

SKETCH #16B

SHEET 1 of 5

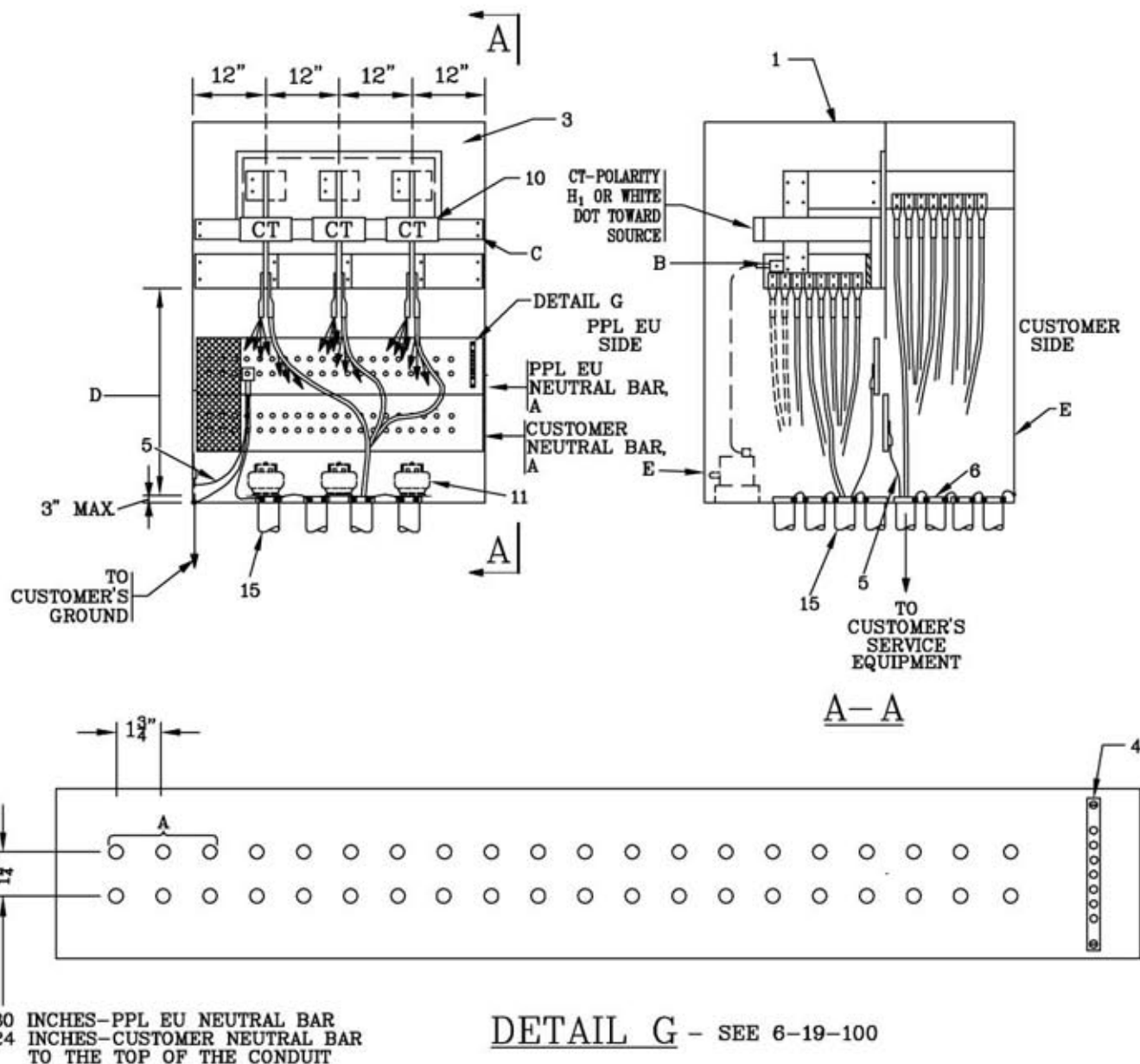
Typical Arrangement of Pad Mounted Metering  
and Service Termination Cabinet  
Up to Sixteen 750 KCML (Max) Conductors per Phase

SKETCH #16B

SHEET 1 of 5

NOT TO SCALE

<u>VOLTAGE:</u> 3 Phase, 4 Wire Wye 277/480V	<u>SERVICE TYPE:</u> Underground
<u>AMPERAGE:</u> 4000 A Maximum	<u>CABINET LOCATION:</u> Outdoor



\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

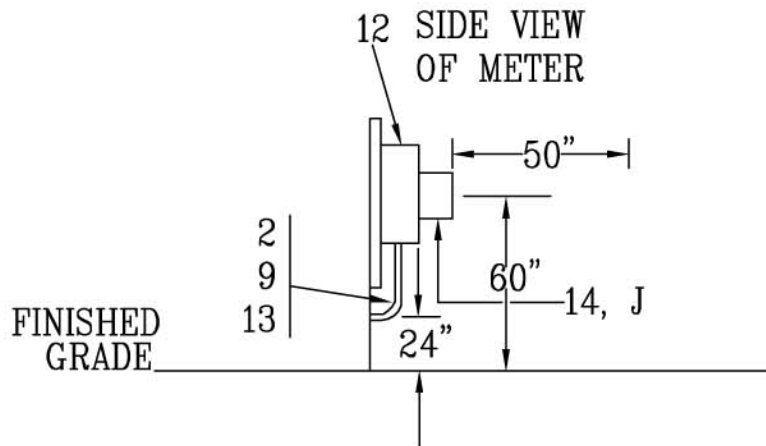
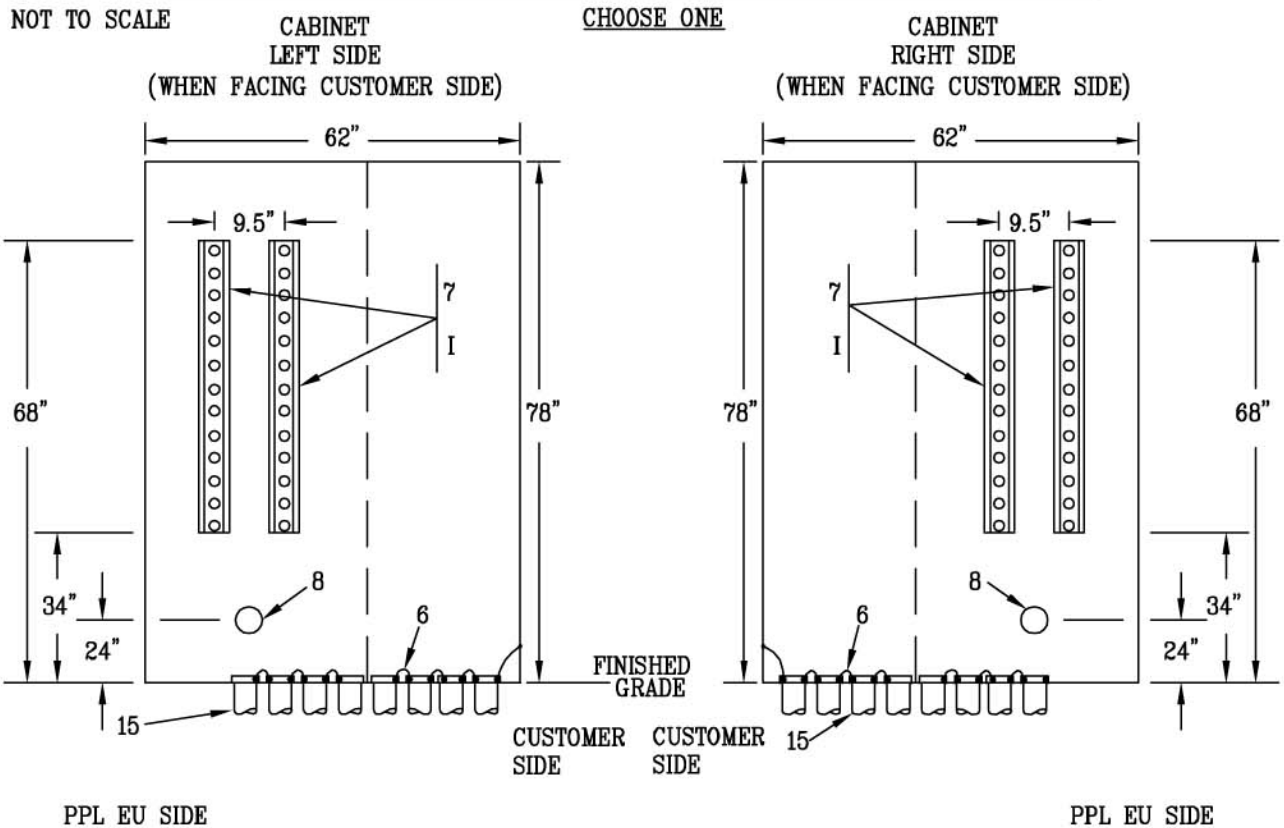
RULES FOR ELECTRIC METER AND SERVICE  
INSTALLATIONS  
**PPL ELECTRIC UTILITIES  
CORPORATION**

Rules: 5, 13, 15

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Date: 8/12/11 Engr: MDB

Typical Arrangement of Pad Mounted Metering  
and Service Termination Cabinet  
Up to Sixteen 750 KCML (Max) Conductors per Phase



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RULES FOR ELECTRIC METER AND SERVICE  
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**Date:** 8/12/11 **Engr:** MDB

SKETCH #16B	Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet	SKETCH #16B
SHEET 3 of 5	Up to Sixteen 750 KCMIL (Max) Conductors per Phase	SHEET 3 of 5

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. SEALABLE METAL CABINET MINIMUM 48 INCHES WIDE BY 78 INCHES HIGH BY 62 INCHES DEEP. OUTDOOR CABINET MUST BE NEMA-3R (WEATHERPROOF). INCLUDES ALL CONDUITS, BUSWORK, HARDWARE, ETC. EXCEPT FOR THAT EQUIPMENT DESIGNATED AS BEING PROVIDED BY PPL EU. SEE REMSI TABLE 1-APPROVED PAD MOUNTED METERING AND SERVICE TERMINATION CABINET FOR PREAPPROVED LIST.
2. METERING CONDUIT AND FITTINGS BETWEEN INSTRUMENT TRANSFORMER CABINET AND METER PANEL.
3. CUSTOMER IS RESPONSIBLE FOR BUS ARRANGEMENT, INTERNALS, AND CABINET.
4. UNINSULATED METER GROUNDING TERMINAL BLOCK MOUNTED ON NEUTRAL BAR. MUST ACCOMMODATE 1-#6 AND 5-#10 STRANDED COPPER CONDUCTORS
5. BONDING JUMPER PER NEC ARTICLE 250 - GROUNDING.
6. GROUNDING BUSHINGS SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET, AND THE NEUTRAL BAR.
7. 2-34 INCH PIECES OF UNISTRUT ARE TO BE MOUNTED, BY THE CABINET MANUFACTURER, VERTICALLY 9-1/2 INCHES FROM CENTERLINE TO CENTERLINE APART. THE BOTTOM OF THE UNISTRUT SHALL BE 34 INCHES, THE TOP OF THE UNISTRUT SHALL BE 68 INCHES, FROM THE BOTTOM OF THE CABINET. THE UNISTRUT WILL BE MOUNTED ON THE OUTSIDE, ON PPL EU'S SIDE, OF THE CABINET. WHEN FACING THE CUSTOMER'S SIDE OF THE CABINET THE UNISTRUT SHALL BE MOUNTED ON EITHER THE RIGHT SIDE OR THE LEFT SIDE OF THE CABINET, NOT BOTH. SEE NOTE I FOR MORE INFORMATION.
8. CENTERED BELOW THE TWO PIECES OF UNISTRUT THE MANUFACTURER WILL INSTALL A 1-1/4 INCH KNOCKOUT 24 INCHES CENTERLINE FROM THE BOTTOM OF THE CABINET TO ATTACH THE METERING CONDUIT AND FITTINGS. THE METER PANEL WILL BE MOUNTED ON THE UNISTRUT.
9. 1-1/4 INCH MINIMUM THREADED GALVANIZED OR INTERMEDIATE RIDGID STEEL OR SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL.

PPL EU FURNISHES, MAINTAINS; CUSTOMER INSTALLS:

10. CURRENT TRANSFORMERS.
11. VOLTAGE TRANSFORMERS FOR 277/480V SERVICES.
12. METER PANEL

PPL EU FURNISHES, INSTALLS, MAINTAINS:

13. WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL SEE RULE 15.
14. METER

CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS:

15. PPL EU SPECIFIES THE NUMBER OF CONDUITS, (MIN 4") ON PPL EU'S SIDE. NUMBER OF CONDUITS IS DETERMINED BY THE SIZE OF THE TRANSFORMER. SERVICE ENTRANCE UP TO 16 PARALLEL CONDUITS. GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT SWEEPS SHALL HAVE A 36 INCH MINIMUM BENDING RADIUS.

\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

<p>RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS</p> <p><b>PPL ELECTRIC UTILITIES CORPORATION</b></p>	<p><b>Rules:</b> 5, 13, 15</p> <p><b>Date:</b> 8/12/11 <b>Engr:</b> MDB</p> <p>REMSI_S016BP3.dwg</p>
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Typical Arrangement of Pad Mounted Metering  
and Service Termination Cabinet  
Up to Sixteen 750 KCMIL (Max) Conductors per Phase

NOTES:

- A. THE LEFT-MOST THREE HOLES ON PPL EU'S BUS BAR AND THE RIGHT-MOST THREE HOLES ON THE CUSTOMER'S BUS BAR ARE TO BE BONDED BY THE MANUFACTURER AND ARE NOT PERMITTED TO BE USED FOR CONNECTING THE NEUTRAL CONDUCTORS.
- B. 1/4 X 20 TAPPED HOLE AND HEX HEAD SCREW FOR METERING VOLTAGE CONNECTION.
- C. ADJUSTABLE CT SUPPORT.
- D. MINIMUM CLEARANCE FROM THE BOTTOM OF THE BAR TO TOP OF CONDUITS. SEE RULE 15(F) AND SKETCH #50 FOR CABLE LIMITER DETAILS.
- E. PPL EU AND CUSTOMER DOORS MUST BE TRIPLE HINGED. THE HINGES AND HINGE PINS MUST BE NON-REMOVABLE. THE PPL EU AND CUSTOMER DOORS MUST ALSO BE SEALABLE. SEE NOTE F AND NOTE G.
- F. A THREE POINT LATCHING MECHANISM THAT SECURES BOTH DOORS IS REQUIRED. THE LATCHING BARS MUST PASS THROUGH A GUIDE THAT ASSURES CORRECT LATCHING. THE LATCHING MECHANISM CANNOT PROTRUDE MORE THAN 1" INSIDE THE CABINET. ALL CONNECTION BOLTS MUST BE PERMANENTLY SECURED TO PREVENT ACCIDENTAL CONTACT OF ANY METAL PART SHOULD THE LATCHING ASSEMBLY FAIL.
- G. THE LATCHING MECHANISM HANDLE MUST BE DESIGNED TO PROVIDE A LOCKING PROVISION IN THE CLOSED POSITION. A 1/2" HOLE IS REQUIRED FOR THE LOCKING PROVISION. KEY LOCKING OF THE HANDLE IS NOT ALLOWED.
- H. REFER TO THE APPROVED METERING AND EQUIPMENT TABLES (TABLE 1) FOR PREAPPROVED PAD MOUNTED METERING AND SERVICE TERMINATION CABINET. CABINETS NOT ALREADY ON THE PREAPPROVED LIST MUST HAVE DETAILED CONSTRUCTION DRAWINGS SUBMITTED TO PPL EU FOR APPROVAL BY THE AREA DESIGN SUPERVISOR PRIOR TO CONSTRUCTION.
- I. IN THE EVENT THE UNISTRUT HAS NOT BEEN MOUNTED BY THE CABINET MANUFACTURER THE METER PANEL IS NOT PERMITTED TO BE INSTALLED ON THE CABINET. THE METER PANEL SHALL THEN BE INSTALLED ON A SEPARATE MOUNTING ARRANGEMENT WITHIN VISUAL DISTANCE OF THE CABINET. SEE SKETCH #8D. CONTACT METERING SUPPORT FOR LOCATION OF METER PANEL. METER PANEL INFORMATION SEE SKETCH #8C. METERING CONDUIT WILL NEED TO BE INSTALLED IN THE FOUNDATION TO RUN BETWEEN THE INSTRUMENT CABINET AND THE METER PANEL. THE METERING CONDUIT SHALL BE BONDED TO THE OTHER CONDUIT AND THE CABINET.
- J. CLEAR SPACE-SEE SKETCH #8C AND RULE 13 FOR MORE INFORMATION.
- K. SEE BARRIER SKETCH #20 AS REQUIRED BY PPL EU.

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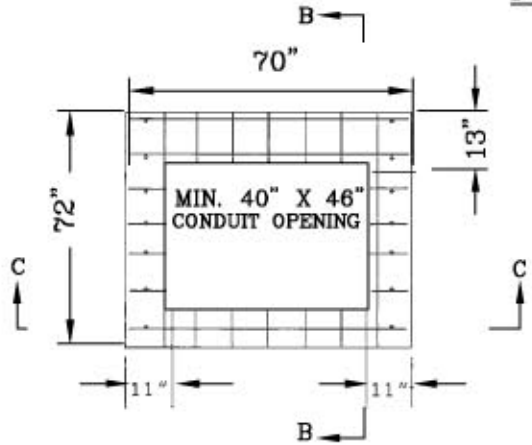
**Rules:** 5, 13, 15

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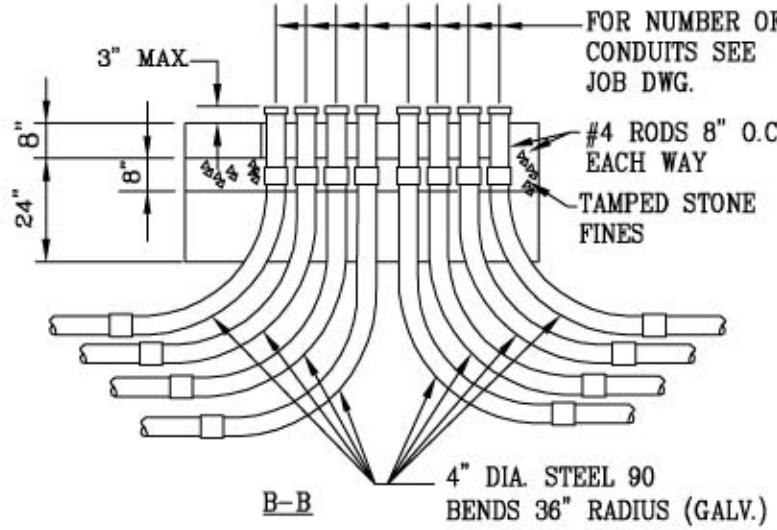
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FOUNDATION DETAILS

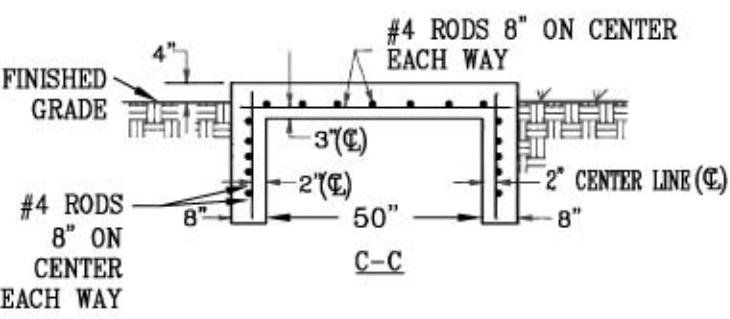
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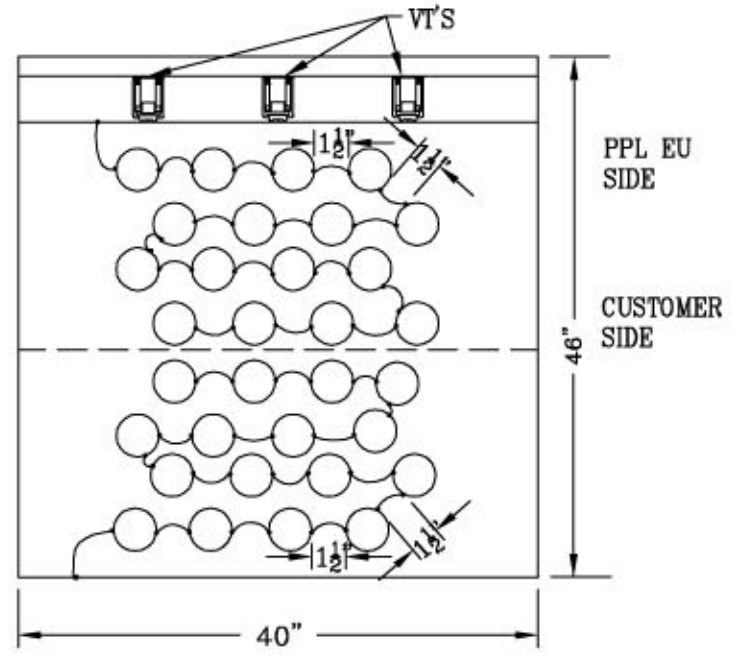
FOUNDATION PLAN  
METER CABINET PAD



B-B  
4" DIA. STEEL 90  
BENDS 36" RADIUS (GALV.)



C-C



CONDUIT PLAN

\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20