

LOCATION MAP

LATITUDE: 41°04'15.93" LONGITUDE: -82°18'32.61"

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

DESIGN DESIGNATION	OH-18	OH-511
CURRENT ADT (2026) .....	3500	2700
DESIGN YEAR ADT (2046) .....	4000	3300
DESIGN HOURLY VOLUME (2046) .....	400	350
DIRECTIONAL DISTRIBUTION		
TRUCKS (24 HOUR B&C) .....	11%	11%
DESIGN SPEED:		
ROUNDABOUT .....	35	35
APPROACH .....	60	60
LEGAL SPEED:		
ROUNDABOUT .....	30	30
APPROACH .....	55	55
DESIGN FUNCTIONAL CLASSIFICATION:	PRINCIPAL ARTERIAL	MAJOR COLLECTOR
NHS PROJECT .....	YES	NO

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)

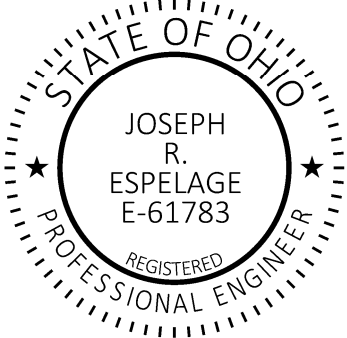
PLAN PREPARED BY:

  
Engineering  
Building Partnerships

LJB Inc.  
2500 Newmark Drive  
Miamisburg, OH 45342  
(866) 552-3536 | LJBinc.com

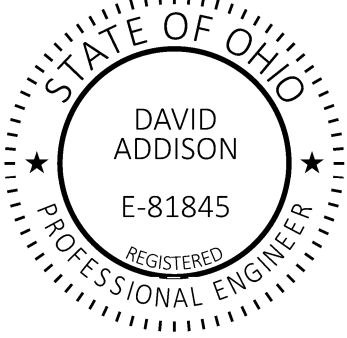
ENGINEER'S SEAL

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ENGINEER'S SEAL

PAGES P.69 - P.73



STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	TC-52.10	10/18/13			800-2023 7/18/25	
BP-4.1	7/19/13	TC-52.20	1/15/21			832 7/18/25	
BP-5.1	7/18/25	TC-65.10	1/17/14			902 7/19/19	
		TC-65.11	1/17/25				
CB-2-2A, 2B, 2C	7/19/24	TC-71.10	7/18/25				
CB-3	7/19/24						
CB-3A	7/19/24	MT-97.10	7/18/25				
		MT-101.60	1/17/25				
DM-1.1	1/17/25	MT-101.90	7/17/20				
DM-1.2	1/17/25	MT-105.10	1/17/20				
DM-4.4	1/15/16						
MH-3	7/19/24	RM-3.1	7/20/18				
TC-41.20	10/18/13						
TC-41.30	4/21/23						
TC-42.20	10/18/13						

# STATE OF OHIO

## DEPARTMENT OF TRANSPORTATION

# LOR-18-1.60

## BRIGHTON TOWNSHIP

## LORAIN COUNTY

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### FEDERAL PROJECT NUMBER

E220275

### RAILROAD INVOLVEMENT

NONE

### PROJECT DESCRIPTION

CONVERT THE EXISTING 2-WAY STOP CONTROLLED INTERSECTION WITH A PROPOSED SINGLE LANE ROUNDABOUT. IMPROVEMENTS INCLUDE FULL DEPTH PAVEMENT RECONSTRUCTION, DRIVE APRON REPLACEMENT, AND LIGHTING .

### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	2.20 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	3.45 ACRES

### 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 REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET P.9, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE PLANS.

  
Robert Weaver  
District 03 Deputy Director

  
Pamela Boratyn  
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY



DESIGNER

ARW

REVIEWER

JRE 09/29/25

PROJECT ID

116214

SHEET

P.1

TOTAL

P.73

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY ENDANGERED NORTHERN LONG-EARED BAT, INDIANA BAT, TRICOLORED BAT AND THE STATE ENDANGERED LITTLE BROWN. 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 AND ORC 1531.25. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

UNDERGROUND STORAGE TANK AND PETROLEUM CONTAMINATED SOILS

ENVIRONMENTAL STUDIES INDICATED THAT AN UNDERGROUND STORAGE TANK (UST) WILL BE AND PETROLEUM CONTAMINATED SOIL (PCS) MAY BE ENCOUNTERED DURING EXCAVATIONS WITHIN THE PROJECT LIMITS. THESE LIMITS ARE ESTIMATED TO BE STATE ROUTE 18, FROM APPROXIMATELY STATION 80+20 TO APPROXIMATELY STATION 82+00, LEFT; IN THE AREA OF 51110 ST RT 18 WELLINGTON, OH 44090. THE CONTRACTOR MUST DETERMINE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT FOR THOSE WHO CONDUCT WORK WITHIN THE LIMITS OF THE PCS. ALL EXCAVATED PCS THAT CANNOT BE REUSED AS PROJECT FILL PER CMS 203.03(j), SHALL BE MANAGED AND DISPOSED OF AT A LICENSED LANDFILL. THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED PCS INTO TRUCKS FOR TRANSPORT AND DISPOSAL. AS AN ALTERNATE, THE ENGINEER MAY PERMIT THE CONTRACTOR TO TEMPORARILY STOCKPILE THE EXCAVATED PCS ON AN IMPERMEABLE MEMBRANE, IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE STOCKPILE SHOULD BE SURROUNDED BY STRAW BALES TO REDUCE RUNOFF. THE CONTRACTOR WILL PROVIDE COMPLETED LOG FORMS AND MANIFESTS FOR TRANSPORT AND DISPOSAL TO THE ENGINEER FOR SIGNATURE. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL TESTING THAT THE LANDFILL MAY REQUIRE FOR DISPOSAL. ONE (1) UNDERGROUND STORAGE TANK (UST) WAS IDENTIFIED DURING PROJECT DEVELOPMENT SHALL FOLLOW CMS 202.08 FOR PROPER PERMITTING, REMOVAL, AND DISPOSAL OF THE TANK. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING, SOIL AND GROUNDWATER DISPOSAL, TANK PREPARATION, REMOVAL AND DISPOSAL, INSPECTIONS, SAMPLING, AND REPORTING. ALL TANK REMOVAL ACTIVITIES MUST BE CONDUCTED BY A CERTIFIED TANK INSTALLER. IF EXCAVATIONS WITHIN THE PCS REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL DEWATER, CONTAINERIZE, AND DISPOSE OF WATERS BY METHOD APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS NEEDED TO STORE, TRANSPORT, AND DISPOSE OF WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL TESTING REQUIRED FOR DISPOSAL. ALL EXCAVATED AREAS SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN ACCORDANCE WITH PROJECT PLANS, APPLICABLE ODOT SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY MANAGE, STORE (IF NECESSARY), TEST FOR DISPOSAL, TRANSPORT AND DISPOSE OF REGULATED MATERIALS, INCLUDING ANY REQUIRED PERMITS OR FEES WITHIN THE IDENTIFIED LIMITS. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

690E65000 - WORK INVOLVING NON-REGULATED MATERIAL	550 TON
690E65016 - WORK INVOLVING PCS	550 TON
690E67000 - REGULATED UNDERGROUND STORAGE TANK REMOVED	1 EACH
690E65022 - NON-REGULATED WATER	500 GALLON
690E65024 - REGULATED WATER	500 GALLON

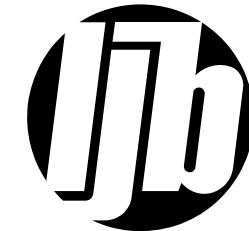
HAZARDOUS MATERIALS

ACCORDING TO THE PLANS, A 10-INCH ASBESTOS CONCRETE WATER MAIN IS LOCATED WITHIN THE PROJECT AREA. SHOULD THE CONTRACTOR DISTURB THE WATER MAIN DURING CONSTRUCTION, THEY ARE REQUIRED TO ADHERE TO CMS 202.04 REGARDING THE REMOVAL OF PIPES CONTAINING ASBESTOS MATERIALS.

611 TYPE A OR B CONDUIT, AS PER PLAN

USE 703.11 STRUCTURAL BACKFILL TYPE 1 OR 613 LOW STRENGTH MORTAR, TYPE 2 AS STRUCTURAL BACKFILL FOR ALL TYPE A AND B FLEXIBLE CONDUITS 12-INCH DIAMETER AND LARGER. DETAIL THE SELECTED CONDUIT MATERIAL AND STRUCTURAL BACKFILL IN THE 611 INSTALLATION PLAN PER 611.04 B. NOTIFY THE ENGINEER IMMEDIATELY WHEN GROUNDWATER IS ENCOUNTERED DURING EXCAVATION. USE 703.11 STRUCTURAL BACKFILL IN AREAS WHERE GROUNDWATER IS PRESENT. INSTALL 703.11 STRUCTURAL BACKFILL TYPE 3 AND GEOTEXTILE FABRIC ACCORDING TO 611.06. VERIFY THE CONDUIT MATERIAL AND REVISED BACKFILL MEET THE STRUCTURAL DESIGN REQUIREMENTS WITH THE CONDUIT MANUFACTURER PRIOR TO INSTALLATION.

GENERAL NOTES



DESIGN AGENCY

DESIGNER  
ARW


REVIEWER  
JRE 01/06/26

PROJECT ID  
116214

SHEET	TOTAL
P.7A	P.73

**LOR-18-1.60**

GENERAL SUMMARY

DESIGN AGENCY  


DESIGNER  
**ARW**

REVIEWER  
**JRE 09/29/25**

PROJECT ID  
**116214**


SHEET  
**P.12**

TOTAL  
**P.73**

REF NO.	SHEET NO.			STATION TO STATION				605	611		611	611		611	611	611	611	611	611	611	670		659					
								6" BASE PIPE UNDERDRAINS	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		6" CONDUIT, TYPE B	8" CONDUIT, TYPE B	8" CONDUIT, TYPE C		12" CONDUIT, TYPE B, AS PER PLAN	12" CONDUIT, TYPE C		15" CONDUIT, TYPE B, AS PER PLAN	15" CONDUIT, TYPE C	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 2-2B	MANHOLE, NO. 3		DITCH EROSION PROTECTION		CY	
						TO		FT	FT		FT	FT		FT	FT	EACH	EACH	EACH	EACH		SY							
D-1	P.17			79+59.58	LT	TO	79+75.03					6	6					2										
D-2	P.17			80+73.81	LT	TO	81+35.05							64	9													
D-3	P.17			81+17.40	LT	TO	81+30.39					6	6															
D-4	P.18			82+11.59	LT	TO	82+37.00						12	42	9			2	1									
D-5	P.18			NOT USED																								
D-6	P.18			82+67.60	LT/RT	TO	82+80.60						12	39	7			2	1									
D-7	P.18			83+69.22	LT	TO	83+82.22					12																
D-8	P.18			387+91.20	LT	TO	388+04.20							12														
D-9	P.18			388+18.62	LT	TO	388+31.61							30					1	1								
D-10				NOT USED																								
D-11	P.18			86+12.30	LT	TO	86+45.32					12		52	9			2	1	1								
D-12	P.20			382+05.60	LT/RT	TO	382+19.10										50	18										
D-13	P.20			383+46.29	LT	TO	383+59.78										38	6		2								
D-14	P.20			384+34.68	LT	TO	384+47.67							6			6						1					
D-15				NOT USED																								
D-16				NOT USED																								
D-17	P.20			386+37.02	LT	TO	386+50.02				6			12									1					
D-18	P.21			389+55.31	LT/RT	TO	389+72.00							44	41			2		2		1						
D-19	P.21			389+89.94	LT	TO	390+02.94							38														
D-20				NOT USED																								
D-21	P.21			390+23.14	LT	TO	390+63.14							49								1	1					
D-22	P.21			390+50.60	LT	TO	390+73.17							22														
D-23	P.22			391+78.50	LT	TO	391+97.50								19													
E-1	P.18	-	P.19	86+85.26	RT	TO	89+71.94														126		46					
E-2	P.19			87+11.50	LT	TO	89+71.94														116		33					
UD-1	P.17	-	P.18	79+68.53	LT	TO	82+11.80	234	10																			
UD-2	P.17	-	P.18	79+68.83	LT/RT	TO	82+34.44	266			36																	
UD-3	P.18			82+20.75	LT	TO	82+71.22	41	10																			
UD-4	P.18			82+38.75	RT	TO	82+77.66	30	10																			
UD-5	P.18			82+75.69	LT	TO	83+62.53	80	10																			
UD-6	P.18			82+82.20	RT	TO	83+31.04	40	10																			
UD-7	P.18	/	P.20	383+54.73	LT	TO	386+68.30	306	10																			
UD-8	P.18	/	P.21	388+17.09	RT	TO	389+58.77	135	10																			
UD-9	P.18			85+16.58	RT	TO	86+43.34	119	10																			
UD-10	P.18			85+47.24	LT	TO	86+17.04	60	10																			
UD-11	P.18	-	P.19	86+21.54	LT	TO	89+71.94	350	14																			
UD-12	P.18	-	P.19	86+49.50	RT	TO	89+71.94	323	19																			
UD-13	P.20			382+11.88	RT	TO	383+50.01	122	23																			
UD-14	P.20			382+12.60	LT	TO	383+50.02	129	10																			
UD-15	P.20			383+54.78	RT	TO	386+36.47	272	10																			
UD-16	P.21			388+58.58	LT	TO	389+58.77	90	10																			
UD-17	P.21			389+72.23	LT	TO	392+41.28	270	10																			
TOTALS CARRIED TO GENERAL SUMMARY								2867	186		42	24	48		410	94		94	24	2	8	11	6		242		79	

DRAINAGE SUBSUMMARY

DESIGN AGENCY



DESIGNER

ARW

REVIEWER

JRE 09/29/25

PROJECT ID

116214

SHEET

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TOTAL

P.73