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DISTRICT 1 DETAILS

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ABBREVIATIONS

ALSF	HIGH INTENSITY APPROACH LIGHTING SYSTEM WITH SEQUENCED FLASHING LIGHTS	USE	UNDERGROUND SERVICE ENTERANCE
AMP	AMPER	W	WATTS
AWG	AMERICAN WIRE GAUGE	XLP	CROSS-LINKED POLYETHYLENE
BC	BOLT CIRCLE		
C	CONDUIT		
CDA	CHICAGO DEPARTMENT OF AVIATION		
DIA	DIAMETER		
GRD	GROUND		
GS	GALVANIZED STEEL		
HDP	HIGH DENSITY POLYETHYLENE		
HPS	HIGH PRESSURE SODIUM		
JB	JUNCTION BOX		
MA	MAST ARM		
MALSR	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS		
MH	MOUNTING HEIGHT		
N	NEUTRAL		
PH	PHASE		
PVC	POLYVINYL CHLORIDE		
RGS	RIGID GALVANIZED STEEL		

FINAL LIGHTING GENERAL NOTES

- PRIOR TO INSTALLATION ON THE NEW UNIT DUCT, CONDUITS, JUNCTION BOXES, LIGHT STANDARD FOUNDATION AND APPURTENANCES, THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLE AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123 OR 811) TO AID IN THIS TASK.
- THE CONTRACTOR MUST VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT PLANS WHICH WOULD EFFECT HIS WORK UNDER THIS CONTRACT FOR THE OPERATION OF THE EXISTING ROADWAY LIGHTING SYSTEM.
- NO MATERIAL OR EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE WITHOUT PRIOR INSPECTION AND APPROVAL BY THE ENGINEER. ANY MATERIAL AND EQUIPMENT NOT APPROVED BY THE ENGINEER MUST BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- ALL NEW UNIT DUCT, CONDUIT, JUNCTION BOXES AND APPURTENANCES ARE SHOWN DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD MUST MEET THE APPROVAL OF THE ENGINEER.
- CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH UNDER DRAINS.
- ALL ELECTRICAL SYSTEMS, EQUIPMENT AND APPURTENANCES SHALL BE PROPERLY GROUNDED IN STRICT CONFORMANCE WITH NATIONAL ELECTRICAL CODE EVEN THOUGH EVERY DETAIL OF REQUIREMENTS IS NOT SPECIFIED OR SHOWN.
- GROUNDED OF POLE INCLUDING GROUND ROD, CONDUCTOR, LUGS INCLUDING EXOTHERMIC WELD TO GROUND ROD SHALL NOT BE PAID SEPARATELY. COST MUST BE INCLUDED IN UNIT PRICE OF EACH POLE.
- ALL UNDERGROUND WIRING SHALL BE 30 INCHES MINIMUM BELOW GRADE PER IDOT SECTION 810.
- THE NEW ELECTRICAL MATERIALS MUST MEET REQUIREMENTS OF STANDARDS BY THE FOLLOWING ORGANIZATIONS.
 - NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION. (NEMA)
 - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS. (IEEE)
 - ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. (IES)
 - AMERICAN ASSOCIATION OF TRANSPORTATION OFFICIALS. (AATO)
 - U.S. DEPARTMENT OF TRANSPORTATION. (U.S.D.O.T)
 - UNDERWRITERS LABORATORIES. (UL)
 - AMERICAN STANDARD INSTITUTE. (ASI)
 - INSULATED POWER AND CABLE ENGINEERS ASSOCIATION. (IPCEA)
 - NATIONAL ELECTRICAL SAFETY CODE (NEC)
 - NATIONAL ELECTRICAL CODE 2011
 - AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING (ANSI/IESNA RP-8)
- ALL LIGHT POLES EXCEPT POLES MOUNTED ON CONCRETE BARRIER WALL/BRIDGE PARAPET WALL/ ABUTMENT WALL/BEHIND GUARD RAIL, SHALL HAVE FRANGIBLE TYPE BREAKAWAY TRANSFORMER BASE FOR 11 1/2" OR 15" BOLT CIRCLE. IT SHALL BE AASHTO APPROVED BREAKAWAY
- ALL SPLICING MUST BE IN POLE BASES OR JUNCTION BOXES ABOVE GRADE WITH WATERPROOF SEALANT AND HEAT SHRINKABLE PLASTIC CAPS.
- UNLESS NOTED OTHERWISE ALL SHOULDER MOUNTED POLES SHALL HAVE MINIMUM SETBACK REQUIREMENT AS FOLLOWS:
 - 1- FACE OF THE CURB TO CENTERLINE OF THE POLE AS 3 FT.
 - 2- WHERE CURB IS NOT THERE, THE MINIMUM SETBACK SHALL BE 13 FT FROM THE EDGE OF TRAVELLED PAVEMENT. ALL POLES MUST BE ALIGNED IN STRAIGHT LINE AS APPROVED BY THE ENGINEER.
- AS ALL GROUND MOUNTED POLES EXCEPT LOW HEIGHT POLES HAVE 15FT MAST ARM. CONTRACTOR SHALL PROVIDE LUMINAIRE SAFETY CABLE WHERE LUMINAIRE IS LOCATED OVER THE TRAVELLED PAVEMENT.
- FOR OFFSET FOUNDATION SEE IDOT STANDARD SHEET BE-310.

TEMPORARY LIGHTING GENERAL NOTES

- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED; APPROVAL DOESN'T RELIEVE CONTRACTOR OF RESPONSIBILITY FOR CONFLICTS.
- THE ELECTRIC SERVICE SHALL BE SINGLE PHASE, 3 WIRE 240/480V. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.
- THE TEMPORARY LIGHT POLE SETBACK FROM THE FURTHEST EDGE OF TRAVEL PAVEMENT (PER MOT PLANS) SHALL BE 18 FT UNLESS OTHERWISE NOTED BY OFFSET FROM EXISTING EDGE OF PAVEMENT FOR THAT STAGE. TEMPORARY LIGHT POLES INSTALLED BEHIND GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 2 FEET SETBACK FROM THE GUARDRAIL OR WALL OR AS OTHERWISE DIRECTED BY THE ENGINEER. ALL TEMPORARY LIGHTING SHALL BE WOODEN.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY THE INDICATED LIGHTING CONTROLLER. NO LIGHT SHALL BE INDIVIDUALLY CONTROLLED BY PHOTOCELL.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.

TEMPORARY LIGHTING GENERAL NOTES (CONTINUED)

- UNLESS NOTED OTHERWISE TEMPORARY UNDERGROUND CONDUCTORS SHALL BE 3-1/C#2, 1-1/C#4 GND; XLP-TYPE USE, COPPER; TEMPORARY OVERHEAD CONDUCTORS SHALL BE 3-1/C#2 AL WITH MESSENGER WIRE.
- WHENEVER POSSIBLE THE CONTRACTOR SHALL INSTALL TEMPORARY LIGHTING UNITS IN THE PRESTAGE. TEMPORARY LIGHTING MUST BE FULLY OPERATIONABLE BEFORE THE EXISTING LIGHTING ON THE WEST SIDE OF MANNHEIM ROAD MAY BE REMOVED. (EXISTING LIGHTING MUST BE REMOVED BEFORE THE OUTER SHOULDERS MAY BE USED AS A DRIVING LANE.)
- EVERY THIRD TEMPORARY LIGHTING POLE SHALL BE FURNISHED WITH A GROUND ROD CONNECTION. THIS GROUND ROD IS NOT SHOWN IN PLAN. 5/8" X 10' COPPER CLAD STEEL GROUND ROD, #2 BARE TINNED COPPER DOWN CONDUCTOR, CABLE GUARD TO 10' ABOVE GRADE ARE INCIDENTAL TO TEMPORARY LIGHTING.
- IN ACCORDANCE WITH NEC 225.18 AERIAL CONDUCTOR TO MAINTAIN 18' CLEARANCE ABOVE ROAD SURFACE AT ALL TIMES.
- CONTRACTOR SHALL TURN OFF CIRCUITS AT THE CONTROLLER BEFORE WORKING ON EXISTING LIGHTING UNITS. CONTRACTOR MUST COORDINATE A POWER OUTAGE WITH COMED PRIOR TO RELOCATING THE EXISTING CONTROLLER B.
- CONTRACTOR MAY ADJUST TEMPORARY POLE LOCATIONS UP TO 10' IN ANY DIRECTION EXCEPT CLOSER TO THE ROAD, IN ORDER TO ADJUST FOR FIELD CONDITIONS.

LIGHTING REMOVAL GENERAL NOTES

- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL REVIEW THE CONTRACT DRAWINGS AND ASCERTAIN EXISTING SITE CONDITIONS TO VERIFY THE EXTENT OF DEMOLITION AND REMODELING WORK. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING ALL RELOCATIONS AND REMOVALS REQUIRED IN THIS CONTRACT. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXISTING CONDITIONS AND COORDINATE AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL CONDUITS AND WIRES OF THE SAME TYPE AND SIZE REQUIRED TO MAINTAIN THE CONTINUITY OF THE CIRCUIT TO EXISTING LIGHT POLES TO REMAIN WHICH MAY BE AFFECTED BY THIS DEMOLITION. SHUTDOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM THE IDOT, AND THEN ONLY FOR THE DATE AND DURATION AGREED UPON.
- BRANCH CIRCUIT WIRING FOR EXISTING EQUIPMENT TO BE REMOVED SHALL BE DISCONNECTED AT SOURCE AND REMOVED. REMOVE EXISTING WIRING.
- COMMENCEMENT OF WORK SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING ROADWAY FOR THIS WORK, AND ACCESS TO WORK SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR ADDITIONAL LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, REINSTALLING, REPAIRING, OR REPLACING EQUIPMENT.
- ALL EXISTING EQUIPMENT THAT ARE TO BE REMOVED SHALL BE RETURNED TO STATE STOCK.
- LOCATIONS SELECTED FOR COLLECTION OF DEBRIS AND/OR STORAGE OF EQUIPMENT SHALL BE SUBJECT TO THE IDOT PROJECT MANAGER'S APPROVAL.
- WHERE THE CONTINUITY OF CIRCUITS OR CONDUITS SERVING ANY EXISTING LIGHTING/EQUIPMENT TO REMAIN IN OPERATION IS INTERFERED WITH, RE-ROUTE AND RECONNECT SUCH CIRCUITS OR CONDUITS.
- THE REMOVAL OF THE EXISTING CABLE DUCT SHALL BE INCIDENTAL TO ROADWAY CONSTRUCTION.
- TEMPORARY LIGHTS SHALL BE REMOVED AFTER ALL PROPOSED LIGHT POLES HAVE BEEN INSTALLED AND FULLY FUNCTIONAL OR AS DIRECT BY ENGINEER. REMOVAL OF TEMPORARY LIGHTING UNIT OR 60 FT POLE WOODDED SUPPORT POLE REQUIRED ON THIS CONTRACT SHALL BE AT NO ADDITIONAL COST TO THIS CONTRACT. REMOVAL AND RELOCATION WILL INCLUDE ALL ITEMS SUCH AS LUMINAIRE'S, MAST ARM, AERIAL CABLE, CABLE DUCT AND MOUNTING HARDWARE.

E-01

HNTB	USER NAME = mikosir	DESIGNED KA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELECTRICAL SHEET INDEX, GENERAL NOTES AND ABBREVIATIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50:1	CHECKED MCD	REVISED -					330	0105 WRS&HB	COOK	605	287
	PLOT DATE = 19-OCT-2012	DATE 10/19/12	REVISED -		SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 60G37				
								ILLINOIS FED. AID PROJECT				