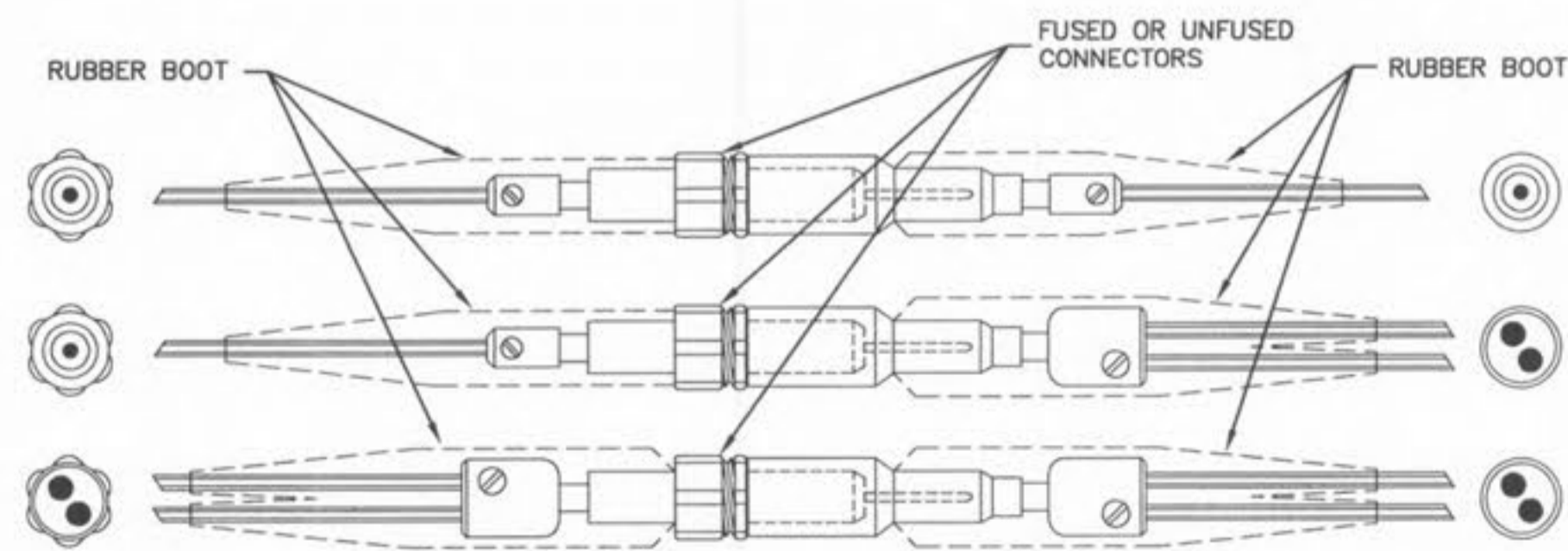


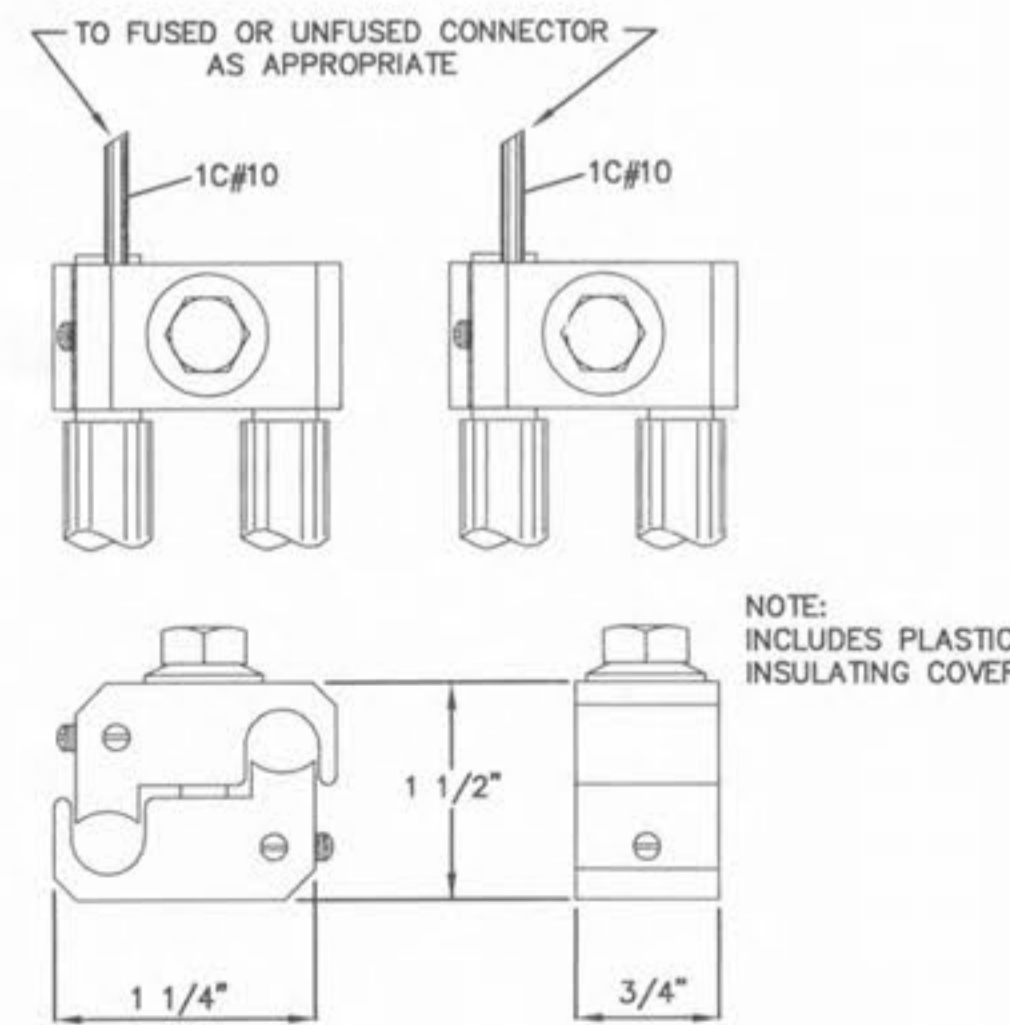
SUMMARY OF STREET LIGHTING QUANTITIES *

ITEM	UNIT	QUANTITY
40' SQUARE STRAIGHT STEEL POLE	EACH	31
40' SQUARE STRAIGHT STEEL POLE W/ TWIN BRACKETS	EACH	-
40' ALUMINUM POLE (DESIGNATION)	EACH	-
40' ALUMINUM POLE (DESIGNATION)	EACH	-
40' FIBERGLASS POLE W/ 8" BRACKET ARM (ANCHOR BASE)	EACH	-
40' FIBERGLASS POLE W/ 6' BRACKET ARM (DIRECT BURIAL)	EACH	-
40' FIBERGLASS POLE W/ 6' BRACKET ARM (ANCHOR BASE)	EACH	-
14' FIBERGLASS POLE (ANCHOR BASE)	EACH	-
14' FIBERGLASS POLE (DIRECT BURIAL)	EACH	-
CONCRETE FOUNDATION FOR 40' POLE (TYPE I)	EACH	-
CONCRETE FOUNDATION FOR 40' POLE (TYPE II)	EACH	-
CONCRETE FOUNDATION FOR 14' POLE	EACH	-
TYPE 1 SCREW IN FOUNDATION	EACH	-
TYPE 2 SCREW IN FOUNDATION	EACH	31
TYPE 3 SCREW IN FOUNDATION	EACH	-
TYPE T2 SCREW IN FOUNDATION	EACH	-
GROUND ROD	EACH	31
LUMINAIRE 250 WATT HPS (TYPE II DISTRIBUTION)	EACH	2
LUMINAIRE 250 WATT HPS (TYPE III DISTRIBUTION)	EACH	29
COBRA HEAD LUMINAIRE WATT H.P.S.	EACH	-
FITTER (PURGATORY)	EACH	-
LAMP POST CROSS ARM	EACH	-
TYPE I JUNCTION BOX	EACH	14
TYPE II JUNCTION BOX	EACH	14
SERVICE BOX	EACH	-
CONTROL CENTER - POLE MOUNTED	EACH	-
CONTROL CENTER - PAD MOUNTED	EACH	2
CONTROL CENTER FOUNDATION	EACH	2
CONTROL CENTER GROUND ROD	EACH	2
PHOTO CELL (DELAY TYPE)	EACH	-
2" METALLIC CONDUIT (BORED)	LN. FT.	-
3" METALLIC CONDUIT	LN. FT.	-
2" SCHEDULE 40 P.V.C. CONDUIT (BRIDGE)	LN. FT.	-
3" SCHEDULE 40 P.V.C. CONDUIT (BORED)	LN. FT.	700
2" SCHEDULE 40 P.V.C. CONDUIT (TRENCHED)	LN. FT.	3800
1c No. 6 TYPE USE DISTRIBUTION CABLE	LN. FT.	31885
1c No. 10 TYPE THHN/THWN POLE & BRACKET CABLE	LN. FT.	2480
1c No. 2 POWER CABLE	LN. FT.	200
INTERCONNECT (24 MODE FIBER, 18 SINGLE/6 MULTI)	LN. FT.	3800
2c No. 12 TYPE THHN GFI CIRCUIT	EACH	-
CONNECTOR KIT, FUSED	EACH	62
CONNECTOR KIT, UNFUSED	EACH	31
FARGO CONNECTORS	EACH	93
CONDUIT MARKERS	EACH	-

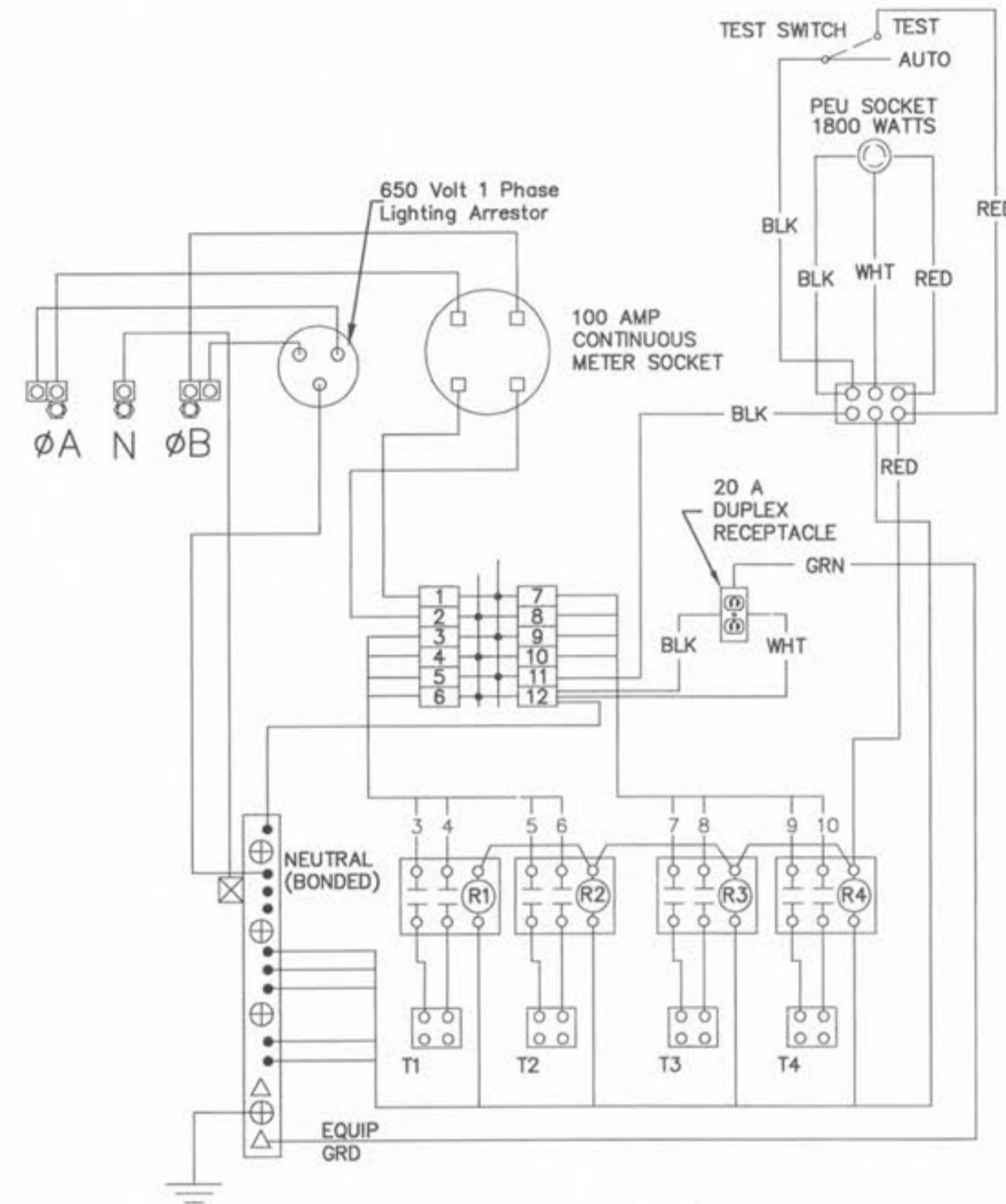
* THESE APPROXIMATE QUANTITIES WERE PREPARED SOLELY FOR THE CONTRACTOR'S CONVENIENCE AND ARE NOT GUARANTEED TO BE A COMPLETE LIST OF MATERIALS FOR THIS PROJECT.



FUSED OR UNFUSED CONNECTOR

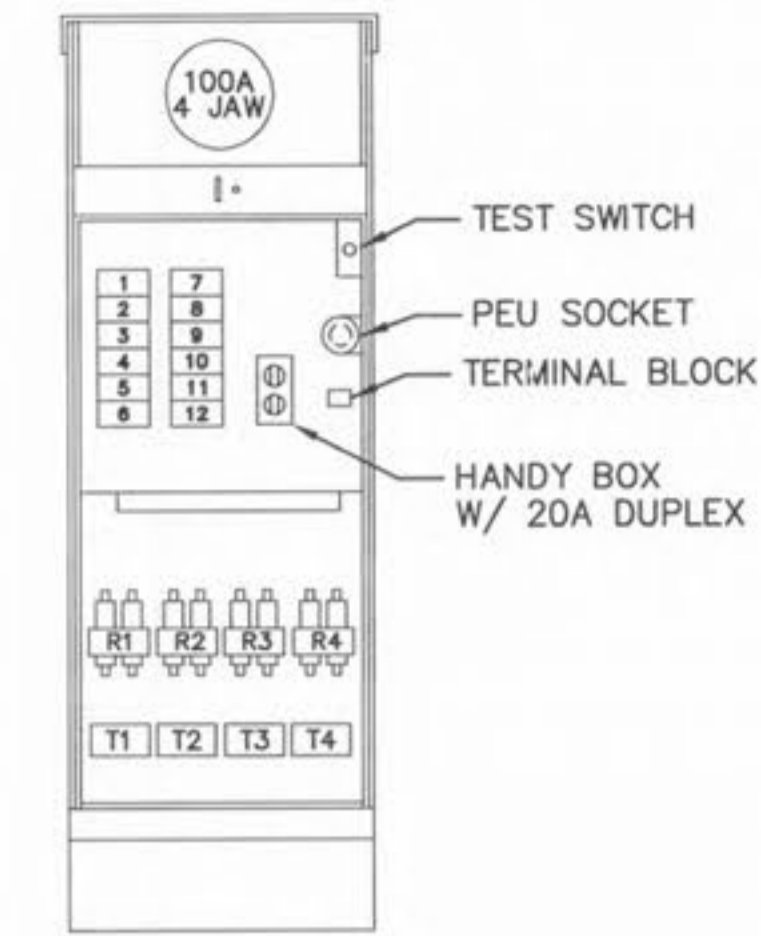


FARGO CONNECTOR



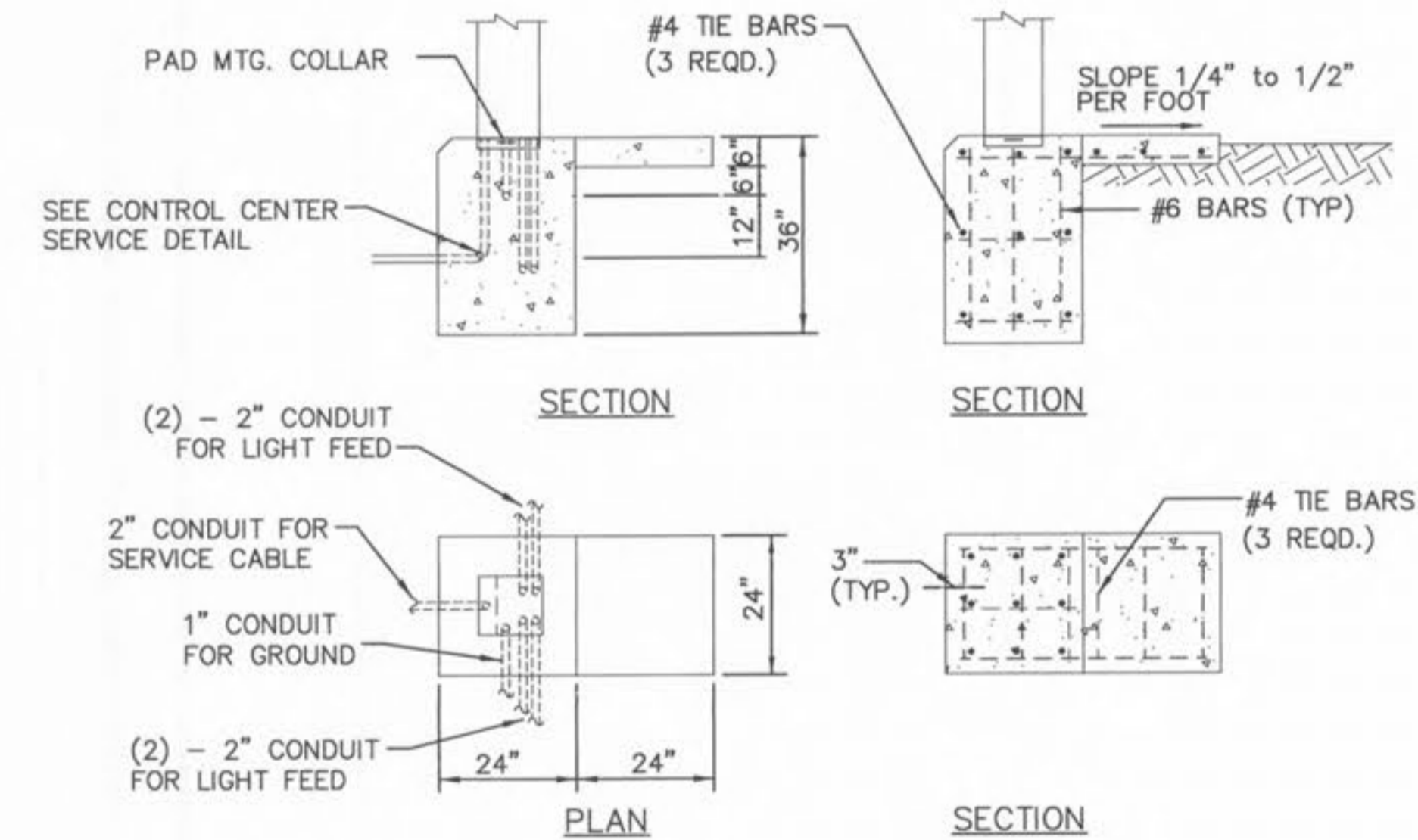
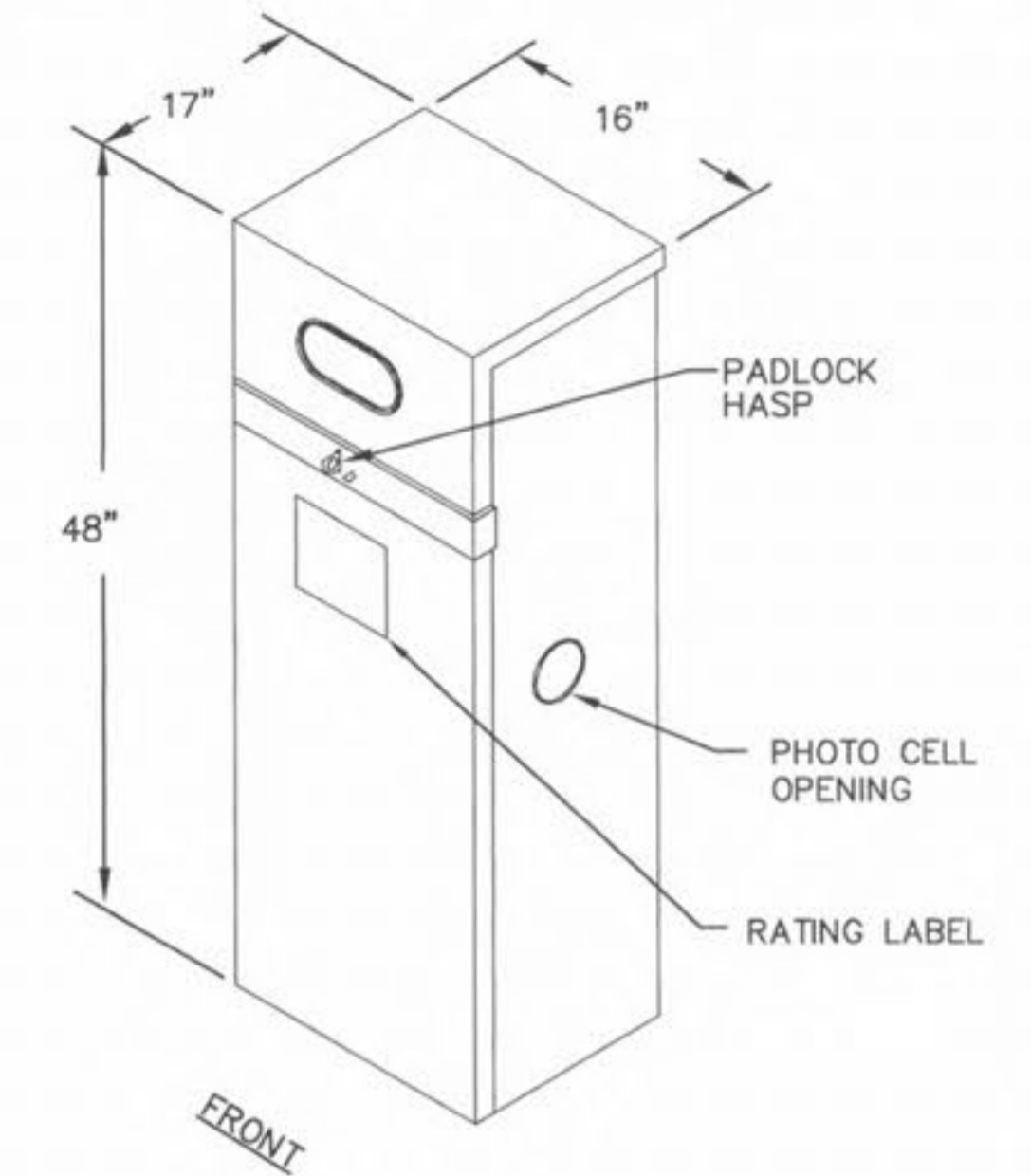
WIRING DIAGRAM

CIRCUIT DIRECTORY				
NO.	DESCRIPTION	QTY	AMP	POLE
1,2	MAIN	1	100	2
3,4	BRKR. 1 (CIRCUIT 1)	1	30	2
5,6	BRKR. 2 (CIRCUIT 2)	1	30	2
7,8	BRKR. 3 (CIRCUIT 3)	1	30	2
9,10	BRKR. 4 (CIRCUIT 4)	1	30	2
11	BRKR. 5	1	15	1
12	BRKR. 6	1	20	1
	RELAY 1	1	30	2
	RELAY 2	1	30	2
	RELAY 3	1	30	2
	RELAY 4	1	30	2

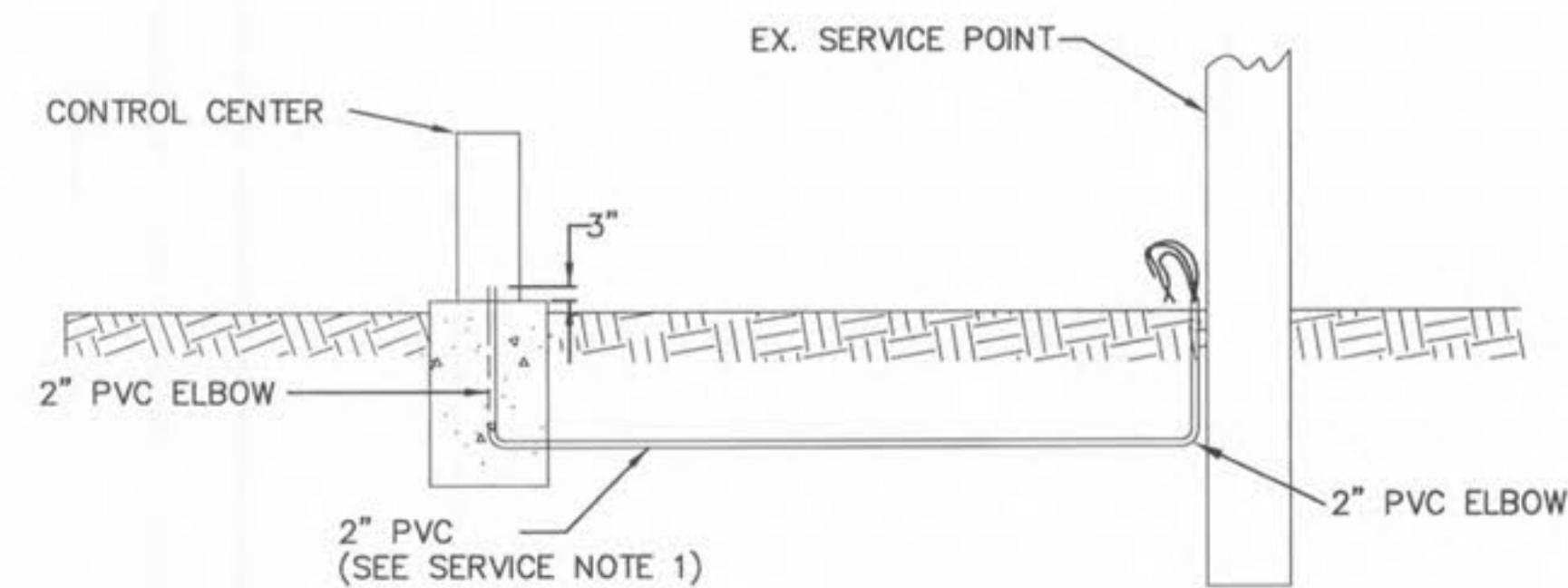


FRONT (LESS COVER)

PAD MOUNTED CONTROL CENTER FOUR-CIRCUIT CONTROLLER



CONTROL CENTER CONCRETE FOUNDATION



CONTROL CENTER NOTES:

- 1) PROVIDE GROUND ROD(S) AS REQUIRED FOR MAXIMUM OF 25 OHMS RESISTANCE TO GROUND.
- 2) CONCRETE SLAB TO PROVIDE SEMI-DRY WORKING AREA IN FRONT OF CONTROLLER CABINET.

CONTROL CENTER SERVICE

SERVICE NOTES:

- 1.) 2" PVC CONDUIT WITH 3-1C#4 AWG POWER CABLE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR FROM THE PROPOSED LIGHTING CONTROL CENTER TO THE SECONDARY SERVICE POINT. A MINIMUM OF 35 FEET ADDITIONAL CABLE SHALL BE PROVIDED AND COILED AT THE BASE OF THE UTILITY POLE FOR HOOK-UP BY AMEREN UE.



DATE: JUNE, 2004
DESIGN BY: DTS
DRAWN BY: TMW
PROJECT NO.: 9908
SHEET NO. 8
TOTAL SHEETS 9

GBA
GEORGE BUTLER ASSOCIATES, INC.
Engineers - Architects
Kansas - Missouri - Illinois

STREET LIGHTING & INTERCONNECT
T.R. HUGHES BOULEVARD
O'FALLON, MISSOURI