

W:\Projects\Projects K-0\000T007\106393\Design\Roadway\Sheets\106393\CC002.dgn Sheet 6/29/2020 3:29:56 PM jkarl

SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
10	20	21	23	59	74	76						01/SAF/OT	EXT	TOTAL				
			3									3	611	99574	3	EACH	MANHOLE, NO. 3	
1												1	611	99720	1	EACH	INSPECTION WELL	
5												5	611	97400	5	FT	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	10
5												5	611	97400	5	FT	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	10
5												5	611	97400	5	FT	CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	10
												5	611	97400	5	FT	CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	10
PAVEMENT																		
	1,116											1,116	301	46000	1,116	CY	ASPHALT CONCRETE BASE, PG64-22	
	1,050			30								1,080	304	20000	1,080	CY	AGGREGATE BASE	
	534											534	407	10000	534	GAL	TACK COAT	
				5								5	441	50000	5	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	185											185	442	20000	185	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
	215											215	442	20200	215	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)	
	527											527	452	19200	527	SY	NON-REINFORCED CONCRETE PAVEMENT, MISC.: DECORATIVE 8" THICK (TRUCK APRON)	11
	1,060											1,060	609	12000	1,060	FT	COMBINATION CURB AND GUTTER, TYPE 2	
	204											204	609	14000	204	FT	CURB, TYPE 2-A	
	1,015											1,015	609	26000	1,015	FT	CURB, TYPE 6	
	320											320	609	31000	320	FT	COMBINATION CURB AND GUTTER, TYPE 9	
WATER WORK																		
		85										85	638	02500	85	FT	12" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS	
		1										1	638	10400	1	EACH	FIRE HYDRANT ADJUSTED TO GRADE	
		1										1	638	10500	1	EACH	FIRE HYDRANT REMOVED AND RESET	
		3										3	638	98000	3	EACH	WATER WORK, MISC.: SPECIAL - VALVE MANHOLE (LUCAS COUNTY STANDARD)	12
LIGHTING																		
					16							16	625	00450	16	EACH	CONNECTION, FUSED PULL APART	
					2							2	625	00480	2	EACH	CONNECTION, UNFUSED PERMANENT	
					8							8	625	10491	8	EACH	LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT04B30	73
					8							8	625	14500	8	EACH	LIGHT POLE FOUNDATION	
					490							490	625	23302	490	FT	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
					720							720	625	23400	720	FT	NO. 10 AWG POLE AND BRACKET CABLE	
					693							693	625	24324	693	FT	1-1/2" DUCT CABLE WITH THREE NO. 6 AWG 2400 VOLT CABLES	
						165						165	625	25400	165	FT	CONDUIT, 2", 725.04	
						171						171	625	25500	171	FT	CONDUIT, 3", 725.04	
						8						8	625	26252	8	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), TYPE III DISTRIBUTION	
						864						864	625	29003	864	FT	TRENCH, 24" DEEP, AS PER PLAN	73
						6						6	625	30700	6	EACH	PULL BOX, 725.08, 18"	
						8						8	625	32000	8	EACH	GROUND ROD	
						1						1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN	73
						864						864	625	36001	864	FT	PLASTIC CAUTION TAPE, AS PER PLAN	73

GENERAL SUMMARY

LUC - 20A - 6.59

LIGHTING GENERAL NOTES ARE SUPPLEMENTAL TO ITEMS 603, 625, AND 725 OF THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS, (CMS) DATED JANUARY 1, 2016, WHICH SHALL GOVERN ALL WORK OF THIS PROJECT, EXCEPT AS HEREINAFTER MODIFIED.

REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS LISTED ON THE TITLE SHEET OF THE PLANS.

UNDERDRAINS FOR PULL BOXES

REFERENCE IS MADE TO ODOT STANDARD DRAWING HL-30.11 FOR DETAILS OF DRAINING PULL BOXES. UNDERDRAINS FOR PULL BOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED 20 FEET. THE CONST FOR THIS WORK IS TO BE INCLUDED IN THE PULL BOX ITEMS. UNDERDRAINS SHOULD ALWAYS BE DRAINED UNLESS IMPOSSIBLE.

625, POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 625.15 AND 725.19 THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

TOLEDO EDISON
6099 ANGOLA ROAD
TOLEDO, OHIO 43528

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS THE MAINTAINING AGENCY NOTED IN THE PLANS.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE FOR EACH CMS 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.

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO 48KA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH CMS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

MAINTAINING LIGHTING

EITHER PERMANENT OR TEMPORARY LIGHTING SHALL BE IN PLACE AND FUNCTIONING PRIOR TO OPENING THE ROUNDABOUT TO TRAFFIC. ANY COSTS ASSOCIATED WITH PROVIDING AND INSTALLING TEMPORARY LIGHTING WILL BE INCLUSIVE OF THE ITEM 614 MAINTAINING TRAFFIC.

ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID-STATE (LED), TYPE III DISTRIBUTION

IN ADDITION TO THE REQUIREMENTS OF CMS 625.08 AND 725.11 THE FOLLOWING IS ADDED.

STREETLIGHTING LUMINAIRES SHALL BE LED, 3,000K CCT, 70 CRI MIN., TYPE III DISTRIBUTION AND SHALL COMPLY WITH I.E.S. CLASSIFICATIONS FOR TYPE III DISTRIBUTION. LUMINAIRES SHALL BE EQUIPPED WITH A PROPER SLIP FITTER TO MATCH THE POLE SPECIFIED AND SHALL INCLUDE A 240 VOLT DRIVER COMPLYING WITH 725.11C.

LUMINAIRES SHALL BE:

COOPER LIGHTING,
VERD SERIES (VERD-G-A02-E-U-T3-7030-10K-IP66-4B-AP

AMERICAN ELECTRIC LIGHTING
ATBM SERIES (ATBM F MVOLT R3 4B 3K)

GENERAL ELECTRIC
ERL2 SERIES (ERL2_116C330E_GRAYLR

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH ITEM 625, "LUMINAIRE, CONVENTIONAL, SOLID-STATE (LED), TYPE III DISTRIBUTION" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED FOR SATISFACTORY PERFORMANCE OF THIS WORK.

ITEM 625, LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT04B30

IN LIEU OF THE GALVANIZED STEEL LIGHT POLES AND BRACKET ARMS SPECIFIED IN 725.21 OF THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONVENTIONAL LIGHT POLES SHALL BE ONE OF THE FOLLOWING ALUMINUM POLES:

COOPER LIGHTING
MODEL # RTA 8 M 30 A D

AMERICAN ELECTRIC
MODEL # RTA3080E

GENERAL ELECTRIC
MODEL # ARTA30PB8.0B

STEEL ANCHOR BOLTS AS PER 725.21 SHALL BE INCIDENTAL TO THIS ITEM.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH ITEM 625 "LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT04B30" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED FOR SATISFACTORY PERFORMANCE OF THIS WORK.

ITEM 625, PLASTIC CAUTION TAPE, AS PER PLAN

THE REQUIREMENTS OF C&MS 625.20 AND 725.22 SHALL APPLY WITH THE FOLLOWING AMENDMENTS:

SUPPLY AND INSTALL TAPE FOR ALL PROPOSED LIGHTING CONDUIT PLACED IN TRENCH. WHERE "CONDUIT, JACKED OR DRILLED, AS PER PLAN" IS USED, TAPE WILL NOT BE REQUIRED. WHERE PORTIONS OF A CONDUIT RUN ARE BOTH INSTALLED IN TRENCH AND JACKED OR DRILLED, THE PORTION OF CONDUIT INSTALLED IN TRENCH SHALL INCLUDE PLASTIC CAUTION TAPE. THE UNIT COST BID FOR ALL TAPE INSTALLED IN TRENCH SHALL INCLUDE ONLY THE MATERIALS, EQUIPMENT, AND LABOR ASSOCIATED WITH THE TAPE. ANY COST RELATED TO CONDUIT OR TRENCH SHALL BE INCLUDED WITH THE RESPECTIVE PAY ITEMS.

CONTROL CENTER DATA

CONTROL CENTER	LINE VOLTS	CONNEX. LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR SIZE-AWG	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD AMPS	CIRCUIT FUSE SIZE AMPS	CIRCUIT CABLE SIZE AWG	MAINTAINING AGENCY
PC-A/B	120V	1.4	TOLEDO EDISON	60	A	3.5	15	8	ODOT
					B	2.3	15	8	

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CALCULATED
KDB
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CEB

LIGHTING GENERAL NOTES

LUC-20A-6.59

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SHEET NO.	REF. NO.	STATION		SIDE	625	625	625	625	625	625	625	625	625	625	625	625	625						
		FROM	TO		CONNECTION, FUSED PULL APART	CONNECTION, UNFUSED PERMANENT	LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT04B30	LIGHT POLE FOUNDATION	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1-1/2" DUCT CABLE WITH THREE NO. 6 AWG 2400 VOLT CABLES	CONDUIT, 3", 725.04	LUMINAIRE, CONVENTIONAL, SOLID-STATE (LED), TYPE III DISTRIBUTION	TRENCH, 24" DEEP, AS PER PLAN	PULL BOX, 725.08, 18"	GROUND ROD	POWER SERVICE, AS PER PLAN	PLASTIC CAUTION TAPE, AS PER PLAN					
					EACH	EACH	EACH	EACH	FT	FT	FT	FT	EACH	FT	EACH	EACH	EACH	FT					
	LP-A-4	347+72.5		RT	2		1	1	90				1										
		347+72.5	347+07.9	RT						99				99									
	LP-A-3	347+07.9		RT	2		1	1	90				1										
		347+07.9	347+06.1	RT						10				10									
	PB-A-3	347+06.1		RT					15						1								
		347+06.1	346+51.4	RT					165		55			55									
	PB-A-2	346+51.4		RT					15						1								
		346+51.4	346+28.3	RT						65				65									
	LP-A-2	346+28.3		RT	2		1	1	90				1			1							
		346+28.3	345+10.9	RT						145				145									
	LP-A-1	345+10.9		RT	2		1	1	90				1			1							
		345+10.9	345+06.9	RT						5				5									
	PB-A-1	345+06.9		RT		2			15						1								
		345+06.9	345+06.6	RT/LT					156		52			52									
	PB-B-1	345+06.6		LT					15						1								
		345+06.6	345+87.2	LT						81				81									
	LP-B-1	345+87.2		LT	2		1	1	90				1			1							
		345+87.2	346+62.3	LT						94				94									
	LP-B-2	345+62.3		LT	2		1	1	90				1			1							
		346+62.3	346+63.8	LT						6				6									
	PB-B-2	346+63.8		LT					15						1								
		346+63.8	347+27.1	LT					64		64			64									
	PB-B-3	347+27.1		LT					15						1								
		347+27.1	347+42.3	LT						43				43									
	LP-B-3	347+42.3		LT	2		1	1	90				1			1							
		347+42.3	348+57.0	LT						130				130									
	LP-B-4	348+57.0		LT	2		1	1	90				1			1							
		345+06.9	344+88.5	LT						15				15									
	CNTRL.	344+88.5		LT					15							1							
TOTALS CARRIED TO GENERAL SUMMARY					16	2	8	8	490	720	693	171	8	864	6	8	1	864					

CALCULATED KDB CHECKED CEB	LIGHTING SUBSUMMARY	LUC - 20A - 6.59	74 90
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