

## 11. GENERAL DRAWINGS AND STANDARDS

## **Table of Contents**

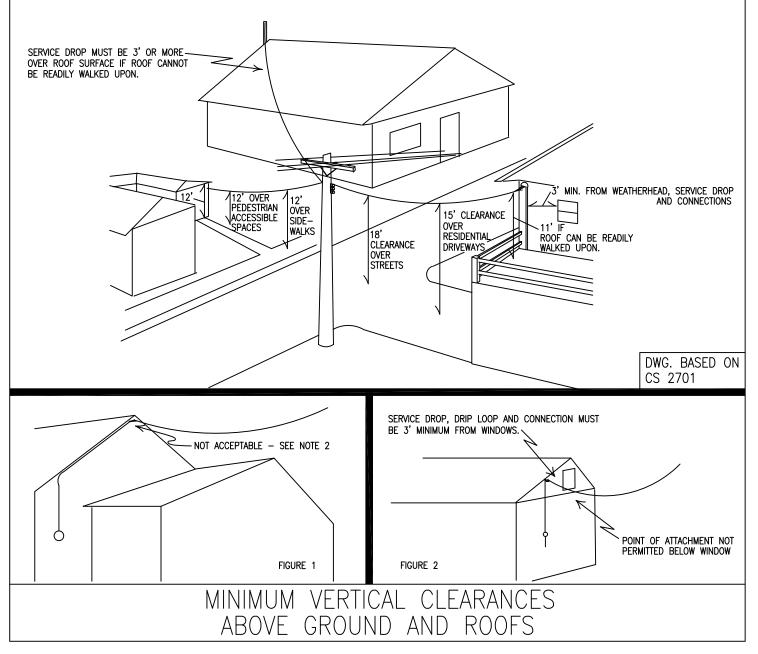
Minimum Vertical Clearances Above Ground and Roofs
Minimum Pool Clearances
Minimum Clearances of Wires Adjacent to But Not Attached to Buildings and Other Structures
O.H 100 – 400 Amp Service Using Structure Supported Mast
O.H. 100 – 400 Amp Service Using Structure Supported Mast – General Notes
Drop Swing Service for Inaccessible Service Entrance Attachment
U.G / O.H 100 – 320 Amp Pole Mounted Service
O.H 400 Amp Pole Mounted ServiceD8
PSEG Long Island Connects Program Connector Installation
Open Wire Services 400 to 600 AmpD10
Customer Installed Cable RiserD11
Customer Installed Cable Riser – General Notes
Customer / Contractor Installed Pull Box and Manhole Specifications
U.G. Service 100 – 800 Amp Single or 3-Phase by Builder / Applicant
U.G. Service 100 – 800 Amp Single or 3-Phase by Builder / Applicant
PSEG Long Island Installed Single Phase Residential RUD Service
Customer / Contractor Installed Single Phase Residential RUD Service
O.H. Service Single Phase Self Contained Meter Outdoor Socket Meter Installation
U.G. Service Single Phase Self Contained Meter Outdoor Socket Meter Installation
O.H. / U.G. Service Single Phase Self Contained Meter Outdoor Socket Trough Multi-Meter Installation
O.H. / U.G. Service Single Phase Self Contained Meters Outdoor Multi-Meter Socket Enclosure
O.H. Service Poly-Phase Self Contained Meters 200 Ampere Socket Meter Installation
U.G. Service Poly-Phase Self Contained Meters 200 Ampere Socket Meter Installation
Clearance Between Electric and Gas Meters
Trough Supply Single and Poly-Phase Self Contained Meters 200 Ampere Multi-Meter Socket Installation

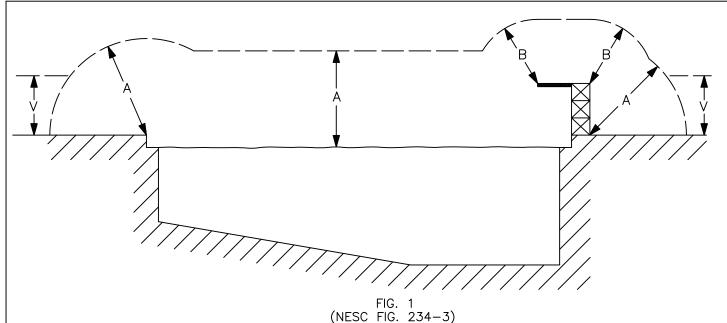


#### **GENERAL DRAWINGS AND STANDARDS**

Meter H Frame Construction Outdoor Mounting for Transformer and/or Meter Cabinet	D26
Electric Meter Room Equipment Clearances	D27
400 – 800 Ampere Service Trans "S" Cabinet Installation.	D28
400 – 800 Ampere Service Trans "S" Cabinet Installation – Notes and Bonding Diagram	D29
Transformer Rated Meter Socket and Current Transformer Cabinet Installation	.D30
400 to 1200 Ampere Service Current Transformer Compartment Installation	D31
1600 Ampere Service and Above Current Transformer Compartment Installation	D32
Typical Grounding Requirements Single Meter / Main Installation	D33
Typical Grounding Details Multi-Meter / Multi-Main Installation	D34
Optional Standby Systems	D35

- 1. POINT OF SERVICE ATTACHMENT ON BUILDING WALL SHALL NOT BE LESS THAN 15'-0" ABOVE GRADE OR GREATER THAN 21'-0" WITHOUT PSEG LONG ISLAND EXPLICIT APPROVAL IN WRITING.
- 2. SERVICE CONNECTIONS LOCATED ABOVE GARAGE OR OTHER BUILDING EXTENSION AS REPRESENTED IN FIGURE 1 ARE NOT ACCEPTABLE BECAUSE THE SERVICE CONNECTION CAN NOT BE DIRECTLY REACHED FROM A LADDER PLACED ON THE GROUND.
- 3. CLEARANCES BETWEEN PSEG LONG ISLAND SERVICES AND VERIZON SERVICE LATERALS SHALL BE 2' MINIMUM.
- 4. FOR COMMERCIAL DRIVEWAYS AND ANY OTHER LOCATIONS SUBJECT TO TRUCK TRAFFIC MINIMUM CLEARANCE SHALL BE 18'-0".
- 5. A 3' CLEARANCE IS REQUIRED FROM THE WEATHERHEAD AND/OR SERVICE DROP CONNECTIONS TO ALL WINDOWS, DOORS, AND MOUNTINGS ON THE BUILDING WALL. POINT OF ATTACHMENT IS NOT PERMITTED BELOW A WINDOW.
- 6. ADD 6" TO ALL MINIMUM CLEARANCES FOR ANY OPEN WIRE CONSTRUCTION.





SWIMMING POOL CLEARÁNCES

#### TABLE 1

	TYPE 1:  MESSENGERS; SURGE PROTECTION WIRES; GROUNDED GUYS; GROUNDED NEUTRAL CONDUCTORS (FEET)	TYPE 2: SUPPLY CABLES 0 TO 750v (OVERHEAD TRIPLEX OR QUADRAPLEX SECONDARY OR SERVICE WIRE)  (FEET)	TYPE 3: OPEN SUPPLY CABLES O TO 750v (OVERHEAD OPEN WIRE SECONDARY OR SERVICE)  (FEET)	TYPE 4: OPEN SUPPLY CABLES 750v TO 22 kv (PRIMARY WIRE, BARE AND COVERED)  (FEET)	
A: CLEARANCE IN ANY DIRECTION FROM THE WATER LEVEL, EDGE OF POOL, BASE OF DIVING PLATFORM OR ANCHORED RAFT	22.0	22.5	23.0	25.0	
B: CLEARANCE IN ANY DIRECTION TO THE DIVING PLATFORM OR TOWER	14.0	14.5	15.0	17.0	
V: VERTICAL CLEARANCE OVER ADJACENT LAND	CLEARANCE SHALL BE AS SHOWN ON DRAWING D1				

PSEG LONG ISLAND BASES ITS REQUIRED CLEARANCES FROM SWIMMING POOLS AND ASSOCIATED STRUCTURES UPON THE REQUIREMENTS OF THE NATIONAL ELECTRICAL SAFETY CODE (NESC). WHERE WIRES CONDUCTORS OR CABLES CROSS OVER A SWIMMING POOL OR THE SURROUNDING AREA THE CLEARANCES IN ALL DIRECTIONS SHALL NOT BE LESS THAN THOSE SHOWN IN TABLE 1 AND ILLUSTRATED IN FIG. 1, AND AS DESCRIBED IN THE NESC. LOCAL MUNICIPALITY MAY HAVE STRICTER POOL CLEARANCE REQUIREMENTS. FOR ADDITIONAL PUBLIC POOL REQUIREMENTS SEE SECT. 3.4

THESE CLEARANCE REQUIREMENTS DO NOT APPLY TO TYPE 1 AND TYPE 2 CABLES DESCRIBED ABOVE THAT ARE 10 FEET OR MORE HORIZONTALLY FROM THE EDGE OF THE POOL OR DIVING PLATFORM.

UNDERGROUND WIRING SHALL NOT BE LOCATED UNDER OR WITHIN AN AREA EXTENDING 5' HORIZONTALLY FROM THE INSIDE WALL OF A POOL, HOT TUB OR SPA.

WARNING: UNDER ON CIRCUMSTANCES SHOULD ANYONE, OTHER THAN PSEG LONG ISLAND PERSONAL ATTEMPT TO MEASURE CLEARANCES TO LIPA DISTRIBUTION SYSTEM.

DWG. BASED ON CS 2035

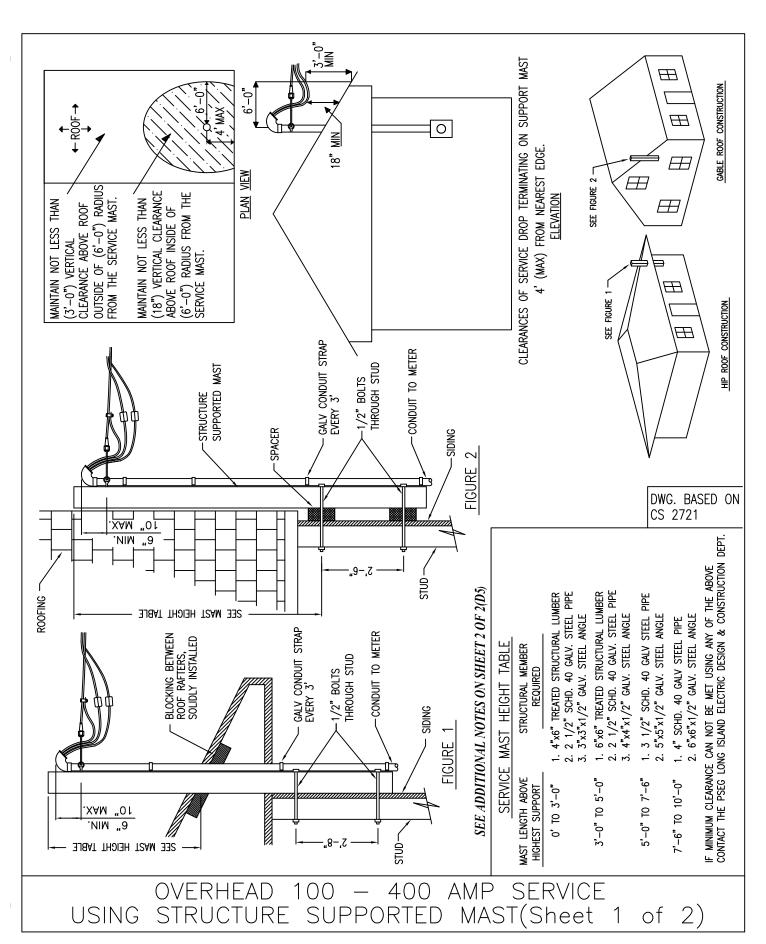
# MINIMUM POOL CLEARANCES

CLEARANCE OF	MESSENGERS, SURGE PROTECTION WIRES, GROUNDED GUYS, GROUNDED NEUTRAL CONDUCTORS (FT)	SUPPLY CABLES OF 0 TO 750V (OVERHEAD TRIPLEX OR QUADRUPLEX) (FT)	OPEN SUPPLY CONDUCTORS 0 TO 750V (OVERHEAD OPEN WIRE) ( FT )	OPEN SUPLY CONDUCTORS OVER 750V TO 22kV (PRIMARY BARE OR TREE WIRE) (FT)
1. BUILDINGS: A. HORIZONTAL (1) TO WALLS, PROJECTIONS AND GUARDED WINDOWS	4.5	5.0	5.5	7.5
(2) TO UNGUARDED WINDOWS	4.5	5.0	5.5	7.5
(3) TO BALCONIES AND AREAS READILY ACCESSIBLE TO PEDESTRIANS	4.5	5.0	5.5	7.5
B. VERTICAL (1) OVER OR UNDER ROOFS OR PROJECTIONS NOT READILY ACCESSIBLE TO PEDESTRIANS	3.0	3.5	10.5	12.5
(2) OVER OR UNDER BALCONIES DECKS AND ROOFS READILY ACCESSIBLE TO PEDESTRIANS	10.5	11.0	11.5	13.5
(3) OVER ROOFS ACCESSIBLE TO VEHICLES BUT NOT SUBJECT TO TRUCK TRAFFIC	10.5	11.0	11.5	13.5
(4) OVER ROOFS ACCESSIBLE TO TRUCK TRAFFIC	15.5	16.0	16.5	18.5
2. SIGNS, CHIMNEYS, BILLBOARDS, RADIO AND TELEVISION ANTENNAS, TANKS AND OTHER INSTALLATIONS NOT CLASSIFIED AS BUILDINGS OR BRIDGES  A. HORIZONTAL  (1) READILY ACCESSIBLE TO	4.5	5.0	5.5	7.5
(2) NOT READILY ACCESSIBLE TO PEDESTRIANS	3.0	3.5	5.5	7.5
B. VERTICAL (1) OVER OR UNDER SURFACE UPON PERSONNEL WALK	10.5	11.0	11.5	13.5
(2) OVER OR UNDER PORTIONS OF SUCH INSTALLATIONS	3.0	3.5	6.0	8.0

VOLTAGES ARE PHASE TO GROUND FOR EFFECTIVELY GROUNDED CIRCUITS AND THOSE OTHER CIRCUITS WHERE ALL GROUND FAULTS ARE CLEARED BY PROMPTLY DE-ENERGIZING THE FAULTED SECTION, BOTH INITIALLY AND FOLLOWING SUBSEQUENT BREAKER OPERATIONS. TABLE IS TAKEN FROM NESC 234-1, SEE NESC FOR DEFINITIONS AND CLARIFYING INFORMATION.

DWG. BASED ON CS 2034

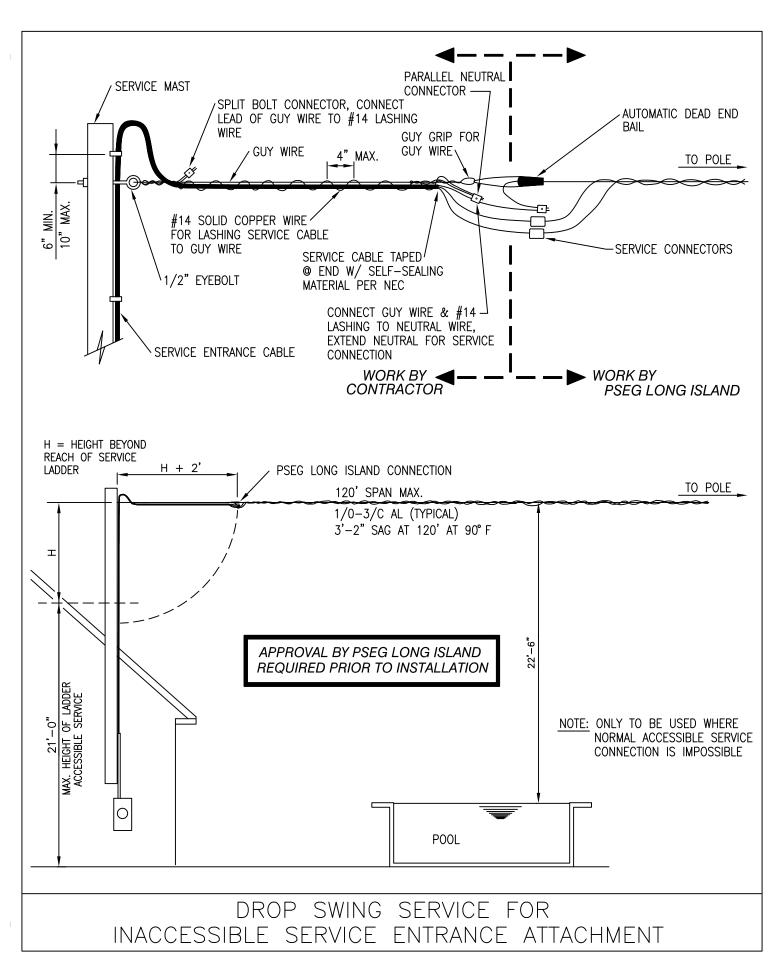
MINIMUM CLEARANCES OF WIRES ADJACENT TO BUT NOT ATTACHED TO BUILDINGS AND OTHER STRUCTURES

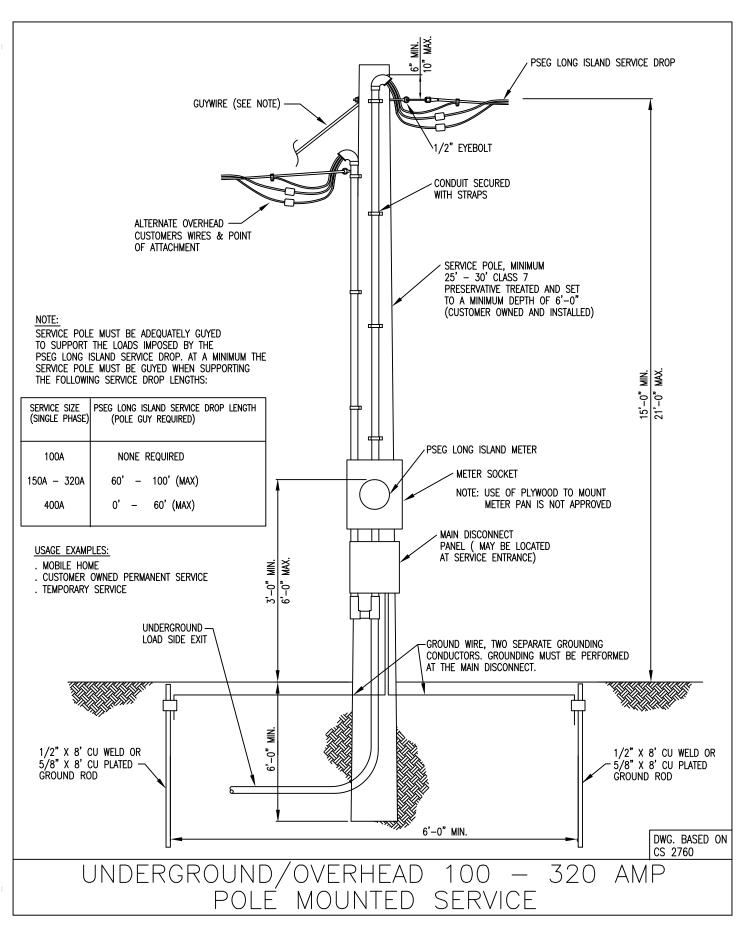


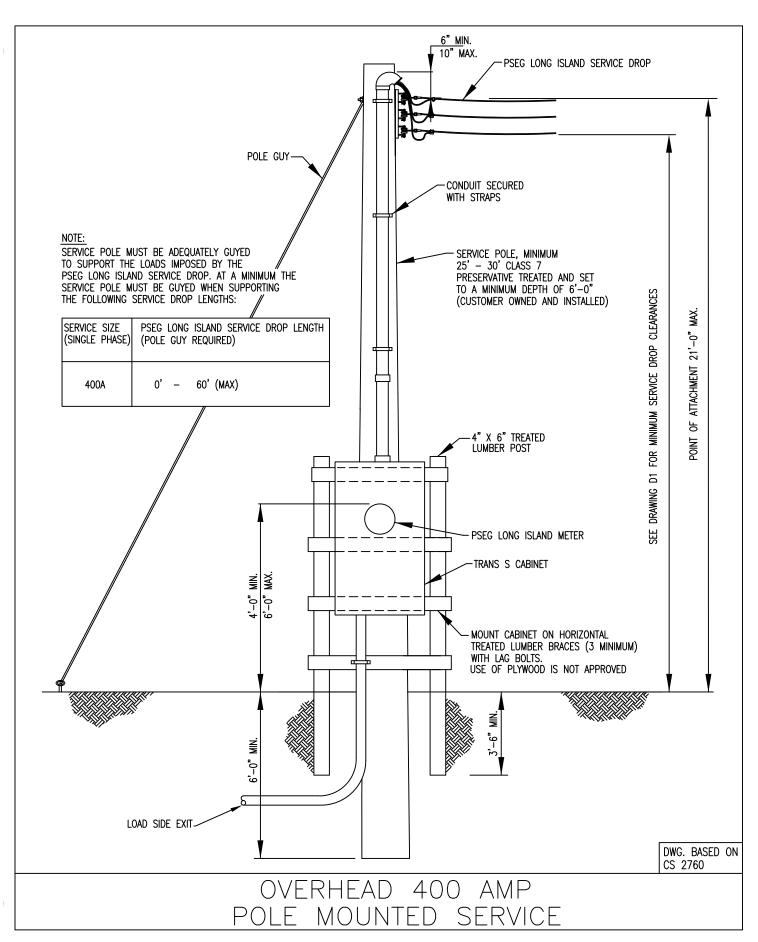
- 1. SERVICE ENTRANCE TYPE "SE" CABLE SHALL BE AS APPROVED BY THE COMPANY AND CAN BE USED WITHOUT BEING ENCASED IN CONDUIT ON THE LINE SIDE OF THE METER ENCLOSURE, PROVIDING IT WILL NOT COME INTO CONTACT WITH ANY AWNINGS, SHUTTERS, OR ANY OTHER OBJECTS THAT MAY CAUSE MECHANICAL INJURY TO THE CABLE. WHEN INSTALLED ADJACENT TO A DRIVEWAY THE CABLE SHALL BE ENCASED IN CONDUIT. PROTECTIVE SLEEVING ON TYPE "SE" CABLE IS REQUIRED TO A HEIGHT OF 8' ABOVE FINISHED GRADE. FOR ADDITIONAL REQUIREMENTS SEE DWG. D18
- 2. PVC AND ALUMINUM CONDUIT IS NOT PERMITTED TO BE USED AS A MAST.
- 3. CUSTOMER SHALL FURNISH MATERIAL AND LABOR FOR ALL WORK SHOWN, EXCEPT AS NOTED. ALL INSTALLATIONS ARE SUBJECT TO INSPECTION BY AN APPROVED INSPECTION AGENCY.
- 4. THROUGH BOLTS ARE REQUIRED FOR ANCHORING ALL SERVICE MASTS. IN THE EVENT THAT A THROUGH BOLT CANNOT BE USED AN ADEQUATELY SIZED LAG SCREW MAY BE APPROVED IF IT CAN BE SHOWN THE SCREW IS SUPPORTED BY A SOUND STRUCTURAL MEMBER.
- 5. FOR SOLID BLOCK OR BRICK WALL CONSTRUCTION THROUGH BOLTS SHALL BE SET IN BLOCK JOINTS THOROUGHLY EMBEDED IN MORTAR.
- 6. FOR SELF SUPPORTING MAST SERVICES ALL PIPE COUPLINGS MUST BE BELOW THE HIGHEST STRUCTURAL ATTACHMENT POINT.
- 7. MAST MUST BE OF SUFFICIENT STRENGTH TO SUPPORT A HORIZONTAL TENSION OF 1000LBS. APPLIED TO THE POINT OF ATTACHMENT. FOR UNUSUAL CIRCUMSTANCES GUYING OF THE MAST MAY BE PERMITTED. CONTACT PSEG LONG ISLAND. FOR GUYED MAST APPROVAL PRIOR TO INSTALLATION.
- 8. NO OTHER UTILITY MAY SUPPORT OR CONNECT AT THE MAST.

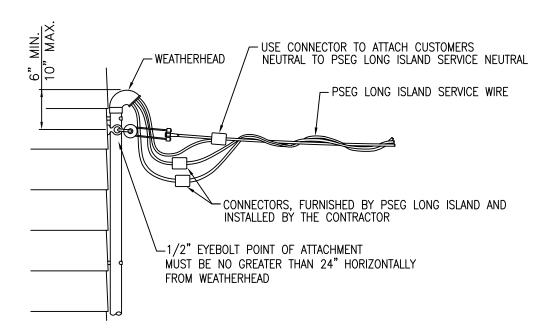
DWG. BASED ON CS 2721

OVERHEAD 100 - 400 AMP SERVICE USING STRUCTURE SUPPORTED MAST(Sheet 2 of 2)







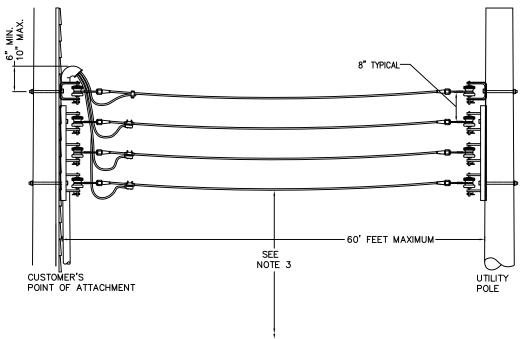


#### CONNECTOR INSTALLATION:

- 1. <u>CLEANING</u> WIRE BRUSH ALL COPPER AND ALUMINUM CONDUCTORS UNTIL SURFACES ARE BRIGHT AND CLEAN. COPPER CORROSION PRODUCTS ARE POOR CONDUCTORS AND ALUMINUM OXIDE, WHICH FORMS RAPIDLY AND IS INVISIBLE, IS AN INSULATOR. WIRE BRUSHING IS A VERY IMPORTANT AND CRITICAL STEP IN MAKING A TROUBLE FREE CONNECTION AND SHOULD NEVER BE NEGLECTED EVEN IF THE CONDUCTOR APPEARS TO BE CLEAN.
- 2. <u>INHIBITOR</u> ALL NEW CONNECTORS ARE PRE—LOADED WITH INHIBITOR. IF ANY CONNECTORS DO NOT HAVE INHIBITOR, IT MUST BE FIELD APPLIED.
- 3. <u>RE-USE OF CONNECTORS</u> WHEN CONNECTORS ARE REMOVED AND RE-INSTALLED IN THE FIELD (EVEN FOR A SHORT TIME), THE FOLLOWING STEPS SHALL BE TAKEN:
  - 3.1 WIRE BRUSH BOTH THE CONDUCTOR AND THE JAWS OF THE CONNECTOR.
  - 3.2 FOR ALUMINUM TO ALUMINUM AND ALUMINUM TO COPPER CONNECTIONS, APPLY INHIBITOR TO CONDUCTORS AND WIRE BRUSH IN.
  - 3.3 FOR ALUMINUM TO COPPER CONNECTIONS. INSTALL THE ALUMINUM ABOVE THE COPPER CONDUCTOR.
- 4. DO NOT TRANSFER SERVICE TO NEW POINT OF ATTACHMENT.

DWG. BASED ON CS 2753

# PSEG LONG ISLAND CONNECTS PROGRAM CONNECTOR INSTALLATION



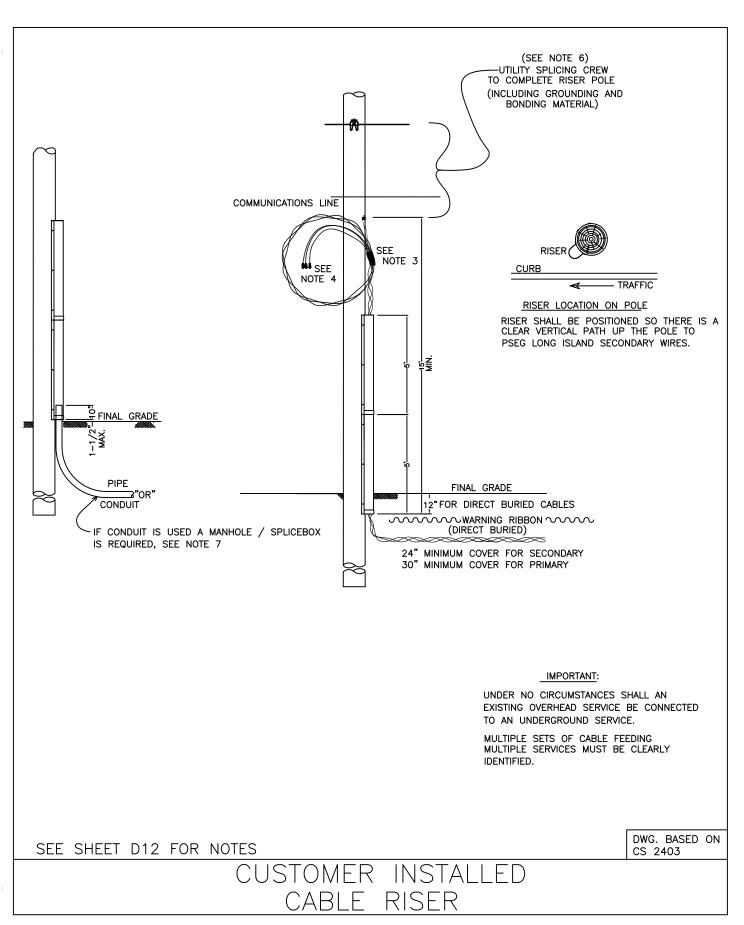
- 1. OVERHEAD SERVICES WHICH ARE 400 AMPERES BUT NOT MORE THAN 600 AMPERES SERVED BY OVERHEAD CONDUCTORS SHALL USE OPEN WIRE CONSTRUCTION. IF THIS IS NOT ACCEPTABLE DUE TO HEIGHT OR APPEARANCE UNDERGROUND SERVICE SHOULD BE SELECTED.
- 2. THE CUSTOMER IS TO INSTALL AND SUPPLY WEATHERHEAD, CONDUIT, CONDUIT STRAPS, SECONDARY RACK AND CABLES IN THE CONDUIT. CABLES SHALL BE SUFFICIENT LENGTH TO PROVIDE 48" OF SLACK CABLE AT WEATHERHEAD TO MAKE CONNECTIONS TO OVERHEAD SYSTEM.
- 3. SERVICE ENTRANCE HEIGHT SHALL BE BASED ON 60'(FEET) MAXIMUM SPAN AND MAINTENANCE OF 16.5 FEET MINIMUM CLEARANCE ABOVE GROUND UNDER THE GREATEST SAG CONDITIONS AS WELL AS AN 18' MINIMUM CLEARANCE FOR AREAS SUBJECT TO VEHICULAR TRAFFIC. MAXIMUM HEIGHT FOR POINT OF ATTACHMENT IS 21' ABOVE GRADE. INCREASED HEIGHT FOR ANY INDIVIDUAL LOCATION MUST BE APPROVED BY THE COMPANY.
- 4. SECONDARY RACK ON SUPPORTING STRUCTURE MUST BE THRU-BOLTED; ANY OTHER TYPE FASTENERS MUST BE APPROVED BEFORE INSTALLATION.

IMPORTANT NOTE: 600 AMP OVERHEAD SERVICE MUST FIRST BE APPROVED BY PSEG LONG ISLAND, AND MAY BE PERMITTED ON A CASE BY CASE BASIS ONLY.

ALL SERVICES OF THIS TYPE MUST BE APPROVED BY PSEG LONG ISLAND PRIOR TO INSTALLATION.

DWG. BASED ON CS 2765

OPEN WIRE SERVICES 400 TO 600 AMP



1. CONTRACTORS SHALL MOUNT ONLY THE UTILITY SPECIFIED RISER MATERIAL ON THE POLE, TO A HEIGHT OF 9 TO 10 FEET ABOVE GRADE. ONLY ONE RISER IS PERMITTED FOR EACH SERVICE.

U-GUARD - 3" PE OR 3" PVC SCHD. 80 OR 3" DBL. GALV. STEEL - 10' LONG W/ BELL ENDS

SECONDARY CABLE MAX.

PRIMARY CABLE MAX

6 - 1/C 350 KCM

3 - 2/C # 1/0 AWG

5" DOUBLE GALVANIZED STEEL U-GUARD - 5' LONG W/ BELL ENDS or 5" PE or 5" PVC SCHD.80

SECONDARY CABLE MIN.

SECONDARY CABLE MAX.

PRIMARY CABLE MAX.

8 - 1/C 4/0

8 - 1/C 500 KCM

3-2/C 750 KCM

- 2. A) THE LOCATION OF THE U-GUARD ON THE POLE SHALL BE IDENTIFIED FOR THE CONTRACTOR OR THE PSEG LONG ISLAND REPRESENTATIVE ASSIGNED TO THE JOB PRIOR TO INSTALLATION OF THE CABLE / RISER.
  - B) THE LENGTH OF THE CABLE REQUIRED FOR PSEG LONG ISLAND TO MAKE FINAL CONNECTIONS AT THE POLE SHALL BE IDENTIFIED FOR THE CONTRACTOR BY THE PSEG LONG ISLAND REPRESENTATIVE.
- 3. A) THE CABLE SUPPLIED BY THE CONTRACTOR FOR USE ON THE POLE SHALL BE INSTALLED AND PROPERLY SECURED TO THE POLE BY THE ELECTRICAL CONTRACTOR TO PREVENT DAMAGE AND/OR ANY ACTS OF VANDALISM FROM DAMAGING THE CABLE PRIOR TO HOOK-UP.
  B) CABLE IS TO BE ATTACHED TO THE POLE WELL ABOVE THE TOP OF THE RISER WITH A KELLUMS GRIP BASKET OR LENGTH OF LINE TIED IN A "ROLLING BEND KNOT" TO PROTECT THE CABLE FROM MECHANICAL BENDING DAMAGE.
- 4. ALL CABLE SHALL BE PROPERLY END CAPPED AT BOTH ENDS BY THE CONTRACTOR WITH APPROVED TIGHTFITTING WATERTIGHT SEALING CAPS OR IN STRICT COMPLIANCE WITH NEC 300-5 (e). \*\*
- 5. POLYETHYLENE AND PVC U-GUARD SHALL BE FASTENED WITH 1/4" X 2 1/2" LAG SCREWS WITH CUSHION. STEEL U-GUARD SHALL BE FASTENED WITH 3/8" X 2 1/2" LAG SCREWS.
- 6. PSEG LONG ISLAND SHALL COMPLETE THE CONSTRUCTION OF THE RISER PER THE APPROPRIATE SCALE CONSTRUCTION STANDARDS.
- 7. IF CONDUIT IS USED, MANHOLES ARE REQUIRED, CONTACT PSEG LONG ISLAND FOR DETAILS.
- \*\* THE CONCERN FOR RELIABLE ELECTRIC SERVICE REQUIRES THAT PSEG LONG ISLAND RESERVE THE RIGHT TO REFUSE TO ACCEPT OR ENERGIZE ANY CABLES THAT HAVE BEEN LEFT WITH 'ENDS' UNCAPED. MOISTURE INTRUSION HAS BEEN DETERMINED TO BE A SUBSTANTIAL CAUSE OF PREMATURE CABLE FAILURES; UNCAPPED CABLE ENDS ARE THE LEADING CAUSE OF THIS PROBLEM.

DWG. BASED ON CS 2403

CUSTOMER INSTALLED CABLE RISER GENERAL NOTES

SERVICE TYPE	MAXIMUM CABLE SIZE	BOX DESCRIPTION AND LOCATION	SPLICE BOX / MANHOLE MINIMUM DIMENSIONS (LENGTH X WIDTH X DEPTH) (INCHES)
SINGLE PHASE AND 3 PHASE	1 SET OF 4/0	PE SPLICE BOX IN GRASS AND NO VEHICLE TRAFFIC LOCATION	BOX: 25 X 16 X 16 COVER: 22 X 12
SINGLE PHASE	2 SETS OF 4/0 OR 1 SET OF 500 KCM	PE SPLICE BOX IN GRASS AND NO VEHICLE TRAFFIC LOCATION	BOX: 33 X 20 X 17 COVER: 31 X 17
THREE PHASE	1 SET OF 4/0	PE SPLICE BOX IN GRASS AND NO VEHICLE TRAFFIC LOCATION	BOX: 33 X 20 X 17 COVER: 31 XX 17
SINGLE PHASE	2 SETS OF 500 KCM OR 1 SET OF 1-2/C 1/O AL 15KV	PE SPLICE BOX IN GRASS AND NO VEHICLE TRAFFIC LOCATION	BOX: 41 X 41 X 18 COVER: 33 XX 33
3 PHASE	1 SET OF 500 KCM OR 1 SET OF 3-2/C 1/0 AL 15KV	PE SPLICE BOX IN GRASS AND NO VEHICLE TRAFFIC LOCATION	BOX: 41 X 41 X 18 COVER: 33 X 33
SINGLE PHASE AND 3 PHASE	4 SETS OF 4/0 OR 2 SETS OF 500 KCM	PRECAST CONCRETE BOX TYPE B 3-6 LOCATED IN GRASS OR VEHICLE TRAFFIC AREA	BOX ID: 42 X 33 X 24 CAST IRON FRAME: 41 X 41 CAST IRON COVER: 32 DIAMETER
SINGLE PHASE AND 3 PHASE	6 SETS OF 4/0 OR 3 SETS OF 500 KCM OR 2 SET OF 3-2/C 1/0 AL 15KV	PRECAST CONCRETE BOX TYPE TS LOCATED IN GRASS OR VEHICLE TRAFFIC AREA	BOX ID: 54 X 42 X 48 CAST IRON FRAME: 41 X 41 CAST IRON COVER: 32 DIAMETER

#### INSTALLATION REQUIREMENTS:

- 1. BOX / MANHOLE SHALL BE INSTALLED, OWNED AND MAINTAINED BY THE CUSTOMER.
- 2. BOX / MANHOLE SHALL BE INSTALLED ON THE CUSTOMERS PROPERTY AT THE LOCATION WHERE THE SERVICE EXITS THE CUSTOMERS PROPERTY AND ENTERS THE PUBLIC RIGHT OF WAY OR PSEG LONG ISLAND EASEMENT AREA.
- 3. INSTALL BOX / MANHOLE PARALLEL TO THE ROADWAY OR REAR PROPERTY EASEMENT LINE.
- 4. FOR CONCRETE MANHOLES:

  ENTRANCE SHALL BE MADE THROUGH END WALL KNOCKOUTS ONLY.

  DUCT SHALL EXTEND A MAXIMUM OF 1" PAST THE INTERIOR FACE OF THE MANHOLE WALL.

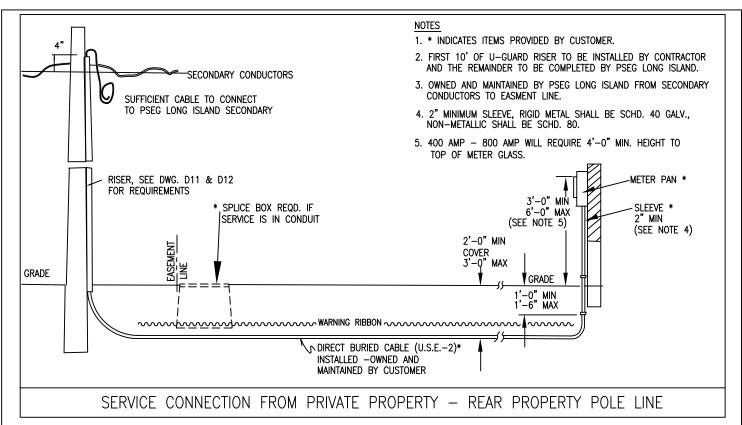
  ALL PENETRATIONS THOUGH THE CONCRETE WALL SHALL BE SEALED WITH GROUT.
- 5. FOR PE SPLICE BOXES:

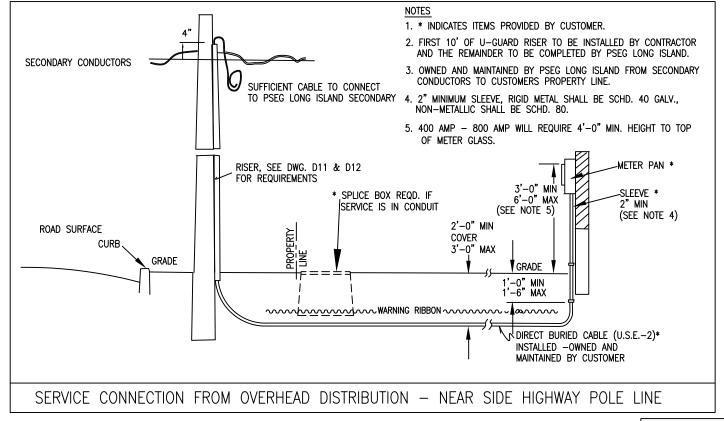
  CONDUIT SHALL ENTER THE BOX BENEATH THE SIDE WALLS BY MEANS OF A CONDUIT SWEEP.

  CONDUIT SHALL EXTEND 2" ABOVE THE BOTTOM OF THE BOX.
- 6. ALL CONDUITS SHALL BE SEALED AT THE BOX/MANHOLE AND BUILDING ENTRANCE USING PRODUCT SPECIFICALLY MADE FOR DUCT SEALING APPLICATION.
- 7. BONDING BUSHING MUST BE SUPPLIED FOR METALLIC CONDUITS.
- 8. 15KV PRIMARY CABLE INSTALLED IN TS BOX OR 41 X 41 X 18 PE BOX ONLY.

DWG. BASED ON CS 6159

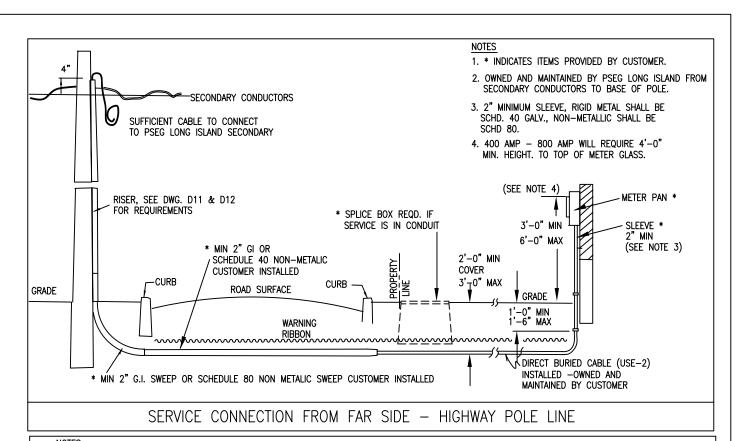
CUSTOMER / CONTRACTOR INSTALLED PULL BOX AND MANHOLE SPECIFICATIONS

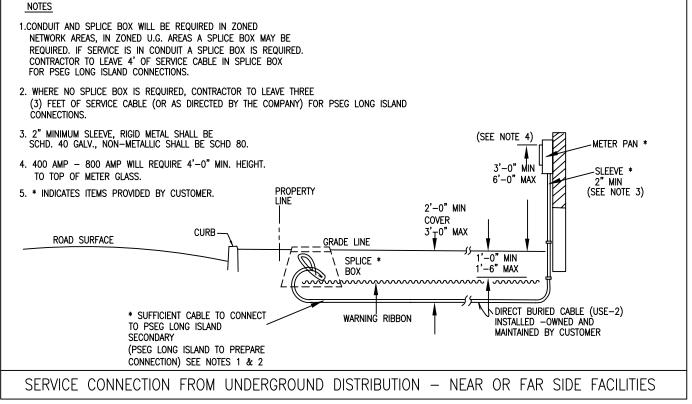




DWG. BASED ON CS 5523

UNDERGROUND SERVICE 100 - 800 AMP SINGLE OR 3\_PHASE BY BUILDER/APPLICANT

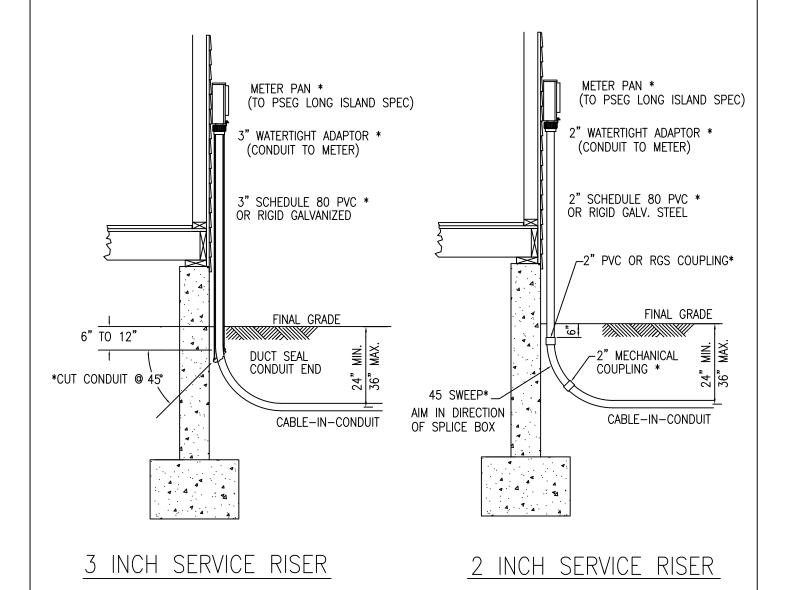




DWG. BASED ON CS 5523

UNDERGROUND SERVICE 100 - 800 AMP SINGLE OR 3 PHASE BY BUILDER/APPLICANT

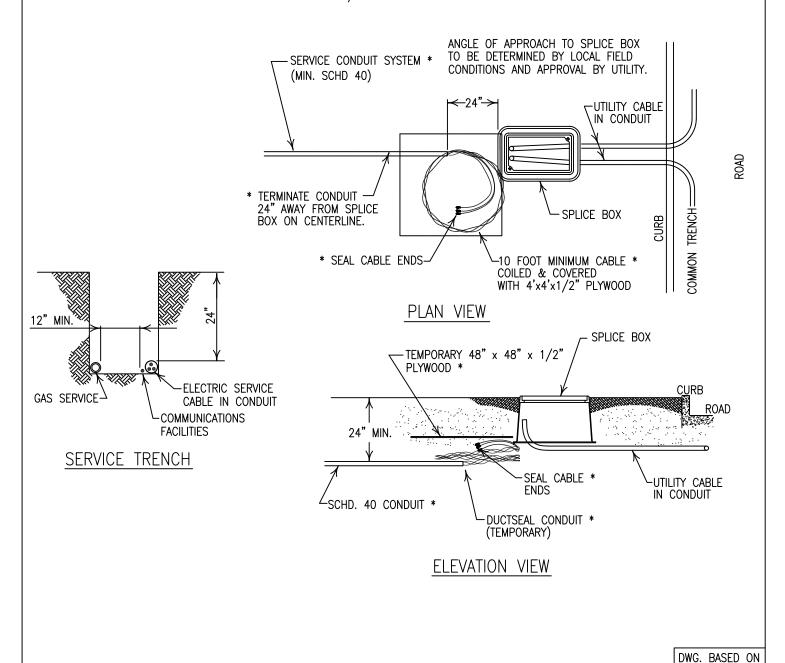
- 1. \* INDICATES ITEMS PROVIDED BY CONTRACTOR.
- 2. 300 AMP AND LARGER SERVICES MAY REQUIRE TWO CONDUITS INTO METER PAN.
- 3. 2" MECHANICAL COUPLING SHALL BE EITHER ANACO P/N HUSKY SD-4006 OR FERNCO P/N 1056-22/SR-11.



DWG. BASED ON CS 6491

PSEG LONG ISLAND INSTALLED SINGLE PHASE RESIDENTIAL RUD SERVICE

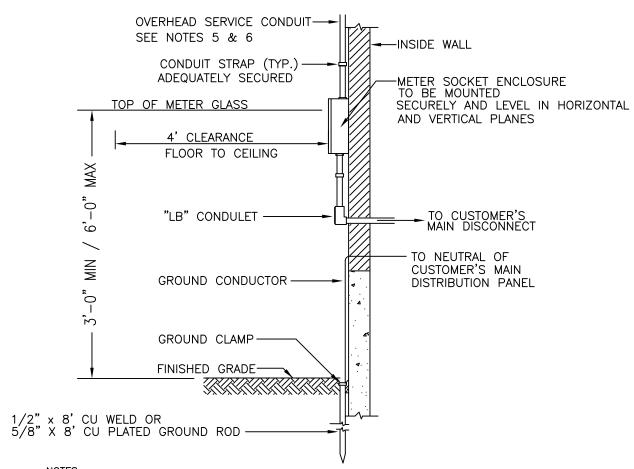
- 1. \* DENOTES ITEMS PERFORMED BY CONTRACTOR / CUSTOMER.
- 2. UTILITY CONNECTS CONDUIT TO SPLICE BOX AND MAKES SERVICE CONNECTIONS IN SPLICE BOX.
- 3. 200 AMP SERVICES SHALL BE RUN IN ONE 3 1/2" CONDUIT MAX. 320 AMP SERVICES SHALL BE RUN IN A 3 1/2" CONDUITS MAX. . 400 AMP SERVICES SHALL BE RUN IN A SINGLE 4" CONDUIT. ALL SERVICES SHALL BE RUN FROM THE METER PAN TO A SPLICE BOX AT THE PROPERTY LINE.
- 4. 600 AND 800 AMP SERVICES SHALL BE RUN IN TWO PARALLEL 4" CONDUITS FROM THE TRANS S CABINET TO A SPLICE BOX AT THE PROPERTY LINE. 600 AND 800 AMP SERVICES ARE INSTALLED, OWNED AND MAINTAINED BY THE CUSTOMER.
- 5. UNDER NO CIRCUMSTANCES SHALL A CUSTOMER / CONTRACTOR ENTER A PSEG LONG ISLAND SPLICE BOX.



CUSTOMER / CONTRACTOR INSTALLED

SINGLE PHASÉ RESIDENTIAL RUD SERVICE

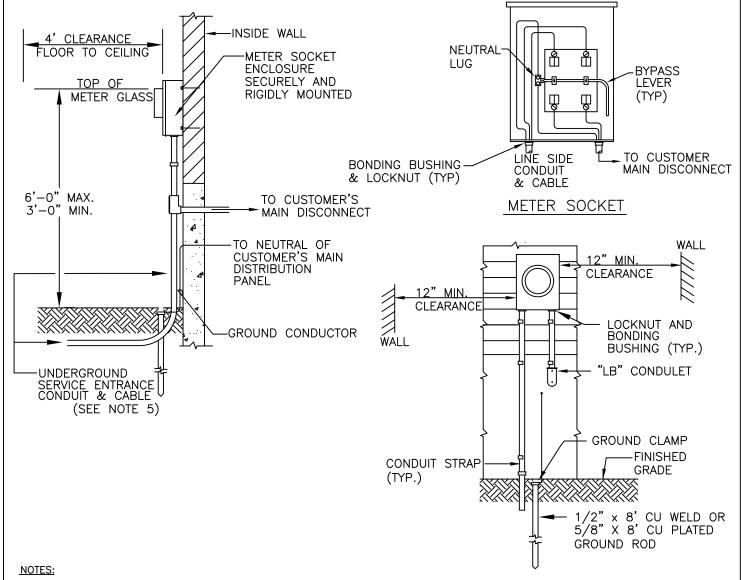
CS 6491



- 1. ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKETS SHALL BE EQUIPPED WITH A FIFTH JAW LOCATED IN THE NINE O'CLOCK POSITION.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- OVERHEAD SERVICE CONDUITS AND PROTECTIVE SLEEVES SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE(NEC).
- 6. SERVICE ENTRANCE TYPE "SE" CABLE SHALL BE AS APPROVED BY PSEG LONG ISLAND AND CAN BE USED WITHOUT BEING ENCASED IN CONDUIT ON THE LINE SIDE OF THE METER ENCLOSURE, PROVIDING IT WILL NOT COME IN CONTACT WITH ANY AWNINGS, SHUTTERS, SIGNS, OR ANY OTHER OBJECTS THAT CAN CAUSE MECHANICAL INJURY TO THE CABLE. WHEN INSTALLED ON THE SIDE OF A BUILDING ADJACENT TO A DRIVEWAY THE CABLE SHALL BE ENCASED IN CONDUIT. PROTECTIVE SLEEVING ON TYPE "SE" CABLE IS REQUIRED TO A HEIGHT OF EIGHT FEET ABOVE FINISHED GRADE. THE SLEEVE SHALL BE SPACED A MINIMUM OF ONE INCH FROM THE TOP OF THE METER PAN. WEATHERTIGHT TYPE "SE" CONNECTORS SHALL BE USED FOR CONNECTION TO THE METER ENCLOSURE.
- 7. A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 8. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE AUTHORIZED ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 9. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURE SHALL BE USED.

DWG. BASED ON CS 8001

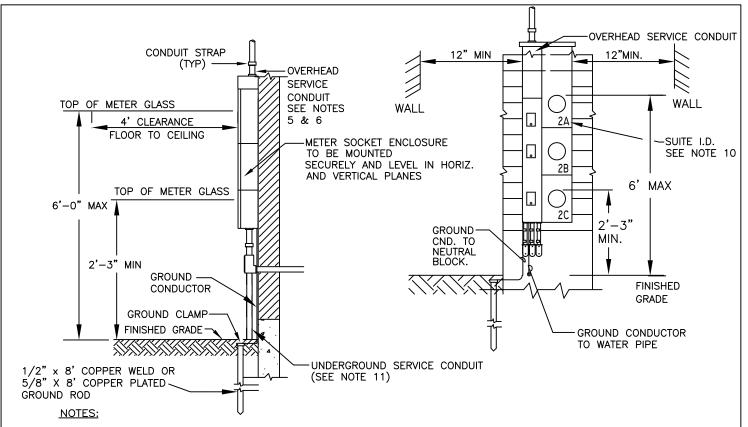
OVERHEAD SERVICE SINGLE PHASE SELF CONTAINED METER OUTDOOR SOCKET METER INSTALLATION



- ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- 2. ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKETS SHALL BE EQUIPPED WITH A FIFTH JAW LOCATED IN THE NINE O'CLOCK POSITION.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- 4. GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- 5. RIGID METALLIC CONDUIT (RMC) AND RIGID NON-METALLIC CONDUIT (RNC) (SCHD. 40 OR 80 RESPECTIVELY, AS REQUIRED), ARE APPROVED FOR BELOW GRADE USE. ELECTRIC METALLIC TUBING (EMT) AND INTERMEDIATE METALLIC CONDUIT (IMC) ARE NOT APPROVED FOR BELOW GRADE INSTALLATION.
- 6. A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 7. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 8. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 9. LINE AND LOAD CONDUCTORS SHALL NOT CROSS WITHIN THE METER ENCLOSURE, RIGHT SIDE OF METER ENCLOSURE SHALL NOT BE USED AS A RACEWAY EXCEPT FOR ROUTING NEUTRAL CABLE AS SHOWN. NEUTRAL CABLE SHALL BE NEATLY TRAINED TO PERMIT PROPER OPERATION OF THE LEVEL, AND SHALL BE COVERED WIRE.

DWG. BASED ON CS 8007

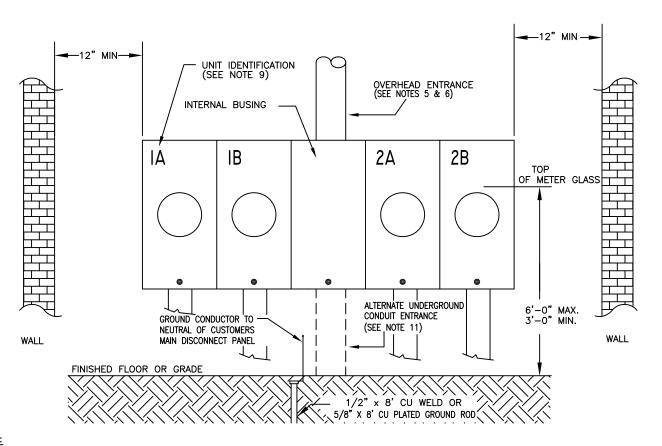
UNDERGROUND SERVICE SINGLE PHASE SELF CONTAINED METER OUTDOOR SOCKET METER INSTALLATION



- 1. ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- 2. ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKETS SHALL BE EQUIPPED WITH A FIFTH JAW LOCATED IN THE NINE O'CLOCK POSITION.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE. WIRES INTENDED TO BE USED FOR BONDING SHALL NOT BE PLACED IN CONTACT WITH ANY GAS PIPE.
- 4. GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- 5. OVERHEAD SERVICE CONDUITS AND PROTECTIVE SLEEVES SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE(NEC).
- 6. SERVICE ENTRANCE TYPE "SE" CABLE SHALL BE AS APPROVED BY PSEG LONG ISLAND AND CAN BE USED WITHOUT BEING ENCASED IN CONDUIT ON THE LINE SIDE OF THE METER ENCLOSURE, PROVIDING IT WILL NOT COME IN CONTACT WITH ANY AWNINGS, SHUTTERS, SIGNS, OR ANY OTHER OBJECTS THAT CAN CAUSE MECHANICAL INJURY TO THE CABLE. WHEN INSTALLED ON THE SIDE OF A BUILDING ADJACENT TO A DRIVEWAY THE CABLE SHALL BE ENCASED IN CONDUIT. PROTECTIVE SLEEVING ON TYPE "SE" CABLE IS REQUIRED TO A HEIGHT OF EIGHT FEET ABOVE FINISHED GRADE. THE SLEEVE SHALL BE SPACED A MINIMUM OF ONE INCH FROM THE TOP OF THE METER PAN. WEATHERTIGHT TYPE "SE" CONNECTORS SHALL BE USED FOR CONNECTION TO THE METER ENCLOSURE.
- A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 8. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 9. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 10. ALL METER PANS AND SERVICE DISCONNECT SWITCHES SHALL BE PERMANENTLY STENCILED INTERNALY AND EXTERNALLY WITH THE BUILDING AND/OR SUITE NUMBER TO IDENTIFY THE PORTION OF THE PREMISES BEING SERVED.
- 11. RIGID METALLIC CONDUIT (RMC) AND RIGID NON-METALLIC CONDUIT (RNC) (SCHD. 40 OR 80 RESPECTIVELY, AS REQUIRED), ARE APPROVED FOR BELOW GRADE USE. ELECTRIC METALLIC TUBING (EMT) AND INTERMEDIATE METALLIC CONDUIT (IMC) ARE NOT APPROVED FOR BELOW GRADE INSTALLATION.

DWG BASED ON CS 8005

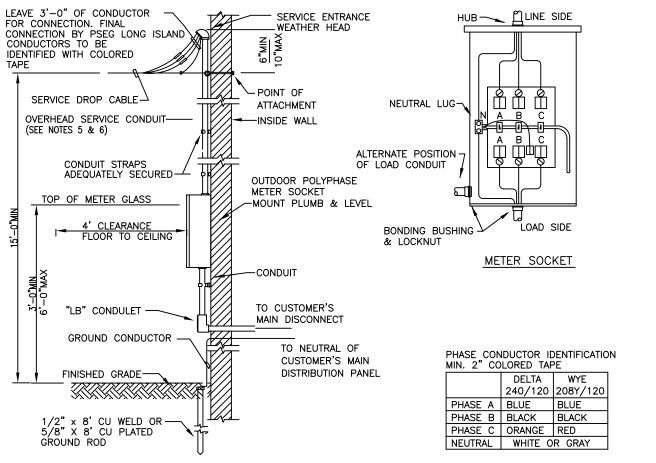
OVERHEAD AND UNDERGROUND SERVICE SINGLE PHASE SELF CONTAINED METER OUTDOOR SOCKET TROUGH MULTIMETER INSTALLATION



- 1. ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- 2. ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKETS SHALL BE EQUIPPED WITH A FIFTH JAW LOCATED IN THE NINE O' CLOCK POSITION.
- 3. GAS PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- 4. GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICAL 250 OF THE NATIONAL ELECTRICAL CODE.
- 5. OVERHEAD SERVICE CONDUITS AND PROTECTIVE SLEEVES SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE(NEC).
- 6. SERVICE ENTRANCE TYPE "SE" CABLE SHALL BE AS APPROVED BY PSEG LONG ISLAND AND CAN BE USED WITHOUT BEING ENCASED IN IN CONDUIT ON THE LINE SIDE OF THE METER ENCLOSURE, PROVIDING IT WILL NOT COME IN CONTACT WITH ANY AWNINGS, SHUTTERS, SIGNS, OR ANY OTHER OBJECTS THAT CAN CAUSE MECHANICAL INJURY TO THE CABLE. WHEN INSTALLED ON THE SIDE OF A BUILDING ADJACENT TO A DRIVEWAY THE CABLE SHALL BE ENCASED IN CONDUIT. PROTECTIVE SLEEVING ON TYPE "SE" CABLE IS REQUIRED TO A HEIGHT OF EIGHT FEET ABOVE FINISHED GRADE. THE SLEEVE SHALL BE SPACED APPROXIMATELY ONE INCH FROM THE TOP OF THE METER PAN. WEATHER TIGHT TYPE "SE" CONNECTORS SHALL BE USED FOR CONNECTION TO THE METER ENCLOSURE.
- 7. A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 8. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS, MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES HAVING JURISDICTION.
- 9. ALL METER PANS AND SERVICE DISCONNECT SWITCHES SHALL BE PERMANENTLY STENCILED INTERNALLY AND EXTERNALLY WITH THE BUILDING AND/OR SUITE NUMBER TO IDENTIFY THE PORTION OF THE PREMISES BEING SERVED.
- 10. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 11. RIGID METALLIC CONDUIT (RMC) AND RIGID NON-METALLIC CONDUIT (RNC) (SCHD. 40 OR 80 RESPECTIVELY, AS REQUIRED), ARE APPROVED FOR BELOW GRADE USE. ELECTRIC METALLIC TUBING (EMT) AND INTERMEDIATE METALLIC CONDUIT (IMC) ARE NOT APPROVED FOR BELOW GRADE INSTALLATION.
- 12. LINE AND LOAD CONDUCTORS SHALL NOT CROSS WITHIN THE METER ENCLOSURE. RIGHT SIDE OF METER ENCLOSURE SHALL NOT BE USED AS A RACEWAY EXCEPT FOR ROUTING NEUTRAL CABLE AS SHOWN. NEUTRAL CABLE SHALL BE NEATLY TRAINED SO AS TO PERMIT PROPER OPERATION OF THE LEVER, AND SHALL BE COVERED WIRE.

DWG. BASED ON CS 8009

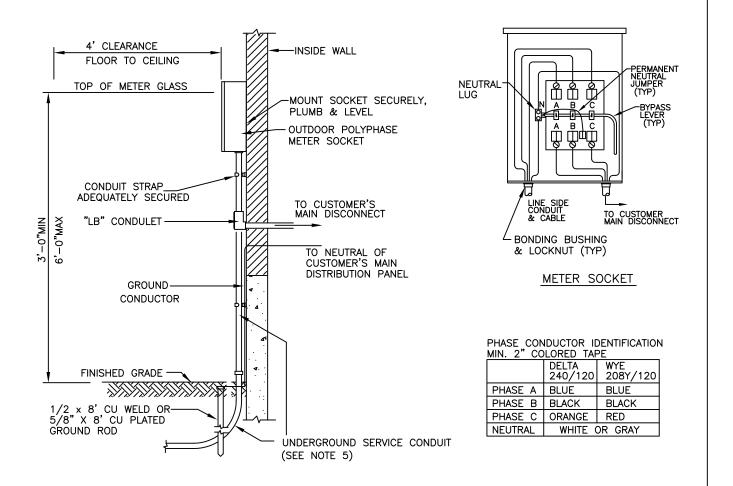
UNDERGROUND AND OVERHEAD SERVICE SINGLE PHASE SELF CONTAINED METERS OUTDOOR MULTI-METER SOCKET ENCLOSURE



- 1. ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKET ASSEMBLY SHALL BE EQUIPPED WITH A LEVER OPERATED, JAW RELEASE BYPASS MECHANISM.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE
- 4. GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- OVERHEAD SERVICE CONDUITS AND PROTECTIVE SLEEVES SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.(NEC)
- 6. SERVICE ENTRANCE TYPE "SE" CABLE SHALL BE AS APPROVED BY PSEG LONG ISLAND AND CAN BE USED WITHOUT BEING ENCASED IN CONDUIT ON THE LINE SIDE OF THE METER ENCLOSURE, PROVIDING IT WILL NOT COME IN CONTACT WITH ANY AWNINGS, SHUTTERS, SIGNS, OR ANY OTHER OBJECTS THAT CAN CAUSE MECHANICAL INJURY TO THE CABLE. WHEN INSTALLED ON THE SIDE OF A BUILDING ADJACENT TO A DRIVEWAY THE CABLE SHALL BE ENCASED IN CONDUIT. PROTECTIVE SLEEVING ON TYPE "SE" CABLE IS REQUIRED TO A HEIGHT OF EIGHT FEET ABOVE FINISHED GRADE. THE SLEEVE SHALL BE SPACED A MINIMUM OF ONE INCH FROM THE TOP OF THE METER PAN. WEATHERTIGHT TYPE "SE" CONNECTORS SHALL BE USED FOR CONNECTION TO THE METER ENCLOSURE.
- A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 9. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 10. LINE AND LOAD CONDUCTORS SHALL NOT CROSS WITHIN THE METER ENCLOSURE. RIGHT SIDE OF METER ENCLOSURE SHALL NOT BE USED AS A RACEWAY EXCEPT FOR ROUTING NEUTRAL CABLE AS SHOWN. NEUTRAL CABLE SHALL BE NEATLY TRAINED SO AS TO PERMIT PROPER OPERATION OF THE LEVER, AND SHALL BE COVERED WIRED.

DWG. BASED ON CS 8207

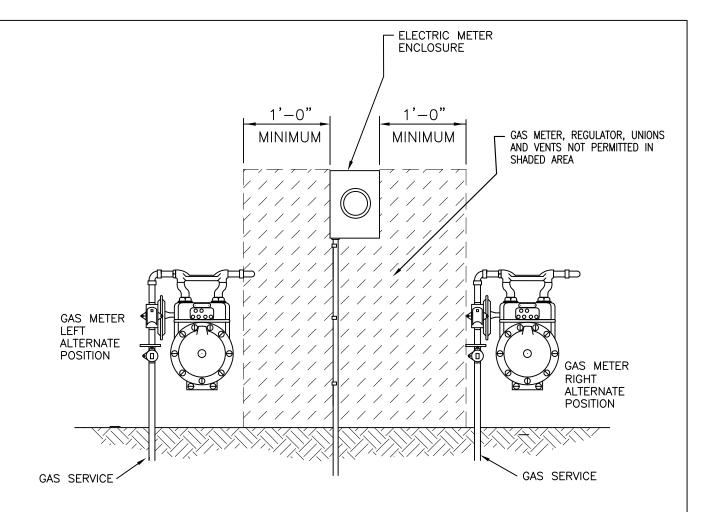
OVERHEAD SERVICE
POLY-PHASE SELF CONTAINED METERS
200 AMPERE SOCKET METER INSTALLATION



- ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- 2. ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKET ASSEMBLY SHALL BE EQUIPPED WITH A LEVER OPERATED, JAW RELEASE BYPASS MECHANISM. ONLY NEUTRAL CONDUCTOR IS PERMITTED BEHIND BYPASS LEVER.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- 5. RIGID METALLIC CONDUIT (RMC) AND RIGID NON-METALLIC CONDUIT (RNC) (SCHEDULE 40 OR 80 RESPECTIVELY, AS REQUIRED), ARE APPROVED FOR BELOW GRADE USE. ELECTRIC METALLIC TUBING (E.M.T.) AND INTERMEDIATE METALLIC CONDUIT (I.M.C.) ARE NOT APPROVED FOR BELOW GRADE INSTALLATION.
- A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 7. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 8. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 9. LINE AND LOAD CONDUCTORS SHALL NOT CROSS WITHIN THE METER ENCLOSURE. RIGHT SIDE OF METER ENCLOSURE SHALL NOT BE USED AS A RACEWAY EXCEPT FOR ROUTING NEUTRAL CABLE AS SHOWN. NEUTRAL CABLE SHALL BE NEATLY TRAINED SO AS TO PERMIT PROPER OPERATION OF THE LEVER, AND SHALL BE COVERED WIRE.

DWG. BASED ON CS 8209

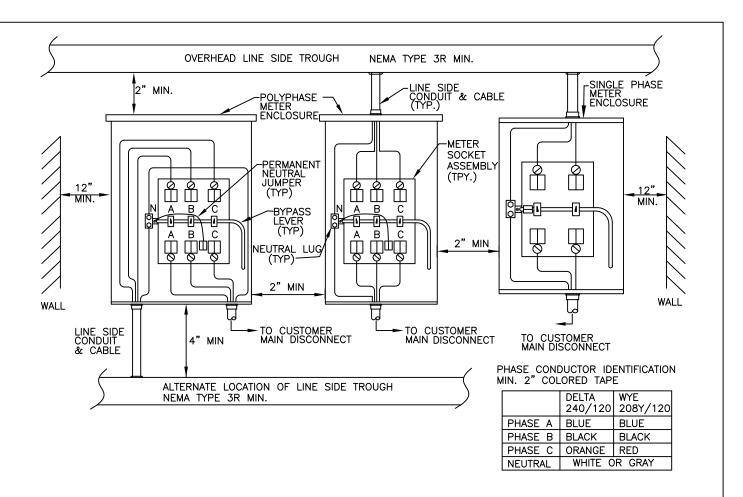
UNDERGROUND SERVICE
POLY-PHASE SELF CONTAINED METERS
200 AMPERE SOCKET METER INSTALLATION



- 1. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE ELECTRIC METER INSTALLATION FOR SAFE ACCESS.
- 3. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 4. A MINIMUM SEPARATION OF 1'-0" MUST BE MAINTAINED BETWEEN GAS METER, REGULATOR, UNIONS COUPLINGS, JOINTS, AND VENTS AND ELECTRIC METERING EQUIPMENT.
- 5. SEPARATION OF GAS SERVICE PIPE OR TUBING AND ALL OTHER UNDERGROUND FACILITIES OR STRUCTURES SHALL BE MAINTAINED IN ACCORDANCE WITH APPROPRIATE CONSTRUCTION STANDARDS.
- 6. NO ELECTRIC METER ENCLOSURE SHALL BE INSTALLED ABOVE THE GAS METER.
- 7. NO PROTECTION BOLLARDS SHALL BE PLACED IN FRONT OF THE ELECTRIC METER.
- 8. VENTING OF GAS REGULATOR SHALL BE PLACED A MINIMUM OF 1'-0" FROM THE NEAREST PART OF THE ELECTRIC METER INSTALLATION.
- 9. A 1' SEPARATION FROM GAS LOAD PIPE TO THE DISTRIBUTION PANEL IS REQUIRED.
- 10. FOR EXISTING METER ROOMS WITH GAS METERS, A MINIMUM OF 3' CLEARANCE IS REQUIRED BETWEEEN THE GAS SERVICE PIPING AND METERS AND ANY ELECTRICAL SERVICE EQUIPMENT.

DWG. BASED ON CS 8015

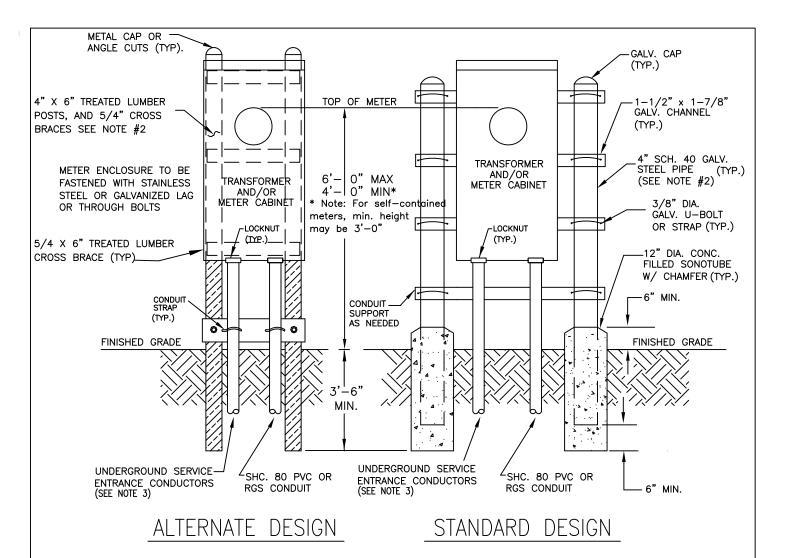
CLEARANCES BETWEEN ELECTRIC & GAS METERS



- 1. ALL ITEMS SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER UNLESS OTHERWISE STATED.
- 2. ALL METER PAN ASSEMBLIES SHALL BE AS APPROVED BY PSEG LONG ISLAND. METER SOCKET ASSEMBLY SHALL BE EQUIPPED WITH A LEVER OPERATED, JAW RELEASE BYPASS MECHANISM.
- 3. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
- 4. GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- 5. CONDUIT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEC.
- 6. LINE AND LOAD CONDUIT CONDUCTORS SHALL NOT CROSS WITHIN THE METER ENCLOSURE. RIGHT SIDE OF METER ENCLOSURE SHALL NOT BE USED AS A RACEWAY EXCEPT FOR ROUTING NEUTRAL CABLE AS SHOWN. NEUTRAL CABLE SHALL BE NEATLY TRAINED SO AS TO PERMIT PROPER OPERATION OF LEVER. AND SHALL BE COVERED WIRE.
- 7. A FOUR FOOT CLEARANCE FROM FLOOR TO CEILING SHALL BE MAINTAINED IN FRONT OF THE METER INSTALLATION FOR SAFE ACCESS.
- 8. IN ADDITION TO PSEG LONG ISLAND REQUIREMENTS, INSTALLATIONS MAY BE SUBJECT TO THE APPROVAL OF THE LOCAL ELECTRICAL INSPECTION AGENCY AS WELL AS LOCAL MUNICIPALITIES.
- 9. ALL METER PANS AND SERVICE DISCONNECT SWITCHES SHALL BE PERMANENTLY STENCILED INTERNALLY AND EXTERNALLY WITH THE BUILDING AND/OR SUITE NUMBER TO IDENTIFY THE PORTION OF THE PREMISES BEING SERVED.
- 10. LINE CONDUCTORS SHALL ENTER METER ENCLOSURE ON THE TOP OR BOTTOM LEFT.
- 11. ONLY FACTORY PREFABRICATED KNOCKOUTS ON METER ENCLOSURES SHALL BE USED.
- 12. IDENTIFICATION OF PHASE CONDUCTORS SHALL BE WITH COLORED TAPE FOR A MINIMUM OF TWO INCHES.

DWG. BASED ON CS 8211

TROUGH SUPPLY
SINGLE AND POLY—PHASE SELF CONTAINED METERS
200 AMPERE MULTI—METER SOCKET INSTALLATION



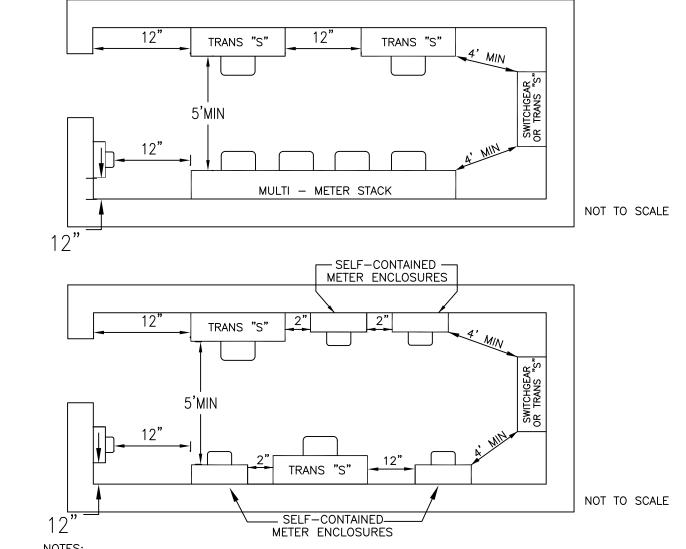
H - FRAME INSTALLATIONS ARE RESTRICTED/NOT PERMITTED BY SOME MUNICIPALITIES. CHECK LOCAL CODES PRIOR TO INSTALLATION.

### NOTES:

- 1. CONCRETE FILLED PROTECTION BOLLARDS SHALL BE INSTALLED WHEN INSTALLATION IS IN THE VICINITY OF VEHICULAR TRAFFIC. BOLLARDS SHALL BE PLACED A MINIMUM OF 4' FROM THE CABINET AND SHALL BE PAINTED FLUORESCENT YELLOW. BOLLARDS SHALL BE CONSTRUCTED FROM A MINIMUM OF 3.5" OUTSIDE DIAMETER SCHEDULE 40 GALVANIZED PIPE, SHALL BE SPACED 24" ON CENTERS AND SHALL BE A MINIMUM OF 3' HIGH.
- 2. FOR SELF-CONTAINED METER ENCLOSURES, 2" RIGID GALVANIZED STEEL PIPE WITH APPROPRIATELY SIZED CHANNEL AND CONCRETE BASE MAY BE USED IN PLACE OF 4" PIPE DESIGN; 4" X 4" TREATED LUMBER MAY BE USED IN PLACE OF 4" X 6" POST DESIGN. USE OF PLYWOOD FOR EQUIPMENT INSTALLATION IS NOT PERMITTED.
- 3. RIGID METALLIC CONDUIT (RMC) AND RIGID NON-METALLIC CONDUIT (RNC) (SCHD. 40 OR 80 RESPECTIVELY, AS REQUIRED), ARE APPROVED FOR BELOW GRADE USE. ELECTRIC METALLIC TUBING (EMT) AND INTERMEDIATE METALLIC CONDUIT (IMC) ARE NOT APPROVED FOR BELOW GRADE INSTALLATION.
- 4. FOR ADDITIONAL TRANS S CABINET REQUIREMENTS SEE DRAWINGS D28 & D29. FOR ADDITIONAL CT CABINET WITH REMOTE METER SOCKET REQUIREMENTS SEE DRAWINGS D30 & D31.
- 5. CHECK WITH LOCAL MUNICIPALITY FOR ANY SPECIAL REQUIREMENTS BEFORE INSTALLING METERING EQUIPMENT ON H-FRAME.
- 6. H FRAME LOCATION MUST BE ALONG FRONT OR SIDEYARD, NOT IN REAR.

DWG. BASED ON CS 8602

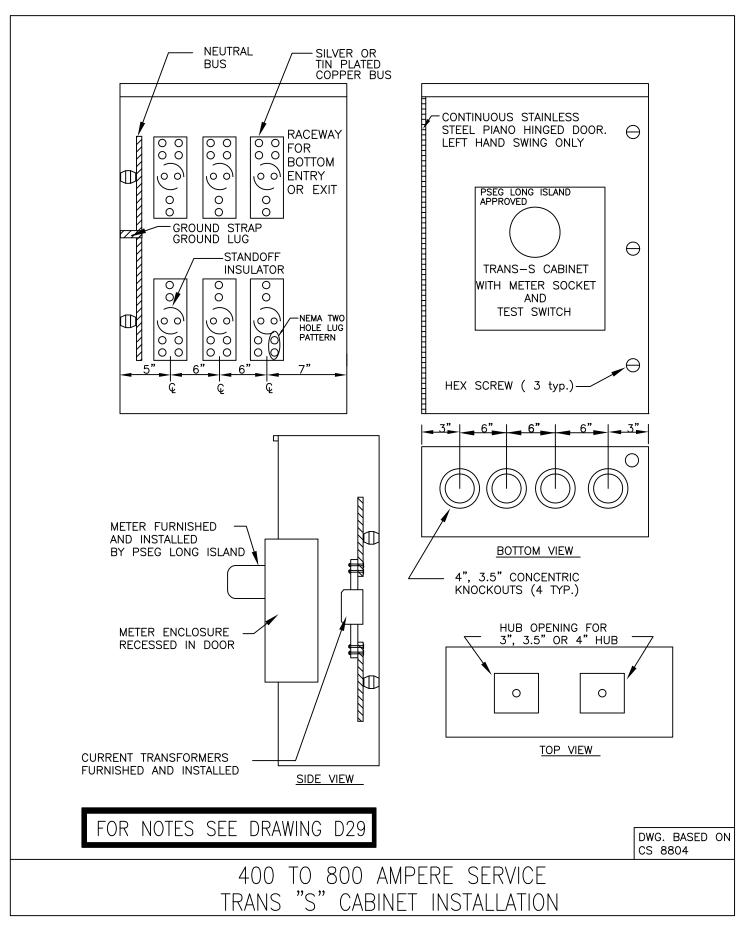
METER H FRAME CONSTRUCTION
OUTDOOR MOUNTING FOR TRANSFORMER AND/OR METER CABINET



- 1. METER ROOM CONSTRUCTION SHALL COMPLY WILL ALL CODE REQUIREMENTS ( eg. NEC110.26) PERTAINING TO ACCESS, EGRESS, AND SAFETY.
- 2. WHEN METERS ARE ON WALLS FACING EACH OTHER, THERE MUST BE 4' OF CLEAR SPACE FROM FLOOR TO CEILING BETWEEN METERS.
- 3. SWITCHGEAR DOORS MUST BE ABLE TO OPEN FULLY WITHOUT BEING OBSTRUCTED BY ANY METER ENCLOSURES OR WALLS.
- 4. ROOMS CLASSIFIED AS CONFINED SPACE AND THOSE THAT REQUIRE LADDER ACCESS SHALL SHALL NOT BE USED AS METER ROOMS.
- 5. PITS AND VAULTS BELOW GRADE ARE NOT ACCEPTABLE AS METER ROOMS.
- 6. MINIMUM METER ROOM CEILING HEIGHT SHALL BE 6'-6". ADEQUATE LIGHTING SHALL BE PROVIDED IN METER ROOM.
- 7. GAS METERS ARE NOT PERMITTED IN ELECTRIC METER ROOMS.
- 8. FOR EXISTING METER ROOMS WITH GAS METERS, A MINIMUM OR 3' CLEARANCE IS REQUIRED BETWEEN THE GAS SERVICE PIPING AND METER AND ANY ELECTRICAL SERVICE EQUIPMENT.

DWG. BASED ON CS 8604

ELECTRIC METER ROOM EQUIPMENT CLEARANCES



- 1. BUS BARS SHALL BE SILVER OR TIN PLATED COPPER AND SHALL BE SIZED PER THE NEC.
- 2. ONLY THE RIGHT HAND SIDE OF THE CABINET SHALL ALLOW FOR LINE AND LOAD CABLES TO ENTER AND EXIT THROUGH THE BOTTOM OF THE CABINET. THIS SPACE SHALL ALLOW FOR THE CABLES TO MEET THE MINIMUM BENDING RADIUS TO THE NEAREST PHASE OR NEUTRAL BUS. AS PER THE NEC.
- 3. CABINET DESIGN SHALL HAVE PROVISIONS FOR A SOLID DOOR TO ALLOW FOR THE METER ENCLOSURE TO BE MOUNTED REMOTELY FROM THE CABINET.
- 4. MANUFACTURER SHALL FURNISH AND INSTALL 1/2-13 STUDS WITH SPLIT LOCK WASHERS AND HEX NUTS FOR C.T MOUNTING.
- 5. USE ONLY MANUFACTURED APPROVED LUG KITS.
- METERING ENCLOSURES SHALL NOT BE ADDED. ONLY FACTORY SUPPLIED KNOCKOUTS AND PERMITTED. FIELD MADE KNOCKOUTS OR ANY OTHER FIELD ALTERATIONS WILL NOT BE ACCEPTED.
- 7. THIS STANDARD SHALL NOT BE USED AS A DESIGN CRITERIA. DIMENSIONS SHOWN ARE RECOMMENDED MINIMUMS ONLY. LARGER DIMENSIONS SHALL BE USED WHERE REQUIRED BY CODE.
- 8. MAINTAIN CLEARANCES BETWEEN TRANS S CABINET AND TROUGHS OF 2" ON TOP AND 4" ON BOTTOM OF CABINET.

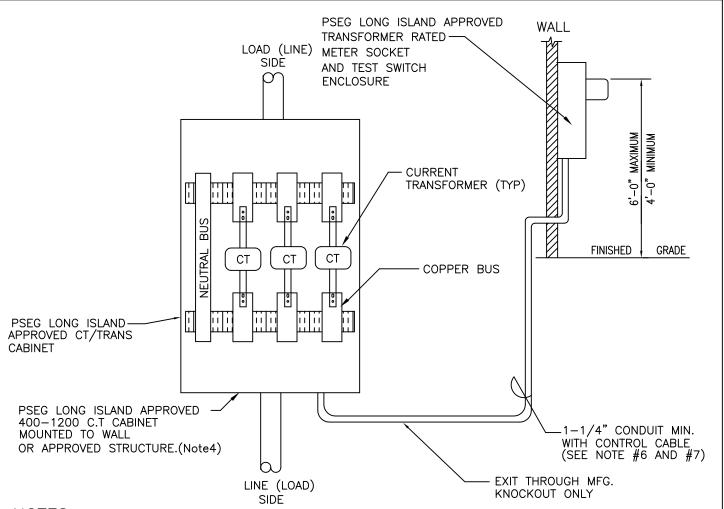
TRANS S CABINET BONDING DIAGRAM

9. PERMANENTLY IDENTIFY LINE AND LOAD CONDUCTORS INSIDE CABINET.

#### GFI MAIN DISCONNECT INSTALLATION TRANS S CABINET BONDING DIAGRAM (APPLIES TO 120/208V & 277/480V SERVICES) NON - GFI MAIN DISCONNECT INSTALLATION TRANS S -TRANS S TRANS S TRANS S **CABINET** CABINET CABINET **CABINET** BOND STRAP BOND STRAP NO BOND NO BOND NEUTRAL-TO-NEUTRAL-TO-BETWEEN BETWEEN **ENCLOSURE ENCLOSURE** NEUTRAL & NEUTRAL & о 0 N o N N CABINET CABINET BOND TO-**ENCLOSURE** BOND\* -BOND\* **ENCLOSURE ENCLOSURE** TO BONDING TO GFI BOND **BUSHING BONDING BONDING POINT BUSHING** BUSHING NON-METALLIC **METALLIC** CONDUIT/ NON-METALLIC **GFI** GFI CONDUITA RACEWAÝ CONDUIT/ **METALLIC** RACEWAY RACEWAY CONDUIT/ RACEWAÝ LINE LINE LINE LINE \* USE MANUFACTURER'S BOND ATTACHMENT POINT

400 TO 800 AMPERE SERVICE

TRANS "S" CABINET INSTALLATION - NOTES & BONDING DIAGRAM



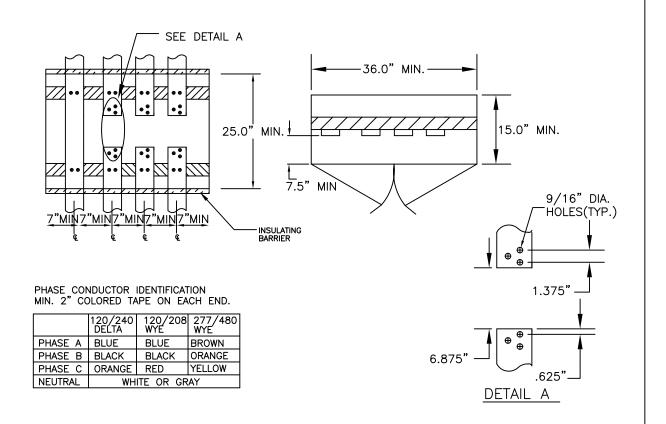
- 1. PSEG LONG ISLAND APPROVED CURRENT TRANSFORMER CABINET AND METER SOCKET SHALL NOT BE LOCATED IN ANY AREA CLASSIFIED AS A HALLWAY, CONFINED SPACE, OR WHERE A LADDER ACCESS IS REQUIRED.
- 2. PITS AND VAULTS BELOW GRADE ARE NOT ACCEPTABLE AS METER ROOMS. METER ENCLOSURES OR CURRENT TRANSFORMER CABINETS SHALL NOT BE LOCATED IN THESE TYPES OF AREAS.
- 3. REFER TO NEC ARTICLE 250 FOR GROUNDING AND BONDING REQUIREMENT.
- 4. CENTERLINE OF C.T CABINET SHALL BE A MAXIMUM OF 5'-0" OR A MINIMUM OF 3'-6" FROM FINISHED FLOOR.
- 5. CONTROL CABLE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR, SEE SECT. 8.9. FINAL TERMINATION IN THE METER AND TRANSFORMER CABINET SHALL BE DONE BY THE COMPANY.
- 6. MAXIMUM DISTANCE OF METER SOCKET FROM C.T CABINET SHALL BE DETERMINED BY THE COMPANY.
- 7. WHEN PVC CONDUIT IS USED A # 8 AWG 600 VOLT FACTORY INSULATED COPPER BOND WIRE SHALL BE INSTALLED BETWEEN THE METER SOCKET ENCLOSURE AND THE C.T CABINET THE BOND WIRE SHALL BE GREEN OR MARKED AS SUCH AND SHALL BE BONDED TO THE METER SOCKET ENCLOSURE AND TO THE CT. CABINET.
- 8. REFER TO DRAWINGS D26, D27, D28, D29 AND SECTION 8.7 FOR OTHER REQUIREMENTS.
- 9. LINE AND LOAD SIDES OF THE COMPARTMENT SHALL BE CLEARLY AND PERMANENTLY MARKED.

DWG. BASED ON CS 8606

TRANSFORMER RATED METER SOCKET

AND

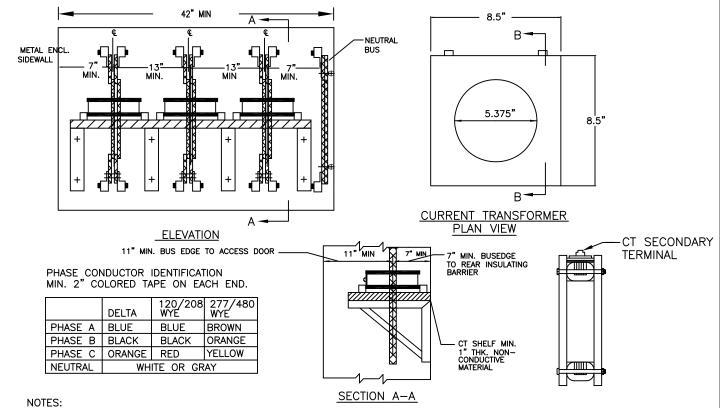
CURRENT TRANSFORMER CABINET INSTALLATION



- 1. THE PSEG LONG ISLAND APPROVED CURRENT TRANSFORMER COMPARTMENT SHALL BE LOCATED WITHIN THE INCOMING SWITCHGEAR CUBICLE WHICH SHALL BE CONSTRUCTED IN CONFORMANCE WITH UL 891.
- 2. THE CURRENT TRANSFORMER COMPARTMENT SHALL BE COMPLETELY ISOLATED FROM THE REMAINDER OF THE SWITCHGEAR CUBICLE BY MEANS OF INSULATING BARRIERS AS PER UL 891. THIS INCLUDES TOP, BOTTOM, BACK AND SIDE BARRIERS.
- 3. BUS BARS WITHIN THE CURRENT TRANSFORMER CUBICLE SHALL BE COPPER AND SHALL AS A MINIMUM BE TIN PLATED AT TERMINATION POINTS.
- 4. BUS BARS SHALL HAVE A MINIMUM THICKNESS OF 0.25 INCHES AND SHALL BE RATED AS PER NEC FOR 1000 AMPERES PER SQUARE INCH.
- 5. THE NEUTRAL BUS SHALL BE DRILLED WITH A 1/4 20 TAP FOR CURRENT TRANSFORMER CONNECTION.
- THE FRONT OF THE CUBICLE SHALL BE FURNISHED WITH A DOUBLE SWING DOOR WHICH SHALL BE EQUIPPED WITH A THREE POINT LATCHING MECHANISM AND HAVE PROVISIONS FOR PSEG LONG ISLAND PADLOCKING.
- 7. DOOR SWING SHALL BE GREATER THAN 90 DEGREES AND SHALL BE EQUIPPED WITH PROVISIONS FOR HOLDING THE DOORS IN THE OPEN POSITION.
- ALL BUS BARS LOCATED ON THE LINE SIDE OF THE CURRENT TRANSFORMER COMPARTMENT SHALL BE LOCATED WITHIN AN ENCLOSURE EQUIPPED WITH TAMPER PROOF SCREWS.
- 9. BUS BAR SUPPORT SHALL BE CONSTRUCTED FROM INSULATING MATERIALS CONFORMING TO UL 746.
- 10. GALVANIZED BOLTS, BELLEVILLE WASHERS AND NUTS SHALL BE PROVIDED FOR MOUNTING OF CURRENT TRANSFORMERS. BOLTS SHALL BE PERMANENTLY AFFIXED TO THE COPPER LANDING PADS.
- 11. LINE AND LOAD SIDES OF THE COMPARTMENT SHALL BE CLEARLY AND PERMANENTLY MARKED.

DWG. BASED ON CS 8801

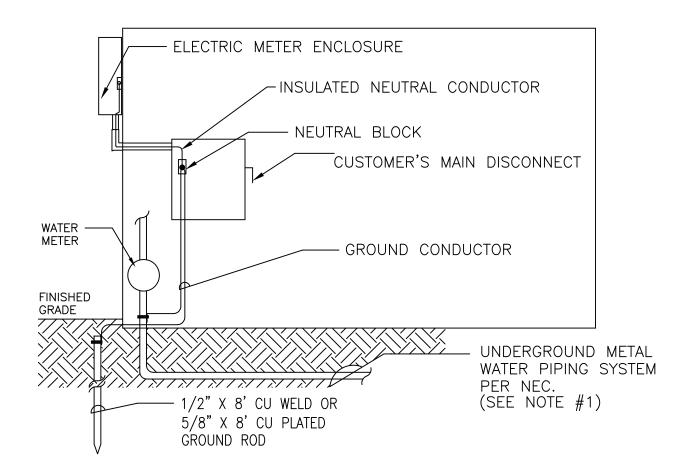
400 TO 1200 AMPERE SERVICE
CURRENT TRANSFORMER COMPARTMENT INSTALLATION



- 1. CURRENT TRANSFORMER COMPARTMENT SHALL BE PSEG LONG ISLAND APPROVED, AND SHALL BE INSTALLED AS SHOWN. CONDUCTOR SHALL BE COPPER BUS AND SHALL BE TIN PLATED AT TERMINATION POINTS AS A MINIMUM. BUS MUST BE CENTERED IN THE WINDOW OF THE TRANSFORMER.
- 2. THE BUS BAR INSTALLATION SHALL BE SO DESIGNED AS TO PERMIT A PRACTICAL AND EASY REPLACEMENT OF THE INSTRUMENT TRANSFORMERS.
- 3. MOUNTING OF THE TRANSFORMERS MAY BE STAGGERED VERTICALLY WHERE CLOSER CENTERS ARE REQUIRED. THE MINIMUM DISTANCES BETWEEN CENTERLINES OF TRANSFORMERS SHALL BE 10 INCHES.
- 4. THE TRANSFORMERS SHALL BE INSTALLED SO THAT THE PRIMARY POLARITY MARKS (H1) IS LOCATED ON THE LINE SIDE WHEREBY THE SECONDARY CONNECTIONS WILL BE READILY ACCESSIBLE.
- 5. ALL PHASE BUS AND THE NEUTRAL BUS SHALL BE DRILLED AND TAPPED FOR 1/4" 20 SCREWS ON THE LINE SIDE OF THE TRANSFORMERS.
- 6. THE TRANSFORMER SHELF AND SUPPORTING BRACKETS SHALL BE CONSTRUCTED FROM NON-FERROUS NON-CONDUCTING, TYPE MATERIAL. MATERIAL SHALL CONFORM TO UL 746 AND UL 94.
- 7. THE TRANSFORMER COMPARTMENT SHALL BE COMPLETELY ISOLATED FROM THE REST OF THE ENCLOSURE WITH AN INSULATING MATERIAL CONFORMING TO UL 746 AND UL 94. THE TRANSFORMERS SHALL BE ACCESSIBLE THROUGH A LOCKABLE DOUBLE HINGED DOOR WHICH SHALL SPAN, AS A MINIMUM, THE OVERALL WIDTH AND HEIGHT OF THE TRANSFORMER COMPARTMENT.
- 8. THERE SHALL BE A MINIMUM OF FOUR FEET FROM FLOOR TO CEILING OF CLEAR WORKING SPACE IN FRONT OF THE TRANSFORMER CABINET.
- 9. WHEN NEUTRAL BUS IS RECESSED, PROVISIONS SHALL BE MADE TO EXTEND THE NEUTRAL CONNECTION TO THE FRONT OF THE CUBICLE TO ACCOMODATE THE CONNECTION OF THE INSTRUMENT TRANSFORMERS.
- 10. BUS BARS SHALL HAVE A MINIMUM THICKNESS OF 0.25 INCHES AND SHALL BE RATED PER THE NEC FOR 1000 AMPERES PER SQUARE INCH. MAXIMUM BUS WIDTH SHALL BE 5 INCHES.
- 11. THE INSTRUMENT TRANSFORMER COMPARTMENT SHALL BE FURNISHED WITH A DOUBLE SWING DOOR EQUIPPED WITH A THREE POINT LATCHING MECHANISM WITH PROVISIONS FOR PSEG LONG ISLAND PADLOCKING.
- 12. LINE AND LOAD SIDES OF THE COMPARTMENT MUST BE CLEARLY AND PERMANENTLY MARKED.

DWG. BASED ON CS 8802

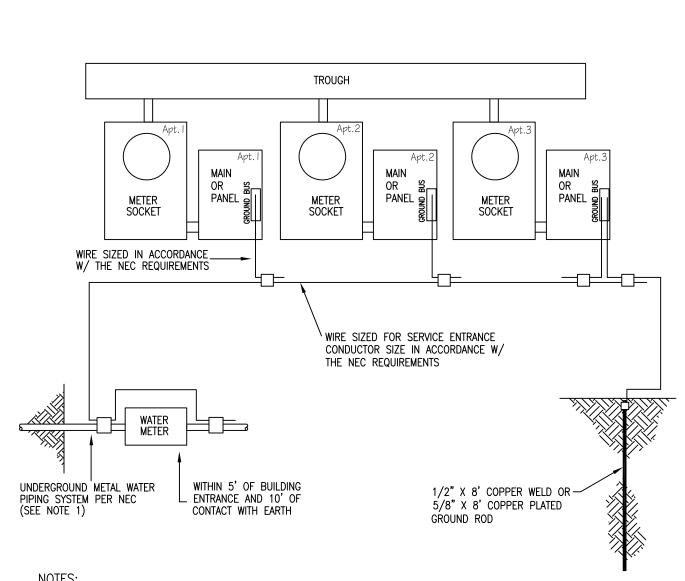
1600 AMPERE SERVICE AND ABOVE CURRENT TRANSFORMER COMPARTMENT INSTALLATION



- 1. WHERE WATER PIPING SYSTEM IS CONSTRUCTED FROM PLASTIC, A SECOND GROUND ROD IS REQUIRED TO BE INSTALLED AT A MINIMUM DISTANCE OF SIX FEET FROM THE FIRST. THE REQUIREMENT FOR A SECOND GROUND ROD IS APPLICABLE WHERE TEN FEET OF CONTINUOUS METAL WATER PIPE IN EARTH IS NOT AVAILABLE.
- 2. GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- 3. WHERE GALVANIZED OR ELECTRICAL METAL TUBING IS USED WITH BONDING BUSHING. BUSHINGS SHALL BE BONDED TO THEIR RESPECTIVE ENCLOSURES. BOND WIRE SHALL BE A MINIMUM OF #8 AWG GREEN INSULATED COPPER.

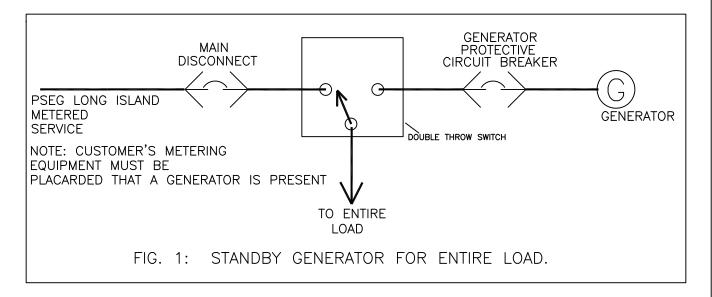
DWG. BASED ON CS 8603

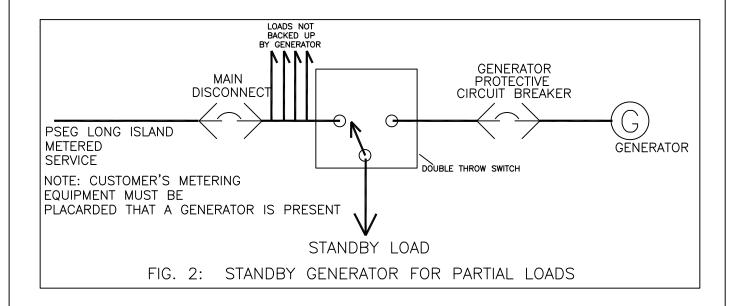
TYPICAL GROUNDING REQUIREMENTS SINGLE METER / MAIN INSTALLATION



- 1. WHERE THE WATER PIPING SYSTEM IS CONSTRUCTED FROM PLASTIC, A SECOND GROUND ROD IS REQUIRED TO BE INSTALLED AT A MINIMUM DISTANCE OF SIX FEET FROM THE FIRST. THE REQUIREMENT FOR A SECOND GROUND ROD IS APPLICABLE WHERE TEN FEET OF CONTINUOUS METAL WATER PIPE IN EARTH IS NOT AVAILABLE.
- 2. GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- 3. WHERE GALV. OR ELECTRICAL METAL TUBING IS USED WITH BONDING BUSHING. BUSHINGS SHALL BE BONDED TO THEIR RESPECTIVE ENCLOSURES. BOND WIRE SHALL BE A MINIMUM OF #8 AWG GREEN INSULATED COPPER.

TYPICAL GROUNDING DETAILS MULTI METER / MULTI MAIN INSTALLATION THE FOLLOWING 2 ONE—LINE SCHEMATICS OUTLINE THE CONNECTIONS PSEG LONG ISLAND WILL ALLOW FOR THE INTERCONNECTION OF OPTIONAL STANDBY SYSTEM EQUIPMENT. THE INTENT OF THE INTERCONNECTION SCHEMES IS TO PREVENT BOTH BACKFEED INTO THE LIPA ELECTRIC DISTRIBUTION SYSTEM, AND UNINTENTIONAL PARALLEL OPERATION WITH AN ENERGIZED LIPA SYSTEM. IMPROPER PARALLEL OPERATION CAN RESULT IN SERIOUS DAMAGE TO THE GENERATOR, THE LIPA DISTRIBUTION SYSTEM, OR BOTH, AND BE A SAFETY HAZARD TO PERSONNEL.





# OPTIONAL STANDBY SYSTEMS