

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
54	57	58	113	114	115	133					01/SAF/OT	02/IMS/BR							
<b>PAVEMENT</b>																			
	18,484	3,528											5,003	17,009	254	01000	22,012	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1-1/2"
		849											849		302	46000	849	CY	ASPHALT CONCRETE BASE, PG64-22, 6"
		998											998		304	20000	998	CY	AGGREGATE BASE, 6"
	1,572	1,135											1,261	1,446	407	10000	2,707	GAL	TACK COAT
		290											290		441	50300	290	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), 1-3/4"
	769	396											457	708	442	20000	1,165	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), 1-1/2"
38														38	609	24510	38	FT	CURB, TYPE 4-C
733													733		609	26000	733	FT	CURB, TYPE 6
<b>LIGHTING</b>																			
						72							72		625	00450	72	EACH	CONNECTION, FUSED PULL APART
						13							13		625	14150	13	EACH	LIGHT POLE FOUNDATION, 24" X 9" DEEP
						160							160		625	23200	160	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE
						35							35		625	23300	35	FT	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE
						1,300							1,300		625	23400	1,300	FT	NO. 10 AWG POLE AND BRACKET CABLE
						1,901							1,901		625	24320	1,901	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES
						321							321		625	24330	321	FT	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES
						795							795		625	25502	795	FT	CONDUIT, 3", 725.05
						145							145		625	25904	145	FT	CONDUIT, JACKED OR DRILLED, 725.05 , 3"
						10							10		625	27520	10	EACH	REMOVAL OF LUMINAIRE AND REERECTION
						2,301							2,301		625	29002	2,301	FT	TRENCH, 24" DEEP
						7							7		625	30706	7	EACH	PULL BOX, 725.08, 24"
						4							4		625	31510	4	EACH	PULL BOX REMOVED
						13							13		625	32000	13	EACH	GROUND ROD
						3							3		625	35010	3	EACH	REMOVE AND REERECT EXISTING LIGHT POLE
						2,301							2,301		625	36010	2,301	FT	UNDERGROUND WARNING/MARKING TAPE
						LS							LS		SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING
						16							16		SPECIAL	62540010	16	EACH	REPLACEMENT OF EXISTING LIGHTING UNIT
						13							13		625	75500	13	EACH	LIGHT POLE FOUNDATION REMOVED
<b>TRAFFIC CONTROL</b>																			
						5							4	1	625	32000	5	EACH	GROUND ROD
						90							90		630	03100	90	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
						1							1		630	72330	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 10
						2							1	1	630	72340	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12
						1							1		630	72550	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 13
						1							1		630	72560	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 14
						126							126		630	80100	126	SF	SIGN, FLAT SHEET
						602							442	160	630	80224	602	SF	SIGN, OVERHEAD EXTRUSHEET
						1							1		630	81020	1	EACH	CONCRETE MEDIAN BARRIER SIGN BRACKET
						2							2		630	84010	2	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50
						1								1	630	84510	1	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION
						1							1		630	84900	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
						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 AND DISPOSAL
						6							5	1	630	87400	6	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL
						3							2	1	630	89702	3	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL
						2							2		642	01312	2	EACH	LANE REDUCTION ARROW, TYPE 1
						1.61							1.61		644	00104	1.61	MILE	EDGE LINE, 6"
						0.85							0.85		644	00204	0.85	MILE	LANE LINE, 6"
						0.4							0.4		644	00300	0.4	MILE	CENTER LINE
						1,373	834						2,207		644	00404	2,207	FT	CHANNELIZING LINE, 12"
						301	301						301		644	00500	301	FT	STOP LINE
						232	232						232		644	00700	232	FT	TRANSVERSE/DIAGONAL LINE
						204	204						204		644	00720	204	FT	CHEVRON MARKING
						11	11						11		644	01300	11	EACH	LANE ARROW
						3	3						3		644	01400	3	EACH	WORD ON PAVEMENT, 72"
						245	245						245		644	01510	245	FT	DOTTED LINE, 6"
						73	73						73		644	01520	73	FT	DOTTED LINE, 12"
						0.12	0.12						0.12		646	10010	0.12	MILE	EDGE LINE, 6"

DESIGN AGENCY



DESIGNER  
**AJS**

REVIEWER  
JDH 09/27/21

PROJECT ID  
109357

SHEET	TOTAL
51	160

REFERENCE NO.	SHEET NO.	SIDE	ROADWAY	STATION TO STATION	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625
					REMOVAL OF LUMINAIRE AND REECTION	TRENCH, 24" DEEP	UNDERGROUND WARNING/MARKING TAPE	NO. 10 AWG POLE AND BRACKET CABLE	GROUND ROD	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES	PULL BOX, 725.08, 24"	CONDUIT, JACKED OR DRILLED, 725.05, 3"	REMOVE AND REERECT EXISTING LIGHT POLE	LIGHT POLE FOUNDATION, 24" X 9" DEEP, TO INCLUDE NEW ANCHOR BOLTS	CONDUIT, 3", 725.05, TO BE USED IN BRIDGE PARAPET	CONNECTION, FUSED PULL APART	LIGHT POLE FOUNDATION REMOVED	SPECIAL - REPLACEMENT OF EXISTING LIGHTING UNIT	SPECIAL - MAINTAIN EXISTING LIGHTING	PULL BOX REMOVED
					EACH	FT	FT	FT	EACH	FT	FT	FT	FT	EACH	FT	EACH	EACH	FT	EACH	EACH	EACH	LS	EACH
PB-1	139	RT	RAMP C	223+81.19										1	85								
PB-2	139	LT	RAMP C	224+12.07										1									
L-7	139	LT	RAMP C	223+78.70	1	75	75	115	1									1					
L-6	138	LT	RAMP C	221+59.49	1	150	150	115	1									1					
L-5	138	LT	RAMP C	219+50.37	1	188	188	115	1									1					
L-4	138	LT	RAMP C	218+16.50	1	208	208	115	1									1					
L-3	137	LT	RAMP C	215+77.81	1	160	160	115	1									1					
L-2	137	LT	RAMP C	213+61.07	1	220	220	115	1									1					
L-1	137	LT	RAMP C	211+38.06	1	225	225	115	1									1					
EXIST LIGHT (DND)	136	LT	RAMP C	209+40.00		208	208																
EXIST LIGHT (DND)	142	LT	BUS 28	153+94																			
PB-3	142	LT	BUS 28	153+85.00		18	18							1									
L-13	142	LT	BUS 28	153+15.00		76	76	50	1									28					
L-12	142	LT	BUS 28	152+35.00		89	89	50	1														
PB-4	142	LT	BUS 28	151+63.50		80	80	50	1														
L-11	142	LT	BUS 28	151+54.50		8	8	50	1														
L-10	141	LT	RAMP C	229+81.11	1			115	1														
L-9	140	LT	RAMP C	227+90.60	1	200	200	115	1														
PB-5	140	LT	RAMP C	226+10.50		185	185																
L-8	140	LT	RAMP C	226+04.39	1	6	6	115	1														
PB-2	139	LT	RAMP C	224+12.07		180	180																
PB-6	142	LT	RAMP C	233+87.00										1									
PB-7	142	RT	BUS-28	152+39.00										1	60								
EXIST. MEDIAN LIGHT (DND)	142	RT	BUS-28	152+00.00		25	25																
BRIDGE PARAPET CONDUIT RT	150	RT	SR 28	66+81.37 TO 70+61.89																			
BRIDGE PARAPET CONDUIT LT	150	LT	SR 28	67+75.00 TO 71+63.00																			
MAINTIAN EXISTING LIGHTING	135-142																						
XPB-1	140	RT	RAMP C	226+04.15																			
XPB-2	139	RT	RAMP C	223+88.00																			
XPB-3	140	RT	RAMP C	225+84.10																			
XPB-4	142	RT	BUS-28	151+60.00																			
TOTALS CARRIED TO GENERAL SUMMARY					10	2301	2301	1300	13	35	160	1901	321	7	145	3	13	795	72	13	16	1	4

LIGHTING SUBSUMMARY	
DESIGN AGENCY	<b>BARGE</b> ENGINEERING
DESIGNER	AEJ
REVIEWER	MHW
PROJECT ID	09/27/21
	109357
SHEET	133
TOTAL	160

**REMOVAL OF LUMINAIRE AND RE-ERECTION**

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING AN EXISTING LUMINAIRE REMOVED FROM A PREVIOUS LOCATION ON THE PROJECT OR SUPPLIED TO THE PROJECT SITE BY OTHERS.

THE LUMINAIRE SHALL BE CLEANED, REPAIRS TO ENSURE THAT IT IS IN GOOD SERVICEABLE CONDITION MADE, ADJUSTMENTS TO THE OPTICAL COMPONENTS TO ENSURE THAT THE SPECIFIED DISTRIBUTION IS BEING PRODUCED MADE, AND A NEW LAMP INSTALLED IF THE LIGHT SOURCE IS A LAMP.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, "REMOVAL OF LUMINAIRE AND RE-ERECTION" FOR EACH LUMINAIRE INSTALLED AND SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM IN A WORKMANLIKE MANNER.

**REMOVE AND RE-ERECT EXISTING LIGHT POLE**

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING AN EXISTING LIGHT POLE REMOVED FROM A PREVIOUS LOCATION ON THE PROJECT OR SUPPLIED TO THE PROJECT SITE BY OTHERS.

THE LIGHT POLE SHALL BE CLEANED AND REPAIRS NEEDED FOR THE POLE TO BE IN GOOD SERVICEABLE CONDITION MADE. THE EXISTING POLE NUMBER DECAL SHALL BE REMOVED IF IT IS IN POOR CONDITION OR THE POLE NUMBER HAS CHANGED. A POLE NUMBER DECAL SHALL BE SUPPLIED AND APPLIED IF THE EXISTING DECAL IS REMOVED OR MISSING.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, "REMOVE AND RE-ERECT EXISTING LIGHT POLE" FOR EACH POLE INSTALLED AND SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM IN A WORKMANLIKE MANNER.

CONTRACTOR SHALL ENSURE THAT THE ANCHOR BOLT PATTERN MATCHES UP WITH THE EXISTING POLES TO BE ERECTED. THE DECORATIVE POLES ON BUSINESS 28 HAVE A DIFFERENT BOLT PATTERN THAN ODOT'S CONVENTIONAL POLES.

**HIGH VOLTAGE TEST WAIVED**

THE HIGH VOLTAGE TEST SHALL NOT BE PERFORMED ON THE CIRCUITS CONSTRUCTED BY THIS PROJECT, SINCE THE TEST COULD DAMAGE THE PORTION OF THE COMPLETED CIRCUIT WHICH HAS BEEN IN SERVICE PRIOR TO THIS PROJECT.

**SPECIAL, MAINTAIN EXISTING LIGHTING**

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

DESIGN AGENCY



DESIGNER

AEJ

REVIEWER

MHW 09/27/21

PROJECT ID

109357

SHEET TOTAL

134 160