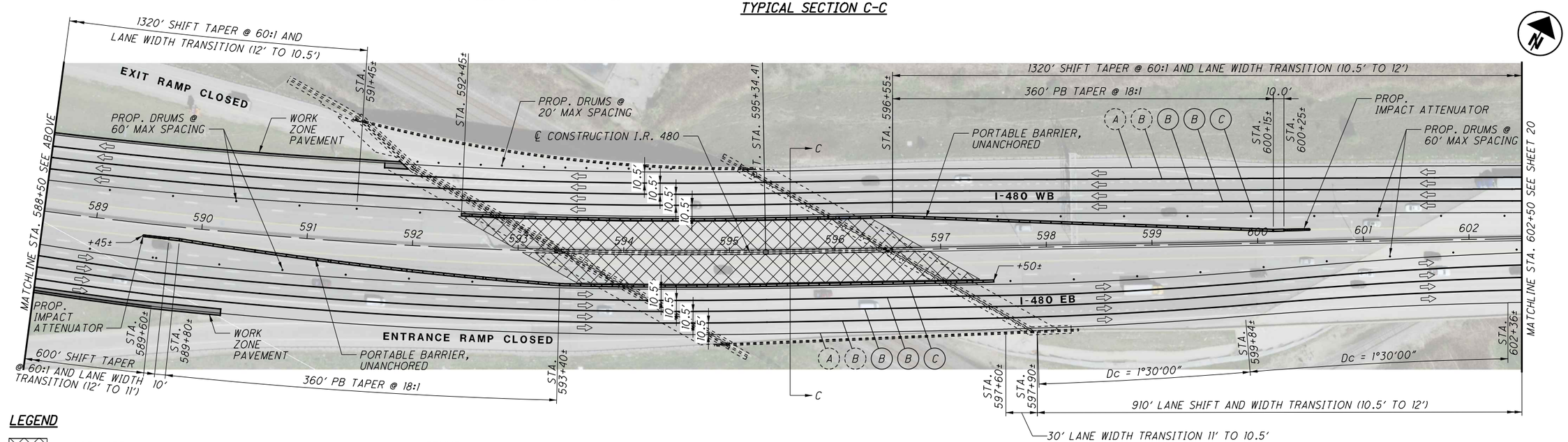
MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 2

D12-BH-FY2021(A) MISC
PID NO. 103162





TYPICAL SECTION C-C



LEGEND

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NOTES

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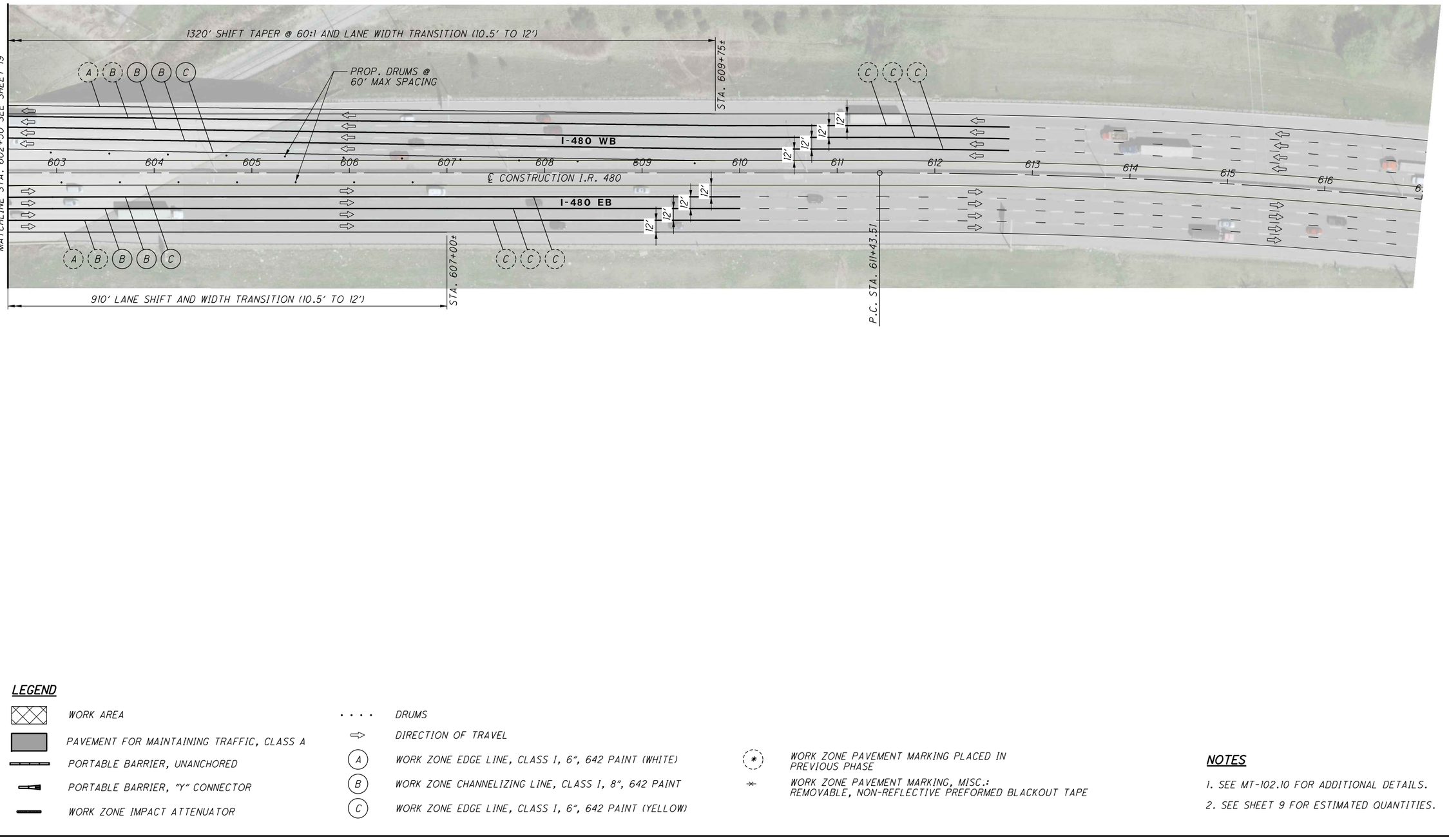
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 3

D12-BH-FY2021(A) MISC
PID NO. 103162



LEGEND

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- PORTABLE BARRIER, UNANCHORED
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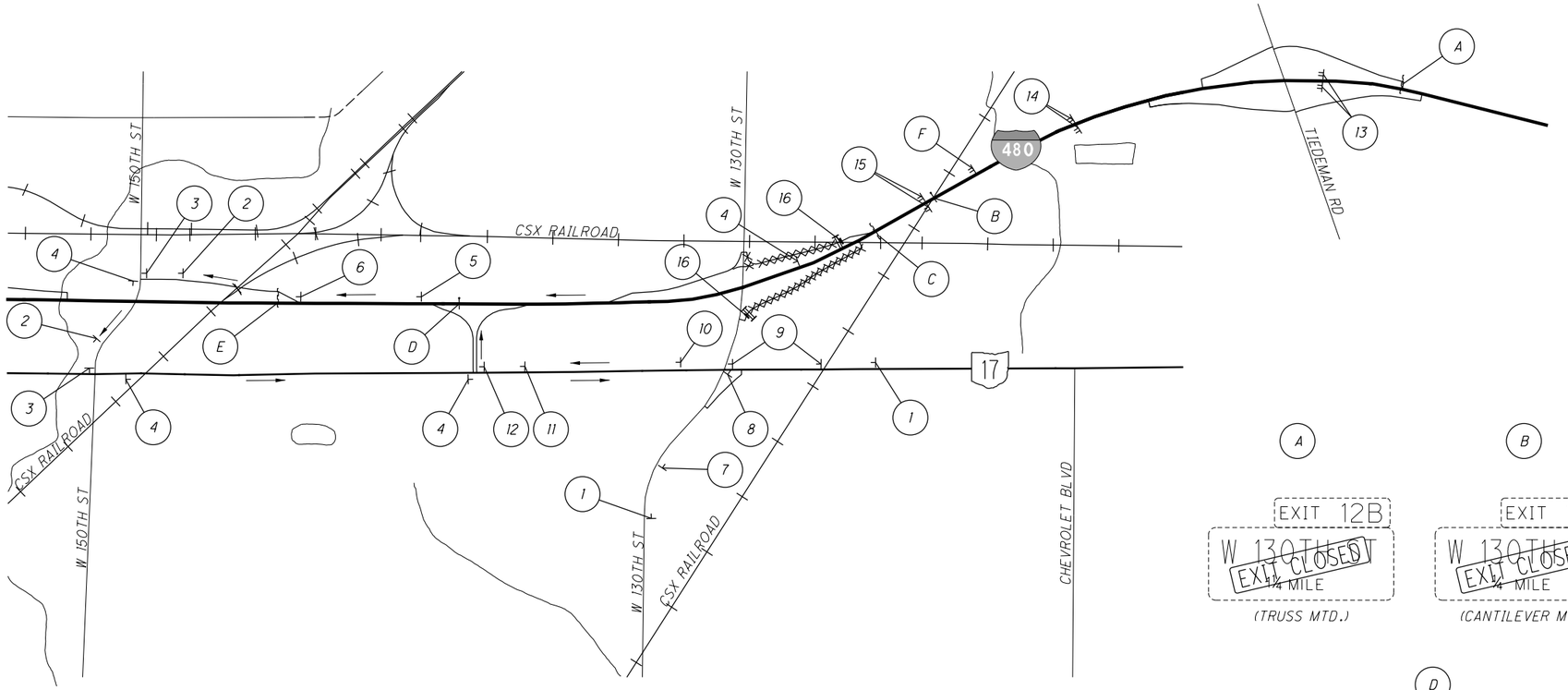
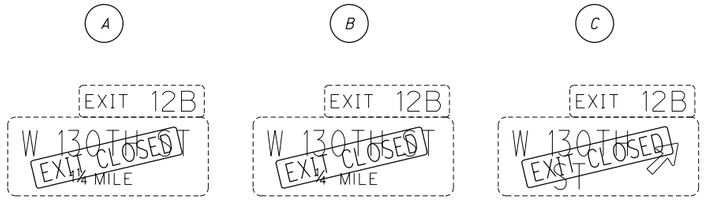
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED KDW
CHECKED TWG

MAINTENANCE OF TRAFFIC PLAN
CUY-480-1075 - PHASE 3

D12-BH-FY2021(A) MISC
PID NO. 103162





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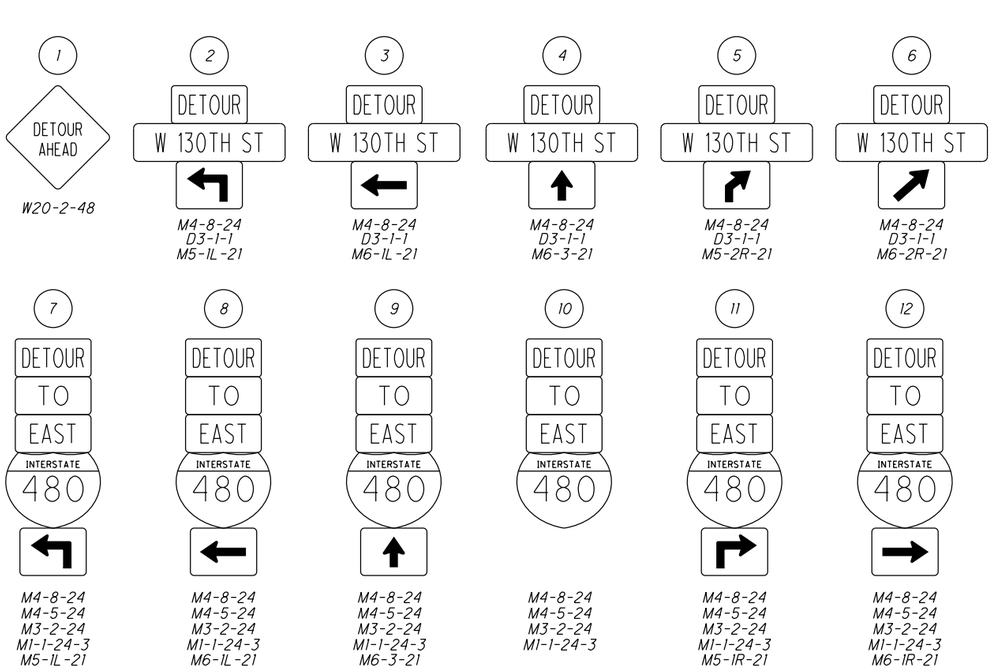
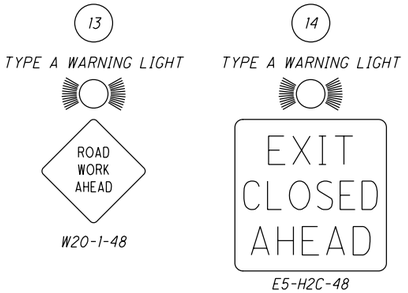


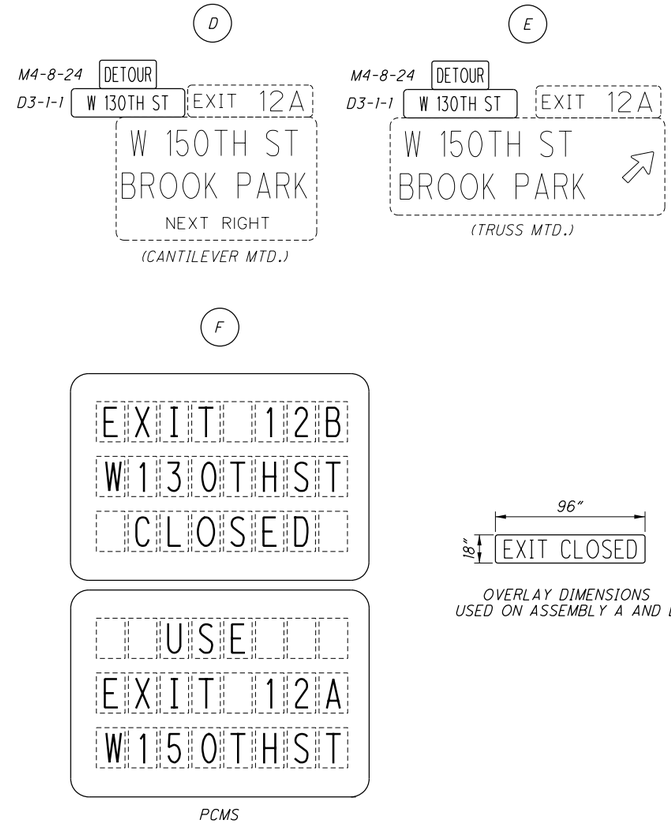
NOTE

FOR EXIT RAMP CLOSURE DETAILS, SEE SCD MT-98.29

LEGEND

- TYPE 3 BARRICADE
- CLOSURE AREA
- DETOUR ROUTE





OVERLAY DIMENSIONS
USED ON ASSEMBLY A AND B

NOT TO SCALE

CALCULATED MTJ
CHECKED TWG

MAINTENANCE OF TRAFFIC
W 130TH ST RAMP DETOUR PLAN

D12-BH-FY2021(A) MISC
PID NO. 103162

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
										3	4	02/NFP/BR							
																		ROADWAY	
										LS		LS		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	3
										100		100		203	10000	100	CY	EXCAVATION	
										100		100		203	20000	100	CY	EMBANKMENT	
											1,839	1,839		204	10000	1,839	SY	SUBGRADE COMPACTION	
											LS	LS		SPECIAL	69098400	LS		SITE ACCESS	4
																		EROSION CONTROL	
											10,000	10,000		832	30000	10,000	EACH	EROSION CONTROL	
																		PAVEMENT	
											383	383		252	01000	383	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT	
											686	686		255	20000	686	FT	FULL DEPTH PAVEMENT SAWING	
											307	307		304	20000	307	CY	AGGREGATE BASE	
																		TRAFFIC CONTROL	
											30	30		630	03100	30	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
											3	3		630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
											2	2		630	86002	2	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
											0.07	0.07		642	00100	0.07	MILE	EDGE LINE, 4", TYPE 1	
											0.15	0.15		642	00300	0.15	MILE	CENTER LINE, TYPE 1	
											238	238		642	00400	238	FT	CHANNELIZING LINE, 8", TYPE 1	
											32	32		642	00500	32	FT	STOP LINE, TYPE 1	
											380	380		642	00700	380	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1	
											3	3		642	01300	3	EACH	LANE ARROW, TYPE 1	
											1	1		642	01400	1	EACH	WORD ON PAVEMENT, 72", TYPE 1	
											0.29	0.29		646	10010	0.29	MILE	EDGE LINE, 6"	
											0.52	0.52		646	10110	0.52	MILE	LANE LINE, 6"	
											448	448		646	10310	448	FT	CHANNELIZING LINE, 12"	
											179	179		646	20504	179	FT	DOTTED LINE, 6"	
																		STRUCTURE REPAIR (CUY-480-0612)	27
																		STRUCTURE REPAIR (CUY-480-0616)	35
																		STRUCTURE REPAIR (CUY-480-1075)	42

CALCULATED KDW
CHECKED TWG

GENERAL SUMMARY

D12-BH-FY2021(A) MISC
PID NO. 103162

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
								3	6	7	9	02/NFP/BR							
																		MAINTENANCE OF TRAFFIC	
										100		100		614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
											1,680	1,680		614	11630	1,680	FT	INCREASED BARRIER DELINEATION	
											6	6		614	12380	6	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
									LS			LS		614	12420	LS		DETOUR SIGNING	
											4,164	4,164		614	12800	4,164	EACH	WORK ZONE RAISED PAVEMENT MARKER	
											129	129		614	13310	129	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY	
											129	129		614	13350	129	EACH	OBJECT MARKER, ONE WAY	
									24			24		614	18601	24	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
											0.27	0.27		614	21200	0.27	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
											7.26	7.26		614	22110	7.26	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
											0.19	0.19		614	22210	0.19	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
											47,280	47,280		614	23200	47,280	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
											665	665		614	24402	665	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
											6	6		614	30400	6	EACH	WORK ZONE ARROW, CLASS I, 740.06, TYPE I	
											35,420	35,420		614	98100	35,420	FT	WORK ZONE PAVEMENT MARKING, MISC.: REMOVABLE, NON-REFLECTIVE BLACKOUT TAPE	7
												LS		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
											296	296		615	20000	296	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
											201	201		621	00300	201	EACH	RPM REFLECTOR	
											201	201		621	54001	201	EACH	RAISED PAVEMENT MARKER REMOVED, AS PER PLAN	7
											2	2		622	41050	2	EACH	PORTABLE BARRIER, "Y" CONNECTOR	
											5,990	5,990		622	41100	5,990	FT	PORTABLE BARRIER, UNANCHORED	
																		INCIDENTALS	
									LS			LS		614	11000	LS		MAINTAINING TRAFFIC	
												LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS		624	10000	LS		MOBILIZATION	

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CALCULATED KDW CHECKED TWG

GENERAL SUMMARY

D12-BH-FY2021(A) MISC
PID NO. 103162

LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	STRUCTURE TYPE	STRUCTURE LIMITS	BRIDGE WIDTH (OUT/OUT)	LANES ON	LANES UNDER	SEALER AND PAINT COLOR	PROPOSED WORK (WORK SHOWN IS REPRESENTATIVE AND DOES NOT INCLUDE ALL WORK REQUIRED)
8	CUY-480-0612	1814168	4 SPAN CONTINUOUS STEEL BEAM	259'	64'-4"	3	8	N/A	- PATCH CONCRETE ABUTMENTS AND PIERS - PATCH CONCRETE PARAPETS AND SIDEWALK CURBS - REPLACE VANDAL PROTECTION FENCE ON BRIDGE - INSTALL TIMBER SUBDECKING - REPLACE SIDEWALK EXPANSION JOINT PLATE - REMOVE EXISTING ASPHALT PATCHING ON DECK AND PATCH WITH CONCRETE
9	CUY-480-0616	1814176	4 SPAN CONTINUOUS STEEL BEAM	398'	40'-4"	2	8	N/A	- PATCH CONCRETE ABUTMENTS AND PIERS - PATCH CONCRETE PARAPETS AND SIDEWALK CURBS - REPLACE VANDAL PROTECTION FENCE ON BRIDGE - REMOVE EXISTING ASPHALT PATCHING ON DECK AND PATCH WITH CONCRETE - FIBER WRAP COLUMNS AT PIER 3
10	CUY-480-1075	1812912	3 SPAN CONTINUOUS STEEL BEAM	312'	VARIES 76'-11" TO 111'-6" WB VARIES 77'-8" TO 92'-3" EB	10	2 CSX TRACKS	N/A	- REPLACE EXPANSION JOINT WITH STRIP SEAL EXPANSION JOINT - REPLACE APPROACH SLABS - REPLACE END CROSSFRAMES - REPLACE ABUTMENT BEARINGS - PAINT END TEN FEET OF GIRDER ENDS - PATCH DECK AND PARAPET

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229 614.656.2424 CMTRAN.COM

DESIGNED ERK | CHECKED STK | DRAWN ERK | REVISED | REVIEWED GDJ | DATE 8-19-20 | STRUCTURE FILE NUMBER VARIOUS

STRUCTURE DATA TABLE
BRIDGE NO. VARIES

D12-BH-FY2021(A) MISC
PID No. 103162

1/2

REFER TO STANDARD BRIDGE DRAWINGS
AS LISTED ON TITLE SHEET

REFER TO SUPPLEMENTAL SPECIFICATION
844 DATED 4-20-18

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

DESIGN DATA

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

EXISTING STRUCTURE VERIFICATION
DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

THE EXISTING STRUCTURE PLANS MAY BE REVIEWED AT THE:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 12 OFFICE
5500 TRANSPORTATION BOULEVARD
GARFIELD HEIGHTS, OH 44125

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

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF THE EXISTING STRUCTURES, ETC. AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK ALSO INCLUDES THE REMOVAL OF SUPERSTRUCTURE BEARINGS AND MISCELLANEOUS STRUCTURAL STEEL ITEMS AS DIRECTED BY THE ENGINEER.

THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING BACKWALL REMOVAL TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

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

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

CLEANING BRIDGE SEATS: REMOVE DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM ABUTMENT SEATS. EQUIPMENT MAY CONSIST OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSIORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS.

THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY PORTION OF THE STRUCTURE THAT WILL REMAIN IN SERVICE. ANY PORTION OF THE REMAINING STRUCTURE DAMAGED AS A RESULT OF CONTRACTOR ACTIONS SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

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

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

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

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

SEAL CONCRETE AREAS SPECIFIED IN THE PLANS. THE COLOR OF THE FINISH COAT SHALL BE AS INDICATED ON THE STRUCTURE DATA SHEET. CONTRACTOR SHALL ENSURE ANY EXISTING UNDERPASS LIGHTING, FENCE AND POSTS, RAILING AND ALL OTHER BRIDGE COMPONENTS ARE PROTECTED DURING THE SEALING OPERATIONS.

ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO SEAL ALL OF THE AREAS DETAILED IN THE PLANS SHALL BE PAID FOR UNDER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN.

ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES, AS PER PLAN

AT LOCATIONS 8 (CUY-480-0612) AND 9 (CUY-480-0616) THIS ITEM IS INCLUDED FOR REMOVAL OF EXISTING COATINGS FROM EXISTING CONCRETE SURFACES TO BE SEALED. AREAS OF CONCRETE REQUIRING PATCHES OR FIBERWRAP SHALL NOT BE INCLUDED IN THIS ITEM.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

FOR LOCATION 10 (CUY-480-1075) ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS IN ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM:
END CROSSFRAMES.

ITEM 514 - FIELD PAINTING EXISTING STRUCTURAL STEEL

THIS ITEM INCLUDES THE WORK NECESSARY FOR PAINTING THE EXISTING STRUCTURAL STEEL OF CUY-480-1075 AS SHOWN ON THE PLANS USING SYSTEM OZEU. PAINT COLOR SHALL MATCH EXISTING.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, TOOLS, MATERIALS, AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER SQUARE FEET OF ITEM 514.

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

THIS WORK SHALL CONSIST OF REPLACING THE EXISTING GLAND AND RETAINERS WITH NEW GLAND AND RETAINERS AT THE EXPANSION JOINTS AT ABUTMENTS. FOR BRIDGE NO. CUY-480-1075.

THIS BRIDGE MAY HAVE AN EXISTING STRIP SEAL THAT IS NOT READILY AVAILABLE ON THE SHELF. A SPECIAL RUN BY THE MANUFACTURER FROM THE OLD MOLDS MAY BE NEEDED WHICH MAY REQUIRE ADDITIONAL LEAD TIME. THE CONTRACTOR IS TO SCHEDULE ACTIVITIES ACCORDINGLY.

THE PHASE CONSTRUCTION JOINTS IN THE RETAINERS SHALL BE WELDED ACCORDING TO STD. DWG. EXJ-4-87. THE PHASE CONSTRUCTION LOCATIONS ARE TO BE DETERMINED BY THE CONTRACTOR.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, MATERIAL, AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER FOOT OF ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.

ITEM 516 - RESET BEARING, AS PER PLAN

AT LOCATION 8 (CUY-480-0612) THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE LOWER MASONRY PLATE BY RELOCATING IT SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60-DEGREES F (15-DEGREES C), AND INSTALLING BEARING RESTRAINING PLATES IF REQUIRED PER PLAN DETAILS.

ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING".

ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - RESET BEARING, AS PER PLAN.

ITEM 519 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

AT LOCATIONS 8 (CUY-480-0612) AND 10 (CUY-480-1075) THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING. WHERE APPLICABLE, CONTRACTOR SHALL ENSURE ANY EXISTING UNDERPASS LIGHTING, BRIDGE RAIL OR ANY OTHER BRIDGE COMPONENTS ARE PROTECTED DURING THE PATCHING OPERATIONS.

SPECIFIC PATCHING LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN ACCORDANCE WITH ITEM 519 UNLESS IDENTIFIED IN THE PLANS. IF EXISTING UTILITIES ARE LOCATED WITHIN THE SPECIFIED PATCHING AREAS, THE COST FOR REMOVAL AND REINSTALLING THE UTILITIES SHALL BE INCLUDED IN THIS ITEM. ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS SHALL BE INCLUDED FOR PAYMENT AT THE SQUARE FOOT CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

ITEM 530 - STRUCTURE, MISC.: PERMANENT TRAFFIC PROTECTION, AS PER PLAN

FOR LOCATION 8 (CUY-480-0612), PRIOR TO CONSTRUCTING THE PERMANENT TRAFFIC PROTECTION, ALL DIMENSIONS SHALL BE FIELD VERIFIED (E.G. CROSSFRAMES, BEAM SPACING, ETC.). PROTECTION SHALL BE PROVIDED TO ALL AREAS WHERE THE STRUCTURE FALLS DIRECTLY ABOVE I.R. 480 TRAVEL LANES AND SHOULDERS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE PERMANENT TRAFFIC PROTECTION SHALL BE MADE AT THE CONTRACT PRICE BID FOR ITEM SPECIAL - STRUCTURE, MISC.: PERMANENT TRAFFIC PROTECTION, AS PER PLAN.

ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN

THIS ITEM SHALL BE AS PER THE DETAILS IN THE PLANS WITH THE APPLICABLE PORTIONS OF STANDARD DRAWING VPF-1-90 AND THE MANUFACTURER'S RECOMMENDATIONS.

PATCHING OPERATIONS SHALL OCCUR PRIOR TO FENCE INSTALLATION.

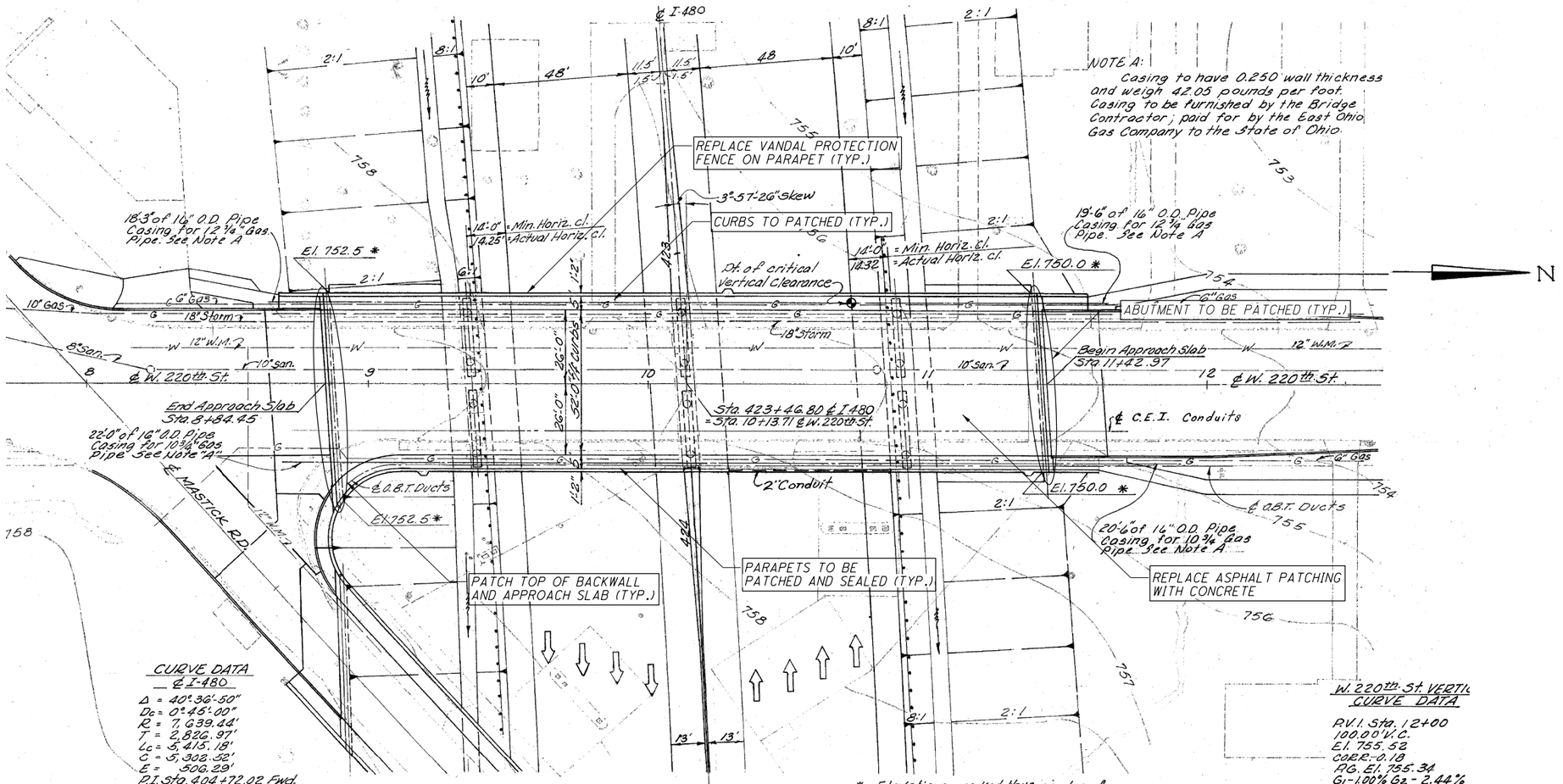
AT LOCATIONS WHERE THE FENCE SPANS ACROSS THE EXPANSION JOINT, DO NOT INSTALL LINE RAILS AND EXPANSION JOINTS SLEEVES; HOWEVER, THE FABRIC SHALL REMAIN CONTINUOUS ACROSS THE EXPANSION JOINT.

THE COLOR OF THE FENCE FABRIC, RAILS, POSTS, PLATES, TIE WIRES, AND ADDITIONAL VISUAL HARDWARE AND CAULK SHALL BE BLACK.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN

AT LOCATION 9 (CUY-480-0616) REPAIR WORK SHALL BE PER SUPPLEMENTAL SPECIFICATION 844. THE MINIMUM SPACING OF 100 GRAM ZINC ANODE SHALL BE 18" OR EQUIVALENT TOTAL ZINC CONTENT PER AREA. THIS ITEM SHALL BE PER ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN AND INCLUDE ALL REQUIRED PATCHING AND PROTECTION WORK TO MAKE THE PIER COLUMNS READY FOR THE COMPOSITE FIBER WRAP SYSTEM.



NOTES

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2. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
3. FOR ESTIMATED QUANTITIES SEE SHEET 2/8.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-27-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814168	

GENERAL PLAN - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

1/8

26/74

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ESTIMATED QUANTITIES					DESIGN: STK DATE: 8-18-20			CHECK: ERK DATE: 8-18-20	
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
202	75261	579	FT	VANDAL PROTECTION FENCE REMOVED, AS PER PLAN				579	33
512	10101	406	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	15	7	384		25
512	74001	322	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES, AS PER PLAN			322		25
516	12310	68	LB	SIDEWALK COVER PLATE			68		
516	46701	1	EACH	RESET BEARING, AS PER PLAN	1				
516	47001	LS	-	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LS		25
519	11101	595	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	90	38	467		25
519	12300	98	SY	PATCHING CONCRETE BRIDGE DECKS - TYPE B*			98		
SPECIAL	53000600	8937	SF	STRUCTURES, PERMANENT TRAFFIC PROTECTION, AS PER PLAN				8937	31
607	39901	579	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN				579	25

* SEE PROPOSAL NOTE 512

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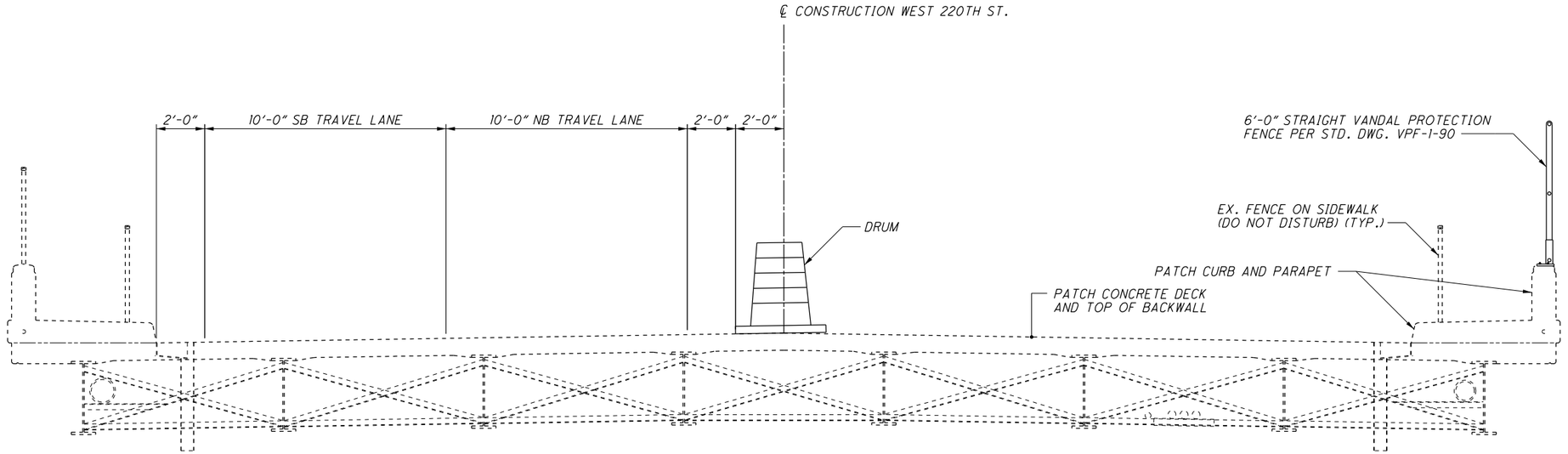
DESIGN AGENCY
CARPENTER MARTY transportation

REVIEWED GDJ | DATE 8-10-20
STRUCTURE FILE NUMBER 1814168
DRAWN STK | REVISED
DESIGNED STK | CHECKED ERK

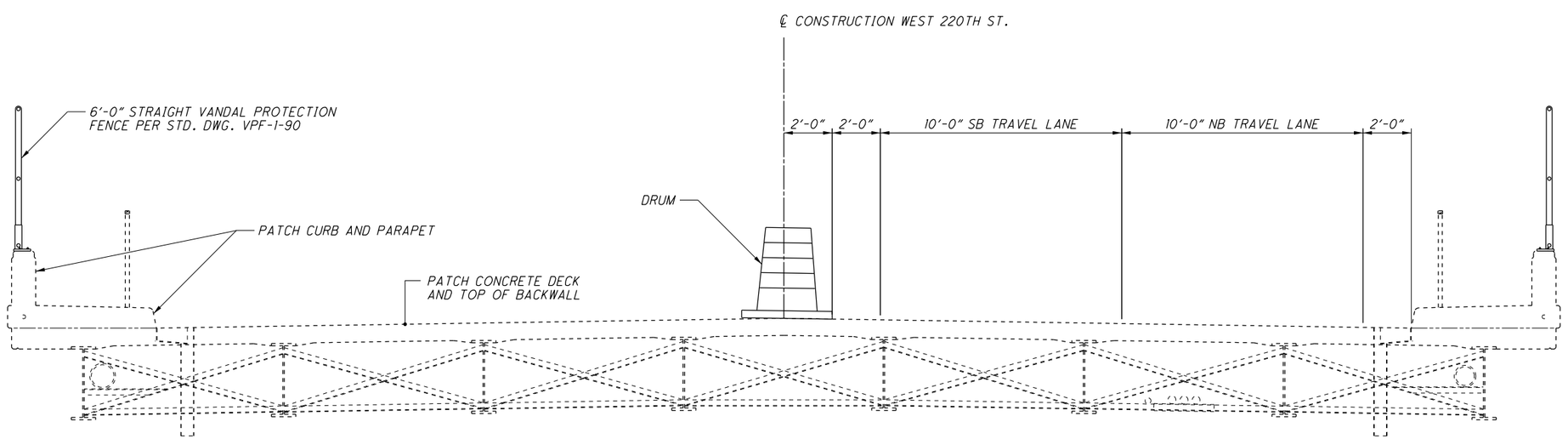
ESTIMATED QUANTITIES - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

2 / 8



PHASE 1 MAINTENANCE OF TRAFFIC AND CONSTRUCTION



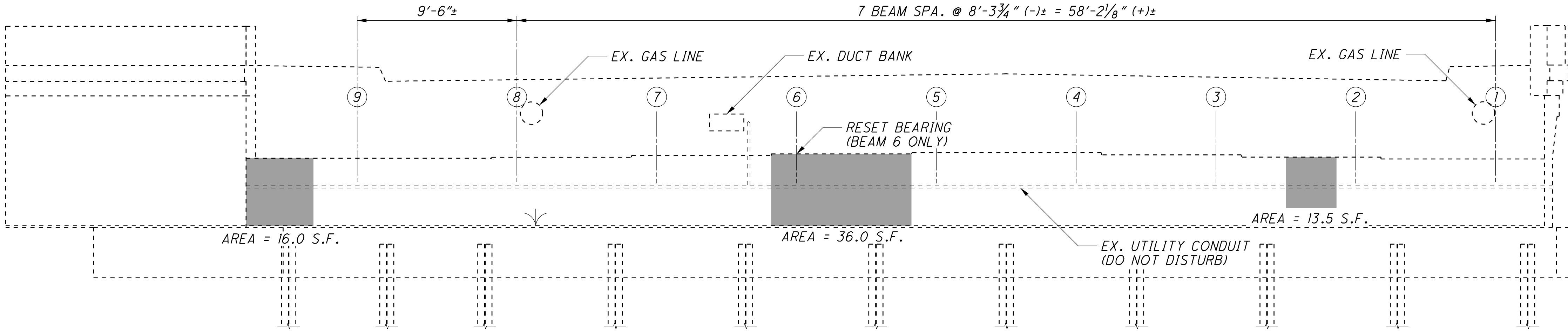
PHASE 2 MAINTENANCE OF TRAFFIC AND CONSTRUCTION

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECTS · ENGINEERS

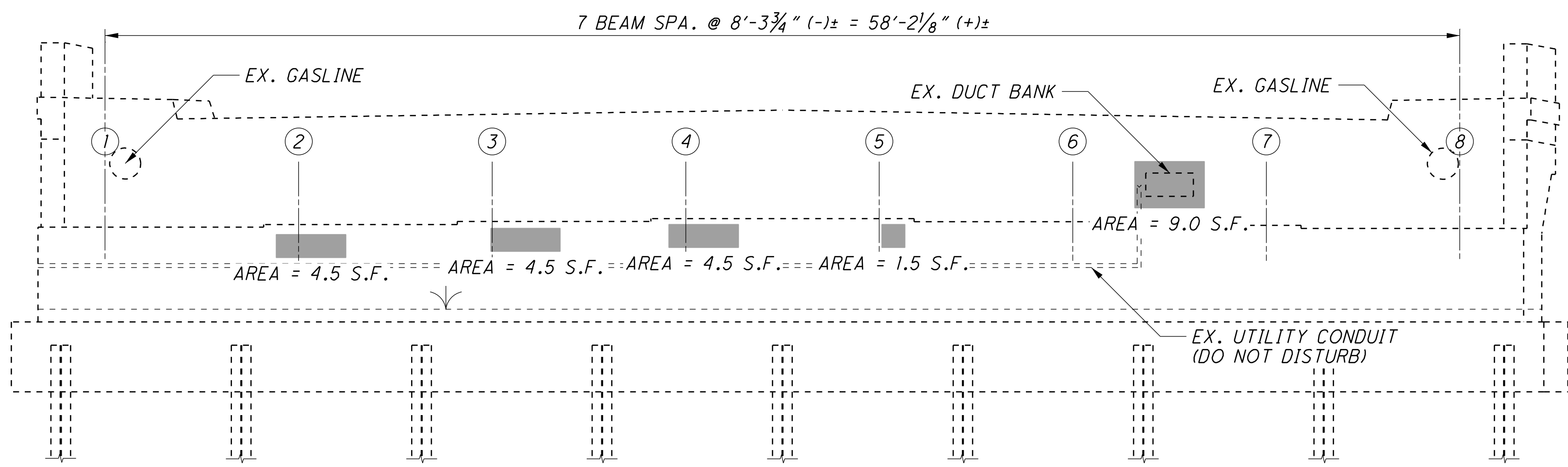
DESIGNED	DRAWN	REVIEWED	DATE
STK	STK	GDJ	8-10-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ERK		1814168	

MAINTENANCE OF TRAFFIC DETAILS - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



REAR ABUTMENT ELEVATION



FORWARD ABUTMENT ELEVATION

NOTES

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3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. FOR ESTIMATED QUANTITIES, SEE SHEET 2/8.
5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.

LEGEND

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 90 S.F.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. FOR ESTIMATING PURPOSES, TOTAL SEALING AREA THIS SHEET = 135 S.F.

(1) BEAM NUMBER

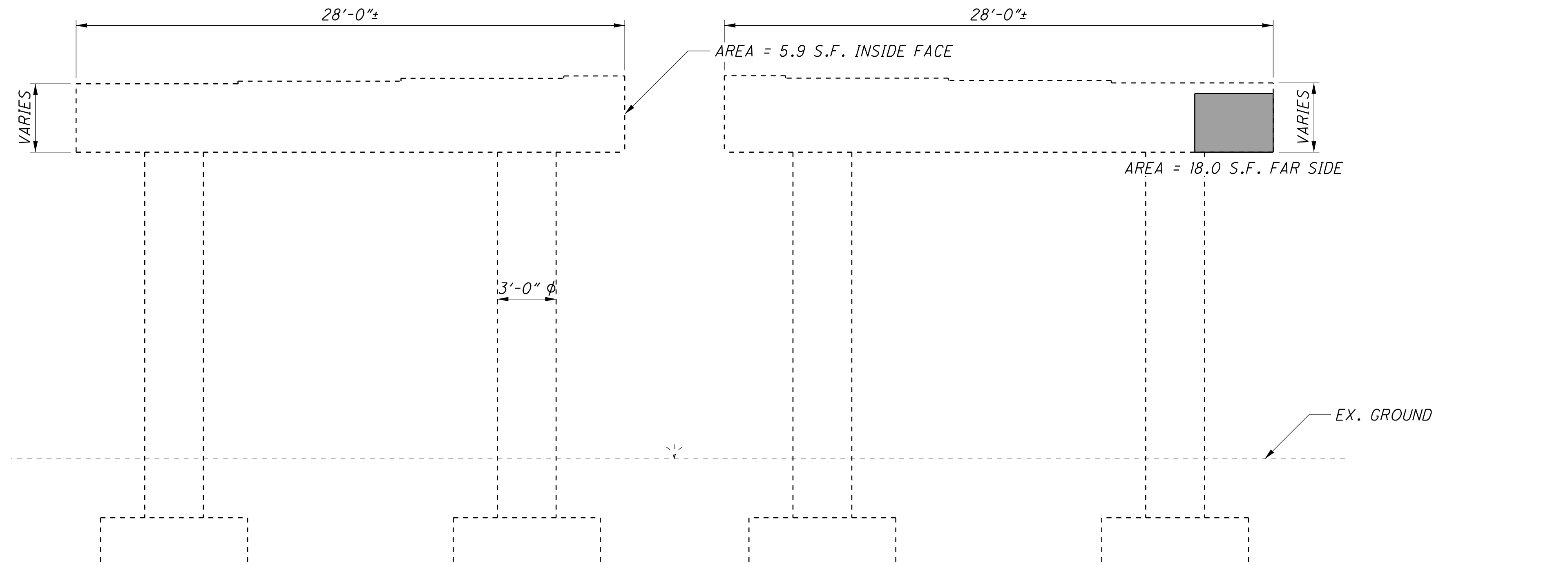
DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-7-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814168	

ABUTMENT REPAIRS - LOCATION 8

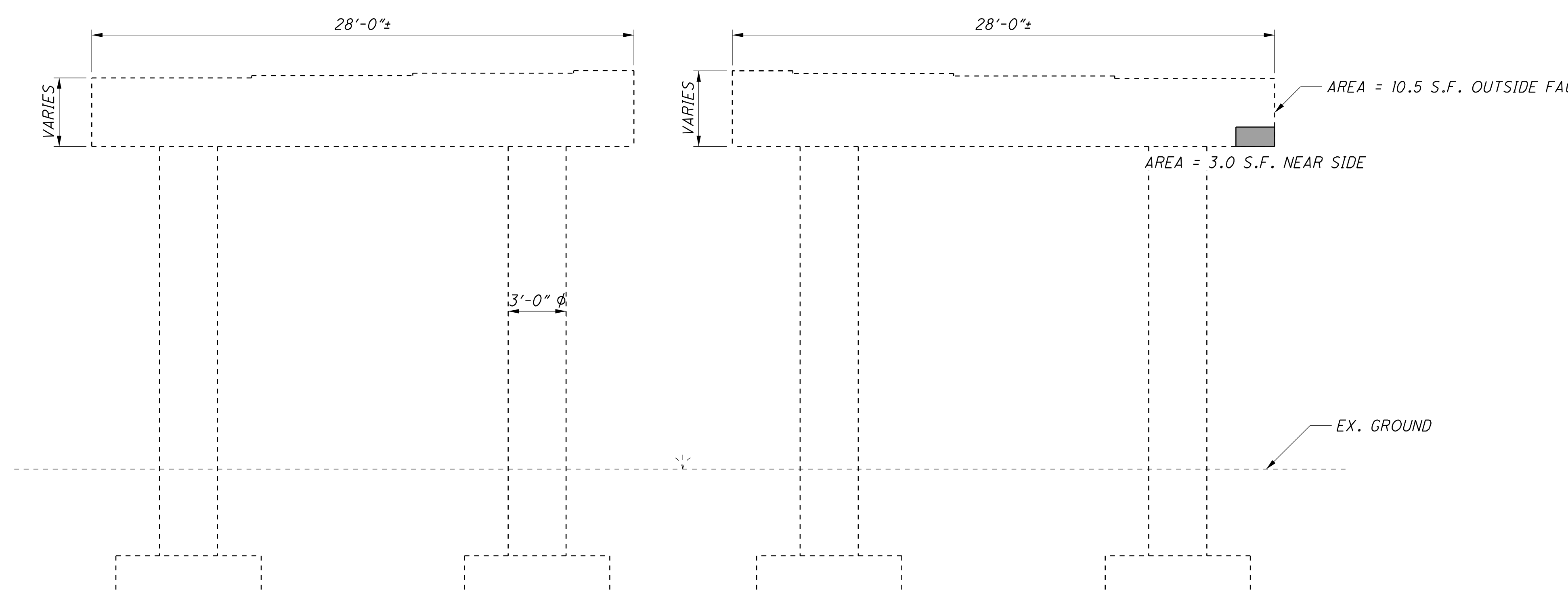
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



PIER 1

(LOOKING NORTH)



PIER 3

(LOOKING NORTH)

NOTES

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3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. FOR ESTIMATED QUANTITIES, SEE SHEET 2/8.
5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.

LEGEND

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 38 S.F.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. FOR ESTIMATING PURPOSES, TOTAL SEALING AREA THIS SHEET = 57 S.F.

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED: ERK | DRAWN: ERK | REVIEWED: GDJ | DATE: 8-7-20
CHECKED: STK | REVISED: | STRUCTURE FILE NUMBER: 1814168

PIER REPAIRS - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

NOTES

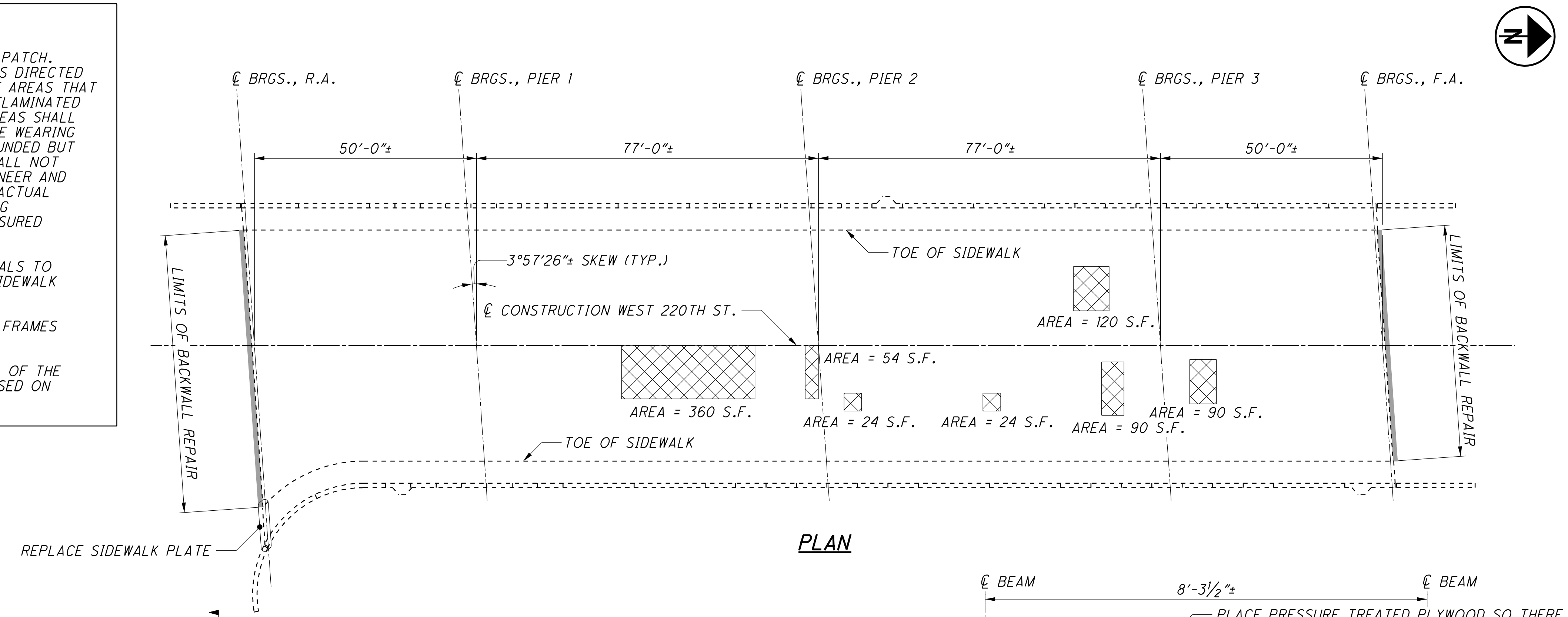
1. PATCH THE WEARING SURFACE PER PROPOSAL NOTE 512, TYPE B PATCH. PATCH ONLY THE AREAS SHOWN IN THE PLANS TO BE REPAIRED AS DIRECTED BY THE ENGINEER. AREAS THAT ARE DESIGNATED FOR REPAIR ARE AREAS THAT ARE PATCHED WITH ASPHALT, SPALLED, OR HEAVILY CRACKED. DELAMINATED AREAS IMMEDIATELY CONTIGUOUS TO THE DESIGNATED REPAIR AREAS SHALL BE REMOVED AND REPAIRED WITH THE SAME PATCH. AREAS OF THE WEARING SURFACE ARE KNOWN TO EXIST THAT ARE DELAMINATED WHEN SOUNDED BUT ARE NOT SHOWING VISIBLE SIGNS OF DISTRESS. THESE AREAS SHALL NOT BE REPAIRED UNLESS DIRECTED TO DO SO BY THE PROJECT ENGINEER AND DISTRICT BRIDGE ENGINEER. PAYMENT WILL BE BASED UPON THE ACTUAL QUANTITIES REPAIRED AND ACCEPTED BY THE ENGINEER. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
2. PAYMENT FOR ALL MATERIALS, LABOR, REMOVAL, AND INCIDENTALS TO REPLACE SIDEWALK PLATE SHALL BE INCLUED WITH ITEM 516 - SIDEWALK COVER PLATE.
3. 2X6 SPACINGS MAY BE ALTERED TO AVOID THE EXISTING CROSS FRAMES AND STIFFENERS. NO SPACING SHALL EXCEED 2 FEET.

   ALTERNATIVE DESIGNS MAY BE USED SUBJECT TO THE APPROVAL OF THE DISTRICT 12 BRIDGE MAINTENANCE ENGINEER. BID SHOULD BE BASED ON PLAN DETAILS.

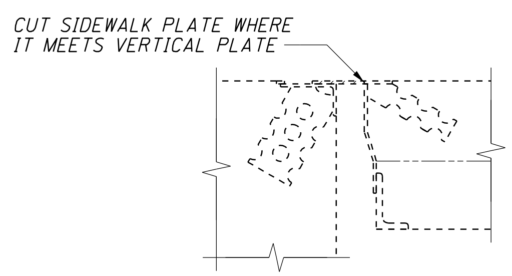
LEGEND

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B. DECK AREA THIS SHEET = 762 S.F.

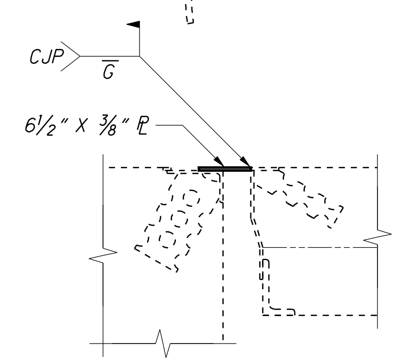
INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B. BACKWALL AREA THIS SHEET = 115 S.F.



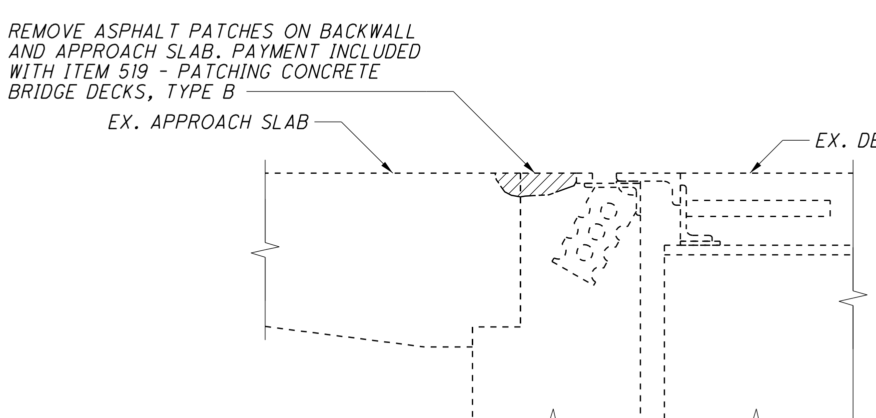
PLAN



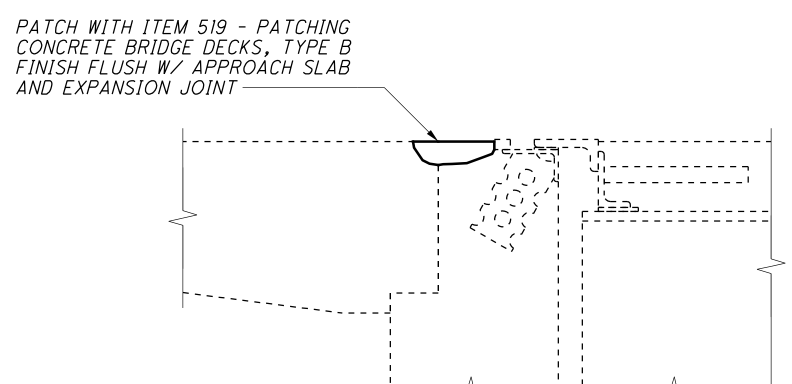
SIDEWALK JOINT REMOVAL SECTION



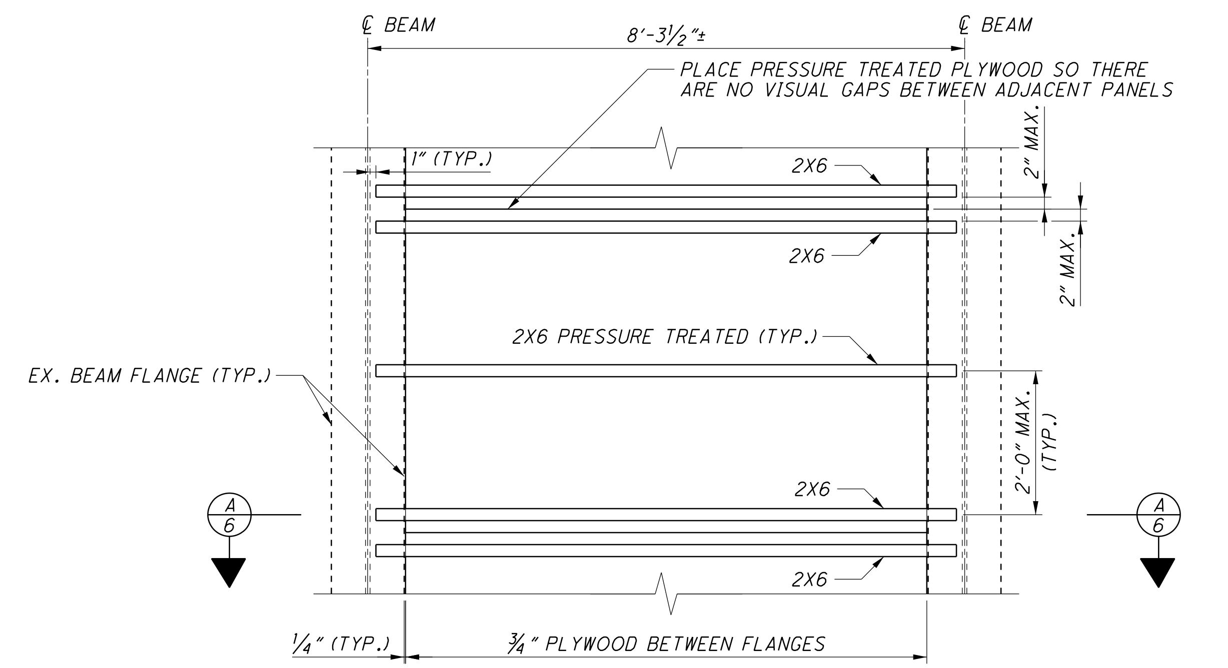
PROPOSED SIDEWALK JOINT SECTION



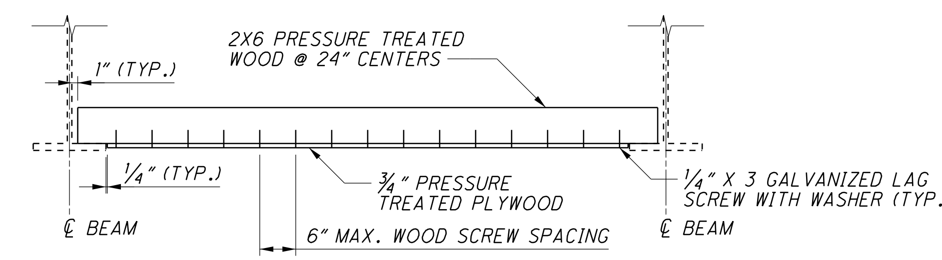
BACKWALL REMOVAL SECTION



PROPOSED BACKWALL SECTION



PERMANENT TRAFFIC PROTECTION PLAN



A/6 SECTION
PERMANENT TRAFFIC PROTECTION

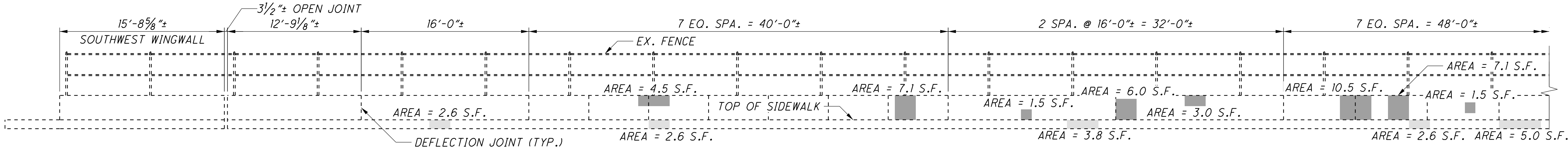
DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229 614.656.2424 CMTRAN.COM

DESIGNED ERK	DRAWN ERK	REVIEWED GDJ	DATE 8-10-20
CHECKED STK	REVISED	STRUCTURE FILE NUMBER 1814168	

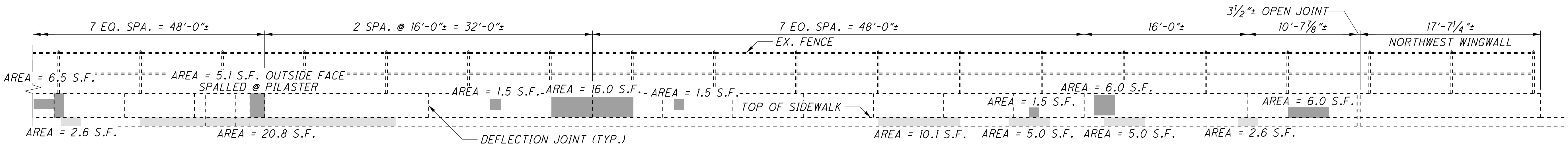
SUPERSTRUCTURE DETAILS - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

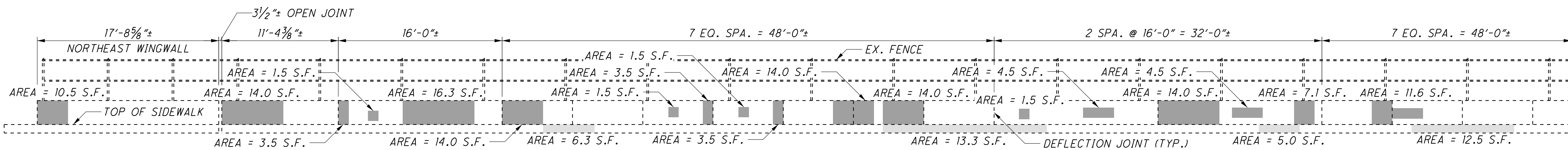
6/8



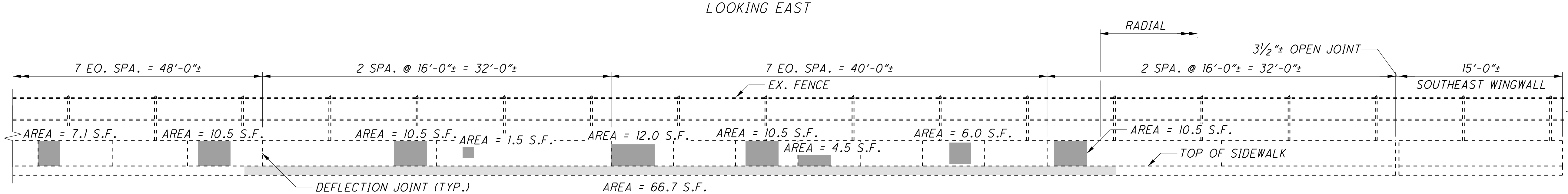
LEFT SIDE
LOOKING WEST



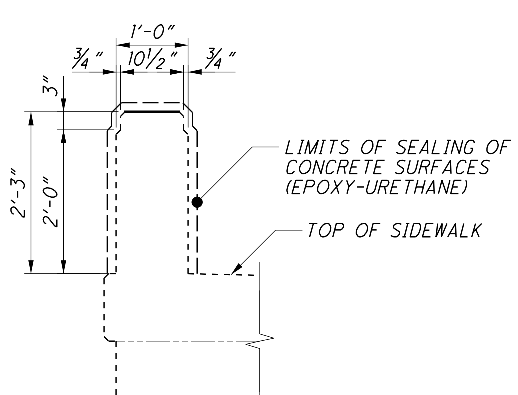
LEFT SIDE
LOOKING WEST



RIGHT SIDE
LOOKING EAST



RIGHT SIDE
LOOKING EAST



PARAPET SECTION (AT FENCE POST)
FENCING NOT SHOWN

NOTES

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3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. FOR ESTIMATED QUANTITIES, SEE SHEET 2/8.
5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
6. DO NOT DISTURB EXISTING FENCING ON SIDEWALK DURING CURB REPAIR OPERATIONS.

LEGEND

(dark shading) INDICATES CONCRETE PARAPET REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 300 S.F.

THE ENTIRE LENGTH OF THE PARAPETS SHALL BE SEALED WITH EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

(light shading) INDICATES CONCRETE CURB REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 167 S.F.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. FOR ESTIMATING PURPOSES, THE TOTAL SEALING AREA THIS SHEET = 251 S.F.

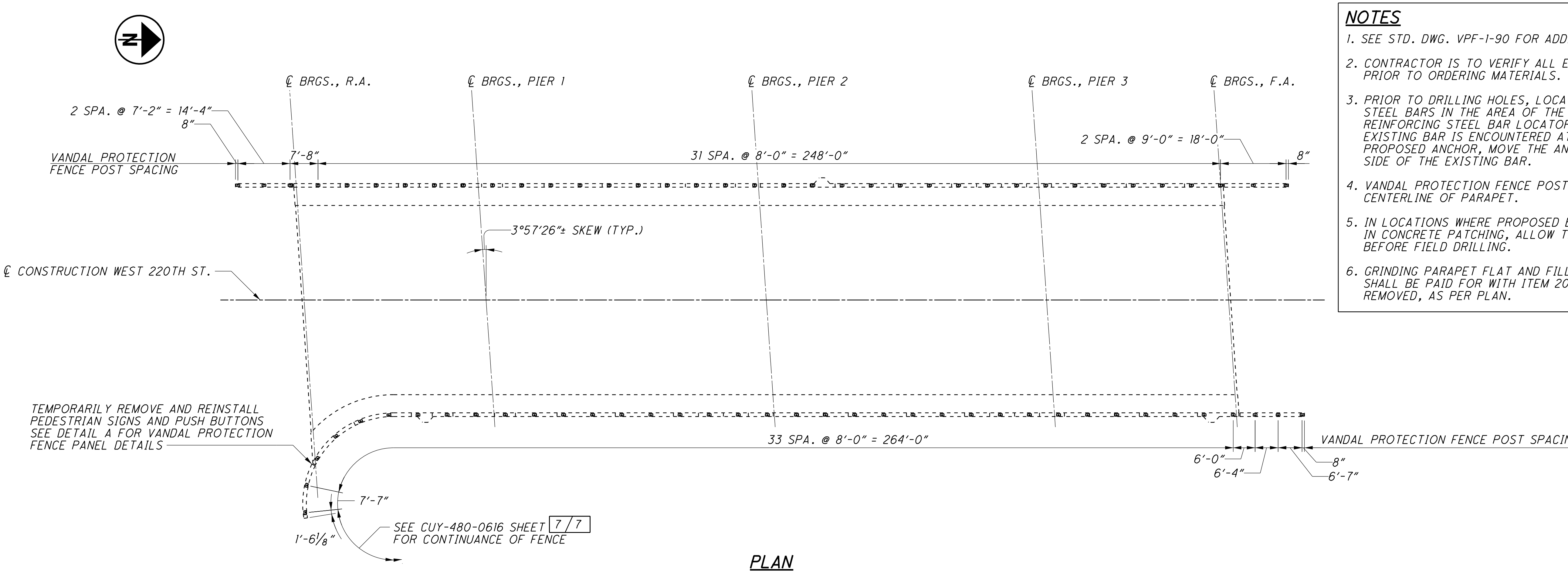
DESIGN AGENCY: CARPENTER MARTY transportation, 6612 SINGLETREE DR. COLUMBUS, OH 43229, 614.656.2424 CMTRAN.COM

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-10-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814168	

CURB AND PARAPET PATCHING DETAILS - LOCATION 8
BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

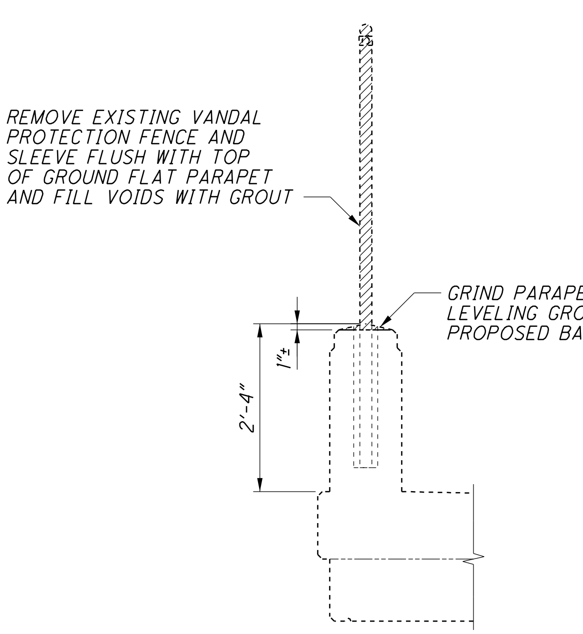
7/8



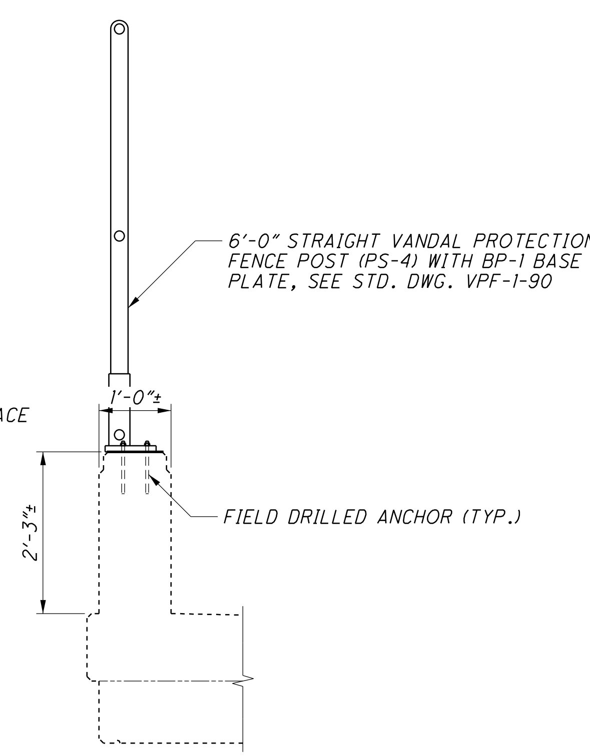
PLAN

NOTES

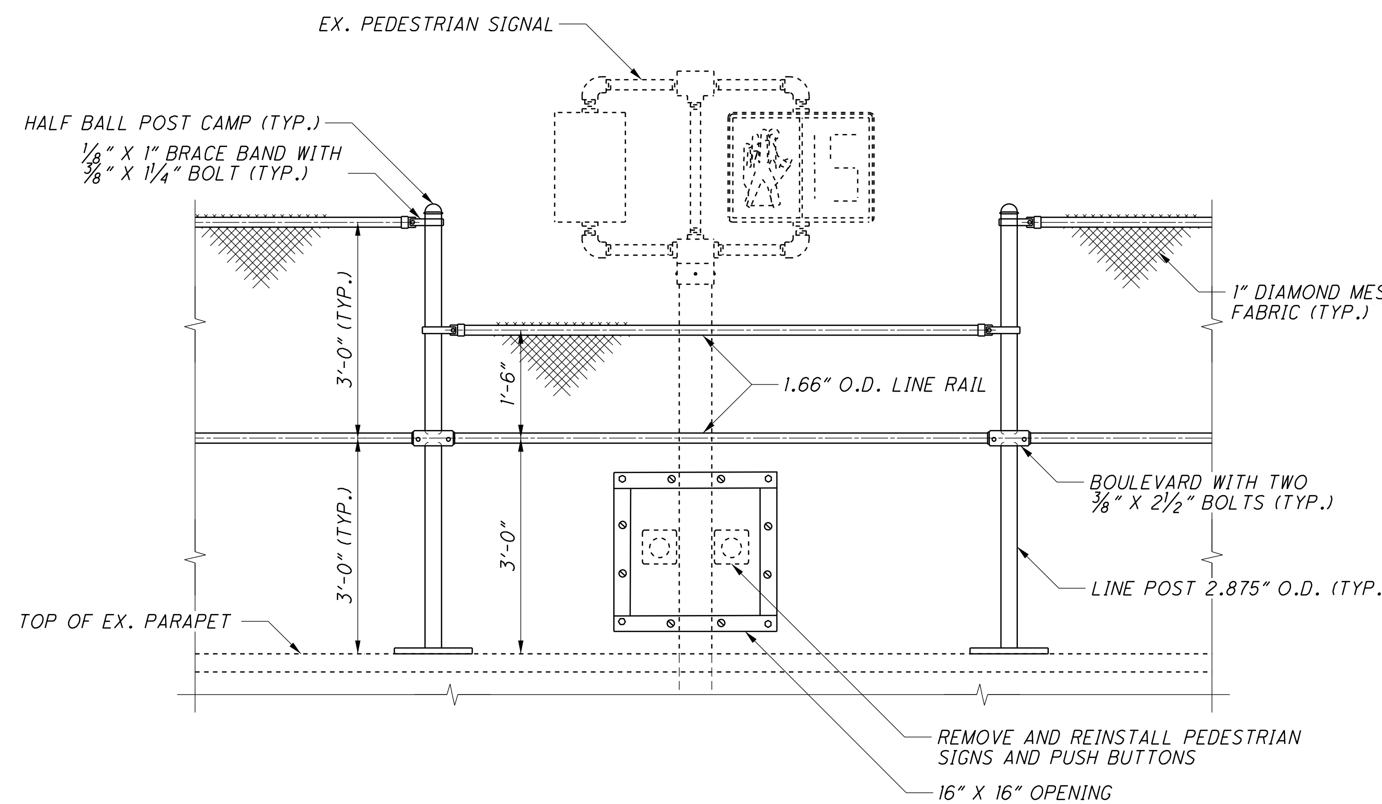
1. SEE STD. DWG. VPF-1-90 FOR ADDITIONAL NOTES AND DETAILS.
2. CONTRACTOR IS TO VERIFY ALL EXISTING FENCING DIMENSIONS PRIOR TO ORDERING MATERIALS.
3. PRIOR TO DRILLING HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED ANCHOR, MOVE THE ANCHOR HOLE TO EITHER SIDE OF THE EXISTING BAR.
4. VANDAL PROTECTION FENCE POST SPACING MEASURED ALONG CENTERLINE OF PARAPET.
5. IN LOCATIONS WHERE PROPOSED BASE PLATE ANCHORS WILL BE IN CONCRETE PATCHING, ALLOW THE CONCRETE TO FULLY CURE BEFORE FIELD DRILLING.
6. GRINDING PARAPET FLAT AND FILLING GROUT IN EXISTING VOIDS SHALL BE PAID FOR WITH ITEM 202, VANDAL PROTECTION FENCE REMOVED, AS PER PLAN.



EXISTING PARAPET SECTION



PROPOSED PARAPET SECTION



DETAIL A

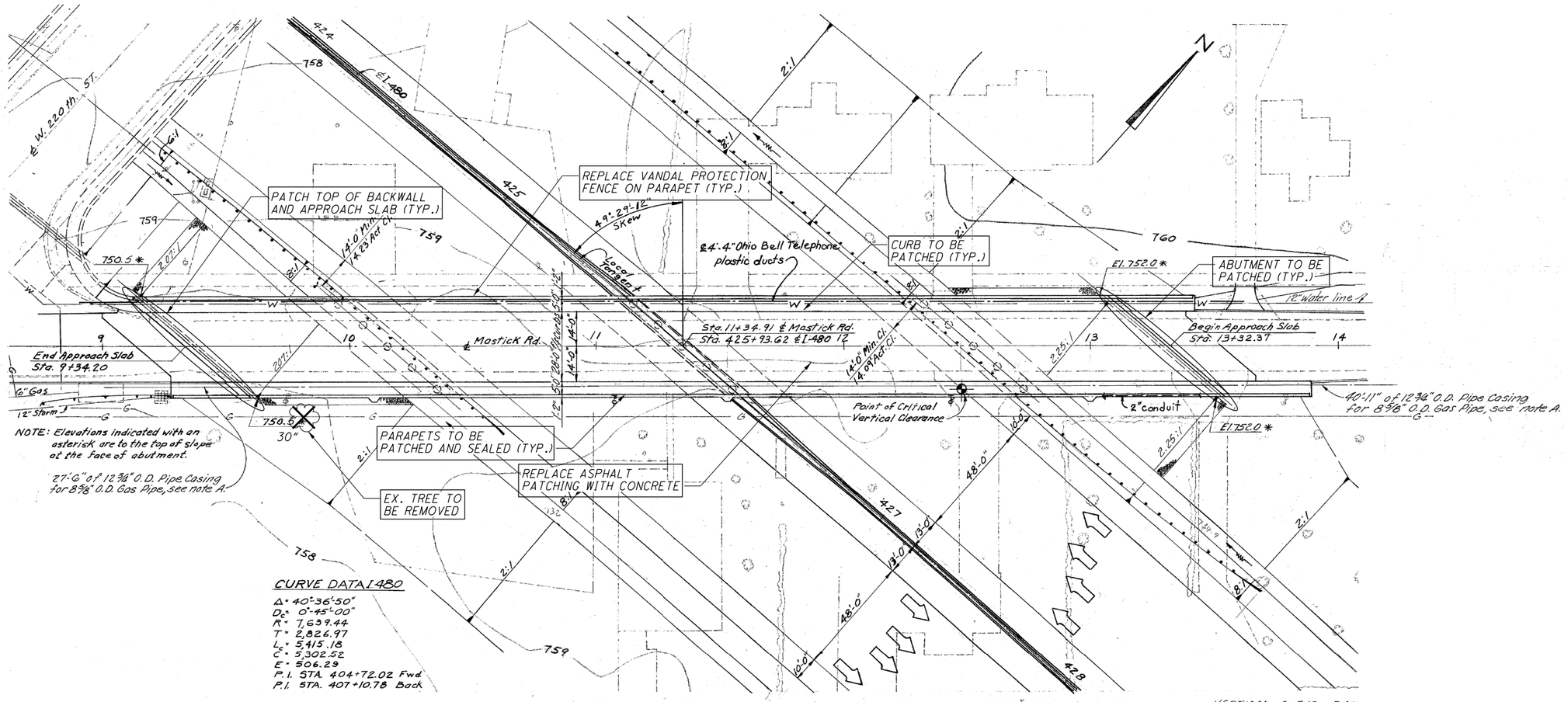
DESIGN AGENCY
CARPENTER MARTY Transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229 614.656.2424 CMTRAN.COM

DESIGNED ERK	DRAWN ERK	REVIEWED GDJ	DATE 8-10-20
CHECKED STK	REVISED	STRUCTURE FILE NUMBER 1814168	

VANDAL PROTECTION FENCE DETAILS - LOCATION 8

BRIDGE NO. CUY-480-0612
WEST 220TH ST. OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



NOTES

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2. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
3. FOR ESTIMATED QUANTITIES SEE SHEET 2/7 .

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINCLAIRE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-6-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814176	

GENERAL PLAN - LOCATION 9
BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

1 / 7

34 / 74

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ESTIMATED QUANTITIES								DESIGN: STK DATE: 8-18-20		CHECK: STK DATE: 8-18-20
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
201	23000	1	EACH	TREE REMOVED, 30"				1	
202	75261	893	FT	VANDAL PROTECTION FENCE REMOVED, AS PER PLAN				893	40
512	10101	626	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	71		555		25
512	71500	69	SY	URETHANE TOP COAT SEALER		69			37
512	74001	483	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES, AS PER PLAN			483		25
SPECIAL	51900100	746	SF	COMPOSITE FIBER WRAP SYSTEM **		746			
519	11101	1045	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	425		620		25
519	12300	24	SY	PATCHING CONCRETE BRIDGE DECKS - TYPE B *			24		
607	39901	893	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN				893	25
844	10001	84	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN		84			25

* SEE PROPOSAL NOTE 512

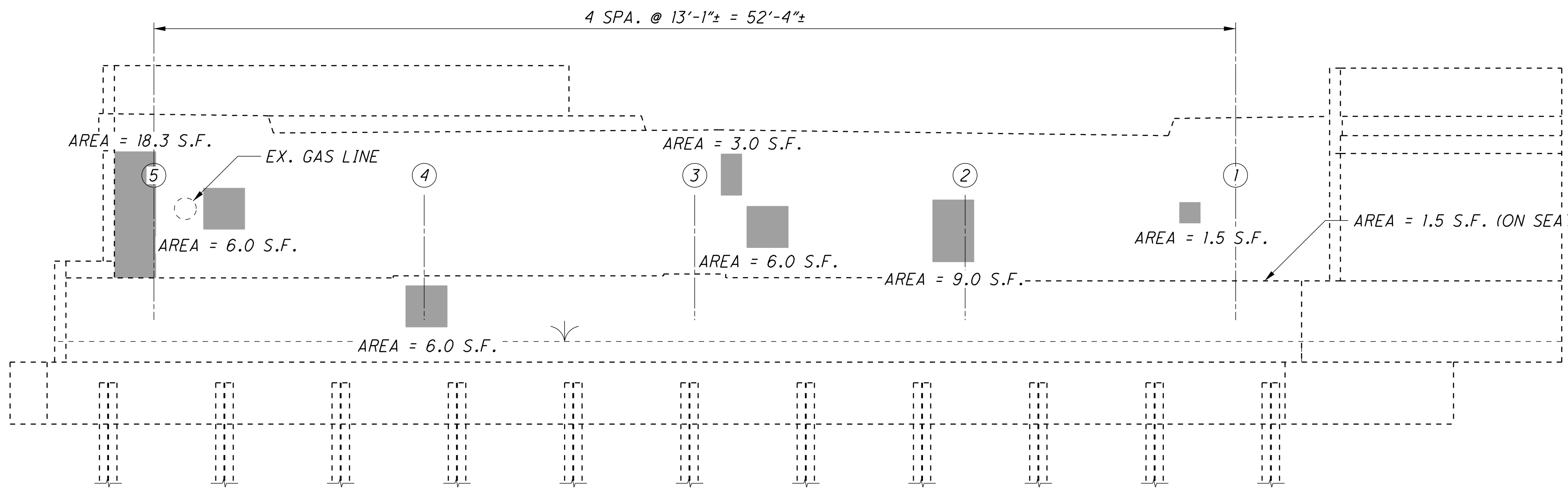
** SEE PROPOSAL NOTE 519

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229
614.656.2424 CMTRAN.COM

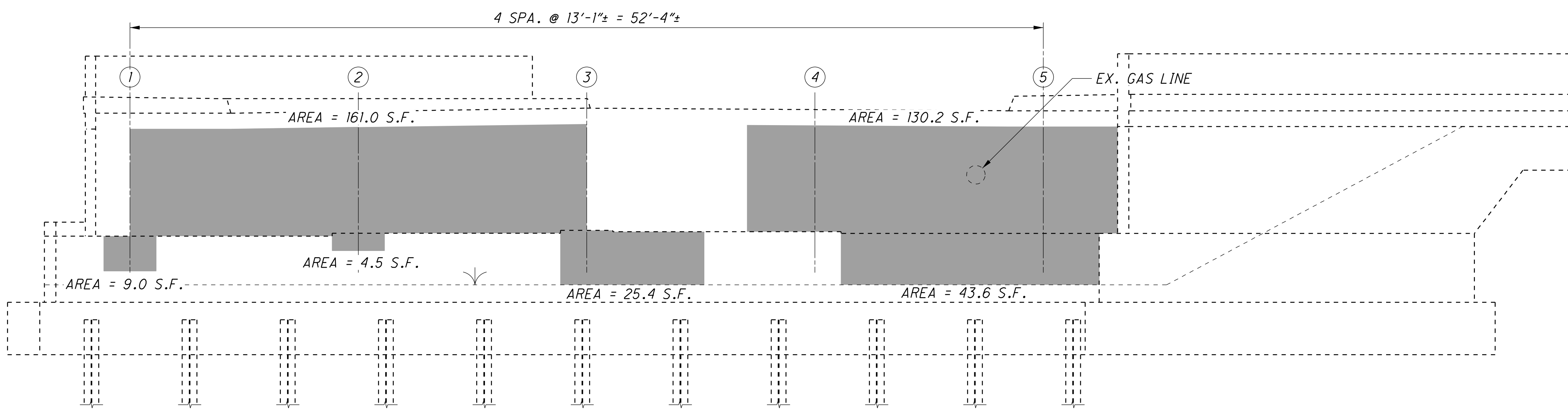
REVIEWED GDJ | DATE 8-6-20
STRUCTURE FILE NUMBER 1814176
DRAWN STK | REVISED
DESIGNED STK | CHECKED ERK

ESTIMATED QUANTITIES - LOCATION 9
BRIDGE NO. CUY-480-0616
MASTICK RD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



REAR ABUTMENT ELEVATION



FORWARD ABUTMENT ELEVATION

NOTES

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3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. FOR ESTIMATED QUANTITIES, SEE SHEET 2/7.
5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.

LEGEND

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 425 S.F.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. FOR ESTIMATING PURPOSES, TOTAL SEALING AREA THIS SHEET = 638 S.F.

(1) BEAM NUMBER

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE
ERK	STK	ERK		GDJ	8-6-20

STRUCTURE FILE NUMBER 1814176

ABUTMENT PATCHING DETAILS - LOCATION 9
BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

3/7

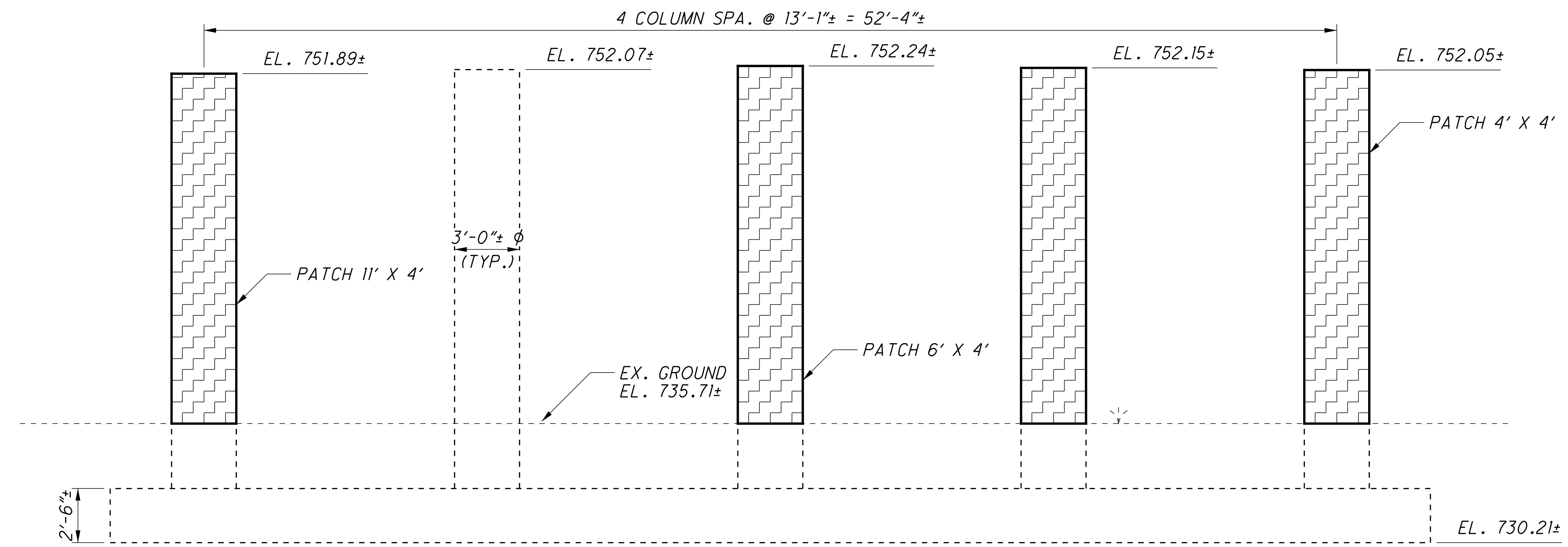
ITEM 512 - URETHANE TOP COAT SEALER

THIS ITEM OF WORK SHALL BE PER C&MS 512, EXCEPT AS MODIFIED BELOW.

A FINAL URETHANE COATING IS REQUIRED TO PROTECT THE COMPOSITE FIBER WRAP SYSTEM FROM THE ELEMENTS, SPECIFICALLY THE UV RADIATION, AND TO GIVE THE FINAL AESTHETIC EFFECT.

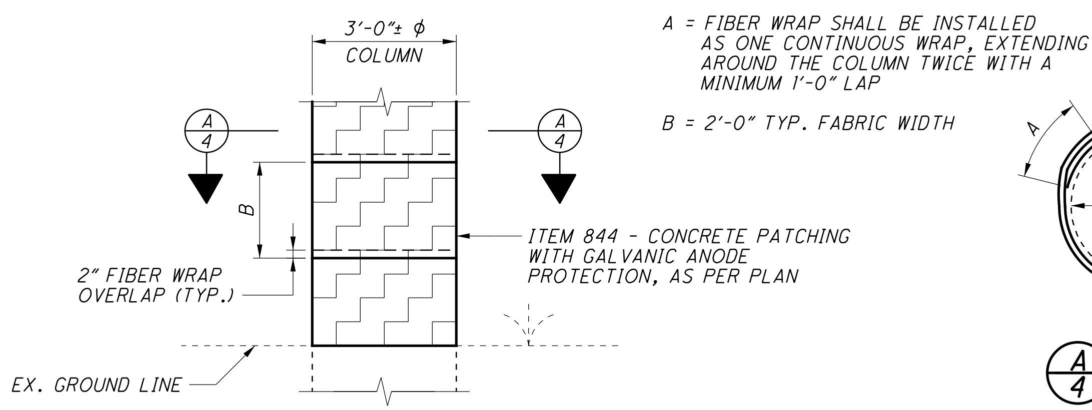
INSTALL THE URETHANE TOP COAT SEALER AFTER THE COMPOSITE FIBER WRAP SYSTEM HAS FULLY CURED, AND WITHIN 4 CALENDAR DAYS OF INSTALLATION. CLEAN AND ROUGHEN THE COMPOSITE FIBER WRAP SYSTEM IN A MANNER THAT WILL NOT DAMAGE THE SYSTEM. IF THE COMPOSITE FIBER WRAP SYSTEM IS DAMAGED, REPAIR IT PER THE MANUFACTURER'S RECOMMENDATIONS AT NO COST TO THE STATE. ALLOW THE CLEANED AND ROUGHENED SURFACES TO DRY COMPLETELY BEFORE INSTALLING THE URETHANE TOP COAT SEALER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 512, URETHANE TOP COAT SEALER, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.



PIER 3 (SPAN 3 SIDE)

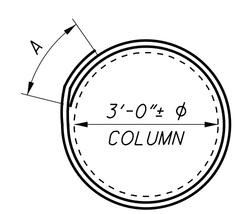
(LOOKING NORTH)



A = FIBER WRAP SHALL BE INSTALLED AS ONE CONTINUOUS WRAP, EXTENDING AROUND THE COLUMN TWICE WITH A MINIMUM 1'-0" LAP

B = 2'-0" TYP. FABRIC WIDTH

PIER COLUMN FIBER WRAP DETAIL



A/4 SECTION

NOTES

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4. FOR ESTIMATED QUANTITIES, SEE SHEET 2/7.
5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
6. AREAS TREATED WITH FIBER WRAP SHALL BE SEALED WITH URETHANE TOP COAT SEALER. COLOR TO MATCH EPOXY-URETHANE SEALER.

LEGEND

INDICATES CONCRETE PIER COLUMN REPAIR PER ITEM SPECIAL - STRUCTURES, COMPOSITE FIBER WRAP SYSTEM AND ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN

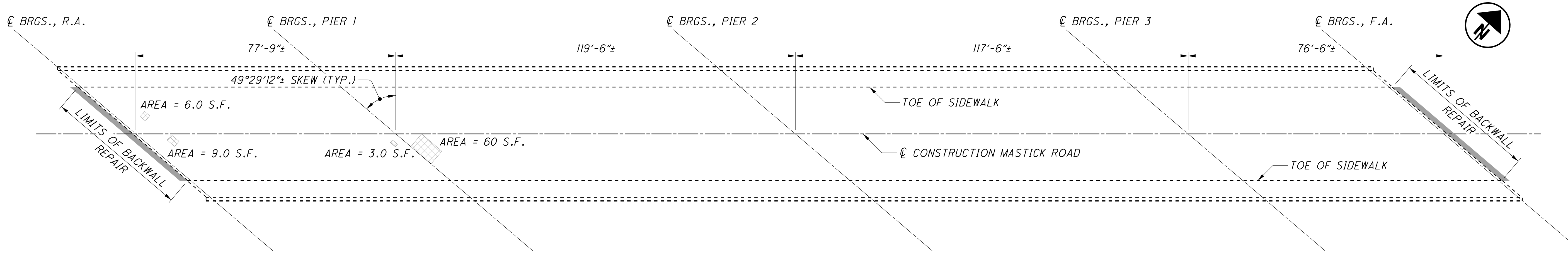
DESIGN AGENCY
CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-6-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814176	

PIER 3 PATCHING DETAILS - LOCATION 9

BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



DECK PLAN

LEGEND

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B. DECK AREA THIS SHEET = 78 S.F.

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B. BACKWALL AREA THIS SHEET = 130 S.F.

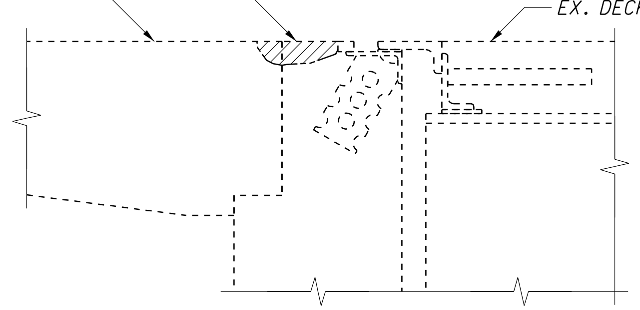
NOTE

PATCH THE WEARING SURFACE PER PROPOSAL NOTE 512, TYPE B PATCH. PATCH ONLY THE AREAS SHOWN IN THE PLANS TO BE REPAIRED AS DIRECTED BY THE ENGINEER. AREAS THAT ARE DESIGNATED FOR REPAIR ARE AREAS THAT ARE PATCHED WITH ASPHALT, SPALLED, OR HEAVILY CRACKED. DELAMINATED AREAS IMMEDIATELY CONTIGUOUS TO THE DESIGNATED REPAIR AREAS SHALL BE REMOVED AND REPAIRED WITH THE SAME PATCH. AREAS OF THE WEARING SURFACE ARE KNOWN TO EXIST THAT ARE DELAMINATED WHEN SOUNDED BUT ARE NOT SHOWING VISIBLE SIGNS OF DISTRESS. THESE AREAS SHALL NOT BE REPAIRED UNLESS DIRECTED TO DO SO BY THE PROJECT ENGINEER AND DISTRICT BRIDGE ENGINEER. PAYMENT WILL BE BASED UPON THE ACTUAL QUANTITIES REPAIRED AND ACCEPTED BY THE ENGINEER. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.

REMOVE ASPHALT PATCHES ON BACKWALL AND APPROACH SLAB; PAYMENT INCLUDED WITH ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B

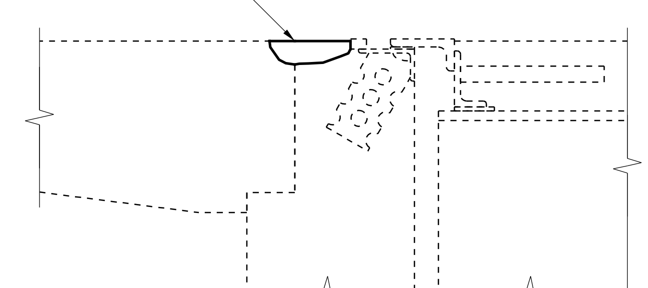
EX. APPROACH SLAB

EX. DECK



BACKWALL REMOVAL SECTION

PATCH WITH ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B FINISH FLUSH W/ APPROACH SLAB AND EXPANSION JOINT



PROPOSED BACKWALL SECTION

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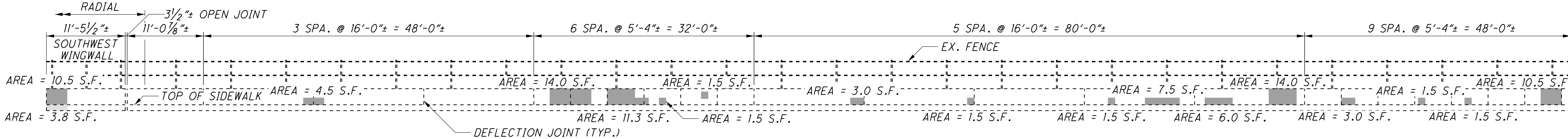
DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229
614.656.2424 CMTINFRA.COM

REVIEWED GDJ DATE 8-6-20
STRUCTURE FILE NUMBER 1814176
DRAWN ERK REVISED
DESIGNED ERK CHECKED STK

DECK AND BACKWALL PATCHING DETAILS - LOCATION 9

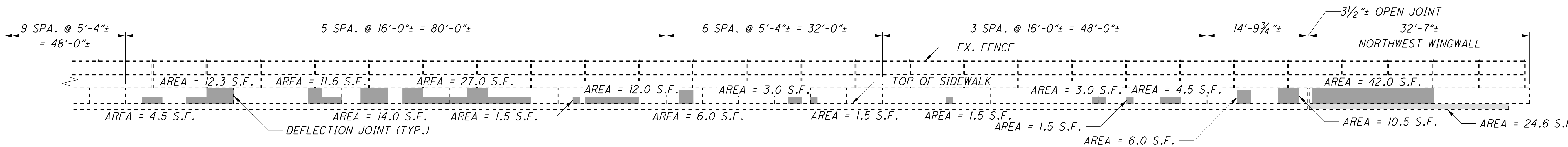
BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162



LEFT SIDE

LOOKING WEST



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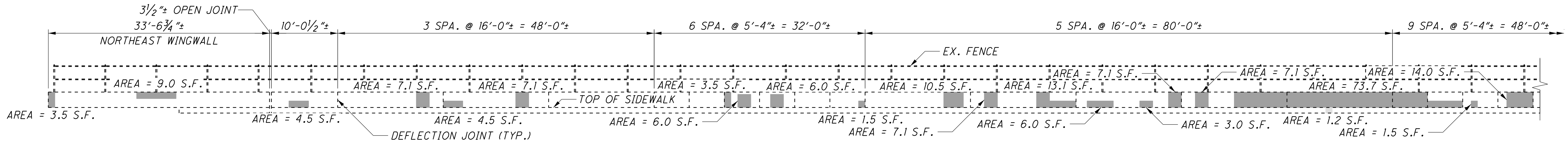
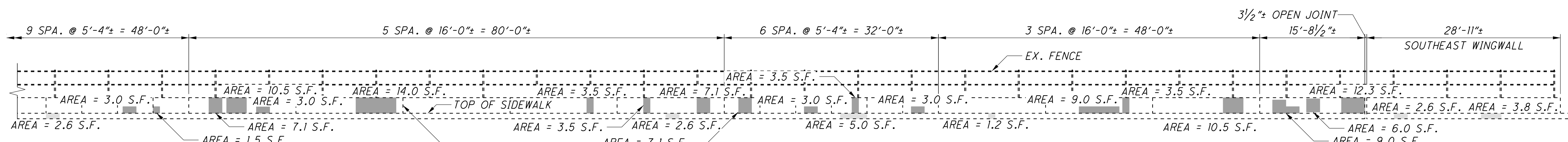
LOOKING WEST



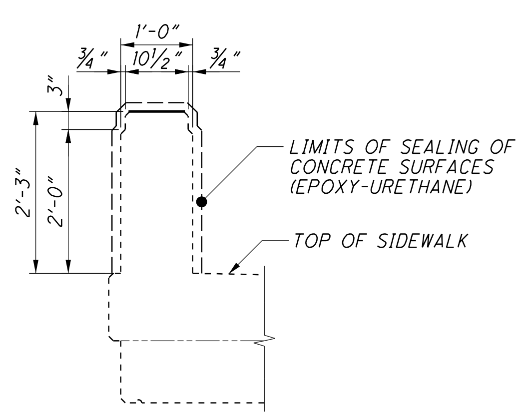
RIGHT SIDE

LOOKING EAST



RIGHT SIDE CONT.

LOOKING EAST



PARAPET SECTION (AT FENCE POST)

FENCING NOT SHOWN

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5. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
6. DO NOT DISTURB EXISTING FENCING ON SIDEWALK DURING CURB REPAIR OPERATIONS.

LEGEND

(dark shading) INDICATES CONCRETE PARAPET REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 572 S.F.

THE ENTIRE LENGTH OF THE PARAPETS SHALL BE SEALED WITH EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

(light shading) INDICATES CONCRETE CURB REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 48 S.F.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. FOR ESTIMATING PURPOSES, THE TOTAL SEALING AREA THIS SHEET = 72 S.F.

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-6-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814176	

CURB AND PARAPET PATCHING DETAILS - LOCATION 9

BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

6/7

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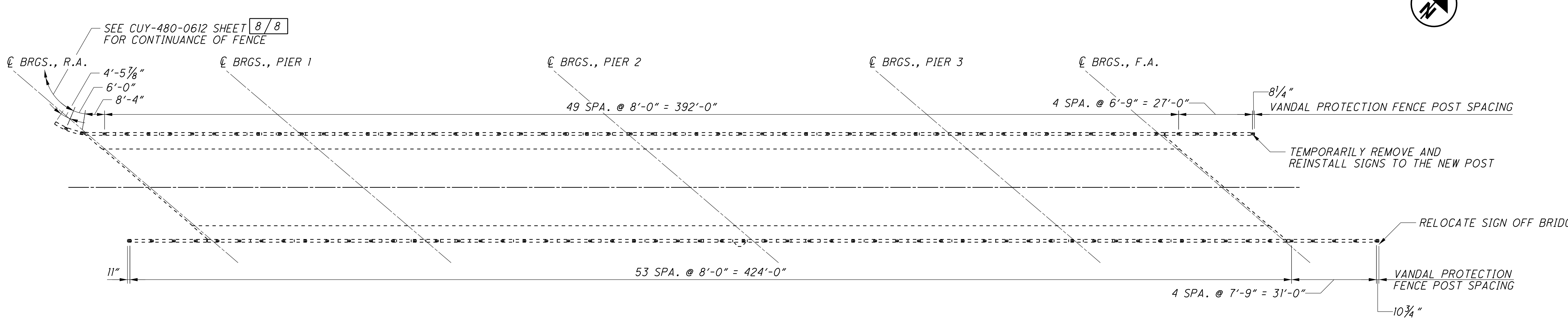
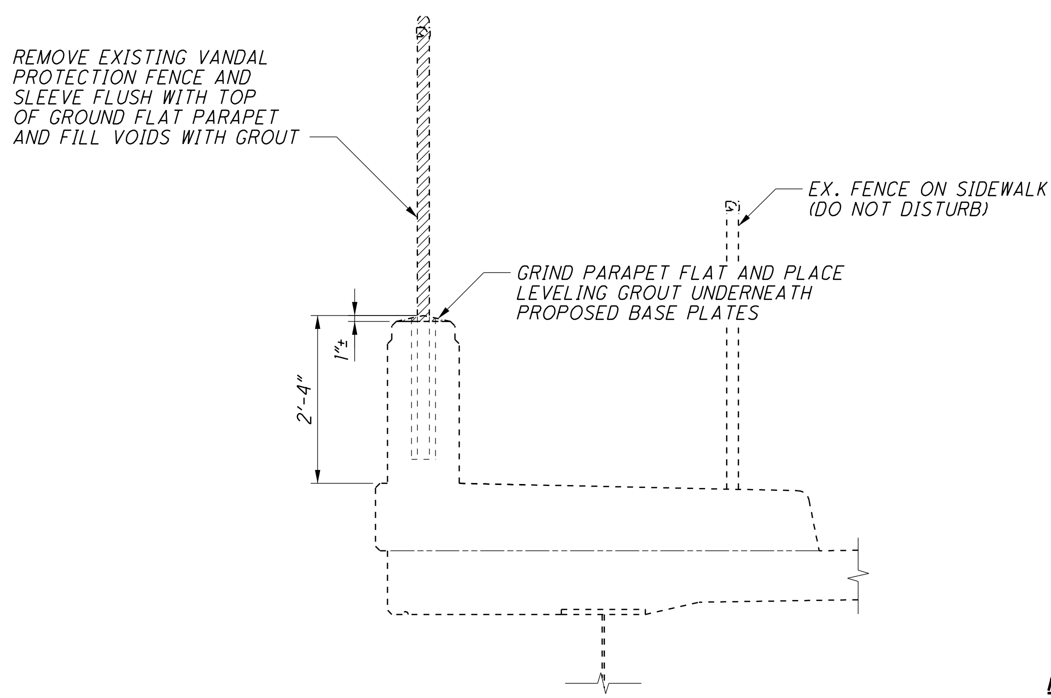
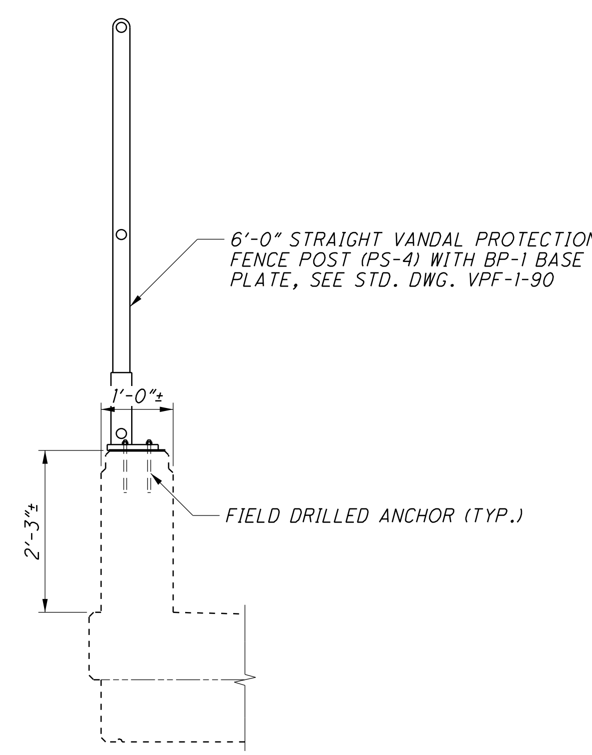


PLAN



EXISTING PARAPET SECTION



PROPOSED PARAPET SECTION

NOTES

1. SEE STD. DWG. VPF-1-90 FOR ADDITIONAL NOTES AND DETAILS.
2. CONTRACTOR IS TO VERIFY ALL EXISTING FENCING DIMENSIONS PRIOR TO ORDERING MATERIALS.
3. PRIOR TO DRILLING HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED ANCHOR, MOVE THE ANCHOR HOLE TO EITHER SIDE OF THE EXISTING BAR.
4. VANDAL PROTECTION FENCE POST SPACING MEASURED ALONG CENTERLINE OF PARAPET.
5. IN LOCATIONS WHERE PROVIDED BASE PLATE ANCHORS WILL BE IN CONCRETE PATCHING, ALLOW THE CONCRETE TO FULLY CURE BEFORE FIELD DRILLING.
6. GRINDING PARAPET FLAT AND PLACING GROUT IN EXISTING VOIDS SHALL BE PAID FOR WITH ITEM 202 - VANDAL PROTECTION FENCE REMOVED, AS PER PLAN.

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-6-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814176	

VANDAL PROTECTION FENCE DETAILS – LOCATION 9

BRIDGE NO. CUY-480-0616
MASTICK ROAD OVER I-480

D12-BH-FY2021(A) MISC
PID No. 103162

7/7

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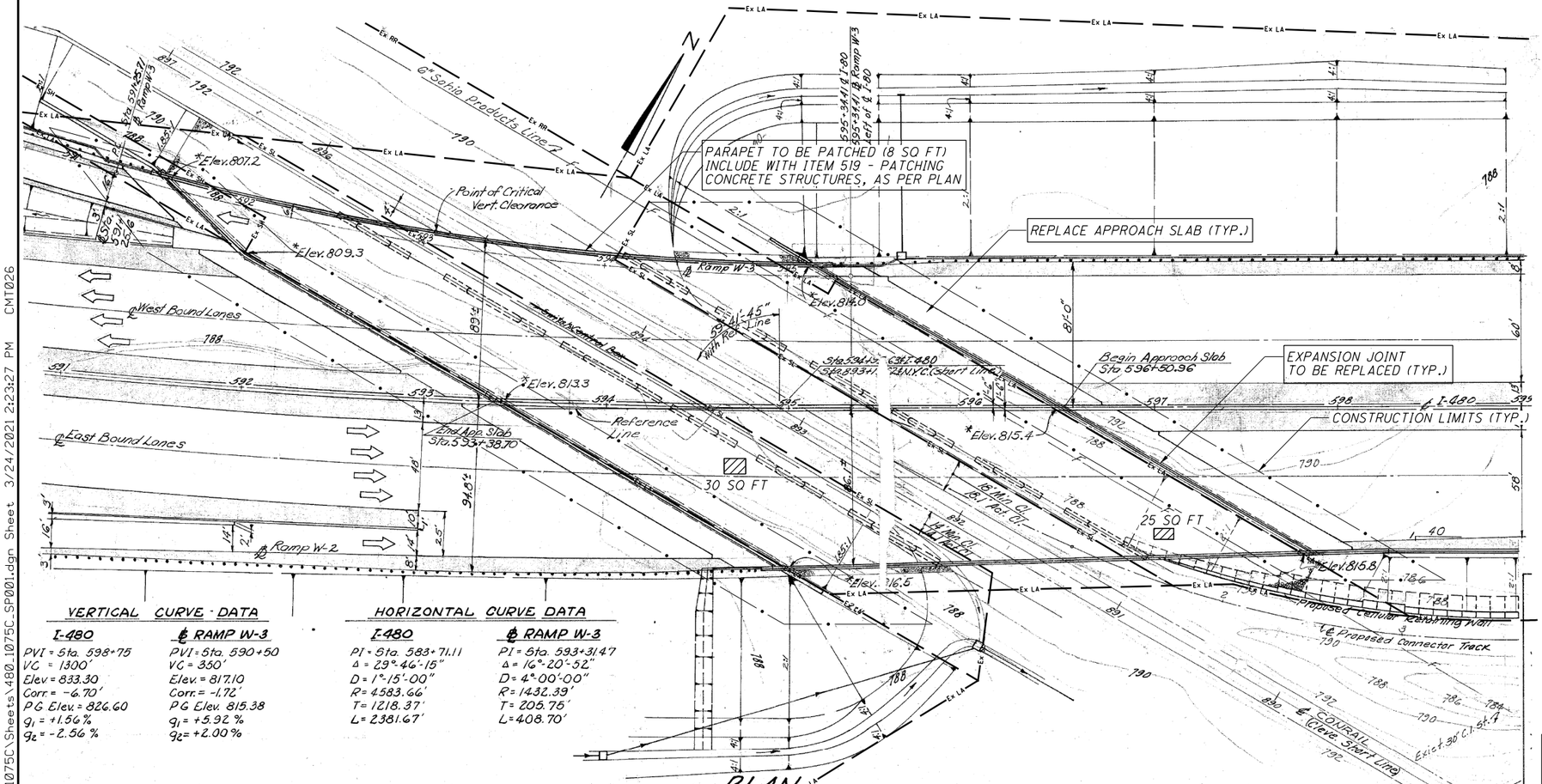

VERTICAL CURVE - DATA

I-480	℄ RAMP W-3
PVI = Sta. 598+75	PVI = Sta. 590+50
VC = 1300'	VC = 350'
Elev = 833.30	Elev. = 817.10
Corr. = -6.70'	Corr. = -1.72'
P.G. Elev. = 826.60	P.G. Elev. 815.38
g_1 = +1.56 %	g_1 = +5.92 %
g_2 = -2.56 %	g_2 = +2.00 %

HORIZONTAL CURVE DATA

I-480	℄ RAMP W-3
PI = Sta. 583+71.11	PI = Sta. 593+31.47
Δ = 29°-46'-15"	Δ = 16°-20'-52"
D = 1°-15'-00"	D = 4°-00'-00"
R = 4583.66'	R = 1432.39'
T = 1218.37'	T = 205.75'
L = 2381.67'	L = 408.70'

LEGEND

▨ INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE BRIDGE DECKS, TYPE B. TOTAL AREA THIS SHEET = 55 S.F.

NOTES:

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
3. FOR ESTIMATED QUANTITIES SEE SHEET 2/34.
4. PATCH THE WEARING SURFACE PER PROPOSAL NOTE 512, TYPE B PATCH. PATCH ONLY THE AREAS SHOWN IN THE PLANS TO BE REPAIRED AS DIRECTED BY THE ENGINEER. AREAS THAT ARE DESIGNATED FOR REPAIR ARE AREAS THAT ARE PATCHED WITH ASPHALT, SPALLED, OR HEAVILY CRACKED. DELAMINATED AREAS IMMEDIATELY CONTIGUOUS TO THE DESIGNATED REPAIR AREAS SHALL BE REMOVED AND REPAIRED WITH THE SAME PATCH. AREAS OF THE WEARING SURFACE ARE KNOWN TO EXIST THAT ARE DELAMINATED WHEN SOUNDED BUT ARE NOT SHOWING VISIBLE SIGNS OF DISTRESS. THESE AREAS SHALL NOT BE REPAIRED UNLESS DIRECTED TO DO SO BY THE PROJECT ENGINEER AND DISTRICT BRIDGE ENGINEER. PAYMENT WILL BE BASED UPON THE ACTUAL QUANTITIES REPAIRED AND ACCEPTED BY THE ENGINEER. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
5. THE PARAPET PATCH SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 12 S.F.
6. CONTRACTOR ACCESS SHALL BE RESTRICTED WITHIN THE CSX RAILROAD R/W.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1814168	

GENERAL PLAN - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

1/34
41/74

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ESTIMATED QUANTITIES						DESIGN: STK DATE: 8-18-20		CHECK: ERK DATE: 8-18-20	
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
202	11203	LS	-	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	25
202	22900	924	SY	APPROACH SLAB REMOVED				924	
202	23500	924	SY	WEARING COURSE REMOVED				924	
509	10000	4050	LB	EPOXY COATED REINFORCING STEEL	2959		1091		
509	20001	5545	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	2071		3474		25
511	21520	71	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	6		65		
511	44110	50	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	50				
512	10100	122	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	62		60		
513	10201	36000	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			36000		25
514	00050	5603	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			5603		
514	00056	5603	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			5603		
514	00060	9294	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			9294		
514	00066	9294	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			9294		25
514	00504	7	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			7		
514	10000	5	EACH	FINAL INSPECTION REPAIR			5		
516	11210	725	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			725		
516	13600	277	SF	1" PREFORMED EXPANSION JOINT FILLER	277				
516	44000	1	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10"X12"X1.648" WITH A 12"X14"X1" LOAD PLATE)	1				
516	44100	1	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12"X6"X2.222" WITH A 14"X8"X1" LOAD PLATE)	1				
516	44100	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"X12"X2.398" WITH A 17"X14"X1" LOAD PLATE)	20				
516	44100	1	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"X12"X2.398" WITH A 18"X14"X1" LOAD PLATE)	1				
516	44400	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"X12"X5.694" WITH A 17"X14"X1" LOAD PLATE)	18				
516	44400	1	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"X12"X5.694" WITH A 18"X17"X1" LOAD PLATE)	1				
516	47001	LS	-	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LS		25
519	11101	379	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	371		8		25
519	12300	7	SY	PATCHING CONCRETE BRIDGE DECKS - TYPE B*			7		
526	25000	924	SY	REINFORCED CONCRETE APPROACH SLABS (T=15")				924	

* SEE PROPOSAL NOTE 512

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DESIGN AGENCY
CARPENTER MARTY transportation

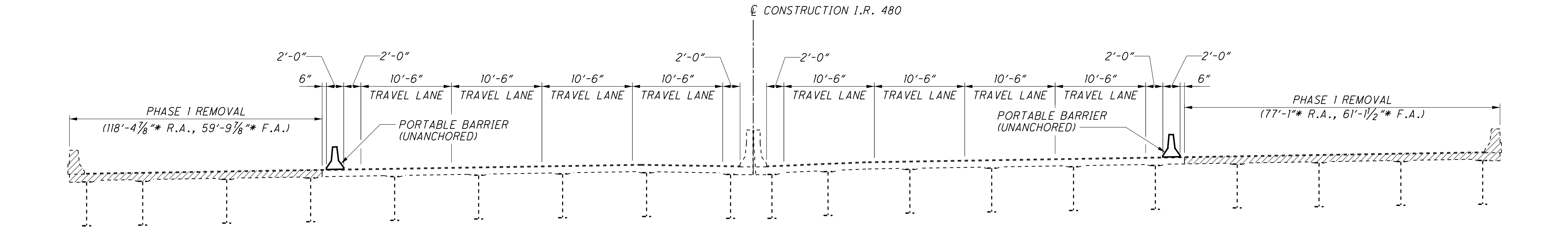
DESIGNED STK | CHECKED ERK | DRAWN STK | REVISED | REVIEWED GDJ | DATE 8-17-20 | STRUCTURE FILE NUMBER 1812912

ESTIMATED QUANTITIES - LOCATION 10

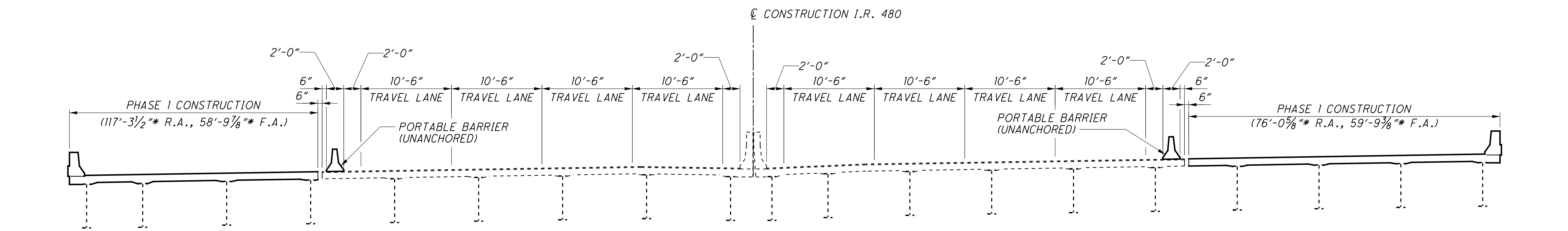
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

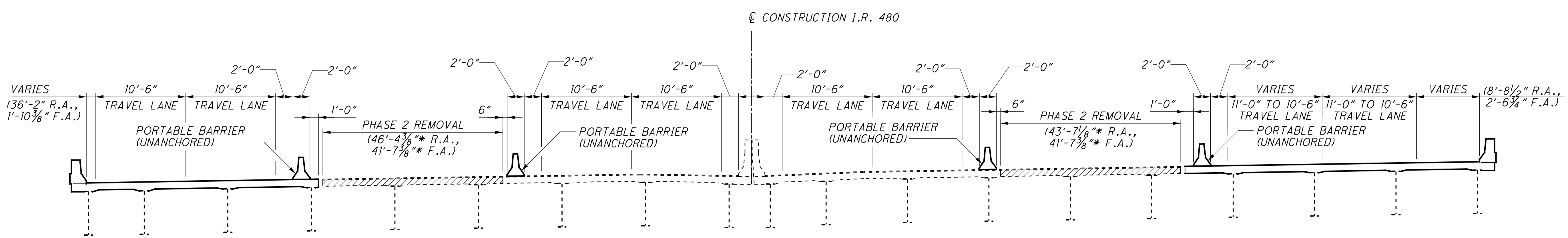
2/34



PHASE 1 MAINTENANCE OF TRAFFIC AND REMOVAL



PHASE 1 CONSTRUCTION



PHASE 2 MAINTENANCE OF TRAFFIC AND REMOVAL

LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (AT BRIDGE LIMITS)

* - MEASURED PARALLEL TO ℄ BRGS. AT ABUTMENT EXPANSION JOINTS

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
STK	STK	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ERK		1812912	

BRIDGE PHASE CONSTRUCTION DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075 OVER CSX RAILROAD

D12-BH-FY2021(A) MISC

PID No. 103162

3/34

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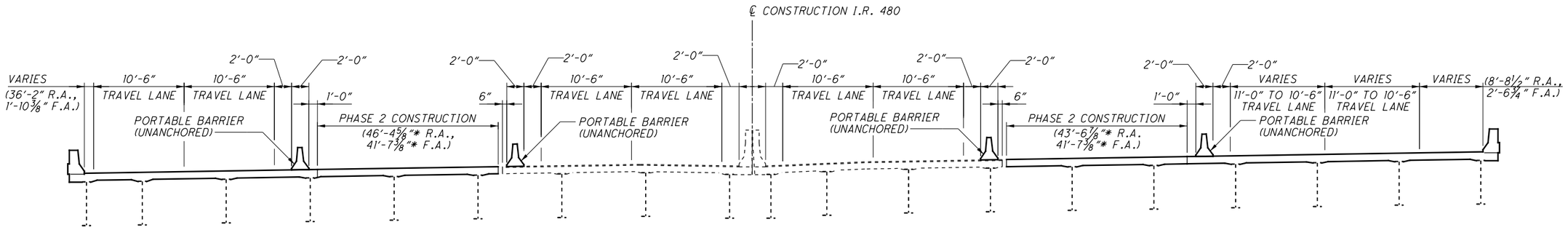
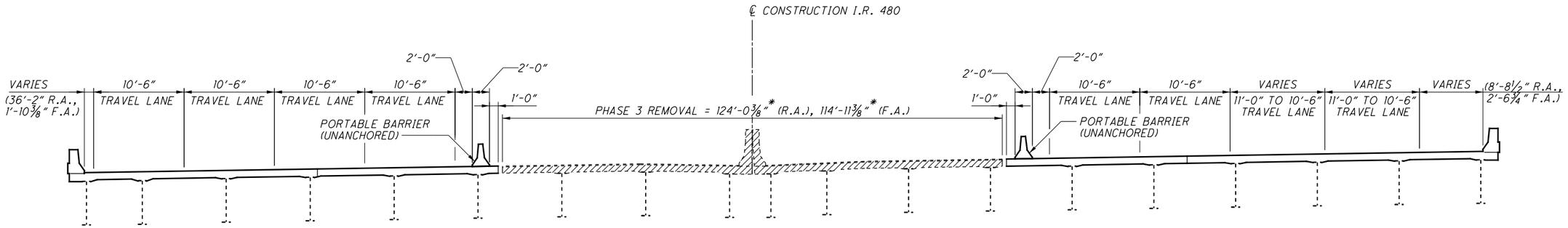
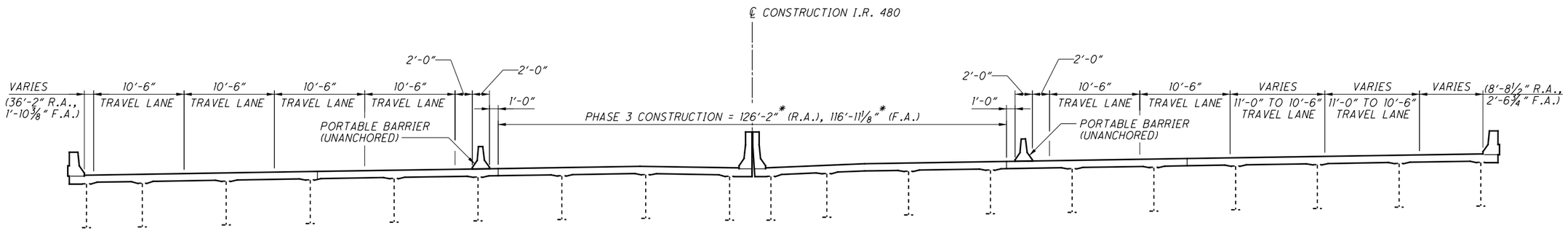


PHASE 2 CONSTRUCTION



PHASE 3 MAINTENANCE OF TRAFFIC AND REMOVAL



PHASE 3 CONSTRUCTION

LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (AT BRIDGE LIMITS)

* - MEASURED PARALLEL TO ℄ BRGS. AT ABUTMENT EXPANSION JOINTS

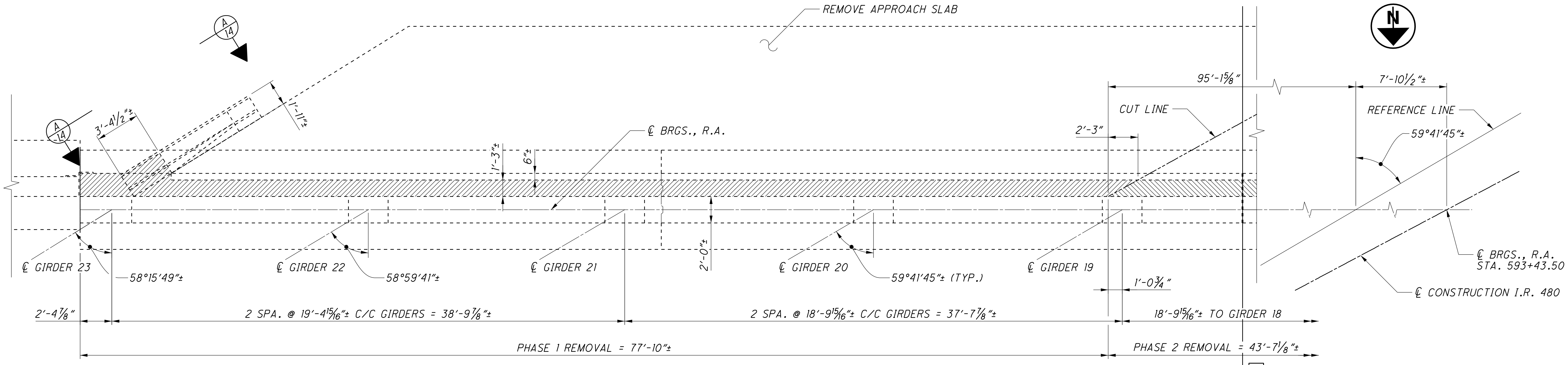
DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229

DESIGNED	DRAWN	REVIEWED	DATE
STK	STK	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ERK		1812912	

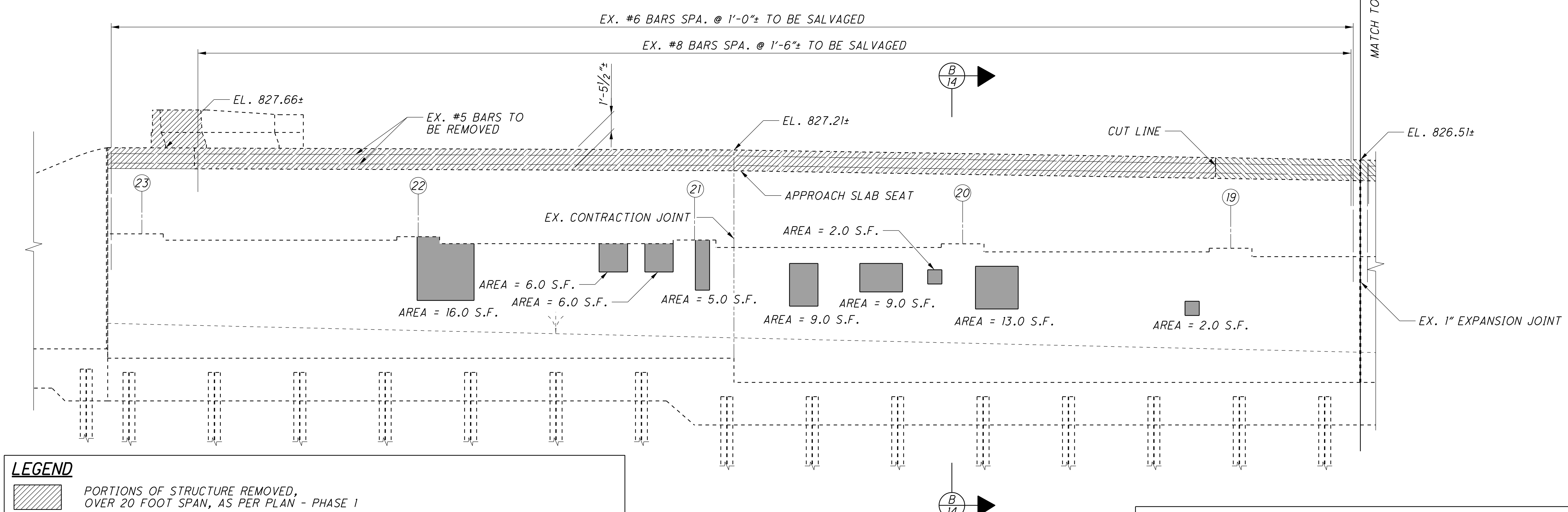
BRIDGE PHASE CONSTRUCTION DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



PLAN



ELEVATION

LEGEND

(Phase 1 hatch)	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1
(Phase 2 hatch)	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
(Shaded)	INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 78.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN. ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 117 S.F.
(1)	BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

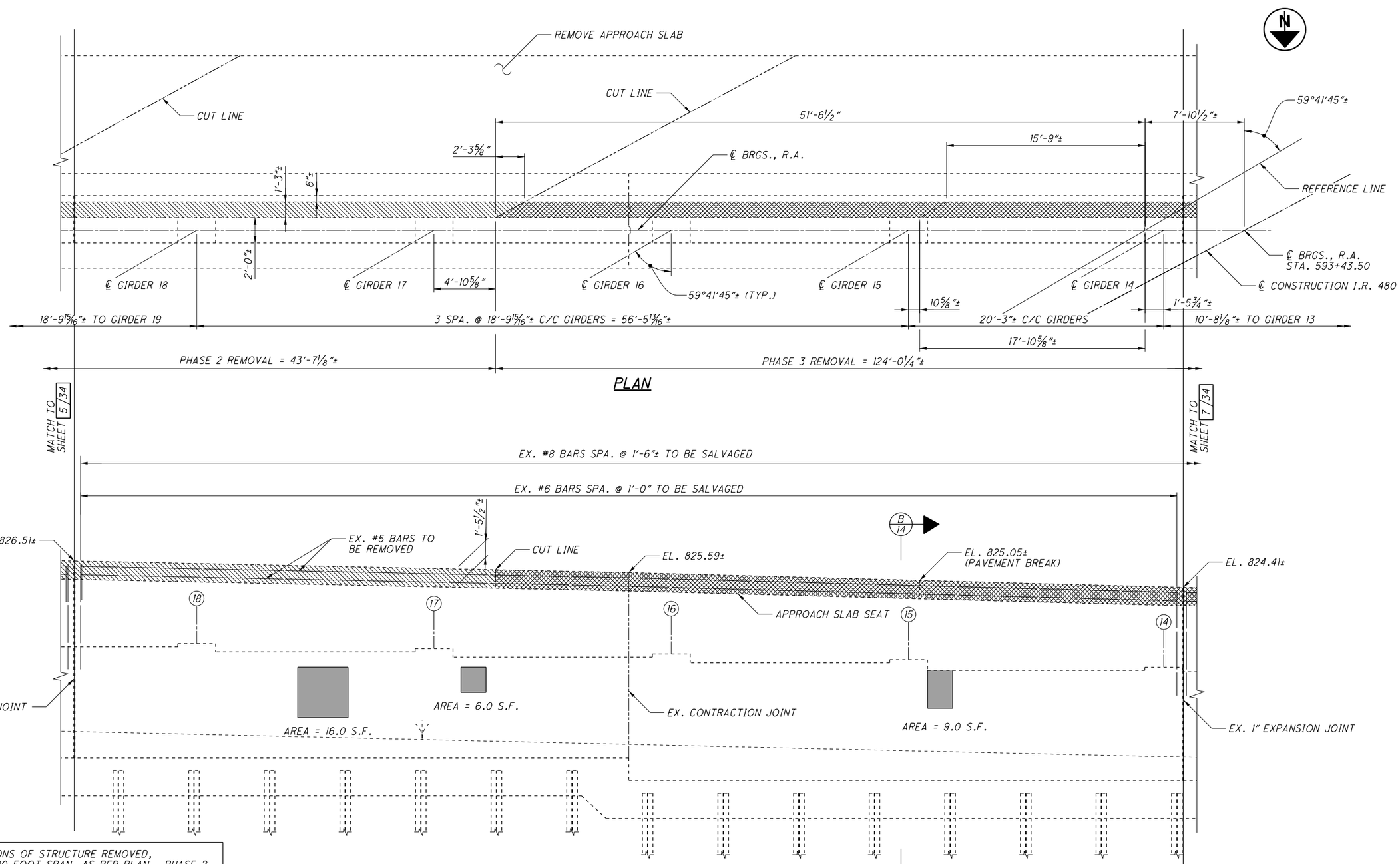
DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-11-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT REMOVAL DETAILS 1 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



LEGEND

- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3
- INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 41.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

  ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 61.5 S.F.
- (1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

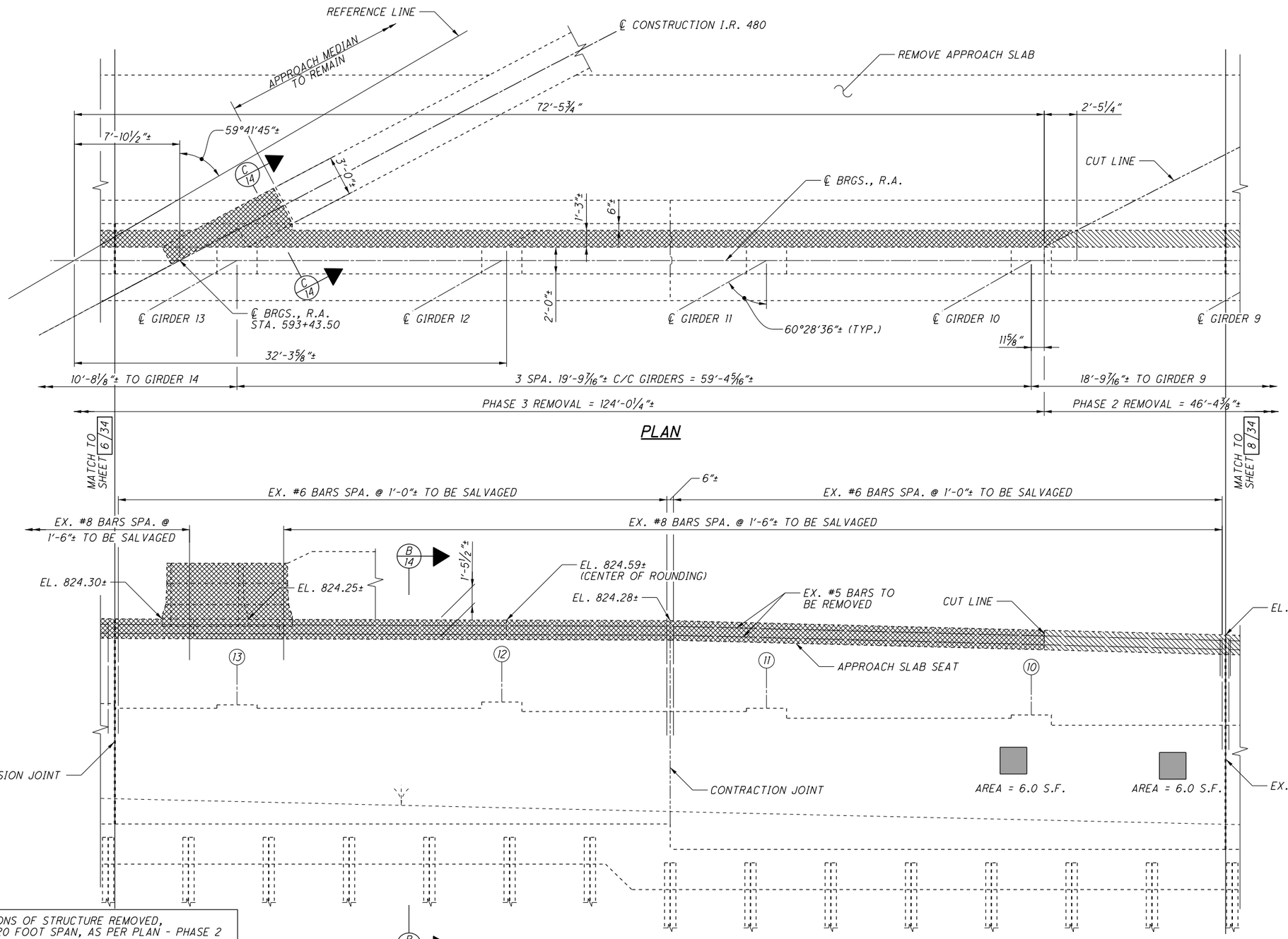
DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTORS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-11-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

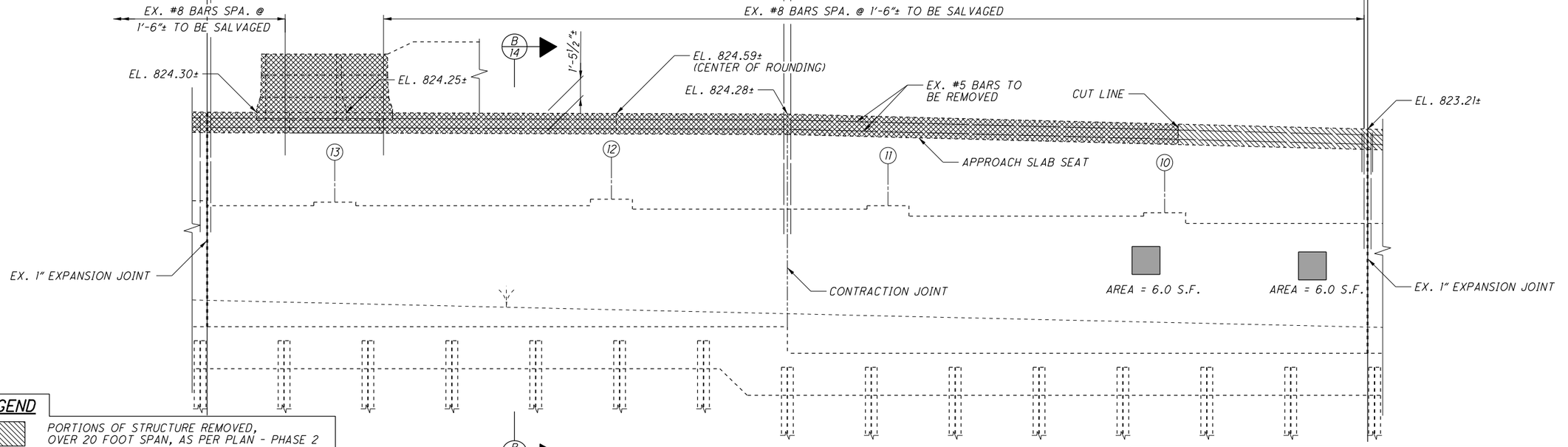
REAR ABUTMENT REMOVAL DETAILS 2 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



PLAN



ELEVATION

LEGEND

- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3
- INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 22.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

  ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 33 S.F.
- (1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINCLAIR DR. COLUMBUS, OH 43229
ENGINEERS CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-11-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT REMOVAL DETAILS 3 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

7 / 34

47 / 74

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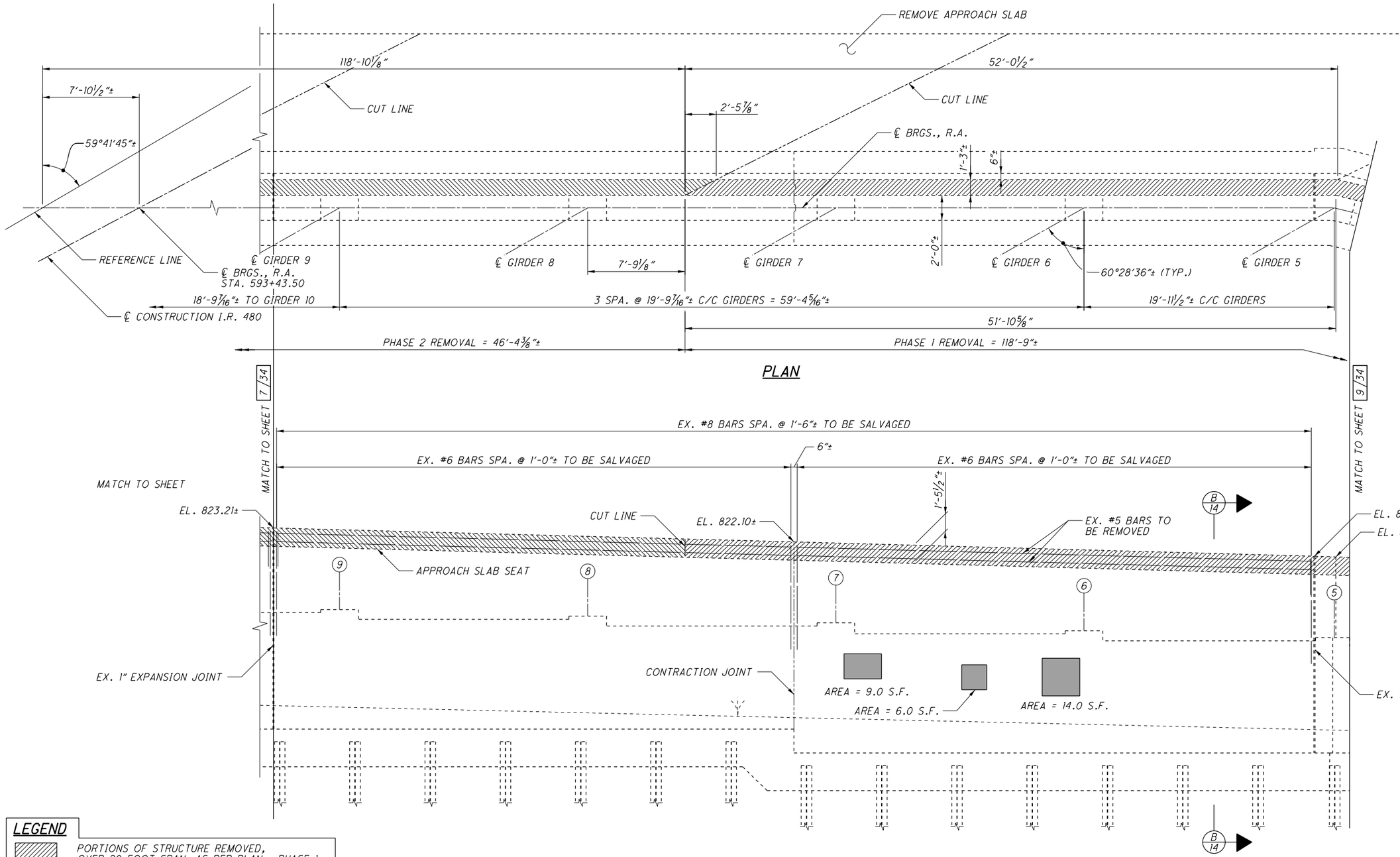


LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 39.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 58.5 S.F.

(1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

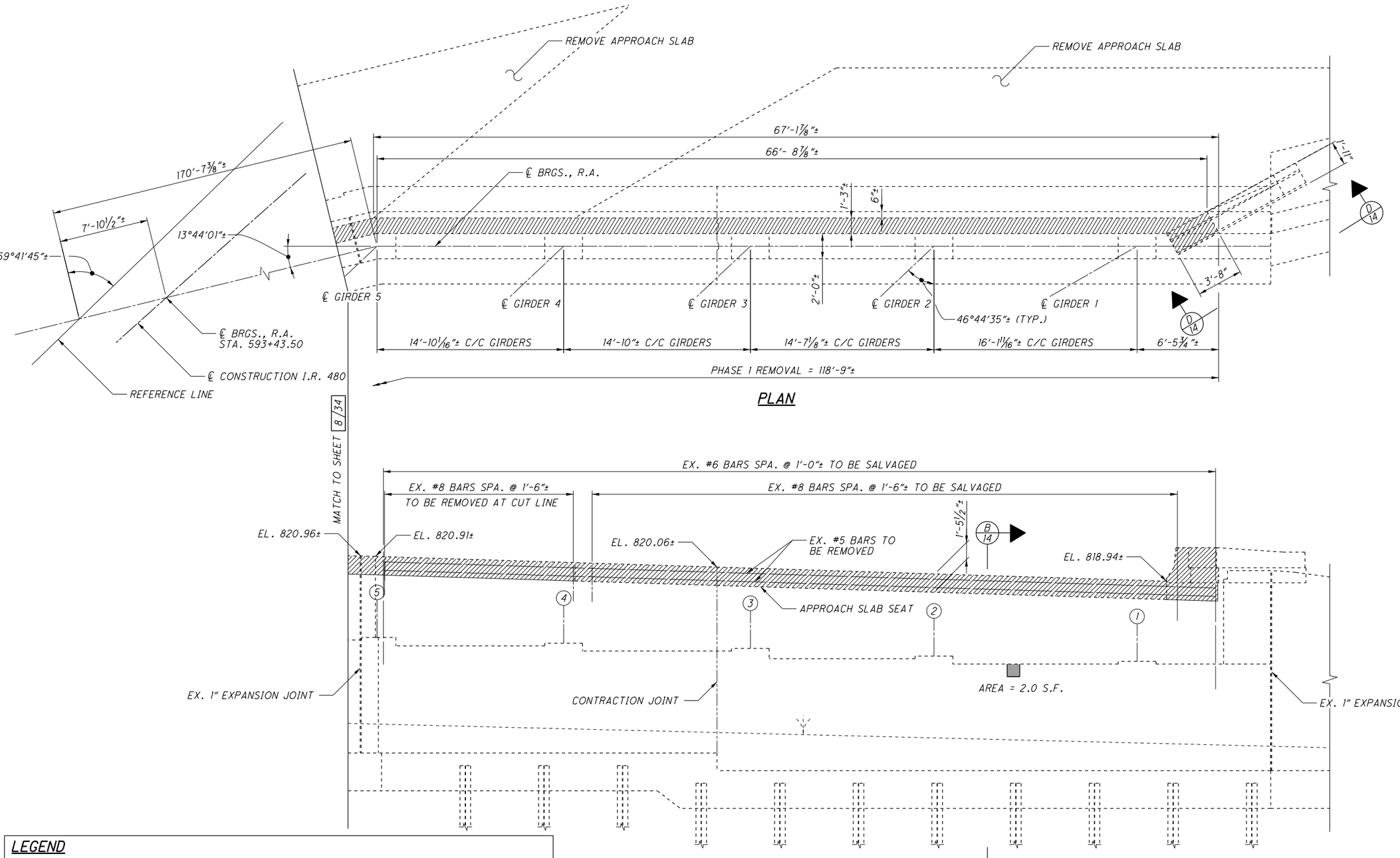
DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-11-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT REMOVAL DETAILS 4 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 12.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 18 S.F.

(1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-11-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT REMOVAL DETAILS 5 - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

9 / 34

49 / 74

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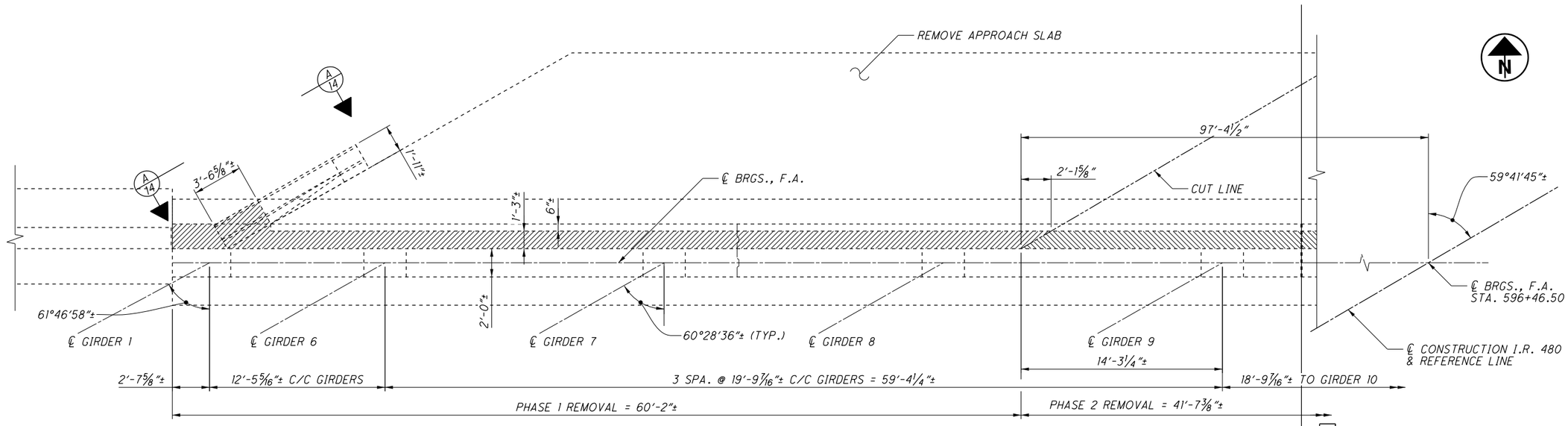
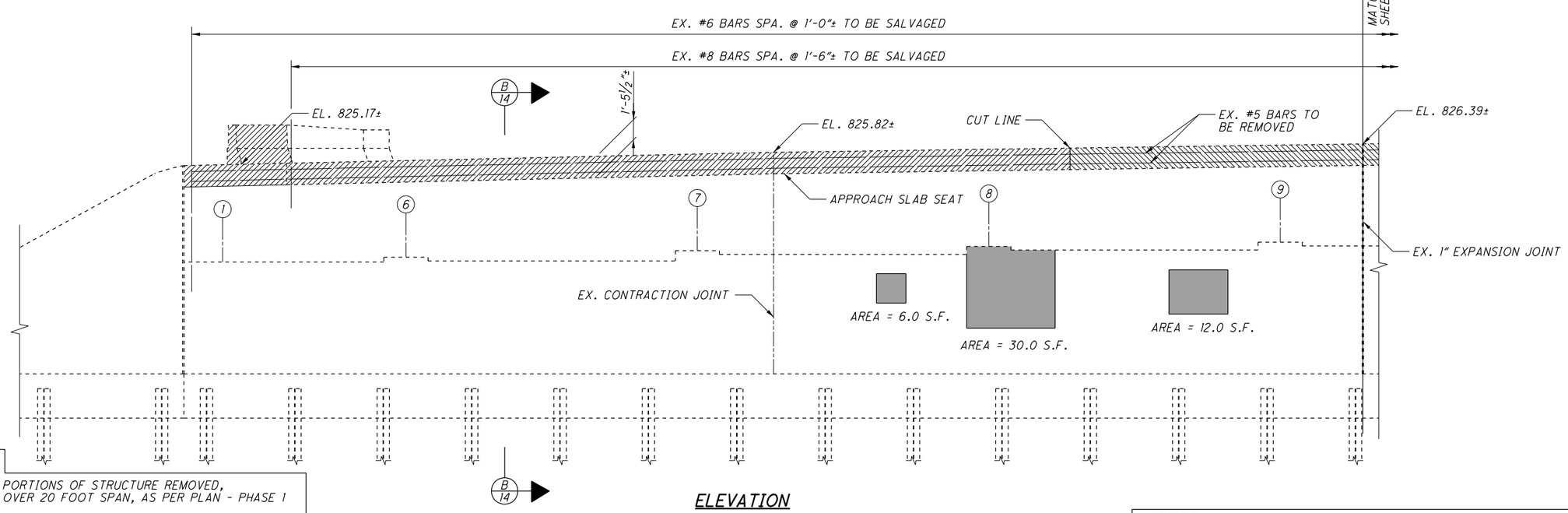


PLAN



ELEVATION

LEGEND

- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1
- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 58.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 87 S.F.

(1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-12-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

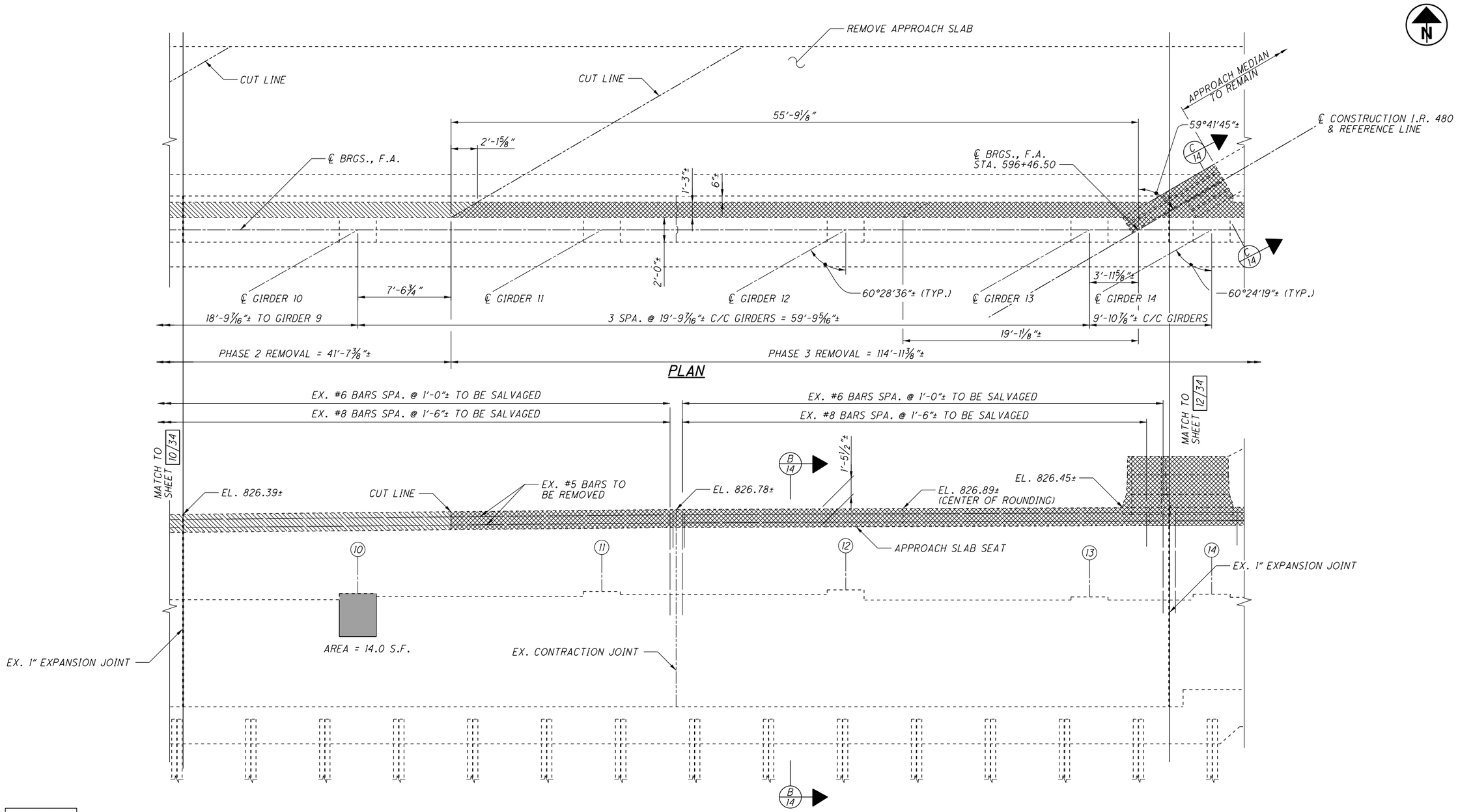
FORWARD ABUTMENT REMOVAL DETAILS 1 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

10 / 34

50 / 74



LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 24.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 36 S.F.

BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

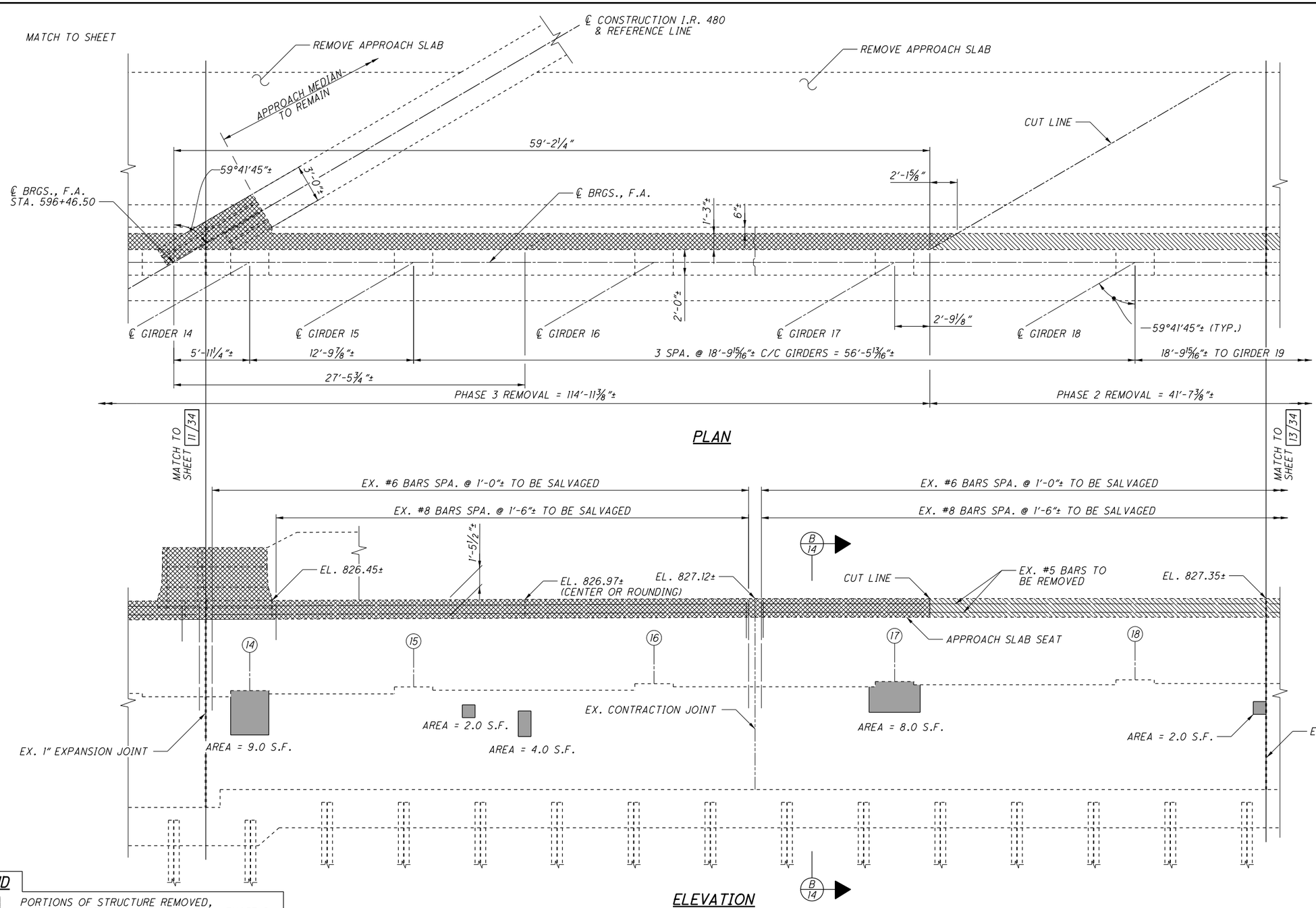
DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-12-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

FORWARD ABUTMENT REMOVAL DETAILS 2 - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

11 / 34

51 / 74



LEGEND

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3

INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 35.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 52.5 S.F.

(1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

FORWARD ABUTMENT REMOVAL DETAILS 3 - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

12 / 34

52 / 74

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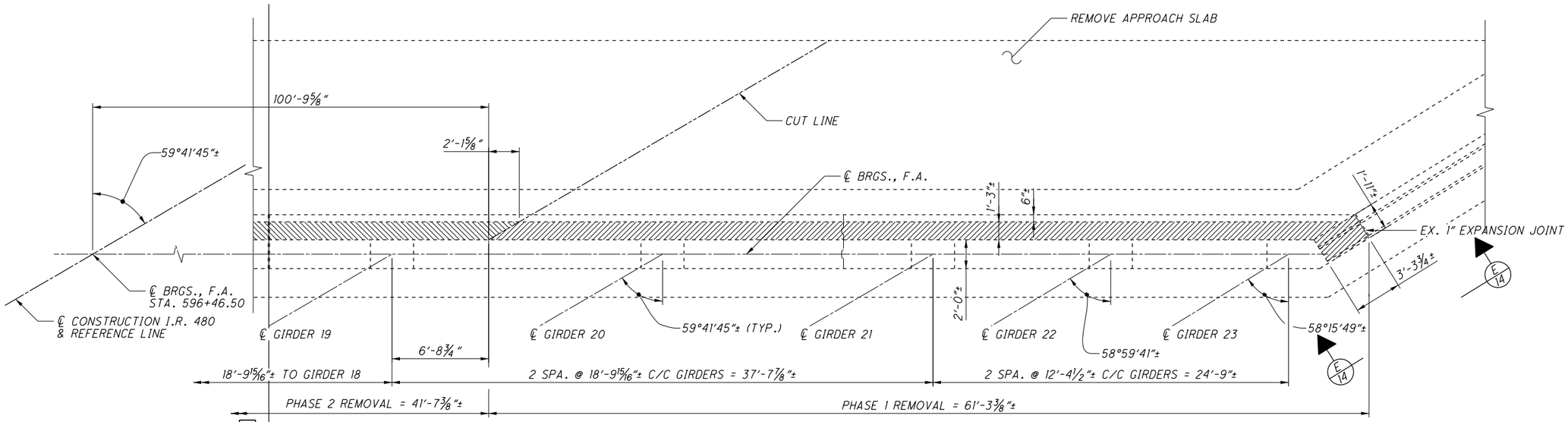
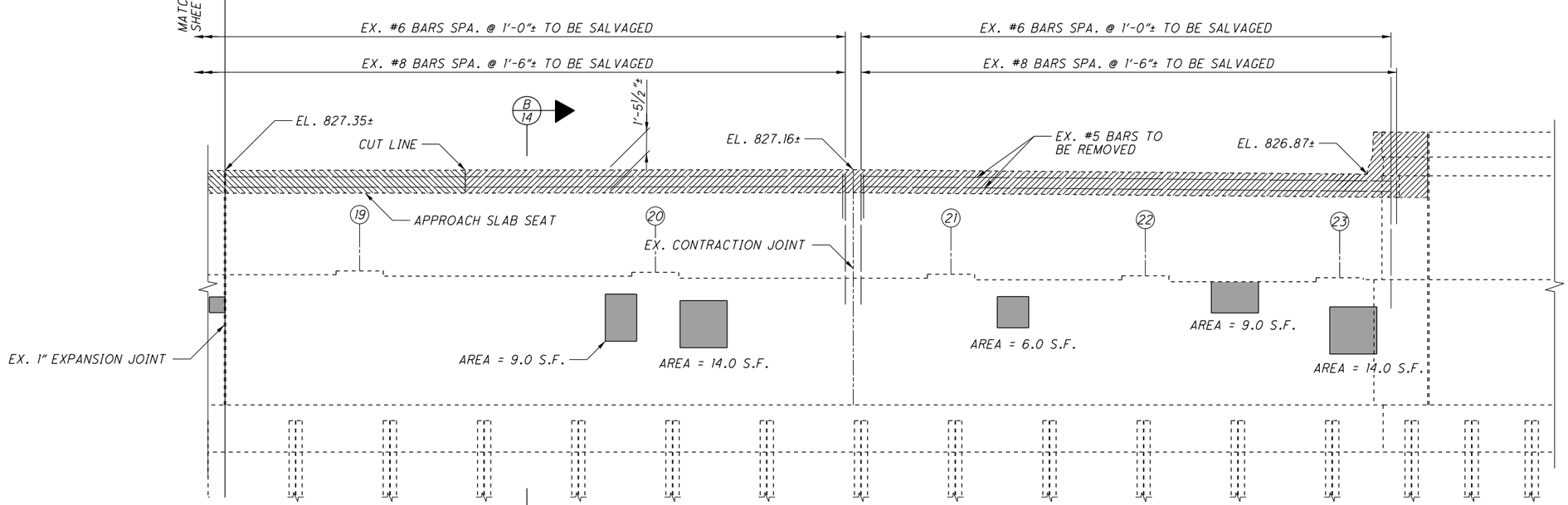


PLAN



ELEVATION

LEGEND

- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1
- PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- INDICATES CONCRETE REPAIR PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. TOTAL AREA THIS SHEET = 62.0 S.F. THIS AREA INCLUDES A CONTINGENCY QUANTITY OF 10 S.F. FOR THE BACKWALL. AT THE TIME OF INSPECTION, THE BACKWALL WAS COVERED WITH A NEOPRENE CURTAIN.

  ALL PATCHES SHALL BE SEALED 6" BEYOND THE PATCHING LIMITS USING EPOXY-URETHANE AND SHALL BE PAID WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN. TOTAL SEALING AREA THIS SHEET = 93 S.F.
- (1) BEAM NUMBER

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. PATCHING ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.
3. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
4. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINCLAIR DR. COLUMBUS, OH 43229
ARCHITECT CORPORATION

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

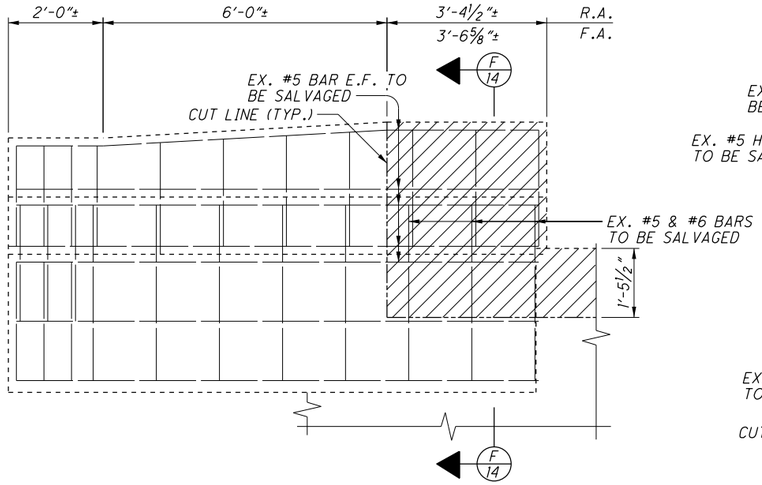
FORWARD ABUTMENT REMOVAL DETAILS 4 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

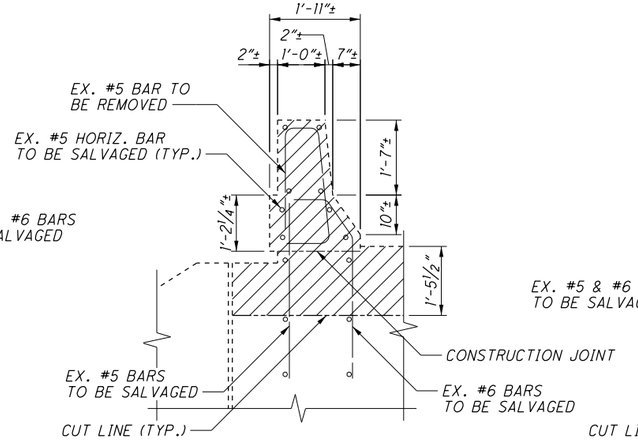
D12-BH-FY2021(A) MISC
PID No. 103162

13 / 34

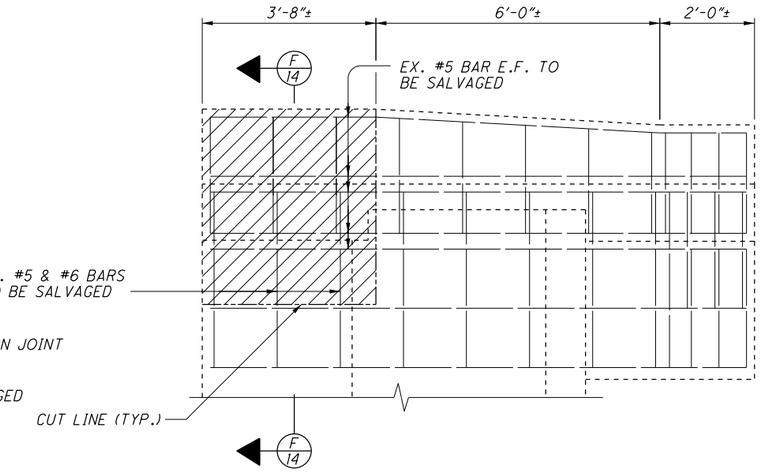
53 / 74



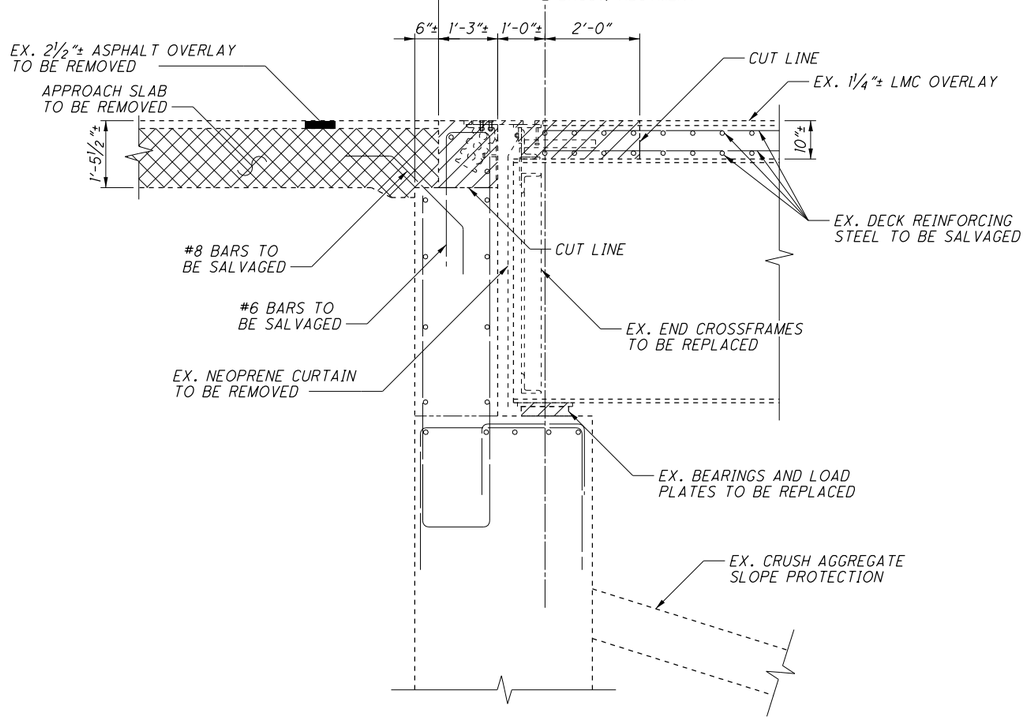
A 5 / A 10 VIEW



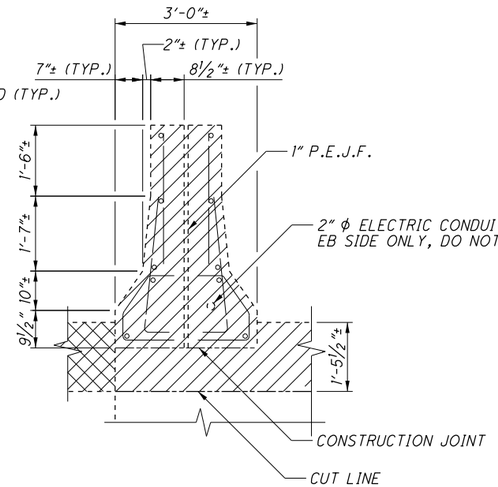
F 14 SECTION
R.A. RIGHT SHOWN, OTHERS ARE SIMILAR



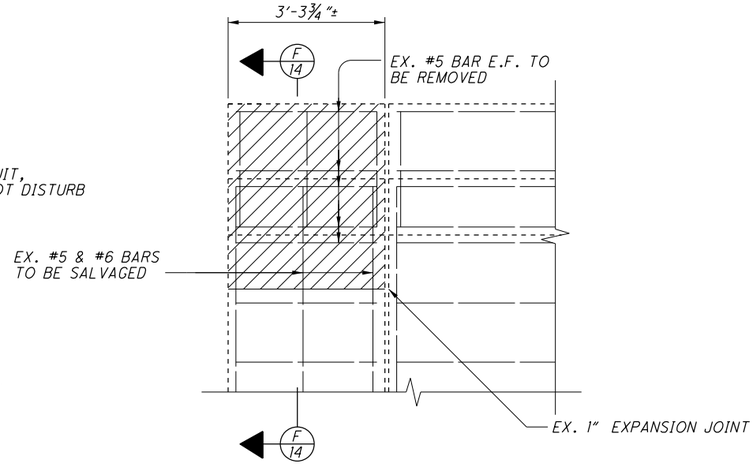
D 9 VIEW



B 5 / B 6 / B 7 / B 8 / B 9 / B 10 / B 11 / B 12 / B 13 SECTION



C 7 / C 11 SECTION



E 13 VIEW

LEGEND

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

APPROACH SLAB REMOVED

E.F. - EACH FACE

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINCLAIR DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

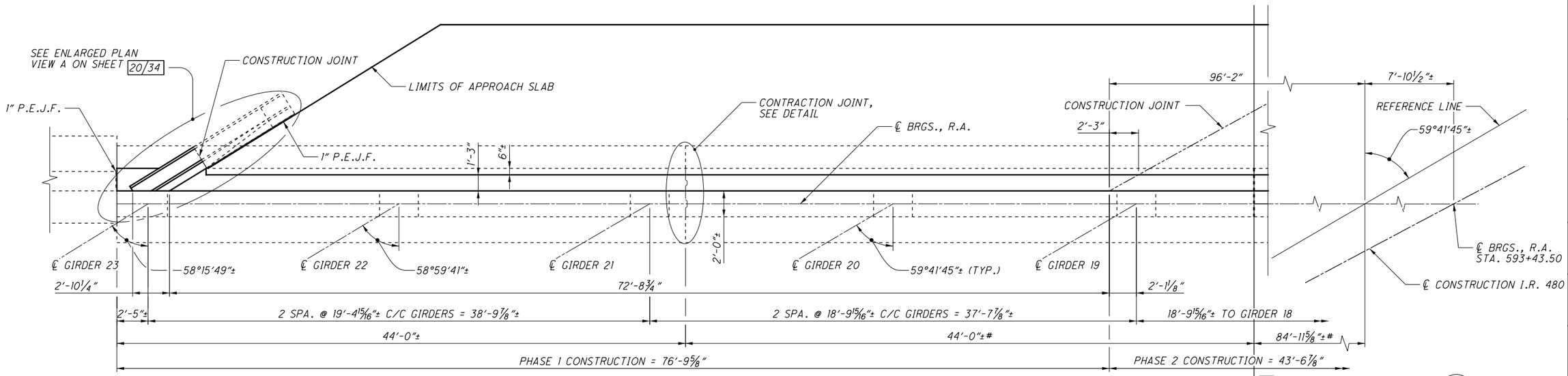
DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		181291	

ABUTMENT REMOVAL DETAILS- LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

14 / 34

54 / 74



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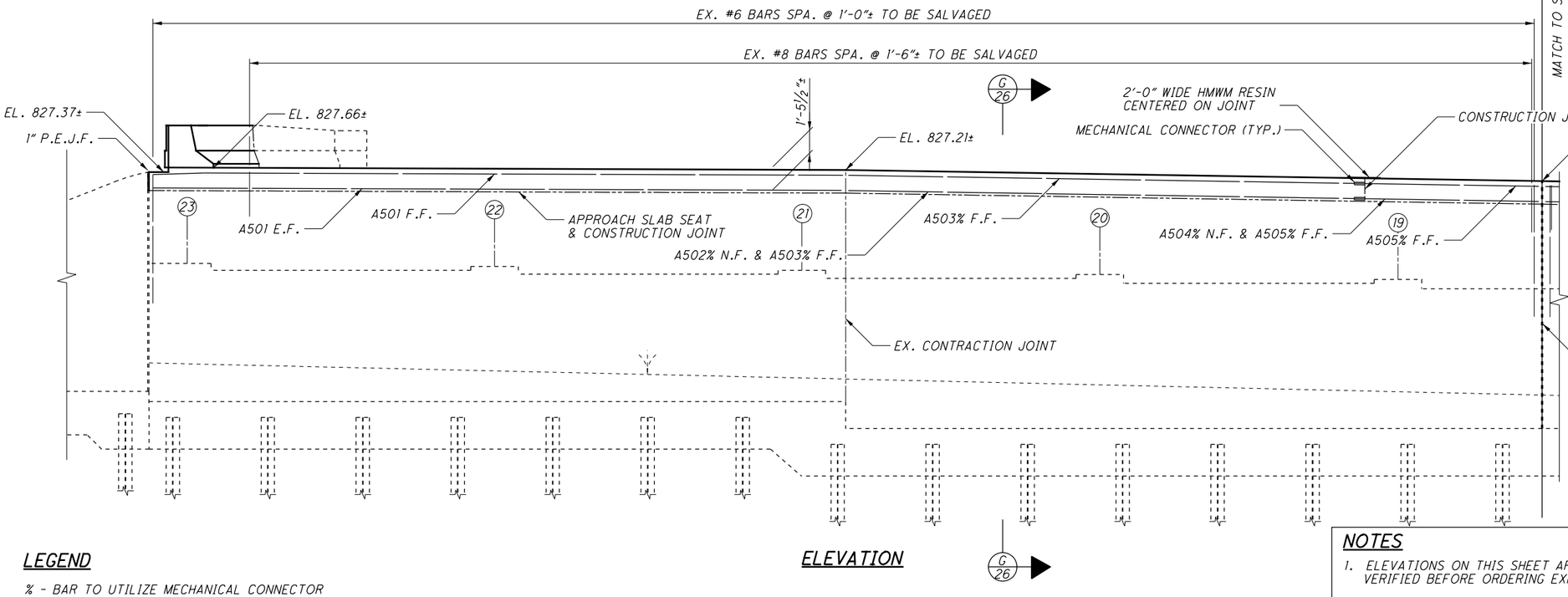
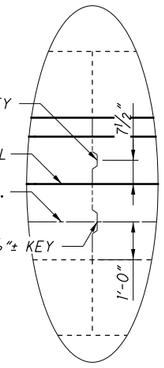


ELEVATION



CONTRACTION JOINT DETAIL

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINCLAIR DR. COLUMBUS, OH 43229
ENGINEERS CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT DETAILS 1 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

15 / 34

55 / 74

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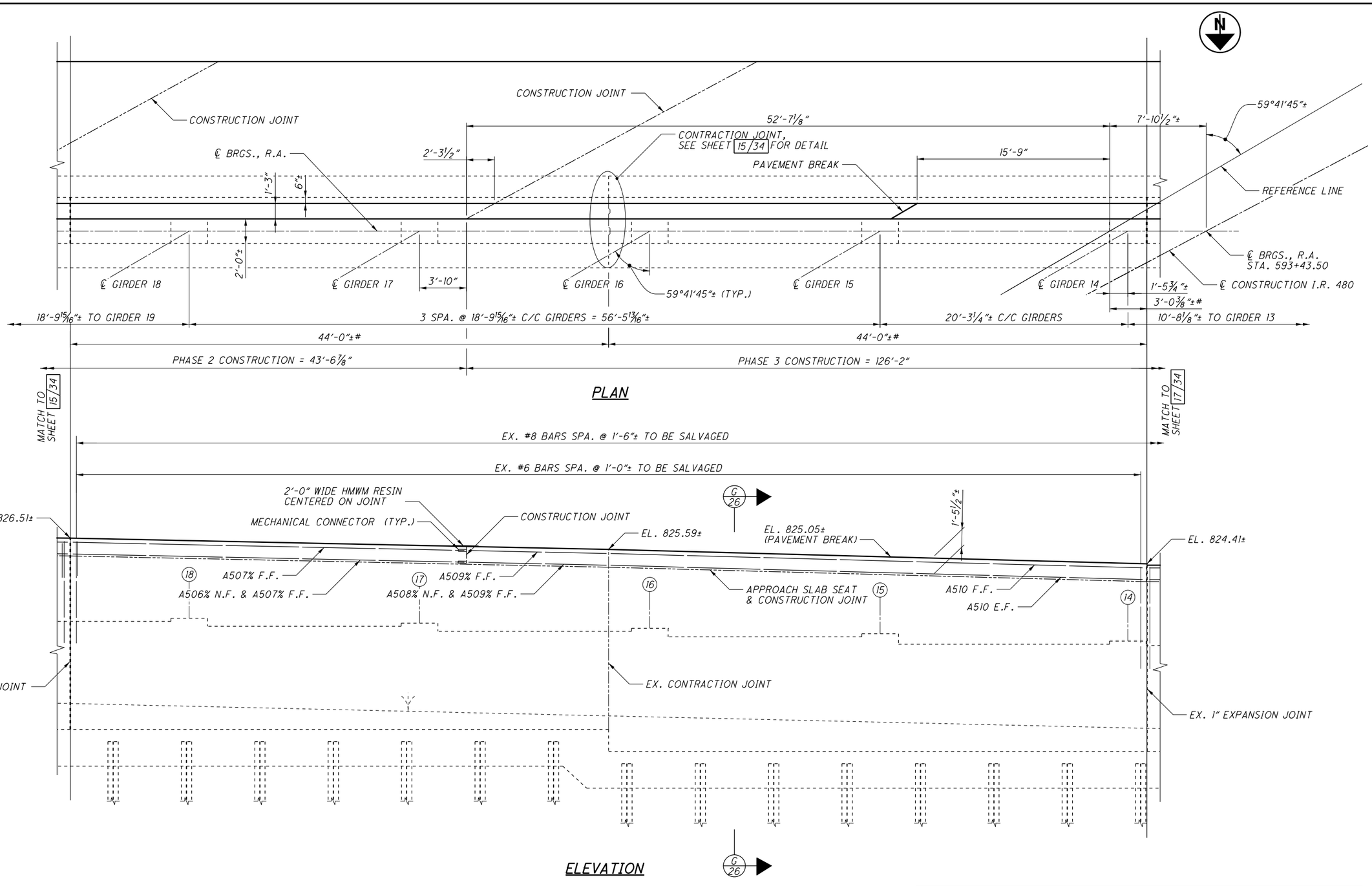

PLAN

ELEVATION

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

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2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT DETAILS 2 - LOCATION 10

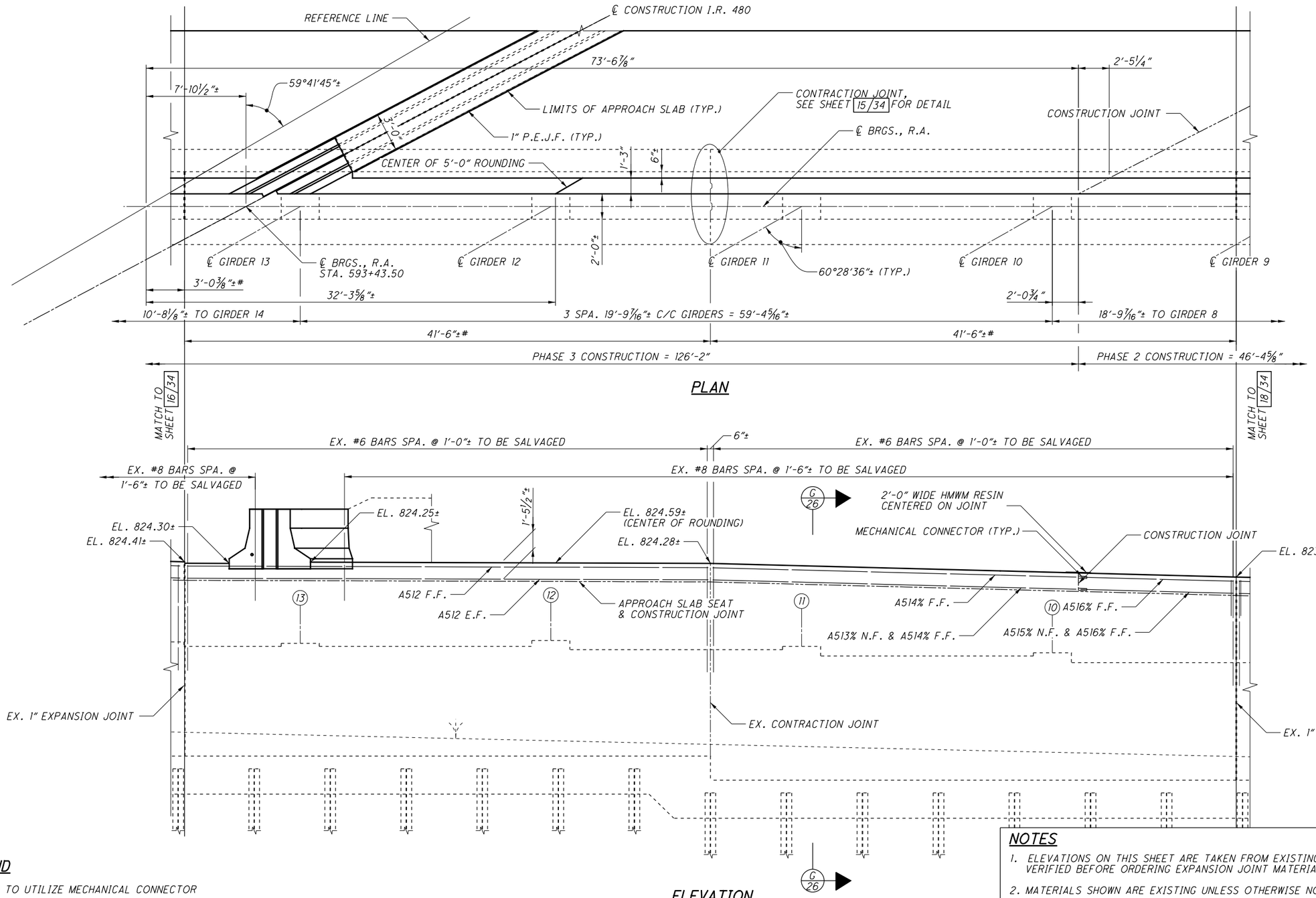
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC

PID No. 103162

16 / 34

56 / 74



LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

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4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.
5. SEE SHEET 26/34 FOR MEDIAN BARRIER DETAILS.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECT CORPORATION

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT DETAILS 3 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

17 / 34

57 / 74

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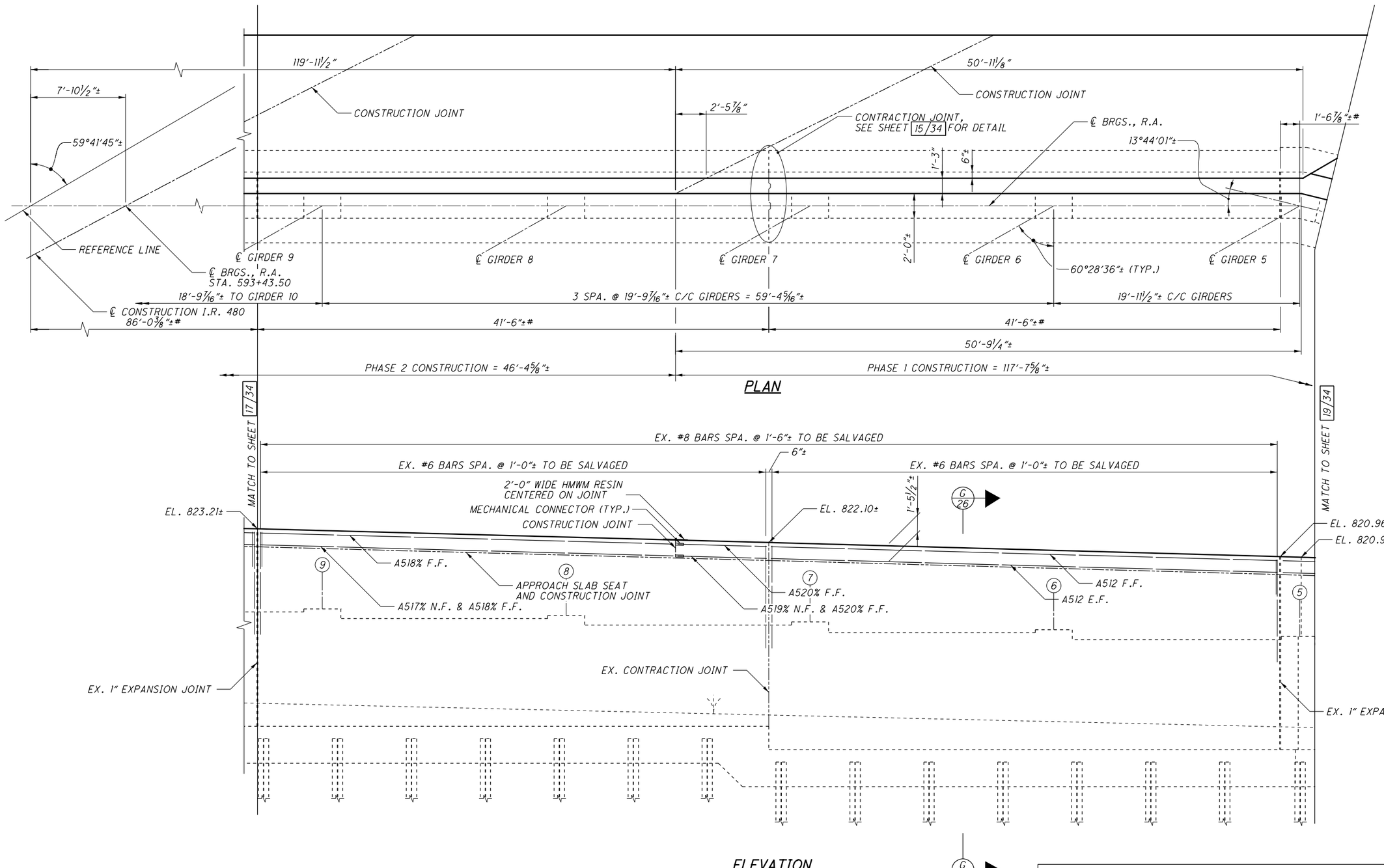

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

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4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

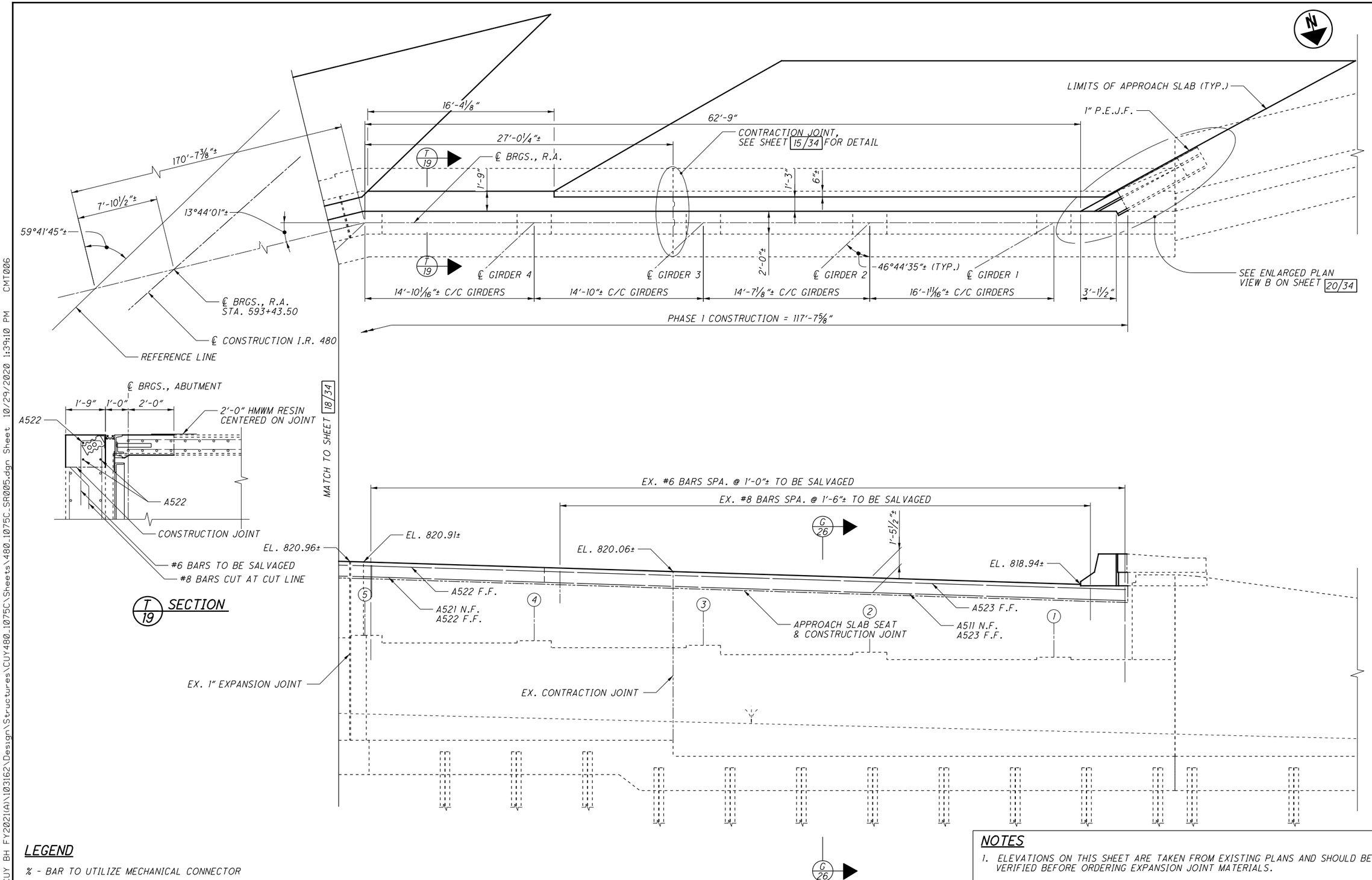
REAR ABUTMENT DETAILS 4 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

18 / 34

58 / 74



T 19 SECTION

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

E.F. - EACH FACE

F.F. - FAR FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-16-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT DETAILS 5 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

19 / 34

59 / 74

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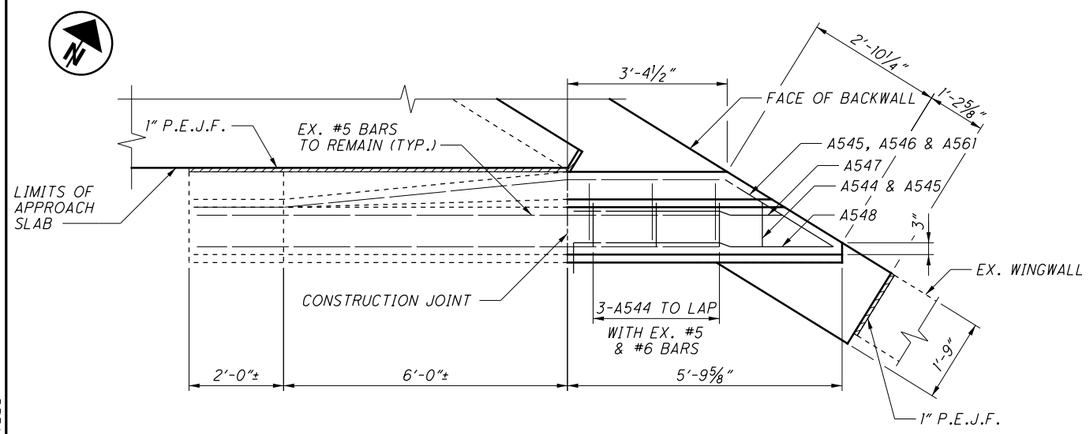
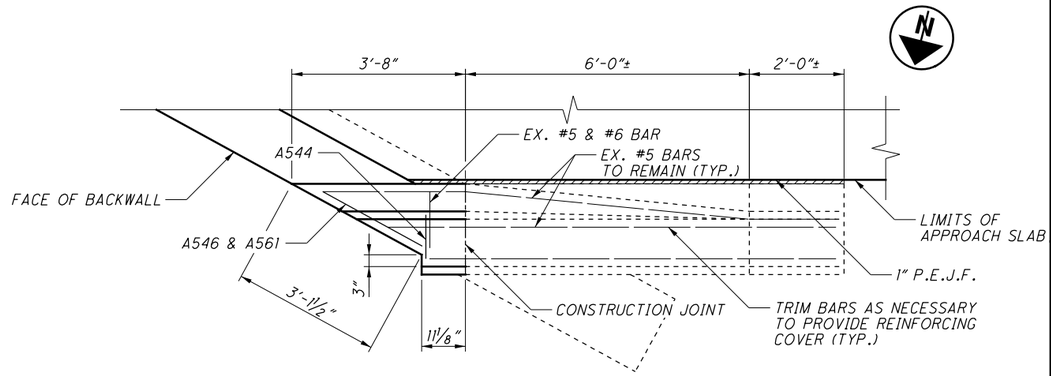


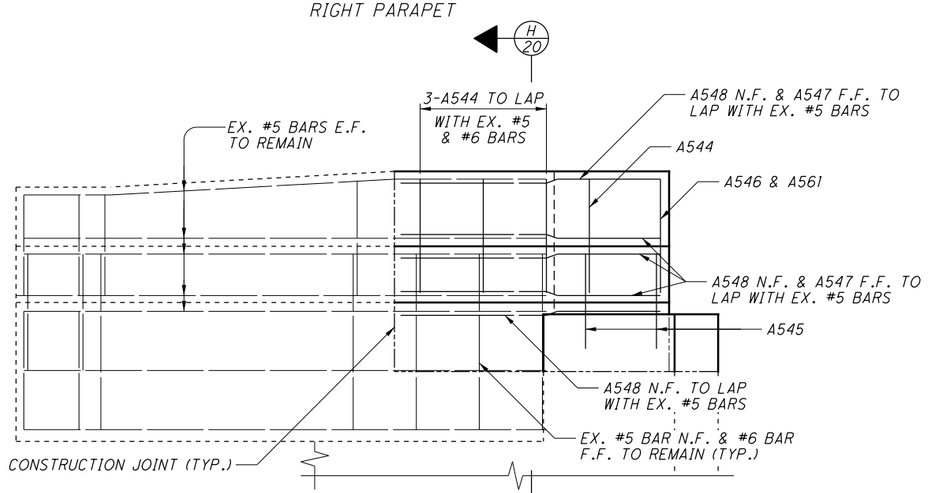
ENLARGED PLAN A

RIGHT PARAPET



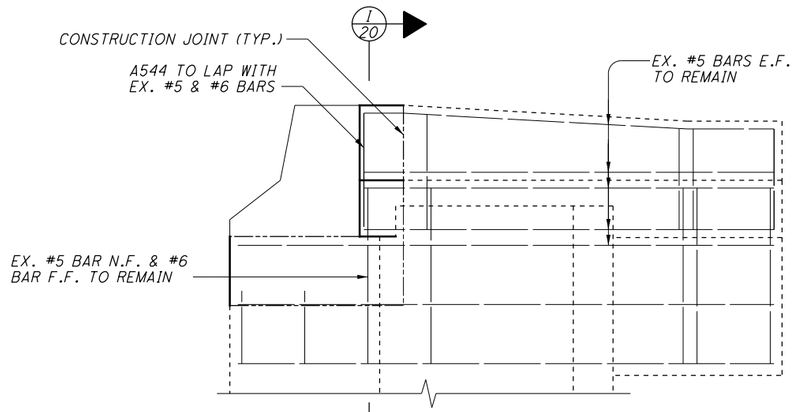
ENLARGED PLAN B

LEFT PARAPET



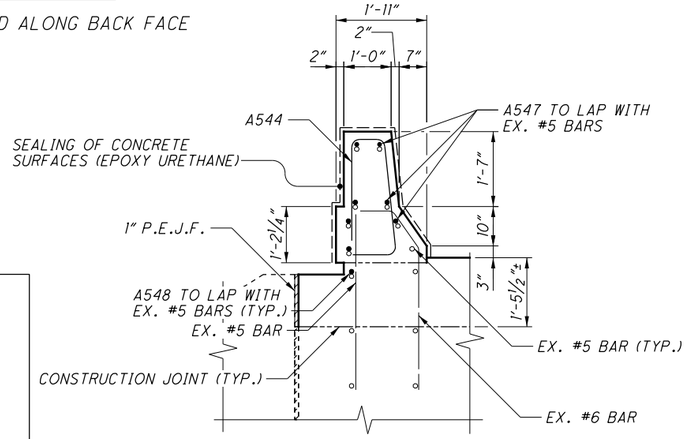
ELEVATION

VIEWED ALONG BACK FACE

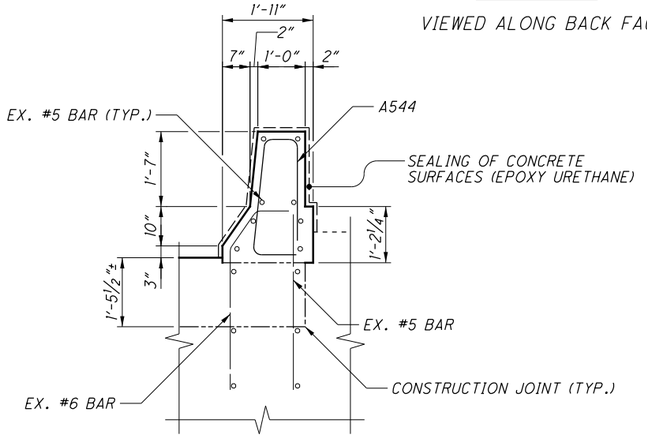


ELEVATION

VIEWED ALONG BACK FACE



H/20 SECTION



I/20 SECTION

LEGEND

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. EXISTING REINFORCING SHALL BE TRIMMED AS NECESSARY TO PROVIDE 2" COVER IN RELATION TO PROPOSED GEOMETRY. COAT TRIMMED ENDS PER C&MS 509.09. PAYMENT FOR TRIMMING AND COATING OF EXISTING REINFORCING STEEL SHALL BE MADE AT THE LUMP SUM PRICE BID OF ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

2. CONCRETE FOR PARAPETS SHALL BE CLASS QC2 CONCRETE AND INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, SUPERSTRUCTURE.

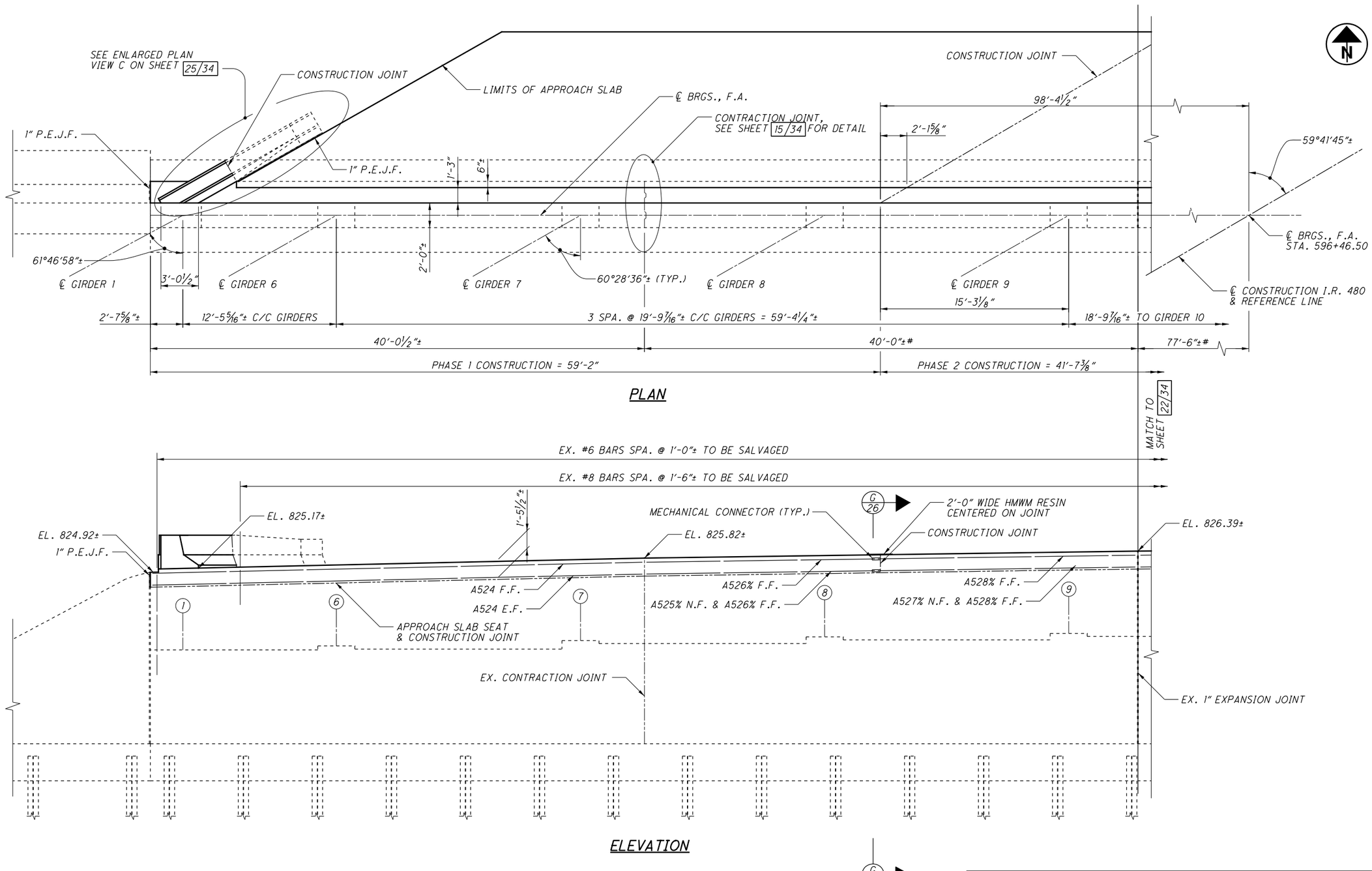
DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINCLAIR DR. COLUMBUS, OH 43229
ARCHITECT CORPORATION

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

REAR ABUTMENT PARAPET DETAILS- LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



PLAN

ELEVATION

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-16-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

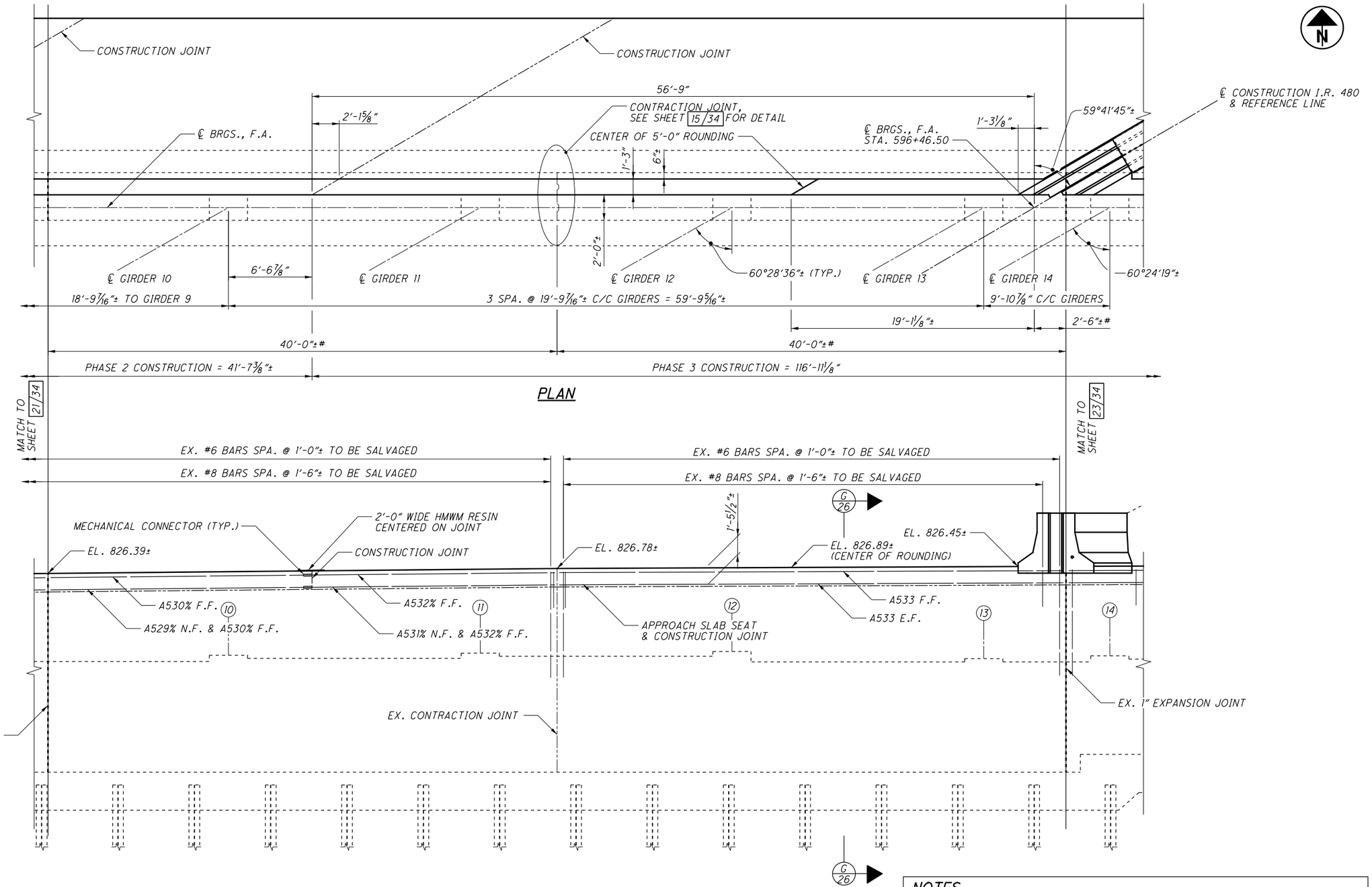
FORWARD ABUTMENT DETAILS 1 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

21/34

61/74



LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.
5. SEE SHEET 26/34 FOR MEDIAN BARRIER DETAILS.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINCLAIRE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-16-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		181291	

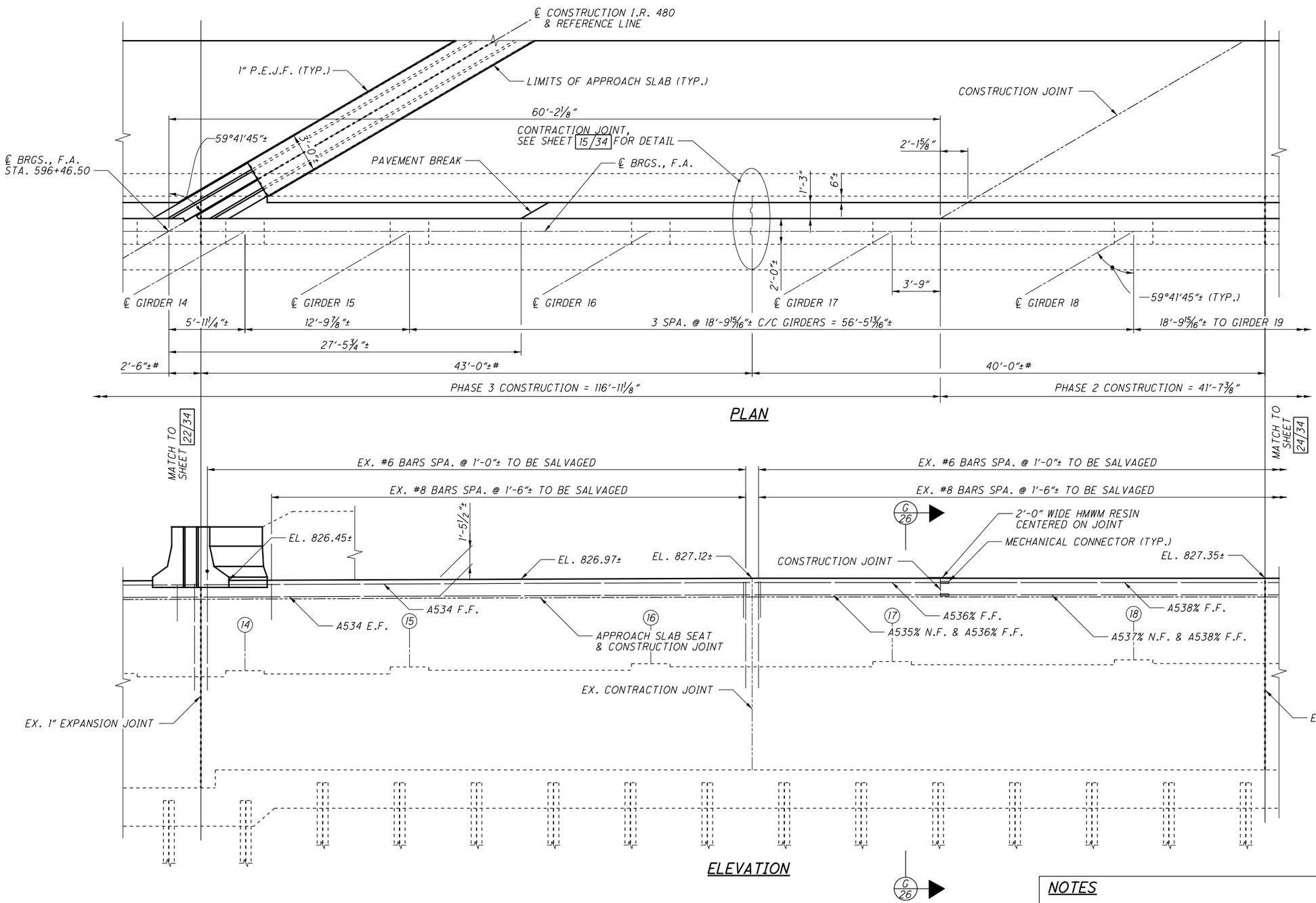
FORWARD ABUTMENT DETAILS 2 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

22/34

62/74



LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.
5. SEE SHEET 26/34 FOR MEDIAN BARRIER DETAILS.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECT CORPORATION

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-16-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

FORWARD ABUTMENT DETAILS 3 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

23/34

63/74

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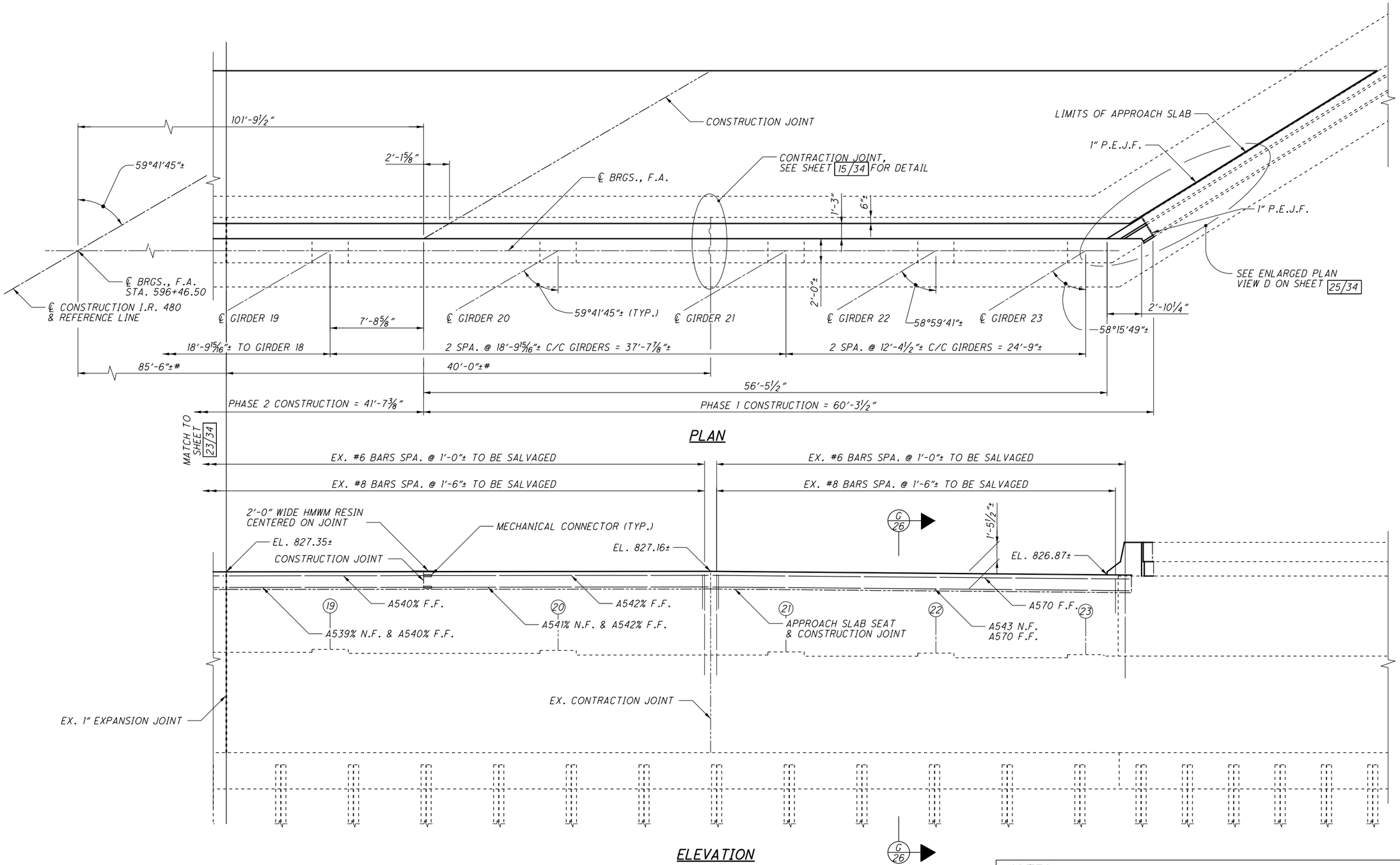

PLAN

ELEVATION

LEGEND

% - BAR TO UTILIZE MECHANICAL CONNECTOR

- MEASURED TO CENTERLINE OF EXPANSION JOINT

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTES

1. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE VERIFIED BEFORE ORDERING EXPANSION JOINT MATERIALS.
2. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
3. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
4. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QCI CONCRETE, ABUTMENT NOT INCLUDING FOOTING.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-16-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

FORWARD ABUTMENT DETAILS 4 - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

24 / 34

64 / 74

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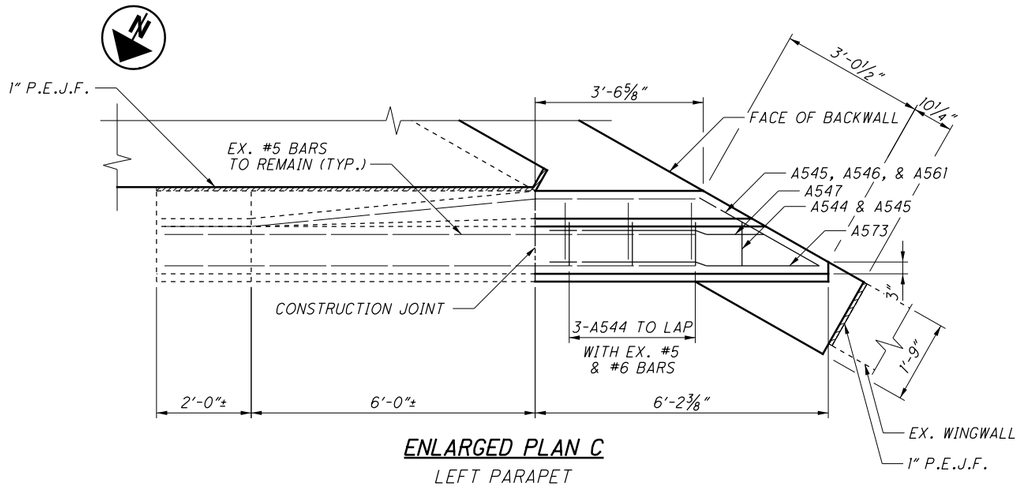
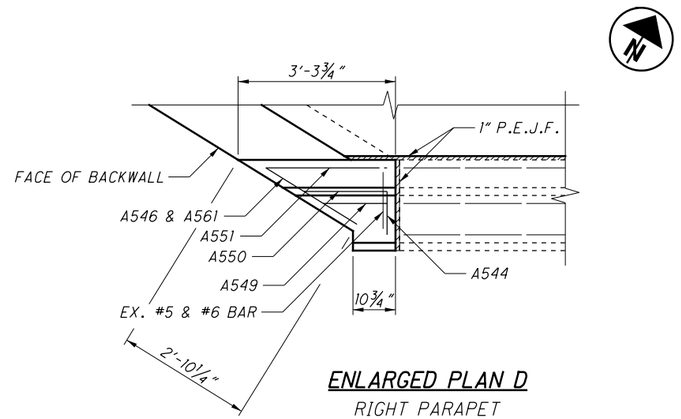


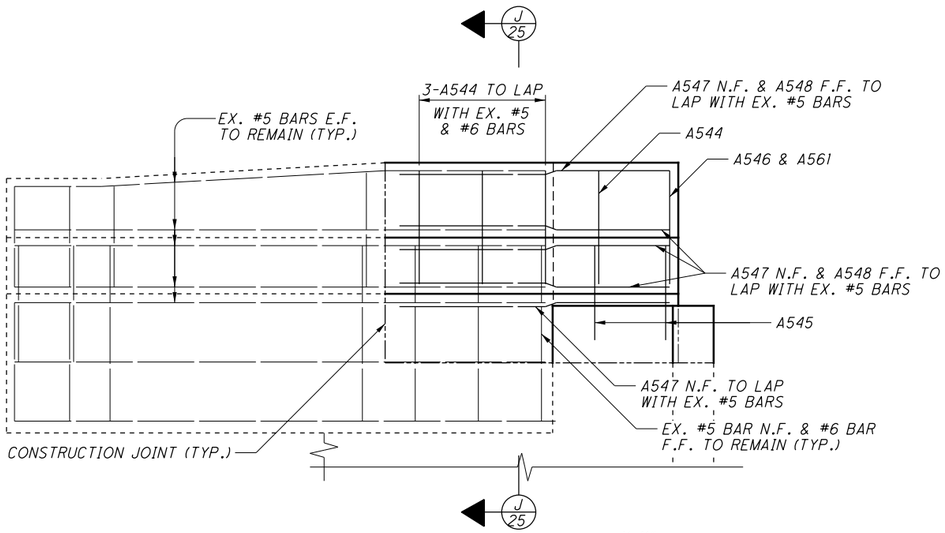
ENLARGED PLAN C

LEFT PARAPET



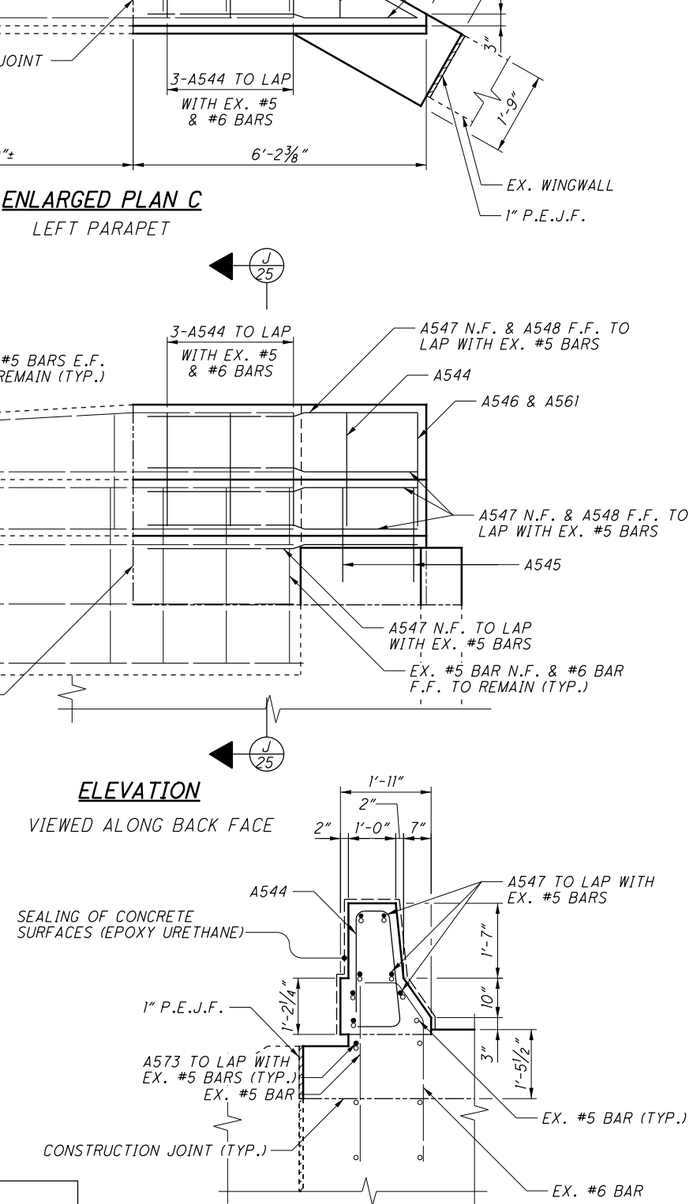
ENLARGED PLAN D

RIGHT PARAPET

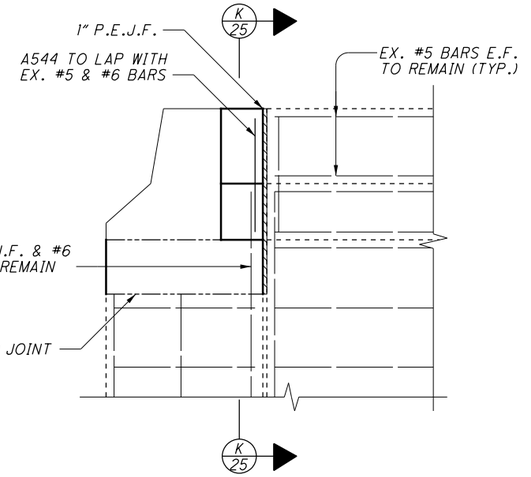


ELEVATION

VIEWED ALONG BACK FACE

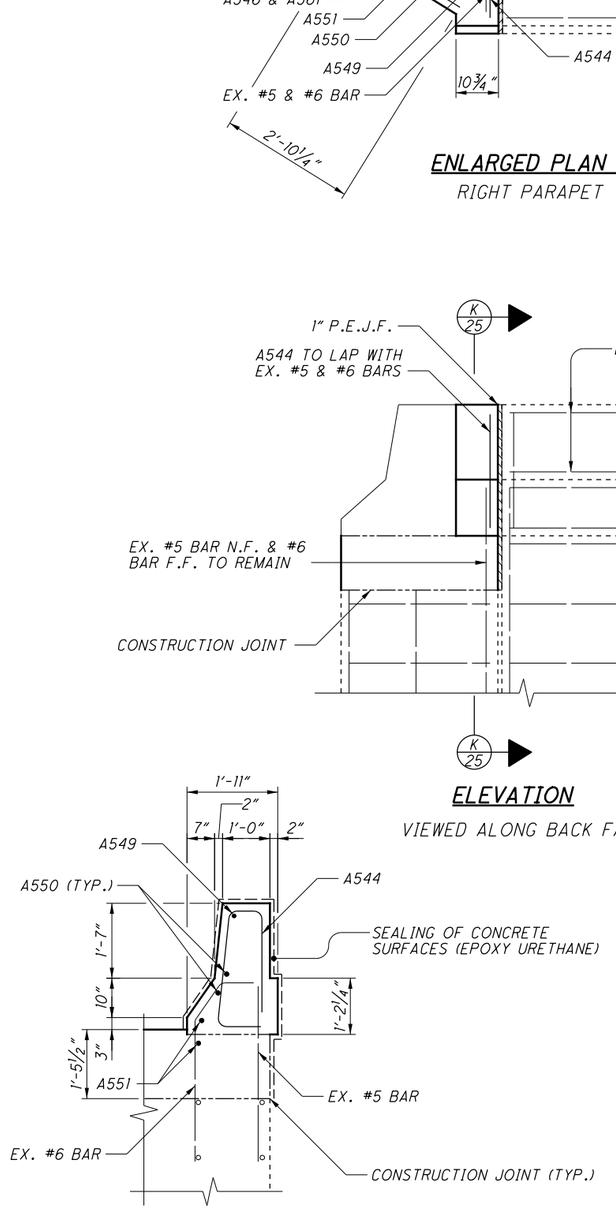


J/25 SECTION



ELEVATION

VIEWED ALONG BACK FACE



K/25 SECTION

LEGEND

N.F. - NEAR FACE

F.F. - FAR FACE

E.F. - EACH FACE

NOTE

CONCRETE FOR PARAPETS SHALL BE CLASS QC2 CONCRETE AND INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, SUPERSTRUCTURE.

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DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINCLAIRE DR. COLUMBUS, OH 43229
ARCHITECT - CORPORATION

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

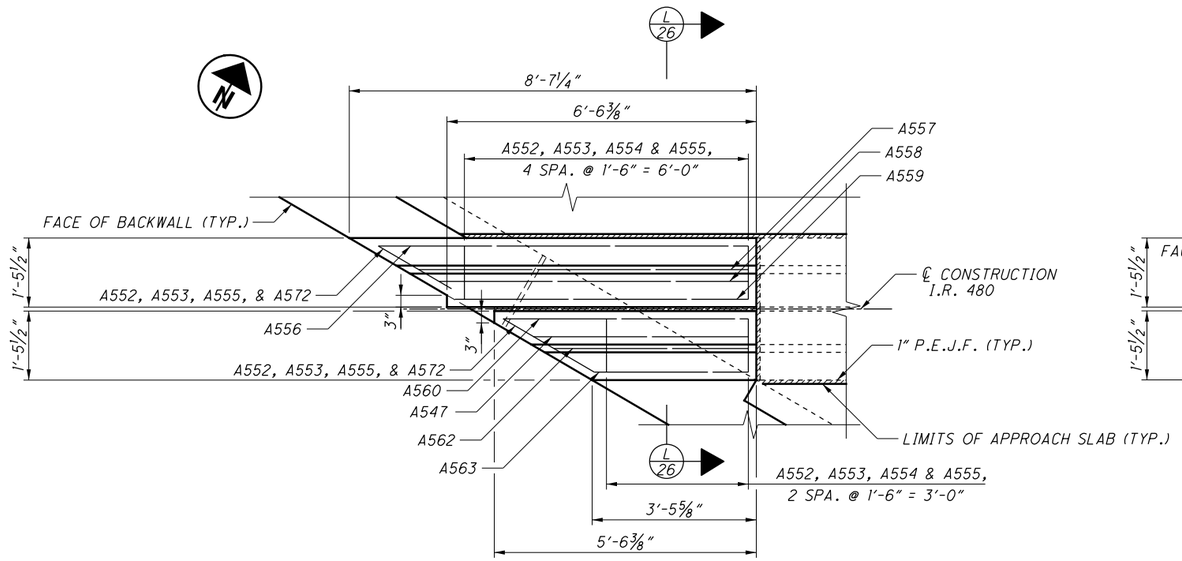
FORWARD ABUTMENT PARAPET DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

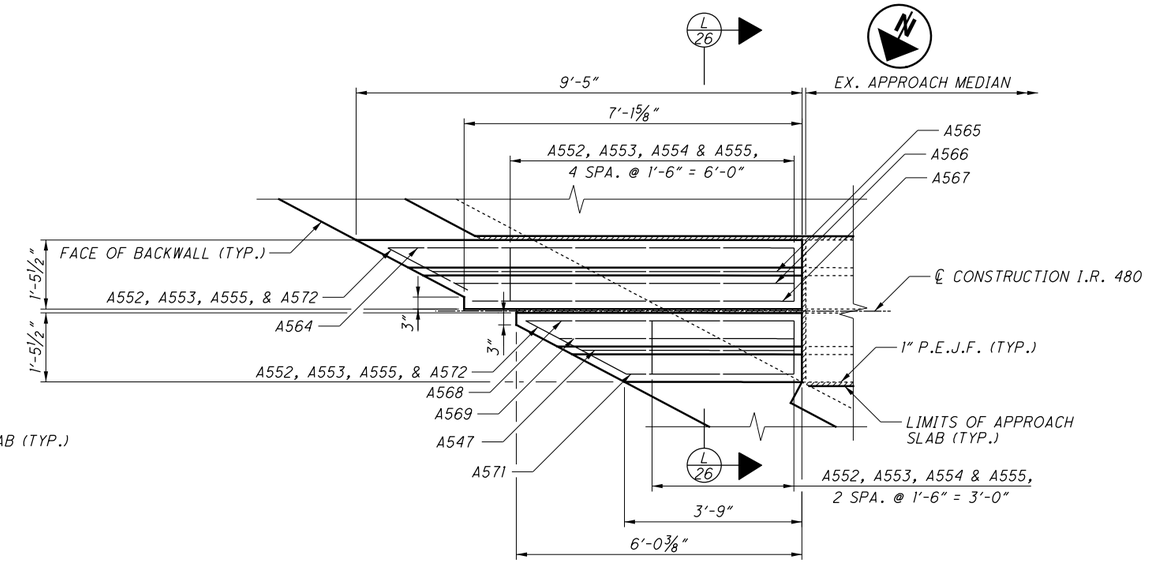
D12-BH-FY2021(A) MISC
PID No. 103162

25/34

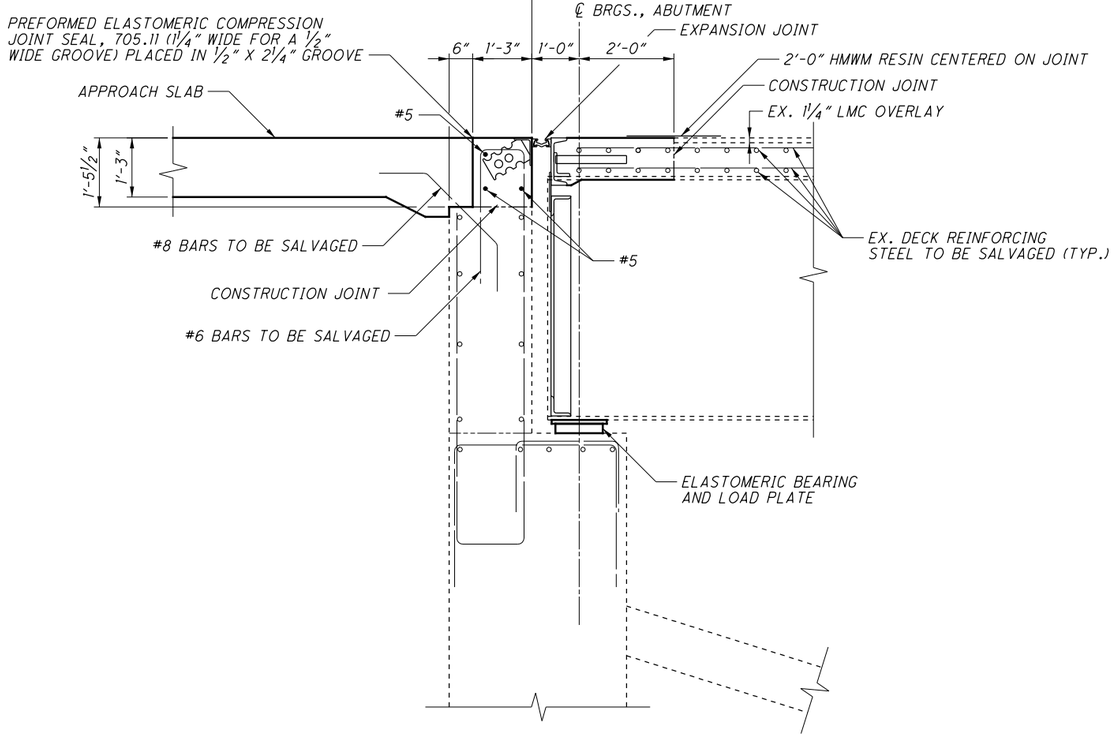
65/74



MEDIAN PARAPET F.A.



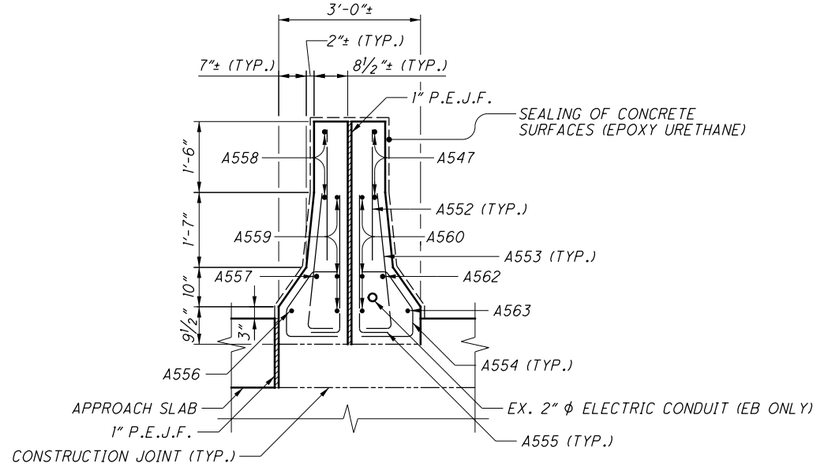
MEDIAN PARAPET R.A.



G 15 G 16 G 17 G 18 G 19 G 21 G 22 G 23 B 24 SECTION

NOTES

1. PAYMENT FOR HMWM RESIN TO BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE, SUPERSTRUCTURE.
2. REFER TO STD. DWG. EXJ-4-87 FOR ADDITIONAL NOTES AND DETAILS.
3. SEE SHEET 28/34 FOR ADDITIONAL EXPANSION JOINT DETAILS.
4. CONCRETE FOR PARAPETS SHALL BE CLASS QC2 CONCRETE AND INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, SUPERSTRUCTURE.



L 26 SECTION
F.A. SHOWN, R.A. SIMILAR

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

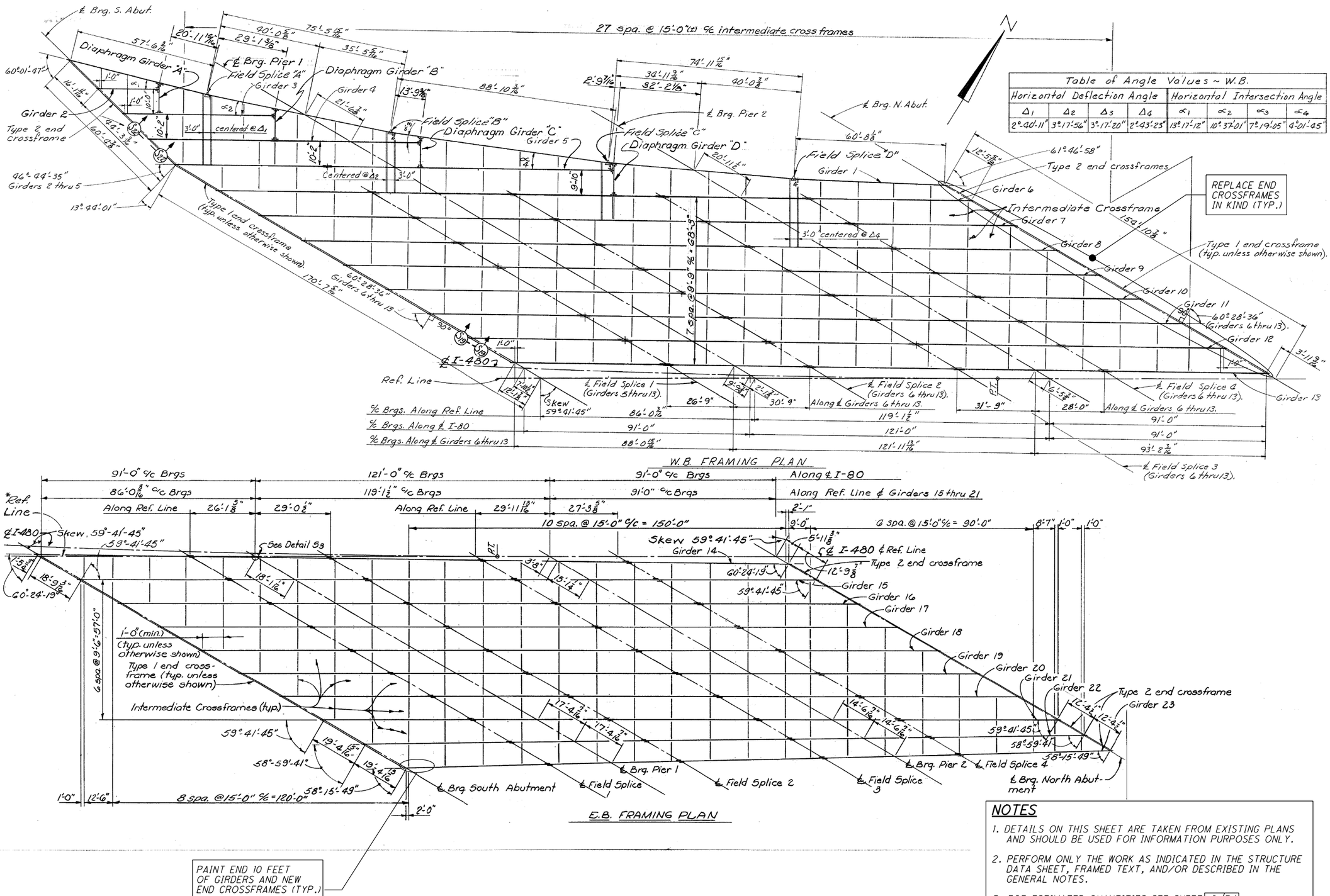
DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

MISCELLANEOUS DETAILS - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

26/34

66/74



NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
3. FOR ESTIMATED QUANTITIES SEE SHEET 2/34.
4. SEE SHEET 28/34 FOR END CROSSFRAME DETAILS.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229

DESIGNED	DRAWN	REVIEWED	DATE
STK	STK	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ERK		1812912	

FRAMING PLAN
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

27 / 34

67 / 74

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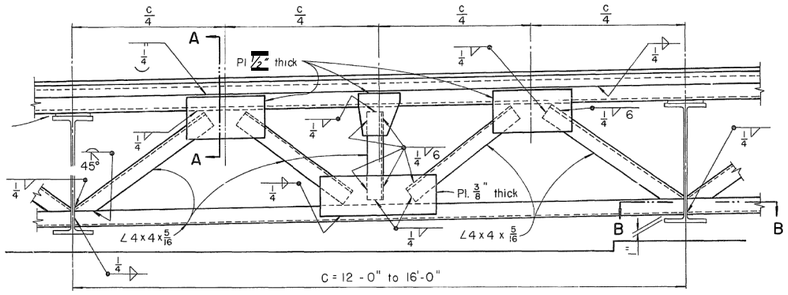
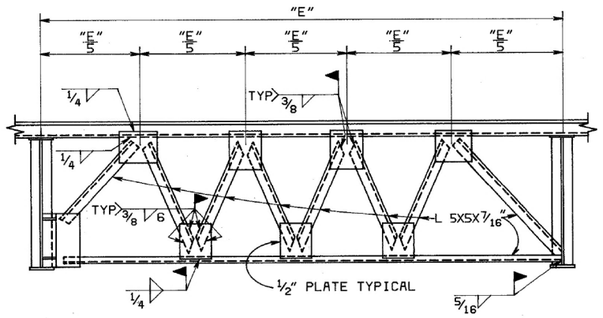
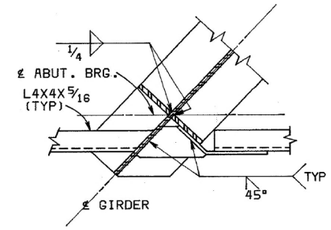


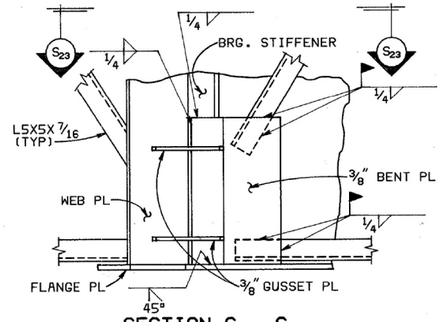
TYPE 2 END CROSSFRAME
FROM RETIRED STD. DWG. SD-1-69



TYPE 1 END CROSSFRAME



VIEW S_{23} -S_{23}



SECTION S_{19} -S_{19}

SECTION S_{22} -S_{22}

NOTES

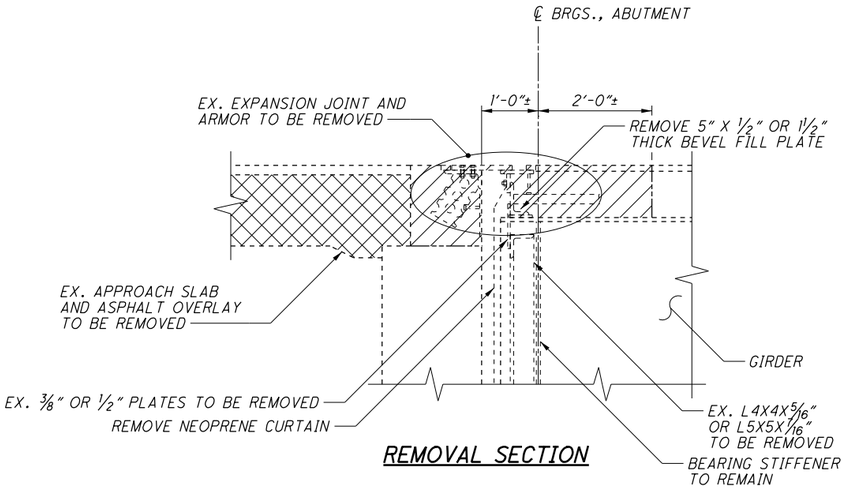
1. INSTALLATION OF SEAL: DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, OBSERVE THE SEATING OF BEAMS ON BEARINGS TO ASSURE THAT POSITIVE BEARING IS MAINTAINED.
2. ALL COSTS ASSOCIATED WITH THE REMOVAL OF THE EXISTING END DAMS AND END CROSSFRAMES SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
3. THE LOCATIONS OF EXISTING CONNECTION PLATES AS SHOWN IN THE DETAILS IN THIS PLAN ARE BASED ON INFORMATION OBTAINED FROM THE PLANS OF THE ORIGINAL STRUCTURE AND RETIRED ODOT STANDARD DRAWING SD-1-69. THE ACTUAL LOCATIONS OF EXISTING CONNECTION PLATE MAY DIFFER FROM THAT SHOWN. TO ENSURE PROPER FITTING OF THE NEW END DAMS, THE CONTRACTOR SHALL TAKE MEASUREMENTS TO FIELD VERIFY ALL CONNECTION PLATE LOCATIONS PRIOR TO FABRICATING THE NEW SUPERSTRUCTURE END DAMS. ALL LABOR AND MATERIALS ASSOCIATED WITH THE SPECIFIED WORK SHALL BE MADE AT THE UNIT PRICE PER LINEAR FOOT OF ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL.
4. REFER TO STD. DWGS. EXJ-4-87 AND GSD-1-19 AND RETIRED STD. DWG. SD-1-69, SHEET 1 FOR ADDITIONAL NOTES AND DETAILS.
5. SHIM 1/2" PLATE AS NECESSARY TO MAINTAIN DIMENSION A IN TABLE. ALL WORK SHALL MEET THE APPROVAL OF THE ENGINEER.
6. THE CONTRACTOR SHALL WELD ANCHOR PLATES IN THE FIELD TO AVOID THE EXISTING VERTICAL REINFORCING STEEL IN THE ABUTMENT.
7. REPLACE ALL END CROSS FRAMES IN KIND.
8. FOR DIMENSIONS "C" AND "E" SEE SHEET 27/34.
9. PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.
10. TYPE-2 END CROSSFRAME DETAILS SHALL BE AS SHOWN IN STD. DWG. SD-1-69 EXCEPT CONNECTION BETWEEN GIRDER WEB AND LS4X4X5/16 SHALL BE AS SHOWN IN SECTION S22-S22.
11. MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.

AMBIENT TEMPERATURE	DIMENSION A	
	R.A.	F.A.
30° F	1 3/16"	1 7/8"
40° F	1 3/4"	1 13/16"
50° F	1 3/4"	1 11/16"
60° F	1 11/16"	1 5/8"
70° F	1 5/8"	1 1/2"
80° F	1 5/8"	1 3/8"
90° F	1 9/16"	1 5/16"

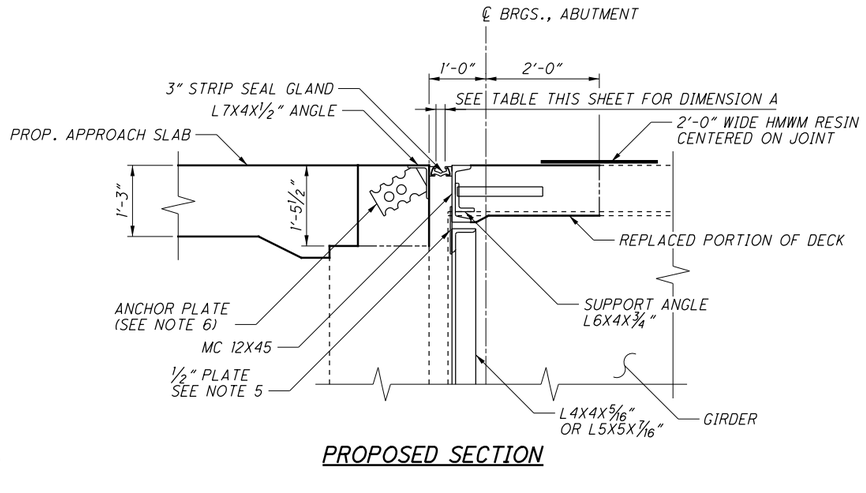
LEGEND

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

APPROACH SLAB REMOVED



REMOVAL SECTION



PROPOSED SECTION

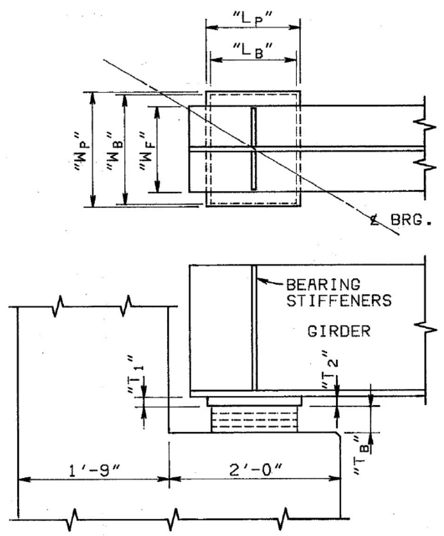
DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECTS · ENGINEERS

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		181292	

EXPANSION JOINT DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



ABUTMENT BEARING DETAILS

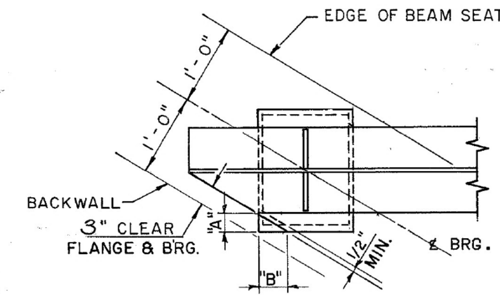
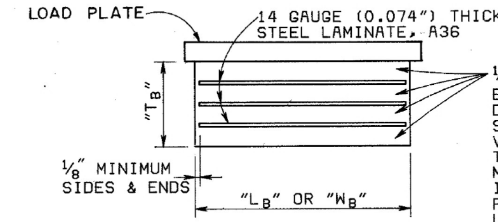


TABLE OF CLIP DIMENSIONS				
GIRDER Nº	SOUTH ABUTMENT "A"	SOUTH ABUTMENT "B"	NORTH ABUTMENT "A"	NORTH ABUTMENT "B"
1	$2\frac{5}{8}$"	$4\frac{5}{8}$"	$3\frac{3}{8}$"	$6\frac{1}{4}$"
4	$2\frac{3}{4}$"	$2\frac{7}{8}$"		
5	$2\frac{3}{4}$"	$3\frac{3}{4}$"		
6-21	$2\frac{1}{8}$"	$3\frac{3}{4}$"	$1\frac{1}{2}$"	$2\frac{5}{8}$"
22 & 23	$2\frac{1}{4}$"	$3\frac{5}{8}$"	$1\frac{5}{8}$"	$2\frac{5}{8}$"

BEARING PAD CLIP DETAILS



$\frac{1}{2}$" OR $\frac{3}{4}$" THICK ELASTOMERIC BEARING PAD LAYERS, 50 DUROMETER HARDNESS.
STEEL LAMINATE AND LOAD PLATE SHALL BE VULCANIZED BONDED TO THE NEOPRENE DURING THE MOLDING PROCESS AS PER ITEM 711.23. SEE TABLE FOR NUMBER & SIZE OF LAYERS.

WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

LAMINATED ELASTOMERIC BEARING PAD DETAILS

LAMINATED ELASTOMERIC BEARINGS TABLE (ALL DIMENSIONS IN INCHES)

		GIRDER 1				GIRDER 2	GIRDER 3
		SOUTH ABUTMENT	PIER 1	PIER 2	NORTH ABUTMENT	SOUTH ABUTMENT	SOUTH ABUTMENT
FLANGE WIDTH, "W_F"		16	16	16	16	12	12
A588 STEEL LOAD PLATE "L_P" X "W_P" X "T_1" X "T_2"		14X18X1 X1	32X22X2X2	$29\frac{1}{2}$X22X2X2	17X18X1X1	8X14X1 X 1	12X14X1 X 1
BEARINGS GRADE 50	PAD SIZE / NO. LAYERS	12X15X$\frac{3}{4}$ / 3	30X20X$\frac{3}{4}$ / 2	$27\frac{1}{2}$X20X$\frac{3}{4}$ / 8	15X12X$\frac{3}{4}$ / 7	6X12X$\frac{1}{2}$ / 4	10X12X$\frac{1}{2}$ / 3
	LAMINATE SIZE / NO. REQ'D.	$11\frac{3}{4}$X$14\frac{3}{4}$X0.074 / 2	$28\frac{3}{4}$X$19\frac{3}{4}$X0.074 / 1	$27\frac{1}{4}$X$19\frac{3}{4}$X0.074 / 7	$14\frac{3}{4}$X$11\frac{3}{4}$X0.074 / 6	$5\frac{3}{4}$X$11\frac{3}{4}$X0.074 / 3	$9\frac{3}{4}$X$11\frac{3}{4}$X0.074 / 2
	"T_B"	2.398	1.574	6.518	5.694	2.222	1.648

		GIRDER 4		GIRDER 5		GIRDERS 6-23			
		SOUTH ABUTMENT	PIER 1	SOUTH ABUTMENT	PIER 1	SOUTH ABUTMENT	PIER 1	PIER 2	NORTH ABUTMENT
FLANGE WIDTH, "W_F"		12	12	12	12	12	12	12	12
A588 STEEL LOAD PLATE "L_P" X "W_P" X "T_1" X "T_2"		14X17X1 X 1	20X26X2X2	14X17X1 X 1	20X26X2X2	14X17X1X1	20X26X2X2	20X26X2X2	17X14X1X1
BEARINGS GRADE 50	PAD SIZE / NO. LAYERS	12X15X$\frac{3}{4}$ / 3	18X24X$\frac{3}{4}$ / 2	12X15X$\frac{3}{4}$ / 3	18X24X$\frac{3}{4}$ / 2	12X15X$\frac{3}{4}$ / 3	18X24X$\frac{3}{4}$ / 2	18X24X$\frac{3}{4}$ / 6	15X12X$\frac{3}{4}$ / 7
	LAMINATE SIZE / NO. REQ'D.	$11\frac{3}{4}$X$14\frac{3}{4}$X0.074 / 2	$17\frac{3}{4}$X$23\frac{3}{4}$X0.074 / 1	$11\frac{3}{4}$X$14\frac{3}{4}$X0.074 / 2	$17\frac{3}{4}$X$23\frac{3}{4}$X0.074 / 1	$11\frac{3}{4}$X$14\frac{3}{4}$X0.074 / 2	$17\frac{3}{4}$X$23\frac{3}{4}$X0.074 / 1	$17\frac{3}{4}$X$23\frac{3}{4}$X0.074 / 5	$14\frac{3}{4}$X$11\frac{3}{4}$X0.074 / 6
	"T_B"	2.398	1.574	2.398	1.574	2.398	1.574	4.870	5.694

NOTES

1. *CONTRACTOR TO CONFIRM BEARING AND LOAD PLATE DIMENSIONS PRIOR TO ORDERING MATERIALS.*
2. *PERFORM ONLY THE WORK AS INDICATED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR DESCRIBED IN THE GENERAL NOTES.*
3. *SEE SHEET 28/34 FOR EXPANSION JOINT DETAILS.*
4. *DETAILS PROVIDED ON THIS SHEET ARE TAKEN FROM EXISTING PLANS.*
5. *SEE SHEET 27/34 FOR FRAMING PLAN.*
6. *MATERIALS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.*

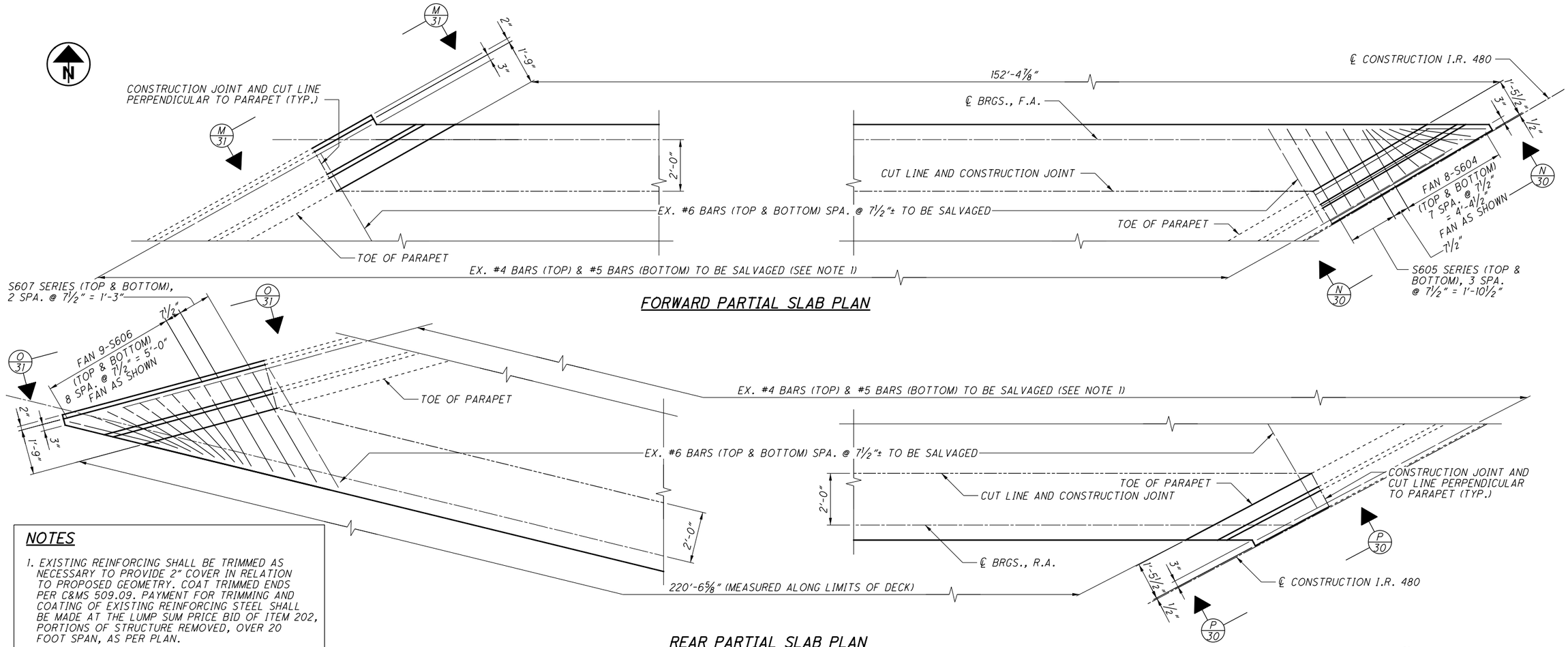
DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
MTJ	MTJ	GDJ	8-13-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

BEARING AND END CROSS FRAME DETAILS

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



FORWARD PARTIAL SLAB PLAN

REAR PARTIAL SLAB PLAN

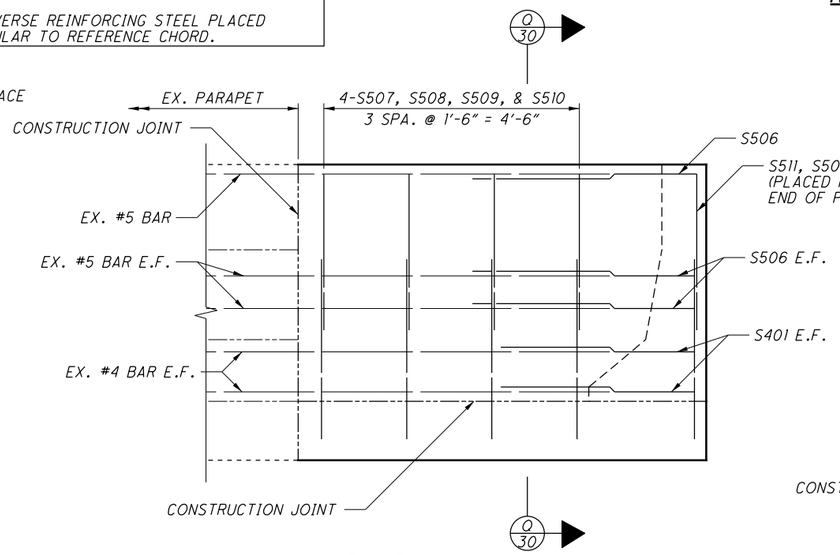
NOTES

1. EXISTING REINFORCING SHALL BE TRIMMED AS NECESSARY TO PROVIDE 2" COVER IN RELATION TO PROPOSED GEOMETRY. COAT TRIMMED ENDS PER C&MS 509.09. PAYMENT FOR TRIMMING AND COATING OF EXISTING REINFORCING STEEL SHALL BE MADE AT THE LUMP SUM PRICE BID OF ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

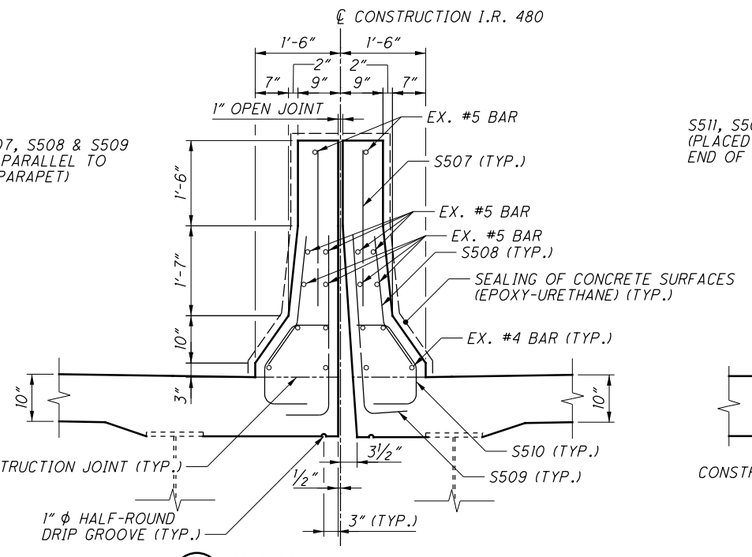
2. EX. TRANSVERSE REINFORCING STEEL PLACED PERPENDICULAR TO REFERENCE CHORD.

LEGEND

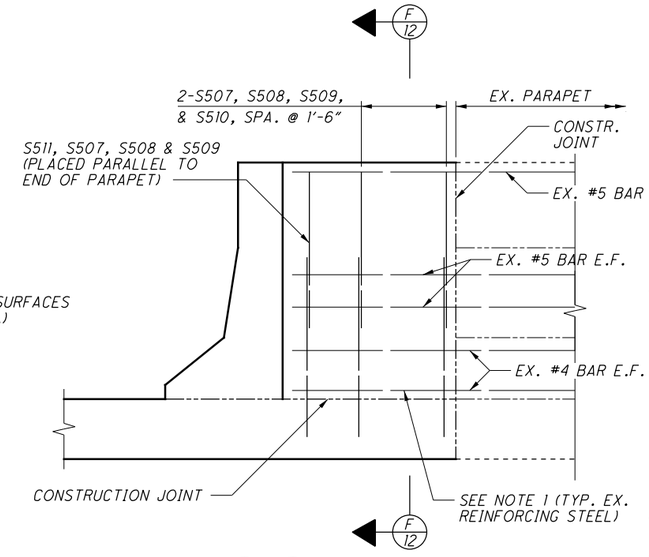
E.F. - EACH FACE



N 30 N 31 ELEVATION



Q 30 SECTION
DECK REINFORCING NOT SHOWN



P 30 P 31 ELEVATION

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

WESTBOUND DECK DETAILS - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

30 / 34

70 / 74

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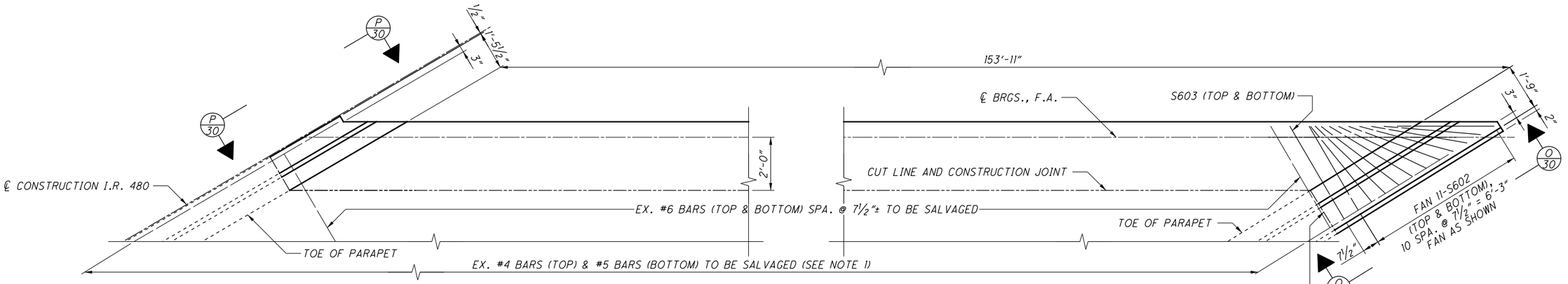
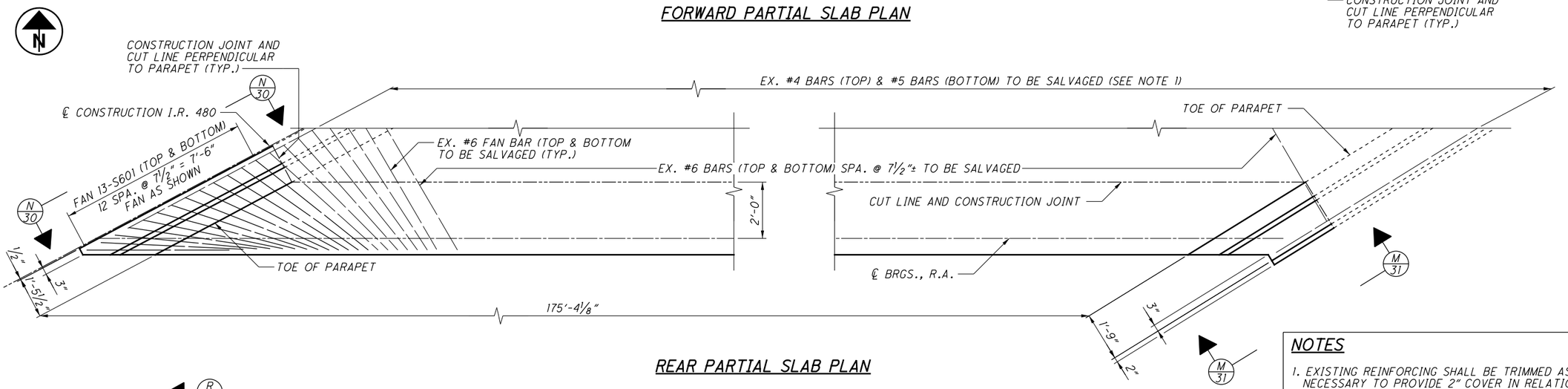


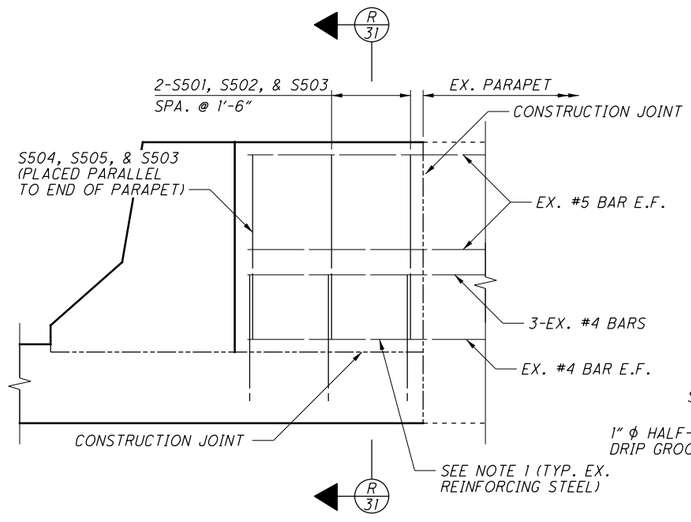
FORWARD PARTIAL SLAB PLAN



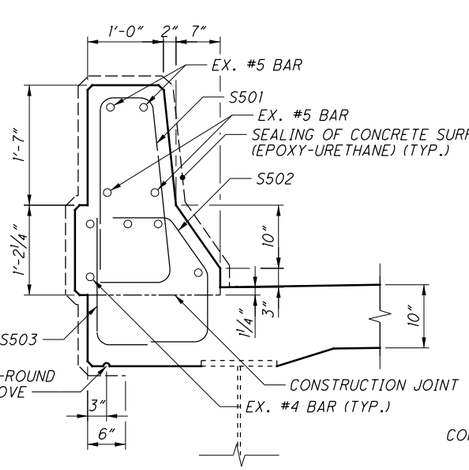
REAR PARTIAL SLAB PLAN

NOTES

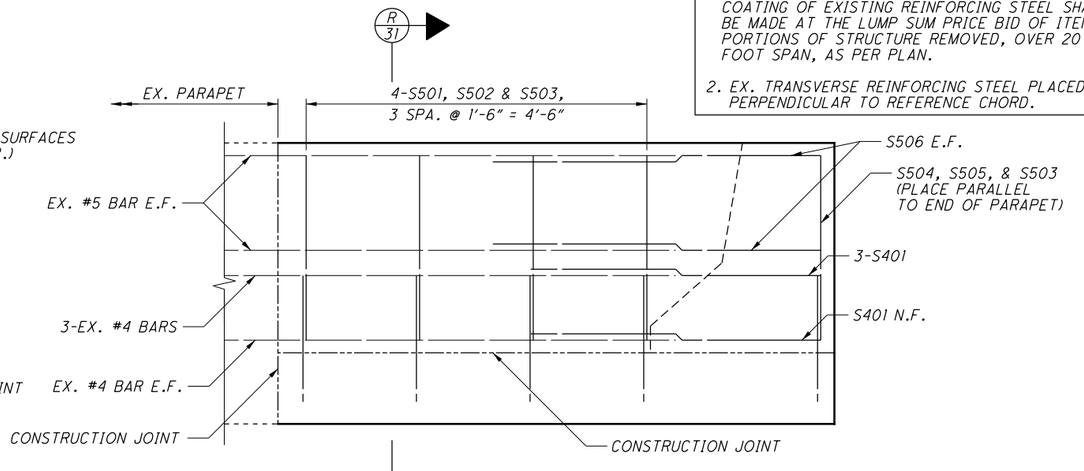
1. EXISTING REINFORCING SHALL BE TRIMMED AS NECESSARY TO PROVIDE 2" COVER IN RELATION TO PROPOSED GEOMETRY. COAT TRIMMED ENDS PER C&MS 509.09. PAYMENT FOR TRIMMING AND COATING OF EXISTING REINFORCING STEEL SHALL BE MADE AT THE LUMP SUM PRICE BID OF ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
2. EX. TRANSVERSE REINFORCING STEEL PLACED PERPENDICULAR TO REFERENCE CHORD.



M 30 / M 31 ELEVATION



R 31 SECTION
DECK REINFORCING NOT SHOWN



O 30 / O 31 ELEVATION

LEGEND

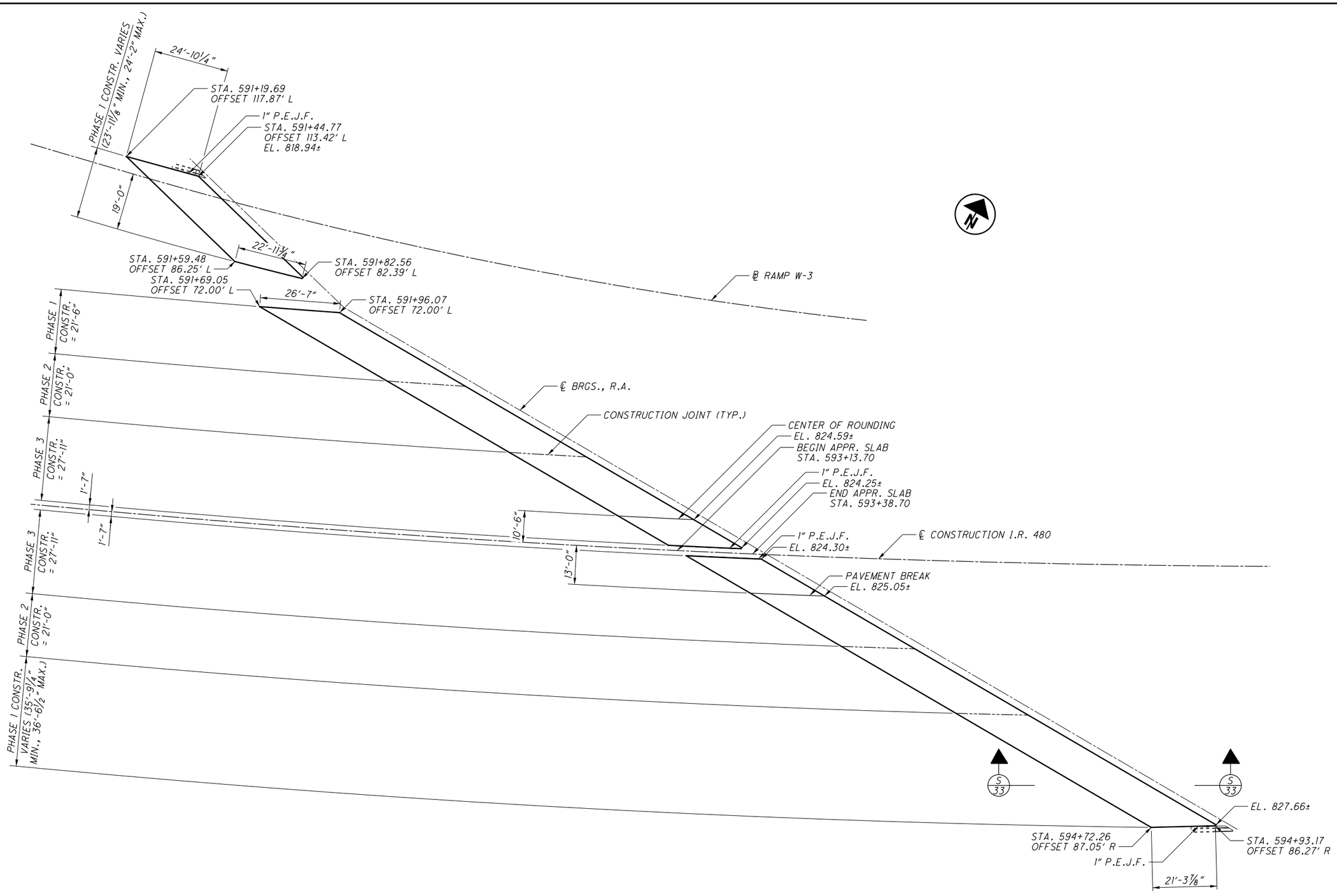
E.F. - EACH FACE
N.F. - NEAR FACE

DESIGN AGENCY
CARPENTER MARTY transportation
6612 SINGLETREE DR. COLUMBUS, OH 43229
ENGINEERS • CONSULTANTS

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

EASTBOUND DECK DETAILS - LOCATION 10
BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162



PLAN

NOTES

1. SEE STD. DWG. AS-1-15 FOR ADDITIONAL NOTES AND DETAILS.
2. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. PROPOSED APPROACH SLAB ELEVATIONS SHOULD MATCH EXISTING ASPHALT ELEVATIONS.
3. OFFSETS ARE TAKEN FROM ℄ CONSTRUCTION I.R. 480.

DESIGN AGENCY
CARPENTER MARTY transportation
6812 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECT CERTIFICATE

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	MM/DD/YY
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

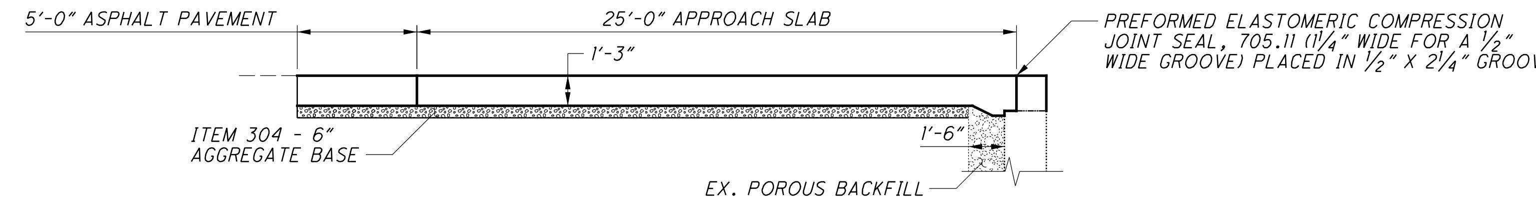
REAR APPROACH SLAB DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

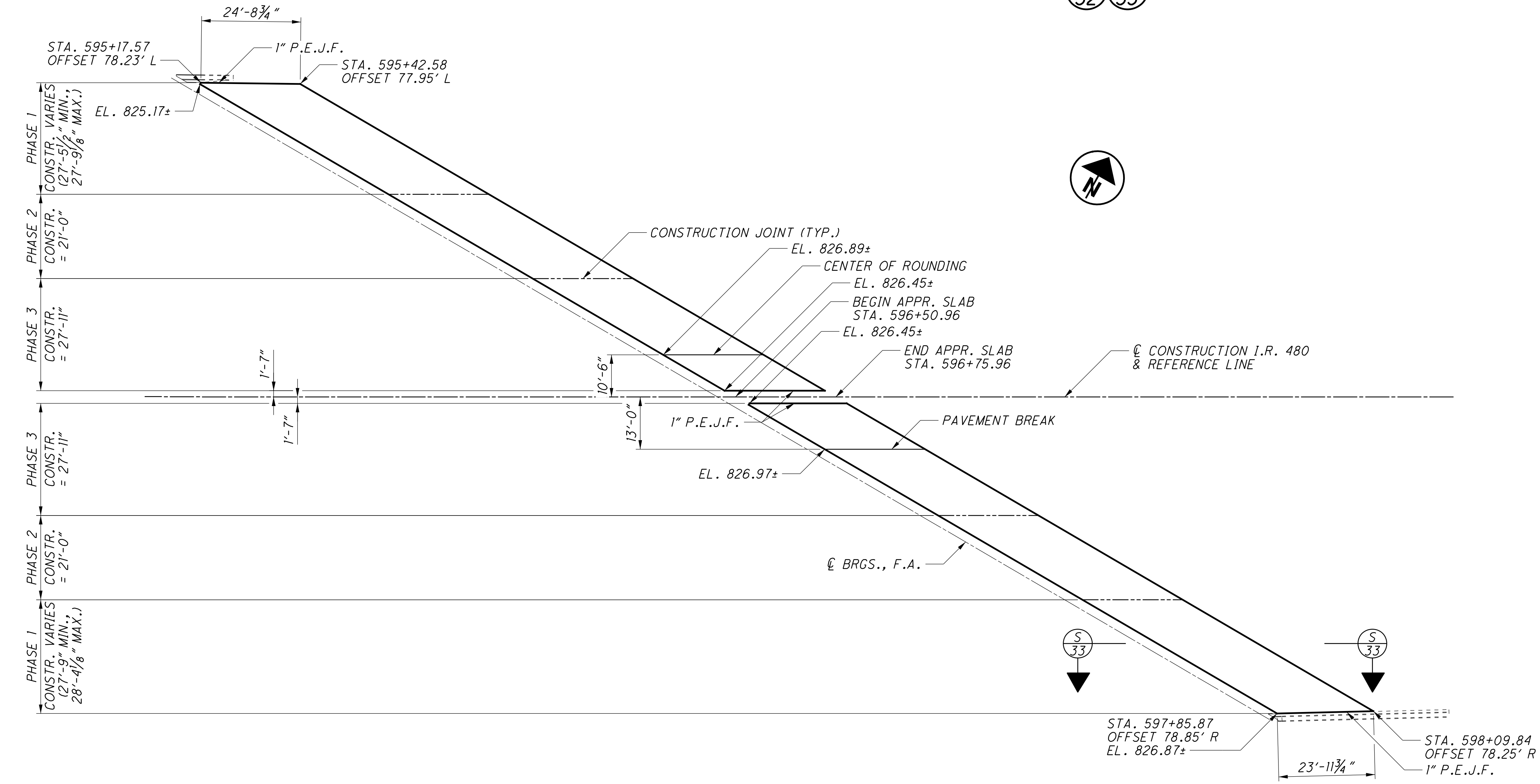
D12-BH-FY2021(A) MISC
PID No. 103162

32 / 34

72 / 74



S/32 S/33 SECTION



PLAN

NOTES

1. SEE STD. DWG. AS-1-15 FOR ADDITIONAL NOTES AND DETAILS.
2. ELEVATIONS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. PROPOSED APPROACH SLAB ELEVATIONS SHOULD MATCH EXISTING ASPHALT ELEVATIONS.
3. OFFSETS TAKEN FROM ℄ CONSTRUCTION I.R. 480.

DESIGN AGENCY: CARPENTER MARTY transportation

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-17-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		1812912	

FORWARD APPROACH SLAB DETAILS - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

33/34

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS				
	R.A.	F.A.	TOTAL				A	B	C	D	E
ABUTMENTS											
A501	3		3	43'-8"	137	STR					
A502%	1		1	33'-0"	35	STR					
A503%	2		2	34'-5"	72	STR					
A504%	1		1	10'-7"	12	STR					
A505%	2		2	9'-2"	20	STR					
A506%	1		1	32'-7"	34	STR					
A507%	2		2	34'-0"	71	STR					
A508%	1		1	11'-0"	12	STR					
A509%	2		2	9'-7"	20	STR					
A510	3		3	43'-7"	137	STR					
A511	1		1	39'-5"	42	STR					
A512	6		6	41'-1"	258	STR					
A513%	1		1	29'-4"	31	STR					
A514%	2		2	30'-10"	65	STR					
A515%	1		1	11'-9"	13	STR					
A516%	2		2	10'-3"	22	STR					
A517%	1		1	34'-2"	36	STR					
A518%	2		2	35'-9"	75	STR					
A519%	1		1	6'-11"	8	STR					
A520%	2		2	5'-4"	12	STR					
A521	1		1	28'-6"	30	19	27'-0"	1'-6"	4"		
A522	2		2	28'-9"	60	19	27'-1"	1'-7"	5"		
A523	2		2	39'-0"	82	STR					
A524		3	3	39'-8"	125	STR					
A525%		1	1	19'-4"	21	STR					
A526%		2	2	20'-8"	44	STR					
A527%		1	1	20'-3"	22	STR					
A528%		2	2	18'-11"	40	STR					
A529%		1	1	20'-11"	22	STR					
A530%		2	2	22'-3"	47	STR					
A531%		1	1	18'-8"	20	STR					
A532%		2	2	17'-4"	37	STR					
A533		3	3	39'-7"	124	STR					
A534		3	3	42'-7"	134	STR					
A535%		1	1	14'-10"	16	STR					
A536%		2	2	16'-3"	34	STR					
A537%		1	1	24'-8"	26	STR					
A538%		2	2	23'-4"	49	STR					
A539%		1	1	16'-5"	18	STR					
A540%		2	2	17'-10"	38	STR					
A541%		1	1	23'-1"	25	STR					
A542%		2	2	21'-9"	46	STR					
A543		1	1	36'-1"	38	STR					
A544	5	5	10	5'-10"	61	37	8"	3"	2'-5"	2'-2"	11"
A545	2	2	4	2'-10"	12	1	2'-0"	1'-0"			
A546	2	2	4	6'-7"	28	37	1'-5"	5"	2'-5"	2'-2"	11"
A547	5	6	11	4'-5"	51	STR					
A548	5		5	5'-6"	29	STR					
A549		1	1	1'-4"	2	STR					
A550		2	2	1'-9"	4	STR					
A551		2	2	2'-6"	6	STR					
A552	10	10	20	2'-9"	58	STR					
A553	10	10	20	3'-5"	72	11	4"	3'-0"	7"		
A554	8	8	16	2'-11"	49	14	1'-1"	7"	9"	7"	6"
A555	10	10	20	3'-5"	72	1	3'-0"	7"			
A556		1	1	7'-9"	9	STR					
A557		1	1	6'-11"	8	STR					
A558		2	2	6'-6"	14	STR					
A559		3	3	6'-2"	20	STR					
A560		3	3	5'-2"	17	STR					
A561	2	2	4	4'-3"	18	14	8"	1'-3"	10"	1'-0"	1'-3"
A562		1	1	4'-1"	5	STR					
A563		1	1	3'-3"	4	STR					
A564	1		1	8'-7"	9	STR					
A565	1		1	7'-7"	8	STR					
A566	2		2	7'-2"	15	STR					
A567	3		3	6'-9"	22	STR					
A568	3		3	5'-8"	18	STR					
A569	2		2	4'-11"	11	STR					
A570		2	2	35'-8"	75	STR					

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS				
	R.A.	F.A.	TOTAL				A	B	C	D	E
ABUTMENTS CONTINUED											
A571	1		1	3'-6"	4	STR					
A572	2	2	4	4'-1"	18	14	1'-1"	7"	9"	1'-3"	1'-2"
A573		5	5	5'-8"	30	STR					
SUB-TOTAL					2959						

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS					
					A	B	C	D	E	INC
SUPERSTRUCTURE										
S401	16	4'-1"	44	STR						
S501	12	5'-11"	75	37	8"	3"	2'-5"	2'-2"	11"	
S502	12	3'-1"	39	14	9"	11"	9"	6"	9"	
S503	16	2'-2"	37	1	1'-8"	8"				
S504	4	6'-6"	28	37	1'-5"	5"	2'-5"	2'-2"	11"	
S505	4	3'-5"	15	14	9"	11"	9"	11"	9"	
S506	18	4'-7"	87	STR						
S507	16	2'-9"	46	STR						
S508	16	2'-4"	39	19	1'-6"	9"	6"			
S509	16	3'-9"	63	1	3'-2"	9"				
S510	12	2'-8"	34	14	9"	8"	9"	6"	7"	
S511	4	3'-6"	15	14	9"	8"	9"	10"	1'-2"	
S601	26	5'-1"	199	STR						
S602	22	3'-8"	122	STR						
S603	2	4'-0"	13	STR						
S604	16	2'-4"	57	STR						
S605	2 SERIES OF 4	2'-9" TO 3'-10"	40	STR						4" (+)
S606	18	3'-7"	97	STR						
S607	2 SERIES OF 3	4'-0" TO 4'-11"	41	STR						5½"
SUB-TOTAL			1091							

NOTES

1. THE BAR NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE INDICATED.
2. ALL REINFORCING STEEL IS TO BE EPOXY COATED.
3. PAYMENT FOR MECHANICAL CONNECTORS SHALL BE INCLUDED WITH ITEM 509, EPOXY COATED REINFORCING STEEL.

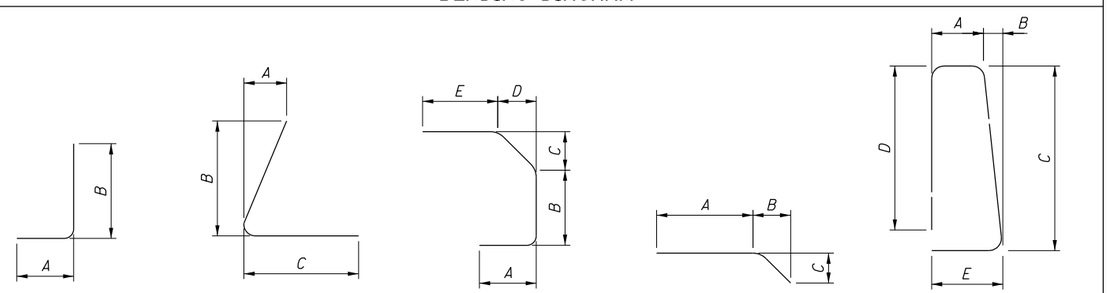
MECHANICAL CONNECTORS		
LOCATION	BAR SIZE	TOTAL
ABUTMENTS	5	24

LEGEND

% - REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL ANCHOR FURNISHED.

- BARS TO BE DOWELED INTO EXISTING STRUCTURE.

BENDING DIAGRAM



DESIGN AGENCY
CARPENTER MARTY transportation
6912 SINGLETREE DR. COLUMBUS, OH 43229
ARCHITECTS · ENGINEERS

DESIGNED	DRAWN	REVIEWED	DATE
ERK	ERK	GDJ	8-19-20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
STK		181292	

REINFORCING STEEL LIST - LOCATION 10

BRIDGE NO. CUY-480-1075
OVER CSX RAILROAD

D12-BH-FY2021(A) MISC
PID No. 103162

34/34

74/74

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