

SEE SHEET 15 FOR PART NUMBER DESCRIPTIONS.

LIGHTING LOCATION MAP
STARK COUNTY

DESIGN AGENCY



DESIGNER

JMW

REVIEWER

RMM 03-14-25

PROJECT ID

115550

SHEET

P.3

TOTAL

18

625 - NO.10 AWG POLE AND BRACKET CABLE, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING NEW NO.10 AWG 600 VOLT CABLE. ALSO INCLUDED SHALL BE ALL CONNECTIONS, AND ANY TESTING REQUIRED TO RETURN THE CIRCUIT TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT

625 - 1-1/2 INCH DUCT CABLE, BY TYPE, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING DUCT CABLE. ALSO INCLUDED SHALL BE ANY CONNECTOR KITS, SPLICE KITS, AND TESTING REQUIRED TO RETURN THE CIRCUIT TO NORMAL OPERATION. AT ALL NEW INSTALLATIONS THE CABLE INSULATION SHALL BE TESTED PER 625.19 TO ASSURE THE CABLE AND SPLICES ARE ACCEPTABLE.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT.

625 - CONDUIT MISC; WALL MOUNTED, 2 INCH

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING 2 INCH GALVANIZED STEEL CONDUIT, PER 725.04 FOR MOUNTING ON CONCRETE WALLS. ALSO INCLUDED SHALL BE THE REMOVAL AND DISPOSAL OF DEFECTIVE CONDUIT AND CLAMPS. ALL CONDUIT, CLAMPS, CONNECTOR KITS, WIRE TESTING OR INCIDENTALS NECESSARY TO RETURN THE SYSTEM TO NORMAL OPERATION SHALL BE INCLUDED IN THE CONTRACTOR'S COST.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT

625 - LUMINAIRE, BY TYPE, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DAMAGED OR DEFECTIVE LUMINAIRE AND FURNISHING AND INSTALLING A NEW COMPLETE LUMINAIRE AND LAMP OF THE SAME TYPE AS SHOWN IN THE CIRCUIT DRAWINGS. ALSO INCLUDED SHALL BE ANY CONNECTIONS, MISCELLANEOUS HARDWARE, WIRING, TESTING AND OTHER INCIDENTALS NECESSARY TO RETURN THE UNIT TO NORMAL OPERATION. BUILT IN LEVEL IS NOT REQUIRED.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

THE LIGHTING AT STA 619 AND MCCALLUM CONSISTS OF A LANTERN STYLE WITH 4 FLAT SLOPING SIDES PER HL-10.11, WITH OR WITHOUT GLASS OR POLYMER PANELS, AND A ROUNDED OR POINTED TOP AND A SMALL CUPOLA. PROVIDE A LUMINAIRE WITH A B-U-G UP-LIGHTING RATING OF U2 OR LESS.

THE LUMINAIRE IS INTENDED FOR EXTERNAL ON/OFF CONTROL AND SHALL NOT INCLUDE A PHOTOCELL SOCKET. ASSURE THE LUMINAIRE HAS A NOMINAL POWER OF 65-85 WATTS AND A NOMINAL COLOR TEMPERATURE OF 3000K. LUMINAIRE SHOULD HAVE FACTORY-APPLIED BLACK FINISH. LUMINAIRES SHALL BE ONE OF THE FOLLOWING, OR AN APPROVED EQUAL:

1. AEL VALIENT
2. COOPER UTLD

THE LIGHTING AT SUM 271/8 AND STA 30/RAFF CONSISTS OF DECORATIVE LOW PROFILE LUMINAIRES ON THE APPROVED LIST.

LED LIGHTING

FAILURE OF ANY LED SHALL BE RETURNED TO THE ODOT DISTRICT 4 TRAFFIC DEPARTMENT, 2088 S.ARLINGTON RD, AKRON OH 44306, WITHIN 14 DAYS OF

REPLACEMENT WITH NOTE OF FAILURE DATE, LOCATION (POLE ID OR DESCRIPTION) AND CAUSE OF FAILURE (IF KNOWN). ODOT MAY, AT ITS DISCRETION, REPAIR THE FAILED LUMINAIRE AND RETURN TO THE PROJECT TO PLACE IT BACK IN SERVICE. A LED LUMINAIRE WILL NOT BE CONSIDERED FAILED UNLESS GREATER THAN 50% OF THE INDIVIDUAL LED UNITS ARE NO LONGER ILLUMINATED.

THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY: LUMINAIRE, INSTALLATION ONLY 2 EACH

625 - BALLAST MISC.: BALLAST FOR UNDERPASS LIGHTING, BY TYPE

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE BALLAST AND FURNISHING AND INSTALLING A NEW HIGH PRESSURE SODIUM BALLAST FOR EXISTING UNDERPASS FIXTURES. ALSO INCLUDED SHALL BE ALL WIRING, CONNECTIONS, TESTING AND OTHER INCIDENTALS REQUIRED TO RETURN THE UNIT TO NORMAL OPERATION. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - BALLAST MISC.: BALLAST FOR LOW MAST LIGHTING FIXTURE, BY TYPE

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE BALLAST AND FURNISHING AND INSTALLING A NEW HIGH PRESSURE SODIUM BALLAST FOR EXISTING LOW MAST FIXTURES. ALSO INCLUDED SHALL BE ALL WIRING, CONNECTIONS, TESTING AND OTHER INCIDENTALS REQUIRED TO RETURN THE UNIT TO NORMAL OPERATION. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - PULL BOX, BY TYPE, AS PER PLAN

THIS ITEM SHALL CONSIST OF EXCAVATING, FURNISHING AND INSTALLING A PULL BOX OF AN APPROVED DESIGN. ALSO INCLUDED SHALL BE THE REMOVAL AND DISPOSAL OF THE EXISTING PULL BOX AND ANY WATERPROOF CONNECTOR KITS, TESTING AND RESTORATION REQUIRED TO RETURN THE CIRCUIT TO NORMAL OPERATION. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - GROUND ROD, AS PER PLAN

IN ADDITION TO 625.16 THIS ITEM SHALL INCLUDE FURNISHING AND DRIVING A ONE INCH BY TEN FOOT GROUND ROD SIX INCHES BELOW GRADE INTO THE GROUND ADJACENT TO THE FOUNDATION OF THE POLE. ALSO INCLUDED IS THE FURNISHING AND RUNNING OF A SEVEN STRAND COPPER WIRE FROM THE TOP OF THE GROUND ROD THROUGH A HOLE IN THE TRANSFORMER BASE [A HOLE SHALL BE BORED IF NONE EXISTS]. THE WIRE SHALL BE CONNECTED ON THE INSIDE OF THE TRANSFORMER AS PER SCD HL-60.11. GROUND ROD RESISTANCE SHALL BE TWENTY-FIVE OHMS MAXIMUM EXCEPT ON TOWERS WHERE IT SHALL BE TEN OHMS MAXIMUM. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - CIRCUIT BREAKER, BY TYPE, TOWER LIGHTING

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE CIRCUIT BREAKER, FURNISHING AND INSTALLING A NEW CIRCUIT BREAKER OF APPROPRIATE AMPERE, WATT AND VOLTAGE RATINGS. ALL WIRING, CONNECTIONS, TESTING AND OTHER INCIDENTALS REQUIRED TO RETURN THE UNIT TO NORMAL OPERATION SHALL BE INCLUDED IN THIS ITEM. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER

625 - POWER SERVICE, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY MATERIALS TO REPLACE FAULTY WIRING, METER BASE OR TO ACCOMODATE NEW REQUIREMENTS OF THE SUPPLYING AGENCY, TO COMPLETE THE ELECTRICAL SERVICE FROM THE SUPPLYING AGENCY TO THE CONTROL CENTER. ALSO INCLUDED SHALL BE THE REMOVAL OF DEFECTIVE CABLE, METER BASE AND ANY CONNECTIONS, TESTING AND OTHER INCIDENTALS REQUIRED TO RETURN THE POWER SERVICE TO NORMAL OPERATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS WITH THE SUPPLYING AGENCY FOR DISCONNECTION AND RE-CONNECTION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.

625 - LIGHTING CONTACTOR, BY TYPE, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE LIGHTING CONTACTOR, FURNISHING AND INSTALLING A NEW CONTACTOR, BY TYPE, IN AN EXISTING CONTROL CENTER, INCLUDING ALL NECESSARY WIRING, TESTING AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - CONTROL CENTER MAINTENANCE ITEM, AS PER PLAN [CIRCUIT BREAKER 30 AMP OR 60 AMP]

REPLACE IN KIND THE EXISTING CIRCUIT BREAKER WITHIN THE CONTROL CENTER. THE EXISTING CIRCUIT BREAKERS ARE EITHER 30 AMP OR 60 AMP.THE REMOVED CIRCUIT BREAKER SHALL BE DISPOSED OF BY THE CONTRACTOR.

625 - CONTROL CENTER CABINET COMPLETE, BY TYPE, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING A COMPLETE CONTROL CENTER CABINET , BY TYPE, INCLUDING DISCONNECT SWITCH, LIGHTING CONTACTOR, H-O-A SWITCH, LIGHTING ARRESTOR, PHOTO-CELL TRANSFORMER, STAINLESS STEEL CABINET, INCLUDING REMOVAL OF EXISTING CONTROL CENTER, ALL NECESSARY WIRING, TESTING AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE SYSTEM TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH. THIS ITEM IS TO BE USED WHERE NEEDED IN THE MAINTENANCE CONTRACT & FOR THE NEW CONTROL CENTER REQUIRED AT SUM 480 & 82/91.

625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES, AS PER PLAN (SUM 480 & 82/91)

THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY TO REPLACE THE CABLES IN BETWEEN TOWERS AT SUM 480 & 82/91. ITEM 625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES, AS PER PLAN (SUM 480 & 82/91) 23021 FT

625 - REPAIR OF INTEGRAL LUMINAIRE LOWERING MECHANISM OF TOWER LIGHTING FIXTURES

THIS ITEM SHALL CONSIST OF THE REPAIR OF ANY LUMINAIRE RING ASSEMBLY, HEAD FRAME ASSEMBLY & THE WINCH ASSEMBLY.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.

THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 625 REPAIR OF INTEGRAL LUMINAIRE LOWERING MECHANISM OF TOWER LIGHTING FIXTURES 1 EACH

625 - REPAIRING UNDERGROUND BREAK OF CABLE IN DUCT OR CONDUIT

THIS ITEM SHALL CONSIST OF EXCAVATING AND UNCOVERING A BREAK OR SHORT OF CABLE IN DUCT OR CONDUIT, SPLICING THE BREAK OR SHORT WITH WATERPROOF SPLICE KITS, SPLICING THE DAMAGED DUCT OR REPAIRING THE DAMAGED CONDUIT, AND BACKFILLING AND RESTORING THE AREA. TESTING PER 625.19 SHALL BE PERFORMED TO ASSURE THE SPLICES ARE ACCEPTABLE.

IF MANY FAULTS OR BREAKS ARE FOUND, THE ENGINEER WILL DECIDE WHETHER TO SPLICE THE CABLE, REPLACE THE ENTIRE CABLE WITHIN THE DUCT, OR INSTALL NEW DUCT CABLE BETWEEN TWO [2] TERMINAL POINTS.

PAYMENT FOR THE REPLACEMENT OF CABLE OR INSTALLATION OF NEW DUCT CABLE IS NOT INCLUDED IN THIS ITEM, BUT WILL BE PAID FOR UNDER THEIR RESPECTIVE PAY ITEMS.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT.

625 - TROUBLE SHOOTING UNDERGROUND AND ABOVE GROUND CIRCUITRY PROBLEM

THIS ITEM SHALL CONSIST OF INVESTIGATING, AT THE REQUEST OF THE ENGINEER, AN UNDERGROUND OR ABOVE GROUND CIRCUIT OF HIGHWAY LIGHTING OR SIGN LIGHTING TO DETERMINE THE CAUSE OF FAILURE OR MALFUNCTION, REPORTING THE FAULT AND RECOMMENDING CORRECTIVE ACTION TO THE ENGINEER. FAULT FINDERS, MEGGERS, ETC. SHOULD BE USED TO ACCURATELY LOCATE FAULTS SO THE ENGINEER CAN MAKE SOUND DECISIONS TO GIVE THE CONTRACTOR APPROVAL TO PROCEED WITH CORRECTIVE ITEMS. IF MORE THAN ONE [1] FAULT EXISTS BETWEEN TWO [2] CABLE SPLICE POINTS, APPROVAL TO REPEAT THIS ITEM MUST BE OBTAINED FROM THE ENGINEER PRIOR TO PERFORMING THE WORK.

TROUBLE SHOOTING PAYMENT IS MADE ON COMPLETE OR PARTIAL CIRCUITS ONLY. OUTAGES ON INDIVIDUAL POLES OR TOWERS SHALL BE REPAIRED USING MAJOR MAINTENANCE ITEMS WHEN REQUIRED. MINOR WIRING REPAIRS TO POLES OR TOWERS SHALL BE CONSIDERED INCIDENTAL TO THE MINIMAL MAINTENANCE ITEMS.

REPAIRING A CIRCUIT FAILURE CAUSED BY DEFECTIVE CABLE SPLICES OR CONNECTOR KITS SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR ONLY ONE [1] CIRCUIT FAULT DETERMINATION PER REQUEST.

ITEM 625 - LIGHTING, MISC.: HOISTING CABLE KIT

THIS ITEM SHALL CONSIST OF HOISTING CABLE KITS FOR THE HIGH MAST LIGHTING TOWERS IDENTIFIED IN THE PLANS. THE EXISTING LOWERING CABLES SHALL BE REPLACED WITH STAINLESS STEEL CABLES THAT MEET THE FOLLOWING SPECIFICATIONS: MI-1379-SS, 3/16" DIA. 7X19 STAINLESS STEEL AIRCRAFT CABLE. THE CABLE SHALL BE MANUFACTURED IN ACCORDANCE WITH FEDERAL SPECIFICATIONRR-W-410 TO THE REVISION IN EFFECT AT THE TIME OF PURCHASE. THE CABLE SHALL MEET THE DIMENSIONAL AND STRENGTH REQUIREMENTS OF MIL SPECIFICATION RR-W-410 TO THE TO THE REVISION IN EFFECT AT THE TIME OF PURCHASE. THE CABLE SHALL MEET THE DIMENSIONAL AND STRENGTH REQUIREMENTS OF MIL SPECIFICATION MIL-DTL-84320 TO THE REVISION IN EFFECT AT THE TIME OF PURHCASE. ALL CABLE SUPPLIED TO HOLOPHANE SHALL HAVE AN IDENTIFYING COLOR TRACER FILAMENT.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH HOISTING CABLE KIT.

DESIGN AGENCY



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JMW

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P.10

TOTAL

18

ITEM SPECIAL - EMERGENCY RESPONSE- KNOCKDOWN
ROADWAY HAZARD AND / OR LIVE EXPOSED WIRE

THIS ITEM SHALL CONSIST OF THE CONTRACTOR RESPONDING TO AN EMERGENCY CALLOUT, ON NOTIFICATION BY ODOT PERSONNEL, IN WHICH THE EMERGENCY OCCURES DURING NON-REGULAR WORKING HOURS. SOME EXAMPLES OF A HAZARDOUS CONDITION THAT WOULD WARRANT AN EMERGENCY CALLOUT OF THE CONTRACTOR WOULD BE A KNOCKDOWN THAT REQUIRED THE USE OF HEAVY EQUIPMENT TO REMOVE A POLE OR AN ACCIDENT THAT WOULD REQUIRE A MAINTENANCE CREW TO REMOVE AND/OR SECURE ELECTRICAL CIRCUITS. THE CONTRACTOR'S RESPONSE TIME, FROM THE TIME OF NOTIFICATION UNTIL PERSONNEL ARRIVE AT THE EMERGENCY SITE, SHALL NOT EXCEED TWO [2] HOURS]

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - LIGHTING, MISC: H-O-A SWITCH

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE H-O-A SWITCH, FURNISHING AND INSTALLING A NEW SWITCH. IN AN EXISTING CONTROL CENTER, THE SWITCH SHALL BE THREE POSITION, "HAND-OFF-AUTOMATIC", WITH THE REQUIRED RATING, AND THE TERMINALS ENCLOSED. INCLUDED SHALL BE ALL NECESSARY WIRING, TESTING AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.

625 - LIGHTING MISC.; PHOTO-CELL TRANSFORMER, BY TYPE

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE PHOTO-CELL TRANSFORMER, FURNISHING AND INSTALLING A NEW PHOTO-CELL TRANSFORMER, BY TYPE, IN AN EXISTING CONTROL CENTER, INCLUDING ALL NECESSARY WIRING, TESTING AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - LIGHTING, MISC; WEATHERTIGHT TWIST LOCK POWER
INLET FOR LIGHT TOWER

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF BOTH MALE AND FEMALE ENDS OF A DEFECTIVE TWIST LOCK POWER INLET AND FURNISHING AND INSTALLING A NEW WEATHER TIGHT TWIST LOCK POWER INLET [BOTH MALE AND FEMALE ENDS] FOR AN EXISTING LIGHT TOWER. ALSO INCLUDED SHALL BE ANY CONNECTIONS, TESTING AND OTHER INCIDENTALS REQUIRED TO RETURN THE UNIT TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - WOOD POLE, AS PER PLAN

THIS ITEM SHALL INCLUDE THE FURNISHING AND INSTALLATION OF A CLASS 5 WOOD POLE 35 FEET IN LENGTH AS PRESCRIBED IN ITEM 632.17.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - LIGHTING, MISC; DISCONNECT SWITCH, WITH ENCLOSURE,
BY TYPE

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE DISCONNECT SWITCH, FURNISHING AND INSTALLING A NEW DISCONNECT SWITCH, BY TYPE, IN AN EXISTING CONTROL CENTER, INCLUDING ALL NECESSARY WIRING, TESTING AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION. THE DISCONNECT SWITCH WILL BE NON-FUSED AND COMPLY WITH CMS 725.19.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - LIGHTING, MISC.; SECONDARY SURGE PROTECTOR
[LIGHTNING ARRESTOR] HIGH MAST LIGHT FIXTURE

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE [OR NON-EXISTANT] SECONDARY SURGE PROTECTOR, FURNISHING AND INSTALLING A NEW SECONDARY SURGE PROTECTOR FOR HIGH MAST [TOWER] FIXTURES. ALSO INCLUDED SHALL BE ANY CONNECTIONS, TESTING AND INCIDENTALS REQUIRED TO RETURN THE UNIT TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

625 - SECONDARY SURGE PROTECTOR AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE SECONDARY SURGE PROTECTOR, FURNISHING AND INSTALLING A NEW SECONDARY SURGE PROTECTOR AT A POWER SERVICE LOCATION, INCLUDING ALL NECESSARY WIRING, TESTING & OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE POWER SERVICE TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH

ITEM 625 - PORTABLE WINCH DRIVE POWER UNIT

THE CONTRACTOR SHALL SUPPLY A PORTABLE WINCH DRIVE POWER UNIT AS PER THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 725.21.B.5.

A QUANTITY OF 1 EACH OF ITEM 625 - PORTABLE WINCH DRIVE POWER UNIT IS INCLUDED IN THE GENERAL SUMMARY FOR THIS PROJECT.

625 - LIGHTING MISC; LAYING OUT UNDERGROUND CABLE

THIS ITEM SHALL CONSIST OF LOCATING AND MARKING THE LOCATION OF UNDERGROUND ELECTRICAL CIRCUITS OR CONDUITS. THIS ITEM SHALL BE USED AT THE DIRECTION OF THE ENGINEER WHEN THE LOCATION OF UNDERGROUND UTILITIES IS REQUIRED FOR SPECIAL PROJECTS. PAYMENT FOR THIS ITEM SHALL NOT BE MADE WHEN LOCATING CABLE IS REQUIRED FOR MAJOR MAINTENANCE PERFORMED UNDER THIS CONTRACT.

PAYMENT SHALL INCLUDE COST OF MANPOWER, USE OF MOTOR VEHICLES AND USE OF TEST INSTRUMENTS.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER HOUR

625 - LIGHTING MISC: ANNUAL OPERATION AND
INSPECTION OF TOWER LIGHTING DEVICES

THIS ITEM SHALL CONSIST OF THE OPERATION AND INSPECTION OF EACH TOWER LIGHTING DEVICE INCLUDED IN THIS CONTRACT ON AN ANNUAL BASIS. DURING AUGUST OF EACH YEAR, EACH TOWER LIGHTING FIXTURE SUPPORT RING SHALL BE LOWERED COMPLETELY TO DETERMINE IF THE LOWERING MECHANISM IS FUNCTIONING PROPERLY.

WHILE LOWERED TO GROUND WORKING LEVEL, THE POWER CORD SHALL BE PLUGGED INTO AN INLET ON THE SUPPORT RING AND THE LUMINAIRES SHALL BE ENERGIZED. ALL OTHER APPURTENANCES ON THE SUPPORT RING SHALL BE INSPECTED AND REPAIRED, AS DIRECTED BY THE ENGINEER. A CHECK OF PROPER LUMINAIRE REFRACTOR ORIENTATION OF THE ASYMMETRICAL FIXTURES SHALL ALSO BE PERFORMED.

THE INSIDE CABLE SHALL BE LUBRICATED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND THE LUMINAIRE SUPPORT RING SHALL BE LEVELED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS PRIOR TO FINAL LATCHING OF THE SUPPORT RING TO THE TOP OF THE TOWER.

ANY NECESSARY REPAIRS SHALL BE PAID FOR UNDER THEIR RESPECTIVE PAY ITEMS LISTED IN THE CONTRACT.

ALSO INCLUDED, THE CONTRACTOR SHALL MAINTAIN A PATH AND THE AREA AROUND [ABOUT 6 FOOT RADIUS] THE TOWER BASE CLEAR OF DEBRIS, TREES, BRANCHES, BRUSH, ETC.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.

625 LIGHTING, MISC.; LOWERING TOWER

THIS ITEM SHALL CONSIST OF LOWERING AND RE-ERECTING A LIGHT TOWER TO PERFORM REQUIRED MAINTENANCE. THIS ITEM SHALL BE USED AT THE DIRECTION OF THE ENGINEER WHEN LOWERING A TOWER IS NECESSARY TO CORRECT PROBLEMS WITH TANGLED CABLES, MALFUNCTIONING LATCHING MECHANISMS, OR OTHER PROBLEMS REQUIRING TOWER LOWERING.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER LIGHTING TOWER LOWERED.
THIS ITEM IS TO BE USED WHERE NEEDED IN THE MAINTENANCE CONTRACT & FOR THE TOWERS AT SUM 480 & 82/91.

THE FOLLOWING HAS BEEN CARRIED TOTHE GENERAL SUMMARY:

ITEM 625 LIGHTING MISC.: LOWERING TOWER 1 EACH (MAINTENANCE CONTRACT)
ITEM 625 LIGHTING MISC.: LOWERING TOWER 33 EACH (SUM 480 & 82/91)

625 - LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER
PLAN, VARIOUS

THIS ITEM SHALL CONSIST OF REPLACEMENT OF CONVENTIONAL HPS LUMINAIRES WITH LEDs AT SUM 76 WB OFF RAMP TO THORNTON (11,000 to 12,100 LUMENS SHALL BE USED FOR 200W):

SUM 76 WB OFF RAMP TO THORNTON
- 9 LUMINAIRES (480 VOLTS, 200 WATT EQUIVALENT)

LUMNAIRE MISC: LED REPLACEMENT LUMINAIRES, VARIOUS

THIS PAY ITEM IS PROVIDED SHOULD THE CONTRACTOR NEED LED REPLACEMENT LUMINAIRES FOR ANY DAMAGED LUMINAIRES. THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 625 LUMINAIRE MISC: LED REPLACEMENT LUMINAIRES, VARIOUS, 10 EACH

HIGH & LOW MAST SYMMETRIC & ASYMMETRIC LUMINAIRES

ASYMMETRIC LUMINAIRES SHALL BE ONE OF THE FOLLOWING THREE OR EQUAL AS APPROVED BY THE ENGINEER:

GE EVOLVE LED ROADWAY LIGHTING CATALOG NO.
ERHM-01-5-30-E1-7-30-N-1-4B-GRAY-R (320 WATT)
HOLOPHANE
HMLED3-PK2-30K-HVOLT-G-M
CHM CONDOR
CLED2- XX-G-30-70-B-T4-XX-XX

SYMMETRIC LUMINAIRES SHALL BE ONE OF THE FOLLOWING THREE OR EQUAL AS APPROVED BY THE ENGINEER:

GE EVOLVE LED ROADWAY LIGHTING CATALOG NO.
ERHM-01-5-40-VM-7-30-N-1-4B-GRAY-R (320 WATT)
HOLOPHANE
HMLED3-PK2-30K-HVOLT-G-AW
CHM CONDOR
CLED2- XX-G-30-70-B-5W-XX-XX

PAYMENT

PAYMENT FOR REMOVAL AND DISPOSAL OF HPS LUMINAIRES AS WELL AS THE INSTALLATION OF THE LED'S SHALL BE PAID FOR UNDER THE BID ITEM FOR EACH LED LUMINAIRE.

ITEM 625 LIGHTING MISC.: REPLACEMENT OF HEADRING LOWERING
DEVICE

HEADRING HIGH-MAST LOWERING DEVICE TO BE A COMPLETE REPLACEMENT OF ALL HIGH MAST TOWER PARTS AT SUM 480 & 82 / 91 EXCLUDING THE TOWER ITSELF (A TOP LATCHING, CENTERING ARM UNIT WITH INTERNAL WINCH, 1 CIRCUIT, STAINLESS STEEL 3/16 INCH DIA. HOISTING CABLES & STAINLESS STEEL 1/4 INCH DIA. WINCH CABLE, LIGHTING ARRESTOR, RING J-BOX, LIGHTING ROD, SPECIAL WINCH ASSEMBLY AND LIGHTING ROD, BREAKER BOX, & ANY OTHER REQUIRED HARDWARE). (THIS EXCLUDES TOWER 82-1-1 AT SUM 480 & 82/91.)

(EX. HOLOPHANE LDV DEVICE SERIES LDV05, STRATUS LOWERING DEVICE SYSTEM MODEL 1060, CAROLINA HIGH MAST MODEL C422)

THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:
REPLACEMENT OF HEADRING LOWERING DEVICE 32 EACH

REPLACEMENT ITEMS AT SUM 480 & 82/91

THE FOLLOWING HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK AT SUM 480 & 82/91

ITEM 625 GROUND ROD 15 EACH
ITEM 625 CONNECTION, UNFUSED PERMANENT 72 EACH
ITEM 625 TRENCH 20,130 FT
ITEM 625 CONDUIT, 3", 725.04 636 FT
ITEM 625 CONDUIT, JACKED OR DRILLED (3") 578 FT
ITEM 625 PULL BOX, 725.08, 18" AS PER PLAN, 3 EACH
ITEM 625 REMOVAL OF LUMINAIRE AND REERECTION 64 EACH

NOTE: CIRCUIT DIAGRAMS HAVE BEEN PROVIDED IN THIS PLAN SET (SEE LAST 2 SHEETS). LIGHTING PLANS WILL BE PROVIDED AT PRE-CONSTRUCTION MEETING IF NEEDED.

NOTE: 3,000 FT EXTRA TRENCH IS IN THE GENERAL SUMMARY FOR MAINTENANCE CONTRACT.
100 FT EXTRA CONDUIT, 3", 725.04 IS IN THE GENERAL SUMMARY FOR MAINTENANCE CONTRACT.
200 FT EXTRA CONDUIT, JACKED OR DRILLED (3") IS IN THE GENERAL SUMMARY FOR MAINTENANCE CONTRACT.

DESIGN AGENCY



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SHEET

P.11

TOTAL

18

DELETED

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	
								10	11	15	16		01/NFP						
																			EROSION CONTROL
														1,000	832	30000	1,000	EACH	EROSION CONTROL
																			LIGHTING
									72					72	625	00480	72	EACH	CONNECTION, UNFUSED PERMANENT
														40	625	02501	40	EACH	TRANSFORMER BASE, TYPE AT-A, AS PER PLAN
														1	625	10500	1	EACH	LIGHT POLE, MISC.:(752.01) 33.50 FT HEIGHT (41.7 FT MH)
														1	625	10503	1	EACH	LIGHT POLE (INSTALLATION ONLY), AS PER PLAN
														35	625	10505	35	EACH	ERECTING REUSABLE DOWNED LIGHT POLE, AS PER PLAN
														5	625	14400	5	EACH	LIGHT POLE FOUNDATION REPAIR (SUBSTITUTE METHOD)
														2	625	14501	2	EACH	LIGHT POLE FOUNDATION, AS PER PLAN
														5	625	18201	5	EACH	BRACKET ARM, 15', AS PER PLAN
														2	625	18401	2	EACH	BRACKET ARM, 20', AS PER PLAN
														20	625	19101	20	EACH	BALLAST FOR TOWER LIGHT FIXTURE, AS PER PLAN (1000W)
														80	625	19101	80	EACH	BALLAST FOR TOWER LIGHT FIXTURE, AS PER PLAN (400W)
														1	625	20000	1	EACH	PORTABLE WINCH DRIVE POWER UNIT
														4,000	625	23201	4,000	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE, AS PER PLAN
														600	625	23301	600	FT	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE, AS PER PLAN
														1,500	625	23401	1,500	FT	NO. 10 AWG POLE AND BRACKET CABLE, AS PER PLAN
														2,500	625	24101	2,500	FT	1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES, AS PER PLAN
														1,000	625	24321	1,000	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES, AS PER PLAN
								23,021						23,021	625	24321	23,021	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES, AS PER PLAN (SUM 480 & 82/91)
														250	625	24331	250	FT	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES, AS PER PLAN
									736					736	625	25500	736	FT	CONDUIT, 3", 725.04
														778	625	25900	778	FT	CONDUIT, JACKED OR DRILLED (3")
														50	625	25920	50	FT	CONDUIT, MISC.: CONDUIT, WALL MOUNTED (2')
										64				64	625	27520	64	EACH	REMOVAL OF LUMINAIRE AND REERECTION
														2	625	27560	2	EACH	LUMINAIRE, INSTALLATION ONLY
														1	625	27600	1	EACH	LUMINAIRE, MISC.: AIRPORT LIGHT
													Was 8880	10	625	27600	10	EACH	LUMINAIRE, MISC.:LED REPLACEMENT LUMINAIRES, VARIOUS
										1,008	1,680			2,688	625	27700	2,688	FXMT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), ASYMMETRIC, 1000W HPS EQUIV
										1,488	8,976			10,464	625	27700	10,464	FXMT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), ASYMMETRIC, 400W HPS EQUIV
										6,744	960			7,704	625	27700	7,704	FXMT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), SYMMETRIC, 1000W HPS EQUIV
										1,584	10,776			12,360	625	27700	12,360	FXMT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), SYMMETRIC, 400W HPS EQUIV
													Was 9936	704	625	27700	704	FXMT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), SYMMETRIC, 400W HPS EQUIV
													Was 576	288	625	27700	288	FXMT	LUMINAIRE, MISC.: HIGH MAST, SYMMETRIC, 400W HPS FIXTURE, 725.11
									Was 264		288			216	625	27700	216	FXMT	LUMINAIRE, MISC.: POST TOP, TYPE III, 150W LED FIXTURE, 725.11
											48	144		192	625	27700	192	FXMT	LUMINAIRE, MISC.: DECORATIVE LOW PROFILE LUMINAIRE
											2,832	10,440		13,272	625	27700	13,272	FXMT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED) TYPE II, 200 WATT HPS EQUIVALENT
									Was 3264		2,016	3,864		5,880	625	27700	5,880	FXMT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED) TYPE III, 200 WATT HPS EQUIVALENT
													Was 10416						
										480	1,368			1,848	625	27700	1,848	FXMT	LUMINAIRE, MISC.:CONVENTIONAL, SOLID STATE (LED), TYPE III, 310W HPS EQUIVALENT
									Was 1488		48	2,496		2,544	625	27700	2,544	FXMT	LUMINAIRE, MISC.:CONVENTIONAL, SOLID STATE (LED), TYPE III, 400W HPS EQUIVALENT
											480			480	625	27700	480	FXMT	LUMINAIRE, MISC.:CONVENTIONAL, STYLE B, TYPE II OR III, 200W HPS FIXTURE, 725.11
											1,152			1,152	625	27700	1,152	FXMT	LUMINAIRE, MISC.:CONVENTIONAL, STYLE C, TYPE III, 400W HPS FIXTURE, 725.11
											264			264	625	27700	264	FXMT	LUMINAIRE, MISC.:INDUCTION, TYPE III
												1,056		1,056	625	27700	1,056	FXMT	LUMINAIRE, MISC.:LOW MAST, SOLID STATE (LED), SYMMETRIC, 1000W HPS EQUIV
										240	6,408			6,648	625	27700	6,648	FXMT	LUMINAIRE, MISC.:LOW MAST, SOLID STATE (LED), SYMMETRIC, 400W HPS EQUIV
											144			144	625	27700	144	FXMT	LUMINAIRE, MISC.:LUMINAIRE, POST TOP LED FIXTURE
										1,224	2,496			3,720	625	27700	3,720	FXMT	LUMINAIRE, MISC.:UNDERPASS, SOLID STATE (LED) 100 WATT HPS EQUIVALENT
												15		15	625	27800	15	EACH	BALLAST, MISC.: (BALLAST FOR LOW MAST LIGHTING FIXTURE, 400W)
														5	625	27800	5	EACH	BALLAST, MISC.: (BALLAST FOR UNDERPASS LIGHTING FIXTURE, 100W)
														2	625	27800	2	EACH	BALLAST, MISC.: (BALLAST FOR UNDERPASS LIGHTING FIXTURE, 150W)
								15	23,130					23,130	625	29000	23,130	FT	TRENCH
									3					18	625	30701	18	EACH	PULL BOX, 725.08, 18", AS PER PLAN
									15					15	625	32000	15	EACH	GROUND ROD
														2	625	32001	2	EACH	GROUND ROD, AS PER PLAN
														20	625	33100	20	EACH	CIRCUIT BREAKER, TOWER LIGHTING (30 AMP)
														1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN
														3	625	34451	3	EACH	CONTROL CENTER CABINET, COMPLETE, AS PER PLAN (30, 60, 100, OR 200 AMP)
														1	625	34507	1	EACH	CONTROL CENTER MAINTENANCE ITEM, AS PER PLAN (CIRCUIT BREAKER, 30, 60, OR 75 AMP)

GENERAL SUMMARY

DESIGN AGENCY

DESIGNER

JMW

REVIEWER

RMM 03-14-25

PROJECT ID


115550

SHEET

P.13

TOTAL

18

GENERAL SUMMARY	
DESIGN AGENCY	
	
DESIGNER	JMW
REVIEWER	RMM
PROJECT ID	03-14-25
115550	
SHEET	TOTAL
P.14	18

D04-LG-FY2026 (WEST)

MODEL: Sheet PAPER: 34x22 (in.) DATE: 8/29/2025 TIME: 10:03:43 AM PLTDRY: OHDOT_PDF.pltclg PENTBL: OHDOT Pen.tbl USER: Joseph.Vilczak@dohio.gov WORKSPACE: OHDOTCEV02 WORKSET: 115550 PRODUCT: OpenRoadsDesigner 24.00.00.2005
 pw:\ohiodot-pw.bentley.com\ohiodot-pw\2\Documents\01 Active Projects\District 04\ D04\115550\400-Engineering\Lighting\Sheets\115550_LS001.dgn

PID IN WHICH LED WILL BE INSTALLED	REF NO.	PART LOCATION	625	625	625	625	625	625	625	625	625	625	625	625	631					
			LUMINAIRE, MISC.: POST TOP, TYPE III, 150W LED FIXTURE, 725.11	LUMINAIRE, MISC.: DECORATIVE LOW PROFILE LUMINAIRE	LUMINAIRE, MISC.: UNDERPASS, SOLID STATE (LED) 100 WATT HPS EQUIVALENT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED) TYPE II, 200 WATT HPS EQUIVALENT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED) TYPE III, 200 WATT HPS EQUIVALENT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED), TYPE III, 310W HPS EQUIVALENT	LUMINAIRE, MISC.:CONVENTIONAL SOLID STATE (LED), TYPE III, 400W HPS EQUIVALENT	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), ASYMMETRIC, 400W HPS EQUIV	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), ASYMMETRIC, 1000W HPS EQUIV	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), SYMMETRIC, 400W HPS EQUIV	LUMINAIRE, MISC.: HIGH MAST, SOLID STATE (LED), SYMMETRIC, 1000W HPS EQUIV	LUMINAIRE, MISC.:LOW MAST, SOLID STATE (LED), SYMMETRIC, 400W HPS EQUIV	LUMINAIRE, MISC.:LOW MAST, SOLID STATE (LED), SYMMETRIC, 1000W HPS EQUIV		SIGN LIGHTING, MISC.:AIRPORT OBSTRUCTION LIGHT (120V)	ANNUAL OPERATION & INSPECTION OF TOWER LIGHTING DEVICES		
			FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT	FXMT		FXMT				
		# - 3 WIRE SYSTEM																		
	1	POR-480/14 (FROST ROAD)				4	15													
	2a	POR-76 EB REST AREA				6	12													
	2b	POR-76 WB REST AREA				10	11													
	3	POR-82 & CHAMBERLAIN ROUNDABOUT					8													
	4a	STA-30 (WHIPPLE, SR297)REPLACED IN 2022 #				11														
	4b	STA-30 (RAFF) REPLACED IN 2022 #		2		20														
	5	STA-30 (RICHVILLE DR, SR627) #				18														
	6a	STA-62 (MARKET ST / SR43)							2		4						3			
	6b	NOT USED																		
	6c	STA-62 (SR44)				6														
	6d	STA-62 (SR173)				22														
	6e	STA-62 (BEESON ST) (MAINTAINED BY THE CITY OF ALLIANCE)																		
	6f	STA-62 (SR225)					7													
	7	STA-77 (SR627)				21														
	8	STA-77 (SR800)			6				40		48						18			
	9	STA-77 (US30)			19		10		22	8	18	8								
	10	STA-77 (172) #							30			26	5				17			
	11	STA-77 (13TH ST) #							2			32	5			6	11			
	12	STA-77 (62 / 687)			8			2				24					15			
	13	STA-77 (WHIPPLE / EVERHARD) #			14		21					49					26			
	14	STA-77 (PORTAGE ST) #			4							53					14			
	15	STA-77 (SHUFFLE) #										30					21			
	16	STA-619 (MCCALLUM)	9									55								
	17	STA-619 (KAUFMAN / KING CHURCH AVE)					20													
	56	SUM-480 @ 91 WEST BOUND ON RAMP														1				
		TOTAL FIXTURES	9	2	51	118	84	20	2	62	42	66	281	10		7	125			
	QTY@	24 MONTHS (HPS OR AIRPORT)																		
	QTY@	12 MONTHS HPS																		
	QTY@	18 MONTHS LED																		
	QTY@	24 MONTHS LED	9	2	51	118	84	20	2	62	42	66	281	10		7	x2			

LIGHTING SUBSUMMARY

DESIGN AGENCY



DESIGNER

JMWW

REVIEWER

RMM 03-14

PROJECT ID

115550

SHEET	TOTAL
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