

BILL OF WIRE

PROJECT ITEM:

BENCHMARK: 10G

1898303

BERKELEY LAKE

OP NUMBER: 10548761

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
8-192/COM1 COMMUNICATIONS	SIA PANEL #8 D140-004	25KV PCB #192 D140-004	RELOCATE DC	1 4	#24	SHIELDED WAS 192/COM1
8-442/COM1 COMMUNICATIONS	SIA PANEL #8 D140-004	25KV PCB #442 D140-004	RELOCATE DC	1 4	#24	SHIELDED WAS 442/COM1
8-552/COM1 COMMUNICATIONS	SIA PANEL #8 D140-004	25KV PCB #552 D140-004	RELOCATE DC	1 4	#24	SHIELDED WAS 552/COM1
8-662/COM1 COMMUNICATIONS	SIA PANEL #8 D140-004	25KV PCB #662 D140-004	RELOCATE DC	1 4	#24	SHIELDED WAS 662/COM1
5-TS/COM1 COMMUNICATIONS	SWITCHBOARD PANEL #5 D129 (RETIRED)	RADIO PANEL D129 (RETIRED)	REMOVE DC			
DAQ-TS/COM1 COMMUNICATIONS	SUPV. REMOTE CAB. H10	TERMINAL SERVER D127	REMOVE DC			
RTU-RADIO/COM1 COMMUNICATIONS	SUPV. REMOTE CAB. D129 (RETIRED)	RADIO PANEL D129 (RETIRED)	REMOVE DC			
RTU-RADIO/COM2 COMMUNICATIONS	SUPV. REMOTE CAB. D129 (RETIRED)	RADIO PANEL D129 (RETIRED)	REMOVE DC			
RTU-RADIO/COM3 COMMUNICATIONS	SUPV. REMOTE CAB. D129 (RETIRED)	RADIO PANEL D129 (RETIRED)	REMOVE DC			
LTC-RAD/COM1 COMMUNICATIONS	BANK B POTENTIAL J.B. D63	RADIO PANEL D140-004	RENAME DC	1 4	#24	SHIELDED WAS RTU-RADIO/COM3

DATE: 11/15/2022

LISTED: MCCULLOUGH, JM

FACILITY ID: 15-364-BW REV 00

BILL OF WIRE

PROJECT ITEM:

BENCHMARK: 20A

2003301

LIVE OAK

OP NUMBER: 11052055

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1-4/EDC DC SUPPLY	PANEL #1 D-32	DME PANEL #4 D-116-002	INSTALL 125 DC	1 2	#10 20	600V PIPJ
2-16/COM2 COMMUNICATIONS	SIA PANEL #2 D-36	PANEL #16 D-36	INSTALL DC	1 8	#24 35	SHIELDED CAT5 CABLE
2-4/SAL1 SUPERVISORY ALARM	SIA PANEL #2 D-35	DME PANEL #4 D-116-002	INSTALL 125 DC	1 2	#16 20	SHIELDED
2-4/SCDC DC SUPPLY	SIA PANEL #2 D-35	DME PANEL #4 D-116-002	INSTALL 125 DC	1 2	#10 20	600V PIPJ
4/AC AC SUPPLY	CNTL HOUSE AC PANEL	DME PANEL #4 D-116-002	INSTALL 120 AC	1 2	#10 20	600V PIPJ
4-14/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #14 D-107	INSTALL 125 DC	1 8	#18 35	600 SHLD
4-15/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #15 D-62	INSTALL 125 DC	1 8	#18 30	600 SHLD
4-16/DFR1 DME ANALOG	DME PANEL #4 D-116-002	PANEL #16 D-68	INSTALL AC	1 12	#18 30	600 SHLD
4-16/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #16 D-68	INSTALL 125 DC	1 8	#18 30	600 SHLD
4-17/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #17 D-72	INSTALL 125 DC	1 8	#18 25	600 SHLD
4-6/DFR1 DME ANALOG	DME PANEL #4 D-116-002	PANEL #6 D-43	INSTALL AC	1 12	#18 25	600 SHLD
4-6/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #6 D-43	INSTALL 125 DC	1 8	#18 25	600 SHLD
4-7/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #7 D-50	INSTALL 125 DC	1 8	#18 20	600 SHLD
4-8/DFR1 DME ANALOG	DME PANEL #4 D-116-002	PANEL #8 D-55	INSTALL AC	1 12	#18 20	600 SHLD

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
4-8/ER1 DME DIGITAL	DME PANEL #4 D-116-002	PANEL #8 D-55	INSTALL 125 DC	1 8	#18 20	600 SHLD
4-RAD/COM COMMUNICATIONS	DME PANEL #4 D-36	ORBIT RADIO D-36	INSTALL DC	1 8	#24 20	SHIELDED CAT5 CABLE

CIRCUIT CIRCUIT	TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1/DC-1		PANEL 1 D-91-002	SS. INDOOR DC CABINET D-99-001	INSTALL	1 2	#10 60	600V PIPJ
10/DC-1		PANEL 10 D-96-002	SS. INDOOR DC CABINET D-99-001	INSTALL	1 2	#10 60	600V PIPJ
10/DC-2		PANEL 10 D-96-002	SS. INDOOR DC CABINET D-99-001	INSTALL	1 2	#10 60	600V PIPJ
10/DC-3		PANEL 10 D-96-002	SS. INDOOR DC CABINET D-99-001	INSTALL	1 2	#10 60	600V PIPJ
10-1T/400R1		PANEL 10 D-96-002	PANEL 1T D-97-002	INSTALL	1 4	#10 35	600V PIPJ
10-1T/400R2		PANEL 10 D-96-002	PANEL 1T D-97-002	INSTALL	1 4	#10 35	600V PIPJ
10-1T/CAP1RN		PANEL 10 D-96-002	PANEL 1T D-97-002	INSTALL	1 2	#10 60	600V PIPJ
10-1T/PR		PANEL 10 D-96-002	PANEL 1T D-97-002	INSTALL	1 4	#10 35	600V PIPJ
10-400/COM1		PANEL 10 D-94-004	PCB 400 D-94-004	INSTALL	1 4	200M 270	FIBER OPTIC
1-1T/152C1		PANEL 1 D-91-002	PANEL 1T D-97-002	INSTALL	1 4	#10 65	600V PIPJ
1-1T/152C2		PANEL 1 D-91-002	PANEL 1T D-97-002	INSTALL	1 4	#10 60	600V PIPJ
1-1T/152C3		PANEL 1 D-91-002	PANEL 1T D-97-002	INSTALL	1 2	#10 60	600V PIPJ
1-1T/152R1		PANEL 1 D-91-002	PANEL 1T D-97-002	INSTALL	1 4	#10 60	600V PIPJ
1-2/C1		PANEL 1 D-91-002	PANEL 2 D-92-002	INSTALL	1 2	#10 25	600V PIPJ

CIRCUIT CIRCUIT	TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1-2/P11		PANEL 1 D-91-002	PANEL 2 D-92-002	INSTALL	1 4	#10 30	600V PIPJ
142REG/COM1		PANEL 8 D-94-004	PCB 112142 D-94-004	INSTALL	1 4	#24 265	SHIELDED
142REG-T.O./COM1		T.O. PANEL D-94-004	PCB 112142 D-94-004	INSTALL	1 4	#24 265	SHIELDED
152/AC		B4152 XXXX	SS. INDOOR AC CABINET D-99-003	INSTALL	1 4	#10 245	600V PIPJ
1-8/COM1		PANEL 1 D-94-004	PANEL 8 D-94-004	INSTALL	1 4	#24 60	SHIELDED
1-8/SAL1		PANEL 1 D-91-002	PANEL 8 D-94-002	INSTALL	1 4	#10 40	600V PIPJ
1-8/SDC		PANEL 1 D-91-002	PANEL 8 D-94-002	INSTALL	1 2	#10 60	600V PIPJ
1-T.O./COM1		PANEL 1 D-94-004	T.O. PANEL D-94-004	INSTALL	1 4	#24 60	SHIELDED
1T-10/400C1		PANEL 1T D-97-002	PANEL 10 D-96-002	INSTALL	1 4	#10 35	600V PIPJ
1T-10/400C2		PANEL 1T D-97-002	PANEL 10 D-96-002	INSTALL	1 4	#10 35	600V PIPJ
1T-10/400C3		PANEL 1T D-97-002	PANEL 10 D-96-002	INSTALL	1 4	#10 35	600V PIPJ
1T-10/400C4		PANEL 1T D-97-002	PANEL 10 D-96-002	INSTALL	1 4	#10 35	600V PIPJ
1T-152/C1		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 4	#10 235	600V PIPJ
1T-152/C2		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 4	#10 235	600V PIPJ

CIRCUIT CIRCUIT	TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1T-152/C3		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 2	#10 250	600V PIPJ
1T-152/C4		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 2	#10 230	600V PIPJ
1T-152/R1		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 4	#10 235	600V PIPJ
1T-152/R2		PANEL 1T D-97-002	B4152 XXXX	INSTALL	1 4	#10 235	600V PIPJ
1T-176/P11		PANEL 1T D-97-002	B4176 XXXX	INSTALL	1 4	#10 155	600V PIPJ
1T-2/152C1		PANEL 1T D-97-002	PANEL 2 D-92-002	INSTALL	1 2	#10 60	600V PIPJ
1T-2/746C4		PANEL 1T D-97-002	PANEL 2 D-92-002	INSTALL	1 2	#10 60	600V PIPJ
1T-2/C1		PANEL 1T D-97-002	PANEL 2 D-92-002	INSTALL	1 2	#10 60	600V PIPJ
1T-2/C2		PANEL 1T D-97-002	PANEL 2 D-92-002	INSTALL	1 4	#10 60	600V PIPJ
1T-2/C3		PANEL 1T D-97-002	PANEL 9 D-92-002	INSTALL	1 2	#10 60	600V PIPJ
1T-400/C1		PANEL 1T D-97-002	112400 XXXX	INSTALL	1 4	#10 220	600V PIPJ
1T-400/C2		PANEL 1T D-97-002	112400 XXXX	INSTALL	1 4	#10 220	600V PIPJ
1T-400/C3		PANEL 1T D-97-002	112400 XXXX	INSTALL	1 4	#10 220	600V PIPJ
1T-400/C4		PANEL 1T D-97-002	112400 XXXX	INSTALL	1 4	#10 220	600V PIPJ

BILL OF WIRE

PROJECT ITEM:

BENCHMARK: 10G

1830701

LAURENS COUNTY SVC

WORKORDER: 298116

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
3/AC AC SUPPLY	SIA PANEL #3 D420	A.C. PANEL #2 D302	INSTALL 240 AC	1 2	#10 40	600V PIPJ
3/COM1 COMMUNICATIONS	SIA PANEL #3 D420	SIA PANEL #3 D420	INSTALL DC	1 8	#24 5	SHIELDED
3/COM2 COMMUNICATIONS	SIA PANEL #3 D420	SIA PANEL #3 D420	INSTALL DC	1 8	#24 5	SHIELDED
3/COM4 COMMUNICATIONS	SIA PANEL #3 D420	SIA PANEL #3 D420	INSTALL DC	1 8	#24 5	SHIELDED
3-4/SAL SUPERVISORY ALARM	SIA PANEL #3 D420	SWITCHBOARD PANEL #4 D380	INSTALL 125 DC	1 2	#16 15	SHIELDED
3-4/SCDC DC SUPPLY	SIA PANEL #3 D420	SWITCHBOARD PANEL #4 D380	INSTALL 125 DC	1 2	#10 15	600V PIPJ
3-ATS/SAL SUPERVISORY ALARM	SIA PANEL #3 D420	AUTO TRANSFER SWITCH D302	INSTALL 125 DC	1 2	#16 30	SHIELDED
3-ATS/SCDC DC SUPPLY	SIA PANEL #3 D420	AUTO TRANSFER SWITCH D302	INSTALL 125 DC	1 2	#10 30	600V PIPJ
3-BC1/SAL SUPERVISORY ALARM	SIA PANEL #3 D420	BATTERY CHARGER #1 D305	INSTALL 125 DC	1 4	#16 35	SHIELDED
3-BC1/SCDC DC SUPPLY	SIA PANEL #3 D420	BATTERY CHARGER #1 D305	INSTALL 125 DC	1 2	#10 35	600V PIPJ
3-BC2/SAL SUPERVISORY ALARM	SIA PANEL #3 D420	BATTERY CHARGER #2 D305	INSTALL 125 DC	1 4	#16 30	SHIELDED
3-BC2/SCDC DC SUPPLY	SIA PANEL #3 D420	BATTERY CHARGER #2 D305	INSTALL 125 DC	1 2	#10 30	600V PIPJ
3-BK1/COM COMMUNICATIONS	SIA PANEL #3 D420	115/13.2KV BANK #1 D273	INSTALL DC	1 4	200M 300	FIBER OPTIC
3-BK2/COM COMMUNICATIONS	SIA PANEL #3 D420	115/13.2KV BANK #2 D275	INSTALL DC	1 4	200M 250	FIBER OPTIC

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
BAL-SAL20	DAQ PANEL H1	MULTITEL PROBE #2 D305	REMOVE			
LAL5	DAQ PANEL H1	LCP PANEL D363	REMOVE			
LAL6	DAQ PANEL H1	LCP PANEL D363	REMOVE			
RTU-RAD/COM1	SWITCHBOARD PANEL #3 H1	PERLE SERVER D417	REMOVE			
SAL9	DAQ PANEL H1	AUTO TRANSFER SWITCH D302	REMOVE			
3-MC/SCDC DC SUPPLY	SIA PANEL #3 D420	MARSHALLING CABINET D290	RENAME 125 DC		40	WAS 3SAL5

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
8/FO1 COMMUNICATIONS	I.T. PANEL #8 FO BOX #1 518(4)	NORC 115KV LINE SPL CAN	INSTALL DC	1 36	SM	FIBER OPTIC INSTALLED BY LINE CONSTRUCTION
8-51/ITDC DC SUPPLY	I.T. PANEL #8 518(3)	DC PANEL #51 D59	INSTALL 125 DC	1 2	#10 60	600V PIPJ
ICON/FO1 COMMUNICATIONS	I.T. PANEL #8 FO BOX #1 518(4)	I.T. PANEL #8 SEL-ICON	INSTALL DC	1 1	9M	FIBER OPTIC 6 SM DUPLEX JMPR 2M
ICON/FO2 COMMUNICATIONS	I.T. PANEL #8 FO BOX #1 518(4)	I.T. PANEL #8 SEL-ICON	INSTALL DC	1 1	9M	FIBER OPTIC 6 SM DUPLEX JMPR 2M

BILL OF WIRE

PROJECT ITEM:

BENCHMARK: 96SC

1865128

MULKEY ROAD

WORKORDER: 421515

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1COMM/A COMMUNICATIONS	RELAY/CONTROL PANEL #1 D50	SUPV. REMOTE CAB. D50	EXISTING DC	1 5	#22	300V SH SEL-C246
1P1 POTENTIAL	RELAY/CONTROL PANEL #1 D42	LTE RADIO CABINET D51	EXISTING 120 AC	1 4	#10	600V PIPJ
1P1A POTENTIAL	25KV BUS PT SFTY SW D28	LTE RADIO CABINET D51	EXISTING 120 AC	1 4	#10	600V PIPJ
RAD/COM1 COMMUNICATIONS	LTE RADIO CABINET D50	LTE RADIO CABINET D50	EXISTING DC	1 8	#24	SHIELDED CAT-5
RAD/COM2 COMMUNICATIONS	LTE RADIO CABINET D50	LTE RADIO CABINET D50	EXISTING DC	1 8	#24	SHIELDED CAT-5
REG/COM COMMUNICATIONS	SUPV. REMOTE CAB. D35	LTE RADIO CABINET D51	EXISTING DC	1 4	#24	SHIELDED
RLY/COM COMMUNICATIONS	RELAY/CONTROL PANEL #2 D50	LTE RADIO CABINET D50	EXISTING DC	1 4	#24	SHIELDED
RTU-RAD/COM COMMUNICATIONS	SUPV. REMOTE CAB. D50	LTE RADIO CABINET D50	EXISTING DC	1 8	#24	SHIELDED CAT-5
722REG/COM1 COMMUNICATIONS	REGULATOR #722 PH. 1 D48	REGULATOR #722 JCT BOX D48	INSTALL DC	1 4	#24	SHIELDED 25
722REG/COM2 COMMUNICATIONS	REGULATOR #722 PH. 2 D48	REGULATOR #722 JCT BOX D48	INSTALL DC	1 4	#24	SHIELDED 15
722REG/COM3 COMMUNICATIONS	REGULATOR #722 PH. 3 D48	REGULATOR #722 JCT BOX D48	INSTALL DC	1 4	#24	SHIELDED 25
AC722 AC SUPPLY	STA. SERV. CABINET D11	25KV PCB #722 D46-002	INSTALL 240 AC	1 4	#10	600V PIPJ 50
AC732 AC SUPPLY	STA. SERV. CABINET D11	25KV PCB #732 D47-002	INSTALL 240 AC	1 4	#10	600V PIPJ 50
1R2/722 RELAYING	RELAY/CONTROL PANEL #1 D42	25KV PCB #722 D46-003	RELOCATE AC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #722

BILL OF WIRE

PROJECT ITEM:

BENCHMARK: 96SC

1865128

MULKEY ROAD

WORKORDER: 421515

CIRCUIT CIRCUIT TYPE	FROM REFERENCE	TO REFERENCE	FUNCTION VOLTAGE	#CABLES #CONDS	SIZE LENGTH	INSULATION REMARKS/REVISION
1R3/732 RELAYING	RELAY/CONTROL PANEL #1 D42	25KV PCB #732 D47-003	RELOCATE AC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #732
2C1/722 CONTROL	RELAY/CONTROL PANEL #2 D32	25KV PCB #722 D46-002	RELOCATE 125 DC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #722
2C2/722 CONTROL	RELAY/CONTROL PANEL #2 D32	25KV PCB #722 D46-002	RELOCATE 125 DC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #722
2C3/732 CONTROL	RELAY/CONTROL PANEL #2 D32	25KV PCB #732 D47-002	RELOCATE 125 DC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #732
2C4/732 CONTROL	RELAY/CONTROL PANEL #2 D32	25KV PCB #732 D47-002	RELOCATE 125 DC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #732
2R1/722 RELAYING	RELAY/CONTROL PANEL #2 D32	25KV PCB #722 D46-003	RELOCATE AC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #722
2R2/732 RELAYING	RELAY/CONTROL PANEL #2 D32	25KV PCB #732 D47-003	RELOCATE AC	1 4	#10	600V PIPJ RELOCATE FROM EXISTING PCB #732
AC1 AC SUPPLY	STA. SERV. CABINET D11	A.C. JCT. BOX #1 D12	REMOVE 240 AC	1 2	#6	600V PIPJ
AC722 AC SUPPLY	A.C. JCT. BOX #1 D12	25KV PCB #722 D19	REMOVE 240 AC	1 2	#10	600V PIPJ
AC732 AC SUPPLY	A.C. JCT. BOX #1 D12	25KV PCB #732 D21	REMOVE 240 AC	1 2	#10	600V PIPJ
722REG/COM COMMUNICATIONS	REGULATOR #722 JCT BOX D48	SUPV. REMOTE CAB. D35	RENAME DC	1 4	#16	SHIELDED WAS TM1/722R
732REG/COM COMMUNICATIONS	REGULATOR #732 JCT BOX D49	SUPV. REMOTE CAB. D35	RENAME DC	1 4	#16	SHIELDED WAS TM4/732R