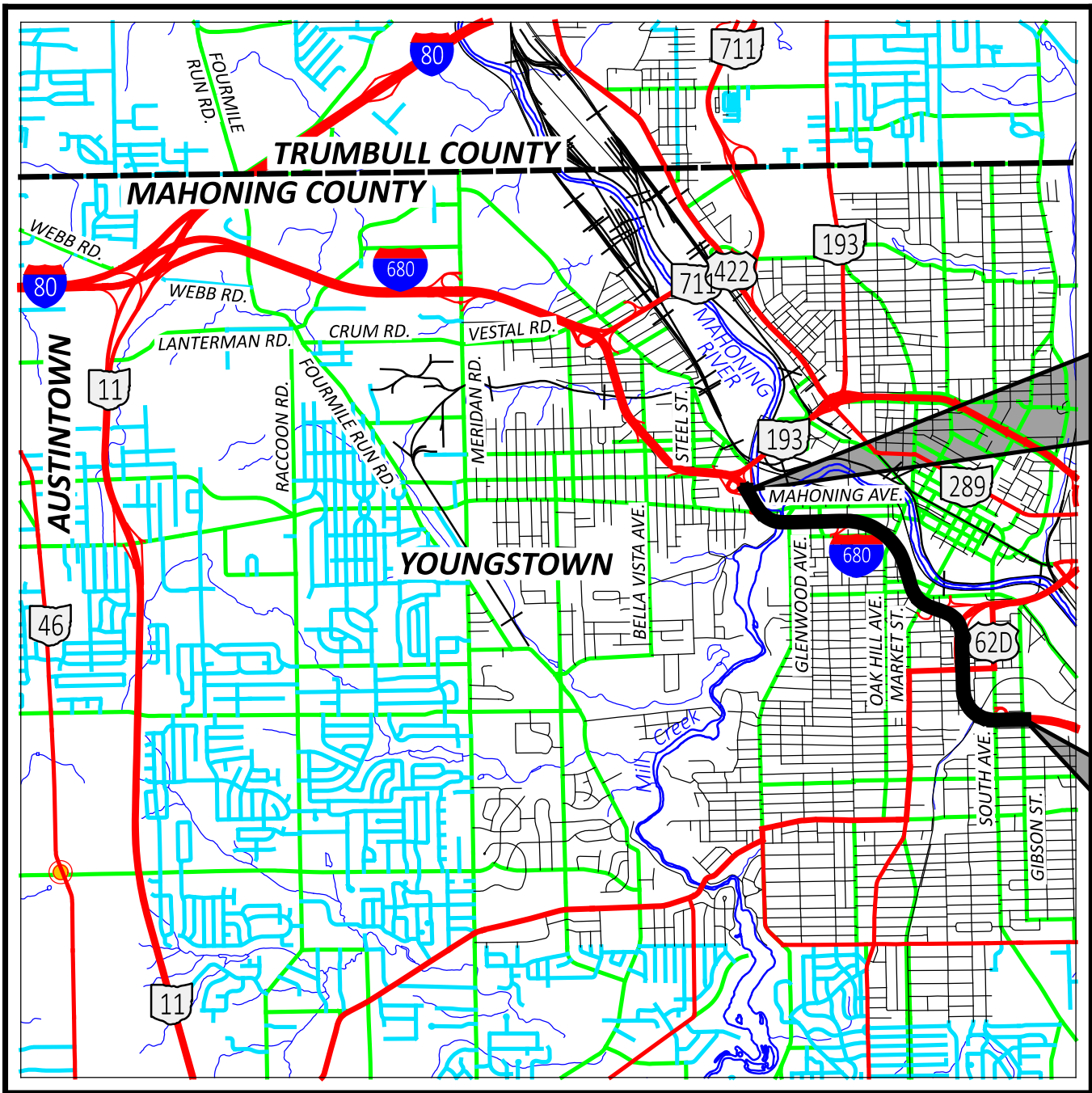


MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/9/2026 TIME: 8:51:01 AM PLTDRV: OHDOT_PDF_E-plctg PENTBL: OHDOT_PenC.tbl USER: doros@msconsultants.com WORKSPACE: OHDOTCEv02 WORKSET: 121474 PRODUCT: OpenRoadsDesigner 24.00.02.25 pvc:\ohio\do-pw-bentley.com\ohio\do-pw-02\Documents\01 Active Projects\District 04\Mahoning\MSConsultants\Roadway\Sheets\121474_0T001.dgn

PLAN PREPARED BY:
ms consultants, inc.
ENGINEERS, ARCHITECTS & PLANNERS
333 E. FEDERAL STREET
YOUNGSTOWN, OHIO 44503
PHONE (330) 744-5321

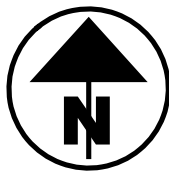


2LMN



LOCATION MAP

LATITUDE: 41°07'35" N LONGITUDE: 80°44'50" W



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

DESIGN DESIGNATION

SEE SHEET P.2

DESIGN EXCEPTIONS

SEE SHEET P.2

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)

BEGIN PROJECT
STA. 950+65.76
S.L.M 4.58

END PROJECT
STA. 1097+25.00
S.L.M 7.37

INDEX OF SHEETS:

TITLE SHEET	P.1	CROSS SECTIONS (SIDE ROADS, RAMPS, ETC.)	P.289 - P.292
DESIGN DESIGNATION DATA	P.2	SUPERELEVATION TABLES	P.293 - P.307
SCHEMATIC PLAN	P.3 - P.7	INTERSECTION, RAMP, AND TERMINAL DETAILS	P.308 - P.370
TYPICAL SECTIONS	P.8 - P.44	BARRIER DETAILS	P.371 - P.376, P.376A
GENERAL NOTES	P.45 - P.51	STORM SEWER PROFILES	P.377 - P.394
MAINTENANCE OF TRAFFIC	P.52 - P.155, 74A	UNDERDRAIN DETAILS	P.395 - P.417
GENERAL SUMMARY	P.156 - P.161, P161A	DRAINAGE DETAILS	P.418 - P.419
SUBSUMMARIES	P.162 - P.196, (P.182 NOT USED)	TRAFFIC CONTROL	P.420 - P.466
PROJECT SITE PLAN	P.197 - P.200	LIGHTING	P.467 - P.485
PLAN AND PROFILE (MAINLINE)	P.201 - P.229	STRUCTURES (OVER 20 FOOT SPAN)	P.486 - P.550, (P.541 NOT USED)
PLAN AND PROFILE (SIDE ROADS, RAMPS, ETC.)	P.230 - P.263	FENCE PLANS	P.551 - P.573
CROSS SECTIONS (MAINLINE)	P.264 - P.288	GEOTECHNICAL PROFILE	P.574 - P.655

ENGINEER'S SEAL		ENGINEER'S SEAL		01-09-2026, STD. DWG. REV. R2 STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
	LIGHTING 2LMN		TRAFFIC CONTROL THOMAS FOK AND ASSOCIATES, INC.	BP-2.1	1/21/23	I-2A	7/19/24	GSD-1-19	7/19/24	ITS-14.50	7/18/25	MT-105.10	1/17/20	800-2023	7/18/25	ASBESTOS REPORT	
				BP-2.2	1/15/21	F-3D	7/19/24	HW-2.1	7/15/22			MT-110.10	7/19/13	807	1/17/25	(SFN 5003350) 5/6/25	
				BP-3.1	1/19/24		7/19/24	HW-2.2	7/20/18	MT-95.30	7/18/25			809	7/18/25	ASBESTOS REPORT	
				BP-4.1	7/19/13	MGS-1.1	1/17/25	SBR-1-20	7/19/24	MT-95.31	7/18/25	TC-12.31	4/15/22	825	7/19/24	(SFN 5006864) 5/6/25	
				BP-5.1	1/17/25	MGS-2.1	1/17/25	SBR-2-20	7/19/24	MT-95.32	7/18/25	TC-15.116	1/19/24	831	4/21/23	ASBESTOS REPORT	
				BP-6.1	7/19/13	MGS-3.1	1/19/18	VPF-1-24	1/17/25	MT-95.40	7/18/25	TC-21.11	7/16/21	832	7/18/25	(SFN 5006872) 1/9/25	
				BP-7.1	1/17/25	MGS-3.2	1/18/13			MT-95.45	7/21/23	TC-21.21	1/20/23	836	1/19/24		
				BP-9.1	1/18/19	MGS-4.2	1/17/25	HL-10.11	7/21/23	MT-95.70	7/21/23	TC-21.50	1/17/25	850	7/21/23		
						MGS-4.3	1/18/13	HL-10.12	7/21/23	MT-95.71	7/21/23	TC-22.20	1/17/14	902	7/19/19		
				CB-2-2A, 2B, 2C	7/19/24	MGS-5.2	7/15/16	HL-10.13	1/20/23	MT-95.72	7/19/24	TC-41.10	7/19/13	905	1/17/25		
	BRIDGE MAH-00680-04.886 ms consultants, inc.		ms consultants, inc.	CB-3	7/19/24	MGS-5.3	7/15/16	HL-10.31	7/15/22	MT-95.73	7/19/24	TC-41.20	10/18/13				
				CB-3A	7/19/24	MGS-6.1	1/19/18	HL-20.11	7/21/23	MT-97.10	7/18/25	TC-41.30	4/21/23				
				CB-4	7/19/24		1/17/25	HL-20.13	1/17/25	MT-98.10	1/17/20	TC-41.40	10/18/13				
				CB-4A, 5A, 8A	7/19/24	MH-3	7/19/24	HL-20.14	4/17/20	MT-98.29	1/17/20	TC-41.50	10/18/13				
				CB-6	7/19/24			HL-20.21	1/17/25	MT-98.30	7/18/25	TC-42.10	10/18/13				
				CB-8	7/19/24	RM-1.1	1/20/23	HL-30.11	7/21/23	MT-99.20	4/19/19	TC-42.20	10/18/13				
						RM-3.1	7/20/18	HL-30.21	4/17/20	MT-99.30	1/17/20	TC-51.11	1/15/16				
				DM-1.1	1/17/25	RM-4.3	1/17/25	HL-30.22	1/17/25	MT-101.60	1/17/25	TC-51.12	1/15/16				
				DM-1.2	1/17/25	RM-4.4	1/17/25	HL-30.31	1/17/25	MT-101.70	7/19/24	TC-52.10	10/18/13				
				DM-3.1	1/18/13	RM-4.5	1/17/25	HL-30.41	1/17/25	MT-101.75	7/21/23	TC-52.20	1/15/21				
				DM-4.3	1/15/16	RM-4.6	7/19/24	HL-40.20	1/17/25	MT-101.80	1/17/20	TC-61.10	4/21/23				
				DM-4.4	1/15/16			HL-60.11	7/21/17	MT-101.90	7/17/20	TC-65.11	1/17/25				
				F-1.1	7/19/13	A-1-20	7/19/24	HL-60.21	7/20/18	MT-102.10	7/21/23	TC-71.10	4/21/23				
				F-3.1	7/19/13	AS-1-15	1/20/23	HL-60.31	7/19/24	MT-102.30	10/16/15	TC-72.20	1/17/25				
				F-3.3	7/19/13	AS-2-15	7/21/23	ITS-14.10	1/17/25	MT-103.10	7/18/25	TC-73.20	1/17/25				
				F-3.4	7/19/13	EXJ-4-87	1/19/24	ITS-14.11	7/18/25	MT-104.10	1/19/24	TC-74.10	7/21/23				

FEDERAL PROJECT NUMBER

E250327

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF FULL DEPTH PAVEMENT REPLACEMENT OF MAHONING I.R. 680 FROM THE S.R. 193 INTERCHANGE (SLM-4.58) TO SOUTH OF THE SOUTH AVENUE INTERCHANGE (SLM-7.37), ALL INTERCHANGE RAMPS WITHIN THE CORRIDOR WILL BE RECONSTRUCTED, INCLUDING RAMPS TO AND FROM S.R. 193 AND U.S. 62/S.R. 7. INCLUDES BRIDGE WORK TO MAH-680-4.886 (SFN 5006872). THIS PROJECT ALSO INCLUDES THE REMOVAL OF THE MAHONING AVENUE ENTRANCE RAMP TO I.R. 680 SOUTHBOUND.

ADDITIONAL WORK INCLUDES GUARDRAIL AND CONCRETE BARRIER REPLACEMENT, ROADWAY DRAINAGE IMPROVEMENTS, SIDEWALK, CURB RAMPS, SIGNING, LIGHTING AND PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 204.55 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 1.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 205.55 ACRES
NOTE: EARTH DISTURBED AREAS (EDA) REFLECT THE OVERALL TOTAL OF PROJECTS MAH-680.00 (PID 113321) AND MAH-680-4.58 (PID 121474). BMP DESIGN REFLECTED IN EACH CONSTRUCTION PLAN IS BASED ON THE EDA OF THE COMBINED PROJECTS.

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 AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEET P.52 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Arthur G. Noirot Jr., P.E.
District 04 Deputy Director

Pamela Boratyn
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY	
DESIGNER	MSN
REVIEWER	CMN 08/29/25
PROJECT ID	121474
SHEET	P.1
TOTAL	655

[illegible]

REF NO.	SHEET NO.	STATION TO STATION					602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	6
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DRAINAGE SUBSUMMARY

DESIGN AGENCY



DESIGNER

REVIEWER
DNO 5/20/25

PROJECT ID
121474

SHEET
P.180

TOTAL
655

P.R.C.O. WITH ITEM 620, APP - PRECAST REINFORCED CONCRETE OUTLET WITH
ITEM 620 - DELINEATOR, POST GROUND MOUNTED, AS PER PLAN



BMP DETAIL SHEETS - RAMPS F & H AT HIGHWAY 10
RAMP H - STA. 0+28.15 TO STA. 10+00.00

$F7$ $F8$

<u>CURVE DATA</u>	<u>SPIRAL DATA</u>
P.I. = STA. 11+77.96	P.I. = STA. 13+58.95'
$\Delta = 87^{\circ}25'39''$ RT	$L = 235.35'$
Rc = 33'00'02"	$\Delta S = 38^{\circ}50'01''$
Dc = 173.62'	$LT = 160.85'$
T = 165.99'	$ST = 82.05'$
L = 264.93'	$x = 224.77'$
E = 66.58'	$y = 51.45'$
DS = 25 mph	$k = 115.90'$
$e_{max} = 0.0580$	$p = 13.08'$

SPIRAL DATA
P.I. = STA. 13+58.95
Ls = 235.35'
Os = 38°50'01"
LT = 160.85'
ST = 82.05'
x = 224.77'
y = 51.45'
k = 115.90'
p = 13.08'
C = 230.58'
CS = Sta. 12+76.90
ST = Sta. 15+12.25
C.B. = S69°05'50"W

$H3$ $H4$ $H5$

SPIRAL DATA	SPIRAL DATA	SPIRAL DATA	CURVE DATA
P1 = STA. 3+80.60	P1 = STA. 5+13.90	P1 = STA. 7+80.35	P1 = STA. 9+89.77
Ss = 200' 00" 00" 00"	Ss = 200' 00" 00" 00"	Ss = 200' 00" 00" 00"	Ss = 200' 00" 00" 00"
Os = 13° 28' 23"	Os = 13° 28' 23"	Os = 08° 00' 00"	Os = 08° 00' 00"
LT = 133.72'	LT = 133.72'	LT = 133.47'	R = 716.20'
ST = 67.02'	ST = 67.02'	ST = 66.92'	T = 142.82'
Y = 156.61'	Y = 156.61'	Y = 66.30'	E = 14.19'
X = 99.82'	X = 99.82'	X = 99.94'	ES = 35 mph
P = 3.91'	P = 3.91'	P = 3.91'	emax = 0.0480
C = 195.51'	C = 195.51'	C = 199.83'	
Ts = STA. 2+46.88	Ts = STA. 4+46.88	Ts = STA. 6+46.88	
Ss = STA. 4+46.88	Ss = STA. 6+46.88	Ss = STA. 8+46.88	
Cs = N75° 20' 13" E	Cs = N57° 22' 12" E	Cs = N55° 32' 45" E	

SPIRAL DATA	CURVE DATA
P.I. = STA. 7+80.35	P.I. = STA. 9+89.77
Ls = 200.00'	$\Delta = 22^{\circ}33'59"$ RT
$\Theta_s = 08^{\circ}00'00"$	Dc = $08^{\circ}00'00"$
Lt = 133.47'	R = 716.20'
ST = 66.79'	T = 142.89'
x = 199.61'	L = 282.08'
y = 9.30'	E = 14.12'
k = 99.94'	DS = 35 mph
p = 2.33'	emax = 0.0480
C = 199.83'	
SS = Sta. 6+46.88	
SC = Sta. 8+46.88	
C.B. = N55°32'45"E	

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATION. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

THE EXCAVATION BRACING SHALL MEET THE FOLLOWING REQUIREMENTS:

		R.A.	F.A.
BEGIN	STATION	962+33.0	968+47.7
	OFFSET	0.0' LT.	0.0' LT.
	TOP ELEVATION	885.5	891.5
	BOT. ELEVATION	853.0	860.0
END	STATION	962+48.6	968+63.0
	OFFSET	0.0' LT.	0.0' LT.
	TOP ELEVATION	885.5	891.5
	BOT. ELEVATION	853.0	860.0
DESIGN EXCAVATION DEPTH (FT.)		10.6	10.4
MINIMUM SECTION MODULUS (cu. in./ft.)		23.1	22.1

MATERIAL FOR EXCAVATION BRACING SHALL BE ASTM A572, GRADE 50 STEEL, MINIMUM YIELD 50 KSI.

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

AFTER THE DECK SLAB IS REMOVED, THE CONTRACTOR AND ENGINEER SHALL INSPECT THE WEBS AT THE ENDS OF THE GIRDERS AT THE ABUTMENTS. ANY DETERIORATION ENCOUNTERED SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER. THE TYPICAL GIRDER REPAIR DETAIL SHOWN ON SHEET 32/64 IS TO BE USED AS A GUIDE FOR REPAIR.

PRIOR TO FIELD WELDING OF THE NEW STRUCTURAL STEEL AND WEB PLATES, THE CONTRACTOR SHALL REMOVE ALL LOOSE AND DISINTEGRATED DEBRIS. BLAST CLEAN AREAS TO BE WELDED TO NEAR WHITE METAL CONDITION. ALL FAYING SURFACES OF THE REPAIR AREAS SHALL BE PAINTED PER CMS ITEM 514.

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

THE FOLLOWING MEMBERS ARE INCLUDED AS A CONTINGENCY IN THIS ITEM:

L 4" X 4" X 7/16".....40 EACH

THE FOLLOWING PLATE SIZE IS INCLUDED AS A CONTINGENCY IN THIS ITEM:

3/8" THICK PLATE.....600 LB

THE FOLLOWING QUANTITY FOR THE MEMBERS AND PLATES AS DESCRIBED ABOVE IS CARRIED TO THE ESTIMATED QUANTITIES:
ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN4700 LB

01-09-2026, ITEM TYPE AND NOTES REV.

R2

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

THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE END CROSSFRAMES, BOLTS AND CONNECTION PLATES AND THE REPLACEMENT WITH NEW END CROSSFRAMES, INCLUDING STIFFENER AND CONNECTION PLATES.

THE EXISTING END CROSSFRAMES SHALL BE REMOVED FLUSH WITH THE EXISTING GIRDERS. BLAST CLEAN AREAS OF REMOVAL. REPAIR ANY AREA DAMAGED BY THE REMOVAL PROCESS.

PAYMENT TO REMOVE AND INSTALL THE NEW END CROSSFRAMES AS SHOWN IN THE PLANS, INCLUDING PLATES AND CONNECTIONS, ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS, SHALL BE INCLUDED WITH ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

THE FOLLOWING QUANTITY FOR THE NEW END CROSSFRAMES IS CARRIED TO THE ESTIMATED QUANTITIES:
ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN11,600 LB

ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION, AS PER PLAN

THE CONTRACTOR SHALL VISUALLY INSPECT THE PIERS, ABUTMENTS, AND WINGWALLS TO DETERMINE THE LOCATION AND EXTENT OF THE CRACKED CONCRETE TO BE REPAIRED BY EPOXY INJECTION. ALL CRACK REPAIR LENGTHS SHALL BE APPROVED BY THE ENGINEER. A CONTINGENCY QUANTITY OF 50 FT IS INCLUDED IN THE ESTIMATED QUANTITIES.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

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

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

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

THE CONTRACTOR SHALL VISUALLY INSPECT THE SUBSTRUCTURES TO DETERMINE THE LOCATION AND EXTENT OF SPALLED AND DELAMINATED CONCRETE TO BE REPAIRED BY PATCHING. ALL LOCATIONS AND AREAS SHALL BE APPROVED BY THE ENGINEER.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE: HIGH-PRESSURE WATER BLASTING WITH, OR WITHOUT, ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

A CONTINGENCY QUANTITY OF 100 SF IS INCLUDED IN THE ESTIMATED QUANTITIES.

DECK PLACEMENT DESIGN ASSUMPTIONS

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.38 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

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

ABBREVIATIONS

ABUT. - ABUTMENT	MIN. - MINIMUM
APPR. - APPROACH	N.F. - NEAR FACE
APPROX. - APPROXIMATE	O/O - OUT TO OUT
BOT. - BOTTOM	P.E.J.F. - PREFORMED
BRG. - BEARING	EXPANSION
C/C - CENTER TO CENTER	JOINT FILLER
C.J. - CONSTRUCTION JOINT	R.A. - REAR ABUTMENT
COL. - COLUMN	RCP - ROCK CHANNEL PROTECTION
CONC. - CONCRETE	REINF. - REINFORCING
CONST. - CONSTRUCTION	RT. - RIGHT
DIA. - DIAMETER	SCD - STANDARD CONSTRUCTION
EL. - ELEV. - ELEVATION	DRAWING
E.W. - EACH WAY	SER. - SERIES
EX. - EXIST. - EXISTING	SPA. - SPACING
EXP. - EXPANSION	STA. - STATION
EQ. SPA. - EQUAL SPACE	T & B - TOP AND BOTTOM
E.F. - EACH FACE	TYP. - TYPICAL
F.A. - FORWARD ABUTMENT	T/T - TOE TO TOE
F.F. - FAR FACE	U.N.O. - UNLESS NOTED
F/F - FACE TO FACE	OTHERWISE
FTG. - FOOTING	VAR. - VARIES
FWD. - FORWARD	V.C. - VERTICAL CURVE
MAX. - MAXIMUM	VERT. - VERTICAL
M.O.T. - MAINTENANCE OF	W.P. - WORKPOINT
TRAFFIC	

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE INSPECTION DETERMINED THAT 40 SQUARE FEET OF EXPANSION JOINT MATERIAL AT THE REAR ABUTMENT LEFT WINGWALL CONTAINS ASBESTOS. THE ASBESTOS CONTAINING MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS IS SUBMITTED TO THE PROJECT ENGINEER FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE SPECIAL PROVISIONS FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT HTTP://WWW.EPA.OHIO.GOV/ASBESTOS AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:

1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM SPECIAL - STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL.

01-09-2026, ITEM QUANTITY REV: R2

ESTIMATED QUANTITIES (02/IMS)									
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET REF.
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					4/64
202	22900	423	SY	APPROACH SLAB REMOVED				423	
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					5/64
503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN					4/64
509	10000	630,671	LB	EPOXY COATED STEEL REINFORCEMENT	30,979		580,313	19,379	
509	26000	6,664	LB	GALVANIZED STEEL REINFORCEMENT	6,664				
509	30020	37,159	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			37,159		
510	10001	651	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	651				4/64
511	34447	1,747	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			1,747		49/64
511	34450	509	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			509		
511	45712	268	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT	268				
512	10001	194	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)		194			4/64
512	10100	6,240	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	526	2,534	3,180		
512	10601	100	FT	CONCRETE REPAIR BY EPOXY INJECTION, AS PER PLAN				100	5/64
512	74000	194	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		194			
513	10201	16,300	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			16,300		5/64
513	20000	18,195	EACH	WELDED STUD SHEAR CONNECTORS			18,195		
514	00050	128	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			128		
514	00056	128	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			128		
514	00060	1,800	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			1,800		
514	00066	1,800	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			1,800		
514	00504	1	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			1		
514	10000	2	EACH	FINAL INSPECTION REPAIR			2		
516	11210	199	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			199		
516	13600	377	SF	1" PREFORMED EXPANSION JOINT FILLER			377		
516	13900	48	SF	2" PREFORMED EXPANSION JOINT FILLER	48				
516	44100	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (17" X 20" X 2.668")		12			
516	44200	48	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (17.5" X 20" X 3.273")		48			
516	44300	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (14" X 15" X 4.565")	24				
516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN					5/64
518	21200	103	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	103				
519	11101	100	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	100				5/64
526	30010	676	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				676	
526	90020	113	SY	TYPE B INSTALLATION				113	
SPECIAL	53000600	40	SF	STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL	40				5/64