



SHEET NUM.						PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
225	229		288	289	290	01-SAF						
											<b>TRAFFIC CONTROL (CONT.)</b>	
	14		2			16	630	84511	16	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION, AS PER PLAN	222
	103					103	630	84900	103	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	3					3	630	85400	3	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
	100					100	630	86002	100	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	4					4	630	86102	4	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
	2					2	630	86292	2	EACH	REMOVAL OF GROUND MOUNTED WOODEN BOX BEAM SUPPORT AND DISPOSAL	
	5					5	630	87400	5	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
	1					1	630	89706	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30	
	1					1	630	89804	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	
0.13						0.13	646	10010	0.13	MILE	EDGE LINE, 6"	
0.07						0.07	646	10200	0.07	MILE	CENTER LINE	
54						54	646	10400	54	FT	STOP LINE	
1,200						1,200	646	10600	1,200	FT	TRANSVERSE/DIAGONAL LINE	
14						14	646	20300	14	EACH	LANE ARROW	
4						4	646	20320	4	EACH	WRONG WAY ARROW	
5						5	646	20350	5	EACH	LANE REDUCTION ARROW	
52						52	646	20800	52	FT	YIELD LINE	
6.94						6.94	807	12010	6.94	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
1.37						1.37	807	12110	1.37	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
0.35						0.35	807	12200	0.35	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, CENTER LINE	
5,499						5,499	807	12310	5,499	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	
381						381	807	12410	381	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"	
3,980						3,980	807	12430	3,980	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12"	
											<b>LIGHTING</b>	
					18	18	625	00450	18	EACH	CONNECTION, FUSED PULL APART	
					12	12	625	00480	12	EACH	CONNECTION, UNFUSED PERMANENT	
					9	9	625	10490	9	EACH	LIGHT POLE, CONVENTIONAL, AT10B40	
					9	9	625	14000	9	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
					3,900	3,900	625	23200	3,900	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
					1,350	1,350	625	23400	1,350	FT	NO. 10 AWG POLE AND BRACKET CABLE	
					105	105	625	25402	105	FT	CONDUIT, 2", 725.05	
					60	60	625	25904	60	FT	CONDUIT, JACKED OR DRILLED, 725.05, 2"	
					9	9	625	26253	9	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, TYPE II, 18,000 - 23,000 LUMENS 480 V	290
					1,240	1,240	625	29002	1,240	FT	TRENCH, 24" DEEP	
					60	60	625	29400	60	FT	TRENCH IN PAVED AREA	
					4	4	625	30700	4	EACH	PULL BOX, 725.08, 18"	
				1		1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN	289
				LS		LS	625	39000	LS		TEMPORARY LIGHTING	289
											<b>TRAFFIC SIGNALS</b>	
					10	1,135	625	25400	1,145	FT	CONDUIT, 2", 725.04	
					41	41	625	25500	41	FT	CONDUIT, 3", 725.04	
					20	20	625	25600	20	FT	CONDUIT, 4", 725.04	
					120	120	625	25900	120	FT	CONDUIT, JACKED OR DRILLED, 3"	
					71	71	625	29000	71	FT	TRENCH	
	14					2	625	30706	2	EACH	PULL BOX, 725.08, 24"	
						3	625	32000	3	EACH	GROUND ROD	
					9	71	625	36011	71	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	282
						1	625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (US-20)	
						13	632	05006	13	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
					1,580	1,580	632	40500	1,580	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
						40	632	69200	40	FT	POWER CABLE, 2 CONDUCTOR, NO. 4 AWG	
						35	632	69700	35	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 8 AWG	
						1	632	70001	1	EACH	POWER SERVICE, AS PER PLAN	282

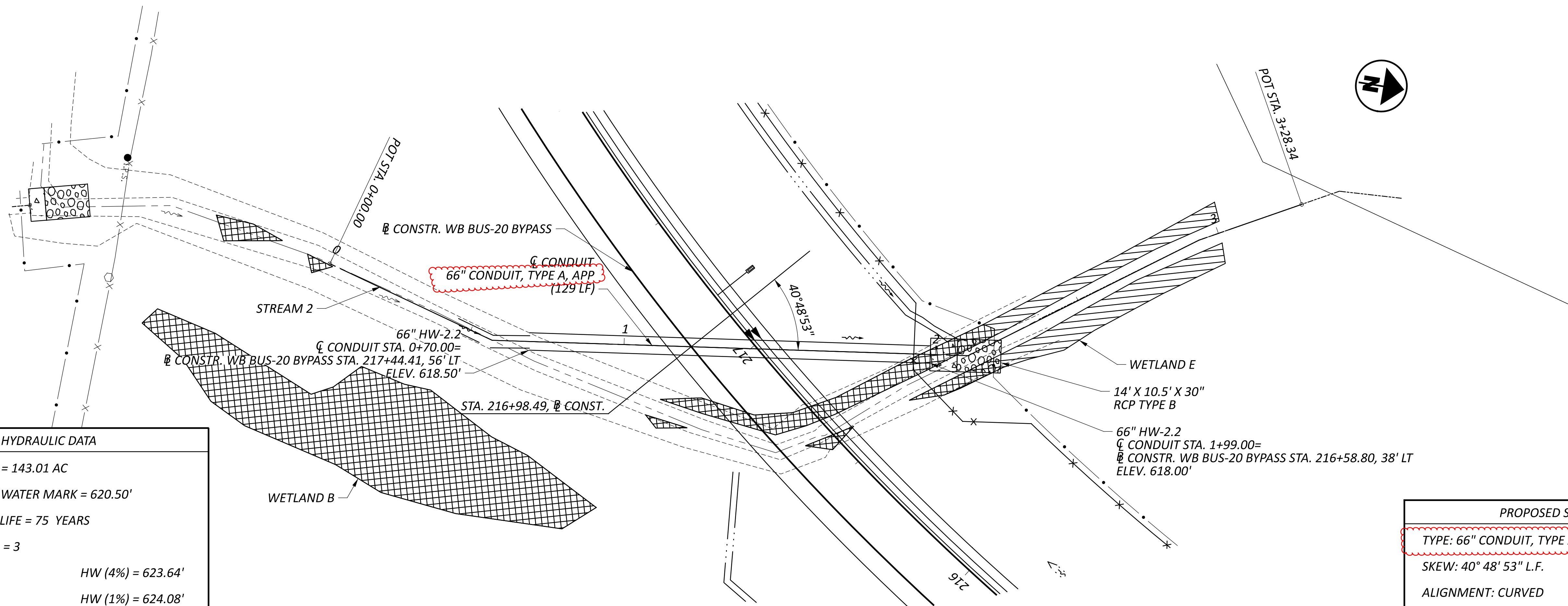
GENERAL SUMMARY

DESIGN AGENCY  
  
**MOTT MACDONALD**  
 20445 EMERALD PKWY  
 SUITE 100  
 CLEVELAND, OH 44135  
 DESIGNER  
**RKC**  
 REVIEWER  
 SJP 02/02/26  
 PROJECT ID  
 112222  
 SHEET TOTAL  
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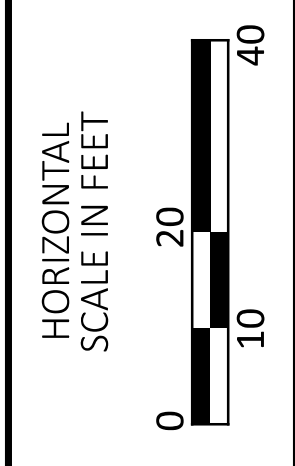
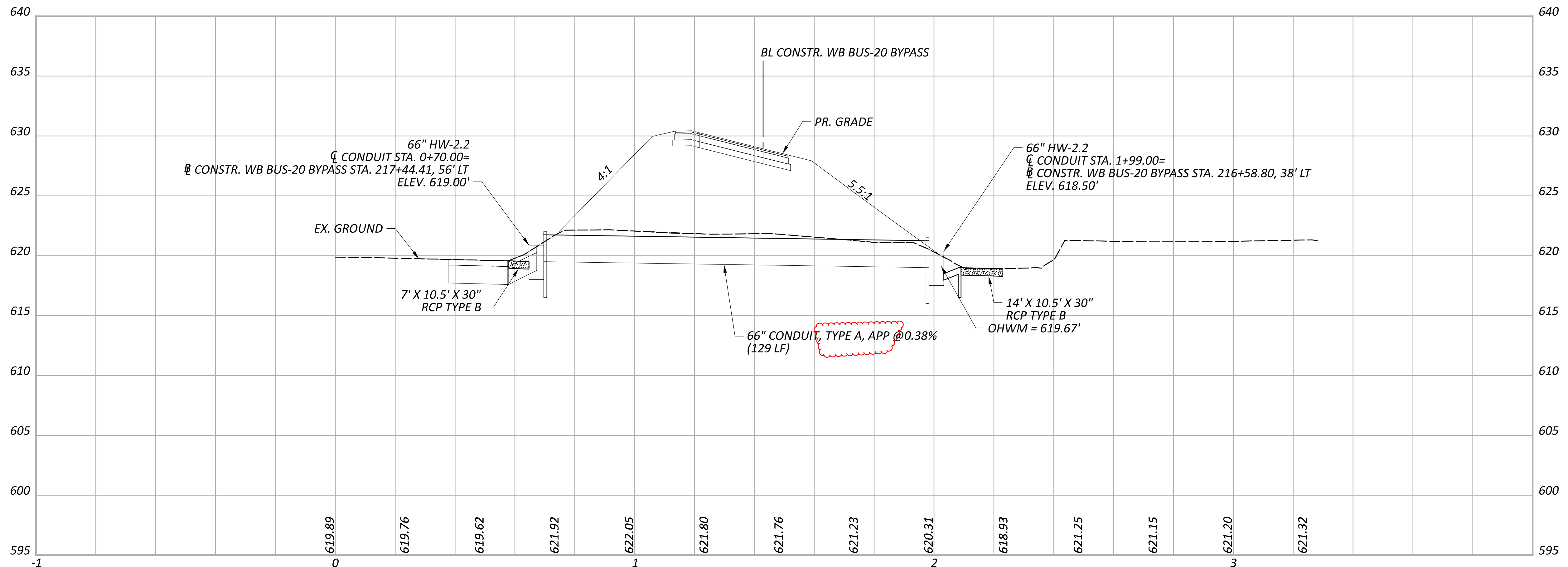




HYDRAULIC DATA	
DRAINAGE AREA = 143.01 AC	
ORDINARY HIGH WATER MARK = 620.50'	
DESIGN SERVICE LIFE = 75 YEARS	
ABRASION LEVEL = 3	
pH = 7.5	HW (4%) = 623.64'
CFN = 2000091	HW (1%) = 624.08'
Q(4%) = 132.07 CFS	V(4%) = 9.90 FPS
Q(1%) = 154.15 CFS	V(1%) = 10.25 FPS



PROPOSED STRUCTURE
TYPE: 66" CONDUIT, TYPE A, APP, 706.02 OR 707.85
SKEW: 40° 48' 53" L.F.
ALIGNMENT: CURVED
CFN: 2000091



CULVERT DETAILS  
 BUS-20 BYPASS RAMP

DESIGN AGENCY	<b>M M</b>
DESIGNER	RKC
REVIEWER	SJP
PROJECT ID	02/02/26
SHEET	112222
TOTAL	323

**625, POWER SERVICE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

POWER COMPANY: TOLEDO EDISON

ADDRESS: 6099 ANGOLA RD, HOLLAND, OH, 43528

PHONE: (419) 249-5218

CONTACT EMAIL: Tepublicworkscoordinator@firstenergycorp.com

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

**625, TEMPORARY LIGHTING**

THE CONTRACTOR SHALL FURNISH AND INSTALL THE TEMPORARY LIGHTING AS DIRECTED BY THE ENGINEER SINCE THE LEAD TIMES FOR LIGHT POLES WILL LIKELY NOT BE READY FOR OPENING OF THE NEW ROUNDABOUT. ALL WORK AND DEVICES SHALL BE IN ACCORDANCE WITH C&MS 625 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS OMTCD AND LDRP. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 625, TEMPORARY LIGHTING.

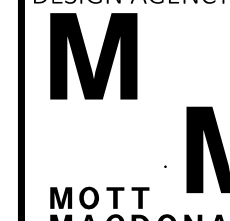
**ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN TYPE II, 18,000 - 23,000 LUMENS 480 V**

SOLID STATE LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS WITH TYPE II DISTRIBUTION SHALL BE 3000K COLOR TEMPERATURE, CATALOG NUMBER:

ATBM-P50-480-R2-3K  
ERL2-5-23-B3-30\_GRAY\_347-480V

\* OR EQUAL AS APPROVED BY THE ENGINEER.

DESIGN AGENCY



20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER

RKC

REVIEWER

SJP 02/02/26

PROJECT ID

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SHEET TOTAL

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