

Addendum No. 3

September 29, 2016

To: Bid Holders

This Addendum forms a part of the Request For Bid documents and modifies the original Request For Bids issued August 16, 2016. Acknowledge receipt of this Addendum in the space provided on the Bid Form. All other provisions of the Request For Bid documents shall remain unchanged unless expressly noted in this Addendum.

General

See attached sign-in-sheet from Pre-Bid Meeting.

See attached photos of interior of the existing CNG station interior.

See Video – interior of the CNG building

Contractor Clarifications/Questions

1. Pre Bid Meeting Agenda Notes, Item 19, it states: Owner will furnish / install cold millings around SW fuel islands after substantial completion of work in that area; compacted base course in this area by contractor. AS-101 note 15 – Area to be rough graded. Qs. Is there a base course other than dirt expected by owner prior to millings?
Answer: Provide a 95% compacted 6" base course below millings.
2. C-102 Notes Enlarge Pond by 4,301 C.F. by steeper slope, 1:2. Qs. Are there additional drawings for the western portion of the detention basin that is being enlarged?
Answer: No. The bottom of the pond is to remain the same per Sheet C-102 Max slope at sides 2:1
3. Are we to price winter conditions on site work?
Answer: Per Addendum #2 two Notice To Proceeds; will be issued the first in Jan. for a sixty day period of submittals and ordering long lead time material, and the second in March, for a one hundred eighty day period for active construction on site. We still have frozen temperatures in March, with some warmer days, then in April it is thawing with some colder days: check weather website histories for Santa Fe for the last few years for detail
4. Is site water available for construction use?
Answer: Water used for dust control & moisture control must be effluent. Effluent water is available at the City's waste water treatment plant, approximately one (1) mile east of NM 559 and Airport Road.
5. Check Bollard Specification. Is Galvanized or primed required?
Answer: Primed and painted.

6. Various Drawings indicate that the Fast-fill dispenser in Lot 4 is future install. Is this part of Base bid or future construction? Also, plans call for both 1/2" tubing and 3/4" tubing to this dispenser. Please clarify. Sheet DG-103 – Pipe G not specified. Plans calls for future 1/2" SS tubing. Is this being installed as part of scope? Plan D-512 shows three (3) - 3/4" SS tubing. G-001 shows future 3/4" lines. Sheet E-401 – Electric for future dispenser shown.
Answer: Lot #4, part of the Base Bid, shall include (1) new two-hose FF CNG dispenser w/ (3) 3/4" SS tubing supply lines in a 4" sch 40 PVC sleeve, and shall also include a separate 4" sch 40 PVC sleeve for future CNG lines, which shall terminate in the dispenser-pit frame for the new dispenser indicated above. • 3x SS tubing to new FF dispenser shall be 3/4". • Lines G.1, G.2, G.3 are all to be included in the line marked 'G', running from valve panel to new FF dispenser.
• Leave second 4" sleeve empty, for future use.
7. Will carbon steel Mercer relief valves be considered an approved equal for the CNG equipment?
Answer: Yes, if they meet all other performance requirements.
8. Please confirm that there are no enclosures requested for the CNG compressor, there are some conflicting requests in the specification and as shown on the drawings.
Answer: Provide CNG compressor skids without enclosures.
9. Please confirm that the horsepower of the compressors to be 250 HP, there are some conflicting requests in the specification and the drawings.
Answer: Provide CNG compressor skids with 250 HP nameplate motors per drawings.
10. Please confirm that the intended design inlet supply for the CNG compressors is 215 psig, there are some conflicting requests in the specification.
Answer: Provide equipment package based on design-typical 215 PSIG supply pressure per drawings.
11. Please confirm if a light and gas detector are required as part of the unenclosed CNG package.
Answer: No, neither are required.
12. Is a Horner Controller considered an approved equal?
Answer: Yes.
13. Is a centralized site controller, with a redundant cold swap PLC back up, acceptable with equipment such as the compressors and valve panels having remote I/O? If yes, will HMI's be required on each piece of equipment?
Answer: Yes, and Yes
14. Typical industry standard is for a 5 gallon day tank instead of the 10 gallon tank specified. Is it acceptable to provide a 5 gallon day tank in lieu of the 10 gallon tank requested?
Answer: Yes, 5 gallon is Okay.
15. Will tubing that is manufactured in the US with supporting documentation be adequate in lieu of tubing specifically being marked "Made in the USA"?
Answer: Yes.
16. Will Weg, Baldor, and/or Marathon electric drive motors be considered approved equals?
Answer: Yes, provided all other performance criteria are met.

17. Will a motor designed for the site ambient of 94F be acceptable? Based on the 115F requirement of the motor, a derate of a higher HP motor will be required, resulting in custom motor and additional project costs.
Answer: Yes, high ambient temperature of 94°F for design basis is acceptable.
18. Monitoring of motor high winding temperature is requested but is not specifically identified. Please confirm if a standard practice of motors without winding sensor is acceptable?
Answer: Omit this requirement.
19. Typical coil design utilizes ASTM 249 for coils stage 1-3 and ASTM 213 for the final stage, please confirm this is acceptable. Additionally, please confirm that the induced draft design is acceptable.
Answer: Welded SS tubing per ASTM 249 for stages other than final, and seamless per ASTM 213 for final stage are acceptable, provided required MAWP is met for each stage. The induced-draft design for the cooler is acceptable.
20. Industry standard practice is to utilize zinc coated carbon steel Parker Seal-Lok for larger tube fitting needs rated for the appropriately for the pressure they service. Please confirm if this is acceptable.
Answer: Yes, zinc-coated CS fittings for this application are acceptable.
21. Please confirm that ball valves 2" and over can utilize painted carbon steel bodies, the specification and the drawings have conflicting requests.
Answer: This is acceptable, provided that all valve parts are listed for methane and appropriate working pressures.
22. Will the City provide photos of the interior of the existing CNG station?
Answer: See attached photos.

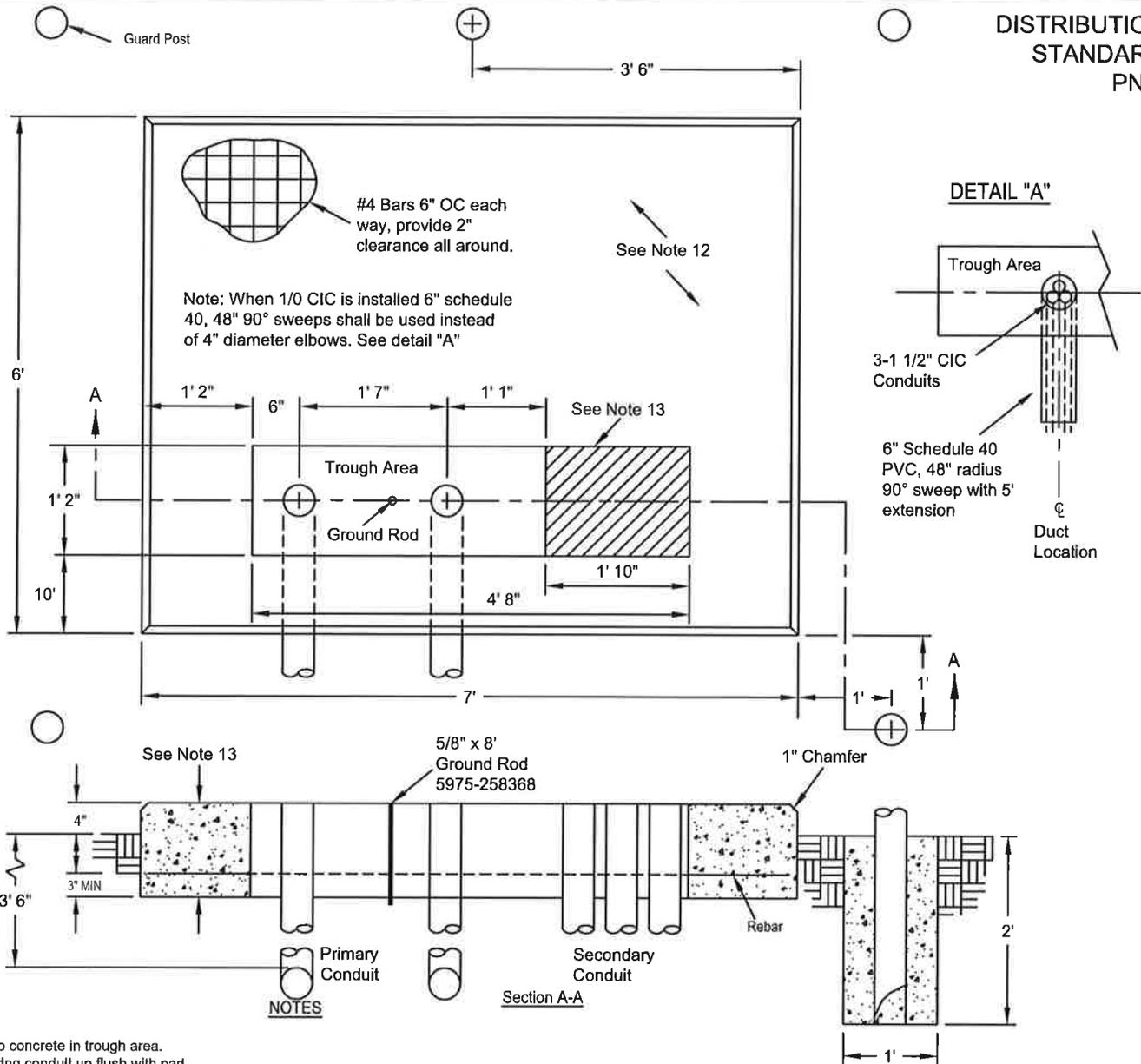
Plan Set

1. Insert attached standard PNM drawings and guidelines for transformer installation. (7 pages)

CNG FUEL FACILITY UPGRADES CIP PROJECT # 657A		August 31, 2016	
RFB '17/05/B	PRE-BID MEETING		
	SIGN UP SHEET		
NAME (PRINT)	ORGANIZATION	E-MAIL ADDRESS	PHONE NUMBER
DWANE MOELLER	CIRSELL MOELLER BOOST	Dwane.Moeller@builtbycm.com	(636) 970-0330
Ryan Erickson	Trillium CNG	RAErickson@TrilliumCNG.com	(714) 380-2763
Rob Strange	TrueStar Energy	rstrange@trustarenergy.com	(909) 217-0990
Jordan Bateson	RUKI	j.bateson@rukinc.com	(505) 345-0008
Jon Watkins	TLC	j.watkins@tloplumbing.com	(505) 944-9509
Reagan Noll	CE	reagan.noll@cleanenergyfuels.com	(214) 876-0888
Tyler Cole	CE	TylerCole@CleanEnergyFuels.com	(505) 975-4064
Scott Stevenson	DHH United Fueling Solutions	STEVENSON@dhk-united.com	(505) 350-8538
Jesse Morgan	Clean Energy GRANCOR	Jmorgan@CleanEnergyFuels.com	(702) 379-4943
Tyler Cole	GRANCOR	TYLER@GRANCOR.com	(505) 350-1695
Robert Sanchez	RandM Construction	randm.construction1@hotmail.com	(505) 927-2017
Reagan Noll	Clean Energy	reagan.noll@cleanenergyfuels.com	(214) 876-0588
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Interior Photos of the Existing CNG Station





- NOTES**
- (1) No concrete in trough area.
 - (2) Bring conduit up flush with pad.
 - (3) Guard Posts are required in traffic areas.
 - (4) Concrete pad shall be 3000 psi concrete, level within $\pm 1/4"$ in 5' straight edge.
 - (5) Existing grade and back fill under concrete pad shall be compacted to 95% in accordance with ASTM D1557.
 - (6) If the primary cable is direct buried contact engineer for secondary duct orientation prior to installation.
 - (7) All stub outs must extend a minimum of 5' from edge of pad.
 - (8) For PNM direct buried primary system, customer shall install PVC elbows and PVC stub outs.
 - (9) For PNM primary duct system other than CIC, customer shall install rigid elbows and threaded rigid stub outs or concrete encased rigid elbows with concrete encased rigid PVC stub outs. Schedule 40 PVC may be used without concrete encasement provided customer installs a 10' length minimum rigid galvanized IMC duct at each vertical 45° or 90° elbow. Red warning tape shall be placed 12" above any PVC that is not concrete encased.
 - (10) Customer shall include a polyethylene pull string with a minimum breaking strength of 210 lbs in completed ducts for future use by PNM.
 - (11) All secondary cables must be tagged with phase and address for tracing reasons. The secondary cables shall be marked no more than 12" above the ducts.
 - (12) Pad to be 1' thick if poured in place otherwise use 0100005825 for pre-engineered pad.
 - (13) Minimum of 1'10" x 14" to be maintained for secondary duct area to allow up to 8-4" secondary ducts.

REFERENCES

- (1) See DS-7-16.8 Page 1 and 2 Transformer and Switchgear Pad Foundation Preparation and Inspection
- (2) See DS-7-16.10 Guard Post
- (3) See DS-7-16.12 Minimum Working Space and Fire Safety Requirements for Transformers
- (4) See DS-18-20.0 Ground Assembly

75-500 kVA Three-Phase Loop Fed Transformer Pad

DS-7-16.7

**Guide to Transformer and Switchgear Pad Foundation
Preparation and Inspection****I. Scope**

This guide summarizes recommendations and practices for the preparation and inspection of transformer and switchgear pad foundations.

II. General

Poor foundations can cause differential settlement of the pad which in turn may result in transformer bushing damage or a potential tamper hazard through separation of the electrical equipment and pad.

Distribution Construction Standard Handbook (DCSH) drawings include foundation compaction requirements. This guide is intended to help our crews install and/or inspect transformer and switchgear pad foundations.

III. Requirements

DCSH drawings require foundations be compacted to 95% of maximum density in accordance with ASTM D1557. This is the so called "Modified" proctor method for soil density determination. The test requires a field soil sample for laboratory test to determine soil properties and characteristics. It also requires field test during construction to determine adherence to requirements. This is time consuming, costly, in relative terms, and requires coordination of the contractor, soils lab, and our inspector. Even so, on critical installations, the above process should be followed to ensure compliance with the standards.

For most installations, the methods used to meet compaction requirements can be specified or approved in lieu of testing. This is "Method Specification" rather than "Performance Specification" described above. Method specification is used for pad foundation preparation to save coordination time and testing money.

The individual inspector is responsible for approving or disapproving the method of compaction proposed by the contractor. When there is doubt about compaction results, obtain lab and field test. We pay for the first tests. Any retests we require are at the contractor's expense.

IV. Methods

Generally compaction can be obtained with a vibrating plate compactor or a vibro tamper. A vibrating plate compactor is not recommended for cohesive soils. Vibrating plate compactors require approximately six passes to achieve desired compactive results. Vibro tampers are suitable for most soil types and are capable of producing a six inch compacted layer with three passes. Typically both vibrating plate compactors and vibro tampers are used in confined areas.

Pad foundations constructed on soils compacted with appropriate motor driven rollers, vibrators, and rammers are also acceptable. Table I shows compactor passes, layer thickness, and appropriate compactor for different soil types.

V. Moisture

Moisture content of compacted soils is the most critical variable component to achieving desired soil densities. Soils at optimum moisture content don't crumble when squeezed in your hand, except sands, and leave your hand moist but not wet.

VI. Density

An experienced inspector can determine whether a pad foundation meets requirements or not. Field methods for inspecting a pad without testing by a soils lab include:

- a. **Probing** the compacted surface with a pencil, piece of rebar, or other rod shaped object.

A probe will not penetrate properly compacted earth more than fractions of an inch with moderate pressure exerted.
- b. **Grinding** one's heel into the ground gives an indication of how well the soil has been compacted.
- c. With moderate effort, one's heel will not dig into compacted soil surfaces more than fractions of an inch.

TABLE I

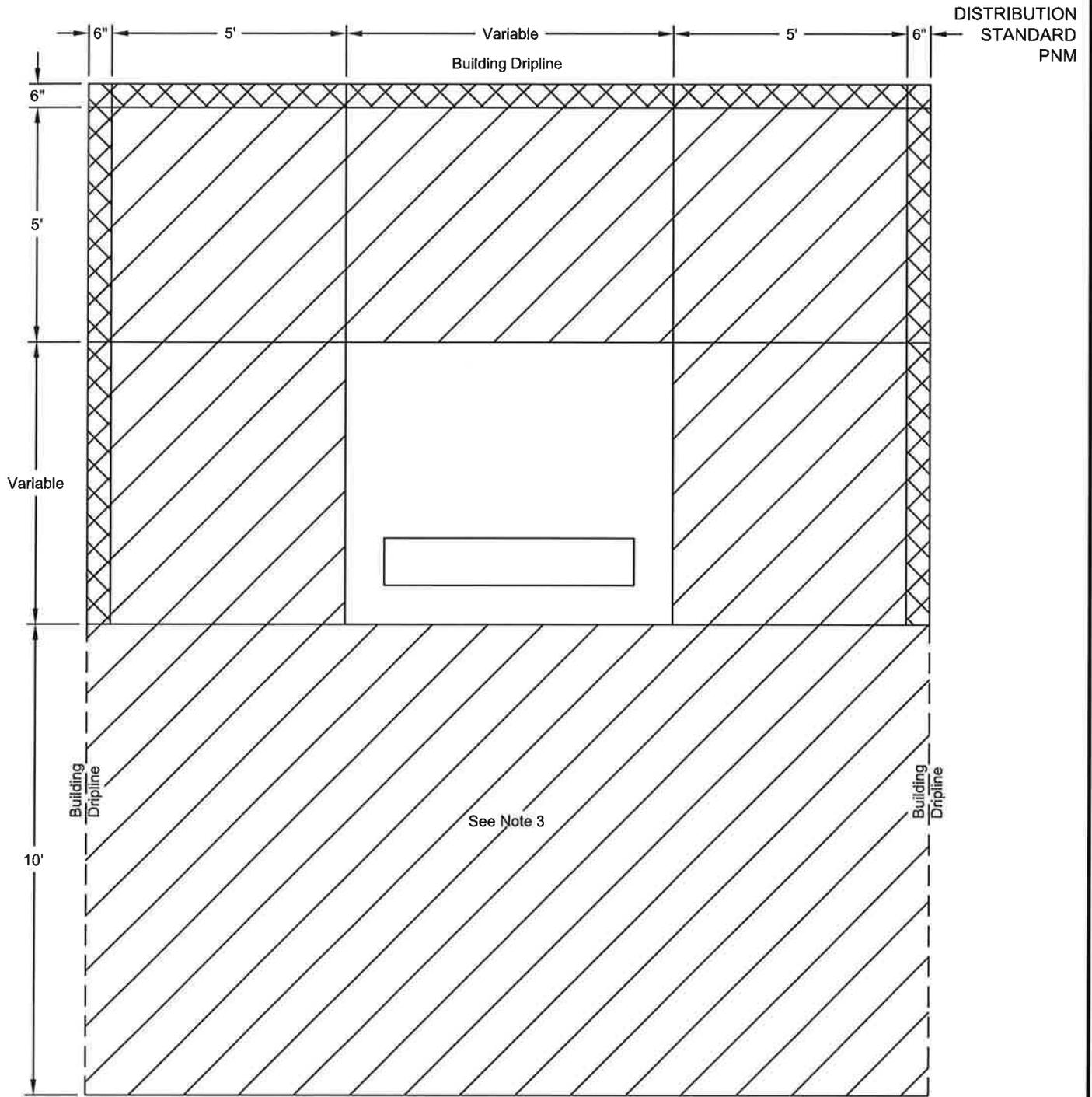
Compactor	Cohesive Soils		Well Graded granular and dry cohesive soils		Uniformly graded material	
	D	N	D	N	D	N
Smooth wheeled roller	6	4-8	6	8-10	6	8-10
Tamping roller (sheepsfoot & pad rollers)	9	4	6	12	10	4
Pneumatic-tired roller	12	4	5	10	6*	10
Vibrating roller	6	4	6	4	8	10
Vibrating plate compactor	4-6+	6	4-8	6	6	5
Vibro tamper	4-8	3	4-6	3	6-8	3

D = Maximum depth of compacted layer, (inches) N = Minimum number of passes
 * Not recommended.
 + Not recommended for cohesive soils unless using a heavy vibrating plate.

NOTES

REFERENCES

- (1) DS-10-12.4 Fill Materials



NOTES

- (1) Transformers can be a fire hazard since they contain flammable oil.
- (2) The above dimensions allow bayonet operation.
- (3) Permanent obstruction in the single hatched working space shall not block access to the transformer.
- (4) Guard posts are required in traffic area.

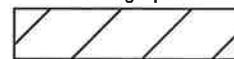
REFERENCES

- (1) See Section 7 for Appropriate Concrete Pad
- (2) See DS-7-16.10 Guard Post
- (3) See DS-7-17.0 Working Space and Fire Safety Requirements Supplement

Fire Wall

Single-phase transformer or three-phase transformer or combination three-phase transformer and metering enclosure for commercial installation

Working Space



Three Hour Masonry Firewall



Minimum Working Space and Fire Safety Requirements for Transformers

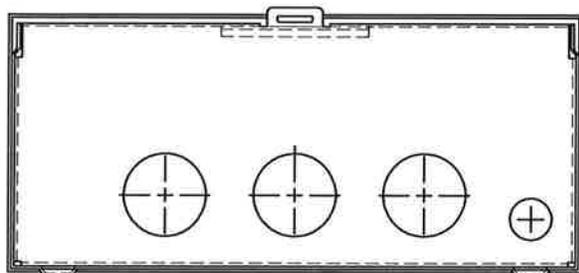
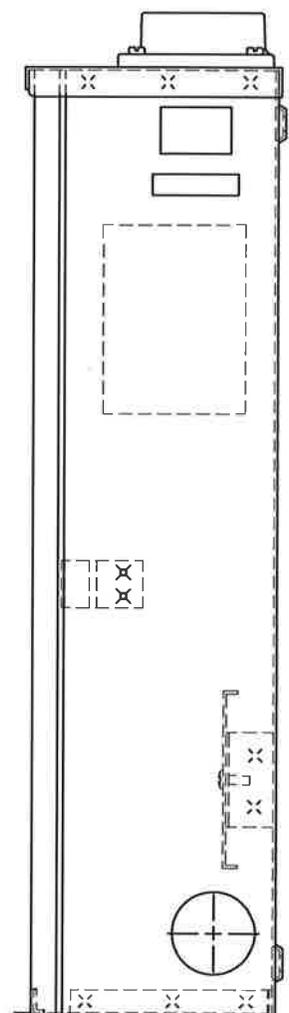
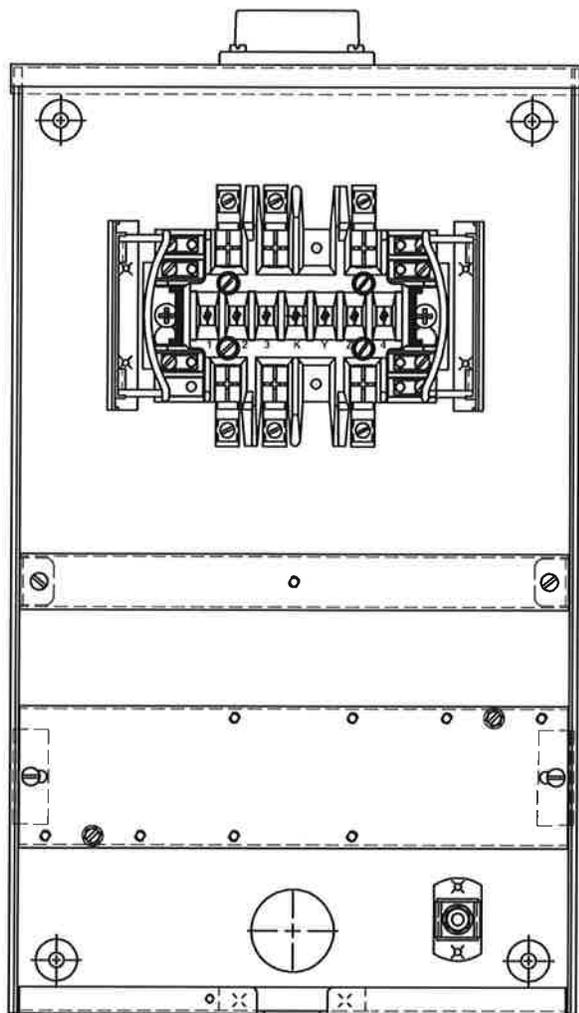
DS-7-16.12

**Distribution Transformers Working Space and Fire Safety Requirements
General Notes**

All dimensions are measured from the exterior of the transformer pad. These dimensions will allow proper clearances for transformers with or without cooling fins.

Three and Single phase Transformers Installation Detail

- A. The single hatched area shows the working space area that must be free of all permanent obstructions, except guard posts.
- B. Transformers must be installed 5' from any wall or building to provide PNM access for maintenance and replacement. Transformers are oil filled, and thus insurance companies may require greater separations from walls and buildings. The customer is responsible for coordinating with their insurance company to meet their particular requirements. If a customer requests a line or a transformer to be relocated after it's initial installation due to insurance requirements or otherwise, the customer will be billed for any new materials and labor in accordance with PNM's Rules and Regulations on file with the New Mexico Public Regulation Commission. Additionally, the customer will be required to provide necessary easements for the new location.
- C. "Variable" indicates the transformer to be installed. There are several configurations.
- D. The 10' dimension in front of the single and three-phase transformers allow the use of large hot sticks. It also affords safe installation and removal of the transformer or other related electrical equipment.
- E. Customer Service or Engineering should assure that the developer or agent is made aware of these work area requirements when the installation is in its planning stages.
- F. The work space for transformer s must be provided or service will be impaired.
- G. All new transformers will be installed in accessible areas only. They must be accessible for installation, removal, and maintenance, using normal PNM procedures and equipment.



NOTES

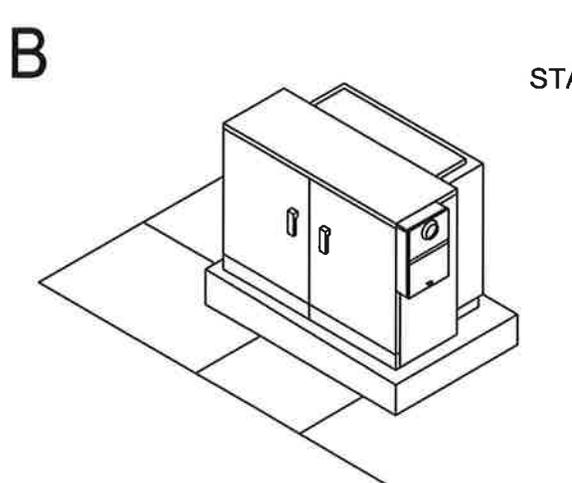
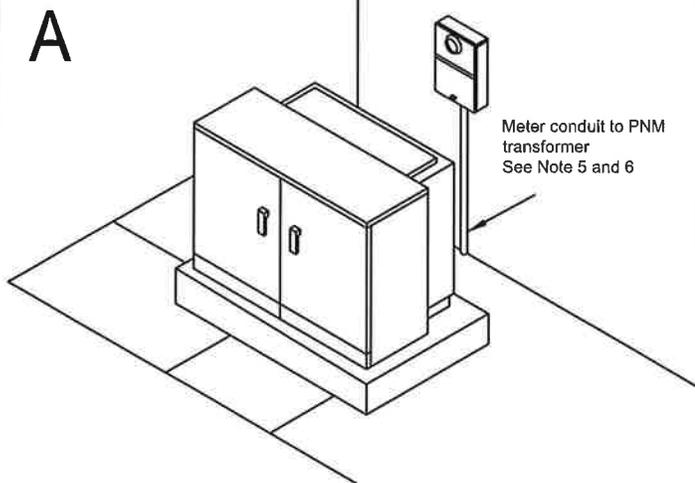
- (1) Socket to be Underwriters Laboratory (UL) listed.
- (2) Socket shall be 20A class only.
- (3) Meter shall be 4' 6" ± 6" from finished grade.
- (4) Socket shall have two separate covers for meter and test switch compartments.
- (5) Latching bottom compartment shall lock both covers.
- (6) Metering and instrument cabinets shall not be used to house Customer-owned equipment, such as distribution panels or other equipment, nor used as a junction box/trough for the distribution of circuits.

Approved Equipment		
Manufacturer	Item	Mfg Part #
Brooks Utility Products	20A 13T Ringless Socket	601U3060C13
Cutler Hammer	20A 13T Ringless Socket	98378513CH
Eaton	20A 13T Ringless Socket	USTS132CCH
Eaton	20A 13T Ringless Socket	98378513
Milbank	20A 13T Ringless Socket	UC3423-XL

For ease of checking service without interruption, PNM will no longer allow ring meter sockets as of 12/01/2013.

Three-Phase Thirteen-Terminal CT Meter Socket

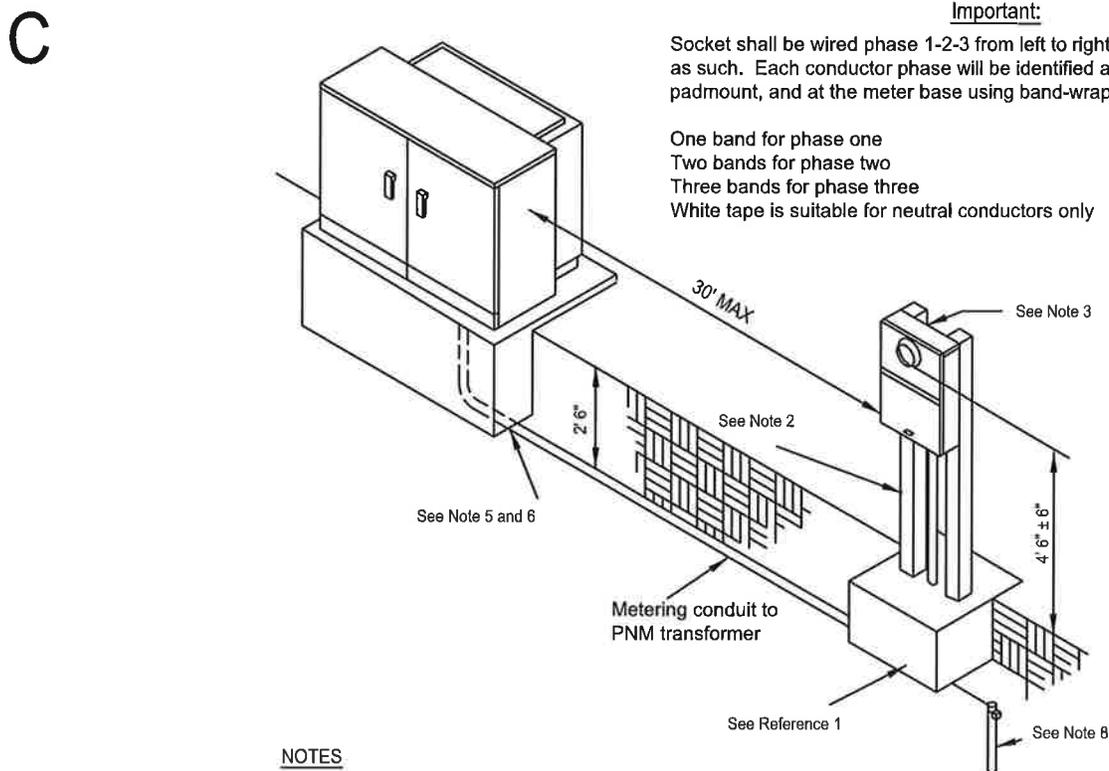
MS-2-7.0



Important:

Socket shall be wired phase 1-2-3 from left to right and the conductors marked as such. Each conductor phase will be identified at the weather head or padmount, and at the meter base using band-wraps of electrical tape:

- One band for phase one
- Two bands for phase two
- Three bands for phase three
- White tape is suitable for neutral conductors only



NOTES

- (1) For use on dedicated transformer installations only.
- (2) Acceptable support members are as follows:
 3" x 3" 1/2" angle
 3" x 4.1 lbs/ft channel
 2" x 2" 3/16" box steel
 2 1/2" standard pipe
 P1001 unistrut
- (3) Equipment shall be securely attached to support members either bolted directly or mounted to metal channel or unistrut cross members.
- (4) Contact PNM new customer service representative to assure proper location.
- (5) The conduit must be 1" rigid galvanized.
- (6) Conduit must be buried a minimum 24" and stubbed into transformer secondary compartment. Arrangement with PNM is necessary to open transformer.
- (7) Caution: 2' 6" depth should not be exceeded because of power and telephone cables below.
- (8) Minimum #6 cu ground wire. Connector and rod per NEC article 250. A separate copper grounding electrode conductor sized in accordance with NEC table 250-94 must be provided for connection to PNM's transformer.

REFERENCES

- (1) See MS-2-7.0 Three-Phase Thirteen-Terminal Socket for CT Meter
- (2) See MS-5-3.0 Single-Phase or Three-Phase Pedestal Meter

**NO
TEMPORARY
SERVICE**