



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

December 9, 2014

CALL NO. 101
CONTRACT ID NO. 141079
ADDENDUM # 2

Subject: Scott County, NHPP 0756 (100)
Letting December 12, 2014

- (1) Revised - Plan Sheets - R2g, T76, T77, & T78
- (2) Revised - CAP Note - Page 123 of 207
- (3) Revised - Bid Items - Pages 200-207 of 207
- (4) Added - Notes - Pages 1-6 of 6

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

Plan revisions are available at <http://www.lynnimaging.com/kytransportation/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Diana Castle Radcliffe".

Diana Castle Radcliffe
Director
Division of Construction Procurement

DR:ks
Enclosures



An Equal Opportunity Employer M/F/D

GENERAL SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
SCOTT	7-425.00	R2C

REVISED 12-9-2014

ITEM	DESCRIPTION	UNIT	KY 3552	I-75/ RAMPS	US 62	TOYOTA										TOTAL
2708	CLEAN SILT TRAP TYPE C	EACH	180	330	36	120										666
2709	CLEAN TEMP SILT FENCE	LF	10,000	34,500	900	4,000										49,400
2726	STAKING	LS	1													1
2731	REMOVE STRUCTURE (KY 3552 STA. 116+10) (9)	EACH	1													1
2731	REMOVE STRUCTURE (KY 3552 STA. 116+25) (9)	EACH	1													1
2898	RELOCATE CRASH CUSHION	EACH		4												4
2900	INSTALL TEMP CRASH CUSHION	EACH		2												2
3171	CONCRETE BARRIER WALL TYPE 9T	LF		13,000												13,000
3287	SIDEWALK RAMP TYPE 1 (27)	EACH	18													18
3382	PVC PIPE-3 IN (10)	LF		3,100												3,100
4797	CONDUIT-3 IN (26)	LF		7,500												7,500
4940	REMOVE LIGHTING (11)	LS				1										1
4950	REMOVE SIGNAL EQUIPMENT (12)	EACH				1										1
5026	EASTERN WHITE PINE	EACH	100													100
5950	EROSION CONTROL BLANKET	SY	864	8,936	357											10,157
5952	TEMP MULCH	SY	110,000	370,000	17,000	43,000										540,000
5953	TEMP SEEDING AND PROTECTION (13)	SY	9,000	30,000	1,000	4,000										44,000
5963	INITIAL FERTILIZER (14)	TON	5	8	1	2										16
5964	20-10-10 FERTILIZER (15)	TON	8	12	2	3										25
5985	SEEDING AND PROTECTION	SY	88,000	308,000	9,000	35,000										440,000
5989	SPECIAL SEEDING CROWN VETCH	SY	15,000	50,000	1,000	6,000										72,000
5990	SODDING	SY	28,900	5,450		900										35,250
5992	AGRICULTURAL LIMESTONE (16)	TON	86	144	15	29										274
6417	FLEXIBLE DELINEATOR POST-W	EACH		426												426
6418	FLEXIBLE DELINEATOR POST-Y	EACH		147												147
6510	PAVE STRIPING-TEMP PAINT-4 IN (17)	LF	7,000	30,000		4,000										41,000
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	37,400		1,000	14,650										53,050
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	400	38,690												39,090
6517	PAVE STRIPING-PERM PAINT-12 IN	LF		4,260												4,260
6550	PAVE STRIPING-TEMP REM TAPE-W (18)	LF		36,000	800											36,800
6551	PAVE STRIPING-TEMP REM TAPE-Y (18)	LF		18,000												18,000
6567	PAVE MARKING-THERMO STOP BAR-12IN	LF	400	0	150	55										605
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF		100												100
6572	PAVE MARKING-DOTTED LANE EXTEN	LF	520	3,700		460										4,680
6573	PAVE MARKING-THERMO STR ARROW	EACH		8		3										11
6574	PAVE MARKING-THERMO CURV ARROW	EACH	25	19	8	10										62
6575	PAVE MARKING-THERMO COMB ARROW	EACH		0		4										4
6576	PAVE MARKING-THERMO ONLY	EACH	3	0		3										6
6592	PAVEMENT MARKER TYPE V-B W/R	EACH		110												110
6593	PAVEMENT MARKER TYPE V-B Y/R	EACH		35												35
8003	FOUNDATION PREP (19)	LS		1												1
8902	CRASH CUSHION TY VI CLASS B TL3	EACH		2												2
10020NS	FUEL ADJUSTMENT	DOLLAR	447,698													447,698
10030NS	ASPHALT ADJUSTMENT	DOLLAR	437,035													437,035
20209EP69	GRANULAR PILE CORE (20)	CY	1,835													1,835
20411ED	LAW ENFORCEMENT OFFICER (21)	HOUR		1,000												1,000
2555	CONCRETE CLASS B (4)	CY		115												115
21289ED	LONGITUDINAL EDGE KEY	LF		11,944	675											12,619
21590EN	SOUND BARRIER WALL	SF		22,680												22,680
22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN	LF				160										160
22880ED	BARRIER WALL TRANSITION	LF		133												133
23131ER701	PIPELINE VIDEO INSPECTION	LF	7,700	2,200	350	800										11,050
23158ES505	DETECTABLE WARNINGS	SF	540													540
23274ENIIF	TURF REINFORCEMENT MAT 1	SY	4,094	6,711		2,834										13,639
23457EC	AIR RELEASE VALVE-3/4 IN (22)	EACH		2												2
23610NC	CORED HOLE DRAINAGE BOX CON	EACH	26	18												44
23668EC	CONN FORCE MAIN 3 IN TO FORCE MAIN 3 IN (23)	EACH		2												2
23877EC	CONC MEDIAN BARRIER WALL TY 14C	LF		6,671												6,671
6602NC	PAVE MARKING-PAINT SYMBOL (FISH HOOK)	EACH				10										10

NOTES:

- (4) FOR GRAVITY WALL
- (9) SHED (10' LT STA. 116+10), BARN (35' RT STA. 116+25)
- (10) INCLUDES ALL MATERIALS, FITTINGS, EXCAVATION AND BACKFILL FOR FORCE MAIN SEWER LINE
- (11) TOYOTA LIGHTING ON OUTER RING RD
- (12) TOYOTA SIGNAL ON OUTER RING RD
- (13) ESTIMATED AT 10% SEEDING AND PROTECTION
- (14) ESTIMATED AT 300 LBS/ACRE
- (15) ESTIMATED AT 11.5 LBS/ 1000 SQ FT
- (16) ESTIMATED AT 3 TONS/ ACRE
- (17) TO BE USED ON RAMPS, KY 3552 & TOYOTA (NOT FOR USE ON I-75)
- (18) FOR USE ON I-75
- (19) FOR SOUND WALL
- (20) FOR MSE WALLS AND END BENT
- (21) FOR ESTIMATE ONLY
- (22) COMBINATION AIR RELEASE/ VACUUM VALVE AND VAULT FOR FORCE MAIN SEWER LINE
- (23) INCLUDING ALL MATERIALS FOR FORCE MAIN SEWER LINE
- (26) TO BE PLACED INSIDE MEDIAN BARRIER WALL
- (27) TO BE PLACED AT MULTI-USE PATH CROSSINGS AND WILL USED KYTC STANDARD DRAWINGS

I-75 INTERCHANGE
GENERAL SUMMARY

FILE NAME: D:\PW\WORKDIR\RICK\DWG\4436\RD0200SL.DGN

USER: Rick
DATE PLOTTED: November 7, 2014

E-SHEET NAME:

MicroStation v8.11.9.459

GENERAL SUMMARY

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SCOTT	7-425.00	R2C

REVISED 12-9-2014

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NOTES:

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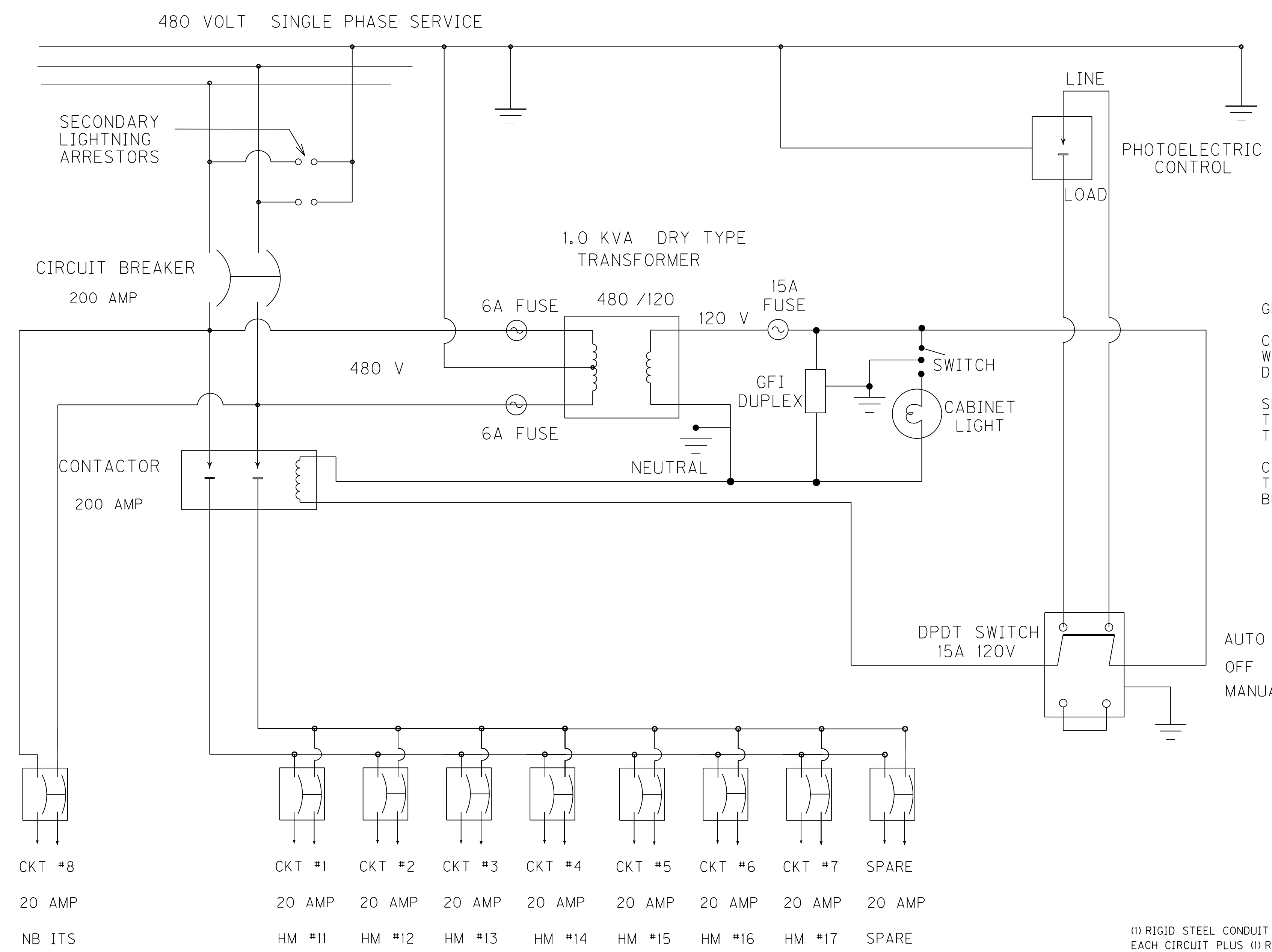
I-75 INTERCHANGE
GENERAL SUMMARY

FILE NAME: D:\PW\WORKDIR\RICK\DWG\4436\RD0200SL.DGN

USER: Rick
DATE PLOTTED: November 7, 2014

E-SHEET NAME:

MicroStation v8.11.9.459

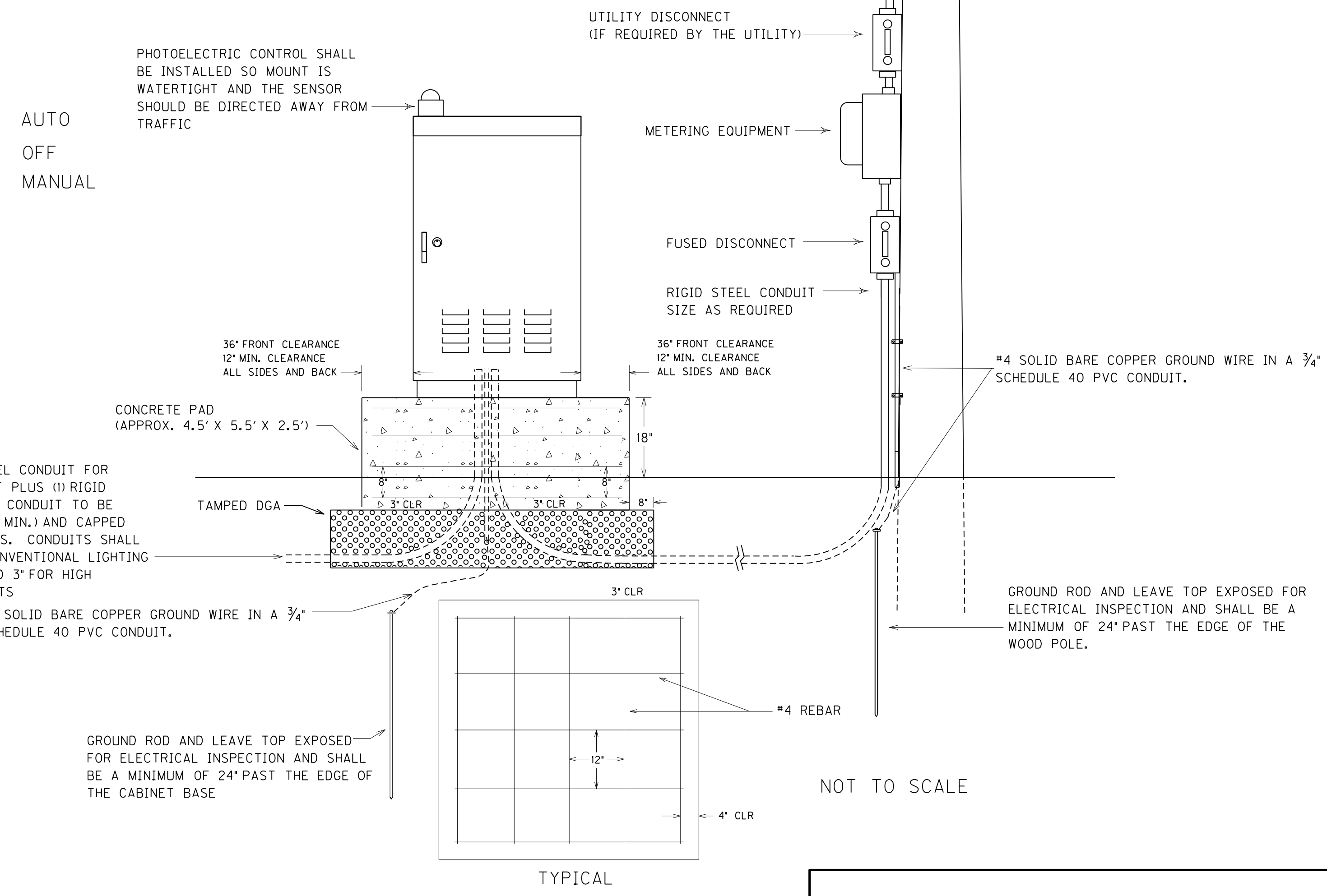


GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R/S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R/S GROUNDING BUSHING.



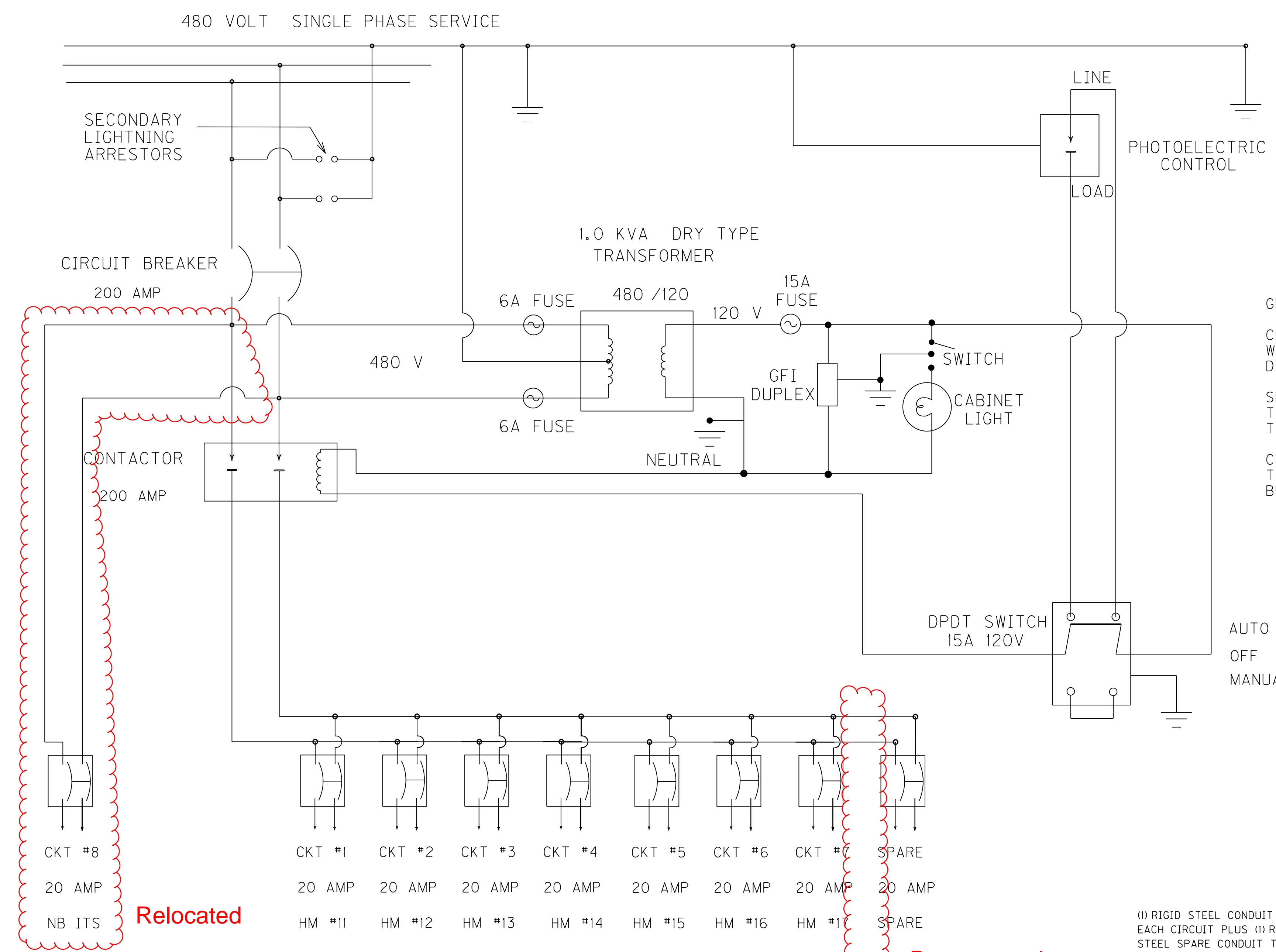
NOTES:

- CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.
- CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.
- PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.
- CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.
- #4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.
- ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM *4761*. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

NOT TO SCALE

BASE MOUNTED SERVICE DETAIL LCC2

USER: fed.swanson@scott.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T076005E
 MicroStation v8.11.7.443



GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

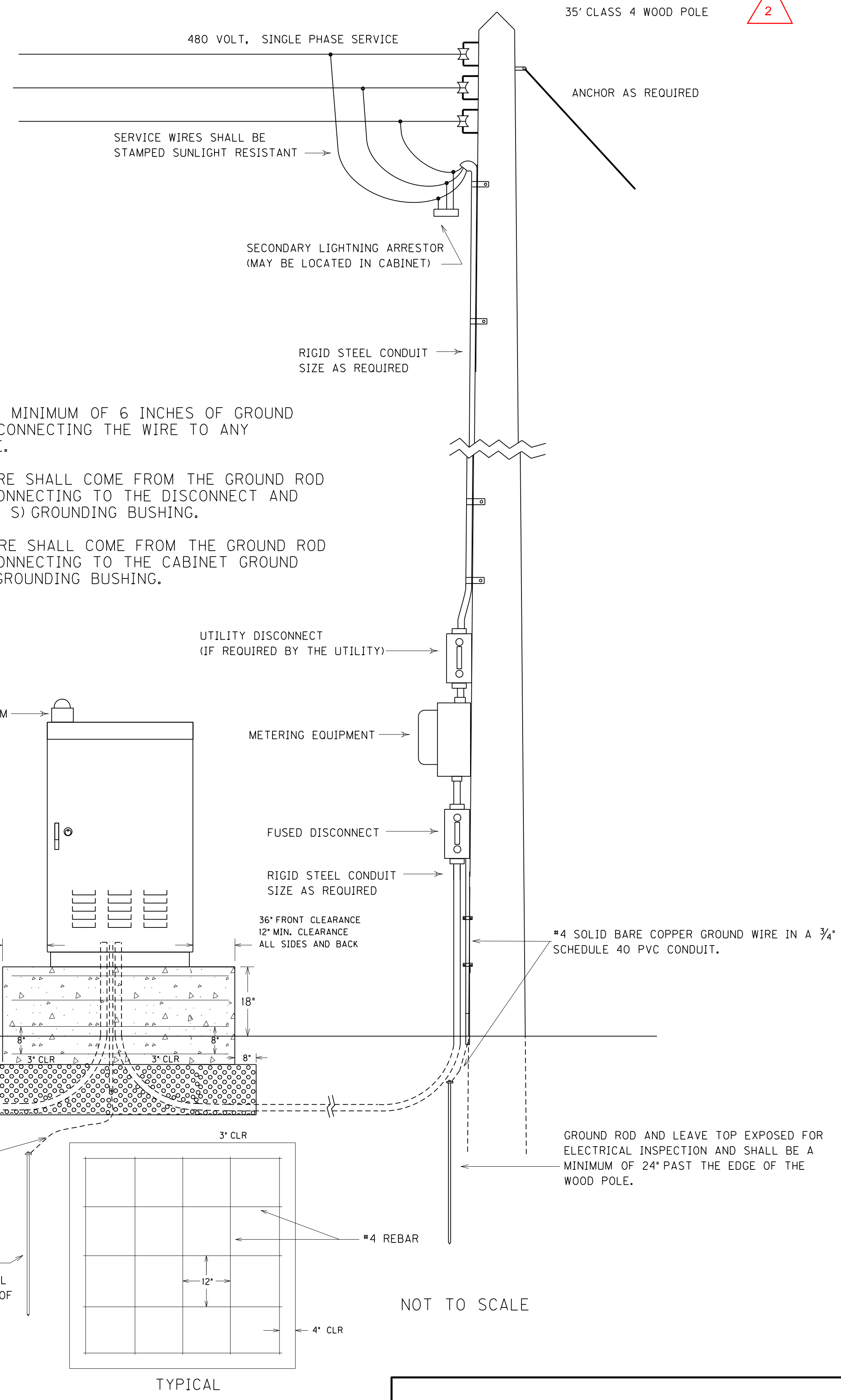
SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R/S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R/S GROUNDING BUSHING.

AUTO
OFF
MANUAL

(1) RIGID STEEL CONDUIT FOR EACH CIRCUIT PLUS (1) RIGID STEEL SPARE CONDUIT TO BE STUBBED (24" MIN.) AND CAPPED ON BOTH ENDS. CONDUITS SHALL BE 2" FOR CONVENTIONAL LIGHTING CIRCUITS AND 3" FOR HIGH MAST CIRCUITS
#4 SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 40 PVC CONDUIT.

GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE CABINET BASE



NOT TO SCALE

BASE MOUNTED SERVICE DETAIL LCC2

NOTES:

CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.

CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.

PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.

CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.

#4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.

ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE, STEEL REINFORCEMENT, ETC.) FOR THE CONCRETE PAD SHALL BE INCIDENTAL TO THE POLE FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.

ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM *4761*. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

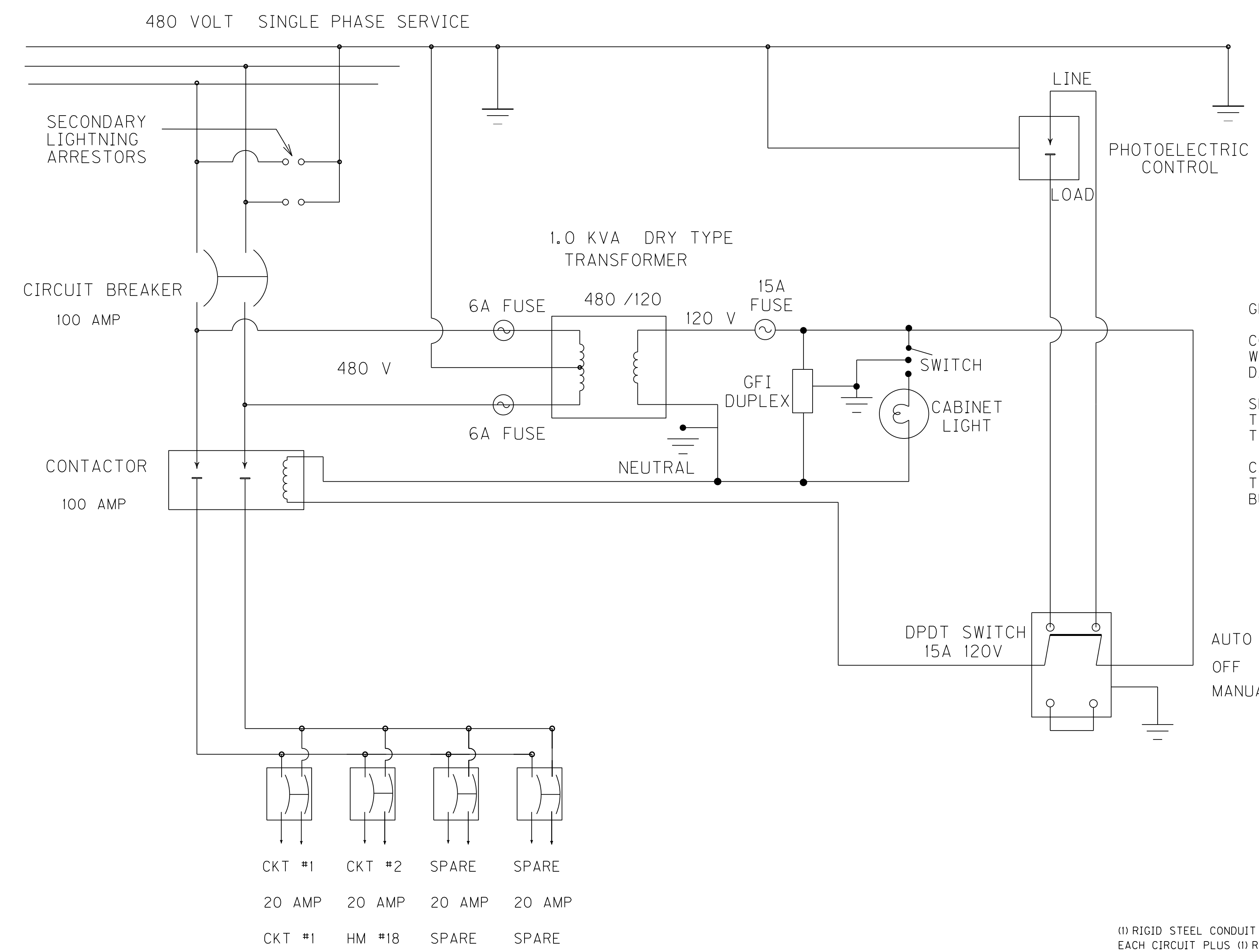
Relocated

Remove and relocate

Changed date

12/8/2014

USER: fed.swanson@scott.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T076005E
 MicroStation v8.11.7.443



GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R S GROUNDING BUSHING.

PHOTOELECTRIC CONTROL SHALL BE INSTALLED SO MOUNT IS WATERTIGHT AND THE SENSOR SHOULD BE DIRECTED AWAY FROM TRAFFIC

AUTO
OFF
MANUAL

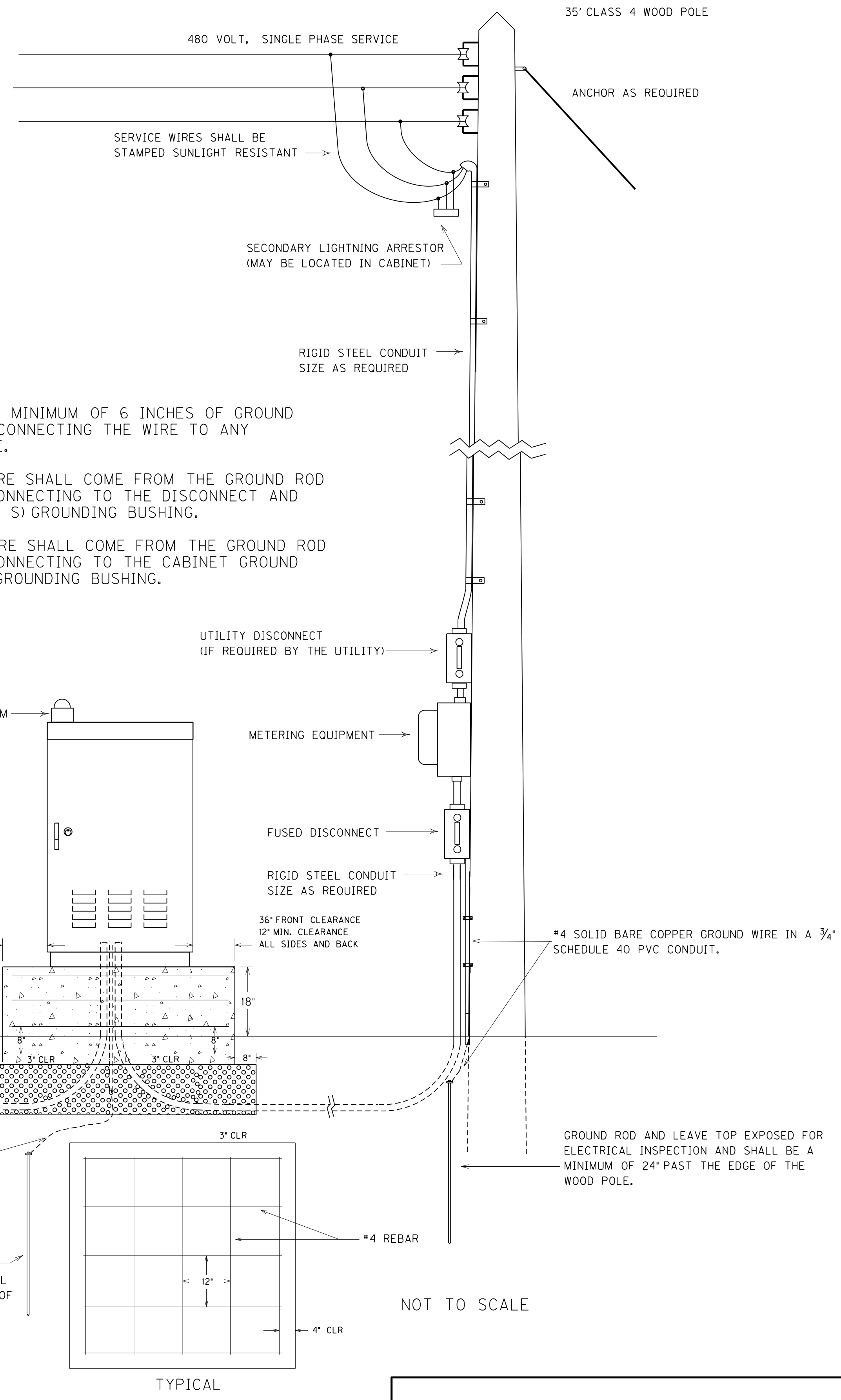
(1) RIGID STEEL CONDUIT FOR EACH CIRCUIT PLUS (1) RIGID STEEL SPARE CONDUIT TO BE STUBBED (24" MIN.) AND CAPPED ON BOTH ENDS. CONDUITS SHALL BE 2" FOR CONVENTIONAL LIGHTING CIRCUITS AND 3" FOR HIGH MAST CIRCUITS

#4 SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 40 PVC CONDUIT.

#4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.

ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE, STEEL REINFORCEMENT, ETC.) FOR THE CONCRETE PAD SHALL BE INCIDENTAL TO THE POLE FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.

ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM *4761*. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

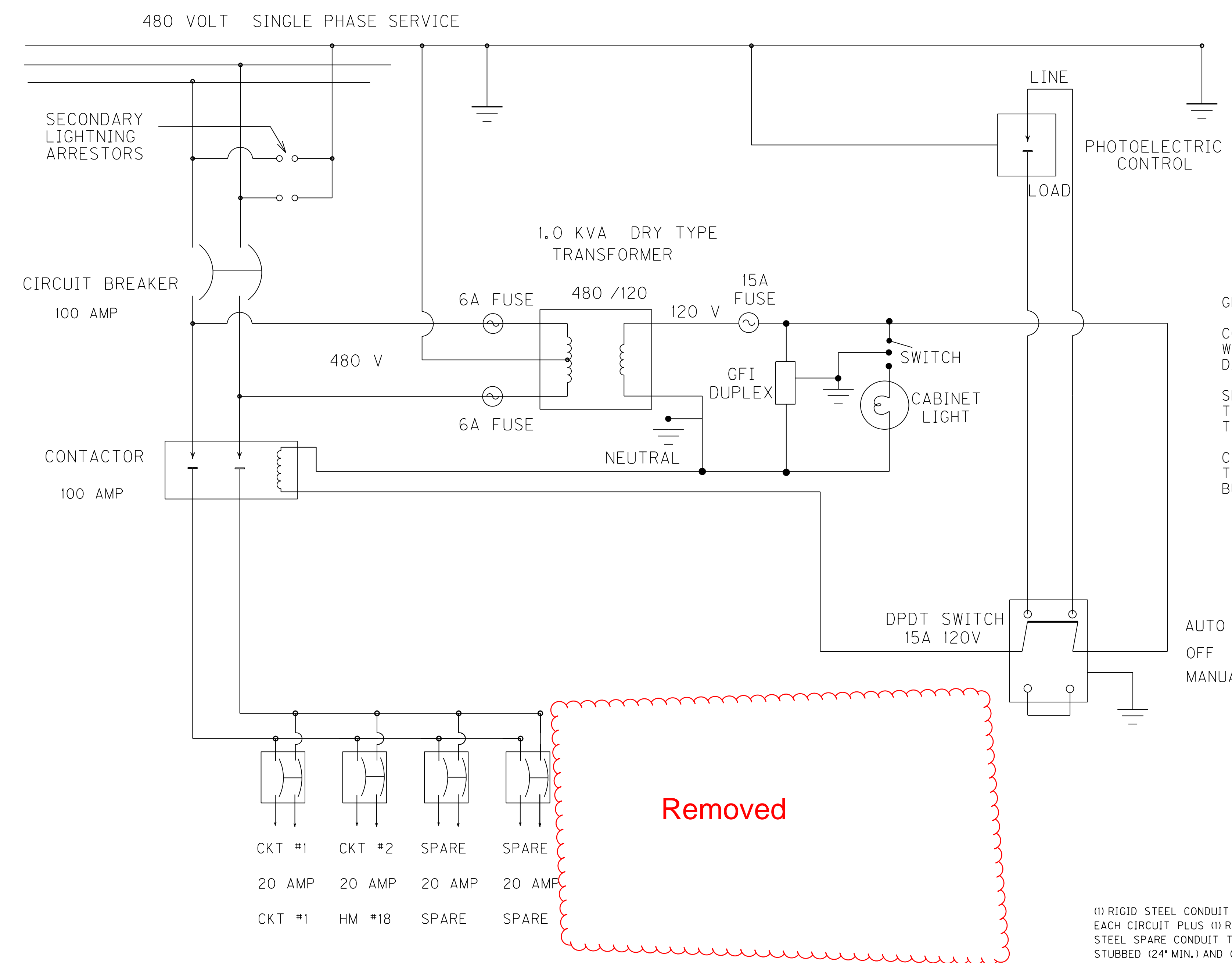


NOT TO SCALE

BASE MOUNTED SERVICE DETAIL LCC3

USER: fed.swanson@scottcounty.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T077005E
 MicroStation v8.11.7.443

11/14/2013



CKT #1	CKT #2	SPARE	SPARE
20 AMP	20 AMP	20 AMP	20 AMP
CKT #1	HM #18	SPARE	SPARE

NOTES:

CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.

CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.

PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.

CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.

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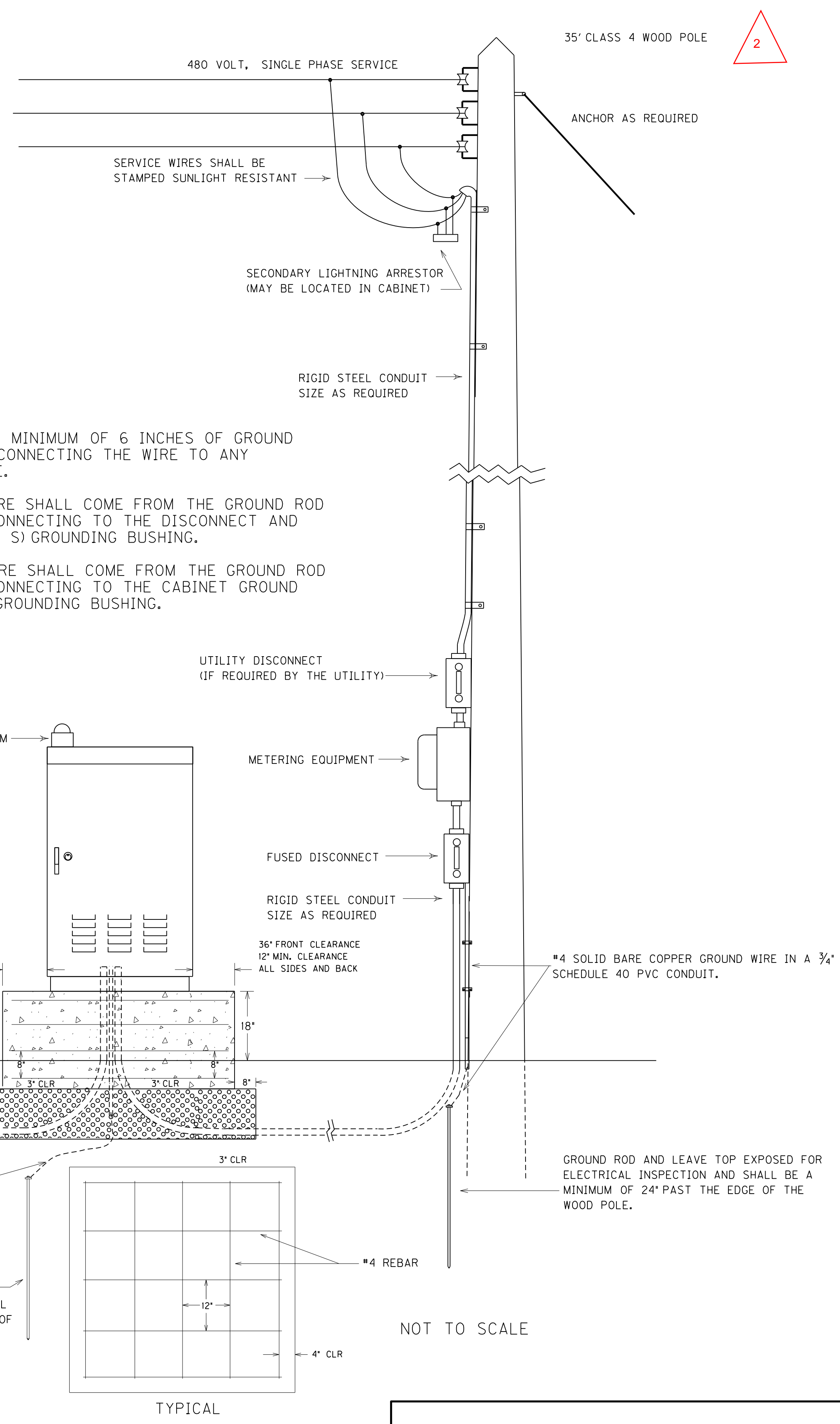
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(1) RIGID STEEL CONDUIT FOR EACH CIRCUIT PLUS (1) RIGID STEEL SPARE CONDUIT TO BE STUBBED (24" MIN.) AND CAPPED ON BOTH ENDS. CONDUITS SHALL BE 2" FOR CONVENTIONAL LIGHTING CIRCUITS AND 3" FOR HIGH MAST CIRCUITS
#4 SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 40 PVC CONDUIT.

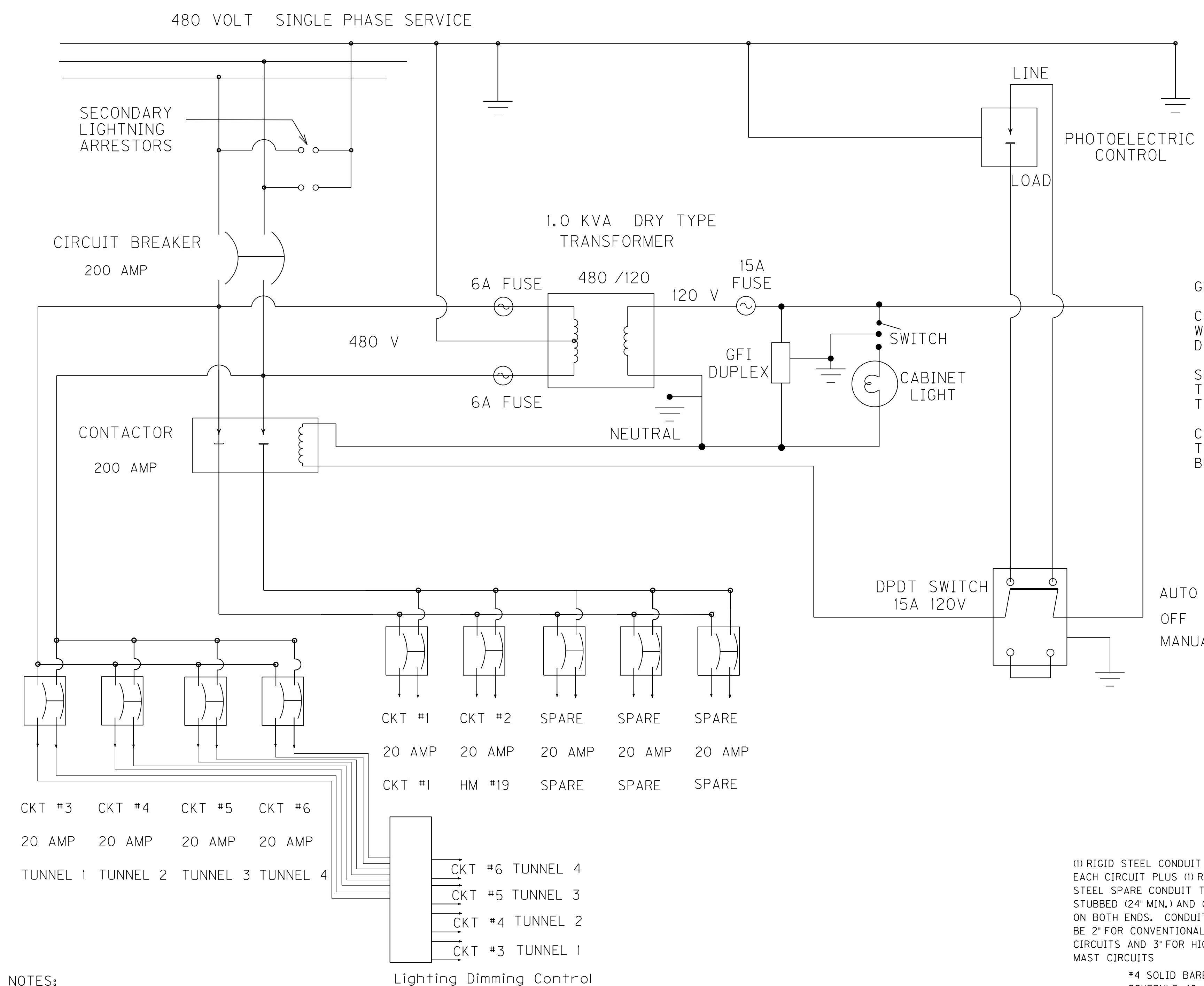
GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE CABINET BASE



NOT TO SCALE

BASE MOUNTED SERVICE DETAIL LCC3

USER: fed.swanson@scottcounty.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T077005E
 MicroStation v8.11.7.443

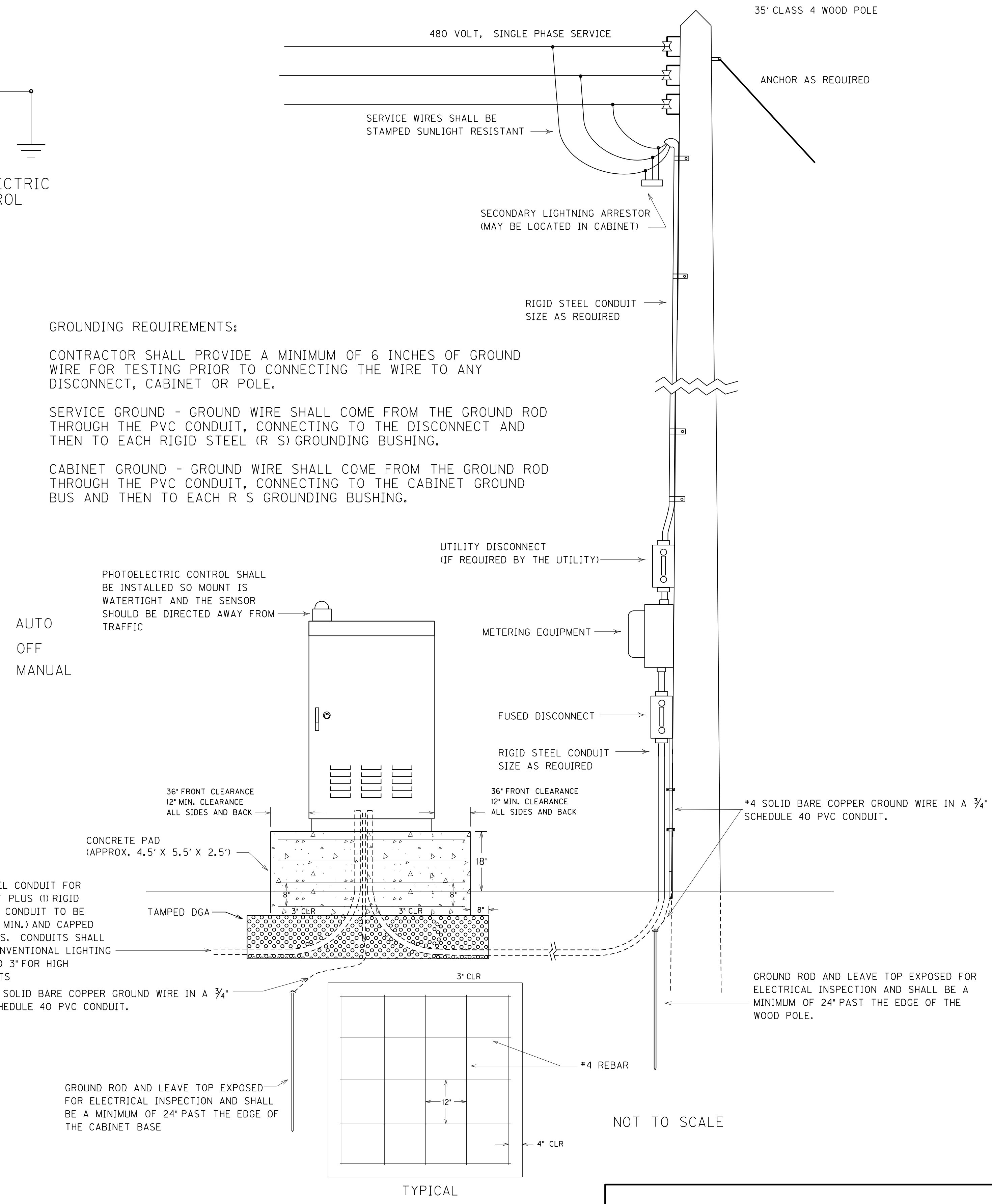


GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R/S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R/S GROUNDING BUSHING.

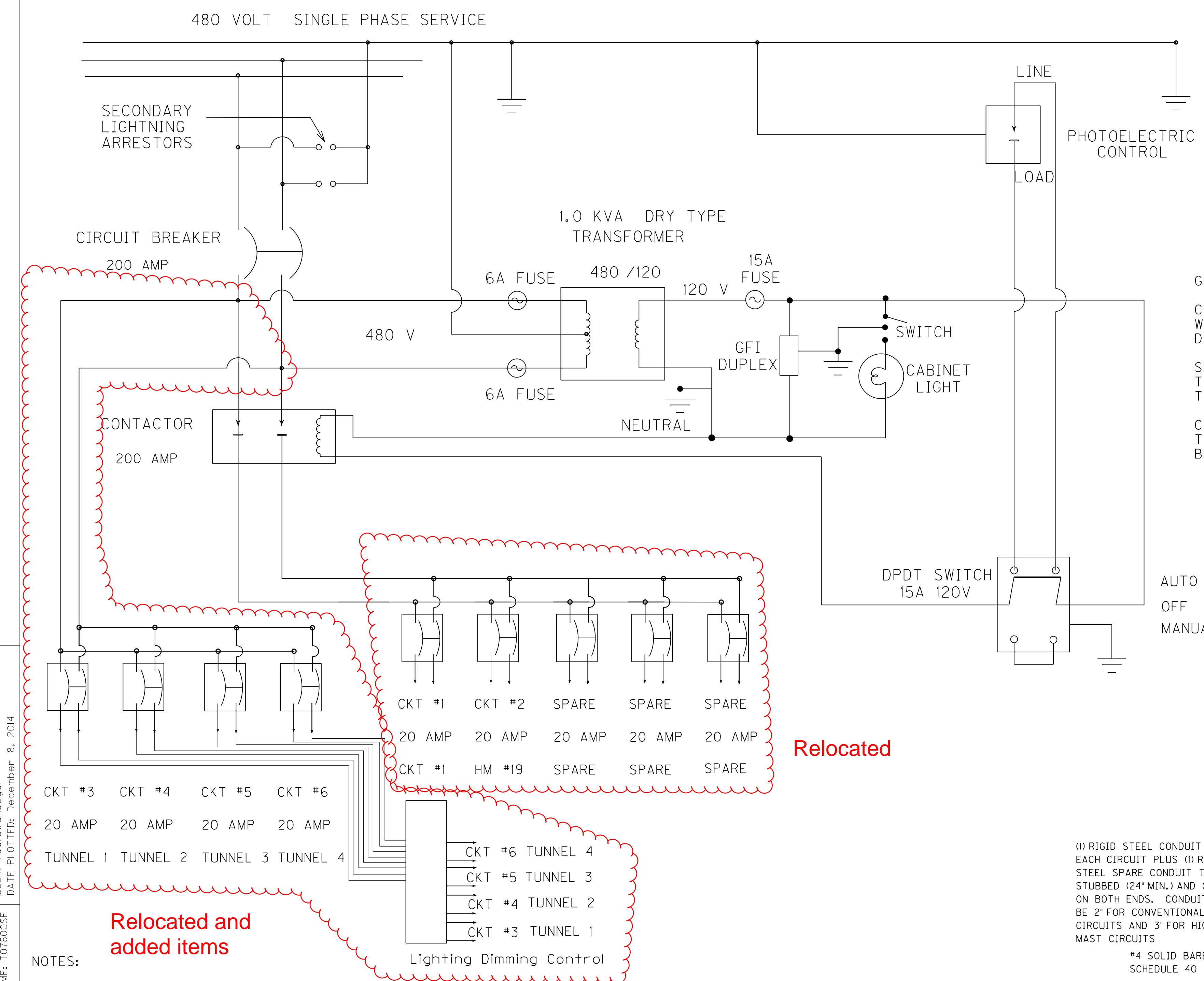


NOTES:

- CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.
- CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.
- PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.
- CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.
- 12/8/2014
- #4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.
- ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE, STEEL REINFORCEMENT, ETC.) FOR THE CONCRETE PAD SHALL BE INCIDENTAL TO THE POLE FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.
- ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM "4761". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

BASE MOUNTED SERVICE DETAIL LCC4

USER: fed.swanson@scott.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T078005E
 MicroStation v8.11.7.443

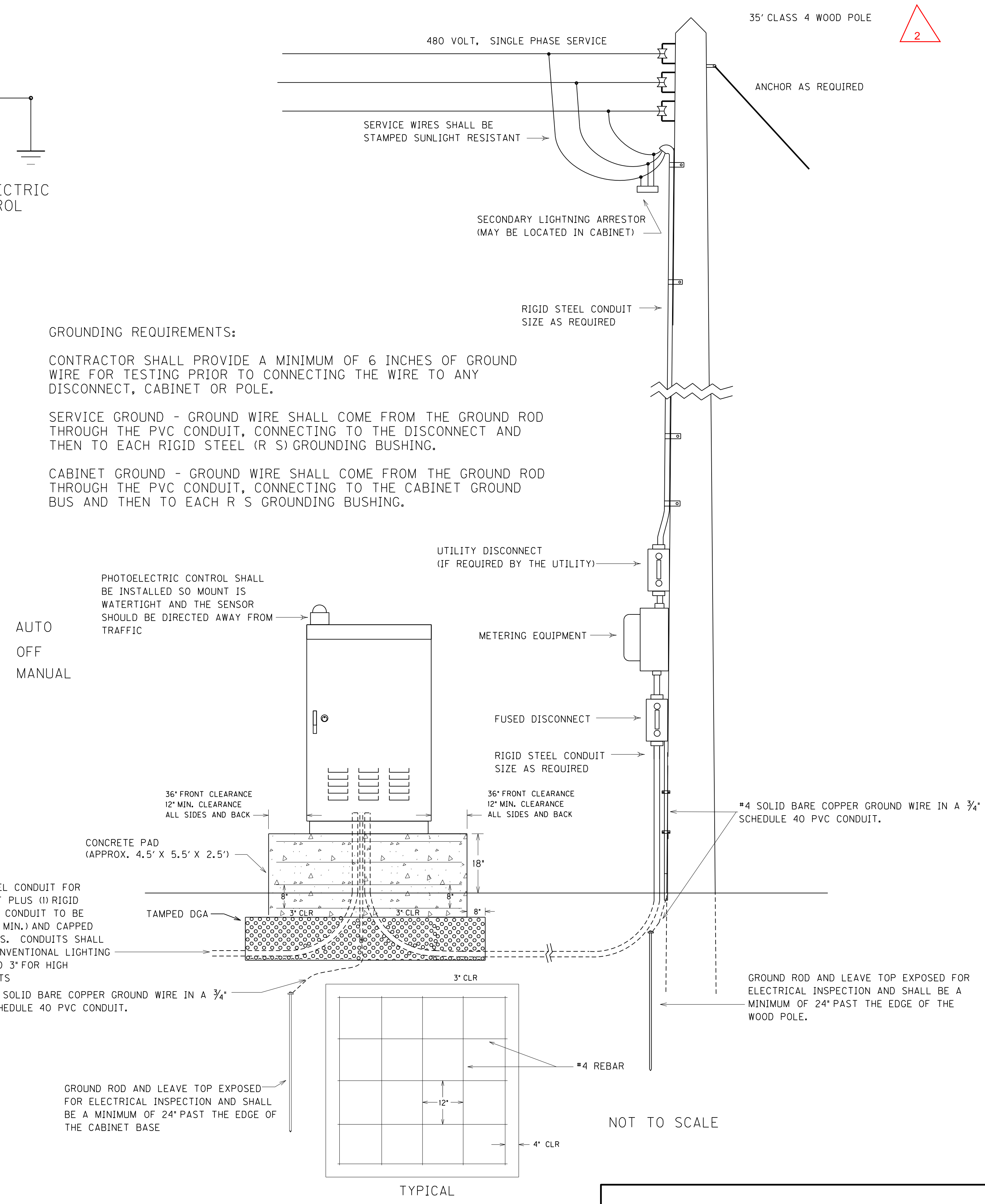


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CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R/S GROUNDING BUSHING.



NOT TO SCALE

BASE MOUNTED SERVICE DETAIL LCC4

USER: fed.swanson@scott.com
 DATE PLOTTED: December 8, 2014
 E-SHEET NAME: T078005E
 MicroStation v8.11.7.443
 12/8/2014

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Relocated and added items

Relocated

KENTUCKY TRANSPORTATION CABINET
COMMUNICATING ALL PROMISES (CAP)
ACTIVE

Item No.	7 - 425			Project Mgr.	kytc\Joshua.Samples	
			County	SCOTT	Route	I-75
CAP #	Date of Promise	Promise made to:	Location of Promise			
1	08-DEC-14	USFWS by Becky Barrick	entire project			
CAP Description						
The Contractor shall complete any tree cutting necessary for the project between November 15 and March 31.						

PROPOSAL BID ITEMS

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Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	73,775.00	TON		\$	
0020	00013		LIME STABILIZED ROADBED	159,583.00	SQYD		\$	
0030	00014		LIME	2,826.00	TON		\$	
0040	00018		DRAINAGE BLANKET-TYPE II-ASPH	31,952.00	TON		\$	
0050	00071		CRUSHED AGGREGATE SIZE NO 57	8,871.00	TON		\$	
0060	00100		ASPHALT SEAL AGGREGATE	276.00	TON		\$	
0070	00103		ASPHALT SEAL COAT	33.00	TON		\$	
0080	00217		CL4 ASPH BASE 1.00D PG64-22	68,084.00	TON		\$	
0090	00219		CL4 ASPH BASE 1.00D PG76-22	32,554.00	TON		\$	
0100	00301		CL2 ASPH SURF 0.38D PG64-22	832.00	TON		\$	
0110	00342		CL4 ASPH SURF 0.38A PG76-22	10,315.00	TON		\$	
0120	00358		ASPHALT CURING SEAL	461.00	TON		\$	
0130	02070		JPC PAVEMENT-12 IN	3,042.00	SQYD		\$	
0140	02077		JPC PAVEMENT-12 IN SHLD	1,007.00	SQYD		\$	
0150	02084		JPC PAVEMENT-8 IN	578.00	SQYD		\$	
0160	02702		SAND FOR BLOTTER	399.00	TON		\$	
0170	22861EN		HIGH STRENGTH GEOTEXTILE FABRIC	19,285.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0840	00069		CRUSHED AGGREGATE SIZE NO 3	4,807.00	TON		\$	
0850	00078		CRUSHED AGGREGATE SIZE NO 2	4,946.00	TON		\$	
0860	00080		CRUSHED AGGREGATE SIZE NO 23	4,807.00	TON		\$	
0870	01000		PERFORATED PIPE-4 IN	35,011.00	LF		\$	
0880	01001		PERFORATED PIPE-6 IN	7,970.00	LF		\$	
0890	01010		NON-PERFORATED PIPE-4 IN	2,970.00	LF		\$	
0900	01011		NON-PERFORATED PIPE-6 IN	68.00	LF		\$	
0910	01020		PERF PIPE HEADWALL TY 1-4 IN	9.00	EACH		\$	
0920	01024		PERF PIPE HEADWALL TY 2-4 IN	8.00	EACH		\$	
0930	01028		PERF PIPE HEADWALL TY 3-4 IN	69.00	EACH		\$	
0940	01032		PERF PIPE HEADWALL TY 4-4 IN	53.00	EACH		\$	
0950	01065		STEEL ENCASMENT PIPE-8 IN	240.00	LF		\$	
0960	01310		REMOVE PIPE	80.00	LF		\$	
0970	01691		FLUME INLET TYPE 2	2.00	EACH		\$	
0980	01811		STANDARD CURB AND GUTTER MOD	26,228.00	LF		\$	
0990	01830		STANDARD INTEGRAL CURB	321.00	LF		\$	
1000	01840		LIP INTEGRAL CURB	415.00	LF		\$	
1010	01895		VALLEY GUTTER	125.00	LF		\$	
1020	01897		ASPHALT WEDGE CURB	293.00	LF		\$	
1030	01915		STANDARD BARRIER MEDIAN TYPE 1	2,271.00	SQYD		\$	
1040	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	78.00	EACH		\$	
1050	01986		DELINEATOR FOR BARRIER WALL-B/Y	9.00	EACH		\$	
1060	02001		CURB TO BARRIER WALL TRANS	2.00	EACH		\$	
1070	02003		RELOCATE TEMP CONC BARRIER	26,000.00	LF		\$	
1080	02014		BARRICADE-TYPE III	8.00	EACH		\$	

PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1090	02091		REMOVE PAVEMENT	1,243.00	SQYD		\$	
1100	02159		TEMP DITCH	24,700.00	LF		\$	
1110	02160		CLEAN TEMP DITCH	24,700.00	LF		\$	
1120	02203		STRUCTURE EXCAV-UNCLASSIFIED	403.00	CUYD		\$	
1130	02230		EMBANKMENT IN PLACE	522,186.00	CUYD		\$	
1140	02242		WATER	10.00	MGAL		\$	
1150	02261		FENCE-WOVEN WIRE	17,844.00	LF		\$	
1160	02274		FENCE-6 FT CHAIN LINK	355.00	LF		\$	
1170	02351		GUARDRAIL-STEEL W BEAM-S FACE	6,995.00	LF		\$	
1180	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	5.00	EACH		\$	
1190	02367		GUARDRAIL END TREATMENT TYPE 1	9.00	EACH		\$	
1200	02369		GUARDRAIL END TREATMENT TYPE 2A	10.00	EACH		\$	
1210	02381		REMOVE GUARDRAIL	1,228.00	LF		\$	
1220	02429		RIGHT-OF-WAY MONUMENT TYPE 1	63.00	EACH		\$	
1230	02432		WITNESS POST	3.00	EACH		\$	
1240	02471		FILL AND CAP SINKHOLE	1.00	EACH		\$	
1250	02483		CHANNEL LINING CLASS II	1,076.00	TON		\$	
1260	02484		CHANNEL LINING CLASS III	311.00	TON		\$	
1270	02545		CLEARING AND GRUBBING 111 ACRES	1.00	LS		\$	
1280	02562		TEMPORARY SIGNS	492.00	SQFT		\$	
1290	02585		EDGE KEY	466.00	LF		\$	
1300	02599		FABRIC-GEOTEXTILE TYPE IV	19,000.00	SQYD		\$	
1310	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	36,650.00	SQYD	\$2.00	\$	\$73,300.00
1320	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
1330	02671		PORTABLE CHANGEABLE MESSAGE SIGN	7.00	EACH		\$	
1340	02696		SHOULDER RUMBLE STRIPS-SAWED	36,175.00	LF		\$	
1350	02701		TEMP SILT FENCE	24,700.00	LF		\$	
1360	02703		SILT TRAP TYPE A	111.00	EACH		\$	
1370	02704		SILT TRAP TYPE B	111.00	EACH		\$	
1380	02705		SILT TRAP TYPE C	111.00	EACH		\$	
1390	02706		CLEAN SILT TRAP TYPE A	666.00	EACH		\$	
1400	02707		CLEAN SILT TRAP TYPE B	666.00	EACH		\$	
1410	02708		CLEAN SILT TRAP TYPE C	666.00	EACH		\$	
1420	02709		CLEAN TEMP SILT FENCE	49,400.00	LF		\$	
1430	02726		STAKING	1.00	LS		\$	
1440	02731		REMOVE STRUCTURE BARN	1.00	LS		\$	
1450	02731		REMOVE STRUCTURE SHED	1.00	LS		\$	
1460	02898		RELOCATE CRASH CUSHION	4.00	EACH		\$	
1470	02900		INSTALL TEMP CRASH CUSHION	2.00	EACH		\$	
1480	03171		CONCRETE BARRIER WALL TYPE 9T	13,000.00	LF		\$	
1490	03287		SIDEWALK RAMP TYPE 1	18.00	EACH		\$	
1500	03382		PVC PIPE-3 IN	3,100.00	LF		\$	
1510	04797		CONDUIT-3 IN	7,500.00	LF		\$	
1520	04940		REMOVE LIGHTING	1.00	LS		\$	
1530	04950		REMOVE SIGNAL EQUIPMENT	1.00	EACH		\$	
1540	05026		EASTERN WHITE PINE	100.00	EACH		\$	
1550	05950		EROSION CONTROL BLANKET	10,157.00	SQYD		\$	

PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1560	05952		TEMP MULCH	540,000.00	SQYD		\$	
1570	05953		TEMP SEEDING AND PROTECTION	44,000.00	SQYD		\$	
1580	05963		INITIAL FERTILIZER	16.00	TON		\$	
1590	05964		20-10-10 FERTILIZER	25.00	TON		\$	
1600	05985		SEEDING AND PROTECTION	440,000.00	SQYD		\$	
1610	05989		SPECIAL SEEDING CROWN VETCH	72,000.00	SQYD		\$	
1620	05990		SODDING	25,250.00	SQYD		\$	
1630	05992		AGRICULTURAL LIMESTONE	274.00	TON		\$	
1640	06510		PAVE STRIPING-TEMP PAINT-4 IN	41,000.00	LF		\$	
1650	06514		PAVE STRIPING-PERM PAINT-4 IN	53,050.00	LF		\$	
1660	06515		PAVE STRIPING-PERM PAINT-6 IN	39,090.00	LF		\$	
1670	06517		PAVE STRIPING-PERM PAINT-12 IN	4,260.00	LF		\$	
1680	06550		PAVE STRIPING-TEMP REM TAPE-W	36,800.00	LF		\$	
1690	06551		PAVE STRIPING-TEMP REM TAPE-Y	18,000.00	LF		\$	
1700	06567		PAVE MARKING-THERMO STOP BAR-12IN	605.00	LF		\$	
1710	06568		PAVE MARKING-THERMO STOP BAR-24IN	100.00	LF		\$	
1720	06572		PAVE MARKING-DOTTED LANE EXTEN	4,680.00	LF		\$	
1730	06573		PAVE MARKING-THERMO STR ARROW	11.00	EACH		\$	
1740	06574		PAVE MARKING-THERMO CURV ARROW	62.00	EACH		\$	
1750	06575		PAVE MARKING-THERMO COMB ARROW	4.00	EACH		\$	
1760	06576		PAVE MARKING-THERMO ONLY	6.00	EACH		\$	
1770	06592		PAVEMENT MARKER TYPE V-B W/R	110.00	EACH		\$	
1780	06593		PAVEMENT MARKER TYPE V-B Y/R	35.00	EACH		\$	
1790	06602NC		PAVE MARKING-PAINT SYMBOL	10.00	EACH		\$	
1800	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1810	08902		CRASH CUSHION TY VI CLASS B TL3	2.00	EACH		\$	
1820	10020NS		FUEL ADJUSTMENT	447,698.00	DOLL	\$1.00	\$	\$447,698.00
1830	10030NS		ASPHALT ADJUSTMENT	437,035.00	DOLL	\$1.00	\$	\$437,035.00
1840	20209EP69		GRANULAR PILE CORE	1,835.00	CUYD		\$	
1850	20411ED		LAW ENFORCEMENT OFFICER	1,000.00	HOURL		\$	
1860	02555		CONCRETE-CLASS B (REVISED: 12-9-14)	115.00	CUYD		\$	
1870	21289ED		LONGITUDINAL EDGE KEY	12,619.00	LF		\$	
1880	21590EN		SOUND BARRIER WALL	22,680.00	SQFT		\$	
1890	22520EN		PAVE MARKING-THERMO YIELD BAR-36 IN	160.00	LF		\$	
1900	22880ED		BARRIER WALL TRANSITION (REVISED: 12-9-14)	133.00	LF		\$	
1910	23131ER701		PIPELINE VIDEO INSPECTION	11,050.00	LF		\$	
1920	23158ES505		DETECTABLE WARNINGS	540.00	SQFT		\$	
1930	23274EN11F		TURF REINFORCEMENT MAT 1	13,639.00	SQYD		\$	
1940	23457EC		AIR RELEASE VALVE-3/4 IN	2.00	EACH		\$	
1950	23610NC		CORED HOLE DRAINAGE BOX CON	44.00	EACH		\$	
1960	23668EC		CONN FORCE MAIN 3 IN TO FORCE MAIN 3 IN	2.00	EACH		\$	
1970	23877EC		CONC MEDIAN BARRIER WALL TY 14C	6,671.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1980	00440		ENTRANCE PIPE-15 IN	49.00	LF		\$	

PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1990	00461		CULVERT PIPE-15 IN	538.00	LF		\$	
2000	00462		CULVERT PIPE-18 IN	1,416.00	LF		\$	
2010	00464		CULVERT PIPE-24 IN	535.00	LF		\$	
2020	00466		CULVERT PIPE-30 IN	530.00	LF		\$	
2030	00468		CULVERT PIPE-36 IN	239.00	LF		\$	
2040	00470		CULVERT PIPE-48 IN	235.00	LF		\$	
2050	00471		CULVERT PIPE-54 IN	197.00	LF		\$	
2060	00492		CULVERT PIPE-24 IN EQUIV	192.00	LF		\$	
2070	00521		STORM SEWER PIPE-15 IN	1,609.00	LF		\$	
2080	00522		STORM SEWER PIPE-18 IN	3,279.00	LF		\$	
2090	00524		STORM SEWER PIPE-24 IN	584.00	LF		\$	
2100	00526		STORM SEWER PIPE-30 IN	691.00	LF		\$	
2110	00528		STORM SEWER PIPE-36 IN	206.00	LF		\$	
2120	00529		STORM SEWER PIPE-42 IN	106.00	LF		\$	
2130	00530		STORM SEWER PIPE-48 IN	291.00	LF		\$	
2140	01202		PIPE CULVERT HEADWALL-15 IN	11.00	EACH		\$	
2150	01204		PIPE CULVERT HEADWALL-18 IN	23.00	EACH		\$	
2160	01208		PIPE CULVERT HEADWALL-24 IN	8.00	EACH		\$	
2170	01209		PIPE CULVERT HEADWALL-24 IN EQUIV	1.00	EACH		\$	
2180	01210		PIPE CULVERT HEADWALL-30 IN	6.00	EACH		\$	
2190	01212		PIPE CULVERT HEADWALL-36 IN	3.00	EACH		\$	
2200	01214		PIPE CULVERT HEADWALL-42 IN	2.00	EACH		\$	
2210	01216		PIPE CULVERT HEADWALL-48 IN	4.00	EACH		\$	
2220	01432		SLOPED BOX OUTLET TYPE 1-15 IN	1.00	EACH		\$	
2230	01433		SLOPED BOX OUTLET TYPE 1-18 IN	4.00	EACH		\$	
2240	01434		SLOPED BOX OUTLET TYPE 1-24 IN	2.00	EACH		\$	
2250	01450		S & F BOX INLET-OUTLET-18 IN	2.00	EACH		\$	
2260	01451		S & F BOX INLET-OUTLET-24 IN	1.00	EACH		\$	
2270	01452		S & F BOX INLET-OUTLET-30 IN	1.00	EACH		\$	
2280	01453		S & F BOX INLET-OUTLET-36 IN	2.00	EACH		\$	
2290	01456		CURB BOX INLET TYPE A	49.00	EACH		\$	
2300	01480		CURB BOX INLET TYPE B	2.00	EACH		\$	
2310	01490		DROP BOX INLET TYPE 1	9.00	EACH		\$	
2320	01511		DROP BOX INLET TYPE 5D	1.00	EACH		\$	
2330	01538		DROP BOX INLET TYPE 7	1.00	EACH		\$	
2340	01541		DROP BOX INLET TYPE 10	1.00	EACH		\$	
2350	01544		DROP BOX INLET TYPE 11	2.00	EACH		\$	
2360	01614		CONC MED BARR BOX INLET TY 14A2	1.00	EACH		\$	
2370	01615		CONC MED BARR BOX INLET TY 14B2	13.00	EACH		\$	
2380	01616		CONC MED BARR BOX INLET TY 14B1	2.00	EACH		\$	
2390	01650		JUNCTION BOX	1.00	EACH		\$	
2400	08100		CONCRETE-CLASS A	2.67	CUYD		\$	
2410	22572NN		METAL END SECTION TY 3-24 IN-EQUIV	1.00	EACH		\$	
2420	24026EC		PIPE CULVERT HEADWALL-54 IN	2.00	EACH		\$	

Section: 0004 - BRIDGE-27181

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2430	02200		ROADWAY EXCAVATION	95.00	CUYD		\$	

PROPOSAL BID ITEMS

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Report Date 12/9/14

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2440	02223		GRANULAR EMBANKMENT	691.00	CUYD		\$	
2450	02231		STRUCTURE GRANULAR BACKFILL	759.00	CUYD		\$	
2460	02998		MASONRY COATING	2,617.00	SQYD		\$	
2470	03299		ARMORED EDGE FOR CONCRETE	208.00	LF		\$	
2480	08001		STRUCTURE EXCAVATION-COMMON	359.00	CUYD		\$	
2490	08002		STRUCTURE EXCAV-SOLID ROCK	58.00	CUYD		\$	
2500	08018		RETAINING WALL	7,084.00	SQFT		\$	
2510	08033		TEST PILES	64.00	LF		\$	
2520	08052		PILES-STEEL HP14X117	807.00	LF		\$	
2530	08095		PILE POINTS-14 IN	28.00	EACH		\$	
2540	08100		CONCRETE-CLASS A	333.00	CUYD		\$	
2550	08104		CONCRETE-CLASS AA	1,113.00	CUYD		\$	
2560	08150		STEEL REINFORCEMENT	54,595.00	LB		\$	
2570	08151		STEEL REINFORCEMENT-EPOXY COATED	332,750.00	LB		\$	
2580	23026ED		ARCHITECTURAL TREATMENT	176.00	SQYD		\$	
2590	23538EC		PEDESTRIAN RAIL	251.00	LF		\$	
2600	24582EN		PRECAST PC I BEAM-HN 7249	2,480.00	LF		\$	

Section: 0005 - BRIDGE-27180

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2610	02998		MASONRY COATING	1,826.00	SQYD		\$	
2620	08001		STRUCTURE EXCAVATION-COMMON	803.00	CUYD		\$	
2630	08002		STRUCTURE EXCAV-SOLID ROCK	101.00	CUYD		\$	
2640	08100		CONCRETE-CLASS A	515.00	CUYD		\$	
2650	08104		CONCRETE-CLASS AA	2,502.00	CUYD		\$	
2660	08150		STEEL REINFORCEMENT	75,313.00	LB		\$	
2670	08151		STEEL REINFORCEMENT-EPOXY COATED	490,732.00	LB		\$	
2680	23026ED		ARCHITECTURAL TREATMENT AESTHETIC TREATMENT	282.00	SQYD		\$	

Section: 0006 - BRIDGE-27179

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2690	02223		GRANULAR EMBANKMENT	48.00	CUYD		\$	
2700	02403		REMOVE CONCRETE MASONRY	17.00	CUYD		\$	
2710	08001		STRUCTURE EXCAVATION-COMMON	95.00	CUYD		\$	
2720	08100		CONCRETE-CLASS A	46.00	CUYD		\$	
2730	08150		STEEL REINFORCEMENT	4,262.00	LB		\$	

Section: 0007 - BRIDGE-27178

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2740	02223		GRANULAR EMBANKMENT	21.00	CUYD		\$	
2750	02403		REMOVE CONCRETE MASONRY	38.00	CUYD		\$	
2760	08001		STRUCTURE EXCAVATION-COMMON	110.00	CUYD		\$	
2770	08100		CONCRETE-CLASS A	99.00	CUYD		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2780	08150		STEEL REINFORCEMENT	12,721.00	LB		\$	

Section: 0008 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2790	04904		BARRIER MOUNTING BRACKET	7.00	EACH		\$	
2800	06400		GMSS GALV STEEL TYPE A	10,911.00	LB		\$	
2810	06401		FLEXIBLE DELINEATOR POST-M/W	267.00	EACH		\$	
2820	06404		FLEXIBLE DELINEATOR POST-M/Y	111.00	EACH		\$	
2830	06405		SBM ALUMINUM PANEL SIGNS	5,039.00	SQFT		\$	
2840	06406		SBM ALUM SHEET SIGNS .080 IN	742.00	SQFT		\$	
2850	06407		SBM ALUM SHEET SIGNS .125 IN	1,044.00	SQFT		\$	
2860	06410		STEEL POST TYPE 1	3,350.00	LF		\$	
2870	06412		STEEL POST MILE MARKERS	2.00	EACH		\$	
2880	06422		OSS ALUMINUM 60 FT TRUSS	1.00	EACH		\$	
2890	06424		OSS ALUMINUM 65 FT TRUSS	1.00	EACH		\$	
2900	06426		OSS ALUMINUM 70 FT TRUSS	1.00	EACH		\$	
2910	06441		GMSS GALV STEEL TYPE C	16,493.00	LB		\$	
2920	06448		SIGN BRIDGE ATTACHMENT BRACKET	2.00	EACH		\$	
2930	06451		REMOVE SIGN SUPPORT BEAM	10.00	EACH		\$	
2940	06490		CLASS A CONCRETE FOR SIGNS	165.00	CUYD		\$	
2950	06491		STEEL REINFORCEMENT FOR SIGNS	9,793.00	LB		\$	
2960	20418ED		REMOVE & RELOCATE SIGNS	5.00	EACH		\$	
2970	20419ND		ROADWAY CROSS SECTION	26.00	EACH		\$	
2980	20912ND		BARRIER WALL POST	7.00	EACH		\$	
2990	21373ND		REMOVE SIGN	5.00	EACH		\$	
3000	21596ND		GMSS TYPE D	10.00	EACH		\$	

Section: 0009 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3010	04793		CONDUIT-1 1/4 IN	1,170.00	LF		\$	
3020	04795		CONDUIT-2 IN	655.00	LF		\$	
3030	04811		ELECTRICAL JUNCTION BOX TYPE B	19.00	EACH		\$	
3040	04820		TRENCHING AND BACKFILLING	1,915.00	LF		\$	
3050	04830		LOOP WIRE	4,140.00	LF		\$	
3060	04844		CABLE-NO. 14/5C	3,975.00	LF		\$	
3070	04850		CABLE-NO. 14/1 PAIR	9,550.00	LF		\$	
3080	04885		MESSENGER-10800 LB	1,525.00	LF		\$	
3090	04895		LOOP SAW SLOT AND FILL	2,485.00	LF		\$	
3100	04931		INSTALL CONTROLLER TYPE 170	3.00	EACH		\$	
3110	04932		INSTALL STEEL STRAIN POLE	12.00	EACH		\$	
3120	20093NS835		INSTALL PEDESTRIAN HEAD-LED	2.00	EACH		\$	
3130	20188NS835		INSTALL LED SIGNAL-3 SECTION	23.00	EACH		\$	
3140	20266ES835		INSTALL LED SIGNAL- 4 SECTION	2.00	EACH		\$	
3150	21743NN		INSTALL PEDESTRIAN DETECTOR	2.00	EACH		\$	
3160	23157EN		TRAFFIC SIGNAL POLE BASE	63.00	CUYD		\$	
3170	23982EC		INSTALL ANTENNA	3.00	EACH		\$	

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Section: 0010 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0180	04701		POLE 40 FT MTG HT	22.00	EACH		\$	
0190	04710		POLE 80 FT MTG HT HIGH MAST	3.00	EACH		\$	
0200	04712		POLE 100 FT MTG HT HIGH MAST	16.00	EACH		\$	
0210	04723		BRACKET 10 FT	22.00	EACH		\$	
0220	04740		POLE BASE	48.00	EACH		\$	
0230	04741		POLE BASE IN MEDIAN WALL	13.00	EACH		\$	
0240	04750		TRANSFORMER BASE	48.00	EACH		\$	
0250	04761		LIGHTING CONTROL EQUIPMENT	5.00	EACH		\$	
0260	04780		FUSED CONNECTOR KIT	122.00	EACH		\$	
0270	04791		CONDUIT-3/4 IN	360.00	LF		\$	
0280	04793		CONDUIT-1 1/4 IN	5,875.00	LF		\$	
0290	04795		CONDUIT-2 IN	4,150.00	LF		\$	
0300	04797		CONDUIT-3 IN	1,755.00	LF		\$	
0310	04800		MARKER	29.00	EACH		\$	
0320	04820		TRENCHING AND BACKFILLING	20,350.00	LF		\$	
0330	04832		WIRE-NO. 12	8,235.00	LF		\$	
0340	04833		WIRE-NO. 8	11,950.00	LF		\$	
0350	04834		WIRE-NO. 6	4,520.00	LF		\$	
0360	04835		WIRE-NO. 4	13,825.00	LF		\$	
0370	04860		CABLE-NO. 8/3C DUCTED	13,155.00	LF		\$	
0380	04861		CABLE-NO. 6/3C DUCTED	17,975.00	LF		\$	
0390	04940		REMOVE LIGHTING	1.00	LS		\$	
0400	04950		REMOVE SIGNAL EQUIPMENT	1.00	EACH		\$	
0410	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	6.00	EACH		\$	
0420	20392NS835		ELECTRICAL JUNCTION BOX TYPE C	18.00	EACH		\$	
0430	20410ED		MAINTAIN LIGHTING	1.00	LS		\$	
0440	21543EN		BORE AND JACK CONDUIT	760.00	LF		\$	
0450	21563NN		SPLICE BOX	3.00	EACH		\$	
0460	23161EN		POLE BASE-HIGH MAST	175.00	CUYD		\$	
0470	23778EC		WIRE-NO. 10	2,000.00	LF		\$	
0480	24589ED		LED LUMINAIRE	61.00	EACH		\$	
0490	24710EC		POLE 33 FT MTG HT W/12 IN ARM	11.00	EACH		\$	
0500	24739EC		POLE 40 FT MTG HT W/12 IN ARM	28.00	EACH		\$	
0510	24749EC		HIGH MAST LED LUMINAIRE	110.00	EACH		\$	
0520	24750EC		LED TUNNEL LUMINAIRE	66.00	EACH		\$	
0530	24752ED		LIGHTING DIMMING CONTROL	1.00	LS		\$	

Section: 0011 - INTELLIGENT TRANSPORTATION SYSTEMS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0540	03381		PVC PIPE-2 IN	1,200.00	LF		\$	
0550	04795		CONDUIT-2 IN	100.00	LF		\$	
0560	04820		TRENCHING AND BACKFILLING	1,200.00	LF		\$	
0570	04835		WIRE-NO. 4	2,500.00	LF		\$	
0580	04899		ELECTRICAL SERVICE	1.00	EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0590	06490		CLASS A CONCRETE FOR SIGNS	38.30	CUYD		\$	
0600	06491		STEEL REINFORCEMENT FOR SIGNS	2,779.00	LB		\$	
0610	20257NC		SITE PREPARATION	1.00	LS		\$	
0620	20392NS835		ELECTRICAL JUNCTION BOX TYPE C	1.00	EACH		\$	
0630	20419ND		ROADWAY CROSS SECTION	1.00	EACH		\$	
0640	21065ND		MODEL 334 ENCLOSURE	1.00	EACH		\$	
0650	21069ND		SURGE DEVICE 120 VOLT	1.00	EACH		\$	
0660	21071ND		DATA SURGE DEVICE	4.00	EACH		\$	
0670	21076ND		FIBER TERMINATION RACK	3.00	EACH		\$	
0680	21077ED		FIBER OPTIC CABLE	500.00	LF		\$	
0690	21079ND		TRANSFORMER 480/120	1.00	EACH		\$	
0700	21117ND		VARIABLE MESSAGE SIGN-DYNAMIC	1.00	EACH		\$	
0710	21458ND		FIBER TRANSCEIVER SIGN	4.00	EACH		\$	
0720	21489ND		RACK MOUNTED UPS	2.00	EACH		\$	
0730	22403NN		WEB CAMERA ASSEMBLY	1.00	EACH		\$	
0740	23150NN		COMMUNICATION CABLE	20.00	LF		\$	
0750	23161EN		POLE BASE-HIGH MAST	9.77	CUYD		\$	
0760	23941EC		VIDEO SURVEILLANCE CONTROLLER	1.00	EACH		\$	
0770	23944EC		ADVANCED GROUNDING SYSTEM	3.00	EACH		\$	
0780	24751ED		REMOVE STORE & REINSTALL TRUSS	1.00	EACH		\$	
0790	24751ED		REMOVE STORE & REINSTALL CAMERA SYSTEM	1.00	EACH		\$	
0800	24753ED		CAMERA POLE LOWERING DEVICE ITS	1.00	EACH		\$	

Section: 0012 - TRAINEES

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0810	02742		TRAINEE PAYMENT REIMBURSEMENT CEMENT MASON	1,200.00	HOURL		\$	

Section: 0013 - DEMOBILIZATION & MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0820	02568		MOBILIZATION	1.00	LS		\$	
0830	02569		DEMOBILIZATION	1.00	LS		\$	

SPECIAL NOTE FOR MECHANICALLY STABILIZED EARTH (MSE) WALLS

1. DESCRIPTION

1.01 This work includes design, fabrication of precast facing panels and other appurtenances and construction of Mechanically Stabilized Earth (MSE) walls in accordance with the Contract documents.

2. REFERENCES

2.01 All references to the Standard Specifications are to the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (a.k.a. "Standard Specifications"), current edition with current Supplemental Specifications. All references to AASHTO are to the current edition of the AASHTO LRFD Bridge Design Specifications, 5th ed, including current interims.

2.02 The requirements in the Standard Specifications or AASHTO shall be used for information not provided herein. Where there are conflicts between the Standard Specifications and AASHTO, the Standard Specifications shall govern.

3. WALL TYPES

3.01 Mechanically Stabilized Earth (MSE) Walls; only walls preauthorized by the Specifications Branch of the Division of Construction are permitted.

Approved Wall Systems:

- Reinforced Earth (Reinforced Earth and Retained Earth)
- VSL Retained Earth
- Hilfiker RSE
- Strengthened Earth Walls
- Keystone KeySystem I
- Tricon Retained Soil Wall System
- ISOGRID Retaining Wall System

Any wall system used must use inextensible reinforcement.

3.02 The wall type selected by the contractor shall be used throughout. Short Cast-In-Place sections may be provided at the ends of the MSE Wall.

3.03 Acceptance of the contractor's design calculations and construction plans does not constitute endorsement nor approval of the work submitted. The acceptance is an acknowledgment of the work performed and authorization for the contractor to proceed with the project.

4. CALCULATIONS AND PLANS

4.01 Design calculations and construction plans clearly showing conformance with the Standard Specifications, AASHTO, and contract plans shall be submitted to the Department for review. Wall designs and construction plans shall be dated, sealed, and signed by a registered professional engineer licensed to practice in Kentucky. The Division of Structural Design requires four sets of the design calculations and five sets of the construction plans for each submission and resubmission. Reduced-size prints (11"x17") are acceptable and preferred for review purposes. The Contractor shall allow 30 working days for the Department to review each submission. The thirty-day period begins when the design calculations and construction plans are received in the Division of Structural Design. Additional time required by the Department to review resubmissions shall not be cause for increasing the number of contract working days. The additional work required by the contractor to provide resubmissions shall be at no cost to the Department.

4.02 The format for the construction plans shall be in accordance with the Division of Structural Design's Guidance Manual. The first sheet shall be a title sheet. All final wall tracings, with drawing number, shall be submitted electronically as an Adobe file or physically on 3 mil or thicker 22" X 36" mylar film. The final tracings of the accepted construction plans submitted to the Division of Structural Design shall be dated, sealed, and signed on Sheet 1 by the engineer performing the work.

4.03 Shop drawings shall not be developed until after the Department has reviewed and accepted the construction plans. The wall design engineer providing the design for the wall shall submit shop drawings for the wall for review and approval. The Division of Structural Design requires nine copies of the approved shop drawings for distribution. Each sheet of two copies of the shop drawings shall be dated, sealed and signed by the wall design engineer providing the design for the wall. The wall design engineer shall approve the shop drawings and provide the Department with a statement of assurance that the shop drawings are accurate and that they satisfy the project requirements.

4.04 All submissions shall be through the Contractor to the Project Resident Engineer. The Project Resident Engineer shall forward the plans, calculations, and shop drawings to the Division of Structural Design. Contact the Division of Structural Design before beginning any work on the wall designs and construction plans.

5. DESIGN

5.01 The wall design shall be in accordance with AASHTO. Exceptions to these requirements are listed in this note or shown elsewhere in the contract plans.

5.02 Earth reinforcement elements in MSE Walls shall be designed to have a corrosion resistance/durability to ensure a minimum design life of 100 years.

5.03 Construction and traffic live loads shall be converted into an equivalent live load surcharge in accordance with Tables 3.11.6.4-1 and 3.11.6.4-2 in AASHTO.

5.04 The MSE Wall volume limits and reinforcement lengths shown on the contract plans are the minimums required by AASHTO and/or the minimums required to satisfy desired external stability. The MSE Wall supplier's design may require increased reinforcement lengths and MSE volume to satisfy their design. The material required for the MSE Wall volume shall extend one foot, minimum, beyond the ends of the MSE reinforcement.

5.05 The footing or leveling pad may be leveled and stepped in the MSE Wall supplier's design, however, the top of the leveling pad or footing must maintain a minimum of two feet below the finish grade in front of the wall or as directed by the Engineer. All elevations and locations of steps must be shown in the shop plans and are subject to review and approval by the Engineer.

5.06 The shop plans must show the limits and depths of granular foundation replacement as required in the contract plans Geotechnical Notes for MSE Walls to fit the MSE Wall Supplier's design.

5.07 The plans do not show a coping on the wall because of the number of wall types permitted to be used. The wall manufacturer, however, is required to design a coping to fit their wall type and shall show the coping on the shop plans. The coping submitted by the wall manufacturer is subject to review and acceptance by the Engineer. The top of the coping/retaining wall must maintain 6 inches above the grade elevations as shown in the plans.

6. GEOTECHNICAL DESIGN PARAMETERS

6.01 Use the Geotechnical Design Parameters shown in the project Geotechnical Notes for MSE Walls in the road and/or bridge plans as applicable.

6.02 Lateral earth pressure coefficients or equivalent fluid pressures may be determined by Coulomb or Rankine theories.

6.03 In no case shall the geotechnical strength parameters used for design exceed the values allowed by the AASHTO Specifications.

7. GENERAL

7.01 Comply with all dimensions shown on the contract plans and accommodate all other project features as shown on the contract plans. Construct the panel wall so that the resulting front face of the wall is vertical and in conformance with the plan layout. Survey control is the front face of the wall at its intersection with the leveling pad.

7.02 Section 107.05 of the Standard Specifications shall apply to the use of patented devices, materials, wall systems, and processes. Concrete for precast elements (facing panels, copings, etc.) shall attain a minimum 28-day compressive strength of 4000 psi unless otherwise specified by the wall supplier. The concrete shall be air entrained containing 5.5 +/- 1.5 percent entrained air at the time the concrete is placed in the forms. A proposed mix design shall be submitted.

7.03 All embedded items and lifting devices shall be set in place in the precast elements prior to concrete placement. Conform to the dimensions and tolerances shown on the approved contract or shop plans or as approved by the Engineer.

7.04 Acceptability of completed precast elements will be determined on the basis of the entrained air in the concrete mix, compression tests, and visual inspection by the Engineer. The Contractor or his supplier shall furnish facilities and a Certified Concrete Technician. The Certified Concrete Technician shall perform all necessary sampling and testing in an expeditious and satisfactory manner.

7.05 Forms for the precast facing elements shall be constructed of steel in a manner that will assure the production of uniform elements. Forms shall remain in place until such time that they can be removed without damage to the finished elements.

7.06 Precast facing panels shall be cast front face down. Each unit will be cast without interruption. Consolidation shall be with a vibrator supplemented by such hand tamping as may be necessary to force the concrete into the corners of the forms and to prevent formation of honeycombed concrete or cleavage planes. Clear form oil of the same manufacture shall be used throughout the casting operation.

7.07 The rear panel face shall be a face floated surface finish and screeded to eliminate open pockets of aggregate and surface distortions in excess of one quarter inch.

7.08 All materials used in the manufacture of the precast elements, including cement, aggregates, water, admixtures, concrete mixes, steel reinforcement, and structural steel with galvanizing will be sampled and tested according to the Department's standard procedures for those items. Fabrication shall not begin until these materials have been approved. At least 1000 psi compressive strength shall be attained before precast face panels may be handled. Other precast elements, such as copings, shall not be handled until they attain the compressive strength required by the wall supplier.

7.09 Clearly scribe, or paint with waterproof paint, the date of manufacture, lot number and piece-mark on the rear face of each precast facing panel. Precast elements shall be handled, stored, and shipped in such a manner as to eliminate the danger of chipping, cracking, fracturing, and/or excessive bending.

7.10 The supplier shall examine all precast elements before shipment. All excessive voids, honeycombed areas, and other surface defects on both sides of precast elements shall be properly patched as required to conform to the balance of the work with respect to appearance, strength, and durability. Precast elements shall not be shipped before attaining the required final concrete strength.

7.11 Fabrication of precast elements is subject to random inspection by the Department, an approved independent laboratory, or the precast fabricator as approved by the Engineer. The Engineer will normally witness tests performed by the precast fabricator. Results of all tests performed by the precast fabricator shall be furnished to the Engineer.

7.12 Precast elements damaged during handling, transporting, storage, erection, or backfilling or any element that cannot be satisfactorily placed in the wall shall be repaired or rejected and replaced as directed by the Engineer. Precast elements shall be installed in accordance with the approved construction plans. Facing panels shall be placed in successive horizontal lifts according to the sequence shown on the approved construction plans. The facing elements shall be maintained in such position while MSE volume placed behind the facing elements so that the finished wall is vertical.

7.13 Placement of the MSE Wall volume and earth reinforcement shall closely follow the erection of each lift of panels. See the Geotechnical Notes for additional restrictions for placement of the MSE volume. The maximum lift thickness shall not exceed ten inches. Level and compact the backfill before placing and attaching the MSE reinforcement to the facing elements. The lowest layer of MSE reinforcement shall be installed a minimum of twelve inches below the finish grade in front of the wall. Heavy equipment shall not come within three feet of the back face of MSE facing elements. Compaction within three feet of the back face of MSE facing elements shall be achieved by no less than three passes of a lightweight mechanical tamper, roller, or vibratory system.

7.14 Fabric Geotextile Type IV is required to be used as a separator between all soil-granular interfaces encountered during granular foundation replacement, MSE Volume construction, and granular backfill replacement as indicated in the geotechnical notes in the plans or as directed by the Engineer. Fabric Geotextile Type IV required around the MSE Volume shall be incidental to the unit price bid per square foot of Retaining Wall. All Fabric Geotextile Type IV required during the granular foundation replacement and granular backfill replacement shall be incidental to the unit price bid for Granular Embankment. The contractor shall have the option, at no additional cost to the Department, of constructing that portion of the embankment above the MSE Volume with the same material as used in the MSE Volume and eliminating the Fabric Geotextile Type IV above the MSE Volume.

7.15 Tie strip earth reinforcement shall be shop fabricated of hot rolled steel conforming to the minimum requirements of ASTM A570, Grade 36 or Grade 50, or equivalent.

7.16 Steel mesh earth reinforcement shall meet the requirements of ASTM A82 for cold drawn wire. The wires shall be welded into the finished mesh according to ASTM A185. Wire size and mesh configuration shall be as shown on the shop plans.

7.17 Ribbed earth reinforcement shall be hot rolled from bars to the required shape and dimensions. Physical and mechanical properties shall conform to AASHTO M223, Grade 65.

7.18 Ladder reinforcing strips shall be fabricated from cold drawn steel wire conforming to ASTM A82. The wires shall be welded into the finished mesh according to ASTM A185.

7.19 All earth reinforcement shall be cut to length and tolerances shown on the construction plans or approved shop drawings. Anchors and connection pins shall conform to ASTM A82. Welding shall be according to ASTM A185.

7.20 Clevis connectors, loops, and connector bars used with steel mesh reinforcement shall be fabricated from cold drawn steel conforming to ASTM A82. Welding shall be in accordance to ASTM A185.

7.21 Fasteners used with ribbed or ladder reinforcing strips shall consist of hexagonal cap screw bolts and nuts conforming to AASHTO M-164 or equivalent.

7.22 U shaped reinforcing connectors used with ribbed or ladder reinforcing strips as yokes to connect the strips to modular blocks shall be shop fabricated from cold drawn steel wire conforming to ASTM A82.

7.23 Pins used to align face panels during construction shall be 5/8 inch diameter, mild steel, round, smooth bars. All steel components shall be hot dip galvanized after fabrication to conform to the minimum requirements of AASHTO M111. Included are tie strip reinforcement, ribbed earth reinforcement, ladder earth reinforcement anchors, connection pins, steel mesh, clevis connectors, loops, connector bars, fasteners, U shaped connectors, and alignment pins. Holes for bolts shall be punched in the locations shown before galvanizing.

7.24 Bearing pads and joint filler for MSE Walls shall be as recommended by the wall supplier. Vertical slip joints shall be provided at 100-foot intervals +/- three feet unless otherwise shown on the plans. Slip joints between wall sections shall be covered by a geotextile fabric. The fabric shall be a non-woven needle punch polyester or woven monofilament polypropylene as recommended by the wall supplier. All joints between MSE Wall panels shall be covered on the back side with Type I geotextile fabric. The minimum width and lap is:

Vertical Joints 18"
Horizontal Joints 12"
All Laps 4"

The adhesive used to hold geotextile fabric at the rear of the MSE Wall units shall be as recommended by the wall supplier.

7.25 Wall elements including coping and face panels exposed in the final structure shall have a surface finish as specified in Section 601.03.18 of the Standard Specifications.

7.26 Supplier's Representative:

- A representative of the wall system supplier is required to be on site a minimum of two full days within the first week of MSE reinforced backfill construction to provide training and assistance to the contractor's personnel and project inspectors.
- A one-day minimum follow-up visit by the supplier's representative will be required within two weeks of the initial visit, or as approved by the Engineer, in order to monitor progress.
- After each on-site visit, the Contractor is required to submit a letter to the Resident Engineer written by the manufacturer's representative documenting the observations of each visit with documentation that the licensed professional engineer responsible for the design has reviewed the letter.

7.27 Reinforced Backfill:

Use reinforced backfill in the MSE Volume consisting of quarry-run limestone conforming to Section 805.12 of the Standard Specifications.

8. METHOD OF MEASUREMENT AND BASIS OF PAYMENT

8.01 The design plan quantity of Roadway Excavation required for wall construction, foundation replacement and backfill replacement was calculated using available geotech information and the average end area method from roadway cross sections. The final quantity of Roadway Excavation shall be the design plan quantity increased or decreased by authorized changes according to Section 204 of the Standard Specifications.

8.02 The design plan quantity of Granular Embankment for foundation replacement beneath the MSE Wall and for backfill replacement was calculated using available geotechnical information and the average end area method from roadway cross sections. The final quantity of Granular Embankment shall be the design plan quantity increased or decreased by authorized changes according to Section 204.04.02 of the Standard Specifications.

8.03 The quantity of MSE Wall will be the gross area in square feet, not including footings or leveling pads for precast walls, lying in the vertical plane of the outside front face of the structure as shown on the plans or as directed by the Engineer. No field measurement will be made. The final quantity will be the design plan quantity increased or decreased by authorized changes.

8.04 The ground line elevations and depth of foundation replacement shown are interpolated from the available geotechnical information. When required, the plan depth of foundation replacement shall be measured from the bottom of wall as constructed.

Changing the limits or quantities of the retaining wall or structure excavation, except as directed by the Engineer shall not be cause for changing the plan pay quantities. Lowering the bottom of wall elevations to accommodate the wall design or configuration of pre-fabricated concrete units shall not be cause for changing the plan pay quantities.

The MSE Wall supplier's design may require additional excavation, embankment, and MSE Wall materials to satisfy their design. The design MSE earth reinforcement lengths shall be equal to or greater than the length shown on the plans or as required by the AASHTO Specifications for the height of the wall plus live load surcharge. The lengths of the MSE Reinforcement shall be constant from the bottom to the top of the section. Extension of the plan limits to accommodate the wall design, configuration of pre-fabricated concrete units, or

lengths of earth reinforcement for MSE Walls shall not be cause for changing the plan pay quantities. Additional quantities of excavation, MSE Reinforcement, MSE volume, excavation for foundation replacement, granular embankment, and labor necessary to satisfy the MSE Wall supplier's design shall be incidental to the unit price bid for the Retaining Wall.

The MSE volume, using reinforced backfill, that extends twelve inches, minimum, beyond the ends of the reinforced volume for MSE Walls shall be incidental to the unit price bid per square foot of Retaining Wall.

All materials, equipment, and labor necessary to provide and install the geotextile fabric shall be incidental to the unit price bid per square foot of Retaining Wall or the unit price bid for Granular Embankment as applicable.

All work associated with providing the design, details and construction for the coping shall be incidental to the unit price bid per square foot of Retaining Wall.

All materials, equipment, and labor necessary to provide the specified surface finish for the wall system shall be incidental to the unit price bid per square foot of Retaining Wall.

Sheeting, shoring, temporary walls or other earth retention systems necessary to stabilize the excavation for the wall during construction shall be the responsibility of the Contractor. All designs, labor, materials, etc. required to complete this work shall be incidental to the unit price bid per square foot of Retaining Wall.

<u>PAY ITEM</u>	<u>UNIT</u>
Retaining Wall	Square Foot
Granular Embankment	Cubic Yard
Roadway Excavation	Cubic Yard