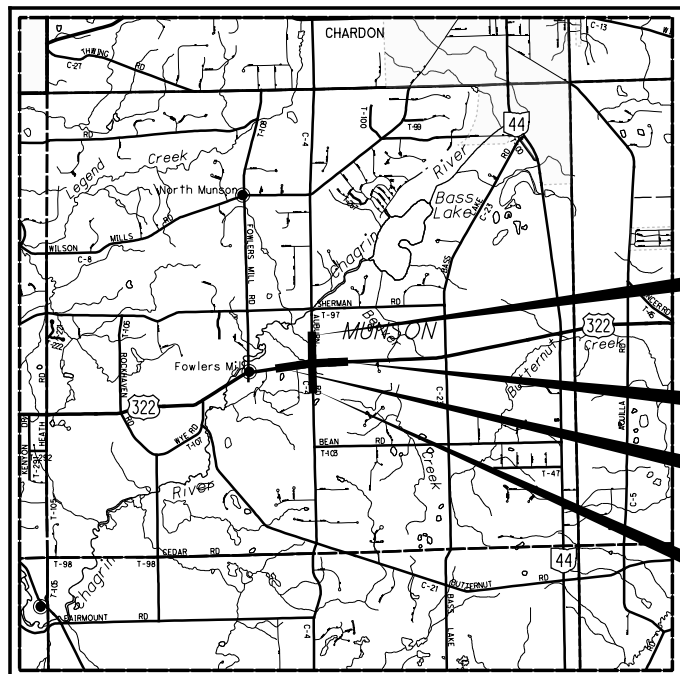


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## GEA-322-7.78

### MUNSON TOWNSHIP GEAUGA COUNTY

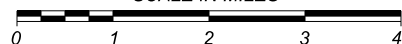


**LOCATION MAP**

LATITUDE: 41°31'43" LONGITUDE: 81°14'36"



SCALE IN MILES



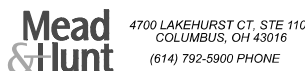
PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	—————
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

DESIGN DESIGNATION	US 322		CH 4	
	WEST LEG	EAST LEG	NORTH LEG	SOUTH LEG
CURRENT ADT (2020)	7,400	7,250	10,100	8,750
DESIGN YEAR ADT (2040)	8,250	8,000	10,900	9,400
DESIGN HOURLY VOLUME (2040)	830	800	1,090	940
DIRECTIONAL DISTRIBUTION	0.58	0.59	0.53	0.54
TRUCKS (24 HOUR B&C)	0.06	0.06	0.05	0.05
TD	0.03	0.03	0.03	0.03
DESIGN SPEED	45 MPH	45 MPH	45 MPH	55 MPH
LEGAL SPEED	45 MPH	45 MPH	45 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	RURAL ARTERIAL		RURAL COLLECTOR	
NHS PROJECT	NO			

**DESIGN EXCEPTIONS**  
SHOULDER WIDTH SEE SHEET 3



PLAN PREPARED BY:



**ENGINEERS SEAL:**

SIGNED: *Steven J. Scheid Jr.* P.E., R.S.  
DATE: 6/12/2020

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STANDARD CONSTRUCTION DRAWINGS							SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	01/17/20	BP-4.1	7/19/13	HL-30.22	4/17/20	TC-41.41	7/19/19	800-2020	10/16/20	WATERWAY PERMITS CONDITIONS 01/07/2021
		BP-5.1	1/18/19			TC-42.20	10/18/13	809	1/17/20	
CB-1.1	7/19/19			MT-97.10	4/19/19	TC-52.10	10/18/13	821	4/20/12	
CB-2.1	7/20/18	MGS-1.1	1/19/18	MT-97.12	1/20/17	TC-52.20	7/20/18	825	1/17/20	
CB-2.2	7/20/18	MGS-2.1	1/19/18	MT-99.20	4/19/19	TC-61.10	1/17/20	832	10/19/18	
CB-4.1	1/18/13	MGS-4.2	7/19/13	MT-99.30	1/17/20	TC-61.30	7/19/19	836	1/19/18	
		MGS-5.3	7/15/16	MT-101.60	1/17/20	TC-65.10	1/17/14	875	1/18/19	
MH-1.2	1/15/16			MT-101.70	1/17/20	TC-65.11	7/21/17	895	4/18/14	
		RM-1.1	7/18/14	MT-101.75	1/17/20	TC-71.10	1/19/18	921	4/20/12	
DM-1.1	7/21/17	RM-4.2	4/17/20	MT-101.90	7/21/17	TC-81.21	1/18/19	995	7/17/15	
DM-1.2	1/18/13			MT-105.10	1/17/20	TC-83.10	1/17/20			
DM-3.1	1/18/13	HW-2.1	7/20/18			TC-83.20	7/21/17			
DM-4.1	7/20/18	HW-2.2	7/20/18	TC-16.21	7/20/18	TC-85.10	4/17/20			
DM-4.2	7/20/12			TC-21.20	7/20/18	TC-85.20	7/20/18			
DM-4.3	1/15/16	HL-30.11	4/17/20	TC-22.10	4/17/20					
DM-4.4	1/15/16	HL-30.21	4/17/20	TC-41.20	10/18/13					

**FEDERAL PROJECT NUMBER**

E180072

**PROJECT DESCRIPTION**

IMPROVE INTERSECTION OF US-322 AND AUBURN ROAD CH-4 BY ADDING A LEFT TURN LANE IN EACH OF THE FOUR APPROACH DIRECTIONS. THIS PROJECT ALSO INCLUDES WIDENING AND RESURFACING, REPLACEMENT AND RELOCATION OF EXISTING GUARDRAIL, INSTALLING DRAINAGE AND REPLACEMENT OF THE TRAFFIC SIGNAL.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: 3.48 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.75 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: 4.90 ACRES

**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.

**TRAFFIC REROUTED FOR SIDE ROAD CLOSURE**

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 NORTHBOUND AUBURN RD AS DESCRIBED ON SHEETS 9 & 14 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED  
DATE 10/13/20 DISTRICT DEPUTY DIRECTOR

APPROVED  
DATE \_\_\_\_\_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

DESIGN AGENCY  
**Mead & Hunt**



CLIENT  
DESIGNER  
MAH

REVIEWER  
SJS 11/12/19


PROJECT ID  
106261

SHEET TOTAL  
P.01 | 134

GEA-322-7.78

MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 9/15/2020 TIME: 9:12:40 AM USER: k26eged X:\4020800\180117\_01\06261\400-Engineer\Ing\Roadway\Sheet\106261.ctb.dgn

SHEET NUM.							PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6A	53	86	97	98	106	OFFICE CALCS	01/SAF/PV	EXT	TOTAL				
<b>PAVEMENT</b>													
100						5,709	100	251	01000	100	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	6A
						1,292	5,709	254	01001	5,709	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	5
		128				958	1,292	301	46000	1,292	CY	ASPHALT CONCRETE BASE, PG64-22	
		25				1,443	1,086	304	20000	1,086	CY	AGGREGATE BASE	
							1,468	407	10000	1,468	GAL	TACK COAT	
						373	373	441	50000	373	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
						13	13	441	50201	13	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN	5
						522	522	441	50300	522	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
		28					28	441	50400	28	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)	
		4					4	452	10010	4	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
2,425							2,425	609	26000	2,425	FT	CURB, TYPE 6	
<b>TRAFFIC CONTROL</b>													
2							2	620	00500	2	EACH	DELINEATOR, POST GROUND MOUNTED	
		153					153	621	00100	153	EACH	RPM	
20							20	626	00110	20	EACH	BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL	
		8					8	630	79100	8	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
		140.5					140.5	630	03100	140.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
				98.9			98.6	630	80100	98.9	SF	SIGN, FLAT SHEET	
				15			15	630	84900	15	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
				11			11	630	86002	11	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
		1.25					1.25	646	10010	1.25	MILE	EDGE LINE, 6"	
		0.8					0.79	646	10200	0.8	MILE	CENTER LINE	
		810					810	646	10300	810	FT	CHANNELIZING LINE, 8"	
		93					93	646	10400	93	FT	STOP LINE	
		319					319	646	10600	319	FT	TRANSVERSE/DIAGONAL LINE	
		11					11	646	20300	11	EACH	LANE ARROW	
<b>TRAFFIC SIGNALS</b>													
				61			61	625	25504	61	FT	CONDUIT, 3", 725.051	
				16			16	625	25604	16	FT	CONDUIT, 4", 725.051	
				261			261	625	25906	261	FT	CONDUIT, JACKED OR DRILLED, 725.051, 4"	
				48			48	625	29000	48	FT	TRENCH	
				5			5	625	30706	5	EACH	PULL BOX, 725.08, 24"	
				5			5	625	32000	5	EACH	GROUND ROD	
				48			48	625	36010	48	FT	UNDERGROUND WARNING/MARKING TAPE	
				1			1	625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL - SIGNAL CONTROLLER	
				4			4	632	05007	4	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	107
				4			4	632	05087	4	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	107
				16			16	632	25000	16	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
				874			874	632	40400	874	FT	SIGNAL CABLE, 4 CONDUCTOR, NO. 14 AWG	
				904			904	632	40900	904	FT	SIGNAL CABLE, 9 CONDUCTOR, NO. 14 AWG	
				4			4	632	64010	4	EACH	SIGNAL SUPPORT FOUNDATION	
				60			60	632	68200	60	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
				340			340	632	69500	340	FT	SERVICE CABLE, 2 CONDUCTOR, NO. 6 AWG	
				1			1	632	70000	1	EACH	POWER SERVICE	
				3			3	632	80502	3	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11	
				1			1	632	80620	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13	
				1			1	632	90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	107
				1			1	633	65520	1	EACH	CABINET, TYPE 332	
				1			1	633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	109
				1			1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	109
				1			1	633	74001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), AS PER PLAN	109
				4			4	809	69000	4	EACH	ADVANCE RADAR DETECTION	108
				4			4	809	69100	4	EACH	STOP LINE RADAR DETECTION	108
				1			1	809	69123	1	EACH	ATC V6.24 CONTROLLER, AS PER PLAN	109
				1			1	809	69200	1	EACH	EMERGENCY VEHICLE PREEMPTION	107
				4			4	809	69210	4	EACH	PREEMPT RECEIVING UNIT	107
				874			874	809	69220	874	FT	PREEMPT DETECTOR CABLE	107
				1			1	809	69230	1	EACH	PREEMPT PHASE SELECTOR	107
				4			4	809	69240	4	EACH	PREEMPT CONFIRMATION LIGHT	109

DESIGN AGENCY  
  
 CLIENT  
  
 DESIGNER  
 MAH  
 REVIEWER  
 SJS 11/12/19  
 PROJECT ID  
 106261  
 SHEET TOTAL  
 P.50 | 134

