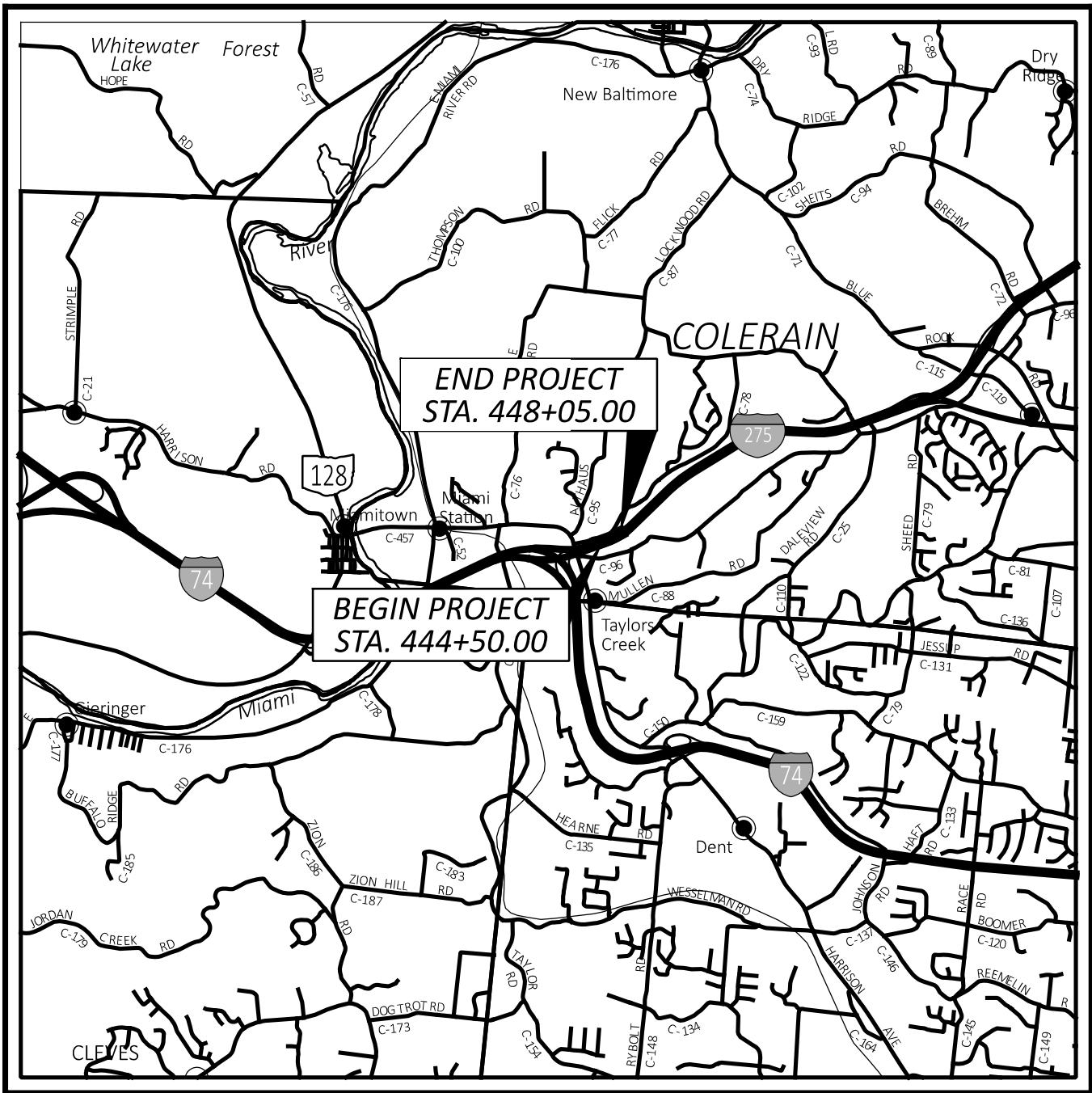




LOCATION MAP

LATITUDE: 39°13'10" LONGITUDE: -84°40'05"



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

DESIGN DESIGNATION

CURRENT ADT (2027)	79,500
DESIGN YEAR ADT (2047)	87,500
DESIGN HOURLY VOLUME (2047)	12,500
DIRECTIONAL DISTRIBUTION	56.7%
TRUCKS (24 HOUR B&C)	15%
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
01 INTERSTATE (URBAN)	
NHS PROJECT	YES

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:



STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAM-275-11.40

COLERAIN TOWNSHIP

HAMILTON COUNTY

INDEX OF SHEETS:

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SUBSUMMARY	P.11 - P.12
ROADWAY PLAN	P.13
CROSS SECTIONS	P.14 - P.26
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PAVEMENT MARKING & SIGNAGE PLAN	P.29
SOLDIER PILE & LAGGING WALL	P.30 - P.36
TEMPORARY SHORING WALL	P.37 - P.38
GEOTECHNICAL INFORMATION	P.39 - P.43
SHEETS NOT USED	P.31

FEDERAL PROJECT NUMBER

E250 (018)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF APPROXIMATELY 330 FEET OF A DRILLED SHAFT RETAINING WALL ALONG I-275 WESTBOUND TO ADDRESS SLOPE MOVEMENT ALONG THE SHOULDER. THE PROJECT INCLUDES PAVEMENT REPLACEMENT ALONG THE SHOULDER AND DRAINAGE IMPROVEMENTS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	1.2 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.4 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)

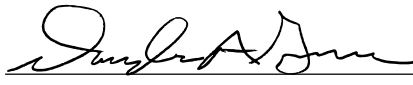
LIMITED ACCESS

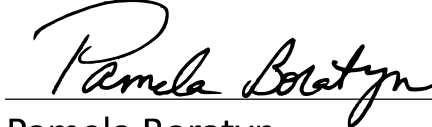
THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

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 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE SET FORTH ON THE PLANS AND ESTIMATES.


Douglas A. Gruver, P.E.
District 08 Deputy Director


Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	HW-2.1	7/15/22	TC-52.20	1/15/21			800-2023	1/16/26
BP-9.1	1/18/19	HW-2.2	7/20/18	TC-61.30	7/19/24			804	1/16/26
				TC-65.10	1/17/14			809	1/16/26
CB-4A, 5A, 8A	7/19/24	MT-95.30	7/18/25	TC-65.11	1/17/25			832	7/18/25
		MT-95.45	7/21/23					878	1/16/26
DM-1.1	1/17/25	MT-99.20	4/19/19					899	1/16/26
DM-1.2	1/17/25	MT-99.30	1/17/20					904	7/15/22
DM-4.3	1/15/16	MT-101.70	7/19/24					909	1/16/26
DM-4.4	1/15/16	MT-101.75	7/21/23						
		MT-102.10	7/21/23						
MGS-2.1	1/16/26	MT-103.10	7/18/25						
MGS-5.3	7/15/16	MT-105.10	1/17/20						
MH-3	7/19/24	TC-41.20	10/18/13						
		TC-42.20	10/18/13						
RM-4.2	1/16/26	TC-52.10	10/18/13						

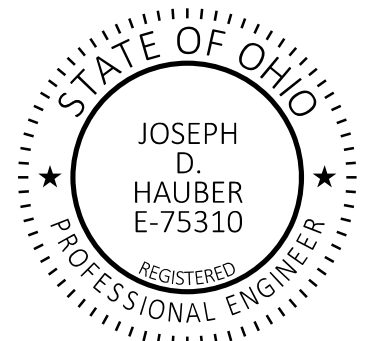
ENGINEER'S SEAL

P.1 - P.29



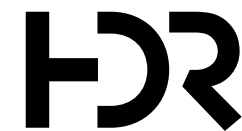
ENGINEER'S SEAL

P.30 - P.38



TITLE SHEET

DESIGN AGENCY



DESIGNER

HRD

REVIEWER

PJD 6-1-26

PROJECT ID

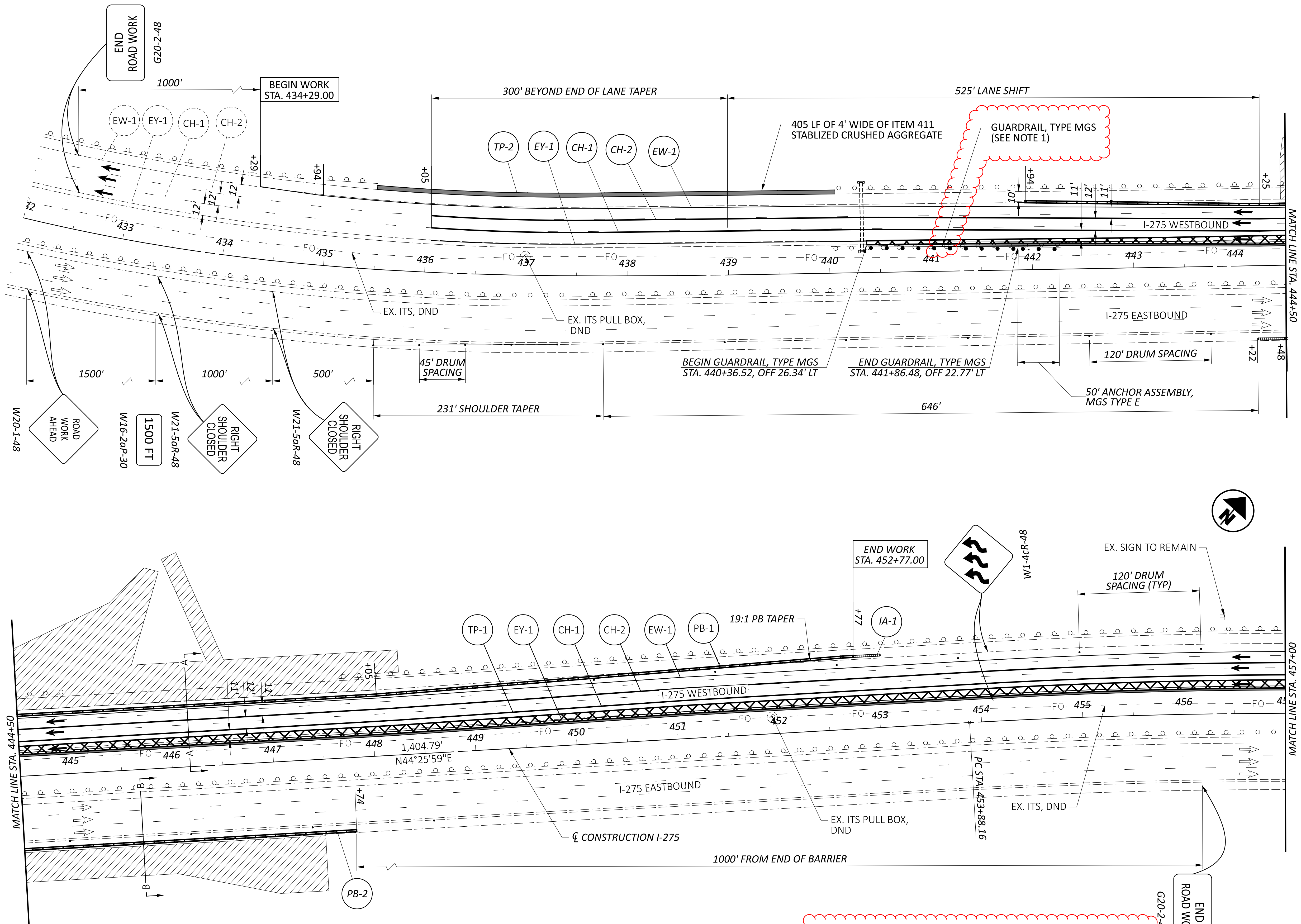
121506

SHEET

P.1

TOTAL

P.43



NOTES:

1.) REMOVE EXISTING GUARDRAIL AND ANCHOR ASSEMBLY FOR REUSE AS SHOWN IN THE PLANS. UPON COMPLETION OF CONSTRUCTION RECONSTRUCT THE GUARDRAIL AND ANCHOR ASSEMBLY IN ITS ORIGINAL LOCATION. IF EXISTING GUARDRAIL AND/OR ANCHOR ASSEMBLY IS DAMAGED, PROVIDE NEW ITEM 606 - GUADRAIL, TYPE MGS AND/OR ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E. ALL WORK INCLUDING GUARDRAIL AND ANCHOR ASSEMBLY REMOVAL, RECONSTRUCTION, AND REPLACEMENT SHALL BE PAID FOR UNDER ITEM 615 - ROADS FOR MAINTAINING TRAFFIC.

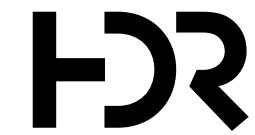
FOR MAINTENANCE OF TRAFFIC LEGEND
AND TYPICAL SECTIONS SEE SHEET P.8

FOR MOT QUANTITIES SEE SHEET P.11

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	5	6	11	12	23	26	30	34	35	36	37		01/IMS						
LS													LS	201	11000	LS		ROADWAY	
				2									2	202	20010	2	EACH	CLEARING AND GRUBBING	
				440									440	202	23000	440	SY	HEADWALL REMOVED	
			97										97	202	35100	97	FT	PAVEMENT REMOVED	
			107										107	202	35200	107	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
																		PIPE REMOVED, OVER 24" DIAMETER	
				88									88	202	38000	88	FT	GUARDRAIL REMOVED	
			2										2	202	58000	2	EACH	MANHOLE REMOVED	
			207										207	SPECIAL	20270110	207	FT	PIPE CLEANOUT, 24" AND UNDER	4
					1,913	206							2,119	203	10000	2,119	CY	EXCAVATION	
					2,947	14							2,961	203	20000	2,961	CY	EMBANKMENT	
				499									499	204	10000	499	SY	SUBGRADE COMPACTION	
				160									160	204	13000	160	CY	EXCAVATION OF SUBGRADE	
1				160									160	204	21000	160	CY	GRANULAR EMBANKMENT	
													1	204	45000	1	hour	PROOF ROLLING	
				499									499	204	50000	499	SY	GEOTEXTILE FABRIC	
			362.5										362.5	606	15050	362.5	FT	GUARDRAIL, TYPE MGS	
													LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
																		EROSION CONTROL	
			7										7	601	11000	7	SY	RIPRAP, TYPE D	
			2										2	601	21050	2	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
2			19										19	601	32104	19	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	
													2	659	00100	2	EACH	SOIL ANALYSIS TEST	
490													490	659	00300	490	CY	TOPSOIL	
					3,838	575							4,413	659	10000	4,413	SY	SEEDING AND MULCHING	
221													221	659	14000	221	SY	REPAIR SEEDING AND MULCHING	
0.6													0.6	659	20000	0.6	TON	COMMERCIAL FERTILIZER	
0.91													0.91	659	31000	0.91	ACRE	LIME	
24													24	659	35000	24	MGAL	WATER	
													12,000	832	30000	12,000	EACH	EROSION CONTROL	
																		DRAINAGE	
			100										100	209	10001	100	FT	DITCH CLEANOUT, AS PER PLAN	3
			2.2										2.2	602	20000	2.2	CY	CONCRETE MASONRY	
			0.8										0.8	602	20001	0.8	CY	CONCRETE MASONRY, AS PER PLAN	3
			354										354	605	11100	354	FT	6" SHALLOW PIPE UNDERDRAINS	
			354										354	605	14000	354	FT	6" BASE PIPE UNDERDRAINS	
													22	611	00510	22	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
			22										56	611	07400	56	FT	18" CONDUIT, TYPE B, 706.02	
			56										41	611	10600	41	FT	24" CONDUIT, TYPE C	
			41										79	611	19400	79	FT	42" CONDUIT, TYPE B, 707.07, GUAGE 8	
			79										28	611	19600	28	FT	42" CONDUIT, TYPE C	
			28																
			1										1	611	99574	1	EACH	MANHOLE, NO. 3 WITH 60" BASE I.D.	
			1										1	611	99574	1	EACH	MANHOLE, NO. 3 WITH 72" BASE I.D.	
			1										1	611	99710	1	EACH	PRECAST REINFORCED CONCRETE OUTLET	
			228										228	899	10000	228	FT	CURED-IN-PLACE PIPE LINER, 42" DIAMETER	
																		PAVEMENT	
				101									101	301	56000	101	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				134									134	304	20000	134	CY	AGGREGATE BASE	
				51									51	407	20000	51	GAL	NON-TRACKING TACK COAT	
				37									37	442	20000	37	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
				355									355	618	40100	355	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

HRD

REVIEWER

PJD 6-1-26

PROJECT ID

121506

SHEET

P.9

TOTAL

P.43

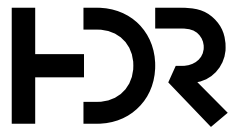
SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	5	6	11	12	23	26	30	34	35	36	37		01/IMS						
																		TRAFFIC CONTROL	
				74									74	621	00100	74	EACH	RPM	
				8									8	626	00110	8	EACH	BARRIER REFLECTOR, TYPE 2, ONE WAY	
				15.5									15.5	630	03100	15.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
				1									1	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
				1									1	630	86002	1	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT	
				1.15									1.15	642	00104	1.15	MILE	EDGE LINE, 6", TYPE 1	
				1.12									1.12	642	00204	1.12	MILE	LANE LINE, 6", TYPE 1	
RETAINING WALLS (SOLDIER PILE & LAGGING WALL)																			
								3,025					3,025	507	00400	3,025	FT	STEEL PILES, MISC.: SOLDIER PILES W24x176	30
										5			5	511	81300	5	EACH	CONCRETE, MISC.:9'-9"x2'-0"x0'-8" PRECAST CONCRETE PANEL	36
										5			5	511	81300	5	EACH	CONCRETE, MISC.:7'-9"x2'-0"x0'-8" PRECAST CONCRETE PANEL	36
										245			245	511	81300	245	EACH	CONCRETE, MISC.:5'-9"x2'-0"x0'-6" PRECAST CONCRETE PANEL	36
										10			10	511	81300	10	EACH	CONCRETE, MISC.:4'-9"x2'-0"x0'-6" PRECAST CONCRETE PANEL	36
										5			5	511	81300	5	EACH	CONCRETE, MISC.:3'-2"x2'-0"x0'-6" PRECAST CONCRETE PANEL	36
									435				435	518	62400	435	SY	STRUCTURE DRAINAGE, MISC.: DOUBLE-SIDED PREFABRICATED GEOCOMPOSITE DRAIN	30
									365				365	518	21101	365	CY	POROUS BACKFILL, AS PER PLAN	30
								2,148					2,148	524	94703	2,148	FT	DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN	30
								878					878	524	94705	878	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK, AS PER PLAN	30
							3,260						3,260	SPECIAL	53050010	3,260	SF	RETAINING WALL, TEMPORARY HARDWOOD LAGGING FOR SOLDIER PILE & LAGGING WALL	30
										325			325	605	13301	325	FT	6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN	36
										25			25	611	00510	25	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
										1			1	611	99710	1	EACH	PRECAST REINFORCED CONCRETE OUTLET	
RETAINING WALLS (TEMPORARY SHORING WALL)																			
											176		176	507	00400	176	FT	STEEL PILES, MISC.:SOLDIER PILES HP14X89	30
											144		144	524	94603	144	FT	DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN	30
											33		33	524	94605	33	FT	DRILLED SHAFTS, 30" DIAMETER INTO BEDROCK, AS PER PLAN	30
							1,120						1,120	SPECIAL	53050010	1,120	SF	RETAINING WALL, TEMPORARY HARDWOOD LAGGING FOR TEMPORARY SHORING WALL	30
MAINTENANCE OF TRAFFIC																			
			78										78	411	10000	78	CY	STABILIZED CRUSHED AGGREGATE	
	200												200	614	11110	200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	600												600	614	11630	600	FT	INCREASED BARRIER DELINEATION	
			1										1	614	12380	1	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
		454											454	614	12801	454	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	6
	8												8	614	13310	8	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
	8												8	614	13350	8	EACH	OBJECT MARKER, ONE WAY	
		10											10	614	18601	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
			1.15										1.15	614	22110	1.15	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
			5,944										5,944	614	23210	5,944	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
ROADS FOR MAINTAINING TRAFFIC																			
			896										896	615	20000	896	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
	1												1	616	10000	1	MGAL	WATER	
			990										990	622	41100	990	FT	PORTABLE BARRIER, UNANCHORED	
INCIDENTALS																			
													LS	614	11000	LS		MAINTAINING TRAFFIC	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	
		</																	

MAINTENANCE OF TRAFFIC SUBSUMMARY													
REF NO.	SHEET NO.	STATION RANGE					411	614	614	614	614	615	622
							STABILIZED CRUSHED AGGREGATE	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	PORTABLE BARRIER, UNANCHORED
CH-1	P.7	436+05.00	LT	TO	465+79.00	LT			149		2972		
CH-2	P.7	436+05.00	LT	TO	465+79.00	LT			149		2972		
EW-1	P.7	434+29.00	LT	TO	465+79.00	LT			78	0.59			
EY-1	P.7	436+05.00	LT	TO	465+79.00	LT			78	0.56			
IA-1	P.7	451+85.00	LT					1					
PB-1	P.7	441+94.00	LT	TO	451+85.00	LT							990
TP-1	P.7	440+36.76	LT	TO	460+52.71	LT	56					896	
TP-2	P.7	435+50.00	LT	TO	440+00.00	LT	22						
TOTALS CARRIED TO GENERAL SUMMARY							78	1	454	1.15	5944	896	990

DRAINAGE SUBSUMMARY																											
REF NO.	SHEET NO.	STATION RANGE					202	202	202	202	202	601	601	601	602	602	605	605	611	611	611	611	611	611	899		
							HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	MANHOLE REMOVED	SPECIAL - PIPE CLEANOUT, 24" AND UNDER	RIPRAP, TYPE D	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	CONCRETE MASONRY	CONCRETE MASONRY, AS PER PLAN	6" SHALLOW PIPE UNDERDRAINS	6" BASE PIPE UNDERDRAINS	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	18" CONDUIT, TYPE B, 706.02	24" CONDUIT, TYPE C	42" CONDUIT, TYPE B, 707.07, GUAGE 8	42" CONDUIT, TYPE C	MANHOLE NO. 3 WITH 60" BASE I.D.	MANHOLE NO. 3 WITH 72" BASE I.D.	PRECAST REINFORCED CONCRETE OUTLET	CURED-IN-PLACE PIPE LINER, 42" DIAMETER
							EACH	FT	FT	EACH	FT	SY	SY	CY	CY	CY	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	FT
UD-1	P.13	444+51.00	LT	TO	448+05.00	LT						2					354	354	22						1		
UD-2	P.13	444+51.00	LT	TO	448+05.00	LT											354										
D-1	P.27	444+82.50	RT	TO	445+55.36	LT					207																
D-2	P.27	445+54.64	LT	TO	445+74.89	LT		56							0.28				56								
D-3	P.27	445+74.85	LT	TO	445+85.75	LT		41		1									41			1					
D-4	P.27	445+87.75	LT				1				1.92		2.67	0.61													
D-5	P.28	447+30.44	RT	TO	446+52.23	LT																			228		
D-6	P.28	446+52.23	LT	TO	446+24.95	LT			79						0.5					79							
D-7	P.28	446+24.95	LT	TO	446+13.75	LT			28	1											28		1				
D-8	P.28	446+13.75	LT				1				4.47		15.56	1.5													
SUBTOTAL							2	97	107	2	207	6.39	2	18.23	2.11	0.78	354	354	22	56	41	79	28	1	1	1	228
TOTALS CARRIED TO GENERAL SUMMARY							2	97	107	2	207	7	2	19	2.2	0.8	354	354	22	56	41	79	28	1	1	1	228

SUBSUMMARY

DESIGN AGENCY



DESIGNER

HRD

REVIEWER

PJD 6-1-26

PROJECT ID

121506

SHEET

P.11

TOTAL

P.43