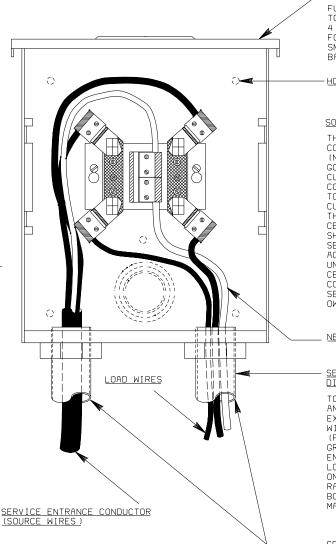
# METER LOOP FOR SOCKET METERS (SINGLE METER INSTALLATIONS ONLY) 3 WIRE SINGLE PHASE 120/240 VOLT UNDERGROUND SERVICE FOR 200 AMPERES OR LESS

A METER SOCKET BASE FURNISHED AND INSTALLED BY CUSTOMER WITH CENTER NOT LESS THAN 4' OR MORE THAN 6' ABOVE GROUND. THE METER SOCKET BASE IS TO BE INSTALLED OUTDOOR. FOR A 120/240 VOLT 200 AMPERE OR SMALLER SERVICE. THE METER SOCKETBASE IS TO BE INSTALLED OUTDOOR.

### GROUNDING CONDUCTOR

GROUNDING CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE NEUTRAL BUS IN THE SERVICE EQUIPMENT TO THE GROUNDING ELECTRODE. INSULATED GROUNDING CONDUCTORS MUST BE IDENTIFIED BY THE USE OF WHITE OR GREY INSULATION, OR BY OTHER SUITABLE METHODS (SEE ARTICLE 200-6 N.E.C. \*). THE GROUNDING CONDUCTOR, MINIMUM SIZE #8 CU. OR ITS ENCLOSURE SHALL BE SECURELY FASTENED TO THE SURFACE ON WHICH IT IS CARRIED. A #4 CU. OR LARGER CONDUCTOR MAY BE EXPOSED, BUT SHALL BE PROTECTED IF EXPOSED TO PHYSICAL DAMAGE. A #6 CU. GROUNDING CONDUCTOR THAT IS FREE FROM EXPOSURE TO PHYSICAL DAMAGE SHALL BE PERMITTED TO RUN ALONG THE SURFACE OF THE STRUCTURE WITHOUT METAL COVERING OR PROTECTION WHERE IT IS RIGIDLY STAPLED TO THE STRUCTURE. OTHERWISE, IT SHALL BE PLACED IN CONDUIT, ELECTRICAL METALLIC TUBING OR CABLE ARMOR.

THE GROUNDING ELECTRODE, GROUNDING ELECTRODE CONDUCTOR AND GROUNDING CLAMP, SHALL COMPLY WITH N.E.C.\* SECTION 250.



2 10-19-05 REVISED PER

### METER SOCKET BASE

FURNISHED AND INSTALLED BY CUSTOMER WITH CENTER NOT LESS THAN 4' OR MORE THAN 6' ABOVE GROUND FOR A 120/240 VOLT 200 AMPERE OR SMALLER SERVICE. THE METER SOCKET BASE IS TO BE INSTALLED OUTDOOR.

HOLES FOR MOUNTING

### SOURCE AND LOAD CONDUCTORS

THE CUSTOMER MAY MAKE THE
CONNECTIONS WITHIN THE METER CAN
(NOTE THE SOURCE CONDUCTORS MUST
GO TO THE TOP TERMINALS), OR THE
CUSTOMER MAY LEAVE SUFFICIENT
CONDUCTOR FOR CENTERPOINT ENERGY
TO MAKE THE CONNECTIONS. ALL
CUSTOMER MADE CONNECTIONS WITHIN
THE METER CAN WILL BE CHECKED BY
CENTERPOINT ENERGY. THE CUSTOMER
SHALL FURNISH AND INSTALL THE
SERVICE ENTRANCE CONDUCTORS IN
ACCORDANCE WITH RESIDENTIAL
UNDERGROUND SERVICE ARRANGEMENTS.
CENTERPOINT ENERGY SHALL MAKE ALL
CONNECTIONS BETWEEN THE CUSTOMER'S
SERVICE CONDUCTORS AND COMPANY
OWNED CONDUCTORS AND EQUIPMENT.

NEUTRAL CONDUCTOR

### SERVICE RACEWAY TO DISTRIBUTION LOAD CENTER

TO SERVICE ENTRANCE DISCONNECT AND OVERCURRENT PROTECTION, EXTERNALLY AND MANUALLY OPERABLE WITH OVERCURRENT PROTECTION (FUSING OR BREAKER SETTING) NOT GREATER THAN CAPACITY OF SERVICE ENTRANCE CONDUCTORS. MAY BE LOCATED INSIDE OR OUTSIDE (EITHER ON THE BUILDING OR ON A POLE) IF RAINTIGHT. (KNOCKOUT ON SIDE, BOTTOM OR BACK OF THE METER CAN MAY BE USED FOR THIS CONNECTION).

### SERVICE RACEWAYS

SERVICE ENTRANCE CONDUIT MAY BE SCHEDULE 40 OR GREATER RIGID NONMETALLIC CONDUIT, RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT EXCEPT WHERE SUBJECT TO PHYSICAL DAMAGE, SUCH AS NEAR A PARKING AREA, DRIVEWAY OR GATE. ONLY SCHEDULE 80 NONMETALLIC CONDUIT, RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT MAY BE USED FOR SERVICE ENTRANCE CONDUIT WHERE SUBJECT TO PHYSICAL DAMAGE.

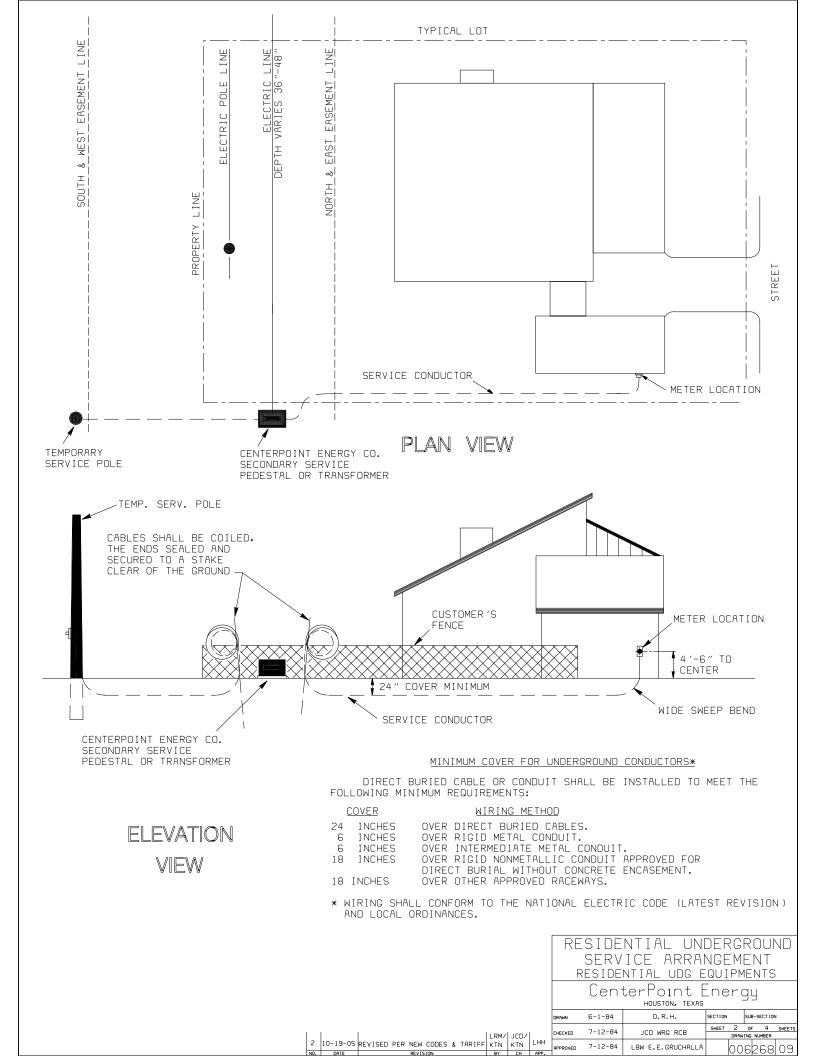
WIRING SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (LATEST REVISION), AND LOCAL ORDINANCES.

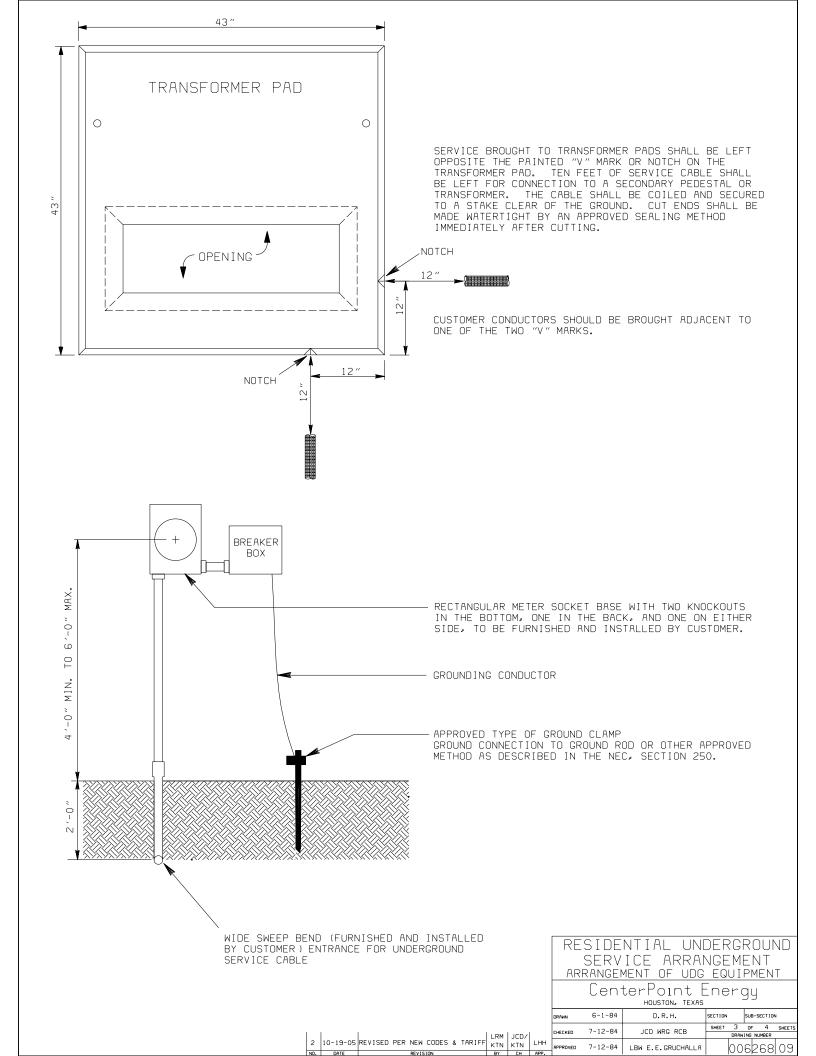
\* NATIONAL ELECTRIC CODE, LATEST REVISION

RESIDENTIAL UNDERGROUND SERVICE ARRANGEMENT METER LOOP FOR 200A OR LESS

CenterPoint Energy

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# RESIDENTIAL UNDERGROUND SERVICE ARRANGEMENT 3 WIRE, SINGLE PHASE, 120 / 240 VOLT FOR 200 AMPERES OR LESS

### METER SOCKET BASE

A METER SOCKET BASE FURNISHED AND INSTALLED BY CUSTOMER'S ELECTRICAL CONTRACTOR SHALL BE CENTERED NOT LESS THAN 4' OR MORE THAN 6' ABOVE GROUND. THE METER SOCKET BASE IS TO BE INSTALLED OUTDOORS. THE METER SHALL BE LOCATED ON THE SIDE OF THE HOUSE (NEAREST THE TRANSFORMER, PEDESTAL, OR POLE RISER). ACCESS TO THE METER SHALL NOT BE BLOCKED BY LOCKED GATES, WALLS OR FENCES. METERING EQUIPMENT SHALL BE INSTALLED ON A WALL THAT IS A SUBSTANTIAL PERMANENT PART OF THE STRUCTURE. DO NOT PLACE METERS WHERE THEY WILL INTERFERE WITH THE OPENING OF DOORS OR WINDOWS. A 36" CLEARANCE IN FRONT OF AND 2" TO EITHER SIDE, TOP, AND BOTTOM OF THE METER SOCKET IS REQUIRED (THIS SPACE MUST BE OVER THE CUSTOMER'S PROPERTY OR PUBLIC WAYS). THE METER SOCKET BASE SHALL BE CLEARLY AND PERMANENTLY MARKED ON THE OUTSIDE BY THE PERSON INSTALLING IT TO SHOW THE ADDRESS TO BE SERVED BY THE METER. THE METER MUST BE INSTALLED ON THE SUPPLY SIDE OF THE BREAKER BOX OR FUSE PANEL. THE SEQUENCE OF CONNECTIONS FOR A 120/240 VOLT SERVICE SHALL BE AS FOLLOWS: SERVICE-METER-SWITCH-FUSE-LOAD. ONLY ONE SET OF SERVICE ENTRANCE CONDUCTORS ON THE LOAD SIDE WILL BE PERMITTED. ALL SINGLE PHASE 125A AND 200A CANS WILL BE PROVIDED WITH TAMPER PROOF LIDS. ONLY RING TYPE METER SOCKETS WILL BE ACCEPTED. HOUSING SHALL BE CONSTRUCTED FROM STEEL OR ALUMINUM IN ACCORDANCE WITH UL STANDARD #414 LATEST REVISION FOR METER SOCKETS AND SUITABLE FOR OUTDOOR USE. ALL METER HOUSING SHALL BE UL LISTED WITH LABEL. THEY SHALL BE USED IN ACCORDANCE WITH THEIR LABEL. METER SOCKET BYPASS DEVICES ARE NOT ALLOWED. MAINTENANCE ON ALL CUSTOMER OWNED DEVICES WOULD BE THE RESPONSIBILITY OF THE CUSTOMER. METER SOCKET INSTALLATION SHALL BE IN ACCORDANCE WITH CENTERPOINT ENERGY SERVICE STANDARDS.

FOR TEMPORARY SERVICES ONLY, THE HEIGHT OF THE METER SOCKET ON A TEMPORARY METER POLE IN UNDERGROUND RESIDENTIAL DISTRIBUTION AREAS MAY BE REDUCED BUT IN NO CASE SHALL THE HEIGHT OF THE CENTER OF THE METER SOCKET BASE BE LOWER THAN 3 FEET ABOVE GRADE. TEMPORARY SERVICE POLES SHALL BE SET OUTSIDE THE CONFINES OF THE UTILITY EASEMENT BUT OTHERWISE WILL BE INSTALLED ACCORDING TO THE ABOVE SPECIFICATION.

### SOURCE AND LOAD CONDUCTOR

THE CUSTOMER'S CONTRACTOR SHALL FURNISH AND INSTALL SERVICE TO THE FOLLOWING SPECIFICATIONS. CONDUCTORS SHALL BE SIZED FOR LOAD ACCORDING TO THE N.E.C.\* (LATEST REVISION) AND SHALL BE SUITABLE FOR DIRECT BURIAL. THE CONDUCTOR SHALL BE CLEARLY MARKED AS TO TYPE AND MUST BE INSTALLED TO A MINIMUM DEPTH OF 24" BELOW GRADE. BACK FILL PLACED IMMEDIATELY ABOVE THE CONDUCTOR SHALL BE OF FINE SOIL OR SAND, FREE OF ANY HARD OBJECTS WHICH COULD DAMAGE CONDUCTORS. CONDUCTORS IN CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH THE N.E.C.\* (LATEST REVISION) OR AS APPROVED BY THE LOCAL GOVERNING AUTHORITIES.

ALUMINUM AND ALUMINUM ALLOY CABLE REQUIRE THE UTMOST CARE IN HANDLING AND INSTALLATION. MOST INSULATION ARE ESPECIALLY, SUSCEPTIBLE TO NICKS AND SCRATCHES, CARELESS HANDLING MAY RESULT IN FAILURE OF CABLE.

THE CUSTOMER'S CONTRACTOR SHALL INSTALL SERVICE CABLE TO WITHIN ONE FOOT OF SECONDARY SERVICE PEDESTAL OR TRANSFORMER PAD (CONTRACTOR SHALL CONTACT CENTERPOINT ENERGY DISTRICT OPERATIONS FOR PROPER LOCATION OF SERVICE CABLE CONNECTION, EVEN IF APPARENTLY EVIDENT ON THE GROUND). SERVICE BROUGHT TO TRANSFORMER PADS SHALL BE LEFT OPPOSITE THE PAINTED "V" MARK OR NOTCH ON THE TRANSFORMER FOUNDATION. TEN FEET OF SERVICE CABLE SHALL BE LEFT FOR CONNECTION TO A SECONDARY PEDESTAL OR TRANSFORMER. THE CABLE SHALL BE COILED AND SECURED CLEAR OF THE GROUND TO A STAKE. CUT ENDS SHALL BE MADE WATERTIGHT BY AN APPROVED SEALING METHOD IMMEDIATELY AFTER CUTTING. CAUTION SHOULD BE OBSERVED WHEN DIGGING WITHIN THE AREA TO AVOID DAMAGE TO THE OTHER CABLES, AND GAS PIPELINES. DAMAGE TO ANY UTILITY EQUIPMENT SHALL BE IMMEDIATELY REPORTED TO THE OWNER OF THE UTILITY. CENTERPOINT ENERGY WILL NOT BE RESPONSIBLE FOR DAMAGE BY PERSONS OTHER THEN ITS OWN PERSONNEL.

## GROUNDING CONDUCTOR

ALL SERVICES MUST BE PROPERLY GROUNDED. USE AN APPROVED METHOD AS DESCRIBED IN THE N.E.C.\* (LATEST REVISION) SECTION 250. A DRIVEN GROUND ROD IS PREFERRED BY CENTERPOINT ENERGY. REGARDLESS OF THE TYPE OF GROUNDING ELECTRODE USED, N.E.C.\* (LATEST REVISION) REQUIRES THAT THE "INTERIOR METALLIC COLD WATER PIPING SYSTEM" BE BONDED TO IT. FOR ADDITIONAL GROUNDING INFORMATION AND INFORMATION ABOUT SERVICE ENTRANCE CONDUIT, PLEASE SEE THE ATTACHED METER LOOP DRAWING. CONSTRUCTION IN AREAS WHERE ELECTRICAL INSTALLATIONS ARE GOVERNED BY CITY ORDINANCE SHALL MEET REQUIREMENTS OF ALL APPLICABLE ORDINANCES AND CODES.

\* NATIONAL ELECTRIC CODE (LATEST REVISION)

RESIDENTIAL UNDERGROUND SERVICE ARRANGEMENT FOR 200AMPERES OR LESS

CenterPoint Energy

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