

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	068-2222-3B	COOK	77	21
STA. -		TO STA. -		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

ELECTRICAL NOTES

PART 1: GENERAL

A. DESCRIPTION

PROVIDE ALL REQUIREMENTS AND CRITERIA FOR SAFETY AND RELIABILITY TO FURNISH AND INSTALL COMPLETE OPERATING ELECTRICAL SYSTEM, INCLUDING MATERIALS, LABOR, NECESSARY EQUIPMENT AS HEREIN SPECIFIED. COMPLY WITH IDOT, NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE CODES AND STANDARDS.








B. ELECTRICAL WORK

- CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE ELECTRICAL/SITE LIGHTING SYSTEM WITH ALL LUMINARIES, FOUNDATION, JUNCTION BOXES, TEMPORARY LIGHTING, CONDUITS, HANGERS, SUPPORTS, DEVICES, WIRING, ETC., REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION.
- THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RULES AND REGULATIONS SET FORTH BY IDOT. THE WORK SHALL ALSO MEET THE LAWS AND ORDINANCE REQUIRED BY THOSE AGENCIES HAVING JURISDICTION.
- CONTRACTOR SHALL VISIT THE SITE AND MAKE HIMSELF/HERSELF THOROUGHLY FAMILIAR WITH EXISTING CONDITIONS. PRIOR TO SUBMITTING THE PROPOSAL, INCLUDE ANY RELOCATION AND/OR ALTERNATIONS TO THE NEW ELECTRICAL SYSTEM, COMPONENTS OR EQUIPMENT REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED TO PERFORM HIS WORK. PREPARE AND SUBMIT TO THE AUTHORITIES ANY AND ALL DATA, DRAWING AND DETAILS REQUIRED FOR APPROVAL BEFORE COMMENCING THE INSTALLATION.
- CONTRACTOR SHALL COORDINATE WORK WITH ALL TRADES AND AVOID CONFLICTS AND DELAYS.
- NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE NEW WORK. LACK OF NOTIFICATION SHALL INDICATE THAT NO DISCREPANCIES OR CONFLICTS EXISTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE CAUSED BY HIM/HER IN ANY AREA OF THE PROJECT SUCH AS PAVEMENT, DRIVEWAYS, AND SIDEWALKS AND SHALL RESTORE THEM TO THEIR ORIGINAL CONDITION AS DIRECTED BY THE ENGINEER. LANDSCAPED AREAS SHALL BE RESTORED AND DAMAGED PLANT MATERIALS REPLACED TO THE SATISFACTION OF THE ENGINEER.
- MAINTENANCE OF EXISTING LIGHTING SYSTEM PAY ITEM SHALL INCLUDE PROTECTION AND MAINTENANCE OF THE EXISTING UNDERPASS LIGHTING.
- REFER TO STRUCTURAL PLANS FOR DETAILS ON ATTACHING NEW LIGHTING POLES. COORDINATE CONDUIT PENETRATION AND PROVIDE ALL ASSOCIATED ACCESSORIES FOR COMPLETE FUNCTIONAL INSTALLATION.
- THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN MOUNTING SUSPENDED CONDUITS UNDER BRIDGE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING CONDUITS UNDER BRIDGE AS REQUIRED TO SUPPORT CONDUITS WEIGHT AND AS APPROVED BY IDOT AND CITY OF CHICAGO.

C. SEQUENCE OF OPERATION

IN ORDER TO MAINTAIN LIGHTING AT THE BRIDGE AT ALL TIME, THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF OPERATION:
 OBTAIN TEMPORARY LIGHTING FROM STATE STOCK
 INSTALL ALL WIRING AND JUNCTION BOXES TO TEMPORARY FIXTURES LOCATION.
 REMOVE EXISTING UNDERPASS FIXTURES.
 INSTALL NEW UNDERPASS LIGHTING
 REMOVE TEMPORARY LIGHTING AND WIRING
 TEST THE SYSTEM.

LEGEND

- RIGID GALVANIZED STEEL CONDUIT, PVC COATED
- UNIT DUCT, 3'-0" BELOW GRADE
- A/C --- TEMPORARY AERIAL CABLE
3-1/C NO. 2, ALUMINUM,
WITH MESSENGER WIRE
-  EXISTING UNDERPASS LUMINAIRE
TO BE REMOVED
-  TEMPORARY UNDERPASS LUMINAIRE, 70W HPS,
WALL MOUNTED
-  TEMPORARY UNDERPASS LUMINAIRE
TO BE REMOVED
-  UNDERPASS LIGHTING LUMINAIRE, 70W HPS,
CIRCUIT NUMBER AS NOTED
-  JUNCTION BOX ATTACHED TO STRUCTURE
-  EXISTING LIGHTING UNIT AND POLE TO REMAIN
-  BG6
LIGHTING UNIT NUMBER
CIRCUIT NAME
LIGHTING CONTROLLER NAME

BILL OF MATERIAL FOR IDOT LIGHTING - UNDERPASS LIGHTING

FULL DESCRIPTION	UNIT	TOTAL QUANTITY
CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	100
CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED, GALVANIZED STEEL	FOOT	210
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	8
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 14" X 6"	EACH	4
UNIT DUCT, 600V, 3-1/C NO.4 AND 1/C NO. 6 GROUND (EPR-TYPE RHW), 1 1/4" DIA., POLYETHYLENE	FOOT	94
ELECTRIC CABLE IN CONDUIT, 600V(EPR-TYPE RHW) 1/C NO. 10	FOOT	1100
ELECTRIC CABLE IN CONDUIT, 600V(EPR-TYPE RHW) 1/C NO. 6	FOOT	138
ELECTRIC CABLE IN CONDUIT, 600V(EPR-TYPE RHW) 1/C NO. 4	FOOT	413
AERIAL CABLE 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	600
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	440
REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	12
DRILL EXISTING FOUNDATION	EACH	4
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6
REMOVAL OF TEMPORARY LIGHTING FIXTURE, SALVAGE	EACH	12
CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., PVC COATED GALVANIZED STEEL	FOOT	140
UNDERPASS LUMINAIRE, 70WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING	EACH	8
TEMPORARY UNDERPASS LUMINAIRE, 70WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING (INSTALL ONLY)	EACH	12

BILL OF MATERIAL FOR GENOA AVE.

FULL DESCRIPTION	UNIT	TOTAL QUANTITY
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	650
CONDUIT EMBEDDED IN STRUCTURE, 3" DIA., PVC	FOOT	20
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	8
DRILL EXISTING HANDHOLE	EACH	4
INSTALL LIGHT POLE, MAST ARM & LUMINAIRE(MATERIAL PROVIDED BY CITY OF CHICAGO)	EACH	8
CONDUIT ATTACHED TO STRUCTURE, 4" DIA, PVC COATED GALVANIZED STEEL	FOOT	1148
STREET LIGHTING CABLE, 1/C NO. 6, CITY OF CHICAGO STANDARD	FOOT	1262
STREET LIGHTING CABLE, 1/C NO. 8, CITY OF CHICAGO STANDARD	FOOT	631



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENOA AVE LIGHTING
GENERAL NOTES AND QUANTITIES

DRAWN BY EHE
CHECKED BY EE

DATE 2-26-10