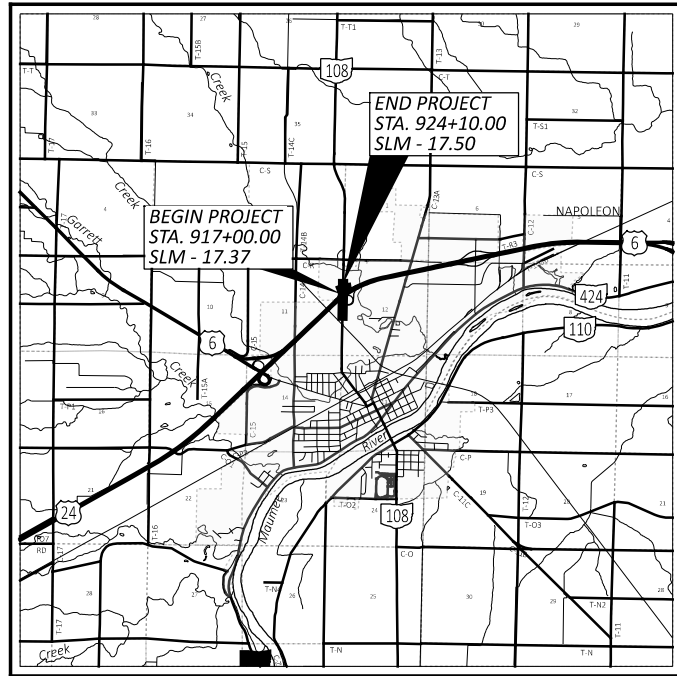


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HEN-108-17.40

CITY OF NAPOLEON
HENRY COUNTY



LOCATION MAP

LATITUDE: 41°24'34" LONGITUDE: -84°07'54"



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

DESIGN DESIGNATION

CURRENT ADT (2022)	8,252
DESIGN YEAR ADT (2042)	12,263
DESIGN HOURLY VOLUME (2042)	1,104
DIRECTIONAL DISTRIBUTION	56/44
TRUCKS (24 HOUR B&C)	10%
DESIGN SPEED	35/50
LEGAL SPEED	35/50
DESIGN FUNCTIONAL CLASSIFICATION:	
04 - MINOR ARTERIAL (URBAN)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:

1500 Lake Shore Drive, Suite 100
Columbus, Ohio 43204
(614) 486-4383

ENGINEER'S SEAL
FOR STRUCTURES

ENGINEER'S SEAL
FOR ENTIRE PLAN
EXCEPT STRUCTURES

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2
ROUNDAABOUT GEOMETRIC LAYOUT	3
TYPICAL SECTIONS	4-5
GENERAL NOTES	6-7
MAINTENANCE OF TRAFFIC	8-11
GENERAL SUMMARY	12-14
SUBSUMMARIES	15-16
PAVEMENT CALCULATIONS	17
PROJECT SITE PLAN	18
PLAN AND PROFILE	19-25
CROSS SECTIONS - S.R. 108	26-41
CROSS SECTIONS - REF. LINE 'ER'	42-43
PAVEMENT DETAILS	44
DRIVE DETAILS	45
CURB RAMP DETAILS	46-47
STORM SEWER PROFILES	48-49
UNDERDRAIN TABLE	50
RETAINING WALL PLANS	51-54
TRAFFIC CONTROL PLANS	55-62
LIGHTING PLANS	63-67
LANDSCAPE PLANS	68

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/21/22	HL-60.11	7/21/17	TC-52.10	10/18/13	DM-2.1	1/18/13	800-2023	SEE PROPOSAL
BP-4.1	7/19/13	HL-60.31	1/17/20	TC-52.20	1/15/21			813	10/19/18
BP-5.1	7/15/22			TC-61.10	1/17/20	HW-2.2	7/20/18	832	7/15/22
BP-7.1	1/20/23	MT-95.61	4/19/19	TC-65.10	1/17/14			836	1/19/18
		MT-97.10	4/19/19	TC-65.11	7/15/22			870	10/21/22
RM-1.1	1/20/23	MT-97.12	1/20/17	TC-71.10	7/15/22			913	4/16/21
RM-3.1	7/20/18	MT-97.20	4/19/19	TC-73.20	1/17/20				
RM-5.2	1/20/23	MT-98.29	1/17/20	TC-74.10	1/20/23				
		MT-101.60	1/17/20						
HL-10.11	7/15/22	MT-101.90	7/17/20	CB-3	7/16/21				
HL-10.12	1/20/23	MT-105.10	1/17/20	CB-3A	7/16/21				
HL-10.13	1/20/23								
HL-20.11	10/21/22	TC-41.20	10/18/13	MH-3	7/16/21				
HL-30.11	1/15/21	TC-41.30	10/18/13						
HL-30.21	4/17/20	TC-42.10	10/18/13	DM-1.1	7/17/20				
HL-40.20	7/15/22	TC-42.20	10/18/13	DM-1.2	7/16/21				

FEDERAL PROJECT NUMBER

E191(043)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

IN HENRY COUNTY, CONVERT THE RAMP INTERSECTION AT S.R. 108 AND WESTBOUND U.S. 24 TO A ROUNDAABOUT. IMPROVEMENTS WILL ALSO INCLUDE PEDESTRIAN FACILITIES IN THE VICINITY OF THE ROUNDAABOUT AND ALONG S.R. 108, ROUNDAABOUT LIGHTING, DRAINAGE, TRAFFIC CONTROL AND DRIVE IMPROVEMENTS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	3.24 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.29 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	4.90 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.

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 10-11.

APPROVED _____
DISTRICT DEPUTY DIRECTOR

APPROVED
DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

DESIGN AGENCY

1500 LAKE SHORE DRIVE,
SUITE 100
COLUMBUS, OH 43204
(614) 486-4383

DESIGNER	NMG
REVIEWER	BMH
PROJECT ID	110867
SHEET	TOTAL
1	68

HEN-108-17.40

MODEL: Sheet PAPER: 17x11 (in.) DATE: 5/6/2023 TIME: 5:33:30 PM USER: ngoodman
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ITEM 517 - RAILING, ALUMINUM, AS PER PLAN

DESIGN AND CONSTRUCT A 42-INCH, HIGH 2-RAIL ALUMINUM (CMS 711.20) RAILING SYSTEM SIDE MOUNTED AT THE VARIABLE THICKNESS CONCRETE WALK. RAILING SHALL CONFORM TO OSHA RAILING GUIDELINES AND LOADING.

CONTRACTOR TO DESIGN ADHESIVE ANCHORS FOR ALUMINUM RAILING. PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH 501.05. ADHESIVE ANCHORS SHALL CONSIST OF A CONTINUOUSLY-THREADED AISI 316 STAINLESS STEEL ANCHOR ROD. ADHESIVE SYSTEM SHALL BE HILTI HIT-RE500-SD OR APPROVED EQUAL. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S INSTRUCTIONS.

PAYMENT FOR ALL DESIGN OF RAILING SYSTEM AND MOUNTING, LABOR, MATERIAL AND EQUIPMENT SHALL BE INCLUDED IN THE PER FOOT PRICE BID PER ITEM 517 RAILING, ALUMINUM, AS PER PLAN.

ITEM 608 - WALKWAY, MISC.: VARIABLE THICKNESS CONCRETE WALK

THIS ITEM SHALL CONFORM TO ALL REQUIREMENTS OF ITEM 608 AND SHALL BE REINFORCED AS SHOWN IN THE PLANS. REINFORCING SHALL MEET REQUIREMENTS OF ITEM 509 CONCRETE REINFORCEMENT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 608 WALKWAY MISC.: VARIABLE THICKNESS CONCRETE WALK.

ITEM 870 - PREFABRICATED MODULAR RETAINING WALL, AS PER PLAN

THE PREFABRICATED MODULAR RETAINING WALL (PMRW) SYSTEM FOR THIS PROJECT SHALL BE LIMITED TO THE REDI-ROCK GRAVITY RETAINING WALL SYSTEM SUPPLIED BY REDI-ROCK STRUCTURES OF OKI, LLC AND COMPLY WITH SS870. THE PMRW SYSTEM MUST BE APPROVED BY THE ODOT PROJECT ENGINEER PRIOR TO ORDERING ANY MATERIALS FOR THE PROJECT.

THE CONTRACTOR (AND REDI-ROCK) IS RESPONSIBLE FOR CONTRACTING CIVIL SOLUTIONS TO GENERATE THE ENGINEERING DRAWINGS FOR THE PMRW SYSTEM.

ITEM 630 - SIGNING, MISC., 6" X 8" SOLID WOOD POST, AS PER PLAN

THIS ITEM SHALL CONSIST OF INSTALLING A GROUND MOUNTED 6" X 8" SOLID WOOD POST. FIGURE 298-26 OF THE TRAFFIC ENGINEERING MANUAL (P. 2-219) SHOULD BE USED AS A GUIDE FOR INSTALLATION OF THE 6" X 8" POST. GRADE 2 SOUTHERN YELLOW PINE SHOULD BE USED AND SHOULD BE PRESSURE TREATED WITH CCA PRESERVATIVE. U-CHANNEL DRIVE POSTS OF THE SAME HEIGHTS AS THE SIGN, WILL BE ATTACHED TO THE WOOD POST WITH 5/8" SQUARE HEAD, GALVANIZED BOLTS, NUTS AND WASHERS. THE SIGNS WILL THEN BE INSTALLED USING STANDARD SIGN CLIPS.

ITEM 630 - GROUND MOUNTED STRUCTURAL BEAM FOUNDATION, AS PER PLAN

FOUNDATIONS FOR WOOD POSTS SHALL BE CONCRETE AND SIZED AS SPECIFIED FOR W6 X 9 SIZE SUPPORTS IN SCD TC-41.10.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	615 CU. YD.
659, SEEDING AND MULCHING	5,532 SQ. YD.
659, REPAIR SEEDING AND MULCHING	277 SQ. YD.
659, INTER-SEEDING	277 SQ. YD.
659, COMMERCIAL FERTILIZER	0.77 TON
659, LIME	1.14 ACRES
659, WATER	31 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING	3 HOURS.
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VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTERS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM SPECIAL - MAILBOX REMOVE AND RESET

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX REMOVE AND RESET



DESIGNER	NMG
REVIEWER	
PROJECT ID	110867
SHEET	7
TOTAL	68

ITEM 614, MAINTAINING TRAFFIC

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

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

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AND AS SHOWN ON SHEET 10.

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

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

NOTICE OF CLOSURE SIGN TIME TABLE
 ITEM DURATION SIGN DISPLAYED
 OF CLOSURE TO PUBLIC

RAMP & >=2 WEEKS 14 CALENDAR DAYS
 PRIOR TO CLOSURE

ROAD > 12 HOURS 7 CALENDAR DAYS
 & < 2 WEEKS 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.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 45 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 10. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

CONTRACTOR TO MAINTAIN PEDESTRIAN ACCESS ALONG S.R. 108 THROUGH WORK ZONE OR TO PROVIDE AN ADDITIONAL ROUTE AROUND WORK ZONE DURING ROAD CLOSURE PERIOD.

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

SEQUENCE OF CONSTRUCTION

THE FOLLOWING IS A SUGGESTED SEQUENCE OF CONSTRUCTION THAT IS INTENDED TO MAINTAIN LOCAL TRAFFIC AS LONG AS POSSIBLE. S.R. 108 CAN NOT BE CLOSED UNTIL AFTER THE HENRY COUNTY ENGINEER PROJECT WORK ON OAKWOOD AVENUE IN NAPOLEON IS OPEN TO TRAFFIC. THE EARLIEST THIS WOULD BE IS JULY 17, 2023.

PHASE 1

THE CONTRACTOR IS TO CONSTRUCT ALL PROPOSED GRADING AND DRAINAGE OUTSIDE OF THE EXISTING PAVEMENT.

PHASE 2

THE CONTRACTOR IS TO CLOSE THE INTERSECTION OF S.R. 108 AND U.S. 24 RAMPS B/C TO THROUGH TRAFFIC FOR A LIMITED TIME OF 45 DAYS OR AT THE APPROVAL OF THE ENGINEER.

COMPLETE IMPROVEMENTS ON U.S. 24 RAMP B, AND U.S. 24 RAMP C. COMPLETE IMPROVEMENTS ON S.R. 108 FROM STA. 912+00 TO 924+10 UP TO SURFACE COURSE AND ALL APPURTENANCES. CONTRACTOR TO BUILD SIDEWALK FROM 905+38 THROUGH 925+84, INCLUDING THE RETAINING WALL, WALKWAY, AND GRADING UNDER THE U.S. 24 BRIDGES.

PHASE 3

THE CONTRACTOR IS TO OPEN S.R. 108, U.S. 24 RAMPS B/C TO THROUGH TRAFFIC. PERFORM MILLING OPERATIONS FROM 905+38 TO 912+00 BETWEEN OVERNIGHT HOURS 8:00 PM TO 8:00 AM, AS TO NOT AFFECT BUSINESS HOURS. INSTALL FINAL PAVEMENT SURFACE AND TRAFFIC CONTROL MARKINGS.

ENSURE THAT ALL TRAFFIC CONTROL SIGNAGE IS INSTALLED PRIOR TO OPENING TO TRAFFIC.

ALTERNATIVELY, CONTRACTOR CAN PERFORM PHASES 1 AND 3 OPERATIONS DURING PHASE 2 UNDER THE SAME LIMITED DETOUR RESTRICTIONS.

ITEM 614, DETOUR SIGNING

A LUMP SUM QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO INCLUDE FURNISHING, INSTALLING, MAINTAINING, AND REMOVING THE DETOUR SIGNING SHOWN ON THE PLANS AND THEIR NECESSARY SUPPORTS.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE 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.

CONTRACTOR TO MAINTAIN PEDESTRIAN ACCESS ALONG S.R. 108 THROUGH WORK ZONE OR TO PROVIDE AN ADDITIONAL ROUTE AROUND WORK ZONE DURING ROAD CLOSURE PERIOD.

DUST CONTROL

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

ITEM 616, WATER 15 M. GAL.

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.

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

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

DESIGN AGENCY

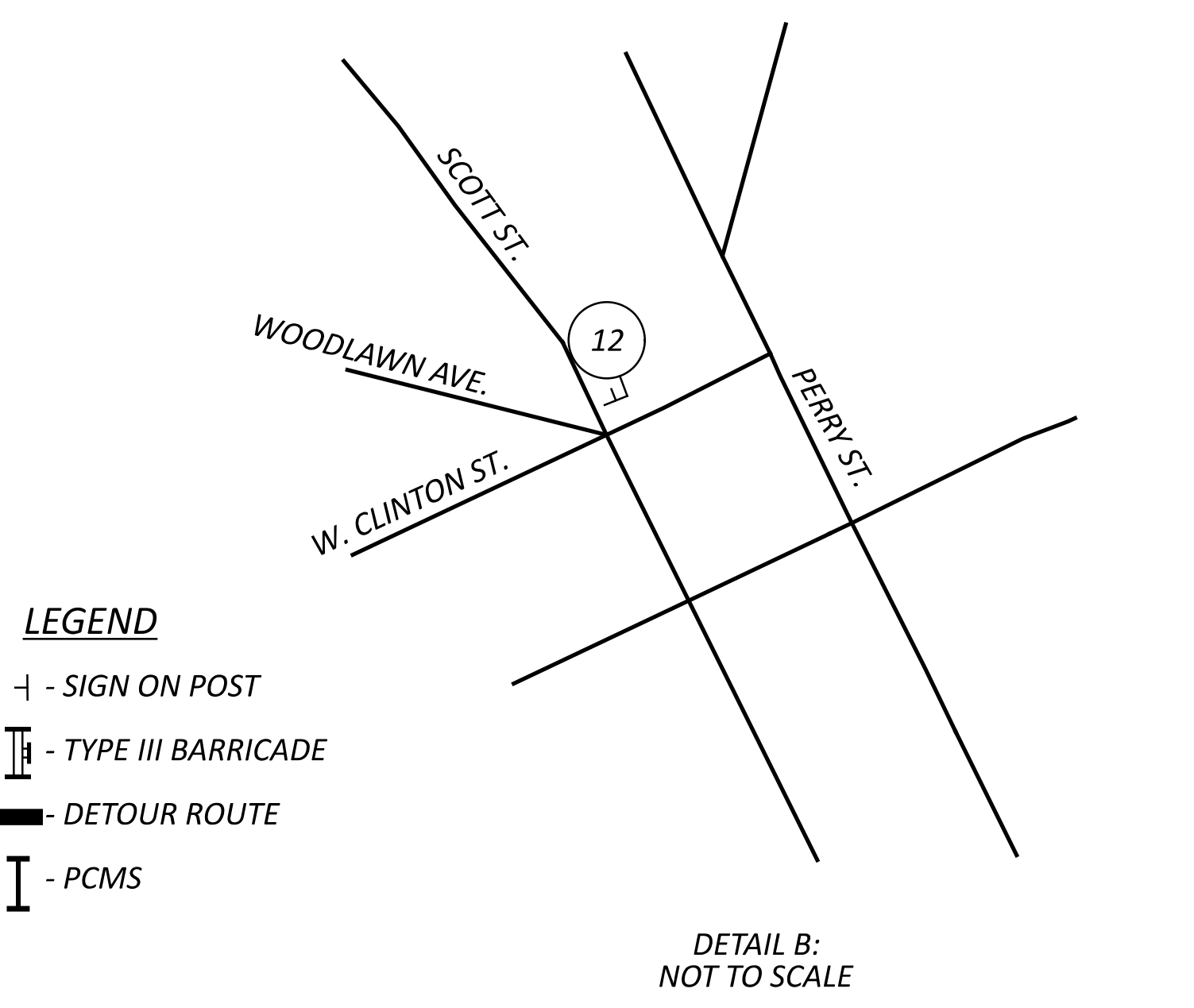
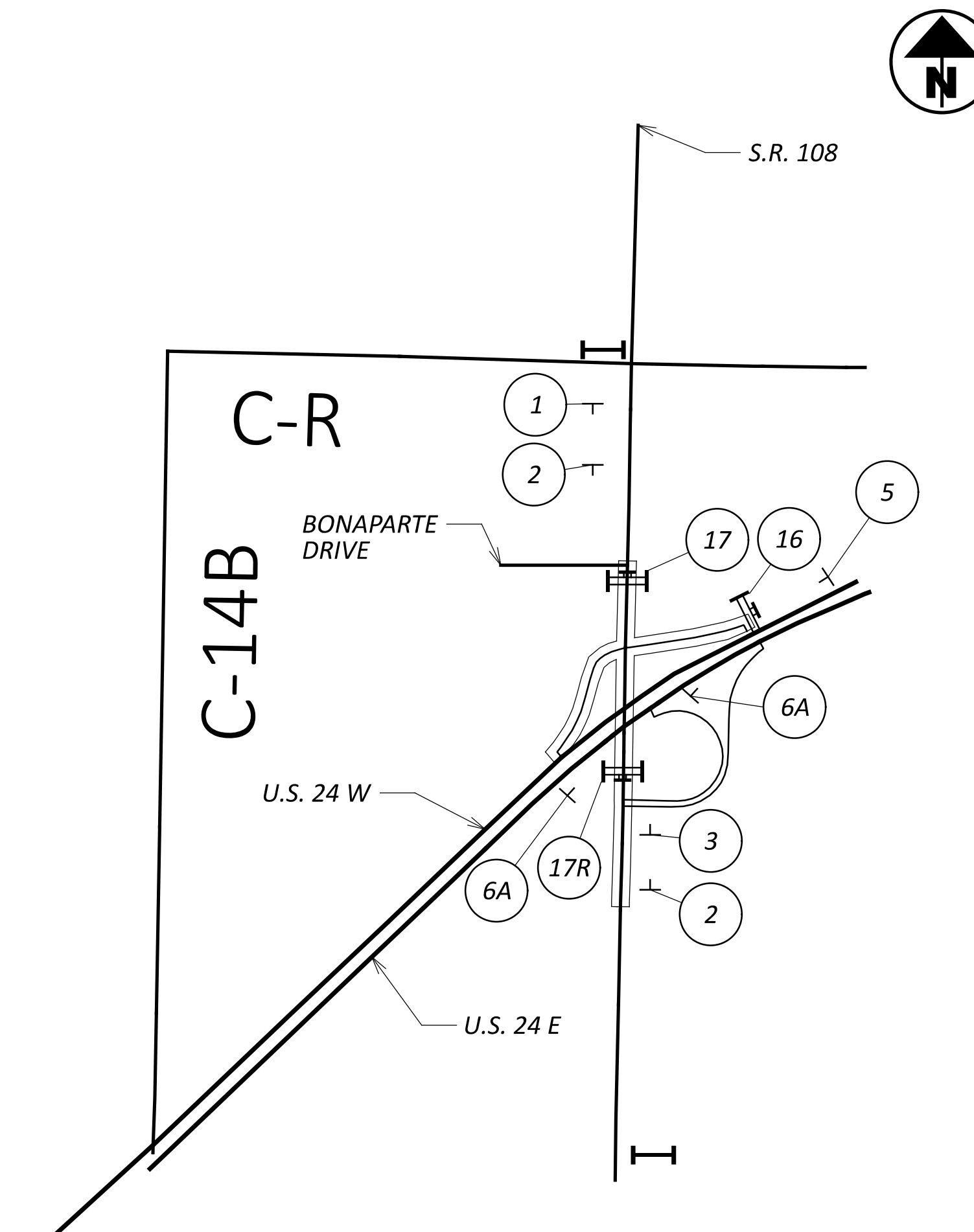
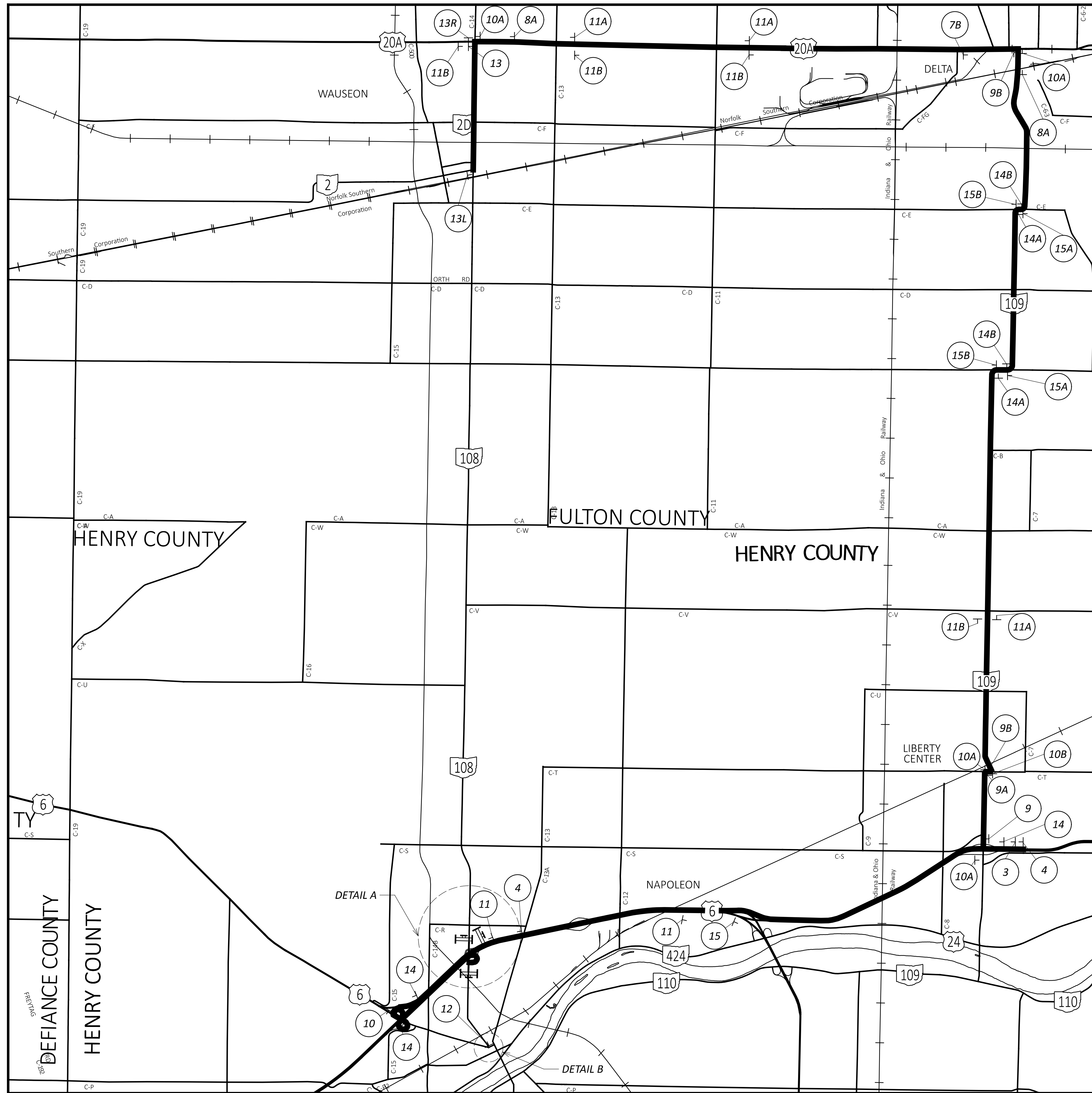
Stantec
 1500 LAKE SHORE DRIVE,
 SUITE 100
 COLUMBUS, OH 43204
 (614) 486-4383

DESIGNER
NMG

REVIEWER
BMH 11/30/22

PROJECT ID
110867

SHEET TOTAL
 8 | 68



- LEGEND**
- ⊥ - SIGN ON POST
 - ⊥ - TYPE III BARRICADE
 - - DETOUR ROUTE
 - ⊥ - PCMS

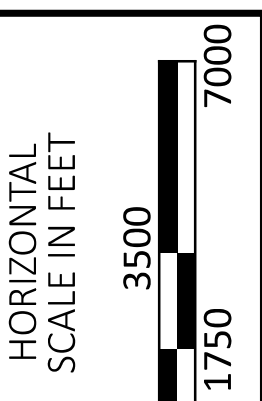
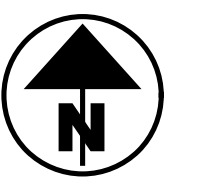
NOTES:

FOR SIGN LEGEND, SEE SHEET 11.

NOTE TO CONTRACTOR, ADJACENT PID 94321 WILL BE DETOURED IN GENERAL VICINITY OF PROJECT.

CONTRACTOR TO MAINTAIN ACCESS FOR PEDESTRIANS ALONG S.R. 108 PER ITEM 614, MAINTAINING TRAFFIC.

S.R. 108 CAN NOT BE CLOSED UNTIL AFTER THE HENRY COUNTY ENGINEER PROJECT WORK ON OAKWOOD AVENUE IN NAPOLEON IS OPEN TO TRAFFIC. THE EARLIEST THIS WOULD BE IS JULY 17, 2023.



**MAINTENANCE OF TRAFFIC
DETOUR PLAN**

DESIGN AGENCY	
1500 LAKE SHORE DRIVE SUITE 100 COLUMBUS, OH 43204 (614) 486-4383	
DESIGNER	
NMG	
REVIEWER	
BMH 11/30/22	
PROJECT ID	
110867	
SHEET	TOTAL
10	68

HEN-108-17.40

MODEL: Sheet PAPER: 17x11 (in.) DATE: 5/6/2023 TIME: 5:33:47 PM USER: ngoodman
U:\173909095\108741Task F HEN-108-17.40\1087400-Engineering\Roadway\Sheets\110867_GG001.dgn

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	9	15	16	17	45	50	54	56	57	67		EXT	TOTAL 01/SAF/04				
ROADWAY																			
LS				2			2,291	151						201	11000	LS		CLEARING AND GRUBBING	
														202	20010	2	EACH	HEADWALL REMOVED	
														202	23000	2,442	SY	PAVEMENT REMOVED	
				412										202	32000	412	FT	CURB REMOVED	
				64										202	32500	64	FT	CURB AND GUTTER REMOVED	
					501									202	35100	501	FT	PIPE REMOVED, 24" AND UNDER	
				4										202	58000	4	EACH	MANHOLE REMOVED	
				6										202	58100	6	EACH	CATCH BASIN REMOVED	
				232										202	75000	232	FT	FENCE REMOVED	
						2,186	28							203	10000	2,214	CY	EXCAVATION	
						1,541	4							203	20000	1,545	CY	EMBANKMENT	
						4,322	148							204	10000	4,470	SY	SUBGRADE COMPACTION	
3														204	45000	3	HOUR	PROOF ROLLING	
				296										607	23000	296	FT	FENCE, TYPE CLT	
				2										623	39500	2	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE	
				1										623	40000	1	EACH	MONUMENT ASSEMBLY REMOVED AND RESET	
				1										623	40500	1	EACH	REFERENCE MONUMENT, TYPE A	6
														623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
														623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
				2										SPECIAL	69050350	2	EACH	MAILBOX REMOVED AND RESET	7
EROSION CONTROL																			
								4						601	21050	4	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
					5									601	32200	5	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
					236									601	34300	236	CY	ROCK CHANNEL PROTECTION, TYPE D WITHOUT FILTER	
					308									601	37501	308	FT	PAVED GUTTER, TYPE 1-2, AS PER PLAN	54
2														659	00100	2	EACH	SOIL ANALYSIS TEST	
														659	00300	615	CY	TOPSOIL	
615														659	10000	5,532	SY	SEEDING AND MULCHING	
5,532														659	14000	277	SY	REPAIR SEEDING AND MULCHING	
277														659	15000	277	SY	INTER-SEEDING	
277														659	20000	0.77	TON	COMMERCIAL FERTILIZER	
0.77														659	31000	1.14	ACRE	LIME	
1.14														659	35000	31	MGAL	WATER	
31					376									670	00720	376	SY	DITCH EROSION PROTECTION MAT, TYPE B	
														832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
														832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
														832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
														832	30000	27,216	EACH	EROSION CONTROL	
DRAINAGE																			
					2.4									602	20000	2.4	CY	CONCRETE MASONRY	
								82						605	13300	82	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
								2,330						605	14000	2,330	FT	6" BASE PIPE UNDERDRAINS	
														611	00510	97	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
														611	00900	85	FT	6" CONDUIT, TYPE B	
														611	04400	73	FT	12" CONDUIT, TYPE B	
					36									611	04600	36	FT	12" CONDUIT, TYPE C	
					59									611	05900	59	FT	15" CONDUIT, TYPE B	
					56									611	06100	56	FT	15" CONDUIT, TYPE C	
					52									611	06400	52	FT	15" CONDUIT, TYPE D	
														611	07400	31	FT	18" CONDUIT, TYPE B	
					31									611	10400	432	FT	24" CONDUIT, TYPE B	
					432									611	98150	4	EACH	CATCH BASIN, NO. 3	
					4									611	98180	4	EACH	CATCH BASIN, NO. 3A	
					2									611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE	
														611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
					1									611	99574	5	EACH	MANHOLE, NO. 3	
					5									611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
					1									611	99710	2	EACH	PRECAST REINFORCED CONCRETE OUTLET	
								2											

GENERAL SUMMARY

DESIGN AGENCY



Stantec
1500 LAKE SHORE DRIVE
SUITE 100
COLUMBUS, OH 43204
(614) 486-4383

DESIGNER
NMG

REVIEWER
CNK 11/30/22

PROJECT ID
110867

SHEET TOTAL
12 | 68

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	9	15	16	17	45	50	54	56	57	67		EXT	TOTAL 01/SAF/04				
PAVEMENT																			
						4,524								254	01000	4,524	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1-1/4"	
65						730								301	56000	795	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
						748	22							304	20000	770	CY	AGGREGATE BASE	
						954								407	10000	954	GAL	TACK COAT	
11						272								441	50000	283	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
17						160								441	50300	177	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
						215								452	09010	215	SY	4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
							127							452	10010	127	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
						355								452	12010	355	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
				11,689										608	13000	11,689	SF	6" CONCRETE WALK	
				467										608	52000	467	SF	CURB RAMP	
				1,639										609	12000	1,639	FT	COMBINATION CURB AND GUTTER, TYPE 2	
60				879										609	26000	939	FT	CURB, TYPE 6	
				229										609	28000	229	FT	CURB, TYPE 7	
				315										609	31000	315	FT	COMBINATION CURB AND GUTTER, TYPE 9	
WATER WORK																			
					2									638	10800	2	EACH	VALVE BOX ADJUSTED TO GRADE	
LIGHTING																			
												12		625	00450	12	EACH	CONNECTION, FUSED PULL APART	
												12		625	00460	12	EACH	CONNECTION, UNFUSED PULL APART	
												24		625	00480	24	EACH	CONNECTION, UNFUSED PERMANENT	
												10		625	10490	10	EACH	LIGHT POLE, CONVENTIONAL: 32' 6" ROUND TAPERED ALUMINUM WITH 8' DAVIT ARM	
												10		625	14000	10	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
												30		625	23200	30	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
												1,530		625	23400	1,530	FT	NO. 10 AWG POLE AND BRACKET CABLE	
												1,599		625	23900	1,599	FT	1-1/2" DUCT CABLE WITH TWO NO. 6 AWG 2400 VOLT CABLES	
												50		625	25300	50	FT	CONDUIT, 1-1/2", 725.04	
												10		625	26252	10	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), 59 WATTS, 120 VOLT	
												2		625	27500	2	EACH	LUMINAIRE, UNDERPASS, COOPER/EATON, WKP-6B-LED-EDGL	
												1,409		625	29002	1,409	FT	TRENCH, 24" DEEP	
												8		625	30700	8	EACH	PULL BOX, 725.08, 18"	
												12		625	32000	12	EACH	GROUND ROD	
												1		625	34001	1	EACH	POWER SERVICE, AS PER PLAN	
												1,409		625	36010	1,409	FT	UNDERGROUND WARNING/MARKING TAPE	
														625	37000	LS		SERVICE TO UNDERPASS LIGHTING	
														625	39000	LS		TEMPORARY LIGHTING	
												2		632	28200	2	EACH	DISCONNECT SWITCH WITH ENCLOSURE	
TRAFFIC CONTROL																			
											104			621	00100	104	EACH	RPM	
						423.5								630	03100	423.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
						240								630	80100	240	SF	SIGN, FLAT SHEET	
						37								630	84900	37	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
						5								630	85100	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
						1								630	85400	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
						16								630	86002	16	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
						3								630	86102	3	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
						2								630	97700	2	EACH	SIGNING, MISC.: GROUND MOUNTED STRUCTURAL BEAM FOUNDATION, AS PER PLAN	
						33								630	97900	33	FT	SIGNING, MISC.: 6" X 8" SOLID WOOD POST, AS PER PLAN	
											0.41			642	00104	0.41	MILE	EDGE LINE, 6", TYPE 1	
											0.42			642	00300	0.42	MILE	CENTER LINE, TYPE 1	
											100			644	00404	100	FT	CHANNELIZING LINE, 12"	
											57			644	00500	57	FT	STOP LINE	
											332			644	00630	332	FT	CROSSWALK LINE, 24"	
											163			644	00700	163	FT	TRANSVERSE/DIAGONAL LINE	
											58			644	00900	58	SF	ISLAND MARKING	
											9			644	01300	9	EACH	LANE ARROW	
											198			644	01520	198	FT	DOTTED LINE, 12"	
											57			644	20800	57	FT	YIELD LINE	

GENERAL SUMMARY

DESIGN AGENCY

Stantec
 1500 LAKE SHORE DRIVE
 SUITE 100
 COLUMBUS, OH 43204
 (614) 486-4383

DESIGNER
NMG

REVIEWER
CNK 11/30/22

PROJECT ID
110867

SHEET TOTAL
 13 | 68

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	
7	8	9	15	16	17	45	50	54	56	57	67	68		ITEM	EXT	TOTAL 01/SAFE/04				
													20	661	00500	20	CY		LANDSCAPING	
												8	661	14000	8	EACH		PERENNIALS, SCHIZACHYRIUM SCOPARIUM		
												32	661	14000	32	EACH		PERENNIALS, SPOROBOLUS HETEROLEPIS		
												449	661	99930	449	SY		PLANTING, MISC.: WASHED STONE, 2"-3"	68	
												449	661	99930	449	SY		PLANTING, MISC.: LANDSCAPE FABRIC UNDER WASHED STONE	68	
												160	662	31000	160	GAL		LANDSCAPE WATERING		
																		RETAINING WALLS		
								9,610						509	30040	9,610	FT	NO. 6 GFRP DEFORMED BARS		
								92						512	10100	92	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
								155						516	13200	155	SF	1/2" PREFORMED EXPANSION JOINT FILLER		
								278						517	75001	278	FT	RAILING, ALUMINUM, AS PER PLAN	7	
								1						518	12800	1	EACH	SCUPPER, MODIFICATION		
								1,747						608	98000	1,747	SF	WALKWAY, MISC.: VARIABLE THICKNESS CONCRETE WALK	7	
								663						870	10001	663	SF	PREFABRICATED MODULAR RETAINING WALL, AS PER PLAN	7	
								20						870	11000	20	CY	WALL EXCAVATION		
								270						870	12000	270	FT	6" DRAINAGE PIPE, PERFORATED		
								17						870	12100	17	FT	6" DRAINAGE PIPE, NON-PERFORATED		
								2						870	14000	2	DAY	ON-SITE ASSISTANCE		
								LS						870	15000	LS		PMRW INSPECTION AND COMPACTION TESTING		
																		MAINTENANCE OF TRAFFIC		
			40											614	11110	40	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
														614	12420	LS		DETOUR SIGNING	8	
			10											614	18601	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	9	
	15													616	10000	15	MGAL	WATER		
																		INCIDENTALS		
														103	05000	LS		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND		
														614	11000	LS		MAINTAINING TRAFFIC		
														619	16010	8	MNTH	FIELD OFFICE, TYPE B		
														623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
														624	10000	LS		MOBILIZATION		

GENERAL SUMMARY

DESIGN AGENCY
 Stantec
<small>1500 LAKE SHORE DRIVE SUITE 100 COLUMBUS, OH 43204 (614) 486-4383</small>
DESIGNER
NMG
REVIEWER
CNK 11/30/22
PROJECT ID
110867
SHEET
14
TOTAL
68

REF NO.	SHEET NO.	STATION		SIDE	202						607	608		609				623			SPEC	
					PIPE REMOVED, 24" & UNDER FT.	HEADWALL REMOVED EACH	CURB REMOVED FT.	CURB & GUTTER REMOVED FT.	CATCH BASIN REMOVED EACH	MANHOLE REMOVED EACH	FENCE REMOVED FT.	FENCE, TYPE CLT FT.	6" CONCRETE WALK SQ. FT.	CURB RAMP SQ. FT.	COMBINATION CURB AND GUTTER, TYPE 2 FT.	CURB, TYPE 6 FT.	CURB, TYPE 7 FT.	COMBINATION CURB AND GUTTER, TYPE 9 FT.	MONUMENT ASSEMBLY ADJUSTED TO GRADE EACH	MONUMENT ASSEMBLY REMOVED AND RESET EACH	REFERENCE MONUMENT, TYPE A EACH	MAILBOX REMOVED AND RESET EACH
		FROM	TO																			
R1		S.R. 108 OMITTED																				
R2	19	906+38.79	906+82.42	LT				48														
R3	19	907+31.02	907+42.46	LT				16														
R4	21	914+00.45		RT	63				1													
R5	21	915+25.02		LT	28				1													
R5A	21	915+25.34		RT					1													
R6	21	915+25.52		RT					1													
R7	21	916+24.94		LT	21				1													
R8	21	916+24.83		RT	225				1													
R9	21	916+24.91		RT	7				1													
R10	21	917+24.29		LT	21				1													
R11	21	917+24.68		RT	100				1													
R12	21	917+25.12		RT	7				1													
R13	21-22	917+00.00	919+14.94	LT				215														
R14	21-22	917+00.00	918+97.00	RT				197														
R15	22	920+51.55	920+79.01	RT	29																	
R16	22	920+50.32		RT					1													
R17	22	922+55.46		RT																1		
R18	25	923+83.54		RT																1		
C1	19	906+38.79	906+82.42	LT																		
C2	19	907+31.02	907+42.46	LT																		
C3	21-22	917+00.00	919+64.12	LT																		
C4	21-22	916+95.00	919+96.13	RT																		
C5	22	918+18.05	919+15.30	LT/RT																		
C6	22	60+00.00 ('WR')	60+41.88 ('WR')	RT																		
C7	22, 25	160+00.00 ('NW')	924+10.00	LT																		
C8	22	919+32.76	920+32.74	LT/RT																		
C9	22	919+46.43	920+19.08	LT/RT																		
C10	22	70+03.90 ('ER')	71+91.48 ('ER')	RT																		
C11	22, 25	174+90.62 ('NE')	924+10.00	RT																		
C12	22	920+52.53	922+49.79	LT/RT																		
P1	19	905+37.69	906+78.84	LT																		
P2	19-21	907+31.47	914+10.60	LT																		
P3	21-22	916+83.07	919+59.58	LT																		
P4	22, 25	919+76.13	925+20.16	LT																		
P5	22	920+74.82	920+84.78	LT																		
P6	22	920+72.12	920+79.20	RT																		
P7	22, 25	920+72.28	925+15.98	RT																		
P8	25	925+77.25	925+83.99	LT																		
F1	19-20	907+48.58	909+80.22	LT																		
F2	21	915+35.64	915+98.85	LT																		
MN1	22	909+74.40		-																1		
MN2	22	911+21.00		-																1		
MN3	22	920+00.00		-																1		
TOTALS CARRIED TO GENERAL SUMMARY					501	2	412	64	6	4	232	296	11,689	467	1,639	879	229	315	2	1	1	2

SUBSUMMARY

DESIGN AGENCY



DESIGNER

NMG

REVIEWER

CNK 11/30/22

PROJECT ID

110867

SHEET TOTAL

15 68

HEN-108-17.40

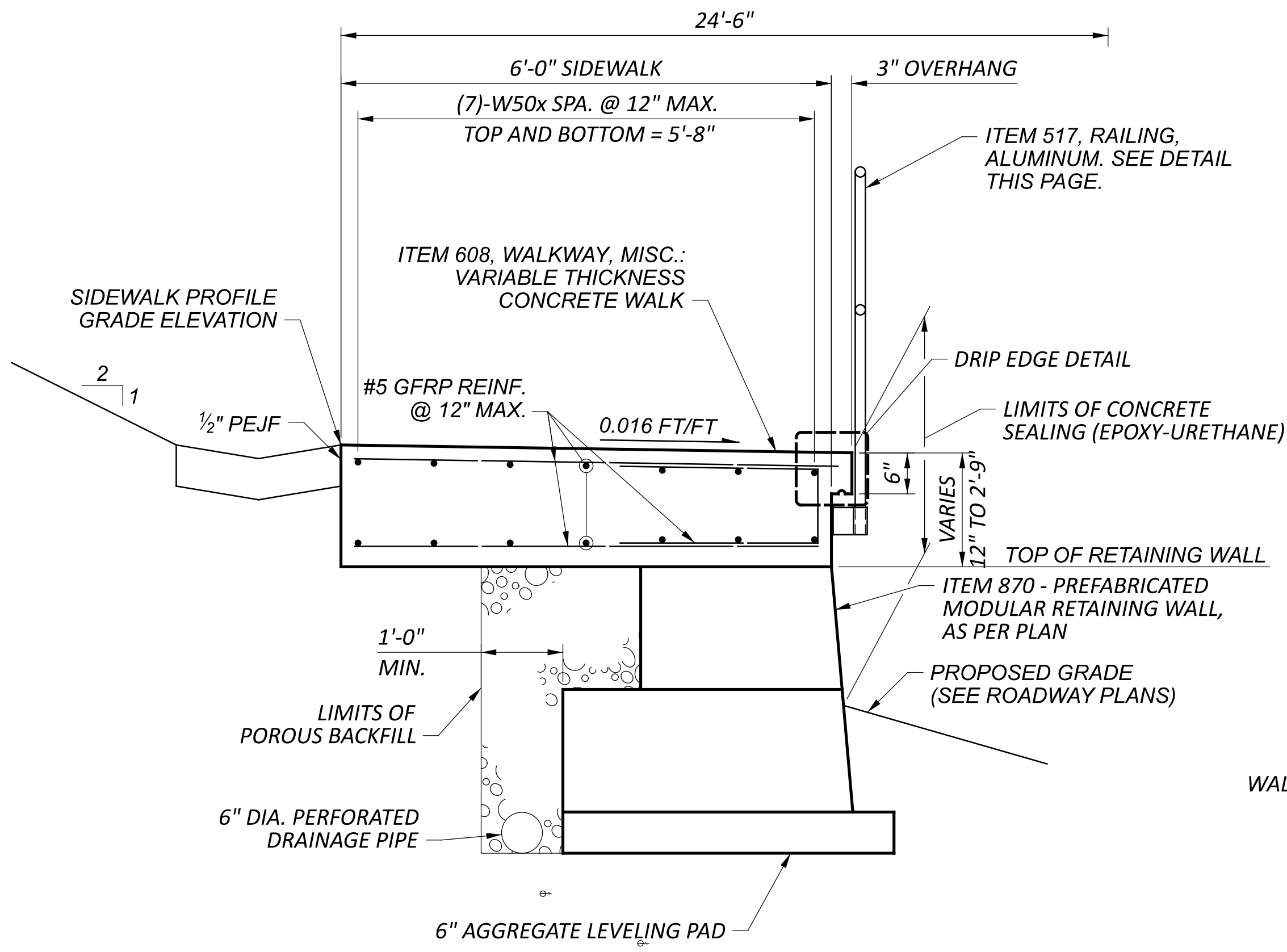
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REF NO.	SHEET NO.	STATION		SIDE	601			602	611						611	611	611	611	611	638	670		
		FROM	TO		ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	ROCK CHANNEL PROTECTION, TYPE D	PAVED GUTTER, TYPE 1-2, AS PER PLAN	CONCRETE MASONRY	12" CONDUIT, TYPE B	12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	15" CONDUIT, TYPE D	18" CONDUIT, TYPE B	24" CONDUIT, TYPE B	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	MANHOLE, NO. 3	CATCH BASIN ADJUSTED TO GRADE	CATCH BASIN RECONSTRUCTED TO GRADE	MANHOLE ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE	DITCH EROSION PROTECTION MAT, TYPE B
					CU. YD.	CU. YD.	FT.	CU. YD.	FT.	FT.	FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SQ. YD.	
S.R. 108																							
D1	21	913+92.15	916+94.90	LT			308																
D2	21	914+00.45		RT				0.43	10					73			1						
D3	21	913+92.15	916+94.90	LT		236																	
D4	21	915+25.02		LT					28								1						
D4A	21	915+25.34		RT									125			1							
D5	21	915+25.52		RT												1							
D6	21	916+24.94		LT					21						1		1						
D7	21	916+24.83		RT										100			1						
D8	21	916+24.91		RT											1								
D9	21	917+24.29		LT													1						
D10	21	917+24.68		RT													1						
D11	21	917+25.12		RT					7					100			1						
D12	22	920+02.61	920+14.45	LT	1			0.50															
D13	22	920+50.32	920+50.26	RT	1			0.46															
D14	22	920+89.16		LT								49											
D15	22	920+85.00		RT							10					1							
D16	22	920+61.33	921+25.00	RT	2			0.45				36		56									
D17	22	920+66.71	920+91.08	LT	1			0.50															
EC1	22	918+49.61	7191.14 ('ER')	RT																		376	
S1	19	906+50.03		LT																		1	
S2	19	906+50.35		LT																		1	
S3	20	912+51.30		LT																		1	
S4	21	917+01.12		LT																		1	
WV1	19	905+69.69		LT																		1	
WV2	20	910+72.46		LT																		1	
TOTALS CARRIED TO GENERAL SUMMARY					5	236	308	2.4	73	36	59	56	52	31	432	4	4	5	2	1	1	2	376

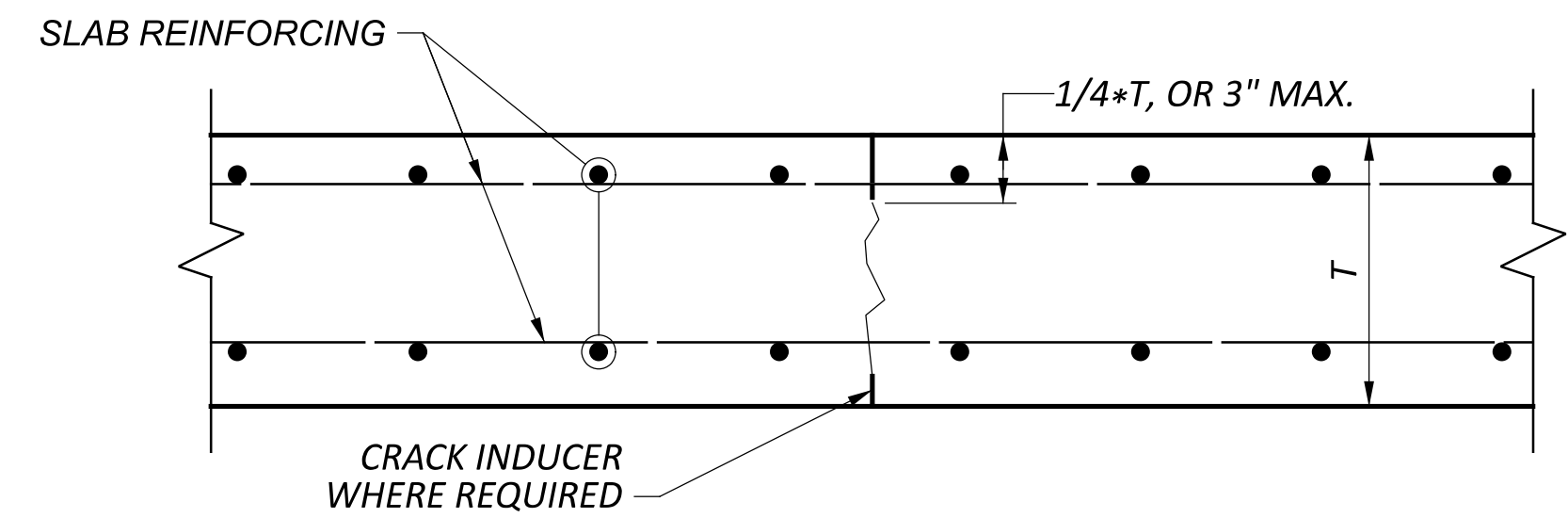
SUBSUMMARY



DESIGNER
 REVIEWER
 CNK 11/30/22
 PROJECT ID
 110867
 SHEET TOTAL
 16 68

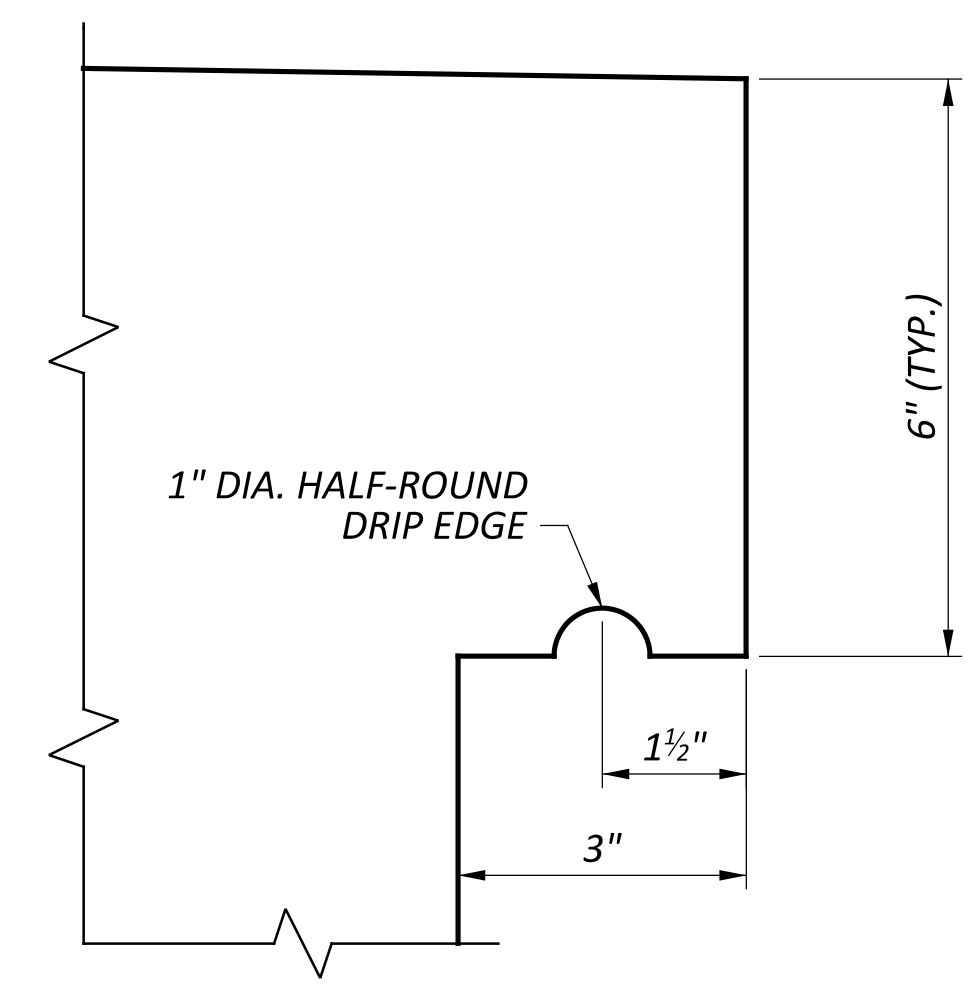


TYPICAL RETAINING WALL SECTION

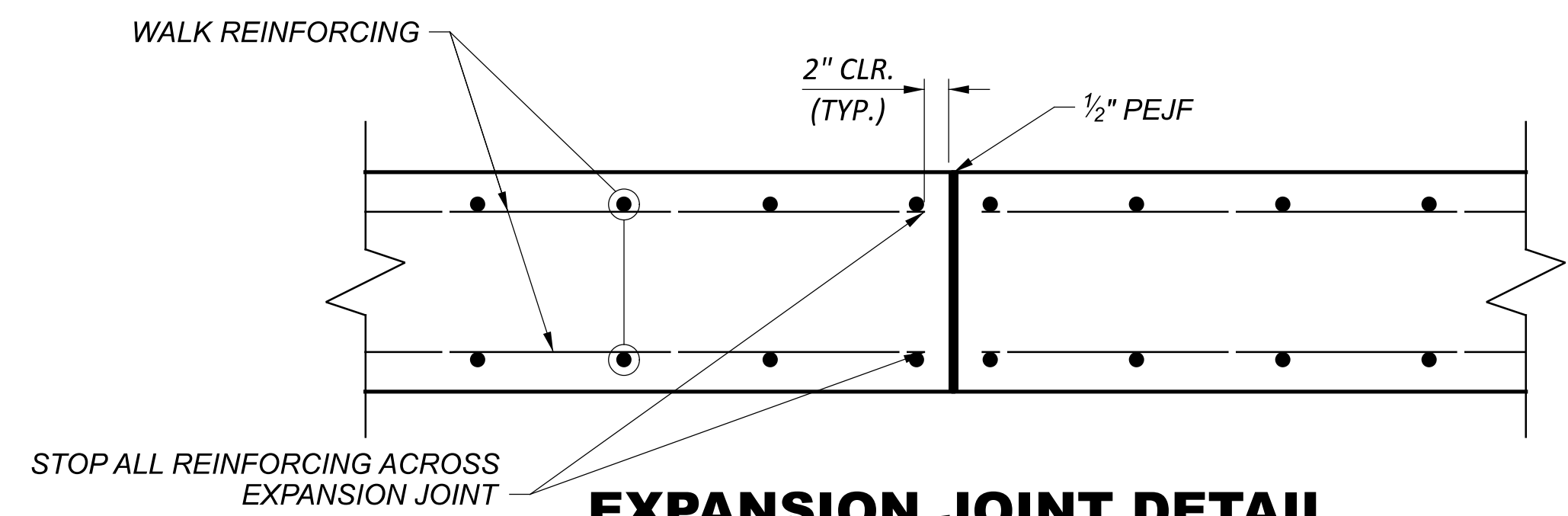


TYPICAL SAWCUT

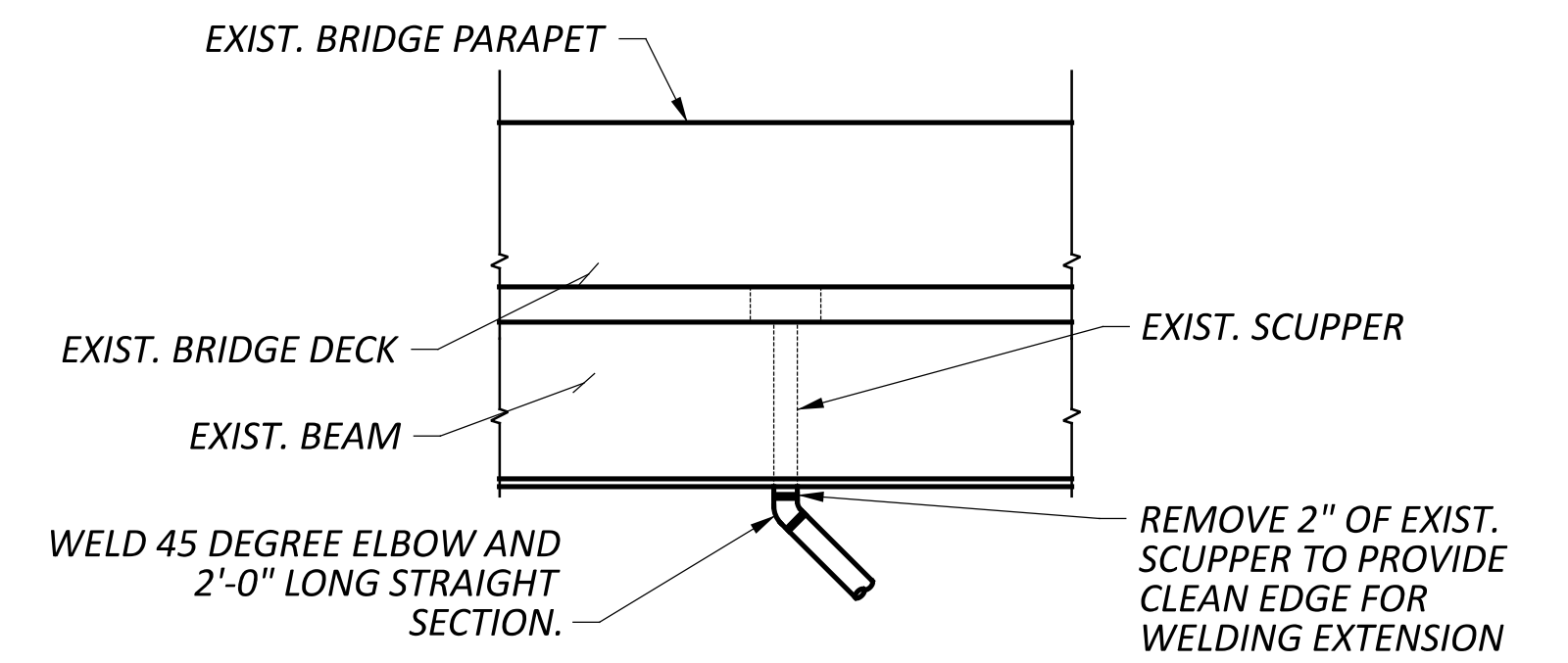
- NOTES:**
1. CRACK INDUCER AND SAWCUT SHALL BE REQUIRED WHERE SLAB THICKNESS EXCEEDS 12".
 2. CRACK INDUCER SHALL BE A DEVICE CAPABLE OF ASSISTING IN PRODUCING A CRACK IN CONCRETE WALK SECTIONS EXCEEDING 12" THICKNESS. CRACK INDUCER SHALL BE A MINIMUM OF 1 1/2" IN HEIGHT AND A MAXIMUM OF 2" IN HEIGHT. MATERIAL CAN BE ANY MATERIAL OTHER THAN ALUMINUM.
 3. JOINT SPACING SHALL BE IN ACCORDANCE WITH CMS ITEM 608.



DRIP EDGE DETAIL



EXPANSION JOINT DETAIL



SCUPPER EXTENSION DETAIL

- NOTE:**
1. SCUPPER EXTENSION DETAIL APPLIES TO (1)-SCUPPER LOCATED ON U.S. 24 WEST BOUND BRIDGE ABOVE PROPOSED LOCATION OF WALK.
 2. SCUPPER EXTENSION PIPE TO EXTEND TO ABOVE PAVED GUTTER
 3. PAYMENT FOR THE ABOVE SCUPPER EXTENSION DETAIL SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 518 SCUPPER. MODIFICATION.

STRUCTURAL GENERAL NOTES:

DESIGN SPECIFICATIONS:

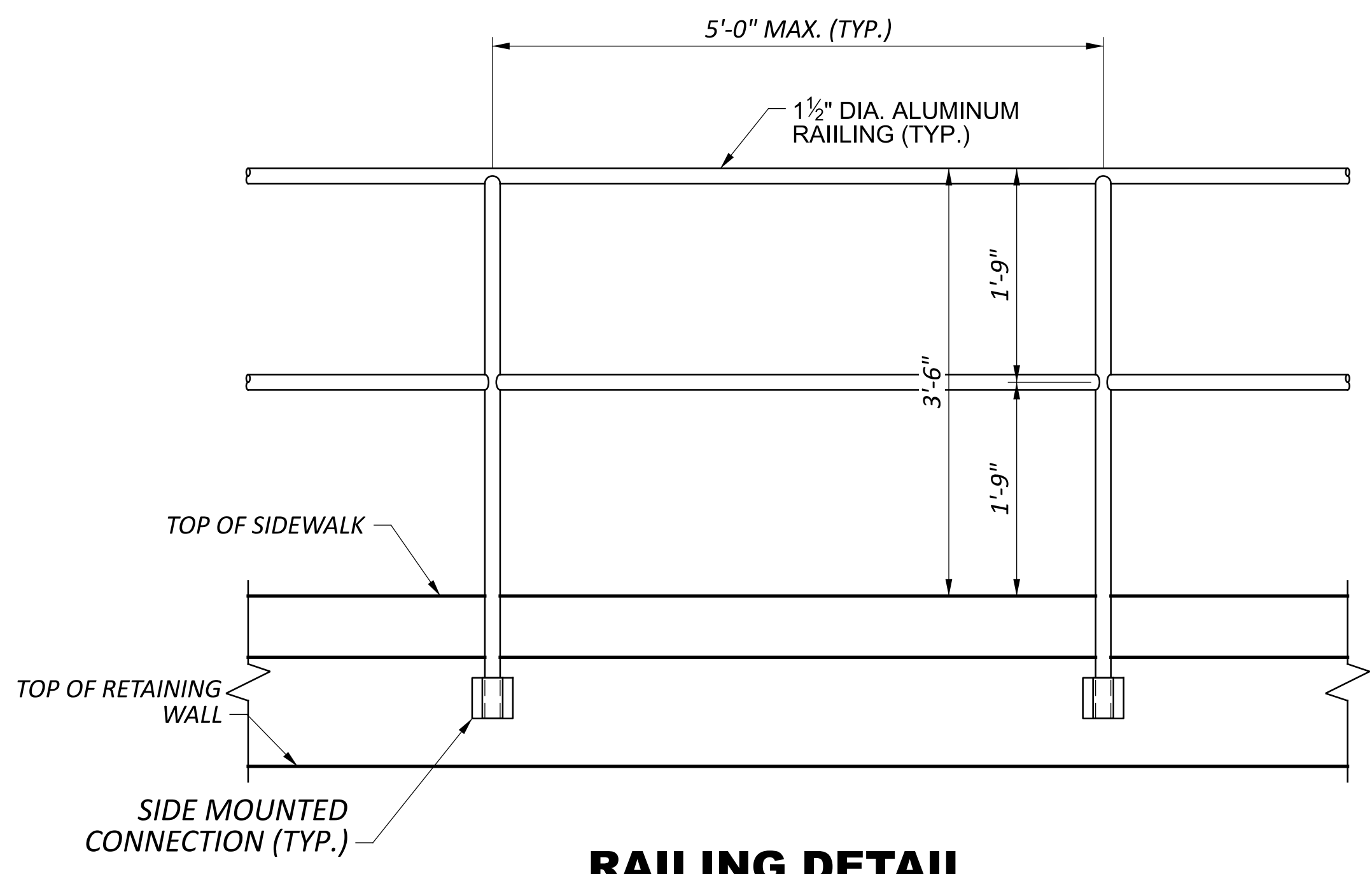
THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, IN 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN DATA:

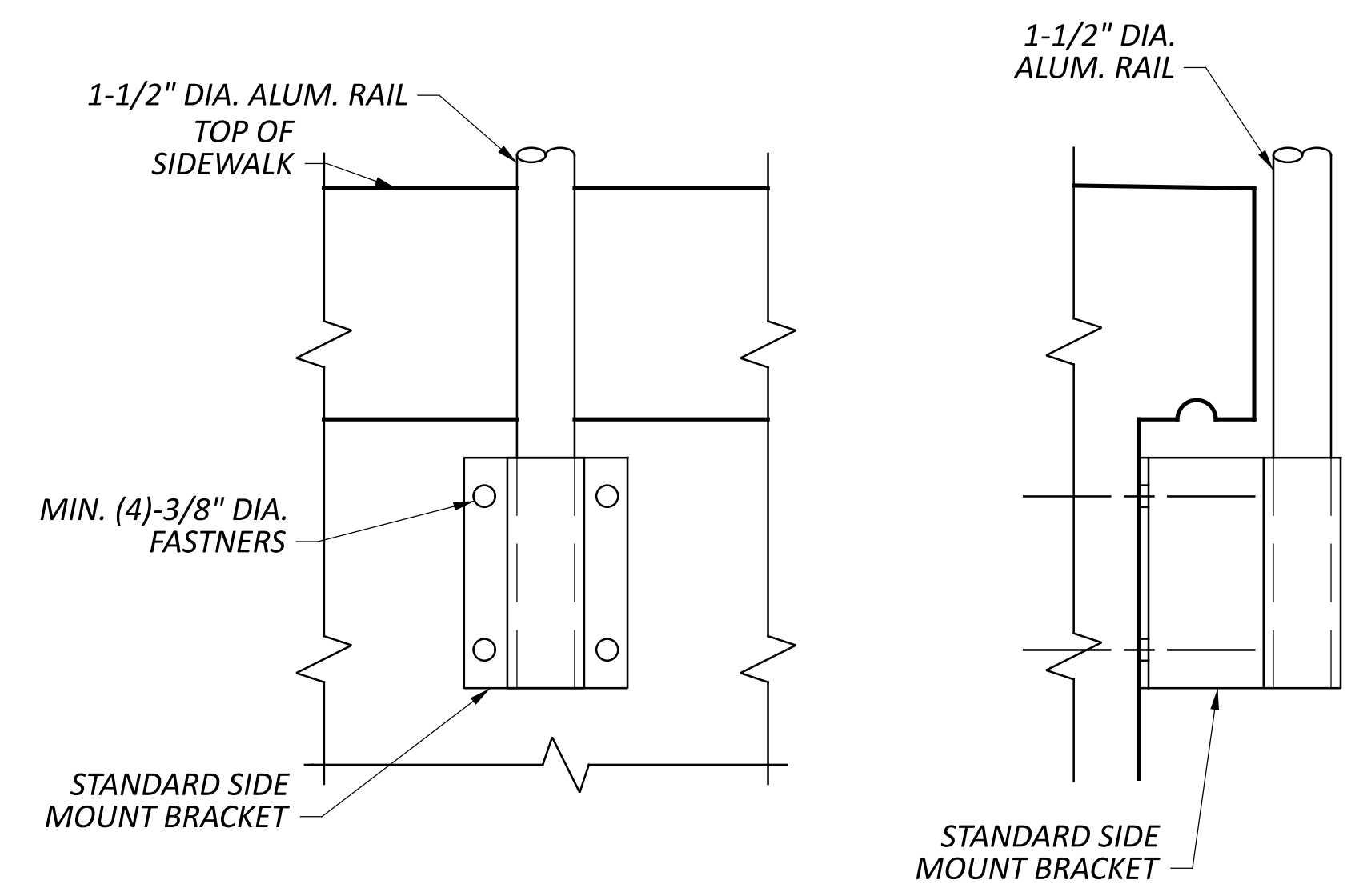
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SIDEWALK)

CONCRETE REINFORCEMENT:
 GFRP REINFORCEMENT (SIDEWALK)

FOR ADDITIONAL ITEM NOTES, SEE SHEET 7/68



RAILING DETAIL



RAILING CONNECTION DETAIL

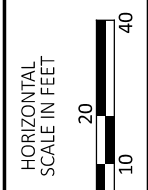
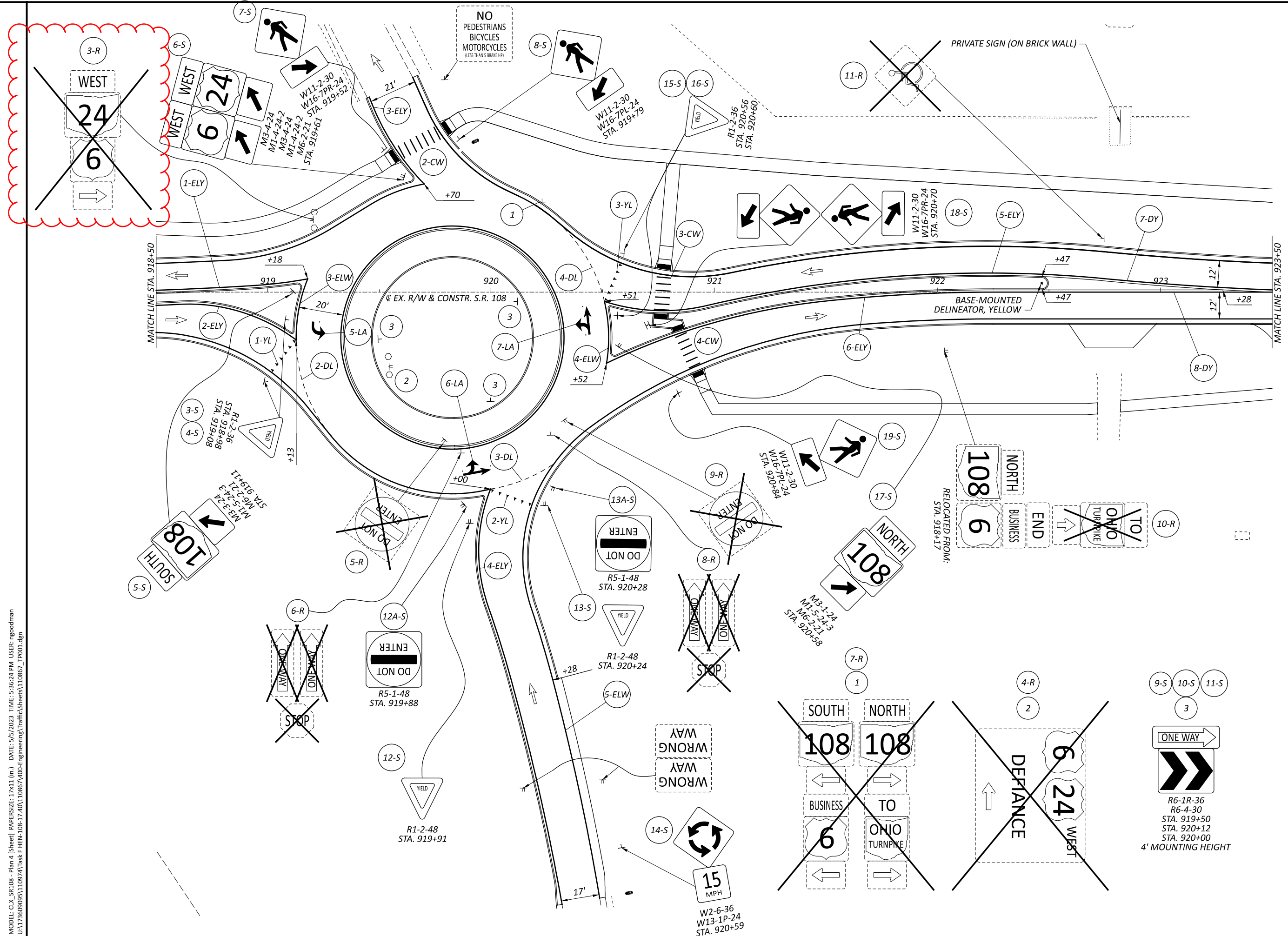
QUANTITIES CARRIED TO THE GENERAL SUMMARY	ITEM				DESCRIPTION	SEE SHEET
	EXTENSION	TOTAL	UNIT			
	509	30040	9,610	FT	NO. 5 GFRP DEFORMED REINFORCEMENT	53
	512	10100	92	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	-
	516	13200	155	SF	1/2" PREFORMED EXPANSION JOINT FILLER	-
	517	75001	278	FT	RAILING, ALUMINUM, AS PER PLAN	7
	608	98000	1,747	SF	WALKWAY, MISC.: VARIABLE THICKNESS CONCRETE WALK	-
	870	10001	663	SF	PREFABRICATED MODULAR RETAINING WALL, AS PER PLAN	7
	870	11000	20	CY	WALL EXCAVATION	-
	870	12000	270	FT	6" DRAINAGE PIPE, PERFORATED	-
	870	12100	17	FT	6" DRAINAGE PIPE, NON-PERFORATED	-
	870	14000	2	DAYS	ON-SITE ASSISTANCE	-
	870	15000	LS	LS	PMRW INSPECTION AND COMPACT TESTING	-

SHEET NO.	REF NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)		630										630		630	
								SIGN, FLAT SHEET	GROUND MOUNTED SIGN SUPPORTS, NO. 3 POST	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	SIGNING, MISC.: GROUND MOUNTED STRUCTURAL BEAM FOUNDATION, AS PER PLAN	SIGNING, MISC.: 6" X 8" SOLID WOOD POST, AS PER PLAN					
61	17-S	S.R. 108	920+58	RT	M3-1-24	24	x	12	2.00	25.00											
					M1-5-24-3	24	x	24	4.00												
					M6-2-21	21	x	15	2.19												
61	18-S	S.R. 108	920+70	RT	W11-2-30	30	x	30	12.50	14.25											
					W16-7PR-24	24	x	12	4.00												
61	19-S	S.R. 108	920+84	RT	W11-2-30	30	x	30	6.25	14.25											
					W16-7PL-24	24	x	12	2.00												
61	10-R	S.R. 108	922+05	RT								2	3	5							
61	11-R	S.R. 108	922+75	LT								1	1								
62	12-R	S.R. 108	923+74	LT								1	1								
62	20-S	S.R. 108	927+50	LT	W2-6-48	48	x	48	16.00								2	33			
					W13-1P-24	24	x	24	4.00												
62	13-R	S.R. 108	927+48	LT								2	4								
TOTAL THIS SHEET								52.94	53.50	6	9	5				2	33				
TOTAL SHEET NUMBER 55								187.06	370.00	10	28	5	1	3							
TOTALS CARRIED TO GENERAL SUMMARY								240	423.5	16	37	5	1	3				2	33		

SIGNING SUBSUMMARY

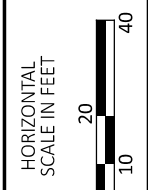
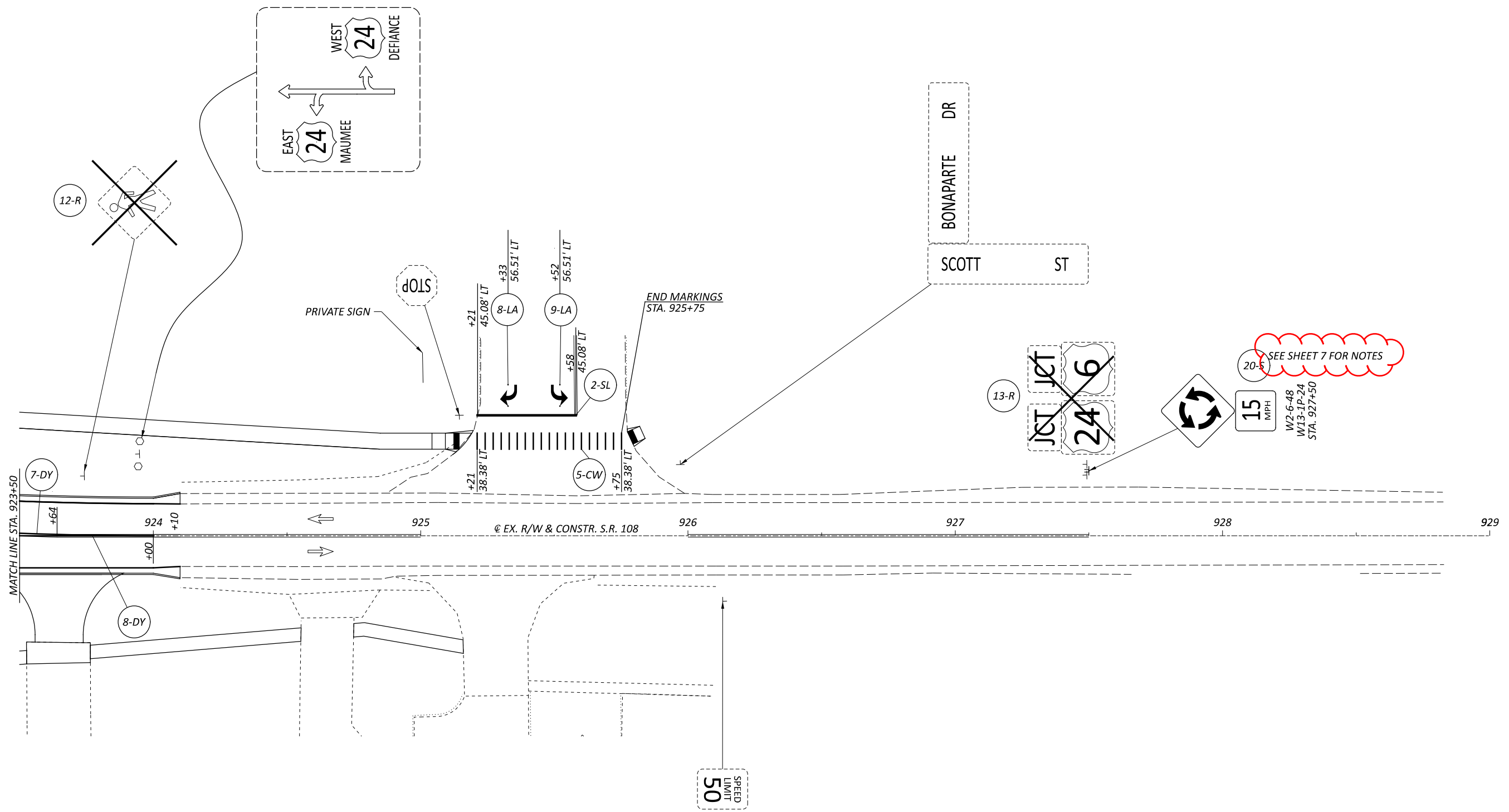


DESIGNER: NMG
 REVIEWER: NMG
 PROJECT ID: 110867
 SHEET TOTAL: 56 | 68



**TRAFFIC CONTROL PLAN S.R. 108
STA. 918+50.00 TO STA. 923+50.00**

DESIGN AGENCY	
1500 LAKE SHORE DRIVE SUITE 100 COLUMBUS, OH 43204 (614) 486-4383	
DESIGNER	
NMG	
REVIEWER	
BMH 11/30/22	
PROJECT ID	
110867	
SHEET	TOTAL
61	68



TRAFFIC CONTROL PLAN S.R. 108
STA. 923+50.00 TO STA. 928+50.00



DESIGNER	NMG
REVIEWER	BMH 11/30/22
PROJECT ID	110867
SHEET	TOTAL
62	68