

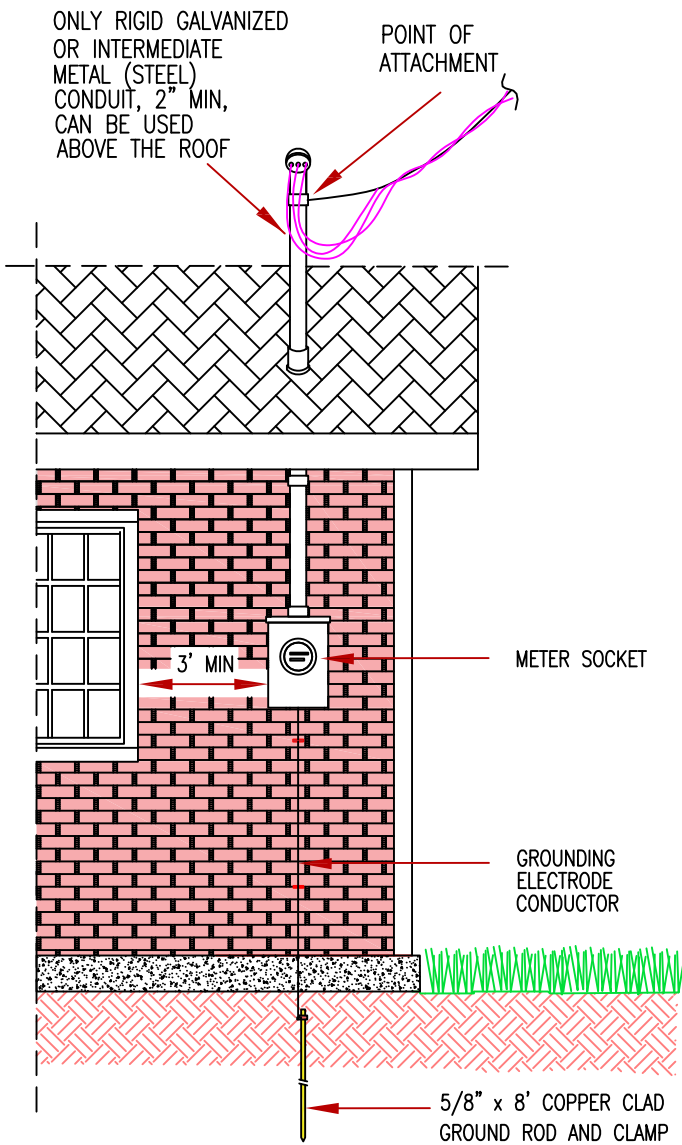
COMMERCIAL

SERVICE ENTRANCE DRAWINGS

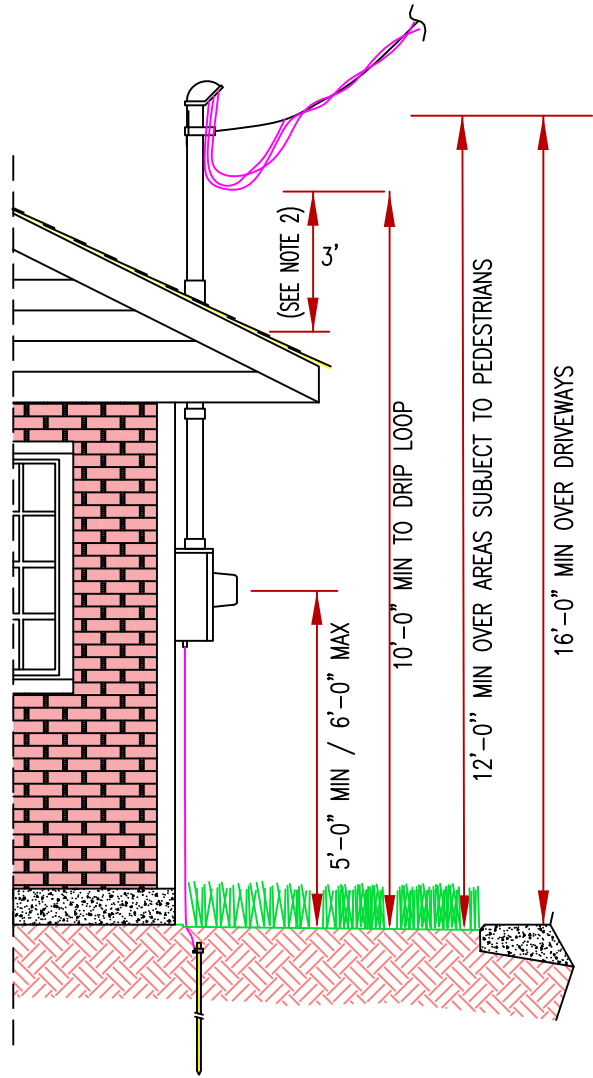




BUILDING



FRONT VIEW



SIDE VIEW


Notes:

1. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
2. Clearance may be reduced to 18 inches if not more than 6 feet of conductors pass over the roof and the service mast is located within 4 feet of the edge of the roof, measured horizontally.
3. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.

* Conductor Sizes for General Purpose Service Equipment

Service Rating (Amperes)	Typical Conduit Size (Inches)	Ungrounded Conductor Size (Minimum)		Typical Grounded (Neutral) Conductor Size		Grounding Electrode and Bonding Conductor Size
		Copper	Aluminum	Copper	Aluminum	
100	1.25	2 AWG	1/0 AWG	4 AWG	2 AWG	6 AWG
200	2.00	3/0 AWG	250 kcmil	1/0 AWG	3/0 AWG	4 AWG
400	3.00	500 kcmil	750 kcmil	350 kcmil	500 kcmil	1/0 AWG

This table is only a guide for some minimum conductor requirements and is not intended to be a comprehensive list of acceptable conductor sizes. The NEC should be reviewed to ensure compliance with all applicable requirements, including but not limited to conductor size, material, and insulation type.

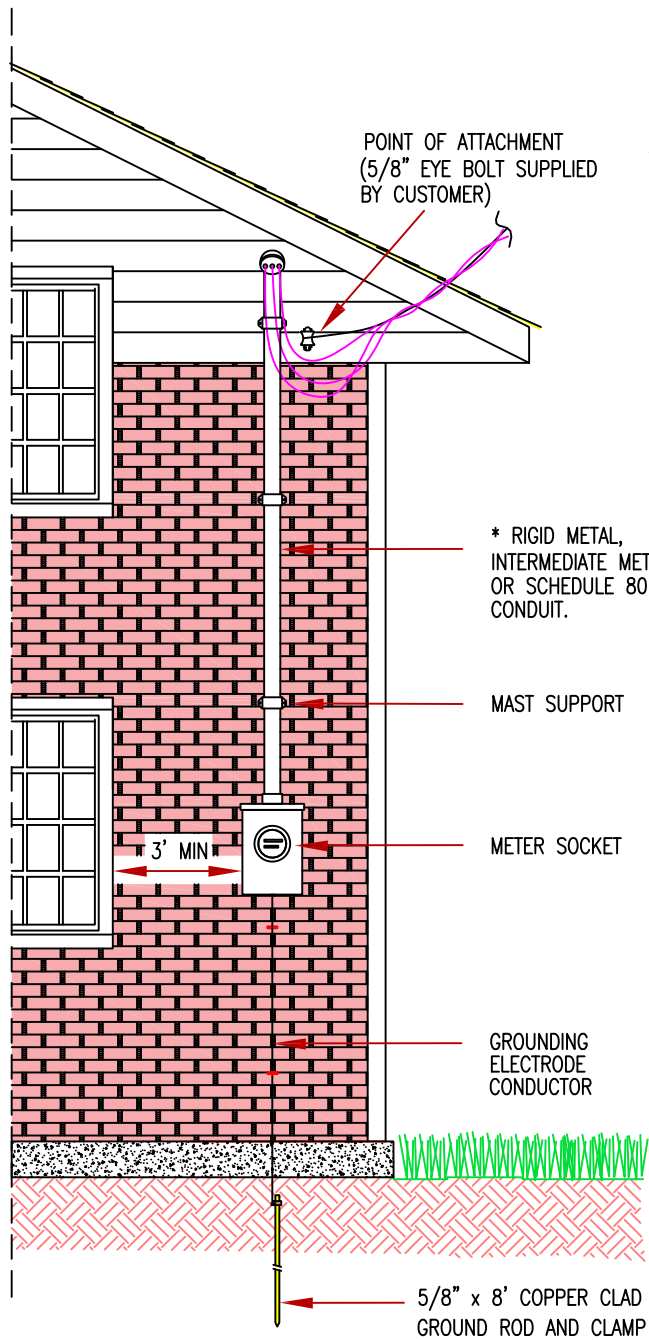


SOUTHERN PINE ELECTRIC

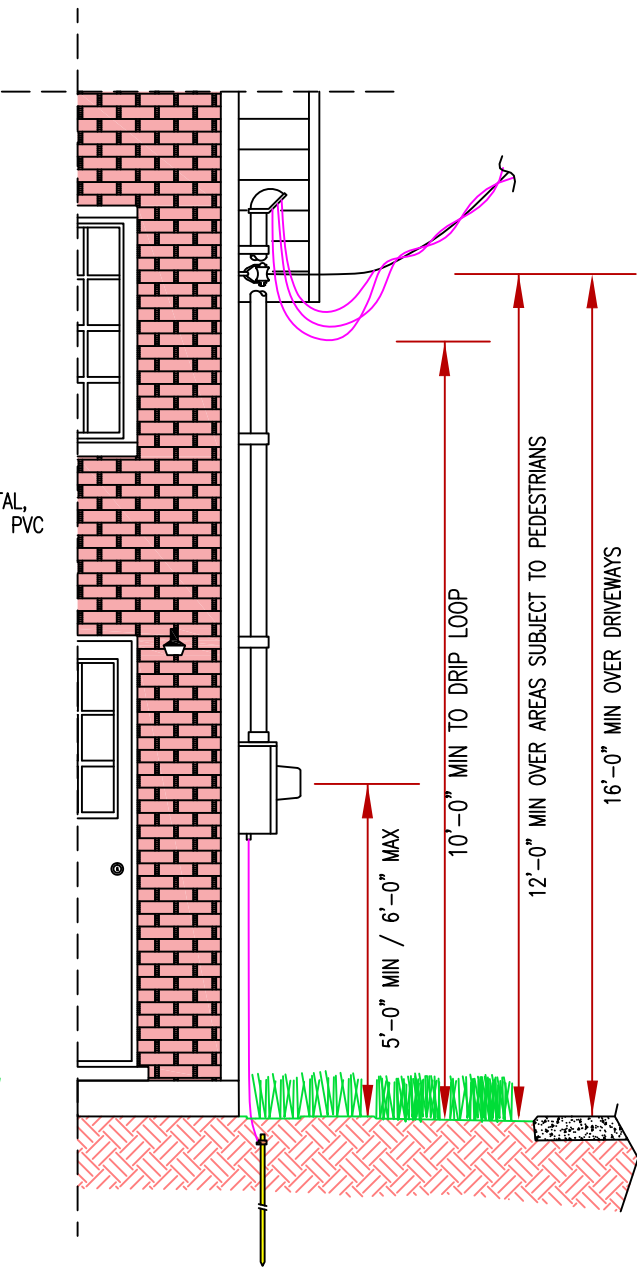
OVERHEAD SERVICE TO STRUCTURE # 2
FOR 120/240 VOLT, 3-WIRE, ABOVE ROOF

DRAWN CLJ	CHECK JLJ	DATE JAN. 2016	FILE NAME OH TO STRUCTURE2
SCALE NOT TO SCALE		SHEET 1 OF 1	ASSEMBLY N/A

DATE	REVISION
08/18/16	CHANGED COMPANY LOGO



FRONT VIEW



SIDE VIEW

Notes:

1. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
2. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.

* Conductor Sizes for General Purpose Service Equipment

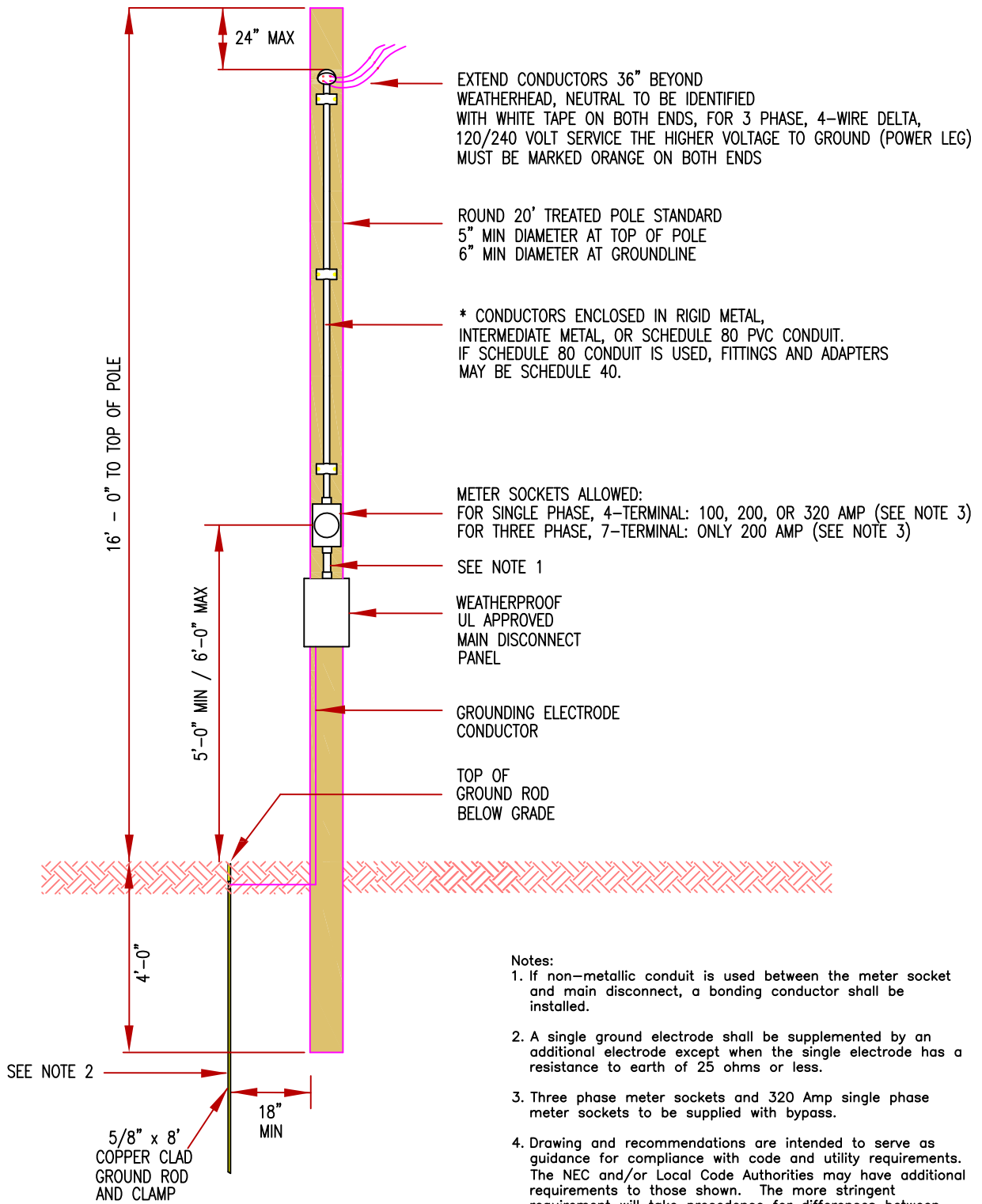
Service Rating (Amperes)	Typical Conduit Size (Inches)	Ungrounded Conductor Size (Minimum)		Typical Grounded (Neutral) Conductor Size		Grounding Electrode and Bonding Conductor Size
		Copper	Aluminum	Copper	Aluminum	
100	1.25	2 AWG	1/0 AWG	4 AWG	2 AWG	6 AWG
200	2.00	3/0 AWG	250 kcmil	1/0 AWG	3/0 AWG	4 AWG
400	3.00	500 kcmil	750 kcmil	350 kcmil	500 kcmil	1/0 AWG

This table is only a guide for some minimum conductor requirements and is not intended to be a comprehensive list of acceptable conductor sizes. The NEC should be reviewed to ensure compliance with all applicable requirements, including but not limited to conductor size, material, and insulation type.



OVERHEAD SERVICE TO STRUCTURE # 1
FOR 120/240 VOLTS, 3-WIRE, UNDER EAVE

DATE	REVISION	DRAWN	CHECK	DATE	FILE NAME
08/18/16	CHANGED COMPANY LOGO	CLJ	JLJ	JAN. 2016	OH TO STRUCTURE1
		SCALE	SHEET	ASSEMBLY	
		NOT TO SCALE	1 OF 1	N/A	




- Notes:
1. If non-metallic conduit is used between the meter socket and main disconnect, a bonding conductor shall be installed.
 2. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
 3. Three phase meter sockets and 320 Amp single phase meter sockets to be supplied with bypass.
 4. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.

* Conductor Sizes for General Purpose Service Equipment

Service Rating (Amperes)	Typical Conduit Size (Inches)	Ungrounded Conductor Size (Minimum)		Typical Grounded (Neutral) Conductor Size		Grounding Electrode and Bonding Conductor Size
		Copper	Aluminum	Copper	Aluminum	
100	1.50	2 AWG	1/0 AWG	4 AWG	2 AWG	6 AWG
200	2.50	3/0 AWG	250 kcmil	1/0 AWG	3/0 AWG	4 AWG
400	3.00	500 kcmil	750 kcmil	350 kcmil	500 kcmil	1/0 AWG

This table is only a guide for some minimum conductor requirements and is not intended to be a comprehensive list of acceptable conductor sizes. The NEC should be reviewed to ensure compliance with all applicable requirements, including but not limited to conductor size, material, and insulation type.



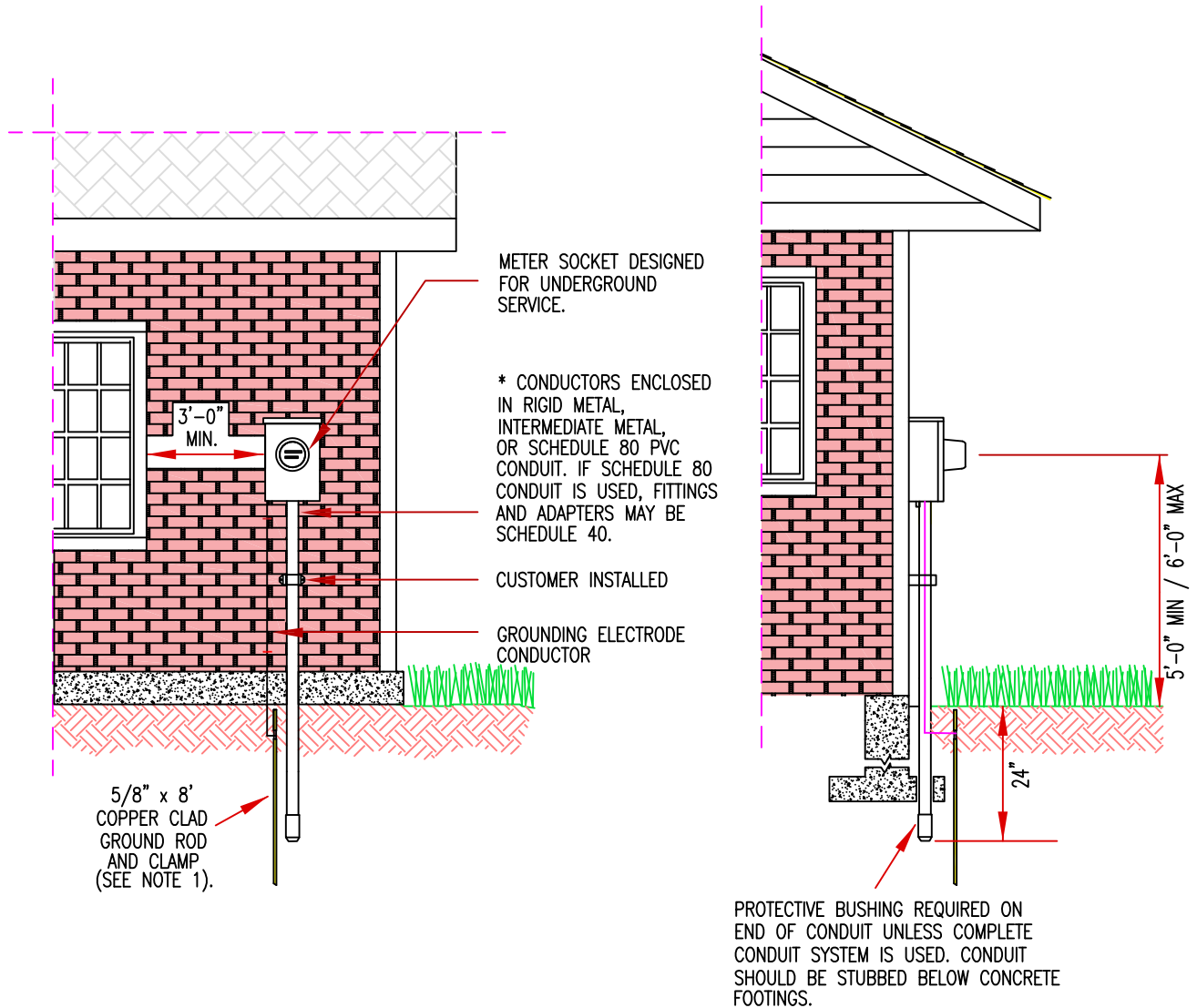
SOUTHERN PINE ELECTRIC

OVERHEAD SERVICE TO METER POLE
FOR GENERAL PURPOSE SERVICE EQUIPMENT

DRAWN CLJ	CHECK JLJ	DATE JAN. 2016	FILE NAME OH TO GENERAL PURPOSE
DATE 08/18/16	REVISION CHANGED COMPANY LOGO	SCALE NOT TO SCALE	SHEET 1 OF 1
			ASSEMBLY N/A

FRONT VIEW

SIDE VIEW



Notes:

1. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
2. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.



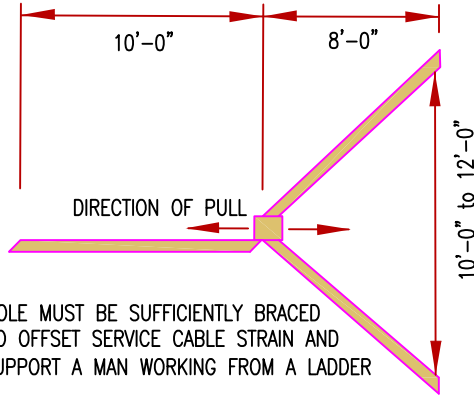
UNDERGROUND SERVICE TO STRUCTURE

DATE	REVISION	DRAWN	CHECK	DATE	FILE NAME
08/18/16	CHANGED COMPANY LOGO	CLJ	JLJ	JAN. 2016	UG TO STRUCT.
		SCALE		SHEET	ASSEMBLY
		NOT TO SCALE		1 OF 1	N/A

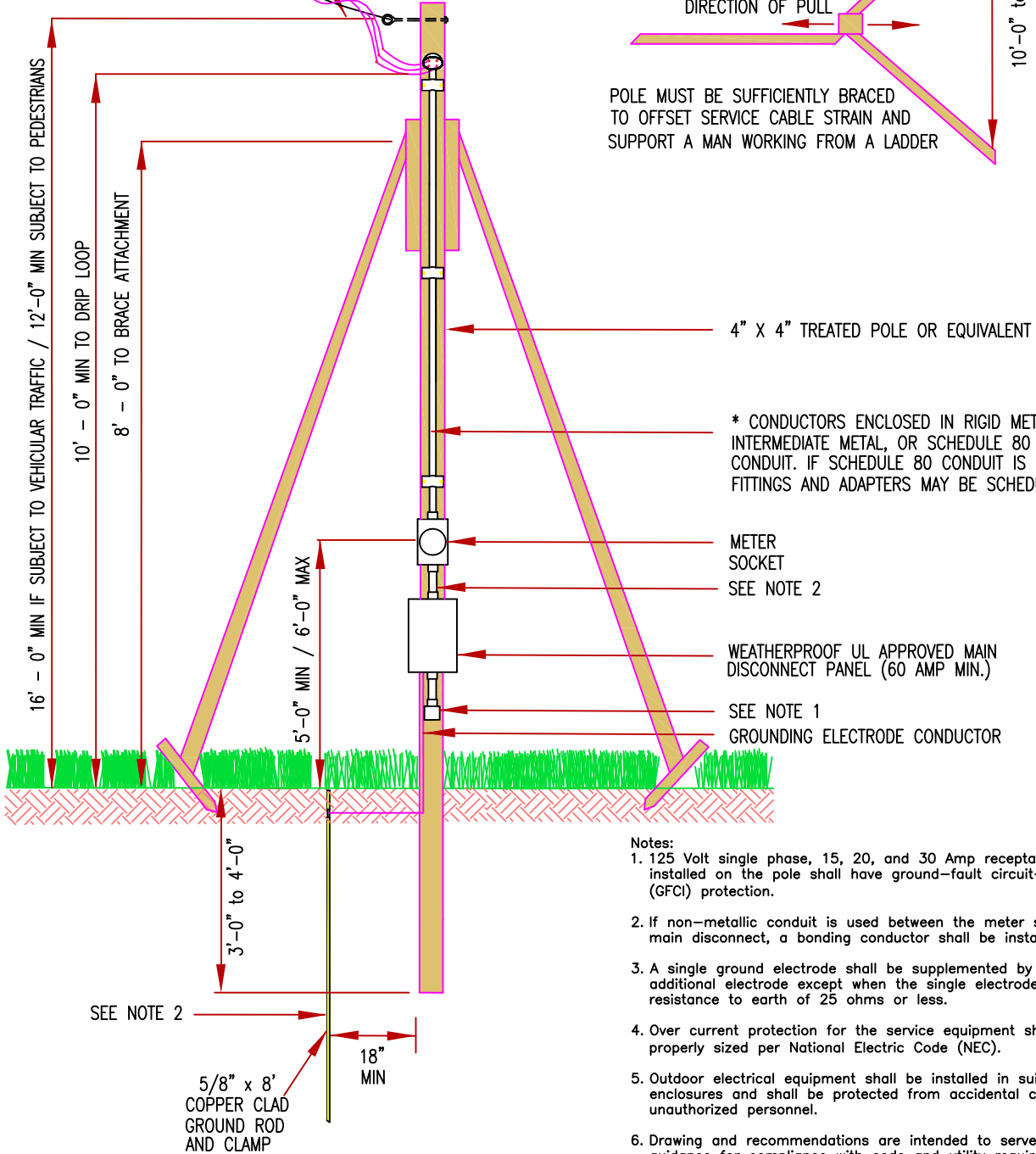
The background features a light gray, stylized tree with a thick trunk and several horizontal branches. Two large, pink lightning bolts are positioned diagonally, one in the upper right and one in the lower left, overlapping the tree's branches. The word "OTHER" is centered in a bold, dark green, sans-serif font.

OTHER

EXTEND CONDUCTORS 36" BEYOND WEATHERHEAD, NEUTRAL TO BE IDENTIFIED WITH WHITE TAPE ON BOTH ENDS



POLE MUST BE SUFFICIENTLY BRACED TO OFFSET SERVICE CABLE STRAIN AND SUPPORT A MAN WORKING FROM A LADDER



4" X 4" TREATED POLE OR EQUIVALENT

* CONDUCTORS ENCLOSED IN RIGID METAL, INTERMEDIATE METAL, OR SCHEDULE 80 PVC CONDUIT. IF SCHEDULE 80 CONDUIT IS USED, FITTINGS AND ADAPTERS MAY BE SCHEDULE 40.

METER SOCKET
SEE NOTE 2

WEATHERPROOF UL APPROVED MAIN DISCONNECT PANEL (60 AMP MIN.)

SEE NOTE 1
GROUNDING ELECTRODE CONDUCTOR

Notes:

1. 125 Volt single phase, 15, 20, and 30 Amp receptacle outlets installed on the pole shall have ground-fault circuit-interrupter (GFCI) protection.
2. If non-metallic conduit is used between the meter socket and main disconnect, a bonding conductor shall be installed.
3. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
4. Over current protection for the service equipment shall be properly sized per National Electric Code (NEC).
5. Outdoor electrical equipment shall be installed in suitable enclosures and shall be protected from accidental contact by unauthorized personnel.
6. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.

SEE NOTE 2

5/8" x 8' COPPER CLAD GROUND ROD AND CLAMP

18" MIN

* Conductor Sizes for 120/240 Volt, Temporary Construction Service Equipment

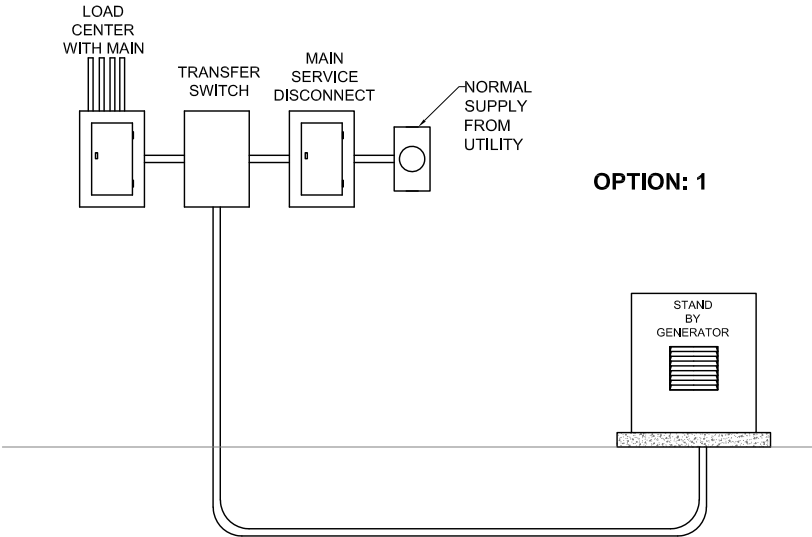
Service Rating (Amperes)	Ungrounded Conductor Size (Minimum)		Typical Grounded (Neutral) Conductor Size		Grounding Electrode and Bonding Conductor Size
	Copper	Aluminum	Copper	Aluminum	
60	6 AWG	4 AWG	8 AWG	6 AWG	6 AWG
100	2 AWG	1/0 AWG	4 AWG	2 AWG	6 AWG
200	3/0 AWG	250 kcmil	1/0 AWG	3/0 AWG	4 AWG

This table is only a guide for some minimum conductor requirements and is not intended to be a comprehensive list of acceptable conductor sizes. The NEC should be reviewed to ensure compliance with all applicable requirements, including but not limited to conductor size, material, and insulation type.

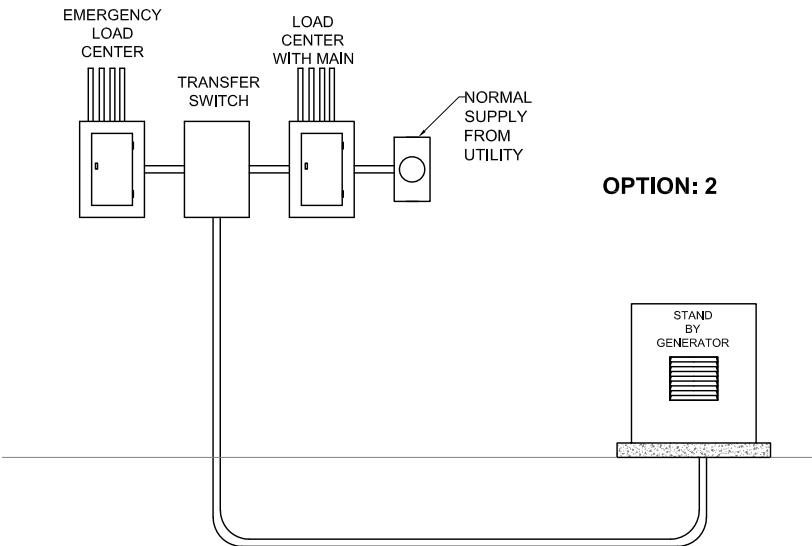


TEMPORARY CONSTRUCTION METER POLE
FOR 120/240 VOLT, 3-WIRE

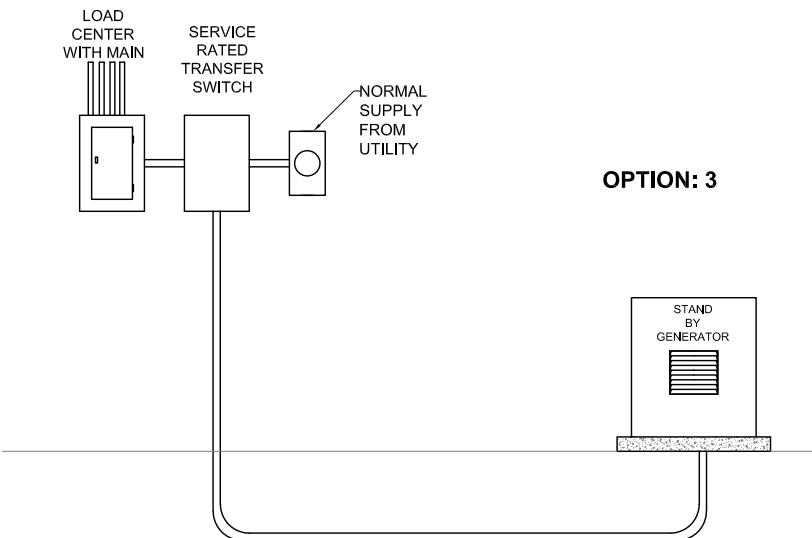
DATE	REVISION	DRAWN	CHECK	DATE	FILE NAME
08/18/16	CHANGED COMPANY LOGO	CLJ	JLJ	JAN. 2016	TEMPORARY CONSTRUCTION
		SCALE		SHEET	ASSEMBLY
		NOT TO SCALE		1 OF 1	N/A



OPTION: 1




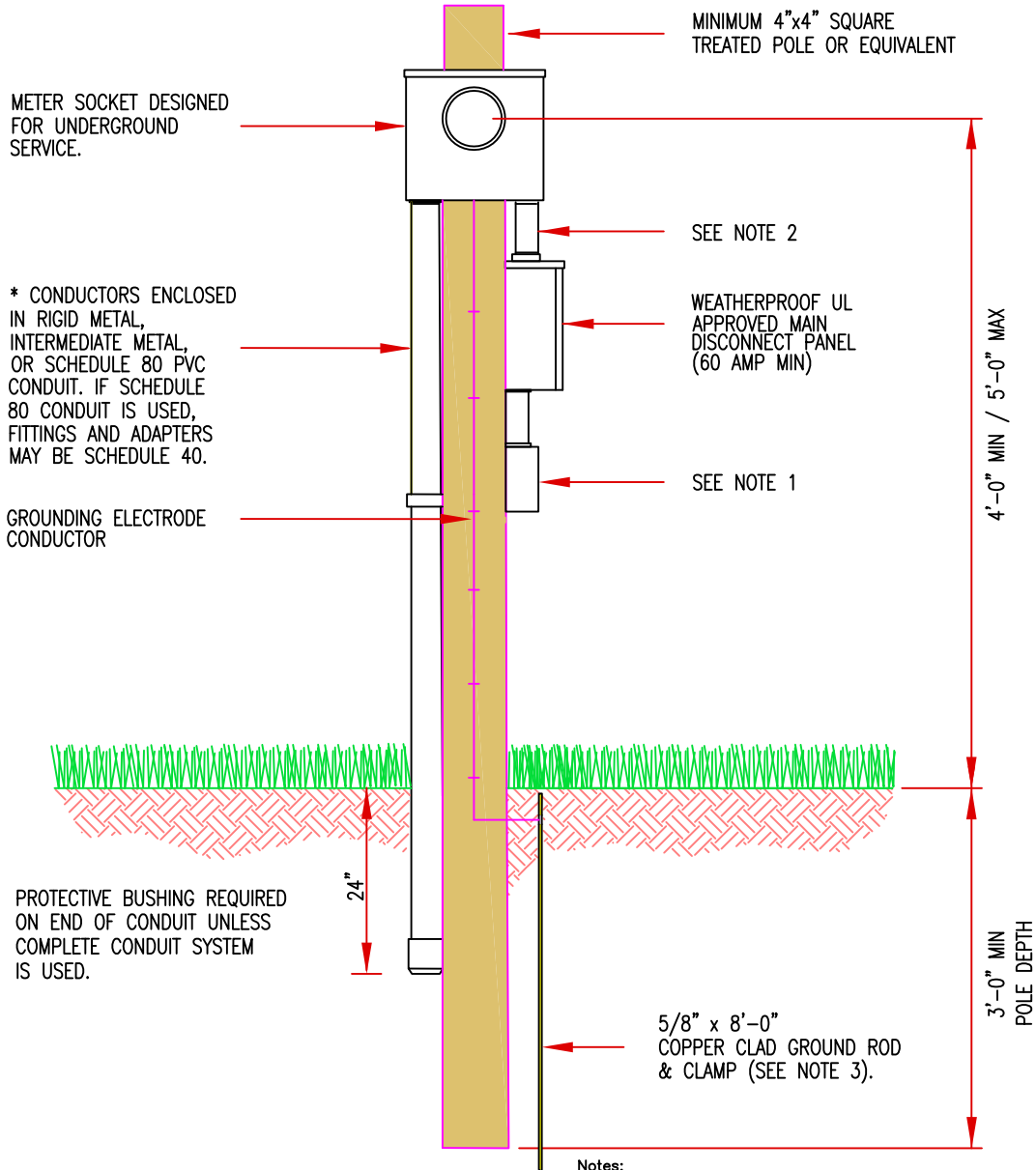
OPTION: 2



OPTION: 3

NOTE:
 1. OPTION 1, 2, OR 3 ARE TYPICAL TRANSFER SWITCH CONFIGURATIONS.
 2. DRAWING IS GUIDANCE FOR COMPLIANCE AND UTILITY EXPECTATIONS. THE NATIONAL ELECTRICAL CODE AND/OR LOCAL AUTHORITIES MAY HAVE ADDITIONAL REQUIREMENTS TO THOSE SHOWN. THE MORE STRINGENT REQUIREMENTS WILL TAKE PRECEDENCE FOR DIFFERENCES BETWEEN AUTHORITIES.

 SOUTHERN PINE ELECTRIC			
TRANSFER SWITCH OPTIONS FOR STANDBY GENERATOR			
DRAWN CLJ	CHECK RHM	DATE 10/04/18	FILE NAME TRANB_SV_SCH_BACKUP_GEN.DWG
SCALE NOT TO SCALE	SHEET 1 OF 1	ASSEMBLY N/A	



Notes:

1. 125 Volt single phase, 15, 20, and 30 Amp receptacle outlets installed on the pole shall have ground-fault circuit-interrupter (GFCI) protection.
2. If non-metallic conduit is used between the meter socket and main disconnect, a bonding conductor shall be installed.
3. A single ground electrode shall be supplemented by an additional electrode except when the single electrode has a resistance to earth of 25 ohms or less.
4. Over current protection for the service equipment shall be properly sized per National Electric Code (NEC).
5. Outdoor electrical equipment shall be installed in suitable enclosures and shall be protected from accidental contact by unauthorized personnel.
6. Drawing and recommendations are intended to serve as guidance for compliance with code and utility requirements. The NEC and/or Local Code Authorities may have additional requirements to those shown. The more stringent requirement will take precedence for differences between authorities.

* Conductor Sizes for 120/240 Volt, Temporary Construction Service Equipment

Service Rating (Amperes)	Ungrounded Conductor Size (Minimum)		Typical Grounded (Neutral) Conductor Size		Grounding Electrode and Bonding Conductor Size
	Copper	Aluminum	Copper	Aluminum	
60	6 AWG	4 AWG	8 AWG	6 AWG	6 AWG
100	2 AWG	1/0 AWG	4 AWG	2 AWG	6 AWG
200	3/0 AWG	250 kcmil	1/0 AWG	3/0 AWG	4 AWG

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UNDERGROUND TEMPORARY CONSTRUCTION
METER POLE
FOR 120/240 VOLT, 3-WIRE

DATE	REVISION	DRAWN	CHECK	DATE	FILE NAME
08/18/16	CHANGED COMPANY LOGO	CLJ	JLJ	JAN. 2016	UG TO TEMP METER POLE
		SCALE	SHEET	ASSEMBLY	
		NOT TO SCALE	1 OF 1		N/A

