

20021: LIST OF MATERIALS

CW&L#	QTY	DESCRIPTION
E01-03-102	210 LF	NO. 6 TRIPLEX ALUM 600 VOLT
E02-01-107	2,180 LF	NO. 4-7 STR AL SUPERTUFF
E02-05-103	280 LF	#10, CU, 600V ST LIGHT CONDUCTOR-black
E02-05-113	280 LF	#10, CU, 600V ST LIGHT CONDUCTOR-green
E02-05-new	280 LF	#10, CU, 600V ST LIGHT CONDUCTOR-red
E11-03-102	1 ea	35 FT CLASS 5 POLE
E13-03-100	8 ea	2-Wire Street Light Fuse Kit (Loop Feed)
E13-03-102	2 ea	1-Wire Street Light Fuse Kit (Radial Feed)
E14-05-101	10 ea	LIMITRON KTK-3 AMP, 600 VOLT FUSES
E17-01-134	5 ea	LED, 258 Watt, BLACK Luminaire, NAVION 4-Square, Multi-Volt
E17-01-138	3 ea	LED, 129 Watt, BLACK Luminaire, NAVION 2-Square, Multi-Volt
E17-03-101	2 ea	8 ft. Wood Pole Street Light Arm
E17-04-113	5 ea	VALMONT CAT #DS 30-8500A 3406S- FPBLACK-HH-FBC-1X40
E18-01-110	630 LF	2" ROLL-PIPE
J-10	1 ea	NEUTRAL CONST. SECONDARY POSITION
L4	5 ea	TRUSS ARM FOR STEEL POLE, 6', 8', 10', 12', 15'
L8	5 ea	*POURED CONCRETE ST LOT FOUNDATION
		USE CW&L BOLT CIRCLE TEMPLATE
V8*	1 ea	*HEAVY DUTY SECONDARY HAND-HOLE
		* USE NOMINAL 10" WIDE CONCRETE COLLAR-HEIGHT AS NEEDED* (* SEE NOTE 14(C))

20021 NOTES

THIS WORK ORDER UPDATES STREET LIGHTING ALONG HITT STREET BETWEEN CHERRY STREET AND LOCUST STREET. DUSK-TO-DAWN LIGHTS IN THE 1ST PRESBYTERIAN CHURCH PARKING LOT ARE ALSO BEING REVISED (PER REQUEST FROM THE CHURCH). IN SO FAR AS PRACTICAL, CW&L WORK SHOULD BE CONCURRENT WITH PUBLIC WORKS EFFORTS ADDRESSING SIDEWALK & CURB ISSUES ON THE EAST SIDE OF HITT STREET IN THE HALF BLOCK IMMEDIATELY NORTH OF LOCUST STREET.

- GENERAL:
- THE STREET LIGHTS WILL BE CW&L TYPICAL 'LED NAVION SERIES' PHOTOCCELL CONTROLLED STREET LIGHTS ON METAL POLES FOR NOMINAL 35' MOUNTING HEIGHT. DUSK-TO-DAWN PARKING LOT LIGHTS WILL BE CW&L TYPICAL 'LED NAVION' STYLE PHOTOCCELL CONTROLLED LIGHTS.
 - COORDINATE PLACEMENT OF STREET LIGHT CIRCUIT WITH PUBLIC WORKS SIDEWALK & CURB WORK IN THIS AREA SO THAT SIDEWALK, CURBS, ETC ARE ONLY DISTURBED ONCE FOR THIS WORK.
 - RUN STREET LIGHT CIRCUIT AS TWO #6 CU 600V + ONE BARE #6 CU EQUIPMENT GROUND IN NEW 2" ROLL PIPE. PULL THIS ROLL PIPE INTO ONE OF TWO ABANDON 3" CONDUITS ALONG THE EAST CURB-LINE OF HITT STREET.
 - CW&L TO RESTORE LAWNS, SIDEWALKS, SOD, ETC DISTURBED BY THIS CW&L WORK:
 - ALL AREAS TO BE RESTORED TO "ACCEPTABLE SAFE" CONDITION.
 - AREAS OUTSIDE OF NEW PUBLIC WORKS PROJECT TO BE RESTORED TO EQUIVALENT "BEFORE" CONDITION.

- POLE-1 REMOVE EXISTING ALUMINUM "DAVIT ARM" POLE & LIGHT FIXTURE. SAFE-OFF EXISTING DIRECT BURY FEED FROM XFMR-LOC 172.
- POLE-2, 3, 4, 5, 6 INSTALL NAVION "4-SQUARE" LED STREET LIGHT FOR 35' MOUNTING HEIGHT ON BLACK PAINTED STEEL STANDARD WITH 6" TRUSS ARM ON TYPE 'L8' CAST-IN PLACE FOUNDATION (2' FROM FRONT FACE OF CURB). WIRE FOR 208 VOLT OPERATION WITH PHOTOCCELL. INSTALL LOOP FEED STYLE 80 FUSE HOLDERS AND LIMITRON KTK-3 AMP FUSES. RUN THREE #10 AWG SOLID CU 600V (1-BLACK, 1-RED, 1-GREEN) CONDUCTORS FROM FUSE BLOCKS UP TO LUMINAIRE.
- POLE-7 REMOVE EXISTING ALUMINUM "DAVIT ARM" POLE, LIGHT FIXTURE & ASSOCIATED OVERHEAD SPAN TO POLE-8.
- POLE-8, 9, 18, 20, 21 EXISTING HPS DUSK-TO-DAWN LIGHT FIXTURE (& RELATED POLE, FRAMING, ETC) TO REMAIN. INDICATED FOR REFERENCE.
- POLE-10 REPLACE EXISTING MV DUSK-TO-DAWN LIGHT WITH NAVION "2-SQUARE" LED LIGHT.
- POLE 11 INSTALL (2) NAVION "2-SQUARE" LED STREET LIGHTS (SPACED 180 DEGREES), EACH ON 8' ARM BRACKET ON NEW 35-CLASS 5 POLE. WIRE FOR 208 VOLT OPERATION WITH PHOTOCCELL CONTROL.
- POLE-12, 13, 14, 15 EXISTING STREET LIGHT (& RELATED POLE, ETC) TO REMAIN. INDICATED FOR REFERENCE. EXISTING CIRCUIT CONTINUES UNCHANGED BACK TO SOURCE AT XFMR LOC 473.
- POLE-16, 17, 19 EXISTING POLE, FRAMING, ETC TO REMAIN. INDICATED FOR REFERENCE.

- NOTE 1 REUSE A PREVIOUSLY ABANDONED 3" ("ORANGEBURG") CW&L CONDUIT FOR USE AS A SLEEVE FOR 2" ROLL PIPE BETWEEN NEW STREET LIGHTS, AS INDICATED.
- NOTE 2 REMOVE EXISTING OVERHEAD STREET LIGHT SPAN.
- NOTE 3 EXISTING STREET LIGHT TRIPLEX TO REMAIN.
- NOTE 4 REPLACE EXISTING STREET LIGHT DUPLEX WITH # 6, AL, TRIPLEX.
- NOTE 5 INSTALL STREET LIGHT CIRCUIT AS # 6, AL, TRIPLEX.
- NOTE 6 PUBLIC WORKS TO MOVE CURB LINE (MOVES EAST ~ 3'6" TO 4'0") AND ADDRESS VARIOUS OTHER ISSUES IN THIS AREA. COORDINATE TIMING OF CW&L WORK TO BE CONCURRENT WITH THAT EFFORT BY PUBLIC WORKS SO THAT CURBS, PAVEMENTS, SIDEWALKS, ETC ARE ONLY DISTURBED ONCE. CONNECT TO AND EXTEND THE EXISTING STREET LIGHT CIRCUIT IN HANDHOLE FOR EXTENSION AS INDICATED.
- NOTE 7 PULL IN TWO #6 CU 600V + ONE BARE #6 CU EQUIPMENT GROUND EXISTING 2" CONDUIT UNDER LOCUST STREET.
- NOTE 8 INTERCEPT PREVIOUSLY ABANDONED CONDUIT AND STUB THE NEW 2" (PULLED INTO EXISTING 3" CONDUIT) INTO EXISTING HANDHOLE FOR FEED TO NEW STREET LIGHTS AS INDICATED.
- NOTE 9 INTERCEPT PREVIOUSLY ABANDONED CONDUIT AND STUB THE NEW 2" ROLL-PIPE (PULLED INTO EXISTING 3" CONDUIT) INTO NEW CAST-IN-PLACE STREET LIGHT FOUNDATIONS. THIS CONDUIT GENERALLY FOLLOWS THE STREET SIDE OF THE CURB-LINE WITH ~4" COVER.
- NOTE 10 CUT (AND RESTORE) PAVEMENT, SIDEWALK & CURB-LINE AS NEEDED TO INSTALL NEW STREET LIGHT (FOUNDATION & RELATED CONDUIT).
- NOTE 11 CUT PAVEMENT, SIDEWALK & CURB-LINE AS NEEDED TO INSTALL NEW STREET LIGHT (FOUNDATION & RELATED CONDUIT). COORDINATE TIMING WITH PUBLIC WORKS DEPARTMENT SO THAT PUBLIC WORKS RESTORES PAVEMENT, CURB & SIDEWALK SHORTLY AFTER THE STREET LIGHT FOUNDATION IS INSTALLED.
- NOTE 12 EXISTING CONDUIT IS BLOCKED AT THIS POINT UNDER HITT STREET FROM THE NORTH. LOCATE END OF "ORANGEBURG" CONDUIT FOR RE-USE AS SLEEVE FOR NEW 2" ROLL PIPE EXTENDED FROM POLE-4 THROUGH TO POLE-5.
- NOTE 14 EXISTING CAST-IN-PLACE VAULT UNDER HITT STREET TO BE REUSED:
 - REPLACE EXISTING 36" SQUARE ACCESS HATCH WITH V8 STYLE ROLL UP ACCESS HATCH (NEENAH # 1640D COVER AND FRAME; INVENTORY # E16-001-00121);
 - CUT AND REPAIR PAVEMENT AS NEEDED TO REPLACE THE ACCESS HATCH;
 - DUE TO IRREGULAR SHAPE (APPROXIMATELY "SQUARE") OF EXISTING VAULT DECK OPENING, USE CUSTOM CONCRETE EXTENSION COLLAR - MINIMUM 9" RING WIDTH; AND HEIGHT AS NEEDED.

20021: MISCELLANEOUS:

REVISIONS TO T.L.O.D. NONE
MoDOT: NOT A MoDOT PROJECT

20021: ANNUAL REPORT

NOTHING TO REPORT

20021: CONTACTS

CW&L ELECTRICAL DISTRIBUTION SUPERINTENDENTS	KEY CONTACTS	PHONE
OVERHEAD & TRANSFORMERS	KEVIN THORNTON	(573)874-6208
UNDERGROUND & SERVICES	LARRY FREEMAN	(573)874-6200
DUSK-DAWN & STREET LIGHTS	MORGAN LONG	(573)874-6205
CW&L INSPECTORS:		
INSPECTOR	KENNY EADS	(573)884-4720
CW&L ENGINEERING	GREG BAEHR	(573)817-5026
1st PRESBYTERIAN CHURCH	WAYNE McCAY	(573)443-2722
COLUMBIA PUBLIC WORKS	ALLISON ANDERSON	(573)817-5048
COOK CONCRETE	JUSTIN COOK	(573)881-6338



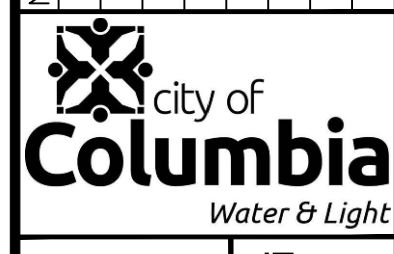
Electric System Project Information Sheet				
Description	RELIGHT HITT ST from BROADWAY to LOCUST also PARKING LOT at HITT ST & LOCUST			
Probable Cost Statement	\$90,000			
Print Number	20021			
Grid	2-2-A			
TYLER/MUNIS FINANCIAL INFORMATION				
WORKORDER:	76221482	LAND AND LAND RIGHTS		
Task 1-	Engineering Land Rights	Activity	Org	Object Project
Task 2-	Land Rights	Inventory	37688360	606870 E0052
		Labor	37688360	600101 E0052
		Outsourcing	37688360	604990 E0052
		Supplies	37688360	601100 E0052
WORKORDER:	76221483	POLES AND FIXTURES		
Task 1-	Engineering Poles/Fixture	Activity	Org	Object Project
Task 2-	Install Poles/Fixtures	Inventory	37688364	606870 E0052
Task 3-	Remove Poles/Fixtures	Labor	37688364	600101 E0052
		Outsourcing	37688364	604990 E0052
		Supplies	37688364	601100 E0052
WORKORDER:	76221484	OVERHEAD CONDUCTOR		
Task 1-	Engineering OH Conduc	Activity	Org	Object Project
Task 2-	Install OH Conductor	Inventory	37688365	606870 E0052
Task 3-	Remove OH Conductor	Labor	37688365	600101 E0052
		Outsourcing	37688365	604990 E0052
		Supplies	37688365	601100 E0052
WORKORDER:	76221485	UNDERGROUND CONDUIT		
Task 1-	Engineering UG Conduit	Activity	Org	Object Project
Task 2-	Install UG Conduit	Inventory	37688366	606870 E0052
Task 3-	Remove UG Conduit	Labor	37688366	600101 E0052
		Outsourcing	37688366	604990 E0052
		Supplies	37688366	601100 E0052
WORKORDER:	76221486	UNDERGROUND CONDUCTOR		
Task 1-	Engineering UG Conduc	Activity	Org	Object Project
Task 2-	Install UG Conductor	Inventory	37688367	606870 E0052
Task 3-	Remove UG Conductor	Labor	37688367	600101 E0052
		Outsourcing	37688367	604990 E0052
		Supplies	37688367	601100 E0052
WORKORDER:	76221490	DUSK TO DAWN		
Task 1-	Engineering Dusk to Dav	Activity	Org	Object Project
Task 2-	Install Dusk to Dawn	Inventory	37688371	606870 E0052
Task 3-	Remove Dusk to Dawn	Labor	37688371	600101 E0052
		Outsourcing	37688371	604990 E0052
		Supplies	37688371	601100 E0052
WORKORDER:	76221491	STREETLIGHTS		
Task 1-	Engineering Streetlights	Activity	Org	Object Project
Task 2-	Install Streetlights	Inventory	37688373	606870 E0052
Task 3-	Remove Streetlights	Labor	37688373	600101 E0052
		Outsourcing	37688373	604990 E0052
		Supplies	37688373	601100 E0052

INSPECTIONS:

THE CONTRACTOR SHALL NOTIFY THE CWL INSPECTORS A MINIMUM OF TWO WORKING DAYS BEFORE COMMENCING WORK. MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 8:00 A.M. AND 4:30 P.M. SHALL CONSTITUTE A TYPICAL WORK WEEK. ANY WORK OUTSIDE THESE HOURS REQUIRES THE APPROVAL OF THE CITY'S ENGINEER OR INSPECTOR. A MINIMUM OF TWO DAYS NOTICE WILL BE REQUIRED WHEN REQUESTING INSPECTION SERVICES OUTSIDE OF NORMAL WORKING HOURS.

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT GREG BAEHR, ENGINEER, 573-817-5026.

No.	Date	By	Revision
1			
2			
3			
4			
5			
6			
7			
8			



City of Columbia, Missouri
Utilities Department
Water and Light Division
701 East Broadway - Columbia, Boone, Missouri
Phone: 573-875-2555

RELIGHT HITT ST from BROADWAY to LOCUST also PARKING LOT at HITT ST & LOCUST

File No:	20021
WO No:	76221482
Des:	GRB
Dwn:	GRB
Chk/Date:	DHC Jan 10, 2020