

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

CUY-BH-FY 2024(B) APPROACH SLABS CUYAHOGA COUNTY



LOCATION MAP

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

FOR COORDINATES PER LOCATION SEE SHEETS 2-3



PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

INDEX OF SHEETS:

TITLE SHEET	1
LOCATION MAPS	2-3
GENERAL NOTES	4
MAINTENANCE OF TRAFFIC	5-47
GENERAL SUMMARY	48-49
PAVEMENT MARKING SUBSUMMARY	50
STRUCTURE DATA TABLE	51
STRUCTURES (OVER 20 FOOT SPAN)	52-65

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

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:

CHAGRIN VALLEY ENGINEERING, LTD.
Creative Engineers. Intelligent Solutions.
2099 Forbes Road, Suite B, Cleveland, OH 44141-6667
Phone: +441.432.1999 Fax: +441.432.1998 www.cvrinc.com

ENGINEER'S SEAL

ROADWAY

ENGINEER'S SEAL

BRIDGE

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-2.1	01-21-22	MT-98.10	01-17-20	AS-1-15	01-20-23	800-2023	SEE PROPOSAL
BP-3.1	01-21-22	MT-98.11	01-17-20	PCB-91	07-17-20	808	01-18-19
BP-9.1	01-18-19	MT-98.20	04-19-19			821	04-20-12
		MT-98.21	01-17-20			832	07-15-22
RM-4.2	04-17-20	MT-98.22	01-17-20			896	07-21-17
		MT-98.28	01-17-20			908	10-20-17
TC-65.10	01-17-14	MT-98.29	01-17-20			921	04-20-12
TC-65.11	07-15-22	MT-98.30	07-16-21			987	01-16-09
TC-72.20	07-20-18	MT-101.70	04-21-23			996	07-15-16
		MT-101.75	01-17-20				
MT-95.30	07-19-19	MT-101.90	07-17-20				
MT-95.31	07-19-19	MT-102.10	01-17-20				
MT-95.32	04-19-19	MT-102.20	04-19-19				
MT-95.40	01-17-20	MT-104.10	04-21-23				
MT-95.41	01-17-20	MT-105.10	01-17-20				
MT-95.50	07-21-17						

LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	MUNICIPALITY
1	CUY-90-2200	1808494	VILLAGE OF BRATENAHL
2	CUY-480N-0011	1814494	CITY OF MAPLE HEIGHTS
3	CUY-480N-0036	1814532	CITY OF BEDFORD HEIGHTS
4	CUY-480N-0054	1814575	VILLAGE OF NORTH RANDALL
5	CUY-480N-0129	1811088	CITY OF WARRENSVILLE HEIGHTS
6	CUY-422-1390R	1814745	CITY OF WARRENSVILLE HEIGHTS
7	CUY-422-1390L	1814788	CITY OF WARRENSVILLE HEIGHTS
8	CUY-422-1468L	1814842	CITY OF SOLON
9	CUY-422-1468R	1814850	CITY OF SOLON
10	CUY-422-1597L	1814885	CITY OF SOLON
11	CUY-422-1597R	1814893	CITY OF SOLON
12	CUY-422-1627L	1814907	CITY OF SOLON
13	CUY-422-1627R	1814915	CITY OF SOLON
14	CUY-480N-140WE	1814753	CITY OF WARRENSVILLE HEIGHTS

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF CONCRETE BRIDGE DECK AND APPROACH SLAB REPAIR ON FOURTEEN (14) STRUCTURES ALONG IR-90, IR-480N, AND US-422, N CUYAHOGA COUNTY.

EARTH DISTURBED AREAS

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

LIMITED ACCESS

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

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 11-14, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John Picuri, P.E., S.I.
District 12 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY



DESIGNER
EL

REVIEWER

CWP 06/28/23

PROJECT ID

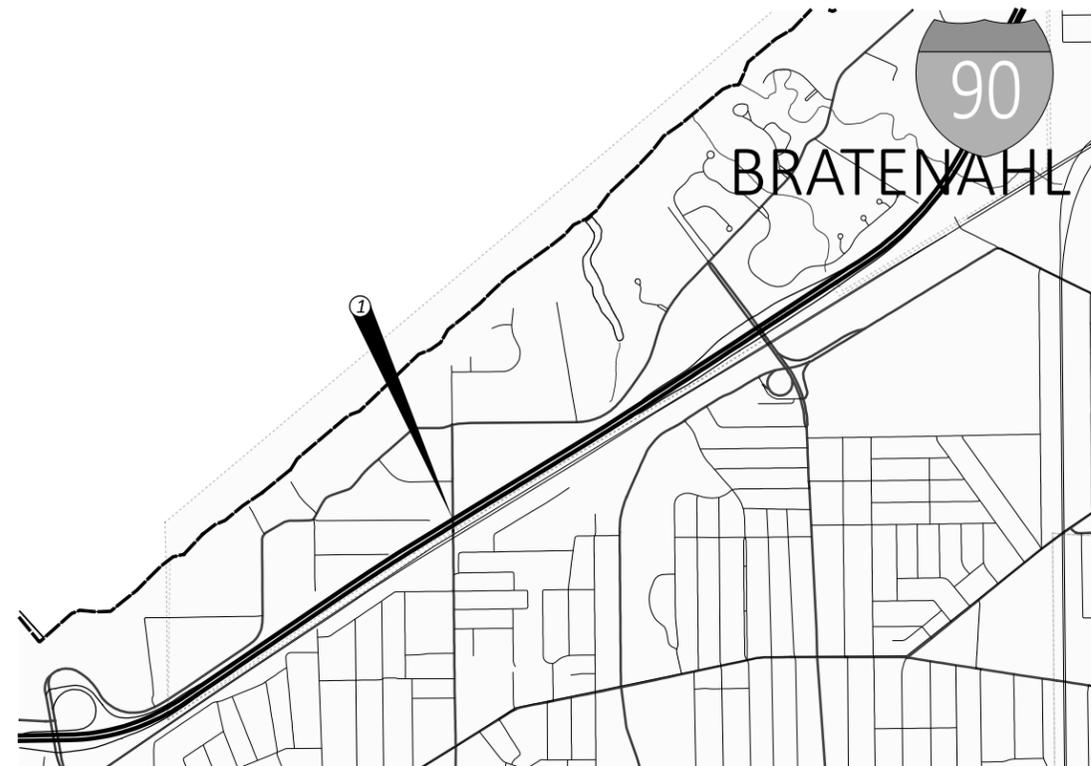
117899

SHEET TOTAL

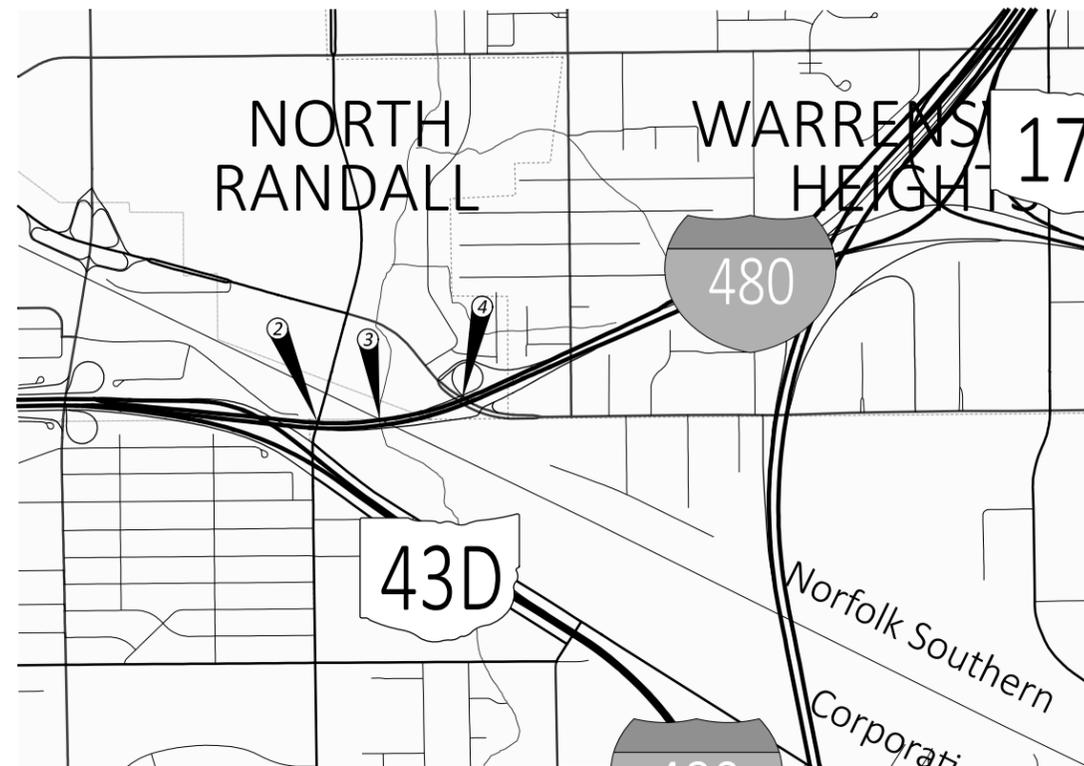
P.01 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet_SurvF1 PAPER SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:05:59 PM USER: thomas P:\23075 ODOT D9-D12 GES\117271\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\Roadway\Sheets\117899_G1001.dgn



LOCATION MAP FOR LOCATION 1



LOCATION MAP FOR LOCATIONS 2 THROUGH 4

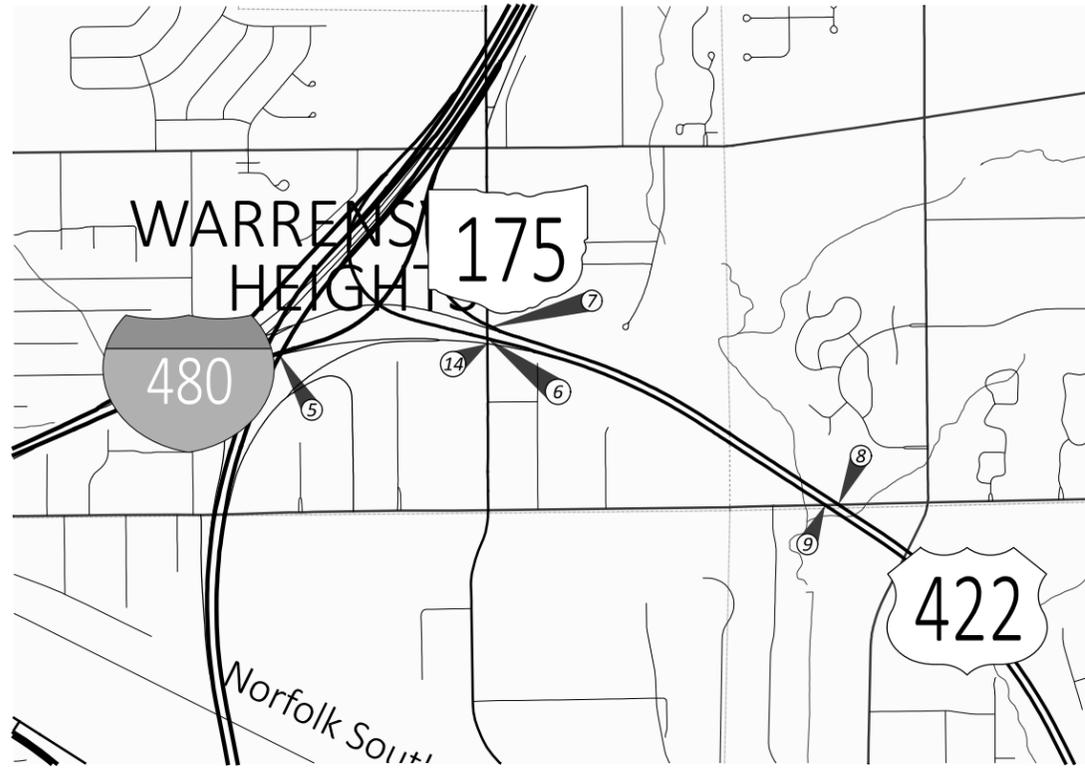


LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	DESCRIPTION	LATITUDE	LONGITUDE
1	CUY-90-2200	1808494	CR 400 (EAST 105 ST)	41.545489	-81.615581
2	CUY-480N-0011	1814494	SR-8 (NORTHFIELD) & 480WB	41.424137	-81.529176
3	CUY-480N-0036	1814532	NSC RR	41.423971	-81.525904
4	CUY-480N-0054	1814575	CR-11 (MILES RD)	41.424684	-81.521223
5	CUY-480N-0129	1811088	IR-271,422WB TO GO 271SB	41.428589	-81.508191
6	CUY-422-1390R	1814745	SR 175 (02.35) RICHMOND RD	41.429403	-81.497881
7	CUY-422-1390L	1814788	SR 175 (RICHMOND RD)	41.429797	-81.497852
8	CUY-422-1468L	1814842	CR-11 (MILES RD)	41.424328	-81.484005
9	CUY-422-1468R	1814850	CR-11 (MILES RD)	41.424294	-81.484386
10	CUY-422-1597L	1814885	CR-99 (CANNON RD)	41.409588	-81.470106
11	CUY-422-1597R	1814893	CR-99 (CANNON RD)	41.409447	-81.470358
12	CUY-422-1627L	1814907	CR-18 (HARPER RD)	41.406407	-81.466988
13	CUY-422-1627R	1814915	CR-18 (HARPER RD)	41.405939	-81.466836
14	CUY-480N-140WE	1814753	SR 175 (RICHMOND RD)	41.429247	-81.497872

NOTES:

- FOR LOCATION MAP FOR LOCATIONS 5 THROUGH 14, SEE SHEET 3.





LOCATION MAP FOR LOCATIONS 5 THROUGH 9 & 14



LOCATION MAP FOR LOCATIONS 10 THROUGH 13



NOTES:

1. FOR LOCATION COORDINATES, SEE SHEET 2.



DESIGN AGENCY



CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER

EL

REVIEWER

CWP 06/28/23

PROJECT ID

117899

SHEET TOTAL

P.03 65

GENERAL

UTILITIES

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

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, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9 PM AND 7 AM. 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.

EXISTING DIMENSION

ALL EXISTING DIMENSIONS ARE APPROXIMATE (±).

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.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS/HER 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 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

LIMITATIONS OF OPERATIONS

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

1. MAINTENANCE OF TRAFFIC RESTRICTIONS (REFER TO MAINTENANCE OF TRAFFIC NOTES SHEETS WITHIN THIS PLAN).

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC, THE CONTRACTOR'S ATTENTION IS DIRECTED TO CMS 614.035. IN ADDITION, NO STORAGE OF EQUIPMENT, MATERIALS, AND VEHICLES WITHIN THE HIGHWAY RIGHT-OF-WAY WILL BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE ENGINEER AND OBTAINING AN ODOT R/W PERMIT FROM THE D12 ROADWAY SERVICES. ALL RESTORATION WILL BE AT NO COST TO THE STATE.

CONTINGENCY 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.

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.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

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 USE THE RIGHT OF WAY -PERMITTING SYSTEM AT [HTTPS://ODHPC.BEMCORP.NET/ACCOUNTS/ACCOUNT/ACCOUNT](https://odhpc.bemcorp.net/accounts/account/account) IN ORDER TO APPLY FOR A PERMIT PER SECTION 107.02 OF THE CMS. FOR SPECIFIC PERMITTING QUESTIONS, THE CONTRACTOR CAN CONTACT THE DISTRICT PERMITTING OFFICE, (MELVIN SAFFORD) AT 216-584-2137 OR AT DISTRICT12PERMITS@DOT.OHIO.GOV.

IF A PERMIT IS GRANTED, ALL CONDITIONS OF THE PERMIT SHALL BE MET IN ADDITION TO THE REQUIREMENTS OF 104.04 OF THE CMS, AT NO ADDITIONAL 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 SHALL BE WITHHELD UNTIL ALL CONDITIONS OF THE PERMIT ARE SATISFIED.

PAVEMENT

PROFILE AND ALIGNMENT

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

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

PLANING REQUIREMENTS

THE DURATION OF TIME BETWEEN PLANING THE ASPHALT AND PLACING THE ASPHALT OVERLAY SHALL BE KEPT TO A MINIMUM. IN NO INSTANCE SHALL THIS TIME EXCEED 7 CALENDAR DAYS. THE TIME LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANNING AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY WEATHER DELAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE SURFACE COURSE. THIS IS TO ENSURE THAT THE POTENTIAL DEGRADATION OF THE EXPOSED PAVEMENT DUE TO TRAFFIC IS KEPT TO A MINIMUM. THIS REQUIREMENT APPLIES TO BOTH MAINLINE AND RAMPS ALIKE.

IN THE EVENT THAT THE TIME BETWEEN EXPOSING THE EXISTING PAVEMENT AND PLACING THE ASPHALT SURFACE COURSE EXCEEDS 7 CALENDAR DAYS, LIQUIDATED DAMAGES AS PER 108.07 OF THE C&MS SHALL BE ASSESSED.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED IN SCD BP-3.1 AND C&MS 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL USE A CERTIFIED 702.01 PG BINDER TO SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
 - BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
 - FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
 - PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
 - ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.
- THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

LONGITUDINAL JOINTS (FLEXIBLE PAVEMENT)

LONGITUDINAL JOINTS BETWEEN A PAVEMENT LANE AND ADJOINING SHOULDER OR SPEED CHANGE LANE, AND BETWEEN A SPEED CHANGE LANE AND THE ADJOINING SHOULDER SHALL BE MADE THE SAME DAY. ALL LONGITUDINAL JOINTS SHALL BE HOT WITH THE EXCEPTION OF ONE COLD JOINT PER ROADWAY. LOCATE THE COLD JOINT ALONG THE CENTERLINE OR A LANE LINE. LONGITUDINAL JOINT LOCATIONS SHALL BE AS APPROVED BY THE ENGINEER. EACH RAMP SHALL HAVE A MAXIMUM OF ONE LONGITUDINAL COLD JOINT LOCATED APPROXIMATELY HALFWAY ACROSS THE RAMP.

ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN

THIS ITEM SHALL BE USED FOR THE REPAIR UNSOUND, COLD PATCH, OR POP-OUT AREAS OF LONGITUDINAL JOINTS, TRANSVERSE JOINTS AND CRACKS CONSISTING OF EXISTING ASPHALT OR CONCRETE AS DIRECTED BY THE ENGINEER. THE WORK SHALL BE PERFORMED PRIOR TO THE PLANING OPERATION. THE DEPTH OF THE REPAIR SHALL BE 5" BELOW THE TOP OF THE EXISTING ASPHALT SURFACE. THE WIDTH OF THE REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT.

USE REPLACEMENT MATERIALS CONFORMING TO THE REQUIREMENTS OF ITEM 442, 19MM.

ITEM 252 – FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN

THIS ITEM SHALL BE USED TO PERFORM A FULL DEPTH FLEXIBLE PAVEMENT REPAIR THE EXISTING CONCRETE BASE PAVEMENT AS DESCRIBED BELOW. THE DEPTH OF THE FULL DEPTH REPAIR SHALL BE 14 INCHES.

THE ENGINEER WILL LOCATE AND MARK THE AREAS FOR FULL DEPTH REPAIR BEFORE THE START OF THE FULL DEPTH SAWING. SAW THE LIMITS OF THE FULL DEPTH REPAIR AT THE LIMITS OF THE AREA DESIGNATED BY THE ENGINEER TO BE REPAIRED.

AFTER THE EXISTING CONCRETE PAVEMENT HAS BEEN REMOVED, PLACE ITEM 301 MATERIAL UP TO 1-1/2 INCHES FROM THE TOP OF THE REPAIR. THE LAST 1-1/2 INCHES SHALL BE REPLACED WITH ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM MATERIAL. COMPLETE ALL AREAS OF FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT AT THE END OF EACH SHIFT OPERATION AND OPEN TO THE NORMAL FLOW OF TRAFFIC.

ALL COSTS ASSOCIATED WITH THIS ITEM INCLUDING THE SAWCUTTING, LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN ITEM 252, FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN.

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH

VARIABLE DEPTH PLANING, FOR THE PURPOSE OF PROFILE AND CROSS SLOPE CORRECTIONS. WILL EXTEND 50 FEET AWAY FROM THE APPROACH SLAB AT LOCATIONS WHERE THERE IS APPROACH SLAB REPLACEMENT WORK.

A PRECONSTRUCTION SURVEY WILL BE TAKEN AT THE EDGE LINES AND LANE LINES. IT WILL ALSO BE TAKEN AT CHANNELIZING LINES AND DOTTED LINES IF APPLICABLE WITHIN THE PAVING LIMITS. POINTS ALONG EACH LINE WILL BE TAKEN EVERY 10 FEET TO HELP ESTABLISH THE EXISTING CROSS SECTIONS. FROM THERE, THE CONTRACTOR SHALL DETERMINE THE DEPTHS OF VARIABLE DEPTH MILLING THAT THEY NEED TO PERFORM IN ORDER TO MILL AND THEN PLACE A 1.5" SURFACE COURSE AT THE CORRECT PROFILE/CROSS SLOPE.

ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. AT LEAST 50% OF FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO ACBFS OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE DO NOT EXCEED 63 IN PRODUCTION.

WHEN ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2 PERCENT. IF ACBFS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF C&MS 442.

PAVEMENT FOR PROJECT REHABILITATION & TRANSITION

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR REHABILITATION OF THE EXISTING PAVEMENT ADJACENT TO APPROACH SLABS. THESE ESTIMATED QUANTITIES INCLUDE A CONTINGENCY OF EACH OF THE FOLLOWING ITEMS TO BE USED AS DIRECTED BY THE ENGINEER. SEE REFERENCE FILES FOR MORE INFORMATION.

LOCATION 2	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	357 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	20 GAL
	ITEM 442 1.25" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	15 CY

LOCATION 3	ITEM 252 FULL DEPTH PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN	18 SY
	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	714 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	40 GAL
	ITEM 442 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	300 CY

LOCATION 4	ITEM 252 FULL DEPTH PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN	20 SY
------------	--	-------

LOCATION 5	ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN	12 SY
------------	---	-------

LOCATION 7	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	267 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	15 GAL
	ITEM 442 1.25" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	12 CY

LOCATION 8	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	212 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	12 GAL
	ITEM 442 1.25" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	9 CY

LOCATION 9	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	212 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	12 GAL
	ITEM 442 1.25" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	9 CY

LOCATION 12	ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN	66 SY
	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	245 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	14 GAL
	ITEM 442 1.25" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	11 CY

TOTAL	ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN	78 SY
	ITEM 252 FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN	38 SY
	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, VARIABLE DEPTH	2007 SY
	ITEM 407 NON-TRACKING TACK COAT (0.055 GAL/SY)	113 GAL
	ITEM 442 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M	86 CY

ENVIRONMENTAL COMMITMENTS

1. ALL WORK TO BE WITHIN EXISTING RIGHT-OF-WAY.
2. NO WORK IN STREAMS, WETLANDS, OR POLLINATOR INITIATIVE SITES.
3. NO TREE REMOVAL.

DESIGN AGENCY	 CHAGRIN VALLEY ENGINEERING, LTD.
DESIGNER	EL
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET TOTAL	P.04 65

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED DURATIONS SPECIFIED ON THE RESPECTIVE DETOUR SHEETS FOR LOCATIONS 3, 6, 7, 10 AND 12, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON THESE SHEETS. A DISINCENTIVE SHALL BE ASSESSED PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT, IN THE AMOUNT SPECIFIED ON THE RESPECTIVE DETOUR SHEET FOR EACH LOCATION.

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

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

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

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

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

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

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

LANE VALUE CONTRACT TABLE

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
I-90 WB (LOCATION 1)	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE	\$290
I-480N WB (LOCATION 2, 3, 4)	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE	\$255
US-422 EB (LOCATION 5, 14, 9, 11, 13)	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE	\$310
US-422 WB (LOCATION 7, 8, 10, 12)	AS PER THE D12 PERMITTED LANE CLOSURE SCHEDULE	EACH MINUTE	\$310
I-271 SB EXIT RAMP TO US 422 EB (LOCATION 6)	1 WEEKEND FROM 8PM FRIDAY TO 6AM MONDAY	EACH HOUR	\$797
US 422 WB EXIT RAMP TO I-271 NB (LOCATION 7)	1 WEEKEND FROM 8PM FRIDAY TO 6AM MONDAY	EACH HOUR	\$761
NB HARPER ROAD ENTRANCE RAMP (LOCATION 12)	1 WEEKEND FROM 8PM FRIDAY TO 6AM MONDAY	EACH HOUR	\$694

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

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

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

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

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

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

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP &	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
ROAD	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

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

1. LANE CLOSURE RESTRICTIONS

- 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 WEB SITE [HTTPS://PLCM.DOT.STATE.OH.US/](https://plcm.dot.state.oh.us/). THE LATEST REVISION AT 14 DAYS PRIOR TO THE BID DATE SHALL BE IN EFFECT FOR THIS PROJECT.
- ANY ROADWAY NOT LISTED IN THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" SHALL NOT HAVE ANY WEEKDAY CLOSURES FROM 6:00AM - 9:00AM OR 3:00PM - 6:00PM, UNLESS PERMITTED OTHERWISE IN THEIR PLANS.
- UNLESS OTHERWISE NOTED, EXIT AND ENTRANCE RAMP LANES SHALL REMAIN OPEN AT ALL TIMES AND EXHIBIT A MINIMUM WIDTH OF ELEVEN (11) FEET.
- NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- MAINTENANCE OF TRAFFIC SHALL FOLLOW THE INSTRUCTION OF STANDARD CONSTRUCTION DRAWINGS LISTED ON THE TITLE SHEET AND THE LATEST REVISION OF THE ODOTCD.
- PEDESTRIAN TRAFFIC SHALL BE PERMITTED AND ACCOMMODATED ON AT LEAST ONE SIDE AT ALL TIMES AT LOCATIONS WHERE PEDESTRIAN TRAFFIC IS CURRENTLY MAINTAINED.
- THE REQUIREMENTS FOR SPECIFICATIONS DURING NONWORKING HOURS SHALL BE WAIVED FOR THE DURATION OF THE WEEKEND CLOSURES.
- ALL NOTES AND RESTRICTIONS LISTED ON DISTRICT 12 WEBSITE AND LISTED IN NOTE 1 SHALL APPLY TO THESE SITES.

LOCATION 1: CUY-90-2200 (I-90 OVER EAST 105TH STREET)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR IR 90. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE TWO (2) LANES OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE TWO (2) LANES OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE AND DUAL LANE CLOSURES OVER ONE (1) WEEKEND FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32, AND/OR MT-95.41.

THE CONTRACTOR MAY CONSTRUCT LOCATION 1 ON ANY WEEKEND AS THE OTHER LOCATIONS.

LOCATION 2: CUY-480N-0011 (I-480N OVER SR 8 (NORTHFIELD ROAD))

THE CONTRACTOR SHALL PERFORM THE WORK IN ONE PHASE OF CONSTRUCTION FOR IR 480N. PHASE ONE SHALL CONSIST OF CLOSING THE OUTSIDE TWO (2) LANES OF TRAFFIC AND OUTSIDE SHOULDER OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE AND DUAL LANE CLOSURES OVER ONE (1) WEEK FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32, AND/OR MT-95.41.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 2, 3 AND 4 CONCURRENTLY.

LOCATION 3: CUY-480N-0036 (I-480N OVER NORFOLK SOUTHERN RAILROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR IR 480N. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE TWO (2) LANES OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE TWO (2) LANES AND OUTSIDE SHOULDER OF TRAFFIC.

THE MILES ROAD ENTRANCE RAMP TO WB IR-480N WILL BE CLOSED AND TRAFFIC DETOURED PER THE DETOUR MAP IN THESE PLANS.

THIS LOCATION WILL REQUIRE SINGLE AND DUAL LANE CLOSURES OVER ONE (1) WEEKEND FOR PHASE ONE AND ONE (1) WEEK FOR PHASE TWO FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32, MT-95.41 AND/OR MT-98.11.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 2, 3 AND 4 CONCURRENTLY.

LOCATION 4: CUY-480N-0054 (I-480N OVER MILES ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR IR 480N. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE TWO (2) LANES OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THE MILES ROAD ENTRANCE RAMP TO WB IR-480N WILL BE CLOSED AND TRAFFIC DETOURED PER THE DETOUR MAP IN THESE PLANS.

THIS LOCATION WILL REQUIRE SINGLE AND DUAL LANE CLOSURES OVER ONE (1) WEEKEND FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32, MT-95.41 AND MT-98.10.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 2, 3 AND 4 CONCURRENTLY.

LOCATION 5: CUY-480N-0129 (I-480N OVER IR-271 AND US 422 WB RAMP TO IR-271 SB)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR IR 480N. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE TWO (2) LANES OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THE EB IR-480N EXIT RAMP TO NB IR-271/WB US 422 WILL REMAIN OPEN AT ALL TIMES.

THIS LOCATION WILL REQUIRE DOUBLE LANE CLOSURES OVER ONE WEEKEND FOR PHASE ONE AND SINGLE LANE CLOSURES FOR PHASE TWO FOLLOWING ODOT STANDARD CONSTRUCTION DRAWING MT-95.30, MT-98.20, MT-98.22 AND/OR MT-98.28.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 5, 6, 9 AND 14 CONCURRENTLY.

LOCATION 6: CUY-422-1390R (US-422 OVER SR 175 (RICHMOND ROAD))

THE CONTRACTOR SHALL PERFORM THE WORK IN ONE PHASE OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE RAMP AND DETOURING TRAFFIC PER THE DETOUR MAP IN THESE PLANS.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES OVER ONE WEEKEND FOR PHASE ONE FOLLOWING ODOT STANDARD CONSTRUCTION DRAWING MT-98.29.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 5, 6, 9 AND 14 CONCURRENTLY.

LOCATION 7: CUY-422-1390L (US-422 OVER SR 175 (RICHMOND ROAD))

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC. THE WORK AT THE IR-271 NORTH EXIT RAMP SHALL BE CONSTRUCTED DURING THE WEEKEND OF THE PHASE TWO CONSTRUCTION. WHEN THE IR-271 NORTH EXIT RAMP IS NOT BEING CONSTRUCTED, IT IS TO REMAIN OPEN TO TRAFFIC.

THE IR-271 NORTH EXIT RAMP WILL BE CLOSED AND TRAFFIC DETOURED PER THE DETOUR MAP IN THESE PLANS.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES FOR ONE (1) WEEK FOR PHASE ONE AND ONE (1) WEEK FOR PHASE TWO FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.40, MT-98.21 AND/OR MT-98.22.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 7 AND 8 CONCURRENTLY.

LOCATION 8: CUY-422-1468L (US-422 OVER MILES ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES FOR ONE (1) WEEK FOR PHASE ONE AND OVER ONE WEEKEND FOR PHASE TWO FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.30 AND/OR MT-95.40.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 7 AND 8 CONCURRENTLY.

LOCATION 9: CUY-422-1468R (US-422 OVER MILES ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES OVER ONE WEEKEND FOR PHASE ONE AND ONE (1) WEEK FOR PHASE TWO FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.30 AND/OR MT-95.40.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 5, 6, 9 AND 14 CONCURRENTLY.

LOCATION 10: CUY-422-1597L (US-422 OVER CANNON ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THE SB HARPER ROAD ENTRANCE RAMP TO WB US 422 WILL REMAIN OPEN AT ALL TIMES.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES FOR ONE (1) WEEK EACH FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.30, MT-95.40, MT-98.10 AND/OR MT-98.30.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 10 AND 12 CONCURRENTLY.

LOCATION 11: CUY-422-1597R (US-422 OVER CANNON ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES OVER ONE (1) WEEKEND FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32 AND/OR MT-95.41.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 11 AND 13 CONCURRENTLY OVER A SINGLE WEEKEND.

LOCATION 12: CUY-422-1627L (US-422 OVER HARPER ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC. THE WORK AT THE HARPER ROAD ENTRANCE RAMP SHALL BE CONSTRUCTED DURING THE WEEKEND OF THE PHASE TWO CONSTRUCTION. WHEN THE HARPER ROAD ENTRANCE RAMP IS NOT BEING CONSTRUCTED, IT IS TO REMAIN OPEN TO TRAFFIC.

WHEN THE NB HARPER ROAD ENTRANCE RAMP TO WB US 422 WORK IS BEING CONSTRUCTED, THE HARPER ROAD ENTRANCE RAMP IS TO BE CLOSED. THE NB HARPER ROAD ENTRANCE RAMP WILL BE DETOURED USING EB US 422 TO EXIT AT SRT 91, NORTH ON SR 91 AND REENTER WB US 422. THE SB HARPER ROAD ENTRANCE RAMP TO WB US 422 WILL REMAIN OPEN AT ALL TIMES.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES FOR ONE (1) WEEK EACH FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.30, MT-95.40, MT-98.10 AND/OR MT-98.30.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 10 AND 12 CONCURRENTLY.

LOCATION 13: CUY-422-1627R (US-422 OVER HARPER ROAD)

THE CONTRACTOR SHALL PERFORM THE WORK IN ONE PHASE OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURE OVER ONE (1) WEEKEND FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31 AND/OR MT-95.41.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 11 AND 13 CONCURRENTLY OVER A SINGLE WEEKEND.

LOCATION 14: CUY-480N-140WE (US-422 EB RAMP OVER SR 175 (RICHMOND ROAD))

THE CONTRACTOR SHALL PERFORM THE WORK IN TWO PHASES OF CONSTRUCTION FOR US 422. PHASE ONE SHALL CONSIST OF CLOSING THE INSIDE LANE OF TRAFFIC AND PHASE TWO SHALL CONSIST OF CLOSING THE OUTSIDE LANE OF TRAFFIC.

THIS LOCATION WILL REQUIRE SINGLE LANE CLOSURES OVER ONE WEEKEND FOR PHASE ONE AND PHASE TWO AND FOLLOWING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.30 AND/OR MT-95.40.

THE CONTRACTOR SHALL CONSTRUCT THE WORK AT LOCATION 5, 6, 9 AND 14 CONCURRENTLY.

CONCURRENT WORK ZONES

DUE TO EXCESSIVELY LONG WORK ZONES OR RAMP CLOSURES UTILIZING THE SAME DETOUR ROUTE, SOME WORK ZONES CAN NOT BE COMBINED.

LOCATIONS 2, 3, 4 AND 5, 6, 9 AND 14 AND 10 AND 12 MAY NOT BE CONSTRUCTED CONCURRENTLY. LOCATIONS 7 AND 8 AND 10 AND 12 MAY NOT BE CONSTRUCTED CONCURRENTLY.

DESIGN AGENCY	
DESIGNER	EL
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET TOTAL	P.05 65

LOCATIONS 5, 6, 9 AND 14 AND 11 AND 13 MAY NOT BE CONSTRUCTED CONCURRENTLY.
LOCATIONS 5, 6, 9 AND 14 AND 7 AND 8 MAY NOT BE CONSTRUCTED CONCURRENTLY.

II. 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 THE 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 NECESSARY ESPECIALLY WHERE A GRADE, CURVE, OR MERGE CONDITIONS EXISTS, THEY MAY DIRECT THAT ADDITIONAL OR ALTERNATIVE DEVICES BE USED.

2. CONDITION 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 CONDITION 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 OR TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

4. FLAGGERS AT LEAST TWO FLAGGERS ARE REQUIRED FOR EACH 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 FOR TRAFFIC CONTROL SET OUT IN THESE PLANS AND NOTES, OR WITH THE 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.

III. MAINTENANCE OF TRAFFIC MATERIALS

1. SIGNS SIGN DIMENSIONS WITH 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 OUT 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 CMS 614.03 AND THE PROVISIONS SET FORTH IN THE "MANUAL" FOR ALL INFORMATION REGARDING FURNISHING, MAINTAINING, AND USE OF FLASHING ARROW PANELS. PAYMENT FOR THE ABOVE MENTIONED ITEMS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

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 CONCRETE 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. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

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 BE OPERATED WITH LIGHTED HEAD AND TAIL LAMPS. THE AMBER LIGHT SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND 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.

IV. PAYMENT

UNLESS STATED OTHERWISE, PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING TEMPORARY MAINTENANCE OF TRAFFIC CONTROL DEVICES INCLUDING DETOURS AND INTERSTATE LANE CLOSURES/SHIFTS SHALL BE MADE UNDER THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

DETOUR SIGNING

ADVANCE TRAFFIC SIGNING AND SUPPORTS, INCLUDING DETOUR SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES, AND SIGNS ON BARRICADES SHOWN ON THE PLANS BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR, AND ALL ASSOCIATED COST SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, DETOUR SIGNING.

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.

CONTINUOUS ACCESS

THE CONTRACTOR SHALL MAINTAIN SAFE AND ADEQUATE DRIVEWAYS AND WALKWAYS IN ORDER TO PROVIDE CONTINUOUS ACCESS FOR PEDESTRIANS, PASSENGER VEHICLES, TRUCKS, AND SAFETY EQUIPMENT TO ALL ADJOINING PROPERTIES. THE COST FOR ALL MATERIALS EQUIPMENT AND LABOR NECESSARY TO PROVIDE CONTINUOUS ACCESS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC CONTROL ZONES

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SIGNS, DRUM AND 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.

MAINTENANCE OF TRAFFIC SCHEME

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. THE CONTRACTOR SHALL DEVISE A SIMPLE MAINTENANCE OF TRAFFIC SCHEME FOR EACH LOCATION WHICH IS NOT PERFORMING AS DESIRED, WHICH SHALL BE STAMPED BY A PROFESSIONAL ENGINEER (SCHEME MAY BE A HAND SKETCH) AND PRESENT IT TO THE DISTRICT WORK ZONE SAFETY 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 SUPPORTED 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.

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. DURING NON-WORKING HOURS, ALL LANES SHALL BE IN FULL OPERATION WITH ALL TRAFFIC CONTROL SIGNS, EXCEPT OW-124 (ROAD CONSTRUCTION AHEAD) SIGNS, REMOVED OR COVERED AND ALL CHANNELIZING DEVICES REMOVED FROM THE PAVEMENT SURFACES. CHANNELIZING DEVICES REMOVED FROM THE PAVEMENT SURFACES. CHANNELIZING DEVICES MAY BE STORED OR DEPLOYED TEMPORARILY ADJACENT TO THE SHOULDER TO MINIMIZE THE NIGHTLY TRAFFIC CONTROL SET-UP TIME. 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.

TIME RESTRICTIONS AND PROJECT COMPLETION DATE

- LOCATION 1: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 2: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 3: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 4: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 5: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 6: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 7: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 8: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 9: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 10: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 11: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 12: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 13: SEE SHEET 5 FOR TIME RESTRICTIONS
- LOCATION 14: SEE SHEET 5 FOR TIME RESTRICTIONS

ALL CONCRETE WORK AT ALL LOCATIONS SHALL BE COMPLETED BY THE PROJECT INTERIM COMPLETION DATE OF NOVEMBER 30, 2023. LIQUIDATED DAMAGES WILL BE ASSESSED IN ACCORDANCE WITH C&MS 108.07.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

ITEM 614. WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING 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.

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

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

APPROVED MOT EXCEPTION(S) INCLUDE:

- LOCATION 2, 3 AND 4, PHASE 2, SINGLE LANE CLOSURE FOR 1 WEEK
- LOCATION 5, 14, 9 AND 6, PHASE 2, SINGLE LANE CLOSURE FOR 1 WEEK
- LOCATION 7 AND 8, PHASE 1, SINGLE LANE CLOSURE FOR 1 WEEK
- LOCATION 7 AND 8, PHASE 2, SINGLE LANE CLOSURE FOR 1 WEEK
- LOCATION 10 AND 12, PHASE 1, SINGLE LANE CLOSURE FOR 1 WEEK
- LOCATION 10 AND 12, PHASE 2, SINGLE LANE CLOSURE FOR 1 WEEK

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

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 06/22/2023 FOR PID 117899" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

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 SIGN 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 2: CUY-480N-0011 (IR-480N OVER SR 8 (NORTHFIELD ROAD))
- LOCATION 3: CUY-480N-0036 (IR-480N OVER NORFOLK SOUTHERN RAILROAD)
- LOCATION 4: CUY-480N-0054 (IR-480N OVER MILES ROAD)
- LANE TAPER NO. N/A, STATION N/A, PHASES 1 & 2; PROVIDE SIGN GROUPS AT 2 MILES AND 3 MILES.
- 2. LOCATION 5: CUY-480N-0129 (IR-480N OVER IR-271 AND US 422 WB RAMP TO IR-271 SB)
- LOCATION 6: CUY-422-1390R (US-422 OVER SR 175 (RICHMOND ROAD))
- LOCATION 9: CUY-422-1468R (US-422 OVER MILES ROAD)
- LOCATION 14: CUY-480N-140WE (US-422 EB RAMP OVER SR 175 (RICHMOND ROAD))
- LANE TAPER NO. N/A, STATION N/A, PHASES 1 & 2; PROVIDE SIGN GROUPS AT 2 MILES AND 3 MILES.
- 3. LOCATION 7: CUY-422-1390L (US-422 OVER SR 175 (RICHMOND ROAD))
- LOCATION 8: CUY-422-1468L (US-422 OVER MILES ROAD)
- LANE TAPER NO. N/A, STATION N/A, PHASE 2; PROVIDE SIGN GROUPS AT 2 MILES, 3 MILES, 4 MILES, AND 5 MILES.
- 4. LOCATION 10: CUY-422-1597L (US-422 OVER CANNON ROAD)
- LOCATION 12: CUY-422-1627L (US-422 OVER HARPER ROAD)
- LANE TAPER NO. N/A, STATION N/A, PHASES 1 & 2; 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.

DESIGN AGENCY



DESIGNER

EL

REVIEWER

CWP 06/28/23

PROJECT ID

117899

SHEET TOTAL

P.06 65

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.

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

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

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

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

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 6 SIGN MONTH
- LOCATION 1: CUY-90-2200 (IR-90 OVER EAST 105th STREET)
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)
- LOCATION 2: CUY-480N-0011 (IR-480N OVER SR 8 (NORTHFIELD ROAD))
- LOCATION 3: CUY-480N-0036 (IR-480N OVER NORFOLK SOUTHERN RAILROAD)
- LOCATION 4: CUY-480N-0054 (IR-480N OVER MILES ROAD)
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)
- LOCATION 5: CUY-480N-0129 (IR-480N OVER IR-271 AND US 422 WB RAMP TO IR-271 SB)
- LOCATION 6: CUY-422-1390R (US-422 OVER SR 175 (RICHMOND ROAD))
- LOCATION 9: CUY-422-1468R (US-422 OVER MILES ROAD)
- LOCATION 14: CUY-480N-140WE (US-422 EB RAMP OVER SR 175 (RICHMOND ROAD))
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)

- LOCATION 7: CUY-422-1390L (US-422 OVER SR 175 (RICHMOND ROAD))
- LOCATION 8: CUY-422-1468L (US-422 OVER MILES ROAD)
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)
- LOCATION 10: CUY-422-1597L (US-422 OVER CANNON ROAD)
- LOCATION 12: CUY-422-1627L (US-422 OVER HARPER ROAD)
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)
- LOCATION 11: CUY-422-1597R (US-422 OVER CANNON ROAD)
- LOCATION 13: CUY-422-1627R (US-422 OVER HARPER ROAD)
- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 1 MONTH(S)

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.
2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE CRASH THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR THE VILLAGE OF NORTH RANDALL FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6:00 AM TO 10:00 AM AND 3:00 PM TO 7:00 PM. ANY SIGNALIZED

INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY VILLAGE OF NORTH RANDALL POLICE, HIRED BY THE CONTRACTOR:

1. MILES ROAD AND I-480N WB RAMP
2. MILES ROAD AND I-480N EB RAMP

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;
2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

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

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 (CA-D-8) WITHIN GOFORMZ AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER BY THE END OF THE WORKDAY IN WHICH THE INSPECTION OCCURRED. THE CA-D-8 INCLUDES A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. CONTACT GOFORMZ.HELP@DOT.OHIO.GOV TO OBTAIN A USER ACCOUNT. ANY DEFICIENCIES OBSERVED SHALL BE NOTED ON THE CA-D-8, 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.

DESIGN AGENCY



CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.07 | 65

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.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	179 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	179 EACH
ITEM 614, INCREASED BARRIER DELINEATION	8,904 FEET

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

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

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 OMTUCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMTUCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC 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 THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

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

- 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).
- FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
 - ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
 - AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
 - AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS

PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

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

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

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	240 HOURS
--	-----------

LOCATION 1: CUY-90-2200 (IR-90 OVER EAST 105' STREET)

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	32 HOURS
--	----------

LOCATION 2: CUY-480N-0011 (IR-480N OVER SR 8 (NORTHFIELD ROAD))
LOCATION 3: CUY-480N-0036 (IR-480N OVER NORFOLK SOUTHERN RAILROAD)

LOCATION 4: CUY-480N-0054 (IR-480N OVER MILES ROAD)

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	32 HOURS
--	----------

LOCATION 5: CUY-480N-0129 (IR-480N OVER IR-271 AND US 422 WB RAMP TO IR-271 SB)

LOCATION 6: CUY-422-1390R (US-422 OVER SR 175 (RICHMOND ROAD))

LOCATION 9: CUY-422-1468R (US-422 OVER MILES ROAD)

LOCATION 14: CUY-480N-140WE (US-422 EB RAMP OVER SR 175 (RICHMOND ROAD))

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	48 HOURS
--	----------

LOCATION 7: CUY-422-1390L (US-422 OVER SR 175 (RICHMOND ROAD))
LOCATION 8: CUY-422-1468L (US-422 OVER MILES ROAD)

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	48 HOURS
--	----------

LOCATION 10: CUY-422-1597L (US-422 OVER CANNON ROAD)
LOCATION 12: CUY-422-1627L (US-422 OVER HARPER ROAD)

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	48 HOURS
--	----------

LOCATION 11: CUY-422-1597R (US-422 OVER CANNON ROAD)
LOCATION 13: CUY-422-1627R (US-422 OVER HARPER ROAD)

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	32 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.

WORK ZONE QUEUE DETECTION WARNING SYSTEM

THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN AN APPROVED WORK ZONE QUEUE DETECTION WARNING SYSTEM (WZQDWS) AS PER SUPPLEMENTAL SPECIFICATION 896.

IT IS EXPECTED THAT THESE LOCATIONS WILL VARY BASED ON PLANNED OR UNPLANNED PHASE AND TRAFFIC PATTERN CHANGES. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE DEVICES BY THE CONTRACTOR SHALL BE DIRECTED BY THE ENGINEER.

THE FOLLOWING TRAFFIC SENSOR THRESHOLDS AND PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) MESSAGES SHALL BE USED:

GREATER THAN OR EQUAL TO 50 MPH — USE FOUR CORNER FLASHING CAUTION MODE
 BETWEEN 50 MPH AND 25 MPH — TRAFFIC AHEAD XX MPH / SLOW DOWN
 BELOW OR EQUAL TO 25 MPH — TRAFFIC AHEAD XX MPH / PREPARE TO STOP

FOUR CORNER FLASHING CAUTION MODE SHALL CONSIST OF THE USE OF ONE ASTERISK IN EACH CORNER OF THE PCMS DISPLAY (4 TOTAL ASTERISKS).

XX SHALL BE ROUNDED UP TO THE NEAREST MULTIPLE OF 5 MPH MINUS 1. OCCUPANCY MAY BE DIRECTED TO BE USED BASED ON CERTAIN TRAFFIC CONDITIONS AND SCENARIOS. ODOT WILL DIRECT THE CONTRACTOR OF THE THRESHOLDS TO BE USED FOR THOSE AREAS WHERE OCCUPANCY IS DIRECTED TO BE USED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 896, PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I SIGN MONTH ASSUMING 48 SENSOR(S) FOR 1 MONTH(S)
--

ITEM 896, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN SIGN MONTH ASSUMING 12 PCMS SIGN(S) FOR 1 MONTH(S)
--

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY-ROUTE SECTION	LOCATION	DIRECTION
WZ-65257-00	CUY-90-22.00	1	WB
WZ-65257-01	CUY-480N-00.46	2	WB
WZ-65257-02	CUY-480N-00.54	3	WB
WZ-65257-03	CUY-480N-00.78	4	WB
WZ-65257-04	CUY-480N-01.63	5	EB
WZ-65257-05	CUY-422-13.81	6, 7 & 14	EB/WB
WZ-65257-06	CUY-422-14.60	8 & 9	EB/WB
WZ-65257-07	CUY-422-15.84	10 & 11	EB/WB
WZ-65257-08	CUY-422-16.12	12 & 13	EB/WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSEVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMTUCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	12 SIGN MNTH
	ASSUMING 12 DSL SIGN ASSEMBLIES FOR 1 MONTHS

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & CLOSURE	≥ 2 WEEKS	21 CALENDAR DAYS PRIOR TO
ROAD CLOSURE	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO
CLOSURES	≤ 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURE	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO
CLOSURES & RESTRICTIONS	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & N/A 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.

DESIGN AGENCY



DESIGNER

EL

REVIEWER

CWP 06/22/23

PROJECT ID

117899

SHEET TOTAL

P.08 65

ITEM 614 — WORK ZONE PAVEMENT MARKING, MISC.: REMOVAL, 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 CONTRACTOR SHALL INSTALL A SINGLE CONTINUOUS PIECE OF BLACKOUT TAPE TO COVER THE EXISTING EDGE LINES AND LANE LINES AS INDICATED IN THE PLANS.

RUMBLE STRIP REMOVAL AND REPLACEMENT

ALL EXISTING RUMBLE STRIPS THAT ARE IN CONFLICT WITH THE PROPOSED MOVEMENT OF TRAFFIC DURING THE MOT OPERATIONS SHALL BE REMOVED BY PAVEMENT PLANING. THE REMOVED RUMBLE STRIP AREAS SHALL BE FILLED WITH ASPHALT CONCRETE SURFACE COURSE. THE RUMBLE STRIP REMOVAL AND REPLACEMENT AREA SHALL BE 2.5 FEET WIDE AND 1.5 INCHES DEEP, CENTERED ON THE RUMBLE STRIP. THE PAVEMENT PLANING AND PLACEMENT OF ASPHALT CONCRETE SURFACE COURSE SHOULD BE COMPLETED IN THE SAME OPERATION. THE ESTIMATED REMOVAL AND REPLACEMENT LENGTH IS 3200 FT FOR LOCATIONS 5, 6, 9 AND 14, 2975 FT FOR LOCATIONS 7 AND 8 AND 2585 FT FOR LOCATIONS 10 AND 12.

IMMEDIATELY FOLLOWING COMPLETION OF MOT OPERATIONS AND RESTORING THE TRAFFIC TO ITS ORIGINAL POSITION, NEW RUMBLE STRIPS SHALL BE INSTALLED AT THE LOCATION WHERE THE EXISTING RUMBLE STRIPS WERE REMOVED.

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

LOCATIONS 5, 6, 9 AND 14, PHASE 2
 ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEPTH) 889 SY
 ITEM 407 – NON-TRACKING TACK COAT 81 GAL
 ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M 38 CY
 ITEM 618 – RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE) 0.61 MILE

LOCATIONS 7 AND 8, PHASE 2
 ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEPTH) 827 SY
 ITEM 407 – NON-TRACKING TACK COAT 75 GAL
 ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M 35 CY
 ITEM 618 – RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE) 0.56 MILE

LOCATIONS 10 AND 12, PHASE 2
 ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEPTH) 719 SY
 ITEM 407 – NON-TRACKING TACK COAT 65 GAL
 ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M 30 CY
 ITEM 618 – RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE) 0.49 MILE

TOTAL
 ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEPTH) 2435 SY
 ITEM 407 – NON-TRACKING TACK COAT 221 GAL
 ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG76-22M 103 CY
 ITEM 618 – RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE) 1.66 MILE

DESIGN AGENCY



DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.09 | 65

NOTES:

1. PLACE EXIT CLOSED OVERLAY DIAGONALLY OVER ALL EXTRUSHEET GUIDE SIGNS PER SCD MT-98.29. PLACE PCMS IN ADVANCE OF THE DETOUR.

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED ONE WEEKEND (8PM FRIDAY THROUGH 6AM MONDAY), WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON THIS SHEET. A DISCINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$797 PER HOUR FOR EACH HOUR THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.



SIGN LEGEND

<p>1</p> <p>W20-2-48</p>	<p>2</p> <p>M4-8-30 M3-2-24 M1-4-30-3 M6-2R-21</p>	<p>3</p> <p>M4-8a-24 M3-2-24 M1-4-30-3</p>	<p>4</p> <p>R11-2-48 ON TYPE III BARRICADES WITH 1 TYPE B FLASHING WARNING LIGHT PER BARRICADE</p>	<p>5</p> <p>E5-H2c-48</p>	<p>6</p> <p>E5-2a-48</p>	<p>7</p> <p>M4-8-30 M3-2-24 M1-4-30-3 M6-1L-21</p>
--------------------------	--	--	--	---------------------------	--------------------------	--

LEGEND
 WORK ZONE

MAINTENANCE OF TRAFFIC
 LOCATION 6 DETOUR PLAN

DESIGN AGENCY



DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.11 65

NOTES:

1. PLACE EXIT CLOSED OVERLAY DIAGONALLY OVER ALL EXTRUSHEET GUIDE SIGNS PER SCD MT-98.29. PLACE PCMS IN ADVANCE OF THE DETOUR.

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED ONE WEEKEND (8PM FRIDAY THROUGH 6AM MONDAY), WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON THIS SHEET. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$761 PER HOUR FOR EACH HOUR THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.



SIGN LEGEND

1

 W20-2-48

2

 M4-8-30
 M3-1-24
 M1-1-30
 M6-3-21

3

 M4-8-30
 M3-1-24
 M1-1-30
 M6-2R-21

4

 M4-8a-24
 M3-1-24
 M1-1-30

5

 R11-2-48
 ON TYPE III BARRICADES WITH 1 TYPE B FLASHING WARNING LIGHT PER BARRICADE

6

 E5-H2c-48

7

 E5-2a-48

8

 M4-8-30
 M3-1-24
 M1-1-30
 M6-1L-21

LEGEND
 WORK ZONE

MAINTENANCE OF TRAFFIC
 LOCATION 7 DETOUR PLAN

DESIGN AGENCY



DESIGNER
 EL

REVIEWER
 CWP 06/28/23

PROJECT ID
 117899

SHEET TOTAL
 P.12 | 65

- NOTES:
- COVER GUIDE SIGNS FOR THE CLOSED ENTRANCE RAMP AND PLACE PCMS IN ADVANCE OF THE DETOUR.
 - SEE MT-98.20 FOR ADDITIONAL INFORMATION.



1

M3-1-24
M1-1-30
W20-2-36

2

M4-8-30
M3-4-24
M1-1-30
M6-3-21

SIGN LEGEND

3

M4-8-30
M3-4-24
M1-1-30
M6-2R-21

4

M4-8a-24
M3-4-24
M1-1-30

5

R11-2-48
M4-10L-48
ON TYPE III BARRICADES
WITH 1 TYPE B FLASHING
WARNING LIGHT PER BARRICADE

LEGEND

WORK ZONE

MAINTENANCE OF TRAFFIC
LOCATION 2, 3 & 4 — MILES ROAD ENTRANCE RAMP DETOUR PLAN

DESIGN AGENCY



DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

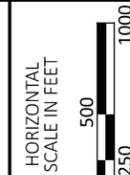
SHEET TOTAL
P.13 65

NOTES:

1. COVER GUIDE SIGNS FOR THE CLOSED ENTRANCE RAMP AND PLACE PCMS IN ADVANCE OF THE DETOUR.
2. SEE MT-98.20 FOR ADDITIONAL INFORMATION.

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED ONE WEEKEND (8PM FRIDAY THROUGH 6AM MONDAY) WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON THIS SHEET. A DISCINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$694 PER HOUR FOR EACH HOUR THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.



SIGN LEGEND

<p>1</p> <p>M3-1-24 M1-4-30-3 W20-2-36</p>	<p>2</p> <p>M4-8-30 M3-4-24 M1-4-30-3 M6-2R-21</p>	<p>3</p> <p>M4-8-30 M3-4-24 M1-4-30-3 M6-3-21</p>	<p>4</p> <p>M4-8-30 M3-4-24 M1-4-30-3 M5-4-24</p>	<p>5</p> <p>R11-2-48 ON TYPE III BARRICADES WITH 1 TYPE B FLASHING WARNING LIGHT PER BARRICADE</p>	<p>6</p> <p>M4-10L-48 M3-4-24 M1-4-30-3</p>	<p>7</p> <p>M4-8a-24 M3-4-24 M1-4-30-3</p>
--	--	---	---	--	---	--

LEGEND
 WORK ZONE

MAINTENANCE OF TRAFFIC
 LOCATION 10 & 12 — HARPER ROAD ENTRANCE RAMP DETOUR PLAN

DESIGN AGENCY



DESIGNER
EL

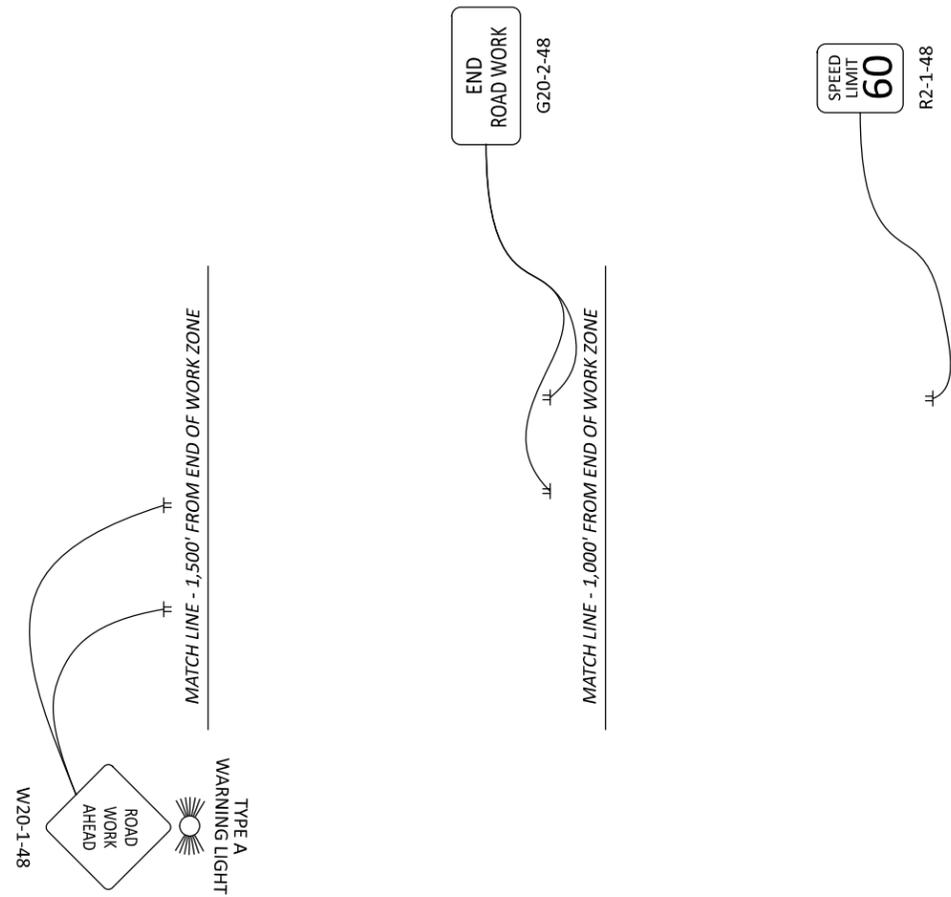
REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.14 | 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 01 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:06:57 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP002.dgn



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE CHANNELIZING LINE, 12" (WHITE)
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

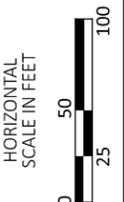


**MAINTENANCE OF TRAFFIC PLAN
LOCATION 2, 3, AND 4 - PHASE 2, SHEET 1**

DESIGN AGENCY



DESIGNER	SHT
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET	TOTAL
P.15	65



MAINTENANCE OF TRAFFIC PLAN
LOCATION 2, 3, AND 4 - PHASE 2, SHEET 2

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE CHANNELIZING LINE, 12" (WHITE)
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

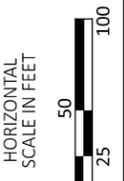
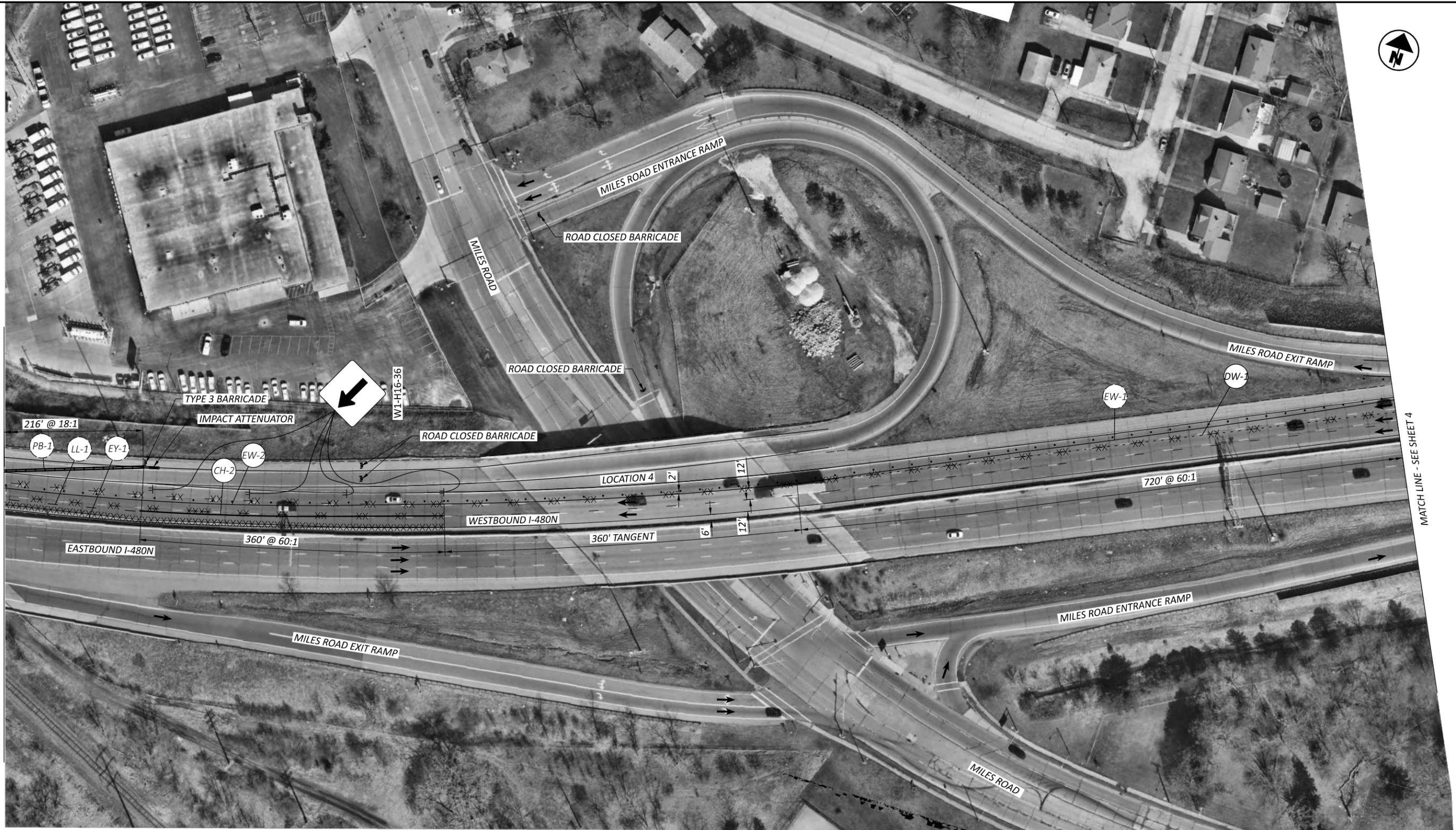
NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

DESIGN AGENCY



DESIGNER	SHT
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET	TOTAL
P.16	65



MATCH LINE - SEE SHEET 2

MATCH LINE - SEE SHEET 4

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- LL - WORK ZONE LANE LINE, 6"
- CH - WORK ZONE CHANNELIZING LINE, 12" (WHITE)
- EY - WORK ZONE EDGE LINE, 6" (YELLOW)
- EW - WORK ZONE EDGE LINE, 6" (WHITE)
- DW - WORK ZONE DOTTED LINE, 6" (WHITE)
- PB - PORTABLE BARRIER

NOTES

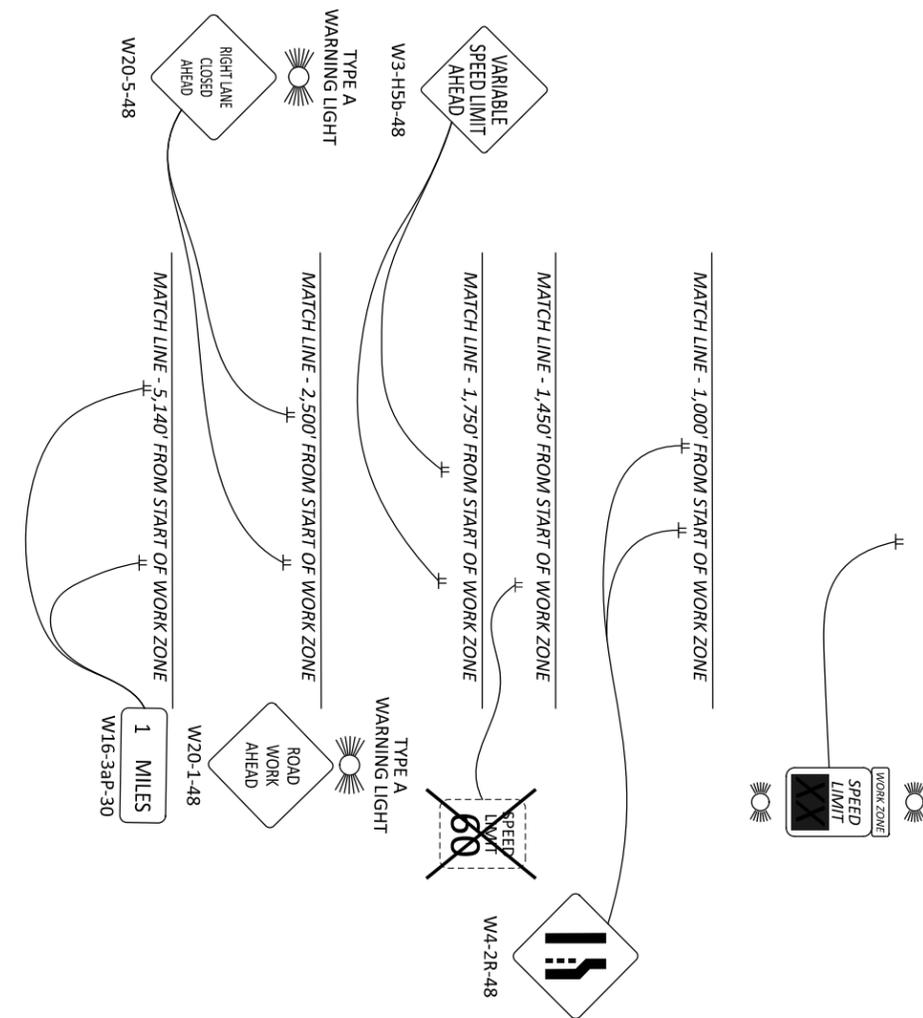
1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC PLAN
LOCATION 2, 3, AND 4 - PHASE 2, SHEET 3

DESIGN AGENCY



DESIGNER	
SHT	
REVIEWER	
CWP 06/28/23	
PROJECT ID	
117899	
SHEET	TOTAL
P.17	65

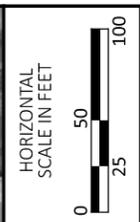
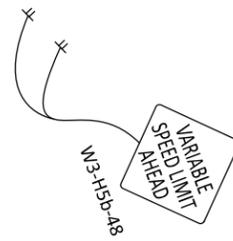


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

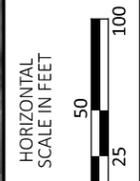


MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 1

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD.	
DESIGNER	SHT
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET	TOTAL
P.19	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 02 PAPER: SIZE: 17X11 (in.) DATE: 6/29/2023 TIME: 2:08:35 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP003.dgn



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

DESIGN AGENCY

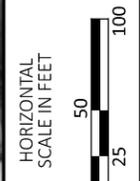


DESIGNER	SHT
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET	TOTAL
P.20	65

**MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 2**

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 03 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:08:47 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP003.dgn



MATCH LINE - SEE SHEET 2

MATCH LINE - SEE SHEET 4

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

DESIGN AGENCY



DESIGNER

SHT

REVIEWER

CWP 06/28/23

PROJECT ID

117899

SHEET TOTAL

P.21 65

**MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 3**



MATCH LINE - SEE SHEET 3

MATCH LINE - SEE SHEET 5

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 4

DESIGN AGENCY



DESIGNER
SHT

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET	TOTAL
P.22	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 05 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:09:20 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP003.dgn



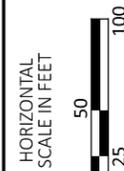
LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 5**

DESIGN AGENCY

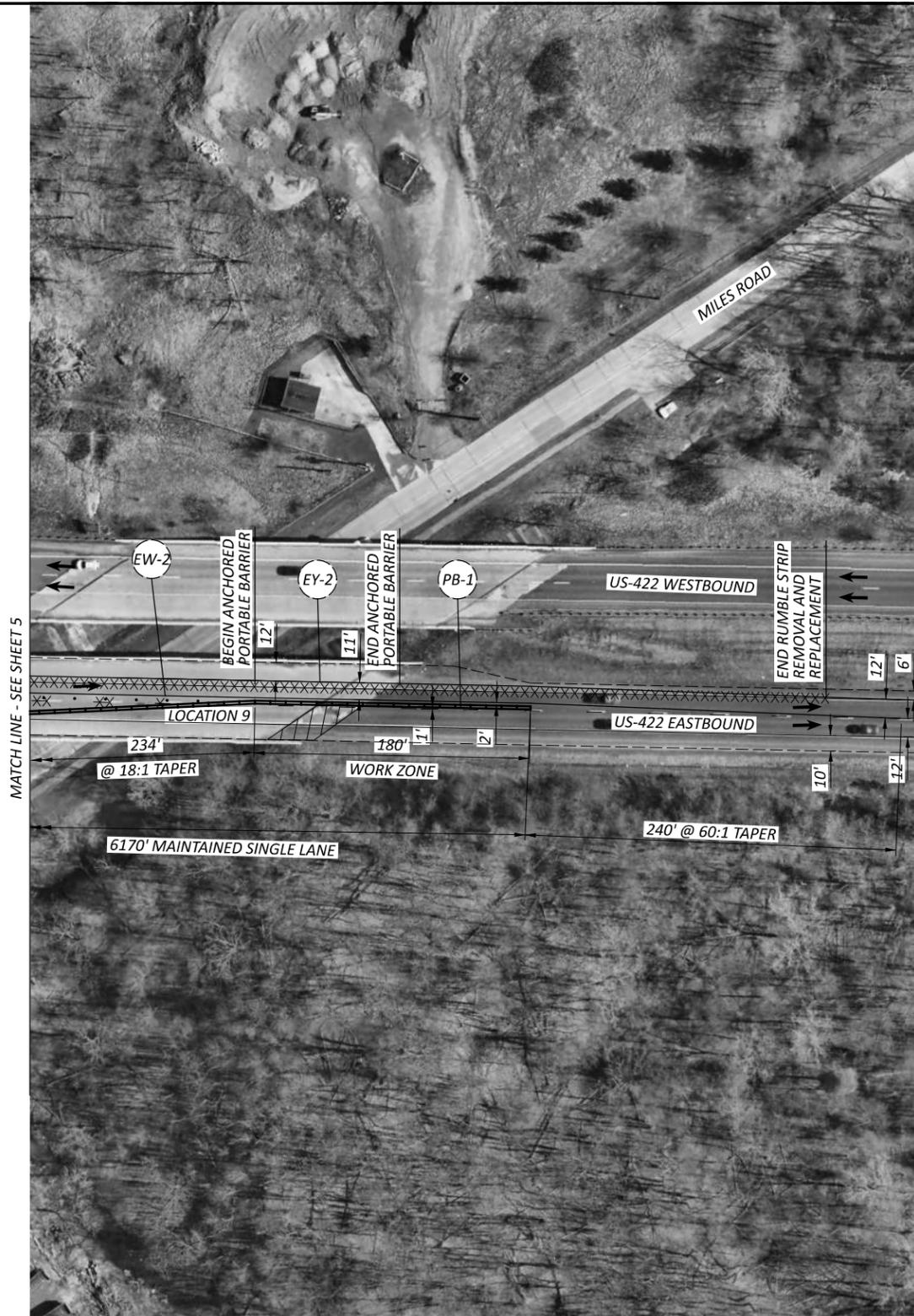


DESIGNER
SHT

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.23 65



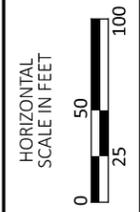
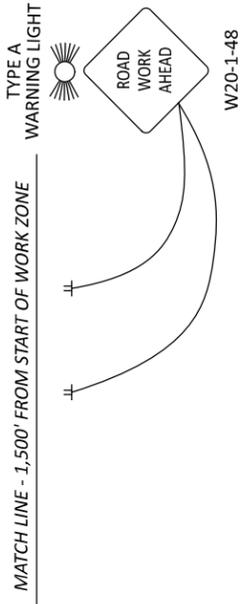
LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

- CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

MATCH LINE - 1,000' FROM START OF WORK ZONE



MAINTENANCE OF TRAFFIC PLAN
LOCATION 5, 14, 9, AND 6 - PHASE 2, SHEET 6

DESIGN AGENCY



DESIGNER
SHT

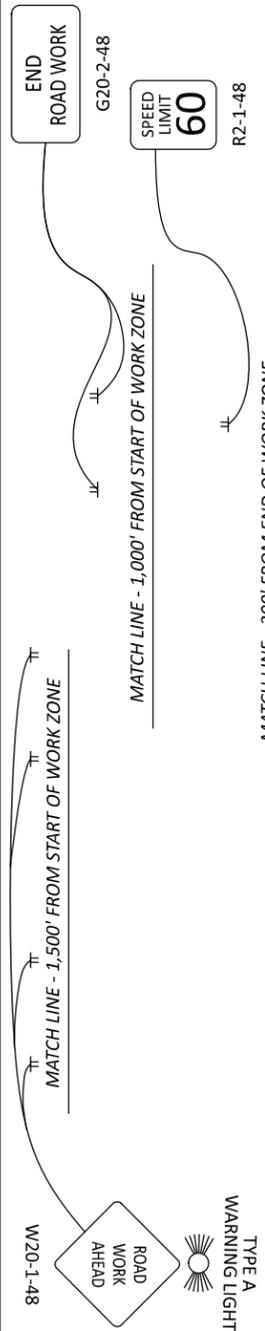
REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.24 | 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 01 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:09:49 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_WP004.dgn



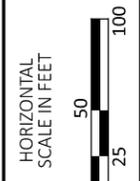
MATCH LINE - SEE SHEET 2

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 1**

DESIGN AGENCY



DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.25 65

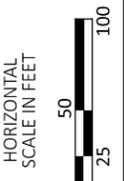


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 2**

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.26	65

MATCH LINE - SEE SHEET 2



MATCH LINE - SEE SHEET 4

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 3

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	117899
SHEET	TOTAL
P.27	65



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 4

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.28	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 05 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:10:29 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MPO04.dgn



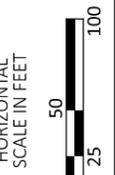
LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 5**

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
SHEET	117899
TOTAL	28
P.29	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 06 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:10:37 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MPO04.dgn

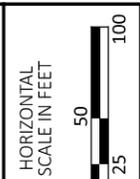
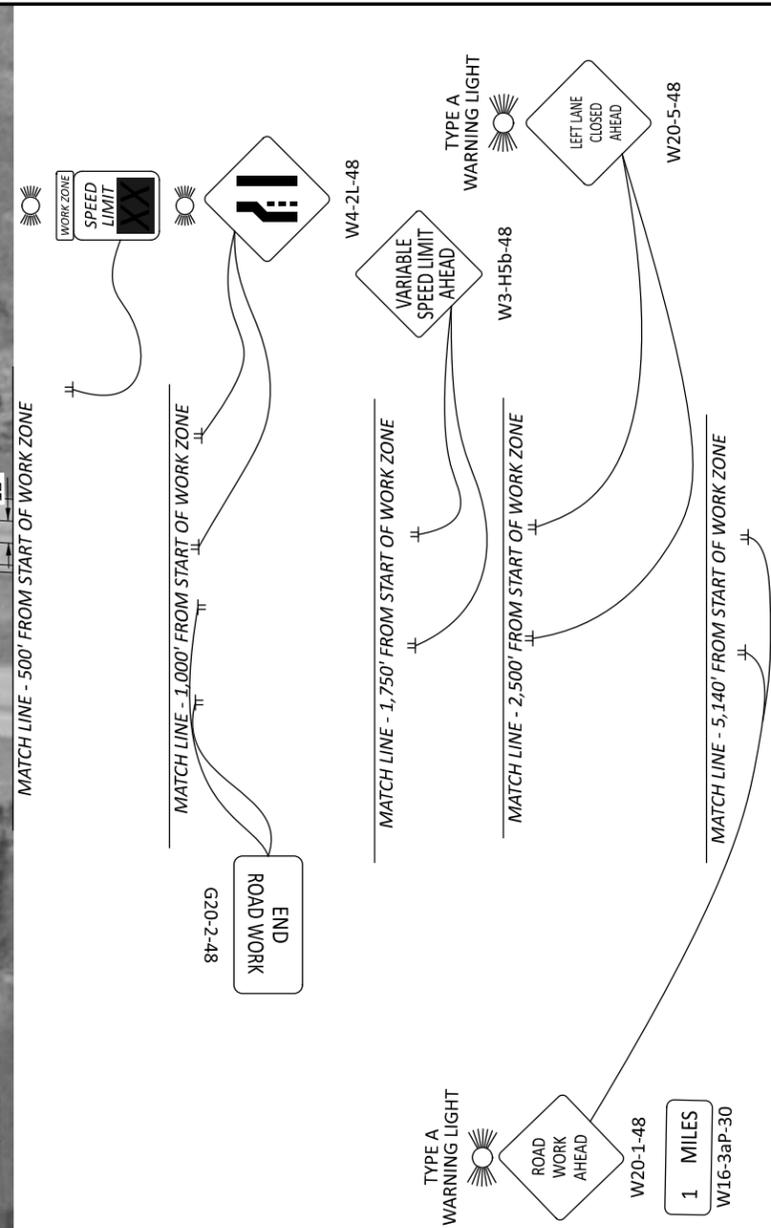
LEGEND

-  - REPAIR AREA
-  - PAVEMENT MARKING BLACK OUT
-  - DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
-  - WORK ZONE IMPACT ATTENUATOR
-  - DIRECTION OF TRAFFIC

-  LL - WORK ZONE LANE LINE, 6"
-  EY - WORK ZONE EDGE LINE, 6" (YELLOW)
-  EW - WORK ZONE EDGE LINE, 6" (WHITE)
-  DW - WORK ZONE DOTTED LINE, 6" (WHITE)
-  PB - PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 1, SHEET 6**

DESIGN AGENCY



DESIGNER
CJD

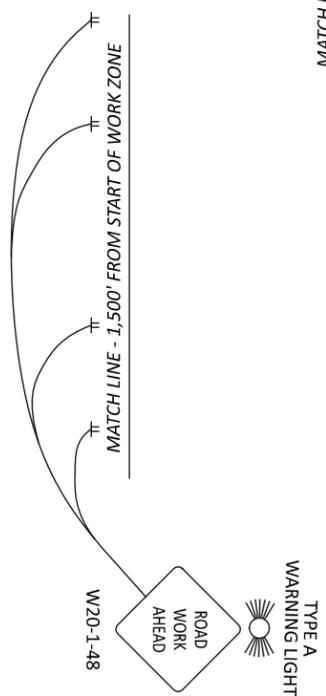
REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.30 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 01 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:10:44 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP204.dgn



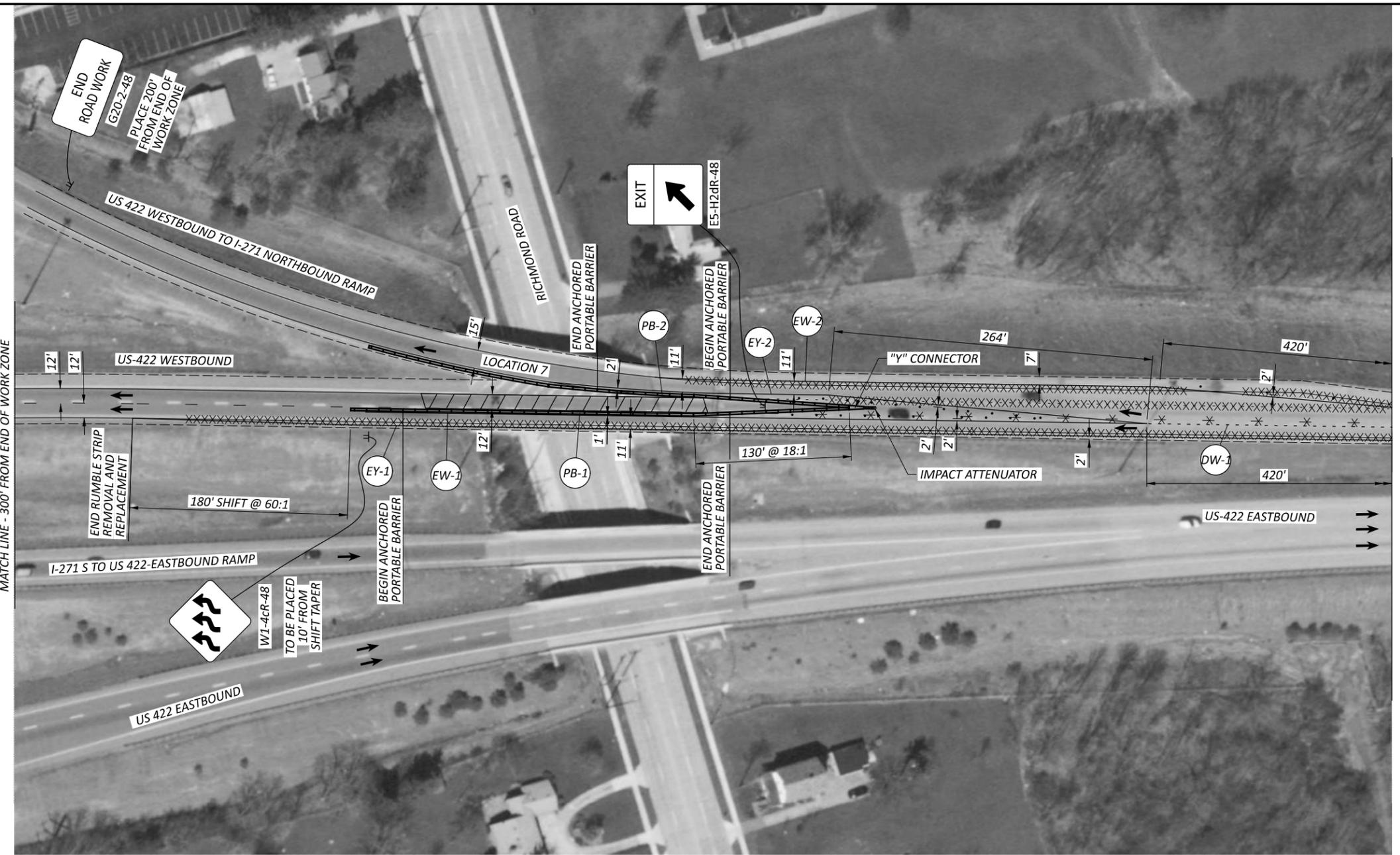
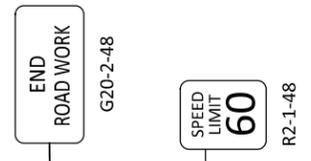
LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

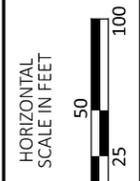
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MATCH LINE - SEE SHEET 2



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 1**

DESIGN AGENCY



DESIGNER

CJD

REVIEWER

CWP 06/28/23

PROJECT ID

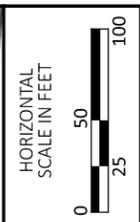
117899

SHEET TOTAL

P.31 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 02 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:10:51 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP204.dgn



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 2**

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD.	
DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.32	65



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 3

DESIGN AGENCY



DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET	TOTAL
P.33	65

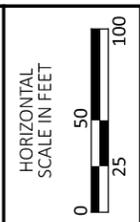


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 4**

DESIGN AGENCY

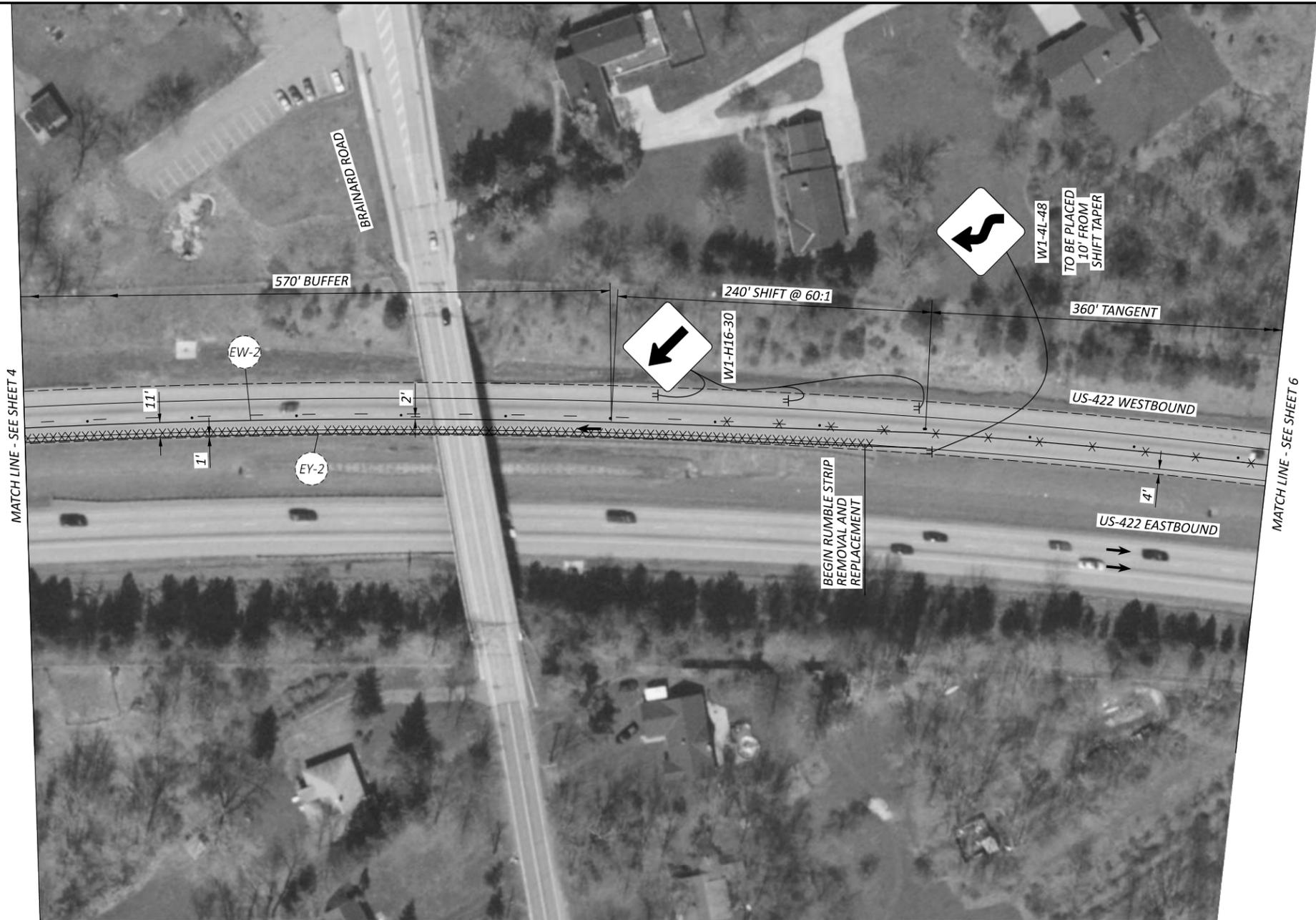


DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.34 | 65



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 5

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.35	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 06 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:11:34 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117895_MP204.dgn

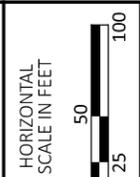
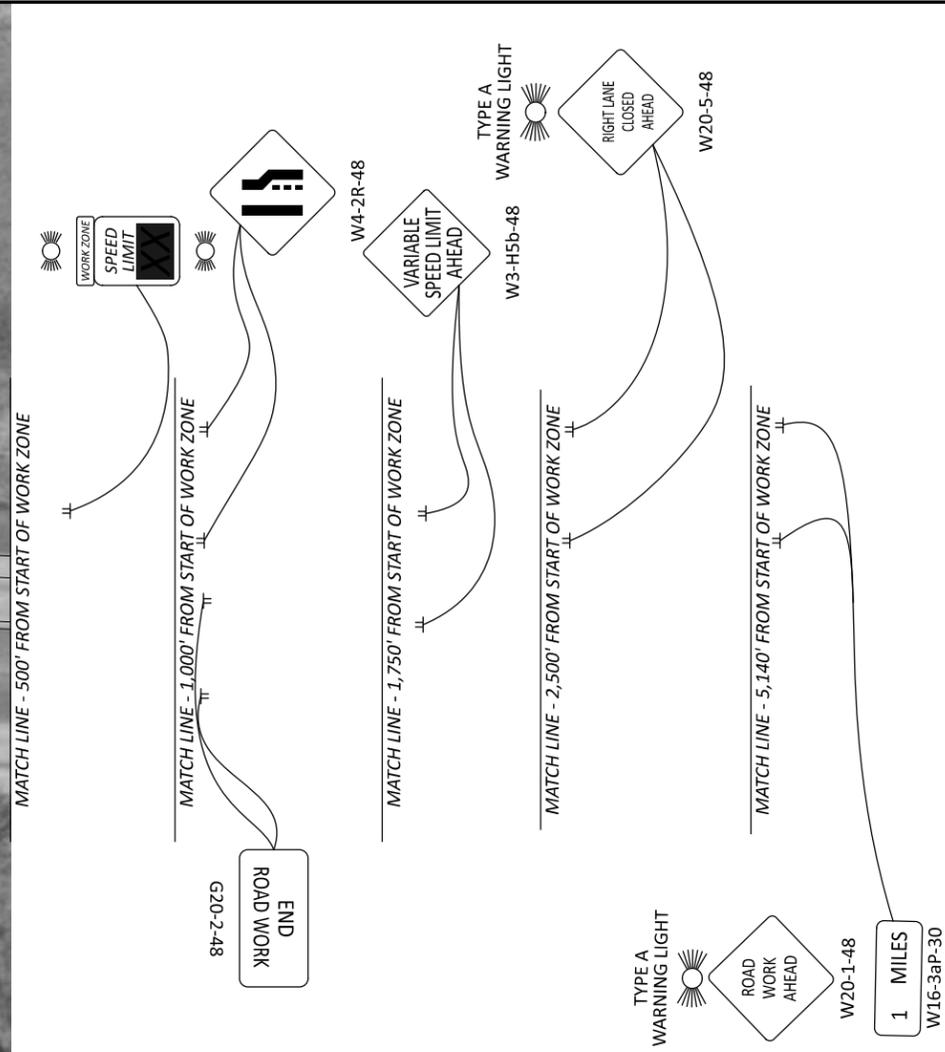
LEGEND

-  - REPAIR AREA
-  - PAVEMENT MARKING BLACK OUT
-  - DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
-  - WORK ZONE IMPACT ATTENUATOR
-  - DIRECTION OF TRAFFIC

-  - WORK ZONE LANE LINE, 6"
-  - WORK ZONE EDGE LINE, 6" (YELLOW)
-  - WORK ZONE EDGE LINE, 6" (WHITE)
-  - WORK ZONE DOTTED LINE, 6" (WHITE)
-  - PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 7 AND 8 - PHASE 2, SHEET 6**

DESIGN AGENCY



DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.36 65

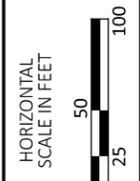
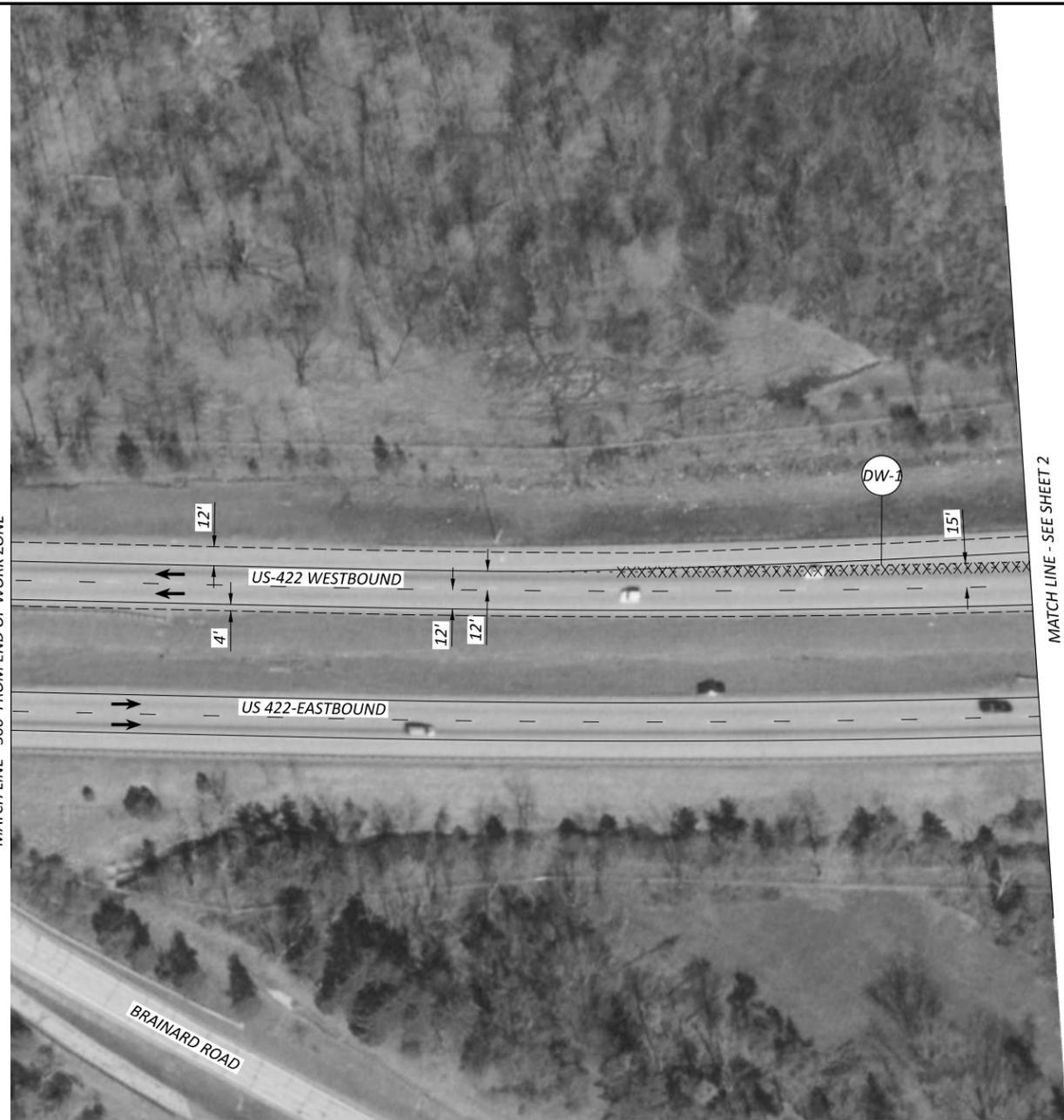
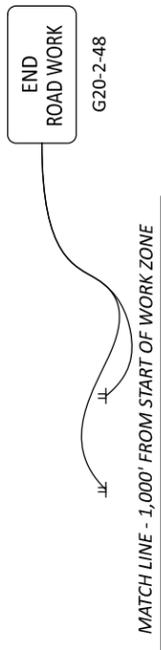
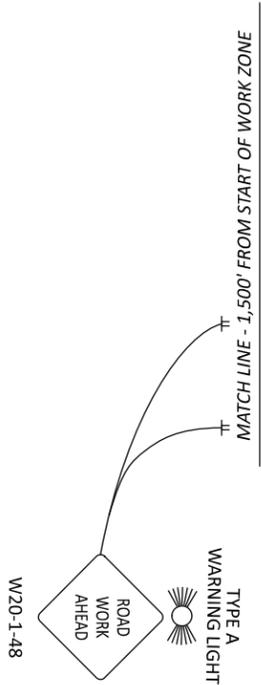
LEGEND

-  - REPAIR AREA
-  - PAVEMENT MARKING BLACK OUT
-  - DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
-  - WORK ZONE IMPACT ATTENUATOR
-  - DIRECTION OF TRAFFIC

-  - WORK ZONE LANE LINE, 6"
-  - WORK ZONE EDGE LINE, 6" (YELLOW)
-  - WORK ZONE EDGE LINE, 6" (WHITE)
-  - WORK ZONE DOTTED LINE, 6" (WHITE)
-  - PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 1, SHEET 1

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
SHEET	117899
TOTAL	65
P.37	

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 02 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:11:59 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MPO05.dgn



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

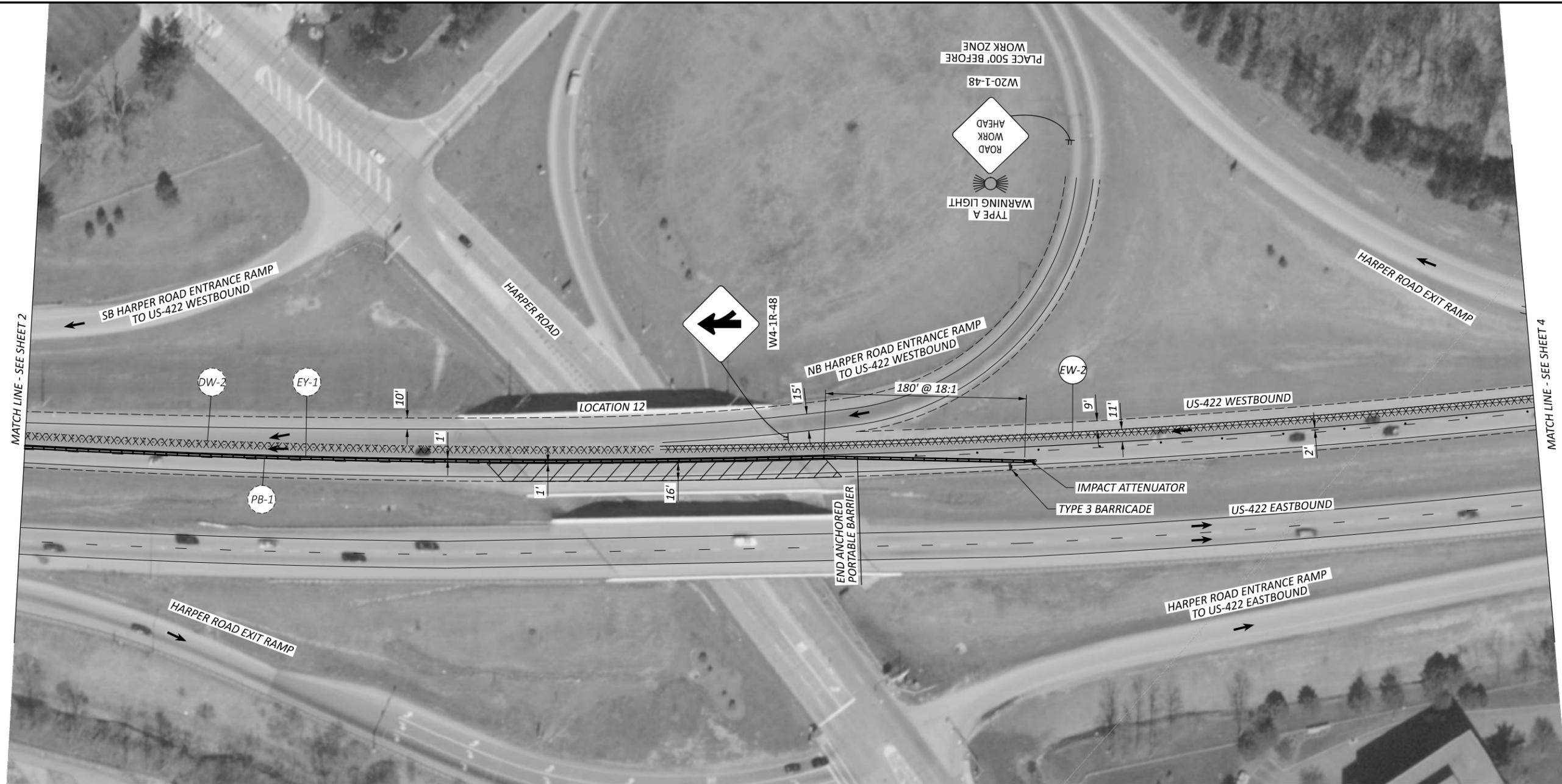


**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 1, SHEET 2**

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.38	65

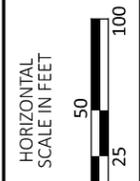


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

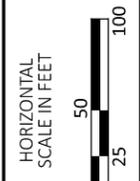


MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 1, SHEET 3

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP 06/28/23
PROJECT ID	117899
SHEET	TOTAL
P.39	65



MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 1, SHEET 4

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
SHEET	117899
TOTAL	P.40
	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 05 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:12:45 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP005.dgn

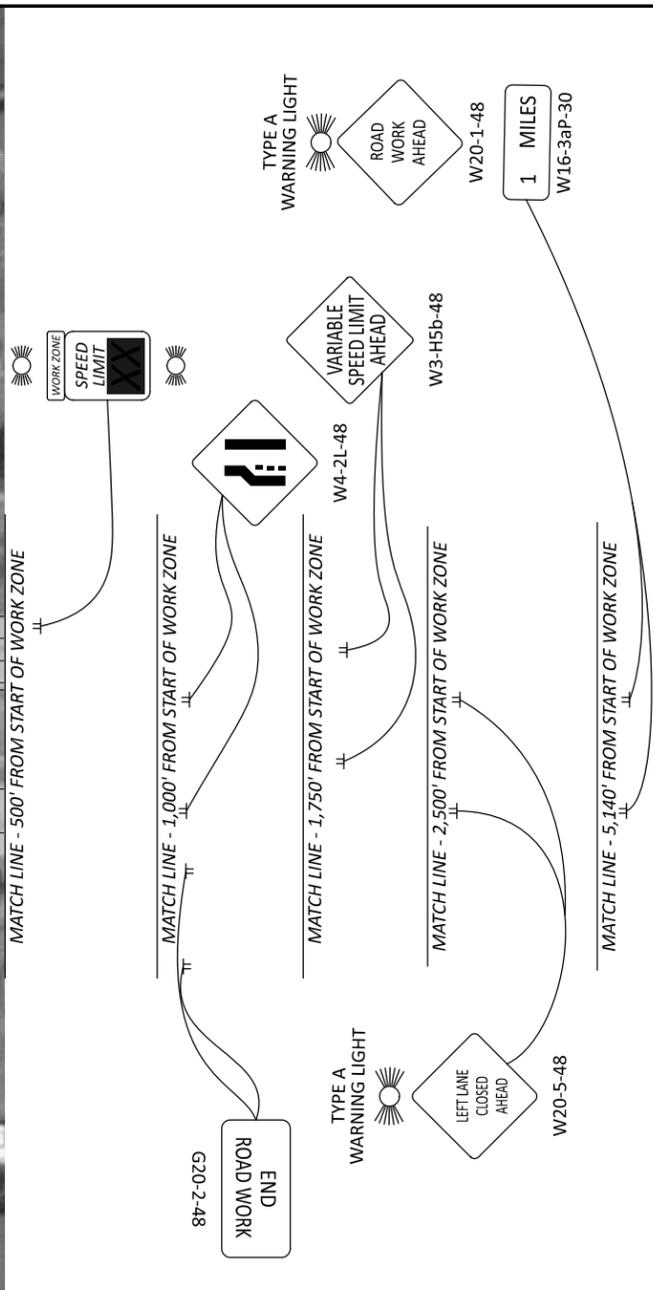


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6" (WHITE)
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 1, SHEET 5**

DESIGN AGENCY

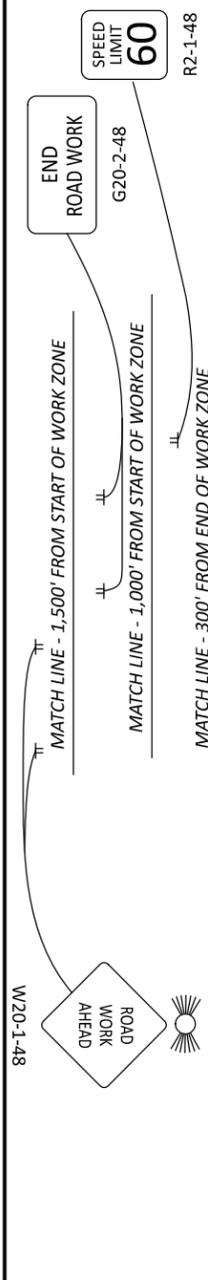


DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.41 65

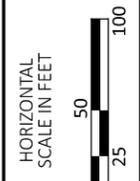


LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 2, SHEET 1

DESIGN AGENCY

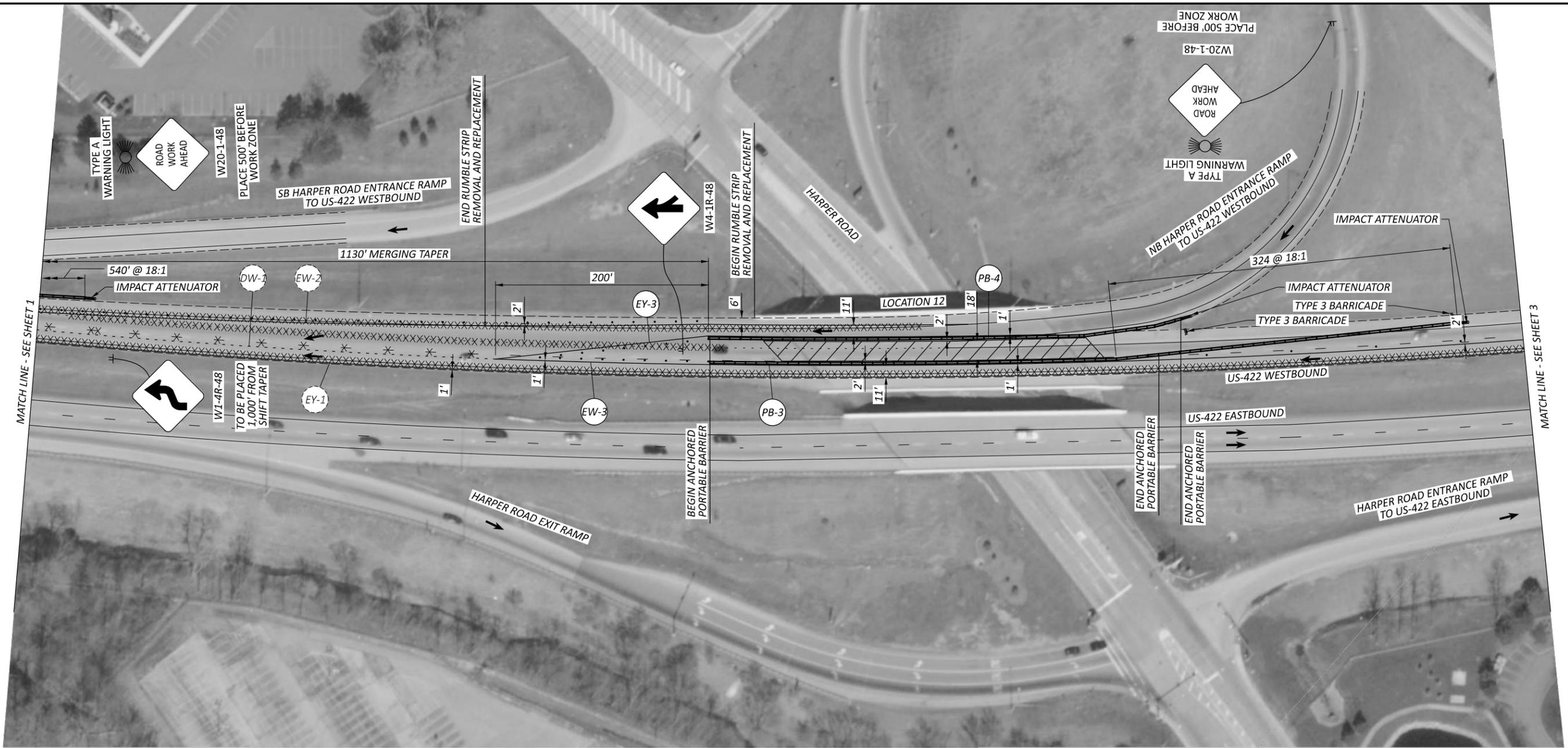


DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.42 65



MATCH LINE - SEE SHEET 1

MATCH LINE - SEE SHEET 3

LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 2, SHEET 2**

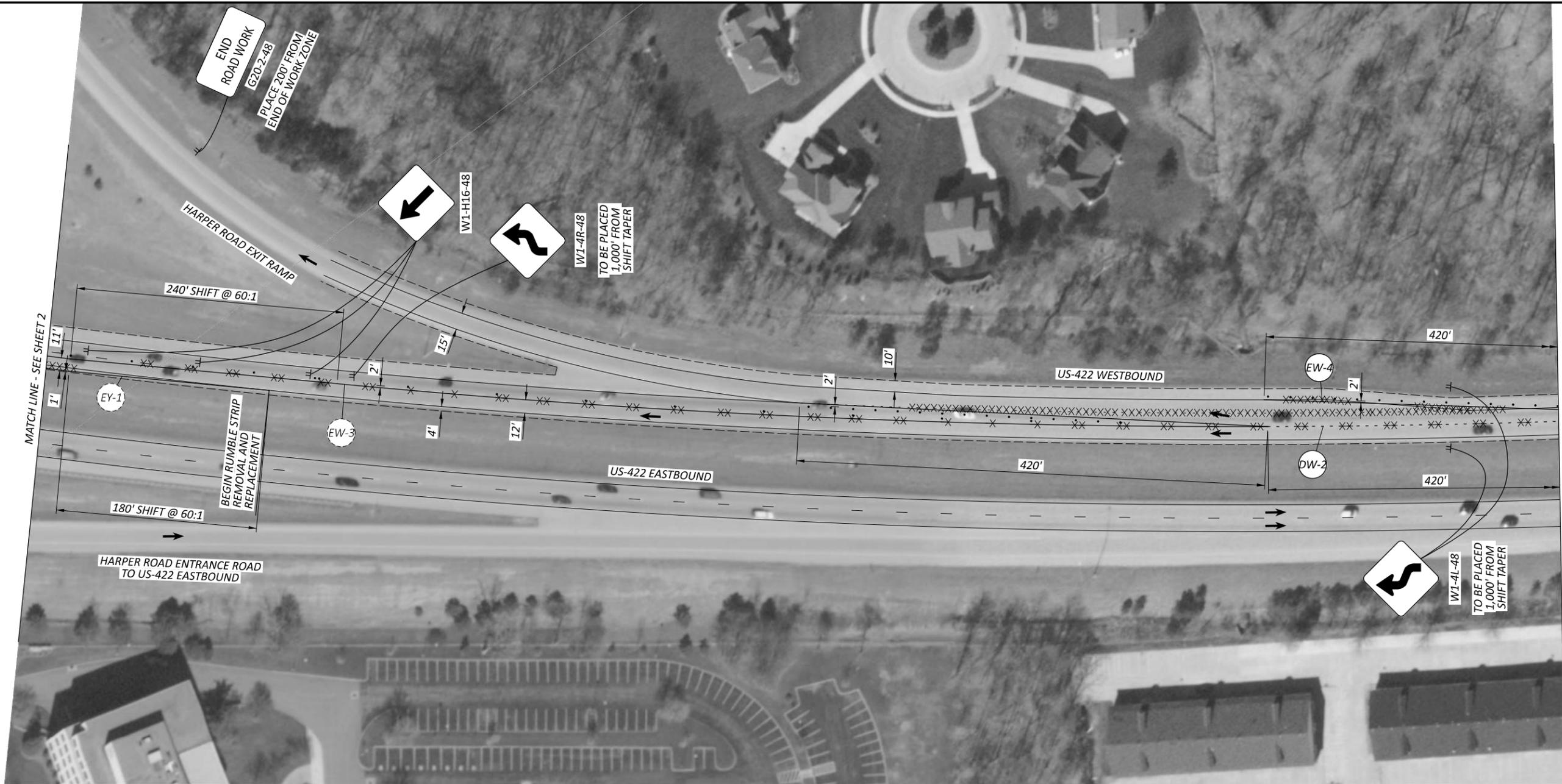
DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
	117899
SHEET	TOTAL
P.43	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 03 PAPER: SIZE: 17x11 (in.) DATE: 6/29/2023 TIME: 2:13:19 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117899_MP205.dgn



LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC
- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 2, SHEET 3**

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	06/28/23
SHEET	117899
TOTAL	65
P.44	

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 04 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:13:33 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117895_MP205.dgn



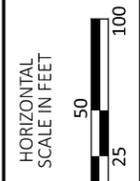
LEGEND

- REPAIR AREA
- PAVEMENT MARKING BLACK OUT
- DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
- WORK ZONE IMPACT ATTENUATOR
- DIRECTION OF TRAFFIC

- WORK ZONE LANE LINE, 6"
- WORK ZONE EDGE LINE, 6" (YELLOW)
- WORK ZONE EDGE LINE, 6" (WHITE)
- WORK ZONE DOTTED LINE, 6" (WHITE)
- PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 2, SHEET 4**

DESIGN AGENCY



DESIGNER	CJD
REVIEWER	CWP
PROJECT ID	117899
SHEET	TOTAL
P.45	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 05 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:13:39 PM USER: thomas P:\23075 ODOT D3-D12 GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\WOT\Sheets\117895_MP205.dgn

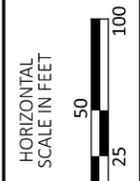
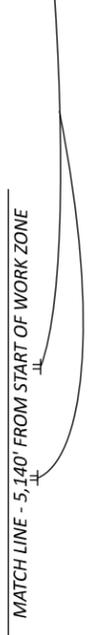
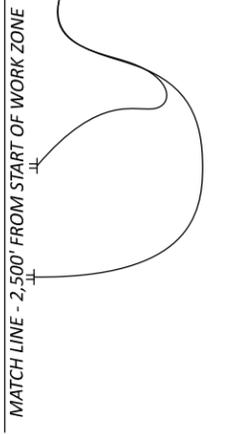
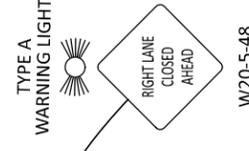
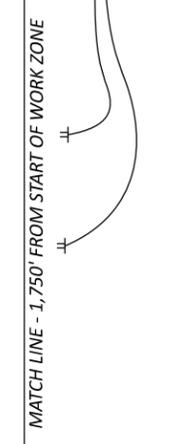
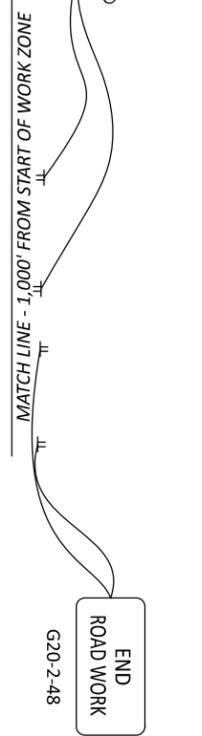
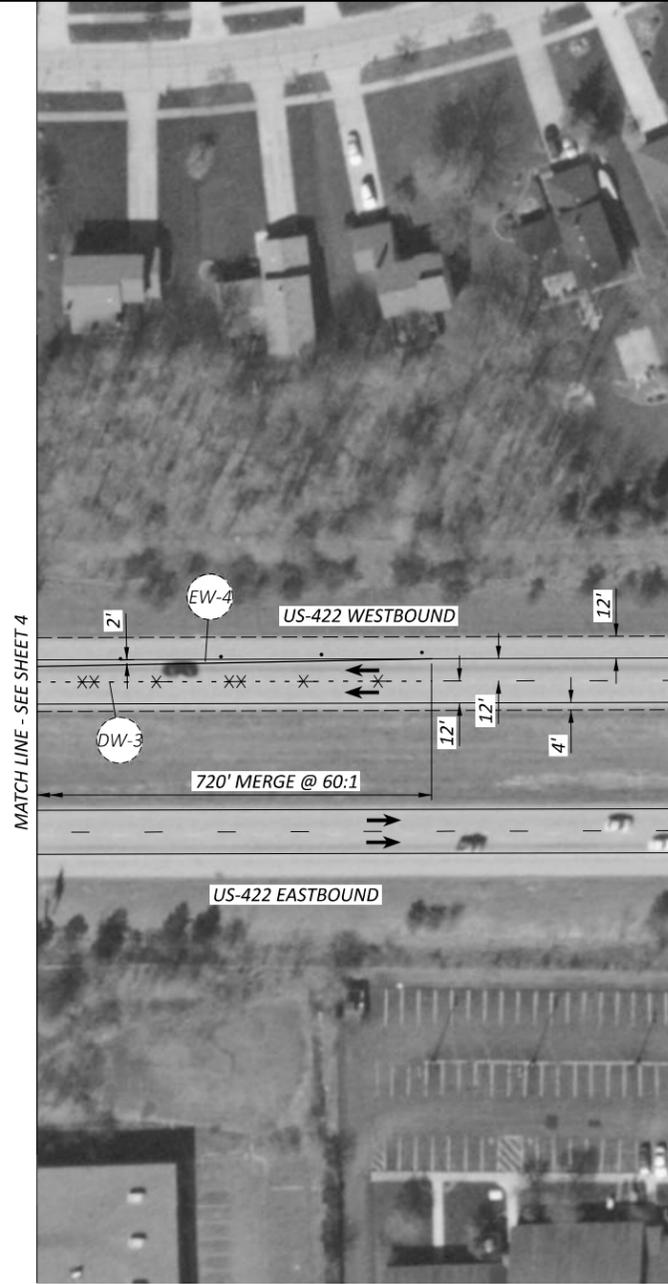
LEGEND

-  - REPAIR AREA
-  - PAVEMENT MARKING BLACK OUT
-  - DRUMS (SPACING PER ODOT STD. CONSTRUCTION DRAWINGS)
-  - WORK ZONE IMPACT ATTENUATOR
-  - DIRECTION OF TRAFFIC

-  - WORK ZONE LANE LINE, 6"
-  - WORK ZONE EDGE LINE, 6" (YELLOW)
-  - WORK ZONE EDGE LINE, 6" (WHITE)
-  - WORK ZONE DOTTED LINE, 6" (WHITE)
-  - PORTABLE BARRIER

NOTES

1. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS. PAYMENT TO BE INCLUDED IN LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.



**MAINTENANCE OF TRAFFIC PLAN
LOCATION 10 AND 12 - PHASE 2, SHEET 5**

DESIGN AGENCY



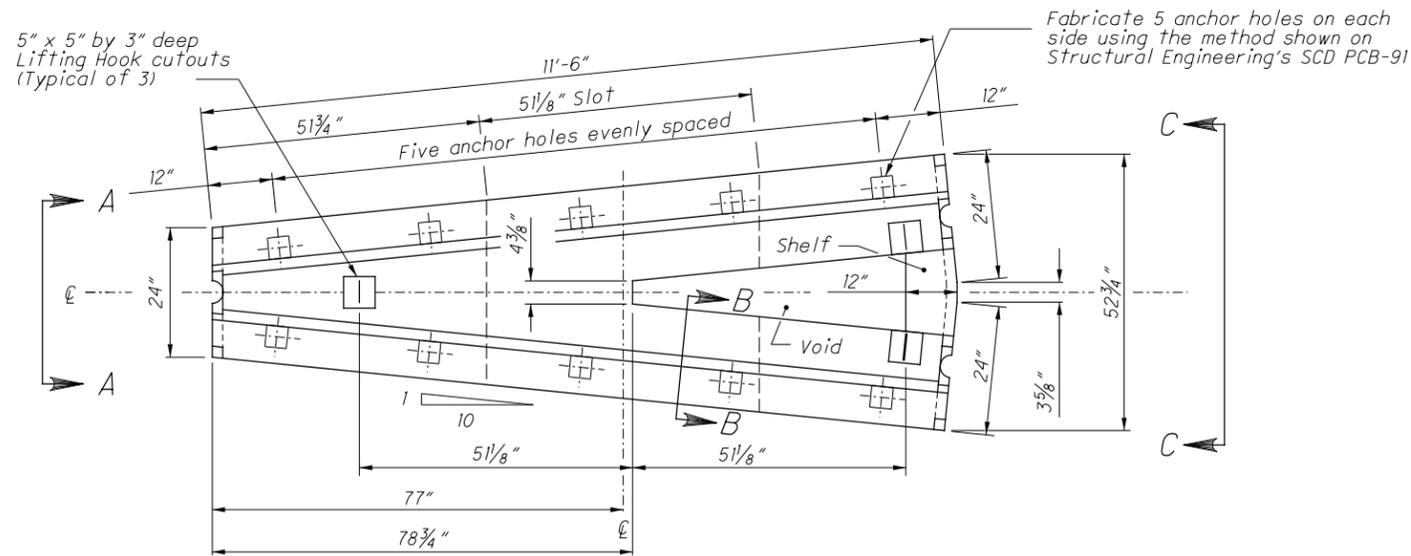
DESIGNER
CJD

REVIEWER
CWP 06/28/23

PROJECT ID
117899

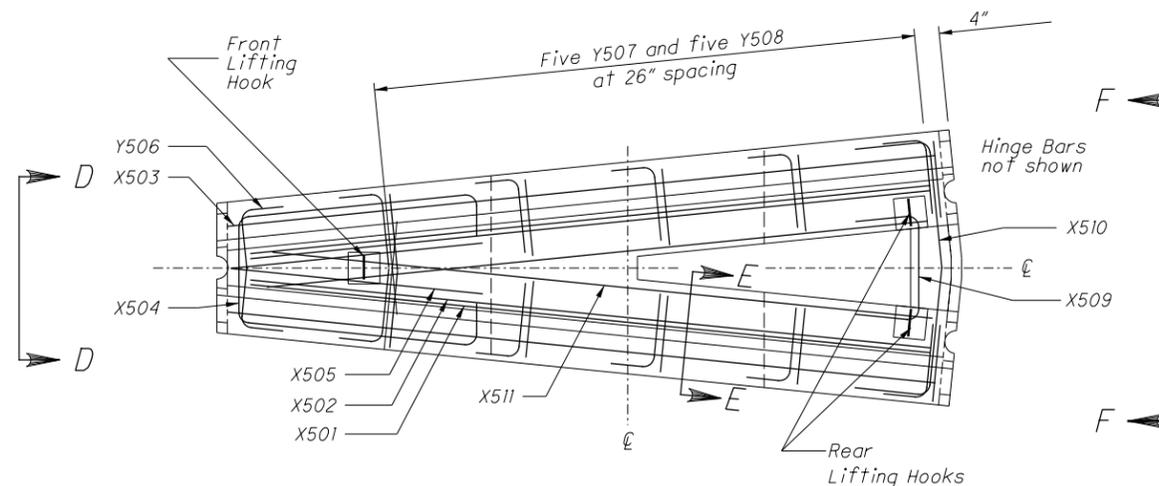
SHEET TOTAL
P.46 65

P:\23075 ODOT D3-D12_GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899_400-Engineering\MOT_Sheets\117899_MM001.dgn Sheet 1 6/29/2023 2:13:49 PM thomas

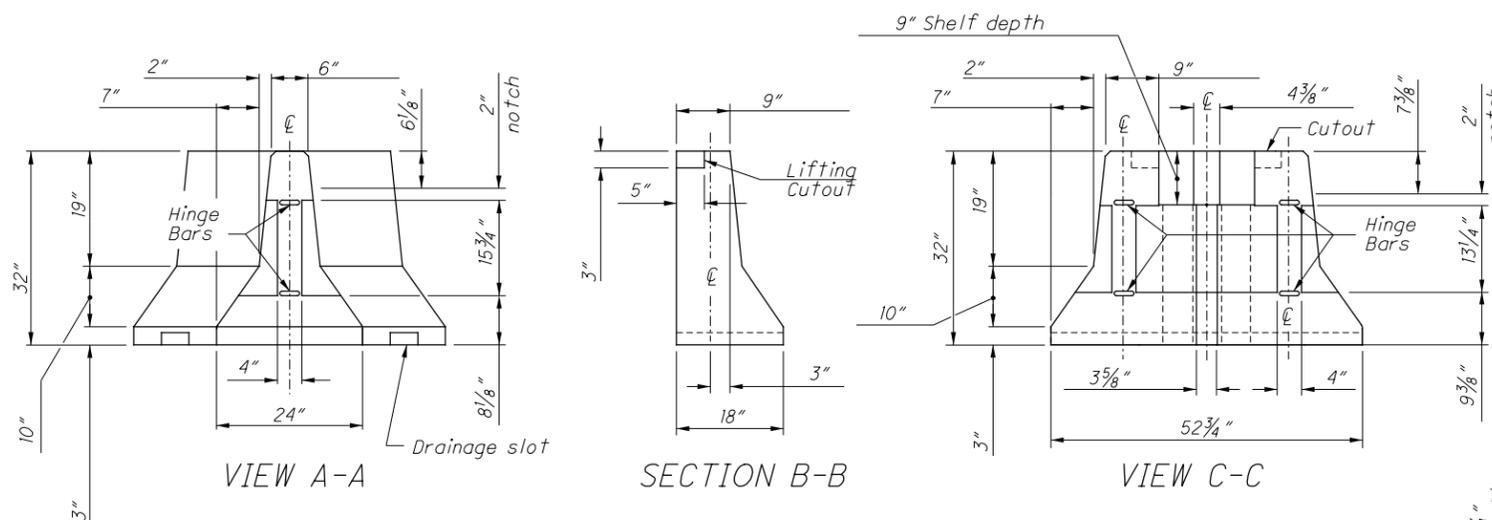


PLAN

Fabricate 5 anchor holes on each side using the method shown on Structural Engineering's SCD PCB-91



REINFORCING PLAN VIEW



NOTES

GENERAL: This barrier segment is used to split one run of portable concrete barrier into dual runs. Attach directly to ODOT's 32" PCB; however, other approved barrier shapes may be connected to this segment by the use of an appropriate transition unit. Attach at least one standard PCB segment in between this "Y" and an Impact Attenuator. Its field application is shown in MOT plans and on MT standard drawings. Do not use this barrier in an unanchored configuration next to bridge deck edges or similar dropoffs, anchor according to method shown on PCBDD or other approved method.

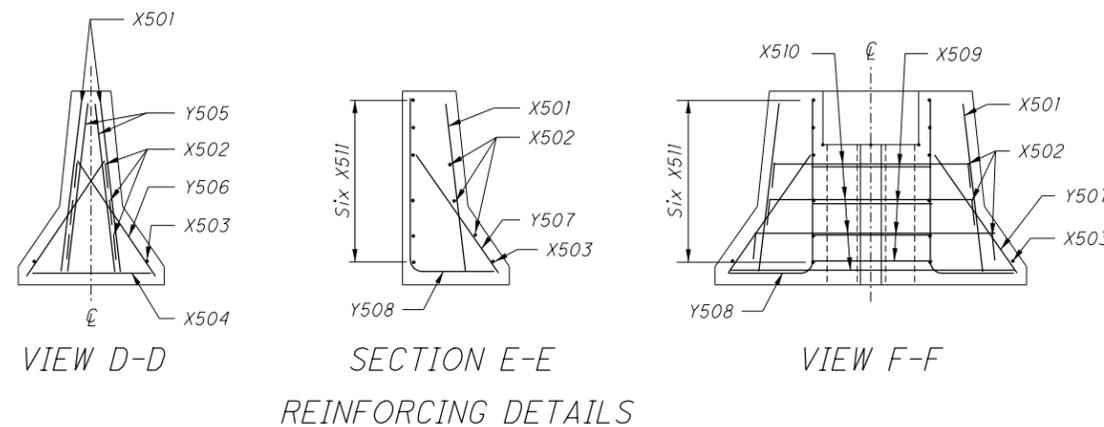
BARRIER DETAILS: Use SCD RM-4.2 for details not shown here, including the geometry of this pin and loop segment matches in every way the design of the end connections shown on the HINGED CONNECTION and JOINT CONNECTION Details (the alternate J-J Hooks connection design is permitted). Additionally, barrier edges may be radiused or chamfered as per the LEGEND Note, barrier is to be permanently marked as mentioned in the MARKINGS Note, and delineate as per the REFLECTORIZATON Note.

MATERIAL SPECIFICATIONS: The minimum design strength of the concrete is 4,000 psi and meets the requirements of CMS 499. For reinforcing steel, use ASTM A615 Grade 60 black steel and provide 2" min. rebar cover. Material specifications for the Hinge and Reinforcing Bars, as well as the Connecting Hardware may be found on SCD RM-4.2. For additional material specifications not shown here, see SCD RM-4.2 and CMS 622.

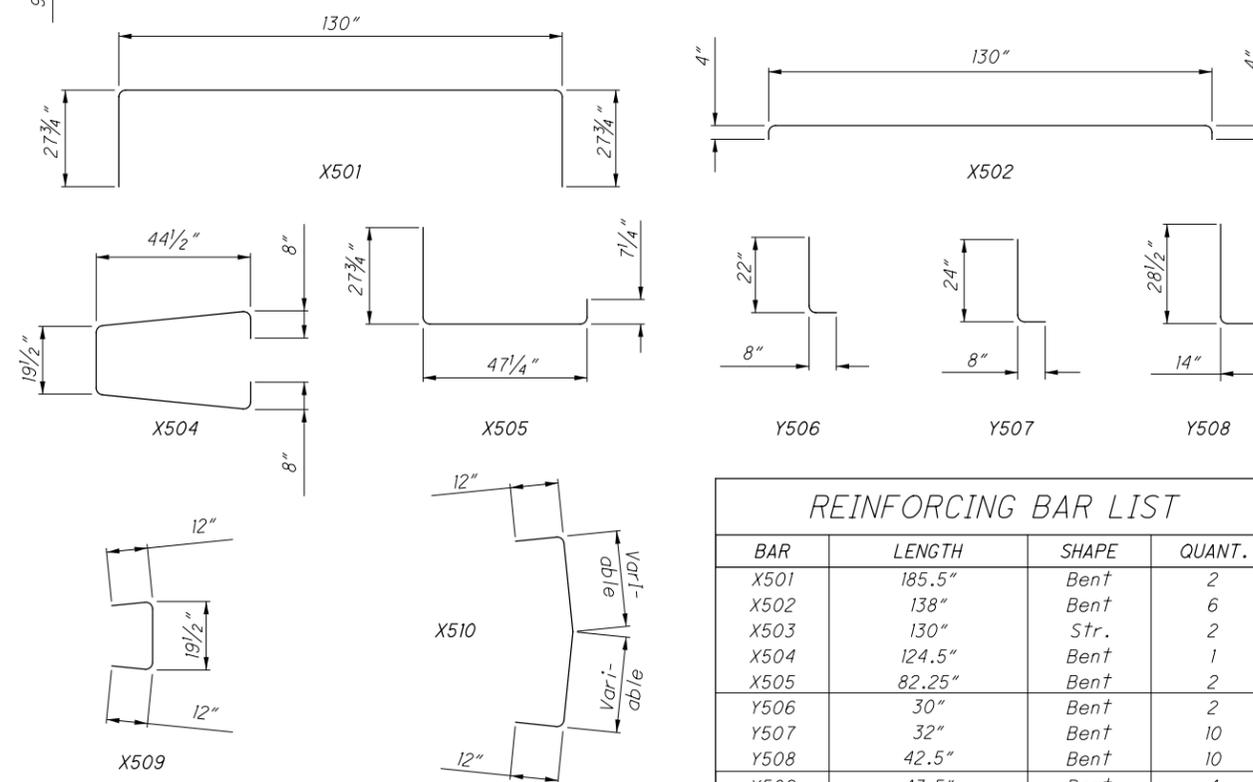
HANDLING: The fabricator is responsible for the design of a lifting system for handling segments. As a minimum, use three lifting points at the locations suggested in the Plan views, and design with a lifting factor of safety of 4. Any protrusions from the lifting hook design is not to affect the crash worthiness of the barrier. The calculations shall be signed, sealed and dated by a Registered Engineer and include these calculations with the Manufacturing Drawings required by Supplement 1073.12. Refer to Part 5 of the PCI Handbook. Approximate segment weight is 8,500 lbs [3850 kg].

PAYMENT: Payment will be made under Item 622 - Portable Barrier, "Y" Connector, Each, and will include all forms, materials and labor to cast this segment.

ALTERNATE METHOD: Contractors may choose to use a wide Impact Attenuator in lieu of the concrete "Y" alternate. The chosen unit will be a Type 2 or 3 Impact Attenuator matching the product previously called for on the project plans at the expected installation location.



REINFORCING DETAILS



BENDING DIAGRAMS

REINFORCING BAR LIST			
BAR	LENGTH	SHAPE	QUANT.
X501	185.5"	Bent	2
X502	138"	Bent	6
X503	130"	Str.	2
X504	124.5"	Bent	1
X505	82.25"	Bent	2
Y506	30"	Bent	2
Y507	32"	Bent	10
Y508	42.5"	Bent	10
X509	43.5"	Bent	4
X510	Varies	Bent	4
X511	124"	Str.	12

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 1 PAPER: 11x17 (in.) DATE: 6/29/2023 TIME: 2:13:50 PM USER: thomas P:\23075\DOT\3-012\GES\117277\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117899\400-Engineering\Roadway\Sheets\117899_G002.dgn

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	9	10	53						01/NFP/47							
STRUCTURE REPAIR (CUY-422-1468R, SFN 1814850 - LOCATION 9)																		
					42							42	202	22901	42	SY	APPROACH SLAB REMOVED, AS PER PLAN	52
					4							4	304	20001	4	CY	AGGREGATE BASE, AS PER PLAN	52
					10							10	519	10000	10	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					42							42	526	15001	42	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN	52
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
STRUCTURE REPAIR (CUY-422-1597L, SFN 1814885 - LOCATION 10)																		
					18							18	519	10000	18	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
STRUCTURE REPAIR (CUY-422-1597R, SFN 1814893 - LOCATION 11)																		
					5							5	519	10000	5	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
STRUCTURE REPAIR (CUY-422-1627L, SFN 1814907 - LOCATION 12)																		
					77							77	202	22901	77	SY	APPROACH SLAB REMOVED, AS PER PLAN	52
					7							7	304	20001	7	CY	AGGREGATE BASE, AS PER PLAN	52
					20							20	519	10000	20	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					77							77	526	15001	77	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN	52
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
STRUCTURE REPAIR (CUY-422-1627R, SFN 1814915 - LOCATION 13)																		
					41							41	519	10000	41	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
STRUCTURE REPAIR (CUY-480N-140WE, SFN 1814753 - LOCATION 14)																		
					31							31	519	10000	31	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	
					LS							LS	SPECIAL	53000200	LS		STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	52
MAINTENANCE OF TRAFFIC																		
		240										240	614	11110	240	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		8,904										8,904	614	11630	8,904	FT	INCREASED BARRIER DELINEATION	
				11								11	614	12380	11	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
LS												LS	614	12420	LS		DETOUR SIGNING	
		179										179	614	13310	179	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
		179										179	614	13350	179	EACH	OBJECT MARKER, ONE WAY	
	6											6	614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
					0.39							0.39	614	20210	0.39	MILE	WORK ZONE LANE LINE, CLASS I, 6", 740.06, TYPE I	
					10.29							10.29	614	22210	10.29	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
					600							600	614	23410	600	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I	
					9,893							9,893	614	24402	9,893	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
					28,899							28,899	614	98100	28,899	FT	WORK ZONE PAVEMENT MARKING, MISC.: REMOVABLE, NON-REFLECTIVE PREFORMED BLACKOUT TAPE	9
				1.66								1.66	618	40600	1.66	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
					1							1	622	41050	1	EACH	PORTABLE BARRIER, "Y" CONNECTOR	
					4,460							4,460	622	41100	4,460	FT	PORTABLE BARRIER, UNANCHORED	
					4,444							4,444	622	41110	4,444	FT	PORTABLE BARRIER, ANCHORED	
					12							12	808	18700	12	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
					48							48	896	00010	48	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I	
					12							12	896	00020	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN	
INCIDENTALS																		
												LS	108	10000	LS		CPM PROGRESS SCHEDULE	
LS												LS	614	11000	LS		MAINTAINING TRAFFIC	
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.49 | 65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Sheet 1 PAPER: 17x11 (in.) DATE: 6/29/2023 TIME: 2:13:51 PM USER: thomas P:\23075 ODOT D3-D12 GES\117271\Task 6 - CUY-BH-FY2024(B) Approach Slabs\117699\400-Engineering\Traffic\Sheets\117699_TS001.dgn

SHEET NO.	REFERENCE NO.	ITEM NO.			LENGTH	WIDTH	AREA	646	646	646	646	646	646	621	621	621						
		EDGE LINE, 6" (WHITE)	EDGE LINE, 6" (YELLOW)	LANE LINE, 6"				CHANNELIZING LINE, 12"	TRANSVERSE/DIAGONAL LINE (WHITE)	DOTTED LINE, 6"	ONE WAY WHITE RPM	TWO WAY WHITE/RED RPM	RAISED PAVEMENT MARKER REMOVED									
		FROM	TO	FT	FT	SQ FT	MILE	MILE	MILE	FT	FT	FT	EACH	EACH	EACH							
LOCATION 1 (CUY-90-2200)																						
		REAR APPROACH SLAB	LT	25			25	25	75													
		FORWARD APPROACH SLAB	LT	25			25	25	75													
LOCATION 2 (CUY-480N-0011)																						
		REAR APPROACH SLAB	LT	30			30	30	60				1		1							
		MILLING NEXT TO REAR A.S.	LT	50			50					50										
LOCATION 3 (CUY-480N-0036)																						
		REAR APPROACH SLAB	LT	25			25	25	50			25										
		FORWARD APPROACH SLAB	LT	25			25	25	50			25										
		MILLING NEXT TO REAR A.S.	LT	50			50				50		1		1							
		MILLING NEXT TO FORWARD A.S.	LT	50			50		50	50		50		1	1	1						
LOCATION 4 (CUY-480N-0054)																						
		FORWARD APPROACH SLAB	LT	25			25	25	50	50												
LOCATION 5 (CUY-480N-0129)																						
		REAR APPROACH SLAB	LT	25			25	25	25	25												
		FORWARD APPROACH SLAB	LT	25			25	25	25	75	50											
LOCATION 6 (CUY-422-1390R)																						
		REAR APPROACH SLAB	RT	25			25	25														
LOCATION 7 (CUY-422-1390L)																						
		REAR APPROACH SLAB	LT	25			25	25	25	50												
		FORWARD APPROACH SLAB	LT	25			25	25	25			25										
		MILLING NEXT TO FORWARD A.S.	LT	50				50	50			50		1		1						
LOCATION 8 (CUY-422-1468L)																						
		FORWARD APPROACH SLAB	LT	25			25	25	25													
		MILLING NEXT TO FORWARD A.S.	LT	50			50	50	50					1		1						
LOCATION 9 (CUY-422-1468R)																						
		FORWARD APPROACH SLAB	RT	25			25	25	25													
		MILLING NEXT TO FORWARD A.S.	RT	50			50	50	50					1		1						
LOCATION 10 (CUY-422-1597L)																						
		REAR APPROACH SLAB	LT	25			25	25	25													
LOCATION 11 (CUY-422-1597R)																						
		REAR APPROACH SLAB	RT	25			25	25	25	25												
LOCATION 12 (CUY-422-1627L)																						
		REAR APPROACH SLAB	LT	25			25	25	25			25										
		FORWARD APPROACH SLAB	LT	25			25	25	25	50												
		MILLING NEXT TO FORWARD A.S.	LT	50				100	50	50				1		1						
LOCATION 13 (CUY-422-1627R)																						
		REAR APPROACH SLAB	RT	25			25	25	25													
		FORWARD APPROACH SLAB	RT	25			25	25	25													
LOCATION 14 (CUY-480N-140WE)																						
		REAR APPROACH SLAB	RT	25			25	25	25													
		FORWARD APPROACH SLAB	RT	25			25	25	25													
SUBTOTALS																						
							780	780	960	375	50	280		6	1	7						
TOTALS CARRIED TO GENERAL SUMMARY								0.30	0.18	375	50	280		6	1	7						

PAVEMENT MARKING SUBSUMMARY

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
EL

REVIEWER
CWP 06/28/23

PROJECT ID
117899

SHEET TOTAL
P.50 | 65

STRUCTURE NOTES

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD DRAWING(S):
BP-2.1 REVISED 01-21-2022

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):
800 DATED 04-21-2023

DESIGN SPECIFICATIONS:

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

DESIGN DATA:

CONCRETE CLASS QC2 COMPRESSIVE STRENGTH 4.5 KSI (APPROACH SLABS)

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (APPROACH SLABS)

MAINTENANCE OF TRAFFIC:

TRAFFIC IS TO BE MAINTAINED THROUGHOUT CONSTRUCTION.

REFER TO THE MAINTENANCE OF TRAFFIC PLANS FOR DETAILS, OTHER REQUIREMENTS AND PAYMENT PROVISIONS.

EXISTING CONDITIONS VERIFICATION:

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

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

PROPOSED WORK:

THE CONTRACTOR SHALL ONLY PERFORM THE WORK INCLUDED IN THE STRUCTURE DATA SHEET, FRAMED TEXT, AND/OR GENERAL NOTES.

EXISTING PAVEMENT MARKINGS:

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

CONTINGENCY QUANTITIES:

CONTINGENCY QUANTITIES ARE ONLY TO BE USED AT THE DIRECTION OF THE ENGINEER.

EQUIPMENT AND MATERIALS STORAGE:

TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC, THE CONTRACTOR'S ATTENTION IS DIRECTED TO C&MS 614.03.

IN ADDITION, THE FOLLOWING PROVISIONS SHALL APPLY:

- NO REMOVED ITEMS ARE PERMITTED TO BE STORED IN THE RIGHT-OF-WAY.
- NO STORAGE OF EQUIPMENT, MATERIALS, OR VEHICLES WITHIN THE RIGHT-OF-WAY WILL BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO COST TO THE STATE.

DESCRIPTION OF THE WORK:

THE FOLLOWING WORK IS ANTICIPATED AT EACH LOCATION. THIS DESCRIPTION IS NOT ALL-INCLUSIVE. REFER TO THE PLANS AND QUANTITIES.

1. PATCH SURFACES OF APPROACH SLABS AND BRIDGE DECK.
2. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS.
3. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS. REMOVE AND REPLACE PORTIONS OF ADJACENT PAVEMENT/SHOULDER.
4. PATCH SURFACES OF APPROACH SLABS. REMOVE AND REPLACE PORTIONS OF ADJACENT PAVEMENT/SHOULDER.
5. PATCH SURFACES OF APPROACH SLABS. PATCH PORTIONS OF ADJACENT PAVEMENT/SHOULDER.
6. PATCH SURFACES OF APPROACH SLABS AND BRIDGE DECK.
7. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS.
8. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS.
9. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS.
10. PATCH SURFACES OF APPROACH SLABS.
11. PATCH SURFACES OF APPROACH SLABS.
12. REMOVE AND REPLACE PORTIONS OF APPROACH SLABS. PATCH SURFACES OF APPROACH SLABS.
13. PATCH SURFACES OF APPROACH SLABS.
14. PATCH SURFACES OF APPROACH SLABS.

ITEM 202 - APPROACH SLAB REMOVED, AS PER PLAN:

DESCRIPTION:

THIS WORK SHALL INCLUDE PARTIAL REMOVAL OF APPROACH SLABS BY SAW-CUTTING, PNEUMATIC HAMMERS, ETC., AND ANY OTHER APPURTENANCES NEEDED TO COMPLETE THE WORK AS SHOWN IN THE PLANS, IN ACCORDANCE WITH C&MS 202, AND AS HEREIN SPECIFIED.

EXECUTION:

REMOVAL OPERATIONS SHALL UTILIZE METHODS THAT WILL NOT DAMAGE THE ADJACENT BRIDGE SLAB, BACKWALL, APPROACH SLAB, OR PAVEMENT TO REMAIN. ANY DAMAGE TO PORTIONS OF EXISTING STRUCTURE TO REMAIN RESULTING FROM THE

CONTRACTOR'S REMOVAL OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE DEPARTMENT.

CUT LINE CONSTRUCTION JOINT PREPARATION

SAW-CUTS SHALL BE PARALLEL TO THE ROADWAY CENTERLINE.

SAW-CUT FULL DEPTH THROUGH APPROACH SLABS EXCEPT WITHIN THREE FEET (3.0') FROM THE TRANSVERSE JOINT ON TOP OF THE BACKWALL. SAW CUT TWO INCHES (2") DEEP WITHIN THAT DISTANCE. PRESERVE ANY EXISTING ANCHORAGE DOWELS INTO THE BACKWALL.

CONCRETE REMOVALS:

THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING CONCRETE REINFORCEMENT TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

MEASUREMENT AND PAYMENT:

PAYMENT FOR ACCEPTED QUANTITIES OF THE WORK DESCRIBED HEREIN SHALL BE MADE AT THE CONTRACT UNIT PRICE BID. THIS SHALL INCLUDE ALL TOOLS, LABOR, MATERIALS, EQUIPMENT, POWER, TRANSPORT, DELIVERY, AND DISPOSAL NECESSARY TO COMPLETE THIS ITEM OF WORK AS DESCRIBED, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 304 - AGGREGATE BASE, AS PER PLAN:

DESCRIPTION:

THIS WORK SHALL INCLUDE FURNISHING, PLACING, AND COMPACTING INCIDENTAL AGGREGATE BASE, AND ANY OTHER EQUIPMENT OR APPURTENANCES NEEDED AS REQUIRED TO CORRECT THE SUBGRADE AFTER REMOVAL OF PORTIONS OF EXISTING APPROACH SLABS. COMPLETE THE WORK AS SHOWN IN THE PLANS, IN ACCORDANCE WITH C&MS 304, AND AS HEREIN SPECIFIED.

EXECUTION:

PROVIDE AND COMPACT AGGREGATE BASE MATERIAL AS REQUIRED TO PROVIDE A UNIFORM COMPACTED SURFACE FOR PROPOSED APPROACH SLABS IN ACCORDANCE WITH C&MS 304.

MEASUREMENT AND PAYMENT:

PAYMENT FOR ACCEPTED QUANTITIES OF THE WORK DESCRIBED HEREIN, COMPLETE IN PLACE, SHALL BE MADE AT THE CONTRACT UNIT PRICE BID. THIS SHALL INCLUDE ALL TOOLS, LABOR, MATERIALS, EQUIPMENT, POWER, TRANSPORT, DELIVERY, AND DISPOSAL NECESSARY TO COMPLETE THIS ITEM OF WORK AS DESCRIBED, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN:

DESCRIPTION:

THIS WORK SHALL INCLUDE FURNISHING AND INSTALLING REINFORCED CONCRETE APPROACH SLABS, REINFORCING STEEL, DOWEL HOLES AND DOWELS, AND ANY OTHER APPURTENANCES NEEDED TO COMPLETE THE WORK AS SHOWN IN THE PLANS AND HEREIN SPECIFIED.

EXECUTION:

PROVIDE AND INSTALL EPOXY COATED DOWELS PER C&MS 255. INSTALL TYPE D DOWELS ALONG LONGITUDINAL JOINTS BETWEEN EXISTING AND PROPOSED APPROACH SLAB SEGMENTS PER STANDARD CONSTRUCTION DRAWING BP-2.1. DO NOT DOWEL ACROSS LONGITUDINAL OR TRANSVERSE JOINTS WITH ROADWAY OR SHOULDER PAVEMENT.

PROVIDE AND INSTALL EPOXY COATED REINFORCING STEEL PER C&MS 509.

PROVIDE DOWEL HOLES AS REQUIRED PER C&MS 510.

COST OF THESE SHALL BE INCLUDED IN THIS ITEM FOR PAYMENT.

MEASUREMENT AND PAYMENT:

PAYMENT FOR ACCEPTED QUANTITIES OF THE WORK DESCRIBED HEREIN, COMPLETE IN PLACE, SHALL BE MADE AT THE CONTRACT UNIT PRICE BID. THIS SHALL INCLUDE ALL TOOLS, LABOR, MATERIALS, EQUIPMENT, POWER, TRANSPORT, DELIVERY, AND DISPOSAL NECESSARY TO COMPLETE THIS ITEM OF WORK AS DESCRIBED, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK:

DESCRIPTION:

THIS WORK SHALL INCLUDE SURVEY, MEASUREMENT, FIELD VERIFICATION, AND/OR GATHERING OTHER REQUIRED INFORMATION NEEDED TO FABRICATE, ORDER, OR OTHERWISE PREPARE FOR CONSTRUCTION WORK. THIS SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, AND ANY OTHER APPURTENANCES NEEDED TO COMPLETE THE WORK AS HEREIN SPECIFIED.

BACKGROUND:

THE BRIDGE AND RELATED WORK REQUIRED IS PART OF THIS REPAIR PROJECT. DESIGN FIELD WORK WAS LIMITED WITH RESPECT TO MEASUREMENTS AND NO SURVEYING WORK WAS PERFORMED. ACCESS TO VARIOUS AREAS OF WORK WAS OFTEN LIMITED BY TRAFFIC AND NO WORK ZONES WERE SET UP TO PERFORM ARM'S LENGTH CLOSEUP INSPECTION OR DATA GATHERING.

MEASUREMENT AND PAYMENT:

PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE AT THE CONTRACT LUMP SUM PRICE BID FOR THIS ITEM.

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Design PAPER SIZE: 17x11 (in.) DATE: 6/26/2023 TIME: 9:26:42 AM USER: RUS61365 P:\CLEV\VE\ODOT D3_D12_GES_2023\Approach_Slabs\CADD\General\Sheets\117899_S\N01.dgn

STRUCTURE GENERAL NOTES

SFN	NA
DESIGN AGENCY	MOTT MACDONALD
DESIGNER	MAR
CHECKER	NKK
REVIEWER	JMR 06/14/23
PROJECT ID	117899
SUBSET	TOTAL
1	14
SHEET	TOTAL
52	65

CUY-BH-FY2024(B) APPROACH SLABS

MODEL: Design PAPER SIZE: 17x11 (in.) DATE: 6/26/2023 TIME: 9:26:49 AM USER: RUS61365
 P:\CLEVE\VE\DOT D3_D12_GES 2023\Approach_Slabs\CADD\General\Sheets\117899_SC01.dgn

ITEM	EXT.	TOTAL	UNIT	DESCRIPTION	LOCATION 1		LOCATION 2		LOCATION 3		LOCATION 4		LOCATION 5		LOCATION 6		LOCATION 7		LOCATION 8		LOCATION 9		LOCATION 10		LOCATION 11		LOCATION 12		LOCATION 13		LOCATION 14	
					CUY-090-22.00 (WB) (SFN 1808494)		CUY-480N-0011 (WB) (SFN 1814494)		CUY-480N-0036 (WB) (SFN 1814532)		CUY-480N-0054 (WB) (SFN 1814575)		CUY-480N-0129 (EB) (SFN 1811088)		CUY-422-13.90R (EB) (SFN 1814745)		CUY-422-13.90L (WB) (SFN 1814788)		CUY-422-14.68L (WB) (SFN 1814842)		CUY-422-14.68R (EB) (SFN 1814850)		CUY-422-15.97L (WB) (SFN 1814885)		CUY-422-15.97R (EB) (SFN 1814893)		CUY-422-16.27L (WB) (SFN 1814907)		CUY-422-16.27R (EB) (SFN 1814915)		CUY-480N-140WE (EB RAMP) (SFN 1814753)	
					REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD	REAR	FWD								
202	22901	397	SY	APPROACH SLAB REMOVED, AS PER PLAN	-	-	46	-	39	77	-	-	-	-	-	77	-	39	-	42	-	-	-	-	-	77	-	-	-	-		
304	20001	37	CY	AGGREGATE BASE, AS PER PLAN *	-	-	4	-	4	7	-	-	-	-	-	7	-	4	-	4	-	-	-	-	-	7	-	-	-	-		
519	10000	444	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE	62	55	21	-	54	6	-	-	38	47	18	-	-	-	18	-	10	18	-	5	-	20	-	11	30	11	20	
519	12200	88	SY	PATCHING CONCRETE BRIDGE DECK - TYPE A	-	-	-	-	-	-	-	26	-	-	-	-	59	3	-	-	-	-	-	-	-	-	-	-	-	-		
526	15001	397	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN	-	-	46	-	39	77	-	-	-	-	-	77	-	39	-	42	-	-	-	-	77	-	-	-	-			
530	00200	LS		SPECIAL - STRUCTURES: MEASURING AND SURVEYING EXISTING CONDITIONS FOR REPAIR WORK	LS		LS		LS		LS		LS		LS		LS		LS		LS											

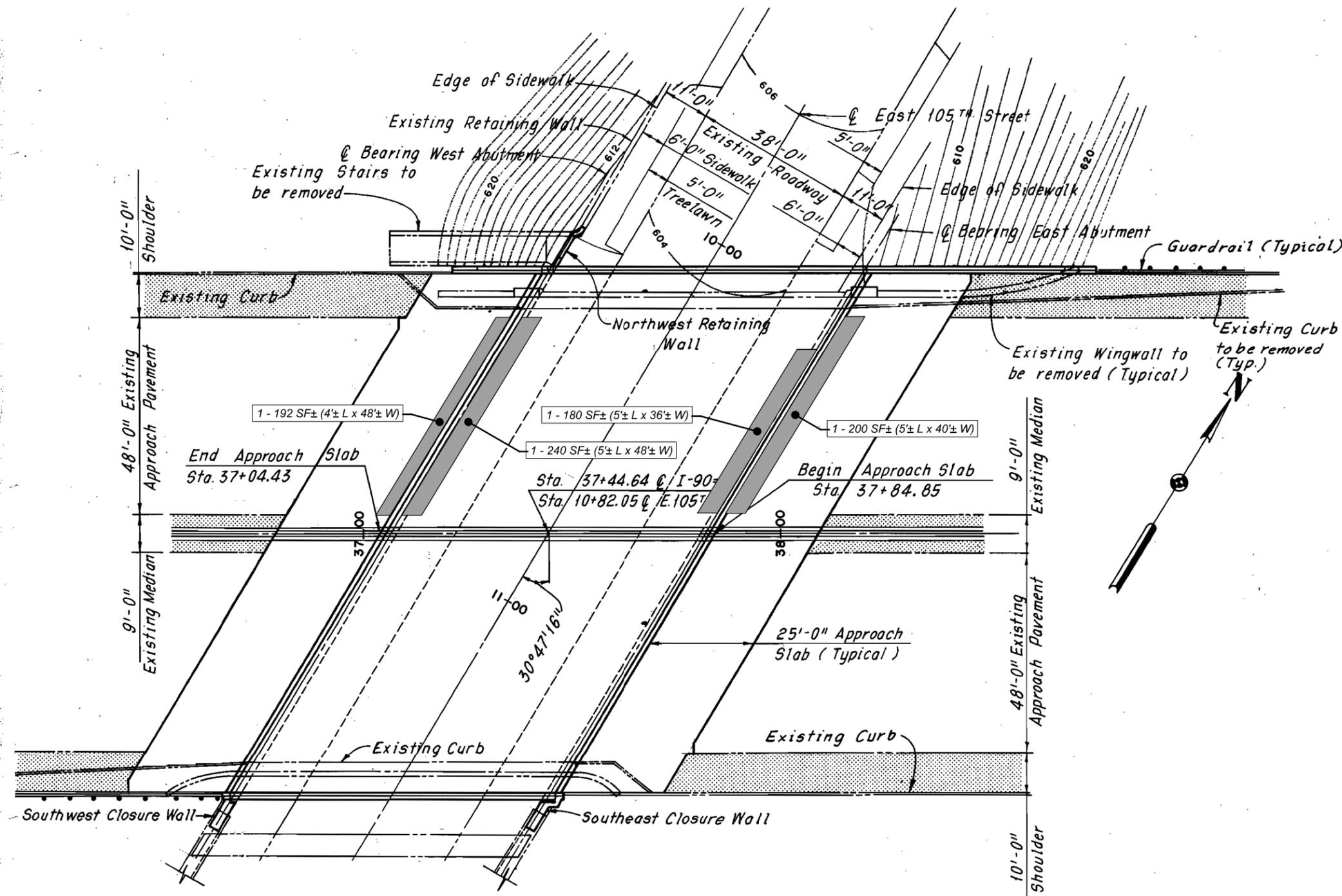
* INDICATES CONTINGENCY QUANTITY TO BE USED AT THE DIRECTION OF THE ENGINEER.

SHEET INDEX:

STRUCTURE GENERAL NOTES	1
STRUCTURE ESTIMATED QUANTITIES	2
LOCATION 01	3
LOCATION 02	4
LOCATION 03	5
LOCATION 04	6
LOCATION 05	7
LOCATIONS 06 & 14	8
LOCATION 07	9
LOCATIONS 08 & 09	10
LOCATIONS 10 & 11	11
LOCATIONS 12 & 13	12
APPROACH SLABS & REINFORCING	13
APPROACH SLAB RECORD DRAWING	14

STRUCTURE ESTIMATED QUANTITIES

SFN	NA
DESIGN AGENCY	M M MOTT MACDONALD
18013 CLEVELAND PKWY SUITE 200 CLEVELAND, OH 44135	
DESIGNER	MAR
CHECKER	NKK
REVIEWER	JMR 06/14/23
PROJECT ID	117899
SUBSET	TOTAL
2	14
SHEET	TOTAL
53	65



GENERAL PLAN
 NOT TO SCALE

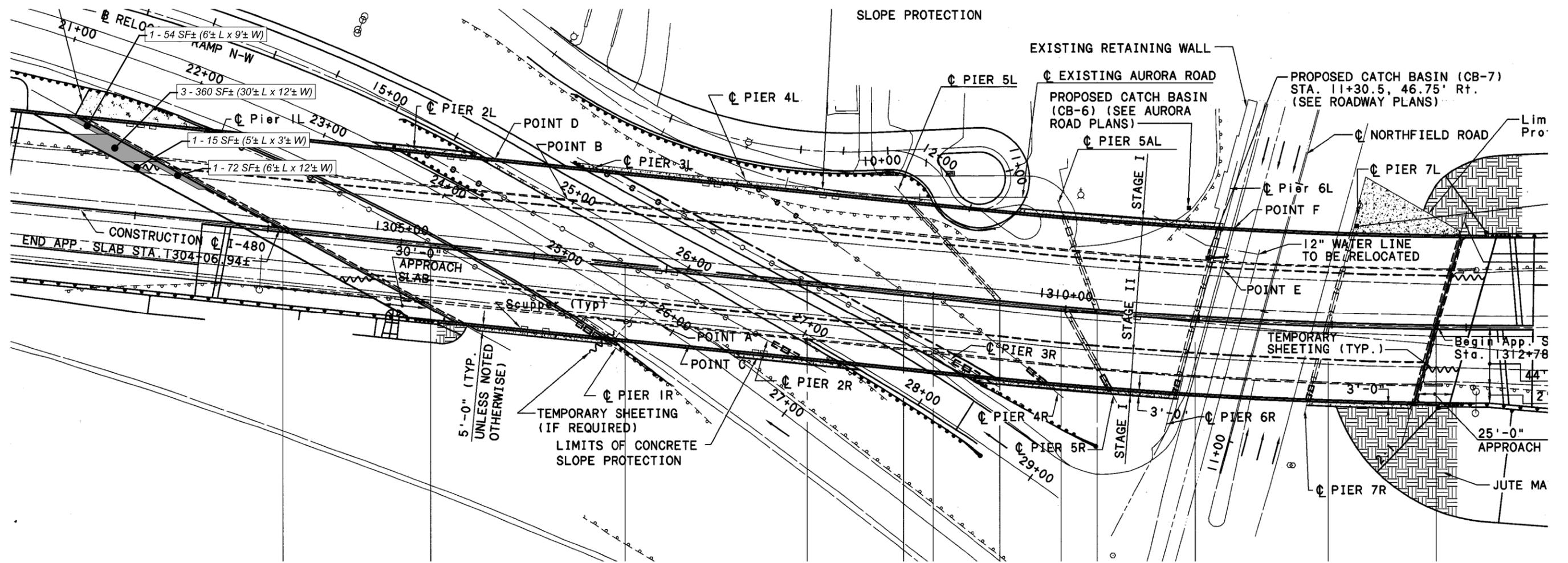
REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	812	1,040
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	NA	NA

NOTES:
 LENGTH "L" IS MEASURED ALONG THE ROADWAY.
 WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:
 A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 01
 CUY-090-22.00
 GENERAL PLAN

SFN 1808494
 DESIGN AGENCY
M M
 MOTT MACDONALD
 18013 CLEVELAND PKWY
 SUITE 200
 CLEVELAND, OH 44135
 DESIGNER/CHECKER
 MAR NKK
 REVIEWER
 JMR 06/14/23
 PROJECT ID
 117899
 SUBSET TOTAL
 3 14
 SHEET TOTAL
 54 65



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	141	181
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	360	414

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.

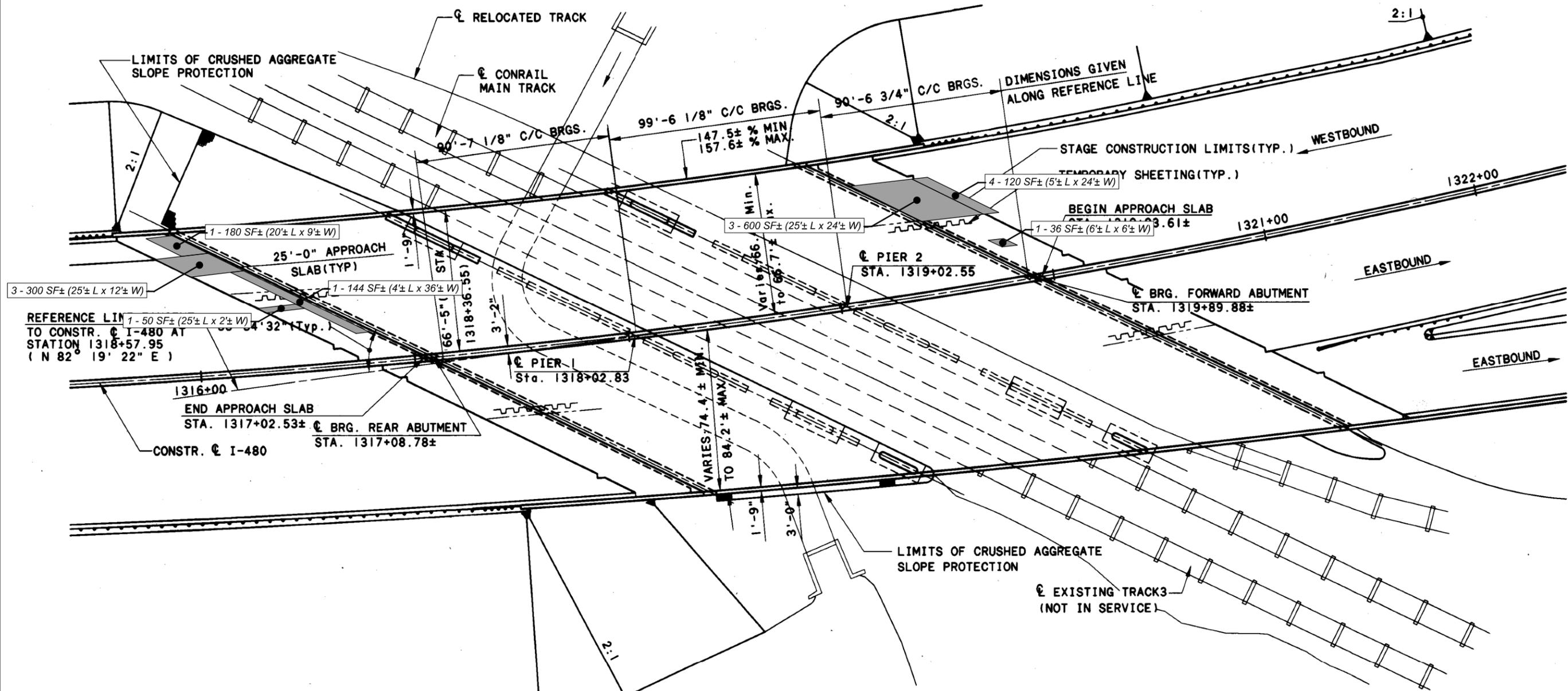
WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 02
 CUY-480N-0011
 GENERAL PLAN

SFN 1814494
 DESIGN AGENCY
M M
 MOTT MACDONALD
 18013 CLEVELAND PKWY
 SUITE 200
 CLEVELAND, OH 44135
 DESIGNER/CHECKER
 MAR NKK
 REVIEWER
 JMR 06/14/23
 PROJECT ID
 117899
 SUBSET TOTAL
 4 14
 SHEET TOTAL
 55 65



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	410	526
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	900	1,035
④	252 - FULL DEPTH RIGID PVTM REMOVAL & FLEXIBLE REPLACEMENT, A.P.P. *	120	154

* CARRIED TO ROADWAY QUANTITIES

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.
 WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 03
 CUY-480N-0036
 GENERAL PLAN

SFN
 1814532

DESIGN AGENCY

M M
 MOTT
 MACDONALD

18013 CLEVELAND PKWY
 SUITE 200
 CLEVELAND, OH 44135

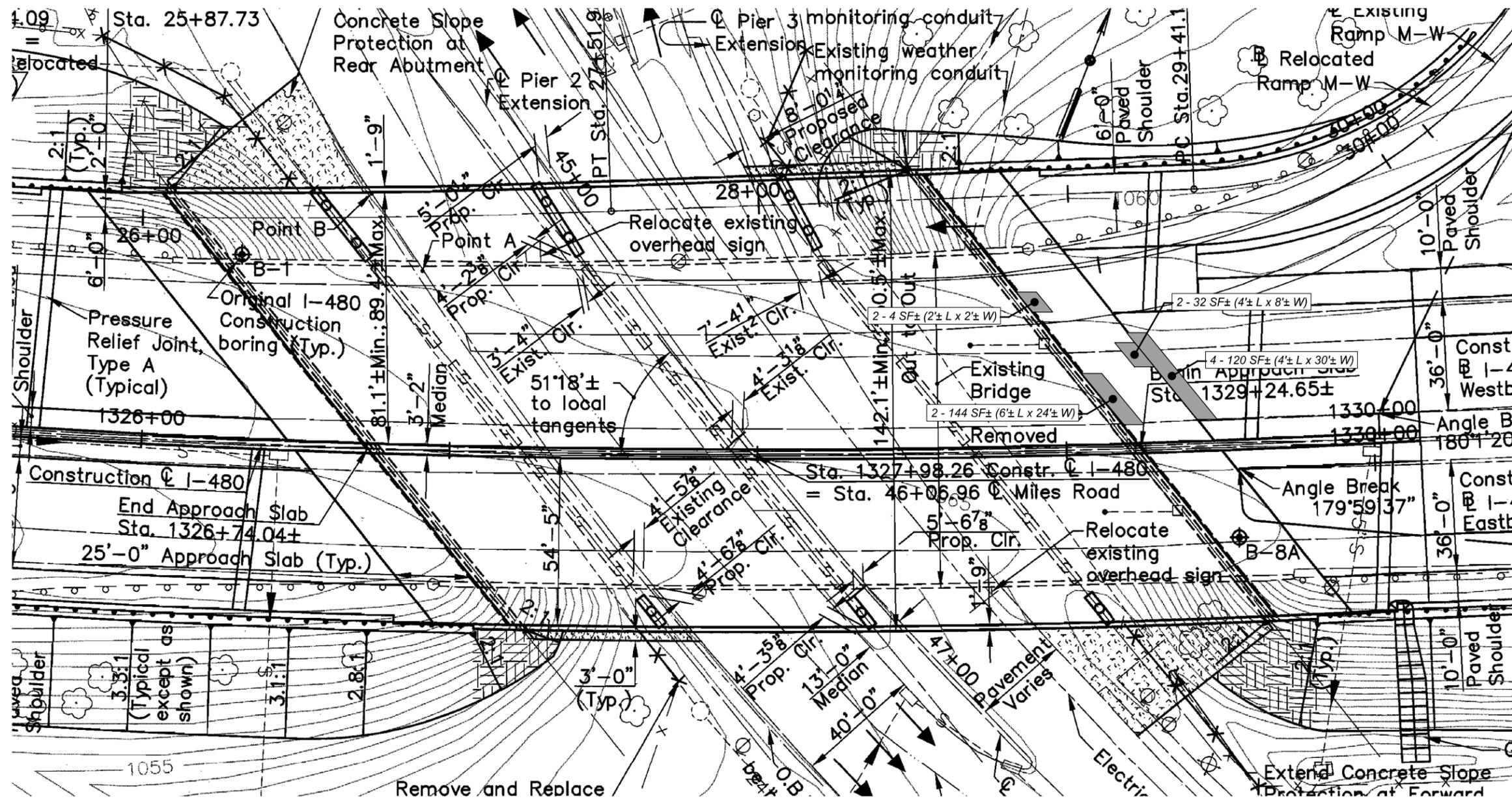
DESIGNER/CHECKER
 MAR NKK

REVIEWER
 JMR 06/14/23

PROJECT ID
 117899

SUBSET	TOTAL
5	14

SHEET	TOTAL
56	65



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	NA	NA
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	180	231
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	NA	NA
④	252 - FULL DEPTH RIGID PVTM REMOVAL & FLEXIBLE REPLACEMENT, A.P.P. *	120	173

* CARRIED TO ROADWAY QUANTITIES

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.

WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 04
 CUY-480N-0054
 GENERAL PLAN

SFN
 1814575

DESIGN AGENCY

M M
 MOTT
 MACDONALD

18013 CLEVELAND PKWY
 SUITE 200
 CLEVELAND, OH 44135

DESIGNER/CHECKER

MAR NKK

REVIEWER

JMR 06/14/23

PROJECT ID

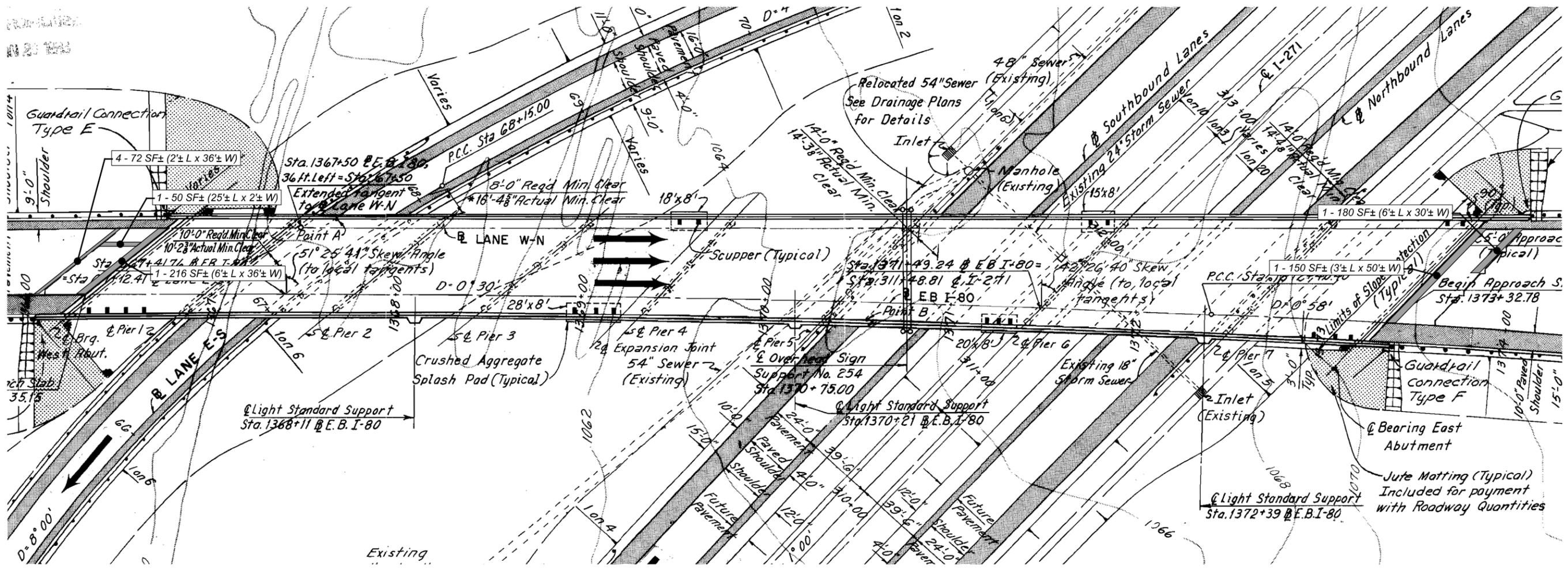
117899

SUBSET TOTAL

6 14

SHEET TOTAL

57 65



GENERAL PLAN
NOT TO SCALE

CUY-BH-FY2024(B) APPROACH SLABS
 MODEL: Design PAPER SIZE: 17x11 (in.) DATE: 6/26/2023 TIME: 9:27:17 AM USER: RUS61365
 P:\CLEVELAND\DOT D3_D12\GIS\2023\Approach_Slabs\CADD\Loc_05\Sheets\05_1811088_SPO1.dgn

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	596	764
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	NA	NA
④	251 - PARTIAL DEPTH PAVEMENT REPAIR (442), A.P.P. *	72	104

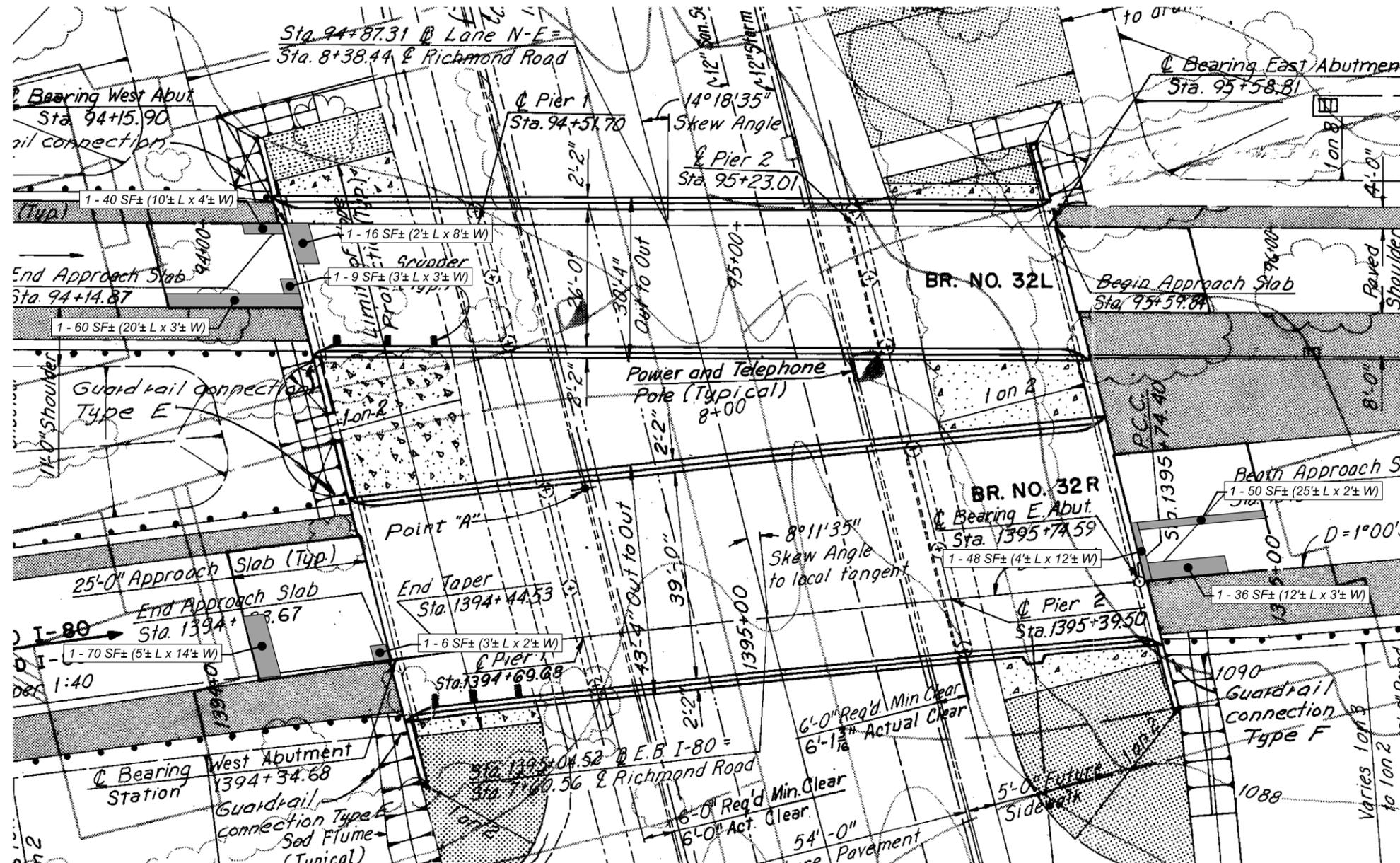
* CARRIED TO ROADWAY QUANTITIES

NOTES:
 LENGTH "L" IS MEASURED ALONG THE ROADWAY.
 WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:
 A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 05
 CUY-480N-0129
 GENERAL PLAN

SFN	1811088
DESIGN AGENCY	M M MOTT MACDONALD
18013 CLEVELAND PKWY SUITE 200 CLEVELAND, OH 44135	
DESIGNER/CHECKER	MAR NKK
REVIEWER	JMR 06/14/23
PROJECT ID	117899
SUBSET	TOTAL
7	14
SHEET	TOTAL
58	65



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	335	430
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	NA	NA

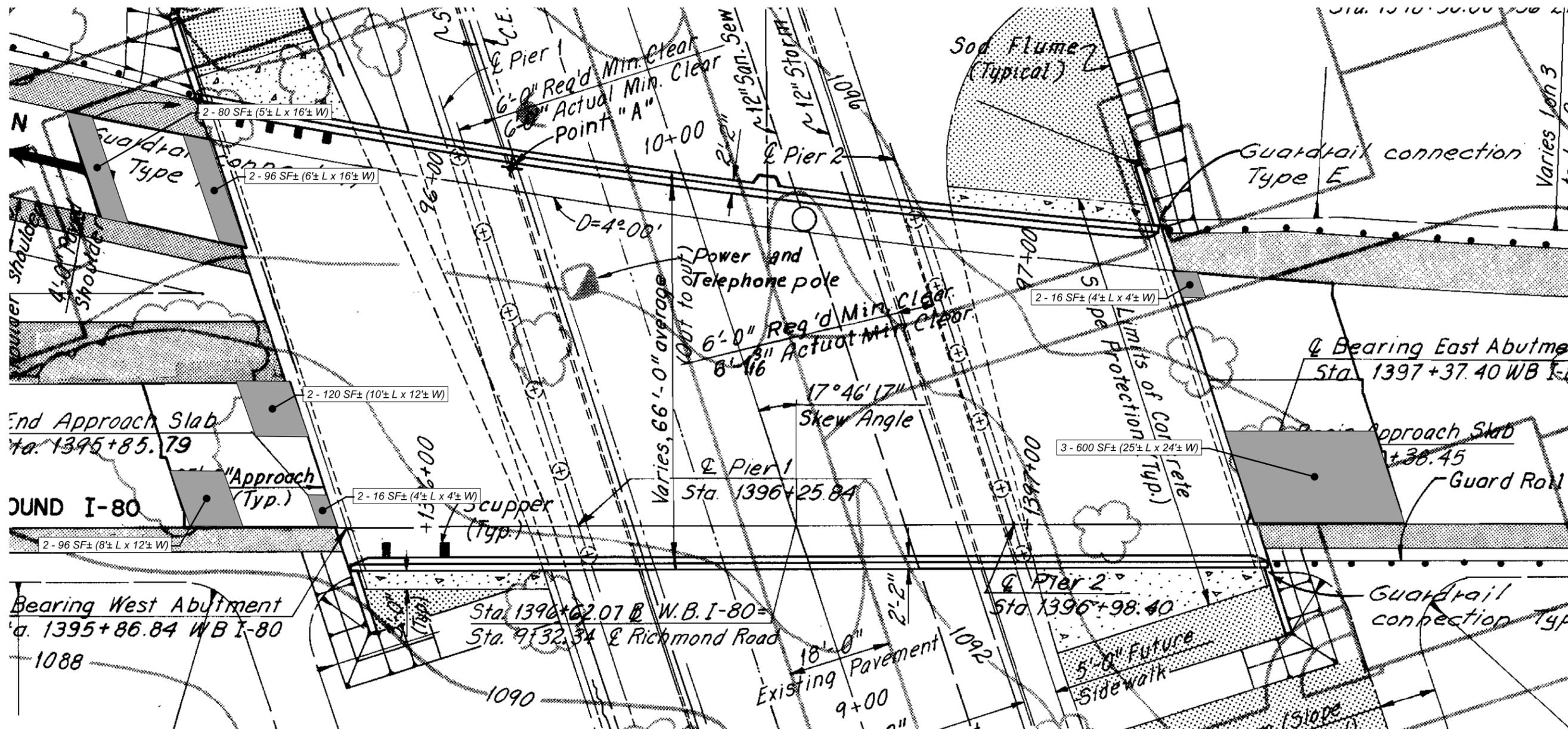
NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.

WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL



GENERAL PLAN
 NOT TO SCALE

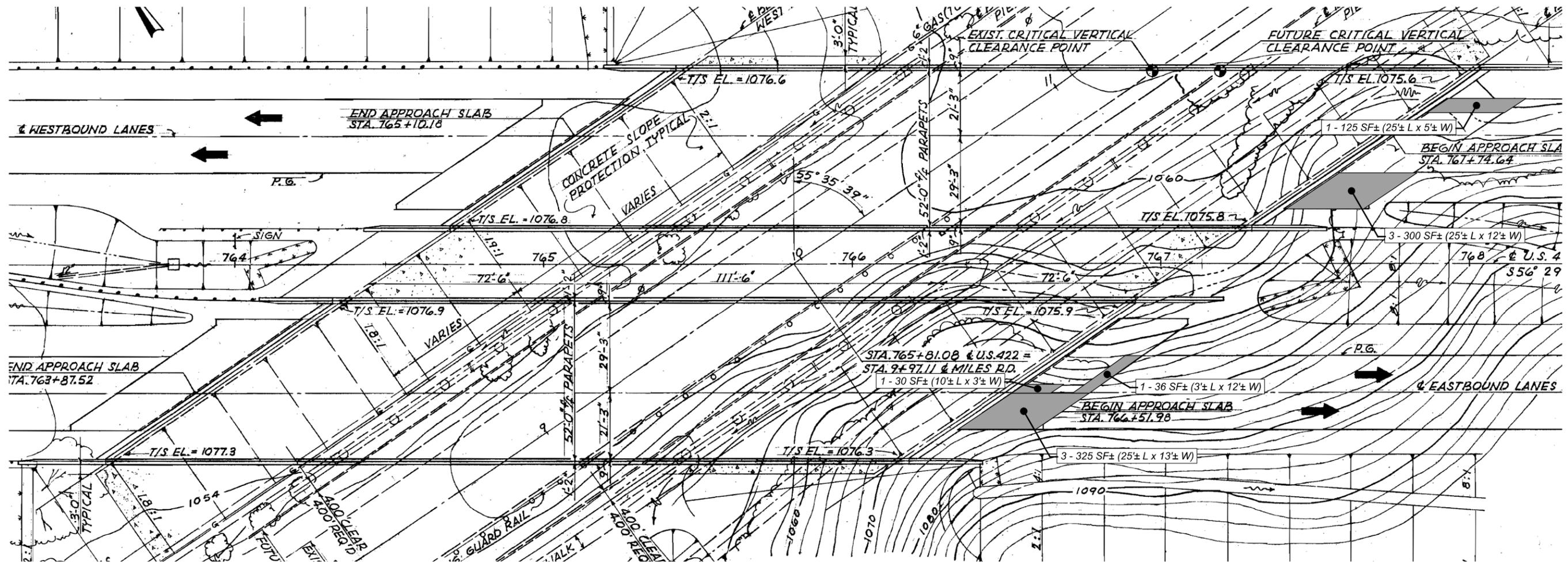
REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	NA	NA
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	424	544
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	600	690

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.
 WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	191	245
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	625	719

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.

WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL

LOCATION 08 - CUY-422-14.68L &
 LOCATION 09 - CUY-422-14.68R
 GENERAL PLAN

SFN
 1814842 / 1814850

DESIGN AGENCY

M M
 MOTT
 MACDONALD
 18013 CLEVELAND PKWY
 SUITE 200
 CLEVELAND, OH 44135

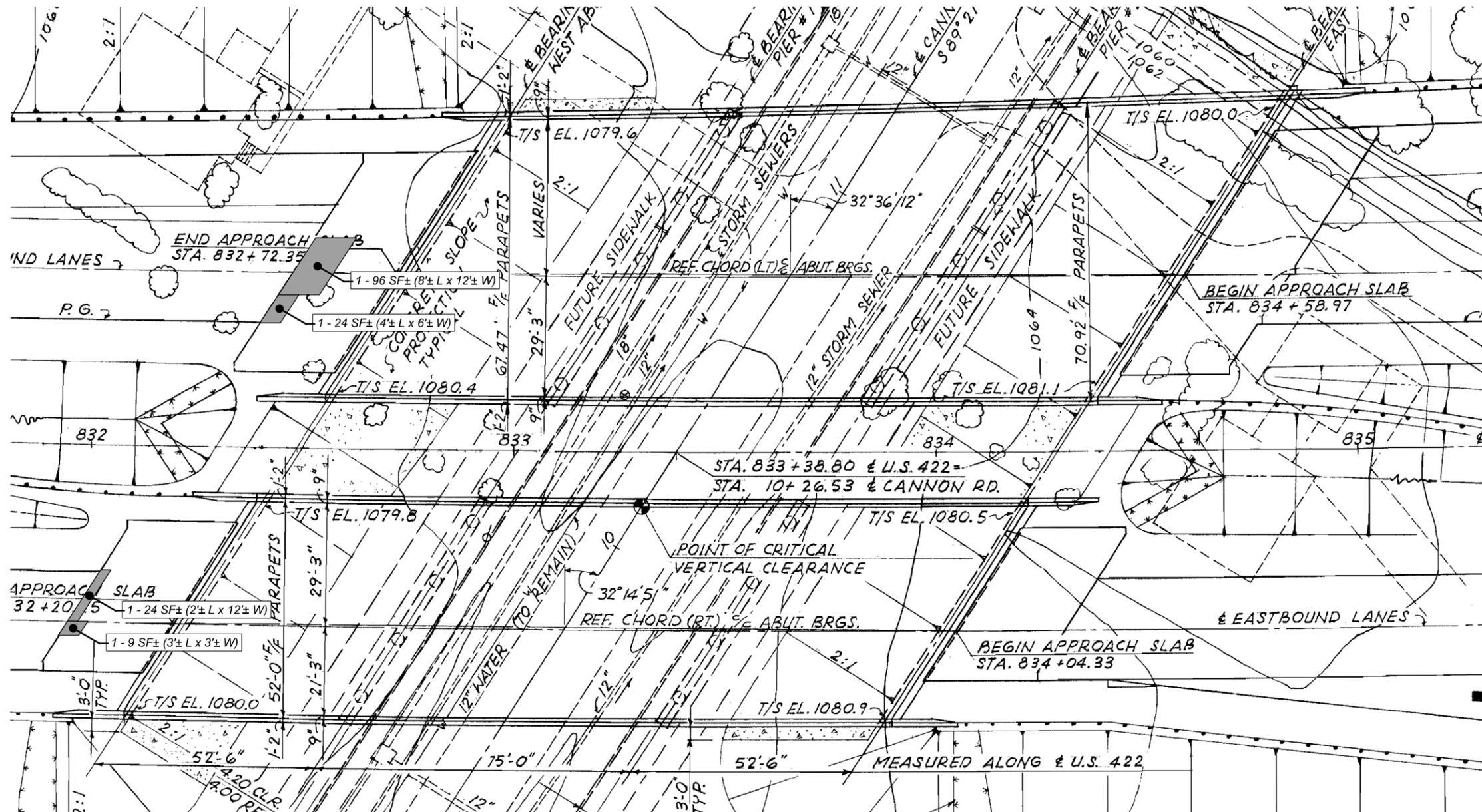
DESIGNER/CHECKER
 MAR NKK

REVIEWER
 JMR 06/14/23

PROJECT ID
 117899

SUBSET	TOTAL
10	14

SHEET	TOTAL
61	65



GENERAL PLAN
 NOT TO SCALE

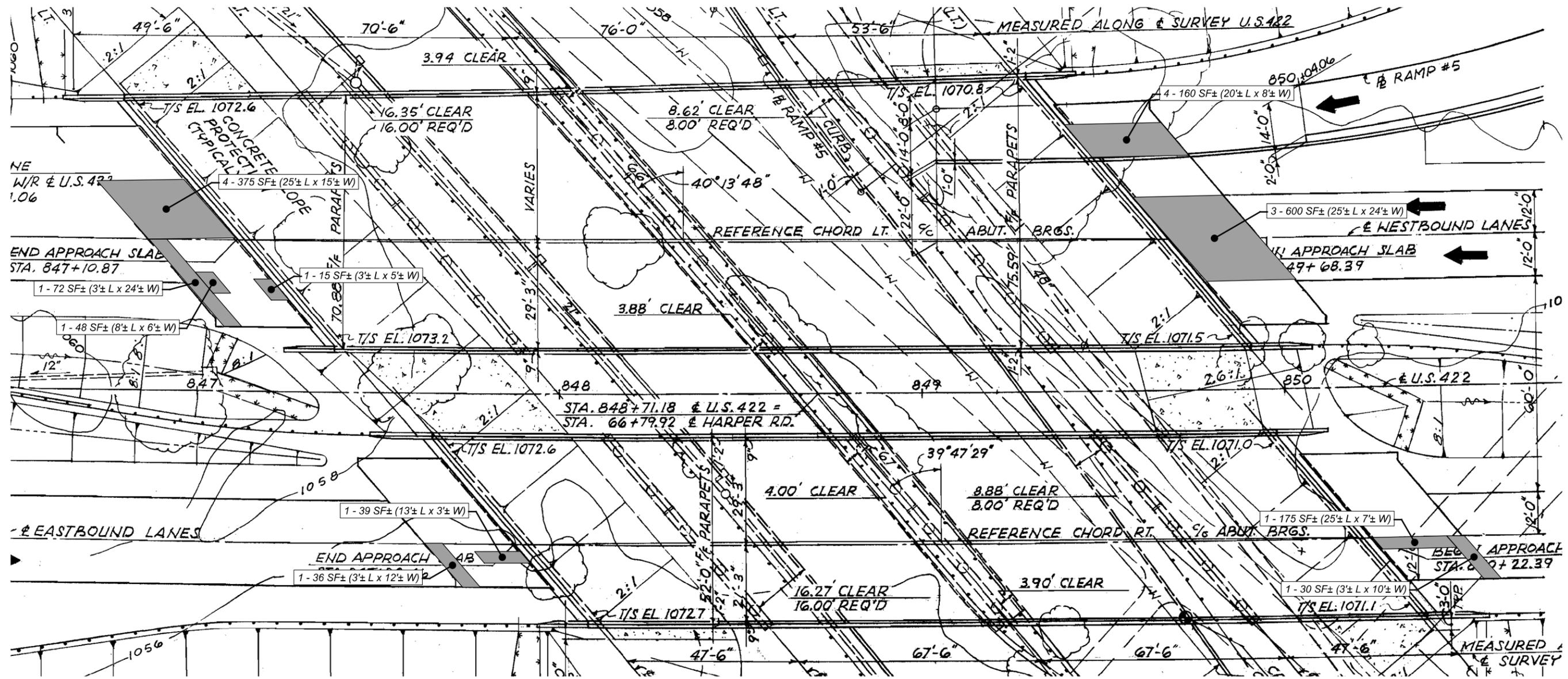
REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	153	197
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	NA	NA

NOTES:

LENGTH "L" IS MEASURED ALONG THE ROADWAY.
 WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL



GENERAL PLAN
 NOT TO SCALE

REPAIR LEGEND & SUB-SUMMARY			
REPAIR	ITEM	MEASURED TOTAL (SF)	ESTIMATED TOTAL (SF)
①	519 - PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MSMC	415	532
②	519 - PATCHING CONCRETE BRIDGE DECK - TYPE A	NA	NA
③	202 - APPROACH SLAB REMOVED & 526 - R.C. APPROACH SLAB, A.P.P.	600	690
④	251 - PARTIAL DEPTH PAVEMENT REPAIR (442), A.P.P. *	535	591

* CARRIED TO ROADWAY QUANTITIES

NOTES:

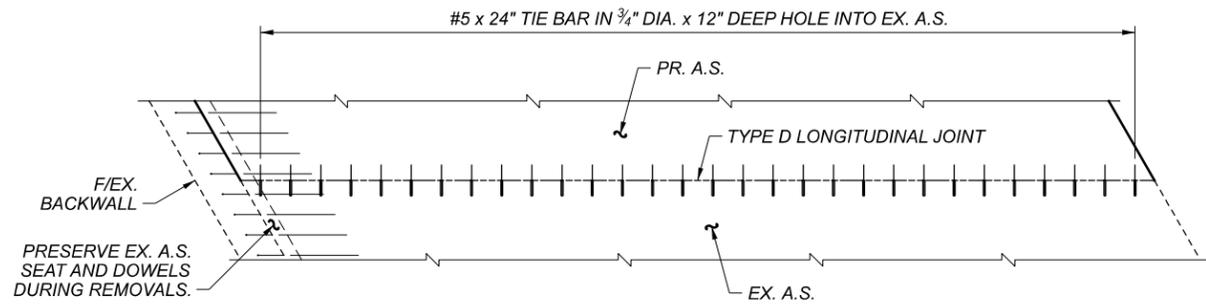
LENGTH "L" IS MEASURED ALONG THE ROADWAY.

WIDTH "W" IS MEASURED TRANSVERSE TO THE ROADWAY.

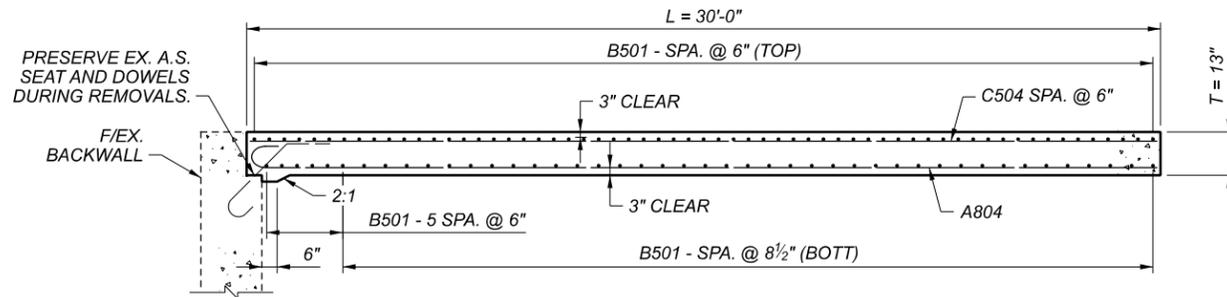
LEGEND:

A.P.P. - AS PER PLAN
 TYP. - TYPICAL

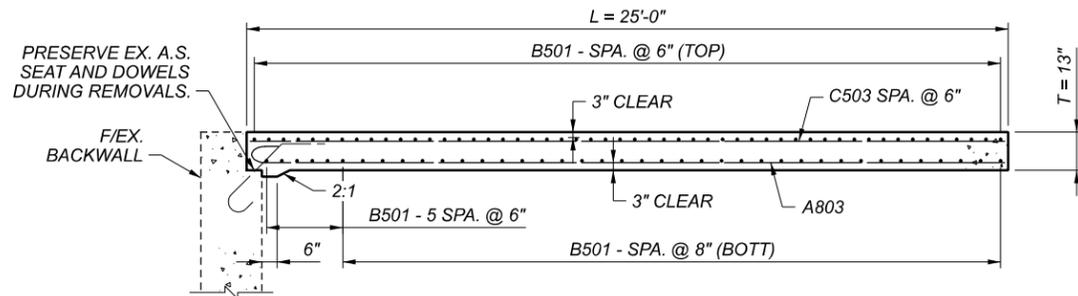
LOCATION		REAR	LENGTH "L"	WIDTH "W"	SKEW	A-BARS (BOTT) (LONGITUDINAL)						B501 (BOTT) (TRANSVERSE)				B501 (TOP) (TRANSVERSE)			C-BARS (TOP) (LONGITUDINAL)				TOTAL WT.
LOCATION 2	CUY-480N-0011 (WB) (SFN 1814494)					MARK	LENGTH	DIM A	SPA.	NO. REQ'D.	WT.	LENGTH	SPA.	NO. REQ'D.	WT.	LENGTH	NO. REQ'D.	WT.	MARK	LENGTH	NO. REQ'D.	WT.	
		FWD	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		REAR	25'-0"	12'-0"	56°± RF	A803	25'-7"	24'-6"	6"	23	1,572 #	20'-6"	8"	39	834 #	20'-6"	50	1,069 #	C503	24'-6"	23	588 #	4,063 #
		FWD	25'-0"	24'-0"	56°± RF	A803	25'-7"	24'-6"	6"	47	3,211 #	42'-0"	8"	39	1,709 #	42'-0"	50	2,190 #	C503	24'-6"	47	1,201 #	8,311 #
		REAR	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FWD	25'-0"	24'-0"	18°± RF	A803	25'-7"	24'-6"	6"	47	3,211 #	24'-6"	8"	39	997 #	24'-6"	50	1,278 #	C503	24'-6"	47	1,201 #	6,686 #
		REAR	25'-0"	12'-0"	55°± LF	A803	25'-7"	24'-6"	6"	23	1,572 #	20'-0"	8"	39	814 #	20'-0"	50	1,043 #	C503	24'-6"	23	588 #	4,016 #
		FWD	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		REAR	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FWD	25'-0"	13'-0"	56°± LF	A803	25'-7"	24'-6"	6"	25	1,708 #	22'-3"	8"	39	905 #	22'-3"	50	1,160 #	C503	24'-6"	25	639 #	4,412 #
		REAR	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FWD	25'-0"	24'-0"	40°± RF	A803	25'-7"	24'-6"	6"	47	3,211 #	30'-6"	8"	39	1,241 #	30'-6"	50	1,591 #	C503	24'-6"	47	1,201 #	7,243 #



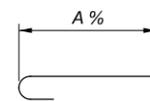
PLAN - LONGITUDINAL JOINT
 OTHER REINFORCEMENT NOT SHOWN FOR CLARITY



LONGITUDINAL SECTION - 30'-0" APPROACH SLAB



LONGITUDINAL SECTION - 25'-0" APPROACH SLAB



A803 / A804

NOTES:

ALL WORK ON THIS SHEET IS INCLUDED IN THE ITEM 526 - REINFORCED CONCRETE APPROACH SLABS, AS PER PLAN, AS APPLICABLE AT EACH LOCATION INDICATED.

THE BAR SIZE 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 BARS SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSIONS INDICATES A STANDARD BED AT THE END OF THE BAR.

ALL REINFORCING TO BE EPOXY COATED.

STANDARD CONSTRUCTION DRAWINGS:

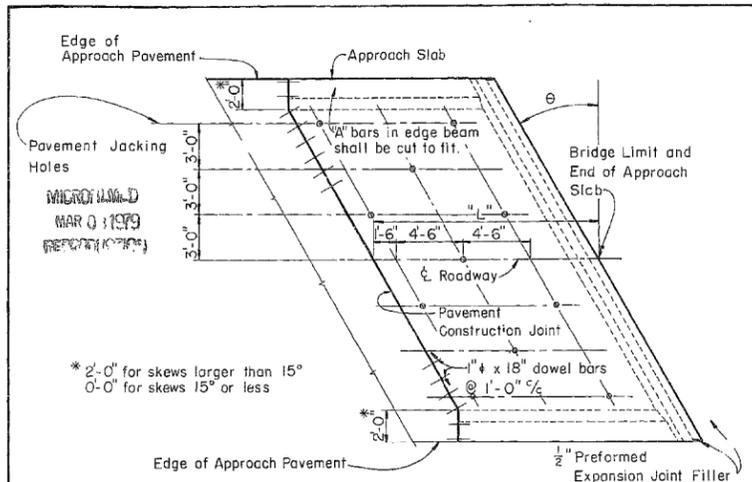
REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:

BP-2.1

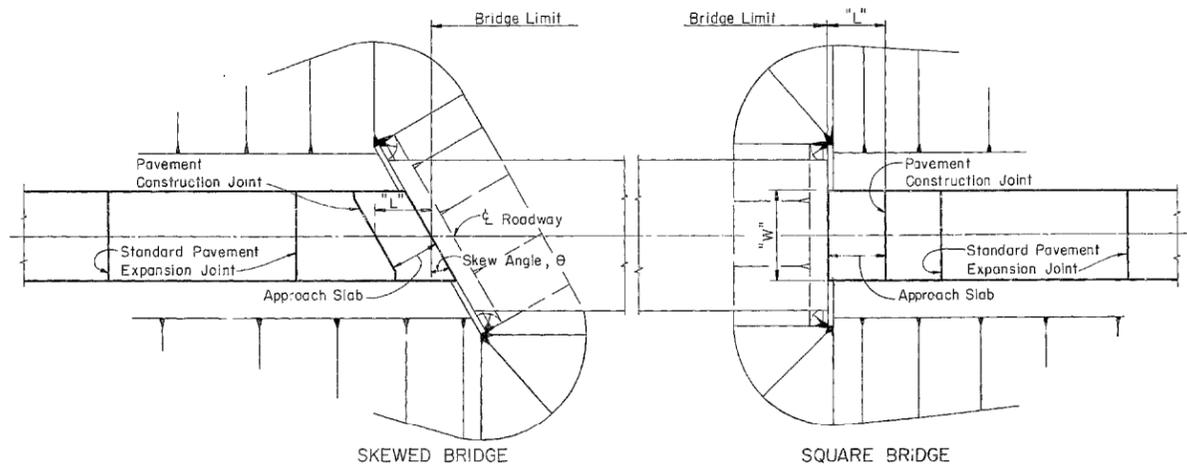
LEGEND:

A.S. - APPROACH SLAB
 BOTT. - BOTTOM
 EX. - EXISTING
 F/ - FACE OF
 PR. - PROPOSED
 SPA. - SPACED
 TYP. - TYPICAL

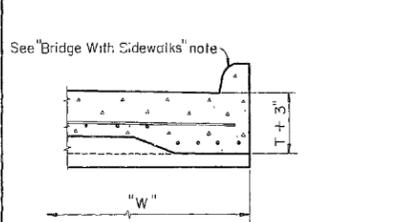
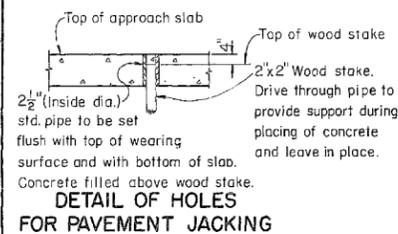
SFN	NA
DESIGN AGENCY	M M
DESIGNER	MOTT MACDONALD
CHECKER	18013 CLEVELAND PKWY SUITE 200 CLEVELAND, OH 44135
REVIEWER	DESIGNER CHECKER
PROJECT ID	MAR NKK
SUBSET	JMR 06/14/23
SHEET	117899
TOTAL	13 14
TOTAL	64 65



APPROACH SLAB FOR SKEWED BRIDGES



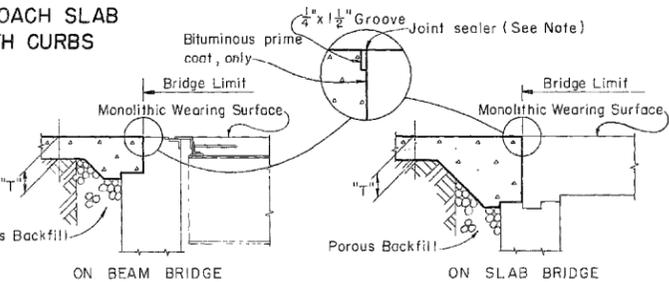
GENERAL PLAN
 Showing Skewed and Square Approach Slabs



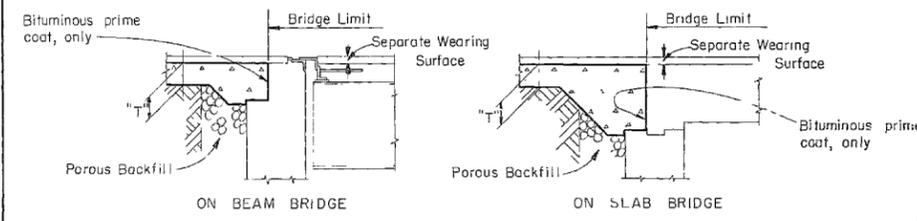
APPROACH SLAB WITH CURBS

REINFORCING STEEL (FOR ONE APPROACH SLAB)									
Length "L"	Thick- ness "t"	Spacg "S"	"A" BARS				B501		
			Length	Dimension "A"	No. reqd	Length	No. reqd		
15'-0"	10"	8"	A801	15'-7"	14'-6"	7	(W-0.5)(sec@)	14	
20'-0"	12"	7"	A802	20'-7"	19'-6"	7	(W-0.5)(sec@)	17	
25'-0"	13"	6"	A803	25'-7"	24'-6"	7	(W-0.5)(sec@)	20	
30'-0"	13"	6"	A804	30'-7"	29'-6"	12	(W-0.5)(sec@)	23	

W = Approach Slab Width, out-to-out, in feet
 θ = Angle of Skew
 S = "A" bar spacing in inches

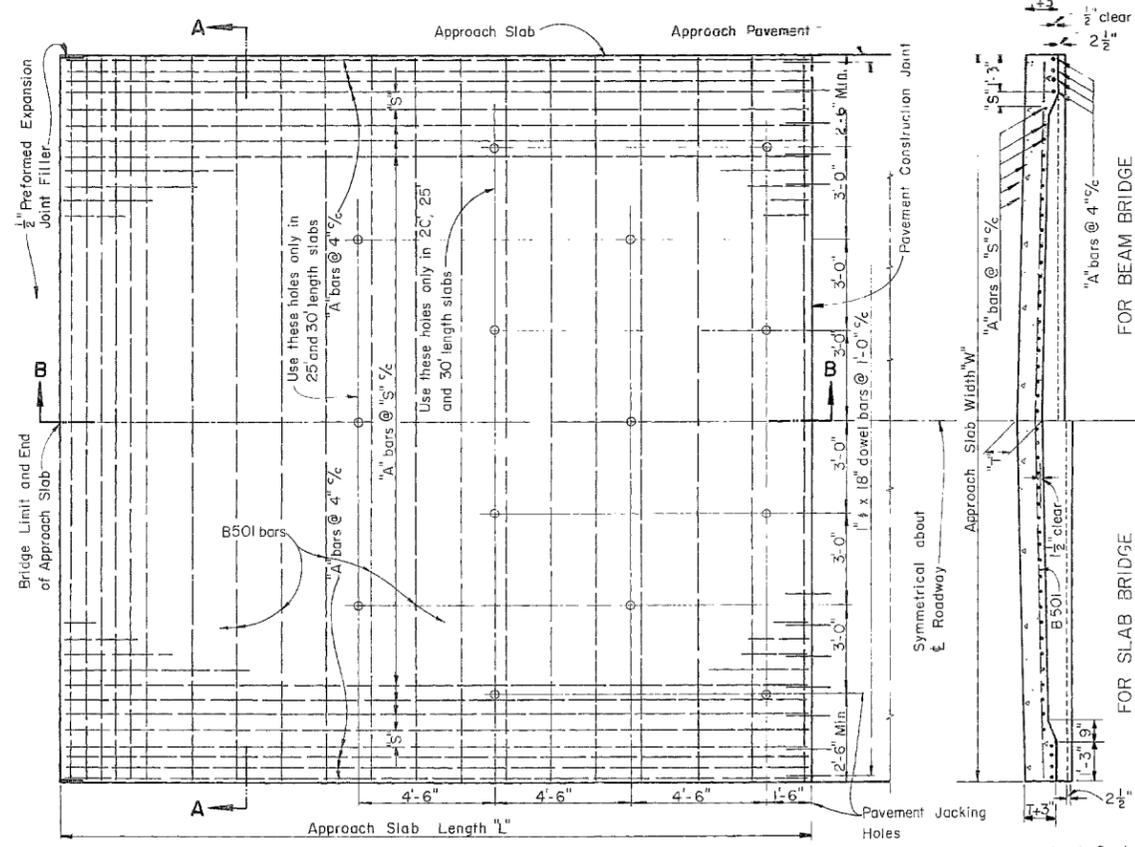


WITH MONOLITHIC WEARING SURFACE

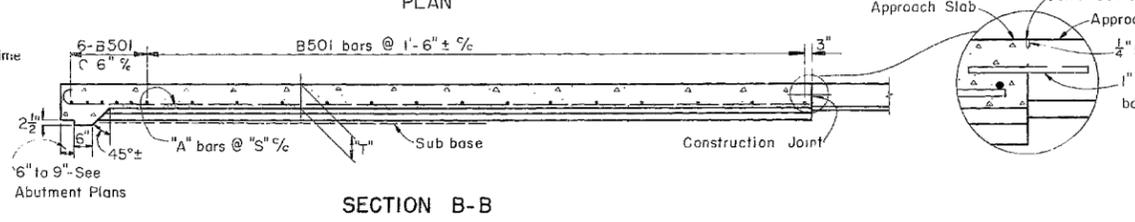


WITH SEPARATE WEARING SURFACE

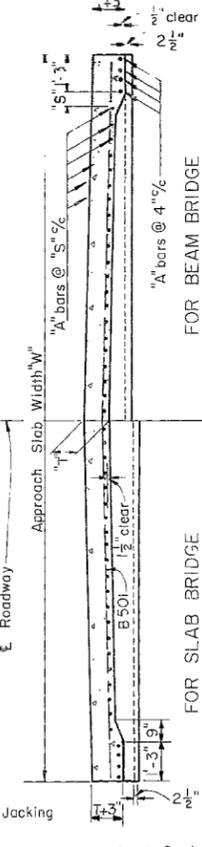
TYPICAL SECTIONS SHOWING JUNCTION OF APPROACH SLAB WITH BRIDGE



PLAN



SECTION B-B



SECTION A-A

GENERAL: This drawing provides design and general construction details. The project plans will show length, skew, curbs (if any), estimated quantity (sq. yds.), and special notes and details where necessary. For conditions other than those indicated herein, the approach slab shall be adapted to fit the ends of the bridge and the approach pavement.

WIDTH of approach slabs shall be the same as the width of the approach pavement unless otherwise indicated on the project plans.

CROWN shall conform to the rate of crown of the approach pavement and bridge deck. If the rate of crown of the bridge deck differs from that of approach pavement, a smooth transition shall be provided within the limits of the approach slab.

CONCRETE shall be Class C.

REINFORCING STEEL: For skewed bridges the "A" bars shall be placed parallel to the centerline of roadway and the "B" bars shall be placed parallel to the abutments.

BAR SIZE is indicated in the bar mark. The first digit indicates the bar size number. For example, A801 is a No. 8 size bar.

PREFORMED EXPANSION JOINT FILLER at the edges of the approach slab shall be included with the approach slab for payment.

BRIDGE WITH SIDEWALKS shall be provided with curbed approach slabs for the full bridge roadway width. The curbs on the approach slabs shall transition from the bridge curb height to the approach curb height.

CONSTRUCTION JOINT details shown herein (at the approach pavement end of the approach slab) apply only in case of concrete approach pavement or concrete base course. Payment for the construction joints, including dowel bars, is included in the price per sq. yd. bid for the approach pavement.

WEARING SURFACE: If a bituminous wearing surface is specified for the bridge, it also shall be used on the approach slab.

LENGTH of approach slabs shall be as shown on project plans.

JOINTS: Longitudinal joints in accordance with Standard Construction Drawing No. BP-3 shall be provided at edges of all traffic lane elements. If joints are sawed the depth of sawed groove shall be 3". Approach-pavement type joint sealer shall be used in all transverse and longitudinal joints.

PAVEMENT JACKING HOLES shown are those required for a two-lane approach slab. If a wider approach slab is used, additional jacking holes shall be provided following the same pattern and spacing as shown. Holes shown on centerline of roadway may be offset 6" to avoid a longitudinal pavement joint.

REVISIONS	
1-11-68	
6-12-69	

STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
 DIVISION OF DESIGN AND CONSTRUCTION
 BUREAU OF BRIDGES

STANDARD
**REINFORCED CONCRETE
 APPROACH SLABS**

LENGTHS-15'-0", 20'-0", 25'-0" AND 30'-0"

APPROVED: *[Signature]*
 DATE: 11-6-67
 ENGINEER OF BRIDGES

DRAWING NUMBER
 AS-1-67

PREPARED BY CFB	TRACED NRB	CHECKED CSD CDB	REVIEWED HHH BFG
--------------------	---------------	-----------------------	------------------------

SFN	NA
DESIGN AGENCY	M M
DESIGNER	MOTT MACDONALD
CHECKER	18013 CLEVELAND PKWY SUITE 200 CLEVELAND, OH 44135
REVIEWER	JMR
DATE	06/14/23
PROJECT ID	117899
SUBSET	14
TOTAL	14
SHEET	65
TOTAL	65