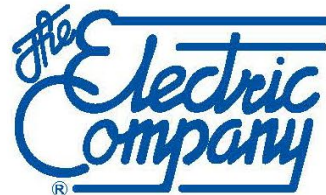


El Paso Electric



El Paso Electric

Electric Service Requirements



Adrian J. Rodriguez
Interim Chief Executive Officer

To: Our Engineering and Construction Industry Partners

"ELECTRIC SERVICE REQUIREMENTS" BOOK - 2019 EDITION

In our joint effort to provide customers with the highest quality of electric service, El Paso Electric Company's (EPE) "Electric Service Requirements" book, commonly referred to as the "Blue Book," has been revised to keep up to date with the most current codes, standards and trends. Your continuing efforts to inform EPE of your plans in a timely manner is an important step in helping us both meet our customers' electric service needs efficiently and safely.

As a core value for EPE, the safety and health of all EPE employees, customers, and the public comes first. The Blue Book enables us to serve your needs, and with your help we can meet your new electric service requirements in a safe, efficient, and effective manner.

The Blue Book has a two-fold purpose: (1) to provide you with EPE's operating procedures, rules, regulations and policies, and (2) to provide you with the most current EPE distribution standards and specifications for both overhead and underground electric service.

Please review this revised edition.

As partners in the development and growth of our communities, we must continue to work closely together to provide our customers with excellent and reliable electric service. This is especially true in the construction industry for both commercial and residential customers. We encourage you to share with us any comments or suggestions on ways we can further improve the Blue Book. Our employees are available to answer your questions and to assist you in obtaining additional service information. Thank you in advance for reviewing the revised edition, and we look forward to continuing our work together.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrian J. Rodriguez". The signature is fluid and cursive, with a large, stylized flourish at the end.

Adrian J. Rodriguez
Interim Chief Executive Officer

ELECTRIC SERVICE REQUIREMENTS

INFORMATION AND REQUIREMENTS FOR ELECTRIC SERVICE INSTALLATIONS

INTRODUCTION

This 2019 Edition of the **Blue Book** replaces the Company's "Electric Service Requirements" book last published in **November 2015 and revised in July 2017**. All information, specifications, and requirements contained in this edition supersede all previous "Electric Service Requirements" books.

This Blue Book has been prepared as a guide to assist Customers, contractors, electricians, builders, architects, and engineers in planning and completing electrical installations. Its purpose is to present the Company's procedures and policies applicable to such installations in an easy-to-use format. Requirements that apply to nearly all types of service and situations appear in the **General Information Section**. Additional requirements and policies that are special to different types of service are covered in other sections and can be readily referred to for specifics on a certain type of project. Please refer to the Table of Contents for a complete listing.

The information in this Book is intended to comply with the latest editions of the National Electric Safety Code, the National Electric Code, and any other Codes and Regulations in effect in the area served and Company tariffs. Any deviation from code or local inspection authority requirements should be brought to the Company's attention before beginning the electrical installation.

Policies, procedures, or requirements are subject to change without advance notice to Customers. The Company will make every effort to keep you informed of any changes. If there are specific conditions not covered in this Blue Book, please contact our Distribution Design and Delivery Business Unit and we will be glad to assist you in any way possible.

Compliance with the information and requirements contained in this Book is essential. This will help assure that The Electric Company can provide the most prompt, economical and reliable electric service.

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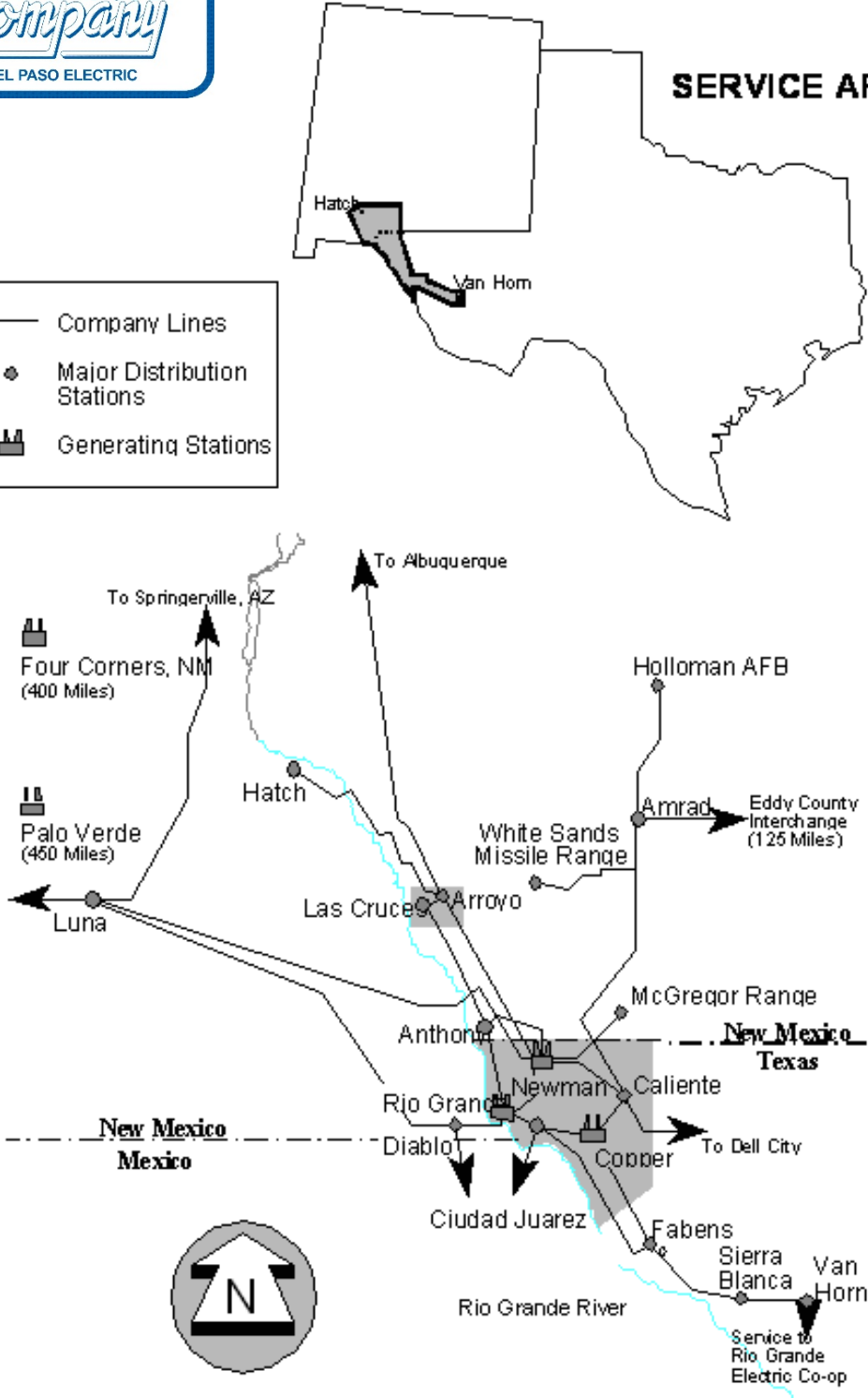
SECTION I

COMPANY SERVICE AREA MAP AND DIRECTORIES



SERVICE AREA

- Company Lines
- Major Distribution Stations
- ⏏ Generating Stations



TEXAS

SERVICE AREA DIRECTORY

DIRECTORY OF IMPORTANT TELEPHONE NUMBERS

TEXAS

COMPANY MAIN TELEPHONE NUMBER (915) 543-5711
..... or 1-800-351-1621

REPORT AN OUTAGE, TROUBLE, AND EMERGENCIES..... (915) 877-3400
.....

REQUEST NEW SERVICE THAT REQUIRES A LINE EXTENSION (915) 351-4224
CALL BEFORE YOU DIG (To Request Underground Cable Locates)

DIG TESS (Texas Excavation Safety System) 1-800-344-8377

TO APPLY FOR A NEW METER INSTALLATION..... (915) 521-4646

TO APPLY FOR SERVICE THAT HAS AN EXISTING METER..... (915) 543-5970

TO APPLY FOR A NEW METER INSTALLATION
FOR RENEWABLE ENERGY INTERCONNECTION..... (800) 351-1621, EXT. 4418

ENERGY EFFICIENCY INFORMATION LINE (915) 521-4488

ELECTRICAL CONTRACTORS NO. FOR EMERGENCY REPAIRS (915) 926-1065

TEXAS PHYSICAL LOCATIONS

Downtown El Paso

(Corner of Kansas St. & Myrtle St.)
El Paso, TX 79901

Hours of Operation

Lobby: 8:00 a.m. - 4:30 p.m.

Fabens

200 E. Main St.
Fabens, TX 79838

Hours of Operation

Lobby: 8:00 a.m. - 4:30 p.m.
Drive Through: 8:30 a.m. - 5:00 p.m. (Based on
Staffing)

Van Horn

207 W. 2nd St.
Van Horn, TX 79855

Hours of Operation

OPEN MONDAY, TUESDAY, THURSDAY & FRIDAY
Lobby Only: 10:00 a.m. - 11:30 a.m. and 12:30 p.m. -
3:00 p.m. (Central Time)
Phone: 432-283-2086

NEW MEXICO

SERVICE AREA DIRECTORY

DIRECTORY OF IMPORTANT TELEPHONE NUMBERS

NEW MEXICO

COMPANY MAIN TELEPHONE NUMBER	(575) 526-5551
.....	or 1-800-351-1621
REPORT AND OUTAGE, TROUBLE, AND EMERGENCIES	(575) 523-7591
.....	or 1-800-351-1621
CUSTOMER SERVICE (TO START OR DISCONNECT SERVICE).....	(575) 526-5555
REQUEST NEW SERVICE THAT REQUIRES A LINE EXTENSION	(575) 523-3630
DISTRIBUTION DESIGN AND DELIVERY BUSINESS UNIT	(575) 523-3532
WIRING AND METERING INFORMATION.....	(575) 523-3644
NEW MEXICO ONE-CALL	1-800-321-2537
.....	or 811 from a cell phone inside New Mexico
TO APPLY FOR A NEW METER INSTALLATION	(575) 523-3575
ENERGY EFFICIENCY INFORMATION LINE.	(575) 523-3533
ELECTRICAL CONTRACTORS NO. FOR EMERGENCY REPAIRS	(915) 926-1065

NEW MEXICO PHYSICAL LOCATIONS

Anthony

400 Anthony Dr.
Anthony, NM 88021

Hours of Operation

Lobby: 8:00 a.m. - 4:30 p.m.
Drive Through: 8:30 a.m. - 5:00 p.m.

Las Cruces (Main Office)

201 N. Water St.
Las Cruces, NM 88005

Hours of Operation

Lobby: 8:00 a.m. - 4:30 p.m.
Drive Through: 8:00 a.m. - 5:00 p.m. (Based on
Staffing)

REQUIRED CITY RELEASES/CERTIFICATES OF COMPLIANCE

IN ADDITION TO THE FOLLOWING REQUIREMENTS THAT ARE SUBJECT TO APPROVAL BY THE AUTHORITY HAVING JURISDICTION, ALL NEW RESIDENTIAL AND COMMERCIAL SERVICES, INCLUDING CHANGES TO EXISTING RESIDENTIAL AND COMMERCIAL SERVICES, ARE SUBJECT TO INSPECTION AND APPROVAL BY ELPASO ELECTRIC COMPANY PRIOR TO THE COMMENCEMENT OF WORK. NOTIFICATION TO EL PASO ELECTRIC COMPANY IS THEREFORE REQUIRED IN ORDER TO OBTAIN NEW OR DIFFERENT SERVICE.

CITY OF EL PASO

- Residential NSER / Commercial NSER and Meter Relocations
 - Require a CITY RELEASE: CITY OF EL PASO
Building Permits & Inspection
212-0104
811 Texas Avenue
El Paso TX 79901

NOTE: If the meter is disconnected because of a **FIRE** or **ELECTRICAL HAZARD**, the Customer will need to apply for a City Release to reconnect service.

EL PASO COUNTY (outside the limits of the City of El Paso, City of San Elizario, etc.; includes extraterritorial jurisdictions of incorporated municipalities, Fabens, Canutillo, Westway)

The Customer will need to provide the legal description of the property, proof of water service, and proof of sewer service/septic system to the County for application of a Certificate of Compliance.

The following Customers who have Certificates of Compliance older than 2005 will need to renew their Certificates:

- Customers moving into an existing mobile home park
- Customers requesting a second service for same property and if one of the services is residential then a Certificate of Compliance indicating two meters, specifying type (res/commercial).

All accounts will be remarked "Certificate of Compliance issued 00/00/00 #99999 by CC&B on file//RAL". The instruction line of the Customer Service Request Sheet, shall state: "Certificate of Compliance on file" first and then continue with the Customer name and initials.

- **Residential NSER**

- Will need a Certificate of Compliance from the County of El Paso before order will be taken. A non-refundable fee of \$25 will be charged for each Certificate of Compliance. Customer must contact:

- * El Paso County
Road & Bridges Department
800 E. Overland Ave., 2nd Floor, Room 200
El Paso TX 79901
915 546-2015

- **Exemptions from the Certificate of Compliance**

- Commercial Accounts with Official Street Address and Assumed Name forms
- Lighting (street lights, traffic signal lights, railroad crossings, sports field lighting)
- Irrigation Wells
- Ysleta del Sur Pueblo (Tigua Reservation)
- Government Entities
- Any business already registered with the Federal Government or State

EL PASO COUNTY (continued)

- **Temporary Certificate of Compliance**

- The County of El Paso will issue temporary Certificates of Compliance to allow for construction of a residence, the testing of water wells, or for other temporary needs as determined by the County.
- This is a 90-day temporary utility service.
- After 90 days the temporary Certificate of Compliance expires, and service will be disconnected. The Customer will need to reapply for an additional 90-day time period.

- **Existing Residential Service**

- If there are no remarks on the account showing that a Certificate of Compliance was issued or the address is not found in the master file – the Customer will need a Certificate of Compliance before an order for new service can be taken by the New Service Group.
- Customers requesting a second service for a property will need a Certificate of Compliance indicating how many meters are required before the additional service is connected.
- System updates to correct records due to changes caused by marriage, divorce, death or roommate changes **will not require a Certificate of Compliance.**

NOTE: Existing mobile homes should be removed from property when a Customer is adding another service, unless a Certificate of Compliance specifies two or more meters. If a Customer refuses to remove a mobile home, they should be advised that they may be in violation of the Certificate of Compliance. EPE cannot enforce the removal of a mobile home.

- **Meter Relocation for Residential & Commercial**

- No Certificate of Compliance is required for same structure relocation/upgrades

NOTE: If a meter is disconnected because of a **FIRE** or **ELECTRICAL HAZARD**, the Residential Customer will need to apply for a Certificate of Compliance if required by governing rules and laws.

- **Non Pay Reconnect for Existing Residential Service (NPRC)**

- If the NPRC is requested within 90 days of the disconnection date of nonpayment, no Certificate of Compliance is required.
- If any service is suspended for more than 90 days and if there is no Certificate of Compliance filed, then a Certificate of Compliance will be required before the services will be turned on for the same Customer.
- If the service is off for more than 90 days, the Certificate of Compliance on file is older than 2005, and the Customer has more than one residential service per property, a Certificate of Compliance is required

- **Commercial New Service (NSER)**

- Needs an OFFICIAL STREET ADDRESS FORM from the County:

- * El Paso County
Road & Bridges Department
800 Overland, 2nd Floor, Room 200
El Paso TX 79901
915 546-2015

EL PASO COUNTY (continued)

- Any Commercial Customers will need an OFFICIAL BUSINESS REGISTRATION Form (Assumed Name Certificate) and an Official Street Address Form. The service address must match on both forms.
 - * El Paso County Clerk
500 E. San Antonio St
Room 105
El Paso, TX 79901
- Existing Commercial Service
 - Exempted from Certificate of Compliance.
 - Commercial Service (accounts) in our system, will only need an Assumed Name Certificate, the address on the certificate must match our system address.
 - Established commercial Customers requesting additional commercial service under the same name or type of business for a different address will be required to submit official documentation as set forth above. Customer.

TOWN OF SAN ELIZARIO

- Residential Services within the Town of San Elizario require a Release from a building official.
- NO mobile homes are allowed within the Town of San Elizario.
 - * Town of San Elizario
Nancy Montes (Point of Contact)
12710 Church St. / P.O. Box 1723
San Elizario, TX 79849
(915) 974-7037
Mon., Tues., Thurs. 9:00 a.m. to 1:00 p.m.
Wed. 1:00 p.m. to 5:00 p.m.

TOWN OF HORIZON CITY

- Residential/Commercial NSER's
 - Residential New Service Requests will require an inspection by the Town of Horizon City
 - Commercial New Service Requests will require an issuance of Business Registration form and an inspection by the Town of Horizon City.
 - Temporary Service will require an inspection.
- NO RELEASE IS REQUIRED TO UNLOCK A METER CAN.

Existing Residential & Commercial Services

- Existing residential requires an inspection by the Town of Horizon City.
- Commercial accounts inside the limits of the Town of Horizon City will need a business registration form.
- Meter relocation/upgrades (any type of electrical repairs) for Residential and Commercial Customers will require an inspection by the Town of Horizon City.
 - * Town of Horizon City
Mr. Esparza (Point of Contact)
14999 Darrington
Horizon City, TX 79928
(915) 852-1046

NOTE: If meter is disconnected because of a **FIRE** or **ELECTRICAL HAZARD**, the Customer will need an inspection by the Town of Horizon City.

CITY OF SOCORRO

- **Residential/Commercial NSER's**
 - Need a RELEASE from City of Socorro
 - Release # begins with:
 - E-MMYY###
 - TE-MMYY### (Temporary Electrical Service)
 - 3PE- MMYT### (Third Party Electrical Inspection)

**The Release may be obtained from:
City of Socorro
860 Rio Vista Rd.
Socorro, TX 79927
(915) 872-8531**

- **Existing Residential/Commercial Service**
 - No release or certificate is needed
- **Meter Relocations/Upgrades for Residential or Commercial**
 - Requires a Release from the City of Socorro
 - **A RELEASE IS NEEDED TO UNLOCK METER**

NOTE: If a meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need an inspection by the City of Socorro to reconnect services.

TOWN OF CLINT

- **Residential/Commercial NSER**
 - Requires a Certificate of Compliance from the Town of Clint if one is not already on file.
 - * **Please call: (915) 851-3146**
- **Meter Relocations/Upgrades for Residential or Commercial**
 - Requires a RELEASE from the Town of Clint

NOTE: If a meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need an inspection by the Town of Clint to reconnect service.

HUDSPETH COUNTY (Including Ft Hancock, Esperanza & Sierra Blanca)

- **Residential/Commercial NSER**
 - Needs Certificate of Compliance from Hudspeth County
 - * **Hudspeth County Court House
109 West Millican St.
Sierra Blanca, TX 79851
(915) 369-2321**

Only Hudspeth County can fax a Certificate of Compliance directly to Fabens Office. Fax # 915 764 2250

- **Existing Residential/Commercial Service**
 - Will require a Certificate of Compliance if one is not on file for residential service
 - All services must have a valid street address

HUDSPETH COUNTY (Includes Ft Hancock, Esperanza & Sierra Blanca) [continued]

- Commercial service will require a Certificate of Address Form
 - * Hudspeth County Court House
109 West Millican
Sierra Blanca, TX 79851
(915) 369-2321

- **Meter Relocations/Upgrades for Residential or Commercial**

- No Certificate of Compliance is required for same structure relocation or upgrades

NOTE: **If a meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need a Certificate of Compliance, if required by governing rules and laws.**

CULBERSON COUNTY (Outside the limits of the Town of Van Horn)

- **Residential NSER**

- Needs a Certificate of Compliance if one is not already on file from:

Culberson County Judge's Office
300 La Caverna St.
Van Horn, TX 79855
(432) 283-2059

- **Exemptions from a Certificate of Compliance:**

- Lighting
- Irrigation Wells
- Government Entities

- **Commercial NSER**

- No Certificate of Compliance is required
- An Assumed Name Certificate together with an Official Street Address Certificate (if address is not already on the EPE system)

- **Existing Residential Service**

- Needs a Certificate of Compliance if one is not already on file

- **Meter Relocations Residential/Commercial**

- No Certificate of Compliance is required for relocation or upgrades

NOTE: **If meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need a Certificate of Compliance, if required by governing rules and laws.**

THE TOWN OF VAN HORN

- **Residential NSER**

- A Certificate of Compliance from the Town of Van Horn is required
 - * Van Horn City Hall
1801 W. Broadway
Van Horn, TX 79855
(432) 283-2050

- **Commercial NSER**
 - An Assumed Name Certificate and Official Street Address Certificate from City Hall is required. A Certificate of Compliance is not needed.
- **Existing Commercial Service**
 - Certificate of Address
- **Existing Residential Service**
 - Mobile homes will need a Certificate of Compliance if one is not already on file
- **Meter Relocations Residential/Commercial**
 - No Certificate of Compliance is required for relocation or upgrades

NOTE: If a meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need a Certificate of Compliance, if a current one is not on file based on the current prevailing rules and regulations.

VILLAGE OF VINTON

- **Residential/Commercial NSER**
 - Requires an inspection by the Village of Vinton Electrical Inspector

**Village of Vinton
436 Vinton Rd
Vinton, TX 79821
(436) 886-5104**

The release card that the Electrical Inspector provides to the Customer must be submitted to EPE.

- **Existing Residential Service**
 - Does not require any kind of release from the Village of Vinton
 - Meter relocation/upgrades will require an inspection by the Village of Vinton Electrical inspector

NOTE: If a meter is disconnected because of a FIRE or ELECTRICAL HAZARD, the Customer will need an inspection by the Village of Vinton Electrical Inspector.

TOWN OF ANTHONY, TX

**401 Wild Cat Dr.
P.O. Box 1269
Anthony, TX 79821
(915) 886-3944
Fax: (915) 886-3115**

New Mexico Permits

IN ADDITION TO THE FOLLOWING REQUIREMENTS THAT ARE SUBJECT TO APPROVAL BY THE AUTHORITY HAVING JURISDICTION, ALL NEW RESIDENTIAL AND COMMERCIAL SERVICES, INCLUDING CHANGES TO EXISTING RESIDENTIAL AND COMMERCIAL SERVICES, ARE ALSO SUBJECT TO INSPECTION AND APPROVAL BY EI PASO ELECTRIC COMPANY.

Dona Ana County

ELECTRIC PERMIT: Any new / upgraded electrical service needs an electric permit. It can be issued by City, County or State Inspectors.

MHIP: Mobile Home Inspection Permit - This permit is from Dona Ana County. *Electric permits are not released until MHIP is in place*

MHD: Manufactured Housing Division Permit- This is a New Mexico state permit. *The movement of any mobile home requires an MHD.* All mobile homes in New Mexico are required to have an MHD before electric installations.

City of Las Cruces – City Hall (575) 528-3222

- | | |
|-------------------------------|--|
| <i>House/Commercial/Temps</i> | 1) City Electric Permit (example: 20114582) |
| <i>Mobile Home</i> | 1) City Electric Permit (example: 20114839)
2) State Manufacture Housing Permit (MHD) (example: 2011003879) |

In Dona Ana County, outside of Las Cruces city limits (including Organ, Radium Springs, DAC, San Miguel, Mesquite, Vado, La Mesa, Berino, Chamberino, La Union, Anthony, Rincon, Hatch, Placitas, Salem, & Garfield)

Main Office: 845 N Motel Blvd, Las Cruces, NM 88007 (575) 647 7350

MHD Office: (575) 524 6320 ext. 107

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- | | |
|-------------------------------|---|
| <i>House/Commercial/Temps</i> | 1) Dona Ana County Electrical Permit (example: 037598) |
| <i>Mobile Home</i> | 1) Dona Ana County Electrical Permit (example: 037596)
2) State Manufacture Housing Permit (MHD) (example: 2011003879) |

Otero County, Luna County & Sierra County

- | | |
|-------------------------------|---|
| <i>House/Commercial/Temps</i> | 1) State Electric Permit (example: 201104582) |
| <i>Mobile Home</i> | 1) State Electrical Permit (example 201104581)
2) State Manufacture Housing Permit (MHD) (example: 2011003879) |

Otero County Inspector: (575) 551-1457

Luna County Inspector: (575) 639-1024

Sierra County Inspector: (505) 469-8109

SECTION II

DEFINITIONS

Terms frequently used in this Blue Book are herein defined:

APPLICATION FOR METER INSTALLATION AND SERVICE CONNECTION (APPLICATION FOR NEW SERVICE): By mail, phone or personal request of the Customer at one of the Company offices stating desire for meter. Deposits guaranteeing payment of bills are normally required of commercial, industrial, and certain Residential Customers. A service charge included in the first bill will be required of all Customers. This process for submittal of the Application for Meter Installation and Service Connection is set forth on page 26.

AREA LIGHT: An outdoor light installed and maintained by the Company for use by Customers for area and security lighting purposes.

BOOK: This Electrical Service Requirements book.

CERTIFICATE OF COMPLIANCE: A document required by Texas law in order to obtain electric service for residential use on property that is located in an Extra Territorial Jurisdiction. This document is issued by the appropriate governing entity before electric service can be provided. This term shall encompass a Certificate of Plat Compliance, as it may be referred to in various jurisdictions.

COMMERCIAL CUSTOMER: Each individual business establishment, institution or association occupying for its exclusive use any unit or units of space as an entire building, entire floor, suite of rooms or a single room and using electric service for lighting, appliances, heating or power.

COMPANY: El Paso Electric Company (also called The Electric Company, EPE, or the Company).

CURRENT TRANSFORMER AND POTENTIAL TRANSFORMER (CT and PT): Transformers used to change electric current or voltage to values suitable for use in metering the consumption of electric energy. These are owned, furnished, and installed by the Company.

CT CAN (INSTRUMENT TRANSFORMER ENCLOSURE): In general, a metal cabinet owned and furnished by the Customer, installed by the Customer's electrical contractor, for use by the Company to enclose the Company's metering transformers. Only CT cans approved by the Company and meeting Company specifications may be installed.

CUSTOMER: Any Residential Customer or Commercial Customer.

The term Customer as used in this Blue Book may also apply to those agents for the Customer - i.e., electricians, contractors, engineers, etc.

CUSTOMER SERVICE REQUEST: When a Customer needs electric service at a new facility or is making changes to the present electrical use that will require the Company to increase or modify its existing electrical system, the Customer shall notify the Company and request that the Company perform the needed work stating the amount and type of electric service required at a certain location. For Commercial and industrial Customers, a "Customer Service Request Sheet" must be completed before the Company can design the electric service. This process is discussed in more detail on pages 43-50 of this Blue Book.

CUSTOMER SERVICE REPRESENTATIVE: Company personnel (in the Transmission and Distribution Department) who coordinate and analyze all aspects of voltage problems, determine whether existing or proposed Customer equipment will overload Company facilities, or cause problems to Company facilities or other Customers, and checks Company equipment to ensure it is functioning properly.

CUSTOMER SERVICE REQUEST SHEET: A Company form that must be completed by a Customer requesting new or changed electric service. The information on this sheet, plus applicable plans, provides the Company with the information necessary to provide the requested service. This process is discussed in more detail on pages 36-55 of this Blue Book. A Customer Service Request Sheet may also be referred to herein as a Request for Service Form.

DESIGNER: Company personnel in the Distribution Design and Delivery Business Unit who serve as the point of contact for the Customer and coordinate all aspects of the new or increased service request with the Customer and other departments of the Company

DISTRIBUTION LINE: The Company's lines located along streets, alleys, highways, easements or elsewhere, intended for general distribution of electric service to Customers at one of the Company's standard Primary Voltages.

DSO (Distribution Standards Overhead): Materials, construction and installation standards and specifications established by the Company for facilities, which are a part of an overhead distribution system.

DSU (Distribution Standards Underground): Materials, construction and installation standards and specifications established by the Company for facilities which are a part of an underground distribution system.

ETJ (Extraterritorial Jurisdiction): In the State of Texas, areas beyond the boundaries of a city's incorporated area.

FAULT CURRENT: The short circuit amperage current produced during the unintentional contact of two parts of an electrical circuit that offers an alternate path for current to flow.

FLOOD LIGHT: A directional outdoor light installed and maintained by the Company for use by Customers for area and security lighting purposes.

IMPAIRED CLEARANCE: The condition where a Customer's structure(s), including, but not limited to, buildings, signs, towers, poles, fencing and swimming pools, is in a position or manner in which insufficient clearance, as specified by any applicable local code(s) and the National Electric Safety Code, as such codes now exist or as such codes may be amended, exists between the structure and the Company's existing transmission, substation, express feeder, street light or Distribution Line facilities, or any combination thereof.

LINE EXTENSION: Any addition (other than services wires and meters) to the Company's existing transmission or distribution system or other existing facilities which must be made to provide new or increased electric service to Customers. Line Extensions are discussed more thoroughly starting on page 18 of this Blue Book.

LINE EXTENSION AGREEMENTS: A contract entered into between the Customer and the Company which states the terms and conditions of certain types of Line Extensions, especially those requiring a revenue guarantee or cash advance.

LINE EXTENSION POLICY: The Company's major policies which have been approved by the respective state regulatory commissions regarding extensions of or additions to existing lines or facilities and also regarding other procedures and policies.

METER ENCLOSURE: A Company-approved metal cabinet owned and furnished by the Customer and installed by the Customer's electrical contractor to enclose the Company's metering equipment. Meter Enclosures will be sealed by the Company with Company's seal or lock.

METER SOCKET: A Company-approved receptacle of square or rectangular design and of weatherproof construction used for mounting socket-type meters. The Meter Socket will be provided by the Customer and installed by the Customer's electrical contractor.

MOBILE HOME INSPECTION PERMIT (MHIP): A permit that is required by Dona Ana County for the movement of a mobile home.

MANUFACTURED HOUSING DIVISION PERMIT (MHD): This is a New Mexico state permit. The installation of any mobile home requires an MHD. All mobile homes in New Mexico are required to have an MHD before electric installations.

NEW SERVICE GROUP:

NPRC: Non-Pay Reconnect for Existing Residential Service:

NSER: New Service.

OVERHEAD DISTRIBUTION AREA: An area which is served by existing Company overhead electric facilities or which has been designated by the Company as an overhead distribution area.

POINT OF ATTACHMENT: The first point of contact on Customer's premises, building structure, or service pole to which the Company's Service Wires are attached.

POINT OF CONNECTION: The point where the Company's wires or facilities are connected with those of the Customer. A Point of Connection may sometimes be referred to as a Service Point or a Point of Delivery.

POINT OF DELIVERY: The point where the Company's wires or facilities are connected with those of the Customer. A Point of Delivery may sometimes be referred to as a Service Point or a Point of Connection.

PRIMARY VOLTAGE: One of the Company's standard voltages between 4,000 volts and 24,000 volts, inclusive, phase to phase. Different Primary Voltages are available in various parts of the Company's service area. All voltages are not available in all areas.

QUALIFYING FACILITY: A cogeneration facility or a small power production facility that qualifies under the Public Utility Regulatory Policies Act of 1978 (PURPA) as a Qualifying Facility.

RELEASE: A document from the relevant official of the authority having jurisdiction allowing new service or upgrades from current service.

REQUEST FOR SERVICE FORM: A Company form that must be completed by a Customer requesting new or changed electric service. The information on this sheet, plus applicable plans, provides the Company with the information necessary to provide the requested service. A Request for Service Form may also be referred to herein as a Customer Service Request Sheet.

RESIDENTIAL CUSTOMER: Every individual house, apartment, or other living quarters occupied by a person or persons constituting a distinct household and using electric service for lighting, appliances, heating, cooking, refrigeration, and incidental single-phase power solely in conjunction with domestic home use.

RIGHTS-OF-WAY OR EASEMENTS: Areas or property where the Company has the right to install, operate and maintain its facilities and equipment by virtue of a grant by property owner. Company facilities will only be installed where firm Rights-Of-Way or Easements have been obtained.

SECONDARY SERVICE ENCLOSURE: A small junction box used or required by the Company in underground served areas as a pullbox and connection point for low voltage secondary conductors. Also referred to as a service pedestal.

SECONDARY VOLTAGE: One of the Company's standard service voltages below 600 volts, phase to phase.

SERVICE ENTRANCE EQUIPMENT: Customer-owned wire, conduit, switches and fittings which are installed on Customer's premises to connect to Company's wiring or facilities at Point of Delivery.

SERVICE POINT: The point where the Company's wires or facilities are connected with those of the Customer. A Service Point may sometimes be referred to as a Point of Connection or Point of Delivery.

SERVICE WIRES: The wires of the Company which are connected to the service entrance wires of the Customer or to the line side of the Meter Enclosure.

TRANSMISSION VOLTAGE: One of the Company's standard voltages greater than or equal to 69,000 volts.

TYPE OF SERVICE: The characteristics of electric service described in terms of voltage, phase, frequency, and number of wires.

UNDERGROUND DISTRIBUTION AREA: An area in which the Customer's premises abut on existing Company underground service facilities or which has been designated or dedicated to underground service by the Company or by covenants or filed Easements stipulated by a developer or regulatory authority.

SECTION III

GENERAL INFORMATION AND REQUIREMENTS

THE FOLLOWING INFORMATION WILL APPLY TO ALL TYPES OF SERVICE:

1. LINE EXTENSION PROCESS

Because of various factors involved with each Line Extension and the Company's workload at any given time, it can take up to 12 weeks to complete everything necessary to provide Customers with electric service. It can take longer than 12 weeks if special materials or Easements or permits are required. Therefore, it is important to give the Company as much advance notice as possible, including the information needed by the Company, in order to provide electric service in a timely manner and by the date the Customer needs electric service. Below is a brief step by step process of the Company's Line Extension process:

- Step 1: Customer contacts the Company to request electric service.**
- Step 2: Customer's request for electric service is assigned to a Designer who will usually contact the Customer within 1 business day after receiving the Customer's request for electric service.**
- Step 3: Designer will arrange to meet with the Customer to obtain all the information necessary to start the engineering design of the Line Extension. Customer's electrical plans must be approved by the Company during this step and before the Customer orders electrical equipment or starts the electrical work.**
- Step 4: Designer conducts a site visit of Customer's property to determine requirements for electric service.**
- Step 5: Designer prepares an engineering design of the proposed Line Extension, which includes the estimated cost of the Line Extension.**
- Step 6: Designer confirms the Service Point location with the Customer and explains the Company's Line Extension Policy to the Customer.**
- Step 7: Customer reviews and approves the Company's Service Point location and engineering design.**

- Step 8:** If necessary, the Designer sends the project to the Land Management Department of the Company to secure all necessary property rights and permits.
- Step 9:** After all required property rights and permits are obtained and the final estimated cost of the Line Extension is known, the Designer will perform a cost-revenue analysis to determine whether or not the Line Extension is revenue justified. The Designer discusses this with the Customer.
- Step 10:** After the Customer signs the Line Extension Agreement and makes payment to the Company for the Line Extension, if applicable, the Designer releases the job to construction.
- Step 11:** The new Line Extension will not be constructed until the Customer's electric service equipment installation is completed, has passed inspection, and the Customer is ready to take service.
- Step 12:** Once the Line Extension is constructed and the Customer's electric service equipment installation is completed and has passed inspection, the Company's New Service Group will contact the Customer to create a new account and create a Field Activity to install the service and meter.

1. THE DESIGNER IS THE CONTACT FOR ELECTRIC SERVICE EXTENSIONS

The Designer in the Distribution Design and Delivery Business Unit has the responsibility of being the one point of contact for Customers, electrical contractors, builders, consulting engineers, architects, etc., to work with in obtaining electric service to new facilities or in making changes in existing facilities. The Designer serves as the liaison between other departments in the Company and the Customer to coordinate all aspects of any given project. **It is therefore extremely important that the Designer be informed immediately of any changes in electric load requirements, specifications, or location. The designer should be notified in the event of any questions or problems. A lack of communication between the Customer and Designer can result in delays and other issues.**

2. COMPANY POLICIES AND RULES

- A. Each request for service will be considered in accordance with the terms and conditions of the Company's filed **Line Extension Policy, Rules and Regulations Regarding Electric Service, applicable tariffs** and in accordance with other standard operating procedures and policies.
- B. Several drawings and written comments explaining Company policies and standards are included in this Blue Book. The DSO and DSU are shown later in this Blue Book. However, since they are updated or revised periodically,

contractors and consulting engineers should check with the Company if they have any questions, especially on major projects.

3. CUSTOMER SERVICE REQUEST SHEET

On commercial or industrial projects, the Customer Service Request Sheet must be completed and signed before the Company will begin final engineering design or construction. The Customer Service Request Sheet is to be given to the appropriate Designer and should contain firm information and be accompanied by final plans. It is important that the appropriate copies of plans are provided. Generally, the following plans will be needed or are required: site plan, legal description, elevation of building, grading, parking and drive layouts, floor plans and all electrical plans (including riser, main and panels). Customer Service Request Sheets are available from the Designer, and a sample is shown at the end of this Section. It may require 6 to 12 weeks to complete engineering, obtain necessary property rights, prepare and execute any needed agreements and complete construction. Some larger projects or those with special requirements may take even longer. Therefore, the Customer Service Request Sheet must be completed, and the project discussed with the Company as early as possible. It is important that the electrical load information, including motor load information asked for on the Customer Service Request Sheet, is furnished accurately and completely.

4. MAINTAINING PROPER SAFETY CLEARANCES FROM EXISTING COMPANY FACILITIES

A. **The owner, architect, consulting engineer, or electrical contractor shall show the location, to scale, of all existing Company poles, anchors, wires, underground facilities, etc. on the electrical site plan, as required by applicable law.** Any conflicts with these existing Company facilities and the proposed use of the land – i.e., clearances from buildings or interference with traffic flow – should be identified as early as possible in the design stages of a project. The Designer should be notified of the potential problems so that design changes can be made if the Company cannot relocate or adjust its facilities. This allows for design changes to be made by the Company before the Customer lets a project out for bid, which can help prevent delays in the project.

B. **IF AN IMPAIRED CLEARANCE IS CREATED DURING CONSTRUCTION, THE COMPANY WILL USE ALL AVAILABLE LEGAL REMEDIES TO HALT CONSTRUCTION IMMEDIATELY IN ORDER TO PREVENT INJURY, DEATH, OR DAMAGE.**

5. DETERMINE TYPE OF ELECTRIC SERVICE AVAILABLE

The Customer, architect, consulting engineer or electrical contractor shall meet with the Designer to determine the exact type and location of service which will be supplied at the premises to be served before specifying or purchasing any equipment or proceeding with the wiring of the project. Attention to this detail may avoid the purchase of equipment for which service is not available or the added cost of installing additional electrical facilities. The Company is ready to assist in the design stages of a project in any way.

EXISTING EQUIPMENT MOVED TO OTHER PREMISES WITH A DIFFERENT TYPE OF SERVICE MUST COMPLY WITH THE PREVAILING REQUIREMENTS OF THE COMPANY BEFORE BEING CONNECTED IN A NEW LOCATION.

6. AVAILABILITY OF OVERHEAD OR UNDERGROUND SERVICE

- A. Overhead service will normally be provided to serve Customers in areas where it is existing, in rural areas and to large manufacturing or industrial tracts. If a Customer requests underground service in one of these situations, each request will be considered on its own merits. The Company will not make an extension that would be economically detrimental to other Customers. If a Customer can be easily served overhead with minimum Company investment and desires underground service for aesthetic reasons only, the Customer may be required to pay the additional cost of the underground facilities. **All overhead services shall be approved, in advance, by the Company and shall be accessible to the Company and its agents 24 hours a day, seven days a week. The service disconnecting means shall be a fusible, loadbreak-rated meter disconnect or overcurrent protective device for all commercial services and a fusible meter disconnect for all residential services, and the service disconnecting means shall be installed on the exterior of the building or structure adjacent to and not more than 5 feet from the meter.**

For overhead services, parallel risers are allowed only under the following conditions:

1. Multiple meters over 400 amps total.
 2. For services greater than 600 amps, up to a maximum of four (4) risers total will be allowed, and only conductor sizes of 350 MCM and larger will be allowed.
 3. For 320 amp meter cans with a single meter, a maximum of two (2) risers total are allowed and can be paralleled, and only conductor sizes 4/0 and larger will be allowed.
- B. **Underground service** will be provided in areas dedicated or committed to underground facilities through Easements, covenants, filed plats, etc. by the developer or in areas committed to underground by Company policy or in areas designated for underground utilities by applicable governmental authority. The Company will not extend overhead service facilities into such areas or come from underground facilities to overhead facilities. (The Company's express feeders may extend overhead through or into such areas by necessity.) **All underground services shall be approved, in advance, by the Company and shall be accessible to the Company 24 hours a day, seven days a week. The service disconnecting means shall be a fusible, loadbreak-rated meter disconnect or overcurrent protective device for all commercial services and a fusible meter disconnect for all residential services, and the service disconnecting means shall be installed on the exterior of the building or structure adjacent to and not more than 5 feet from the meter.**

- C. **Primary single-phase or three-phase underground risers** will not be installed on an existing Company pole which has other facilities on it (i.e., transformers, capacitors, etc.). There shall only be one riser installed on a pole except when a double riser base is used.
- D. High-Leg Marking on a 4-wire, delta-connected system where the midpoint of one phase winding is grounded to supply lighting and similar loads, the conductor or busbar having the higher phase voltage to ground shall be durably and permanently marked by an outer finish that is orange in color or by other effective means. This is in accordance with the NEC, Article 110.15.
- E. For all new overhead services, Customer is responsible for all costs associated with trimming all trees necessary in order to have a clear line of sight to install the overhead service drop. The overhead service drop will not be installed until all tree trimming has been completed.

7. MOTORS

The availability of three-phase service and/or certain voltages to serve a Customer's motors will vary in different locations of the Company's service area. Contact the Designer about proposed plans before purchasing new or used motors to ensure that motors can be served at the desired location. See Section V for additional information on electric service to motors.

8. VOLTAGE VARIATIONS/CLEAN POWER

The Company is responsible for maintaining steady-state voltage levels of power provided to Customers within the ranges stipulated by appropriate regulatory agencies. The Company cannot guarantee that the steady-state voltage will not vary within these ranges. The Company provides "utility-grade" voltage and cannot guarantee "clean" power that is free from outages or voltages transients, also known as spikes, dips, sags or swells. Normal operation of the Company's electrical system may result in voltage transients and outages in addition to problems caused by storms, accidents, collisions, wildlife or equipment failure. **It is the Customer's responsibility to install and maintain protective equipment such as power conditioners, Uninterrupted Power Supply systems, surge suppressors, single phasing protection for three phase motors, etc.**

Customers shall adhere to IEEE Standard 519, Section 10, for current distortion (harmonics) limits at the point of common coupling (PCC) unless a written variance is obtained from the Company. If a Customer has a question about voltage levels or current distortion, call (915) 877-3400 in Texas or (575) 523-7591 in New Mexico or you can call toll free at (800) 351-1621. The Company will determine if a problem exists with the Company's service or is being caused by another source or the Customer's equipment.

9. METERS AND METERING REQUIREMENTS

Refer to Section VI for complete information on metering. Special comments on metering also appear in various sections as applicable.

IMPORTANT NOTE: Even though the electrical contractor furnishes the Meter Socket or Enclosure, the Company will specify what type of Meter Socket or Enclosure is to be used on each service and where the meter will be located. For commercial installations, please contact the appropriate Designer, or the Company's Meter Test Section at (915) 543-5860.

A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment.

10. CONNECTORS (LUGS, SPADES)

- A. On all new or upgraded commercial overhead services, including parallel and multiple service risers, the Customer's electrical contractor shall provide and install the connector for all wire sizes above 4/0.

These connectors shall be a compression lug straight two-hole NEMA that meets EEI-NEMA Standard TDJ-162, or a compression lug stacking two-hole NEMA that meets EI-NEMA Standard TJC-162. The Customer's electrical contractor shall be responsible for providing the spades and shaping, identifying, and crimping the connectors.

All parallel conductors shall be shaped, spaded, crimped and bolted together showing like phases.

- B. On all new or upgraded commercial underground services, the Company will continue to connect the Customer's secondary service wire to the Company's service wire or transformer, and the Company will provide and install the connectors for all wire (conductor) sizes up to 500 MCM for single-phase and up to 750 MCM for three-phase.

If the Customer's electrical contractor installs a different size conductor than the ones listed above, the Company will require the contractor to provide and install the connectors on the Service Wires and the Company will then make the connection.

11. MAXIMUM NUMBER OF CUSTOMER CONDUCTORS ALLOWED FOR PADMOUNT TRANSFORMER OR SECONDARY SERVICE ENCLOSURE CONNECTION

Depending upon the size, voltage and type of padmount transformer the Company will specify for a job, only a certain number of Customer secondary conductors can be accommodated within the transformer housing and on the bushings. Please refer to DSU 510 for the limits in effect for each transformer. If the Customers' number of conductors per phase exceeds the limits, the Customer must provide, install, own and maintain a secondary bus enclosure (or a submersible set screw-type bar connector and enclosure approved by the Company – the Company will specify which is to be used) for the Point of Connection. The consulting engineer or the electrical contractor shall verify with the Company as to whether a separate secondary termination will be required before Customer's plans are finalized and the job goes out for bid.

If the Service Point is in a Company-provided Secondary Service Enclosure, please refer to DSU 405 for the maximum number of conductors allowed. If the Customer's number of conductors per phase exceeds these limits, a separate enclosure shall be provided by the Customer as stated in the preceding paragraph.

12. ONE TYPE OF SERVICE PER BUILDING

The Company will normally provide only one Type of Service and one set of service conductors to a building, and all electric energy is to be measured by a meter(s) at each point of delivery.

If more than one electrical service entrance to a building is desired, all applicable building, fire and electrical codes must be met and must be approved in advance by the Company. **The Customer shall pay, as a nonrefundable Contribution in aid of Construction (CIAC), for all costs associated with an additional Service Point. The Company reserves the right to refuse to provide multiple points of service if the multiple points of service causes problems for the Company or is not equitable for the Company.**

As per Article 230.2(E) of the National Electrical Code, where a building or structure is supplied by more than one service, a permanent plaque or directory shall be installed at each service disconnect location denoting all other services supplying that building or structure and the area served by each.

13. OVERTIME WORK BY COMPANY AT CUSTOMER'S REQUEST

If a Customer requests the Company to perform work at a time other than normal business hours for the particular employees involved, the Customer shall pay the total labor and supervisory costs (with applicable overheads) incurred by the Company directly related to the overtime work. For example, the Customer would be charged the full time and a half or double time rate of pay for employees, and not just the amount above regular time.

14. SERVICE POINT LOCATION CONFIRMATION

Customer or the Customer's authorized agent shall provide their electrical requirements, including the Customer's electrical power riser diagram, to EPE before any work is started on the Customer's wiring. The Company will provide to the Customer written confirmation that the Company agrees to provide electric service to the location mutually agreed upon by the Customer and the Company.

The Point of Attachment or delivery and location of all new Company facilities will be designated by the Company. The Customer should mark the desired Service Point on the plans. Due to individual situations, every building may not be served as desired. The location for the Point of Attachment and meter shall be secured from the Designer in writing. This information shall be obtained before any work is started on the Customer's wiring. Since the desired voltage may not be available or the distance for an overhead drop may be too far, the Customer should not assume that a building will be served from the nearest pole or transformers. The Company will also specify the height of the Point of Attachment for an overhead drop to meet all codes.

Architects and owners must be aware of the planned location of Company poles, anchors, padmounted transformers, etc., to ensure that potential problems with landscaping, vehicle and pedestrian traffic flow, aesthetics, trash receptacles, possible future expansions, etc., will be minimized and resolved in the early stages of design or construction.

15. CHANGES IN PLANS

If a change in the electric service specifications, building design or site plan is contemplated after the Customer has requested service verbally or the Customer Service Request Sheet has been submitted, the Customer must notify the Designer immediately. Changes in electrical service specifications may result in additional charges to the Customer if such changes require revision or construction already completed by the Company or extensive engineering design changes.

16. INSPECTION AND APPROVAL OF CUSTOMER'S WIRING

- A. The Customer's wiring and equipment shall be installed in conformity with the latest edition of the National Electric Code and any other codes or regulations in effect in the area served. It is important that Customers and contractors make proper arrangements with the City Inspectors where applicable in Texas and State Inspectors in the State of New Mexico in order to avoid delaying the Company from providing service. **THE COMPANY IS PROHIBITED BY LAW FROM CONNECTING ANY SERVICE UNTIL THE AUTHORIZED INSPECTOR HAS APPROVED THE WIRING INSTALLATION IN WRITING.** The Company inspects the Customer's installation only for the purpose of insuring that the installation meets the Company's own requirements at the meter and Point of Connection.
- B. In Texas and New Mexico, all new residential and commercial services must be approved by the authorizing agent having jurisdiction. In Texas and New Mexico, this inspection and approval must be made by the authorized City, County or State Inspector. In the unincorporated areas of the Company's Texas service territory, the Company is responsible for the inspection and approval of the Customer's wiring. All new residential and commercial services, including changes to existing residential and commercial services, are also subject to inspection approval by the Company.
- C. The Customer's wiring must be confined to Customer's own premises, and cannot cross public alleys, or streets, or other public or private property used by others.
- D. The Electrical Ordinances of the City of El Paso and the state of New Mexico require that all electrical work performed within those jurisdictions must be installed by a licensed electrical contractor. In areas outside of these jurisdictions, El Paso Electric Company will inspect the Customer's wiring at the meter and Point of Attachment and will not connect any service that does not meet the National Electric Safety Code requirements. If the Company is aware of a hazardous wiring condition on the Customer's premises, a connection will not be made until the hazardous condition is corrected.

17. APPLICATION FOR NEW SERVICE

The Customer must apply for permanent service in the following manner:

- A. **In the Texas area**, the Application for New Service is to be made as follows:
 - 1. Residential Customers: Apply by phone or in person at any of the Company offices listed in Section I.
 - 2. Commercial Customers: Apply by phone or in person to the New Service Group **(915) 521-4646**.
 - 3. Customers in Fabens, Anthony, Sierra Blanca or Van Horn, Texas, may apply at Company offices in those communities or at Company offices in El Paso. See Section I for locations and phone numbers.
- B. **In the New Mexico area**, the Customer must apply for permanent service either by phone at (575) 523-3575 or in person at one of the Company's offices located in Las Cruces or Anthony, New Mexico. The phone numbers and addresses for each of these locations are listed in Section I.
- C. There are different requirements depending on the area and state where electric service is being requested. Some of these requirements include but are not limited to the following: Social Security Number, proper identification, Certificate of Compliance for residential service in the county areas of Texas, building permits in all areas of New Mexico, and deposits for some Customers. Deposits must be paid when applying for electric service and a meter. The required deposit shall not exceed an amount equal to one-sixth of the estimated annual billings. An Application for New Service should be made as early as possible in case additional electrical facilities are required, which could delay electric service.

18. ENERGIZING CUSTOMER'S SERVICE

The Company will make the service connection during **normal working hours, excluding holidays, Saturdays or Sundays**, upon receiving notice that the Customer's installation is ready for service and has passed all inspections where required. **It is necessary for the Customer to have his permanent address attached to the front of the building or to have the permanent address displayed between the street and building. The address must be visible from the street. Service will not be connected until the address is posted.** In multiple-tenant buildings that are individually metered, all Meter Sockets and switches must be properly and permanently identified. Metal numbers or painting of numbers or letters is a requirement of the Company and local fire protection authorities. The numbers or letters must be a minimum of 4 inches in height. If numbers are placed on wood, only solid boards can be used (no plywood allowed).

Only Company authorized employees are permitted to make and energize the connection between the Company's Service Wires and the Customer's service entrance conductors. Such employees carry identification badges which will be shown upon request.

19. CUSTOMER CHANGING OR INCREASING EXISTING ELECTRICAL REQUIREMENTS

Customers shall not increase or decrease the connected load except upon notice to the Company, and in the event of any such increase or decrease, the Customer shall pay for such increased or altered service at the Company's approved rates with applicable minimum or guaranteed charges. The Customer, if requested by the Company, will sign a new agreement based on the Company's regular approved rates covering the total new connected load. When there is to be a change in existing electrical requirements (a different voltage required, for example), the Customer should notify the Company as soon as possible to allow enough time for the Company to meet these changes. The owner, architect, consulting engineer or electrical contractor should contact the appropriate Designer to determine the exact type and location of existing service and facilities available at the premises before specifying or purchasing any equipment or proceeding with the wiring of the project. Attention to this detail may avoid the purchase of equipment for which service is not available or the added cost of installing additional electrical facilities. The Company is ready to assist in the preliminary design stages of a project to coordinate the Company's installation with the Customer's plans. Fault Current information can be obtained by calling the appropriate area Designer.

EXISTING EQUIPMENT MOVED TO OTHER PREMISES MUST COMPLY WITH THE PREVAILING REQUIREMENTS OF THE COMPANY BEFORE BEING CONNECTED IN A NEW LOCATION.

A. Change Required in Existing Company Facilities

When extensions beyond the existing service facilities of the Company are required or when additional load is to be added, changes in electrical requirements for existing Customers will be initiated after the Customer has completed and signed a Customer Service Request Sheet. It is important that the information asked for on the Customer Service Request Sheet is furnished accurately and completely and should include the following:

1. Date that the change in service will be required.
2. Proposed change in electrical load which includes heating, cooling, lighting, motors, phase and voltage.
3. Site plan showing the physical layout of the existing building in relation to the property, electrical plan and the legal description of the property. In some cases this is not required, but when the physical shape of an existing building will be changed or when a different Service Point or additional facilities are required, then this information will be necessary. When a change in the Service Point is necessary, a notation should be made indicating the desired electric Service Point. Approval for the Service Point must be obtained through the Designer.
4. In New Mexico, electrical loads over 100 KVA single phase or over 225 KVA three phase require electrical plans stamped by a Registered Professional

Engineer and must be approved by the State. Such plans shall be provided to the Company as a condition of service and as early in the design process as possible.

- B. The maximum service length of overhead or underground wires from the Company's new or existing facilities to the Customer's Service Point will depend on the Customer's electrical load and size of the Company's Service Wires. Confirm the maximum service length that will be allowed before finalizing the plans.
- C. If a change in the electric Service Point is requested by the Customer simply for convenience or any other reason that is not economically equitable for the Company, there will be a relocation charge to the Customer.
- D. If the Company, at the Customer's request, replaces existing overhead facilities with underground facilities, the Customer shall pay the Company in advance the estimated installed cost of the new underground facilities plus the estimated cost to remove the existing overhead facilities, less the estimated salvage value of the removed overhead facilities.

The Company will not make an underground "dip" in an overhead feeder line. If a Customer requests that the Company convert an overhead line to underground, the entire overhead line must be converted from the point it goes underground to the end of the line. This connection would be done at the Customer's expense.

- E. **When changes or additions in a structure or building are made which impair the clearance of Service Wires or make the Company's facilities and metering equipment inaccessible, the Customer shall change the service entrance so that the Company can move the service to obtain proper clearance and/or maintain access to Company's facilities and metering equipment. If this change is necessary, the Customer shall bear all costs incurred.**

20. ACCESS TO CUSTOMER'S PREMISES

The Company's representatives shall have free and easy access at any time to its equipment on the premises of the Customer and may remove its meters and equipment for proper cause.

21. ATTACHMENT TO COMPANY'S PROPERTY

The use of Company poles, wires, towers, structures or other facilities for the purpose of fastening or supporting any radio equipment, or any lights, wires, ropes, signs, banners or anything of any nature, not necessary to the supplying by the Company of electric service to the community, or the locating of same in such proximity to the Company's aforesaid property of facilities as to cause, or be likely to cause interference with the supply of electric service, or a dangerous condition in connection therewith, is prohibited and the Company shall have the right forthwith to remove same without notice, unless the Company's consent is given in writing.

22. EASEMENTS OR RIGHTS-OF-WAY

The Company will not install any electrical facilities until all required Easements or rights-of-way have been obtained in writing from the owner or legally authorized agent representing the owner of the property. In extreme cases, it may require several months to obtain an Easement, so it is advantageous to the Customer to notify the Company of his/her plans as early as possible.

23. PROTECTION OF COMPANY'S PROPERTY

The Customer shall properly protect the Company's property on the Customer's premises and shall not permit anyone other than the Company's agents and persons otherwise authorized by law, to inspect or maintain the Company's wiring and apparatus. In the event of any loss or damage to Company's property caused by or arising out of carelessness, neglect, or misuse by the Customer or other unauthorized parties, **the cost of replacing such loss or repairing such damage shall be paid by the Customer.**

24. RESPONSIBILITY FOR CUSTOMER'S INSTALLATIONS

The Company will not be responsible for any accidents, fires, or failures which the Customer may sustain due to the condition or use of the Customer's wiring installation or equipment. The Company reserves the right to refuse to connect its electric service to any new installations, and to disconnect any existing installations, should it come to the attention of and be determined by the Company that any such installation is unsafe. **The Customer has the sole responsibility of providing and installing the appropriate equipment to adequately protect 3 phase motors, etc., from damage in the event a single phasing condition might occur. The Customer will also provide the proper protection against Fault Currents, low voltage, interruption of electrical service, etc.**

25. RATES AND BILLINGS

A. The Customer must notify the Company at **(575) 526-5555** in the New Mexico area or at **(915) 543-5970** in the Texas service area to ensure that the Customer will be billed under the proper rate schedule when there has been a change in electrical requirements.

The Company will assist the temporary and permanent Customer in the selection of the rate schedule under which the Customer is eligible to be billed. However, the Company will not be held responsible to refund any overcharge caused by failure on the part of the Customer to select the appropriate rate schedule, or for failure on the part of the Customer to promptly notify the Company of a change in Customer's operations. The rate schedules and rules and regulations, which are approved and filed with the appropriate regulatory agencies, are available for Customer's review upon request.

B. **The Company will not be obligated to change any past consumption history or make any billing adjustments due to a change in existing electrical requirements or usage.**

26. METER PULSE OUTPUT FOR ENERGY MANAGEMENT EQUIPMENT

The Company will provide electric kilowatt-hour (KWH) pulses to the Customer for use with energy management equipment. Time pulses will not be provided. These KWH pulses will be provided by pulse metering equipment installed by the Company. The Customer pays the full cost of the installation. The Customer must contact the appropriate area Designer for additional information and cost. Please see **page 32** for a sample copy of the "Agreement and Terms and Conditions for Pulse Metering Equipment Installation."

27. FUTURE CHANGES IN POLICIES IN THIS BOOK

The Company reserves the right to make changes in any policies, procedures, methods, rules, tariffs, etc., without advance notice to recipients of this Blue Book or to the general public. Where needed, the appropriate regulatory approval will be obtained before any changes are made. Other changes may be made at the Company's discretion due to technological or economic conditions.

28. CUSTOMER BACKUP GENERATORS

Refer to Section XX, "Generation Utilized for Backup Support," for information regarding backup generator requirements.

AGREEMENT AND TERMS AND CONDITIONS FOR PULSE METERING EQUIPMENT INSTALLATION

El Paso Electric Company ("Company") and, _____ [an Electric Power and Energy end-user; or the written authorized representative of _____, an Electric Power and Energy end-user ("Customer")] hereby agree that the provision of Pulse Metering Equipment will be governed by the Company's Tariff for Retail Delivery Service and this Agreement and Terms and Conditions for Pulse Metering Equipment Installation ("Agreement").

Upon the request of Customer, Company shall install, maintain, repair, replace, or remove Pulse Metering Equipment located at Company's Meter used for billing Delivery System Services in accordance with the following terms and conditions:

1. Company shall install Pulse Metering Equipment, including: pulse initiator, as needed; external protective devices, as needed; junction box as needed; and necessary wiring and related materials and supplies up to a point for Customer's interconnection.
2. Customer shall be responsible for the installation and maintenance of all wiring and equipment on Customer's side of the point of interconnection with Company's Pulse Metering Equipment.
3. Customer agrees that Company is not obligated to alter or adjust any meter reading based on the equipment that Customer installs to receive the Electrical Pulses provided for herein and that Company in no way guarantees that Customer's equipment will operate satisfactorily.
4. Company shall charge and Customer shall pay (i) the installation charge as set forth in Company's Tariff for Retail Delivery Service, or if there is no such charge, (ii) the difference in costs, if any, between the existing meter (or the standard meter if no meter is currently installed) and the cost of an advanced meter that meets Customer's requirements, or (iii) the actual cost of the installation requirements, which includes the actual cost of equipment, labor, and overheads necessary to provide pulse access, or (iv) an engineering estimate thereof. Customer shall remit payment to Company for the costs incurred under this paragraph by the due date shown on Company's invoice.
5. Only Company or Company's authorized representatives shall install, maintain, repair, replace, or remove Pulse Metering Equipment. Company shall normally complete installation or removal of such equipment within thirty (30) days from the date request is made in accordance with Section 10. Normal installation times may be impacted by equipment availability or other factors beyond the reasonable control of Company. If Company determines that the installation time may exceed thirty (30) days, Company shall provide notice to Customer pursuant to Section 11 of this agreement. Company shall provide notice to Customer's contact person as set forth in Section 11 of this Agreement when Pulse Metering Equipment installation is complete, including pulse multipliers for the meter, so that pulse data can be interpreted.

6. Company shall maintain, repair, or replace Pulse Metering Equipment installed hereunder, if and to the extent that such work is necessary to maintain the pulse access desired by Customer. If applicable, a charge for maintenance shall be optional, with Customer having the option whether to pay a monthly maintenance fee, rather than the cost of repair or replacement should such become necessary to maintain the pulse access desired by Customer. Company shall charge and Customer shall pay (i) the replacement charge, (ii) the actual cost of all required repairs/replacement, or (iii) an engineering estimate thereof. Company shall repair or replace only such Company equipment as requires repair or replacement.
7. If an isolation relay is used, under no circumstances shall Customer modify or interrupt the operation of Company's relay and associated wiring.
8. Company shall have the right to interrupt the pulse circuit in accordance with the provisions of the Company's tariff for Retail Delivery Service.
9. This Agreement may be amended, revised, or otherwise changed only by an appropriate order of an Applicable Legal Authority.
10. All requests for Pulse Metering Equipment shall be in writing and must include the following information:
 - (a) Customer name;
 - (b) Letter of authorization if Customer is other than an Electric Power and Energy end-user;
 - (c) Customer's authorized representative contact name, if applicable;
 - (d) Customer's authorized representative contact phone number, if applicable;
 - (e) ESI ID (if available);
 - (f) Service address (including City and zip code);
 - (g) Pulse data requested e.g. watt-hour, time, var-hour;
 - (h) Billing/Invoice Information, including:
 - Responsible Party;
 - Billing Address; and
 - (i) If Customer is not the owner of the premises upon which Pulse Metering Equipment will be located, Customer shall represent that Company is fully authorized to enter the premises and to perform any reasonable effort necessary to install, maintain, repair, replace, or remove Pulse Metering Equipment.
11. All communications necessary in the administration and execution of this Agreement may be effectuated by contacting Company and Customer at the addresses and telephone numbers set forth below:

FOR COMPANY: **EL PASO ELECTRIC COMPANY**
 P. O. BOX 982
 EL PASO, TEXAS 79960

Contact: _____

Address: _____

E-mail: _____

Phone Number: _____

Fax Number: _____

FOR CUSTOMER:

SERVICE ADDRESS: _____

Contact: _____

Address: _____

E-mail: _____

Phone Number: _____

Fax Number: _____

Either party may change the preceding designation by providing the other party with no less than thirty (30) days advanced notification of such change.

- 12. Except as expressly provided by this Agreement, no provisions of this Agreement shall revise, alter, modify, or amend Company's Tariff for Retail Delivery Service.

- 13. This Agreement shall commence upon the date of execution by both Parties (the "Effective Date") and shall terminate (a) upon mutual agreement of the Parties, or (b) written notification by Customer to Company that it request to terminate this Agreement; or (c) upon the effective date of a new agreement between the Parties.

- 14. Termination of this Agreement, for any reason, shall not relieve Company or Customer of any obligation accrued or accruing prior to such termination.
- 15. This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

Company (insert name) El Paso Electric Company

(legal signature) _____

(date) _____

Customer (insert name) _____

(legal signature) _____

(date) _____



**EL PASO ELECTRIC COMPANY
RESIDENTIAL REQUEST FOR SERVICE FORM**

Responsible Party:

Property Owner Name: _____ Phone: _____ Email: _____
 Customer Name: _____ Phone: _____ Email: _____
 Electrician Name: _____ Phone: _____ Email: _____
 Builder/Contractor: _____ Phone: _____ Email: _____
 Service address: _____
 Mailing address: _____
 Primary _____ Owner _____ Customer _____ Electrician _____ Builder
 Preferred _____ Email _____ Phone _____ Best Time to Call: _____
 If property is in a rural area, please provide GPS coordinates or driving directions: _____

New service classification:

_____ Mobile Home	_____ Multiplex/Duplex	_____ Single Family	_____ Sq. Ft.
_____ Permanent	_____ Temporary	In Service Date Required _____	
_____ Overhead	_____ Underground		

THE FOLLOWING INFORMATION MUST BE MADE AVAILABLE TO YOUR EL PASO ELECTRIC COMPANY DESIGNER IN ORDER TO INITIATE DESIGN FOR AN ELECTRIC LINE EXTENSION.

- A) _____ Legal Description/Warranty Deed
- B) _____ A plot or site plan with dimensions that include the legal description must be provided. If a property right is needed the Property Survey may be required.
- C) Total Connected Electrical Load _____ KW
- D) Generation- Customer installed back-up generator (check applicable items)

_____ Solar	_____ KW	
_____ Fuel	_____ KW	
_____ Other	_____	_____ KW
_____ None	_____	

Please check the following and indicate number of units and size.

NO/SIZE

_____	Electric Water Heater	_____	KW
_____	Heat Pumps	_____	KW
_____	Electric Heat	_____	KW
_____	Evap. Cooler	_____	HP
_____	Refrigerated Air	_____	Tons
_____	Swimming Pool	_____	HP
_____	Jacuzzi	_____	HP
_____	Domestic Well	_____	HP
_____	Generator	_____	KW
_____	Other (Hand Tools, Welders, Etc.) Please indicate no. and size of equipment		

Conductors Per Phase _____ Main Size _____ Wire Size _____

- A) A New Mexico Building Permit will be required if the residence is located in Dona Ana County (575-647-7350).
- B) THE COMPANY'S REPRESENTATIVES SHALL HAVE FREE AND EASY ACCESS AT ANY TIME TO EPE EQUIPMENT LOCATED ON THE PREMISES OF THE CUSTOMER AND RESERVE THE RIGHT TO REMOVE EPE METERS AND EQUIPMENT FOR PROPER CAUSE.

Property Owners Signature _____ Date _____

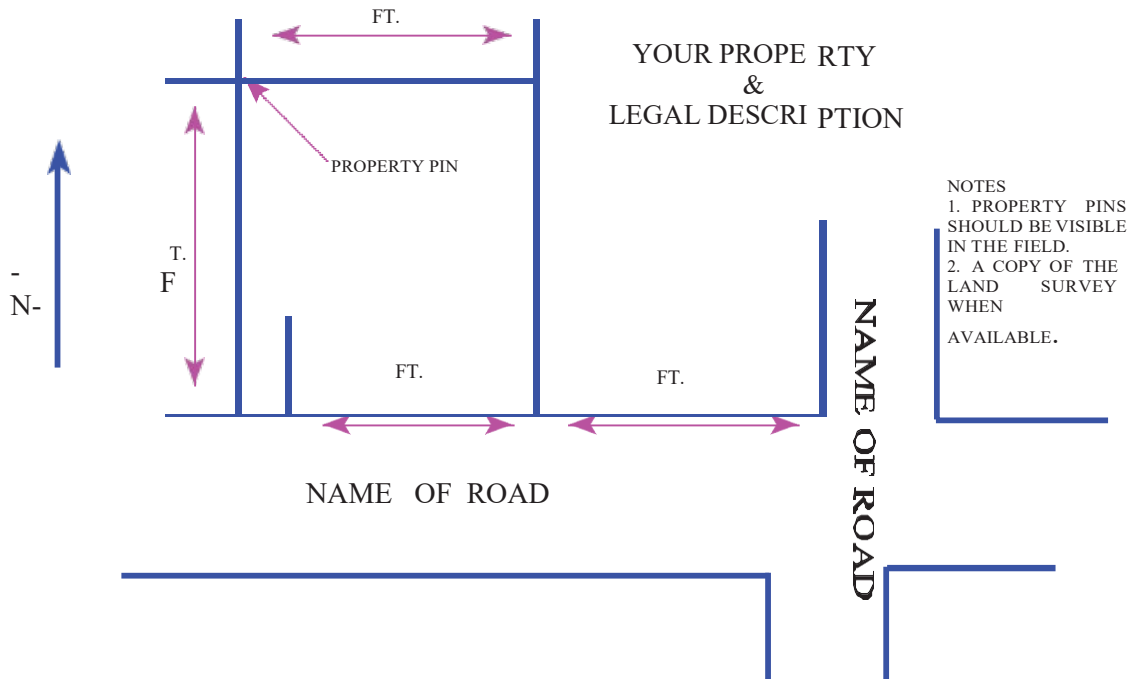
If not self, please appoint an authorized agent for this request.

Electrician Name: _____

Builder/Contractor: _____

EL PASO ELECTRIC COMPANY CHECKLIST

- ___A) Contact Designer or Engineer prior to construction.
- ___B) Provide Designer or Engineer with Residential Request for Service Form.
- ___C) Provide Designer or Engineer with plot plan/site plan. An example is shown below.



- ___D) Confirmation of service location by EPE. Do not install any electrical facilities without approval from EPE Designer or Engineer. EPE will designate the meter and service location.
- ___E) Process agreements and provide revenue guaranty if required.
* The Customer may be required to secure construction charges in the form of cash, Letter of Credit, Certificate of Deposit or Withdrawal Restricted Savings Account if the construction charges exceed Customer's projected revenue for four (4) years. The EPE Designer or Engineer will explain the details.
- ___F) Install property pins which may be required prior to construction.
- ___G) EPE requires that house numbers be attached to your house, meter pole or mobile home. The numbers must be 4" or larger. EPE will not accept cardboard posters or "stick on" numbers. EPE will also require the electrical permit number (New Mexico) or Texas release number at the time you place your Application for New Service.

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SERVICE POINT CONFIRMATION BY EL PASO ELECTRIC COMPANY (EPEC)

Service Address: _____

Customer, or the Customer's authorized agent, has requested electric service at the address shown above, and the Customer has provided their electrical requirements to EPE. This is written confirmation that EPE agrees to provide electric service to the location mutually agreed upon by the Customer and in accordance with the electrical service information provided by the Customer to EPE.

EPE'S SERVICE INFORMATION

Type of Service: ___ Overhead ___ Underground
Service Voltage: ___ 120/208 ___ 120/240 ___ 277/480
 ___ 3 wire ___ 4 wire
Phase: ___ Single Phase ___ Three Phase

Conductors Per Phase: _____ Size: _____ Copper: _____ Aluminum: _____
Neutral Conductors: _____ Size: _____ Copper: _____ Aluminum: _____
Main Size: _____ Amps Entrance Conduit: _____ Size: _____
Maximum Service Length _____
Service Point Location: _____

OVERHEAD SERVICES

For all new or upgraded residential overhead services, the maximum length of the service drop from EPE's pole to the Customer's house or meter pole will depend on the Customer's electrical load and size of Company's Service Wires but shall not exceed 75 feet for electrical loads of 15 KW and less. Shorter distances are required for larger electrical loads and larger Service Wires. The Company will install, own and maintain the meter and the overhead service drop to the Point of Attachment on the house or Customer's meter pole. The Customer will furnish install, own and maintain the Service Entrance Equipment including the wire, conduit and Meter Socket. See EPE's **DSO 415**, and **DSO 417** for further details. Meter poles and all Customer-owned electrical service equipment must be furnished, installed, owned and maintained by the Customer for service to mobile homes. See requirements for meter poles on **DSO 430**.

UNDERGROUND SERVICES

For all new or upgraded single residential underground services with one meter, the maximum length of the service run from EPE's padmount transformer, pullbox or enclosure to the Customer's house or meter pedestal will depend on the Customer's electrical load and size of EPE's Service Wires, but in general will not exceed 150 feet for single phase loads of 200 amps or less. The Customer will furnish, install, own, and maintain the service duct from the Customer's house or meter pedestal to EPE's padmount transformer, pullbox or service enclosure. A total of two (2) bends not exceeding a total of 135 degrees shall be allowed in an underground service duct run; one (1) bend at EPE's padmount transformer, pullbox or service enclosure, and one (1) bend at the Customer's house or meter pedestal, and the underground service duct run must be a straight line from EPE's padmount transformer, pullbox or service enclosure to the Customer's house or meter pedestal. EPE will own and maintain all structural facilities for secondary conductors up to and including the first service enclosure. EPE will furnish, install, own and maintain the meter and the service

cable from the Company's padmount transformer, pullbox or service enclosure to the Customer's service entrance at the house or meter pedestal. The location of the meter must be approved by EPE and shall be located at the nearest point on the house from EPE's padmount transformer, pullbox or service enclosure. See **DSU 420** for underground residential services to houses and manufactured homes set in place on a foundation. See **DSU 1020** and **DSU 1025** for underground residential services for mobile homes. Please note that a meter pole or meter pedestal must be installed for underground service to mobile homes.

For all new or upgraded underground services to multiple Residential Customers where the residential units have their meters grouped and connected into a common gutter, the Point of Delivery shall be at EPE's padmount transformer, pullbox or service enclosure as designated by EPE. The Customer shall furnish, install, own and maintain the underground service duct and cable from the Customer's building to EPE's padmount transformer, pullbox or service enclosure, which is the Point of Delivery. EPE will make the service connection between EPE- owned wires and Customer-owned wires at this point. This policy applies to duplexes, multiplexes, apartments, condominiums, townhouses or other similar construction. The electrical contractor shall obtain approval from EPE for stack metering prior to Customer purchasing and installing this type of metering. No more than four (4) meters stacked vertically shall be allowed for Company-approved stack metering. See **DSU 1040** and **DSU 1045** for the requirements and the separation between meters for this type of installation.

Agreed to and Accepted by Customer:

Signature: _____

Print Name: _____

Title of Person Signing: _____

Date: _____

Agreed to and Accepted by EPE:

Signature: _____

Print Name: _____

Title of Person Signing: _____

Date: _____

**CHECKLIST FOR NEW OR UPGRADED ELECTRIC SERVICES FOR USE BY
CUSTOMERS AND ELECTRICAL CONTRACTORS**

**THE FOLLOWING INFORMATION MUST BE MADE AVAILABLE TO YOUR EL PASO ELECTRIC
COMPANY ENGINEERING DESIGNER IN ORDER TO INITIATE ENGINEERING DESIGN FOR AN
ELECTRIC LINE EXTENSION:**

- _____ Address Posted (Must be on house, building or meterpole & visible from the street)
- _____ Electrical Grounds Properly Connected
- _____ Meter can height (5 feet max. from finished grade to top of meter opening)
- _____ Multiple meter cans shall be guttered and marked (Space # or Suite #)
- _____ Point of attachment at correct height (if not going through the roof)
- _____ Rigid or IMC conduit if going through the roof
- _____ All commercial meter cans must have a heavy-duty lever bypass
- _____ 200 amp meter cans minimum required for underground services
- _____ Main disconnect must be outside and within 5' (feet) of the meter
- _____ Load-side wires made up
- _____ Electrical Inspection Release by Appropriate Authority Having Jurisdiction
- _____ Certificate of Compliance (From El Paso, Hudspeth or Culberson County)
- _____ Spades provided by Electrical Contractor (for overhead services)
- _____ Access needed to Company and Customer Equipment
- _____ Please visit link below for service distance requirements between EPE Transformer and Customer
Meter Loop (Section VI- Metering)
- _____ A minimum of three (3) inch separation is required between meter enclosures and any adjacent
equipment

www.epelectric.com/bluebook

NOTE: If El Paso Electric Company is not able to install the service, meter, and/or energize your service for any reason checked off on this checklist additional charges may apply. If you have any questions, please call:

- El Paso (915) 521-4646
- Las Cruces (575) 523-3575



**EL PASO ELECTRIC COMPANY
COMMERCIAL REQUEST FOR SERVICE FORM**

Responsible Party:

Business Name: _____

Property Owner Name: _____ Phone: _____ Email: _____

Service Address: _____

Mailing Address: _____

Electrician Name: _____ Phone: _____ Email: _____

Builder/Contractor: _____ Phone: _____ Email: _____

Architect: _____ Phone: _____ Email: _____

Primary _____ Owner _____ Electrician _____ Builder/Contractor _____ Architect

Preferred _____ Email _____ Phone _____ Best Time to Call: _____

If property is in a rural area, please provide GPS coordinates or driving directions: _____

Is temporary construction service required? _____ Yes: _____ No: _____

Legal Description: _____

For Right-of-Way Signatures, contact: _____

New Service Classification: _____ Overhead _____ Underground

NOTE: In some cases, temporary service may not be available. A non-refundable cash advance for construction mat be required for the installation of additional facilities.

Meter request may be made by calling (915) 521-4646 in Texas or (575) 523-3575 in New Mexico.

Customer Ready Date: _____ Permanent service is required by: _____

The following information must be made available to the Designer who you are working with the order to initiate engineering design for electrical services:

- _____ Construction Schedule
- _____ Building Elevation Plan
- _____ AutoCAD file of Civil Site Plant
(Include existing/proposed utilities, benchmark and survey/XREF files)
- _____ Property Plat
- _____ Electrical Plan Sheets
(Load/Riser Diagram)
- _____ Civil Plan Sheets
- _____ Landscape Plan Sheets

*Please provide a listing of all electric motors with horsepower size.

EPE'S SERVICE INFORMATION

Type of Service: _____ Overhead _____ Underground

Service Voltage: _____ 120/208 _____ 120/240 _____ 277/480

_____ 3 wire _____ 4 wire

Phase: _____ Single Phase _____ Three Phase

Conductors Per Phase: _____ Size: _____ Copper: _____ Aluminum: _____

Neutral Conductors: _____ Size: _____ Copper: _____ Aluminum: _____

Main Size: _____ Amps Entrance Conduit: _____ Size: _____

Maximum Service Length _____ Service Point Location: _____

Generation- Customer installed back-up generator (check applicable items)

_____ Solar _____ KW

_____ Fuel _____ KW

_____ Other _____ KW

_____ None _____

* For Underground Services:

The Customer may be required to install a secondary bus enclosure if the number of conduits per phase exceeds the approved number allowed for transformer size.

Electrical Load Information:

	<u>Connected KW</u>	<u>Phase</u>		<u>Estimated KW Demand</u>
Existing Load	_____	1	3	_____
New Phase	_____	1	3	_____

El Paso Electric Company Reserves the right to designate the meter location. Do not install any metering without written approval from El Paso Electric confirming location and metering type.
 Items not included in other loads:

		<u>Phase</u>		<u>Estimated KW Demand</u>
New Motors (HP)	_____	1	3	_____
New Motors (HP)	_____	1	3	_____
New Heating	_____	1	3	_____
New Air Conditioning	_____			_____
Total Load	=====			=====

Please list the number and size of each motor 50 HP or greater:

_____	_____
_____	_____
_____	_____
_____	_____

Special Request or Comments: _____

*El Paso Electric Representatives shall have free and easy access at any time to EPE equipment located on the premises of the Customer and reserve the right to remove EPE meters and equipment for just cause.

Signature: _____

Date: _____

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CHECKLIST FOR NEW OR UPGRADED COMMERCIAL CUSTOMERS
(FOR USE BY CUSTOMERS AND ELECTRICAL CONTRACTORS)

- _____ Address Posted (Must be on house, building or meter pole & visible from the street)
- _____ Electrical Grounds Properly Connected
- _____ Meter can height (5 feet max. from finished grade to top of meter opening)
- _____ Multiple meter cans shall be guttered and marked (Space # or Suite #)
- _____ Point of attachment at correct height (if not going through the roof)
- _____ Rigid or IMC conduit if going through the roof
- _____ All commercial meter cans must have a heavy-duty lever bypass
- _____ 200-amp meter cans minimum required for underground services
- _____ Main disconnect must be outside and within 5' (feet) of the meter
- _____ Load-side wires made up
- _____ Electrical Inspection Release by Appropriate Authority Having Jurisdiction
- _____ Certificate of Compliance (From El Paso, Hudspeth or Culberson County)
- _____ Spades provided by Electrical Contractor (for overhead services)
- _____ Access needed to Company and Customer Equipment
- _____ Please visit link below for service distance requirements between EPE Transformer and Customer Meter Loop (Section VI- Metering)
- _____ A minimum of three (3) inch separation is required between meter enclosures and any adjacent equipment

www.epelectric.com/bluebook

NOTE: If El Paso Electric Company is not able to install the service, meter, and/or energize your service for any reason checked off on this checklist additional charges may apply. If you have any questions, please call:

- **El Paso (915) 521-4646**
- **Las Cruces (575) 523-3575**

SERVICE POINT CONFIRMATION BY EL PASO ELECTRIC COMPANY (EPE)

Customer, or the Customer's authorized agent, has requested electric service at the address shown on page 43 above, and the Customer has provided their electrical requirements to EPE. This is written confirmation that EPE agrees to provide electric service to the location mutually agreed upon by the Customer and EPE as shown on EPE's design map attached, and in accordance with the electrical service information provided by the Customer to EPE as shown on the Customer's electrical power riser diagram attached.

EPE'S SERVICE INFORMATION

Type of Service: Overhead Underground

Service Voltage: 120/208 120/240 277/480

 3 wire _____ 4 wire _____

Phase: Single Phase Three Phase

Conductors Per Phase: _____ Size _____ ___ Copper ___ Aluminum

Neutral Conductors: _____ Size _____ ___ Copper ___ Aluminum

Maximum Service Length: _____

Service Point Location: **As shown on the attached EPE design drawing.**

OVERHEAD SERVICES

1. For all new or upgraded commercial overhead services, including parallel service risers, the Company will install, own and maintain the meter and the overhead service drop to the Point of Attachment on the building or Customer's meter pole. The Customer will furnish install, own and maintain the Service Entrance Equipment including the wire, conduit and Meter Socket. See EPE's DSO 420, DSO 440, DSO 1827, DSO 1845 or DSO 1870 for details about different installations. Meter poles and all Customer-owned electrical service equipment must be furnished, installed, owned and maintained by the Customer. The Customer's electrical contractor shall provide and install the connector for all wire sizes including but not limited to the following wire (conductor) sizes:

4/0, 250 MCM, 300 MCM, 350 MCM, 500 MCM, 600 MCM and 750 MCM.

These connectors shall be a compression lug straight two-hole NEMA that meets EEI-NEMA Standard TDJ-162, or a compression lug stacking two-hole NEMA that meets EEI-NEMA Standard TJC-162. The Customer's electrical contractor shall be responsible for shaping, identifying, and crimping the connectors.

2. **All meters for commercial services up to and including 400 amps (In-line Metering) shall have a Company-approved heavy-duty lever bypass Meter Socket.**

UNDERGROUND SERVICES

1. For all new or upgraded underground services to single Commercial Customers or to multiple Commercial Customers where the meters are grouped and connected into a common gutter, the Point of Delivery shall be at the EPE-owned padmount transformer, pullbox or service enclosure as designated by EPE. The Customer shall furnish, install, own and maintain the underground service duct and cable from the Customer's building to EPE's padmount transformer, pullbox or service enclosure, which is the Point of Delivery. EPE will make the service connection between the EPE-owned wires and the Customer-owned wires at this point. See DSU 1040 and DSU 1045 for the requirements and the separation between meters for this type of installation. Please refer to DSU 510 for the maximum number of conductors allowed in each size padmounted transformer. If these limits are exceeded, the Customer must provide and install a secondary bus enclosure, provide connectors and connect the Customer's conductors to the load side of the bus. EPE will designate the location and type of enclosure or connectors to be used. Refer to DSU 445 for more details about a commercial secondary bus enclosure.
2. For all commercial underground services, EPE reserves the right to approve the location of the meter in relation to the padmount transformer. If EPE believes this distance is excessive, EPE shall require the Customer to provide EPE with a written statement from the Customer's electrical engineer approving the location of the meter and accepting responsibility for the quality of service for any installation where the Company believes the distance from the padmount transformer to the meter is excessive.
3. **All meters for commercial services up to and including 400 amps (In-line Metering) shall have a Company-approved heavy-duty lever bypass Meter Socket.**
4. For all new or upgraded underground services to multiple Residential Customers where the residential units have their meters grouped and connected into a common gutter, the Point of Delivery shall be at EPE's padmount transformer, pullbox or service enclosure as designated by EPE. The Customer shall furnish, install, own and maintain the underground service duct and cable from the Customer's building to EPE's padmount transformer, pullbox or service enclosure, which is the Point of Delivery. EPE will make the service connection between EPE-owned wires and Customer-owned wires at this point. This policy applies to duplexes, multiplexes, apartments, condominiums, townhouses or other similar construction. The electrical contractor shall obtain approval from EPE for stack metering prior to Customer purchasing and installing this type of metering. No more than four (4) meters stacked vertically shall be allowed for Company-approved stack metering. See DSU 1040 and DSU 1045 for the requirements and the separation between meters for this type of installation.
5. Separate meters for services up to and including 400 amps that will be used for commercial or non-residential purposes services such as house meters for various uses for the property, parking lot lighting or lighting for other purposes, security systems, sprinkler systems, barns, sheds, storage buildings, domestic or irrigation water well, other types of buildings, etc., shall have a heavy-duty bypass Meter Socket and will be billed under the applicable commercial service rate tariff.

The Customer, or the Customer's authorized agent, agrees to the preceding Service Point confirmation. Should the Customer, or the Customer's authorized agent, make changes that have not been agreed to in writing by EPE, the Customer understands additional costs may be billed to Customer and must be paid by the Customer before EPE continues with the work to provide electric service to the Customer.

Agreed to and Accepted by Customer:

Signature: _____

Print Name: _____

Title of Person Signing: _____

Date: _____

Agreed to and Accepted by EPE:

Signature: _____

Print Name: _____

Title of Person Signing: _____

Date: _____



EL PASO ELECTRIC COMPANY
RESIDENTIAL SUBDIVISION REQUEST FOR SERVICE FORM

Responsible Party:

Business Name: _____

Property Owner Name: _____ Phone: _____ Email: _____

Service Address: _____

Mailing Address: _____

Electrician Name: _____ Phone: _____ Email: _____

Builder/Contractor: _____ Phone: _____ Email: _____

Architect: _____ Phone: _____ Email: _____

Primary _____ Owner _____ Electrician _____ Builder/Contractor _____ Architect

Preferred _____ Email _____ Phone _____ Best Time to Call: _____

If property is in a rural area, please provide GPS coordinates or driving directions: _____

Is temporary construction service required? _____ Yes: _____ No: _____

Legal Description: _____

For Right-of-Way Signatures, contact: _____

Right-of-Way Signatures, Contact Name: _____ Email: _____

Mailing Address: _____

Phone Number: _____

Subdivision Name: _____

Block and Lot Numbers: _____

Total Residential Lots: _____ Residential House Sq. Ft. _____ Total Street Lamps: _____

Total Commercial Lots: _____

**If commercial lots will also be constructed, be sure to complete the Commercial Service Request Form and provide to El Paso Electric.*

New Service Classification: _____ Overhead _____ Underground

NOTE: In some cases, temporary service may not be available. A non-refundable cash advance for construction may be required for the installation of additional facilities.

Meter request may be made by calling (915) 521-4646 in Texas or (575) 523-3575 in New Mexico.

Customer Ready Date: _____ Permanent service is required by: _____

The following information must be made available to the Designer who you are working with the order to initiate engineering design for electrical services:

- _____ Construction Schedule
- _____ Building Elevation Plan
- _____ AutoCAD file of Civil Site Plant
(Include existing/proposed utilities, benchmark and survey/XREF files)
- _____ Property Plat
- _____ Electrical Plan Sheets
(Load/Riser Diagram)
- _____ Civil Plan Sheets
- _____ Landscape Plan Sheets

*Please provide a listing of all electric motors with horsepower size.

EPE'S SERVICE INFORMATION

Type of Service: _____ Overhead _____ Underground

Service Voltage: _____ 120/208 _____ 120/240 _____ 277/480

_____ 3 wire _____ 4 wire

Phase: _____ Single Phase _____ Three Phase

Conductors Per Phase: _____ Size: _____ Copper: _____ Aluminum: _____

Neutral Conductors: _____ Size: _____ Copper: _____ Aluminum: _____

Main Size: _____ Amps Entrance Conduit: _____ Size: _____

Maximum Service Length _____ Service Point Location: _____

Generation- Customer installed back-up generator (check applicable items)

_____ Solar _____ KW

_____ Fuel _____ KW

_____ Other _____ KW

_____ None _____

Special Request or Comments: _____

*El Paso Electric Representatives shall have free and easy access at any time to EPE equipment located on the premises of the Customer and reserve the right to remove EPE meters and equipment for just cause.

Signature: _____

Date: _____

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CHECKLIST FOR NEW OR UPGRADED COMMERCIAL CUSTOMERS
 (FOR USE BY CUSTOMERS AND ELECTRICAL CONTRACTORS)

- _____ Address Posted
- _____ Electrical Grounds Properly Connected
- _____ Meter can height (5 feet max. from finished grade to top of meter opening)
- _____ Multiple meter cans shall be guttered and marked (Space # or Suite #)
- _____ Point of attachment at correct height (if not going through the roof)
- _____ Rigid or IMC conduit if going through the roof
- _____ All commercial meter cans must have a heavy-duty lever bypass
- _____ 200-amp meter cans minimum required for underground services
- _____ Main disconnect must be outside and within 5' (feet) of the meter
- _____ Load-side wires made up
- _____ Electrical Inspection Release by Appropriate Authority Having Jurisdiction
- _____ Certificate of Compliance (From El Paso, Hudspeth or Culberson County)
- _____ Spades provided by Electrical Contractor (for overhead services)
- _____ Access needed to Company and Customer Equipment
- _____ Please visit link below for service distance requirements between EPE Transformer and Customer Meter Loop (Section VI- Metering)
- _____ A minimum of three (3) inch separation is required between meter enclosures and any adjacent equipment

www.epelectric.com/bluebook

NOTE: If El Paso Electric Company is not able to install the service, meter, and/or energize your service for any reason checked off on this checklist additional charges may apply. If you have any questions, please call:

- **El Paso (915) 521-4646**
- **Las Cruces (575) 523-3575**

COUNTY OF EL PASO
ADMINISTRATION
OF
CERTIFICATE OF PLAT COMPLIANCE

Please see: <https://www.epcounty.com/publicworks/compliance.htm> for further guidance.

ELECTRICAL SAFETY DECALS/TIPS

Dear Customer:

El Paso Electric Company (EPE) is concerned about EPE employee safety, safety for you, your employees and the general public. EPE and contractors in the area may avoid needless accidents, injuries and expenses through a concerted effort. This letter identifies laws and regulations, which address safety around power lines.

Federal law prohibits operation of equipment or machines closer than 20 feet to an overhead power line unless the power line has been deenergized and visibly grounded at the worksite. Specifically, it is a violation of the Occupational Health and Safety Act (OSHA), 29 C.F.R. §1926.1408 (as may be amended) to operate equipment in a manner that persons or equipment could get closer than 20 feet to an energized power line. OSHA enforces these regulations, and violators may be subject to criminal and civil penalties.

In Texas, the Texas Health and Safety Code (as may be amended) requires that a contractor contact an electric utility company at least 48 hours before working near energized high voltage overhead lines. Once contacted, the electric utility company and contractor shall make a satisfactory mutual arrangement to prevent contact between the line and the material or equipment or the person performing the work, activity, or function. The contractor shall pay the electric utility company for all expenses incurred by the electric utility company to guard against danger by contact with the overhead power line. The same rule applies in New Mexico.

Before doing any work near overhead power lines, please contact EPE at (915) 877-3400 in El Paso or (575) 523-7591 in Las Cruces. If your company needs additional information or would like a presentation on electrical safety, call (915) 543-4349 for assistance.

Sincerely,

Derek Grimes
Manager-Safety

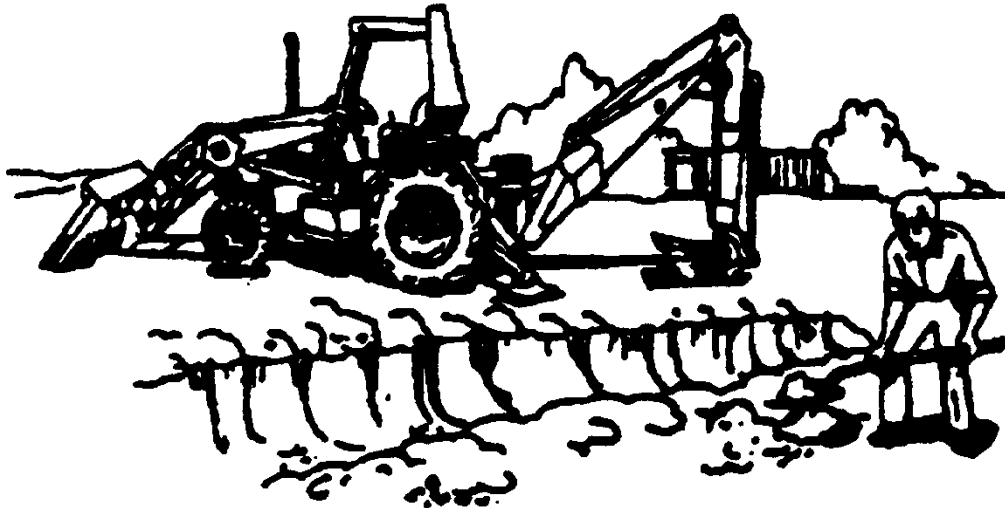
"WARNING"

BEFORE DIGGING OR TRENCHING CALL
1-800-344-8377 IN TEXAS

OR

1-800-321-ALERT (25378) IN NEW MEXICO
EL PASO ELECTRIC

UNDERGROUND CABLE



"AVISO"

ANTES DE EXCAVAR O ZANJAR LLAME
1-800-344-8377 EN TEXAS

O

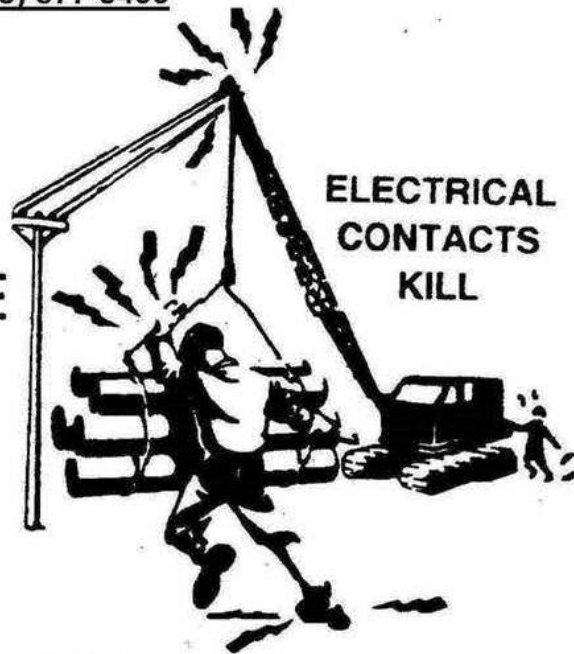
1-800-321-ALERT (25378) EN NEW MEXICO
EL PASO ELECTRIC

CABLE SUBTERRANEO

"DANGER"
UNLAWFUL TO OPERATE THIS
EQUIPMENT WITHIN 20 FEET OF
HIGH VOLTAGE LINES.

FOR ASSISTANCE: EL PASO (915) 877-3400
LAS CRUCES (575) 523-7591

"PELIGRO"
NO DEBE
OPERAR ESTE
EQUIPO
DENTRO 20
PIES DE LAS
LINEAS DE
ALTO
VOLTAJE.



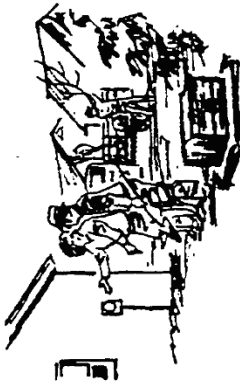
PARA ASISTENCIA: EL PASO (915) 877-3400
LAS CRUCES (575) 523-7591

LADDER AND SCAFFOLD CONTACTS ARE DANGEROUS



Do not set up ladders or scaffolds close to overhead electric lines. Contacting electric lines could cause serious burns or death to people working from ladders or scaffolds.

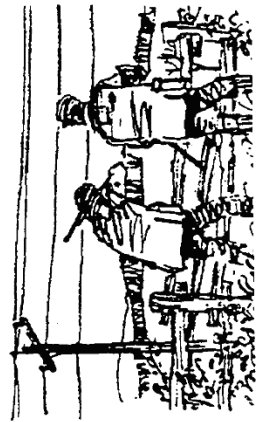
KNOW LOCATION OF UNDERGROUND ELECTRICAL FACILITIES BEFORE DIGGING



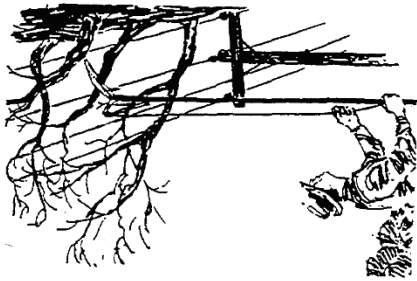
Digging or driving objects into underground wires could cause serious injuries and/or service interruptions. Call El Paso Electric in advance to locate electrical facilities.

POLES, TOWERS AND STRUCTURES ARE NOT TARGETS!

Never shoot at poles, towers or structures. Bullet damage to insulators and other electrical equipment could result in service interruptions or possible serious injuries to anyone that touches the pole, tower or structure.

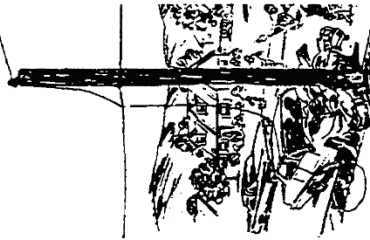


DON'T TRIM OR CUT TREES NEAR ELECTRICAL FACILITIES



Never attempt to prune trees that are located near power lines. Trimming trees could cause contact with electrical facilities, resulting in serious injuries. Call El Paso Electric if you feel your trees are growing too close to power lines.

STAY AWAY FROM ANY FALLEN WIRES



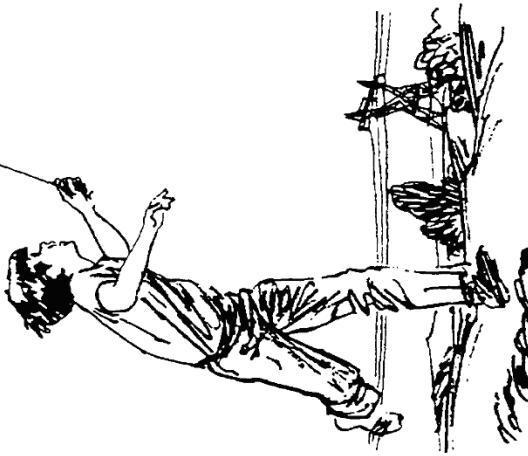
Fallen wires can result from motor vehicle accidents, storms, fires or other causes. Don't go near or touch any fallen wires--they may be energized! If a person or object is in contact with a wire, don't touch the person, object or wire. Call El Paso Electric for corrective action.

CAUTION: TAMPERING WITH ELECTRIC METER COULD RESULT IN ELECTROCUTION



The electric meter which serves you is the property of El Paso Electric and when installed was sealed for your protection. It is not only dangerous but a criminal act to tamper with or remove the electric meter. Penalties for tampering include fines, imprisonment, or both.

PUBLIC SAFETY AROUND ELECTRICAL FACILITIES



EMERGENCY NUMBERS
TX (915) 877-3400
NM (575) 523-7591



INTRODUCTION

Overhead and underground electric lines are powerless only in one respect . . . they can't prevent you or your equipment from making a dangerous contact--only you can control that. Keep a safe distance from them and prevent "hot wire" fatalities and injuries.

EI Paso Electric offers an informative Electrical Safety Display Presentation. The demonstration is very effective in educating the children, as well as adults, on the importance of practicing electrical safety. Anyone interested in scheduling a presentation may call EI Paso Electric at (915) 543-5758.

SUBSTATION AND TRANSFORMER ENCLOSURE ENTRY--ILLEGAL AND DANGEROUS



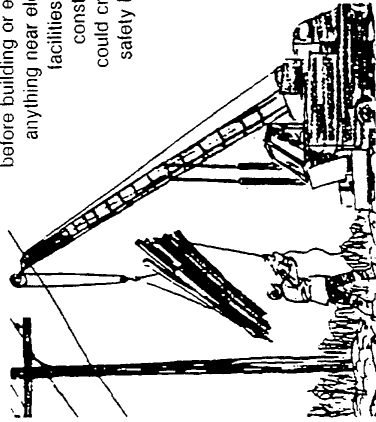
Entering a substation or transformer vault is illegal and dangerous. You could be seriously injured or electrocuted. If you lose a kite, ball, model airplane or anything else inside these facilities, call EI Paso Electric's emergency number--don't try to retrieve them yourself.

LOOK UP . . . LOOK OUT . . . AVOID EQUIPMENT CONTACTS WITH OVERHEAD WIRES

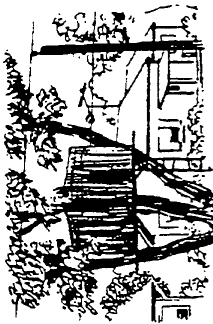
Don't work under electric wires. Equipment such as cranes, post hole diggers, well drilling rigs, hay loaders and raised truck beds could contact electric wires causing serious burns or even death to the operator and anyone else in close proximity of the equipment.

CONSTRUCTION NEAR ELECTRICAL FACILITIES MAY BE HAZARDOUS

Check with EI Paso Electric before building or erecting anything near electrical facilities. Such construction could create a safety hazard.



KEEP TREE HUTS AWAY FROM WIRES



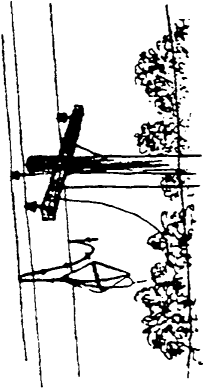
Never build, or permit to be built, a tree hut in a tree that has wires running through or near it. Don't let children play in trees that have wires through them.

NEVER CLIMB POLES, TOWERS OR STRUCTURES



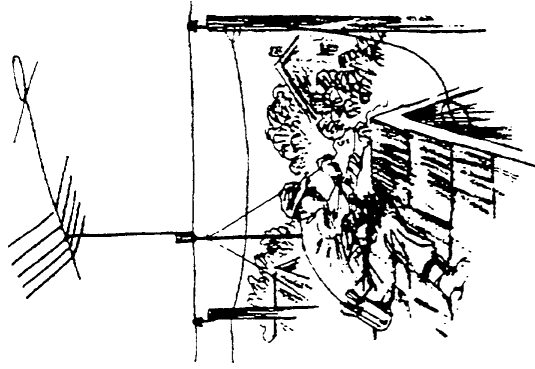
You could contact "energized" facilities and be seriously injured or electrocuted.

DON'T FLY KITES OR MODEL AIRPLANES NEAR ELECTRICAL FACILITIES



Never fly a kite or model airplane near overhead electric wires of any kind. Fly kites or model airplanes in the open and stay alert. If they become entangled with overhead wires, don't attempt to get them down or touch any dangling strings or wires. Notify EI Paso Electric.

LEAVE CB, TV AND RADIO ANTENNA INSTALLATIONS TO EXPERTS



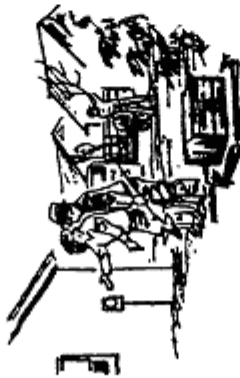
Installing an antenna can be unstable and awkward to control. There is danger of it falling against electric wires, resulting in serious burns or death to anyone contacting the "energized" antenna.

EL CONTACTO DE ESCALERAS Y ANDAMIOS CON CABLES ES PELIGROSO.



No instale andamios o escaleras cerca de cables aéreos de electricidad. El contacto con los cables de la luz puede causar quemaduras graves o la muerte a las personas trabajando en las escaleras o los andamios.

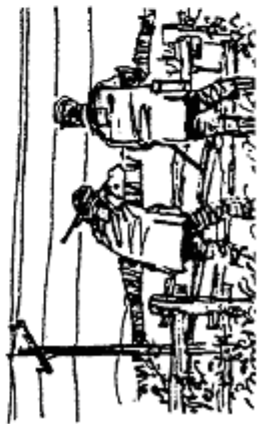
ANTES DE CAVAR CONOZCA LA LOCALIZACIÓN DE CABLES SUBTERRANEOS.



Cavar o enterrar objetos que encuentren cables eléctricos puede causar lesiones graves o interrupciones del servicio. Llame a El Paso Electric con anticipación para localizar instalaciones eléctricas subterráneas.

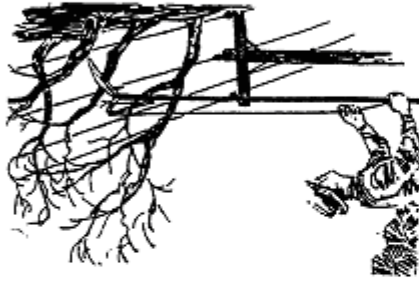
LOS POSTES, TORRES Y ESTRUCTURAS ELÉCTRICAS NO SON PARA TIRO AL BLANCO.

Nunca dispare contra los postes, torres o estructuras eléctricas. Los proyectiles dañan los aislantes y el equipo eléctrico lo que puede resultar en interrupciones del servicio o causar lesiones graves a todo aquel que toque ese poste, torre o estructura eléctricos.



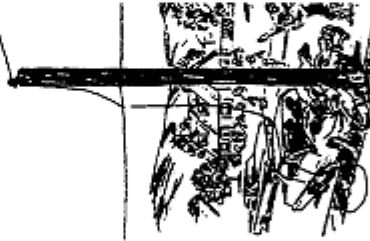
NO PODE O CORTE ÁRBOLES CERCA DE INSTALACIONES ELÉCTRICAS.

Nunca trate de poder árboles que estén cerca de cables aéreos de luz. Podría entrar en contacto con esos cables y recibir lesiones graves. Llame a El Paso Electric si nota que sus árboles están creciendo cerca de los cables aéreos de luz.



ALEJESE DE CUALQUIER CABLE ELÉCTRICO CAÍDO.

Los accidentes automovilísticos, tormentas, incendios y otras causas pueden ocasionar cables eléctricos caídos. No se acerque ni los toque, pueden estar "vivos". Si una persona o objeto está en contacto con estos cables no toque ni a la persona, ni al objeto ni al cable. Llame a El Paso Electric para recibir indicaciones.



CUIDADO: MANIPULAR EL MEDIDOR DE LUZ PUEDE ELECTROCUTARLO.

El medidor de luz es propiedad de El Paso Electric y cuando se instala es sellado para su protección. No solamente es peligroso sino que es además un delito manipular o remover el medidor de luz. Las penas por este delito incluyen multas, prisión o ambos.



SEGURIDAD PUBLICA CERCA DE INSTALACIONES ELÉCTRICAS



NUMEROS DE EMERGENCIA
TX (915) 877-3400
NM (575) 523-7591



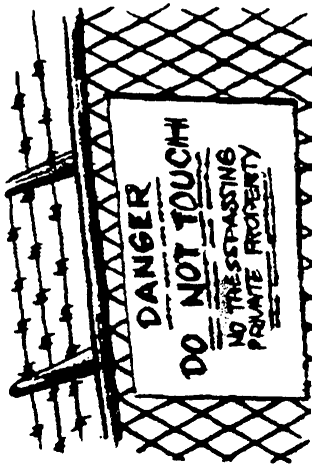
INTRODUCCION

Sobre su cabeza y bajo tierra los cables conductores de electricidad no tienen ningún poder. Sólo en un sentido . . . no pueden prevenirle a Usted o su maquinaria de hacer contacto peligroso con ellos. Sólo Ud. puede controlar eso. Manténgase a una distancia segura de cables conductores de electricidad y prevenga lesiones por "cables vivos".

El Paso Electric ofrece una presentación informativa sobre el mantenimiento de la seguridad al manejarse la electricidad o aparatos eléctricos. La demostración es muy efectiva y educa a niños y adultos acerca de la importancia de practicar las reglas de seguridad al manejarse la electricidad o aparatos eléctricos.

Aquellas personas interesadas en fijar el horario de una presentación pueden llamar a El Paso Electric al numero (915) 543-5758.

ENTRADA AL RECINTO DE SUBESTACIONES Y TRANSFORMADORES. ILEGAL Y PELIGROSA.



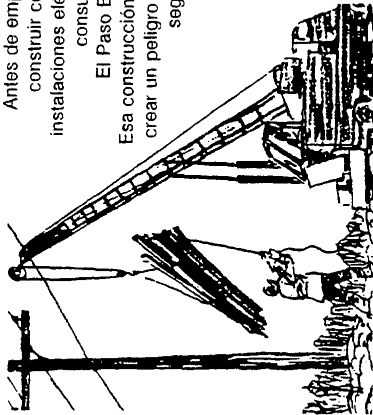
Entrar al recinto de una subestación o transformador eléctricos es ilegal y peligroso. Podría causarse lesiones graves o electrocutarse. Si pierde una cometa, pelota, avion miniatura o cualquier otra cosa dentro de estos recintos, llame al número telefónico de emergencia de El Paso Electric, no trate de recuperar esos objetos Ud. mismo.

MIRE HACIA ARRIBA . . . MIRE A TODOS LADOS . . . EVITE EL CONTACTO CON CABLES AEREOS.

No trabaje debajo de cables conductores de electricidad. El equipo de trabajo como grúas, escavadores, empacadores de heno y camiones de caja hidráulica pueden hacer contacto con cables eléctricos causando quemaduras graves o la muerte al operador y cualquier otra persona que se encuentre cerca.

PUEDA SER PELIGROSO HACER TRABAJOS DE CONSTRUCCIÓN CERCA DE INSTALACIONES ELECTRICAS.

Antes de empezar a construir cerca de instalaciones eléctricas consulte con El Paso Electric. Esa construcción podría crear un peligro para la seguridad.



CONSTRUYA LAS CASITAS EN LOS ÁRBOLES LEJOS DE LOS CABLES DE LUZ



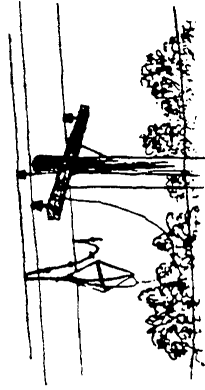
Nunca construya, o permita que construyan, una casita en un árbol por el que atraviesen cables o pasen cerca. No deje que los niños jueguen en árboles por los que pasen cables de luz.

NO SE SUBA A LOS POSTES, TORRES O ESTRUCTURAS DE ELECTRICIDAD



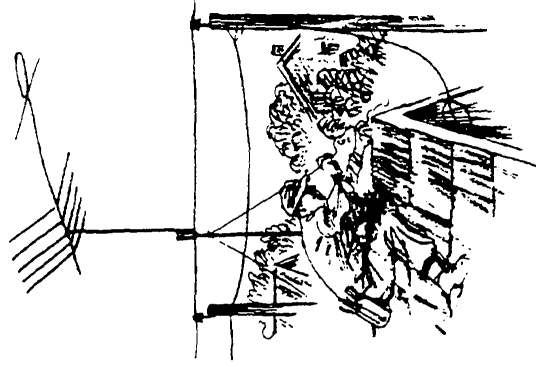
Se puede encontrar con instalaciones con "energía activa" y recibir lesiones graves o ser electrocutado.

NO VUELE COMETAS O AVIONES MINIATURA CERCA DE INSTALACIONES ELECTRICAS



Nunca vuele cometas o aviones miniatura cerca de cables aéreos de ninguna clase. Vuele sus cometas o aviones miniatura en espacios abiertos y esté alerta. Si se enredan en cables aéreos de luz, no trate de bajarlos. No toque la cuerda ni los cables. Notifique a El Paso Electric.

DEJE LA INSTALACIÓN DE LAS ANTENAS DE CF, RADIO Y TV A LOS EXPERTOS.



Al instalar una antena su estabilidad es difícil de controlar. Hay el peligro de que caiga sobre cables eléctricos resultando en quemaduras graves o la muerte para cualquiera que esté en contacto con esa antena.

SECTION IV

TYPES OF SERVICE VOLTAGES AVAILABLE

1. GENERAL

The Customer should contact the Company to determine the exact Type of Service which will be supplied at the premises to be served before purchasing any equipment or proceeding with the wiring of the project. Attention to this detail may avoid the purchase of equipment for which service is not available.

EXISTING EQUIPMENT MOVED TO OTHER PREMISES WITH A DIFFERENT TYPE OF SERVICE MUST COMPLY WITH THE PREVAILING REQUIREMENTS OF THE COMPANY BEFORE BEING CONNECTED IN A NEW LOCATION.

The Alternating Current Service supplied by the Company has a normal frequency of 60 hertz.

Where an AC system at less than 1000 volts is grounded at any point, the grounded conductor(s) shall be run to each service disconnecting means and shall be connected to each disconnecting means grounded conductor(s) terminal or bus. A main bonding jumper shall connect the grounded conductor to each service disconnecting means enclosure. The grounded conductor(s) shall be installed in accordance with Sections 250.24(C)(1) through 250.24 (C)(3) of the NEC.

2. TYPES OF ELECTRIC SERVICES GENERALLY AVAILABLE

The following types of service are generally available in the Company's service territory to Customers served under the Company's standard rate schedules. All service will be taken at one point of delivery designated by the Company and at one of the Company's standard types of service. **The Company will normally supply only one Type of Service and one set of conductors to a building. All electric energy will be measured by a single meter for each Customer served.** The Company is responsible for maintaining nominal voltage levels up to the point of delivery.

Refer to the chart on the last page of this Section for a summary of the minimum and maximum kilowatt (KW) levels necessary to qualify for the various types of service available.

120/240 VOLT, SINGLE-PHASE, 3 WIRE SERVICE

This Type of Service is generally available throughout the Company's service area except in the Downtown underground district in El Paso and certain other areas. This service is suitable for 240-volt, single phase loads and 120-volt lighting service.

240/480 VOLT, SINGLE-PHASE, 3 WIRE SERVICE

This Type of Service is generally available throughout the Company's service area for City-owned and Company-owned street lighting for state, city or county use only. If a meter will be installed, 3 wire service will be provided and the Customer must install 3 wires.

120/240 VOLT, THREE-PHASE, 4 WIRE "DELTA" SERVICE

This Type of Service is primarily for power service. Since it is usually necessary to extend the Distribution Line and/or install transformation to provide this Type of Service, the Customer must contact the Designer to determine the availability of this Type of Service. **This Type of Service is generally not available for underground service.** Under certain conditions, this Type of Service is available for large residential refrigerated air conditioning or space heating loads. The Designer must be contacted to determine if this Type of Service is available for residential service.

120/208 VOLT, THREE-PHASE, 4 WIRE "Y" SERVICE

This Type of Service is available in the downtown, and other underground commercial areas of El Paso and Las Cruces and other installations upon request and approval. The Customer must ensure that all equipment is manufactured to operate at 208 volts. The Company is not liable for voltage problems that occur with 230 volt rated equipment being served 208 volts.

This service is suitable for 208-volt, 3 phase motor loads, for 120 volt lighting service and for 120/208 volt, three-phase service. For 120/208-volt services, all Customers with a main size breaker, or the sum of main size breakers, of 3000 amps or less will be evaluated on a case by case basis and will depend on the estimated peak demand. If the estimated peak demand is greater than 500 KVA, the Customer will be required to receive service at 277/480 volts. The Company will notify the Customer of the results of the Company's evaluation to determine the Secondary Voltage that will be allowed.

Service in the El Paso downtown underground network area is normally of this type except nominal voltage is 125/216 volts and all revised services shall be for 3 phase, 4 wire, 125/216 volt service in the area except as specifically negotiated with the Distribution Design and Delivery Business Unit in El Paso.

Service in the Las Cruces downtown underground area is normally single phase, 120/240 volt, 3 wire service and 3 phase, 120/208 volt or 277/480 volt, 4 wire service.

For single phase and 3 phase service in this area, consult with the Designer in Las Cruces.

This Type of Service will necessitate the selection of motors or equipment which is specifically designed for operation at this specified voltage.

277/480 VOLT TRANSFORMER CONNECTIONS TO A CUSTOMER REQUIRING 480 VOLT, THREE-PHASE SERVICE FOR THREE-PHASE LOADS ONLY

This service is for three-phase loads only (i.e., irrigation pumps, water wells, etc.), where Customer requires 480 volt, three-phase service for three-phase loads only. The Company will run 4 wires to the service delivery point. The Customer shall run 4 wires, including the neutral, to the first service disconnecting means.

The Company will not allow the Customer to ground "one corner" of 480 volt service because of our transformer secondary connections. **Customer must bring out an equipment ground to the Service Point, which will be tied to the Company's system neutral, as per current National Electric Code.** For equipment grounding conductor size, refer to current National Electric Code. All 120 and 240 volt equipment and lighting must be supplied by means of two winding transformers installed, owned and maintained by the Customer.

277/480 VOLT, THREE-PHASE, 4 WIRE "Y" SERVICE

This Type of Service is available to serve approved loads upon special application to the Company. It is suitable for large nonresidential loads. 120 and 240 volt equipment and lighting must be supplied by means of two winding transformers installed, owned and maintained by the Customer.

Single-phase 277/480 volt is not available.

NOTE: Whatever voltage is required by a Customer regardless of the electrical load on single-phase and 3 phase meter loops, the **minimum rating on the Service Entrance Equipment will be 100 amps.** The Company is not liable for damage to Customer's equipment due to installation of wrong circuit paneling.

3. TRANSMISSION OR PRIMARY VOLTAGE SERVICE

A. **Primary voltage service** can be made available for approved loads upon special application to the Company. Nominal voltages available, as rated phase to phase, are: 4,160 volts, 13,800 volts, or 24,000 volts. Some voltages are not available in all areas of the Company's service territory. The supply of such service usually requires the Customer to construct or install special facilities for connection and metering purposes on the Customer's premises. The details of such construction and Type of Service are subject to special negotiations

between the Company and the Customer. Such details shall be secured by the Customer in writing from the Designer.

- B. **Transmission voltage service** (69,000 volts or 115,000 volts) availability is contingent upon many factors and will be negotiated with the Company. Six (6) months to two (2) years may be required to provide Transmission Voltage service, so adequate lead time should be given to the Company.

TYPES OF SERVICE AVAILABLE FOR CUSTOMER'S ELECTRICAL LOAD (DEMAND)

1. Secondary Voltage Service

Voltage	Service Type	Demand Range (KVA)*
120/240, Single-Phase, 3 Wire	Overhead	1 – 75
120/240, Three-Phase, 4 Wire, Delta	Overhead	7½ – 112½
120/208, Three-Phase, 4 Wire, Wye	Overhead	20 – 112½
277/480, Three-Phase, 4 Wire, Wye	Overhead	30 – 225
120/240, Single-Phase, 3 Wire	Underground	1 – 167 (up to 250 KVA in New Mexico)
120/208, Three-Phase, 4 Wire, Wye (Maximum 3000 Amp Service)	Underground	50-500
277/480, Three-Phase, 4 Wire, Wye	Underground	150 – 2500

2. Primary Voltage Service (Overhead or Underground)

Voltage	Demand Minimum (KVA)*
7,970 Single-Phase Line to Ground	200
13,800 Grd/7,970 Three-Phase	600
13,800 Single-Phase Line to Ground	300
23,900 Grd/13,800 Three-Phase	750 and above

*Demand range subject to modification by EPE.

SECTION V

MOTORS

1. SINGLE-PHASE OR THREE-PHASE

Motors of 5 horsepower or less shall normally be served **single-phase**. Motors of 7.5 horsepower or larger shall normally be served **three-phase**. When there are several fractional horsepower motors that will be operating simultaneously, they may be served three-phase if they meet the total KW demand requirements for three-phase in the desired voltage. However, **the Customer should discuss the specific installation and obtain written approval from the Company before purchasing and installing equipment.**

2. MOTOR PROTECTION

Motors must be protected by the Customer from all variations of circuit conditions both from Customer load and utility source. The use of proper protective devices with suitable time delay in motor control switches is highly recommended. **The Company is not responsible for protection of Customer equipment.** The Company assumes no responsibility for single-phasing damage to three-phase motors or any other equipment, which are unprotected or only partially protected against single-phase operation; or for any damage to single-phase or three-phase motors or any other equipment from any cause where proper protective equipment is not installed; or from failure of such protective equipment to function properly or in any case where switches, circuits, motors, etc., have been over fused.

3. MOTOR STARTING CURRENT REQUIREMENTS

In general, motor starting current shall not **exceed four and one-half times** the full load running current of the motor. No motor starting or any other individual load shall sag or dip Primary Voltage over 2.0% without written variance from the Company. The Company should be consulted for primary impedance information before large motors and related equipment is purchased or installed. The Company may request motor and motor starting information such as starting power factor. The Company assumes no responsibility for damage to single or 3 phase motors due to overload caused by not starting motors in sequence.

4. MOTORS FOR WELLS

A. Customers who desire electric service to a new well motor should contact the appropriate Designer before the pump motor is purchased. Motor name plate information must be provided (including starting currents and power factor), the

location of the well and planned riser (wiring), diagrams and main disconnect information. Please indicate if a pump motor is submersible or if vertical shaft.

- B. If a Line Extension is required to serve the new well, the Customer shall enter into a written agreement covering the cost of the extension as set forth in the Company's Line Extension Policy. Wells and pumps should be located at least 35 feet away from Company lines.
- C. If more than one well will be on the Company's line and depending upon the motor sizes, sequential starting of the motors may be required.
- D. The following table details the service and voltage characteristics recommended for electric service to water pumping motors when no other loads are involved:

Motor Size	Phase	Voltage	Secondary Connection
5 HP	Single	120/240	
*7½ HP	Three	120/240	Delta
*10 HP	Three	120/240	Delta
*20 HP	Three	120/240	Delta
*25 HP and above	Three	120/240	Delta
20 HP and above	Three	277/480	Wye

* Available only in areas with overhead service.

Requests for any other voltage will be negotiated with the Company. 4,160 volts service is not available in all parts of the Company service area.

- NOTES:**
1. All three-phase services will be 4 wire with a grounded neutral and a grounded conductor at the first service disconnecting means.
 2. Some manufacturers of submersible pumps insist on and will guarantee three phase motors only served from a closed delta transformer bank. Notify the Company in these instances. The Company will not serve submersible or vertical shaft pumps from an open delta transformer bank.
 3. Proposed voltage and metering requirements are to be designated on the service inquiries by the Designer before work orders are prepared. Any changes in the voltage characteristics will be coordinated at the earliest possible date between the Company and the Customer.
 4. The Company recommends that all three-phase motors be protected from single-phase conditions.

SECTION VI

METERING

A. General Information

1. **EL PASO ELECTRIC COMPANY RESERVES THE RIGHT TO DESIGNATE THE METER LOCATION AND SERVICE POINT. DO NOT INSTALL ANY METERING EQUIPMENT WITHOUT A WRITTEN APPROVAL FROM THE COMPANY CONFIRMING LOCATION AND METERING TYPE.**
2. **The Company will normally supply only one Type of Service and one set of conductors to a building. All electric energy will be measured by a single meter for each Customer served.**

If more than one electrical service entrance to a building is desired, all applicable building, fire and electrical codes must be met and must be approved in advance by the Company. **The Customer shall pay, as a nonrefundable Contribution in aid of Construction (CIAC), for all costs associated with an additional Service Point. The Company reserves the right to refuse to provide multiple points of service if the multiple points of service causes problems for the Company or is not equitable for the Company.**

As per Article 230.2(E) of the National Electrical Code, where a building or structure is supplied by more than one service, a permanent plaque or directory shall be installed at each service disconnect location denoting all other services supplying that building or structure and the area served by each.

3. **The service disconnecting means shall be a fusible, loadbreak-rated meter disconnect or overcurrent protective device for all commercial services and a fusible meter disconnect for all residential services, and shall be installed on the exterior of the building or structure adjacent to and not more than 5 feet from the meter. The CT cabinet must also be installed on the exterior of the building or structure adjacent to and not more than 5 feet from the meter. The grounding and bonding of the Customer-owned electrical system shall **be installed in compliance with Article 250 of the National Electrical Code (NEC) (as may be amended) and all other applicable local and State electrical code requirements.****
4. **All meters for commercial services up to and including 400 amps (In-line Metering) shall have a Company-approved heavy-duty lever bypass Meter Socket. A heavy-duty lever bypass Meter Socket is also required for all house meters and non-residential meters in apartment and multiple tenant complexes, shopping centers and other similar types of facilities.**

- 5 Locations with more than one meter are required to have the space number on the meter can before the meter is installed. Meter cans need to be marked with stenciled or metal numbers or letters, or the numbers or letters can be permanently painted on.**
- 6. All Meter Enclosures (CT or in-line) are required to be grounded before the meter is installed.**
7. All Meter Enclosures shall be installed in such a manner that the top of the meter opening is 5 feet from finished grade and must be approved in advance by the Company. Special circumstances may be allowed for special applications and this will be determined and approved by the Company on a case by case basis. A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment. Please refer to applicable DSO or DSU in Section XXI.
- 8. Underground Mobile Home Park Pedestals:**

All Meter Enclosures shall be installed in such a manner that the top of the meter opening is a minimum of 3 feet and a maximum of 5 feet from finished grade and must be approved in advance by the Company. Special circumstances may be allowed for special applications and this will be determined and approved by the Company on a case by case basis. Please refer to applicable DSO or DSU in Section XXI.
- 9. Locations with multiple meters served with one transformer:**

NO CT METERING WILL BE INSTALLED IN THE TRANSFORMERS, including house meters. CT metering will be installed in a CT enclosure and shall be installed within 5 feet of the main disconnecting means.
- 10. For all services above 400 amps, the CT metering must be installed in a Company-approved CT enclosure.**
- 11. Contractors shall not utilize any Current Transformer (CT) metering cabinet or metering equipment unless it has been depicted on the power riser diagram and pre-approved by the Company.**
- 12. All power riser diagrams shall include the main size, fuse size, wire size, model of CT cabinet, if applicable, and the location and distance of metering equipment in relation to the Company transformer. All power riser diagrams shall be submitted to the Company and approved by the Company before the Customer begins any construction on the Customer's service equipment installation.**
- 13. Within the City of El Paso's jurisdiction, all services must have a stamped seal of approval from the City of El Paso.**

- 14. All Company metering equipment shall be mounted on the exterior wall of the building, per local inspection authorities. Multiple services cannot be installed away from the building(s) and then run to each building. All Company metering equipment must be installed on the exterior of the building.**
- 15. The Customer's electrical contractor shall contact the Company's Designer before any construction (new or rebuild) is started to determine the Type of Service required, location of service, service connections, type and location of the meter and Meter Enclosure. All connectors and Point of Attachment devices furnished by the contractor for connection to Company equipment or wires shall be approved by the Company's Service Section. Riser conduit installed through a roof overhang must be high enough for the Company's service conductors to meet local safety code clearance requirements. Refer to DSO's 417 and 1827.**
- 16. Customer-owned Service Entrance Equipment and Company-owned meters shall not be installed on Company-owned poles or other Company-owned facilities.**
- 17. All meters and services must have a system neutral at the first point of disconnecting means in accordance with the National Electric Code. The Company will only allow neutral to be reduced by no more than one (1) wire size to the first disconnecting means.**
- 18. All meter cans that are group-metered must be permanently marked with the same address as the Company's customer care and billing B system and in accordance with local government authorities. A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment.**
- 19. For all new and upgraded commercial services, including apartment and other multiple tenant complexes, power riser diagrams must be submitted with plans and the Request for Electric Service form for approval by the Company before the Customer or electrician orders any electrical equipment or starts any electric work. The power riser diagram must be reviewed and approved by the Company's Service and Meter Test Section management before Customer applies for electric service.**
- 20 The Company may disconnect Customer's service without prior notice for any of the following reasons: (1) where a known dangerous condition exists for as long as the condition exists, (2) where service is connected without authority by a person who has not made an Application for New Service, (3) where service was reconnected without authority following termination of service for nonpayment, or (4) where there has been meter tampering with the Company's equipment or evidence of theft of service. Where reasonable, given the nature of the hazardous condition, the Company will post a notice of disconnection and the reason for the disconnection at the place of common entry or upon the front door of each affected residential or commercial unit as soon as possible after service

has been disconnected. The Company reserves the right to disconnect, pull or remove power from any site it feels poses a safety hazard to the Company's employees or the general public. Such services and meters will not be reconnected until the safety hazard has been corrected and/or the appropriate authority having jurisdiction has authorized the Company to reconnect the service. **Any time the Company disconnects Customer's service for any reason and prior to the Company's installation of a new service and meter, the Customer's new or upgraded service must meet the Company's current electric service requirements in effect.**

21. For all commercial underground services, the meter **and main service panel** location and the Customer's main disconnect shall not exceed 20 feet from the Company's padmount transformer for services over 1200 amps, and the meter **and main service panel** location and the Customer's main disconnect shall not exceed 75 feet from the Company's padmount transformer for services up to 1200 amps. If a meter stand is installed by the Customer, it should comply with DSU 1015 and not interfere with the Company's operational clearance area.
22. In Texas and New Mexico, all new residential and commercial services must be approved by the authorizing agent having jurisdiction. In Texas and New Mexico, this inspection and approval must be made by the authorized City, County or State Inspector. In the unincorporated areas of the Company's Texas service territory, the Company is responsible for the inspection and approval of the Customer's wiring. All new residential and commercial services, including changes to existing residential and commercial services, are also subject to inspection approval by the Company.
23. All new residential and commercial services, including changes to existing residential and commercial services, are also subject to inspection and approval by the Company in Texas and New Mexico.
24. High-Leg Marking on a 4-wire, delta-connected system where the midpoint of one phase winding is grounded to supply lighting and similar loads, the conductor or buss bar having the higher phase voltage to ground shall be durably and permanently marked by an outer finish that is orange in color or by other effective means. This is in accordance with the National Electric Code.
25. All services rated at 1200 amps or more must comply with Article 110.16(B) of the NEC, which states as follows:

"Service Equipment. In other than dwelling units, in addition to the requirements in Article 110.16(A), a permanent label shall be field or factory applied to service equipment rated 1200 amps or more. The label shall meet the requirements of 110.21(B) and contain the following information:

 - (1) Nominal system voltage
 - (2) Available fault current at the service overcurrent protective devices
 - (3) The clearing time of service overcurrent protective devices based on the available fault current at the service equipment
 - (4) The date the label was applied

Exception: Service equipment labeling shall not be required if an arc flash label is applied in accordance with acceptable industry practice."

B. Meter Location

1. **EL PASO ELECTRIC COMPANY RESERVES THE RIGHT TO DESIGNATE THE METER LOCATION. DO NOT INSTALL ANY METERING EQUIPMENT WITHOUT A WRITTEN APPROVAL FROM THE COMPANY CONFIRMING LOCATION AND METERING TYPE.**
2. The location of meters is an important consideration to both the Customer and the Company and shall be designated by the Company. In all cases meters shall be located in a readily accessible place for convenience in reading, testing and servicing. Meters shall be located on a substantial wall or pole, free from vibration and safe from physical damage. For the mutual convenience of our Customers and the Company, meters shall be installed outdoors and shall not be installed in enclosed backyards, **closets or cabinets.**
3. **All Meter Enclosures shall be installed in such a manner that the top of the meter opening is 5 feet from finished grade and must be approved in advance by the Company. Special circumstances may be allowed for special applications and this will be determined and approved by the Company on a case by case basis. Please refer to applicable DSO or DSU in Section XXI.**
4. **Underground Mobile Home Park Pedestals:**

All Meter Enclosures shall be installed in such a manner that the top of the meter opening is a minimum of 3 feet and a maximum of 5 feet from finished grade and must be approved in advance by the Company. Special circumstances may be allowed for special applications and this will be determined and approved by the Company on a case by case basis. Please refer to applicable DSO or DSU in Section XXI.
5. **Meters shall be accessible at all times to the Company. Meters shall not be installed on Company-owned poles or other Company-owned facilities. Larger commercial and industrial services usually require extensive metering equipment with corresponding increased space requirements. These installations often require detailed consultation between the Customer and Company representatives. Company representatives are readily available to assist Customers or their consultants, contractors, etc., in the location of their service entrance facilities and metering installation. Customers are encouraged to request assistance from the Company through the Designer.**
6. When structure changes or additions are made which make the meter inaccessible as indicated above, the Customer shall move the service entrance, including metering devices and disconnects and at the Customer's expense, to a suitable new location approved by the Company. When the Customer has to

repair or make changes in the service entrance facilities, the Meter Enclosure installation shall also be changed by the Customer at his expense in order to meet the Company's prevailing specifications, prevailing National Electric Code, and other applicable electrical ordinances and codes in effect in the area served.

7. Meters and necessary instrument transformers (current transformers - "CT's" and potential transformers - "PT's") and testing devices are furnished, installed and maintained by the Company. Meters and metering devices remain the property of the Company and must not be moved or the connection changed by any person other than the authorized employees of the Company.
8. **All separately metered fire pumps must have corresponding size disconnects and wire sizing adjacent to the main service metering. Meter and disconnect shall be installed on the exterior of the building or structure adjacent to and within 5 feet of each other. The power riser diagram for this installation must be approved in advance by the Company and included in the Service Point Confirmation. The NEC (§ 695.3.A.3 (as may be amended)) allows for a dedicated feeder from the Service Point, gutter, transformer or other approved point of delivery. The minimum size wire from the Company's point of delivery to the Customer's meter shall be 4/0 copper. By special permission from the Company, the Customer's electrical contractor may be allowed to tie into the load-side of a CT cabinet to install a service for a fire pump.**
9. All main disconnects and meter shall be installed on the exterior of the building or structure adjacent to and within 5 feet of one another. The ATS can be service rated.
10. Please see Section XIX for renewable energy and cogeneration projects and see Section XX for generation utilized for backup support for Customer loads.

C. Meter Enclosure Seals and Energy Diversion

1. Meter Enclosures are sealed for the protection of the Customer and the Company. The Company's seals on the Meter Enclosures should not be tampered with and should not be removed without providing prior notice to the Company. The Company performs Meter Enclosure seal audits on existing and new service locations to ensure public safety and compliance. Electrical contractors and builders are responsible to help prevent tampering and unsafe practices which endangers Customers, employees and the general public.

THEFT OF ELECTRICAL ENERGY IS A CRIMINAL OFFENSE AND OFFENDERS WILL BE PROSECUTED.

Theft of electrical energy, also referred to as energy diversion, is a serious and life-threatening issue that is against the law. Energy diversion occurs when a person tampers with the service wires, Service Entrance Equipment, electrical meter or distribution power lines. There are various types of tampering practices that create unsafe conditions which can result in electrical shock, explosion, fire, personal injury or death.

The Company makes every effort to recover the costs and losses associated with the theft of electrical energy. The cost of energy diversion includes the recovery of non-metered usage, damaged metering equipment, labor for repair and investigation expenses. The Company takes theft of electrical energy very seriously and each case detected will be filed with law enforcement and prosecuted to the fullest extent of the law.

To report a suspected energy theft situation, call the Company in Texas at (915) 543-5979 or in New Mexico at (575) 523-3551 or send an e-mail to reportenergytheft@epelectric.com. All reporting is kept confidential and anonymous.

2. If the contractor finds it necessary to remove a meter, the contractor must notify the Company before breaking the seal by calling the service number listed above and providing his name, the meter address and the meter number. The meter number must have a manufacturer's prefix letter in front of the number (**I** for Itron, **G** for General Electric, **W** for Westinghouse and ABB, **S** for Sangamo and Schlumberger, and **L** for Landis/Gyr and Duncan - for example, S-1372640). Failure to provide this prior notice may result in legal action against the Customer by the Company. Meter Sockets found with broken seals or jumpers may be considered evidence of intentional theft of electrical energy and will be dealt with accordingly.

D. Furnishing and Installation of Meter Sockets or Enclosures

1. The Customer (or his builder, electrical contractor, etc.) must furnish the Meter Sockets and Meter Enclosures (also known as meter cans) approved by the Company to be installed by the Customer's electrical contractor. The Meter Socket or enclosure is owned by the Customer, who is responsible for all repair and maintenance needed to ensure a safe and reliable installation. The permanent Meter Enclosure shall be securely fastened to the wall, pole, etc., and shall not rely on conduits or risers for the sole support. **Electrical contractors are responsible for marking Meter Enclosures accurately with permanent numbers or letters to correspond to the correct unit, apartments or commercial suites.** The Customer's electrical contractor in all cases furnishes and installs all Service Entrance Equipment and metering conduit for suitable and complete installations in a manner approved by the Company. The Company has the right at any time to install locks, locking devices, protective covers, etc., on the Meter Enclosures or sockets to protect and secure the Company's meters and metering equipment. The Customer shall not tamper with these locks, etc., in any way. Evidence of tampering may result in an immediate disconnection of service and appropriate charges. **The Customer will be charged a service fee if the Company's personnel are unable to connect a new, existing, upgraded or modified service because the service did not meet all of the Company's requirements.**
2. The meter or instrument transformer enclosures must not be used as a terminal point for more than one load circuit with the exception of a fire pump. All self-contained metering is designed to receive only one conductor per phase and

one ground conductor. The Company reserves the right to require no more than one conductor per phase, as long as applicable electric codes can be met.

3. The Company will not permit the connection of any of Customer's equipment to the Company's metering equipment or circuits. If a Customer needs kilowatt-hour (KWH) pulses for use with an energy management system, the Company will provide and install pulse metering equipment at the Customer's expense. See page 32 for additional information.
4. All services will be reviewed by the Company to determine the type of metering and Meter Enclosures to be installed in each situation. The electrical contractor shall purchase and install only Meter Sockets or enclosures that the Company has approved. The electrical contractor shall contact a Designer or the Meter Testing Department to verify the type or Meter Enclosure to be used on a job before purchasing or installing the enclosure. A list of approved Meter Enclosures may be obtained from the Designer. Service requiring instrument transformers of multiple conductors per phase must be approved by the Company and approval obtained in writing for the Designer before proceeding with any work.
5. **For all commercial underground services, the Company reserves the right to approve the location of the meter in relation to the padmount transformer. This approval by the Company should be obtained by the Customer before any work is done by the electrical contractor.**
6. Refer to Section XXI for Company standard drawings of typical meter installations.
7. Meters shall not be installed in vaults, enclosed or confined spaces, locked cabinets or any place that is not accessible to authorized Company employees on a 24/7 hour basis.

E. Company Policy for Overhead Service to Multiple Residential and Commercial Customers With Grouped Electrical Meters and Gutter

1. **For overhead service to multiple Residential Customers, the Company will install, own and maintain one (1) service drop to the Customer's meter pole, structure or building. The size and maximum length of this service drop will depend on the Customer's electrical load. This information will be provided to the Customer by the Company's Designer. The Customer shall supply, install, own, operate and maintain a suitable service pole, Service Entrance Equipment, pole riser, low voltage cable, conduit and other necessary equipment for the Customer's electrical system. See DSO 432 and DSO 1815 for the requirements for this installation. Parallel risers are acceptable only under certain conditions. See DSO 1845 to find out under what conditions parallel risers are allowed.**
2. **For overhead service to multiple Commercial Customers, the Company will install, own and maintain one (1) service drop to the Customer's meter pole,**

structure or building. The size and maximum length of this service drop will depend on the Customer's electrical load. This information will be provided to the Customer by the Company's Designer. The Customer shall supply, install, own, operate and maintain a suitable service pole, Service Entrance Equipment, pole riser, low voltage cable, conduit and other necessary equipment for the Customer's electrical system. See DSO 1810 for the requirements for this installation. Parallel risers are acceptable only under certain conditions. See DSO 1845 to find out under what conditions parallel risers are allowed.

3. For overhead service to multiple Commercial Customers at a communication or cell tower site, the Company will install, own and maintain one (1) service drop to the Customer's meter pole, structure or building. The size of this service drop will depend on the Customer's electrical load. The maximum length of the service drop will not exceed 20 feet. This information will be provided to the Customer by the Company's Designer. The Customer shall supply, install, own, operate and maintain a suitable service pole, Service Entrance Equipment, pole riser, low voltage cable, conduit and other necessary equipment for the Customer's electrical system. All meters will be grouped at one location by a gutter or a Company-approved meter stack device. See DSO 440 for the requirements for this installation. Parallel risers are acceptable only under certain conditions. See DSO 440 to find out under what conditions parallel risers are allowed.
4. A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment.

F. Company Policy for Underground Service to Multiple Residential and Commercial Customers With Grouped Electrical Meters and Gutter

1. For underground service to multiple Residential Customers where the residential units have their meters grouped and connected into a common gutter, the Point of Delivery shall be at the Company-owned padmount transformer, pullbox or service enclosure as designated by the Company. The Customer shall furnish, install, own and maintain the underground service duct and cable from the Customer's building to the Company's padmount transformer, pullbox or service enclosure, which is the Point of Delivery. The Company will make the service connection between the Company-owned wires and Customer-owned wires at this point. This policy applies to duplexes, multiplexes, apartments, condominiums, townhouses or other similar construction. The electrical contractor shall obtain approval from the Company for stack metering prior to purchase and installation. No more than four (4) meters stacked vertically shall be allowed for Company-approved stack metering. See DSU 1040 and DSU 1045 for the requirements and the separation between meters for this type of installation.
2. For underground service to multiple Commercial Customers where the meters are grouped and connected into a common gutter, the Point of

Delivery shall be at the Company-owned padmount transformer, pullbox or service enclosure as designated by the Company. The Customer shall furnish, install, own and maintain the underground service duct and cable from the Customer's building to the Company's padmount transformer, pullbox or service enclosure, which is the Point of Delivery. The Company will make the service connection between the Company-owned wires and Customer-owned wires at this point. This policy also applies to communication and cell tower sites or other similar types of Customers. At communication and cell tower sites and other similar types of Customers, the meters must be grouped and connected into a common gutter for multiple Customers. No more than four (4) meters stacked vertically shall be allowed for Company-approved stack metering. See DSU 1040 and DSU 1045 for the requirements and the separation between meters for this type of installation. **Please refer to DSU 510 for the maximum number of conductors allowed in each size padmounted transformer. If these limits are exceeded, the Customer must provide and install a secondary bus enclosure, provide connectors and connect the Customer's conductors to the load side of the bus. The Company will designate the location and type of enclosure or connector to be used. Refer to DSU 445 for more details about a commercial secondary bus enclosure.**

3. A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment.

G. SERVICE ENTRANCE REQUIREMENTS FOR INSTRUMENT TRANSFORMERS AND HEAVY-DUTY METERS SERVED FROM AN OVERHEAD SYSTEM

1. Current Transformer (CT) Metering

The Company will determine when CT's will be installed based upon the Customer's service main size. The Company can require the electrical contractor or consultant to install one larger conductor per phase instead of multiple smaller conductors per phase if it would allow the use of self-contained metering and still meet all applicable codes. IT IS EXTREMELY IMPORTANT TO VERIFY WITH THE COMPANY IN ADVANCE WHETHER METERING WILL BE IN-LINE OR CT.

- a. **For all commercial service sizes, the service disconnecting means for services shall be a fusible, loadbreak-rated meter disconnect or overcurrent protective device and shall be installed on the exterior of the building or structure adjacent to and not more than 5 feet from the meter.**
- b. CT metering is required for all services over 400 amps. A Company-approved CT enclosure, in addition to the regular Meter Enclosure, is required and must be installed by the electrical contractor. The Meter Enclosure must be within 5 feet of the CT enclosure.

- c. **If there is more than one meter at a service, a gutter must be used.** If one of the meters requires CT's, the electrical contractor will provide, install and maintain a CT enclosure in addition to the regular Meter Enclosure. The Company will provide and install CT's in the can and the electrician will run the conductors from the gutter to the CT enclosure. The electrician makes the connections at both ends. The Company will inspect the gutter, CT's and meter to ensure proper installation and then seal the CT can.
- d. Meter cans and other metering equipment shall not be used as a raceway for any type of sub feed or for any other device.

2. In-line Metering

- a. In-line metering will accommodate a maximum of two (2) parallel risers under certain conditions and shall be installed by the electrical contractor. In-line metering enclosures approved by the Company can accommodate a maximum of one 500 MCM conductor (copper or aluminum) per phase, or as allowed by the approved UL rating, for a demand load ampacity not greater than 400 amps. All class 320 amp meter cans shall have a Company-approved heavy duty lever bypass.
- b. For class 200 amp meter cans, only one conductor per phase is allowed and the maximum size conductor shall comply with the manufacturers' specifications. All class 200 meter cans shall have a Company-approved heavy-duty bypass Meter Socket. Bypass Meter Sockets not approved by the Company are not allowed. The minimum size wire on a class 200 meter can is #4 copper or #2 aluminum. When using a meter can for a three phase, 120/240 volt service with a high leg, the high leg must be positioned so that the high leg is in the far right position located on the Meter Socket.
- c. For class 320 amp meter cans that will accept dual conductors per phase, the Company will allow a minimum wire size of 4/0 copper to be paralleled. The meter can shall be suitable to accept multiple conductors, as per the approved UL rating of the meter can. A maximum of two conductors per phase will be allowed on both the line side and the load side of the meter can. Parallel risers shall be allowed for either overhead or underground services, except for single residential underground services. All class 320 meter cans shall have a Company-approved heavy-duty bypass Meter Socket. Bypass Meter Sockets not approved by the Company are not allowed. When using a meter can for a three phase with a high leg, the high leg must be positioned so that the high leg is in the far right position located on the Meter Socket.
- d. All grouped meter cans must be connected by a gutter. If a new Customer is added to the existing service, the new meter can shall be connected through the existing gutter or modified to accept the service off the existing guttered service. Multiple isolated runs of conduit shall not be permitted.

3. Primary Voltage Meter on Overhead System

- a. Refer to Primary Voltage Service Chart in Section IV, for Primary Voltage service demand load requirements. Normally primary service is not available off the 4 KV system. The Company will install the metering equipment on a Company-installed pole. The Customer will install a dead-end pole with the height and guy wires as specified by the Company. The Customer's pole location will be designated by the Company. The Customer must provide and install an appropriate gang-operated load interrupter switch and over current protection on the pole and the Company will run and connect its conductors to the switch. Company approval for primary service, associated switch and over current protection must be obtained in advance. The Company will designate the size and type of overcurrent protection installed by the Customer. The Customer provides the Meter Enclosure and the conduit and the Company installs it on the Company pole. Please refer to DSO for Primary Voltage meter installations on overhead systems.
- b. In order to prevent interruption to the daily operations of a Customer and for the Company to maintain easy access to its facilities at all times, the Company may require the Customer to take primary metered service at a location that is mutually agreeable to the Customer and the Company. This applies to high security areas such as, but not limited to, local, state and federal jails, prisons or detention centers, medical facilities, Homeland Security facilities and all other types of high security facilities.
- c. The Company has added a single-phase primary metering sequential bypass switch for single-phase primary metering. Please see the Company's Distribution Standards for the requirements for this Type of Service.

H. SERVICE ENTRANCE REQUIREMENTS FOR INSTRUMENT TRANSFORMERS (CT'S) AND HEAVY-DUTY METERS SERVED FROM AN UNDERGROUND SYSTEM

1. When a Customer is served underground, the following requirements must be considered.

The Service Point where the Customer's secondary conductors are connected to the Company's conductors or facilities will be at one of the following:

- Secondary bushings of the Company's transformer
- Secondary service enclosure installed by the Company
- Secondary bus enclosure installed by the Customer
- Secondary submersible bus bar set screw connector terminator and junction box installed by the Customer.

The Company will designate the type and location of the Service Point. Refer to DSU 510 for the maximum number of conductors allowed in each size padmounted transformer and DSU 405 for the limits on Secondary Service Enclosures. If these limits are exceeded, the Customer must provide and install a secondary bus enclosure or submersible bus bar set screw connector and enclosure or pedestal, provide his own connectors and connect his conductors to the load side of the bus. **The Company will designate the location and type of enclosure or connector to be used.** The location of the secondary bus enclosure shall normally not be more than ten (10) feet from the padmount transformer. The Company provides and installs connectors for the Customer's conductors at the Company furnished Service Point only for the Company's standard conductor sizes:

No. 2, 1/0, 4/0 250 MCM and 350 MCM, 500 MCM, 750 MCM, aluminum or copper

On nonstandard size conductors, the connectors will be furnished and installed by the electrical contractor. Wire terminations will be with compression connectors that have two 9/16" holes with NEMA drilling on 1-3/4" centers.

2. In-line Metering

- a. In-line metering will accommodate parallel risers under certain conditions and shall be installed by the electrical contractor. In-line metering enclosures approved by the Company can accommodate a maximum of one 500 MCM conductor (copper or aluminum) per phase, or as allowed by the approved UL rating, for a demand load ampacity not greater than 400 amps.
- b. For class 200 amp meter cans, only one conductor per phase is allowed and the maximum size conductor shall comply with the manufacturers' specifications. All class 200 meter cans shall have a Company-approved heavy-duty bypass Meter Socket. Bypass Meter Sockets not approved by the Company are not allowed. The minimum size wire on a class 200 meter can is #4 copper or #2 aluminum. When using a meter can for a three phase, 120/240 volt service with a high leg, the high leg must be positioned so that the high leg is in the far right position located on the Meter Socket.
- c. For class 320 amp meter cans that will accept dual conductors per phase, the Company will allow a minimum wire size of 4/0 (copper or aluminum) to be paralleled. The meter can shall be suitable to accept multiple conductors, as per the approved UL rating of the meter can. A maximum of two conductors per phase will be allowed on both the line side and the load side of the meter can. Parallel risers shall be allowed for either overhead or underground services, except for single residential underground services. All class 320 meter cans shall have a Company-approved heavy-duty bypass Meter Socket. Bypass Meter Sockets not approved by the Company are not allowed. When using a meter can for a three phase with a high leg, the high leg must be positioned so that the high leg is in the far right position located on the Meter Socket.

- d. All grouped meter cans must be connected by a gutter. If a new Customer is added to the existing service, the new meter can shall be connected through the existing gutter or modified to accept the service off the existing guttered service. Multiple isolated runs of conduit shall not be permitted.

3. CT Metering

- a. For services above 400 amps or if more than one Customer is being served from the transformer, the electrical contractor shall provide and install a Company approved enclosure for the CT's, in addition to the Meter Enclosure, on the building wall or on a meter stand. **The meter stand is not to be bolted or connected to the transformer or the transformer pad.** See DSU 1015 for specifications. **The Meter Enclosure must be within 5 feet of the CT enclosure.**
- b. **For all commercial underground services, the Company reserves the right to approve the location of the meter in relation to the padmount transformer.**
- c. Customers requiring an underground vault or ground-level vault shall furnish drawings in advance for written approval by the Company. For Customers who terminate inside a vault with a bus duct, refer to Paragraph II-B in this section for bus duct termination. If Customer brings flexible conductors into the vault, the conductors shall be long enough to pass through the current transformers and to reach the transformer terminals or overhead bus. Connectors will be furnished by the Company if standard Company size.

4. Primary Voltage Meters on Underground System

- a. Refer to Primary Voltage Service Chart in Section IV for Primary Voltage service demand load requirements. Normally primary service is not available off the 4 KV system. The Company will install the primary metering equipment in a padmounted meter transclosure furnished and installed by the Company at a location designated by the Company. The Customer shall provide and install a Meter Enclosure within 20 feet of the instrument transformers as specified by the Company. The Customer must provide and install an appropriate gang-operated load interrupter switch and over current protection on the load side of the Company's Meter Enclosure. All Primary Voltage service requests and associated switch and over current protection must be approved in advance for each situation. The Company will designate the size and type of overcurrent protection installed by the Customer.
- b. In order to prevent interruption to the daily operations of a Customer and for the Company to maintain easy access to its facilities at all times, the Company may require the Customer to take primary metered service at a location that is mutually agreeable to the Customer and the Company. This applies to high security areas such as, but not limited to, local, state and federal jails, prisons or detention centers, medical facilities, Homeland Security facilities and all other types of high security facilities.

I. EL PASO ELECTRIC COMPANY APPROVED RESIDENTIAL METER ENCLOSURE AND SOCKETS

1. Approved Meter Sockets are shown on the following pages.
2. Any Meter Sockets not shown must be approved by a representative of the Company and must meet the Meter Socket specification.
3. **Electricians shall not use meter cans as a raceway for their copper grounding wire. As per Article 250.24(A)(1) of the National Electrical Code:**

"...connection shall be made at any accessible point from the load end of the service drop or service lateral to and including the terminal or bus to which the grounded service conductor is connected at the service disconnecting means."

Meter cans are not to be accessible to anyone but Company personnel. The only grounding location is at the nipple of the conduit used to carry the load Service Wires. Grounding wire shall not be pulled through the meter can or attached to system neutral.

EPE APPROVED METER CAN LISTING (REVISED JUNE 2019)

MANUFACTURER	MODEL NUMBER	CHARACTERISTICS
	SINGLE PHASE	
MILBANK	U5934 XLBL6	***OH ONLY*** SINGLE PHASE CLASS 100 RESIDENTIAL
MILBANK	U 7487 RL TG	***OH ONLY*** SINGLE PHASE CLASS 100 SOCKET RESIDENTIAL (COVER TYPE)
MILBANK	U 7490 RL	***OH ONLY***SINGLE PHASE CLASS 100 SOCKET RESIDENTIAL (RING TYPE)
EATON	UTRS 101 BCH	***FOR UG USE ONLY***SINGLE PHASE RESIDENTIAL METER CAN 125 AMP
MILBANK	U 7040 XL TG	CLASS 200 SINGLE PHASE SOCKET (COVER TYPE)
MILBANK	U 8032 XL	100 AMP DUAL METER CAN FOR DUPLEX USE (METER ONLY)
EATON	UTRS 213 CE	CLASS 200 SINGLE PHASE SOCKET (COVER TYPE)
MILBANK	U 1980 O	CLASS 200 RESIDENTIAL METER CAN
EATON	MBE 4040 B200 BTS	CLASS 200 WITH LOAD CENTER COMBINATION UNIT FOR RESIDENTIAL USE ONLY
EATON	MBE 2040 B150 BTS	SINGLE PHASE COMBINATION UNIT RESIDENTIAL 150 AMP
EATON	UTE7213UCH	OH/UG with 3 inch hub on top residential only combo unit
MILBANK	U 3995-XL-200	200 AMP UG LEVER BY PASS WITH 200 AMP MAIN
MILBANK	CP3B5111A42SP2	SINGLE PHASE PEDESTAL COMBINATION UNIT 200 AMP
MILBANK	U-5890-X-2/200-BL	SINGLE PHASE WITH TWO 200 AMP MAINS COMBO UNIT WITH LEVER BY PASS 320
MILBANK	U-5890-X-2-150-BL	SINGLE PHASE WITH TWO 150 AMP MAINS COMBO UNIT WITH LEVER BY PASS 320
SQUARE D	RC200-S	SINGLE PHASE MAIN ONLY 200 AMP RESIDENTIAL OH/UG
SQUARE D	SC42M200PS	SINGLE PHASE ALL IN ONE WITH ARC FLASH BREAKERS ACCEPTABLE 200 AMP 42 CIRCUIT-OH/UG
SQUARE D	SC2040M200PS	SINGLE PHASE ALL IN ONE WITH ARC FLASH BREAKERS ACCEPTABLE 200 AMP 40 CIRCUIT-OH/UG
SQUARE D	SC2040M200PS150	SINGLE PHASE ALL IN ONE WITH ARC FLASH BREAKERS ACCEPTABLE 150 AMP 40 CIRCUIT-OH/UG
SQUARE D	SC2040M200PS100	SINGLE PHASE ALL IN ONE WITH ARC FLASH BREAKERS ACCEPTABLE 100 AMP 24 CIRCUIT-OH/UG
SQUARE D	SC42M200PSH	SINGLE PHASE ALL IN ONE WITH A 200 AMP PANEL AND 2.5 INCH HUB ON THE BOTTOM
SQUARE D	RQC200SFMG M01	SINGLE PHASE 150 AMP AND 200 AMP MAIN BREAKER ONLY
SQUARE D	CRQA200	SINGLE PHASE RESIDENTIAL ONLY RING TYPE WITH 200 AMP MAIN ONLY

EPE APPROVED METER CAN LISTING (REVISED JUNE 2019)

MANUFACTURER	MODEL NUMBER	CHARACTERISTICS
SQUARE D	CRQA150	SINGLE PHASE RESIDENTIAL ONLY RING TYPE WITH 150 AMP MAIN ONLY
GE	TSM2020CSCU	SINGLE PHASE ALL IN ONE COMBO WITH RING AND 20 CIRCUIT PANEL
EATON	MBE SERIES	*** OH ONLY***THIS SERIES 100 AMP SERIES MULTIPLE SPACE BREAKERS
EATON	MBE SERIES	OH/UG IF CORRECTLY RATED CLASS 200 SERIES MULTIPLE SPACE BREAKERS
HOMELINE	SC 1624 M 125S	***OH ONLY***SURFACE MOUNT COMBINATION UNTIL 125 AMP RESIDENTIAL
HOMELINE	SC 1623 M 100S	***OH ONLY*** SURFACE MOUNT COMBINATION UNTIL 100 AMP RESIDENTIAL
SIEMENS	MC 4040B1200 SECM	RESIDENTIAL CLASS 200 OH/UG COMBINATION SINGLE PHASE
SIEMENS	MC 0816B 1200TH	RESIDENTIAL SINGLE PHASE 200 AMP COMBINATION OH/UG
SIEMENS	MC2040 B1200	RESIDENTIAL 200 AMP COMBINATION OH/UG
SIEMENS	MC 3040 B1200 SECW	CLASS 200 SINGLE PHASE COMBINATION OH/UG
SIEMENS	MC1224 B1100 SEC	***OH ONLY*** RESIDENTIAL 100 AMP COMBINATION SINGLE PHASE
SIEMENS	MC0816 B 1200 T	***OH ONLY*** RESIDENTIAL COMBINATION SINGLE PHASE
MILBANK	U 3491 XL 200	***OH ONLY*** SINGLE PHASE CLASS 200 WITH MAIN COMBINATION
HOMELINE	S02040 M200 S	***OH ONLY*** 200 AMP COMBINATION RESIDENTIAL
HOMELINE	RC186 F 200C	***OH ONLY*** 200 AMP COMBINATION RESIDENTIAL
HOMELINE	S0120 M100S	***OH ONLY*** 100 AMP COMBINATION RESIDENTIAL
HOMELINE	SC2040M200 S100	***OH ONLY***RESIDENTIAL 100 AMP COMBINATION
HOMELINE	SC 2040 M 200 S150	150 AMP COMBINATION RESIDENTIAL OH/UG
HOMELINE	SC1040M200S	200 AMP RESIDENTIAL COMBINATION OH/UG
MILBANK	MPAP 20020 GR78	RESIDENTIAL 200 AMP SINGLE PHASE WITH GFI AND MAIN PEDESTAL UG
MILBANK	CP3B51119A42SP2	UG only 200 amp pedestal for Walls Fargo and ATT sites, with Lever by pass.
EATON	UTH 4300 TCH	CLASS 320 SINGLE PHASE WITH LEVER BY PASS
EATON	HP404040 SHL	SINGLE PHASE LEVER BY PASS WITH A 150 AND A 200 AMP BREAKER OFF MAIN BUS UG ONLY
EATON	UTH 4300 UCH	CLASS 320 SINGLE PHASE WITH LEVER BY PASS
SIEMENS	MC 0816 B1400 RTLM	SINGLE PHASE CLASS 320 WITH LEVER BY PASS COMBO METER AND LOAD CENTER
SIEMENS	MM 0404L1400 RLS	CLASS 320 SINGLE PHASE WITH LEVER BY PASS

EPE APPROVED METER CAN LISTING (REVISED JUNE 2019)

MANUFACTURER	MODEL NUMBER	CHARACTERISTICS
SIEMENS	MC 0816 B1400 RTLM	SINGLE PHASE CLASS 320 WITH LEVER BY PASS COMBINATION UNIT
MILBANK	U 2448 X	CLASS 320 LEVER BY PASS SINGLE PHASE
SIEMENS	MC2442B1200ESV	CLASS 200 WITH 16/32 CIRCUIT PANEL COMBO UNIT TOP OR BOTTOM FEED (REVERSIBLE LUGS)
MILBANK	U5891-X-2/200	CLASS 320 WITH LBP AND 200 AMP LOAD CENTER AND 200 AMP SUB FEED BREAKER.
MILBANK	U5882X	2@ 100 AMP EACH COMBO UNIT OH/UG RESIDENTIAL ONLY 4 TERMINAL RING TYPE MAX 100 AMP BREAKERS
MILBANK	UT862-X	2 AT 100 EACH COMBO W/ 100 AMP MAX BRAKERS 4 TERMINALS OH/UG
	5 TERMINAL NETWORK	
MILBANK	U 9551 RXL	200 AMP 5 TERMINAL NETWORK WITH LEVER BY PASS
EATON	UT 5213 CCH	200 AMP 5 TERMINAL NETWORK WITH LEVER BY PASS
EATON	UT 5213 UCH	200 AMP 5 TERMINAL NETWORK WITH LEVER BY PASS
	THREE PHASE	
EATON	UTH 7213 CCH	CLASS 200 THREE PHASE METER CAN WITH LEVER BY PASS
EATON	UTH 7213 UCH	CLASS 200 THREE PHASE METER CAN WITH LEVER BY PASS
EATON	UTH 7330 UCH	CLASS 200 THREE PHASE METER CAN WITH LEVER BY PASS
MURRAY	RH 173 GRF	CLASS 200 THREE PHASE METER CAN WITH LEVER BY PASS
MILBANK	U 9701 RXL	CLASS 200 THREE PHASE METER CAN WITH LEVER BY PASS
MILBANK	U 2594 X	320 AMP THREE PHASE WITH LEVER BY PASS
	ALL CURRENT TRANSFORMER METERING	
MILBANK	UC 7445 RL	CLASS 20 C T METER CAN 13 TERMINAL FOR ALL C T METERING
EATON	USTS 131 BCH	CLASS 20 C T METER CAN 13 TERMINAL FOR ALL C T METERING
	CURRENT TRANSFORMER METERING CABINETS	
MILBANK	U 4468 XT	C T CABINET 1200 AMP
ERICKSON	CT 84 EPEA	C T CABINET 600-800 AMP THREE PHASE

EPE APPROVED METER CAN LISTING (REVISED JUNE 2019)

MANUFACTURER	MODEL NUMBER	CHARACTERISTICS
ERICKSON	CT 81 EPEA	CT CABINET 600-800 AMP SINGLE PHASE
ERICKSON	CT 124 EPEA	C T CABINET 1200 AMP THREE PHASE
ERICKSON	CT 121 EPEA	CT CABINET 1200 AMP SINGLE PHASE
ERICKSON	CT 164 EPEA	CT CABINET 1600 AMP THREE PHASE
ERICKSON	CT 204 EPEA	CT CABINET 2000 AMP THREE PHASE
ERICKSON	CT 254 EPEA	CT CABINET 2500 AMP THREE PHASE
ERICKSON	CT 304 EPEA	CT CABINET 3000 AMP THREE PHASE
ERICKSON	CT 404 EPEA	CT CABINET 4000 AMP THREE PHASE
ERICKSON	SGL24	24" CT CABINET LEFT SIDE GUTTER
ERICKSON	SGR25	24" CT CABINET RIGHT SIDE GUTTER
ERICKSON	SGL 30	30" CT CABINET LEFT SIDE GUTTER
ERICKSON	SGR 30	30" CT CABINET RIGHT SIDE GUTTER
ERICKSON	SGL 44	44" CT CABINET LEFT SIDE GUTTER
ERICKSON	SGR 44	44" CT CABINET RIGHT SIDE GUTTER
ERICKSON	PMCT 81 EPEH	PAD MOUNTED CABINET 600-800 AMP SINGLE PHASE
ERICKSON	PMCT 84 EPEA	PAD MOUNTED CABINET 600-800 AMP THREE PHASE
ERICKSON	PMCT 124 EPEA	PAD MOUNTED CABINET 1200 AMP THREE PHASE
ERICKSON	PMCT 164 EPEA	PAD MOUNTED CABINET 1600 AMP THREE PHASE
ERICKSON	PMCT 204 EPEA	PAD MOUNTED CABINET 2000 AMP THREE PHASE
ERICKSON	PMCT 254 EPEA	PAD MOUNTED CABINET 2500 AMP THREE PHASE
ERICKSON	PMCT 304 EPEA	PAD MOUNTED CABINET 3000 AMP THREE PHASE
ERICKSON	PMCTCC 4610 NEPEA	PAD MOUNTED CT CABINET 2000 AMP THREE PHASE
ERICKSON	PMCTCC 4611 NEPEA	PAD MOUNTED CT CABINET 2500 AMP THREE PHASE
ERICKSON	PMCTT 4612 NEPEA	PAD MOUNTED CT CABINET 3000 AMP THREE PHASE
ERICKSON	PMCTCC 4613 NEPEA	PAD MOUNTED CT CABINET 4000 AMP THREE PHASE
ERICKSON	PMCT-07D	2500 TO 3000 AMP CT CABINET PAD MOUNTED
ERICKSON	EPEPMCTCC-07A	2000 TO 4000 AMP CT ENCLOSURE (MUST MEET REQUIREMENTS FOR MAXIMUM NUMBER OF CONDUCTORS IN PADMOUNT TRANSFORMER)
SHALLBETTER	STEI-406034-CU-GA-WO	SECONDARY BUSS ENCLOSURE (FOR USE IN SITUATIONS WHERE THE MAXIMUM NUMBER OF CONDUCTORS ALLOWED IN A PADMOUNT TRANSFORMER IS EXCEEDED)

**CHECKLIST FOR NEW OR UPGRADED ELECTRIC SERVICES
FOR USE BY CUSTOMERS AND ELECTRICAL CONTRACTORS**

- _____ Address posted (Must be on house, building or meter pole)
- _____ Grounds made up
- _____ Meter can height (5 feet max. from finished grade to top of meter opening)
- _____ Multiple meter cans shall be guttered and marked (Space # or Suite #)
- _____ Point of attachment at correct height (if not going through the roof)
- _____ Rigid or IMC conduit if going through the roof
- _____ All commercial meter cans must have a heavy duty lever bypass
- _____ Impaired clearance (Details included)
- _____ 200 amp meter cans required for underground services
- _____ Main disconnect must be outside and within 5' of the meter
- _____ Load-side wires made up
- _____ Electrical Inspection Release by Appropriate Authority Having Jurisdiction
- _____ Certificate of Compliance (From El Paso, Hudspeth or Culberson County)
- _____ Pull string in pvc duct
- _____ Spades provided by Electrical Contractor (for overhead services)
- _____ Access needed to Company and Customer Equipment

*** If the Company is not able to install the service and meter and energize your service for any reason checked off on this checklist, please call (915) 521-4646 in El Paso or (575) 523-3575 in Las Cruces if you have any questions or if you need more information. Additional service charges may apply.**

SECTION VII

ELECTRIC SERVICE TO RESIDENTIAL SINGLE-FAMILY DETACHED HOMES AND MOBILE HOMES

1. REQUEST FOR SERVICE

- A. Residential service will normally be 120/240 volt, single phase, 3 wire service except that 3 phase, 120/240 volt or 120/208 volt service may be provided for motors over 5 horsepower if 3 phase service is available. Three phase is not available in underground served subdivisions. Single or 3 phase motors shall not exceed 10 horsepower individual capacity without written approval of the Company.
- B. If the Company only needs to install the service wire and/or install a meter, then up to 7 working days should be allowed to connect the service.
- C. If the Company needs to install additional facilities such as transformers, poles, boxes, lines, etc. (considered a Line Extension), then 6 to 12 weeks may normally be required to provide service. Please contact the Designer well in advance of the date that service is required when extension beyond the existing facilities is required.
- D. It is the policy of EPE not to install service wire over any type of building or structure.

2. FOR OVERHEAD SERVICE

Normally, the Company will not install overhead electric service drops over public roads, homes, mobile homes, buildings or other permanent structures.

For all residential overhead services, the Customer's Service Point shall be located at the nearest point to the Company's existing or new facilities, and shall not be blocked or obstructed in any way by trees, buildings or any other structures, etc. The maximum length of the service drop from the Company's pole to the Customer's house or meter pole will depend on the Customer's electrical load and size of Company's Service Wires but shall not exceed 75 feet for electrical loads of 15 KW and less. Shorter distances are required for larger electrical loads and larger Service Wires. The Company will install, own and maintain the meter and the overhead service drop to the Point of Attachment on the house or Customer's meter pole. The Customer will furnish install, own and maintain the Service Entrance

Equipment including the wire, conduit and Meter Socket. **The Customer's Point of Attachment located on the wall of the house must be strong enough to support the weight of the service drop wire. The Company reserves the right to require the Customer to strengthen the Point of Attachment if necessary.** See DSO 415, and DSO 417 for details. Meter poles must be furnished, installed, owned and maintained by the Customer for service to mobile homes. See requirements for meter poles on DSO 430.

3. FOR UNDERGROUND SERVICE

The meter shall be installed on the side of the house nearest to the Company's service connection point, and the service run shall be a straight line from the service connection point to the meter. The meter shall be rated at not less than 200 amps. The maximum length of the service run from the Company's padmount transformer, pullbox or enclosure to the Customer's house or meter pedestal will depend on the Customer's electrical load and size of Company's Service Wires but in general will not exceed 150 feet for single phase loads under 25 KVA (approximately 100 amps). The Customer will furnish, install, own, and maintain the service duct from the Customer's house or meter pedestal to the Company's padmount transformer, pullbox or service enclosure. **A total of two (2) bends not exceeding a total of 135 degrees shall be allowed in an underground service duct run; one (1) bend at the Company's padmount transformer, pullbox or service enclosure, and one (1) bend at the Customer's house or meter pedestal, and the underground service duct run must be a straight line from the Company's padmount transformer, pullbox or service enclosure to the Customer's house or meter pedestal.** For all underground services under driveways and used for one-family and two-family dwelling-related purposes only, the minimum cover requirements shall be 18 inches. **If the Customer's service duct ever needs to be repaired, the Customer will not have electric service until the repairs have been made. The Company will not leave an energized service cable on the ground while the duct is being repaired.** The Company will own and maintain all structural facilities for secondary conductors up to and including the first service enclosure. The Company will furnish, install, own and maintain the meter and the service cable from the Company's padmount transformer, pullbox or service enclosure to the Customer's service entrance at the house or meter pedestal. The location of the meter must be approved by the Company and shall be located at the nearest point on the house from the Company's padmount transformer, pullbox or service enclosure. See DSU 420 for underground residential services to houses and manufactured homes set in place on a foundation. See DSU 1020 and DSU 1025 for underground residential services for mobile homes. Please note that a meter pole or meter pedestal must be installed for underground service to mobile homes. Please contact the Designer for information on this installation.

If a Residential Customer requests conversion of his existing overhead service drop to underground service, or if the conversion is required as the result of a situation created by the Customer, the Company will, at its expense, install underground service conductors in a Customer supplied, owned and maintained conduit system from the nearest Company transformer or service enclosure to the Point of Delivery.

The maximum length of the service run will be determined by the Company's standards. The location of the Company transformer or service enclosure and the Point of Delivery will be designated by the Company. The Customer further agrees to the following:

- (1) The Customer pays the Company in advance the estimated installed cost of the new underground facilities plus the estimated cost to remove the existing overhead facilities less the salvage value of the removed overhead facilities. The Customer must also grant to the Company any needed firm Easements for this installation and for future underground extensions to adjacent lots as required. See DSU 410 for this installation.
- (2) The Customer shall supply, install, own and maintain the conduit system from the Company service enclosure to the Customer's Meter Enclosure. The conduit system must meet Company and applicable code requirements. See DSU 420 for this installation.
- (3) The Customer must make any changes to his/her Service Entrance Equipment necessary to accommodate the new underground service.

Installation of all Company underground structural facilities shall be done by either Company crews or Company approved contractors, which have contracted with the Company for these installations.

When the electrician is ready for the Company to run the service wire and install the meter, the electrician shall run a minimum 200 lb. test pull string in the duct and leave it for the Company. Do not stick a fish tape into the transformer housing.

The Customer-installed underground service duct shall be a minimum of 18 inches deep in Texas and New Mexico.

The builder should check Company facilities (pedestals, service enclosures) for damage prior to beginning construction. If damaged, notify the Company at once. Otherwise, the builder may be charged for damages.

4. SERVICE ENTRANCE REQUIREMENTS

Service entrance equipment should be rated at not less than 100 amperes for overhead and 200 amperes for underground.

The service disconnecting means for all services must be installed on the exterior of the building or structure adjacent to and within 5 feet of the meter.

SECTION VIII

RESIDENTIAL OVERHEAD SUBDIVISIONS

1. PRELIMINARY PLANNING

The developer should contact the Designer in the early stages of planning to discuss the proposed project and the procedures for obtaining electric service. This is important because the developer should consider the following:

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- How will lot or tract configuration affect the number of poles and anchors needed and where should utility Easements be granted?
- Where will the future lot owners most likely want service and what may be their costs?
- Typically, a single phase, Primary Voltage line will be installed, will 3 phase service be needed for wells or sewage treatment plants? What will the loads be, and where are they located?
- Will the Company have difficulty in obtaining Easements to get to the project and will there be delays in obtaining materials or other factors that could prevent the Company from meeting the developer's time frame?
- What will be the costs to the developer and how will they be handled?
- A single phase, Primary Voltage line will be installed. Transformers will be installed to provide 120/240 volt service to each lot.

2. REQUEST FOR SERVICE

Once these above items have been considered and the **subdivision plat finalized**, the developer should submit a completed Customer Service Request Sheet, 5 copies of the final plat, a mylar or AutoCad Disk, if available, and a development schedule to the Designer. Also, clearly identify the name of the person, corporation, joint venture, etc., that is developing the project and in whose name agreements or contracts would be prepared.

If street lights are to be installed as a requirement of a regulatory body, the proposed light locations need to be determined at this time. See Section XI for additional details.

3. WORK ORDER PREPARED, COST AND AGREEMENT

The Company will prepare a work order on providing service to the subdivision. The Designer will then give the developers a copy of the electrical layout to review and

the estimated cost (cash advance or revenue guarantee amount). Any Easements required that are not shown on the filed plat will be requested from the developer. If the developer has any questions about the proposed service, it should be brought to the attention of the Designer at once. The developer then determines which of the revenue guarantee options he will use (these options are subject to change). The Designer will then prepare the agreement which details the requirements for this construction. The agreement is valid for 60 days. The developer obtains the revenue guarantee, signs the agreement (the Surety signs the acknowledgment portion) and returns it to the Company.

The rules governing these installations are found in the Company's filed Line Extension Policy.

The work order will not be released for construction until the agreement is signed and the revenue guarantee approved. Depending upon the Company's work load and materials inventory, it may require up to 60 days to complete construction.

4. INSTALLATION OF ELECTRIC FACILITIES

The areas where the Company's facilities will be located are to be to final grade, and all necessary property irons are to be installed by the developer prior to the Company beginning construction.

The developer may be required to have platted roads/streets improved or to assist the Company in grading temporary roads through inaccessible or rough terrain. The Company will schedule the construction as normal work, but if there are no Customers who require electricity living on or preparing to move into the subdivision, other jobs may be given priority at the Company's discretion. The Designer will provide the developer with a letter he can show to prospective buyers that states electricity will be installed when needed and that all arrangements with the Company have been made.

After the electrical installation has been completed, the developer shall install permanent street signs to facilitate the setting of meters and service for future Customers. If transformers are not installed in the subdivision, the developer shall notify each lot purchaser to contact the Designer for service and that there may be an additional cost to the lot owner.

The developer is required to pay the cost of (1) relocation and/or extension of any installed electric facilities due to grade changes or other requirements of the developer or subsequent lot owner, and (2) repair and/or replacement of any Company facilities covered in the original agreement should such facilities be damaged during subsequent development and/or building construction.

Should a change in the original plat, or development schedule occur, please notify the Designer immediately. Changes in the plat may result in additional Customer charges if such changes require revision of construction already completed by the Company. Plat changes also require a revision of the work order which may take from 1 to 4 weeks.

SECTION IX

RESIDENTIAL UNDERGROUND SUBDIVISIONS

(SINGLE-FAMILY DETACHED HOMES OR MOBILE HOMES)

1. PRELIMINARY PLANNING

The developer or his engineering consultants shall provide the Company with a preliminary plat and master plan of the area when available. The Company will review the plat, designate the width and location of all required utility Easements and identify any potential problems that need to be resolved. This can normally be done through the activities of City or County Planning Departments or Subdivision Coordinating Committees during the preliminary plat approval process. For subdivisions outside of this jurisdiction, plans must be given to the Company and required utility Easements shown on the filed plats. Within the city limits and extra territorial zones in New Mexico, all subdivision developers are required to submit a master utility plan to the Company for the design of its underground distribution facilities.

The following additional information must be detailed on the plat:

- Illumination Plan as required in the Texas Jurisdiction.
- Street width, property line to property line.
- Paved width of streets, curb to curb.
- Type of curbs (curb and gutter, header curb, other).
- Sidewalk width and location with respect to curb.
- Width of parkway from curb to sidewalk.
- Elevation of streets and adjacent lots when subdivision is in rough terrain.
- Final grading plans.

It is helpful for future follow-up with builders and to check on any applicable refunds if the addresses of each lot are shown.

2. REQUEST FOR SERVICE

- A. **ONCE THE DEVELOPER FINALIZES THE SUBDIVISION PLAN**, he completes a Customer Service Request Sheet and returns it and 5 copies of the final plat, a mylar, or AutoCad Disk, if available to the Designer. **The Company will not complete a work order using preliminary plans.** A development schedule should be included. This will aid the Designer in coordinating the work order. It is especially important that the information for subdivisions include the date when all property irons will be in place. The Company cannot begin construction until all irons are in place.
- B. If any of the lots within the subdivision are to be dedicated or set aside for any use other than single family, the use must be identified when possible. For example, school sites, parks, commercial areas, apartment sites, etc., should be shown. The developer must identify blocks and lots where duplex or multiplex units are to be built, indicate of separate or grouped meter locations are desired, and provide a plan showing "typical" unit, drive and sidewalk layouts. See Section X for additional information.
- C. If any of these above types of uses could require three (3) phase electrical service, the Company shall incorporate the applicable requirements in to the subdivision electrical design, and the costs for the 3 phase will be a part of the agreement for the subdivision. (Future revenues from these 3 phase users will also apply to fulfilling any revenue guarantees under the agreement terms.) If 3 phase service is required by the water or sewer utility, these locations must be identified prior to the start of the electrical design. Any financial considerations required in providing service to such facilities will be handled with the developer or the water/sewer utility as determined by the parties.
- D. If street lights are to be installed as a requirement of a regulatory body, the proposed light locations need to be determined at this time. See Section XI for additional information.

3. COST AND AGREEMENT

The Company will prepare a work order on providing service to the subdivision. The Designer will then give the developers a copy of the electrical layout to review and the estimated cost (revenue guarantee or cash advance amount). If the developer has any questions about the proposed service, it should be brought to the attention of the Designer. The developer then determines which of the revenue guarantee options he will use. (The options are subject to change.) The Designer will then prepare the agreement. The agreement is valid for 60 days. The developer obtains the revenue guarantee, signs the agreement (the Surety signs the acknowledgement portion) and returns it to the Company.

The job will not be put out for bids and/or the work order released for construction until the agreement is signed and the Surety's guarantee approved. Depending upon the size of the subdivision, it may require three weeks for the bidding and selection of a contractor and preparation to start construction.

4. INSTALLATION OF ELECTRIC FACILITIES

The areas where the Company's facilities will be located are to be to final grade; curb and gutter, water and sewer main lines and taps are to be installed prior to the Company beginning construction. Any exceptions to this requirement must be approved by the Company in advance. The Company will coordinate its installation of structural facilities with the other utilities involved. After the structural facilities are installed, the Company will not install cables, transformers, etc., until they are needed to serve homes.

Should a change in the original plat or development schedule occur, please notify the Designer immediately. Changes in the plat may result in additional Customer charges if such changes require revision of construction already completed by the Company. Plat changes also require a revision of the electrical design which may take from 1 to 4 weeks.

After the structural installation is complete and accepted and the Company's Inspector and the Developer's representative have reviewed the subdivision for damage to curbs, etc., the Company's Underground Construction Inspector will provide the Developer with a written paving release.

If a subdivision is replatted after Company facilities have been installed, either through a filing action or by the sale of lots by metes and bounds, or if the intended use of the lots changes from single family to multiplex units, the Customer shall notify the Company as soon as the changes are known and provide a layout of the changes showing both old and new property lines.

If additional service/meter points are required because of the changes, the developer or builder shall enter into a new revenue guarantee agreement for the amount of the additional investment in facilities made by the Company. The developer or builder will pay the entire cost to remove or relocate existing Company facilities.

5. MOBILE HOME SUBDIVISION - SPECIAL CONSIDERATION

In a mobile home subdivision, meters are not allowed to be placed on the side of the mobile home per the national Electric Code. The meter must be located on an approved meter stand at a point designated by the Company. An example of such a stand is shown on the enclosed Company Standards DSU 1020, page 1 of 1, and DSU 1025, page 1 and 2 of 2. Self-contained metering pedestals are also available from electrical suppliers. The developer may install the meter stands to insure uniformity and reliability or it may be done on an individual basis by the future lot owners.

SECTION X

ELECTRIC SERVICE TO MULTI-FAMILY RESIDENTIAL UNITS (DUPLEXES, TRIPLEXES, ETC.)

1. PRELIMINARY PLANNING

The owner, architect, consulting engineer or electrical contractor (referred to as "Customer") should contact the Designer in the early stages of planning to discuss to proposed multi-family subdivision or projects and the procedures for obtaining electric service. They should provide the Company with a preliminary plat when available. The Company will review the plat, designate the location and width of all required utility Easements and identify any potential problems that may need to be resolved, such as the location of the Company's existing electrical facilities in relation to the location of the proposed development.

The Designer will confirm the exact type and location of service which will be supplied to each unit(s) before proceeding with the electrical wiring of a project. If the units are to be separately sold, the Company can advise the Customer on the best service method. Attention to this detail may avoid the added cost of installing additional electrical facilities later. The Company is ready to assist in the preliminary design stages of a project in any way.

2. REQUEST FOR SERVICE

The Customer must complete and sign a Customer Service Request Sheet and provide final plans before the Company begins the engineering design. It is important that the information asked for on the Request Sheet be furnished accurately and completely and include the following:

- A. Name, street, address and exact location of the proposed multiplex project to be served, including a legal description of the property.
- B. Final plans showing the physical layout of the proposed building(s) in relation to the property in including building elevation plans, electrical plans, floor plans, grading plans (existing and final), landscaping plans, location of proposed curbs, sidewalks, parking areas, driveways and location of other utility lines (water, gas, sewer, telephone, cablevision), etc.
- C. Number of buildings in the proposed project along with the number of units per building and the approximate square footage of each. **For all multi-family**

residential units, including apartment complexes with multiple buildings, the Customer shall install a house meter for each building.

- D. Type of electric service (overhead or underground) and the desired Service Point for each building and whether meters will be grouped or served individually. If more than one service per building is requested, fire walls will be required and appropriate inspection approval obtained.
- E. Date that electric service will be required and the approximate time table for construction.

3. WORK ORDER AND COMPANY POLICIES AND RULES

The Customer must execute any necessary agreements before construction can begin. Any Easements that are required will be requested from the property owner. The work order will not be released for construction until all necessary agreements are signed and approved by the Company and all Easements are obtained.

4. INSTALLATION OF ELECTRIC FACILITIES

The areas where the Company's facilities will be located are to be at final grade, clear of all objects. Sidewalks and curbs, etc., should be existing or properly marked, and all necessary property irons as specified by the Company are to be installed by the Customer prior to the Company beginning construction.

When meters are to be grouped, the gutter and all of the sockets are to be installed by the Customer. The Customer shall furnish, install, own and maintain the service duct and service wire from the grouped meters to the service enclosure or transformer box as designated by the Company. For stack metering for multi-family residential units, no more than four (4) meters stacked vertically shall be allowed. A minimum of three (3) inch separation is required between Meter Enclosures and any adjacent equipment.

For overhead services, parallel risers are allowed only under the following conditions:

1. Multiple meters over 400 amps total.
2. For services greater than 600 amps, up to a maximum of four (4) risers total will be allowed, and only conductor sizes of 350 MCM and larger will be allowed.
3. For 320 amp meter cans with a single meter, a maximum of two (2) risers total are allowed and can be paralleled, and only conductor sizes 4/0 and larger will be allowed.

SECTION XI

STREET LIGHTING AND TRAFFIC SIGNALS

TEXAS

STREET LIGHTING

1. GENERAL INFORMATION

- A. There are five types of governmental street or highway lighting that are installed in the Company's service area. **The Customer must obtain approval from the Company for all installations, and these installations must comply with the clearance requirements specified in DSO 1870.** All types have to be installed or requested to be installed by a governmental unit and the monthly electric bills are paid by the governmental entity. These five types are:
1. Municipal street lighting.
 2. New subdivision street lighting under the jurisdiction of the City of El Paso.
 3. County road and highway lighting in El Paso County and the portions of Culberson and Hudspeth Counties in the Company service area.
 4. Interstate freeway lighting involving a cooperative agreement between the Texas Department of Transportation and a municipal or county government.
 5. State and interstate highway and intersection lighting by the Texas Department of Transportation.
- B. The Electric Company maintains all street, highway and freeway lighting except for ornamental standards and systems owned by municipalities and those lights outside of cities or towns which are maintained by the Texas Department of Transportation. Report damaged or burned out lights to the Electric Company by calling 877-3400.
- C. Information relative to requesting or obtaining lighting in each of these categories follows.

2. MUNICIPAL STREET LIGHTING ON EXISTING STREETS

- A. A municipality decides when and where to install street lighting based upon traffic conditions, needs and location of Company facilities.
- B. If a resident or residents of a street want to have a street light installed on their street, they should contact their local governmental body with their request. Depending upon each situation, the local government may install the light without cost to the residents or the government may require the residents to pay the installation cost. **Do not contact The Electric Company to request a street light.** The Company cannot install any lighting without governmental approval and authorization. Within the City Limits of El Paso, contact the Street and Maintenance Department at 311. Outside the City Limits of El Paso, call (915) 212-0118.

3. STREET LIGHTING IN NEW SUBDIVISIONS UNDER THE JURISDICTION OF THE CITY OF EL PASO

- A. All new subdivisions are to have provisions for street lighting provided by the subdivision developer. The developer is to submit his subdivision plat to the Streets and Maintenance Traffic and Transportation Department of the City before final plat approval is given. The Traffic and Transportation Department will designate the number and location of street lights required for that subdivision on the plat.
- B. A copy of the plat showing these locations is given to the Company so the Company can design the electrical system to include service to the lights. If there are any problems with the proposed light location, the Company will resolve these problems with the Streets and Maintenance Traffic and Transportation Department in a mutually agreeable manner.
- C. The developer shall pay either the City or the Company (as determined by governing ordinances) the installation cost for each light in advance. The lights will be installed and energized within a time frame set forth by governing ordinances in effect.
- D. The developer shall contact the Streets and Maintenance Traffic and Transportation Department in the planning stages of each subdivision to verify the lighting requirements for the subdivision and what governing ordinances and policies will apply.

4. COUNTY ROAD AND HIGHWAY LIGHTING

County government decides when and where to install street lighting based upon traffic conditions and needs. Contact your county government officials at (915) 546-2015 to make requests for lighting. Depending upon each situation, the county may install the light without cost or the county may require the citizen(s) to

pay the installation costs. Outside the Limits of the City of El Paso, the County of El Paso may be contacted at (915) 546-2015.

5. INTERSTATE AND FREEWAY LIGHTING WITHIN MUNICIPALITIES

These systems are designed and installed by the state and cities normally when new highways are constructed or changes are made. Contact the city governments if there are questions about adding lights to these lighting systems.

6. STATE AND INTERSTATE HIGHWAY AND INTERSECTION LIGHTING

Outside of municipalities, the Texas Department of Transportation installs and maintains this lighting. Contact them with questions or requests about lighting.

7. COMPANY POLICIES AND RULES

The Company's Rules and Regulations, Line Extension Policy, applicable tariffs and established operating procedures and policies apply to all lighting service and installation in addition to any specific agreements between the Company and any governmental units.

8. CONVERTING FROM OVERHEAD TO UNDERGROUND SERVICE

The total cost of converting existing overhead service to underground service shall be paid by the Customer. The Company reserves the right to refuse to convert any existing overhead service to underground service if the conversion causes problems for the Company or is not equitable for the Company.

9. MUNICIPAL COLLECTIVE ROAD LIGHTING/ARTERIAL LIGHTING

All new installations of collective and arterial roads are to have provisions for street lighting by the City of El Paso. These special projects are projected based upon traffic conditions, needs, locations, and street renovations throughout the City. The City should contact the Company's Street Lighting Department in the planning stages of a project to discuss the project and the procedures. The Company will provide a cost estimate for a standard installation. Upon agreement of the cost, the City shall submit a Purchase Order for the total cost of the job. The Company will not release a work order for construction until the City has submitted a Purchase Order to the Company. The Street Light Representative is the liaison between the City and the Company to will coordinate all aspects of any given project. The Street Light Representative ensures that all policies, procedures and Company standards are being met.

10. STATE AND CITY LIGHTING POWER SOURCES

A request for service for State and City lighting power sources should be made through the Company's Street Lighting Department. This type of lighting normally requires 240/480 volt, single phase service. The Company will meet with the State's

or City's representative at the proposed service location to determine if the service for the required voltage is readily available. If a new transformer and/or additional facilities is required to provide service, the City or State shall pay for the total cost of the additional facilities required. The service address and service voltage must be displayed on the main disconnect box and should be visible from the street.

11. RELOCATION OF STREET LIGHTS

If the City requests to have a City-owned street light relocated, the City shall pay the total cost of relocation. The City shall provide the Company with a Purchase Order for the total cost, and then the Company will initiate a new work order and start the process for the relocation.

12. TRAFFIC AND SCHOOL SIGNAL INSTALLATIONS

All traffic and school signal services in Texas shall be metered and will be billed in accordance with the Company's Rate Schedule No. 9, Governmental Traffic Signal Service Rate (as may be amended).

NEW MEXICO

1. GENERAL INFORMATION

Street lighting provides safety, security and convenience. The Company presently offers three (3) types of street lighting: (1) municipal street lighting; (2) private residential subdivision street lighting; and (3) interstate highway street lighting. For private area lighting see Section XVIII.

2. MUNICIPAL STREET LIGHTING

Municipal street lighting is available to any village, town, city or county governmental agency for street lighting purposes only and Customers must submit their request for this type of street lighting to these governing bodies for approval. Inside the city limits of Las Cruces, this request must be submitted in writing to the Traffic Engineering Department, City of Las Cruces, New Mexico. Once this street light request is approved, the governing body will submit in writing to the Company a letter of authorization for the installation of the street light(s). The Company will then prepare all the necessary paper work to have the street light installed. All street lights installed inside the City of Las Cruces will be installed in accordance with the Street Lighting Policy adopted by the City Commission on November 19, 1984. The Company will install all other municipal street lighting in accordance with the street lighting policy in effect in the area where the street light is to be installed.

3. PRIVATE RESIDENTIAL SUBDIVISION STREET LIGHTING

Private residential subdivision street lighting is available to any individual corporation outside the incorporated limits of the municipalities in the territory served by the Company and is installed only after a contract has been entered into by the Customer and the Company. Contact the Street Lighting Department of the Company for more information and details on this type of street lighting.

4. INTERSTATE HIGHWAY LIGHTING

Interstate highway lighting is a metered service contracted for by a village, town, city, county or state governmental agency and under conditions where the governmental agency owns, installs and maintains the street lighting system, including fixtures, standards, appurtenances, cable and duct. Contact the Distribution Design and Business Delivery Unit for more information and details on this type of street lighting.

5. COMPANY POLICIES AND RULES

The Company's Rules and Regulations, Line Extension Policy, applicable tariffs and established operating procedures and policies apply to all lighting service and installation in addition to any specific agreements between the Company and any governmental units.

6. CONVERTING FROM OVERHEAD TO UNDERGROUND SERVICE

The total cost of converting existing overhead service to underground service shall be paid by the Customer. The Company reserves the right to refuse to convert any existing overhead service to underground service if the conversion causes problems for the Company or is not equitable for the Company.

SECTION XII

SERVICE TO MOBILE HOME PARKS (TRAILER, RV PARKS)

1. GENERAL INFORMATION

A mobile home park is defined as a location where the lots are rented or leased, as compared to selling them to mobile home owners. Each lot will receive a separate electric service with meters being placed separately on each lot or several lots grouped together on a common pole or stand. The developer of a park shall contact the appropriate Designer, complete a Customer Service Request Sheet and provide a set of plans showing the following:

- Lot spaces layout.
- Driveways and entrances/exits.
- Location of laundry buildings, swimming pool, playground areas, lighting, water, sewer and gas lines, etc.
- The electrical loads expected, wiring diagrams and layouts.

No meters are to be installed directly on the side of a mobile home. Meters can be installed on manufactured homes that are set in place on a foundation. This must be approved by the Company prior to any electrical work being done by the Customer or the Customer's electrical contractor. Locations of the meters shall be such that they are protected from possible vehicular damage. The meter installation shall conform to the latest National, State or applicable municipal electrical codes. The Customer provides and installs the Meter Socket. **No parallel risers shall be allowed on Customer-owned meter poles.**

2. OVERHEAD SERVICE

If the park is served electricity from an overhead Company system, the following specifications and conditions will apply:

For all residential overhead services, the Customer's Service Point shall be located at the nearest point to the Company's existing or new facilities, and shall not be blocked or obstructed in any way by trees, buildings or any other structures, etc. The maximum distance the Company will install an overhead service drop is 75 feet in serving an estimated demand load of 15 KVA or less. If meters for multiple mobile homes having a demand load greater than this are

grouped on one pole, the length of the service drop will be shortened. If multiple meter poles are installed by the Customer for multiple mobile homes, there shall be adequate distance or spacing between these meter poles to prevent an unsafe or improper clearance between Service Wires that could create a safety hazard. This must be approved by the Company prior any electrical work being done by the Customer or the Customer's electrical contractor.

All Customer service and meter poles will be installed according to specifications stated in DSO's 430 and 431. Electric Company Service Wires will not cross over mobile home locations. If mobile homes are installed that create an Customer Service Request, the Company reserves the right to disconnect Service Wires until clearance is corrected. The Customer shall have the location of all meter poles confirmed by the Company before any installations are made. **No parallel risers shall be allowed on Customer-owned meter poles.**

3. UNDERGROUND SERVICE

- A. The meter shall be installed on the side of the house nearest to the Company's service connection point, and the service run shall be a straight line from the service connection point to the meter. The meter shall not be rated at less than 200 amps.**
- B. If the mobile home park is to be served underground, special consideration must be given to the placement of Company facilities and the protection of these facilities from vehicle damage. The Company will supply, install, own and maintain an underground electrical distribution system to serve each lot. The Company will prepare a work order for the mobile home park and give the developer a copy of the electrical layout to review and the estimate cost (cash advance or revenue guarantee amount). If the developer has any questions about the proposed service, it should be brought to the attention of the Designer. The developer notifies the Designer which of the revenue guarantee options he will use. (These options are subject to change.) The Designer will then prepare the agreement, which is valid for 60 days. The developer obtains the revenue guarantee, signs the agreement (the Surety signs the acknowledgement portion) and returns it to the Company.
- C. The job will not be put out for bids or the work order released for construction until the agreement is signed and the Surety's guarantee approved. Depending upon the size of the mobile home park, it may require three weeks for the bidding and selection of a contractor and preparation to start construction.
- D. The areas where the Company's facilities will be located are to be to final grade prior to the start of construction by the Company. Curb and gutter, water and sewer main lines and taps are to be installed prior to the Company beginning construction, if applicable. Coordination between the Company and others installing underground utilities is important to avoid damage to Company facilities, which the Customer must pay for.

- E. The meters must be located in an approved meter stand or pedestal at a point designated by the Company. Examples of two such stands are shown on the enclosed Company Standards, DSU 1020 and DSU 1025. Meter heights must be a minimum of 3 feet and a maximum of 5 feet above ground level.
- F. Security lighting provided by the Company is available to be installed along private streets within the park. The Customer pays a one-time installation cost for the underground facilities to serve the light pole and the Company will maintain the light(s). The Customer then pays a monthly rate for the electricity, pole and light assembly.

4. ADDITIONAL GUIDELINES

- A. **Each mobile home space shall be prominently numbered and this number shall be legibly and permanently marked on the mobile home main switch box and Meter Socket. Service will not be connected until the address is permanently displayed and visible from the street.**
- B. See the detailed instructions for meter service poles and their installation on DSO's 430 and 431.

SECTION XIII

ELECTRIC SERVICE TO APARTMENT COMPLEXES

1. PRELIMINARY PLANNING

The owner, architect, consulting engineer or electrical contractor should contact the Designer in the early stages of planning to discuss the proposed apartment project and the procedures for obtaining electric service. The Customer should provide the Company with a preliminary plat when available. The Company will review the plat, designate the location and width of all required utility Easements and identify any potential problems that may need to be resolved, such as the location of the Company's existing electrical facilities in relation to the location of the proposed apartment project. The exact type and location of service which will be supplied to the apartment complex should be determined before specifying or purchasing any equipment or proceeding with the electrical wiring or a project. Attention to this detail may avoid the purchase of equipment for which service is not available or the added cost of installing additional electrical facilities. The Company is ready to assist in the preliminary design stages of a project.

2. REQUEST FOR SERVICE

- A. The Customer must complete and sign a Customer Service Request Sheet and provide final plans before the Company begins the engineering design. It is important that the information asked for on the Request Sheet be furnished accurately and completely and include the following:
1. Name, street address and exact location of the proposed apartment complex to be served including a legal description of the property.
 2. Final plans showing the physical layout of the proposed apartment building in relation to the property including building elevation plans, electrical plans, floor plans, grading plans (existing and final), landscaping plans, location of proposed curbs, sidewalks, parking areas, driveways, location of other utility lines (water, gas, sewer, telephone, cablevision, on site ponding areas, etc.).
 3. Number of buildings in the proposed apartment complex along with the number of apartments per building and the approximate square footage of each.
 4. Itemized commercial load requirements – i.e., office, laundry room, recreation room, pool, exterior lighting, etc.

5. Type of electric service (overhead or underground) and the desired Service Point for each building. **For all multi-family residential units, including apartment complexes with multiple buildings, the Customer shall install a house meter for each building.**
6. Date that electric service will be required and the approximate timetable for construction.
7. Temporary construction service requirements. Please contact the Designer as early as possible for temporary service requirements. The Customer shall pay the Company the estimated cost to install and remove any additional facilities that are needed for temporary construction service. In some cases, temporary service may not be readily available, practical or economically feasible.

3. WORK ORDER, COMPANY POLICIES AND RULES

The Company will prepare a work order to provide service to the proposed apartment complex. The Designer will then give the Customer a copy of the Company's proposed electrical layout to review and the estimated cost to provide the electric service. Each request for service will be considered in accordance with the terms and conditions of the Company's filed **Line Extension Policy and Rules and Regulations Regarding Electric Service**. The Customer must execute any necessary agreements before construction can begin. Any Easements that are required will be requested from the property owner.

The work order will not be released from construction until all necessary agreements are signed, and the revenue guaranty account or cash advance (if required) is approved by the Company and all Easements are obtained.

4. ONE TYPE OF SERVICE PER BUILDING

The Company will normally provide only one Type of Service and one set of service conductors to a building, and all electric energy is to be measured by a single meter at each point of delivery.

If more than one electrical service entrance to a building is desired, all applicable building, fire and electrical codes must be met and must be approved in advance by the Company. **The Customer shall pay, as a nonrefundable Contribution in aid of Construction (CIAC), for all costs associated with an additional Service Point. The Company reserves the right to refuse to provide multiple points of service if the multiple points of service causes problems for the Company or is not equitable for the Company.**

As per Article 230.2(E) of the National Electrical Code, where a building or structure is supplied by more than one service, a permanent plaque or directory shall be installed at each service disconnect location denoting all other services supplying that building or structure and the area served by each.

5. SERVICE POINT AND METER LOCATION CONFIRMATION

The Service Point location (Point of Attachment or point of delivery) and the metering locations will be designated by the Company. The location for the Service Point and meters shall be secured from the Designer. This information shall be obtained before any work is started on the Customer's wiring.

6. INSTALLATION OF ELECTRIC FACILITIES

The areas where the Company's facilities will be located are to be to final grade and clear of all objects. Sidewalks, curbs, etc., should be existing or properly marked, and all necessary property irons as specified by the Company are to be installed by the Customer prior to the Company beginning construction.

- A. **Overhead Service:** The maximum length of the service drops from the Company's service pole to the Customer's apartment building will depend on the Customer's electrical load and size of Company's Service Wires. Shorter distances are required for larger electrical loads and larger Service Wires. The Company will install, own and maintain the overhead service drop to the Point of Attachment on the building, including the meter. The Customer will furnish, install, own and maintain the Service Entrance Equipment including the wire, conduit and Meter Socket. **Stack metering may be used, but must conform to Company requirements on spacing between the Meter Sockets, and must be approved by the Company in advance. The minimum distance between Meter Sockets is 3 inches. For stack metering for apartment complexes, no more than four (4) meters stacked vertically shall be allowed.** The Point of Attachment of the Company's Service Wires to the Customer's building shall be high enough so that minimum service wire clearance, above finished grade, shall not be less than the applicable code requirements.
- B. **Underground Service:** For all underground services in an apartment complex, including the clubhouse, laundry room, swimming pool and any and all other types of buildings or structures requiring electric service in the apartment complex, the Customer will furnish, install, own and maintain the service duct and cable from the Customer's building to the Company's padmount transformer, pullbox or service enclosure. The Company's padmount transformer, pullbox or service enclosure will be the point of delivery, and the Company will make the service connection between Company-owned wires and Customer-owned wires at this point. If the number of Customer's cables coming to the designated Service Point exceed the number allowed for the transformer or Company connector (see DSU 405 and DSU 510), the Customer shall provide, own, install and maintain a secondary bus enclosure or submersible set screw bar type connector and enclosure approved by the Company. The Company will specify which type may be used. The location of this enclosure will be designated by the Company. The Company's transformer(s) shall be protected from vehicular traffic by the Customer as shown in DSU 515, 1 of 2 and 2 of 2 or DSU 525 when applicable. See DSU 1045 for typical multiple underground residential metering installations.

Stack metering may be used; but, must conform to Company requirements on spacing between the Meter Sockets, and must be approved by the Company in advance. The minimum distance between Meter Sockets is 3 inches. For stack metering for apartment complexes, no more than four (4) meters stacked vertically shall be allowed.

1. Padmount Transformer Installation/Service Connection

The Company's transformer must be located in an area that provides accessibility to vehicles, trucks and/or cranes with applicable operating clearances around and above the transformer. **Adequate protection for the transformer must also be provided and installed by the Customer or his contractor before service to the Customer will be connected. Refer to DSU 515, 520, 525, 528 and 530 for complete specifications on the required clearances and protection.**

7. RATES

The Residential Service Rate is available only for domestic purpose **individually metered apartments**. If more than one unit or apartment is served on one meter, then the applicable commercial rate will apply.

All electric service to loads such as the apartment office, laundry room, recreation room, pool or exterior lighting, etc., will be separately metered (one or more meters) and billed under the applicable commercial service rate.

In accordance with the Federal Public Utility Regulatory Policy Act and state and local laws, all newly constructed or occupied apartments or condominiums must provide for individual metering of each dwelling unit by the Company or submetering by the owner. The Designer can furnish additional information on this subject.

8. BUILDING AND METER SOCKET IDENTIFICATION

The electrical contractor shall place permanent markings on the Meter Sockets to correctly identify them with the corresponding apartment number. Each apartment building shall be clearly marked and identified with a large number or letter permanently attached to the building. METERS WILL NOT BE SET UNTIL THE METER SOCKETS AND THE BUILDINGS ARE MARKED.

9. SECURITY LIGHTING

Private Area Lighting installed, owned and maintained by the Company is available. See Section XVIII for additional details.

SECTION XIV

COMMERCIAL MANUFACTURING OR INDUSTRIAL SERVICE

1. GENERAL INFORMATION

- A. A complete set of plans including site, floor, elevations, grading, electrical, mechanical and landscaping should be provided to the Designer as early as possible. The location of existing or proposed Company facilities needs to be reviewed to avoid conflicts that could later create additional costs or delays. An owner requesting service to a speculative development without written commitments from future tenants may require that a revenue guarantee or cash advance agreement be signed before the Company begins the installation of its facilities.
- B. **The service disconnecting means for all services must be installed on the exterior of the building or structure adjacent to and within 5 feet of the meter.**

All meters for commercial services up to 400 amps shall have a heavy-duty lever bypass Meter Socket. When using the bypass Meter Socket for three phase 120/240 volt service, the High-Leg Marking on a 4-wire, delta-connected system where the midpoint of one phase winding is grounded to supply lighting and similar loads, the conductor or buss bar having the higher phase voltage to ground shall be durably and permanently marked by an outer finish that is orange in color or by other effective means. This is in accordance with the NEC, Article 110.15.

- C. Please review Section III, IV, V and VI of this Blue Book. They contain important information related to Commercial/Industrial services.
- D. Service Point Location Confirmation

The Customer should show the desired location for the transformer/Service Point on his drawings. The Point of Attachment or delivery will be designated by the Company. The location for the Point of Attachment and meter shall be secured from the Designer. This information shall be obtained before any work is started on the Customer's wiring. Do not assume that a building will be served from the nearest pole or transformers. For example, the desired voltage may not be available or the distance for an overhead drop may be too far.

Architects and owners should also be aware of the planned location of Company poles, anchors, padmounted transformers, etc., to ensure that

potential problems with landscaping, vehicle and pedestrian traffic flow, aesthetics, trash receptacles, possible future expansions, etc., will be minimized and resolved in the early stages of design or construction.

If underground service is desired, but space limitations prohibit the installation of a padmounted transformer, a Customer meter pole next to the Company transformer pole should be considered.

E. Fault Current information can be obtained by calling the appropriate Designer.

2. OVERHEAD ELECTRIC SERVICES

- A. The **Point of Attachment** provided by the electrical contractor for the Company to attach its Service Wires needs to be 18" - 24" higher than the ground to wire code clearance requirements to allow for wire sag and the drip loop.
- B. The **length** of the **Company's service drop** is determined by the size of the Company transformer and thus the size of the Service Wires. This is important to consider in determining the Service Point in relation to the Company's existing pole line or new pole installation. Contact the Company to verify these distances. Do not assume that secondary can always be run from a nearby pole line. Normally, the Company will not install overhead electric service drops over public roads, homes, mobile homes, buildings or other permanent structures.

3. UNDERGROUND ELECTRIC SERVICES

A. Design of Company Facilities

The design and installation of Company underground facilities will be done by the Company. The Customer is to show the desired Service Point or transformer location on his electrical site plan. The Company will confirm the desired Service Point or specify a different one in writing depending upon the underground design. If a Customer requests an underground service in areas where there are overhead lines, the Company has the right to designate the location of the riser pole for the underground service, which may include an overhead Line Extension as part of the design.

No permanent buildings or structures can be constructed on top of the Company's underground facilities, so it is important for the Customer to show future additions or buildings planned for the property. It is also very important to show the location of other utilities' lines and to assist the Company in coordinating the layout and installation of all underground facilities for the benefit of all utilities. The Company's Primary Voltage lines shall be installed a minimum of 36" below final grade. **Customer's** Secondary Voltage lines shall **have a minimum cover** of 24" below final grade. The area must be to final grade before installation will begin and the required property irons shall be installed. Primary voltage lines will be concrete encased for protection when deemed necessary by the Company's Distribution Design and Business Delivery Unit.

The development of a commercial subdivision requires careful planning between the developer and the Company. Usually lot lines are not absolutely final and future driveway locations unknown. If a developer has two or three possibilities of lot layouts; but, needs to install the underground electric facilities in advance, it is wise to install extra street crossings to provide duct for future use without extensive street cuts. The developer would pay the cost up front of these extra crossings. If installed Company facilities have to be relocated or removed, the developer pays these costs. Curbs and gutters are to be installed prior to the installation of Company facilities. The underground electrical system will be installed along the streets in the subdivision.

B. Padmount Transformer Installation/Service Connection

The Company's transformer must be located in an area that provides accessibility to vehicles, trucks and/or cranes with applicable operating clearances around and above the transformer. **Adequate protection for the transformer must also be provided and installed by the Customer or his contractor before the Company's padmount transformer is installed and service to the Customer is connected. Refer to DSU 515, 520, 525, 528 and 530 for complete specifications on the required clearances and protection. The Customer has the option of requesting that the Company install adequate protection for the transformer and the Customer shall pay the Company, in advance, a nonrefundable contribution in aid of construction for the Company to install adequate protection for the transformer.**

For all commercial underground services, the Customer will provide, install, own and maintain all ducts and low voltage cables from the secondary terminals of the transformer to and within the building. The meter location and the Customer's main disconnect shall not exceed 20 feet from the Company's padmount transformer for services over 1200 amps and the meter location and the Customer's main disconnect shall not exceed 75 feet from the Company's padmount transformer for services up to 1200 amps. The meter location shall not be located within the Company's operational clearance space requirements, and if a meter stand is installed by the Customer, it should comply with DSU 1015 and the meter stand shall not interfere with the Company's operational clearance area.

The Point of Connection for the Customer's secondary service cables will be at the secondary bushings of the transformer if the number of Customer cables does not exceed the capacity of the transformer. Refer to DSU 510 for a listing of these limits for various sizes of transformers. The Company will determine the size of transformer to install based upon the Customer's connected load and diversity of operation. If more than 4 conductors per phase are installed, the electrical contractor shall bundle all the cables in each phase together in the transformer pullbox.

If the Customer's number of cables per phase exceeds the number allowed for the transformer, the Customer shall provide and install either a secondary bus enclosure or a submersible bus bar set screw-type connector and enclosure approved by the Company for the Point of Connection. The Company will determine which type is to be used. The Company will designate the location of the enclosure close to the transformer and install duct and cables from the transformer to the line side of the bus or connector. The electrical contractor will terminate his secondary cables on the load side of the bus or connector. The consulting engineer or electrical contractor shall verify with the Company whether a separate secondary termination point will be required before plans are finalized and the job goes out for bid. Refer to DSU 530 for Right of Way Requirements.

When the Point of Connection is the transformer secondary bushings, the duct and cable installation into the transformer pullbox and housing must follow the specifications shown on DSU 510 and DSU 440.

When a meter stand is installed next to the transformer, the meter stand must be constructed as per the specifications in DSU 1015. The Meter Enclosure shall be installed in such a manner that the top of the meter opening must be 5 feet from finished grade. The stand shall not be attached to the transformer housing or to the concrete pullbox or lid. The meter stand shall not be located more than 20 feet away from the transformer. This is for padmount transformers only with pre-approved current transformers located in the transformer. Current transformers will be in an approved CT cabinet for services from 401 to 1200-amp ratings. If multiple services larger than 1200 amperes are served from the same transformer, all metering will be guttered and CT's will NOT be installed in the transformer.

Customers with multiple transformers shall not have any internal ties in their electrical system to allow transformers to operate in parallel.

C. Transformer Installed in a Vault

1. **Underground Vault:** The Customer will design and construct the vault following **Company specifications**. The vault design must be approved by the Company in advance of construction. Contact the Company for the specifications and requirements, which will vary depending upon the size and location of each vault.
2. **Connections in a Vault:** If the Customer's service entrance into the vault is with cable, the Point of Connection will be at the secondary bushings of the transformer. The Customer's cable shall be long enough to rest in all cable trays, pass through CT's and reach the transformer bushings easily.

If the Customer's service entrance is a bus duct, the Company shall approve the bus duct design and entrance location in advance. The Company will specify the number and size of the termination lugs required on the bus. The Company will run its cables from the transformer to the bus duct.

SECTION XV

TEMPORARY SERVICE

1. REQUEST FOR TEMPORARY SERVICE

A request for temporary service should be made well in advance of the date that temporary service is required. If the Company only needs to install secondary wire and set a meter, then up to 7 days should be allowed to connect the temporary service. If the Company needs to install additional facilities such as transformers, poles, overhead or underground lines, etc. (considered a Line Extension), then 4 to 12 weeks may be required to provide temporary service. Therefore, it is very important that the Company be notified well in advance of the date that temporary service is required when a Line Extension beyond the existing service facilities of the Company is required. In some cases, temporary service may not be readily available, practical or economically feasible. Contact the New Service Group at (915) 521-4646 in Texas (El Paso) or (575) 523-3575 in New Mexico (Las Cruces) to apply for temporary service.

2. TEMPORARY SERVICE CONNECTION CHARGE

A temporary service connection charge shall be made for temporary overhead and underground services based on the current charge in effect in the area served and approved by the appropriate regulatory agency. This is an additional charge for temporary service and does not include the costs of additional facilities installed by the Company. This is a one-time charge, is nonrefundable and will normally be included in the Customer's first monthly bill.

3. TEMPORARY LINE EXTENSION

If a Line Extension is required to provide temporary overhead or underground service, the Customer shall pay the Company in advance the estimated cost of required Company facilities plus installation and removal costs, less the estimated salvage value of the facilities when they are removed. This cost will be obtained from the Designer of the Company. When a Line Extension is required, the Customer or Customer's contractor shall provide the Company with the following information before planning for the temporary service can begin:

- Name of responsible party and street address and/or location where temporary service is required.
- A map or site plan indicating the Customer's desired temporary Service Point.

- Electrical load requirements (load in amps or KW, single phase or three phase and Secondary Voltage).
- Type of service required (overhead or underground).
- Date that temporary service will be required.

4. TEMPORARY SERVICE POINT LOCATION

The temporary Service Point location will be designated by the Company. The location for the temporary Service Point and meter shall be secured from the Designer. This information shall be obtained before any work is started on the Customer's temporary wiring installation.

- A. **For temporary overhead service**, the Customer will furnish, install, own and maintain the temporary Service Entrance Equipment including the temporary meter pole, wire, conduit and Meter Socket. See DSO 430 and 431 for specific details on this installation. The maximum length of the service drop shall not exceed 75 feet for single phase loads of 15 KW or less. Shorter distances are required for larger electrical loads and larger Service Wires. The Company will install, own and maintain the overhead service drop to the Point of Attachment on the temporary meter pole, including the meter. The Point of Attachment of Company's Service Wires to the temporary meter pole shall be high enough so that minimum service wire clearance, above finished grade, shall not be less than the applicable code requirements.
- B. **For temporary underground service**, the Customer will furnish, install, own and maintain the temporary Service Entrance Equipment including the temporary meter pole, wire, conduit and Meter Socket. See DSU 425 for specific details on this installation. The Customer will furnish, install, own and maintain the service duct and cable from the temporary meter pole to the Company's padmounted transformer, pullbox or service enclosure. The **minimum distance from the temporary meter pole to the Company's padmount transformer, pullbox or service enclosure shall be 1 foot, but shall not exceed 75 feet.** The Company's padmounted transformer, pullbox or service enclosure will be the Point of Delivery and the Company will make the service connection between Company-owned wires and Customer-owned wires at this point. **UNDER NO CIRCUMSTANCES WILL THE CUSTOMER OR THE CUSTOMER'S ELECTRICAL CONTRACTOR BE AUTHORIZED TO MAKE THIS CONNECTION.**

SECTION XVI

ELECTRIC SERVICE IN THE DOWNTOWN EL PASO AREA AND THE DOWNTOWN LAS CRUCES AREA

1. DOWNTOWN EL PASO AREA

El Paso Electric Company maintains an underground electrical network system in a specified geographical area of downtown. The main Type of Service available from the network has a nominal voltage of 125/216 volts, 3 phase, 4 wire, "wye" connected. This service is suitable to serve motor loads rated at 208 volts, 3 phase and for 120 volt lighting service. The Customer must ensure that all equipment is manufactured to operate at 208 volts. The Company is not liable for voltage problems that occur with 240 volt rated equipment being served 216 volts. 277/480 volts, 3 phase, 4 wire service is available in some locations. The Primary Voltage serving the network is 13,800 volts and is available in certain situations and applications.

A new Customer requesting service shall contact the Designer to determine if the desired voltage is available. More than one type of voltage is normally not available in a building. All meters will be located near the Service Point. The Company **will not** run service or Primary Voltage conductors as interior building circuits, set dry-type transformers within the building, or install meters on different floors. Customer's low voltage cable connected to the Company's downtown underground network system must be either 350 MCM or 500 MCM copper cable only.

It is very important if a new or existing Customer is adding new electrical loads in the downtown El Paso area to contact the Network Engineering Group before purchasing or installing the equipment to verify that existing services to the building have adequate capacity.

It is also very important to note that a new customer constructing a new building with the downtown El Paso network area will be served from a vault. The Customer will construct the vault to Company-approved specifications and standards at the Customer's expense. The design of the vault including bus duct entrance location and specifications must be approved by the Company in advance of any construction.

2. DOWNTOWN LAS CRUCES AREA

The Company shall make every effort to encourage and promote the design and use of underground facilities in the downtown Las Cruces area, also referred to as the urban renewal area or downtown redevelopment area. The Company has a 3 phase underground electric distribution system in this area. The Type of Service normally available in this area is single phase, 120/240 volt, 3 wire service or 3 phase, 120/208 volt or 277/480 volt, 4 wire service. For single phase or 3 phase service in this area, the Company may require the Customer to take service at the Company's existing Secondary Voltage. **Therefore, it is important that the owner, architect, consulting engineer or electrical contractor contact the Company to determine the exact type and location of service which will be supplied and approved by the Company before specifying or purchasing any equipment or proceeding with the electrical wiring of any project.**

All other Company policies and rules will be applicable to the Type of Service that will be provided, and this information can be found in the appropriate section of this Blue Book.

SECTION XVII

REMOVAL AND RELOCATION OF EXISTING COMPANY FACILITIES

1. REMOVAL AND/OR RELOCATION REQUESTED BY CUSTOMER

- A. A Customer requesting removal and/or relocation of Company facilities shall pay all costs incurred by the Company in completing the removal and/or relocation. If removal and/or relocation causes technical problems for the Company or is objectionable to other parties, the Company may refuse to remove and/or relocate the facilities. Relocation of Company facilities is contingent upon the Company securing all necessary rights-of-way.
- B. Customers needing assistance in locating existing Company underground lines should call (915) 877-3400 in El Paso or (575) 526-0400 in Las Cruces. To locate existing underground lines anywhere in New Mexico, Customers should call toll-free 1-800-321-ALERT (25378). To locate underground lines anywhere in Texas, Customers should call toll-free 1-800-344-8377.
- C. When a Customer requests removal and/or relocation of Company facilities that are in the way of proposed construction and/or which involves providing electric service to a new Customer, then the Customer should contact the **Company** at the earliest possible time. This will allow the Company time to review the request and if possible coordinate the removal and/or relocation of Company facilities in conjunction with providing electric service to a new Customer. This could save time and money for both the Company and the Customer. General information requirements for the type of new service to be provided – i.e., residential or commercial – can be found in the appropriate section of this Blue Book. The Company is always ready to assist the Customer in the design stages of a project.
- D. If other utilities (telephone or cable television) have their facilities attached to poles that a Customer has requested be removed or relocated, the Company will provide a cost only for the work involved with Company-owned facilities. The Customer must contact the other utilities, make all necessary financial arrangements with them, and provide written verification from the other utilities to the Company that everything is resolved before Company will proceed with its work.

2. CONVERSION OF OVERHEAD FACILITIES TO UNDERGROUND FACILITIES

- A. If the Company, in response to a Customer request, agrees to replace the Company's existing overhead facilities with underground facilities, the Customer shall pay the Company in advance the estimated installed cost of the Company's new underground facilities plus the estimated cost to remove the existing overhead facilities less the estimated salvage value of the removed overhead facilities. Only one secondary riser will be installed on a Company pole.
- B. For Residential Customers (excluding multiple-metered installations), the Customer will furnish, install, own and maintain the underground service duct from the Customer's house or meter pedestal (for mobile homes) to the Company's padmount transformer, pullbox or service enclosure. The Company will furnish, install, own and maintain the service conductors in the duct. The Company will own and maintain all structural facilities for secondary conductors up to and including the service enclosure.
- C. For Commercial and industrial Customers (including multiple-metered residential installations), the Customer will furnish, install, own and maintain all facilities (**service duct and service conductors**) beyond the Point of Delivery (Company's padmount transformer, pullbox or service enclosure) to the Customer's building.

3. IMPAIRED CLEARANCE

Any Customer (person, company, corporation, partnership, contractor, land developer, property owner or property lease) who installs or constructs any permanent or temporary structure(s) that impairs the clearance of the Company's existing facilities shall pay all costs incurred by the Company in the reconstruction or relocation, or both, necessary to remove any and all Customer Service Requests. The Customer shall notify the Company as soon as possible of any existing or anticipated Customer Service Requests. An Customer Service Request is defined as a condition where structures(s), including, but not limited to, buildings, signs, towers, poles, fencing, swimming pools, etc. is located in a position or manner in which insufficient clearance, as specified by any applicable local code(s) and the National Electric Safety Code, as such codes now exist or as such codes may be amended, exists between the structure and the Company's existing facilities.

THE COMPANY WILL TAKE ANY AND ALL LEGAL ACTION NECESSARY TO CORRECT A HAZARDOUS SITUATION OR TO HALT CONSTRUCTION IMMEDIATELY TO PREVENT INJURY, DEATH OR DAMAGE AND TO KEEP CONSTRUCTION STOPPED UNTIL THE HAZARDOUS SITUATION IS CORRECTED.

If a Customer is asked by the Company to change his service entrance location, to grant an Easement to the Company, or to pay the Company the cost of labor and materials to correct an Customer Service Request and the Customer refuses to

comply with the Company's request after a reasonable period or time, the Company will take any and all legal action necessary to correct a hazard until the situation is corrected by the Customer.

4. SERVICE AND METER LOCATION CHANGED

- A. The Company shall have free and easy access at any time to its equipment on the premises of the Customer and may remove its meters and equipment for proper cause.
- B. When changes or repair are necessary to a Meter Enclosure installation, the Meter Enclosure installation shall be changed to meet the Company's prevailing specifications, prevailing National Electric Codes and any other electrical ordinances and codes in effect in the area served.
- C. When a structure changes or additions are made which make the Company's facilities inaccessible, the Customer shall, at his own expense, move the Meter Enclosure to a suitable location approved by the Company or pay all costs incurred by the Company for relocation of existing Company facilities. The Customer shall not disconnect the service or the meter but shall request the Company to make the disconnection.
- D. In an effort to improve service response time for electrical outage requests, the Customer may arrange for a service outage by calling (915) 521-4646 in Texas (El Paso) or (575) 523-3575 in New Mexico (Las Cruces). A 24-hour advance notice is preferred, and the Customer shall pay all costs incurred by the Company in completing this type of request.

5. GUIDELINES FOR UNDERGROUND DIPS

It is the mission of El Paso Electric Company (EPE) to provide all its Customers with safe, efficient and reliable electric service at a reasonable cost. To keep its focus on this mission, EPE has developed guidelines for when an "underground dip" may be allowed by EPE. If, at the Customer's request, an "underground dip" is allowed by EPE, the Customer shall pay to EPE, in advance, the total cost incurred by EPE for an "underground dip." This cost is a nonrefundable contribution in aid of construction and will not be combined with the cost to supply electric service. These costs do not include any costs that may be charged by other joint-use utilities such as telephone, cable or any other companies. The "underground dip" will also be contingent upon EPE securing all the required firm Easements and permits necessary to install the "underground dip."

EPE's definition of an "underground dip" is: "From an existing overhead electric line, transition or "dip" to a new underground electric line, then transition or rise back up from the underground line to the same overhead electric line."

Customer requests for EPE to make an "underground dip" in EPE's overhead electrical distribution system will be considered and evaluated on a case by case basis, and EPE's upper level management will make the final decision on whether EPE will or will not make an "underground dip" requested by a Customer.

SECTION XVIII

PRIVATE AREA LIGHTING

1. AREA LIGHT/FLOOD LIGHT PROGRAM

The El Paso Electric Company, from either its overhead or underground systems, offers outdoor area and flood lighting to its Customers for several reasons: protection of property, safety, outdoor work at night, outdoor recreation at night and simply for convenience. The Company currently offers high pressure sodium vapor and metal halide area lights and flood lights in various sizes and at different costs.

2. REQUEST FOR AN AREA LIGHT/FLOOD LIGHT

Please contact the Lighting Representative at (915) 543-2041 in Texas or (575) 523-3695 in New Mexico to request a light. The Lighting Representative will initiate the necessary paper work to have the light installed and assist the Customer in the selection and location of the light for the maximum benefit to the Customer. Depending on the Company's work load, it can take up to eight (8) weeks to install a light. The Company reserves the right not to install lights in areas that are inaccessible to Company trucks. Lights are not available in residential subdivisions served with underground electric installation. Persons requesting lights must obtain written agreement from any neighbors that would be affected by the light that they do not object to it.

3. LIGHTING AGREEMENT

Upon requesting a light, the Customer shall enter into an agreement with the Company for an initial period of two (2) years. During this initial term, the Customer will be billed monthly for twenty-four (24) consecutive months. If the Customer moves or no longer wants the light before the initial two (2) year term has expired, then the Company may remove the light and bill the Customer for the remainder of the agreement in one sum. After the initial term has expired, the agreement will remain in effect on a month-to-month basis. The Company's Rules and Regulations and applicable tariffs apply to service for the light. This agreement and its terms are subject to change without notice.

4. GENERAL INFORMATION

The Company will own, operate and maintain the installation. All facilities will remain the property of the Company. The Company will install the light on the private property of the Customer requesting the light. The Customer shall give the Company permission to build the necessary facilities on the Customer's property. The Company's representatives shall have free and easy access at any time to its

equipment on the Customer's property. If the light circuit crosses another owner's property, the Company shall attempt to acquire the necessary property rights.

The Customer shall also give the Company permission to trim trees when necessary for installation of the light and at any other time that the Company deems necessary to maintain clearances. The Company will normally not install an overhead light circuit over or near buildings. Wires will not be installed over mobile homes or metal buildings. If the light must be installed over or near a building, the Company will install the light circuit and maintain proper clearance from the building in conformity with the latest edition of the National Electric Safety Code and any other codes or regulations in effect in the area covered. The Customer will pay in advance the cost of additional or taller poles, wire, etc., to provide this clearance.

5. FACILITIES PROVIDED

A. Lights Served from **OVERHEAD Facilities**

The Company will install the appropriate wood pole, if necessary, luminaire and necessary equipment, and extend overhead wiring up to 160 feet. Facilities necessary in addition to the above will be paid for by the Customer prior to the installation of the light and will be a nonrefundable contribution in-aid-of construction.

B. Lights Served from **UNDERGROUND Facilities**

The Company will not normally install security lights in residential subdivisions that are being served from underground facilities. However, in areas such as mobile home parks and subdivisions with private streets, private subdivisions, apartment complexes, Commercial and/or industrial facilities, etc., the Company will install overhead lights and serve them from existing underground facilities in accordance with the following. Underground service for area lighting is available at a cost equal to the differential between supplied overhead facilities and the actual cost of the underground facilities. The Company will install the appropriate wood pole, luminaire and necessary equipment. The Company will do the necessary trenching and backfilling and install the necessary underground facilities including the service enclosure, conduit and wire. **The Customer shall pay the total cost of installing the underground facilities prior to the installation of the light, and this will be a nonrefundable contribution in-aid-of construction.** There will be no additional charge for the cost to install the appropriate wood pole, luminaire and necessary equipment. The Company will then extend overhead wiring up to 160 feet if the Customer requested more than one light. There will be no additional charge to extend overhead wiring, but there will be an additional charge to install the underground secondary as stated above.

6. REPAIR AND MAINTENANCE

The Company will perform necessary repairs and maintenance during normal working hours, excluding holidays, Saturdays or Sundays, upon receiving notice from the Customer that repairs are necessary. **However, if repairs become excessive due to vandalism or other causes, the Company has the right to cancel the Lighting Agreement and remove its facilities.**

7. LIGHT RELOCATION

A Customer requesting that a light be relocated shall pay all costs incurred by the Company in completing the relocation. If the relocation causes problems for the Company or is objectionable to other parties, the Company may refuse to relocate the light. If an Customer Service Request (a situation where the distance between live electrical wires and structures, workers, or equipment is less than the electrical code requirements) is created by the Customer or if the Customer creates a situation that makes it necessary for the Company to relocate a light, then the Customer shall pay all costs incurred by the Company for correcting the Customer Service Request and/or relocating the light.

8. RATES

Lights will be billed under the Private Area Lighting Rate filed with and approved by the appropriate regulatory agency for the area served. The Company will normally bill the Customer for the light as a separate item under the main service account number. A Customer that has a light installed will receive a copy of the Private Area Lighting Rate Schedule, and this rate schedule and the rules and regulations pertaining to this Type of Service are available for Customer's review upon request.

9. FLOODLIGHT OPTION

The Company offers directional all-night illumination as part of the Area Light Program. Floodlights offer Customers the option of aimed illumination that concentrates light to a specific area, versus a general lighting pattern produced by area Lights. Floodlights are available in various wattages in high pressure sodium and metal halide and are leased to the Customer under a flat monthly charge that appears in a Customer's monthly electric bill. For information on the current monthly charges, please refer to the current Company's Schedule No. 28 - Private Area Lighting Rate. Since Floodlights are a part of the Area Light Program, their installation will be under the guidelines of this program.

SECTION XIX

RENEWABLE ENERGY AND COGENERATION

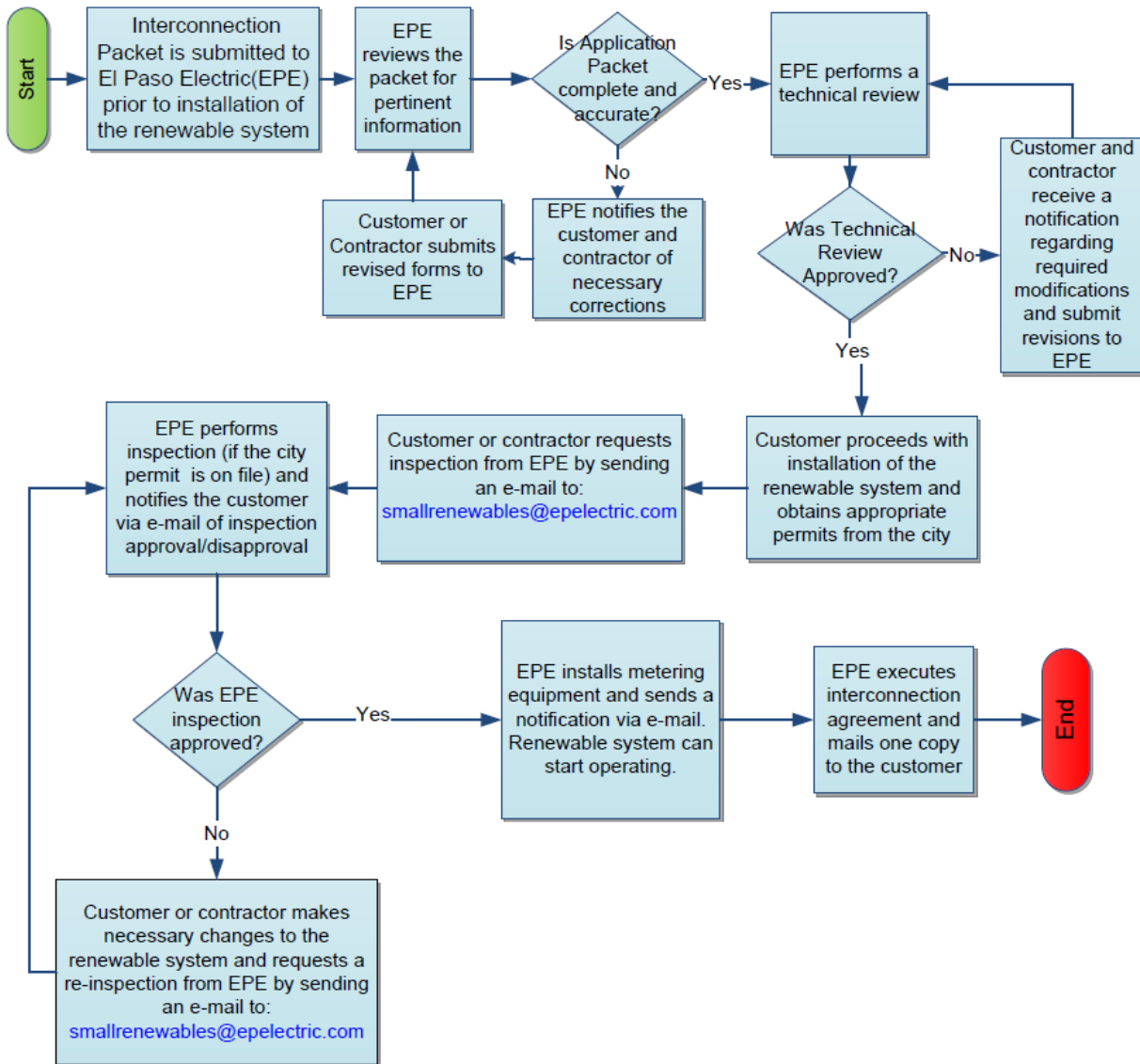
1. RENEWABLE ENERGY PROJECTS

There is a great deal of public interest today in renewable energy sources such as wind, solar, geothermal, hydro power and combustible waste. A growing number of Customers are considering the purchase and installation of systems that would make them more energy self-sufficient or that would allow them to sell electric power to the utility company.

El Paso Electric Company supports the concept of reducing our dependence on nonrenewable and imported fuel resources. The Company's philosophy and support to develop new and renewable energy sources has been demonstrated by its various projects, studies, and ongoing support of research to investigate new energy alternatives.

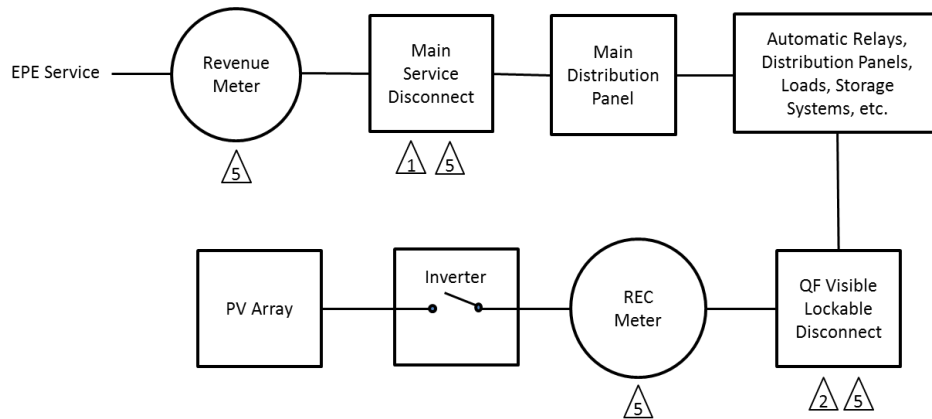
Customers interested in renewable energy sources and looking for more information about the Company's requirements for interconnection can email their inquiries to Smallrenewables@epe.com. Please see on the following page the "Interconnection Process of Distributed Generation (DG) Systems" for Customers in both Texas and New Mexico.

INTERCONNECTION PROCESS OF DISTRIBUTED GENERATION (DG) SYSTEMS



This process is subject to change at any time. For more information, please see the Company's website and refer to the "Renewable Energy Interconnection Manual for Small Size Systems" available under the Renewable Energy section.

SAMPLE ONE-LINE DIAGRAM FOR INTERCONNECTION OF QUALIFYING FACILITIES



GENERAL NOTES

1. Main Service Disconnect and Main Distribution Panel can be a combined enclosure only if it is located in the exterior; Main Service Disconnect must be located within 5 feet of the Revenue Meter.
2. A Qualifying Facility must have a visible and lockable disconnect accessible to EPE's crews.
3. If the existing service is upgraded, changed or modified, it must be brought up to current EPE standards.
4. Permanently post one-line diagram by REC meter.
5. Placards must be permanently placed on service indicating "EPEC NET METERING INTERCONNECTION SITE", "REC METER", and "AC DISCONNECT".
6. One-line diagram must list Customer's name, interconnection address, system capacity, and specifications of equipment installed e.g. PV modules, inverter(s), AC disconnect, conductor sizes, storage system (if applicable).
7. Other configurations for QFs will be reviewed on a case by case basis.
8. All interconnection requests are subject to EPE's review.

REC METER CAN NOTES

1. A 100-amp REC meter can shall be used for all 100-amp REC meters. The model and part number is a Milbank U5929. This is UL rated for #12 to 1/0 wire equipped with an isolated neutral buss.
2. Ground conductors are not to land in a meter can unless on a bonding bushing only. EPE does not allow landed grounds on the neutral buss in a meter can.
3. Grounds and neutrals will be landed in a disconnect at a common point, if the service has a line side tap and is proclaimed to be a second service and if it is on the load side of a breaker, then they may be separated in the disconnect.
4. Neutrals will be required to land in a REC meter can and will be the responsibility of the Contractor to use the meter can required by EPE on its approved meter can listing.
5. Line side tap services will require a fusible disconnect.
6. All 5-terminal and 7-terminal meter cans will be required to also have an isolated neutral.
7. Splices are not allowed in a meter can nor in a disconnect.

2. COGENERATION PROJECTS

Customers considering the development of either a cogeneration or small power production facility should contact the Company at the earliest opportunity. Upon request from a cogenerator or small power producer, the Company will interconnect with and purchase electric energy from a Qualifying Facility. Before the Company will interconnect with a Qualifying Facility, an Interconnection Agreement must be signed and executed by the Qualifying Facility owner or operator, or both, and the Company.

An application for interconnection of a Qualifying Facility to the Company's electrical system is available upon request. A Customer's proposed plan must be discussed in detail with the Company before any purchase orders are issued for the Qualifying Facility including the necessary interconnection and safety equipment. For the safe operation of a Qualifying Facility and the Company's electrical system, the interconnection and safety equipment provided and installed by the Customer must meet local, National Electric Code, National Electric Safety Code and the Company requirements. For more information regarding cogeneration or small power production, contact the Company's Renewables Development Department at Smallrenewables@epe.com.

SECTION XX

GENERATION UTILIZED FOR BACKUP SUPPORT

1. INTRODUCTION

This section addresses the growing implementation of Customer installed backup generation utilized to support Customer loads during supply system disturbances, coordinated disconnection from the utility, and re-connection to the utility. Generation used for backup support is not considered a supply source for the utility and will at no time be allowed to supply power to the utility.

Customers utilizing Company approved backup generation installed prior to 07/24/2013 can continue to utilize the legacy systems but may be required to follow the requirements listed in this section if any system changes are made and shall contact the Company prior to implementation.

Customers interested in backup generation that want more information about the Company's requirements for these installations should contact the New Service line at (915) 351-4224 in Texas or (575) 523-3630 in New Mexico.

2. INTERCONNECTION TYPES

Customers installing backup generation will be classified through the type of switching connection utilized. The two switching classifications defined by the Company are Open Transition and Closed Transition. Open Transition switching requires the Customer to disconnect local loads from the utility supply prior to connecting backup generation ***and*** disconnect the generator before re-connection to the utility supply, ensuring the generator is never electrically paralleled to the Company. Closed Transition switching includes all transfers performed where the generator is momentarily paralleled with the utility supply during disconnection from and/or re-connection to the Company.

3. OPEN TRANSITION REQUIREMENTS

Customers implementing Open Transition switching shall provide the Company the generator and transfer switch specifications, protection method and settings, and a One-Line diagram of the circuit connection to the utility. The Company shall review and approve all Open Transition connections dependent upon the Customers clear illustration of the Open Transition method utilized, as well as, the installation of a visible, manual, lockable disconnect, located on the exterior of the building, that is accessible by Company employees. This disconnect will serve as a visual open and ensure electrical isolation of the utility from the Customer. It shall be installed in accordance with the service entrance requirements and shall not be integrated with

any other electrical equipment. It will be located after the Company meter and before the transfer switch and/or main, to avoid any back feed into the Distribution System. Site testing and evaluation must also be performed with a Company representative present.

4. CLOSED TRANSITION REQUIREMENTS

All Closed Transition connections are required to be reviewed and approved by the Company. An aggregate total of the generation connected to the supply feeder, as well as, the Customers system will be utilized to determine the generator category. Closed Transition connections must be 10 seconds or less in duration to qualify as backup generation. Customers installing Closed Transition connections greater than 10 seconds will be considered Distributed Generation and shall contact the Company's Corporate Development Department for more information.

A. Closed Transition with a generator less than 1 MW

The Customer shall provide the Company with the: generator and transfer switch specifications, protection methods and settings, one-line diagrams of the electrical circuit including protective devices, interconnection equipment specifications, and short circuit and fault studies. The Customer may also need to perform feasibility and impact studies which will be determined on a case by case basis.

The Company requirements include the following:

1. Interconnection disconnect device, located on the exterior of the building, that is manual, lockable, visible, and accessible by Company employees.
2. Interrupting device of appropriate rating with the following protection implemented:
 - Over/Under-voltage
 - Over/Under-frequency
 - Ground Fault Over-voltage
 - Parallel Time Limiter
 - Phase/Ground Over-current
 - Reverse Power Flow
 - Synchronism Check
 - Unbalanced Voltage
3. Redundant protection for primary interrupting device and protection failure.
4. Site testing and evaluation with a Company representative present.

B. Closed Transition with a generator 1 MW or greater

The Customer shall provide the Company the generator specifications, protection methods and settings, one-line diagrams of the electrical circuit including protective devices, interconnection equipment specifications, and short circuit and fault studies. The Customer will also need to perform feasibility and impact studies which include unbalanced load flow, dynamic load flow, transient stability, and harmonic analysis.

The Company requirements include the following:

1. Interconnection disconnect device, located on the exterior of the building, that is manual, lockable, visible, and accessible by Company employees at the Power Control Center.
2. Interrupting device of appropriate rating with the following protection implemented:
 - Over/Under-voltage
 - Over/Under-frequency
 - Ground Fault Over-voltage
 - Parallel Time Limiter
 - Phase/Ground Over-current
 - Reverse Power Flow
 - Synchronism Check
 - Unbalanced Voltage
3. Redundant protection for primary interrupting device and protection failure.
4. Customer will consume the cost of installing and configuring a utility side recloser
5. Customer will provide a Company compatible communication link for Supervisory Control and Data Acquisition.
6. The foregoing will be required to monitor status of the utility recloser, generator interrupting device, Customer interrupting device at the PCC, and generator control mode.
7. A Power Quality meter capable of bi-directional metering, recording harmonics to the 32nd harmonic, sub-cycle event capture, and data storage will be installed at the Power Control Center.
8. Voltage regulation
9. VAR support
10. Direct Transfer Trip
11. Site testing and evaluation with a Company representative present.
12. Customer will be required to contact the Company when transferring to backup generation during nominal system operation.

C. Closed Transition transfers of 1 second or less

Customers that implement Closed Transition connections that are 1 second or less may qualify for a reduced requirements variance pending review and approval by the Company.

SECTION XXI

COMPANY STANDARDS FOR SERVICE INSTALLATIONS

1. The Company and the Customer interconnect with one another as the Company provides service. To ensure that all connections and related facilities are installed correctly, the Company has developed and adopted various standards and specifications in compliance with the National Electric Safety Code and other applicable codes. The following pages include those Company standards that apply to service and installations covered in this Blue Book. Review them completely for the details of these installations.
2. The standards for installations located in areas presently served by overhead electrical systems are listed first. Those standards are called "DSO's."
3. The standards for installations located in an underground served area are listed next. These standards are called "DSU's."
4. **These standards are subject to change without notice.** Customer should contact the Distribution Design and Delivery Business Unit in Texas at (915) 543-4015 or (915) 543-4106 or in New Mexico at (575) 644-4240 to obtain information and copies of the current standards.
5. If there are any questions, contact the Company prior to finalizing plans or beginning construction.

THE INFORMATION CONTAINED IN THE FOLLOWING COMPANY STANDARDS IS CONFIDENTIAL AND/OR PRIVILEGED. THESE STANDARDS ARE INTENDED FOR INFORMATION PURPOSES ONLY AND SHOULD NOT BE COPIED, MODIFIED, DISTRIBUTED OR USED IN ANY MANNER OTHER THAN WHAT THEY ARE INTENDED FOR WITHOUT WRITTEN PERMISSION FROM THE COMPANY.

DSO INDEX BLUE BOOK

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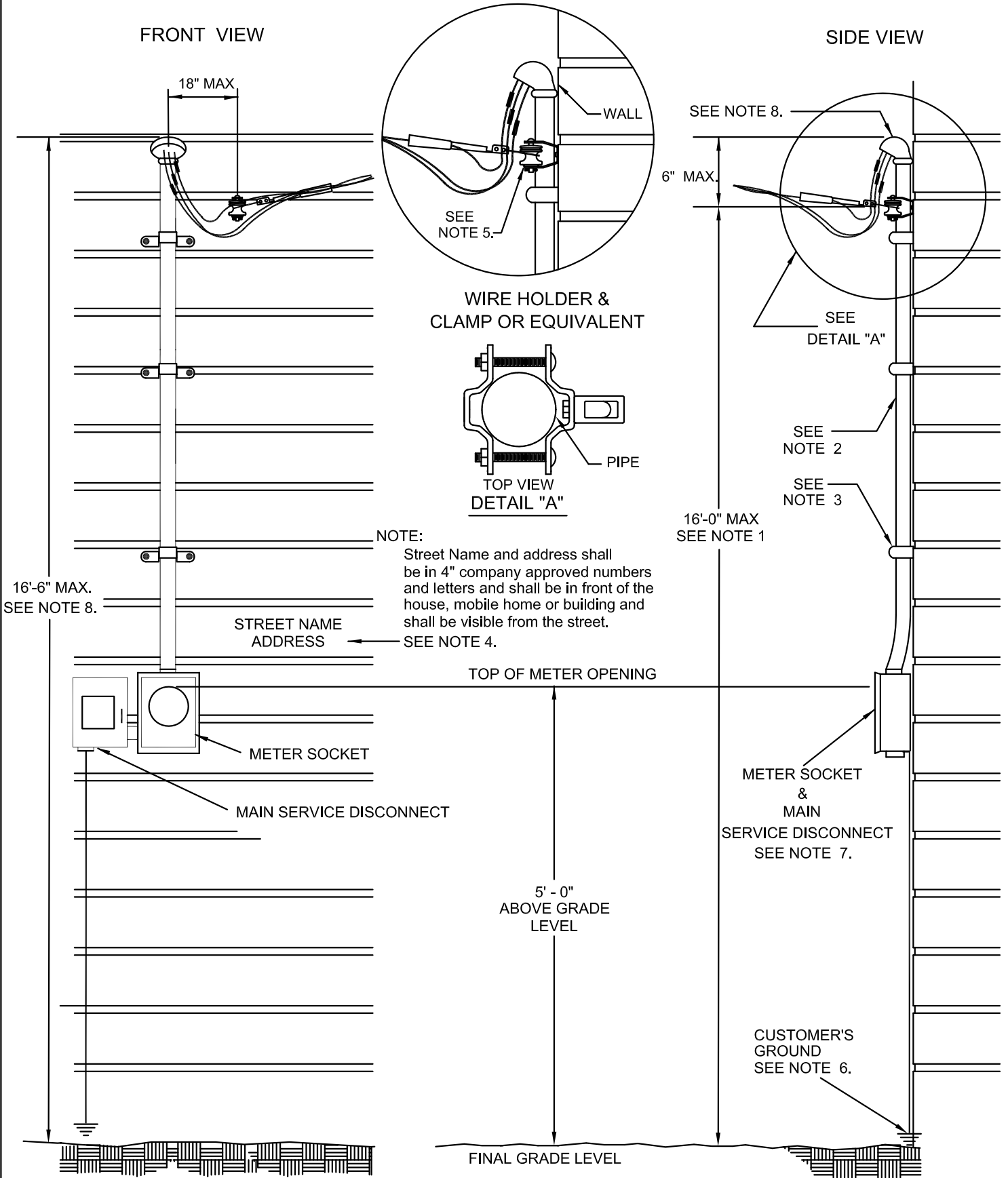
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DSO 1820	TYPICAL MULTIPLE METERING INSTALLATIONS WITH 3Ø AND 1Ø SERVICE
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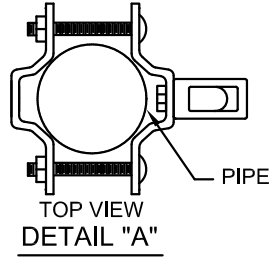
GROUP 400

FRONT VIEW

SIDE VIEW



WIRE HOLDER & CLAMP OR EQUIVALENT



NOTE:
Street Name and address shall be in 4" company approved numbers and letters and shall be in front of the house, mobile home or building and shall be visible from the street.
SEE NOTE 4.

STREET NAME ADDRESS

TOP OF METER OPENING

METER SOCKET

MAIN SERVICE DISCONNECT

5' - 0" ABOVE GRADE LEVEL

FINAL GRADE LEVEL

METER SOCKET & MAIN SERVICE DISCONNECT
SEE NOTE 7.

CUSTOMER'S GROUND
SEE NOTE 6.

NOTE: SEE NEXT PAGES FOR SPANISH VERSION.

DRAWING NOT TO SCALE

RESIDENTIAL SERVICE ENTRANCE
WALL SUPPORT

ORIG. DATE: 12/22/82
REV. DATE: 03/27/18

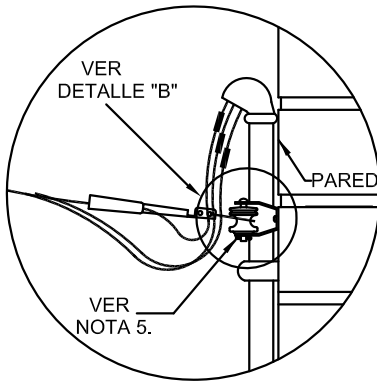
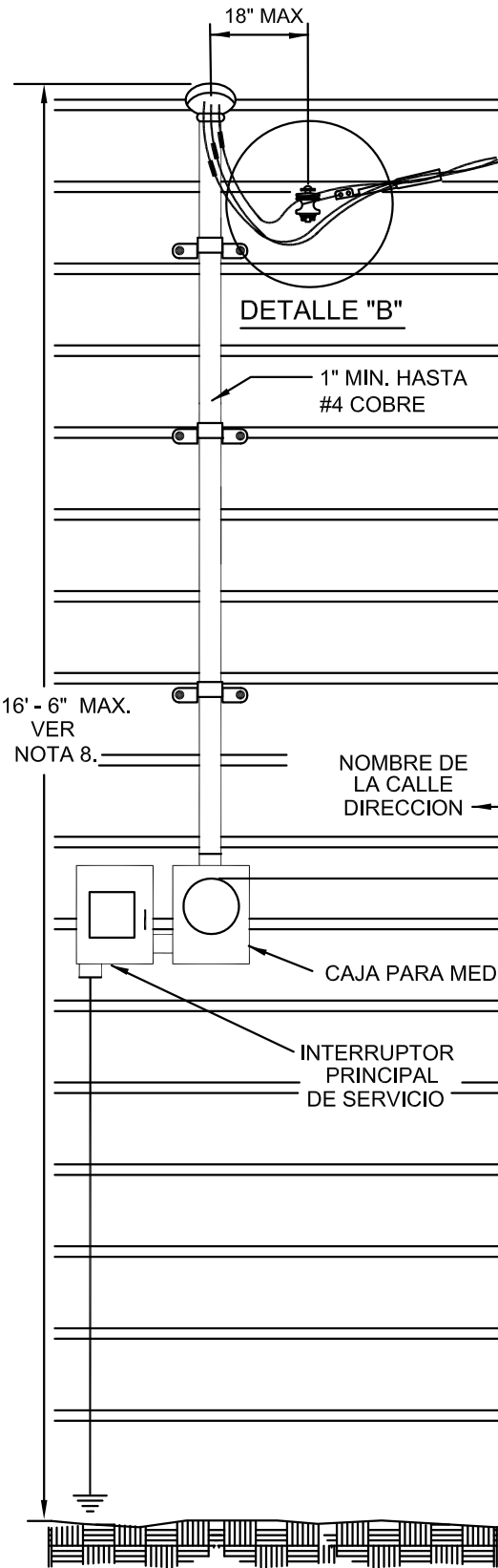
EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

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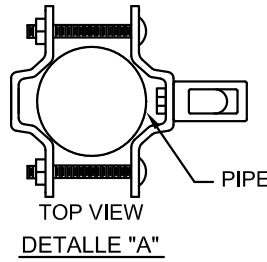
NOTES:

- 1 16' MAX. CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING RESIDENTIAL DRIVEWAYS, PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN N.E.S.C. 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 2 FOR SERVICES UP TO 100 AMPS, THE RISER MUST BE 1" MINIMUM (IMC, EMT OR RMC) FOR CONDUCTORS, # 4 COPPER (MINIMUM).
FOR SERVICES OVER 100 AMPS, THE RISER MUST BE 1 1/4" (MINIMUM).
- 3 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK.
- 4 STREET NAME AND ADDRESS SHALL BE IN 4" COMPANY APPROVED NUMBERS AND LETTERS AND SHALL BE ON THE FRONT OF THE HOUSE, MOBILE HOME OR BUILDING AND SHALL BE VISIBLE FROM THE STREET. **ADHESIVE DECALS ARE NOT ALLOWED.** THE STREET NAME IS NOT REQUIRED IF THE STREET IS ADEQUATELY MARKED. OTHER METHODS MAY BE ALLOWED IF PRIOR APPROVAL FROM E.P.E.C. IS OBTAINED.
- 5 CUSTOMER MUST PROVIDE A POINT OF ATTACHMENT ON THE WALL. THE CUSTOMER SHOULD USE A SECONDARY CLEVIS WITH INSULATOR (E.P.E.C. GROUP & ITEM # 007-550 & # 006-150). DO NOT USE RISER AS POINT OF ATTACHMENT. IF THE POINT OF ATTACHMENT NEEDS TO BE DEADENDED AT THE RISER (FOR , CLEARANCE PURPOSES ONLY), PRIOR APPROVAL FROM E.P.E.C MUST BE OBTAINED.
A WIRE HOLDER OR CLAMP SHALL BE INSTALLED. THE RISER CONDUIT MUST BE INTERMEDIATE METALLIC CONDUIT OR RIGID METALLIC CONDUIT AND SHOULD BE ABLE TO SUASTAIN THE WEIGHT OF THE WIRE.
- 6 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 7 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 8 THE MAXIMUM HEIGHT OF THE WEATHER HEAD ON THE WALL SHALL BE 16'-6". IF THE RISER IS PERMANENTLY TRUCK ACCESSIBLE.
- 9 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 10 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CONTACT THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 11 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.

VISTA FRONTAL

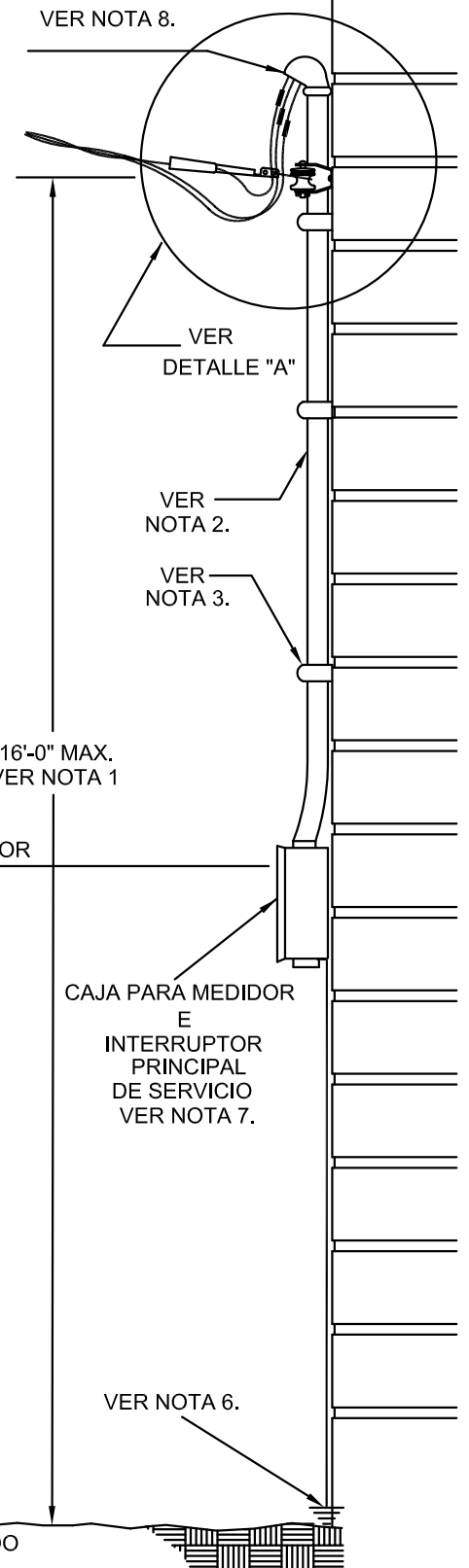


WIRE HOLDER & CLAMP OR EQUIVALENT



NOTA:
La dirección debe incluir número y nombre de la calle con letras de 4" aprobadas por la compañía y deben ser instaladas en frente del edificio ó casa móvil. La dirección debe ser visible desde la calle.

VISTA LATERAL



PARTE SUPERIOR DEL MEDIDOR

CAJA PARA MEDIDOR

INTERRUPTOR PRINCIPAL DE SERVICIO

CAJA PARA MEDIDOR E INTERRUPTOR PRINCIPAL DE SERVICIO VER NOTA 7.

5' - 0" SOBRE EL NIVEL DE PISO TERMINADO

NIVEL DE PISO TERMINADO

DIBUJO SIN ESCALA

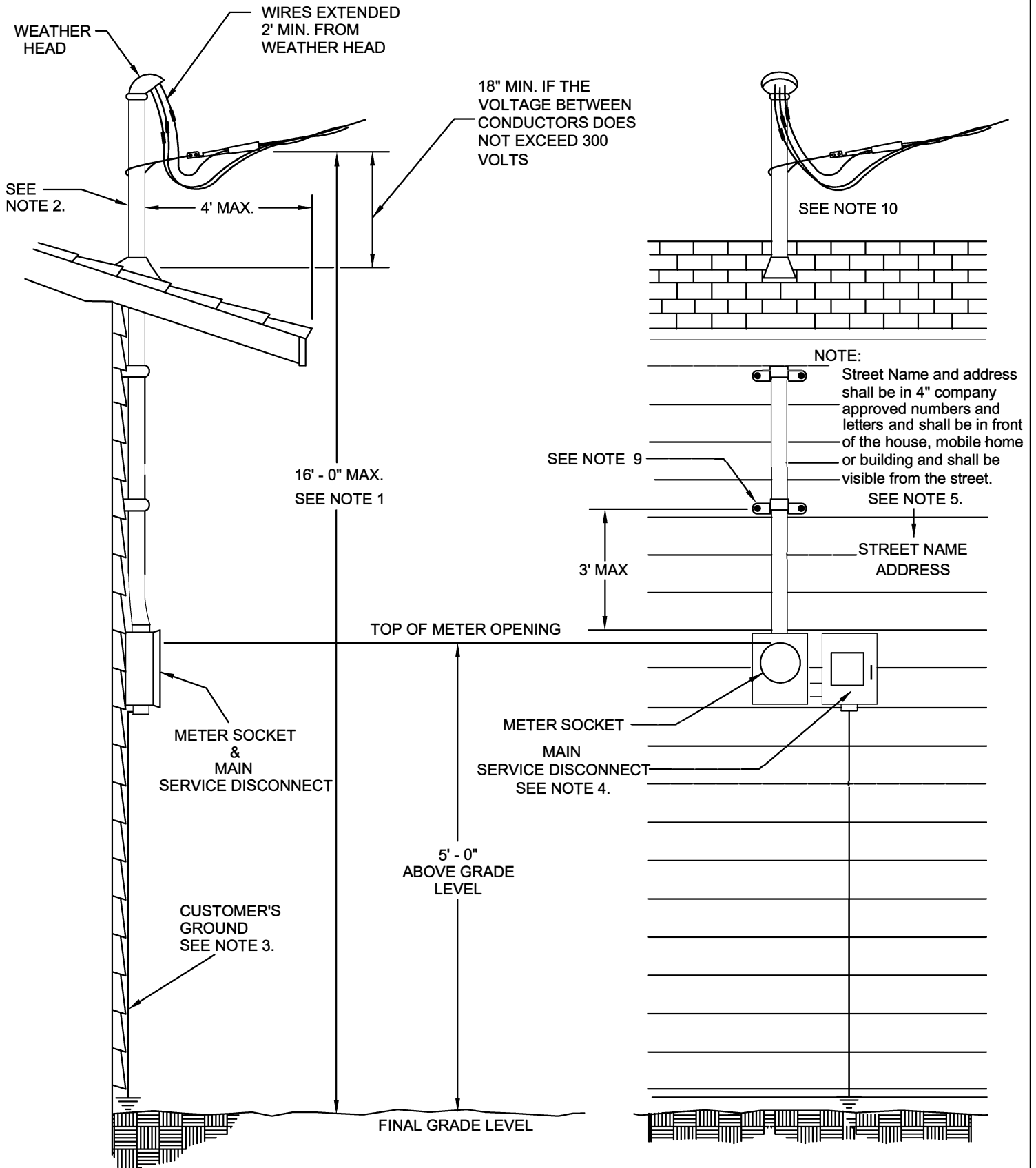
ENTRADA DE SERVICIO RESIDENCIAL
SOPORTE EN LA PARED

Notas:

- 1 Sobre una entrada de autos residencial, estacionamientos y otras áreas sujetas a tráfico vehicular, el punto más bajo del cable de servicio debe estar a 16' (máximo) de el nivel final del piso. Esta distancia debe de mantenerse durante todas las fases de la construcción.
 - A. Una distancia adicional es requerida al cruzar calles ,vías de ferrocarril y ciertos cuerpos de agua como lo establece el Código Nacional de Seguridad Eléctrica, Sección 232 (NESC 232).
 - B. Esta distancia puede ser reducida a 12' si el cable de servicio es accesible solamente a tráfico peatonal. Este libramiento se mide de la parte más baja del cable de servicio al nivel final del piso ó a cualquier proyección ó plataforma de donde podría ser alcanzado.
- 2 Para servicios que requieren hasta 100 amperes, la acometida será de tubo (IMC,EMT ó RMC) de 1" de diámetro interior como mínimo, para conductores, de cobre # 4 (mínimo). Para servicios que requieren más de 100 amperes, la acometida será de tubo de 1 1/4" de diámetro (mínimo).
- 3 La acometida deberá de estar fija a la pared del edificio usando tornillos de mariposa para block de concreto ó taquetes de plástico con tornillos adecuados para madera ó ladrillo.
- 4 El nombre de la calle y la dirección deberá tener números y letras de 4" aprobadas por la compañía y deberá ser colocada en frente de la casa, casa móvil ó edificio y deberá estar visible desde la calle. Números adhesivos no son permitidos. El nombre de la calle no será necesario si la calle está adecuadamente marcada. Otros métodos podrán ser permitidos con la previa aprobación de El Paso Electric Company.
- 5 El usuario deberá proporcionar un punto de fijación en la pared, utilizando para ello un carrete con aislador secundario (E.P.E.C. G&I # 007-550 & # 006-150). No se deberá utilizar el tubo de la acometida como punto de fijación. Si es necesario rematar en le tubo de la acometida (con el sólo propósito de mantener el claro requerido), permiso previo de la E.P.E.C (El Paso Electric) deberá ser obtenido. Un sostenedor de conductor ó amarre deberá ser instalado. El tubo de la acometida deberá ser de tubo metálico intermedio ó de tubo metálico rígido y deberá ser capaz de sostener el alambre de servicio.
- 6 Las conexiones eléctricas y la puesta a tierra de el sistema eléctrico perteneciente al cliente deberá ser instalado de acuerdo al Artículo 250 del Código Nacional Eléctrico (NEC) y de acuerdo a todos los requerimientos de Códigos Eléctricos locales y Estatales que sean aplicables.
- 7 Para todos los servicios, independientemente de el tamaño, deberán tener un fusible cortacorriente instalado en el exterior del edificio ó de la estructura , a un distancia de 5 pies de el medidor.
- 8 La altura máxima de la parte superior de la acometida (mufa) en la pared, deberá ser 16'-6". Si la acometida se encuentra donde puede ser accesible a camiones de carga de manera permanente.
- 9 La instalación deberá de cumplir con los requerimientos de códigos locales, el Código Nacional Eléctrico (NEC) y el Código Nacional de Seguridad Eléctrica (NESC).
- 10 Para cualquier aclaración o pregunta en relación a ésta norma, llame al Departamento de Ingeniería de Distribución de E.P.E.C.
- 11 La caja para el medidor no deberá ser utilizada como caja de unión (ó conexiones).

SIDE VIEW

FRONT VIEW



NOTE: SEE NEXT PAGES FOR SPANISH VERSION

DRAWING NOT TO SCALE

RESIDENTIAL SERVICE ENTRANCE
RISER SUPPORT

ORIG. DATE: 12/22/82
REV. DATE: 12-12-2018

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

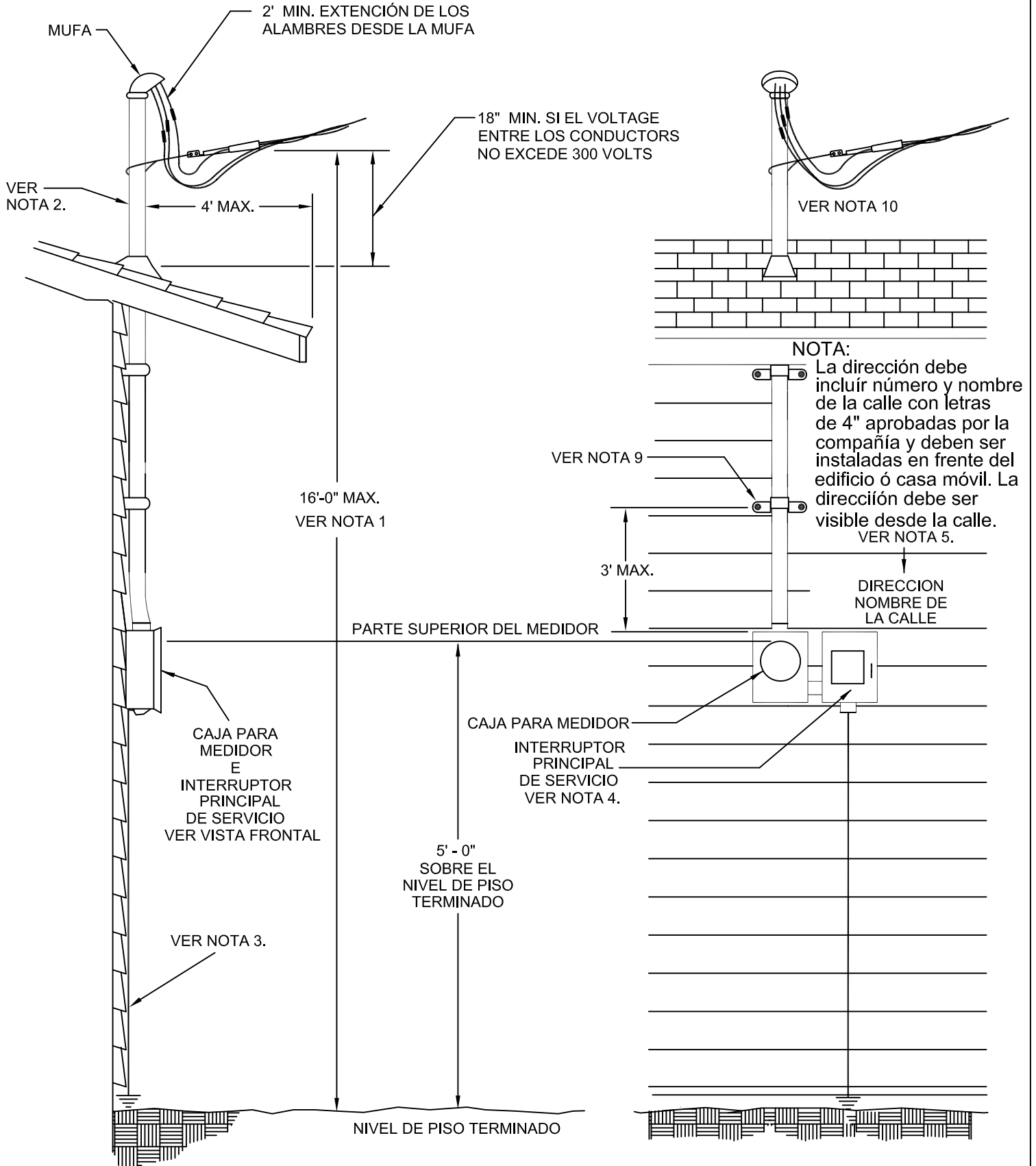
DSO 417
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NOTES:

- 1 16' MAX. CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING RESIDENTIAL DRIVEWAYS, PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 2 FOR SERVICES UP TO 100 AMPS, THE RISER MUST BE 1 1/4" MINIMUM (IMC OR RMC). FOR CONDUCTORS, # 4 COPPER (MINIMUM). FOR SERVICES OVER 100 AMPS, THE RISER MUST BE 2" MINIMUM (IMC OR RMC). RISER SHALL NOT EXTEND MORE THAN 3' ABOVE THE ROOF EXCEPT BY SPECIAL PERMISSION BY THE ELECTRICAL INSPECTOR. RISER CONDUIT MUST BE INTERMEDIATE METALLIC CONDUIT OR RIGID METALLIC CONDUIT.
- 3 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 4 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 5 STREET NAME AND ADDRESS SHALL BE IN 4" COMPANY APPROVED NUMBERS AND LETTERS AND SHALL BE ON THE FRONT OF THE HOUSE, MOBILE HOME OR BUILDING AND SHALL BE VISIBLE FROM THE STREET. **ADHESIVE DECALS ARE NOT ALLOWED.** THE STREET NAME IS NOT REQUIRED IF THE STREET IS ADEQUATELY MARKED. OTHER METHODS MAY BE ALLOWED IF PRIOR APPROVAL FROM E.P.E.C. IS OBTAINED.
- 6 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 7 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CONTACT THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 8 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.
- 9 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK. FIRST SUPPORTING STRAP FOR THE RISER CONDUIT SHALL BE INSTALLED NO MORE THAN THREE (3) FEET FROM THE TOP OF THE METER ENCLOSURE.
- 10 A WIRE HOLDER AND CLAMP OR EQUIVALENT SHALL BE INSTALLED OF THE THE SERVICE IS TERMINATED ON THE WEATHER HEAD.

VISTA LATERAL

VISTA FRONTAL



DIBUJO SIN ESCALA

ENTRADA DE SERVICIO RESIDENCIAL
SOPORTE DE TUBO DE TRANSICION

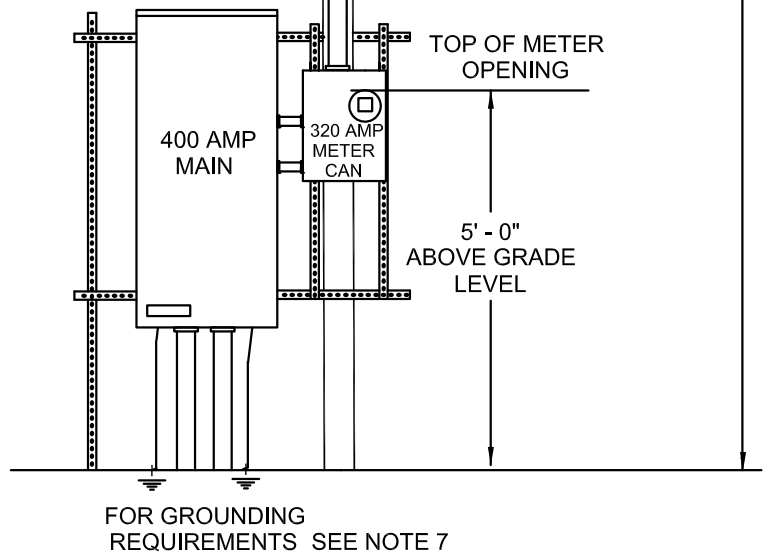
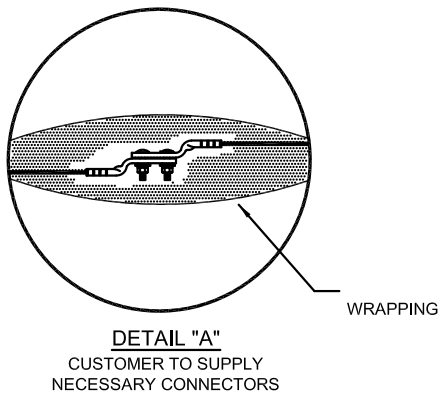
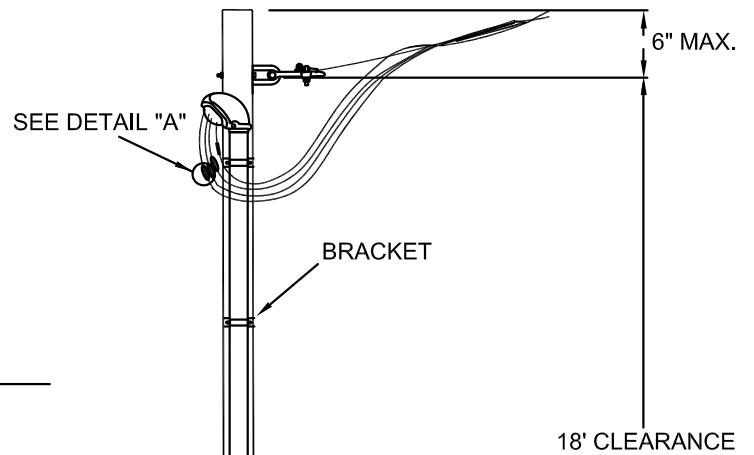
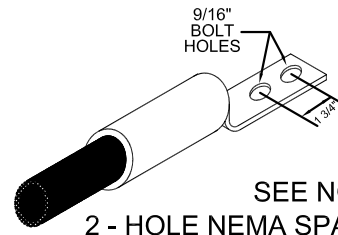
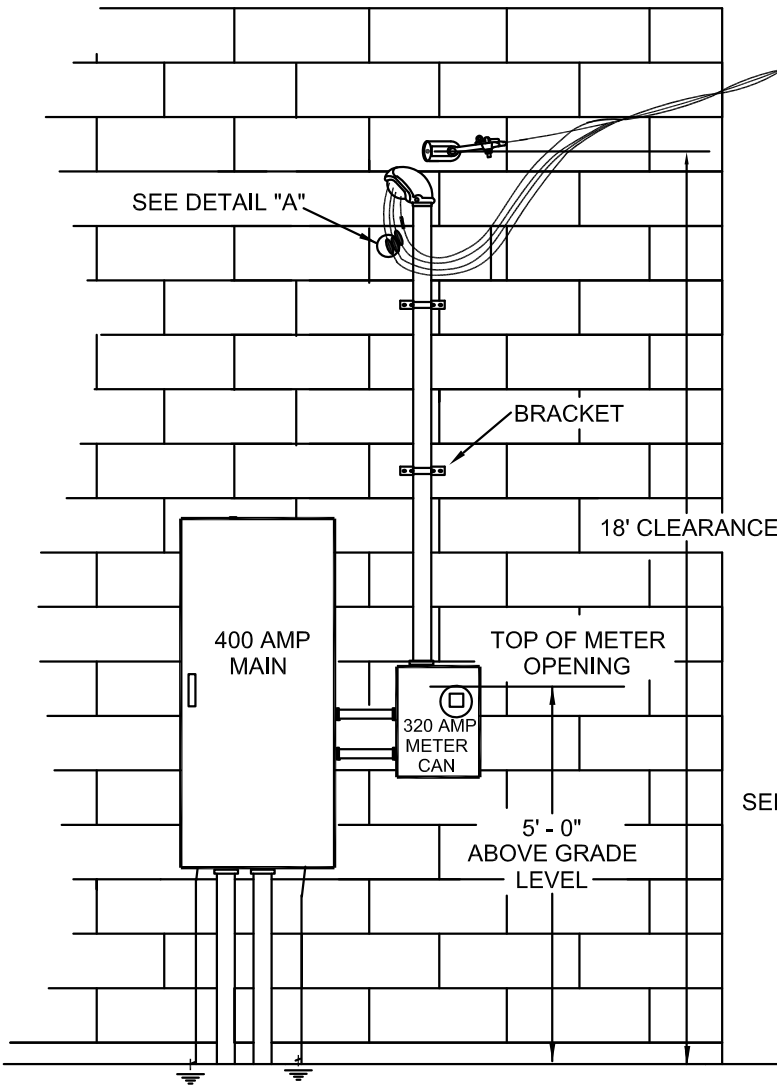
EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

ORIG. DATE: 12/22/82
REV. DATE: 12-12-2018

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PAGE 1 OF 2

Notas:

- 1 Sobre una entrada de autos residencial, estacionamientos y otras áreas sujetas a tráfico vehicular, el punto más bajo del cable de servicio debe estar por lo menos a 16' (máximo) de el nivel del piso.
Esta distancia debe de mantenerse durante todas las fases de la construcción.
 - A. Una distancia adicional es requerida al cruzar calles, vías de ferrocarril y ciertos cuerpos de agua como lo establece el Código Nacional de Seguridad Eléctrica, sección 232 (NESC 132).
 - B. Esta distancia puede ser reducida a 12' si el cable de servicio es accesible solamente al tráfico peatonal. Este libramiento se mide de la parte más baja del cable de servicio al nivel final de el piso, ó a cualquier proyección ó plataforma de donde podría ser alcanzado.
- 2 Para servicios que requieren hasta 100 amperes, la acometida será de tubo (IMC ó RMC) de 1 ¼" diámetro interior como mínimo, para conductores de cobre # 4 (mínimo).
Para servicios que requieren más de 100 amperes, la acometida será de tubo (IMC ó RMC) de 2" de diámetro.
La acometida no deberá de extenderse más de 3' por encima de el techo, excepto con permiso especial del inspector eléctrico. El tubo de la acometida debe ser de tubo metálico intermedio (IMC) ó tubo metálico rígido (RUC).
- 3 Las conexiones eléctricas y la puesta a tierra de el sistema eléctrico perteneciente al cliente deberá ser instalado de acuerdo al Artículo 250 del Código Nacional Eléctrico (NEC) y de acuerdo a todos los requerimientos de Códigos Eléctricos locales y Estatales que sean aplicables.
- 4 Para todos los servicios, independientemente de el tamaño, deberán tener un fusible cortacorriente instalado en el exterior de el edificio ó de la estructura, a un distancia de 5 pies de el medidor.
- 5 El nombre de la calle y la dirección deberán tener números y letras de 4" aprobadas por la compañía de luz y deberá ser colocada en frente de la casa, casa móvil ó edificio y deberá estar visible desde la calle. Números adhesivos no son permitidos. El nombre de la calle no será necesario si la calle está adecuadamente marcada. Otros métodos podrán ser permitidos con aprobacion de la compañía de luz (El Paso Electric Company).
- 6 La instalación deberá de cumplir con los requerimientos de códigos locales, el Código Nacional Eléctrico (NEC), y el Código Nacional de Seguridad Eléctrica (NESC).
- 7 Para cualquier aclaración ó pregunta en relación a ésta norma, llame al Departamento de Ingeniería de Distribución de la compañía de luz (El Paso Electric Company).
- 8 La caja para el medidor no deberá ser utilizada como caja de unión (ó conexiones).
- 9 La acometida deberá estar fija a la pared de el edificio usando tornillos de mariposa para block de concreto ó taquetes de plástico con tornillos adecuados para madera ó ladrillo. La primera atadura que sostiene el tubo de la acometida deberá ser instalada a no más de (3) tres pies arriba de la caja para el medidor.
- 10 Un sostenedor de alambre deberá ser instalado si el cable de servicio es rematado en el tubo de la acometida.



DRAWING NOT TO SCALE

3Ø COMMERCIAL SERVICE ENTRANCES

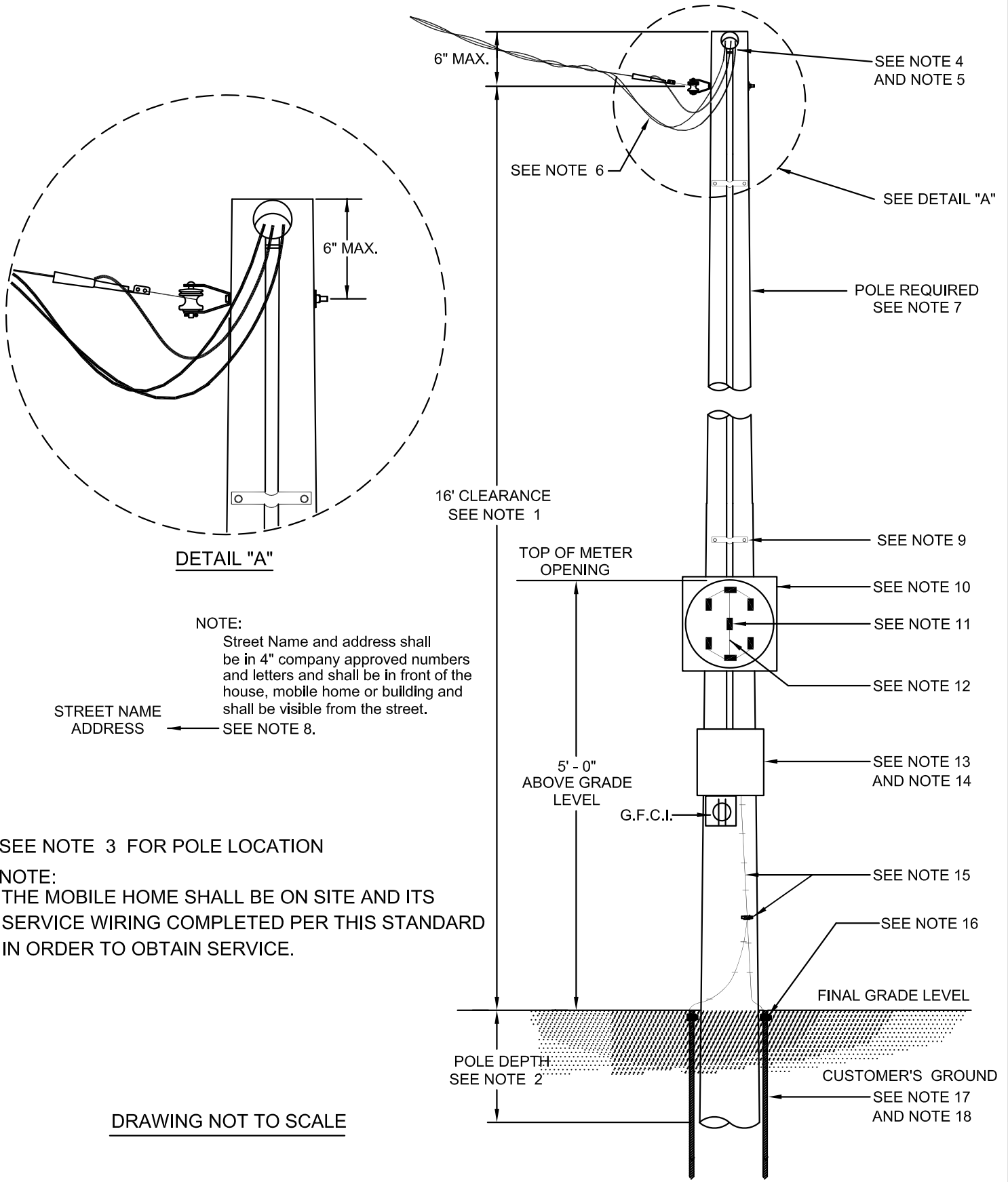
ORIG. DATE: 12/22/82
 REV. DATE: 02/17/18

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSO 420
 PAGE 1 OF 2

NOTES:

- 1 CUSTOMER NEEDS TO PROVIDE A POINT OF ATTACHMENT AT WALL OR FRAME. RATED FOR 300LBS PULLOUT.
- 2 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 3 MINIMUM POLE LENGTH SHALL BE 25'. POLE SHALL HAVE A 6" MINIMUM DIAMETER OR 6" X 6" TIMBER CROSS-SECTION. POLE MUST BE PRESSURE TREATED WITH A PRESERVATIVE. TALLER POLES MAY BE REQUIRED TO OBTAIN PROPER VERTICAL CLEARANCES.
- 4 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 5 FOR APPROPRIATE POLE DEPTH. SEE DSO 615.
- 6 FOR 800 AMPS SERVICES OR LESS, A METER DISCONNECT SWITCH SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, ADJACENT TO AND NOT MORE THAN 5 FEET FROM THE METER. IF THE MAIN SERVICE DISCONNECT IS LOCATED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE AND ADJACENT TO THE METER, THE METER DISCONNECT SWITCH IS NOT REQUIRED.
- 7 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 8 THE METER ENCLOSURE WILL BE PROVIDED BY THE CUSTOMER AND INSTALLED BY AN ELECTRICAL CONTRACTOR AT THE CUSTOMER'S EXPENSE. THE METER WILL BE INSTALLED, MAINTAINED AND REPAIRED BY THE EL PASO ELECTRIC COMPANY AT ITS EXPENSE.
- 9 THE COST OF ANY DAMAGE TO EL PASO ELECTRIC COMPANY PROPERTY ON THE CUSTOMER'S PROPERTY WHICH IS CAUSED BY THE CUSTOMER OR OTHER PARTIES AUTHORIZED BY THE CUSTOMER SHALL BE PAID BY THE CUSTOMER.
- 10 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CALL THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 11 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.
- 12 CUSTOMER SHALL PROVIDE AND INSTALL SPADE (2 HOLE NEMA SPADE) CONNECTORS ON ALL INDIVIDUAL SERVICE ENTRANCE CONDUCTORS. PIG TAILS ARE NOT ALLOWED.

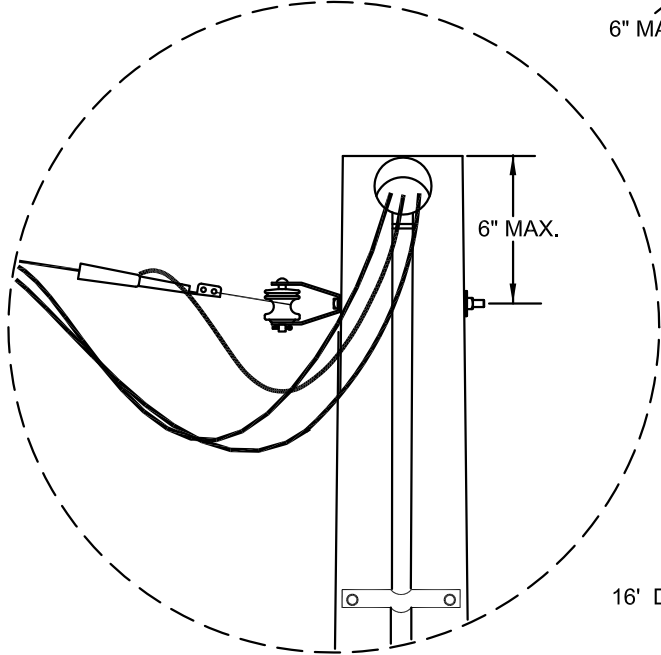
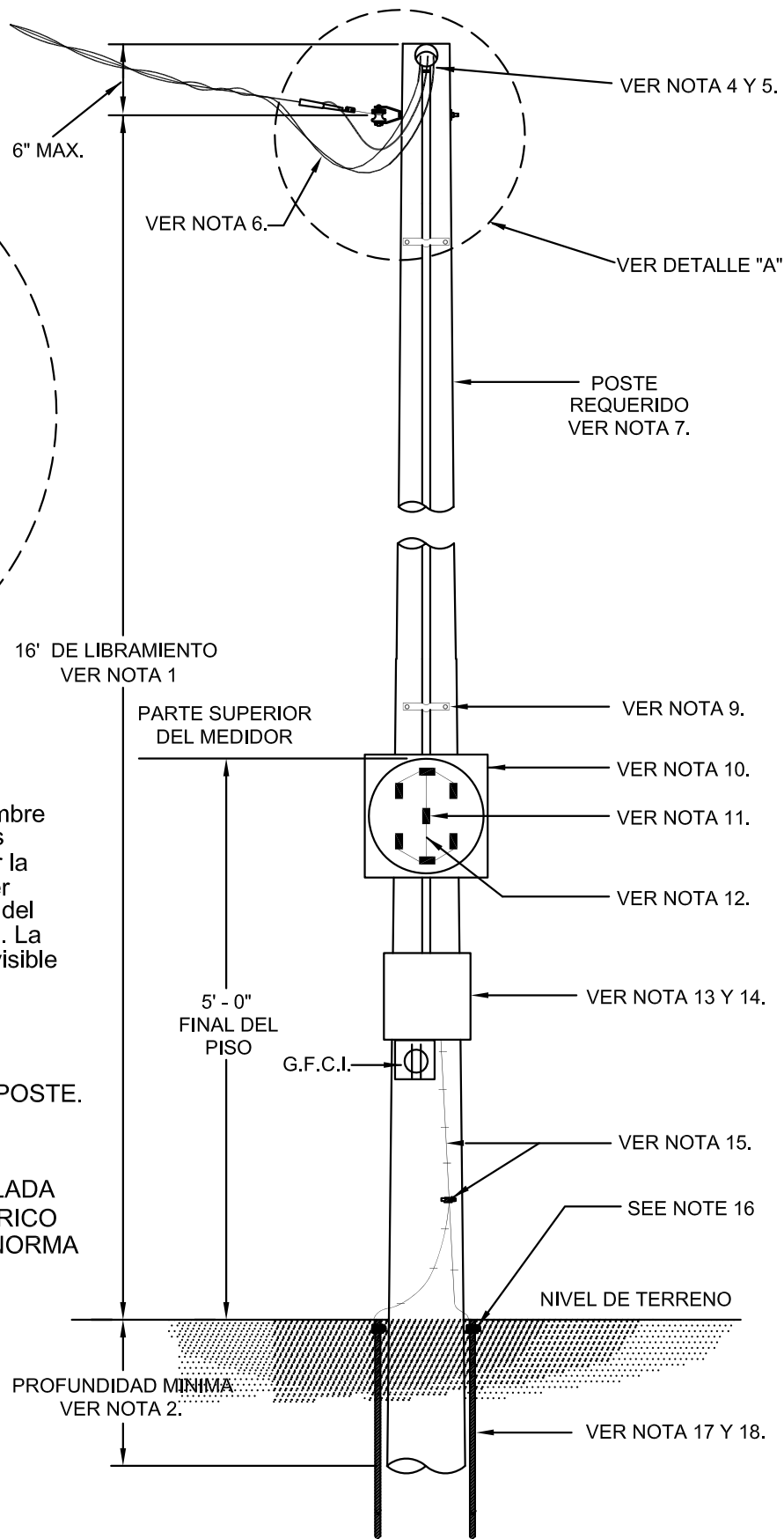


NOTE: SEE NEXT PAGES FOR SPANISH VERSION

**CUSTOMER SERVICE POLE FOR PERMANENT MOBILE HOME
RESIDENTIAL, COMMERCIAL OR TEMPORARY SERVICE**

NOTES:

- 1 16' MAX. CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING RESIDENTIAL DRIVEWAYS, PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICLUAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 2 FOR APPROPRIATE POLE DEPTH, SEE DSO 615.
- 3 THE DISTANCE BETWEEN SERVICE POLE AND E.P.E.C. POLE MUST BE LESS THAN 75' FOR 100 AMP SERVICES AND FOR LARGER SERVICES CONTACT E.P.E.C. THE SERVICE POLE SHALL BE A A MINIMUM OF 10' FROM EASEMENT.
- 4 WEATHER HEAD MUST BE AT TOP OF POLE. COMPANY APPROVED POINT OF ATTACHMENT SHALL BE INSTALLED BY CUSTOMER NO MORE THAN 6" BELOW THE WEATHER HEAD.
A THROUGH-BOLT SHALL BE USED. RISERS MUST BE 1" MINIMUM (IMC, EMT OR RIGID METALLIC) FOR CONDUCTORS # 4 COPPER (MINIMUM).
- 5 PARALLEL RISERS ARE NOT ALLOWED.
- 6 CUSTOMER MUST LEAVE A MINIMUM 18" LEAD AT THE WEATHER HEAD. IF COPPER WIRE IS USED, INSTALL # 4 AWG FOR LOADS UP TO 100 AMPS.
IF ALUMINUM WIRE IS USED, INSTALL# 2 AWG FOR LOADS UP TO 100 AMPS.
- 7 MINIMUM POLE LENGTH SHALL BE 20'. POLE SHALL HAVE A 6" MINIMUM DIAMETER OR 6" X 6" TIMBER CROSS SECTION. POLE MUST BE PRESSURE TREATED WITH A PRESERVATIVE.
TALLER POLES MAY BE REQUIRED TO OBTAIN PROPER VERTICAL CLEARANCES.
- 8 STREET NAME AND ADDRESS SHALL BE IN 4" COMPANY APPROVED NUMBERS AND LETTERS AND SHALL BE ON THE FRONT OF THE HOUSE, MOBILE HOME OR BUILDING AND SHALL BE VISIBLE FROM THE STREET. **ADHESIVE DECALS ARE NOT ALLOWED.** THE STREET NAME IS NOT REQUIRED IF THE STREET IS ADEQUATELY MARKED. OTHER METHODS MAY BE ALLOWED IF PRIOR APPROVAL FROM E.P.E.C. IS OBTAINED.
- 9 A COMMERCIALY AVAILABLE STRAP SHALL BE USED. HOME MADE STRAPS ARE NOT ALLOWED.
- 10 METER SOCKET SHALL BE U.L. APPROVED AND RATED FOR 100 AMPS MINIMUM.
- 11 GROUND TERMINAL SHALL BE MADE IN THE METER SOCKET.
- 12 NEUTRAL SHALL BE ONE CONTINUOUS (UN CUT) WIRE FROM WEATHER HEAD TO GROUNDING TERMINAL IN MAIN FUSE / BREAKER BOX. NEUTRAL WIRE INSULATION MUST BE REMOVED AT GROUND TERMINAL IN METER SOCKET.
- 13 U.L. APPROVED, RAIN TIGHT, OUTDOOR SERVICE EQUIPMENT IS REQUIRED. THE MINIMUM RATING SHALL BE 100 AMPS FOR 120/240 VOLTS WITH 4 CIRCUIT CAPABILITY. THE MAIN BREAKER SHALL BE 60 AMPS MINIMUM. A 120V G.F.C.I. RECEPTACLE, INSTALLED PER N.E.C., SHALL BE PROVIDED.
- 14 FOR TEMPORARY SERVICE ONLY, A 60 AMP 120/240 VOLT PANEL AND # 6 COPPER (MIN.) IS ALLOWED.
- 15 GROUND WIRE SHALL BE # 6 AWG SOLID COPPER MINIMUM. A #4-#4 BRONZE VISE CONNECTOR SHOULD BE USED TO TIE THE GROUND WIRES TOGETHER.
- 16 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 17 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CONTACT THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 18 16' CLEARANCE MAY NOT BE NECESSARY FOR TEMPORARY SERVICE. PLEASE CALL THE SERVICE DEPARTMENT FOR CLARIFICATION.
- 19 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.
- 20 AN OUTLET IS NOT REQUIRED FOR COMMERICAL INSTALLATIONS.



DETALLE "A"

NOTA:
 La dirección debe incluir número y nombre de la calle con letras de 4" aprobadas por la compañía y debe ser instaladas en frente del edificio ó casa móvil. La dirección debe ser visible desde la calle.

DIRECCION
 NOMBRE DE
 LA CALLE

← VER NOTA 4.

VER NOTA 3 PARA LA UBICACIÓN DEL POSTE.

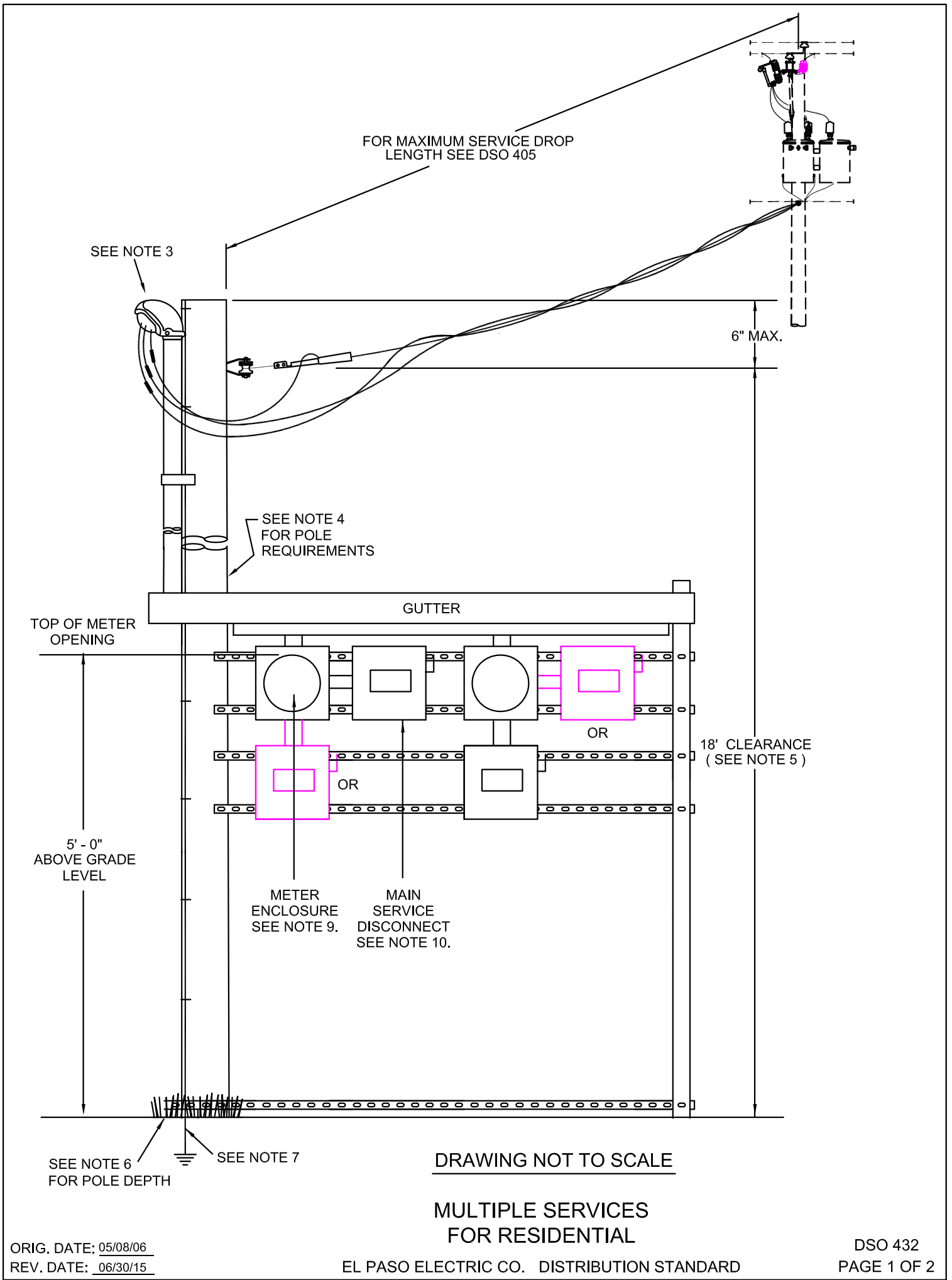
NOTA:
 LA CASA MÓVIL DEBERÁ ESTAR INSTALADA Y EL ALAMBRADO DE SERVICIO ELÉCTRICO TERMINADO DE ACUERDO CON ESTA NORMA PARA PODER OBTENER SERVICIO.

DIBUJO SIN ESCALA

**POSTE DE SERVICIO PARA CASAS MOBILES PERMANENTES,
 SERVICIO RESIDENCIAL, COMERCIAL O SERVICIO TEMPORAL**

Notas:

- 1 Sobre una entrada de autos residencial, estacionamientos y otras áreas sujetas a tráfico vehicular, el punto más bajo del cable de servicio debe estar por lo menos a 16' (máximo) del nivel final del piso. Esta distancia debe de mantenerse durante todas las fases de la construcción.
 - A. Una distancia adicional es requerida al cruzar calles, vías de ferrocarril y ciertos cuerpos de agua como lo establece el Código Nacional de Seguridad Eléctrica, Sección 232 (NESC 232).
 - B. Esta distancia puede ser reducida a 12' si el cable de servicio es accesible solamente a tráfico peatonal. Este libramiento se mide de la parte más baja del cable de servicio al nivel final del piso ó a cualquier proyección ó plataforma de donde podría ser alcanzado.
- 2 Para el empotramiento adecuado de postes, ver DSO 615.
- 3 La distancia entre el poste de servicio y el poste de E.P.E.C. deberá ser de 75' ó menos para servicios de 100 amperes. Para servicios más grandes favor de llamar a E.P.E.C.
El poste de servicio debe de instalarse a una distancia mínima de 10' del derecho de acceso.
- 4 La acometida (mufa) deberá ser instalada en la parte superior del poste. El punto de sujeción del cable aprobado por E.P.E.C. debe de ser instalado por el usuario a una distancia no mayor de 6" debajo de la acometida, usando un tornillo de rosca continua. La acometida será de tubo de 1" de diámetro interior como mínimo (IMC, EMT ó tubo metálico rígido) para conductores de cobre #4 (mínimo).
- 5 No se permiten acometidas paralelas.
- 6 El usuario deberá dejar un mínimo de 18" de cable saliendo de la acometida. Si se usa alambre de cobre, alambre # 4 awg para cargas eléctricas hasta 100 amperes deberá ser utilizado. Si se usa alambre de aluminio, alambre # 2 awg para cargas eléctricas hasta 100 amperes deberá ser utilizado.
- 7 El poste debe medir 20' de largo como mínimo. El poste debe ser redondo con un diámetro mínimo de 6" ó poste cuadrado de 6" x 6" de madera sólida. El poste deberá de ser tratado a presión con un conservante. Postes más largos pueden ser requeridos para obtener los libramientos verticales adecuados. Ver Nota 1.
- 8 El nombre de la calle y la dirección deberá tener números y letras de 4" aprobadas por la compañía y deberá ser colocada en frente de la casa, casa móvil ó edificio y deberá estar visible desde la calle. Números adhesivos no son permitidos. El nombre de la calle no será necesario si la calle está adecuadamente marcada. Otros métodos podrán ser permitidos con la previa aprobación de El Paso Electric Company.
- 9 Solamente utilice abrazaderas de tipo comercial. No se permiten abrazaderas hechas a mano ó improvisadas.
- 10 El receptáculo para el medidor deberá tener el sello U.L. y aprobado para 100 amperes mínimo.
- 11 La terminal (conexión) a tierra deberá de hacerse en la base del medidor.
- 12 El cable neutro deberá ser continuo (sin uniones) desde la acometida hasta la terminal de tierra en la caja principal de fusibles ó interruptores. El aislante del alambre neutro será removido de la terminal a tierra en la base del medidor.
- 13 Se requiere la utilización de equipo para servicio exterior, a prueba de agua, con el sello de aprobación U.L. El equipo deberá de estar aprobado para 100 amperes con voltajes de 120/240 con capacidad para 4 circuitos. El interruptor principal deberá de estar aprobado para 60 amperes como mínimo. Un tomacorriente de 120 v, con protección de fallas a tierra (G.F.C.I.), instalado de acuerdo con el Código Nacional Eléctrico (NEC) deberá de ser proveído.
- 14 Unicamente para servicios temporales, se permite el uso de equipo aprobado para 60 amperes con voltajes de 120/240.
- 15 El alambre de tierra deberá de ser #6 awg (mínimo) de cobre sólido. Un conector de tornillo de bronce de tamaño #4-#4 deberá ser utilizado para unir los alambres de tierra.
- 16 Las conexiones eléctricas y la puesta a tierra de el sistema eléctrico perteneciente al cliente deberá ser instalado de acuerdo al Artículo 250 del Código Nacional Eléctrico (NEC) y de acuerdo a todos los requerimientos de Códigos Eléctricos locales y Estatales que sean aplicables.
- 17 Para cualquier clarificación ó pregunta en relación a ésta norma, llame al Departamento de Ingeniería de Distribución de E.P.E.C.
- 18 Para servicios temporales, un libramiento de 16' podría no ser necesario. Por favor llame al Departamento de Servicio para aclaraciones.
- 20 El medidor no deberá ser utilizado como caja de unión.
- 21 Para instalaciones comerciales no es necesario instalar un tomacorriente.



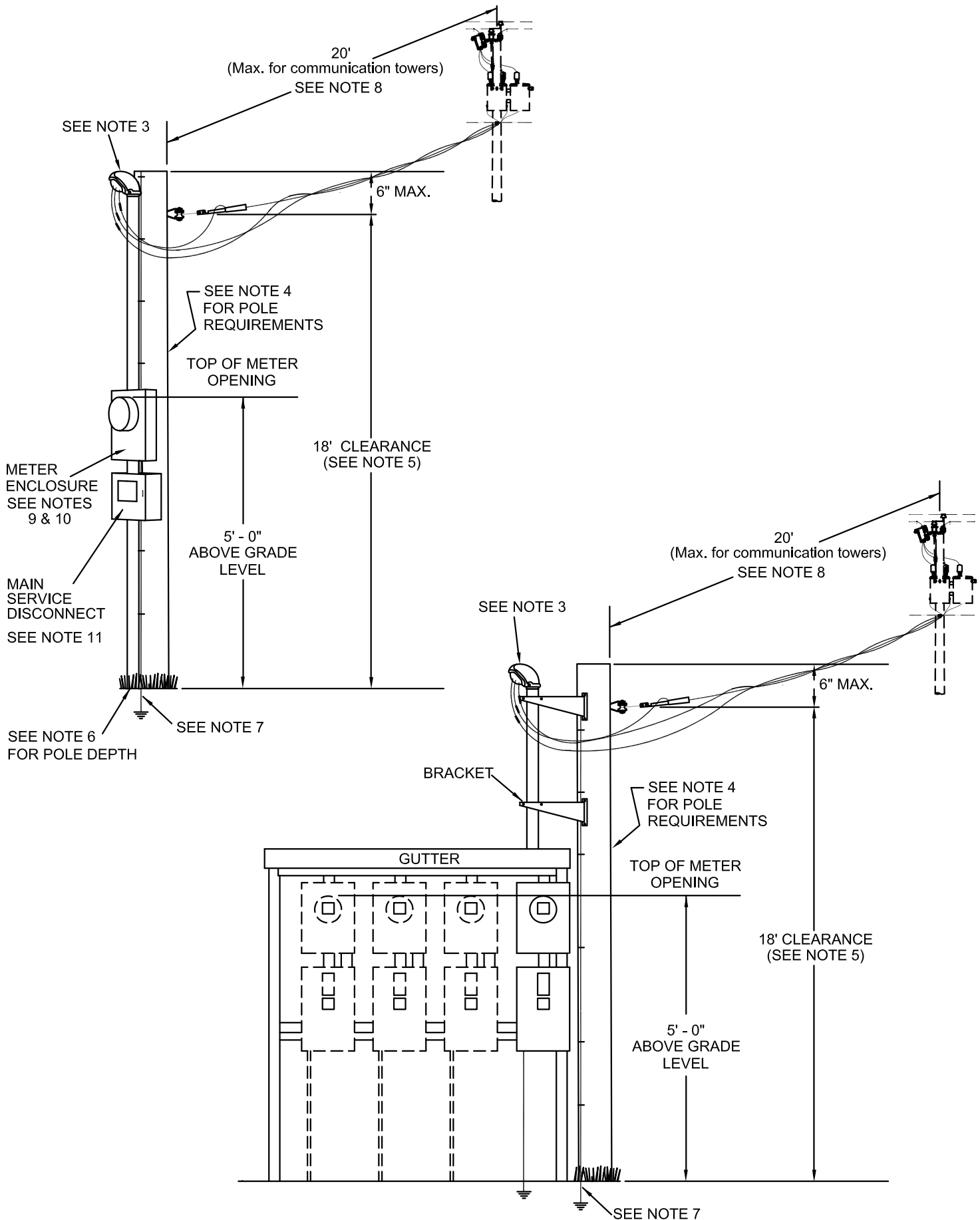
ORIG. DATE: 05/08/06
 REV. DATE: 06/30/15

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSO 432
 PAGE 1 OF 2

NOTES:

- 1 THE CUSTOMER SHALL INSTALL, OPERATE AND MAINTAIN A SUITABLE SERVICE POLE, SERVICE ENTRANCE EQUIPMENT, POLE RISER, LOW VOLTAGE CABLE, CONDUIT AND OTHER NECESSARY EQUIPMENT MAKING UP ITS ELECTRICAL SYSTEM.
- 2 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 3 WEATHER HEAD MUST BE AT TOP OF POLE. COMPANY APPROVED POINT OF ATTACHMENT SHALL BE INSTALLED BY CUSTOMER NO MORE THAN 6" BELOW THE WEATHER HEAD.
A THROUGH-BOLT SHALL BE USED. RISERS MUST BE 1" MINIMUM (IMC, EMT OR RIGID METALLIC) FOR CONDUCTORS # 4 COPPER (MINIMUM).
SEE N.E.C. FOR SIZE OF CONDUIT FOR CONDUCTORS LARGER THAN # 4 COPPER.
- 4 MINIMUM POLE LENGTH SHALL BE 25'. POLE SHALL HAVE A 6" MINIMUM DIAMETER OR 6" X 6" TIMBER CROSS-SECTION. POLE MUST BE PRESSURE TREATED WITH A PRESERVATIVE.
TALLER POLES MAY BE REQUIRED TO OBTAIN PROPER VERTICAL CLEARANCES.
- 5 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
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 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 6 FOR APPROPRIATE POLE DEPTH, SEE DSO 615.
- 7 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 8 THE LOCATION OF THE POLE AND METER, WILL BE DESIGNATED BY E.P.E.C..
- 9 THE METER ENCLOSURE WILL BE PROVIDED BY THE CUSTOMER AND INSTALLED BY AN ELECTRICAL CONTRACTOR AT THE CUSTOMER'S EXPENSE. THE METER WILL BE INSTALLED, MAINTAINED AND REPAIRED BY THE EL PASO ELECTRIC COMPANY AT ITS EXPENSE.
- 10 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 11 THE COST OF ANY DAMAGE TO EL PASO ELECTRIC COMPANY PROPERTY ON THE CUSTOMER'S PROPERTY WHICH IS CAUSED BY THE CUSTOMER OR OTHER PARTIES AUTHORIZED BY THE CUSTOMER SHALL BE PAID BY THE CUSTOMER.
- 12 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE E.P.E.C. DISTRIBUTION DESIGN AND DELIVERY DEPARTMENT.



DRAWING NOT TO SCALE

**TYPICAL SELF CONTAINED METER
FOR COMMERCIAL INSTALLATION**

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

ORIG. DATE: 04/14/00
REV. DATE: 05/02/12

DSO 440
PAGE 1 OF 2

NOTES:

- 1 THE CUSTOMER SHALL INSTALL, OPERATE AND MAINTAIN A SUITABLE SERVICE POLE, SERVICE ENTRANCE EQUIPMENT, POLE RISER, LOW VOLTAGE CABLE, CONDUIT AND OTHER NECESSARY EQUIPMENT MAKING UP ITS ELECTRICAL SYSTEM.
- 2 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 3 WEATHER HEAD MUST BE AT TOP OF POLE. COMPANY APPROVED POINT OF ATTACHMENT SHALL BE INSTALLED BY CUSTOMER NO MORE THAN 6" BELOW THE WEATHER HEAD.
A THROUGH-BOLT SHALL BE USED. RISERS MUST BE 1" MINIMUM (IMC, EMT OR RIGID METALLIC) FOR CONDUCTORS # 4 COPPER (MINIMUM).
SEE N.E.C. FOR SIZE OF CONDUIT FOR CONDUCTORS LARGER THAN # 4 COPPER.
- 4 MINIMUM POLE LENGTH SHALL BE 25'. POLE SHALL HAVE A 6" MINIMUM DIAMETER OR 6" X 6" TIMBER CROSS-SECTION. POLE MUST BE PRESSURE TREATED WITH A PRESERVATIVE.
TALLER POLES MAY BE REQUIRED TO OBTAIN PROPER VERTICAL CLEARANCES.
- 5 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
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- 6 FOR APPROPRIATE POLE DEPTH, SEE DSO 615.
- 7 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 8 THE LOCATION OF THE POLE AND METER, WILL BE DESIGNATED BY E.P.E.C.. FOR COMMUNICATION TOWERS, THIS DISTANCE SHALL NOT EXCEED 20' FEET FROM THE E.P.E.C. TRANSFORMER POLE.
- 9 THE METER ENCLOSURE WILL BE PROVIDED BY THE CUSTOMER AND INSTALLED BY AN ELECTRICAL CONTRACTOR AT THE CUSTOMER'S EXPENSE. THE METER WILL BE INSTALLED, MAINTAINED AND REPAIRED BY THE EL PASO ELECTRIC COMPANY AT ITS EXPENSE.
- 10 ALL COMMERCIAL INSTALLATIONS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET FOR LOADS UP TO 400 AMPS.
- 11 THE SERVICE DISCONNECTING MEANS FOR SERVICES OF 800 AMPS OR LESS SHALL BE A LOADBREAK-RATED METER DISCONNECT AND SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE ADJACENT TO AND NOT MORE THAN FIVE (5) FEET FROM THE METER.
- 12 THE COST OF ANY DAMAGE TO EL PASO ELECTRIC COMPANY PROPERTY ON THE CUSTOMER'S PROPERTY WHICH IS CAUSED BY THE CUSTOMER OR OTHER PARTIES AUTHORIZED BY THE CUSTOMER SHALL BE PAID BY THE CUSTOMER.
- 13 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE E.P.E.C. DISTRIBUTION DESIGN AND DELIVERY DEPARTMENT.
- 14 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.

GROUP 600

POLE SETTING

THE MINIMUM DEPTH FOR SETTING POLES SHALL BE AS FOLLOWS:

<u>LENGTH OF POLE</u>	<u>SETTING IN SOIL</u>	<u>SETTING IN ALL SOLID ROCK</u>
(feet)	(feet)	(feet)
20	4.0	3.0
25	5.0	3.5
30	5.5	3.5
35	6.0	4.0
40	6.0	4.0
45	6.5	4.5
50	7.0	4.5
55	7.5	5.0
60	8.0	5.0

NOTE:

ON SLOPING GROUND, THE DEPTH OF THE HOLE SHALL BE MEASURED FROM THE LOW SIDE OF THE HOLE.

(1) SETTING IN SOIL DEPTH SHALL APPLY WHEN :

- a. POLES ARE TO BE SET IN SOIL.
- b. THERE IS A LAYER OF SOIL MORE THAN TWO (2) FEET IN DEPTH OVER SOLID ROCK.
- c. THE HOLE IN SOLID ROCK IS NOT SUBSTANTIALLY VERTICAL OR THE DIAMETER OF THE HOLE AT THE SURFACE OF THE ROCK EXCEEDS APPROXIMATELY TWICE THE DIAMETER OF THE POLE AT THE SAME LEVEL.

(2) SETTING IN ALL SOLID ROCK DEPTH SHALL APPLY WHEN :

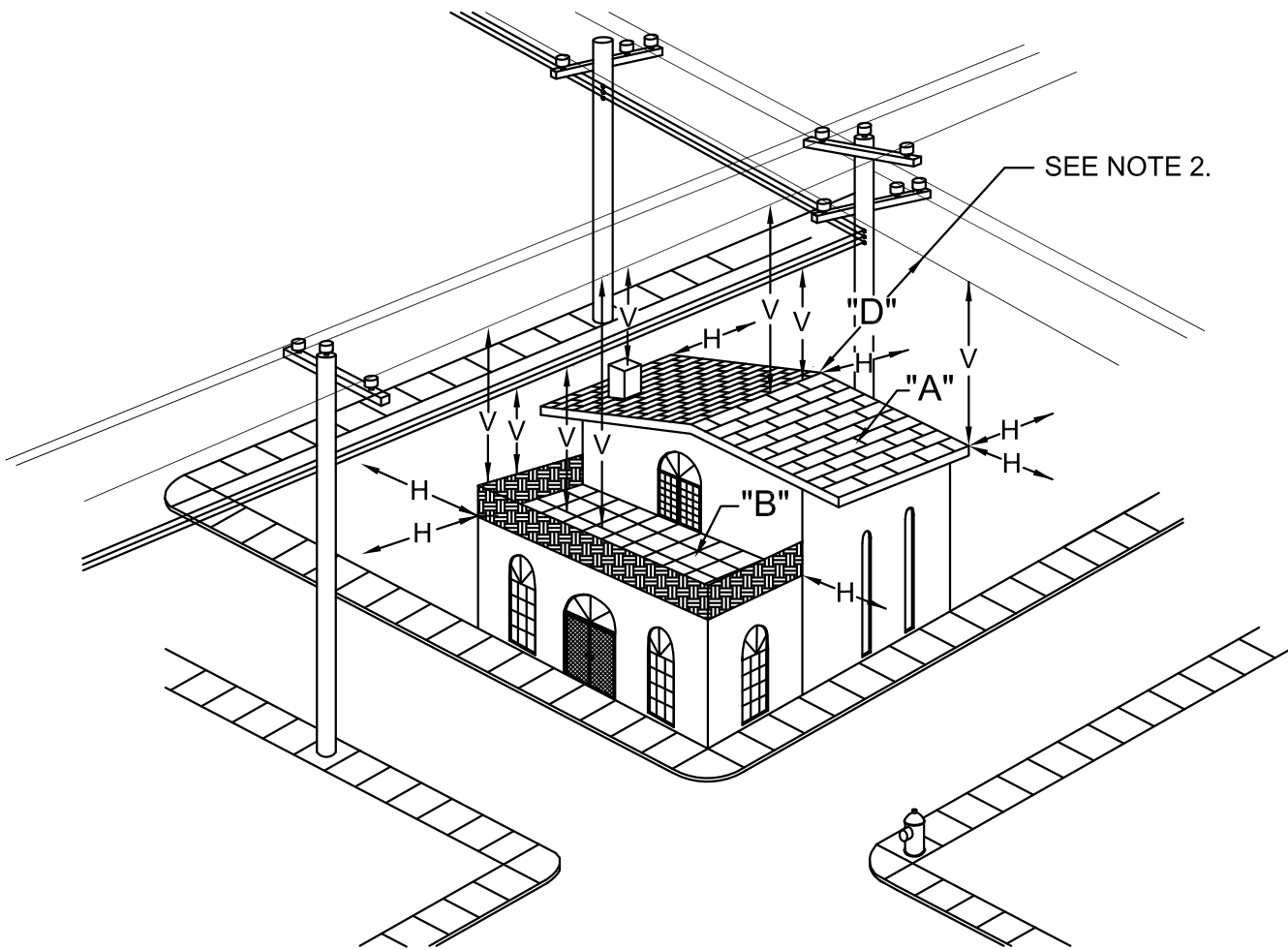
POLES ARE TO BE SET IN SOLID ROCK AND WHERE THE HOLE IS SUBSTANTIALLY VERTICAL, APPROXIMATELY UNIFORM IN DIAMETER AND LARGE ENOUGH TO PERMIT THE USE OF TAMPING BARS FOR THE FULL DEPTH OF THE HOLE.

(3) SETTING IN COMBINATION SOIL AND SOLID ROCK

WHEN THERE IS A LAYER OF SOIL TWO (2) FEET OR LESS IN DEPTH OVER SOLID ROCK, THE DEPTH OF THE HOLE SHALL BE THE DEPTH OF THE SOIL PLUS THE DEPTH SPECIFIED UNDER SETTING IN ALL SOLID ROCK. HOWEVER, THE DEPTH SHALL NOT EXCEED THE DEPTH SPECIFIED UNDER SETTING IN SOIL.

POLE SETTING

GROUP 1200



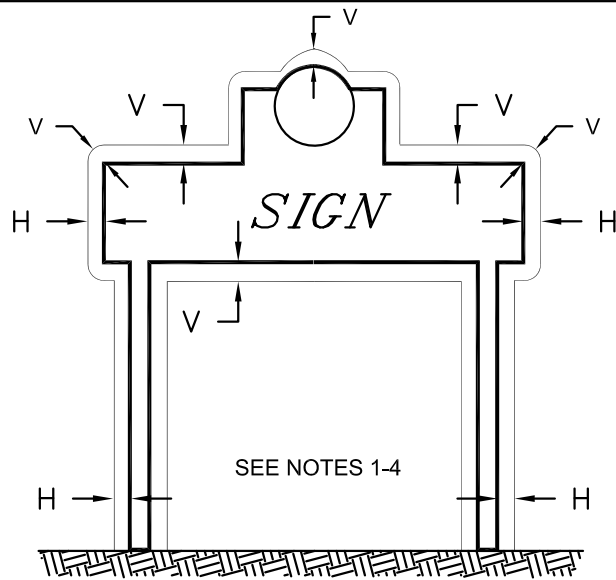
LINE TO GROUND VOLTAGE	A - NOT ACCESSIBLE TO PEDESTRIANS		B - ACCESSIBLE TO PEDESTRIANS	
	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
NEUTRAL	4.5'	* 8'	4.5'	10.5'
O - 750 VOLTS (INSULATED)	5'	* 8'	5'	11'
O - 750 VOLTS (OPEN WIRE)	5.5'	10.5'	5.5'	15'
750 - 22KV (OPEN WIRE)	7.5'	12.5'	7.5'	15'

* See note 8 on DSO1215 page 2 of 2.

CLEARANCES FROM BUILDING

NOTES:

- 1 A ROOF, BALCONY, OR AREA IS CONSIDERED ACCESSIBLE TO PEDESTRIANS IF THE MEANS OF ACCESS IS THROUGH A DOORWAY, RAMP, STAIRWAY OR PERMANENTLY MOUNTED LADDER.
- 2 THE DIAGONAL CLEARANCE MUST EQUAL VERTICAL CLEARANCE IF HORIZONTAL CLEARANCE IS NOT OBTAINED.
- 3 FOR FURTHER INFORMATION REFER TO NATIONAL ELECTRICAL SAFETY CODE, RULE 234.
- 4 HORIZONTAL CLEARANCES SHALL BE APPLIED WITH THE CONDUCTOR DISPLACED FROM REST BY A 6 - POUND PER SQUARE FOOT WIND AT FINAL SAG AT 60 DEGREES F.
- 5 INSTALLATION MUST COMPLY WITH ALL LOCAL REQUIREMENTS.
- 6 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 7 THIS DSO DOES NOT APPLY TO CONDUCTORS ATTACHED TO THE BUILDING. FOR SERVICE CONDUCTORS, REFER TO DSO SECTION 400.
- 8 DIMENSIONS REQUIRED BY CITY OF EL PASO.



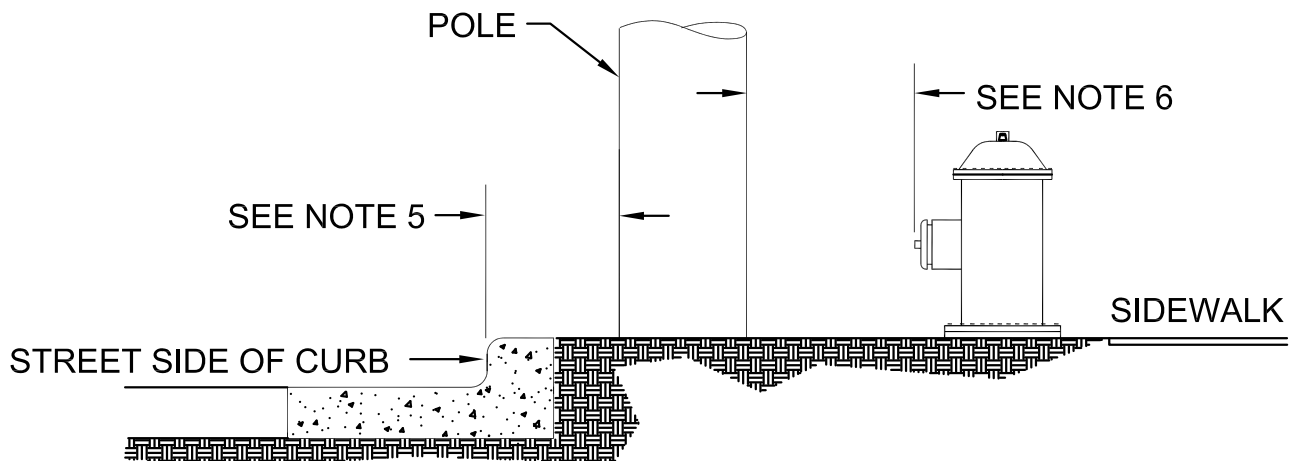
SIGN AND SUPPORTING STRUCTURE SHOULD BE ADEQUATELY BONDED AND GROUNDED.

MINIMUM CLEARANCES FROM SIGNS

V = MINIMUM CLEARANCE MEASURED EITHER DIAGONALLY OR VERTICALLY. H = MINIMUM HORIZONTAL CLEARANCE.

VOLTAGE - LINE TO GROUND	H FT.	V FT.	V OVER OR UNDER CATWALKS
GUY WIRES AND NEUTRALS	3	3	10.5
0-750 V SUPPLY CABLES MEETING RULE 230C2 AND 230C3 NESC.	3.5	3.5	11
0-750 V OPEN CONDUCTORS N.E.S.E. RULE 230C2 AND 230C3	5.5	6	11.5
750V - 22 KV	7.5	8	13.5

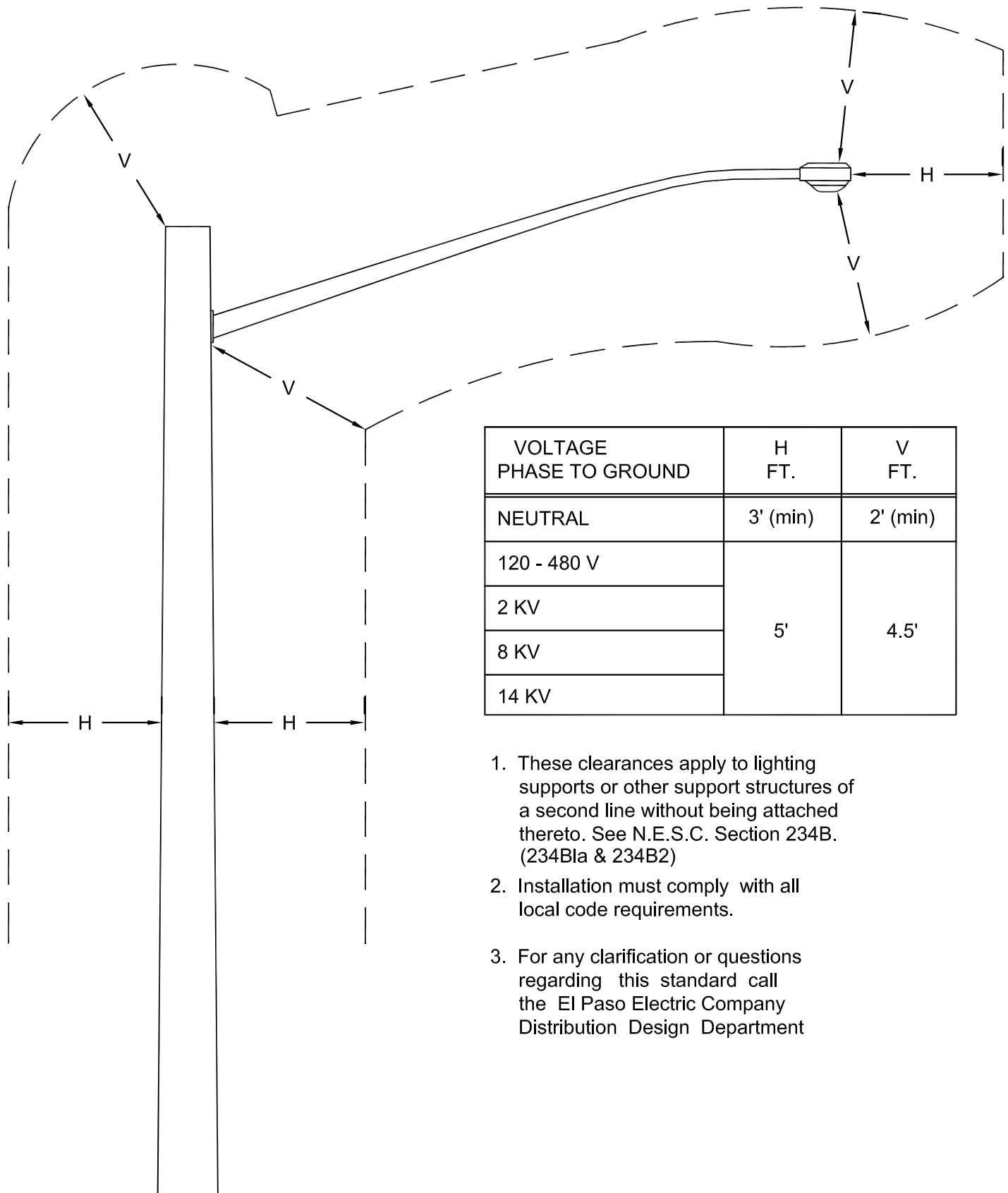
CLEARANCES OF POLE FROM STREET CURB AND POLE FROM HYDRANT



CLEARANCE FROM SIGNS AND OBJECTS (PRIMARY - SECONDARY)

NOTES:

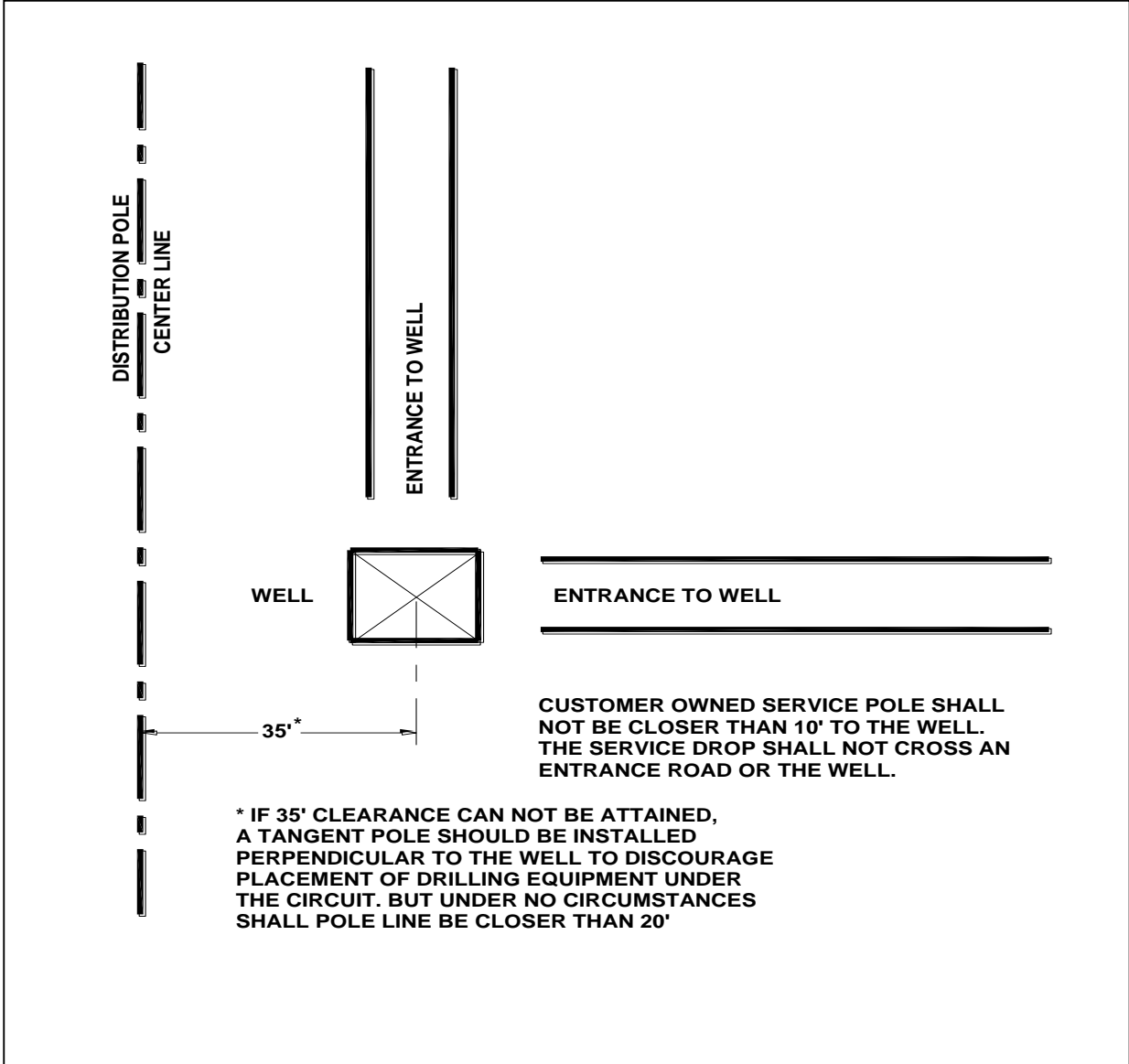
- 1 THE RECOMMENDED MINIMUM CLEARANCES SHOWN ABOVE SHOULD BE INCREASED AS MUCH AS PRACTICABLE.
- 2 SIGNS SHOULD NEVER HANG OVER ANY ADJACENT POWER CIRCUITS.
- 3 CLEARANCES BASED ON SECTION 234 OF N.E.S.C. LATEST EDITION.
- 4 VOLTAGES ARE LINE TO GROUND.
- 5 THE PREFERRED DISTANCE IS 60" BUT SHALL NOT BE LESS THAN 12", FROM BACK OF CURB TO FACE OF POLE (REFER TO N.E.S.C. RULE 231B).
- 6 E.P.E.C. AND CITY OF EL PASO PREFERENCE IS 60" FOR ALL POLES. N.E.S.C. 231A RECOMMENDS A MINIMUM OF 48" BUT ALLOWS 36" WHEN CONDITIONS DO NOT ALLOW 48".
- 7 INSTALLATION MUST COMPLY WITH ALL LOCAL REQUIREMENTS.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.

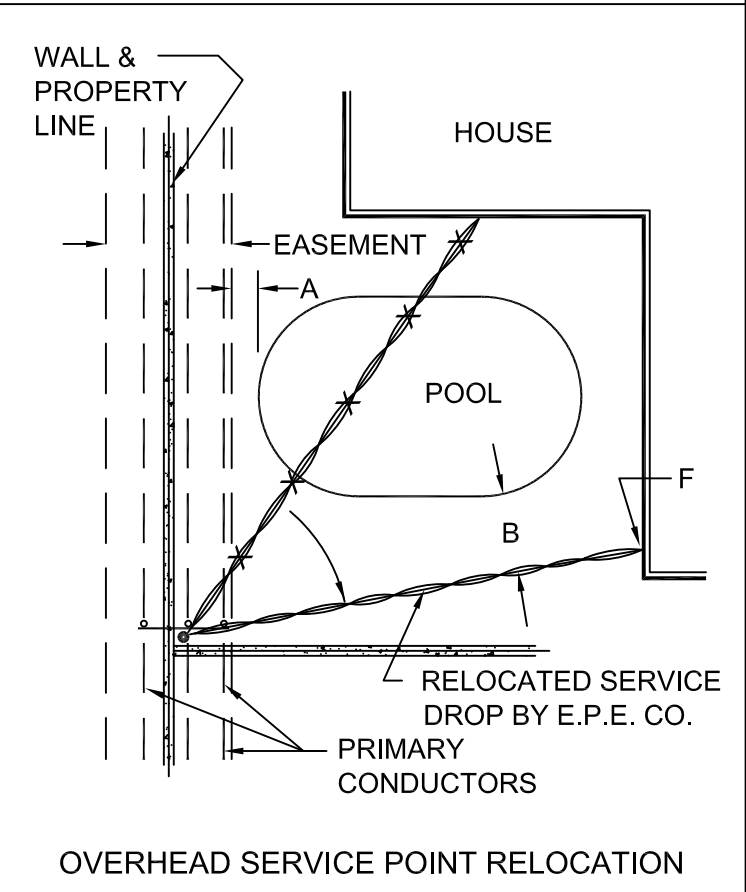
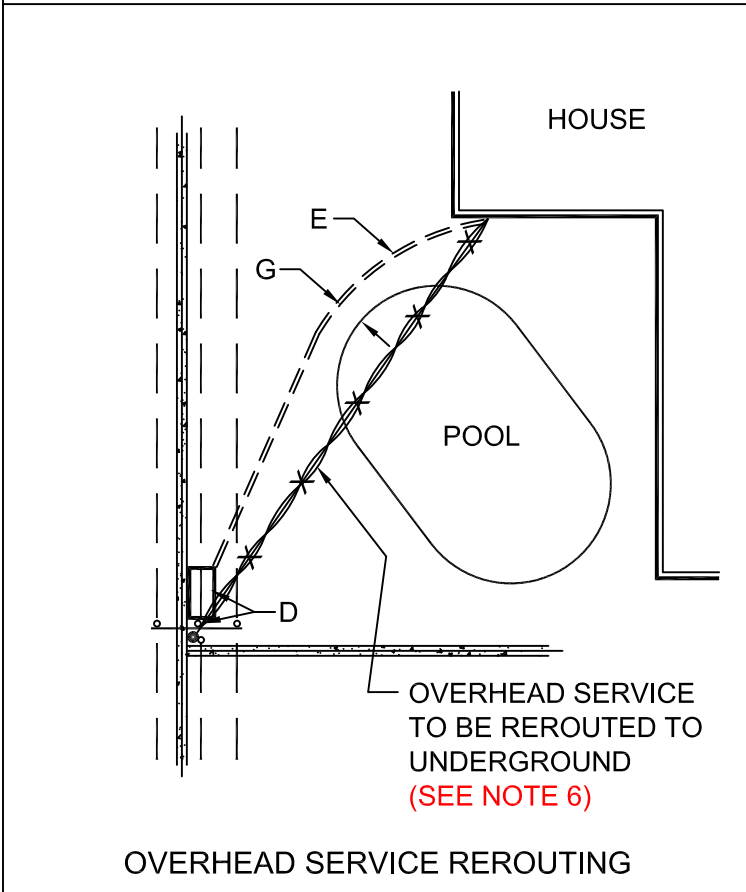
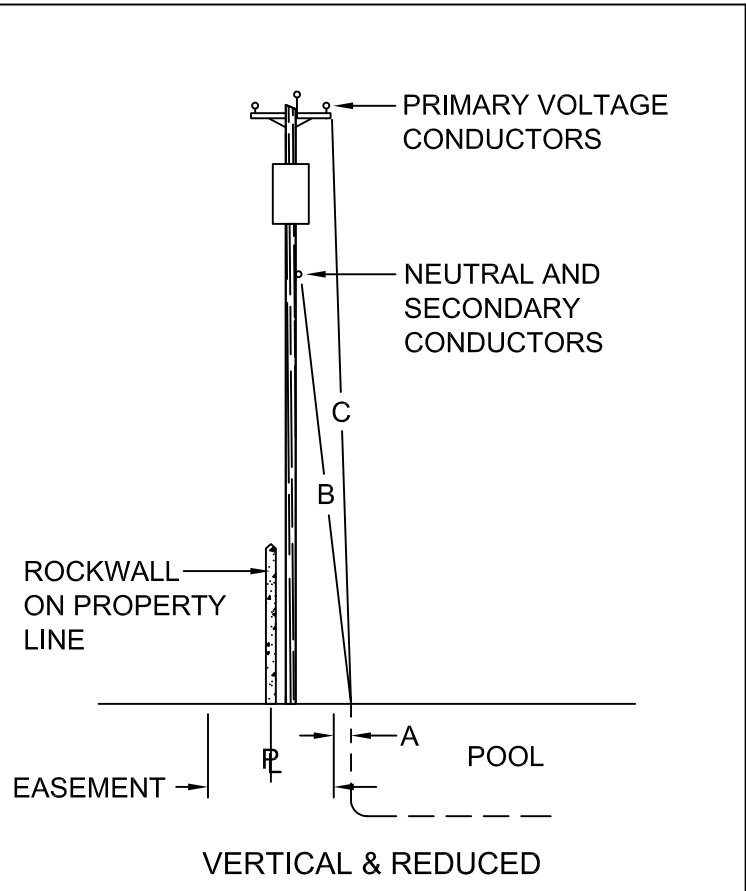
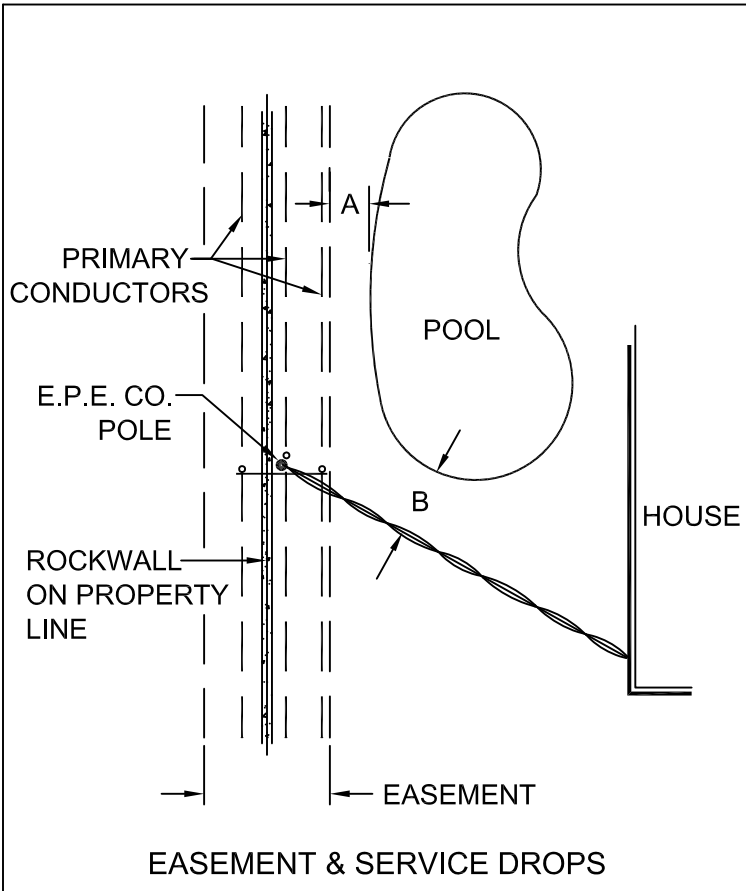


VOLTAGE PHASE TO GROUND	H FT.	V FT.
NEUTRAL	3' (min)	2' (min)
120 - 480 V	5'	4.5'
2 KV		
8 KV		
14 KV		

1. These clearances apply to lighting supports or other support structures of a second line without being attached thereto. See N.E.S.C. Section 234B. (234B1a & 234B2)
2. Installation must comply with all local code requirements.
3. For any clarification or questions regarding this standard call the El Paso Electric Company Distribution Design Department

**MINIMUM CLEARANCE FROM OTHER
SUPPORTING STRUCTURES**





SWIMMING POOL APPROVAL GUIDELINES

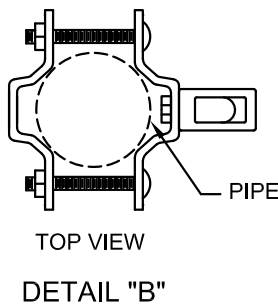
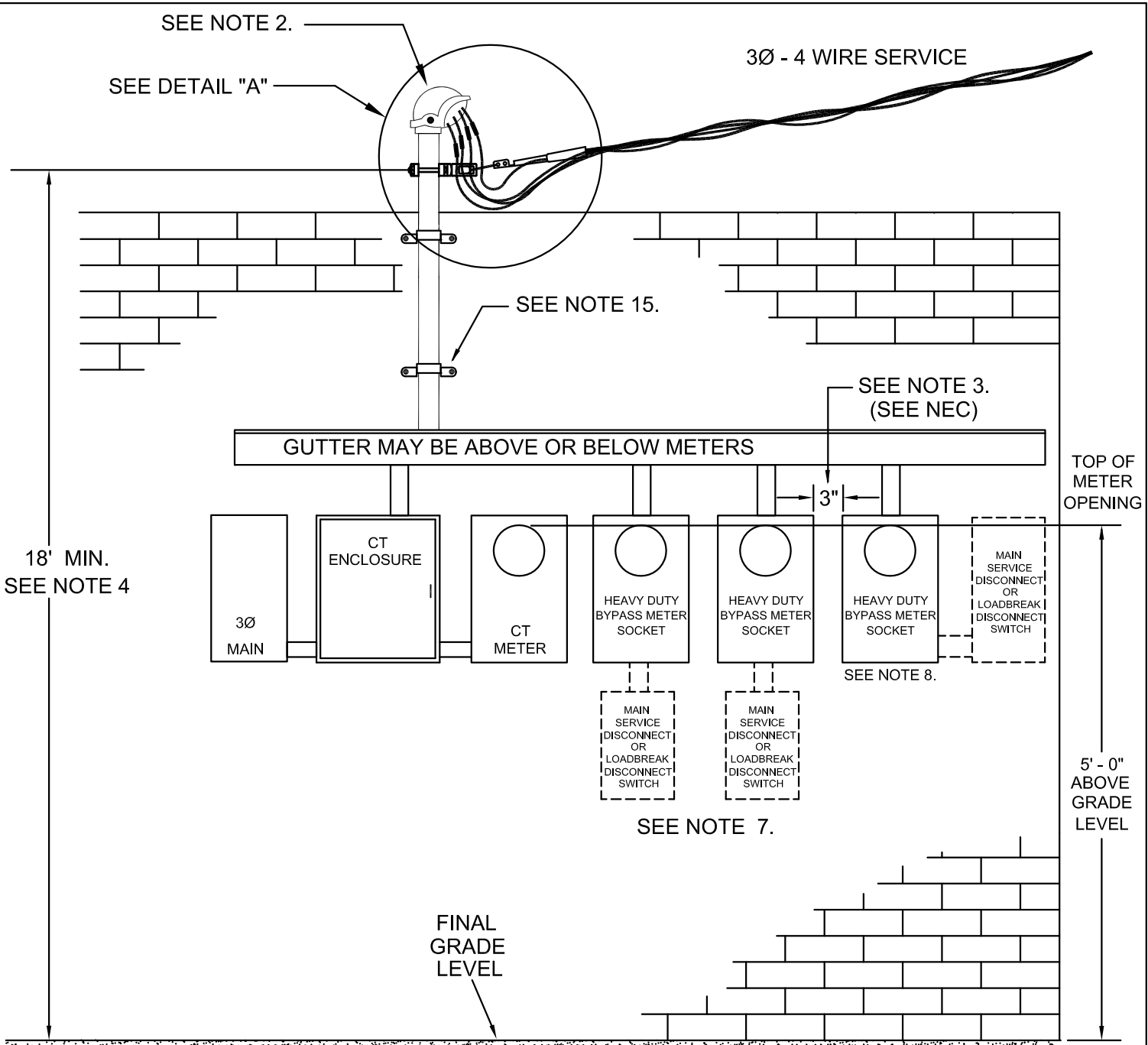
NOTES A - G :

- A POOL EDGE WILL NOT BE ALLOWED WITHIN THE PLATTED OR PRIVATE UTILITY EASEMENT, USUALLY 5 FEET OR GREATER ON BOTH SIDES OF THE PROPERTY LINE.
- B **SECONDARY / SERVICE OR NEUTRAL:** 22.5' MINIMUM DIAGONAL CLEARANCE FOR INSULATED SECONDARY / SERVICE. FOR BARE UNINSULATED SECONDARY, THE MINIMUM DIAGONAL CLEARANCE IS 23'. FOR NEUTRAL WIRES THE MINIMUM DIAGONAL CLEARANCE IS 22'.
- C,D&E **PRIMARY CONDUCTOR:** 25' MINIMUM DIAGONAL CLEARANCE.
SERVICE ENCLOSURE, RISER BASE AND SERVICE DUCT (PVC) TO BE PROVIDED AND INSTALLED BY ELECTRICAL SUBCONTRACTOR. EL PASO ELECTRIC COMPANY WILL INSTALL SERVICE CONDUCTORS AT CUSTOMER EXPENSE.
- F RELOCATED OVERHEAD SERVICE POINT (WEATHERHEAD) BY ELECTRICAL SUBCONTRACTOR. SERVICE CONDUCTORS TO BE RELOCATED BY E.P.E.C. PERSONNEL AT CUSTOMER EXPENSE.
- G UNDERGROUND WIRING SHALL NOT BE PERMITTED UNDER THE POOL OR WITHIN THE AREA EXTENDING 5 FEET HORIZONTALLY FROM THE INSIDE WALL OF THE POOL.

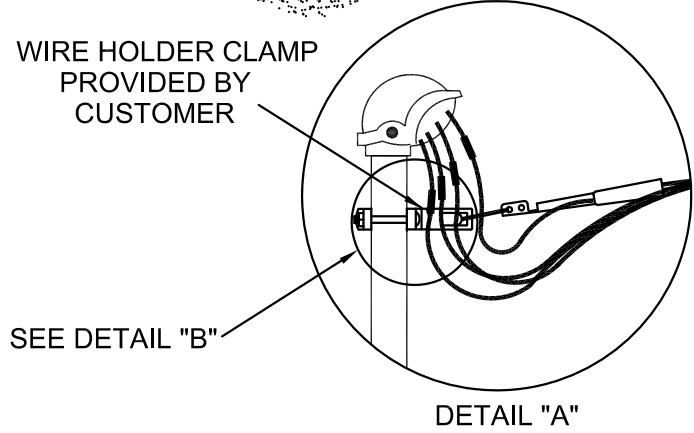
NOTES 1 -7 :

- 1 ALL SWIMMING POOL PLANS SUBMITTED TO THE E.P.E.C. DISTRIBUTION DESIGN DEPARTMENT FOR APPROVAL MUST HAVE A WRITTEN STATEMENT ASSURING THE DIMENSIONS IN NOTES A, B & C WILL BE MAINTAINED.
- 2 THIS STANDARD COMPLIES WITH REQUIREMENTS FOR CLEARANCES OF OVERHEAD LINES TO SWIMMING POOLS AS STATED IN THE NATIONAL ELECTRICAL SAFETY CODE, 1997 EDITION RULE 234E AND THE CURRENT CITY OF EL PASO ELECTRICAL CODE.
- 3 EL PASO ELECTRIC COMPANY WILL NOT DETERMINE THE ADEQUACY OF LOT SIZE OR AVAILABILITY FOR A VARIANCE FROM THE CITY OF EL PASO REGARDING INSTALLATION OF A SWIMMING POOL.
- 4 ALL CLEARANCES SHALL BE MEASURED FROM THE WATER LEVEL, EDGE OF POOL, OR BASE OF DIVING PLATFORM TO THE OUTERMOST EDGE OF THE INVOLVED EQUIPMENT, WIRE OR CABLE.
- 5 INSTALLATION MUST COMPLY WITH ALL LOCAL REQUIREMENTS.
- 6 NO CONSTRUCTION SHALL BE BUILT OVER THE UNDERGROUND SERVICE, INCLUDING DECKING OR POOL BUILDINGS OF ANY SIZE.
- 7 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.

GROUP 1800



JOSLYN
WIRE HOLDER &
CLAMP OR EQUIVALENT
SEE NOTE 1.

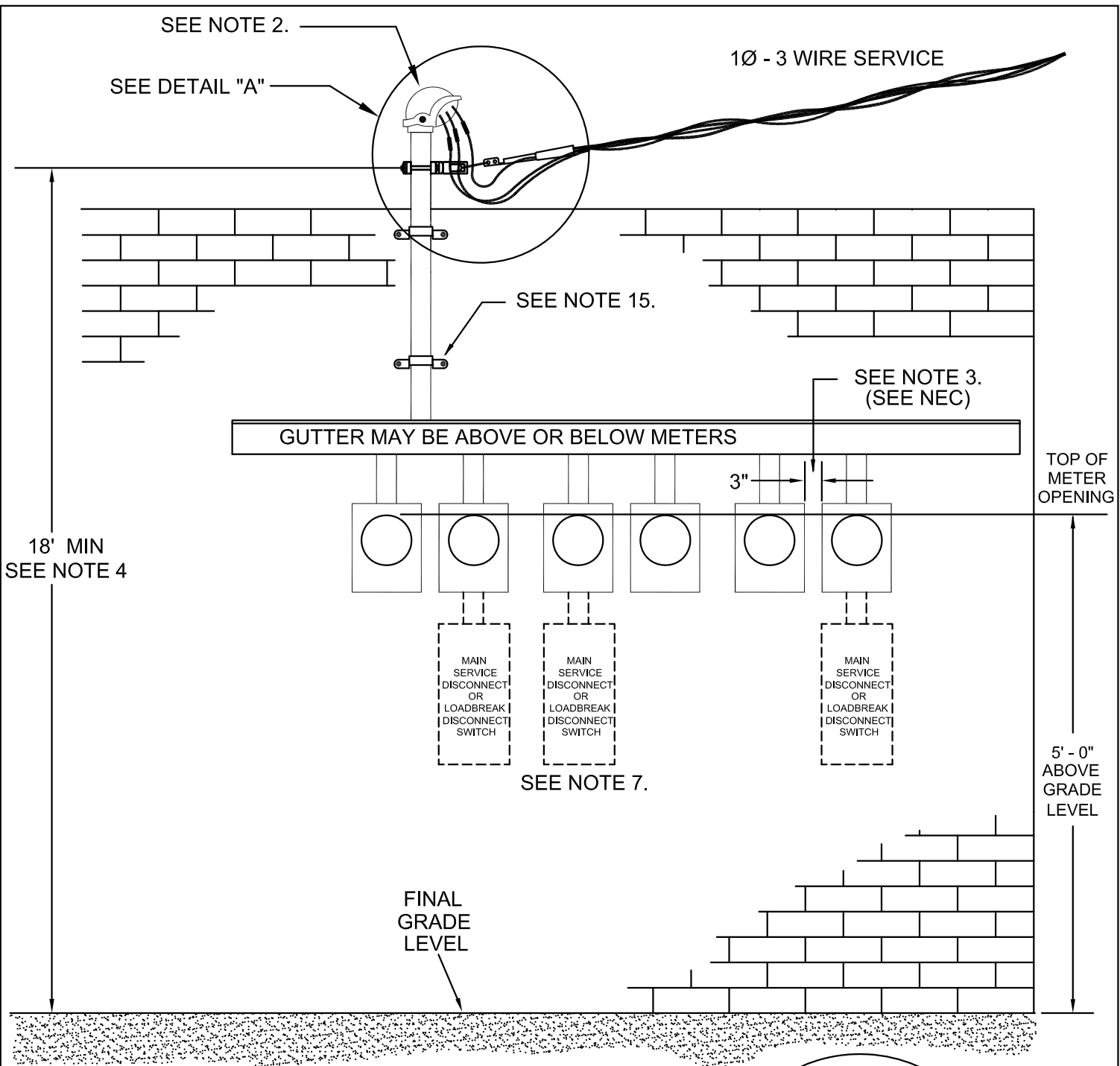


DRAWING NOT TO SCALE

**TYPICAL MULTIPLE COMMERCIAL
METERING INSTALLATION**

NOTES:

- 1 JOSLYN WIRE HOLDER TO BE USE FOR UP TO 4/0 CABLE. FOR LARGER CABLE USE ALUMINUM STRAP, EYELET AND ALUMINUM STRAIN CLAMP.
- 2 FOR PARALLEL RISERS, SEE DSO 1845 FOR DETAILS.
- 3 3" MINIMUM IS REQUIRED BETWEEN A METER ENCLOSURE AND ANY ADJACENT EQUIPMENT.
- 4 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 5 THERE SHALL BE NO MORE THAN SIX DISCONNECTS PER SERVICE GROUPED IN ANY ONE LOCATION AS PER NATIONAL ELECTRICAL CODE, SECTION 230 - 71, PARAGRAPH "A".
- 6 SERVICE DISCONNECT NEEDED WHEN MORE THAN 6 METERS ARE USED.
- 7 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 8 ALL COMMERCIAL INSTALLATIONS UP TO 400 AMPS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET.
- 9 RIGID CONDUIT MUST BE USED IF SERVICE DROP IS ANCHORED TO MAST.
- 10 ELECTRICAL CONTRACTORS ARE RESPONSIBLE FOR MARKING EACH METER ENCLOSURE ACCURATELY WITH PERMANENT NUMBERS OR LETTERS TO CORRESPOND TO THE CORRECT UNIT, APARTMENT OR COMMERCIAL SUITES.
- 11 INSTALLATION MUST COMPLY WITH LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 12 THEGROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAI ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 13 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN AND DELIVERY DEPARTMENT.
- 14 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.
- 15 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK.

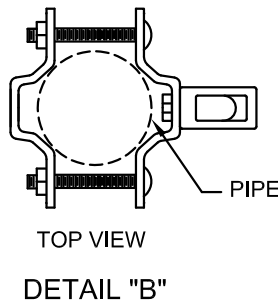


18' MIN
SEE NOTE 4

TOP OF
METER
OPENING

5'-0"
ABOVE
GRADE
LEVEL

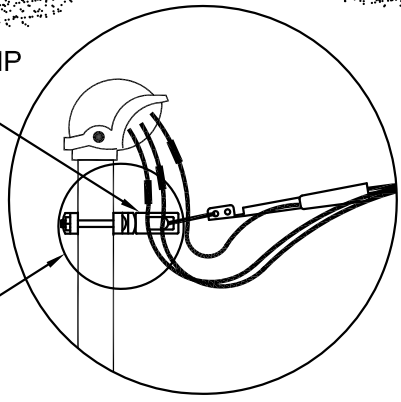
FINAL
GRADE
LEVEL



JOSLYN
WIRE HOLDER &
CLAMP OR EQUIVALENT
SEE NOTE 1.

WIRE HOLDER CLAMP
PROVIDED BY
CUSTOMER

SEE DETAIL "B"



DRAWING NOT TO SCALE

TYPICAL MULTIPLE RESIDENTIAL
METERING INSTALLATION

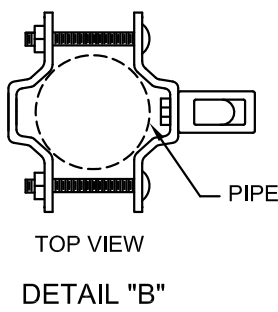
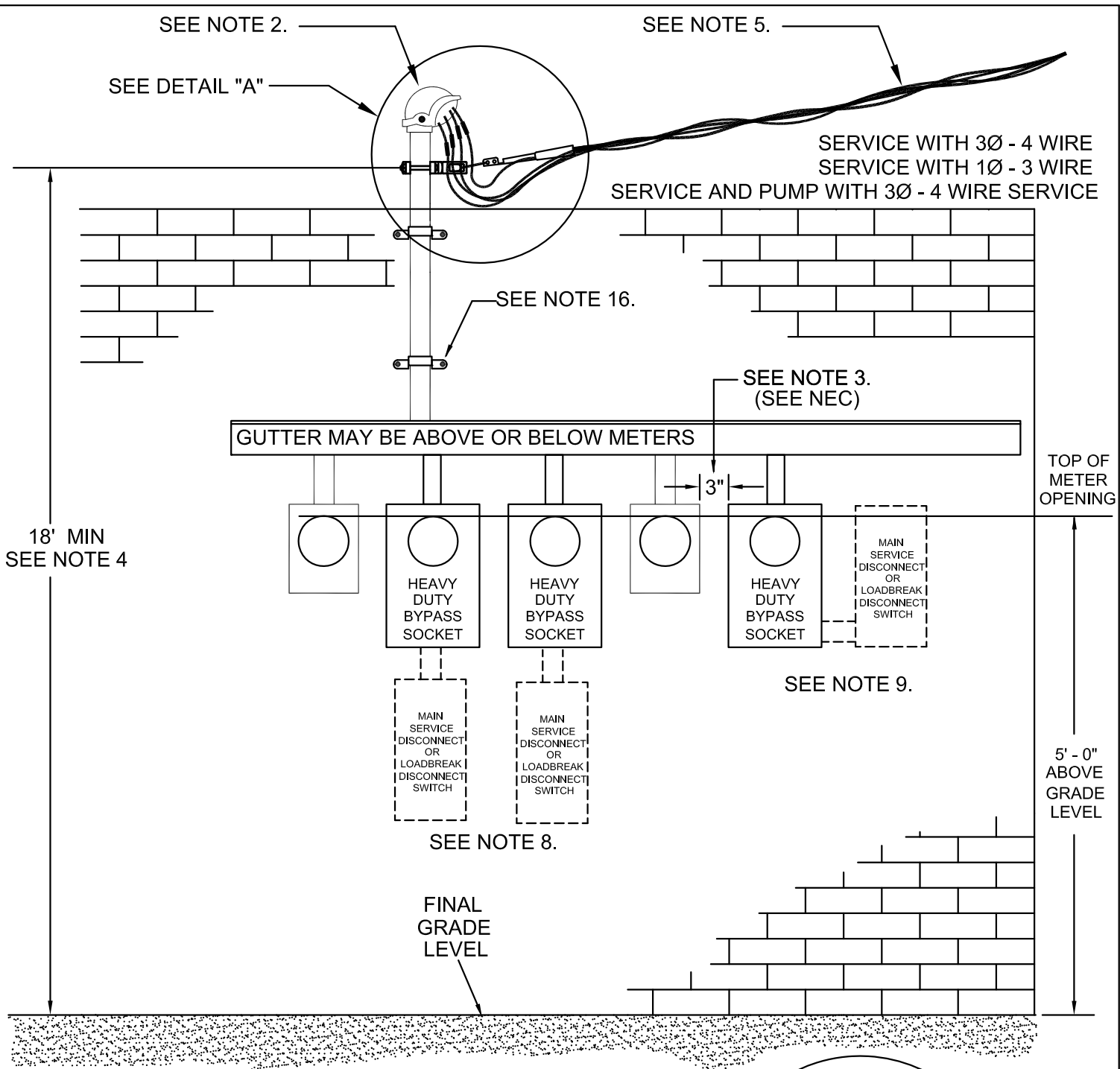
ORIG. DATE: 04/06/84
REV. DATE: 03/27/18

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

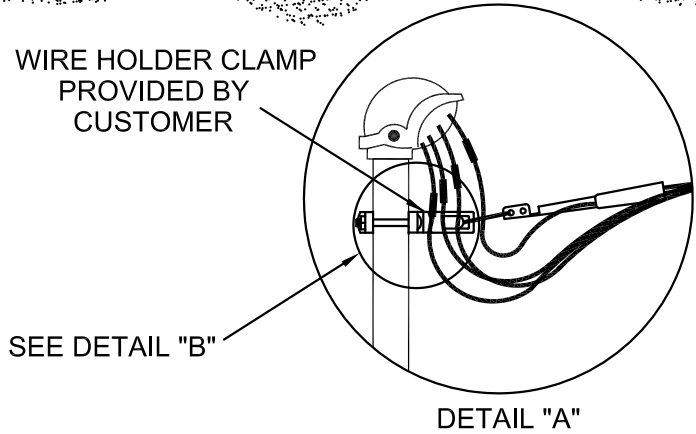
DSO 1815
PAGE 1 OF 2

NOTES:

- 1 JOSLYN WIRE HOLDER TO BE USE FOR UP TO 4/0 CABLE. FOR LARGER CABLE USE ALUMINUM STRAP, EYELET AND ALUMINUM STRAIN CLAMP.
- 2 FOR PARALLEL RISERS, SEE DSO 1845 FOR DETAILS.
- 3 3" MINIMUM IS REQUIRED BETWEEN A METER ENCLOSURE AND ANY ADJACENT EQUIPMENT.
- 4 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 5 THERE SHALL BE NO MORE THAN SIX DISCONNECTS PER SERVICE GROUPED IN ANY ONE LOCATION AS PER NATIONAL ELECTRICAL CODE, SECTION 230 - 71, PARAGRAPH "A".
- 6 SERVICE DISCONNECT NEEDED WHEN MORE THAN 6 METERS ARE USED.
- 7 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIORR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 8 ALL COMMERCIAL INSTALLATIONS UP TO 400 AMPS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET.
- 9 RIGID CONDUIT MUST BE USED IF SERVICE DROP IS ANCHORED TO MAST.
- 10 ELECTRICAL CONTRACTORS ARE RESPONSIBLE FOR MARKING EACH METER ENCLOSURE. (INCLUDING WATER HEATER) ACCURATELY WITH PERMANENT NUMBERS OR LETTERS TO CORRESPOND TO THE CORRECT UNIT, APARTMENT OR COMMERCIAL SUITES.
- 11 INSTALLATION MUST COMPLY WITH LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 12 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRTICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 13 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN AND DELIVERY DEPARTMENT.
- 14 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.
- 15 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK.



JOSLYN
WIRE HOLDER &
CLAMP OR EQUIVALENT
SEE NOTE 1.



DRAWING NOT TO SCALE

**TYPICAL MULTIPLE METERING
INSTALLATION WITH 3Ø AND 1Ø SERVICE**

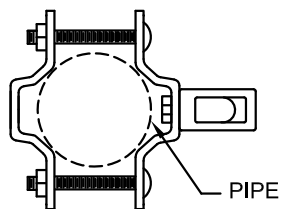
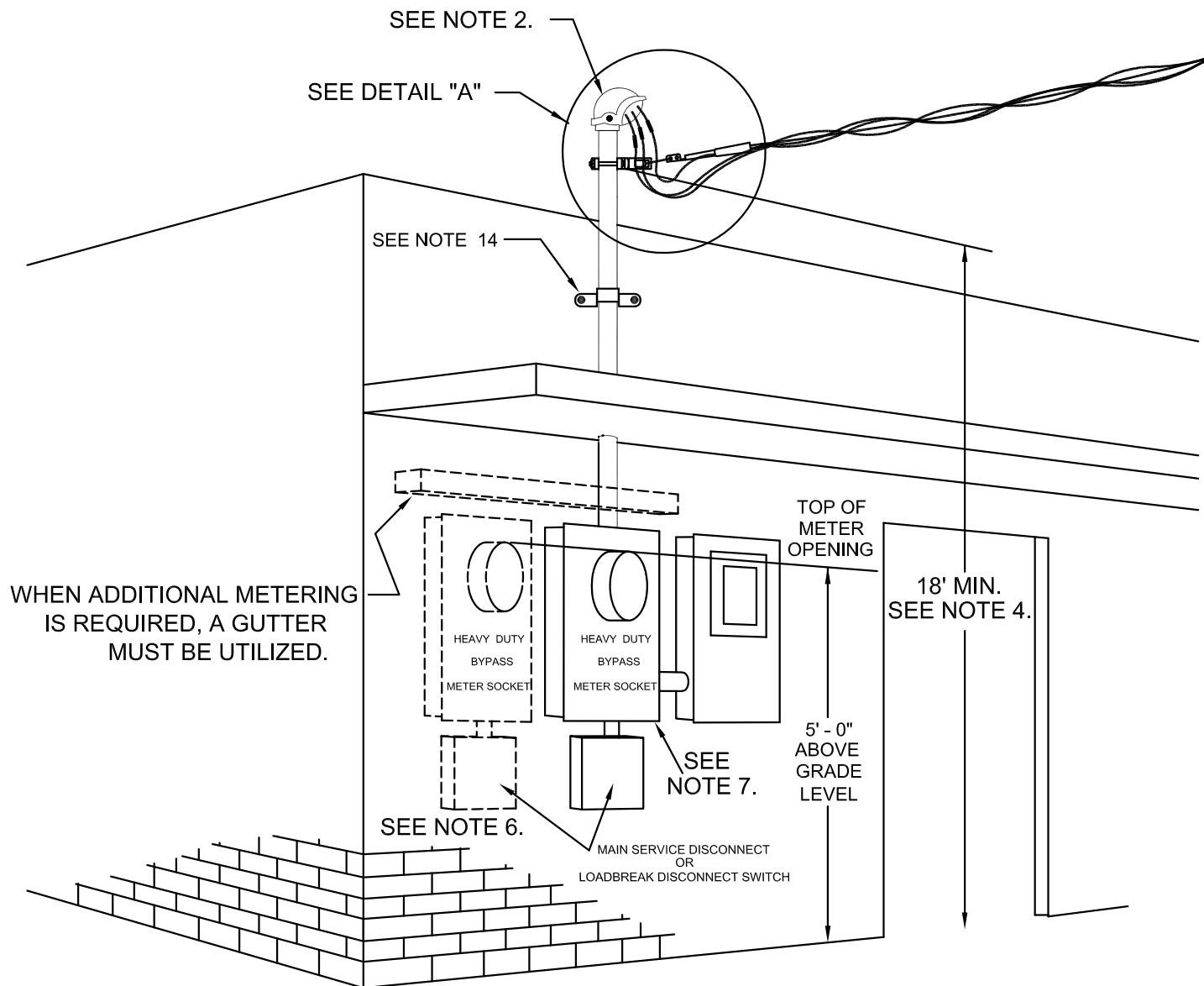
ORIG. DATE: 04/06/84
REV. DATE: 03/27/18

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSO 1820
PAGE 1 OF 2

NOTES:

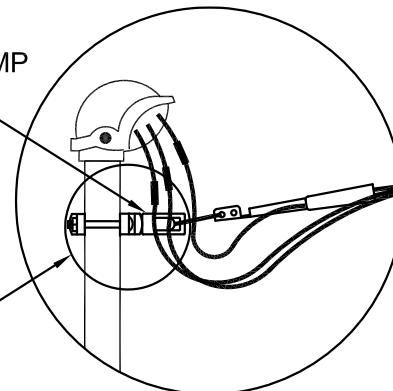
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- 5 THIS SERVICE SHALL NOT PASS THROUGH ANY OTHER BUILDING OR ENCLOSED STRUCTURE PER THE NATIONAL ELECTRICAL CODE.
- 6 THERE SHALL BE NO MORE THAN SIX DISCONNECTS PER SERVICE GROUPED IN ANY ONE LOCATION AS PER NATIONAL ELECTRICAL CODE, SECTION 230 - 71, PARAGRAPH "A".
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- 15 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.
- 16 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK.



JOSLYN
WIRE HOLDER &
CLAMP OR EQUIVALENT
SEE NOTE 1.

WIRE HOLDER CLAMP
PROVIDED BY
CUSTOMER

SEE DETAIL "B"

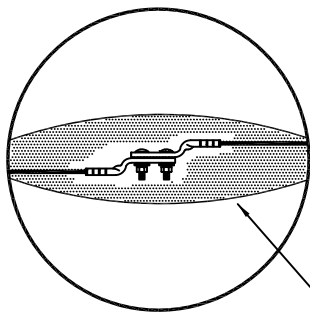


DRAWING NOT TO SCALE

TYPICAL IN - LINE METER
INSTALLATION

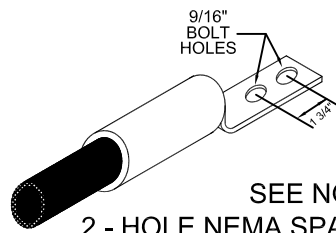
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- 5 SERVICE DISCONNECT NEEDED WHEN MORE THAN 6 METERS ARE USED.
- 6 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 7 ALL COMMERCIAL INSTALLATIONS UP TO 400 AMPS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET.
- 8 RIGID CONDUIT MUST BE USED IF SERVICE DROP IS ANCHORED TO MAST.
- 9 ELECTRICAL CONTRACTORS ARE RESPONSIBLE FOR MARKING EACH METER ENCLOSURE ACCURATELY WITH PERMANENT NUMBERS OR LETTERS TO CORRESPOND TO THE CORRECT UNIT, APARTMENT OR COMMERCIAL SUITES.
- 10 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 11 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 12 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN AND DELIVERY DEPARTMENT.
- 13 METER CAN, CAN NOT BE USED AS A JUNCTION BOX.
- 14 RISER MUST BE SECURELY ATTACHED TO THE WALL OF THE BUILDING. USE TOGGLE BOLTS FOR CINDER BLOCK OR PLASTIC SHIELDS WITH THE APPROPRIATE SCREWS FOR WOOD OR BRICK.

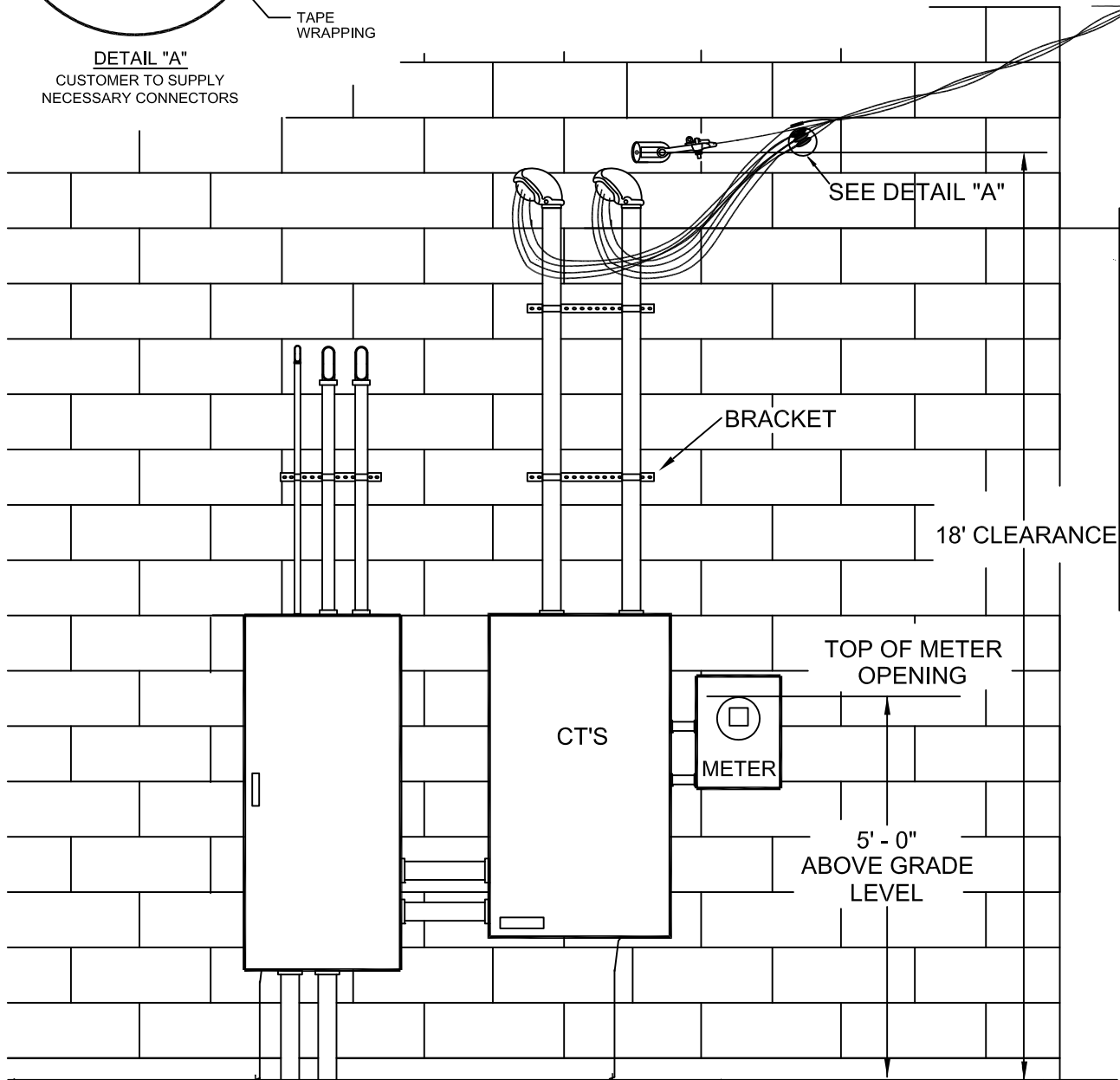


DETAIL "A"
CUSTOMER TO SUPPLY
NECESSARY CONNECTORS

TAPE
WRAPPING



9/16"
BOLT
HOLES
SEE NOTE 7.
2 - HOLE NEMA SPADE CONNECTOR



SEE NOTE 3.
FOR GROUNDING
REQUIREMENTS

DRAWING NOT TO SCALE

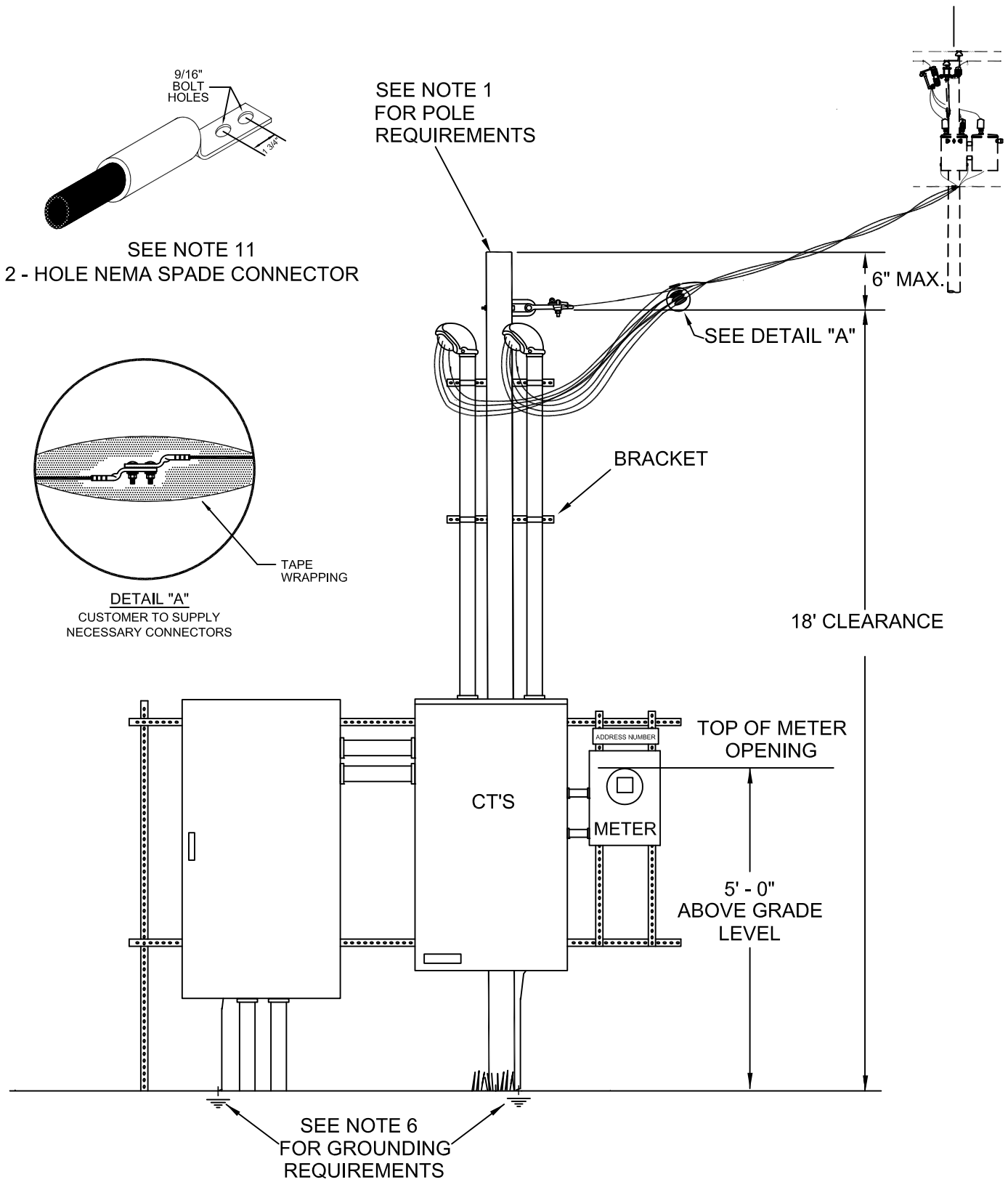
MAIN SIZE RANGE: 401 AMPS AND GREATER

TYPICAL 3Ø 4 WIRE 120 / 208 , 120 / 240
OR 277/480 VOLT

INSTRUMENT TRANSFORMER METERING
MOUNTED ON BUILDING WALL

NOTES:

- 1 FOR CONDUCTOR SIZE 4/0 OR LARGER USE STRAIN CLAMP.
FOR CONDUCTOR SMALLER THAN 4/0 USE SERVICE WEDGE CLAMP.
- 2 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - A. ADDITIONAL CLEARANCE IS REQUIRED OVER STREET CROSSINGS, RAILWAYS AND CERTAIN BODIES OF WATER AS OUTLINED IN NESC 232.
 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 3 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 4 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 5 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CONTACT THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 6 RIGID CONDUIT MUST BE USED IF SERVICE DROP IS ANCHORED TO MAST.
- 7 CUSTOMER SHALL PROVIDE AND INSTALL SPADE (2 HOLE NEMA SPADE) CONNECTORS ON ALL INDIVIDUAL SERVICE ENTRANCE CONDUCTORS. PIG TAILS ARE NOT ALLOWED.
- 8 A METER DISCONNECT SWITCH SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, ADJACENT TO AND NOT MORE THAN 5 FEET FROM THE METER.
IF THE MAIN SERVICE DISCONNECT IS LOCATED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE AND ADJACENT TO THE METER, THE METER DISCONNECT SWITCH IS NOT REQUIRED.



MAIN SIZE RANGE: 401 AMPS TO 1200 AMPS

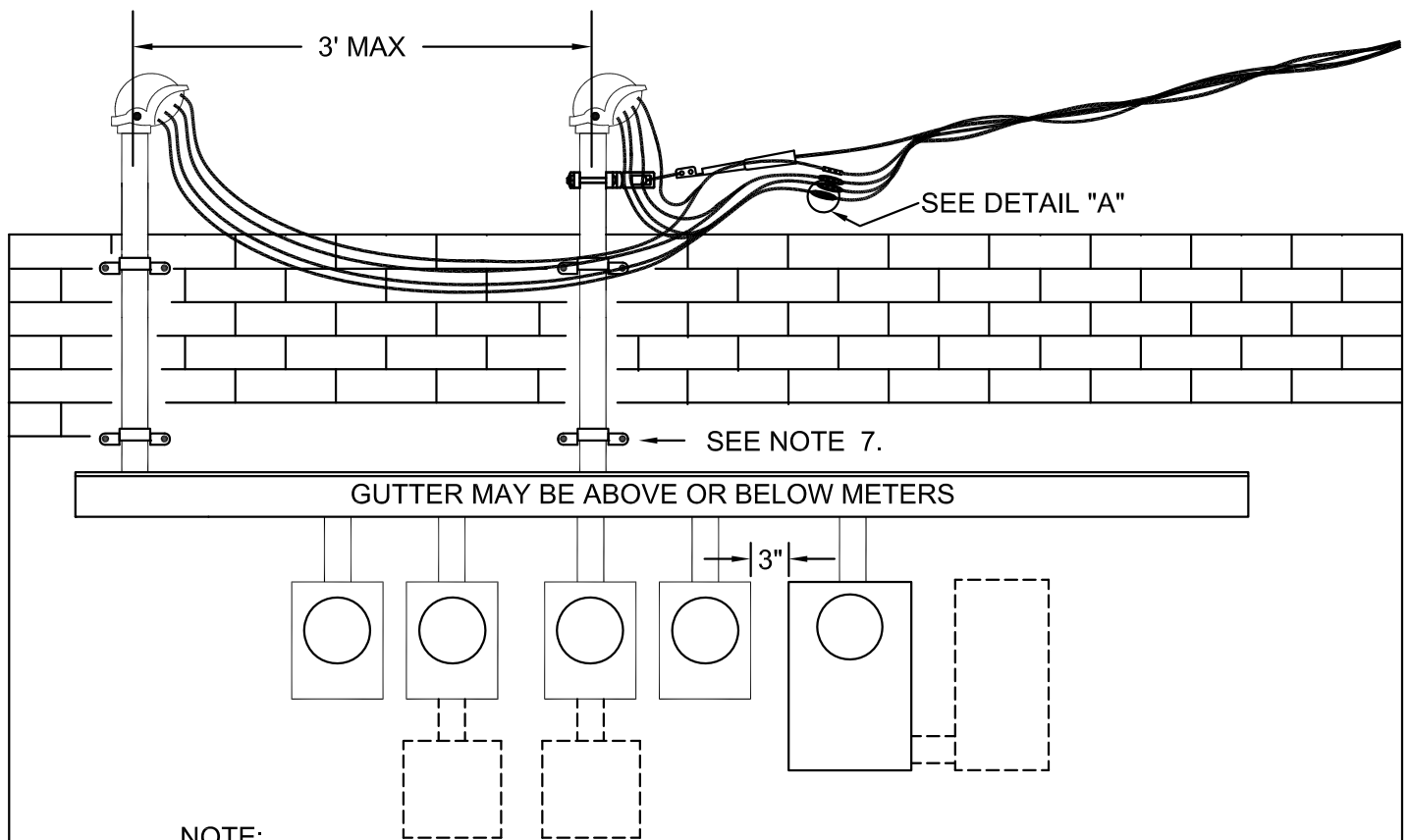
DRAWING NOT TO SCALE

TYPICAL 3 Ø 4 WIRE 120/208, 120/240 OR 277/480 VOLT
INSTRUMENT TRANSFORMER METERING
MOUNTED ON SERVICE POLE

NOTES:

- 1 CUSTOMER NEEDS TO PROVIDE A POINT OF ATTACHMENT AT WALL OR FRAME. RATED FOR 300LBS PULLOUT.
- 2 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRIC CODE AND THE NATIONAL ELECTRIC SAFETY CODE.
- 3 MINIMUM POLE LENGTH SHALL BE 25'. POLE SHALL HAVE A 6" MINIMUM DIAMETER OR 6" X 6" TIMBER CROSS-SECTION. POLE MUST BE PRESSURE TREATED WITH A PRESERVATIVE. TALLER POLES MAY BE REQUIRED TO OBTAIN PROPER VERTICAL CLEARANCES.
- 4 18' CLEARANCE IS REQUIRED FOR SERVICE DROPS CROSSING PARKING LOTS AND OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. THE CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE. ALL CLEARANCES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
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 - B. THIS CLEARANCE MAY BE REDUCED TO 12' IF THE SERVICE DROP IS ACCESSIBLE ONLY TO PEDESTRIANS. THIS CLEARANCE IS MEASURED FROM THE LOWEST PART OF THE SERVICE DROP TO FINAL GRADE OR ANY PROJECTION OR PLATFORM FROM WHICH IT MIGHT BE REACHED.
- 5 FOR APPROPRIATE POLE DEPTH. SEE DSO 615.
- 6 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 7 THE METER ENCLOSURE WILL BE PROVIDED BY THE CUSTOMER AND INSTALLED BY AN ELECTRICAL CONTRACTOR AT THE CUSTOMER'S EXPENSE. THE METER WILL BE INSTALLED, MAINTAINED AND REPAIRED BY THE EL PASO ELECTRIC COMPANY AT ITS EXPENSE.
- 8 THE COST OF ANY DAMAGE TO EL PASO ELECTRIC COMPANY PROPERTY ON THE CUSTOMER'S PROPERTY WHICH IS CAUSED BY THE CUSTOMER OR OTHER PARTIES AUTHORIZED BY THE CUSTOMER SHALL BE PAID BY THE CUSTOMER.
- 9 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD CALL THE E.P.E.C. DISTRIBUTION DESIGN & DELIVERY DEPARTMENT.
- 10 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.
- 11 CUSTOMER SHALL PROVIDE AND INSTALL SPADE (2 HOLE NEMA SPADE) CONNECTORS ON ALL INDIVIDUAL SERVICE ENTRANCE CONDUCTORS. PIG TAILS ARE NOT ALLOWED.
- 12 A METER DISCONNECT SWITCH SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, ADJACENT TO AND NOT MORE THAN 5 FEET FROM THE METER. IF THE MAIN SERVICE DISCONNECT IS LOCATED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE AND ADJACENT TO THE METER, THE METER DISCONNECT SWITCH IS NOT REQUIRED.

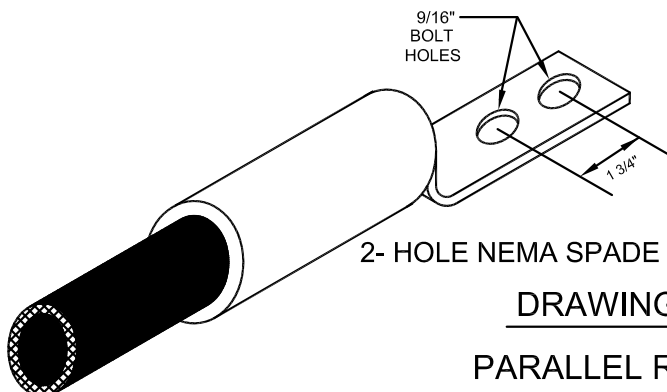
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NOTE:

PARALLEL RISERS ARE ALLOWED UNDER THE FOLLOWING CONDITIONS:

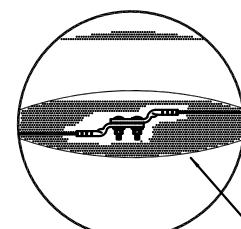
1. MULTIPLE METERS OVER 400 AMPS TOTAL.
2. FOR SERVICES GREATER THEN 600 AMPS, UP TO A MAXIMUM OF FOUR (4) RISERS TOTAL WILL BE ALLOWED, AND ONLY CONDUCTOR SIZES OF 350 MCM AND LARGER WILL BE ALLOWED.
3. FOR 320 AMP METER CANS WITH A SINGLE METER: A MAXIMUM OF TWO (2) RISERS TOTAL ARE ALLOWED AND CAN BE PARALLELED, AND ONLY CONDUCTOR SIZES OF 4/0 AND LARGER WILL BE ALLOWED.
4. FOR 320 AMP METER CANS, ONLY CONDUCTOR SIZE 4/0 AND LARGER CAN BE PARALLELED.
5. MAXIMUM SEPARATION BETWEEN RISERS IS 3'-0".
6. NO PARALLEL CONDUCTORS WILL BE ALLOWED IN A SINGLE RISER.
7. CUSTOMER SHALL PROVIDE AND INSTALL SPADE CONNECTORS (SEE INSERT) ON ALL INDIVIDUAL SERVICE ENTRANCE CONDUCTORS. PIGTAILS ARE NOT ALLOWED.
8. RISER MUST BE SECURELY ATTACHED TO THE WALL OR BUILDING.
9. ALL OTHER DESIGN AND CONSTRUCTION REQUIREMENTS MUST BE OBSERVED. SEE APPROPRIATE STANDARDS IN THIS BOOK FOR DETAILS.
10. JOSLYN WIRE HOLDER TO BE USED FOR UP TO 4/0 CABLE. FOR LARGER CABLE USE ALUMINUM STRAP, EYELET AND ALUMINUM STRAIN CLAMP.



2- HOLE NEMA SPADE CONNECTOR

DRAWING NOT TO SCALE

**PARALLEL RISER INSTALLATION
FOR COMMERCIAL METERING**

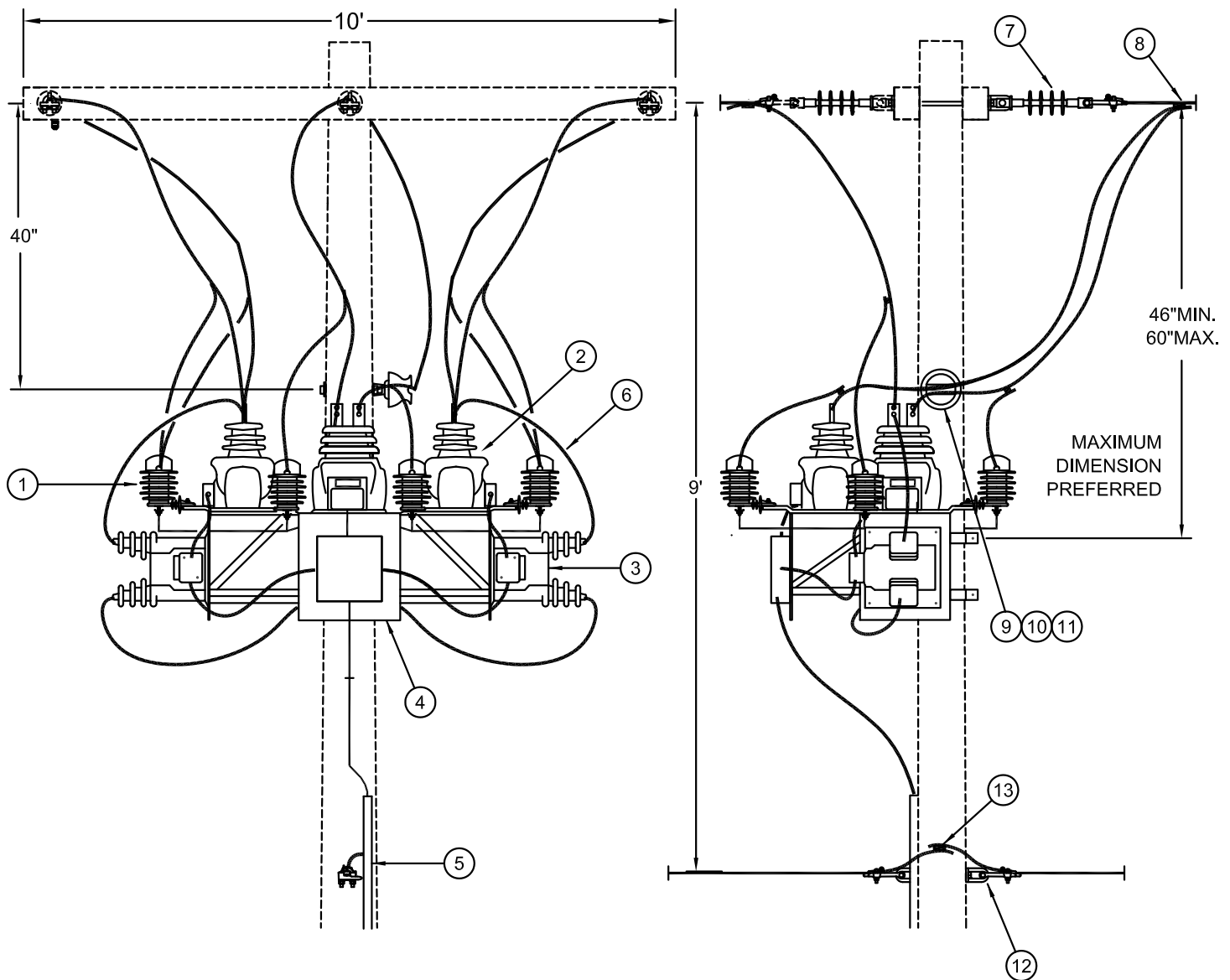


DETAIL "A"
CUSTOMER TO SUPPLY
NECESSARY CONNECTORS

TAPE
WRAPPING

NOTE:

PREFERRED LOCATION OF CUT-OUTS IS ON E.P.E.C. ADJACENT POLE.



14 KV PRIMARY METERING CROSSARM
TANGENT CONSTRUCTION POLE

ORIG. DATE: 06/13/84
REV. DATE: 06/09/17

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSO 1860
PAGE 1 OF 2

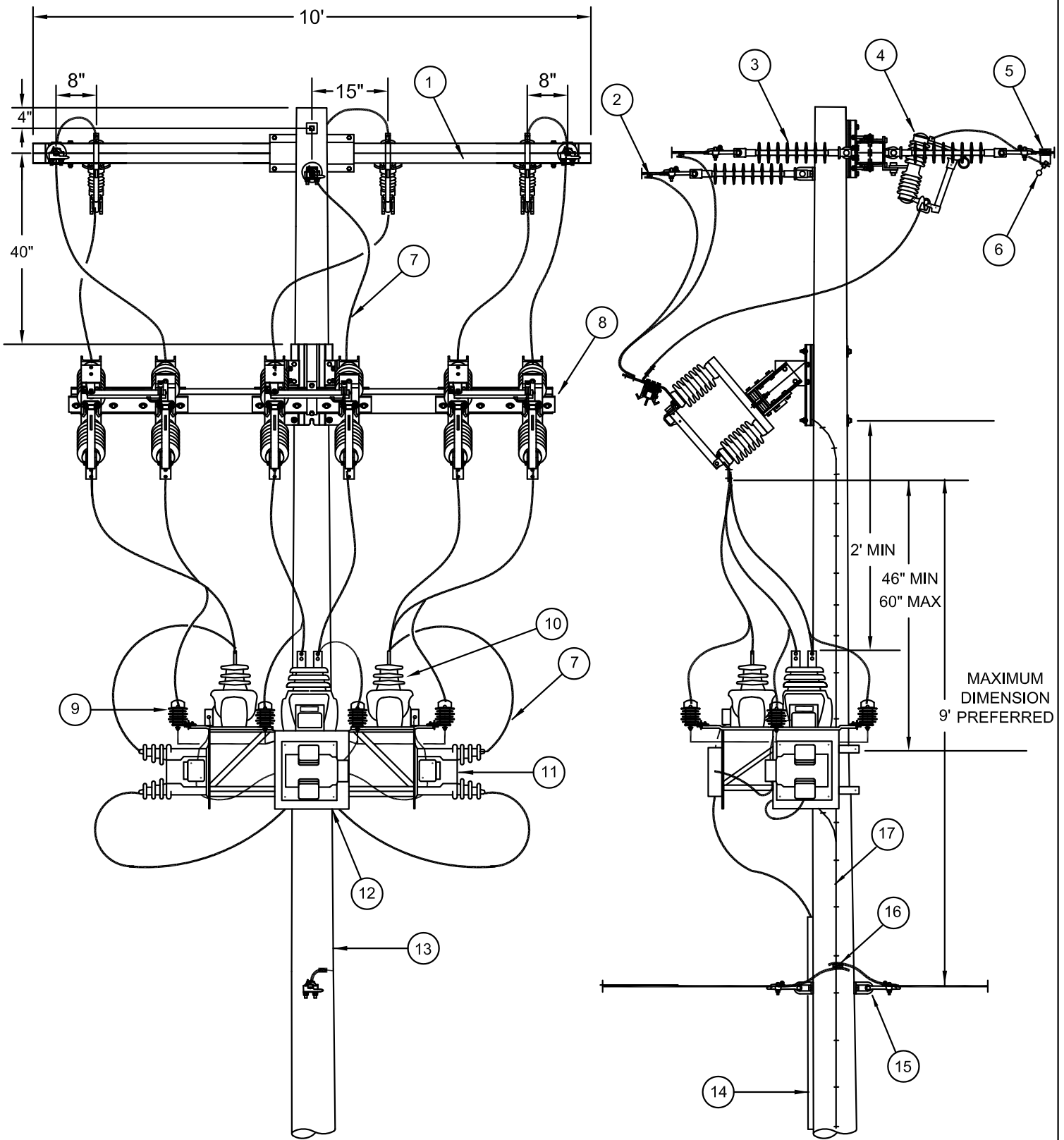
ITEM No.	DESCRIPTION	STOCK/DSO No.	Qty.	C/U Code
1	ARRESTER	01-140	6	CLAD12C
2	CURRENT TRANSFORMER	-----	3	
3	POTENTIAL TRANSFORMER	19-666	2	
4	SATELLITE MOUNTING BRACKET	19-310	1	
5	1" STEEL CONDUIT (PROVIDED BY CUSTOMER)		25'	
6	# 4 SOLID COVERED CU WIRE	12-111	AS REQ.	C4INSCU
7	POLYMER INSULATOR ASSEMBLY	DSO 1705	6	CPOLY15
8	WEDGE CONNECTOR OR COMPRESSION CONNECTOR	DSO 1758	6	
9	INSULATOR ADAPTER	07-010	1	PINSADPT
10	5/8" X 12" MACHINE BOLT	02-470	1	PMB5/812
11	15KV PIN INSULATOR	DSO 1705	1	CINS13
12	NEUTRAL ASSEMBLY "B"	DSO 1708	2	
13	NEUTRAL CONNECTOR	DSO1758	1	

NOTES:

- 1 THIS PARTICULAR C.T. AND P.T. ARRANGEMENT IS FOR A 3 PHASE 4 - WIRE 2 1/2 ELEMENT METER.
- 2 CUSTOMER MUST INSTALL A GANG-OPERATED LOAD INTERRUPTER SWITCH, PER N.E.S.C. 216, ON CUSTOMER'S POLE, WITH OVER CURRENT PROTECTION . REFER TO E.P.E.C.'S ELECTRIC REQUIREMENTS BOOK SECTION VI, SUBSECTION G, PARAGRAPH 3.
- 3 LAST SPAN TO CUSTOMER OWNED WOOD POLE TO BE PROVIDED AND INSTALLED BY E.P.E.C.
- 4 SEE DSO 321 (MAINT. SECTION) FOR DEADEND ASSEMBLY.

IF CUT-OUTS ARE LOCATED ON THIS POLE ORDER ITEMS BELOW

CUTOUT 15KV 100AMP OR CUTOUT 15KV 200AMP	01-340 OR 01-341	3	LINECO10015 OR LINECO20015
HOT LINE CLAMP 1/0 - 336 OR HOT LINE CLAMP 1/0 - 795	03-730 OR 03-795	3	CHTLN336 OR CHTLN795



45' MINIMUM POLE

4 KV - 24 KV PRIMARY METERING
FOR CUSTOMERS WITH BY-PASS

ORIG. DATE: 06/13/64
REV. DATE: 12/27/10

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSO 1865
PAGE 1 OF 2

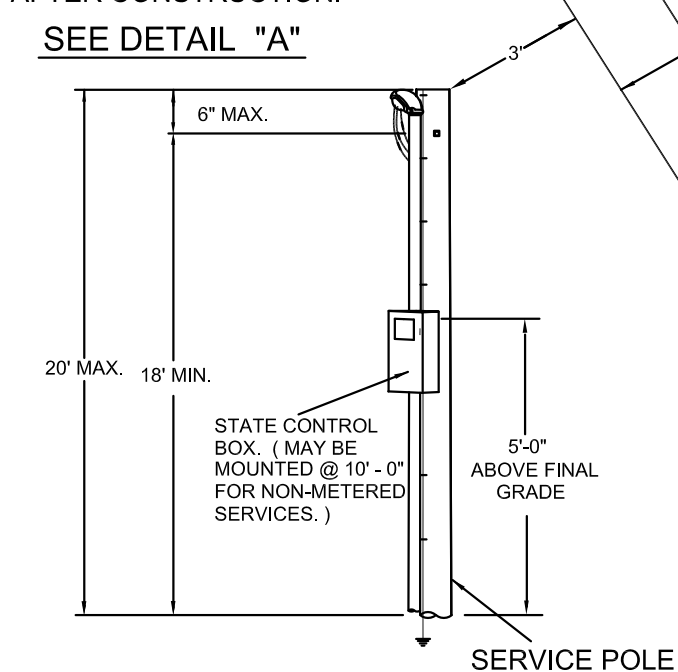
ITEM No.	DESCRIPTION	STOCK/DSO No.	Qty.	C/U Code
1	10' DEADEND CROSSARM ASSEMBLY	DSO 1725	1	
2	WEDGE CONNECTOR	DSO 1758	3	
3	POLYMER INSULATOR ASSEMBLY	DSO 1705	6	
4	CUTOUT, 100AMP 15KV OR CUTOUT, 200AMP 15KV OR CUTOUT, 100AMP 25KV	01-340 OR 01-341 OR 01-360	3	LINECO10015 OR LINECO20015 OR LINECO10025
5	WEDGE BAIL CONNECTOR 336 ACSR OR WEDGE BAIL CONNECTOR 795 AAC	03-332 OR 03-336	3	CBWS3361 OR CBWS7952
6	HOT LINE CLAMP 1/0 - 336	03-730	3	CCOCLAMP
7	# 4 SOLID COVERED CU WIRE	12-111	AS REQ.	C4INSCU
8	RECLOSER BYPASS SWITCH	01-920	1	SWITCH_BYPASS_25KV3PH
9	ARRESTER, CROSSARM MOUNT, 3KV OR ARRESTER, CROSSARM MOUNT, 10KV OR ARRESTER, CROSSARM MOUNT, 18KV	01-100 OR 01-140 OR 01-152	3	CLAD3C OR CLAD12C OR CLAD18C
* 10	CURRENT TRANSFORMER	-----	3	
* 11	POTENTIAL TRANSFORMER	19-666	3	
* 12	SATELLITE MOUNTING BRACKET	19-310	1	
13	WOOD POLE	DSO 610	1	
14	1" STEEL CONDUIT (PROVIDED BY CUSTOMER)		25'	
15	NEUTRAL ASSEMBLY "B"	DSO 1708	2	
16	NEUTRAL CONNECTOR	DSO 1758	1	
17	EQUIPMENT GROUNDING ASSEMBLY	DSO 1405	1	

NOTES:

- 1 THIS PARTICULAR C.T. AND P.T. ARRANGEMENT IS FOR A 3 PHASE 4 - WIRE 2 1/2 ELEMENT METER. *THIS EQUIPMENT IS PROVIDED BY METER TESTING DEPARTMENT.
- 2 CUSTOMER MUST INSTALL A GANG-OPERATED LOAD INTERRUPTER SWITCH, PER N.E.S.C. 216, ON CUSTOMER'S POLE, WITH OVER CURRENT PROTECTION . REFER TO E.P.E.C.'S ELECTRIC REQUIREMENTS BOOK SECTION VI, SUBSECTION G, PARAGRAPH 3.
- 3 LAST SPAN TO CUSTOMER OWNED WOOD POLE TO BE PROVIDED AND INSTALLED BY E.P.E.C.
- 4 SEE DSO 323 FOR DEADEND ASSEMBLY.
- 5 HOTLINE CLAMP MUST BE CONNECTED TO WEDGE STIRRUP FOR 336 ACSR OR LARGER CONDUCTOR.

SERVICE POLE SHALL MAINTAIN A MINIMUM OF 10 FT. CLEARANCE TO PRIMARY CONDUCTORS AND 3 FT. TO EPE'S LOWEST CONDUCTOR. THESE CLEARANCES ARE TO BE MAINTAINED DURING AND AFTER CONSTRUCTION.

SEE DETAIL "A"



NOTE:
THIS STANDARD PROVIDES THE REQUIRED CLEARANCES FOR GOVERNMENTAL ILLUMINATION AND TRAFFIC MANAGEMENT SERVICES. IF THESE CLEARANCES CANNOT BE MET, MODIFICATIONS TO THE STANDARD MUST BE ACQUIRED FROM E.P.E.C. STANDARDS ENGINEERING PRIOR TO CONSTRUCTION.

IF SUITABLE OVERHEAD ALTERNATIVES CANNOT BE ARRIVED AT, REFER TO DSU 427 FOR UNDERGROUND SERVICE REQUIREMENTS.

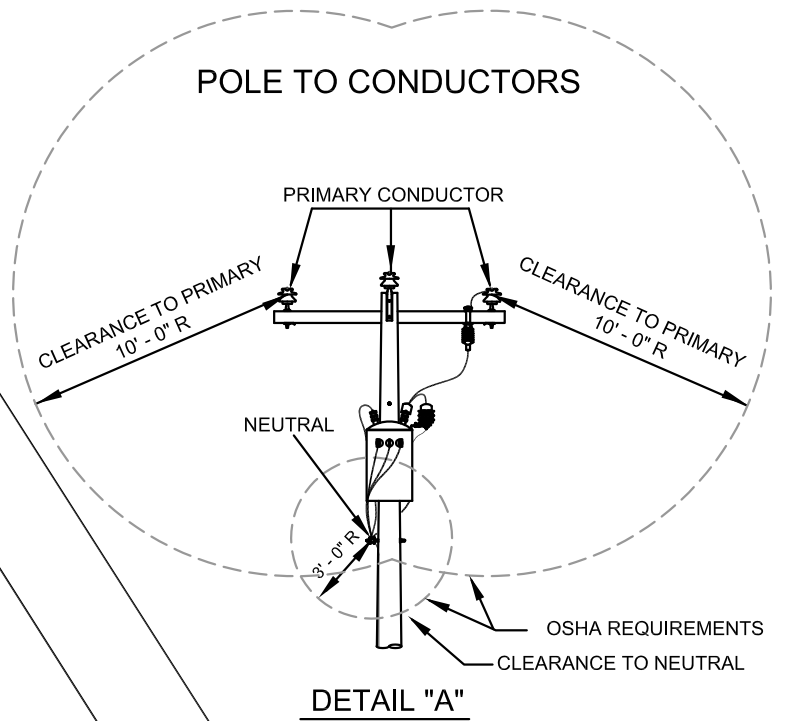
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GOVERNMENTAL AND COMMERCIAL ILLUMINATION AND TRAFFIC MANAGEMENT SERVICE POLE AND SUPPORTING STRUCTURES INSTALLATION

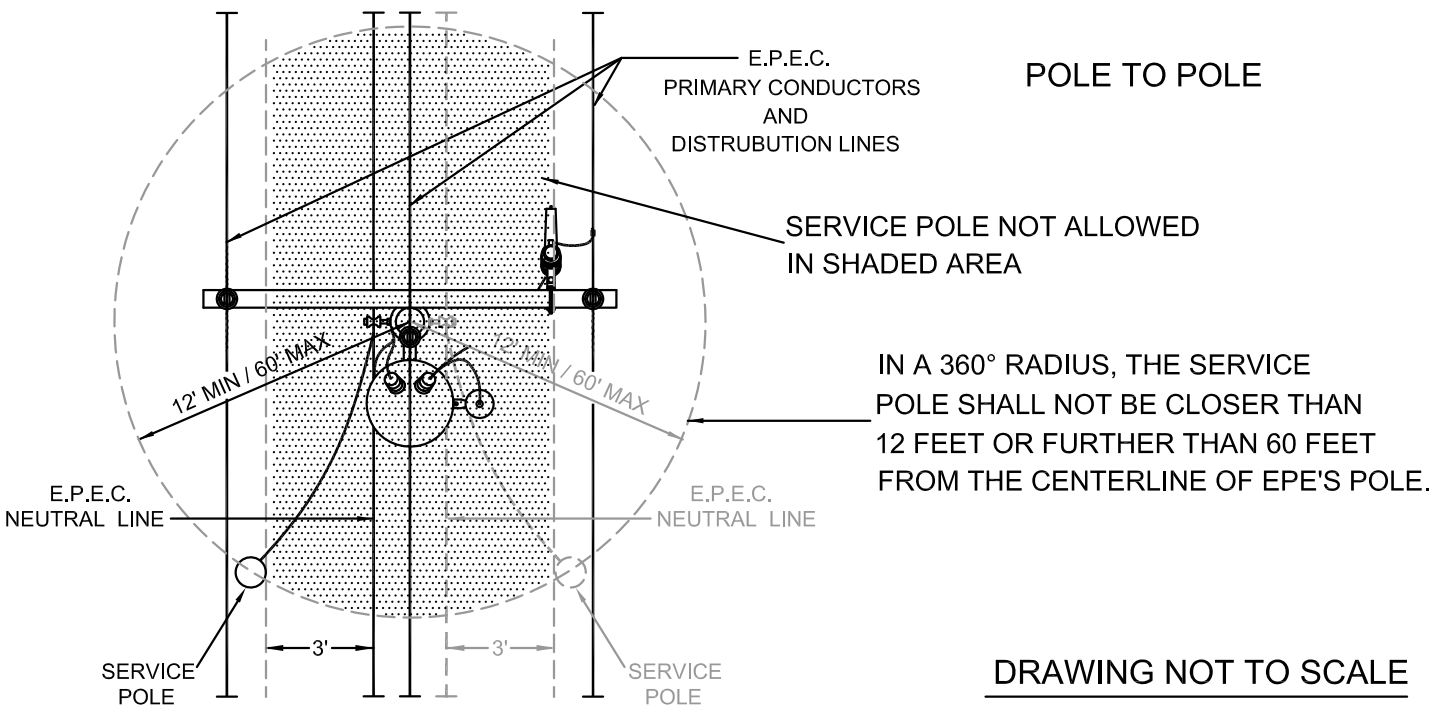
ORIG. DATE: 12/06/01
REV. DATE: 06/29/17

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

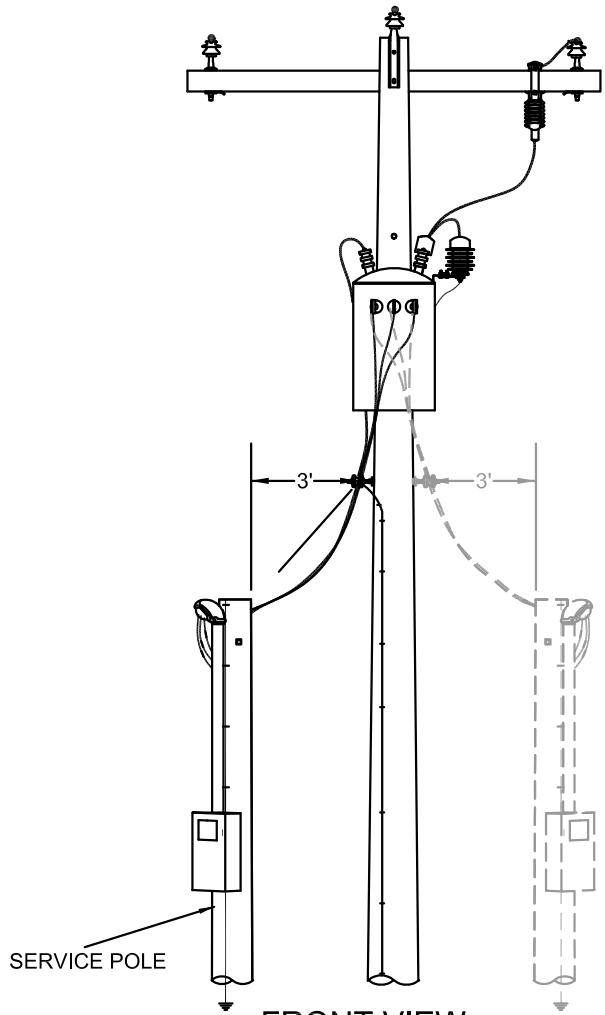
DSO 1870
PAGE 1 OF 2



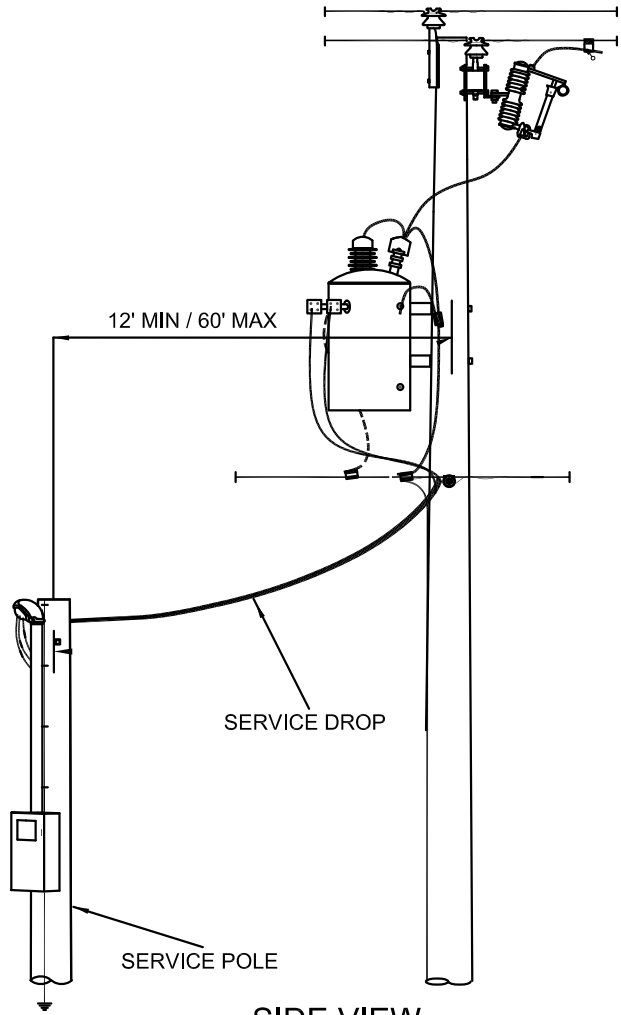
DETAIL "A"



TOP VIEW



FRONT VIEW



SIDE VIEW

**GOVERNMENTAL AND COMMERCIAL ILLUMINATION AND TRAFFIC MANAGEMENT
SERVICE POLE AND SUPPORTING STRUCTURES
INSTALLATION**

DSU INDEX BLUE BOOK

GROUP 400

DSU 405	SERVICE ENCLOSURE AND SELECTION CHARTS
DSU 410	SECONDARY RISER 3', 4" AND 5"
DSU 420	UNDERGROUND RESIDENTIAL SERVICE CUSTOMER INSTALLED
DSU 425	TEMPORARY SERVICE FROM UNDERGROUND DISTRIBUTION
DSU 440	TYPICAL SELF-CONTAINED METER FOR COMMERCIAL INSTALLATION
DSU 445	COMMERCIAL SECONDARY BUS ENCLOSURE

GROUP 500

DSU 510	MAXIMUM NUMBER OF CUSTOMER SECONDARY CONDUCTOR PER PHASE IN PADMOUNT TRANSFORMERS
DSU 515	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 3Ø PADMOUNT TRANSFORMERS 500-100 KVA, 1500 -2500 KVA
DSU 520	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 3Ø PADMOUNT TRANSFORMERS 300 KVA AND BELOW
DSU 525	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 1Ø PADMOUNT TRANSFORMERS 25-250 KVA
DSU 528	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 1Ø PADMOUNT TRANSFORMERS 25-250 KVA ASSEMBLY "E"
DSU 530	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR COMMERCIAL SECONDARY SERVICE ENCLOSURE
DSU 545	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 1Ø PVI SWITCH
DSU 550	CLEARANCES AND RIGHT-OF-WAY REQUIREMENTS FOR 3Ø PVI SWITCH

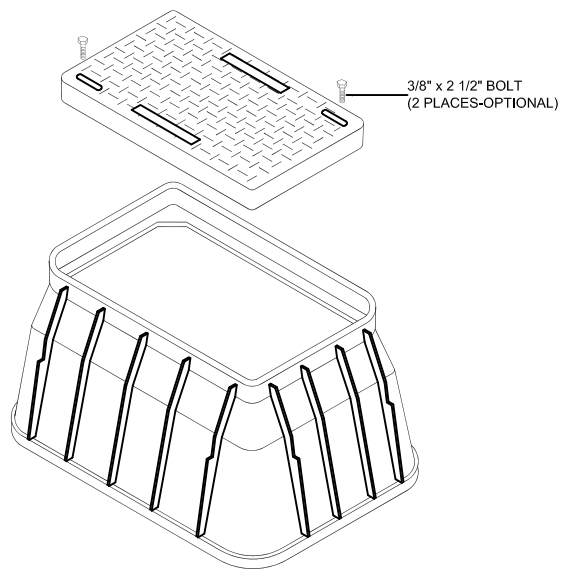
GROUP 1000

DSU 1015	METER FRAME FOR METERING
DSU 1020	REQUIREMENTS FOR PREMANUFACTURED METERING PEDESTALS FOR MOBILE HOMES
DSU 1025	METER AND SWITCH FRAME MOUNTING FOR MOBILE HOMES
DSU 1040	TYPICAL MULTIPLE COMMERCIAL METERING INSTALLATION
DSU 1045	TYPICAL MULTIPLE UNDERGROUND 3Ø AND 1Ø METERING INSTLLATION

GROUP 1200

DSU 1207	PULLBOXES
DSU 1210	PULLBOX ASSEMBLES
DSU 1235	EQUIPMENT DETAILS

GROUP 400



**SERVICE ENCLOSURE
13" X 24"**

MAXIMUM No. OF SECONDARY AND/OR SERVICE RUNS	MAXIMUM No. OF CONDUCTORS	CABLE RANGE	STOCK/DSU No.	Qty.	C/U Code
4	12 (SEE NOTE 1)	1/0 THRU 4/0 (SEE NOTE 3)	17 - 475 OR 17 - 474 (SEE NOTE 2)	1	DSE13X24 OR DHD13X24

**SERVICE ENCLOSURE
17" X 30"**

MAXIMUM No. OF SECONDARY AND/OR SERVICE RUNS	MAXIMUM No. OF CONDUCTORS	CABLE RANGE	STOCK/DSU No.	Qty.	C/U Code
8	24 (SEE NOTE 1)	1/0 THRU 350 MCM	17 - 471 OR 17 - 470 (SEE NOTE 2)	1	DSE17X30 OR DHD17X30

NOTES:

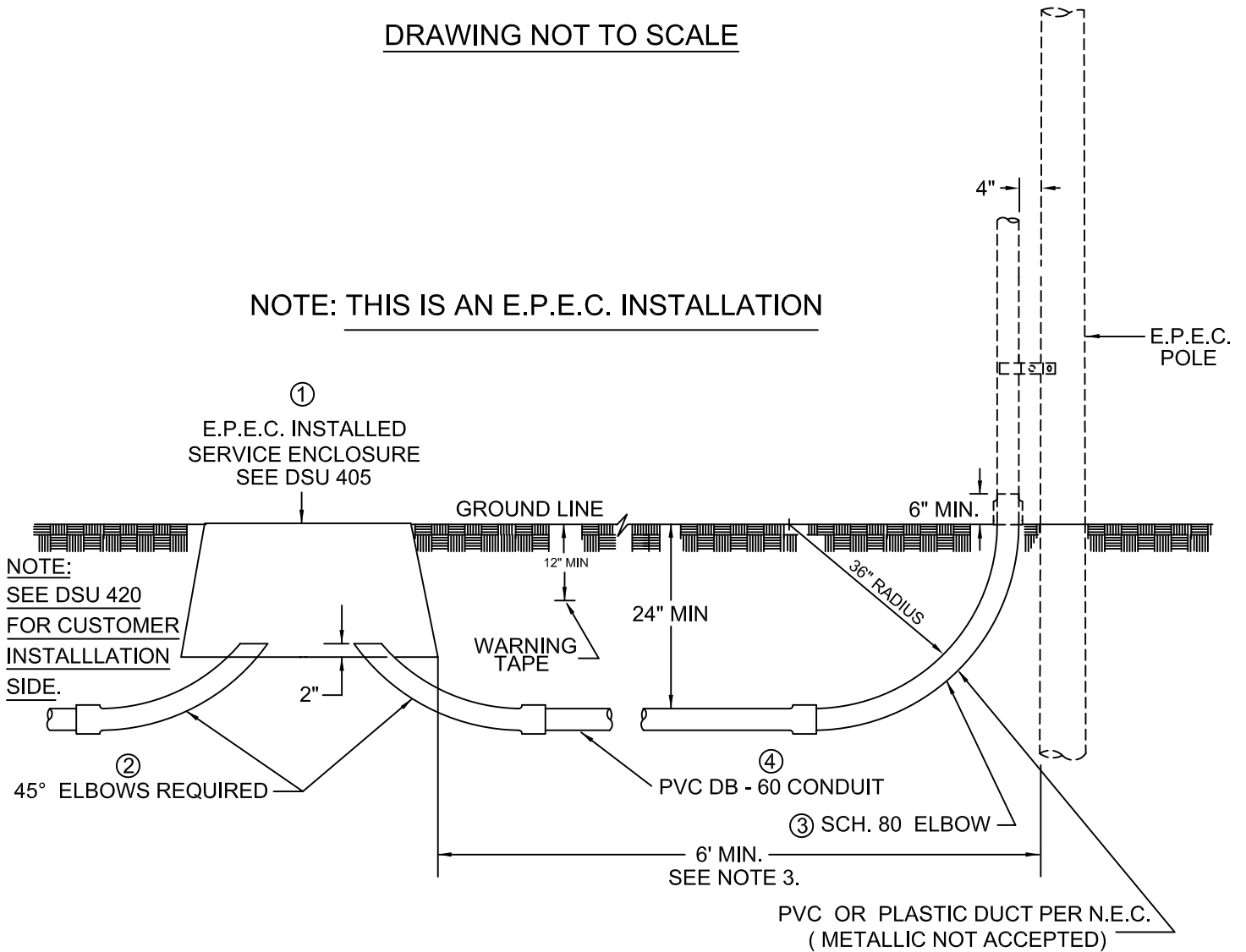
- 1 INCLUDING UNDERGROUND STREETLIGHT CONDUCTORS WHEN REQUIRED.
- 2 TO BE INSTALLED IN RESIDENTIAL AREAS WHERE A DRIVEWAY IS BUILT AT THE LOCATION OF THE ENCLOSURE. TO BE USED FOR NEW CONSTRUCTION WHEN THE NEED ARISES.
- 3 NOT MORE THEN ONE 4/0 CIRCUIT ALLOWED AT DESIGN, UNLESS ONLY ONE CUSTOMER IS INTENDED TO BE SERVED.

**SERVICE ENCLOSURE
AND SELECTION CHARTS**

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NOTE: THIS IS AN E.P.E.C. INSTALLATION



NOTE:
SEE DSU 420
FOR CUSTOMER
INSTALLATION
SIDE.

PVC OR PLASTIC DUCT PER N.E.C.
(METALLIC NOT ACCEPTED)

SERVICE TYPE	CABLE SIZE	DUCT SIZE
SECONDARY SINGLE PHASE	1 - 1/0 OR 4/0 TRIPLEX (SEE NOTE 6)	3"
	3 - 350 MCM CONDUCTORS	4"
	3 - 500 MCM CONDUCTORS	
SECONDARY THREE PHASE	2 - 350 MCM CONDUCTORS PER PHASE AND NEUTRAL	5"
SECONDARY THREE PHASE	3 - 4/0 TRIPLEX CONDUCTORS 1 CONDUCTOR PER PHASE AND NEUTRAL	4"

**SECONDARY RISER
3", 4" AND 5" SINGLE DUCT**

ITEM No.	DESCRIPTION	STOCK/DSU No.	Qty.	C/U Code
1	SERVICE ENCLOSURE	DSU 405	1	
2	45° DB-60 PVC DUCT SWEEP WITH BELL END	17-32__	1	DEL4536_
3	90° SCH. 80 PVC DUCT SWEEP WITHOUT BELL	15-32__	1	DEL80_
4	DB- 60 PVC DUCT	17-30__	1	DPVC_

NOTES:

- 1 THIS IS AN E.P.E.C. INSTALLATION. REFER TO E.P.E.C. LINE EXTENSION POLICY FOR MATERIAL AND CONSTRUCTION RESPONSIBILITIES.
- 2 SIZE OF SCHEDULE 80 CONDUIT (UV RESISTANT) TO BE SPECIFIED FOR EACH JOB.
- 3 ANY EXCEPTION OR MODIFICATIONS MUST BE APPROVED BY AN E.P.E.C. REPRESENTATIVE.
- 4 ENCLOSURE AND DUCT RUNS WILL BE INSTALLED PARALLEL TO E.P.E.C. OVERHEAD FACILITIES TO FACILITATE THE USE OF DEDICATED EASEMENTS WHEN POSSIBLE.
- 5 WHEN A SECONDARY RISER USING 2-500 MCM CABLES PLUS NEUTRAL IS NECESSARY, A PADMOUNT INSTALLATION IS PREFERRED. IF A PADMOUNT INSTALLATION IS NOT POSSIBLE, A 60" PULLBOX OR TRAFFIC BEARING BOX SHOULD BE INSTALLED AND A 6" OR 5" DIA. DUCT SIZE WILL BE REQUIRED. BOX TYPE AND DUCT SIZE WILL BE DEPENDENT ON THE CONDITIONS OF THE JOB.
- 6 FOR 4/0 SECONDARY RUNS EXCEEDING 200 FEET, 4" DUCT WILL BE USED (SEE DSU 1645).

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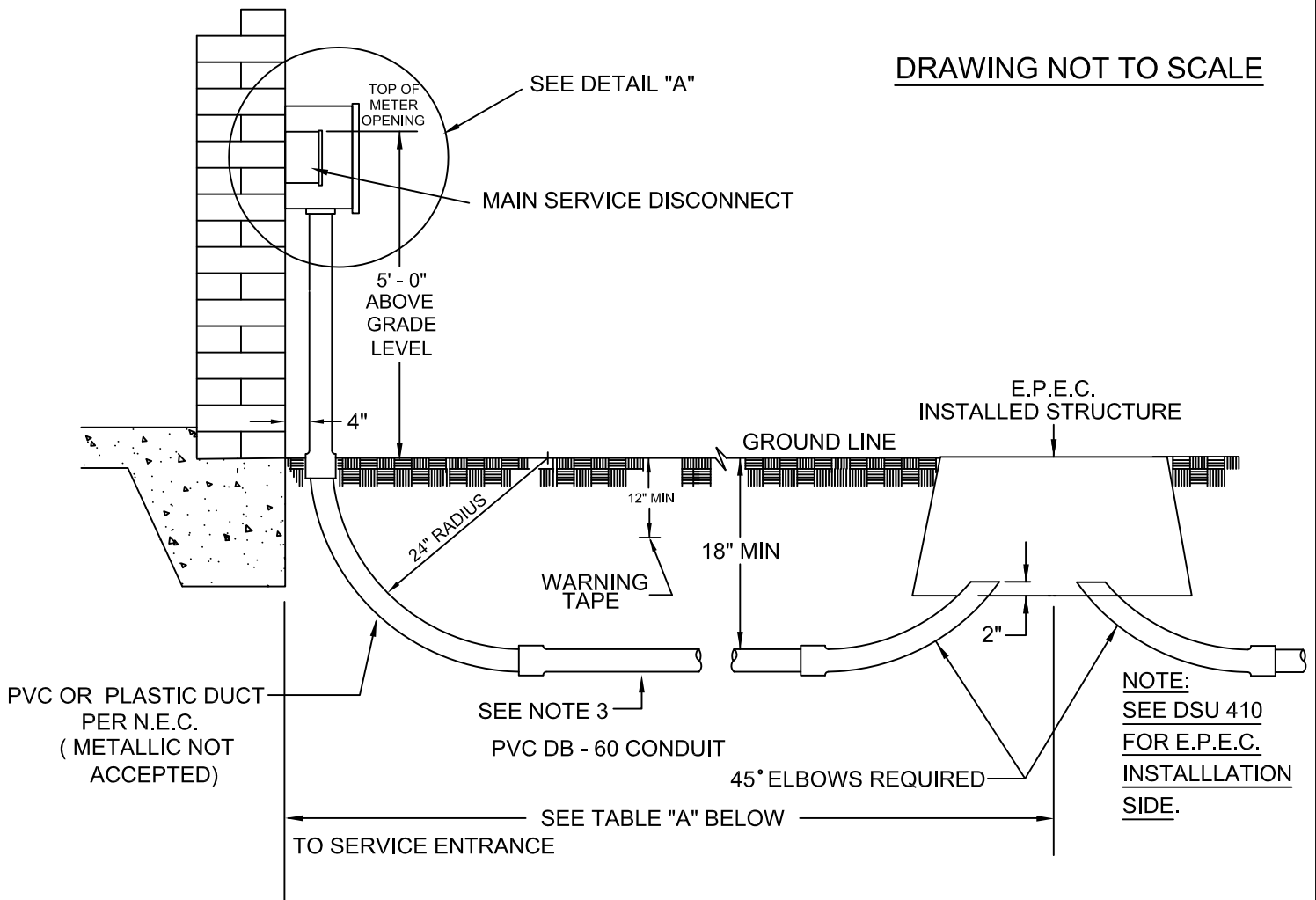
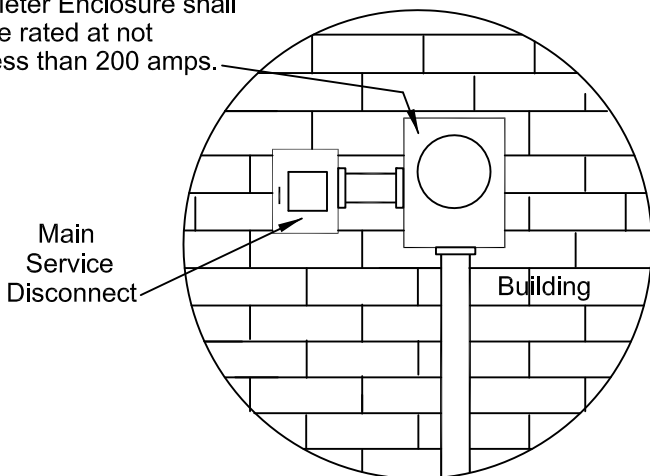


TABLE A

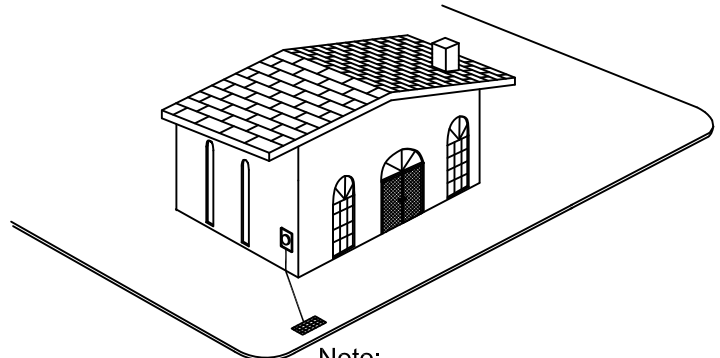
MAIN SERVICE DISCONNECT SIZE	CABLE	G & I #	MIN. CONDUIT	MAX. DISTANCE	C/U
200 AMPS SERVICES OR LESS	NO. 1/0, PAR, AL, 600V, BRENAU	11- 651	2.5"	150'	CABLE_1/0_SVC_AL_TRIPLEX_1000
GREATER THAN 200 AMPS	NO. 4/0 PAR, AL, 600V, SWEETBRIAR	11- 645	3"	100'	E4/0 TRIP
	350 MCM.AL,600V. WESLEYAN	11- 653	3"	50'	E350TRIP
	500 MCM, AL,600V, EMORY	11- 567	3"	30'	E500QUAD

Note:

Meter Enclosure shall be rated at not less than 200 amps.



DETAIL "A"



Note:

The service run shall be a straight line from the service connection point to the meter. The service run can be installed under concreted areas.

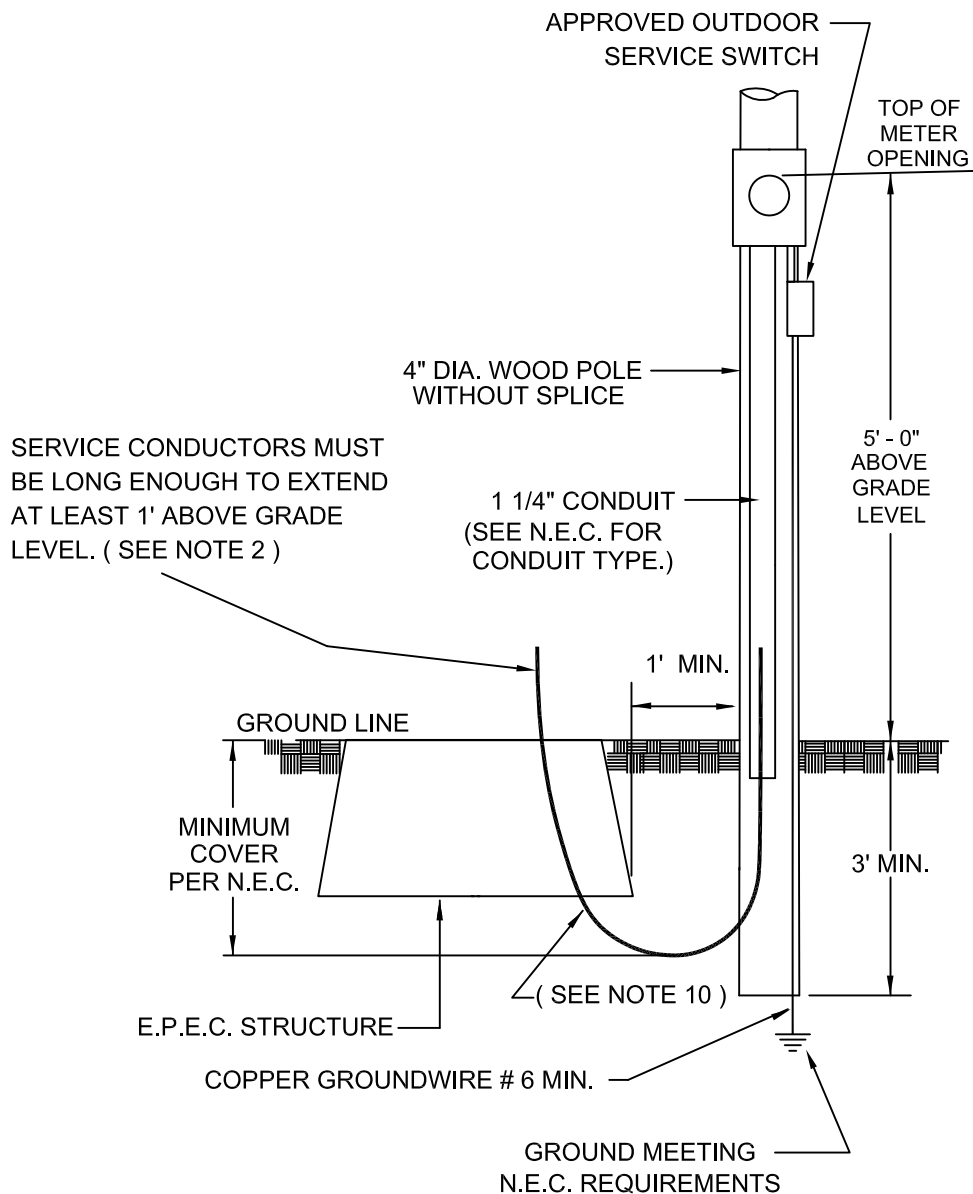
**UNDERGROUND RESIDENTIAL SERVICE
CUSTOMER INSTALLED**

SPECIFICATIONS FOR UNDERGROUND RESIDENTIAL SERVICE.

UNDERGROUND SERVICE FROM EITHER OVERHEAD DISTRIBUTION OR UNDERGROUND DISTRIBUTION SHALL MEET THE FOLLOWING REQUIREMENTS.

NOTES:

- 1 **METER LOCATION:** THE METER SHALL BE INSTALLED ON THE SIDE OF THE HOUSE NEAREST TO EL PASO ELECTRIC COMPANY SERVICE CONNECTION POINT. THE METER ENCLOSURE SHALL BE RATED AT NOT LESS THAN 200 AMPS. THE SERVICE RUN SHALL BE A STRAIGHT LINE FROM THE SERVICE CONNECTION POINT TO THE METER.
- 2 **UNDERGROUND RISER TO METER:** THE RISER FROM THE DUCT TO THE METER SHALL BE OF RIGID CONDUIT, IMC, EMT OR SCHEDULE 80 MEETING ALL APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
- 3 **SERVICE DUCT:** SERVICE CONDUCTORS WILL BE INSTALLED ONLY IN DUCT, WITH NO DIRECT - BURIAL CABLES. ALL DUCT INSTALLED SHALL MEET APPLICABLE CODE REQUIREMENTS. MINIMUM INSIDE DIAMETER OF THE DUCT SHALL BE 2.5 " FOR 200 AMP SERVICES OR LESS AND 3" FOR SERVICES GREATER THAN 200 AMPS. SEE TABLE "A". BENDS ON EACH END OF A DUCT RUN SHALL NOT EXCEED 90°. NO BENDS ALLOWED BETWEEN ELBOWS.
- 4 WHEN THE ELECTRICIAN IS READY FOR THE COMPANY TO RUN SERVICE WIRE AND INSTALL THE METER, HE SHALL RUN A MINIMUM 200LB TEST PULL STRING IN THE DUCT AND LEAVE IT FOR THE COMPANY. DO NOT STICK A FISH TAPE INTO THE TRANSFORMER HOUSING.
- 5 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSALLED ON THE EXERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 6 **DEPTH:** DISTANCE FROM FINAL GRADE TO THE TOP OF THE DUCT IS 18 INCHES (MIN). THE FIRST 12 INCHES OF BACK - FILL ABOVE THE DUCT SHALL NOT CONTAIN ROCKS OR CLODS GREATER THAN 3 INCHES IN DIAMETER.
- 7 **ELBOWS:** ALL ELBOWS ARE TO HAVE A MINIMUM RADIUS OF 24 INCHES.
- 8 WHERE THE SERVICE CONNECTION IS FROM AN UNDERGROUND SYSTEM, THE SERVICE DUCT MUST BE TERMINATED 2 INCHES ABOVE THE BOTTOM OF THE SERVICE CONNECTION BOX.
- 9 WHERE THE SERVICE CONNECTION IS FROM AN OVERHEAD SYSTEM, A POLE RISER MUST BE INSTALLED IN ACCORDANCE WITH DSU 410.
- 10 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS, NATIONAL ELECTRICAL CODE AND NATIONAL ELECTRICAL SAFETY CODE.
- 11 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 12 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 13 CONTACT E.P.E.C. SERVICE DEPARTMENT FOR EXISTING SERVICES.
- 14 FOR COMMERCIAL SERVICES, DUCT AND SERVICE WIRE MUST BE PROVIDED, INSTALLED AND MAINTAINED BY CUSTOMER.
- 15 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.



NOTE:

THIS SERVICE INSTALLATION IS TO BE USED ONLY DURING THE CONSTRUCTION OF A HOUSE OR BUILDING.

CUSTOMER SHALL NOT ALLOW POLE TO BE MOVED OR TAMPERED WITH WHILE ATTACHED TO E.P.E.C. SYSTEM.

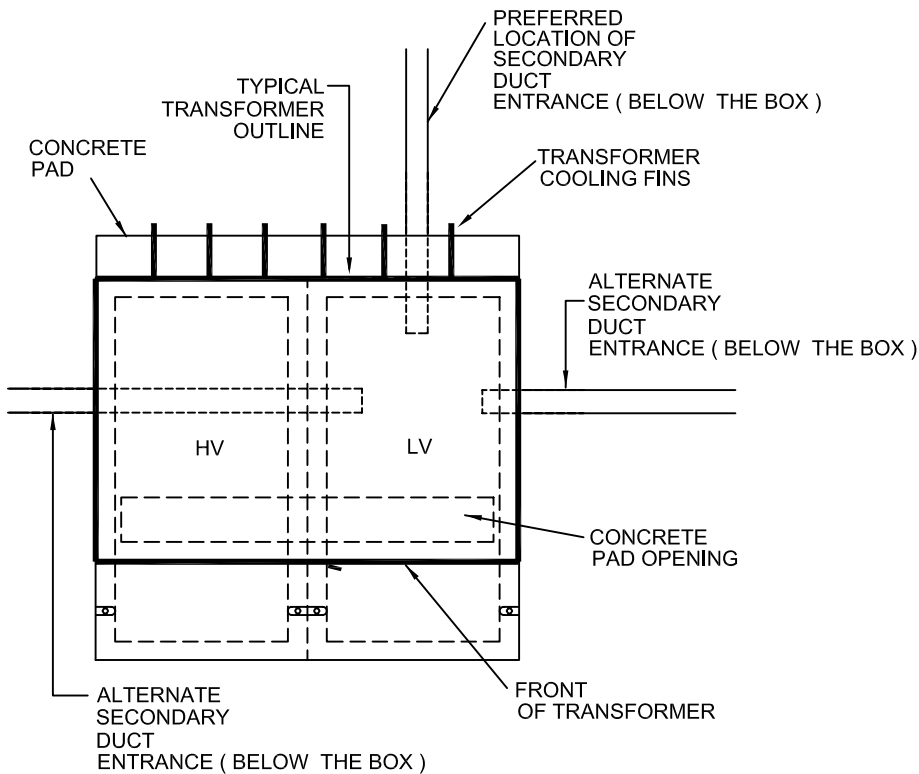
CUSTOMER SHALL NOT INSTALL POLE IN E.P.E. TRENCH LINE.

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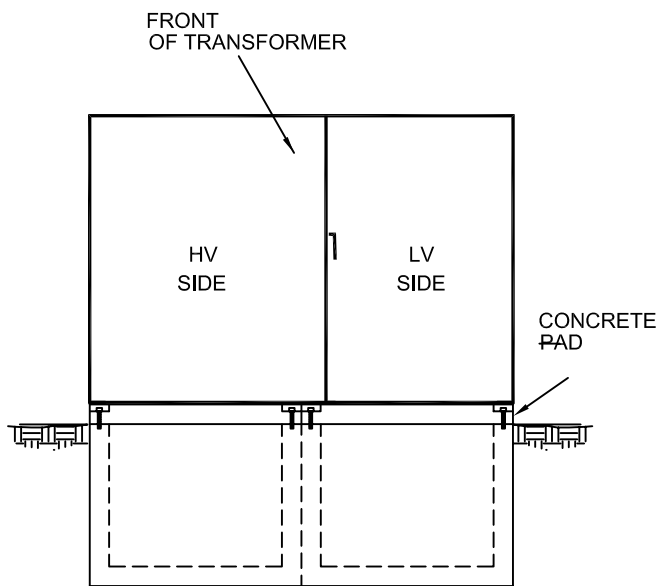
TEMPORARY SERVICE FROM UNDERGROUND DISTRIBUTION

REQUIREMENTS FOR TEMPORARY SERVICE FROM UNDERGROUND DISTRIBUTION

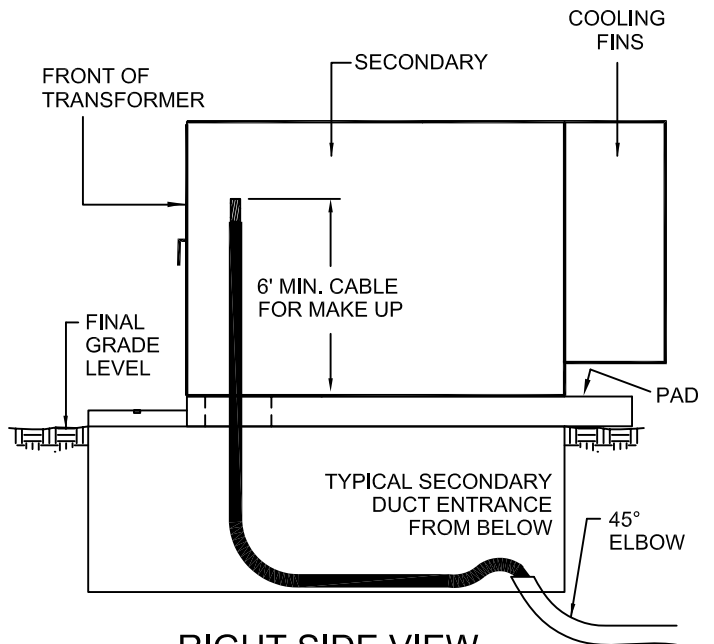
- 1 **THE CONTRACTOR WILL PROVIDE, INSTALL AND MAINTAIN:**
 - A. A WOOD POLE, 4 INCH MINIMUM DIAMETER, TO SUPPORT THE METER LOOP.
 - B. CONDUIT, METER CAN AND SERVICE SWITCH IN ACCORDANCE WITH ALL CODES AND REQUIREMENTS.
- 2 THE POINT OF SERVICE WILL BE AT AN EXISTING CONNECTION POINT (SERVICE ENCLOSURE OR TRANSFORMER). EL PASO ELECTRIC COMPANY EMPLOYEES WILL MAKE THE CONNECTION AT THE CONNECTION POINT.
- 3 TEMPORARY SERVICE SHALL BE INSTALLED AS SHOWN ON PAGE 1 OF 2 OF THIS STANDARD. IN ADDITION TO THE REQUIREMENTS OF ITEM 1, THE CONTRACTOR WILL PROVIDE AND INSTALL THE SERVICE CONDUCTORS FROM THE METER CAN TO THE CONNECTION POINT. THESE SERVICE CONDUCTORS SHALL MEET ALL CODES AND REQUIREMENTS. (# 6 COPPER MINIMUM) CONDUCTOR.
- 4 A PERMANENT SERVICE MAY BE USED FOR TEMPORARY SERVICE IF THE REQUIREMENTS OF ITEM 1, 2, 3 ABOVE AND DSU 420 ARE MET.
- 5 TEMPORARY SERVICE WILL BE DISCONTINUED WHEN PERMANENT SERVICE IS REQUIRED FROM THE CONNECTION POINT.
- 6 THE CONTRACTOR WILL BE CHARGED FULL TIME AND MATERIAL COST FOR SERVICE RESTORATION REQUIRED DUE TO OVERLOAD AND / OR DEFECTIVE WIRING OR EQUIPMENT.
- 7 ALL TEMPORARY SERVICES SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- 8 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 9 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 10 SERVICE SIDE CONDUCTORS MUST SWEEP UNDER THE NEAREST E.P.E.C. STRUCTURE.



TOP VIEW



FRONT VIEW

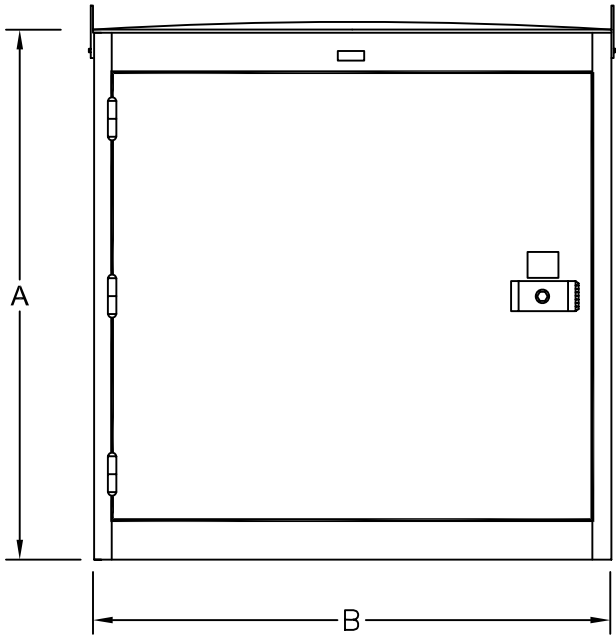


RIGHT SIDE VIEW

TYPICAL CUSTOMER SECONDARY CABLE LENGTH
PADMOUNT TRANSFORMERS

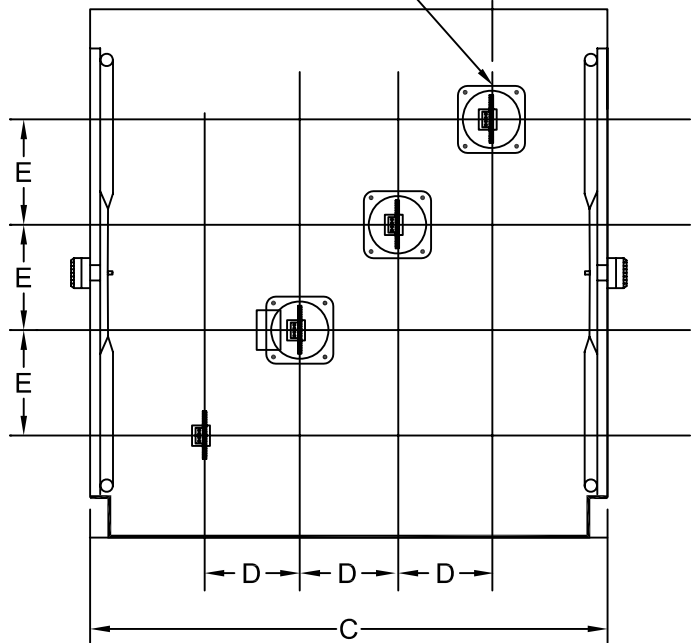
NOTES:

- 1 DUCT OR ELBOW SHOULD TERMINATE 3" - 4" ABOVE SURFACE INSIDE PULLBOX.
- 2 SECONDARY CABLE SHALL REST ON BOTTOM OF PULLBOX AS SHOWN.
- 3 DUE TO POSITIONING OF LEVELING BLOCKS, DUCT MUST NOT ENTER PULLBOX WITH 12" OF ANY CORNER.
- 4 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER.
- 5 **NO SPLICES ALLOWED ON CUSTOMER SECONDARY, ON E.P.E.C. TRANSFORMERS OR PULLBOX.**
- 6 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.



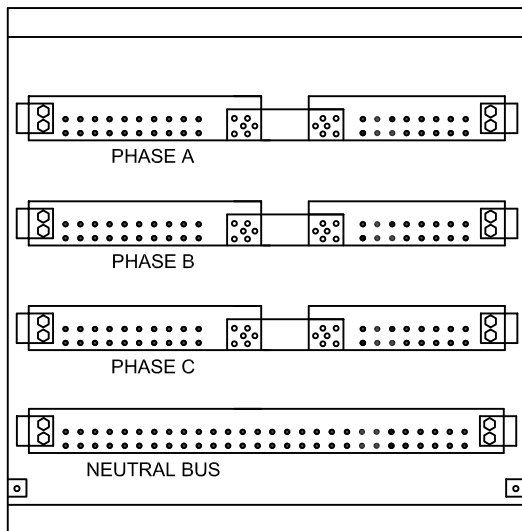
FRONT VIEW

TYPICAL C.T. INSTALLATION

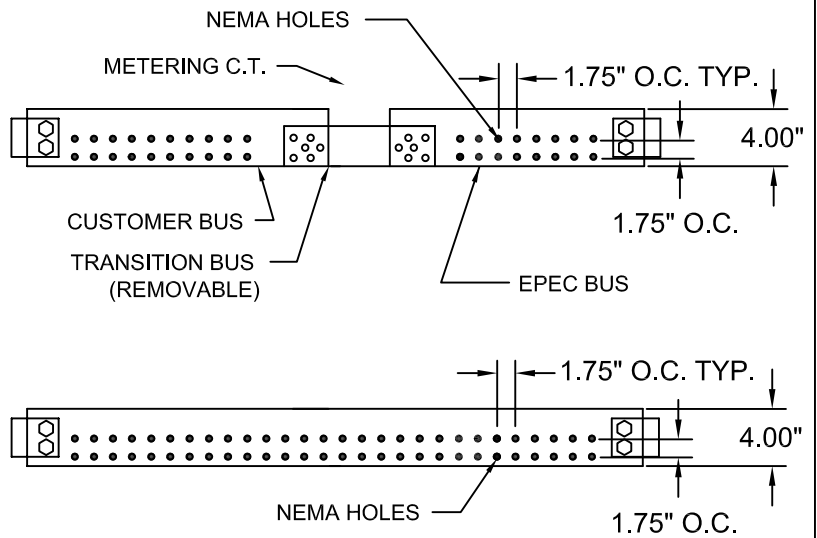


SIDE VIEW

SERVICE CAPACITY	DIMENSIONS				
KVA RATING	A	B	C	D	E
500 - 2500	54"	54" - 60"	36"	8"	11"



FRONT VIEW
(DOORS REMOVED)



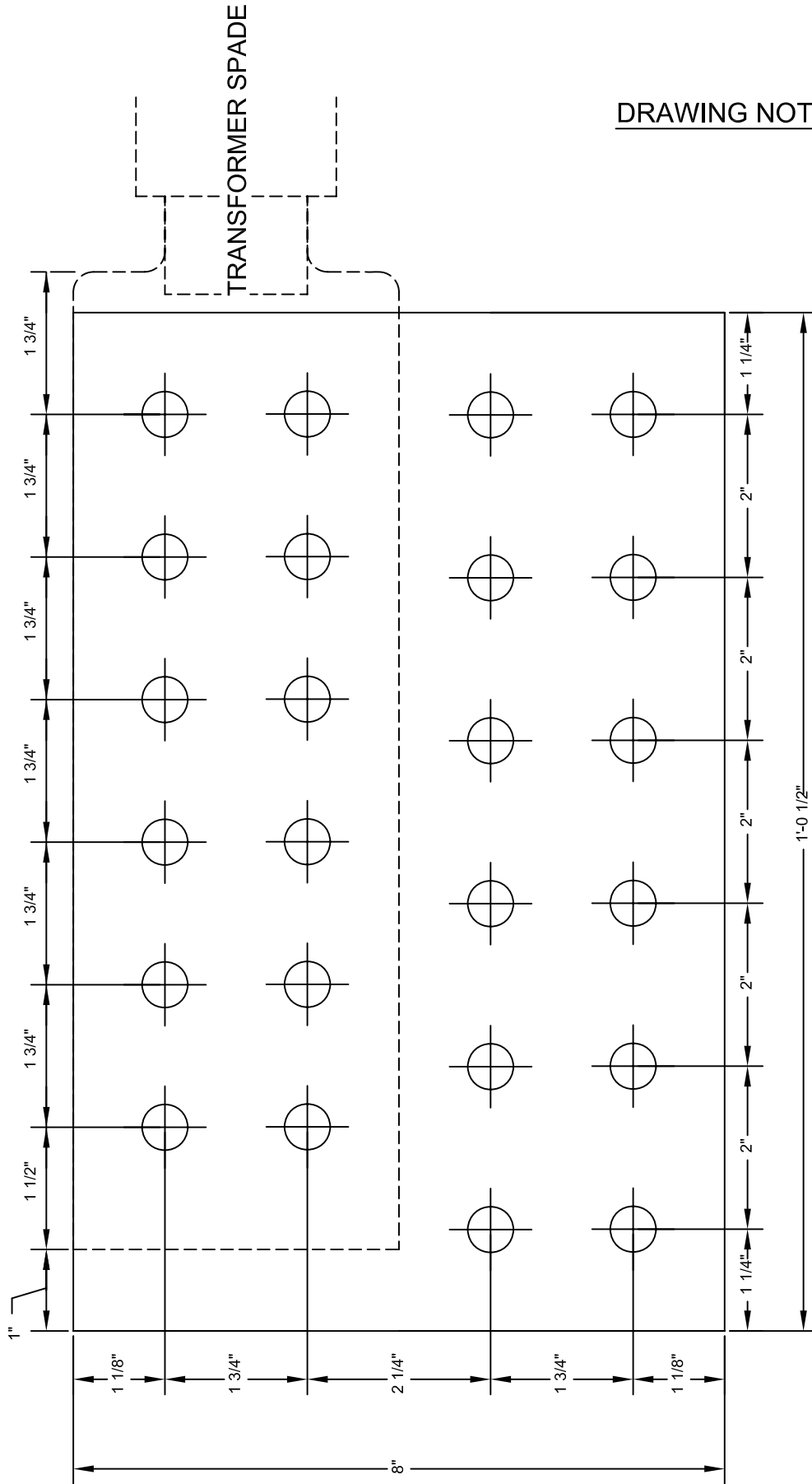
DRAWING NOT TO SCALE

COMMERCIAL SECONDARY
BUS ENCLOSURE

NOTES:

- 1 DEVIATIONS FROM THIS STANDARD MUST BE CLEARED WITH E.P.E.C. DISTRIBUTION DESIGN DEPARTMENT BEFORE EQUIPMENT IS ORDERED.
- 2 DIMENSIONS FOR C.T.'S WILL BE PROVIDED BY E.P.E.C. METER TESTING DEPARTMENT.
- 3 MINIMUM EIGHT SETS OF NEMA HOLES (2 - 9/16" Ø HOLES 1.75" APART) WILL BE PROVIDED ON ALL THREE PHASES AND NEUTRAL FOR SERVICE CONNECTION ON E.P.E.C. BUS.
- 4 CUSTOMER'S SIDE OF THE BUS WILL BE PUNCHED AS REQUIRED BY THE CUSTOMER OR APPROPRIATE CODES.
- 5 C.T.'S SHALL BE INSTALLED IN SECONDARY BUS ENCLOSURE.
- 6 PULLBOX UNDER BUS ENCLOSURE WILL BE ASSEMBLY "S" SEE DSU 1210 (PAGE 2 OF 3) ASSEMBLY AND INSTALLATION WILL BE PROVIDE BY E.P.E.C.
- 7 THE BUS ENCLOSURE SHALL HAVE PROVISIONS FOR INSTALLING PADLOCKS ON BOTH DOORS AS SPECIFIED IN ANSI C57.12.28 LATEST REVISION. E.P.E.C. WILL PROVIDE AND INSTALL PADLOCKS ON BOTH DO
- 8 SECONDARY CABLE FROM THE TRANSFORMER TO BUS ENCLOSURE WILL BE SUPPLIED AND TERMINATED BY E.P.E.C.
- 9 SECONDARY BUS ENCLOSURE SHALL COMPLY WITH THE DIMENSIONS SPECIFIED IN THIS STANDARD. SHOP DRAWINGS OF THE PROPOSED ENCLOSURE SHALL BE SUBMITTED TO THE METER TESTING DEPARTMENT AND DISTRIBUTION DESIGN DEPARTMENT FOR APPROVAL BEFORE PURCHASE.
- 10 WHEN ENCLOSURE IS INSTALLED THE USE OF A CABLE PROTECTOR IS REQUIRED. USE G & I # 17-680 FOR 350 MCM AND G & I # 17-681 FOR 500 MCM.
- 11 WHEN A BUS ENCLOSURE IS REQUIRED, ONLY SIX 5" PVC CONDUITS IN A 2 BY 3 ARRAY ARE ALLOWED BETWEEN TRANSFORMER AND COMMERCIAL SECONDARY BUS ENCLOSURE.
- 12 USE COPPER BAR WITH THE TRANSFORMER. (ECUBUS)
- 13 FOR BUS ENCLOSURE CABLE REQUIREMENTS SEE DSU 510.
- 14 SECONDARY BUS ENCLOSURE SHALL BE PROVIDED, INSTALLED, MAINTAINED AND OWNED BY THE CUSTOMER. PULLBOX ASSEMBLY CONDUIT AND CABLE FROM TRANSFORMER SHALL BE OWNED, INSTALLED AND MAINTAINED BY E.P.E.C. BUS ENCLOSURE SHALL BE SECURED WITH E.P.E.C. LOCKS.

DRAWING NOT TO SCALE



COPPER BAR
12 1/2" X 8" X 1/2" THICK
24 - 9/16" Ø HOLES

COMMERCIAL SECONDARY
BUS ENCLOSURE

ORIG. DATE: 12/15/75
REV. DATE: 03/23/06

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSU 445
PAGE 3 OF 3

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GROUP 500

SINGLE PHASE ONLY	
TRANSFORMER SIZE (KVA)	NUMBER OF CONDUCTOR PER LEG
25	6 - CONDUCTORS 350 MCM MAX. (SEE NOTE 5.)
37.5 (SEE NOTE 10.)	
50	
75 THRU 167	6 - CONDUCTORS 500 MCM MAX. (SEE NOTE 5.)

3 PHASE ONLY - 277/480 V					
TRANSFORMER SIZE KVA		TRANSFORMER VOLTAGE	MAX. No. OF 500 MCM Cu. PER PHASE	ALTERNATE MAX No. OF 750 MCM Cu. PER PHASE	No. OF CABLES FROM TRANSFORMER TO BUS ENCLOSURE
15 KV	25 KV				
75	75	277 / 480	4 - 500 MCM	4 - 750 MCM	1 - 500 MCM
	112	277 / 480	4 - 500 MCM	4 - 750 MCM	1 - 500 MCM
150	150	277 / 480	4 - 500 MCM	4 - 750 MCM	1 - 500 MCM
300	300	277 / 480	4 - 500 MCM	4 - 750 MCM	2 - 500 MCM
500	500	277 / 480	6 - 500 MCM	5 - 750 MCM	2 - 500 MCM
750	750	277 / 480	8 - 500 MCM	5 - 750 MCM	3 - 500 MCM
1000	1000	277 / 480	10 - 500 MCM	5 - 750 MCM	4 - 500 MCM
1500	1500	277 / 480	12 - 500 MCM	10 - 750 MCM	6 - 500 MCM
2500	2500	277 / 480	12 - 500 MCM	10 - 750 MCM	10 - 500 MCM

3 PHASE ONLY - 120/208 V (SEE NOTE 7.)					
TRANSFORMER SIZE KVA		TRANSFORMER VOLTAGE	MAX. No. OF 500 MCM Cu. PER PHASE	ALTERNATE MAX No. OF 750 MCM Cu. PER PHASE	No. OF CABLES FROM TRANSFORMER TO BUS ENCLOSURE
15 KV	25 KV				
75	75	120 / 208	4 - 500 MCM	4 - 750 MCM	1 - 500 MCM
	112	120 / 208	4 - 500 MCM	4 - 750 MCM	1 - 500 MCM
150	150	120 / 208	4 - 500 MCM	4 - 750 MCM	2 - 500 MCM
300	300	120 / 208	4 - 500 MCM	4 - 750 MCM	3 - 500 MCM
500	500	120 / 208	6 - 500 MCM	5 - 750 MCM	4 - 500 MCM

**MAXIMUM NUMBER OF CUSTOMER
SECONDARY CONDUCTORS PER PHASE IN
PADMOUNT TRANSFORMERS**

NOTES:

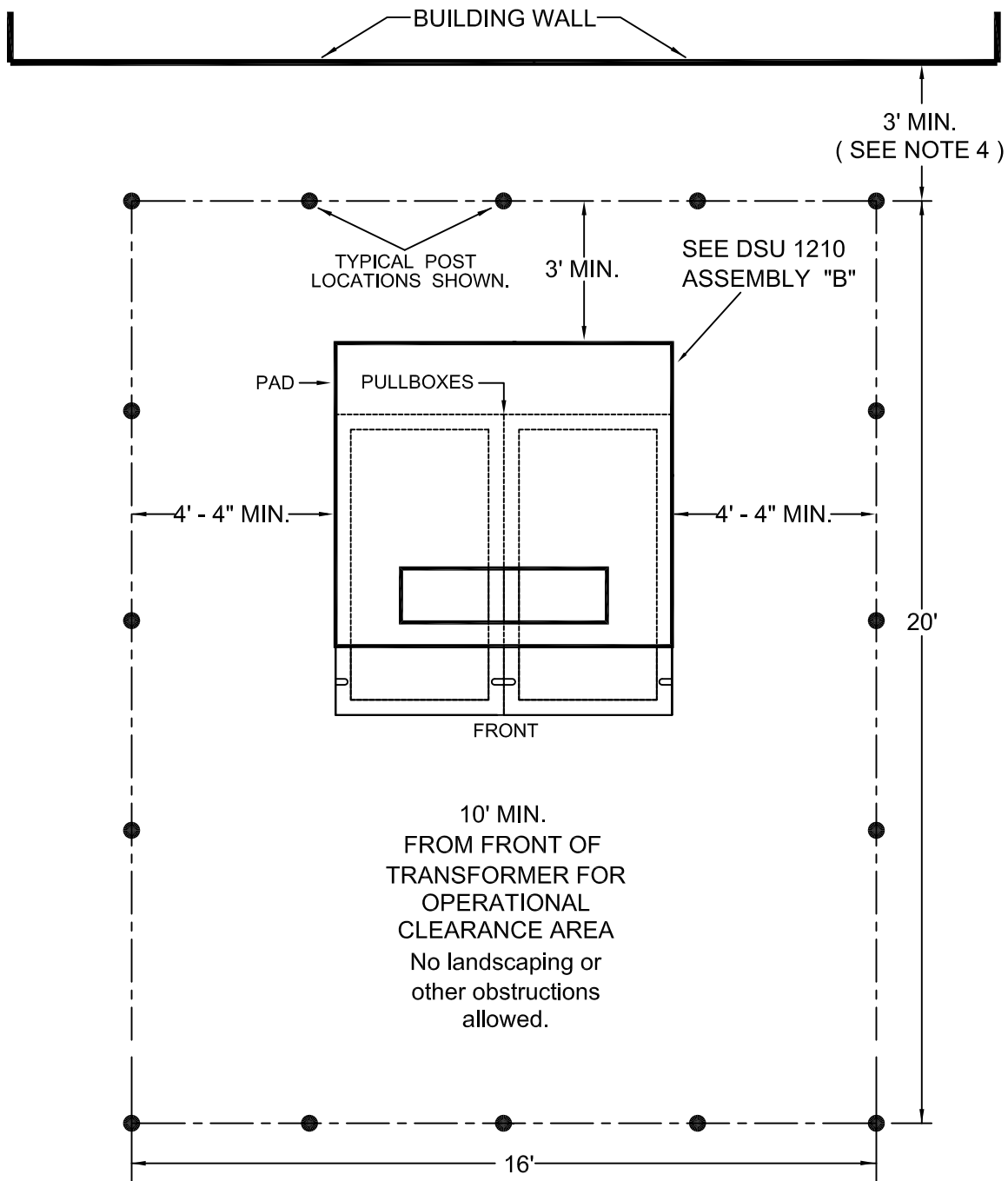
1. USING DATA SUPPLIED BY THE CUSTOMER'S ENGINEER AND/OR ELECTRICIAN AND EXISTING SIMILAR INSTALLATIONS, EPEC WILL PERFORM A DETAILED LOAD DEMAND ANALYSIS TO DETERMINE TRANSFORMER SIZE(S). SHOULD THE NUMBER OF CABLES PER PHASE EXCEED THE CAPACITY OF THE SELECTED TRANSFORMER (SEE PAGE 1), THE CUSTOMER SHALL INSTALL A SECONDARY BUS ENCLOSURE. EPEC WILL PROVIDE TRANSFORMER SIZE INFORMATION TO THE CUSTOMER TO COORDINDATE THE REQUIRED CONSTRUCTION.
2. CUSTOMER SHALL NOT SPLICE CABLE WITHIN THE TRANSFORMER CABINET, OR THE PULLBOX UNDERNEATH.
3. CUSTOMER CABLES MUST BE BUNDLED TOGETHER BY PHASE.
4. THERE MUST BE SUFFICIENT LENGTH TO ALLOW CUSTOMER CABLE TO EXTEND 6' ABOVE PAD WHILE IT RESTS IN THE BOTTOM OF PULLBOX (SEE DSU 440 .)
5. E.P.E.C. PERMITS MULTIPLE CONDUCTORS IN SINGLE PHASE TRANSFORMERS 100 KVA AND SMALLER, TO ALLOW MORE THAN ONE SERVICE TO BE RUN FROM A SINGLE TRANSFORMER. EACH SERVICE MUST BE RUN TO A SEPARATE METER LOOP INSTALLED IN ACCORDANCE WITH ALL OTHER STANDARDS. PARALLELED CONDUCTORS ARE NOT ALLOWED ON THESE SERVICES WITHOUT APPROVAL PRIOR TO CONSTRUCTION.
6. WHEN A COMMERCIAL SECONDARY BUS ENCLOSURE IS REQUIRED, SEE DSU 445 FOR DETAILS.
7. CUSTOMERS INSTALLING MAIN BREAKER RATINGS, OR THE SUM OF ALL INDIVIDUAL CUSTOMER BREAKER RATINGS, GREATER THAN 3000 AMPS WILL BE REQUIRED TO OBTAIN SERVICE AT 277/480 VOLTS. CUSTOMERS REQUESTING 120/208 VOLT SERVICE WITH MAIN BREAKER (OR THE SUM OF INDIVIDUAL CUSTOMER BREAKERS) RATED 3000 AMPS AND BELOW WILL BE EVALUATED BY EPEC TO DETERMINE EXPECTED KVA DEMAND. IF THE ESTIMATED DEMAND IS DETERMINED TO BE GREATER THAN 500 KVA, THE CUSTOMER WILL BE REQUIRED TO RECEIVE SERVICE AT 277/480 VOLTS. EPEC WILL NOTIFY THE CUSTOMER OF THE RESULTS OF THE ANALYSIS.
8. AMPACITY CALCULATIONS ARE REQUIRED WHEN 750 MCM ALUMINUM CABLE IS A PREFERENCE IN THE DESIGN.
9. ONLY 350 MCM OR 500 MCM COPPER CONDUCTORS, OR EQUIVALENT ALUMINUM CONDUCTORS, CAN BE PARALLELED.
10. EPE DOES NOT CARRY 37.5 KVA SINGLE PHASE TRANSFORMERS ANY LONGER. THIS TRANSFORMER SIZE IS INCLUDED AS A REFERENCE FOR EXISTING TRANSFORMERS.

MAXIMUM NUMBER OF CUSTOMER
SECONDARY CONDUCTORS PER PHASE IN
PADMOUNT TRANSFORMERS

ORIG. DATE: 01/27/84
REV. DATE: 03/09/18

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSU 510
PAGE 2 OF 2

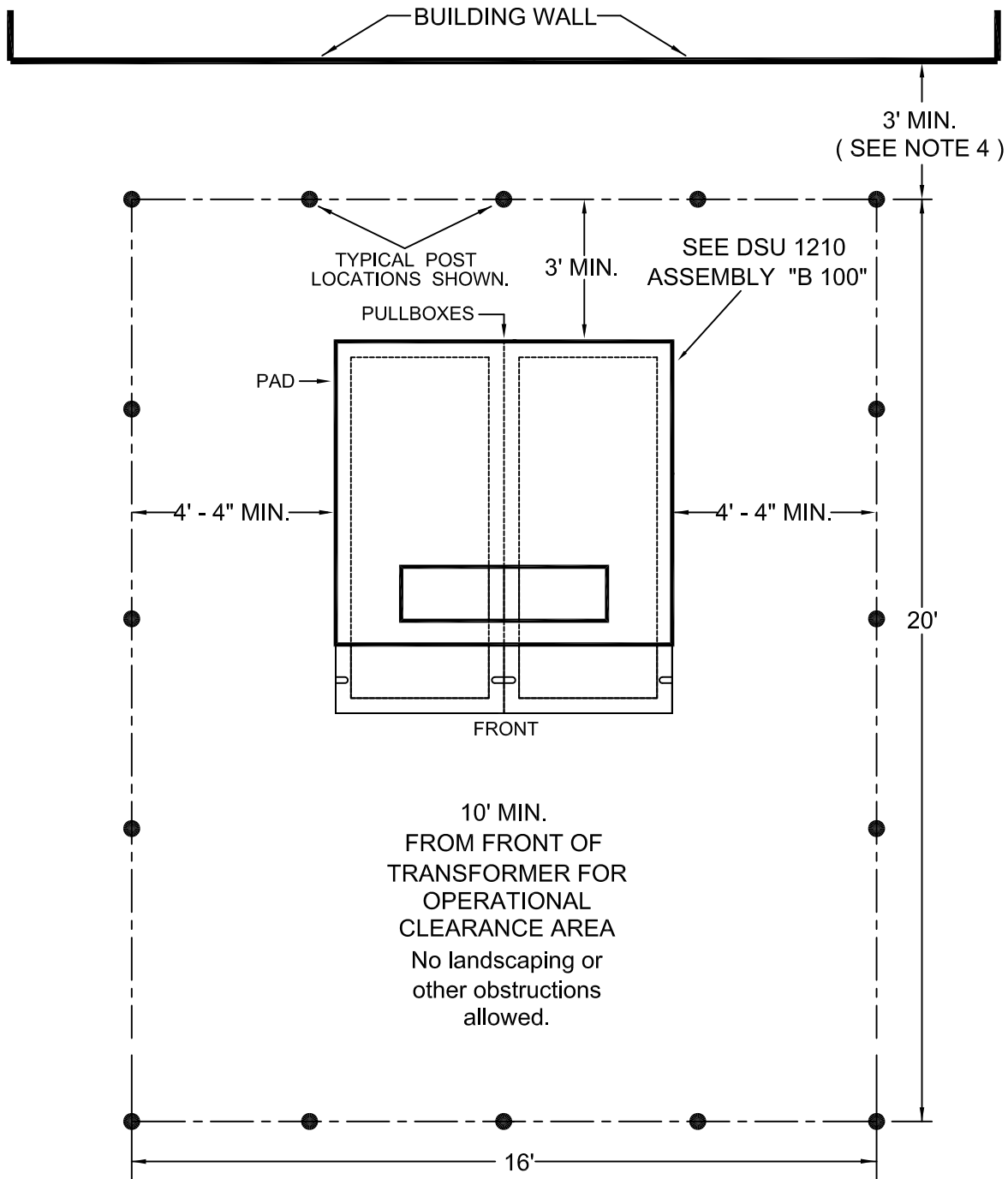


10' MIN.
 FROM FRONT OF
 TRANSFORMER FOR
 OPERATIONAL
 CLEARANCE AREA
 No landscaping or
 other obstructions
 allowed.

- CONCRETE FILLED POSTS (SEE NOTE 10)
- RIGHT - OF - WAY

DRAWING NOT TO SCALE

CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
 FOR 3Ø PADMOUNT TRANSFORMERS
 500 - 1000 KVA



● CONCRETE FILLED POSTS
(SEE NOTE 10)

□ RIGHT - OF - WAY

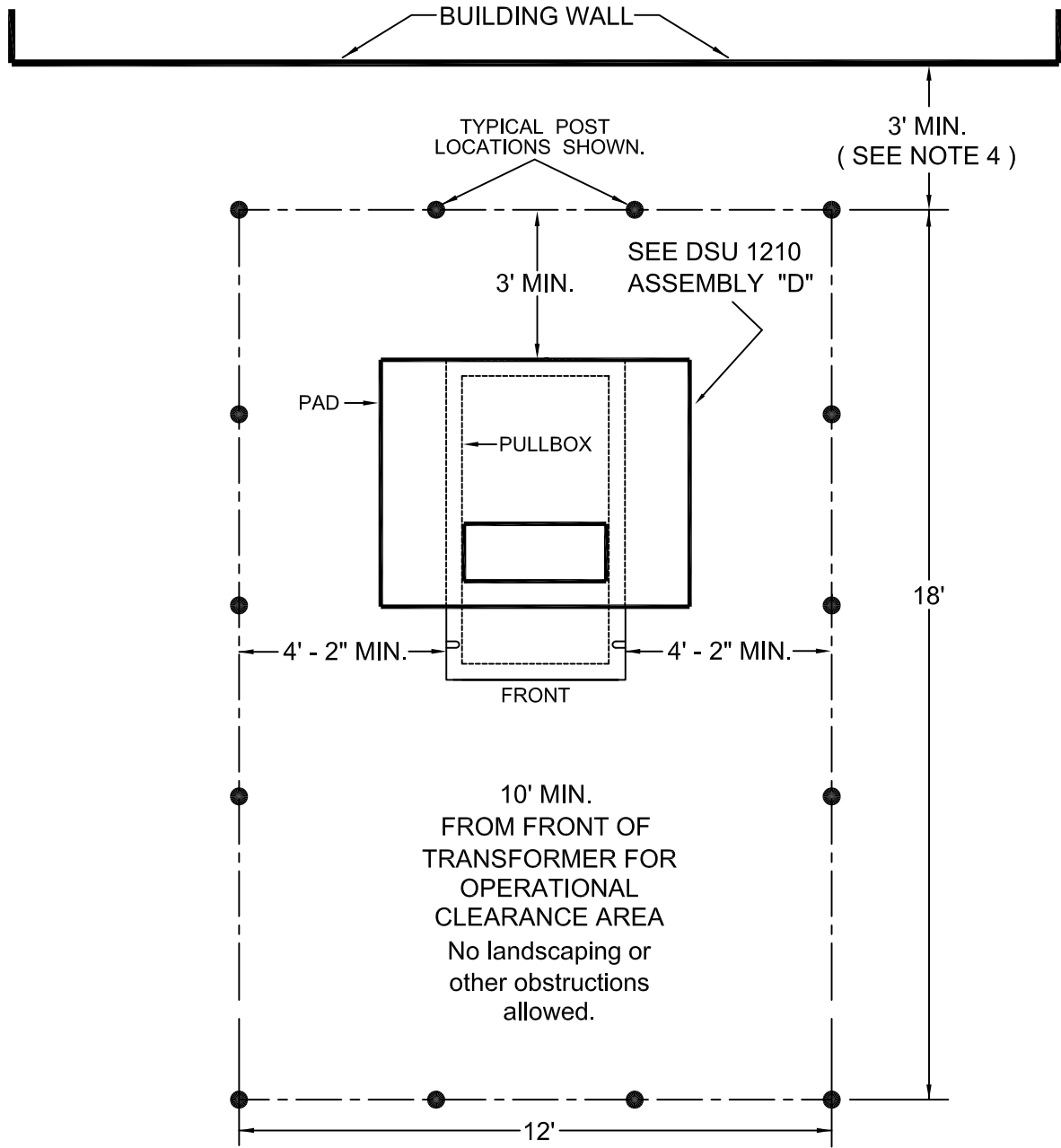
DRAWING NOT TO SCALE

**CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR 3Ø PADMOUNT TRANSFORMERS
1500 - 2500 KVA**

NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "B" FOR 3Ø 500-1000 KVA AND ASSEMBLY "B 100" FOR 3Ø 1500-2500 KVA PADMOUNT TRANSFORMERS INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 16' X 20' IS REQUIRED.
- 7 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER. SEE DSU 440.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 9 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
- 10 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.

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● CONCRETE FILLED POSTS (SEE NOTE 10)

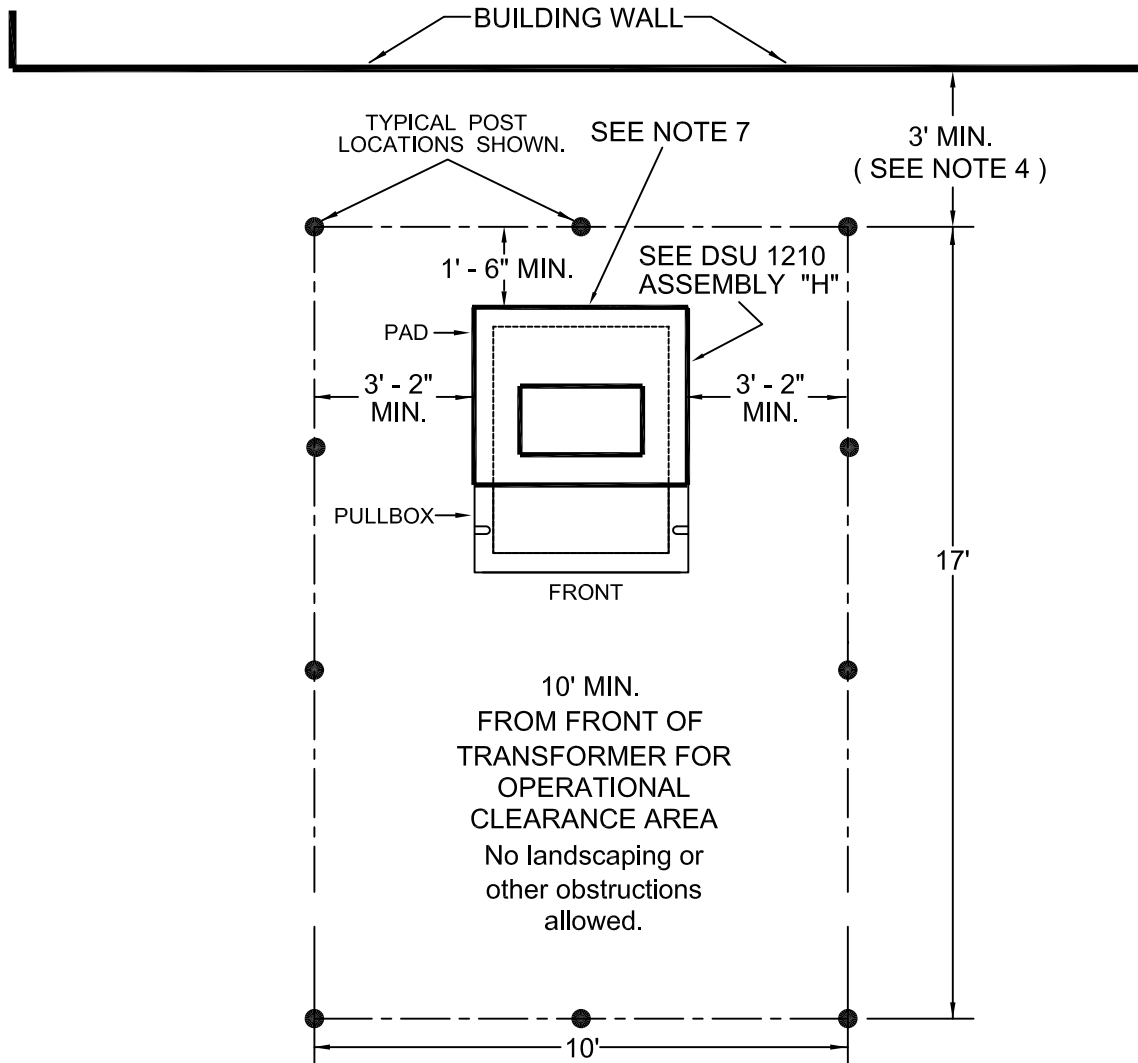
□ RIGHT - OF - WAY

DRAWING NOT TO SCALE

CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR 3 Ø PADMOUNT TRANSFORMERS
300 KVA AND BELOW

NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "D" FOR 3Ø 300 KVA AND BELOW PADMOUNT TRANSFORMERS INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 12' X 18' IS REQUIRED.
- 7 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER. SEE DSU 440.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 9 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
- 10 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.



● CONCRETE FILLED POSTS
(SEE NOTE 10)

□ RIGHT - OF - WAY

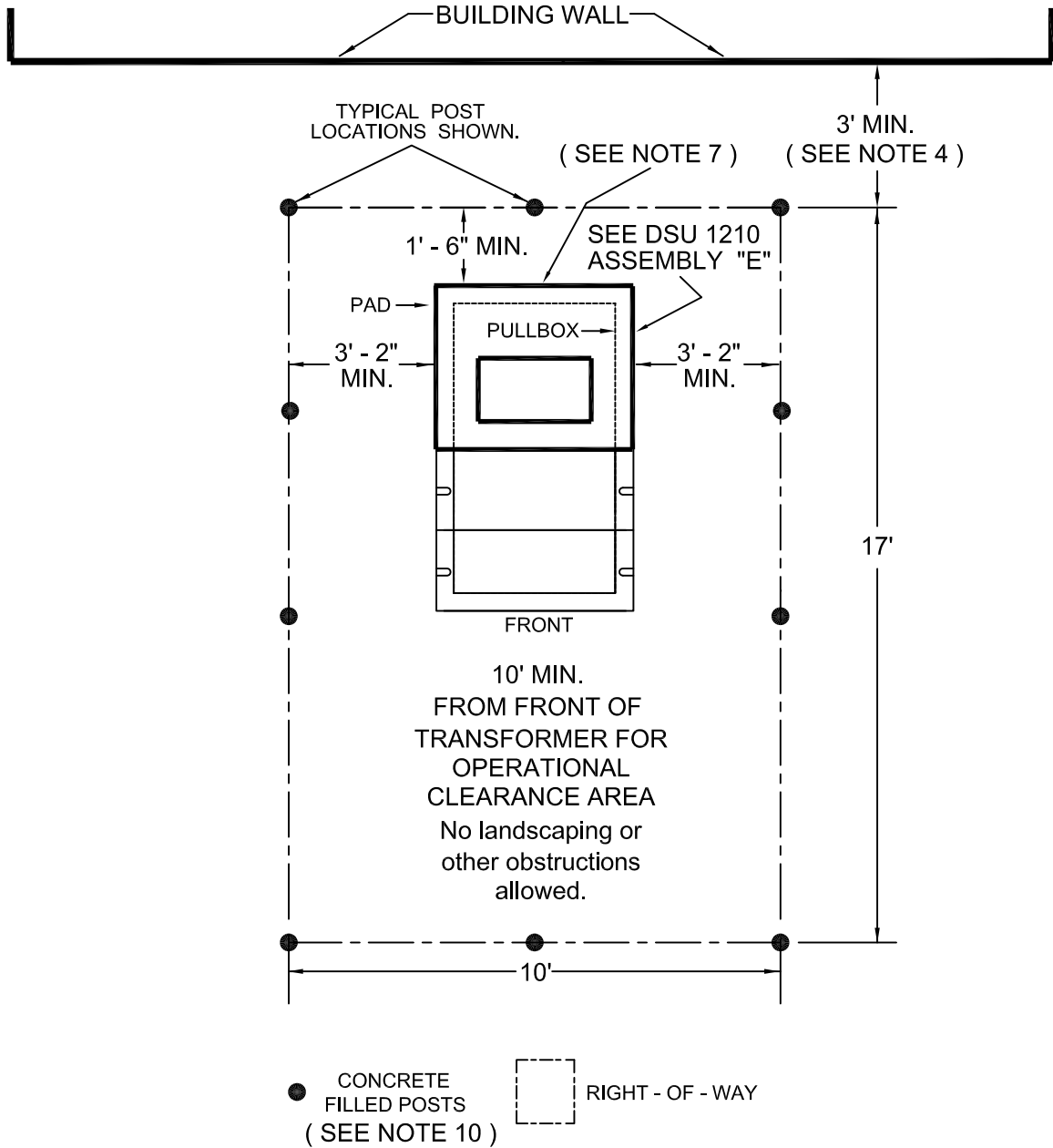
DRAWING NOT TO SCALE

CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR 1 Ø PADMOUNT TRANSFORMERS
25 - 250 KVA

NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "H" FOR 1Ø 25 - 250 KVA PADMOUNT TRANSFORMERS INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 10' X 17' IS REQUIRED.
- 7 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER. SEE DSU 440.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 9 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
- 10 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.

DRAWING NOT TO SCALE

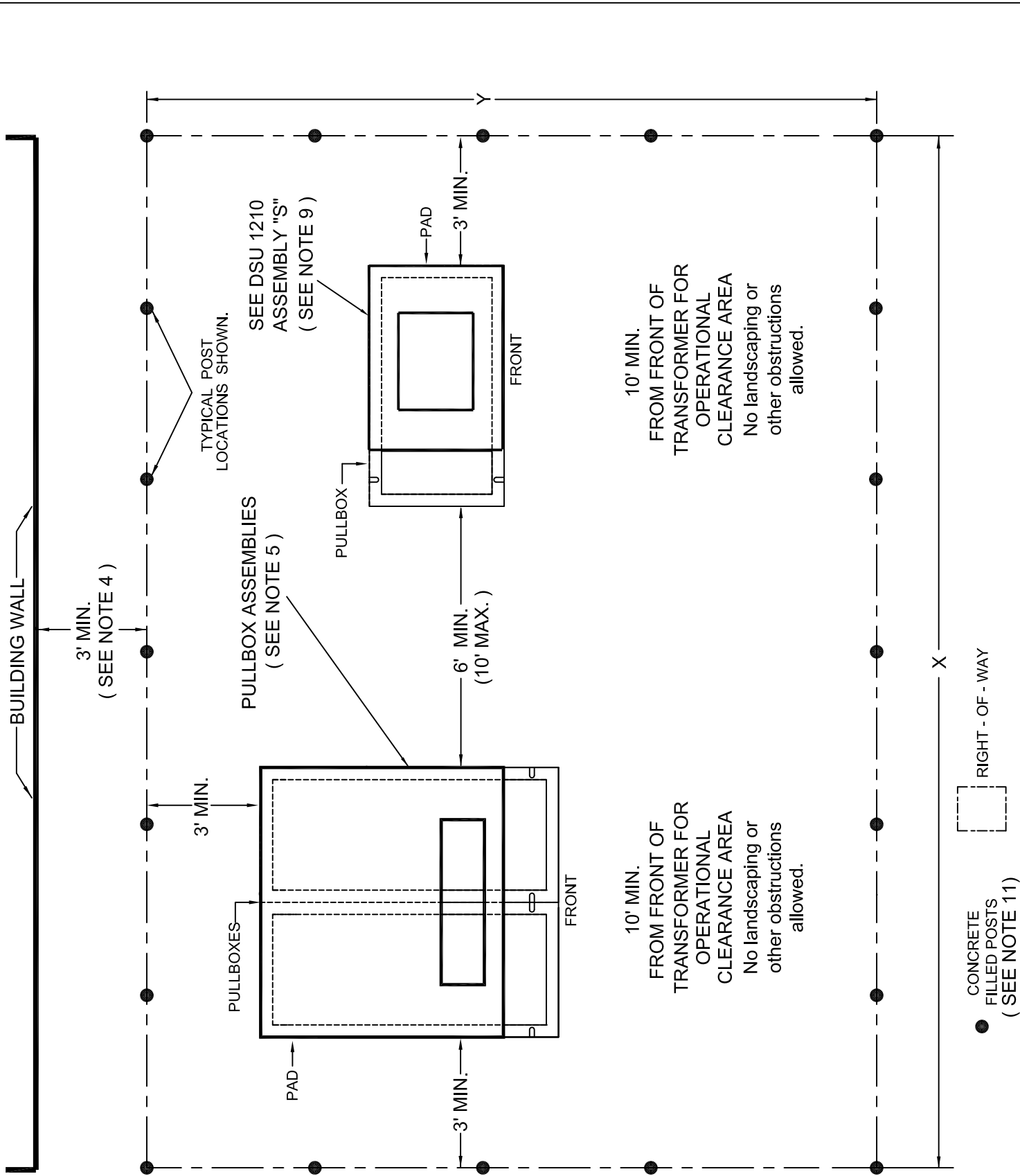


DRAWING NOT TO SCALE

CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR 1 Ø PADMOUNT TRANSFORMERS
25 - 250 KVA
ASSEMBLY "E"

NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "E" FOR 1Ø 25 - 250 KVA PADMOUNT TRANSFORMERS INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 10' X 17' IS REQUIRED.
- 7 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER. SEE DSU 440.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 9 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
- 10 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.



DRAWING NOT TO SCALE

**CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR COMMERCIAL SECONDARY SERVICE ENCLOSURE**

ORIG. DATE: 11/05/72
REV. DATE: 11/02/15

EL PASO ELECTRIC CO. DISTRIBUTION STANDARD

DSU 530
PAGE 1 OF 2

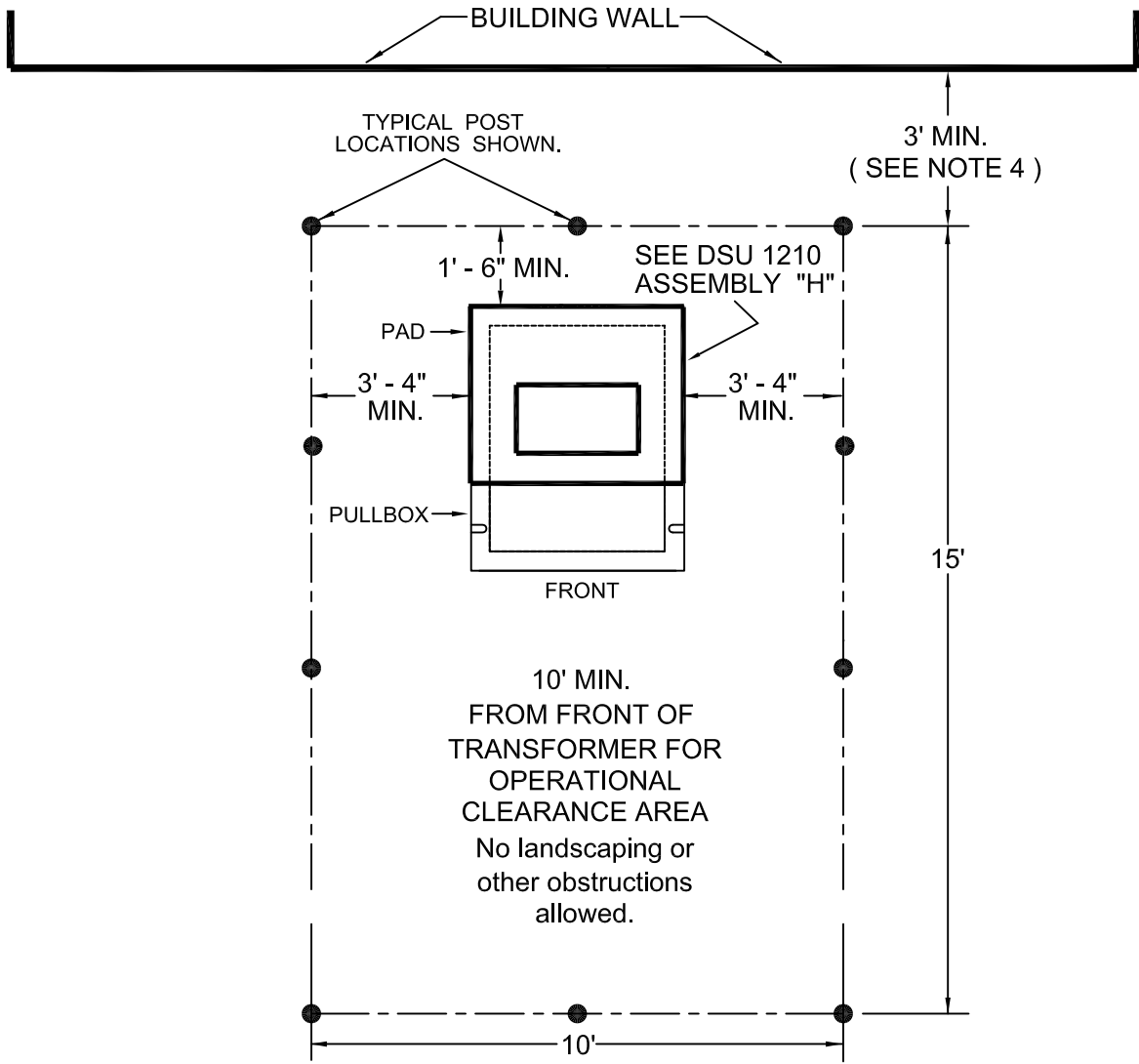
NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "B" AND "S" FOR 3Ø 500 - 2500 KVA PADMOUNT TRANSFORMERS AND COMMERCIAL SECONDARY SERVICE ENCLOSURE INSTALLATIONS ARE SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT AREA OF (X AND Y) DIMENSIONS WILL BE DETERMINED BY ACTUAL TRANSFORMER SIZE.

INSTALLATION

DIMENSIONS

- | | |
|------------------------|-----------------|
| 3 Ø - UP TO 300 KVA | X = 29' Y = 18' |
| 3 Ø - 500 KVA TO 2500. | X = 30' Y = 20' |
- 7 THE DISTANCE BETWEEN TRANSFORMER AND BUS ENCLOSURE SHALL NORMALLY NOT EXCEED 10' - 0" .
 - 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
 - 9 OPERATIONAL SIDE OF SERVICE ENCLOSURE SHALL BE THE SAME SIDE OF THE TRANSFORMER.
 - 10 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
 - 11 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.



● CONCRETE FILLED POSTS
 (SEE NOTE 10)

□ RIGHT - OF - WAY

DRAWING NOT TO SCALE

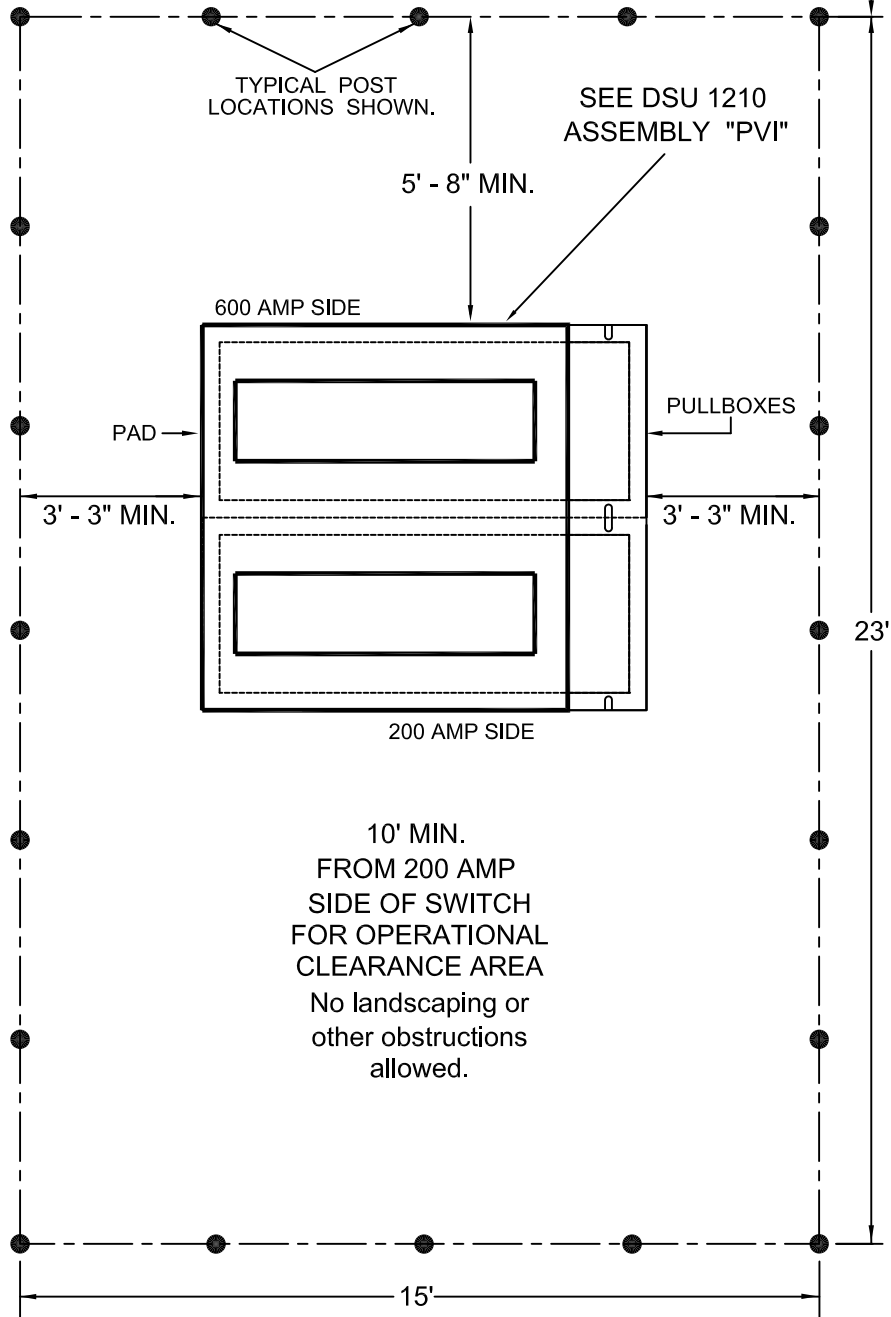
CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
 FOR 1 Ø PVI SWITCH

NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "H" FOR 1Ø 25 - 250 KVA PADMOUNT TRANSFORMERS AND PVI SWITCH INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 10' X 15' IS REQUIRED.
- 7 THE SECONDARY DUCT ENTRANCE SHALL NOT ENTER THE FRONT OF PULLBOX / TRANSFORMER. SEE DSU 440.
- 8 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 9 THE METER FRAME FOR METERING SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.
- 10 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.



3' MIN.
(SEE NOTE 4)



10' MIN.
FROM 200 AMP
SIDE OF SWITCH
FOR OPERATIONAL
CLEARANCE AREA
No landscaping or
other obstructions
allowed.

● CONCRETE
FILLED POSTS
(SEE NOTE 8)



DRAWING NOT TO SCALE

**CLEARANCES AND RIGHT - OF - WAY REQUIREMENTS
FOR 3Ø PVI SWITCH**

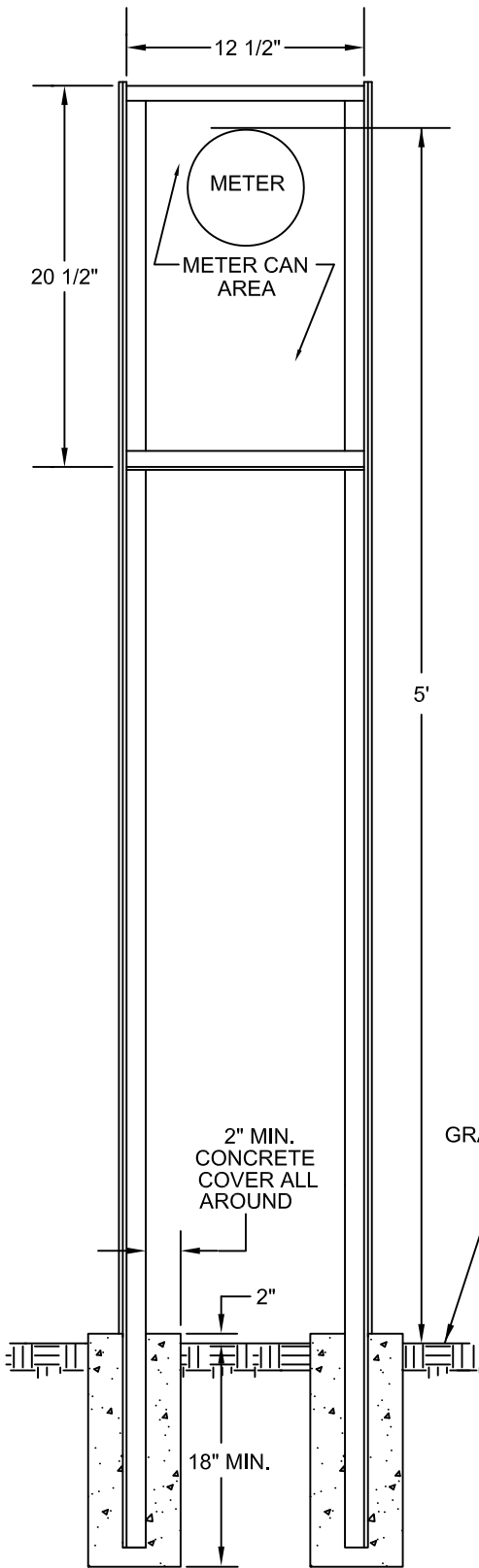
NOTES:

- 1 WHERE THIS AREA IS SUBJECT TO VEHICULAR TRAFFIC, THE CUSTOMER WILL INSTALL PROTECTION AS DESCRIBED BELOW BEFORE ELECTRICAL SERVICE IS PROVIDED.
 - A. CONCRETE FILLED METAL PIPES WITH A 4 INCH MINIMUM DIAMETER USED AS POSTS, 3 FEET MINIMUM SECURELY EMBEDDED IN CONCRETE AND EXTENDING AT LEAST 4 FEET OUT OF THE GROUND.
 - B. THE POSTS SHOULD BE EQUALLY SPACED BUT NOT MORE THAN 5 FEET APART AND LOCATED ON THE PERIMETER OF THE EASEMENT ON THOSE SIDES REQUIRING PROTECTION.
- 2 THERE SHALL BE NO BUILDING OVERHANG OR OTHER OBSTRUCTION THAT WILL PREVENT ACCESS WITH A BOOM TRUCK OR CRANE.
- 3 ASSEMBLY "PVI" FOR 3Ø PVI SWITCH INSTALLATION IS SHOWN.
- 4 EASEMENT SHALL BE LOCATED A MINIMUM OF 3' FROM THE CLOSEST BUILDING WALL.
- 5 FOR PULL BOXES AND PAD SIZES SEE DSU 1210.
- 6 A MINIMUM STANDARD EASEMENT OF 15' X 23' IS REQUIRED.
- 7 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 8 THE CUSTOMER HAS THE OPTION OF REQUESTING THAT THE COMPANY INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER AND THE CUSTOMER SHALL PAY THE COMPANY, IN ADVANCE, A NONREFUNABLE CONTRIBUTION IN AID OF CONSTRUCTION FOR THE COMPANY TO INSTALL ADEQUATE PROTECTION FOR THE TRANSFORMER.

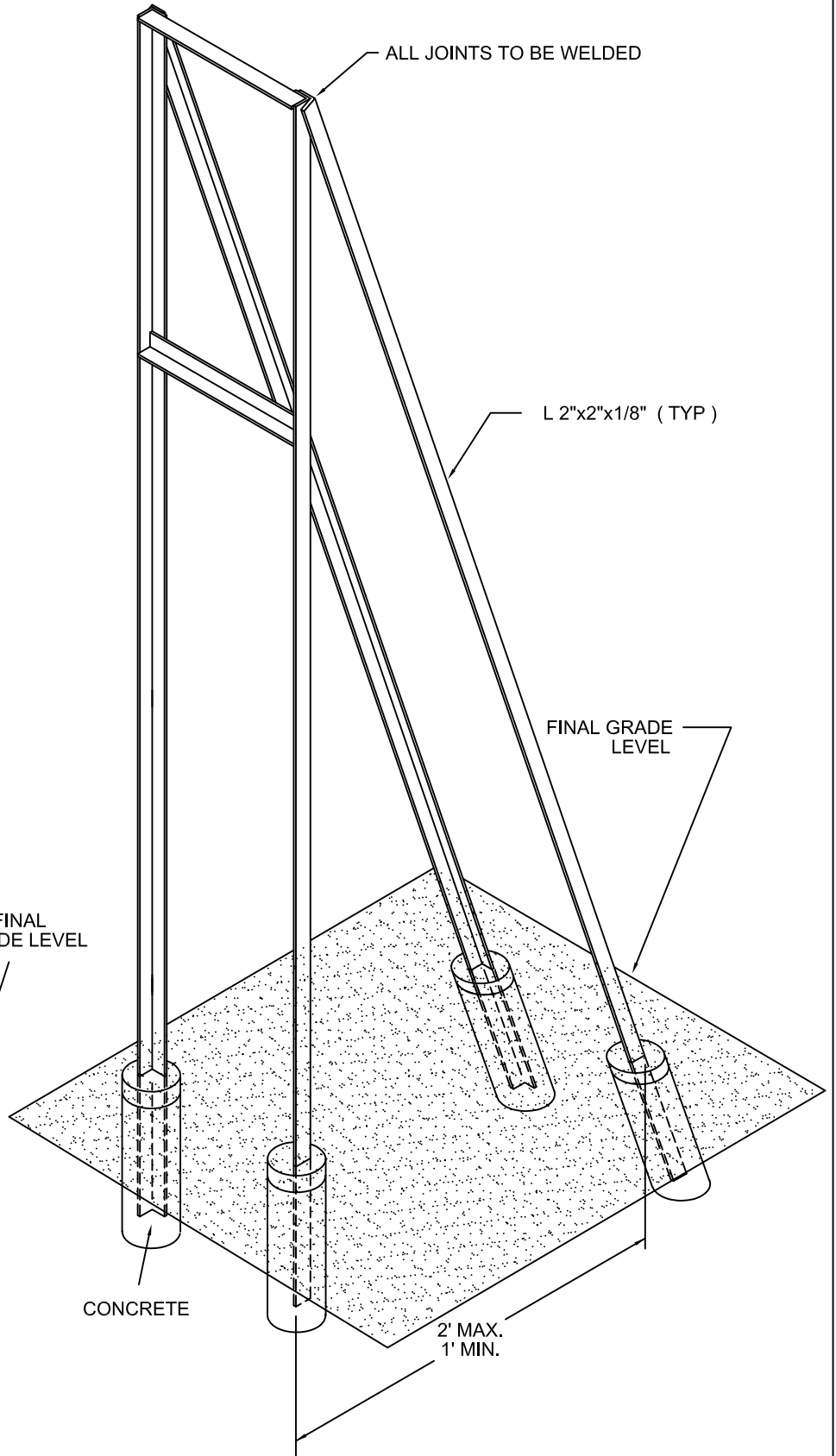
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GROUP 1000

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FRONT VIEW

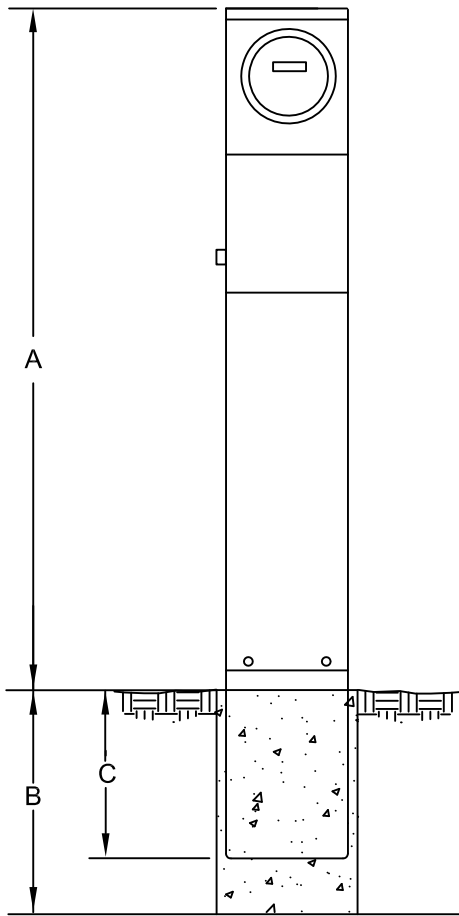


METER FRAME DETAIL

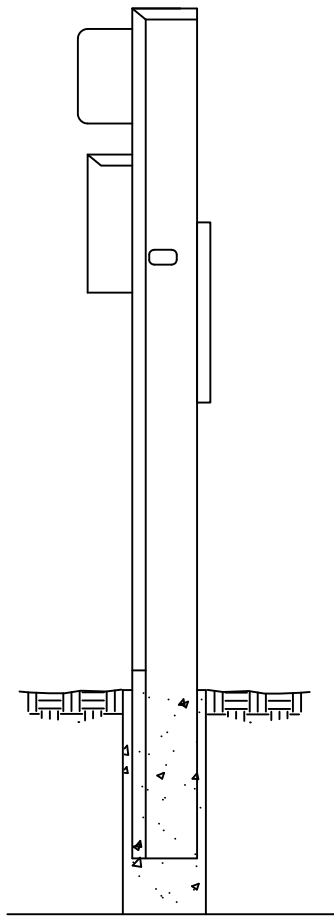
METER FRAME FOR METERING

NOTES:

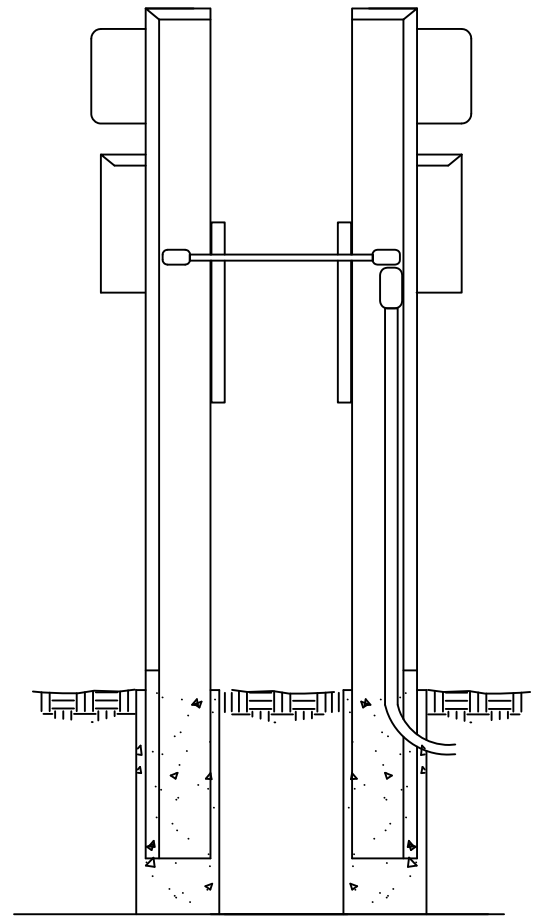
- 1 METER CAN MUST BE GROUNDED.
- 2 SPECIFICATION FOR METER FRAME INSTALLATION:
L 2" X 2" X 1/8" STEEL OR UNISTRUT CHANNEL 1 5/8" X 1 5/8" 12 GAUGE
- 3 FRAME SHALL BE INSTALLED 3 FEET MIN. FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER PAD TO ALLOW ROOM FOR TRANSFORMER MAINTENANCE. FRAME MAY BE INSTALLED ON HIGH VOLTAGE SIDE OF THE TRANSFORMER WITH E.P.E.C. PERMISSION ONLY.



SINGLE HEAD POST



SINGLE HEAD POST
SIDE VIEW



DOUBLE HEAD POST
(BACK TO BACK)

FABRICATED - PEDESTALS 120/240 Volts

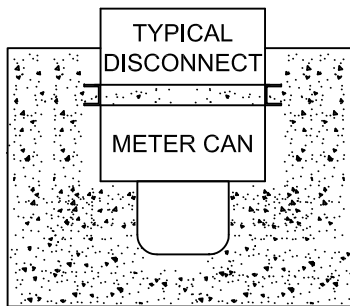
DIMENSIONS	
A	3' - 5'
B	16"
C	12" MIN

NOTE:
200 AMP (MIN) REQUIRED FOR MOBILE HOMES THAT ARE TOTAL ELECTRIC.

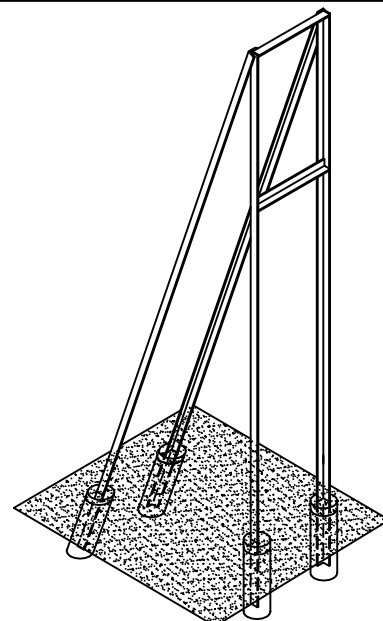
REQUIREMENTS FOR PREMANUFACTURED
METERING PEDESTALS FOR MOBILE HOMES

NOTES:

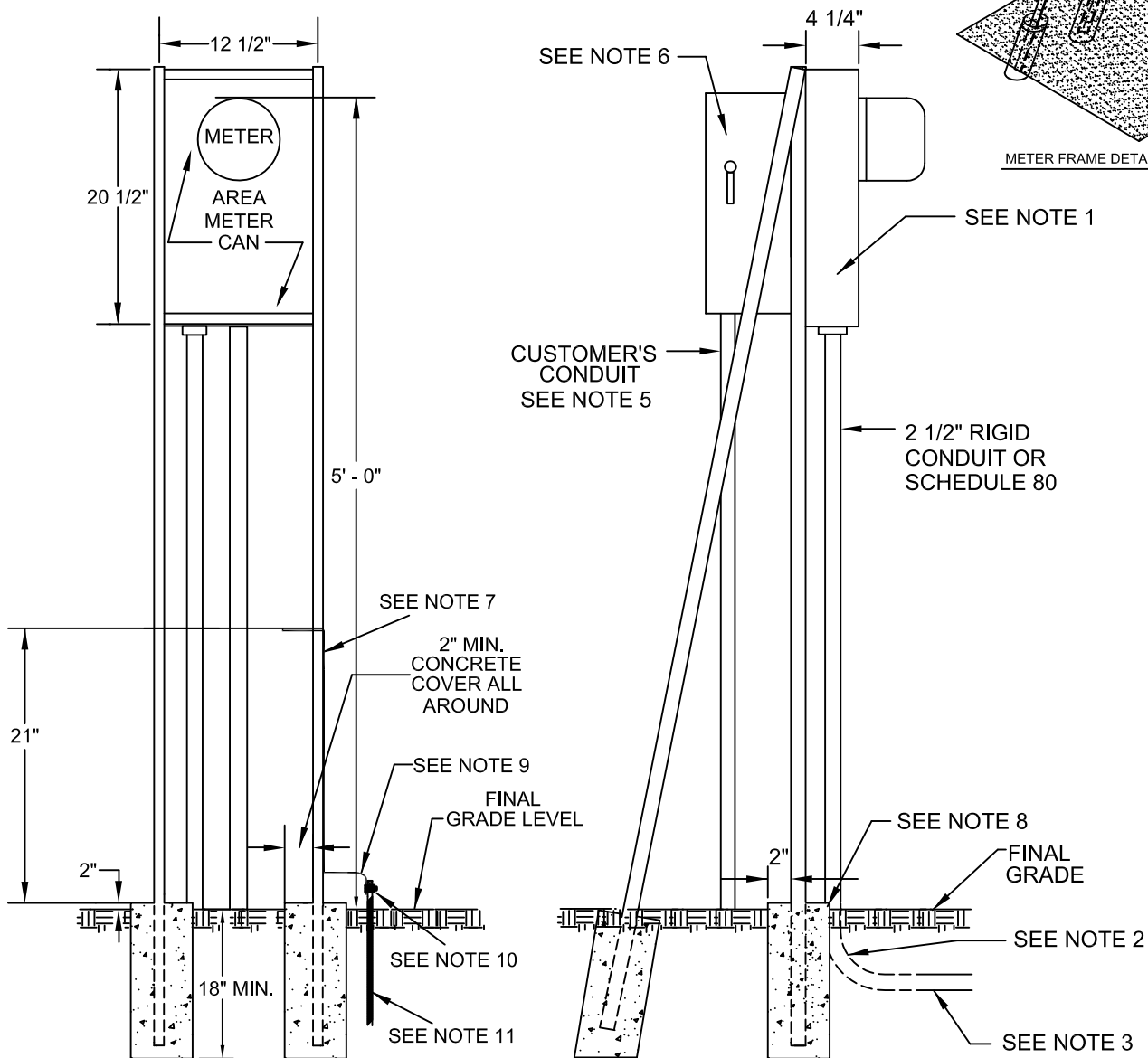
- 1 PEDESTALS SHALL INCLUDE SOCKETS FOR 4 - PRONG 120/240V RINGLESS SOCKET METERS, WITH PROVISIONS FOR AN E.P.E.C. SEAL ON THE METER CAN.
- 2 RIGID CONDUIT OR SCHEDULE 80 TO PVC ELBOW IN CONCRETE.
- 3 **UNDERGROUND RISER TO METER:** THE RISER FROM THE DUCT TO THE METER SHALL BE OF RIGID CONDUIT, IMC, EMT OR SCHEDULE 80 MEETING ALL APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
- 4 **SERVICE DUCT:** SERVICE CONDUCTORS WILL BE INSTALLED ONLY IN DUCT, WITH NO DIRECT - BURIAL CABLES. ALL DUCT INSTALLED SHALL MEET APPLICABLE CODE REQUIREMENTS. MINIMUM INSIDE DIAMETER OF DUCT SHALL BE 2.5 INCHES.
- 5 THE LUGS FOR THE E.P.E.C. SERVICE CONNECTION MUST BE CAPABLE OF ACCEPTING BOTH COPPER AND ALUMINUM CONDUCTORS FROM #2 AWG - 4/0 AWG.
- 6 THERE MUST BE A WIRING CHANNEL ISOLATED FROM ALL CUSTOMER OWNED EQUIPMENT, FOR E.P.E.C. SERVICE WIRES AND CONNECTIONS. IF THERE IS A DOOR OR OTHER TYPE OF REMOVABLE PANEL ALLOWING ACCESS TO THE SERVICE CONDUCTORS OR THE CONNECTIONS, THERE MUST BE PROVISIONS FOR AN E.P.E.C. SEAL.
- 7 PEDESTALS MUST BE OF SUITABLE HEIGHT TO ALLOW AN INSTALLED METER HEIGHT BETWEEN 3' AND 5'. PEDESTALS MUST BE MOUNTED ON CONCRETE FOUNDATIONS 16" HEIGHT, BURIED 12" DEEP MINIMUM.
- 8 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS.
- 9 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.



TOP VIEW



METER FRAME DETAIL SEE DSU 1015



FRONT VIEW

SIDE VIEW

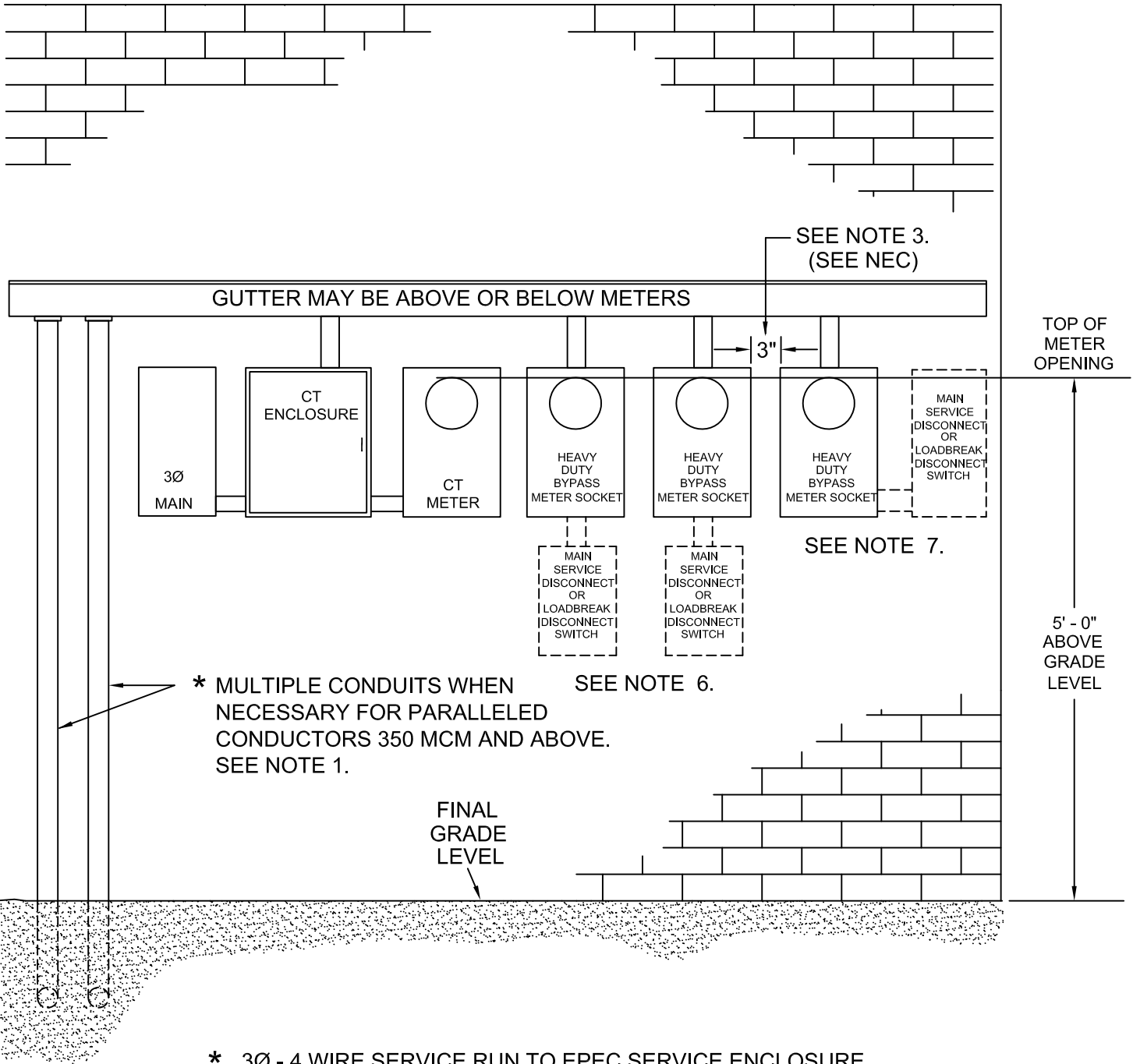
200 AMP ALLOWED ONLY

DRAWING NOT TO SCALE.

METER & SWITCH FRAME MOUNTING
FOR MOBILE HOMES

NOTES:

- 1 200 AMP METER - CAN SHALL BE PROVIDED BY CUSTOMER.
- 2 RIGID CONDUIT OR SCHEDULE 80 TO PVC ELBOW IN CONCRETE.
- 3 PVC CONDUIT UNDERGROUND.
- 4 **UNDERGROUND RISER TO METER:** THE RISER FROM THE DUCT TO THE METER SHALL BE OF RIGID CONDUIT, IMC **THAT IS TAPPED OR** SCHEDULE 80 MEETING ALL APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
- 5 **SERVICE DUCT:** SERVICE CONDUCTORS WILL BE INSTALLED ONLY IN DUCT, WITH NO DIRECT - BURIAL CABLES. ALL DUCT INSTALLED SHALL MEET APPLICABLE CODE REQUIREMENTS. MINIMUM INSIDE DIAMETER OF DUCT SHALL BE 2.5 INCHES.
- 6 ATTACH DISCONNECT TO METER CAN USING REAR KNOCKOUT. CUSTOMER DISCONNECT MUST PROVIDE OVER CURRENT PROTECTION. CUSTOMER MUST PROVIDE A 120V , GFCI RECEPTACLE INSTALLED PER N.E.C..
- 7 UNISTRUT CHANNEL P-1000SL OR EQUIVALENT.
- 8 CONCRETE FOOTER REQUIRED.
- 9 GROUND WIRE # 6 AWG COPPER.
- 10 APPROVED GROUND CLAMP MUST BE CONNECTED TO GROUND ROD 6" ABOVE GROUND LEVEL.
- 11 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 12 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS AND NATIONAL ELECTRIC CODE.
- 13 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.



* MULTIPLE CONDUITS WHEN NECESSARY FOR PARALLELED CONDUCTORS 350 MCM AND ABOVE. SEE NOTE 1.

SEE NOTE 6.

SEE NOTE 7.

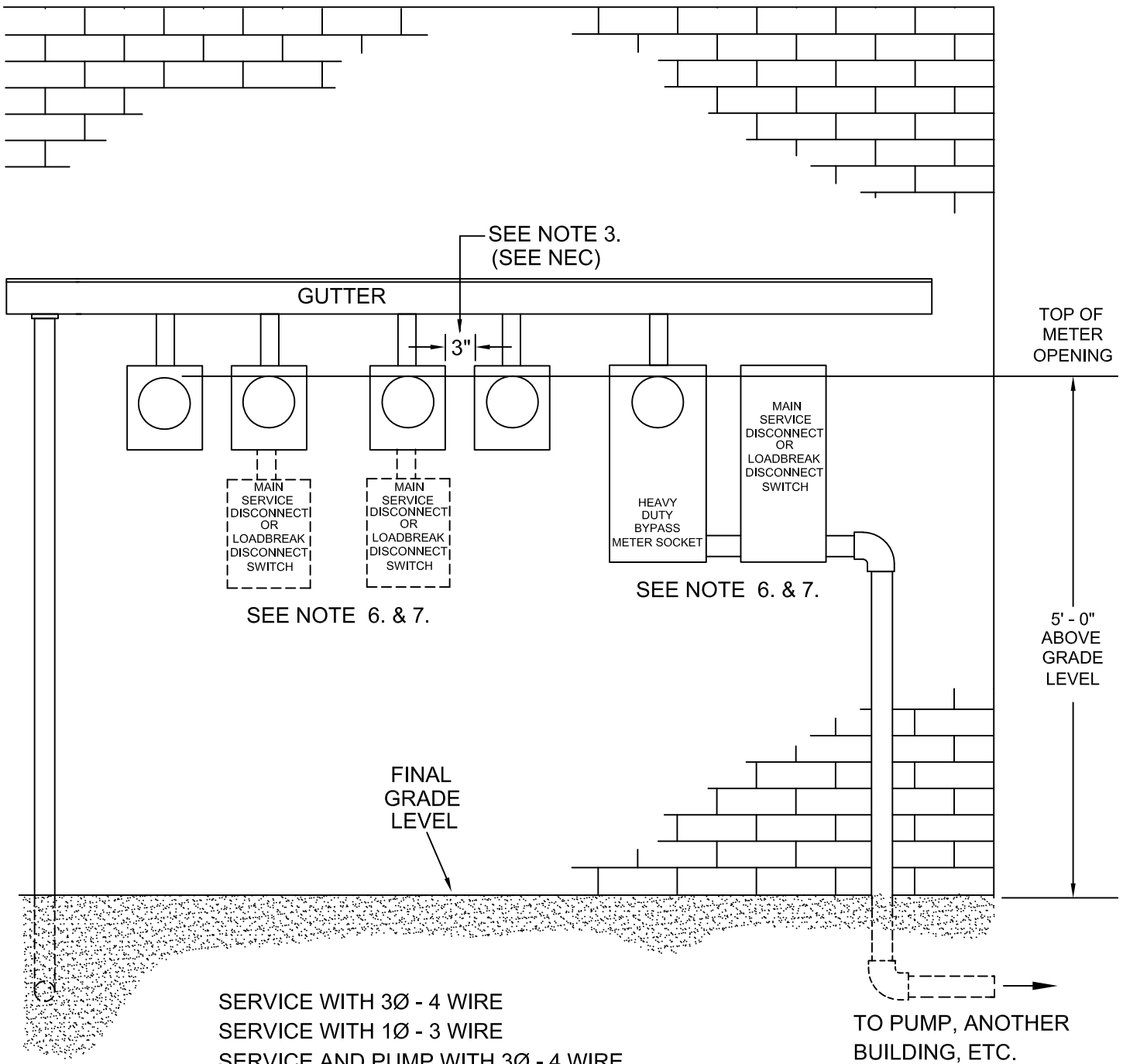
* 3Ø - 4 WIRE SERVICE RUN TO EPEC SERVICE ENCLOSURE OR TRANSFORMER. MAXIMUM DISTANCE WILL BE DETERMINED BY E.P.E.C. .

DRAWING NOT TO SCALE

TYPICAL MULTIPLE COMMERCIAL
METERING INSTALLATION

NOTES:

- 1 **THE SERVICE CONDUCTOR SIZE SHALL NOT BE LESS THAN 350 MCM IF MULTIPLE SERVICE CONDUCTORS (PARALLEL CIRCUITS) ARE TO BE INSTALLED.**
- 2 THE CUSTOMER'S CONNECTION POINT SHALL BE IN THE SERVICE ENCLOSURE OR TRANSFORMER SECONDARY COMPARTMENT. E.P.E.C. WILL FURNISH CONNECTORS FOR THE CUSTOMER'S SERVICE WIRE IN SIZES #2, 1/0, 4/0, 250 MCM, 350MCM, 500 MCM AND 750 MCM. THE MAXIMUM NUMBER OF CONDUCTORS PER LEG SHALL CONFORM TO DSU 510.
- 3 3" MINIMUM IS REQUIRED BETWEEN A METER ENCLOSURE AND ANY ADJACENT EQUIPMENT.
- 4 THERE SHALL BE NO MORE THAN SIX DISCONNECTS PER SERVICE GROUPED IN ANY ONE LOCATION AS PER NATIONAL ELECTRICAL CODE, SECTION 230 - 71, PARAGRAPH "A".
- 5 SERVICE DISCONNECT NEEDED WHEN MORE THAN 6 METERS ARE USED.
- 6 FOR AL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 7 ALL COMMERCIAL INSTALLATIONS UP TO 400 AMPS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET.
- 8 ELECTRICAL CONTRACTORS ARE RESPONSIBLE FOR MARKING EACH METER ENCLOSURE ACCURATELY WITH PERMANENT NUMBERS OR LETTERS TO CORRESPOND TO THE CORRECT UNIT, APARTMENT OR COMMERCIAL SUITES.
- 9 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS NATIONAL ELECTRIC CODE AND NATIONAL ELECTRIC SAFETY CODE.
- 10 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE AND STATE ELECTRICAL CODE REQUIREMENTS.
- 11 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 12 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.



SERVICE WITH 3Ø - 4 WIRE
 SERVICE WITH 1Ø - 3 WIRE
 SERVICE AND PUMP WITH 3Ø - 4 WIRE
 SERVICE RUN TO E.P.E.Co. SERVICE
 ENCLOSURE OR TRANSFORMER.

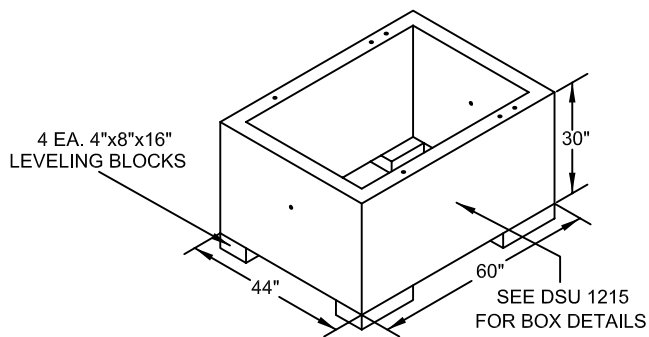
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TYPICAL MULTIPLE UNDERGROUND
 3Ø AND 1Ø METERING INSTALLATION

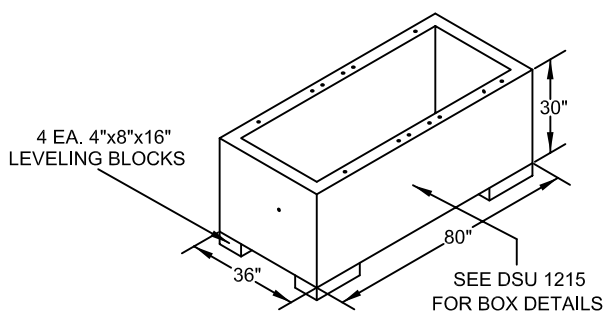
NOTES:

- 1 THE ONLY TAP THAT MAY BE MADE IN THE METER CAN IS AN ELECTRICAL WATER HEATER TAP TO A WATER HEATER METER. USING A 350 METER CAN.
- 2 THE CUSTOMER'S CONNECTION POINT SHALL BE IN THE SERVICE ENCLOSURE OR TRANSFORMER SECONDARY COMPARTMENT. E.P.E.C. WILL FURNISH CONNECTORS FOR THE CUSTOMER'S SERVICE WIRE IN SIZES #2, 1/0, 4/0, 250 MCM, 350MCM, 500 MCM AND 750 MCM. THE MAXIMUM NUMBER OF CONDUCTORS PER LEG SHALL CONFORM TO DSU 510.
- 3 3" MINIMUM IS REQUIRED BETWEEN A METER ENCLOSURE AND ANY ADJACENT EQUIPMENT.
- 4 THERE SHALL BE NO MORE THAN SIX DISCONNECTS PER SERVICE GROUPED IN ANY ONE LOCATION AS PER NATIONAL ELECTRICAL CODE, SECTION 230 - 71, PARAGRAPH "A".
- 5 SERVICE DISCONNECT NEEDED WHEN MORE THAN 6 METERS ARE USED.
- 6 FOR ALL SERVICES, REGARDLESS OF SIZE, WILL HAVE AN EXTERIOR LOAD BREAK FUSIBLE DISCONNECT INSTALLED ON THE EXTERIOR OF THE BUILDING OR STRUCTURE, WITHIN 5 FEET OF THE METER.
- 7 ALL COMMERCIAL INSTALLATIONS UP TO 400 AMPS WILL REQUIRE A HEAVY DUTY BYPASS METER SOCKET.
- 8 ELECTRICAL CONTRACTORS ARE RESPONSIBLE FOR MARKING EACH METER ENCLOSURE ACCURATELY WITH PERMANENT NUMBERS OR LETTERS TO CORRESPOND TO THE CORRECT UNIT, APARTMENT OR COMMERCIAL SUITES.
- 9 INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS NATIONAL ELECTRIC CODE AND NATIONAL ELECTRIC SAFETY CODE.
- 10 THE GROUNDING AND BONDING OF THE CUSTOMER-OWNED ELECTRICAL SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL AND STATE ELECTRICAL CODE REQUIREMENTS.
- 11 FOR ANY CLARIFICATION OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- 12 EXCEPTIONS TO THESE DIMENSIONS MUST BE APPROVED IN WRITING BY THE COMPANY'S SERVICE SECTION OR METER TEST SECTION.
- 13 METER ENCLOSURE SHALL NOT BE USED AS A JUNCTION BOX.

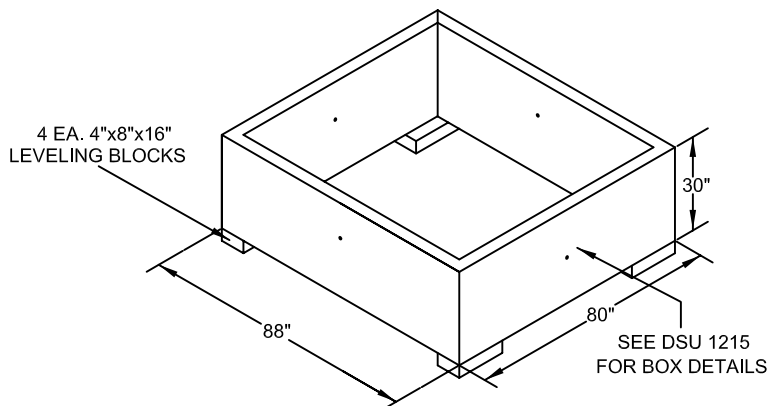
GROUP 1200



PULLBOX
60" X 44"



PULLBOX
80" X 36"

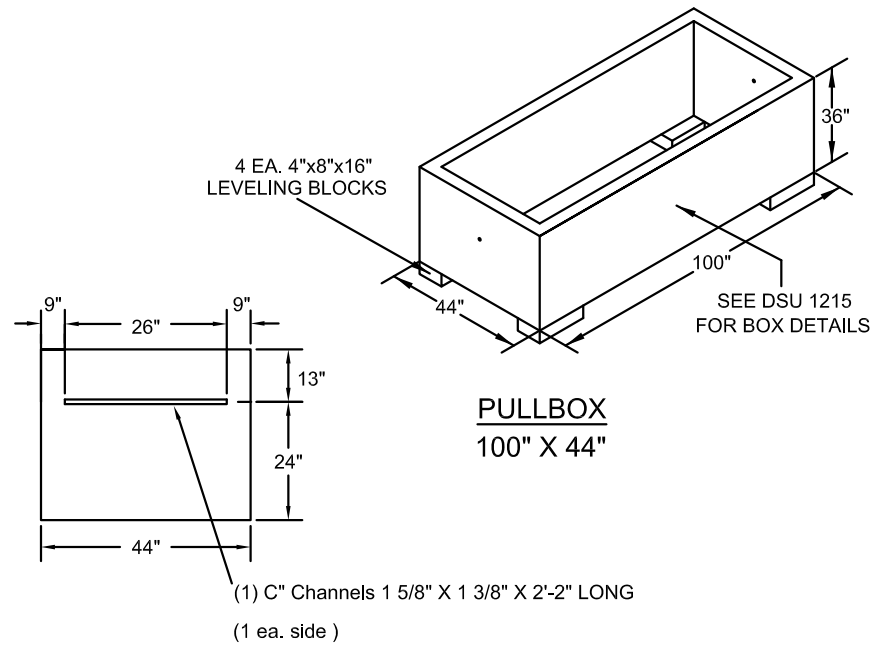
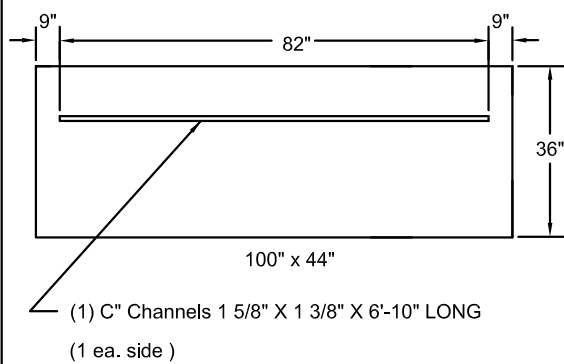
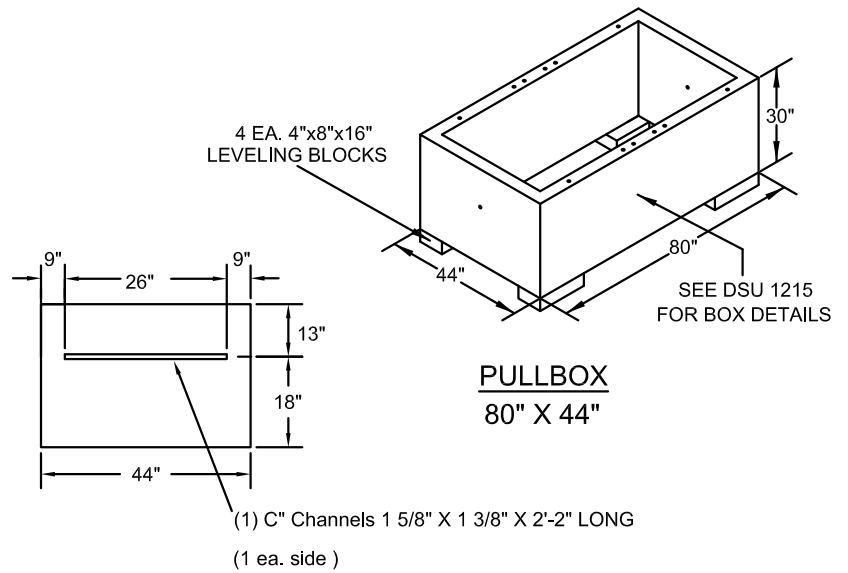
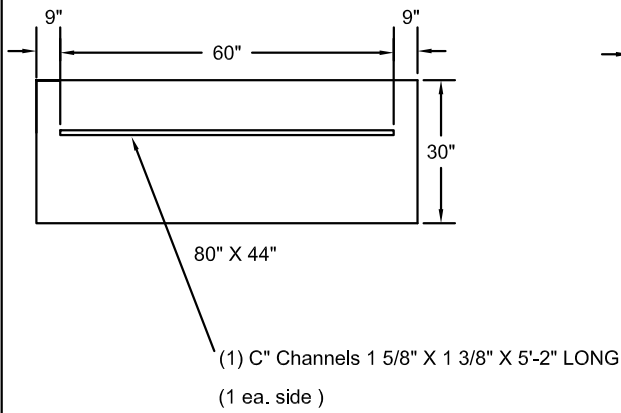


PULLBOX
88" X 80"
(FOR MAINTENANCE ONLY)

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PULLBOXES

DRAWING NOT TO SCALE



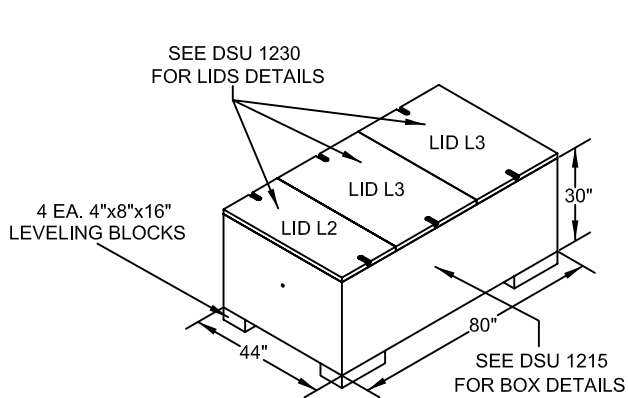
PULLBOXES

	Description	Stock Number	Qty.	C/U Code
	PULLBOX 60" X 44"	N/A	1	DPBF1
	LEVELING BLOCKS	N/A	4	
	PULLBOX 80" X 36"	N/A	1	DPB8036
	LEVELING BLOCKS	N/A	4	
	PULLBOX 80" X 44"	N/A	1	DPBF
	LEVELING BLOCKS	N/A	4	
	PULLBOX 88" X 80"	N/A	1	DPB8880
	LEVELING BLOCKS	N/A	4	
	PULLBOX 100" X 44"	N/A	1	DPB100
	LEVELING BLOCKS	N/A	4	

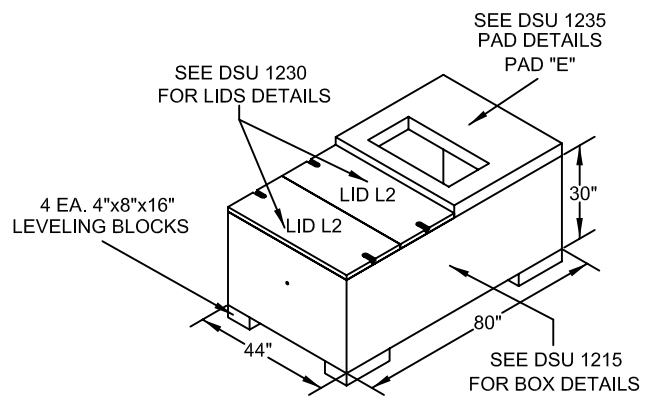
NOTES:

- 1 LEVELING BLOCKS SHOWN ARE 4" X 8" X 16" CINDER BLOCKS.
- 2 EACH PULLBOX SHALL BE INSTALLED WITH A 3" LAYER OF 3/4" GRAVEL BASE INSIDE.

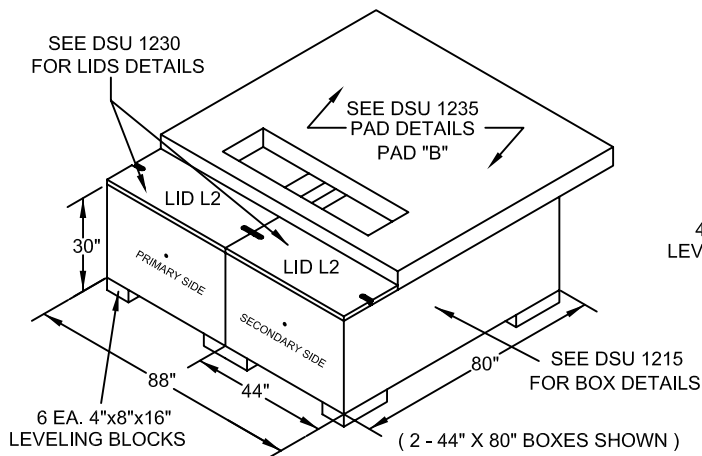
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ASSEMBLY "A"
80" X 44"

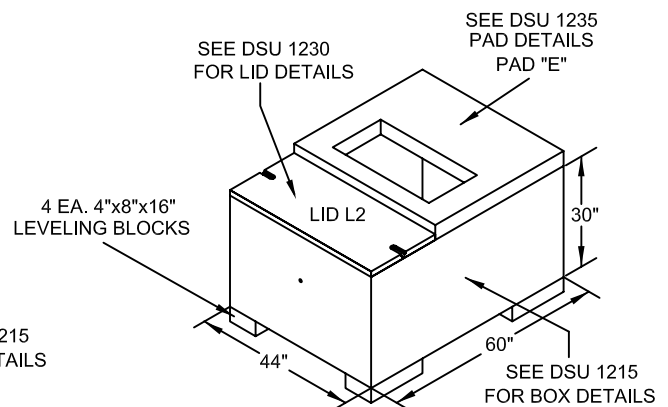


ASSEMBLY "E"
80" X 44"

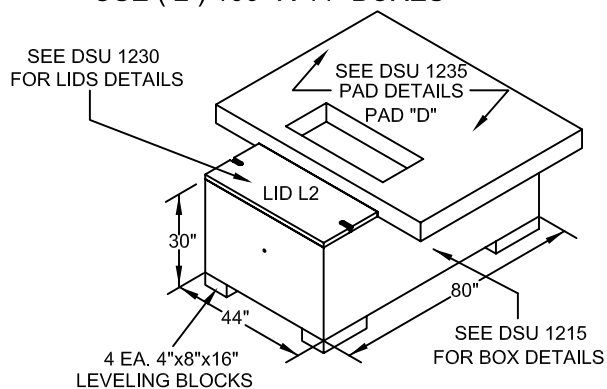


ASSEMBLY "B" AND ASSEMBLY "B100"
80" X 88" 100" X 88"

FOR 3Ø 500 -1000 KVA
USE (2) 80" X 44" BOXES
FOR 3Ø 1500 -2500 KVA
USE (2) 100" X 44" BOXES

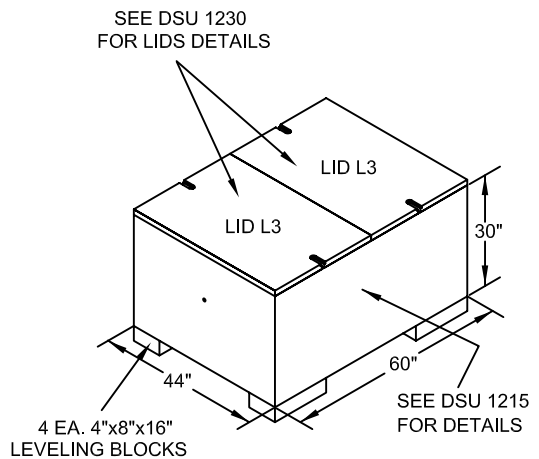


ASSEMBLY "H"
60" X 44"



ASSEMBLY "D"
80" X 44"

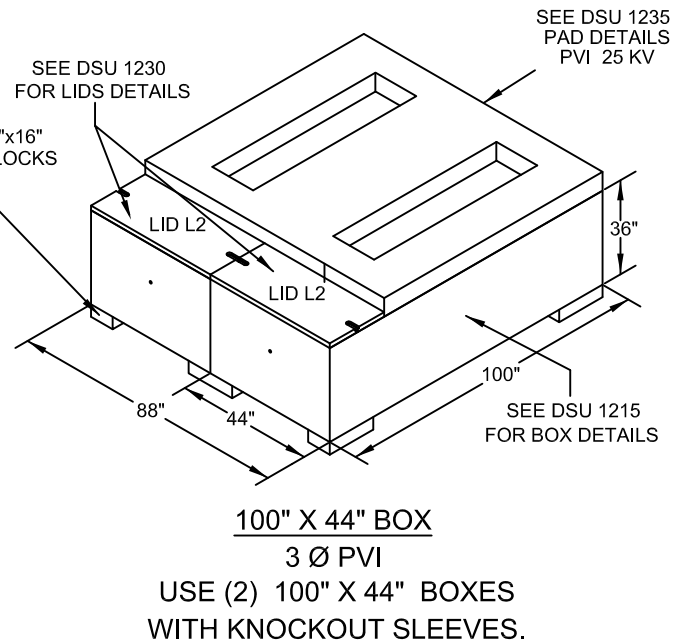
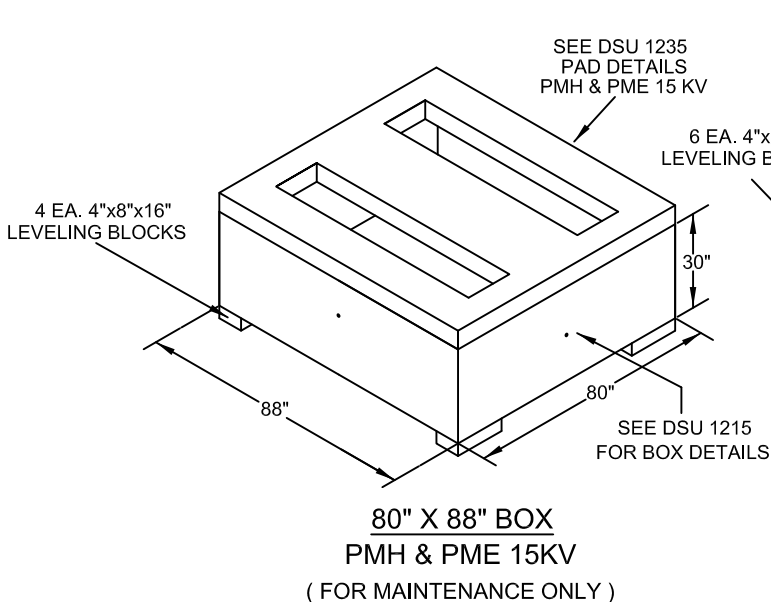
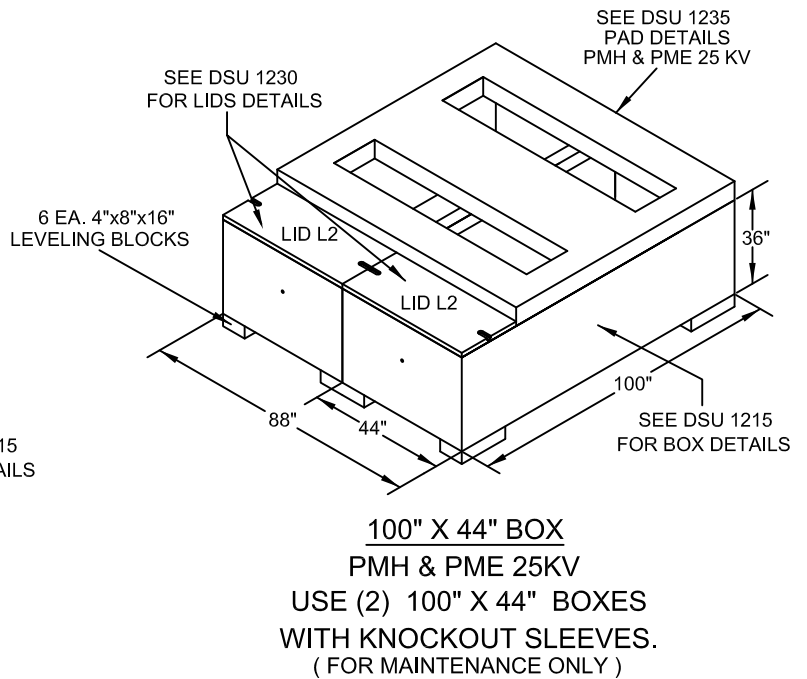
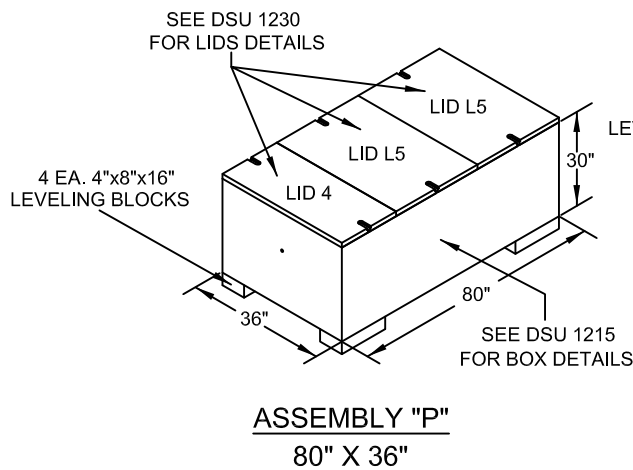
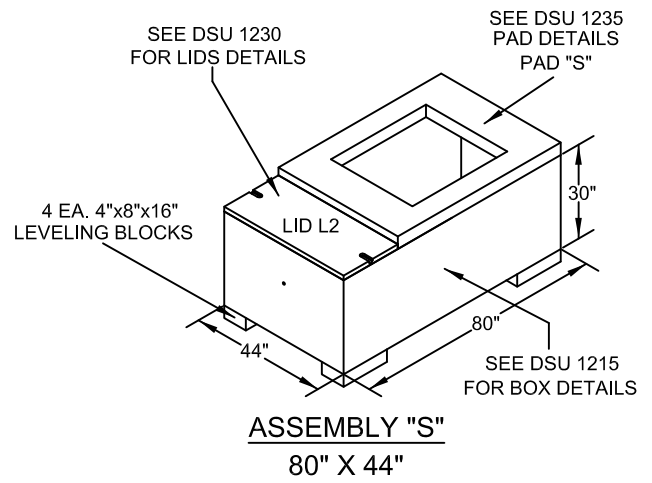
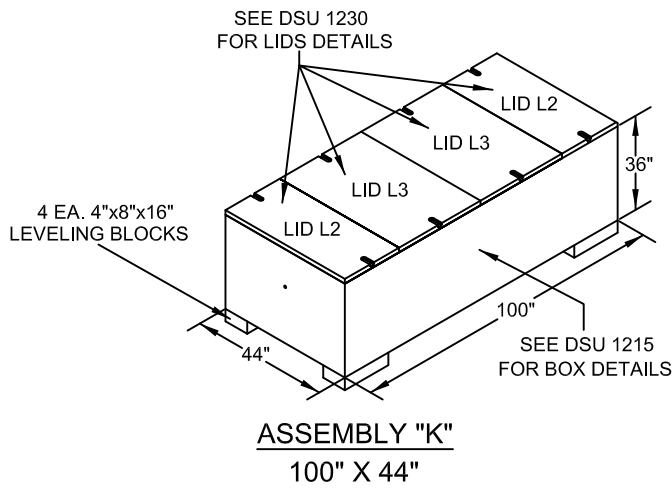
NOTE: FOR 3 Ø 300KVA AND BELOW



ASSEMBLY "J"
60" X 44"

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PULLBOX ASSEMBLIES



DRAWING NOT TO SCALE

PULLBOX ASSEMBLIES

Assembly	Description	Stock Number	Qty.	C/U Code	Feature
"A"	PULLBOX 80" X 44"		1	DPBF	80 IN PULLBOX ASSEMBLY "A"
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	1	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	2		
	LIGHT WEIGHT LID L3	17-996	2	DLID30	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
BOLT PENTA HED. 1/2" X 2 1/2"	17-987	2			
"B"	PULLBOX 80" X 44"		2	DPBF	80 IN X 44 IN PULLBOX
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	2	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4		
CONCRETE PAD "B"		1	DBPAD		
"B100"	PULLBOX 100" X 44"		2	DPB100	100 IN X 44 IN PULLBOX
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	2	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4		
CONCRETE PAD "B"		1	DBPAD		
"D"	PULLBOX 80" X 44"		1	DPDF	80 IN X 44 IN PULLBOX
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	1	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	2		
CONCRETE PAD "D"		1	DDPAD		

NOTES:

- 1 LEVELING BLOCKS SHOWN ARE 4" X 8" X 16" CINDER BLOCKS.
- 2 EACH PULLBOX SHALL BE INSTALLED WITH A 3" LAYER OF 3/4" GRAVEL BASE INSIDE.
- 3 SEE DSU 1215 FOR PULLBOX DETAILS.
- 4 SEE DSU 1230 FOR BOLT DOWN LID DETAILS.
- 5 SEE DSU 1235 FOR EQUIPMENT PAD DETAIL.
- 6 ASSEMBLY " D " CAN BE USED FOR A CAPACITOR BANK WITH SOME MODIFICATIONS.

Assembly	Description	Stock Number	Qty.	C/U Code	Feature
"E"	PULLBOX 80" X 44"		1	DPBF	80 IN X 44 IN PULLBOX
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	2	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4		
CONCRETE PAD "E"		1	DEPAD		
"H"	PULLBOX 60" X 44"		1	DPBF1	60 IN X 44 IN PULLBOX
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	1	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	2		
CONCRETE PAD "E"		1	DEPAD		
"J"	PULLBOX 60" X 44"		1	DPBF1	60 IN PULLBOX ASSY J
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L3	17-996	2	DLID30	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4			
"K"	PULLBOX 100" X 44"		1	DPB100	100 IN PULLBOX ASSY. K
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	2	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HED. 1/2" X 2 1/2"	17-987	4		
	LIGHT WEIGHT LID L3	17-996	2	DLID30	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4			

NOTES:

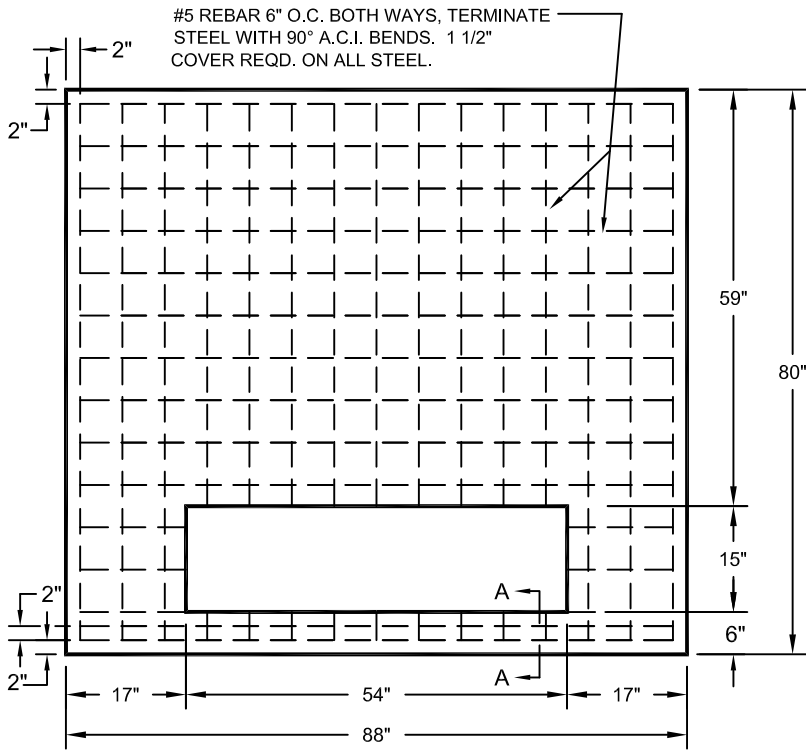
- 1 LEVELING BLOCKS SHOWN ARE 4" X 8" X 16" CINDER BLOCKS.
- 2 EACH PULLBOX SHALL BE INSTALLED WITH A 3" LAYER OF 3/4" GRAVEL BASE INSIDE.
- 3 SEE DSU 1215 FOR PULLBOX DETAILS.
- 4 SEE DSU 1230 FOR BOLT DOWN LID DETAILS.
- 5 SEE DSU 1235 FOR EQUIPMENT PAD DETAIL.
- 6 ASSEMBLY " D " CAN BE USED FOR A CAPACITOR BANK WITH SOME MODIFICATIONS.

Assembly	Description	Stock Number	Qty.	C/U Code	Feature
"P"	PULLBOX 80" X 36"		1	DPB8036	80 IN PULLBOX ASSY. P
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L4	17-998	1	DLID4	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
	BOLT PENTA HEaD. 1/2" X 2 1/2"	17-987	2		
	LIGHT WEIGHT LID L5	17-997	2	DLID5	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HED. 1/2" X 2 1/2"	17-987	4		
"S"	PULLBOX 80" X 44"		1	DPB8044	80 IN X 44 IN PULLBOX ASSY. S
	5/8" X 10' CU BONDED GROUND ROD	08-626	1	GROUNDROD _UG	
	5/8" GROUND ROD CLAMP	07-461			
	WISE CONNECTOR # 4 - # 2	04-030			
	WIRE # 2 BARE 7 STRD.	12-115			
	LIGHT WEIGHT LID L2	17-995	1	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	2		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	2		
	CONCRETE PAD "S"		1	DSPAD	
PMH-PME PULLBOX (MAINTENANCE ONLY)	PULLBOX 100" X 44"		1	DPB100	PAD PMH-PME 25 KV
	LIGHT WEIGHT LID L2	17-995	2	DLID20	
	WASHER ROUND GALV. 1 3/8" O.D. 9/16" HOLE	02-755	4		
	BOLT PENTA HEAD. 1/2" X 2 1/2"	17-987	4		
	CONCRETE PAD (PMH-PME 25 KV)		1	DPADMH2	
PMH-PME PULLBOX (MAINTENANCE ONLY)	PULLBOX 80" X 88"		1	DPB8088	PAD PMH 15 KV PAD PME 15KV
	CONCRETE PAD (PMH 15KV) OR		1	DPADMH OR	
	CONCRETE PAD (PMH 15KV)			DPADME	
DVI PULLBOX	PULLBOX 100" X 44"		2	DPB100	PVI PAD
	CONCRETE PAD PVI 25 KV		1	DPADVI	

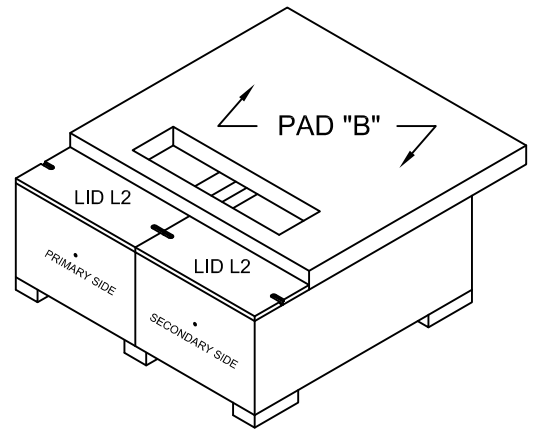
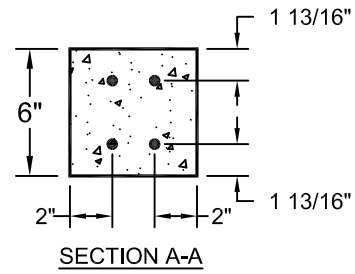
NOTES:

- 1 LEVELING BLOCKS SHOWN ARE 4" X 8" X 16" CINDER BLOCKS.
- 2 EACH PULLBOX SHALL BE INSTALLED WITH A 3" LAYER OF 3/4" GRAVEL BASE INSIDE.
- 3 SEE DSU 1215 FOR PULLBOX DETAILS.
- 4 SEE DSU 1230 FOR BOLT DOWN LID DETAILS.
- 5 SEE DSU 1235 FOR EQUIPMENT PAD DETAIL.
- 6 ASSEMBLY " D " CAN BE USED FOR A CAPACITOR BANK WITH SOME MODIFICATIONS.

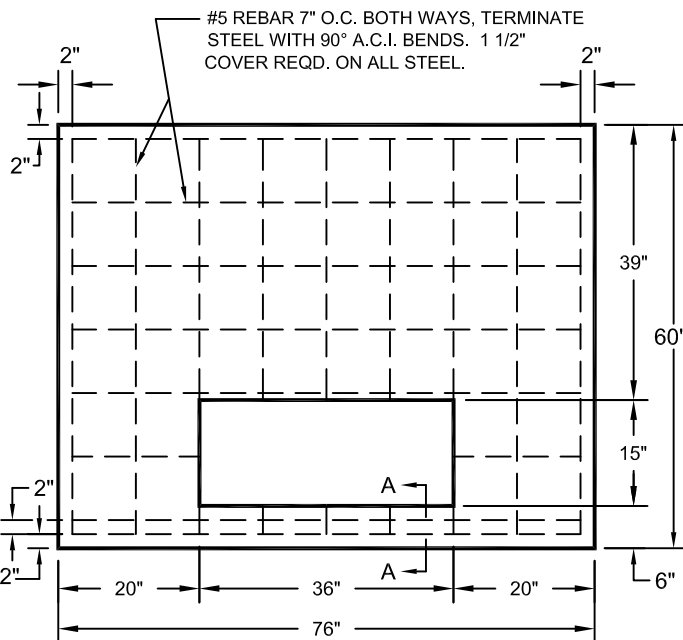
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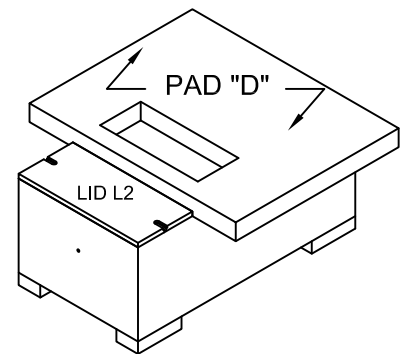
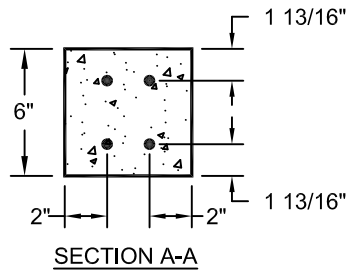
PAD "B"
500 KVA - 2500 KVA



ASSEMBLY "B"
80" X 88"
USE (2) 80" X 44" BOXES.
(FOR 500-1000 KVA)
USE (2) 100" X 44" BOXES
(FOR 1500-2500 KVA)



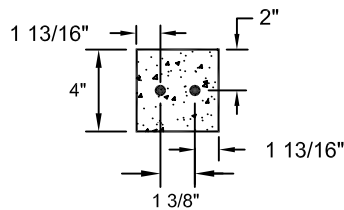
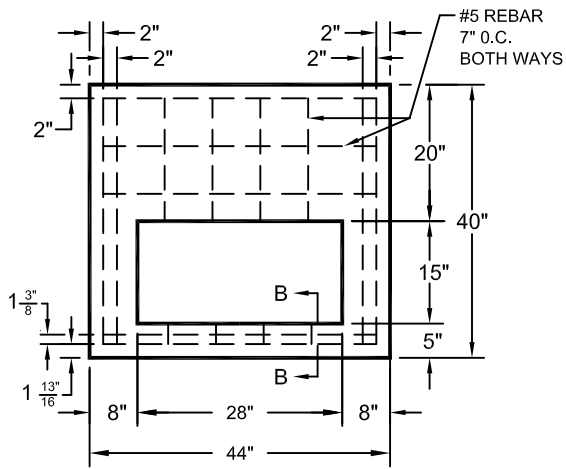
PAD 'D'
300 KVA MAXIMUM



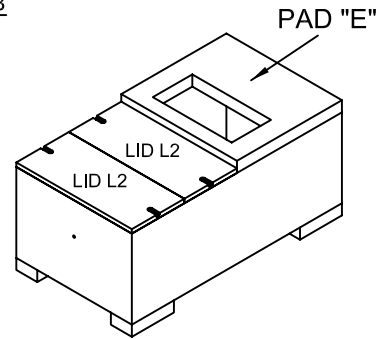
ASSEMBLY "D"
80" X 44"
NOTE: FOR 3 Ø 300KVA AND BELOW

DRAWING NOT TO SCALE

EQUIPMENT PAD DETAILS

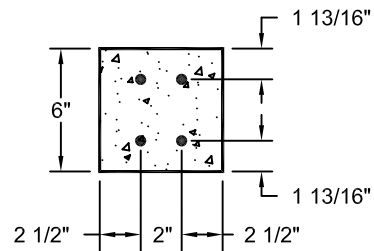
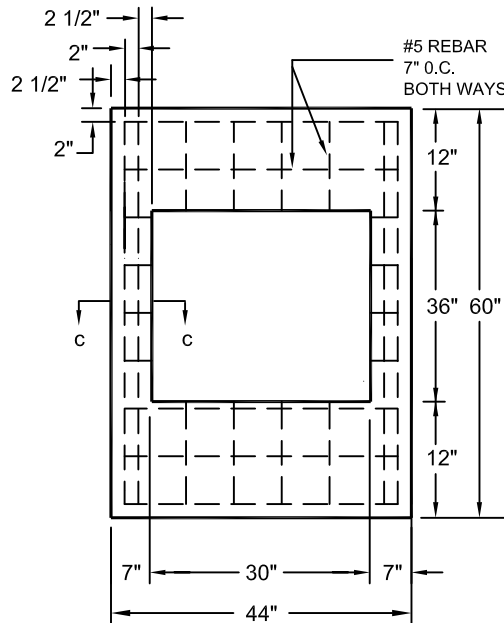


SECTION B-B

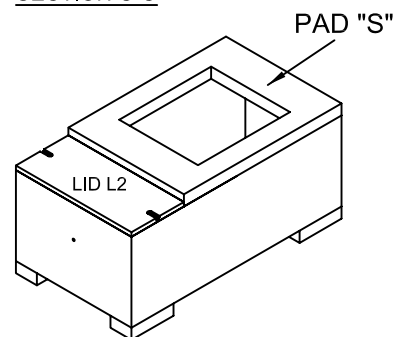


ASSEMBLY "E"
80" X 44"

PAD "E"
167 KVA MAXIMUM



SECTION C-C

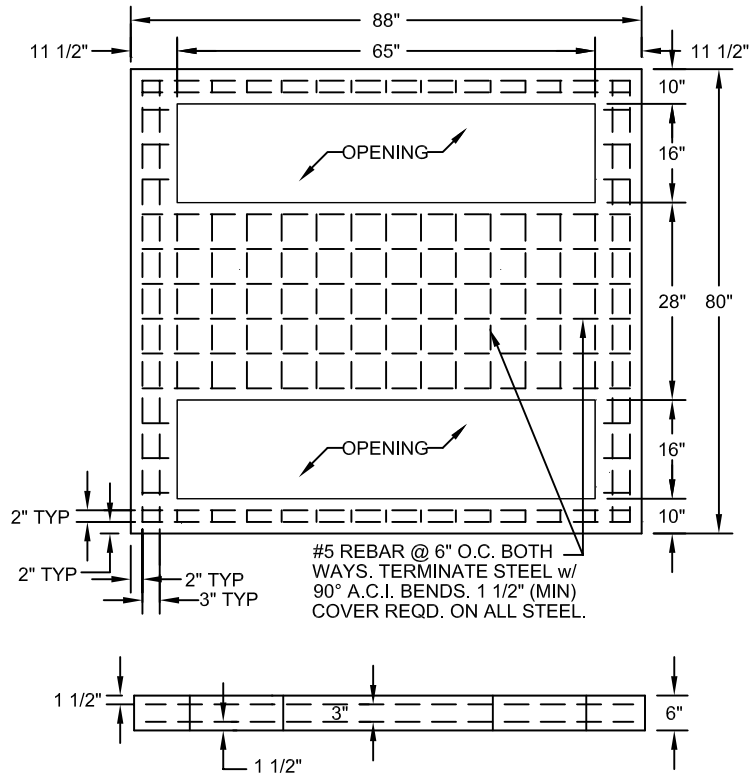


ASSEMBLY "S"
80" X 44"

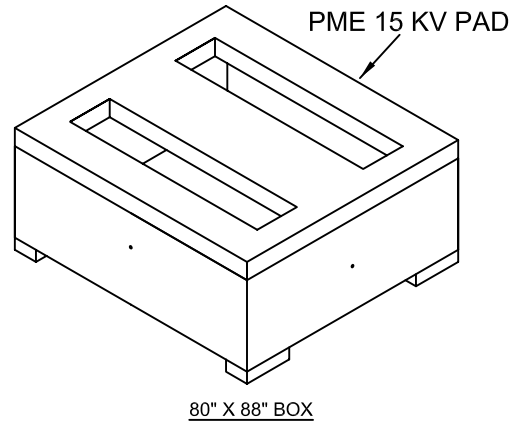
PAD "S"
FOR COMMERCIAL
SECONDARY BUS ENCLOSURE

DRAWING NOT TO SCALE

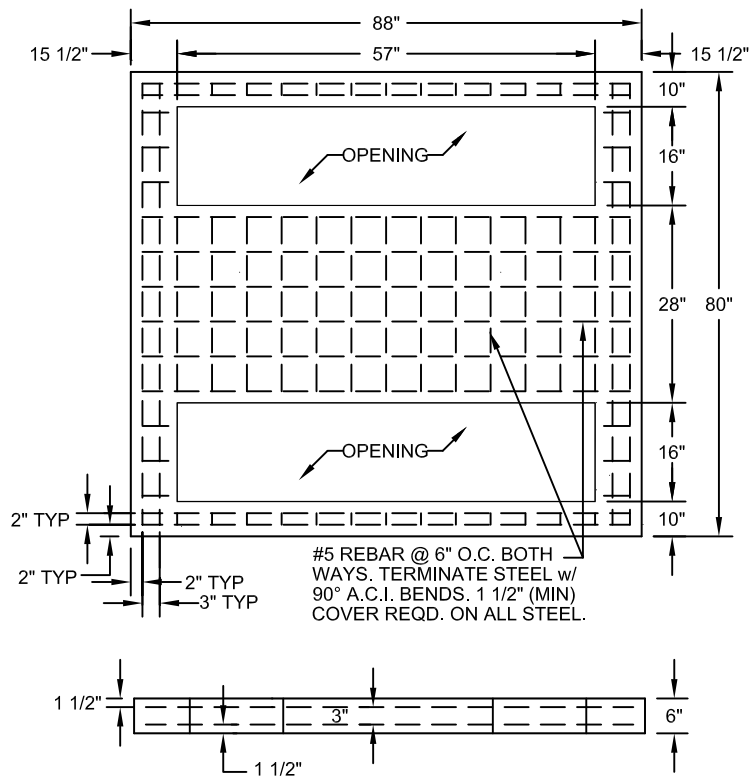
EQUIPMENT PAD DETAILS



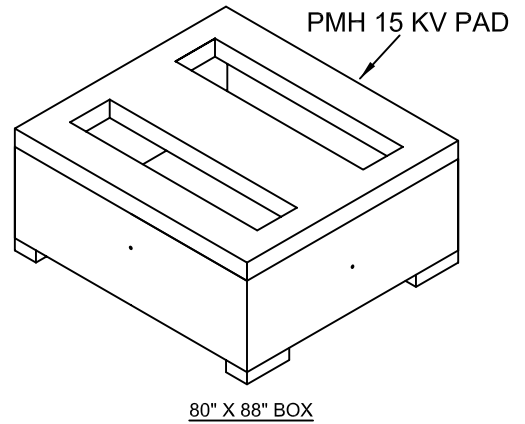
(FOR MAINTENANCE ONLY)
PME 15KV PAD



NOTE: THREADED INSERTS FOR ANCHOR BOLTS TO BE FIELD INSTALLED.



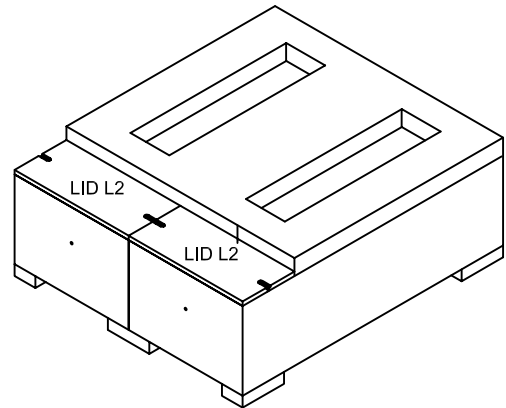
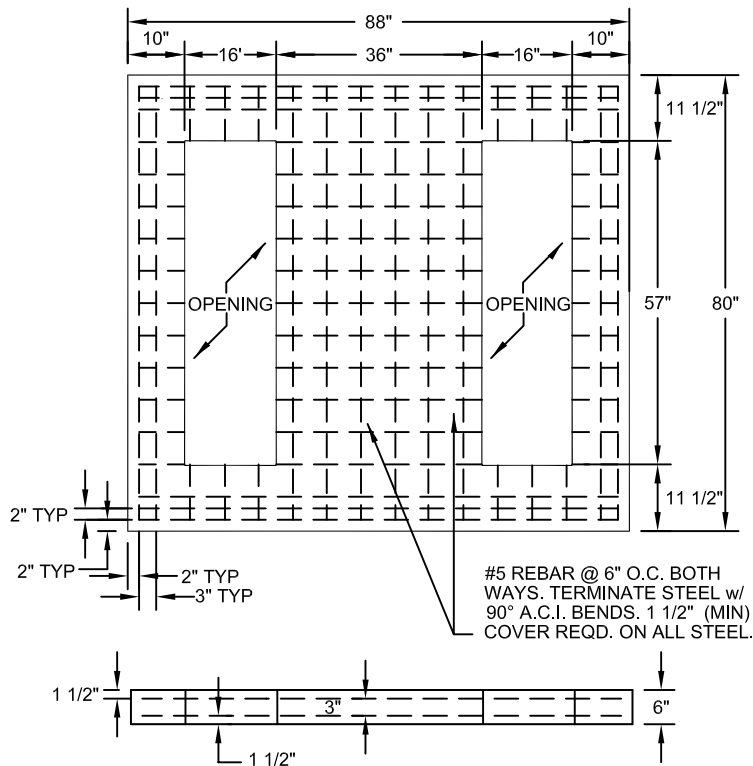
(FOR MAINTENANCE ONLY)
PMH 15KV PAD



NOTE: THREADED INSERTS FOR ANCHOR BOLTS TO BE FIELD INSTALLED.

DRAWING NOT TO SCALE

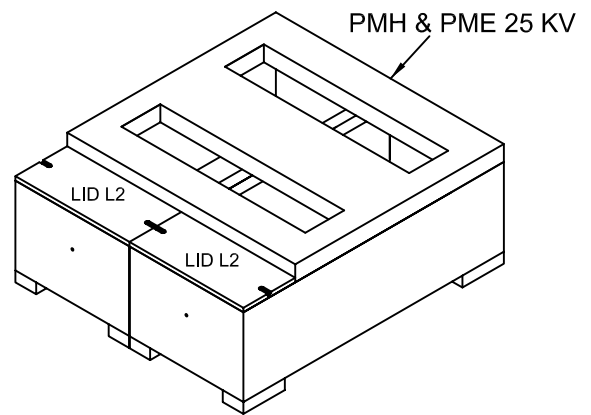
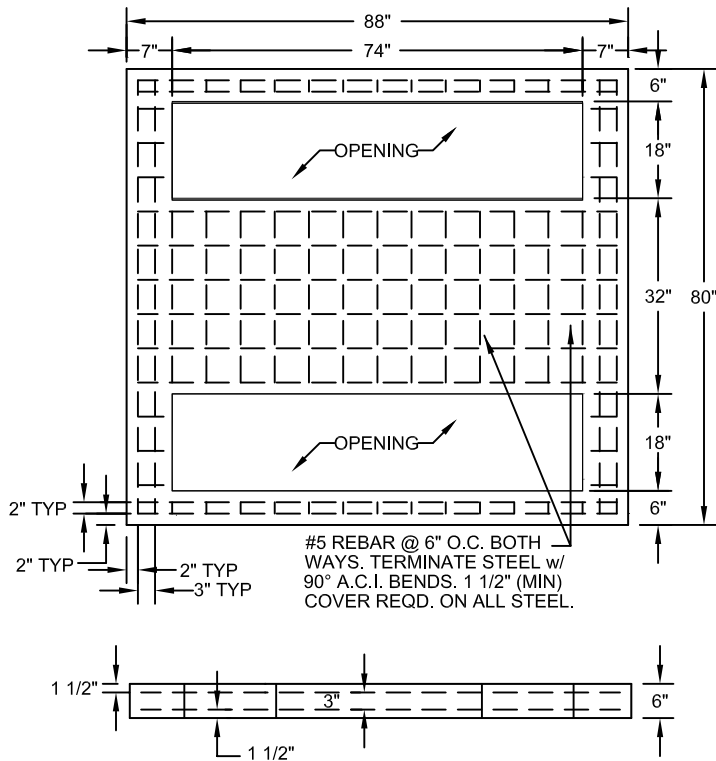
EQUIPMENT PAD DETAILS



2 - 100" X 44" BOXES
PVI

NOTE: THREADED INSERTS FOR ANCHOR BOLTS TO BE FIELD INSTALLED.

PVI 25KV PAD



100" X 44" BOX
PMH & PME

NOTE: THREADED INSERTS FOR ANCHOR BOLTS TO BE FIELD INSTALLED.

(FOR MAINTENANCE ONLY)
PMH & PME 25KV PAD

DRAWING NOT TO SCALE

EQUIPMENT PAD DETAILS

	Description	Stock Number	Qty.	C/U Code	Feature
	TRANSFORMER PAD "B"	N/A	1	DBPAD	PADB
	TRANSFORMER PAD "D"	N/A	1	DDPAD	PADD
	TRANSFORMER PAD "E"	N/A	1	DEPAD	PADE
	TRANSFORMER PAD "S"	N/A	1	DSPAD	PADS
	CONCRETE PAD PME (15 KV) (MAINT. ONLY)	N/A	1	DPADPME	PADPME15
	CONCRETE PAD PMH (15 KV) (MAINT. ONLY)	N/A	1	DPADPMH	PADPMH15
	CONCRETE PAD PVI (15 KV) (25KV)	N/A	1	DPADVI	PVIPAD
	CONCRETE PAD PME & PMH (25 KV) (MAINT. ONLY)	N/A	1	DPADMH2	PADPMHPME25KV

NOTES:

- 1 PAD "E" SHALL BE 4" THICK WITH REBAR AT 2" DEPTH.
- 2 ALL CONCRETE SHALL BE 4000 PSI AT 28 DAYS.
- 3 ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4".
- 4 ALL STEEL TO BE # 5 REBAR TERMINATE STEEL WITH 90 ACI. BEND.
- 5 ALL STEEL TO HAVE MINIMUM COVER OF 1 1/2".

