PSEG LONG ISLAND

We make things work for you.

SPECIFICATIONS & REQUIREMENTS FOR ELECTRIC INSTALLATIONS

2017 Edition

www.psegliny.com

PSEG LONG ISLAND
We make things work for you.

Dear Trade Ally Partner:

At PSEG Long Island, we are committed to providing all our customers with safe, reliable and resilient electric service. The work you do helps us fulfill our mission, so we took the time to redesign this important document and re-release it as the PSEG Long Island Red Book. It reflects our commitment to you and our customers while outlining the requirements for supplying safe electric service.

The answers to many of the electric service questions frequently asked by customers, electricians, architects, engineers, builders and inspectors can be found on the following pages. You will also find that we have updated and enhanced a number of policies and procedures and associated forms. We encourage you to carefully review this new edition.

The PSEG Long Island Red Book offers valuable guidance, but it may not always take the place of discussing a particular issue or question with an expert. To ensure that we are giving you, our Trade Allies, the highest level of service, the new Building and Renovation Services department is staffed and ready to respond to all of your needs. Building and Renovation Service specialists are available to assist you as you build and/or expand homes and offices on Long Island and in the Rockaways. If you're starting a new service, relocating or changing an existing service, or simply need temporary power, please call 1-844-341-6378, Monday through Friday, from 7:30 a.m. – 4:00 p.m. or email us at brsli@pseg.com. Our team is here to help.

When our partnership succeeds, it's good for everyone across Long Island and in the Rockaways. To learn more about how we can help you, please call us at the appropriate contact phone number located throughout this guide or visit us at www.psegliny.com/brservices.

Sincerely,

John O'Connell
Vice President - Transmission & Distribution
PSEG Long Island

** Important Safety Notice **

PSEG Long Island actively promotes safety awareness around high voltage electric lines in its service territory. Whether you operate heavy equipment, or use ladders or scaffolding, you may work around electric power lines. Every year, some of our Trade Allies are injured or killed because they accidentally hit an overhead utility line.

Awareness and Education is the First Step

If you must work within 10' of the overhead electric lines, contact PSEG Long Island to de-energize or relocate these lines so you can work safely. This 10' distance is a requirement of Code Rule 57, also known as "High Voltage Proximity Act". This New York State Labor Law requires safe work practices with respect to overhead wires, and proper clearances of wires to workers and structures. Further, it requires employers to contact the local utility a minimum of five working days prior to commencing work. PSEG Long Island frequently communicates on this subject with our Trade Allies through monthly electrical contractor and builder association meetings; scheduled meetings with municipalities, building department inspectors, engineers, architects; newsletters and various training seminars which PSEG Long Island offers throughout the year. PSEG Long Island welcomes any ideas and suggestions from these organizations on how to further expand this process. For further information, contact Building and Renovation Services (BRS) at 1-844-341-6378.

The Most Dangerous Situations to Watch For:

Operating Large Equipment - Concrete pumping rigs, long-bed dump trucks, and other equipment can easily contact overhead power lines. Keep all equipment at least 10 feet away from power lines, poles, or towers. Work with a designated spotter whose only responsibility is to keep you clear of lines.
Guiding Loads - If a crane or other equipment hits an overhead power line, electricity may travel through the tag line and through you. Don't try to do double duty by guiding a load and spotting. Rely on a designated spotter.
Ladder, Scaffolds, Tools and Supplies - Always be aware of your surroundings. Carry ladders, scaffolds, gutters and other long objects so they are even with the ground until you need to use them. If you carry them upright, you could hit an overhead line.

Your Safety Steps:

PSEG Long Island wants to make sure you and your co-workers avoid electric hazards:
Locate overhead Lines – Survey your job site to find overhead power lines, poles, guy wires and service drops.
Inform Co-Workers what's Overhead and Underground – Make sure everyone at the job site knows about nearby overhead power lines and underground utilities.
Remember the 10' Rule – Keep all vehicles, equipment, tools and people at least 10 feet away from overhead power lines.
Locate Underground Facilities – If you plan to dig, call the One-Call Center at 1-800-272-4480 or dial (811), 2-10 working days before digging so utilities can mark underground facilities.

TO REPORT AN ELECTRICAL EMERGENCY CALL 1-800-490-0075

PSEG Long Island

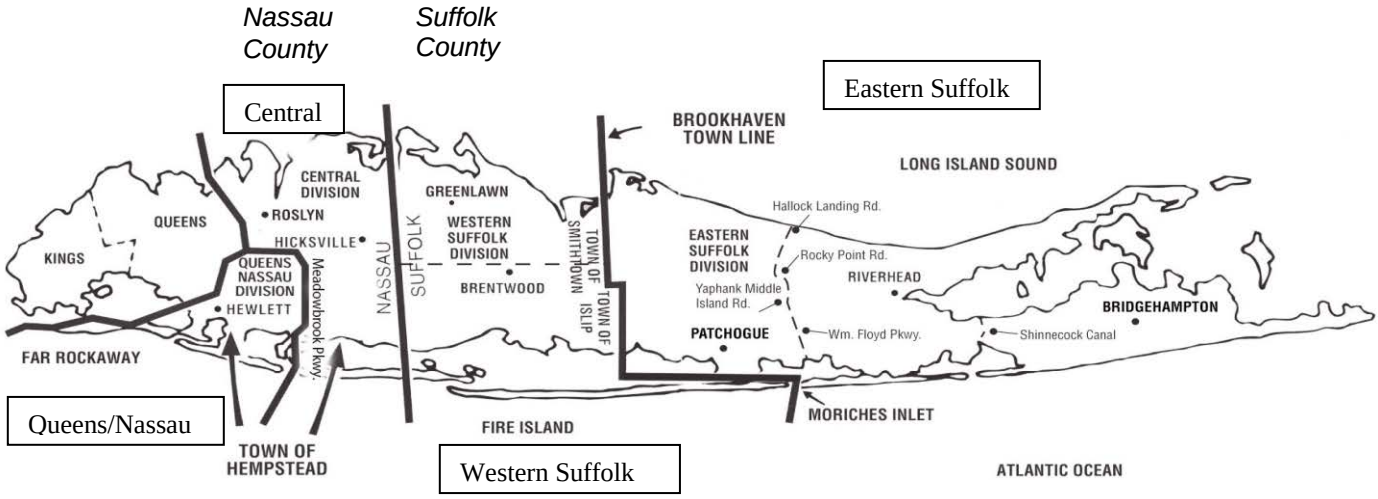
Building and Renovation Services

Building and Renovation Services is available to assist you with your electric service needs – from the beginning of your project through its successful completion. This includes new service installations, service changes, demolitions, elevating a residence, pool clearance measurements, and the relocation of PSEG Long Island equipment/facilities.

E-Mail: BRSLI@pseg.com

Mail all correspondence to:
PSEG Long Island
Building and Renovation Services
15 Park Drive
Melville, NY 11747

QUEENS-NASSAU	CENTRAL	WESTERN SUFFOLK	EASTERN SUFFOLK
Division	**Division**	**Division**	**Division**
Telephone: 1-844-341-6378	**Telephone: 1-844-341-6378**	**Telephone: 1-844-341-6378**	**Telephone: 1-844-341-6378**
Fax: 1-844-846-1550	***Fax: 1-844-846-1550***	***Fax: 1-844-846-1550***	***Fax: 1-844-846-1550***
FOR ALL WORK AREAS:	***FOR ALL WORK AREAS:***	***FOR ALL WORK AREAS:***	***FOR ALL WORK AREAS:***
NYC ROCKAWAY PENNINSULA TOWN OF HEMPSTEAD (West of Meadowbrook parkway and S/O Jericho Tpke and S/O Old Country Rd) CITY OF LONG BEACH	NORTH HEMPSTEAD Floral Park *(N/O Jericho Tpke)* New Hyde Park (N/O Jericho Tpke & E/O New Hyde Park Rd, N/O LIRR) OYSTER BAY HEMPSTEAD (E/O Meadowbrook Parkway and North of Jericho Turnpike & Old Country Rd) Garden City *(E/O Meadowbrook Pkwy)* Jones, Gilgo & W Gilgo Beaches	BABYLON HUNTINGTON ISLIP SMITHTOWN FIRE ISLAND	BROOKHAVEN EAST HAMPTON RIVERHEAD SHELTER ISLAND SOUTHAMPTON SOUTHOLD



PSEG Long Island

Important Telephone Numbers

For billing and other customer account inquiries contact:

Business Call Center
1-800-966-4818
Residential Call Center
1-800-490-0025

For emergency service contact:

Customer Assistance Center
1-800-490-0075
1-631-755-6000

For markouts of underground facilities call:

New York City and Long Island One Call Center
811 or 1-800-272-4480

For information on:

Energy Efficiency Programs, Rebates, Dusk-to-Dawn Lights, and Solar
(PSEG Long Island Energy Info Line)
1-800-692-2626

Parallel Generation Operation and Wind Turbines
(Power Asset Management)
1-516-949-8295

Directory of PSEG Long Island Customer Billing Offices

NASSAU COUNTY

2400 Sunrise Highway	Bellmore	11710
455 Mill Road	Hewlett	11557
175 East Old Country Road	Hicksville	11801
250 Willis Avenue	Roslyn Heights	11577

SUFFOLK COUNTY

479 Park Avenue	W Babylon / Lindenhurst	11757
1650 Islip Avenue	Brentwood	11717
1000 Montauk Highway	Bridgehampton	11932
2045 Route 112	Coram	11727
15 Park Dr	Melville	11747
460 East Main Street	Patchogue	11772
117 Doctors Path	Riverhead	11901

Please submit all paperwork to:
PSEG Long Island Building and Renovation Services
Phone: 1-844-341-6378
Fax: 1-844-846-1550
E-mail: BRSLI@pseg.com

COMMERCIAL/INDUSTRIAL
JOB NOTIFICATION CHECKLIST/LOAD LETTER

Customer Name: _____ Date: _____

Address:_____ Cross Street:_____Town: _____

Customer Email: _____ Phone: _____

Builder's Name: _____ Phone: _____

Electrical Contractor's Name: _____ Lic#:_____

Address: _____ Town: _____ Zip: _____

Electrical Contractor's Email: _____ Phone: _____

Service Characteristics

- Service Size _____ Amperes
  1 ϕ □ 3 ϕ □
- Voltage_____
- Overhead □ Underground □
- Main Switch Size _____ Amps
- Total Sq. Ft. of Building _____ Ft

Load Information
(Total Load by Category)

Total Connected Load (kw)

- □ Lights_____
- □ Motors_____ HP_____
- □ Common area load, including hall lighting, elevators, etc. _____
- □ Air Conditioning_____
- □ Refrigeration_____
- □ Computers_____
- □ Welders_____
- □ Miscellaneous Equipment_____
- □ Electric Heating_____

TOTAL _____ kW

Estimated Monthly Electric Demand

- □ Less than 7 KW
- □ 7KW or more
- □ Over 145 KW (June – Sept) or 500 KW (Oct – May)
- □ Unknown

******A site plan or sketch is required for ALL new Commercial services, please include the following information:***

- □ Exact Building Location
- □ Proposed/Existing Subsurface Facilities
- □ Proposed Meter Location
- □ Proposed Transformer Pad Location
- □ Proposed Cable Route

Please visit our website at: https://www.psegliny.com/brservices

PSEG Long Island
Building and Renovation Services

PSEG Long Island CONNECTS FORM

Applies to Residential Overhead Service Customers Only

Contractor to Complete All Information Below

CUSTOMER

Name: _____
Address: _____
Town: _____ Zip _____
Phone: (_____)_____
Electric Meter #: _____

ELECTRICIAN

Name: _____
Phone: _____
License#: _____
Address: _____
Email: _____

RESIDENTIAL SERVICE INFORMATION

Existing Overhead (Check one):

( ) #6 Cu Triplex ( ) #4 Al Triplex ( ) #6 Cu Concentric ( ) 1/0 Triplex ( ) Other

Meter Pan Manufacturer _____ Catalog # _____

	YES	NO		YES	NO
Was Meter RE-INSTALLED ……..	( )	( )	200 Amp Service or Less….	( )	( )
Existing Socket Meter……	( )	( )	Point of Attachment Relocated		
Single Phase……	( )	( )	less than two feet ……	( )	( )
Single Family……	( )	( )	LIPA Supplied Connectors		
Existing 3 Wire……	( )	( )	Utilized ……	( )	( )

New Load Addition _____kW

Is there a pool in the vicinity of LIPA wires ? _____
New service entrance cable size _____
Date Service Installed _____

Attach Electrical Inspection Certificate with Every Form Used

SEE OPPOSITE PAGE FOR INSTRUCTIONS

Transfer of service drop to new point of attachment is not permitted.
Transfer shall be performed by PSEG Long Island.

PSEG Long Island CONNECTS Procedure for Electrical Contractors

PSEG Long Island CONNECTS applies only to change of service that qualifies for all of the following conditions:

1. Residential Accounts
2. Single family house with a single meter
3. Single phase electric power
4. Existing 3 wire service entrance
5. Service entrance equipment NOT exceeding 200 amperes
6. Electrical Inspection Certificate (attached)

PSEG Long Island CONNECTS does not apply to the following:

1. Commercial accounts
2. Multi-metered facilities
3. 3-Phase electric power
4. Underground (existing or changing to) service cables
5. Service entrance equipment exceeding 200 amperes
6. New service or addition of meter(s)

The Electrical Contractor provides PSEG Long Island with the following completed forms:

a) The Electrical Inspection Agency Certificate
b) PSEG Long Island CONNECT forms

PSEG Long Island will provide the following items to the Electrical Contractor in advance:

a) Permanent connectors
b) PSEG Long Island CONNECT forms

Replenishment of initial stock will be issued to the contractors based on demonstrated prior usage. Proceed as follows, depending on method of contact:

a) E-mail, fax, or mail the required paperwork to PSEG Long Island
b) Proceed with the installation

PSEG Long Island's Building and Renovation Services Communication Information

Phone: 1-844-341-6378

Fax: 1-844-846-1550

E-Mail: BRSLI@pseg.com

Website: psegliny.com/brservices

Business hours: Monday – Friday 7:30am – 4:00pm

PSEG Long Island Redbook

REVISION HISTORY				
Controlled electronic copies of all revisions will be retained with the PSEG Long Island Operations Manual				
Is LIPA Approver sign-off required for this document? ☐ YES			☒ NO	
Version	**Description of Change**	**PSEG LI Approver and Title**	**LIPA Approver and Title**	**Revision Date**
Original	General Review; PSEG Long Island Format	Fred Vaupel, Manager, Distribution Design	--	1/5/2017
.				

PSEG LONG ISLAND	LIPA Long Island Power Authority
Approved by Fred Vaupel **Date** 1/5/2017	**Approved by** _____ **Date** _____

OPERATIONS MANUAL DOCUMENT HIERARCHY

The PSEG Long Island Operations Manual is composed of five levels of documents:

- **Core Functions.** Core Functions define the functional areas of the Operations Manual that are critical to the operation of the Utility. They list and briefly describe the major processes contained in their portion of the Operations Manual.
- **Processes / Sub-Processes.** Processes and Sub-Processes define the way we work within or across functions. They describe a series of steps performed in bringing about an end result. Processes document "what" must be completed to ensure the end result is achieved.
- **Procedures.** Procedures describe a way of performing or affecting a process step, or a series of process steps taken to accomplish an end. Procedures document "how" tasks are completed to ensure the step in a Process or an end result is achieved.
- **Technical Manuals.** Technical Manuals document specific instructions and required parts for the installation, operation, and maintenance of a piece of equipment, machine, process, or system.
- **Job Hazard Analyses (JHA).** Job Hazard Analyses (JHAs) document the identified risks or hazards of a specific job in the workplace, and the measures to eliminate or control those hazards. The JHA document is used in the workplace or at the job site to guide workers in safe job performance.

NOTE:

Any changes from the previous document will be denoted by a vertical black line on the right border of the page (see example below).

Example: Any revision from a previous version will be indicated as shown. 

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Purpose

The purpose of this book is to present information and specifications relative to the introduction and use of electricity supplied by PSEG Long Island. This book is to be used as a guide for installing electrical installations in order to protect the interests of our customers and to comply with regulations. These guidelines are necessary for safe, adequate, and satisfactory service.

1.2 Scope

The information and specifications included in this book cover conductors and equipment connecting Long Island Power Authority's (LIPA) electric supply system to the premises. It also encompasses other related subjects associated with the supply of electricity that are of mutual interest to PSEG Long Island, customers, architects, engineers, and electrical contractors. It should be noted that this is not a complete set of rules governing the installation of electrical wiring and equipment.

1.3 Rate Schedule

For Rate Schedules and the Rules and Regulations pertaining thereto, reference is made to the "Long Island Power Authority Tariff for Electric Service." These schedules are available for examination at any PSEG Long Island Business Office or online at www.psegliny.com. PSEG Long Island will make the initial assignment of the appropriate electric rate, based on information supplied in the application and load letter. If the characteristic of electric usage changes after the service is energized, it will be the customer's responsibility to notify PSEG Long Island of such change, so that the appropriate rate may be selected.

1.4 Cooperation

1.4.1 It is PSEG Long Island's sincere desire to provide and maintain dependable, safe, and satisfactory electric service in a courteous and efficient manner.

1.4.2 Preliminary information leading to new or increased electric service requirements should be submitted to PSEG Long Island early in the planning stages. This will insure proper design and scheduling coordination of the work associated with the service connection. PSEG Long Island, when applicable, will advise the customer of any additional requirements for grounding, service equipment, and metering facilities.

1.4.3 Cooperation of all interested parties and strict adherence to the specifications outlined in this book will provide for satisfactory electrical service.

1.5 Codes

These specifications are a supplement to the National Electrical Code (NEC) and National Electrical Safety Code (NESC), but they are not a substitute for these codes or for municipal codes. PSEG Long Island requires the customer's wiring to be installed in accordance with applicable codes.

1.6 Request for Information

PSEG Long Island will be pleased to assist the customer with any request for information in connection with the utilization of electric service. Representatives are available at PSEG Long Island's Building and Renovation Services Department to respond to these requests for information.

1.7 Responsibility

It is the customer's responsibility to maintain their wiring and equipment in a safe and operating condition, and in compliance with all applicable codes. PSEG Long Island/LIPA does not accept any responsibility for the customer's wiring and equipment.

1.8 Inspections and Approvals

To maintain compliance with code requirements, the Authority Having Jurisdiction (AHJ) requires customers to furnish satisfactory evidence of the safe condition of a structure's wiring. AHJ's perform electrical inspections or accept an electrical inspection certificate from an inspection agency approved by the AHJ as evidence that the structure's wiring is safe, meets all applicable code requirements, and is ready for connection to LIPA system. This certificate also serves as notification to PSEG Long Island that the AHJ, or the inspection agency approved by the AHJ, has deemed the wiring meets all applicable codes and is ready for connection to the system. PSEG Long Island reserves the right to challenge an inspection, when PSEG Long Island personnel observe deficiencies in the installation any time prior to energizing the installation.

For new service installations, PSEG Long Island requires an application for service and an electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ. For name changes to an existing service, PSEG Long Island requires an application.

Changes and/or modifications to an electric service will require an inspection certificate from the AHJ, or an inspection agency approved by the AHJ.

An electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ, may be required for service reconnects.

Inspections shall confirm compliance with the NEC, any applicable municipal codes, and any Company specifications that may supersede portions of the aforementioned codes. Application for service and inspection should be made before the work is started. It is PSEG Long Island's intent that all electric services of outdated design be brought into compliance with these current specifications (as well as NEC and NESC code, as they may apply) when the service size is changed, load is added, or major service construction/replacement work is performed.

For ALL fire and flood damaged homes and buildings, it will be necessary to obtain an electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ, and the certificate must be provided to PSEG Long Island prior to re-connection. This certificate also serves as notification to PSEG Long Island that the AHJ has deemed the wiring meets all applicable codes and is ready for connection to the LIPA system.

During large-scale flood/storm events, PSEG Long Island will coordinate an initial assessment of homes to be energized. If it is determined that the house cannot be safely energized due to flooding or physical damage, PSEG Long Island will require an inspection certificate, or possibly a certification from a licensed electrical contractor, that the building has been made safe and power can be restored.

1.9 Wiring Adequacy

Compliance with the NEC or local municipal code assures only that the installation will conform to recognized safe practices. The provision for adequate electrical capacity must be decided by the customer. The electrical contractor should assist the customer in determining that their electrical installation will have adequate capacity for future use. The customer has the responsibility to maintain their wiring and equipment in a safe operating condition. Defects in customer furnished apparatuses, materials, and labor shall be rectified by the customer at their expense. PSEG Long Island does not accept responsibility for the customer's wiring and equipment.

1.10 Continuity of Electric Supply

1.10.1 PSEG Long Island will endeavor, at all times, to provide a regular and uninterrupted supply of electric service. However, PSEG Long Island will not be liable under the following:

- Service is interrupted for the purpose of making repairs or improvements in any part of its system
- Service is interrupted, defective, or failed from causes beyond its control
- Ordinary negligence of employees, servants, or agents

1.10.2 Service for electric furnaces, welders, x-ray apparatus, and other types of equipment, which may interfere with satisfactory service to other customers, require special consideration.

1.10.3 PSEG Long Island reserves the right to discontinue service where equipment used by a customer results in objectionable effects upon, or interference with, the operation of LIPA's facilities, its customers, or of another public service company, unless the customer discontinues the use of such equipment or installs corrective equipment to overcome objectionable affect or interference.

1.11 Power Quality

1.11.1 Voltage dips or spikes and brief service interruptions of varying duration and severity will occur due to operating conditions on the electric system. These irregularities will not cause malfunction of lighting or motor loads, but may affect computers or similar equipment. If irregularities of this nature will be of consequence, the customer/contractor is advised to consider the installation of a motor generator set, Uninterruptible Power Supply (UPS), or some other form of UPS to insure proper operation of critical equipment. PSEG Long Island/LIPA shall not be liable for any damages arising from these voltage irregularities, momentary interruptions, or de-energization and re-energization of electric service.

1.11.2 In addition, normal electric distribution system operations include reacting and responding to the following events, any of which can cause voltage spikes, dips, temporary low voltage, and even outages:

- Adverse weather conditions
- Overhead wires falling
- Underground wires failing
- Connections failing in service, or coming loose
- Trees and/or wildlife intrusion into wires
- Failure of another customer's equipment
- Capacitors being put on line, or being disconnected
- System switching
- Auto accidents and events caused by others
- Intentional interruptions in contingency situations
- Operation of a customer's own equipment

Each of the above instances is either a normal electric utility operation, an event which causes a normal, automatic fault clearing episode on the electric system, or an event generated within the customer's own building or home. PSEG Long Island will respond appropriately, when notified by a customer, of any abnormal voltage incident involving the electric system.

Voltage excursions generated during these events may effect electronic equipment, such as late model TV's, VCR's, computer systems, stereo equipment, etc. It is the customer's responsibility to provide adequate protection against such events, which typically includes use of a quality surge protection device, GFCI receptacles or circuit breakers, or a UPS, as appropriate.

1.11.3 Adequate maintenance of a home or building's grounding system, which includes water piping ground connections, ground rods, and/or structural grounds, can help minimize the effects of the above events (see Section 7).

1.12 Access to Customer's Premises

Authorized PSEG Long Island employees or agents shall have safe access, at all reasonable times, to meters and equipment installed on the customer's premises.

1.13 Identification of Employees

PSEG Long Island employees, authorized to visit the customer's premises, are furnished with photograph identification, which they will show upon request. This is done to protect the customer from unauthorized persons representing themselves as PSEG Long Island employees.

1.14 Revisions

1.14.1 These specifications will be revised or amended, as required by developments and progress in the industry, to protect the mutual interests of the customer and PSEG Long Island. The latest revisions should always be used. Revisions shall also be posted on the PSEG Long Island website www.psegliny.com.

1.14.2 Revisions can come in the form of single and/or multiple sheets, or the entire book. These revisions will be made available to the Five Borough Electric League (www.5boroelectric.com), the International Association of Electrical Inspectors (IAEI) (www.iaei.org), the Long Island Chapter of the National Electrical Contractors Association (www.lineca.org), the Nassau Electric League (NEL) (www.nassauelectricleague.com), the Suffolk County Electrical Contractors Association (www.sceca.com), and local supply houses.

1.14.3 New books will be issued as required. Copies can be obtained by contacting PSEG Long Island's Building and Renovation Services (BRS) Department. The complete text is available on the PSEG Long Island website (www.psegliny.com).

1.14.4 Visit www.psegliny.com/brservices to access the latest notices and updates to the Redbook.

2. DEFINITIONS

1) Ampacity: The current, in amperes, that a conductor can carry continuously under the conditions of use without exceeding its temperature rating

2) Authority Having Jurisdiction (AHJ): A federal, state, local, or other regional department, or other individual having licensed statutory authority

3) Bonding - The permanent joining of metallic parts to form an electrically conductive path, which will assure electrical continuity and the capacity to conduct safely any current likely to be imposed

4) Building: A structure which stands alone, or which is separated from adjoining structures by fire walls with all openings therein protected by approved fire doors

5) Cable Systems: The conduit and/or cable which is part of the service lateral

6) Company: PSEG Long Island and LIPA

7) Cost or Expense: The cost of all materials, equipment, labor, and other definite charges, plus a reasonable charge for other costs of a general nature (purchasing, engineering, etc.) involved in a project

8) Customer or Consumer: A person or any other entity who is approved for, and supplied electric service by, PSEG Long Island. Each customer will have a unique account unless specified otherwise.

9) Fire Wall: As per the Fire Marshall, a fire wall is considered a masonry wall at least 8" thick extending through all building stores and the roof, except where the roof is of fire resistant construction, in which case the masonry wall is carried up tightly against the lower side of the roof slabs. Acceptable construction includes concrete block, brick, and solid reinforced concrete. Any exception to this definition shall be certified in writing by a registered architect, licensed Professional Engineer, local Fire Marshall, or Building inspector stating that the wall meets the New York State Uniform Fire Prevention and Building Code. In addition, the letter must state that the wall meets the NEC requirement for an additional service to the building. Having a firewall does not entitle the customer to an additional service, but it is required for second service.

10) Ground: A conducting connection between an electrical circuit or equipment and earth or some conducting body that serves in place of the earth

11) Ladder Accessible: Capable of being reached from the ground, at level grade with an extension ladder

12) Line: A system of overhead poles, wires, and accessory equipment or underground ducts, conduits, and cables used for the distribution of electricity to customers

13) Multiple Occupancy Building: A structure, including row houses, enclosed within exterior walls or fire walls, built, erected, and framed or component structural parts, and designed to contain four or more individual dwelling units for permanent residential occupancy

14) Non-Residential Customer: A person, firm, or other entity, that does not use the service location as a residence

15) Point of Attachment (POA): The overhead connection point mounted to the building owned and maintained by the customer to which PSEG Long Island attaches the service drop

16) Ring Out: A procedure used to verify that the meter and associated distribution panel have been correctly identified to avoid meter/billing problems

17) Self-Contained Meter: A meter that contains the Current Transformers ("CT's") within the meter. The meter carries the entire customer load. Also known as "socket meters," self contained meters are used on services up to 320 amps. See Section 6 for special requirements at 277/480 volts.

18) Service Connection: A service lateral and its associated service entrance

19) Service Drop: The overhead service conductors between the last utility-owned pole, or other aerial support, and the first customer connecting point

20) Service Entrance: The part of the customer's wiring from the point of attachment, or service termination of the service drop or service lateral, to and including the service equipment on the customer's premises

21) Service Entrance Conductors: The service conductors or cable which extend from the point of attachment, or service termination of the service drop or service lateral, to the terminals of the service equipment

22) Service Equipment: The necessary disconnecting and protective equipment; usually consisting of a circuit breaker or switch and fuses and their accessories; owned by the customer and located near the point where the service entrance conductors enter a building and intended to constitute the main control and means of cutoff for the supply to the premises

23) Service Line or Lateral: A system of conductors and equipment for delivering electricity from the LIPA distribution system to the wiring system of a building or address

24) Service Termination: The point at which the LIPA service line or lateral ends, and the customer connects with the wiring system

25) Set of Conductors: Comprised of one conductor per phase, plus a neutral conductor

26) Temporary Service: Service to be used for less than two years; contact PSEG Long Island's Building and Renovation Services Department for the charges involved for temporary electric service

27) Transformer Rated Meter: A meter that requires the installation of separate Current Transformers (CTs) within a CT or Trans-S cabinet; Transformer Rated Meters are used on services 400 amps and above and all 277/480 volt services

28) Wire Size: Where stated, the size is in terms of American Wire Gauge (AWG) and applies to copper and aluminum conductors

3. GENERAL INFORMATION AND REQUIREMENTS

3.1 Application for Service

3.1.1 Application for service may be made by fax, mail, e-mail, or by personal visit to any PSEG Long Island office, but the required application form furnished by PSEG Long Island, for the class of electric service desired, must be signed and forwarded well in advance of the date service is needed.

3.1.2 PSEG Long Island shall be consulted regarding the character of service available before plans are completed, equipment purchased, or construction commenced, on facilities to be connected to LIPA's distribution system. Information regarding a customer's proposed electrical installation should be supplied in writing.

It is imperative that the customer/contractor also supply PSEG Long Island with electric load information, in order to insure proper design of its facilities prior to construction. PSEG Long Island will not be responsible for errors resulting from information communicated verbally or by telephone.

3.1.3 Any change in the location of a meter or a service lateral after installation will be made at the expense of the applicant or customer if it has been:

- Requested by an applicant or a customer for their accommodation, providing such a change is approved by PSEG Long Island
- Deemed necessary to provide suitable location and adequate protection for the meter
    - Such changes shall be governed by the requirements applying to the new installation

3.1.4 When there is a change in the customer's requirements for electric service, or a change by the customer from one service classification to another, such changes shall be governed by the requirements applying to new installations.

3.1.5 Services that are cut-off, and where the service drop and/or meter have been removed, shall require an electrical inspection certificate from the appropriate inspection authority. The service shall fall into the same category as a new installation, and a re-connect of this service shall then be governed by requirements applying to new installations. If there are any questions regarding a specific field situation, contact PSEG Long Island for consultation.

3.1.6 House raising or relocation must be de-energized, will require a temporary electrical inspection certificate before re-energizing, and must meet the same requirements as a new installation.

3.2 Mobile Homes and Trailers

3.2.1 Requirements for electric service and metering for mobile homes, travel trailers, construction trailers, and mobile home courts differ from the requirements of other types of service and, therefore, must be given special consideration for each case.

3.2.2 When the service is overhead, the customer shall be required to provide a substantial and adequate service post, guyed if necessary, and must not be attached to trailer. Such a support shall be a treated pole, minimum 25', Class 7, set 6 feet in ground (see drawing D7 & D8).

3.3 Temporary Service

3.3.1 Temporary services are those supplied to structures, other than permanent or substantial buildings, for service usually:

- of short duration
- during the construction of permanent buildings or projects
- of short time service to carnivals, exhibits, decorative lighting, etc.

Contact PSEG Long Island prior to the installation for charges and other requirements, including appropriate applications.

3.3.2 A treated pole, minimum Class 7, or equivalent (see drawings D7 & D8), set in solid earth, is required where no building exists. The customer shall be required to provide a substantial and adequate support, guyed if necessary. Such a support may be a 4" x 6" sound timber, securely attached to the framing of a building (not a trailer), and extending no more than 3' above support, if unguyed, or 8', if guyed.

3.3.3 PSEG Long Island will provide a charge to install and remove lines, appurtenances, and metering equipment. The applicant shall pay PSEG Long Island the total cost, in advance, and pay for electric current consumed, based on the appropriate service classification. The customer shall be required to provide an appropriate application for service, a security deposit, and an inspection certificate.

3.3.4 Service entrance, metering equipment, and other wiring on temporary installations are to be installed in the same manner as required for permanent installations. Inspections and approval shall be required prior to PSEG Long Island making service connections.

3.4 Swimming Pools

3.4.1 All overhead and underground conductors must maintain a minimum distance away from all pools, hot tubs, spas, and any other swimming area. The minimum distances shall be in accordance with the latest applicable codes and local ordinances, including the latest addition of the NESC (see Section 11, drawing D2).

3.4.2 If there are any questions regarding the clearance at a specific site, PSEG Long Island must be contacted to determine available clearances before work is started. Under no circumstances should anyone, other than qualified PSEG Long Island personnel, attempt to measure clearances to LIPA's distribution system.

3.4.3 Public Swimming Pools - The New York State Sanitary Code (i.e., Public Health Law Section 225) requires that overhead electrical wires must have a minimum clearance of 20 feet, measured horizontally from the edge of public swimming pools, or from the mean high water mark at public bathing beaches. This does not apply to private swimming pools, or other bathing facilities owned and maintained by an individual for use by family and friends.

3.4.4 Customers may be requested to relocate any portable, above grade swimming pool to correct any violation created by the improper placement, with respect to LIPA overhead lines.

3.4.5 If LIPA's facilities must be relocated to accommodate a swimming pool, the customer shall bear all costs associated with this work.

3.5 Character of Electric Service

3.5.1 PSEG Long Island supplies alternating current at a nominal frequency of 60 Hertz (cycles per second). All secondary, primary, and transmission voltages mentioned in this book are nominal. In addition, in contingency situations, tolerances in voltage limits may exceed usual system limits, as defined in American National Standards Institute (ANSI) standards C84.1.

3.5.2 Secondary or low voltage service of the following types will be supplied under the terms of LIPA's tariff:

Phase	No. of Wires	Nominal Voltage
1	3	120/240
1	3	120/208 (320 amp max.)
3	4	240/120
3	4	208Y/120
3	4	480Y/277

3.5.3 The service voltage, number of phases, and wires will depend upon available lines, the customer's location, and the size and nature of the proposed service. As all voltage characteristics are not available at all locations, the customer shall consult PSEG Long Island before proceeding with installation of wiring or ordering of electrical equipment, to determine the type of service to be supplied.

3.6 Load Balance

The customer shall connect and balance their load so that a minimum of unbalanced current occurs.

3.7 Service Taps

3.7.1 Unless otherwise specified, all connections to be made outside a building wall between LIPA's wires and the customer's wires will be made and removed exclusively by PSEG Long Island authorized personnel (except for the PSEG Long Island CONNECTS Procedure as described in Section 4).

3.7.2 New service or additions of meters to existing services **SHALL NOT** be energized by the contractor, in any case, without specific authorization from PSEG Long Island.

3.7.3 PSEG Long Island reserves the right to make all service connections. Connections to LIPA's electric system, or any alteration to LIPA's metering equipment, by anyone except PSEG Long Island authorized personnel, is prohibited by the penal law and punishable as a misdemeanor, if done with the intent to avoid payment. Violators of this rule may be prosecuted. The law provides that the user of such a connection, as well as the party making the unlawful connection, is presumed to have made, or consented to, the unauthorized connection to avoid payment, and is subject to prosecution.

3.8 Emergency Supply

PSEG Long Island shall be consulted before any generating equipment is connected to circuits, or loads which are supplied from LIPA's lines. Before installing permanently wired generators, the customer/contractor shall refer to Section 11 (see drawing D35). If parallel operation with LIPA's system is contemplated, contact the Distributed Resource Management Department at (516) 949-8295 and see Section 10.

3.9 Electric Heating

When electric service is used for heating a new or existing residence, the residence must meet the minimum insulation standards required by the current edition of the New York State Building Code. A "Certificate of Compliance" for the minimum insulation standards will be required, in addition to the "Application for Electric Service." To qualify for PSEG Long Island's electric heating rates, a load letter must be supplied with the application.

3.10 Unauthorized Attachments to Poles

3.10.1 There is a law prohibiting, and PSEG Long Island forbids, the unauthorized attachment of any flags, banners, signs, clotheslines, antennas, etc., to any of the poles. It forbids the use of the poles for placards or other advertising matter. PSEG Long Island will remove any such unauthorized attachments without notice, and may prosecute any such trespassing.

3.10.2 PSEG Long Island prohibits any work by contractors on the poles, towers, vaults, surface mounted equipment, or manholes without specific authorization.

3.11 Unmetered Services (Flat Connects)

3.11.1 Any service that is Flat Connected without authorization will be disconnected if a meter cannot be installed.

3.12 Cell Sites

3.12.1 Cell towers, including those on water towers, having single or multiple carriers, will only be supplied from one service lateral. PSEG Long Island will not own the service lateral on private property.

3.12.2 If attaching to buildings, the cell site(s) service will be required to come off the existing building service. If the existing service is inadequate for the cell site, the building service must be upgraded.

3.13 Submetering

3.13.1 Submetering for residential purposes in new construction is not permitted per the Tariff, except for new or renovated Cooperatives and Condominiums, with application and approval by LIPA's Trustees.

3.13.2 Submetering for non-residential purposes may be permitted if an application is submitted to LIPA's Trustees for approval.

3.13.3 Applications should be sent to the Office of the Chairman at LIPA. Refer to the applicable Tariff Leaf (No.'s 35 thru 38) for further details.

4. SERVICE CONNECTIONS

4.1 General

4.1.1 This section applies to each new service installation, and to existing installations, when changes and/or rearrangements are made. PSEG Long Island shall be notified before electrical work has begun. To avoid any misunderstanding, the applicant or contractor shall consult with PSEG Long Island and secure specifications before plans are completed or construction commenced.

4.1.2 Only one service drop or lateral will be made available to a customer's premises. Exceptions may be made where a customer requires services of different voltage characteristics, large service capacities, or construction divided by a fire wall. Installation of more than one service to a building is subject to PSEG Long Island approval, and the customer shall be responsible for all charges required for PSEG Long Island to perform the work.

4.1.3 The type of construction and route of service connection will be determined by PSEG Long Island, in consultation with the customer.

4.1.4 Section 12 contains maps indicating certain areas which have been designated as Secondary Network Areas. In these areas, for all new service connections or changes to existing service connections, complete specifications should be requested from PSEG Long Island before planning, estimating, or starting any work.

4.1.5 Services will not be run from building to building.

4.1.6 The minimum service entrance and service equipment acceptable by PSEG Long Island for a single meter service shall be single-phase, three-wire, and 100 amperes. The minimum service entrance and service equipment acceptable by PSEG Long Island for a multi-meter service shall be single-phase, three-wire, and 150 amperes. PSEG Long Island may permit a variance to this requirement for installations solely supplying loads for signs. All such variances must be requested by the customer, in writing, and approved by PSEG Long Island prior to installation.

4.1.7 PSEG Long Island will supply 3-Phase service when:

- 3-Phase secondary is available at the pole (manhole) from which the service is to be taken, and the service has a single 3-Phase motor rated 3 HP or 25,000 BTU's/hr., or larger (commercial), or 5 HP or 40,000 BTU’s/hr. (residential)

  Upon PSEG Long Island request, the customer shall provide a copy of the motor(s) specification. The customer must contact the Company to determine if 120/208V or 120/240V service will be provided.

- In the opinion of PSEG Long Island, 3-Phase service is desirable due to the size or characteristics of the load

4.1.8 The customer shall furnish, install, own, and maintain all service entrance conductors, meter mounting equipment, and service equipment.

4.1.9 Service entrance conductors on the line side of the meter shall not be covered.

4.1.10 If replacing service equipment without increasing service size, grounding must be provided, as per NEC Article 250. An electrical inspection certificate from an approved inspection agency is also required.

4.1.11 PSEG Long Island/LIPA will furnish, install, own, and maintain adequate metering equipment to measure the energy and demand used, in accordance with its tariffs.

4.1.12 The use of aluminum wiring may be restricted due to code or municipal ordinance. It is the contractor's, and ultimately the property owner's, responsibility to comply with such local ordinances.

4.1.13 Oxide inhibitor shall be used on all connections utilizing aluminum conductors.

4.1.14 All conductors and terminals in socket terminals and ground terminals of service switch or disconnecting means shall be cadmium plated bronze, cadmium plated copper, hot tin dipped copper, or bimetallic connectors approved for connecting aluminum conductors to copper. Un-plated copper terminals or connectors will only be approved with copper conductors. At the point of connection of LIPA's wires to the customer's wires, all connectors used to connect aluminum to aluminum, or aluminum to copper shall be of a material compatible for use with copper and aluminum, and shall be compression type.

4.2 Change of Service Procedures

In recognition of the timing and coordination problems involved in the disconnect and reconnect of simple single phase residential overhead services, where modifications or upgrading of existing service entrances are involved, the procedure known as PSEG Long Island CONNECTS is to be used. The purpose of PSEG Long Island CONNECTS is to minimize the licensed electrical contractor's time and effort, while affording them a measure of protection by authorization to handle specific LIPA facilities, without fear of prosecution for tampering or diversion of current. It will also provide PSEG Long Island with a control mechanism and minimize the estimating of unmetered consumption (see forms in front of book).

4.2.1 PSEG Long Island CONNECTS Procedure for Electrical Contractors

- This procedure will be used by electrical contractors for the replacement and upgrading of all three (3) wire, single-phase, socket type meter, residential, overhead, electric services up to and including 200 amperes in size, including replacement of individual service entrance components. (i.e., meter socket pan, distribution panel, or service entrance conductors)
- PSEG Long Island CONNECTS procedure does not apply to **non-residential, multi-metered 3-Phase, underground (existing or changing to), services exceeding 200 amperes, new services or addition of meter(s).**
- The contractor is to provide PSEG Long Island with a completed PSEG Long Island CONNECTS form (see front of book) and a completed and legible electrical inspection agency certificate. This information shall be provided to Building and Renovation Services, and may be sent by mail, fax, or e-mail.
- All authorized electrical contractors will receive an adequate supply of permanent connectors for use on PSEG Long Island CONNECTS qualified change services, in advance of starting work, and will be re-supplied, as required, based on the volume of jobs reported to PSEG Long Island.
- The connectors that are provided by PSEG Long Island will be used by the contractor to make permanent conductor connections between the service drop and service entrance cable at the weather head (see drawing D9). Under no circumstances, shall the contractor transfer the service to the new point of attachment.
- The contractor shall leave the meter enclosure in a safe and secure condition, including installing meter pan cover and re-setting meter, or installing a clear plastic safety shield over the meter socket.
- Where it is necessary to parallel conductors when changing from a two to three-wire service, temporary connections may only be made at the service weather head.
- The electrical contractor must notify PSEG Long Island on the day work has been completed. The contractor must also provide the date the meter was removed and reset, as well as an approved inspection agency's certificate.

4.2.2

For the connection of all commercial 3-Phase, underground, and residential change services that do not qualify for the PSEG Long Island CONNECTS procedure, the customer shall:

- Provide PSEG Long Island the following information and documents, prior to starting any electrical work: size of the proposed electric service, single or 3-Phase, connected load, overhead or underground, electrical inspection certificate, etc.

  This information shall be conveyed by utilizing the Job Notification Checklist located (see front of the book) and providing it to Building and Renovation Services by mail, fax, or e-mail.

4.3 Overhead Service Connections

4.3.1 PSEG Long Island/LIPA will install, own, and maintain the overhead service drop to supply service equipment. In those cases where the service drop exceeds 100', the customer may be required to contribute towards the cost of the excess, in accordance with the rate schedule. PSEG Long Island retains responsibility for the connection at the weather head (see Figure 4.3.1).

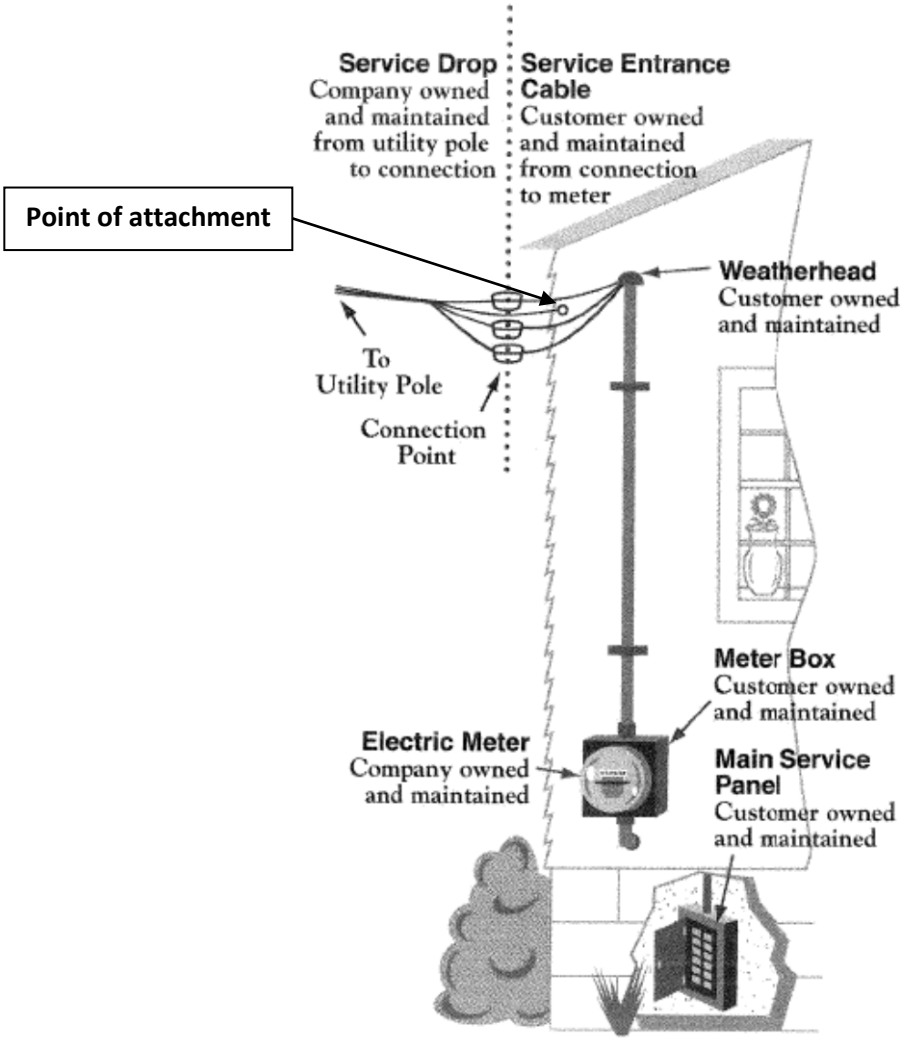


Figure 4.3.1 – Overhead Service Connections

4.3.2 For services up to 200 amps, where it is anticipated that the service drop will exceed 100' from pole to point of attachment, contact PSEG Long Island for approval.

4.3.3 Mid-span service drops can be installed, but will require PSEG Long Island approval, prior to construction, and charges may apply.

4.3.4 The Company reserves the right to designate the location at which its service drop will be attached to the customer's structure. This Point of Attachment (POA) will normally be not less than 15' or more than 21' above final grade. Where the customer's building is too low to permit the installation of the service bracket or eye bolt at the minimum 15' above final grade, PSEG Long Island may, if municipal ordinances and field conditions permit, approve the attachment at a lower point, provided the minimum heights listed below for the lowest service drop conductor sag can be obtained, with the drop attached at normal height on LIPA's poles.

LOCATION OF CONDUCTORS	HEIGHT
Above public streets, alleys or roads, and over driveways other than to residential garages	**18 feet**
Above automobile parking lots, drive-in establishments and similar commercial areas	**18 feet**
Above driveways to residential garages not subject to commercial traffic	**15 feet**
Above spaces or walks accessible to pedestrians only: *(if more than 25 feet measured in any direction from swimming pool, swimming area or diving platform)*	
Conductors limited to 300 volts to ground	**12 feet**
Conductors exceeding 300 volts to ground	**15 feet**
*Attachments to chimneys **are not allowed**.*	

4.3.5 All service attachments must be directly accessible by a ladder in contact with the ground. Attachment height shall be no greater than 21' above grade. For commercial/industrial applications, where greater than 21' is required, contact PSEG Long Island for approval. Attachments to chimneys are not permitted.

4.3.6 On all overhead electric services, up to and including 320 amperes, the customer must, at their own expense, furnish and install a ½" steel eye-bolt with a 1 inch minimum inside diameter eye securely bolted with a backing plate and supported by a sound structural member of adequate strength to withstand safely the strain imposed by the service drop. In the event an eye-bolt cannot be used, a ½" screw eye-lag with a 1" minimum inside diameter eye and a minimum 2 ½" thread length may be approved, if it can be shown the lag screw is supported by a sound structural member (minimum of a 2" x 4"). The eye bolt/lag shall be located at a point 6" minimum or 10" maximum below, and a maximum of 24" horizontally from, the weather head.

4.3.7 A mast type service may be utilized where the customer's structure is too low to provide a point of attachment that will assure the minimum service drop clearance required (see drawing D4).

4.3.8 Due to wire size and weight, and other considerations, overhead services of 400 Amperes will be limited to pole lines on the "near side" of the road, or pole lines within 60 feet of the building. Therefore, it is important that the contractor contact PSEG Long Island before planning the work or commencing construction. Convenience service poles may be required and charges may apply.

4.3.9 For open wire service rated at 400 amperes or greater, the customer's service head(s) shall be located above and within 10 inches of the point of attachment of LIPA's service drop. The point of attachment must include a 3 or 4 spool rack, and a minimum of 48" of slack shall be provided in each of the service entrance conductors, at the service head, for connection to the service drop (see drawing D10).

4.3.10 A 600-ampere overhead open wire service may be approved, on a case-by-case basis. Consult PSEG Long Island on all such planned installations.

4.3.11 A maximum of three (3) weather heads will be permitted for connection to an overhead service drop. The maximum total ampacity is limited to 400 amperes. 600 amp overhead services may be approved on a case by case basis only.

4.3.12 PVC conduit used above grade must be schedule 80.

4.4 Underground Service Connections

Underground installations by the customer, from their service equipment to their property line, must meet minimum requirements of PSEG Long Island, NEC, and local municipal codes.

BEFORE YOU DIG
Call for a Mark-Out of Existing
UNDERGROUND FACILITIES
New York City and Long Island One Call Center
1-800-272-4480 or 811

One phone call will serve to notify utilities of your planned excavation in accordance with New York State law and Industrial Rule 753. This law requires excavators to notify the operators of underground facilities of their planned excavations two to ten days prior to starting work. Any person or contractor conducting excavation who has not called for a facilities mark-out and damages LIPA facilities while excavating is financially liable for all costs of repair and other material damages.

4.5 Underground Conduits – Types

Where it is required by the customer or applicant to install conduit, the following will apply:

4.5.1 Aluminum conduit will not be approved.

4.5.2 Flexible conduits will not be approved; only solid types.

4.5.3 Rigid Metallic Conduit (RMC) and Rigid Non-metallic Conduit (RNC) (Schedule 40 or 80 respectively, as required), will be approved for below grade use when installed in accordance with the requirements of the latest issue of the NEC and local codes, including under highways and sidewalks unless prohibited by municipal ordinances.

4.5.4 The use of Electric Metallic Tubing (EMT) or Intermediate Metallic Conduit (IMC) will not be permitted for below grade installation.

4.5.5 Non-metallic conduit used above-grade must be Schedule 80.

4.5.6 Rigid Non-metallic Conduit (RNC) shall be clearly and permanently identified, as to schedule and/or trademark, and be installed so that that the markings can be easily seen.

4.5.7 All conduits shall be sized in accordance with the current edition of the NEC, but in no case shall be less than 2” inside diameter.

4.5.8 For additional conduit requirements for 480Y/277 volt services, see Section 6.

4.6 Underground Conduits – Installation

4.6.1 In all residential underground developments, all service laterals must be installed in a minimum 2" metallic or non-metallic conduit. Multiple conduits may be necessary for larger services (see drawing D17).

4.6.2 All couplings or connections must be tight or cemented. The ends at the service conduit, within the building and in the pull box nearest the building, must be sealed with suitable compound (compatible with the cable insulation) to prevent the entrance of moisture or gases. PSEG Long Island/LIPA will not be liable for property damage resulting from the entry of moisture or gases, due to inadequately sealed joints or ends of conduits.

4.6.3 Conduits for cables rated 600 volts and less shall be buried with a minimum cover of 24" and a maximum cover of 30" below final grade. Conduits containing service cables more than 600 volts and having a cover of less than 36" must be galvanized rigid metal (Schedule 40 - UL approved).

4.6.4 All conduit and/or direct buried runs in the public area must be at 90-degree angles to the curb and/or building. Where unusual conditions exist, such as a long service run, abrupt changes of grade, sub-surface interference along the service path, or where more than two 45-degree bends are necessary, there may be additional requirements to facilitate initial or replacement of cable pulls.

4.7 Cables – Approved Types 600V and Below

4.7.1 A minimum of three conductors, of which all three must have a minimum voltage rating of 600 volts, shall be installed for all secondary underground service installations. Conductor sizes shall be in accordance with the requirements of the current edition of the NEC and Municipal Codes, but shall have a minimum rating of 100 amperes.

4.7.2 With the exception of secondary network areas, only the following types of cable will be PSEG Long Island approved for 120/240 or 208Y/120 volt service and metering operation, when properly installed in conduit. All insulation must be 90^{o} C rated.

- USE-2
- THW-2
- THWN-2
- XHHW-2
- RHW-2*

*with neoprene or hypalon jacket only

Markings on cable must be as per NEC Article 310.11. See Section 6.2 for 277/480v requirements.

4.7.3 In secondary network areas, only copper type USE-2, XHHW-2, THWN-2, or RHW-2 cable will be approved for service and metering operation when installed in conduit. Aluminum cables in these areas will not be approved.

4.7.4 The applicant or customer may install direct buried conductors. Section 11 provides construction specifications and installation responsibilities.

Direct burial of 480Y/277 Volt cables is prohibited.

4.7.5 Service conductors approved for direct buried installation must be USE-2, in accordance with the definition as stated in the NEC.

4.7.6 For direct buried installations, depth of earth cover shall not be less than 24", or as required in the latest edition of the NEC.

4.7.7 Except as noted in Section 4.7.4, either copper or aluminum conductors will be approved in the following sizes:

- #4 AWG (copper only)
- #2 AWG
- #1/0 AWG
- #2/0 AWG
- #3/0 AWG
- #4/0 AWG
- #250 KCM
- #350 KCM
- #500 KCM
- #750 KCM

(Will only be approved for use in 3-Phase padmount or submersible transformers; not to be used for secondary risers or single phase padmount or below grade transformers).

600 KCM will not be approved.

4.7.8 On all 3-Phase services, ALL conductors to the main switch must be of the same size and type. No downsizing of neutrals shall be allowed.

4.7.9 Cable ends must be sealed to prevent the entrance of moisture, unless all splicing is completed immediately.

4.7.10 Maximum conductors permitted per phase, for connection to 3-Phase pad mount and submersible transformer secondary terminals, shall be eight conductors.

4.7.11 All connections to the pad-mounted transformer secondary terminals shall be made with a 2-hole "NEMA" compression terminal lug.

4.8 Cables Rated Above 600 Volts

4.8.1 All underground cable installations exceeding 600 volts shall have the following minimum cable specifications to meet PSEG Long Island requirements:

Each phase shall consist of a two-conductor #2 AWG copper or aluminum (minimum) 15kV shielded, tree-retardant cross-linked polyethylene or EPR insulation with an insulation thickness of 220 mils. Larger cable sizes may be installed with prior approval by PSEG Long Island. This cable must have a full concentric neutral of round or flatstrap copper wires, applied spirally over insulation shield layer. The cable must also be jacketed with an extruded-to-fill encapsulating 50 mil LLDPE thermoplastic compound. The cable must be marked as per AEIC Specification # CS5.

4.8.2 Only semi-conducting jacket material may be direct buried with other facilities (such as communications cables); cables with insulating jacket material must be installed in conduit on public highways, and in the presence of direct buried communications facilities.

4.8.3 Detailed specifications for all cables and transformers above 600 V installation must be obtained from PSEG Long Island.

4.9 Identification of Cables

4.9.1 Primary cable shall, in all cases, be color coded with one or more parallel stripes for phase identification. Any contrasting color may be used except white or green.

Aϕ = 1 Stripe

Bϕ = 2 Stripes

Cϕ = 3 Stripes

4.9.2 Secondary color coding of 3-Phase conductors at the service connection and meter enclosure shall be marked as follows:

VOLTAGE	Aϕ	Bϕ	Cϕ
208Y/120	Blue	Black	Red
240/120 delta	Blue	Black	Orange
480Y/277	Brown	Orange	Yellow

4.9.3 All secondary neutral conductors shall be marked at the service connection and meter enclosure, with white or gray tape, or as identified by the manufacturer.

4.9.4 When two or more units of a building are supplied from the same transformer, in accordance with Article 230-40 of the NEC, the contractor shall label the service cables within the transformer enclosure or adjacent manhole to identify the unit supplied.

4.10 Service End Boxes

4.10.1 Where LIPA's distribution system is underground and PSEG Long Island elects to provide cables to and within the building, a service end box will be required.

4.10.2 PSEG Long Island will make all connections in service end boxes mounted externally on the building. PSEG Long Island does not complete, nor is it responsible for, connections to be made when it runs cable into a service end box mounted inside a building.

4.10.3 Service end box size shall comply with all requirements of the NEC, and shall be installed in accordance with the manufacturers requirements.

4.10.4 All service end boxes must be installed in an accessible location. Areas such as crawl spaces, space under show window, etc., will not be considered accessible. The service end box must be mounted in a vertical rain-tight position when utilized outdoors.

4.10.5 If aluminum conductors are used within a service end box, lug type compression connectors or internally fired lugs are required, and shall be of the two-bolt type.

4.11 Underground Service Connection from Overhead Distribution

4.11.1 Where an underground secondary service is to be supplied from an overhead distribution line on the public highway or on an easement, PSEG Long Island will identify the pole to be used for the underground connection. It is the customer's responsibility to extend their cable across the roadway to LIPA pole lines on the opposite side of the street. In areas where both overhead and underground distribution facilities exist, PSEG Long Island must be consulted, in order to designate a service point for the applicant.

4.11.2 When the underground service is installed in a conduit system, a manhole or pullbox shall be installed, owned, and maintained by the customer. The pull box shall be located on the customer’s property, immediately adjacent to the property line or rear property LIPA easement line. See drawing D13 for pull box specifications.

4.11.3 The customer will furnish and install the necessary cable system between the meter location and the utility pole, and provide sufficient cable for termination at LIPA's overhead conductors. Approved conduit will be required when cable runs under roadway/highways. Approved conduit and a sweep will be required when the utility pole is surrounded by concrete.

4.11.4 Where a LIPA manhole or pull box exists at the base of a pole, or when PSEG Long Island elects to install a manhole or pull box at the base of the service pole, PSEG Long Island will furnish and install the conduit and cable between the box and the point of termination on the pole. The customer's installation shall terminate in LIPA's pull box or manhole.

4.11.5 All splicing in LIPA's pull box will be performed by PSEG Long Island.

4.11.6 Upon acceptance and energization of the service, LIPA will assume ownership of the cable systems between the base of the pole and the customer's property line. LIPA will, thereafter, own and maintain the portion of the service lateral between the distribution line and the customer's property line. The customer shall, thereafter, own and maintain the balance of the service lateral to the meter location.

4.11.7 For safety measures and to deter cable theft, the following installation is required by PSEG Long Island on all primary or secondary installations:

The customer/contractor shall coil and attach the service cable 15' above ground level, and install 10' of service U-guard over it. Existing overhead service shall not be tied in to the new underground service on the pole. It is of the utmost importance for the customer/contractor to consult with PSEG Long Island in advance of such planned installations. PSEG Long Island shall designate the pole quadrant for the U-guard, and decide whether the pole is to be replaced prior to running cable. In all cases, PSEG Long Island will designate the riser pole location and equipment (see drawing D11).

Under no circumstances should anyone remove existing overhead service drops and energize new underground service or connect overhead service drops to new underground service.

4.11.8 For an existing underground service lateral where the customer requires a change in service characteristic and/or service capacity, it is the customer's responsibility to install these facilities under the same requirements as a new service.

4.11.9 Charges, payable by the customer prior to construction, may be required for the remaining work performed by PSEG Long Island's construction crews to complete the secondary riser.

4.12 Underground Service Connection from Underground Distribution

4.12.1 Where LIPA's distribution facilities are underground, it will install, own, and maintain the necessary cable system from the designated underground distribution line, which is part of the distribution system in the public highway to the applicant's point of service connection. In areas where both overhead and underground distribution facilities exist, PSEG Long Island must be consulted in order to designate a service point for the applicant. The applicant will install, own, and maintain, at their own expense, the required service lateral from this point to their service equipment. PSEG Long Island does not extend underground electric facilities onto private property, except under certain circumstances, in designated Residential Underground Distribution (RUD) areas and Commercial/Industrial Primary Underground Distribution (CIPUD) areas.

4.12.2 Where the point of entrance through the building wall is within 10' of the property line, and there is difficulty in providing a suitable location for a pull box, PSEG Long Island/LIPA may elect to waive the installation of the property line pull box and install, own, and maintain the service conduit to the street property line. The applicant must then provide an opening in the building wall and install conduit, matching PSEG Long Island's conduit in number, size, and specifications, from the street property line to the interior of the building. The customer/contractor shall install the proper service end box and main switch just inside the building wall.

4.12.3 Where the building wall borders upon the street property line, the applicant must extend their conduit a minimum of 6" outside the building wall along with a service end box or switch. Metal conduit must be properly bonded. PSEG Long Island/LIPA will furnish, own, and maintain the service cables from the street to the service end box, and the applicant will furnish, own, and maintain the remaining cables necessary to complete the installation from the service end box to their service equipment.

4.13 Underground Extensions for New Residential Sub-Divisions

4.13.1 Extensions of electric distribution lines necessary to furnish permanent electric service to new residential buildings within a sub-division on which it is planned to construct five (5) or more such buildings or to new multiple occupancy residential buildings of four (4) or more family units on the same parcel, shall be made underground by PSEG Long Island. Exceptions to these requirements are listed in LIPA's Tariff for Electric Service.

4.13.2 Service laterals may be installed:

- By the applicant, in accordance with Section 11
  - When energized, LIPA will own and maintain the service lateral, if requested by the property owner, in writing, to PSEG Long Island before installation and the service conductors are installed, in accordance with PSEG Long Island specifications. It is the property owner's responsibility to obtain any site-specific PSEG Long Island specifications for the service lateral installation. LIPA may not assume ownership of the service lateral if it is not installed in accordance with the proper PSEG Long Island specifications. There will be no reimbursement by PSEG Long Island to the applicant.
- By LIPA, in accordance with its filed tariff
  - Services greater than 400 amperes must be installed and owned by the customer.
- In either case above, PSEG Long Island reserves the right to determine the points of connection of the service lateral to LIPA's facilities and to the termination on the building.

4.13.3 To avoid any misunderstanding, the applicant or contractor shall consult with PSEG Long Island and secure specifications, before plans are completed or construction commences.

4.14 Underground Extensions for New Commercial-Industrial Developments or Shopping Centers

4.14.1 Extensions of electric distribution lines necessary to furnish permanent electric service to new buildings within a proposed commercial/industrial development or shopping center may be installed underground, at the option of PSEG Long Island.

4.14.2 Where all primary facilities are to be established by PSEG Long Island on a secured easement, obtained from the developer, PSEG Long Island/LIPA will provide, install, own and maintain the necessary distribution lines to a pad mount type transformer (location to be determined by PSEG Long Island), and in addition, prepare all primary terminations. It will be the applicant's responsibility to install, own, and maintain, at their expense, the concrete transformer pad, and in addition, the service lateral and its components from this point to their service equipment.

4.14.3 To avoid any misunderstanding, the applicant or contractor shall consult PSEG Long Island and secure specifications, before plans are completed or construction commences.

4.15 Underground Service in Zoned Network Areas

4.15.1 In those areas which are zoned as secondary network areas, underground services will be required. Refer to the maps in Section 12 to ascertain whether a particular work location falls into a zoned network area.

4.15.2 Where LIPA's distribution facilities are in a zoned network area, it will install, own, and maintain, at its own expense, the necessary cable system from the underground distribution line, which is part of its distribution system in the public highway to the applicant's point of service connection.

The applicant will install, own, and maintain at their own expense, the required service lateral from this point to their service equipment. The customer shall be responsible for collector buss construction, as well as the installation of a secondary disconnect switch between the load side of the network protector and the collector bus on 277/480 Volt installations. Under certain circumstances, a service end box must be provided by the customer (see Section 4.12.2 for details).

4.15.3 All new or upgraded services in a zoned network area shall require a single main switch before the metering equipment.

4.15.4 In secondary network areas, only copper type USE-2, XHHW-2, RHW-2, or THWN-2 cable will be approved. Aluminum cables will not be approved.

4.15.5 In secondary network areas, service cable must be installed in conduit. Direct burial of cable in zoned network areas is prohibited.

4.15.6 In 120/208 volts secondary network areas, whenever the size of a service requires two or more sets of conductors installed in separate pipes or conduits to supply a common bus, the customer must install suitable limiters, as specified by PSEG Long Island (see table below).

Limiter Assemblies		
Manufacturer	Cable to Lug Limiter Assembly	Cable to Cable Limiter Assembly
Burndy Richards Dossert	YFA-CR CLLA LLA-2R123	YFS-CR CCLA NRLA-R123

PSEG Long Island approval will be required in the event a limiter assembly, other than the above listed, is used. Catalog cuts must be provided for approval review.

4.16 Primary Underground Service from Overhead Lines

4.16.1 Where underground primary service is to be supplied from an overhead distribution line, PSEG Long Island may require the customer to install a manhole at their street property line or LIPA's easement line.

4.16.2 It is the customer's responsibility to extend their cable and conduit across the roadway to pole lines on the opposite side of the street.

4.16.3 Upon acceptance and energization of the service, LIPA will assume ownership of the cable systems between the base of the pole and the customer's property line. Thereafter, LIPA will own and maintain the portion of the cable system between the distribution line and the customer's property line or property line manhole, and the customer shall, thereafter, own and maintain the balance of the cable system to its terminus on their property.

4.17 Primary Underground Service from Underground Lines

4.17.1 Where LIPA primary distribution facilities are underground, it will install, own, and maintain the necessary cable system to the applicant's property line or point of service connection.

4.17.2 The Company will specify customer manhole requirements. Where PSEG Long Island/LIPA elects to waive the requirement of the manhole, and to install, own, and maintain, at its own expense, the cable system to the point of service connection, such point of connection shall be the customer installed transformer pad, vault, or enclosure. Connections at this point, which are not part of LIPA’s distribution system, are to be made by the applicant's contractor, and PSEG Long Island will handle all connections in the street.

4.18 Transformer Installations

All existing transformer vaults constructed, in the past, on customer property, owned and maintained by the customer, including but not limited to, transformer vault enclosures located in basements, within the building and on-grade, outside of the building, on or below grade, and all fenced enclosures, are a construction practice discontinued by PSEG Long Island.

Therefore, any customer whose premises have these structures and wish to upgrade their electric service, must abandon these vault enclosures and conform to LIPA's current transformer specifications, which are pad mounted transformers, on grade, outside of the building, and accessible by truck.

4.18.1 The customer shall provide at their cost, an area suitable for the installation of a transformer or switchgear, should the service requirements dictate such equipment.

4.18.2 PSEG Long Island may require each applicant to furnish the necessary easement, suitable and adequate in the judgment of PSEG Long Island, to permit the installation and maintenance of the service lateral, together with such additional facilities as it may require to serve the applicant.

4.18.3 PSEG Long Island must have the right to 24-hour unobstructed PSEG Long Island truck access to all locations in which LIPA equipment is installed, in order to assure the continuity of service, and that the equipment is properly maintained and operated.

4.18.4 The choice of transformer installation arrangements will depend on specific conditions. The customer shall, in all cases, consult with PSEG Long Island regarding the location, selection, and details of the installation, prior to finalizing work plans. See transformer specification package for additional details.

4.18.5 The maximum number of conductors permitted, per phase, for connection to 3-Phase padmount transformer secondary terminals shall be eight conductors.

4.19 Primary Metered Service Connections 4,160 or 13,200 Volts

For detailed specifications regarding primary metered installations contact PSEG Long Island before proceeding with plans.

4.19.1 Primary metered service connections shall be hot sequenced.

4.19.2 Equipment for 4,160 volt service shall be rated for 13,200 volt applications.

5. SERVICE EQUIPMENT

5.1 General

5.1.1 Each service entrance shall be provided with disconnecting means and over current protection, as required by the NEC. The maximum number of disconnects on a service is six at one location.

5.1.2 The location of the service equipment and the general electrical arrangement will be agreed upon, after mutual consideration of all factors, by the customer and PSEG Long Island.

5.1.3 Service equipment shall conform to the NEC and all local authorities having jurisdiction.

5.1.4 Service equipment shall be grounded in accordance with NEC Article 250.

5.2 Current Rating

5.2.1 A new single phase service entrance for an installation of one meter shall have a capacity of not less than 100 amperes and for an installation of two or more meters not less than 150 amperes (see Section 8).

5.2.2 For 120/240 volt single phase service, the maximum single service entrance shall be as follows:

SERVICE POINT	MAXIMUM SIZE
Overhead Service	400 Amperes
Secondary Riser Service	600 Amperes
Below Grade Transformer	600 Amperes
Pad Mounted Transformer	800 Amperes

5.2.3 For 120/208 volt single phase service, the maximum single service entrance shall be 300 amperes.

5.2.4 For 3-Phase service, the maximum single service entrance shall be as follows:

SERVICE TYPE	MAXIMUM SIZE
208Y/120 Volt Overhead	400 Amperes
208Y/120 Volt Riser	800 Amperes
208Y/120 Volt PM Transformer	4,000 Amperes
480Y/277 Volt Overhead and Riser	400 Amperes
480Y/277 Volt PM Transformer	2,500 Amperes
240/120 Volt Delta	800 Amperes (pole mounted transformers, secondary riser only)

Multiple service entrances for higher rated services must be approved by PSEG Long Island.

5.2.5 600 ampere overhead services may be approved on a case by case basis. Consult with PSEG Long Island before planning any such installation (see drawing D10).

5.3 Service Rated Below 600 Volts

5.3.1 Service equipment shall include provision for metering transformers when load currents of any one customer will exceed 300 amperes for single phase, or 200 amperes for multi-phase (see Section 8).

5.3.2 For service equipment 1,000 amperes and above, it is required that PSEG Long Island be contacted to discuss the service equipment and its arrangement. It is important that the customer/contractor provide PSEG Long Island with detailed plans and specifications, prior to the purchase of service equipment and proceeding with the installation.

5.3.3 Upon request, PSEG Long Island will inform the customer/contractor of the magnitude of the current, which the service equipment may be called upon, to interrupt under fault conditions.

5.3.4 Any tap made ahead of the main service equipment, for fire pumps, exit lights, control power for circuit breaker, etc., shall be provided with disconnecting means and over current protection adequate for the fault duty. Such connections shall be made only where specifically approved by PSEG Long Island, and will require an additional meter.

5.3.5 The customer is responsible for maintenance of their service equipment and transformer pad or vault, if applicable. For access to a customer's vault, contact PSEG Long Island, well in advance, in order to de-energize the vault.

Neither the customer nor the contractor shall enter an energized vault, fenced enclosure, or other transformer containment without PSEG Long Island de-energizing the facility first. Serious injury may result.

5.3.6 The customer shall install equipment, which has a voltage rating suitable to the service, and an ampere rating, which is adequate for the initial and anticipated future load current requirements. The equipment shall be capable of interrupting load current equal to its ampere rating.

5.4 Service Above 600 Volts

5.4.1 All primary service installations shall be discussed with PSEG Long Island before planning, estimating, ordering, or purchasing equipment.

5.4.2 Based on the electrical arrangement selected, PSEG Long Island will advise the customer concerning its requirements for basic insulation level, protective equipment, and metering facilities, and will supply such additional information as estimated short circuit data, relay recommendations, etc., so the customer may complete the design of their installation. The customer shall submit detail plans and specifications for inspection and approval by PSEG Long Island, prior to the purchase of equipment or proceeding with the installation.

5.4.3 Circuit breakers or other switchgear furnished, owned, and maintained by customers taking power 600 volts and above, must include provision for testing (to determine if voltage is present) and for grounding of normally energized parts, to permit maintenance and other work to be performed in a safe manner.

5.4.4 If an air circuit breaker is utilized, it shall conform with latest NEMA Standards for Power Circuit Breakers and meet the following requirements:

- An operating mechanism of mechanically trip free construction
- An over current tripping device on each pole, arranged for delayed over current protection, with instantaneous tripping for currents of fault magnitude

5.4.5 Under no circumstances shall customer wiring ever be able to provide a path for electric current flow from one service entrance to another.

5.4.6 Customer protection equipment should coordinate within the system protection to clear faults within the customer's facility, without causing interruptions to other customers.

6. SERVICE AT 480Y/277 VOLTS

6.1 General

6.1.1 The specifications, as set forth in this section, apply to secondary services of 480Y/277 volts only. The customer/contractor shall consult PSEG Long Island before ordering or installing any equipment, since this type of service may not be available to the customer. Information within this section does not preclude other requirements for electric installations, as set forth within this book.

6.1.2 Maximum single service entrance shall not exceed 2,500 amperes.

6.1.3 Minimum 100 KW connected load is required.

6.1.4 Services up to, and including, 800 amperes may use integrated phase construction. Services 1,000 amperes and above must be isolated phase construction.

6.1.5 Only one service lateral will be supplied from a transformer. Where local building codes require a fire pump to be installed on the line side of the main switch, a second service may be allowed, at the discretion of PSEG Long Island.

6.1.6 Service above 400 amperes shall only be supplied from pad mount transformers. Service up to, and including, 400 amperes may be supplied from pole mounted overhead transformers.

6.1.7 Isolated phase service run shall not exceed 50'. Installations in excess of 50' shall be reviewed with PSEG Long Island for special consideration, prior to construction.

6.1.8 Direct burial of 480Y/277 volts cables are prohibited. Service cables must be run in approved conduits (see Section 6.3).

6.1.9 All metering equipment must be transformer rated.

6.1.10 All services must display a permanent label "480Y/277 volts." The label must have an orange background with black lettering, and be a minimum of 1" high by 4.5" long. The label must be located on both the inside and outside of the meter enclosure, and on the outside of the main distribution panel.

6.2 Approved Cable Types 480Y/277 Volts

6.2.1 A minimum of four (4) conductors, of which all must have a minimum voltage rating of 600 volts, shall be installed for all secondary service installations in this category.

6.2.2 The following types of cable, both aluminum and copper, when rated for 90°C will be approved when properly installed in conduit, in and out of the meter equipment (regardless of whether the meter pans are before or after the main switch):

- USE-2
- XHHW-2
- RHW-2
- THWN-2

All cables must be clearly marked.

6.3 Conduits for 480Y/277 Volts

6.3.1 Conduit shall be sized, in accordance with the current edition of the NEC, but in no case shall be less than 2" in diameter.

6.3.2 Integrated phase construction may use either metallic or non-metallic conduit. Metallic conduit shall be in accordance with Section 4.5; non-metallic conduit shall be as outlined in Section 6.3.3.

6.3.3 Isolated phase construction must utilize non-metallic conduit. This conduit must be made of either fiber, concrete, or U.L. approved plastic (minimum schedule 80).

6.4 Ground Fault Protection for 480Y/277 Volts

6.4.1 Services to a **single meter with multiple main disconnects**, all of which are rated 800 amperes or less, do not require Ground Fault Protection.

6.4.2 Any service of 1,000 amperes or more, requiring a single main disconnect, per the NEC Article 230-95, shall have Ground Fault Protection at the main disconnect.

6.4.3 Services supplying multiple metered customers require a single main disconnect switch with Ground Fault Protection, regardless of service size.

6.4.4 Where metering equipment is installed on the load side of a switch with ground fault protection, neutral terminals of meter equipment must be isolated from ground. The grounding strap to the neutral bus must be disconnected (see drawing D29).

7. GROUNDING AND BONDING

7.1 Grounding

7.1.1 All grounding and bonding shall be in accordance with the provisions in the latest edition of the NEC, as well as all local, state, and federal regulations.

7.1.2 The grounding electrode conductor and equipment of the service entrance shall be effectively and permanently grounded, in accordance with, or exceeding, the latest edition of the NEC, or in accordance with the requirements of applicable authorities having jurisdiction where any differences occur.

7.1.3 The grounding electrode conductor shall be solid or stranded, sized in accordance with the requirements of the NEC, but shall, in no case, be less than No. 6 AWG copper or No. 4 AWG aluminum or copper-clad aluminum. Use of aluminum or copper-clad aluminum conductors for grounding will only be approved when installed in accordance with the NEC and all local codes. In New York City, installation must be according to applicable city codes (e.g., #6 stranded copper in conduit).

7.1.4 All ground rods will be required to be minimum 1/2" x 8' copper weld or 5/8" x 8' copper plated only. No galvanized rods or piping will be accepted as a grounding electrode.

7.1.5 An approved ground shall be:

- A metal underground water pipe in direct contact with the earth for 10' or more (including any metal well casing effectively bonded to the pipe), in addition to a supplemental ground rod
- Not less than two driven ground rods placed at a minimum of 6' apart, when a non-metallic water piping system exists, or is to be installed; a separate grounding conductor to each ground rod shall be utilized (as shown in Section 11 – see drawing D7)
- As outlined in the NEC, Article 250 – Grounding

7.1.6 Under no circumstances shall a gas or fuel oil piping system be used as a grounding electrode, nor should any CATV, telephone, electric, or other bond wires be placed in contact with gas mains or service piping, gas meters, or regulators.

7.1.7 Where a continuous copper water system is installed from the street line to the interior of the building (which includes bonding of the water meter, whether located indoors or outdoors), grounding shall be accomplished by:

- Installing a grounding electrode conductor from the neutral block of the main switch to a point where the water pipe enters the building, before the first pipe weld or fitting
- Installing a grounding electrode conductor from the neutral block of the main switch to a supplemental ground, namely, one driven ground rod

7.1.8 Where a plastic water piping system is installed from the street line to the interior of the building, grounding shall be accomplished by:

- Installing two separate grounding electrode conductors from the neutral block of the main switch to a supplemental ground, namely, two driven ground rods (see Section 7.1.4)
- A bonding conductor from the neutral block of the main switch to the interior water piping system is also required. If the interior water piping system within the building has not yet been installed at the time, PSEG Long Island makes the electric service connections, and accepts the two ground rod configuration (regardless of whether a copper water service is planned for the building). It is the responsibility of the electrical contractor, as agent for the property owner, to install the bonding immediately upon water piping installation.

7.1.9 The meter enclosure shall not be used as a raceway for the grounding conductor to either the water pipe or the ground rod connector.

7.1.10 Only zinc-coated, steel type connectors shall be used on iron water pipe.

7.2 Bonding

7.2.1 Bonding shall be done in accordance with the National Electric Code. All metallic components shall be bonded, including line and load conduits, meter equipment, and main switch using a minimum bond wire of #8 solid AWG or #8 stranded AWG green 600 V factory insulated copper. Green tape is acceptable, if applied over an insulated conductor. Bonding jumpers shall be used around concentric and eccentric knockouts. Bonding does not apply to EMT containing SEU, unless the EMT is physically connected to the meter pan, whereby a bonding bushing must be used.

7.2.2 A triple neutral lug for a bonding conductor is required for all individual self-contained meter sockets.

8. REVENUE METERING

8.1 Introduction

The purpose of this section is to outline requirements of the customer, as set forth herein by PSEG Long Island, as they pertain to Electric Revenue Metering at Primary and Secondary Level Service Installations. These requirements pertain to all revenue metering and associated equipment, and any other equipment that may be required, but is not specifically referenced herein, to provide for complete and operational revenue metering system installation.

8.1.1 The breaking of seals, tampering with meters, unmetered wiring, or removal of revenue metering equipment is prohibited. Section 165.15 of the New York State Penal Laws make such unauthorized tampering a misdemeanor, punishable by fine or imprisonment or both.

8.1.2 Under no circumstances shall a service entrance be left unmetered. Notify the Company if an unmetered service is encountered.

8.1.3 PSEG Long Island shall be the sole supplier of all revenue metering potential and current transformers, all electric revenue meters, and related accessories.

8.1.4 PSEG Long Island will furnish and install all meters and metering transformers required for billing purposes. However, the contractor will be responsible for installing window type current transformers.

8.1.5 All 480Y/277 volt installations shall be transformer rated, and require prior PSEG Long Island approval. Self-contained installations at this voltage will not be approved.

8.1.6 The Company shall be contacted for all primary level service metering and connections.

8.1.7 All single meter services must be hot sequenced.

8.1.8 In an underground secondary network area, all metering and fire pumps must be installed on the load side of the main switch.

8.2 Meter Location and Clearance Requirements

8.2.1 A suitably located and adequately protected meter location shall be provided to ensure meter accuracy, and to facilitate meter access, reading, and testing, without undue inconvenience. Meters shall be located on the front or side of the building. Meters installed on H-frames for rear property pole lines must be placed along the front or side of the building to facilitate meter access, not in the rear of the property. Other locations must be approved by PSEG Long Island.

8.2.2 On new installations, the meter location shall be outside the customer's building. While it is PSEG Long Island's general practice to require its meters to be installed outdoors, indoor installations may be allowed at the option of PSEG Long Island. However, residential meters must be outside.

8.2.3 Indoor meter installations shall be within 5 linear feet from the point where the conductors enter the building. Meters shall **not** be installed in the following locations:

- where they would be subjected to vibration or mechanical damage
- near moving machinery
- in transformer vaults, or attached to padmount transformers, or in meter pits
- in hallways, stairways, or under stairways
- in bedrooms, attics, store windows, behind shelves, in bathrooms, or toilets
- in storage closets
- other areas deemed hazardous by PSEG Long Island

8.2.4 An unobstructed space of 12" on each side of the meter pan, 4' in front of each meter enclosure (floor to ceiling), and 2" between meter sockets must be provided. A 4" spacing must be maintained from the bottom of a self-contained meter pan to any obstruction. The height to the top of the meter glass shall not be less than 3', nor greater than 6', for self-contained meters, or in the case of Tran-S meter enclosures, the minimum height shall not be less than 4'.

An obstruction is anything that has a greater profile than the metering equipment or restricts access to the metering equipment.

8.2.5 In multiple occupancy buildings, of three or more stories above street level, the installation of unmetered risers, in rigid conduit, to a single approved accessible metering location, on alternate floors may be permitted in accordance with the NEC. The disconnecting means, at the point of service entrance, must indicate the floor levels controlled. Under these circumstances, PSEG Long Island will not be responsible for maintaining an adequate voltage level beyond the service taps. PSEG Long Island reserves the right to prohibit the installation of meter rooms, other than one adjacent to the point of service entrance.

8.3 Equipment Requirements

8.3.1 Only PSEG Long Island approved metering equipment, identified in the latest edition of the "Electric Meter Enclosures and Accessories" list, shall be utilized. The customer shall be responsible for the procurement and installation of all equipment, as outlined herein. The PSEG Long Island "Electric Meter Enclosures and Accessories" list can be found on the PSEG Long Island website (https://www.psegliny.com/page.cfm/Commercial/Trade). The list will be revised and updated by PSEG Long Island, as necessary. PSEG Long Island gives no warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any equipment, wiring of devices, and assumes no responsibility with respect thereto.

8.3.2 All metering enclosures and their associated assemblies used in the service area, shall be UL approved and bear the UL label. Metering enclosures and their associated assemblies used in the Fifth Ward of Queens, New York City, shall also meet the requirement of the Department of Public Works, Bureau of Gas and Electricity of the City of New York.

8.3.3 Meter and current transformer mounting equipment, and its installation, shall meet, at a minimum, the requirements, as set forth in the following codes and standards as they may pertain:

- National Electrical Code (NEC)
- National Electrical Safety Code (NESC)
- Local Municipal Code
- Federal Emergency Management Agency (FEMA)
- New York State Uniform Building Code

It is the responsibility of the customer to ascertain that this equipment meets the requirements of all other authorities having jurisdiction.

8.3.4 A triple neutral lug for a bonding conductor is required for all individual self-contained meter sockets.

8.3.5 Three Wire – Single Phase Service meter pans shall be ringless type equipped with:

- fifth jaw in the 9 o'clock position
- lever operated, jaw release bypass
- plastic safety shield over the jaws
- insulating barriers between the wiring terminals and bypass blades

8.3.6 Four Wire – 3-Phase Service meter pans shall be ringless type equipped with:

- seven jaws
- lever operated, jaw release bypass
- plastic safety shield over the jaws (plastic may be clear or opaque)
- insulating barriers between the wiring terminals and bypass blades

8.3.7 Metering enclosures shall not be altered. Only factory supplied knockouts are permitted. Field-made knockouts, or any other field alterations, will void the UL approval, and will not be accepted.

8.3.8 Multi-stack meter mounting equipment shall be used, as allowed by the manufacturer's instructions. Field-made penetrations (knockouts) on multi-stack metering mounting equipment will be allowed, when made in accordance with manufacturer's factory specifications.

8.3.9 Meter equipment shall not be utilized as a raceway, junction, or splice point.

8.3.10 Outdoor metering equipment shall not be mounted to plywood.

8.3.11 All metering equipment shall be secured to an adequate building structure with stainless steel or galvanized lag screws, through bolts or anchors for masonry applications.

8.3.12 Line and Load Conductors:

- Shall not cross and shall not be located in the same trough. Load conductors shall not exit the top of a meter pan, except for Trans "S" enclosures.
- Of horizontal and vertical meter bank assemblies of two (2) or more positions shall not be in the same raceway
- Shall not be installed behind the bypass mechanism in a meter pan. It is permissible, however, to install an insulated neutral behind the bypass mechanism, on UNDERGROUND SERVICES ONLY.
- Must be marked accordingly in the meter pan in all instrument rated services, including Trans "S" cabinets

8.3.13 Only the equipment manufacturers' cable lug kits, supplied with the equipment, shall be accepted for termination of the line and load conductors. The contractor shall be responsible for ensuring that the number and size of line and load conductors, their entry and exit, and the associated terminal lugs conform to the UL approved configurations listed by the equipment manufacturer.

The substitution of non-listed cable sizes and the use of lug-adapters is prohibited, unless the contractor obtains written approval from the equipment manufacturer that the installation does not invalidate the equipment UL rating. Lugs shall not exceed the width of the bus, and may not be cut or altered. Back-to-back connections of lugs, or the use of step lugs, is prohibited.

8.4 Service Equipment Identification

8.4.1 In multiple meter installations (i.e., an apartment house, meter room, etc.), each meter enclosure, associated service disconnect, and distribution panel shall be permanently marked to properly identify the portions of the premises being served. The markings shall be on the inside and outside of the meter enclosure, the customer's distribution panel, and on all equipment covers.

8.4.2 Identification, in the case of apartment buildings, shall consist of the apartment number. In the case of a store or office building, the address and/or unit/suite number shall be utilized. Contact PSEG Long Island for the correct marking information, prior to starting any work.

8.4.3 Identification lettering shall be a minimum of 1" high, and shall be done in indelible ink or paint. Magic markers or adhesive labels are **not** acceptable.

8.5 Security of Service

8.5.1 All cabinets, conduit fittings, and equipment enclosures containing unmetered conductors shall be purchased and installed, with provisions, to allow PSEG Long Island to install a seal, as necessary.

8.5.2 All meters, meter facilities, and all points of access to unmetered wiring on the customer's premises will be sealed by PSEG Long Island.

8.5.3 To gain entry to sealed equipment, arrangements are to be made by contacting the Company during normal working hours, at least three (3) working days in advance of the need. Electrical contractors will be asked to provide their name, license number, and telephone numbers, in addition to the customer's name, address, and reason for requiring access to the metering equipment.

The Company representative may require an "Addition of Electric Load" letter, prior to unlocking commercial services. Upon receipt of the above information, PSEG Long Island shall provide for the metering equipment locking devices to be removed in the following manner:

1) Permission shall be granted by PSEG Long Island to the licensed electrical contractor to remove the locking device(s)

or, if the licensed electrical contractor does not want to remove the locking device,

2) A PSEG Long Island representative shall unlock the equipment, by the end of the third business day, following initial contact

8.5.4 Electrical contractors/customers requesting entry to the metering equipment shall, upon removal of the locking device, be responsible for such equipment. Responsibility will rest with the electrical contractor/customer until all work is completed, and the equipment is again made secure by PSEG Long Island. All unused revenue metering equipment shall be returned to PSEG Long Island. Electrical contractors/customers shall not dispose of, or retain any, PSEG Long Island revenue metering equipment.

8.6 Connection

8.6.1 Metering will be connected to the service entrance conductors on the line side of service equipment.

EXCEPTIONS:

Where a main switch is installed in multi-metered installation, metering shall be connected on the load side of the main switch. Fire pumps may be connected on the line side of the main switch and metered separately.

In an underground secondary network area, all metering and fire pumps must be installed on the load side of the main switch.

8.6.2 PSEG Long Island will make final connections to the meter, metering instrument transformers, and test switch.

8.7 Trans "S" Installations – Additional Requirements

8.7.1 Application of Trans "S" equipment is limited to single and 3-Phase services, ranging from 100 to 800 amperes, for either indoor or outdoor metering points.

8.7.2 Where metering equipment is installed on the load side of a switch with ground fault protection, neutral terminals of meter equipment must be isolated. The grounding strap of the neutral bus must be disconnected (see drawing D29).

8.7.3 Only manufacturer supplied lug kits shall be used to connect conductors to landing pads. Lugs shall not exceed the width of the bus and may not be cut or altered. Back-to-back connections of lugs or step lugs is prohibited.

8.7.4 Entry and exits of cables will only be acceptable if they meet these criteria:

- in the top and out the top
- in the bottom and out the bottom
- in the top and out the bottom
- in the bottom and out the top

8.7.5 The maximum allowable wire size shall be 500 KC mil.

8.7.6 The use of SEU cable in a Trans “S” is not allowed.

8.7.7 In addition to clearances outlined in Section 8.2, a 12" clearance from the left side of a Trans “S” enclosure must be maintained from any obstruction including walls, metering equipment, or other electrical equipment.

8.7.8 Only the right hand side of a Trans “S” shall be used for line or load conductors.

8.7.9 A 5' +/- 12" height, from top of meter glass to finished grade, is required.

8.7.10 Conductors must be properly inserted in the connectors, so as to facilitate ease of installation and removal of bar type current transformers.

8.7.11 All final termination of control wiring will be done by PSEG Long Island personnel.

8.7.12 Trans “S” cabinets shall be secured to an adequate building structure, with stainless steel or galvanized lag screws, through bolts or anchors for masonry applications.

8.8 Instrument Transformer Socket Meter

8.8.1 An approved ringless socket type transformer rated meter enclosure, with an approved test switch, shall be used. Entry through the hub opening at the top of the meter enclosure will not be permitted.

8.8.2 The contractor shall furnish and install the required control cable from the instrument transformer compartment to the metering location. Splicing of control cable is prohibited.

8.8.3 Remote meter installations shall utilize a ten (10) conductor control cable, as specified in Section 8.9. Maximum distance of meter socket from CT cabinet shall be determined by PSEG Long Island.

8.9 Control Wire and Cable

Insulated multi-conductor type 20/10-control cable for installation for all secondary wiring of instrument transformers as follows:

8.9.1 600 V, 10 conductor #12 AWG, Class "C" stranding (19/25), soft drawn, annealed copper, color coded; blue, black, red, orange, white with black trace, green, white, red with trace, green with trace, and orange with trace. Each conductor shall be insulated with an extruded 20 mil wall of virgin high molecular weight polyethylene, with a melt index of .2 to .4, and a 75ºC heat and moisture resistant 60 mil polyvinyl chloride jacket over the polyethylene insulation. Cable shall be flame resistant, and comply with IEEE 383 Vertical Tray Flame Test. Sizes other than #12 must have prior approval.

8.9.2 For instrument transformer control cable lengths in excess of 25’, contact the Company to determine proper wire size.

8.9.3 Control cable for totalized meter installations shall consist of (4) triad 16 AWG stranded copper conductors, with individual triad shield, and an overall cable shield. Conductor and cable jacket PVC installation shall be rated 90ºC, 600 V. Triads shall be color-coded with tracers.

9. MOTORS AND CONTROLLERS

9.1 General

Before any large motors or special apparatus are installed, it is necessary to consult PSEG Long Island regarding the character and adequacy of the available service, and the manner in which the equipment may be connected.

9.2 Motor Protection

9.2.1 For the customer's protection, all motors and special apparatus should be equipped with suitable under voltage tripping devices to prevent sustained under voltage operation and equipment damage.

9.2.2 All poly-phase motors shall be equipped with suitable protection to prevent single phase operation, improper rotation, and excessive heating due to phase current unbalance.

9.2.3 PSEG Long Island/LIPA will not be responsible in any way for damage to customer's equipment due to the failure of the customer to provide adequate protection.

9.3 Motor Starting Limitations

9.3.1 The starting of a motor on an electric circuit causes a momentary fluctuation of the circuit voltage each time the motor starts. Where this effect is pronounced, a visual disturbance or lighting flicker may be observed by the customer, or other customers served, from the same system. In extreme cases, the motor itself may have difficulty in starting. To minimize this problem, it is necessary to set limits upon the starting current permitted in any motor installation. These limits are designed to cover typical cases, and PSEG Long Island/LIPA gives no warranty that particular conditions may not later require changes.

9.3.2 Typical motor starting limitations, based on motor start cycles not exceeding four starts per hour, are listed in the tables in Section 9. Separate limitations are prescribed for conventional motorized equipment, rated in BTU's per hour. Cases not covered therein should be referred to PSEG Long Island.

9.3.3 All motors connected for operation at 120 or 240 volts, which do not exceed the locked rotor starting current limitations as stated in Tables 1 and 2 (see Section 9.4.3), and are normally started four times per hour or less, may be connected directly to LIPA’s supply lines.

9.3.4 Motors that do not comply with the locked rotor starting current limitations, or not covered therein, shall be discussed with PSEG Long Island. Specific inrush limitations will be supplied, and will vary with the size, type, demand, and location of service.

9.3.5 When starting devices are used, the total current taken by the motor is not restricted by the rules, but may have to be built up in steps, each of which does not exceed the maximum allowable motor starting current, as stated by the Company. When a step-type starter is used, an appreciable time must be allowed on each step.

9.3.6 When motors are started in a group, instead of individually, the starting current limitations apply to the group, and not to the individual motors.

9.4 Starting Current Limits for Single Phase Motors

9.4.1 PSEG Long Island must be notified of any single phase motor installation totaling 3 HP or more, as it may be necessary, in such cases, to effect changes in the supply system to serve the additional load.

9.4.2 All single phase motor driven equipment rated larger than 1 HP must be connected for operation at 240 volts, unless arranged as part of an approved 3-Phase installation.

9.4.3 Tables I and II list the maximum starting currents permitted at 120 or 240 volts single phase, for conventional motorized equipment rated in horsepower, and for air conditioning or heat pump equipment rated in BTU's per hour. These limits are permitted only for motors normally expected to start not more than four times per hour. For convenience, the tables include the NEMA Code designation of motors, which will start without exceeding the prescribed starting current limits and without requiring auxiliary starting devices.

Table I
Motor Starting Limitations
Single Phase Equipment With Motors Rated In Horsepower

Operating Voltage	Motor Size (HP)	Maximum Starting Current Amp.	NEMA Code Letter
120	½	50	A to M
120	¾	50	A to J
120	1	50	A to G
240	½	60	A to S
240	¾	60	A to P
240	1	60	A to H
240	2	60	A to G
240	3	80	A to B
240	5	120	A
	In excess of 5 HP		*(see note below)*

Table II Single Phase Air Conditioning Or Heat Pump Equipment		
Operating Voltage	Capacity BTU/Hr.	Maximum Starting Current Amp.
120	---	50
240	20,000 or less	60
240	25,000	75
240	30,000	90
240	35,000	105
240	40,000	120
240	In excess of 40,000	120 *(see note below)*

Motors in these sizes generally require an auxiliary starting device to meet the starting current limits. The Company should be consulted to obtain allowable inrush limitations, which will vary with service size and location.

9.5 Starting Current Limits for 3-Phase Motors

9.5.1 Tables III and IV (see Section 9.5.4) list the maximum starting current permitted at 240 volts, 3-Phase for conventional motorized equipment rated in horsepower, and for air conditioning or heat pumping equipment rated in BTU's per hour, on the basis of not more than four starts per hour.

9.5.2 A customer, upon proper notification to the Company, may connect to LIPA's supply lines, any motor which conforms to the starting current limits specified in these tables, with or without the use of reduced voltage starting equipment, provided that the estimated or recorded electrical demand at the point of service, exclusive of the motor being added, meet the Minimum Demand Required, shown in the left hand column.

9.5.3 In the case of motor-driven equipment rated greater than 20 HP or 225,000 BTU's per hour, the Company should be consulted. In cases of motor driven equipment rated less than 20 HP or 225,000 BTU's per hour (if the equipment in question cannot meet the starting current limits indicated in the tables), or if the customer's existing load does not satisfy the minimum demand requirements, then the Company will determine whether specific conditions, at the point of service, will permit a greater starting current to be drawn without adverse effect on the electric service to other customers.

9.5.4 The starting currents permitted in Table III and IV are based on motors carrying a nameplate voltage rating of 220 volts. Motors rated at 200 volts, or at 208 volts, will actually draw a higher starting current than indicated on their name plates, when they are supplied at a higher voltage, for example, 230 volts. However, for the purpose of these Rules and Regulations, it may be assumed that the actual starting currents of motors rated at 200 or 208 volts will be the same as the starting current (locked rotor current) indicated on the nameplate.

Table III
Motor Starting Limitations
3-Phase Equipment With
Motors Rated In Horsepower

Minimum Demand Required – KW	Motor Size (HP)	Maximum Starting Current Amp.
No Minimum Demand Required	2 or less	50
10	3	64
10	5	92
10	7	127
20	10	162
20	15	232
30	20	300

Table IV
3-Phase Air Conditioning
Or Heat Pump Equipment

Minimum Demand Required – KW	Capacity BTU/Hr.	Maximum Starting Current Amp.
No minimum demand required	20,000 or less	50
10	30,000	75
10	40,000	100
10	50,000	125
10	60,000	135
10	75,000	150
20	100,000	175
20	150,000	225
30	200,000	275
30	225,000	300

10. SPECIAL PROVISIONS/SPECIAL EQUIPMENT

10.1 Capacitors

Customers installing capacitors to improve the power factor of their load should contact PSEG Long Island, so advice may be given regarding supply system characteristics.

10.2 Radio and Television Transmitters, Flashing Signs, Welders, and Electric Furnaces

The operation of large flashing signs, welders, furnaces, dielectric and induction heaters, radio and television transmitters, X-ray equipment, reciprocating compressors, and similar apparatus having intermittent flow of large currents sometimes interferes with other users of the electric service. The customer shall consult PSEG Long Island, in each case, so that the character of electric service that will be supplied, the corrective equipment needed, and other special precautions that must be taken will be mutually known factors before planning to use such apparatus.

10.3 Load Control Management

10.3.1 Where a customer requires information from LIPA metering equipment, namely, KW data pulses, for the operation of load control equipment, the Company will furnish electric demand pulses at the point of metering.

10.3.2 The customer will be required to:

- Compensate PSEG Long Island for service and equipment provided
- Enter into an agreement with PSEG Long Island, wherein responsibilities of both parties are provided

It is recommended that before any load control device is purchased, an agreement be reached with the Company regarding installation practices.

The customer shall be responsible for providing the communications to the meter.

10.4 Optional Stand-by Systems

10.4.1 All installations of customer's generating equipment require adherence to fundamental rules for safeguard of all personnel and LIPA's equipment. PSEG Long Island must be consulted before any generating equipment is connected to any circuits which are, or can be, supplied from LIPA's distribution system. This is to insure against any back feed of electricity into LIPA's system. When a customer has a generator, the customer's metering equipment must be placarded that a generator is present.

10.4.2 An open transition (break-before-make) double throw type switch or contactor shall be provided to transfer all ungrounded conductors of an emergency lighting or power load to either the stand-by generator or the normal supply (see drawing D35). Automatic transfer systems must be approved by PSEG Long Island. Installation of a closed transition transfer switch will be considered a parallel operation, and will be subject to the requirements of Section 10.4.4.

10.4.3 The stand-by generator should be 60 Hertz (cycles per second) alternating current.

10.4.4 Interconnection of generation, in parallel with the LIPA system, if not constructed with the proper relay and protection, can be hazardous to customer equipment, LIPA equipment, PSEG Long Island employees, and electrical contractors. PSEG Long Island will provide the technical specifications required for interconnection of independent power generation units, upon request. In addition, all independent generators of power are required to sign an Interconnection Agreement with PSEG Long Island, which highlights the responsibilities of each party. Copies of this agreement and PSEG Long Island's interconnection requirements can be found on PSEG Long Island's website (https://www.psegliny.com/page.cfm/AboutUs/CompanyProfile/Powering/SGIP).

10.5 Solar PhotoVoltaic Systems

10.5.1 All installations of customer Solar PhotoVoltaic Systems must be installed in compliance with NEC Article 690, and will require an electrical inspection certificate ensuring the installation meets the requirements of these codes.

10.5.2 Visit PSEG Long Island's website at https://www.psegliny.com/page.cfm/Efficiency/Renewables/NYSun for additional information on the PSEG Long Island solar program, or call the Energy Efficiency Infoline at 1-800-692-2626.

10.6 Carrier Current Systems

If a customer uses their building wiring for a current carrier system for communication or signaling purposes, the customer shall install suitable filter equipment, or make other provisions approved by PSEG Long Island, to keep LIPA's distribution facilities free from carrier currents produced by their equipment.

10.7 Electric Vehicle Charging Systems

10.7.1 Electric Vehicle Charging Systems is covered by Article 625 of the NEC.

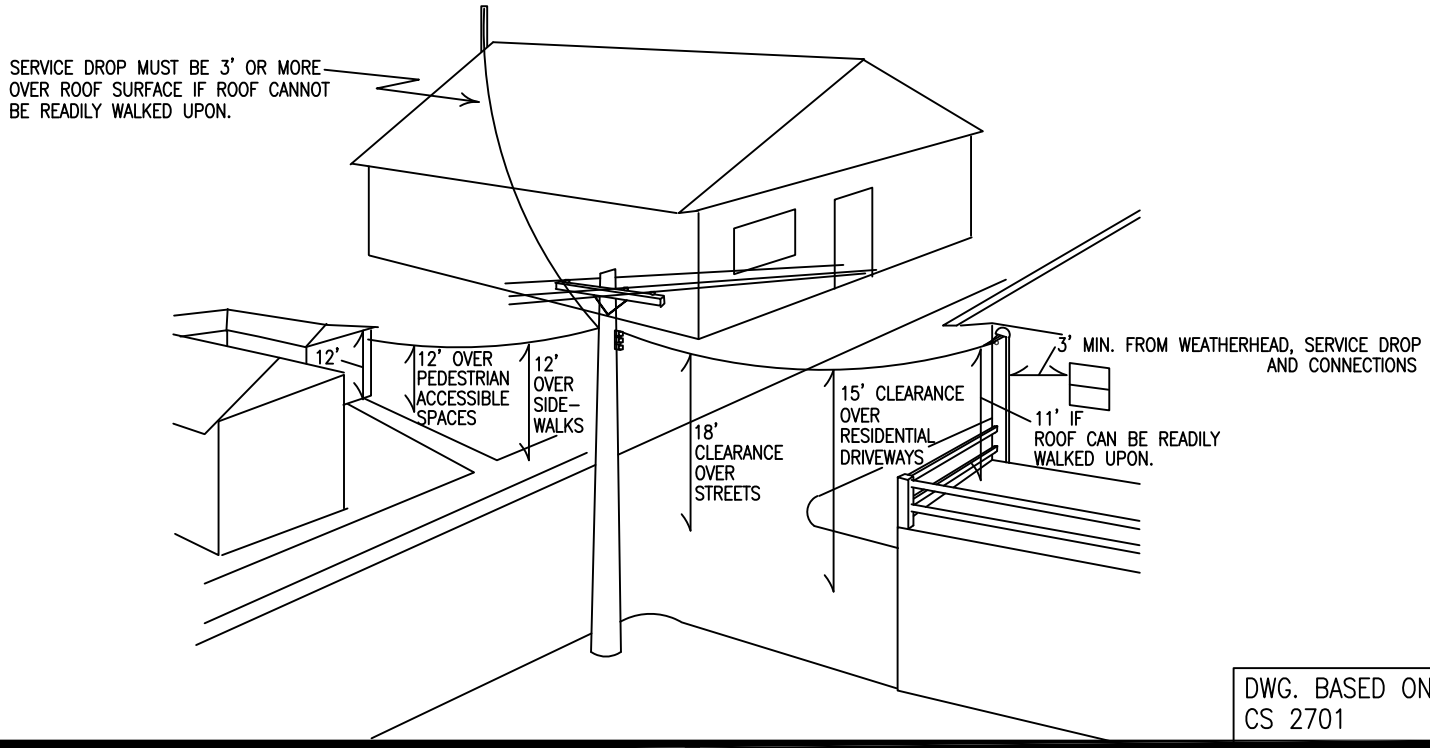
10.7.2 Please contact PSEG Long Island at 1-800-490-0025 to ensure that your electric account has been assigned the appropriate service classification.

11. GENERAL DRAWINGS AND STANDARDS

Table of Contents

NOTES

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.



DWG. BASED ON CS 2701

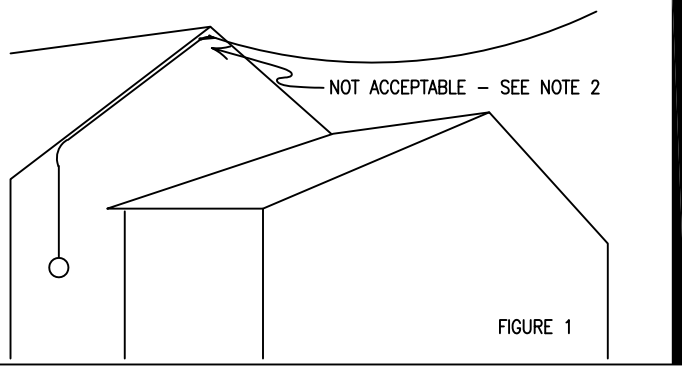


FIGURE 1

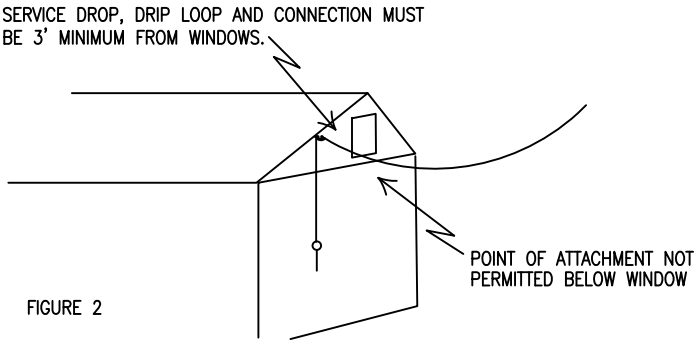


FIGURE 2

MINIMUM VERTICAL CLEARANCES ABOVE GROUND AND ROOFS

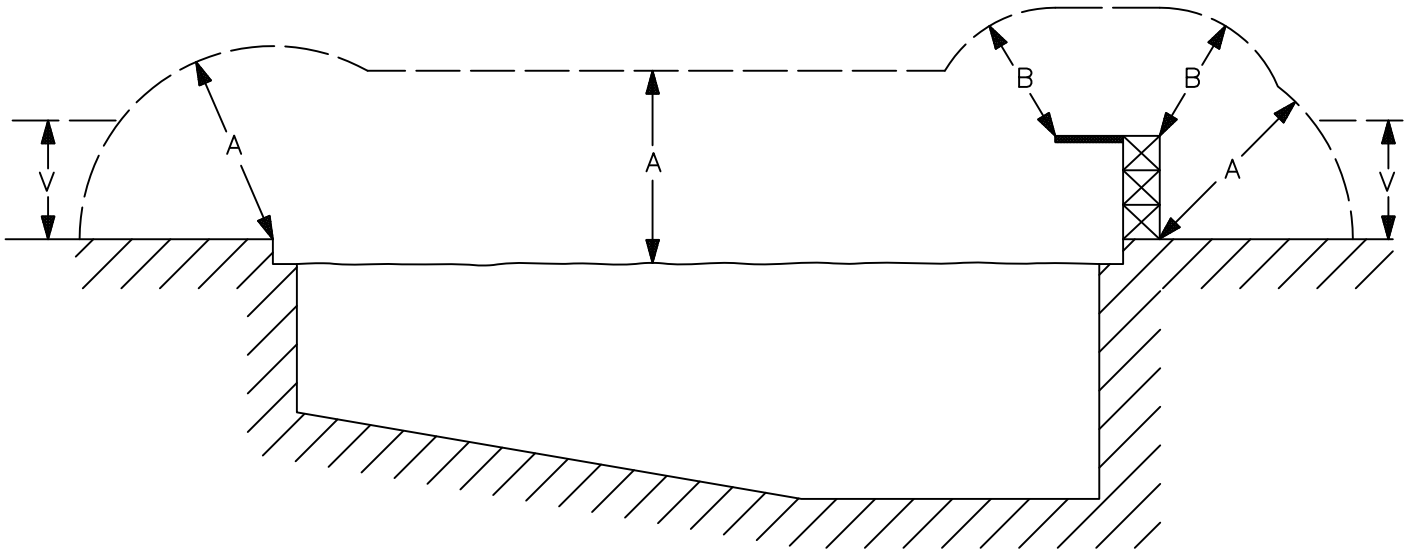


FIG. 1
(NESC FIG. 234–3)
SWIMMING POOL CLEARANCES

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 0 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

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

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 PEDESTRIANS	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

OVERHEAD 100 – 400 AMP SERVICE USING STRUCTURE SUPPORTED MAST(Sheet 1 of 2)

D4

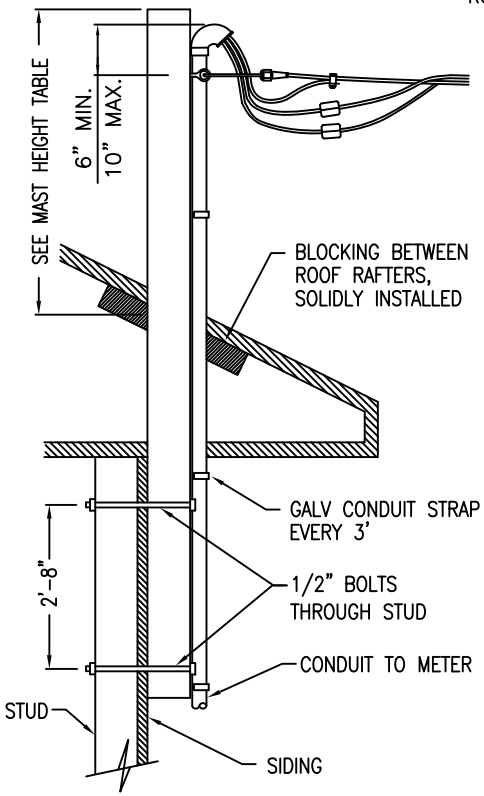


FIGURE 1

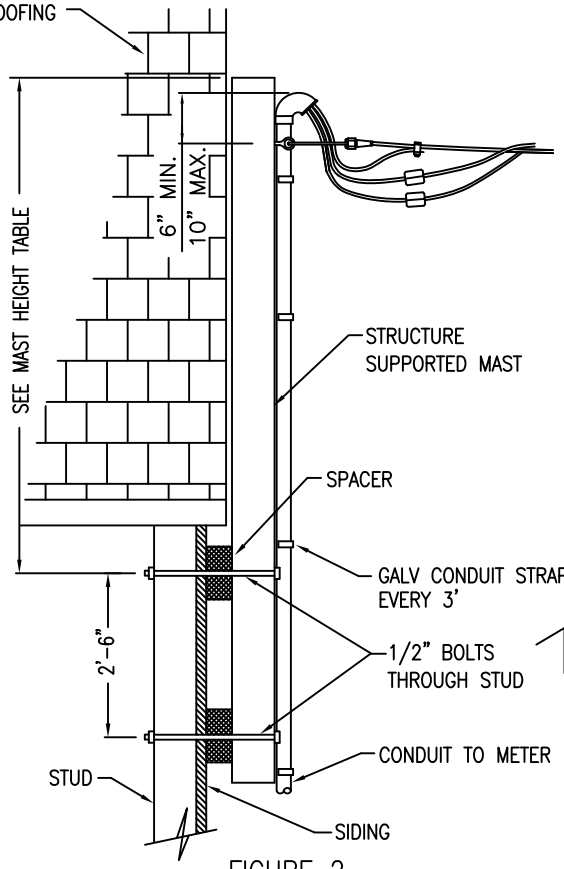


FIGURE 2

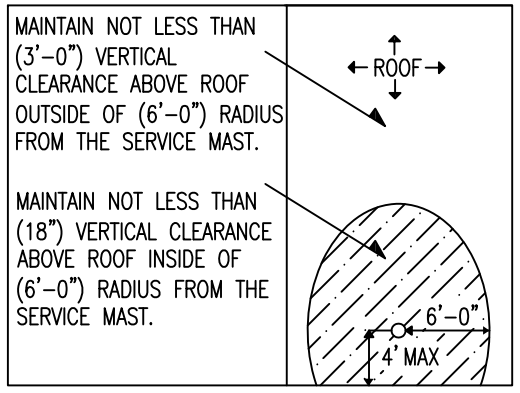
SEE ADDITIONAL NOTES ON SHEET 2 OF 2(D5)

SERVICE MAST HEIGHT TABLE

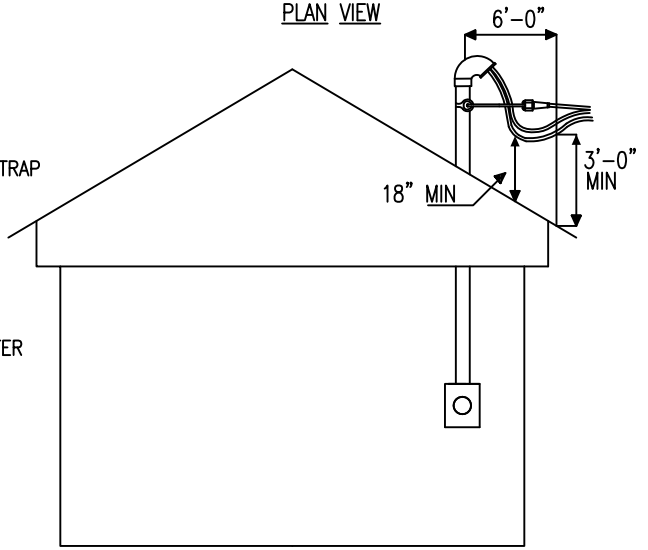
MAST LENGTH ABOVE HIGHEST SUPPORT	STRUCTURAL MEMBER REQUIRED
0' TO 3'–0"	1. 4"x6" TREATED STRUCTURAL LUMBER 2. 2 1/2" SCHD. 40 GALV. STEEL PIPE 3. 3"x3"x1/2" GALV. STEEL ANGLE
3'–0" TO 5'–0"	1. 6"x6" TREATED STRUCTURAL LUMBER 2. 2 1/2" SCHD. 40 GALV. STEEL PIPE 3. 4"x4"x1/2" GALV. STEEL ANGLE
5'–0" TO 7'–6"	1. 3 1/2" SCHD. 40 GALV STEEL PIPE 2. 5"x5"x1/2" GALV. STEEL ANGLE
7'–6" TO 10'–0"	1. 4" SCHD. 40 GALV STEEL PIPE 2. 6"x6"x1/2" GALV. STEEL ANGLE

IF MINIMUM CLEARANCE CAN NOT BE MET USING ANY OF THE ABOVE CONTACT THE PSEG LONG ISLAND ELECTRIC DESIGN & CONSTRUCTION DEPT.

DWG. BASED ON CS 2721

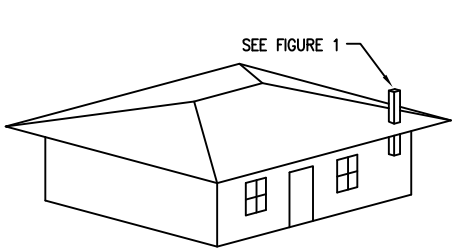


PLAN VIEW

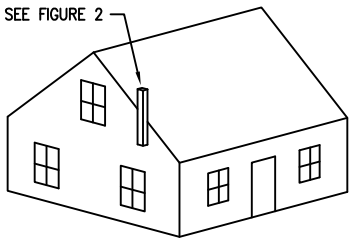


CLEARANCES OF SERVICE DROP TERMINATING ON SUPPORT MAST 4' (MAX) FROM NEAREST EDGE.

ELEVATION



HIP ROOF CONSTRUCTION



GABLE ROOF CONSTRUCTION

NOTES:

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.

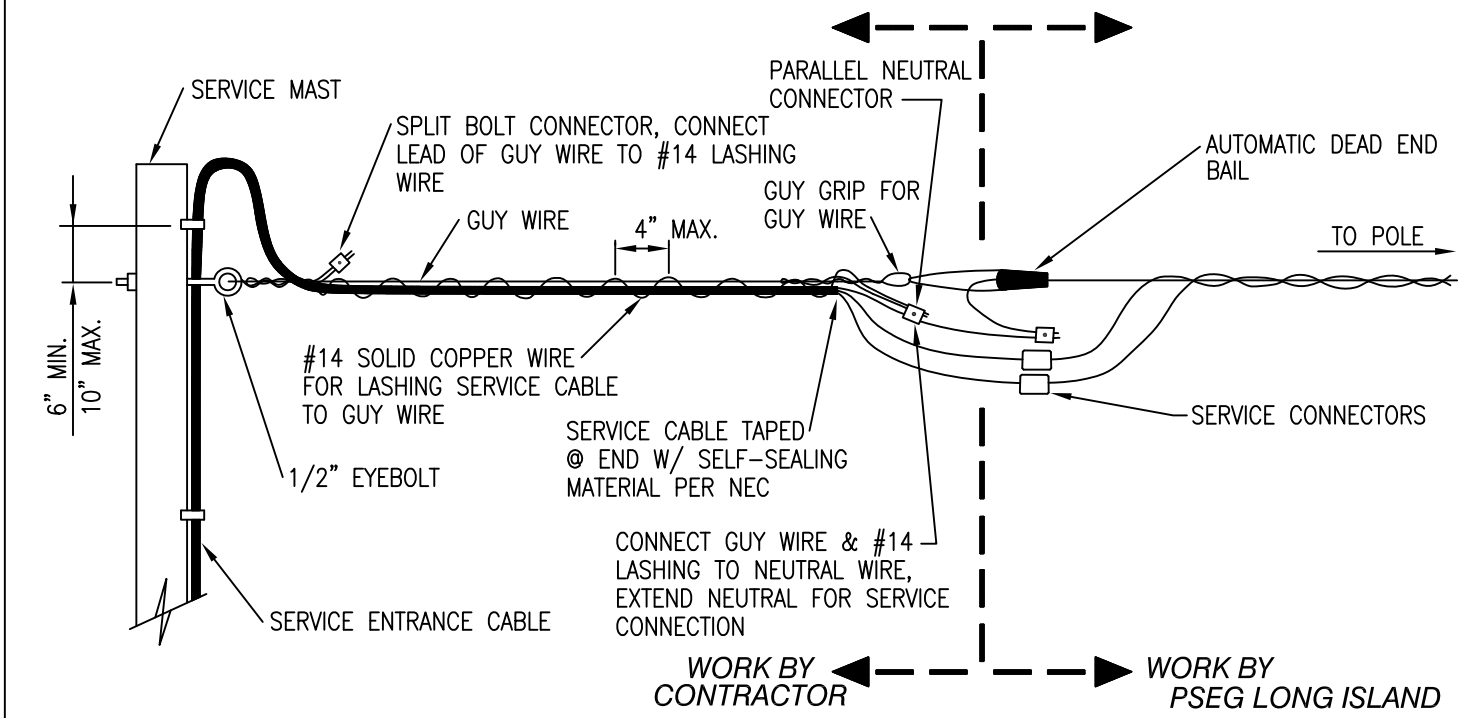
6. FOR SELF SUPPORTING MAST SERVICES ALL PIPE COUPLINGS MUST BE BELOW THE HIGHEST STRUCTURAL ATTACHMENT POINT.

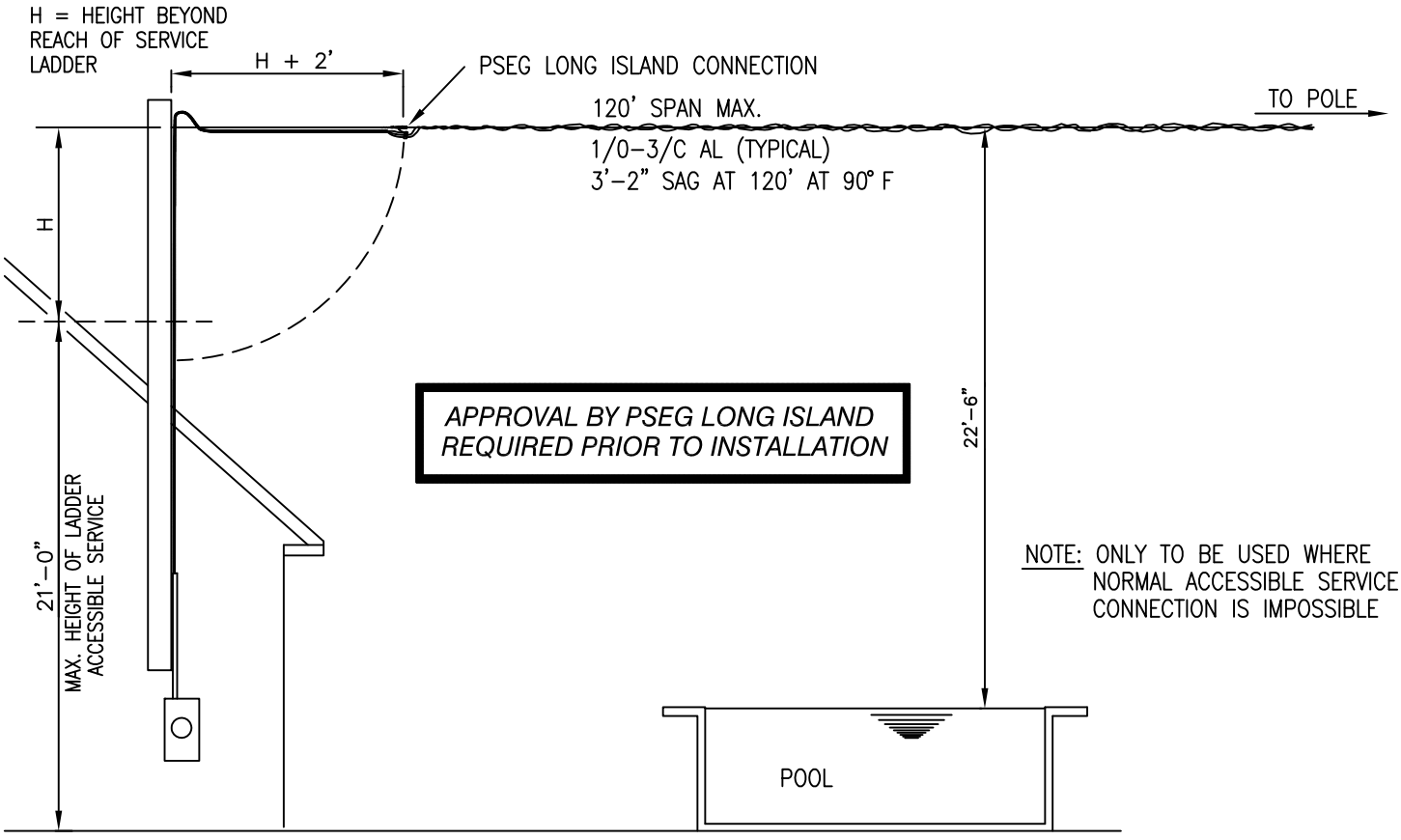
7. MAST MUST BE OF SUFFICIENT STRENGTH TO SUPPORT A HORIZONTAL TENSION OF 1000LBS. APPLIED TO THE POINT OF ATTACHMENT. FOR UNUSUAL CIRCUMSTANCES GUYING OF THE MAST MAY BE PERMITTED. CONTACT PSEG LONG ISLAND. FOR GUYED MAST APPROVAL PRIOR TO INSTALLATION.

8. NO OTHER UTILITY MAY SUPPORT OR CONNECT AT THE MAST.

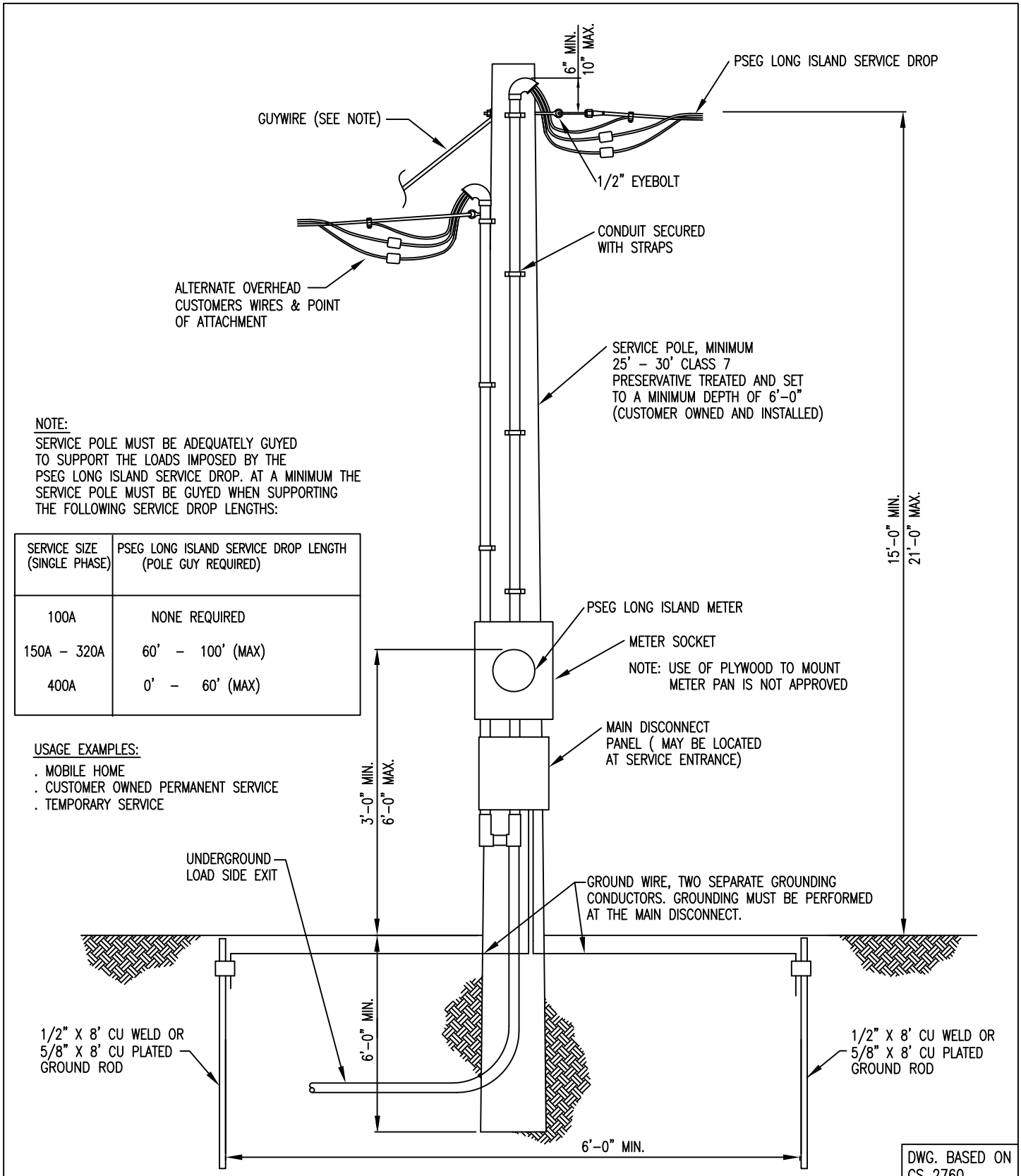
DWG. BASED ON CS 2721

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





DROP SWING SERVICE FOR INACCESSIBLE SERVICE ENTRANCE ATTACHMENT



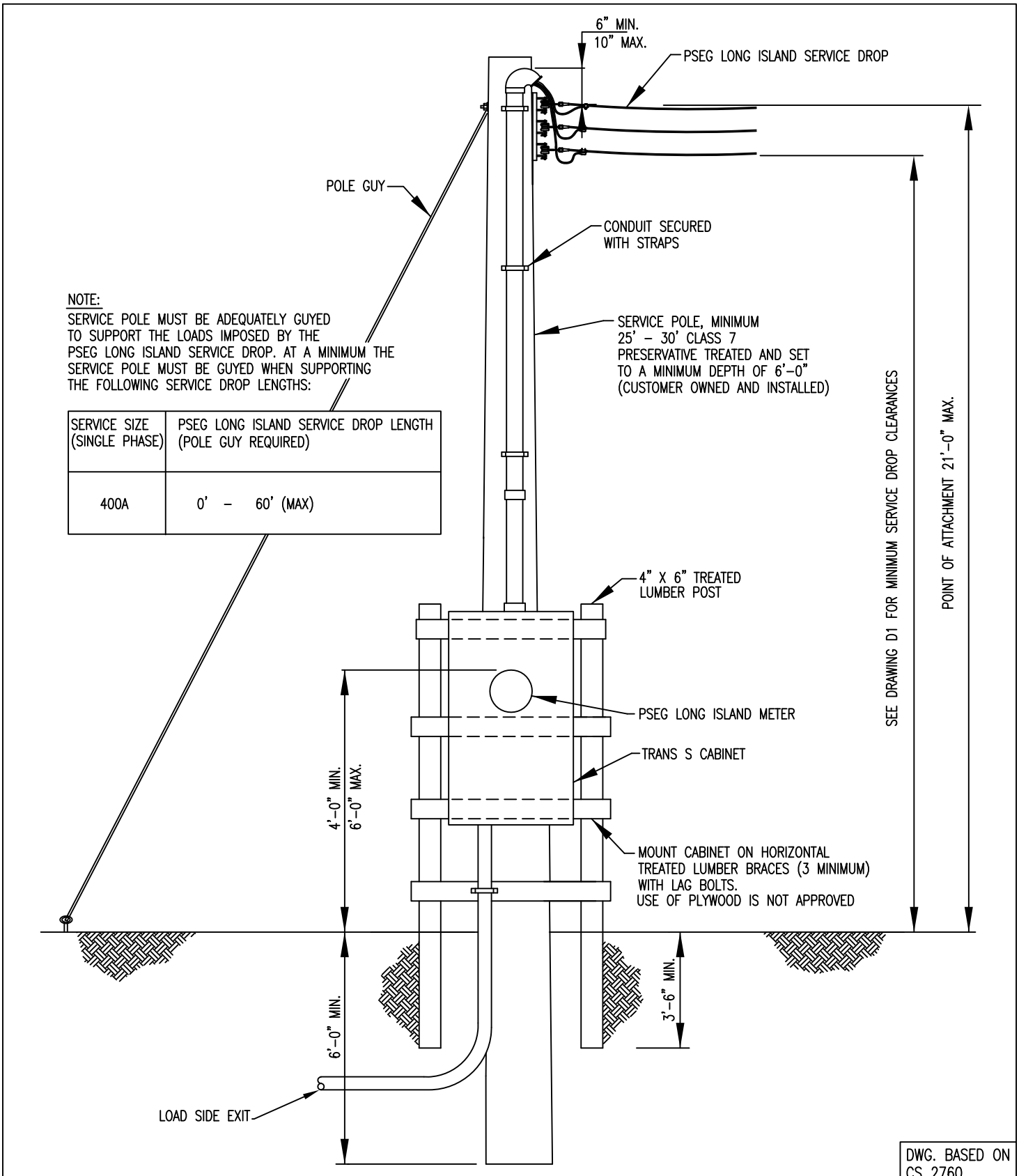
NOTE:
SERVICE POLE MUST BE ADEQUATELY GUYED TO SUPPORT THE LOADS IMPOSED BY THE PSEG LONG ISLAND SERVICE DROP. AT A MINIMUM THE SERVICE POLE MUST BE GUYED WHEN SUPPORTING THE FOLLOWING SERVICE DROP LENGTHS:

SERVICE SIZE (SINGLE PHASE)	PSEG LONG ISLAND SERVICE DROP LENGTH (POLE GUY REQUIRED)
100A	NONE REQUIRED
150A – 320A	60' – 100' (MAX)
400A	0' – 60' (MAX)

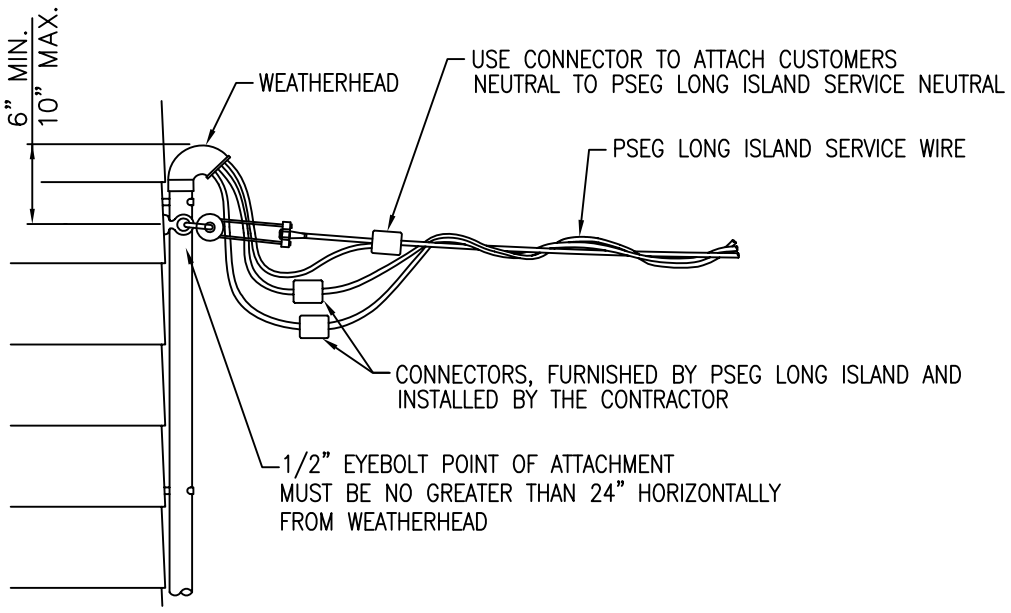
USAGE EXAMPLES:
. MOBILE HOME
. CUSTOMER OWNED PERMANENT SERVICE
. TEMPORARY SERVICE

DWG. BASED ON CS 2760

UNDERGROUND/OVERHEAD 100 – 320 AMP POLE MOUNTED SERVICE



OVERHEAD 400 AMP POLE MOUNTED SERVICE



CONNECTOR INSTALLATION:

1. CLEANING – 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. INHIBITOR – ALL NEW CONNECTORS ARE PRE–LOADED WITH INHIBITOR. IF ANY CONNECTORS DO NOT HAVE INHIBITOR, IT MUST BE FIELD APPLIED.

3. RE–USE OF CONNECTORS – 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.

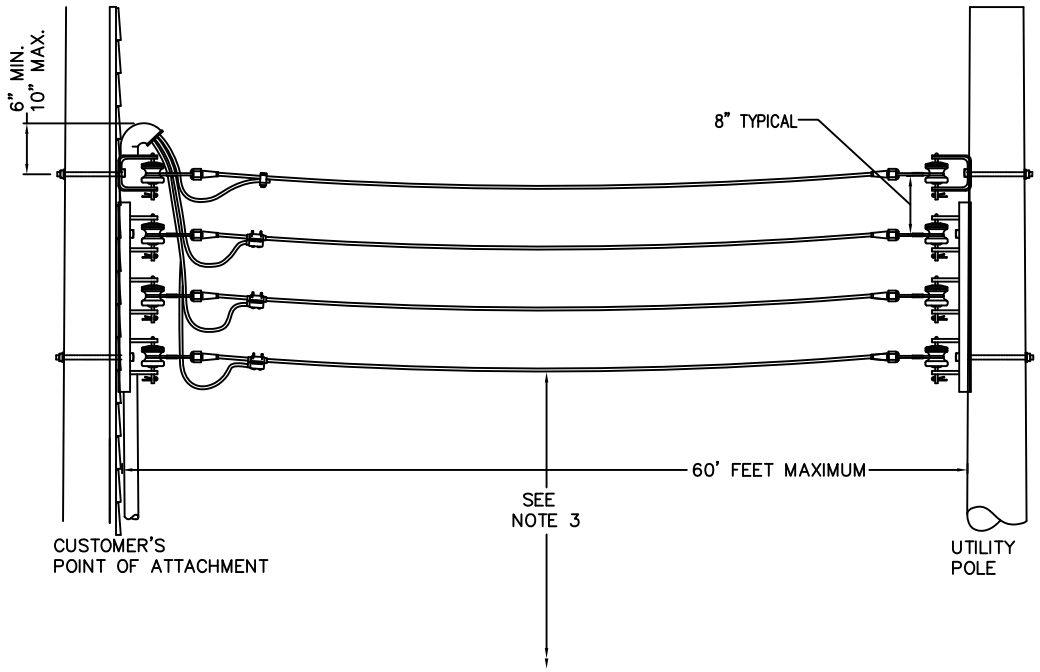
   3.2 FOR ALUMINUM TO ALUMINUM AND ALUMINUM TO COPPER CONNECTIONS, APPLY INHIBITOR TO CONDUCTORS AND WIRE BRUSH IN.

   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



NOTES:

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.

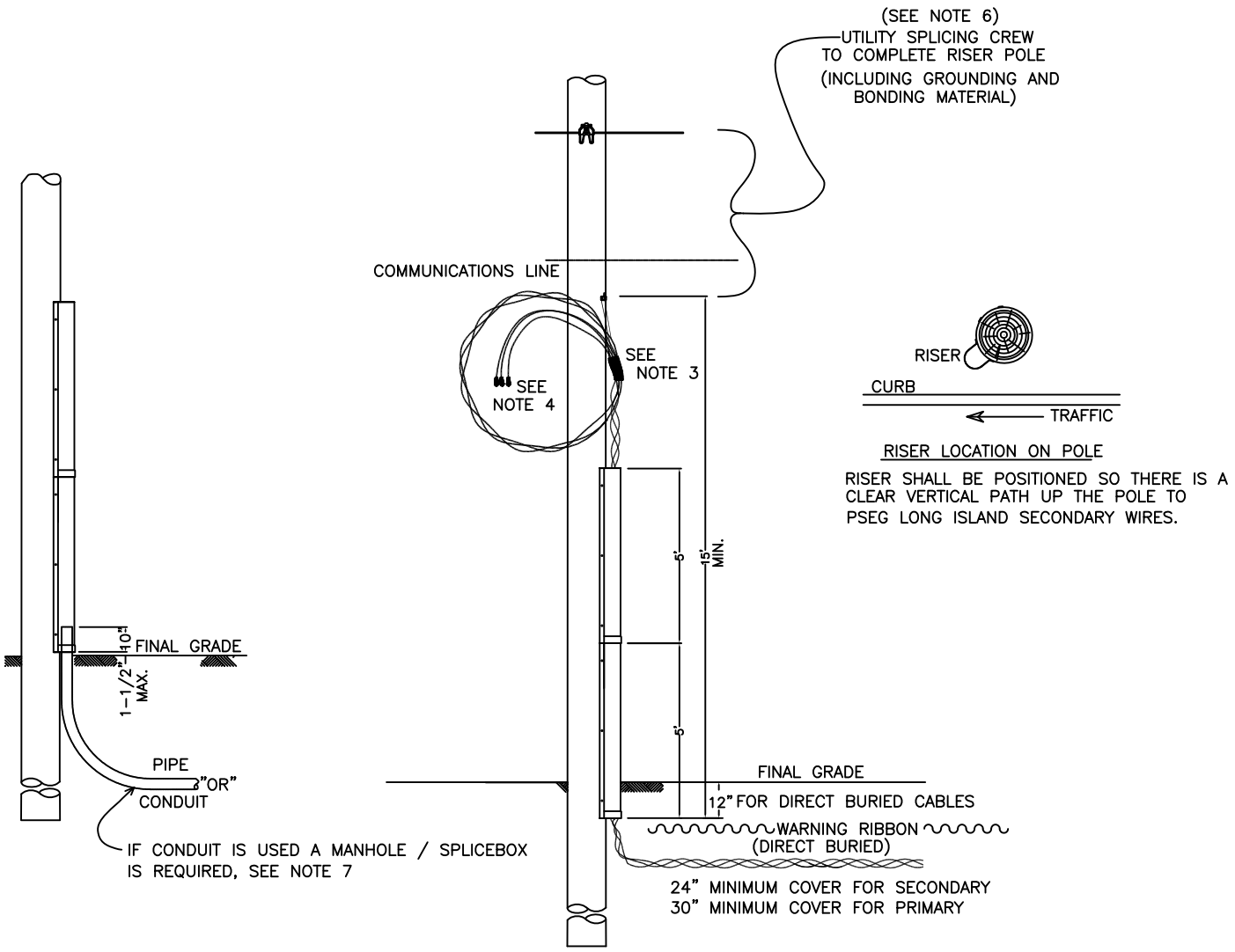
3. SERVICE ENTRANCE HEIGHT SHALL BE BASED ON 60'(FEET) MAXIMUM SPAN AND MAINTENANCE OF 16.5 FEET MINIMUM CLEARANCE ABOVE GROUND UNDER THE GREATEST SAG CONDITIONS AS WELL AS AN 18' MINIMUM CLEARANCE FOR AREAS SUBJECT TO VEHICULAR TRAFFIC. MAXIMUM HEIGHT FOR POINT OF ATTACHMENT IS 21' ABOVE GRADE. INCREASED 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



IMPORTANT:

UNDER NO CIRCUMSTANCES SHALL AN EXISTING OVERHEAD SERVICE BE CONNECTED TO AN UNDERGROUND SERVICE.

MULTIPLE SETS OF CABLE FEEDING MULTIPLE SERVICES MUST BE CLEARLY IDENTIFIED.

SEE SHEET D12 FOR NOTES

DWG. BASED ON CS 2403

CUSTOMER INSTALLED CABLE RISER

NOTES:

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 1/0 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.

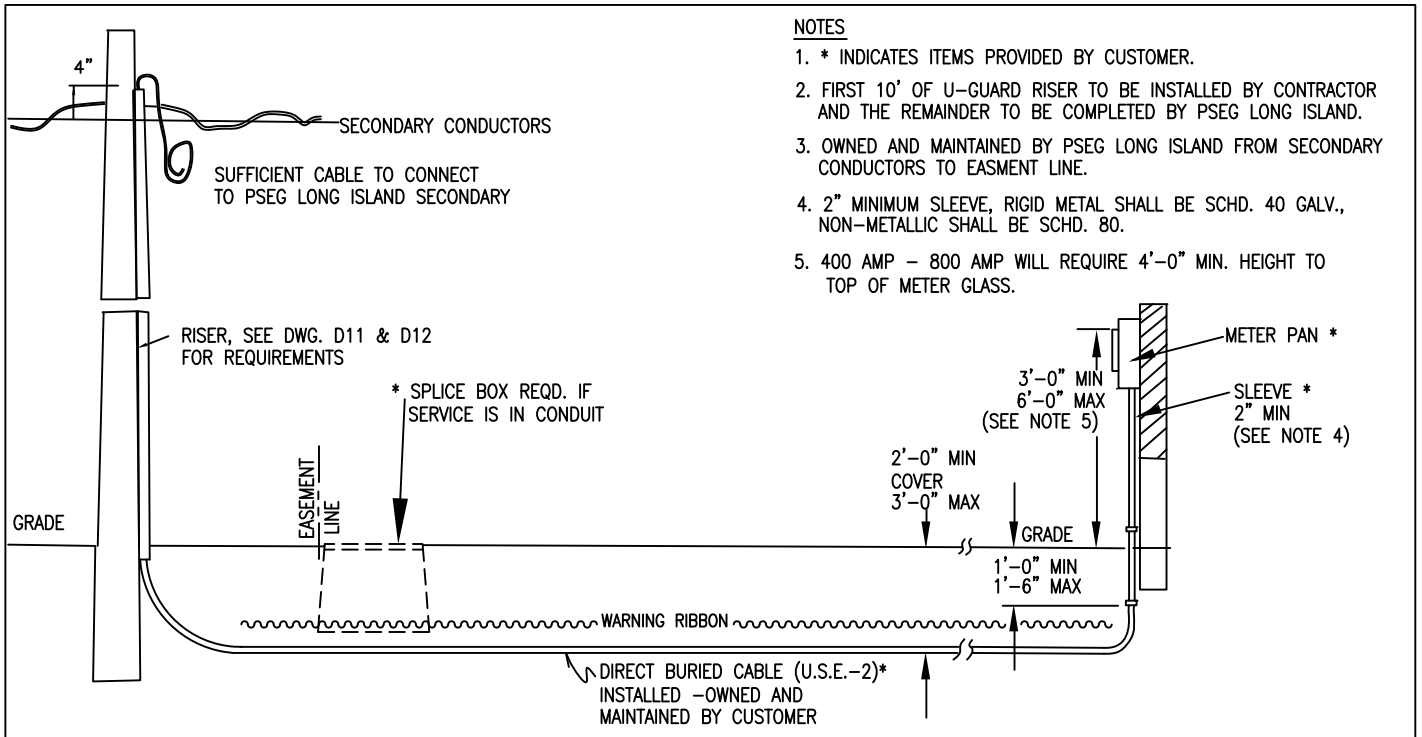
6. ALL CONDUITS SHALL BE SEALED AT THE BOX/MANHOLE AND BUILDING ENTRANCE USING PRODUCT SPECIFICALLY MADE FOR DUCT SEALING APPLICATION.

7. BONDING BUSHING MUST BE SUPPLIED FOR METALLIC CONDUITS.

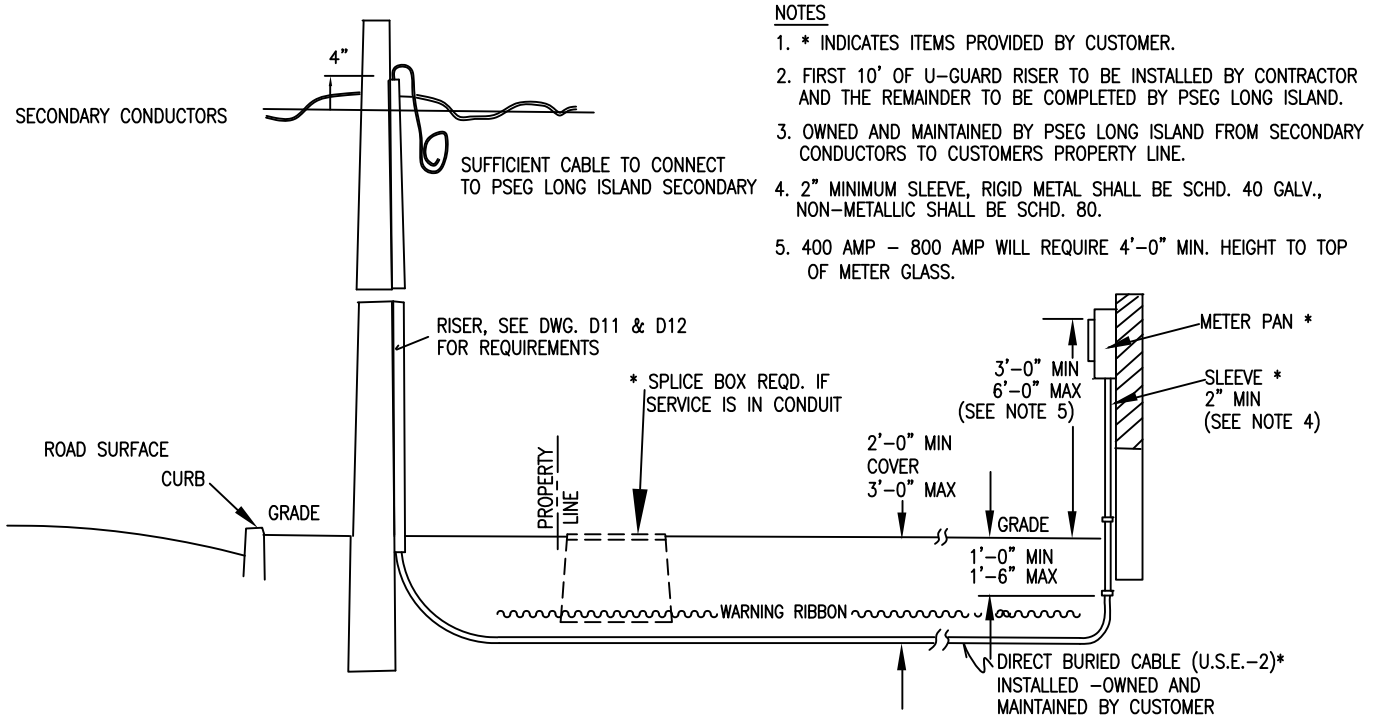
8. 15KV PRIMARY CABLE INSTALLED IN TS BOX OR 41 X 41 X 18 PE BOX ONLY.

DWG. BASED ON CS 6159

CUSTOMER / CONTRACTOR INSTALLED PULL BOX AND MANHOLE SPECIFICATIONS



SERVICE CONNECTION FROM PRIVATE PROPERTY – REAR PROPERTY POLE LINE



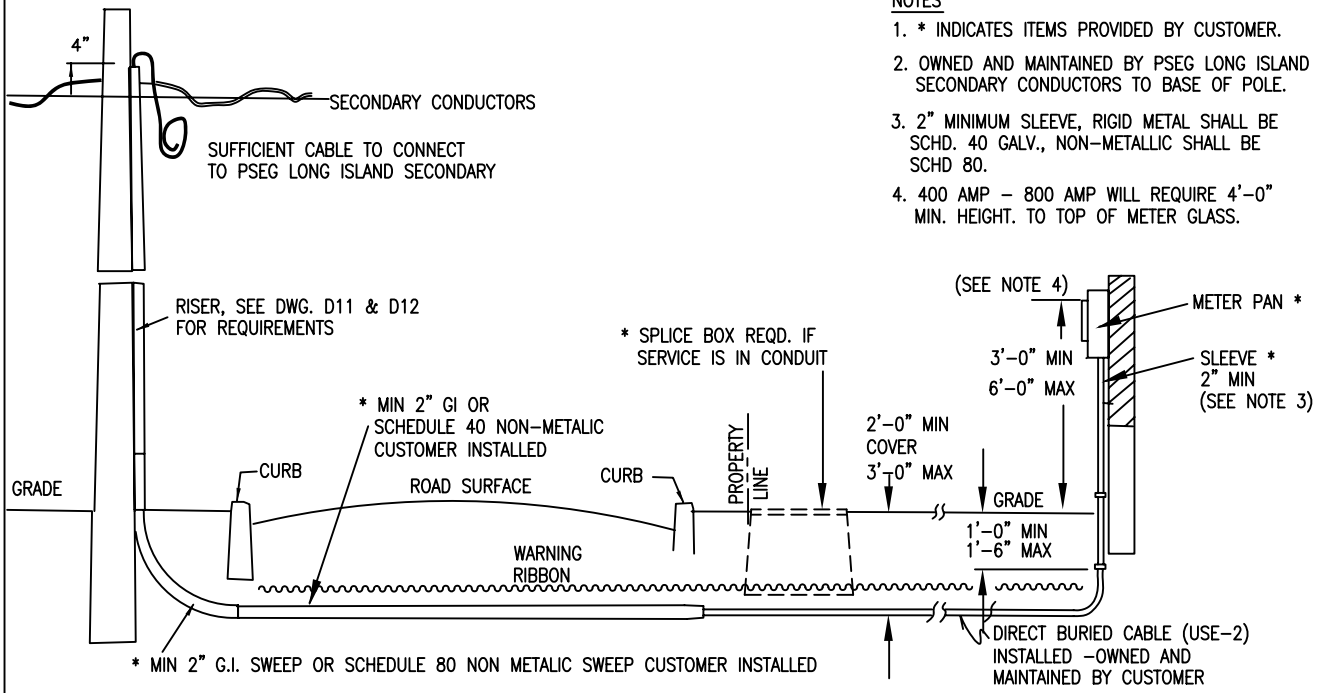
SERVICE CONNECTION FROM OVERHEAD DISTRIBUTION – NEAR SIDE HIGHWAY POLE LINE

DWG. BASED ON CS 5523

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

NOTES

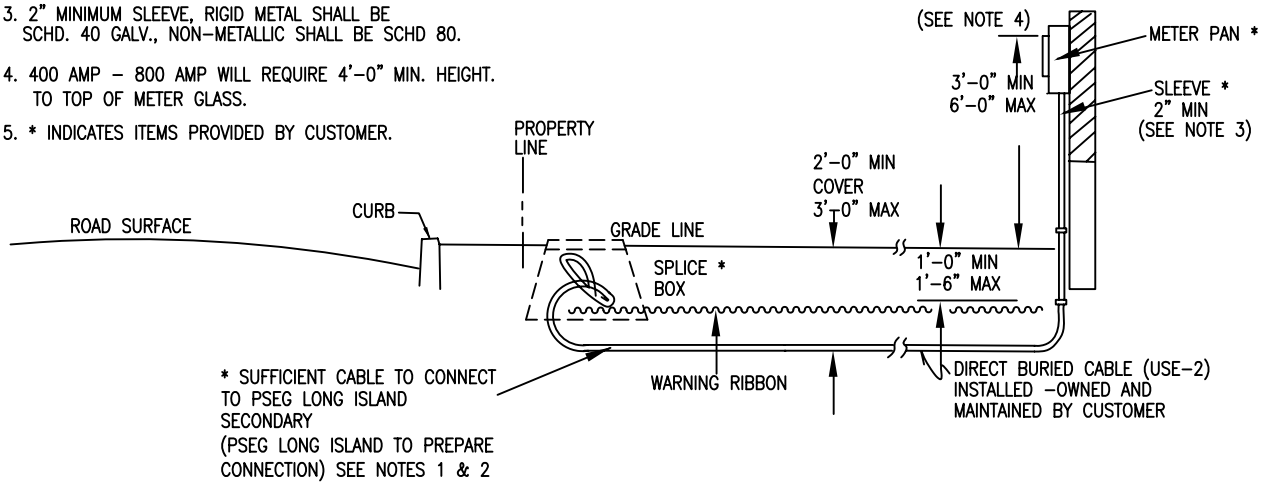
1. * INDICATES ITEMS PROVIDED BY CUSTOMER.
2. OWNED AND MAINTAINED BY PSEG LONG ISLAND FROM SECONDARY CONDUCTORS TO BASE OF POLE.
3. 2" MINIMUM SLEEVE, RIGID METAL SHALL BE SCHD. 40 GALV., NON-METALLIC SHALL BE SCHD 80.
4. 400 AMP – 800 AMP WILL REQUIRE 4'-0" MIN. HEIGHT. TO TOP OF METER GLASS.



SERVICE CONNECTION FROM FAR SIDE – HIGHWAY POLE LINE

NOTES

1. CONDUIT AND SPLICE BOX WILL BE REQUIRED IN ZONED NETWORK AREAS, IN ZONED U.G. AREAS A SPLICE BOX MAY BE REQUIRED. IF SERVICE IS IN CONDUIT A SPLICE BOX IS REQUIRED. CONTRACTOR TO LEAVE 4' OF SERVICE CABLE IN SPLICE BOX FOR PSEG LONG ISLAND CONNECTIONS.
2. WHERE NO SPLICE BOX IS REQUIRED, CONTRACTOR TO LEAVE THREE (3) FEET OF SERVICE CABLE (OR AS DIRECTED BY THE COMPANY) FOR PSEG LONG ISLAND CONNECTIONS.
3. 2" MINIMUM SLEEVE, RIGID METAL SHALL BE SCHD. 40 GALV., NON-METALLIC SHALL BE SCHD 80.
4. 400 AMP – 800 AMP WILL REQUIRE 4'-0" MIN. HEIGHT. TO TOP OF METER GLASS.
5. * INDICATES ITEMS PROVIDED BY CUSTOMER.



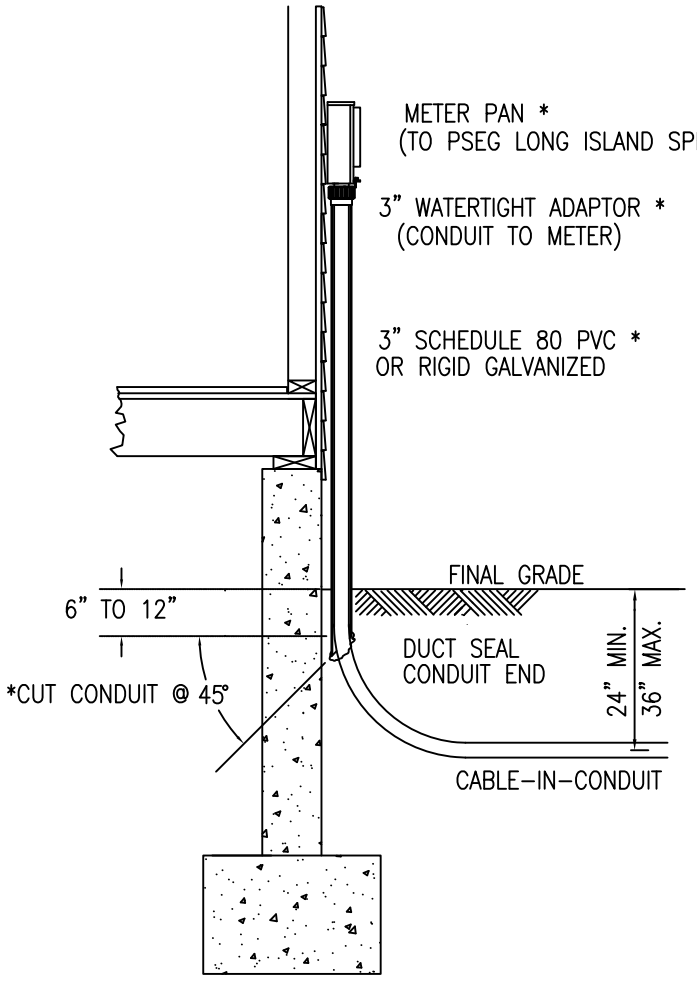
SERVICE CONNECTION FROM UNDERGROUND DISTRIBUTION – NEAR OR FAR SIDE FACILITIES

DWG. BASED ON CS 5523

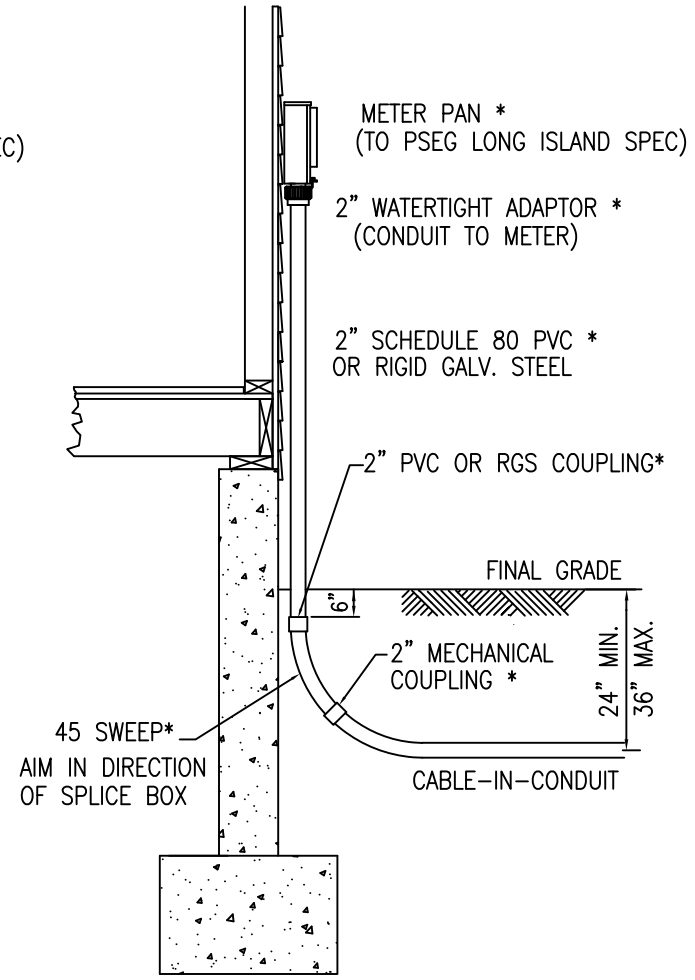
UNDERGROUND SERVICE
100 – 800 AMP SINGLE OR 3 PHASE BY BUILDER/APPLICANT

NOTES:

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.



3 INCH SERVICE RISER



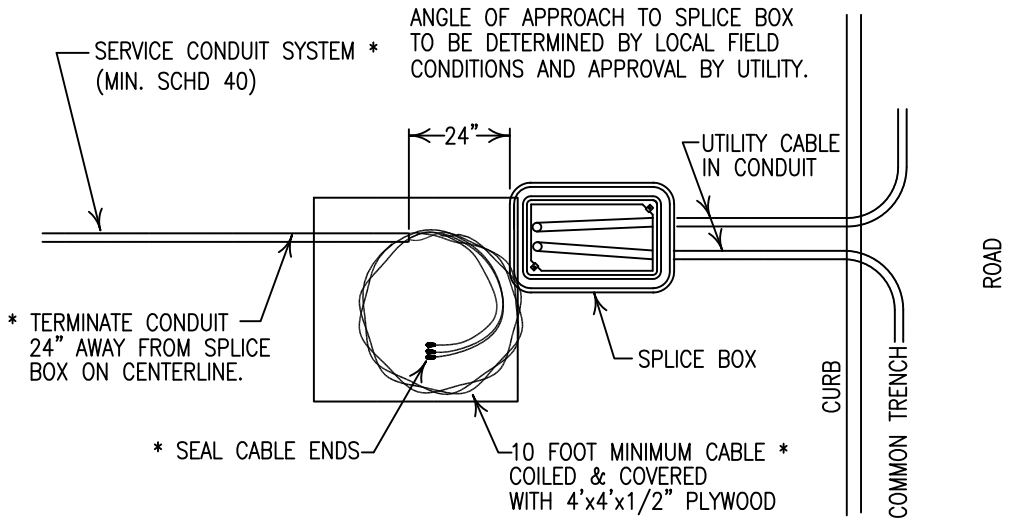
2 INCH SERVICE RISER

DWG. BASED ON
CS 6491

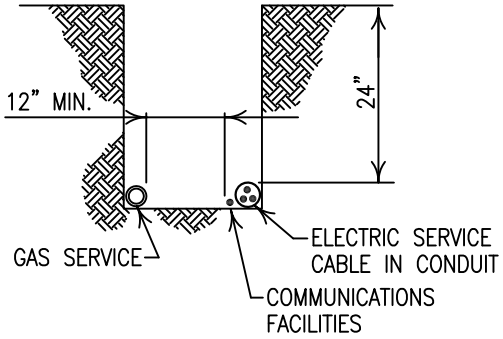
PSEG LONG ISLAND INSTALLED SINGLE PHASE RESIDENTIAL RUD SERVICE

NOTES:

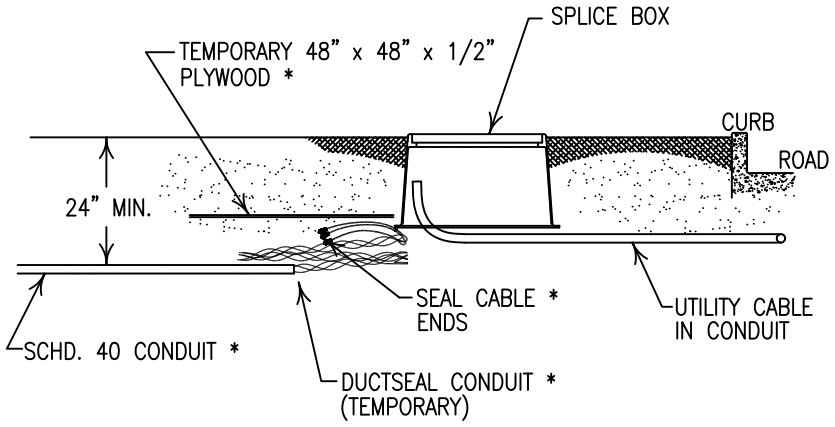
1. * DENOTES ITEMS PERFORMED BY CONTRACTOR / CUSTOMER.
2. UTILITY CONNECTS CONDUIT TO SPLICE BOX AND MAKES SERVICE CONNECTIONS IN SPLICE BOX.
3. 200 AMP SERVICES SHALL BE RUN IN ONE 3 1/2" CONDUIT MAX. 320 AMP SERVICES SHALL BE RUN IN A 3 1/2" CONDUITS MAX. . 400 AMP SERVICES SHALL BE RUN IN A SINGLE 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.



PLAN VIEW



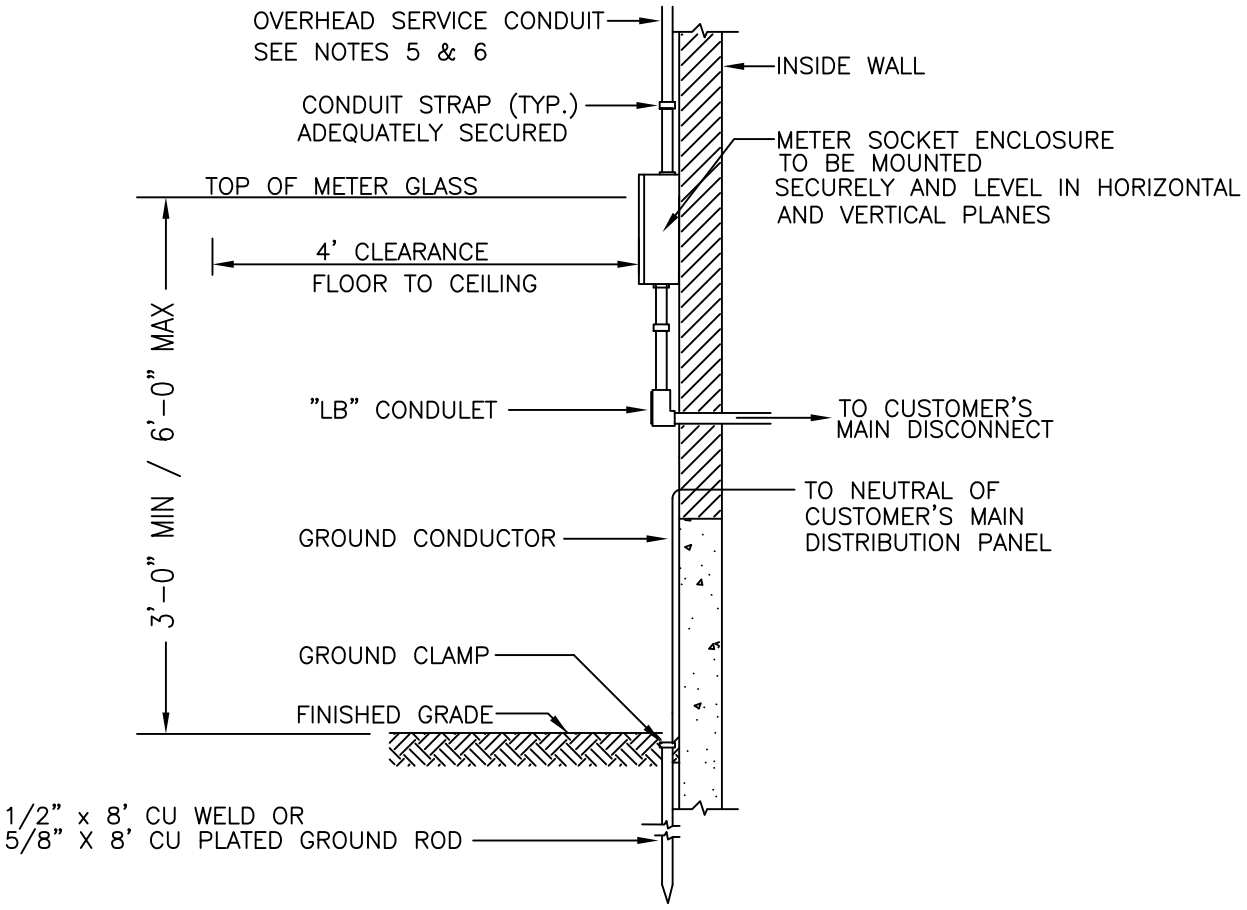
SERVICE TRENCH



ELEVATION VIEW

DWG. BASED ON CS 6491

CUSTOMER / CONTRACTOR INSTALLED SINGLE PHASE RESIDENTIAL RUD SERVICE

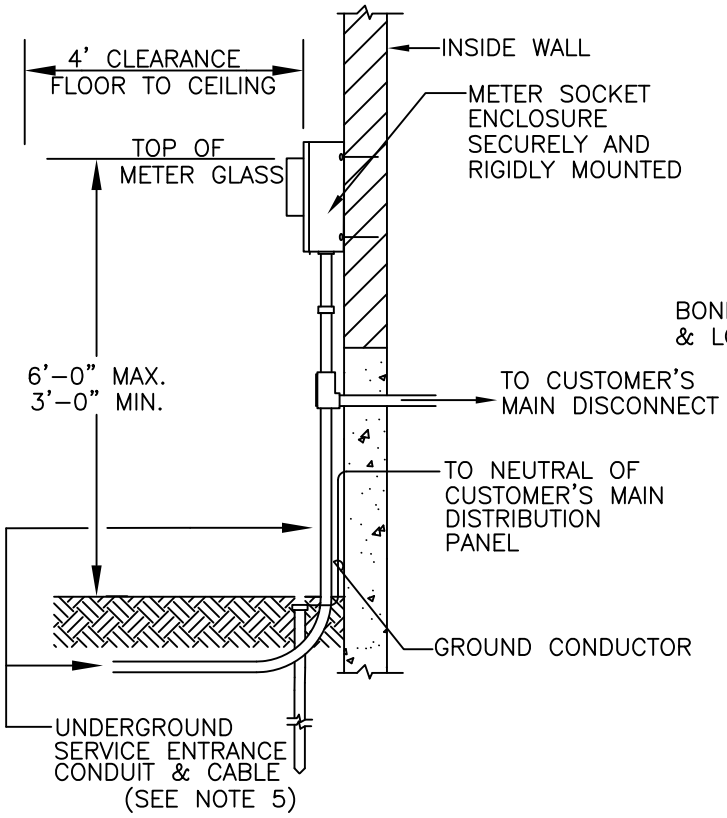


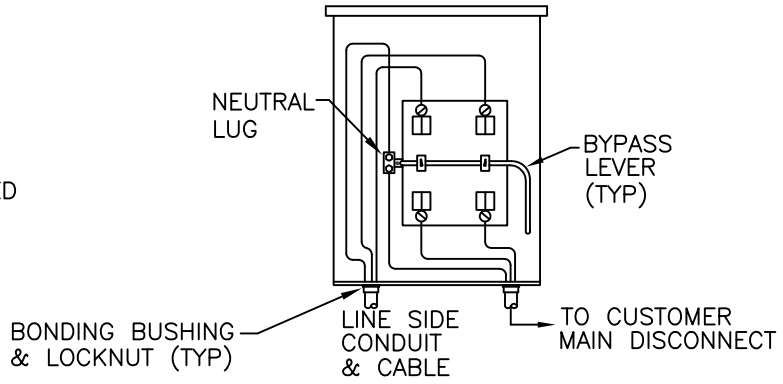
NOTES:

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.
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.
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.

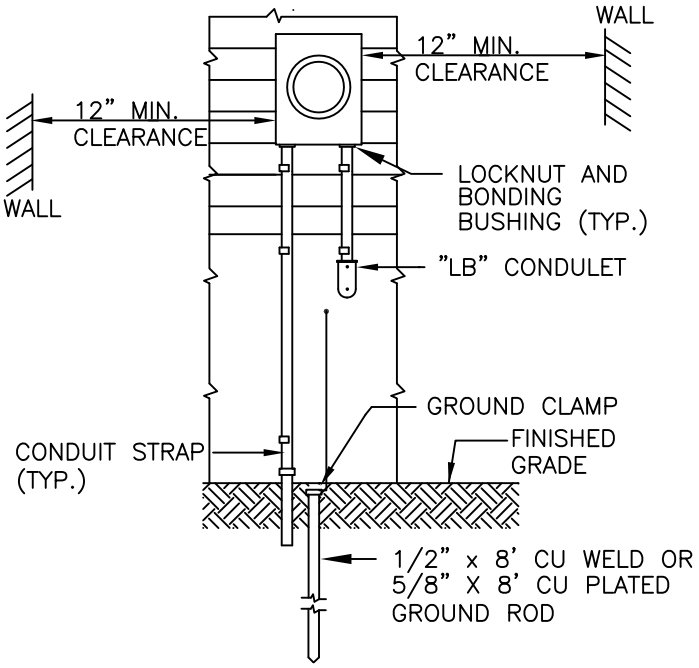
DWG. BASED ON
CS 8001

OVERHEAD SERVICE
SINGLE PHASE SELF CONTAINED METER
OUTDOOR SOCKET METER INSTALLATION





METER SOCKET

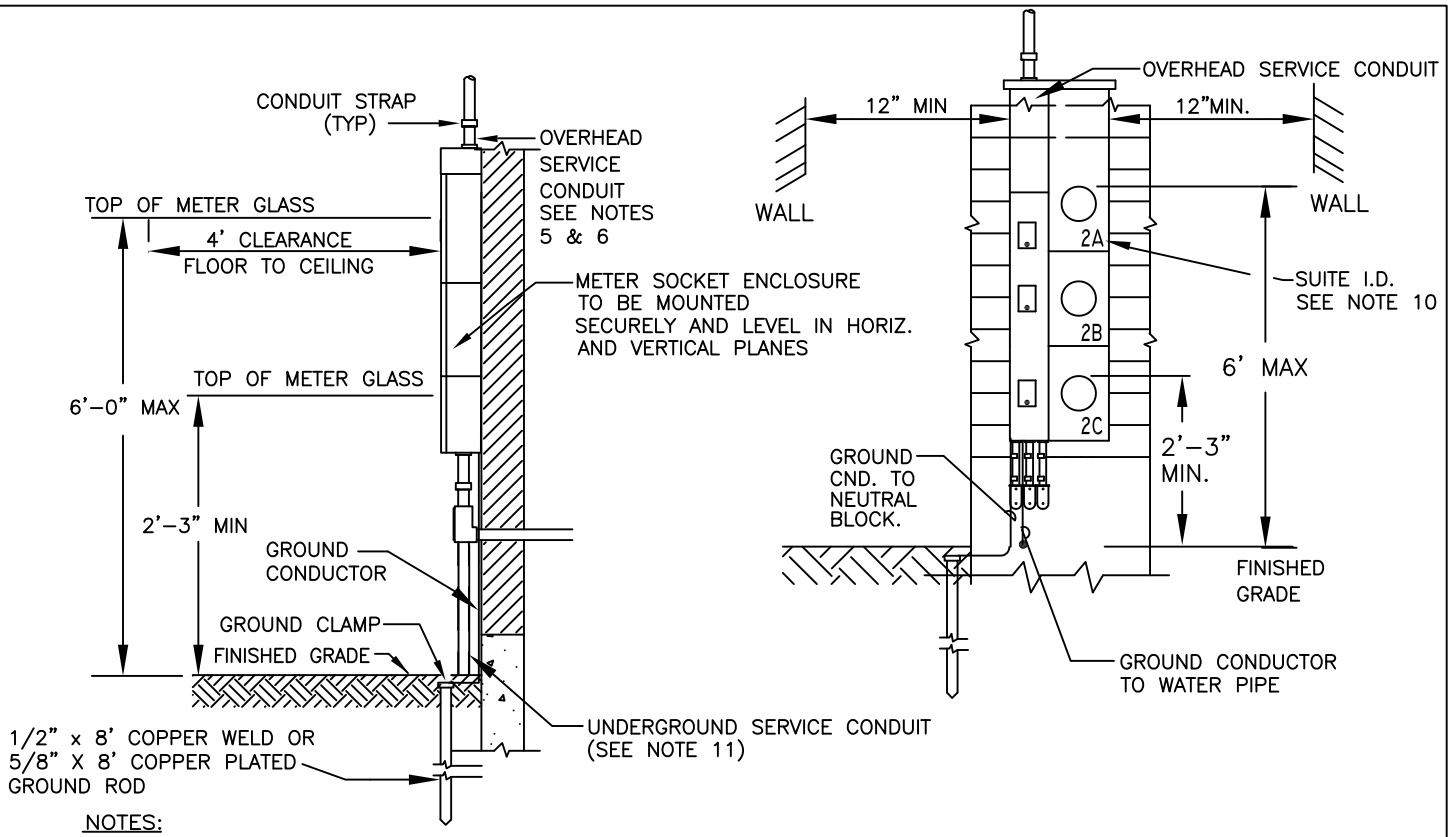


NOTES:

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.
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

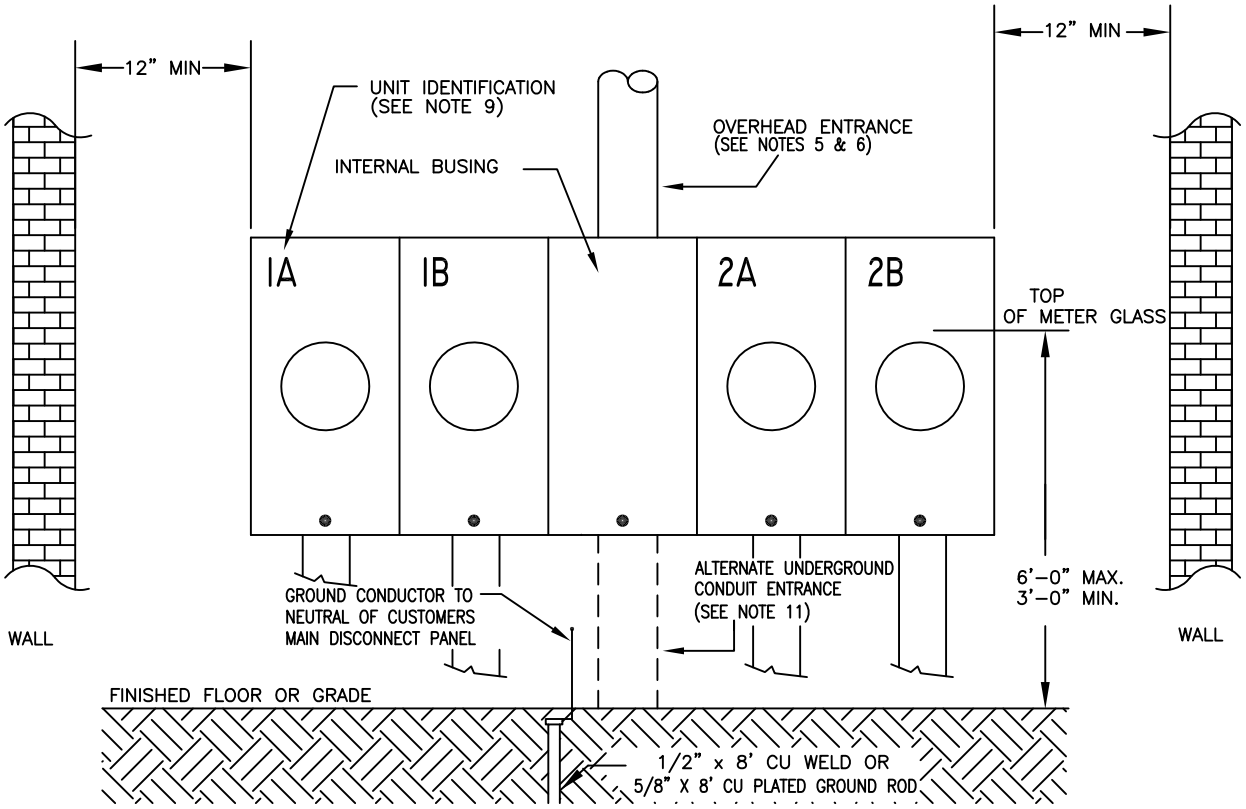


NOTES:

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.
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. 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

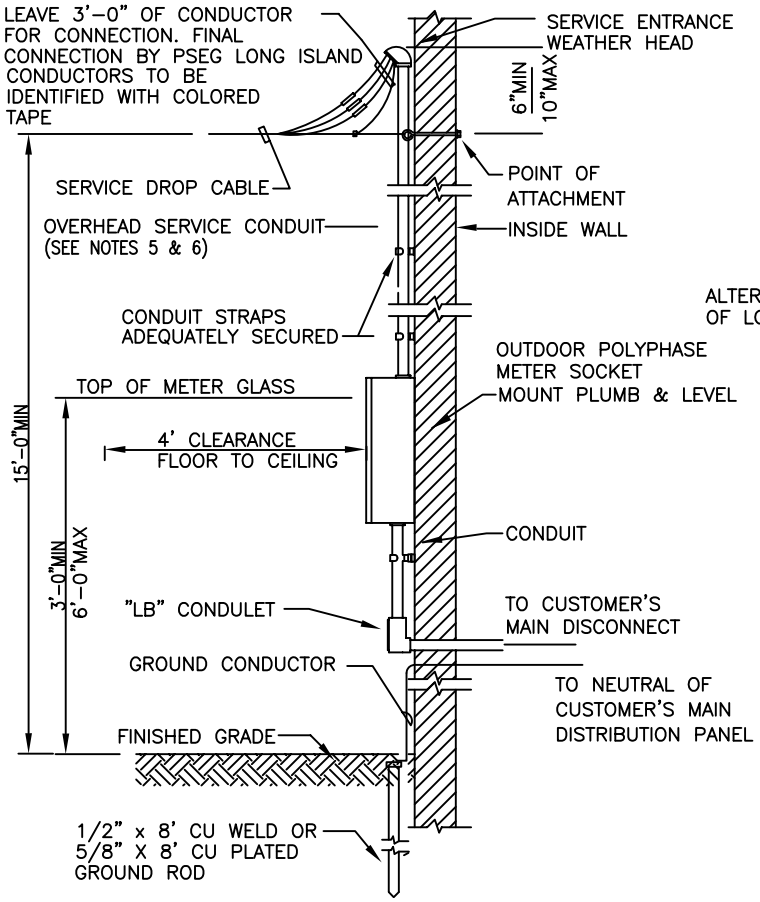


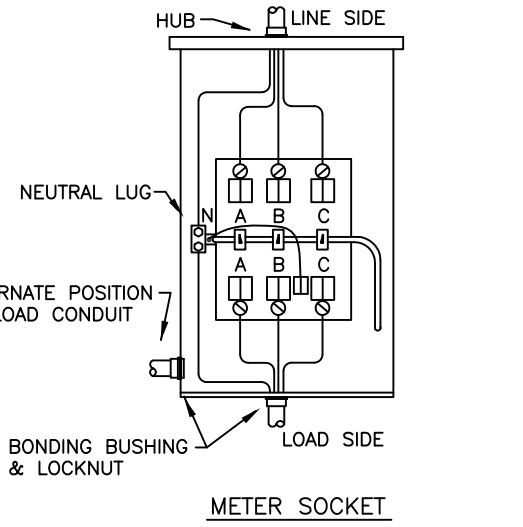
NOTES:

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





METER SOCKET

PHASE CONDUCTOR IDENTIFICATION
MIN. 2" COLORED TAPE

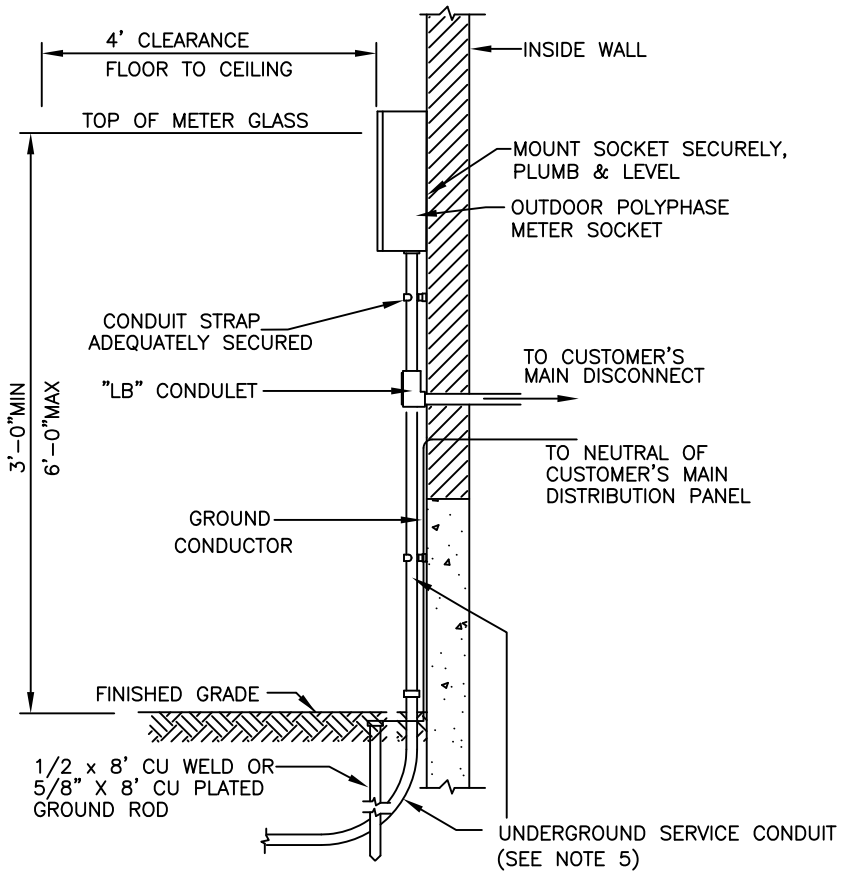
	DELTA 240/120	WYE 208Y/120
PHASE A	BLUE	BLUE
PHASE B	BLACK	BLACK
PHASE C	ORANGE	RED
NEUTRAL	WHITE OR GRAY	

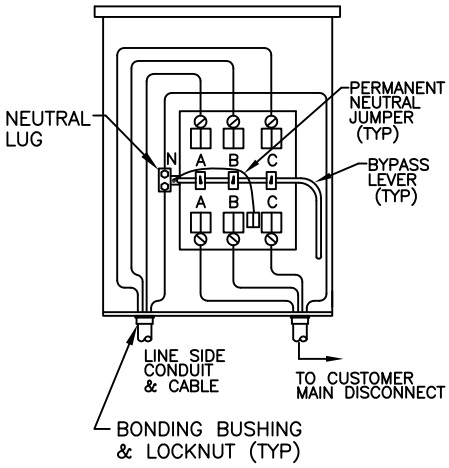
NOTES:

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. 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 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





METER SOCKET

PHASE CONDUCTOR IDENTIFICATION
MIN. 2" COLORED TAPE

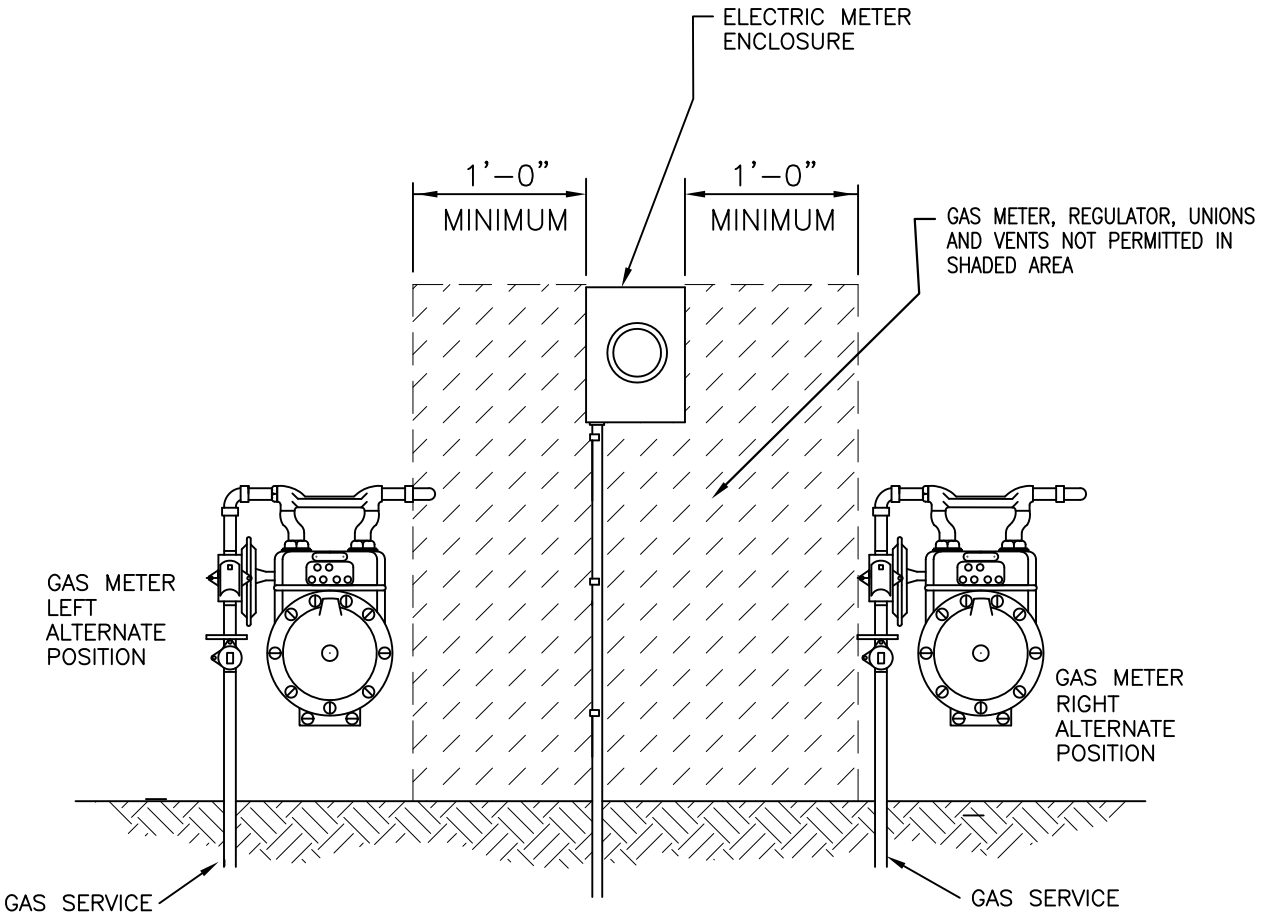
	DELTA 240/120	WYE 208Y/120
PHASE A	BLUE	BLUE
PHASE B	BLACK	BLACK
PHASE C	ORANGE	RED
NEUTRAL	WHITE OR GRAY	

NOTES:

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. ONLY NEUTRAL CONDUCTOR IS PERMITTED BEHIND BYPASS LEVER.
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) (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.
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 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

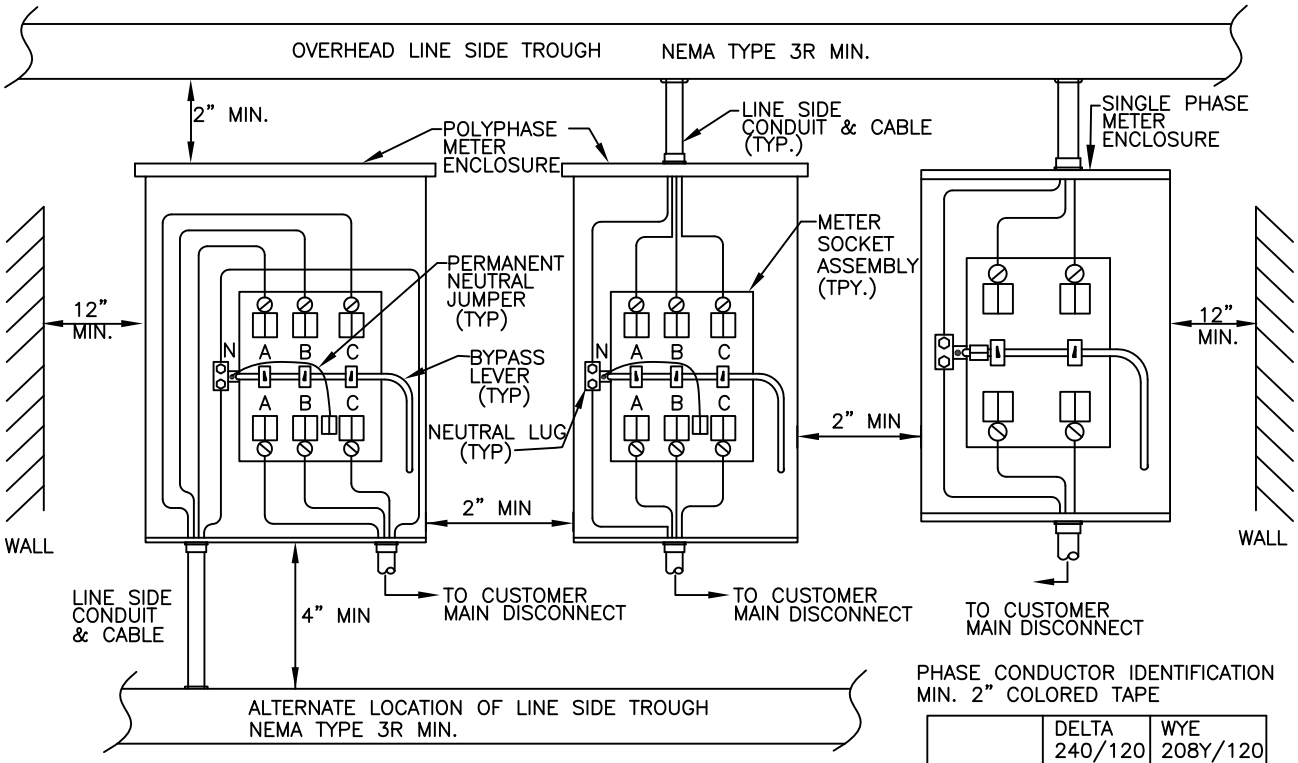


NOTES:

1. GAS SERVICE PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE.
2. 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



PHASE CONDUCTOR IDENTIFICATION
MIN. 2" COLORED TAPE

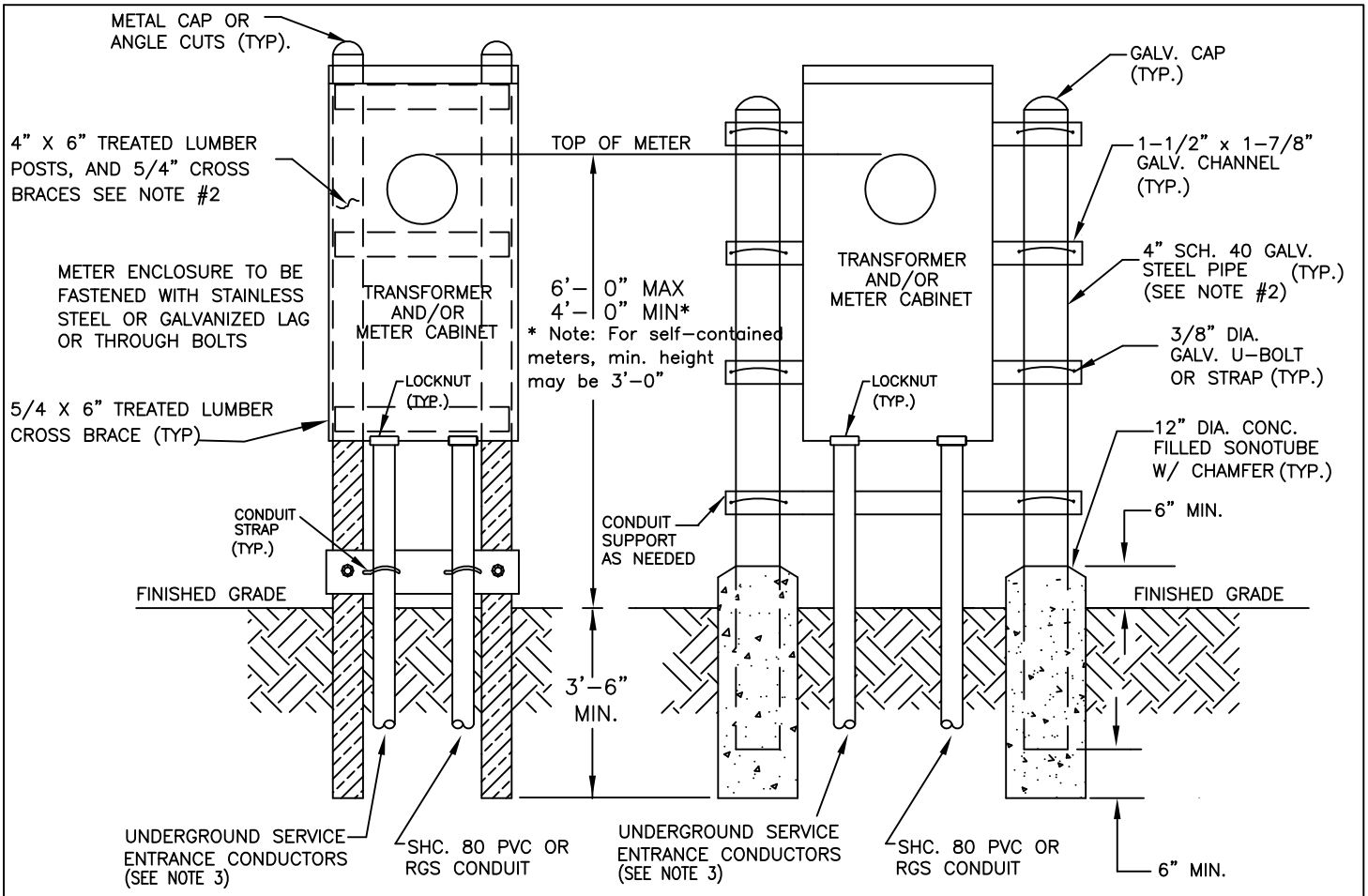
	DELTA 240/120	WYE 208Y/120
PHASE A	BLUE	BLUE
PHASE B	BLACK	BLACK
PHASE C	ORANGE	RED
NEUTRAL	WHITE OR GRAY	

NOTES:

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



ALTERNATE DESIGN STANDARD DESIGN

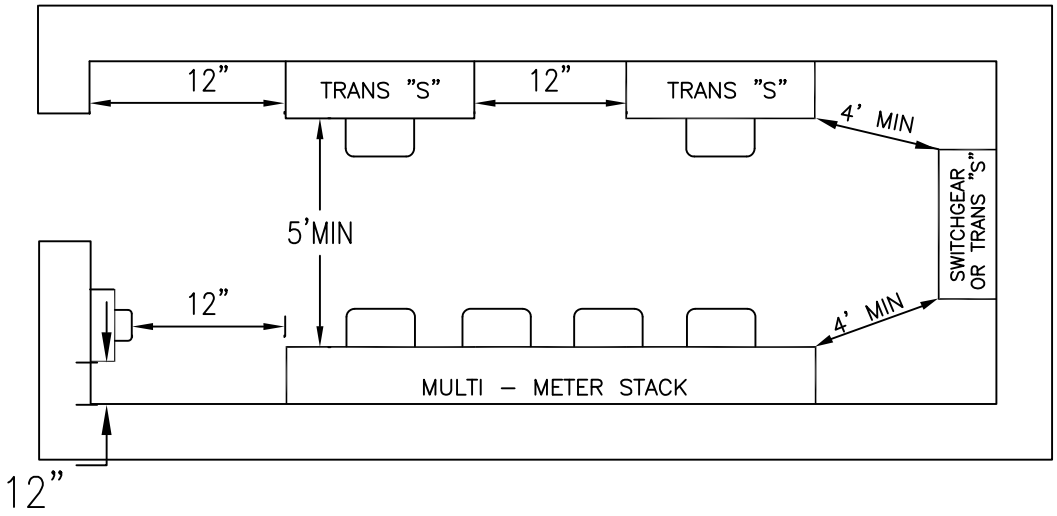
H – FRAME INSTALLATIONS ARE RESTRICTED/NOT PERMITTED BY SOME MUNICIPALITIES. CHECK LOCAL CODES PRIOR TO INSTALLATION.

NOTES:

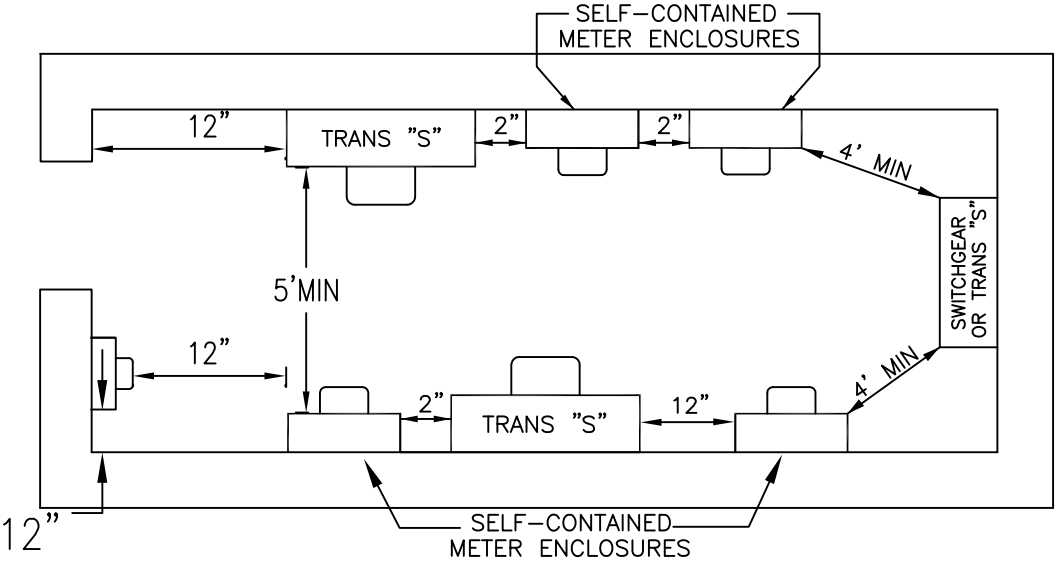
1. CONCRETE FILLED PROTECTION BOLLARDS SHALL BE INSTALLED WHEN INSTALLATION IS IN THE VICINITY OF VEHICULAR TRAFFIC. BOLLARDS SHALL BE PLACED A MINIMUM OF 4' FROM THE CABINET AND SHALL BE PAINTED FLUORESCENT YELLOW. BOLLARDS SHALL BE CONSTRUCTED FROM A MINIMUM OF 3.5" OUTSIDE DIAMETER SCHEDULE 40 GALVANIZED 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



NOT TO SCALE



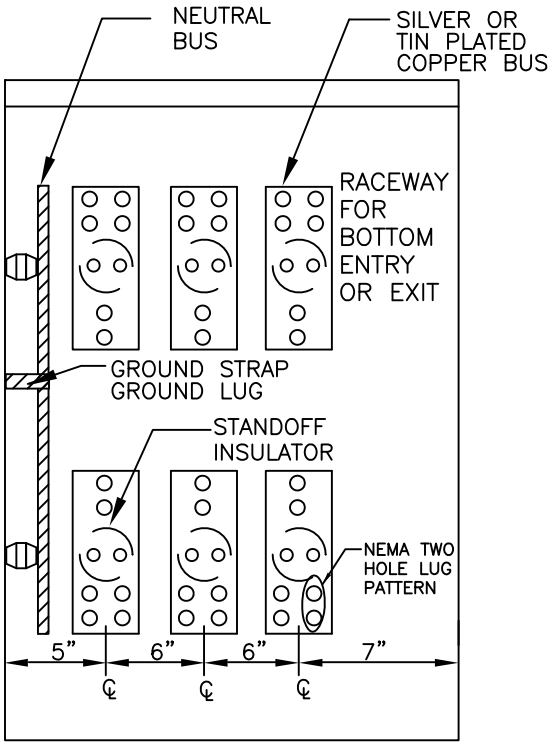
NOT TO SCALE

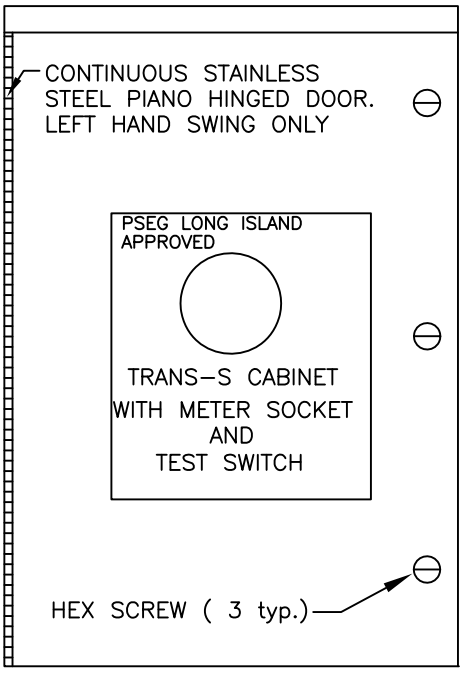
NOTES:

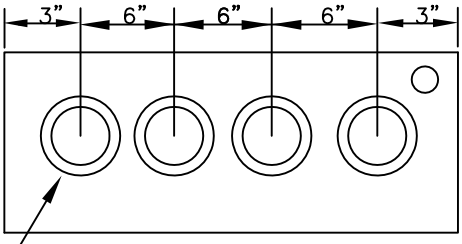
1. METER ROOM CONSTRUCTION SHALL COMPLY WILL ALL CODE REQUIREMENTS (eg. NEC110.26) PERTAINING TO ACCESS, EGRESS, AND SAFETY.
2. WHEN METERS ARE ON WALLS FACING EACH OTHER, THERE MUST BE 4' OF CLEAR SPACE FROM FLOOR TO CEILING BETWEEN METERS.
3. SWITCHGEAR DOORS MUST BE ABLE TO OPEN FULLY WITHOUT BEING 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

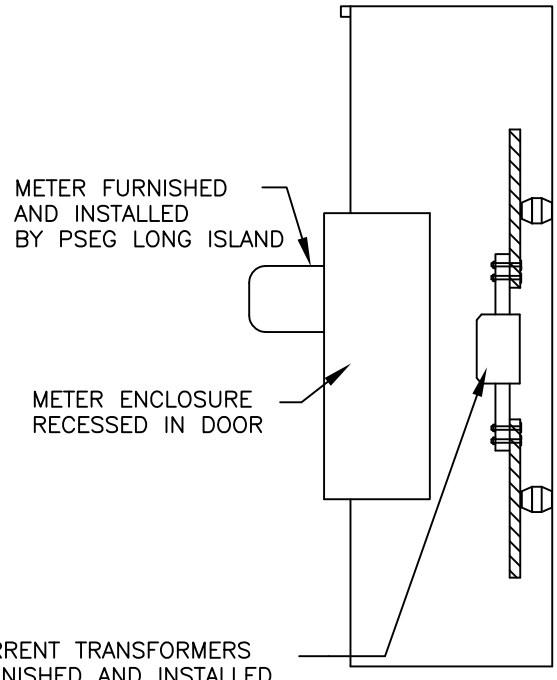




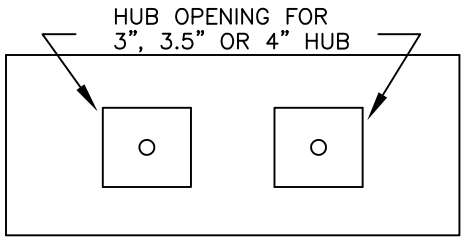


BOTTOM VIEW

4", 3.5" CONCENTRIC KNOCKOUTS (4 TYP.)



SIDE VIEW



TOP VIEW

FOR NOTES SEE DRAWING D29

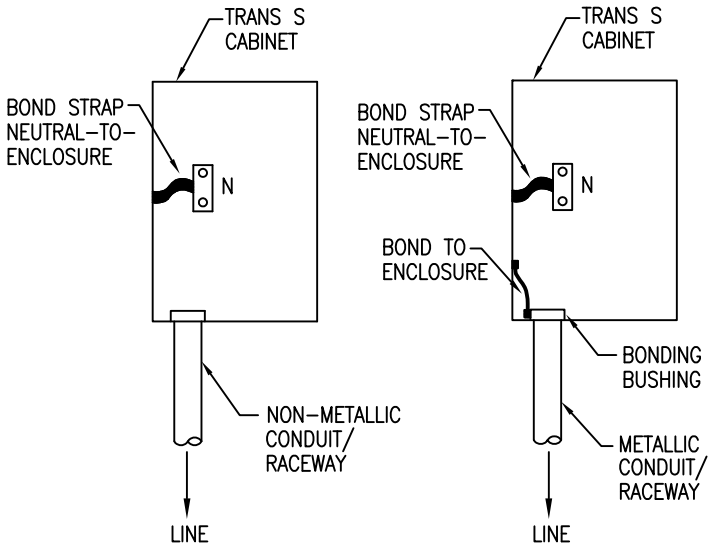
DWG. BASED ON CS 8804

400 TO 800 AMPERE SERVICE TRANS "S" CABINET INSTALLATION

NOTES:

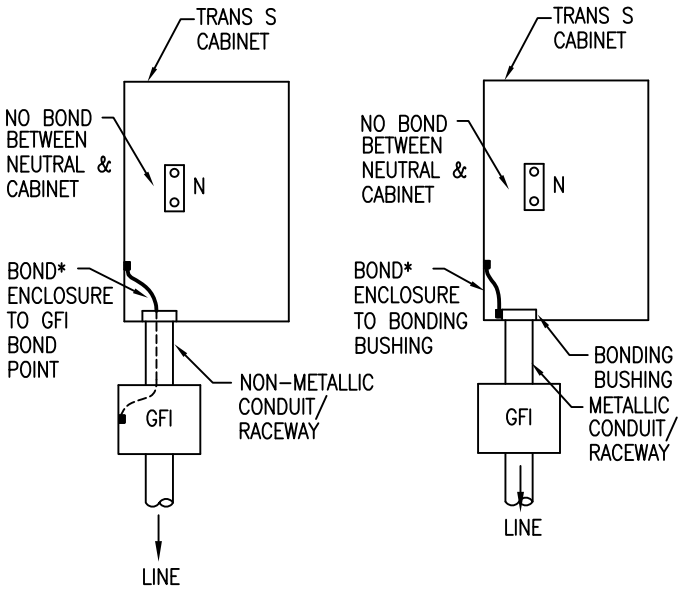
1. BUS BARS SHALL BE SILVER OR TIN PLATED COPPER AND SHALL BE SIZED PER THE NEC.
2. ONLY THE RIGHT HAND SIDE OF THE CABINET SHALL ALLOW FOR LINE AND LOAD CABLES TO ENTER AND EXIT THROUGH THE BOTTOM OF THE CABINET. THIS SPACE SHALL ALLOW FOR THE CABLES TO MEET THE MINIMUM BENDING RADIUS TO THE NEAREST 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.
6. 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.
9. PERMANENTLY IDENTIFY LINE AND LOAD CONDUCTORS INSIDE CABINET.

TRANS S CABINET BONDING DIAGRAM
NON – GFI MAIN DISCONNECT INSTALLATION



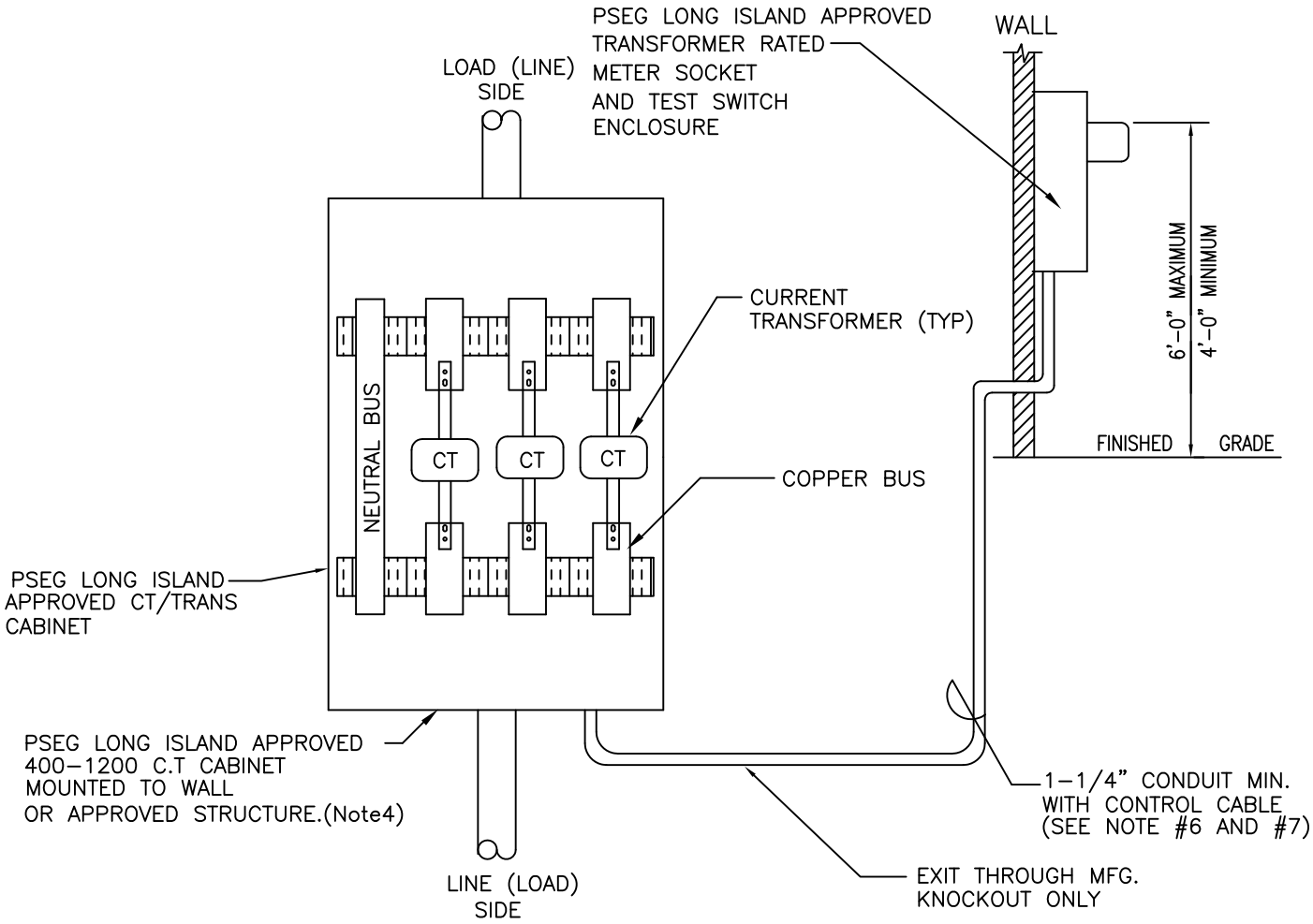
TRANS S CABINET BONDING DIAGRAM
GFI MAIN DISCONNECT INSTALLATION

(APPLIES TO 120/208V & 277/480V SERVICES)



* USE MANUFACTURER'S BOND ATTACHMENT POINT

400 TO 800 AMPERE SERVICE
TRANS "S" CABINET INSTALLATION – NOTES & BONDING DIAGRAM

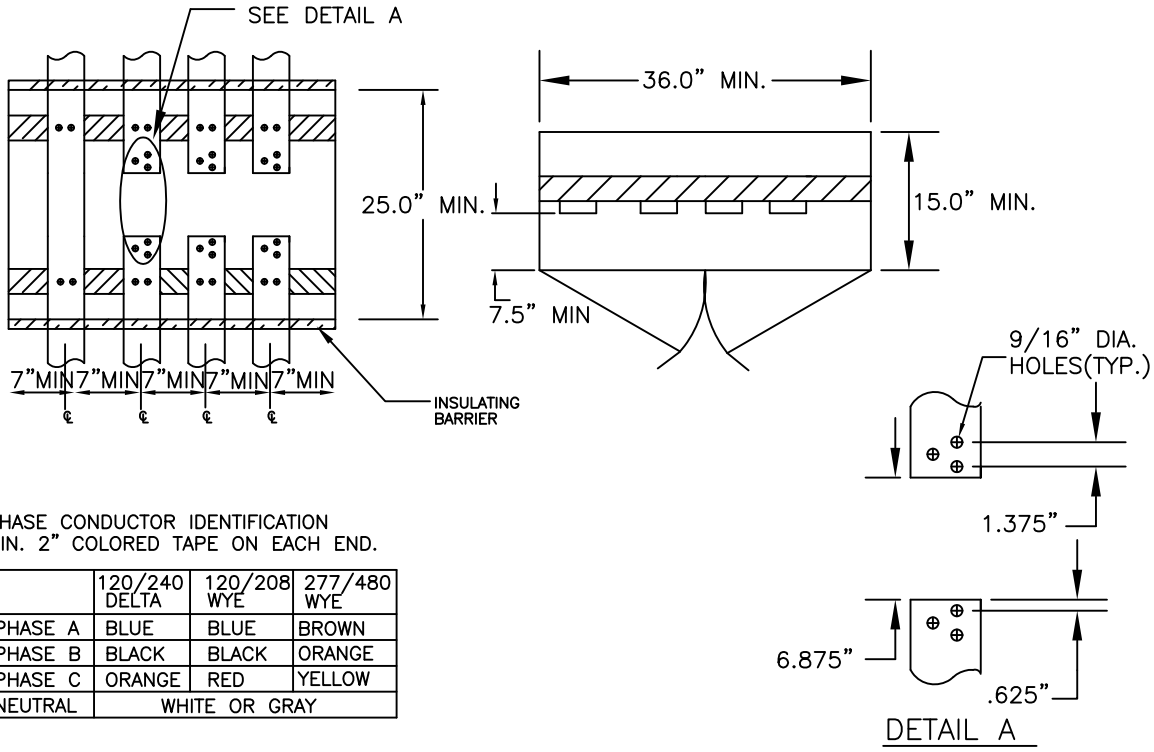


NOTES:

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



PHASE CONDUCTOR IDENTIFICATION
MIN. 2" COLORED TAPE ON EACH END.

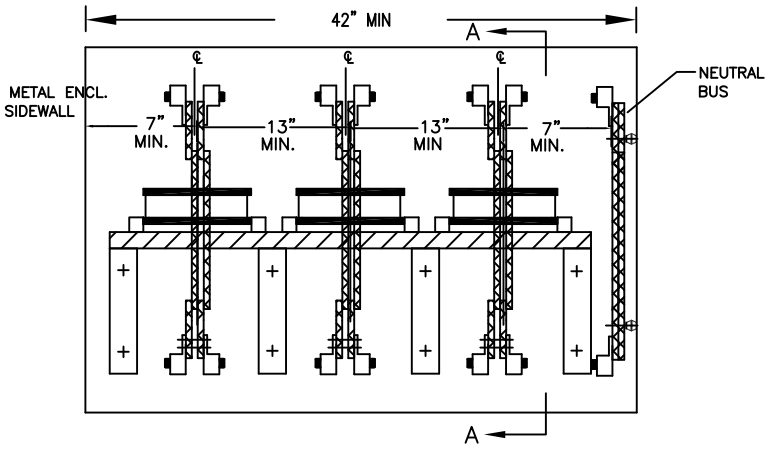
	120/240 DELTA	120/208 WYE	277/480 WYE
PHASE A	BLUE	BLUE	BROWN
PHASE B	BLACK	BLACK	ORANGE
PHASE C	ORANGE	RED	YELLOW
NEUTRAL	WHITE OR GRAY		

NOTES:

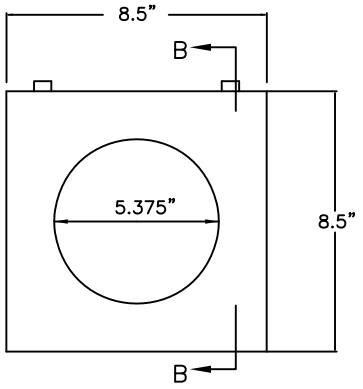
1. THE PSEG LONG ISLAND APPROVED CURRENT TRANSFORMER COMPARTMENT SHALL BE LOCATED WITHIN THE INCOMING SWITCHGEAR CUBICLE WHICH SHALL BE CONSTRUCTED IN CONFORMANCE WITH UL 891.
2. THE CURRENT TRANSFORMER COMPARTMENT SHALL BE COMPLETELY ISOLATED FROM THE REMAINDER OF THE SWITCHGEAR CUBICLE BY MEANS OF 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.
6. 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.
8. 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



ELEVATION

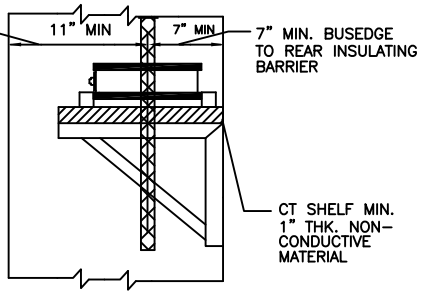


CURRENT TRANSFORMER PLAN VIEW

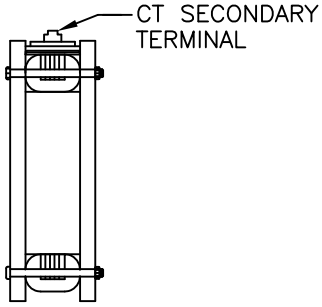
11" MIN. BUS EDGE TO ACCESS DOOR

PHASE CONDUCTOR IDENTIFICATION
MIN. 2" COLORED TAPE ON EACH END.

	DELTA	120/208 WYE	277/480 WYE
PHASE A	BLUE	BLUE	BROWN
PHASE B	BLACK	BLACK	ORANGE
PHASE C	ORANGE	RED	YELLOW
NEUTRAL	WHITE OR GRAY		



SECTION A–A

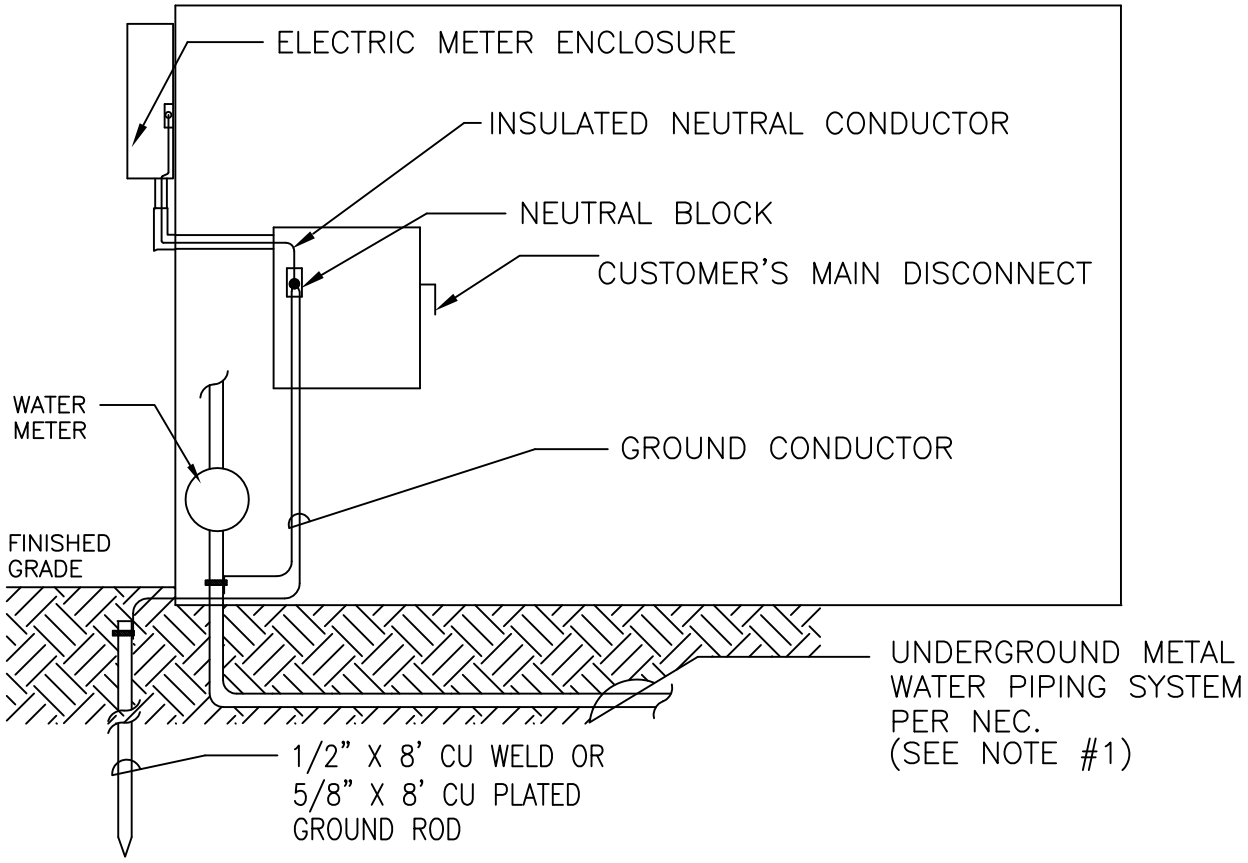


NOTES:

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



NOTES:

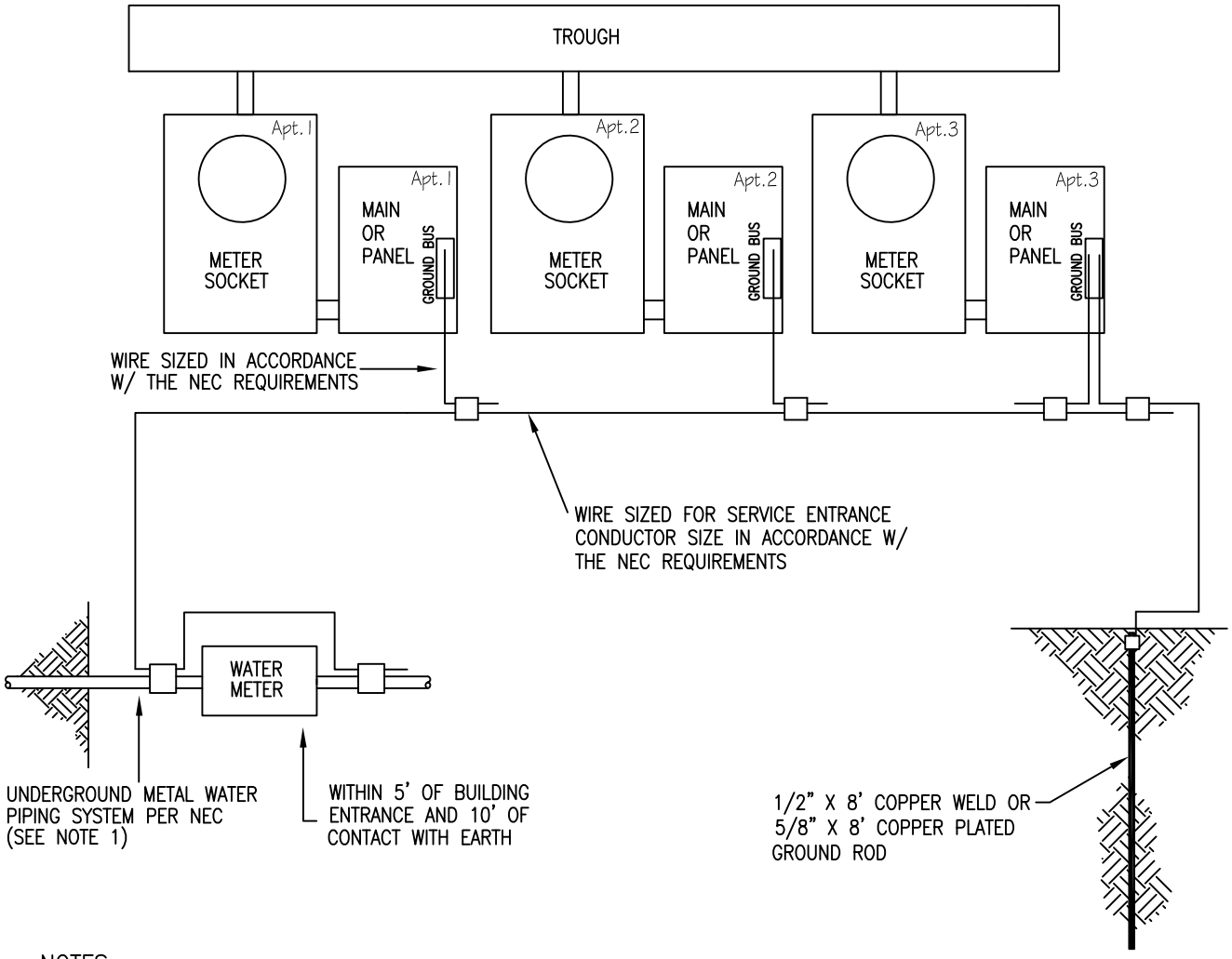
1. WHERE WATER PIPING SYSTEM IS CONSTRUCTED FROM PLASTIC, A SECOND GROUND ROD IS REQUIRED TO BE INSTALLED AT A MINIMUM DISTANCE OF SIX FEET FROM THE FIRST. THE REQUIREMENT FOR A SECOND GROUND ROD IS APPLICABLE WHERE TEN FEET OF CONTINUOUS METAL WATER PIPE IN EARTH IS NOT AVAILABLE.

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



NOTES:

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.

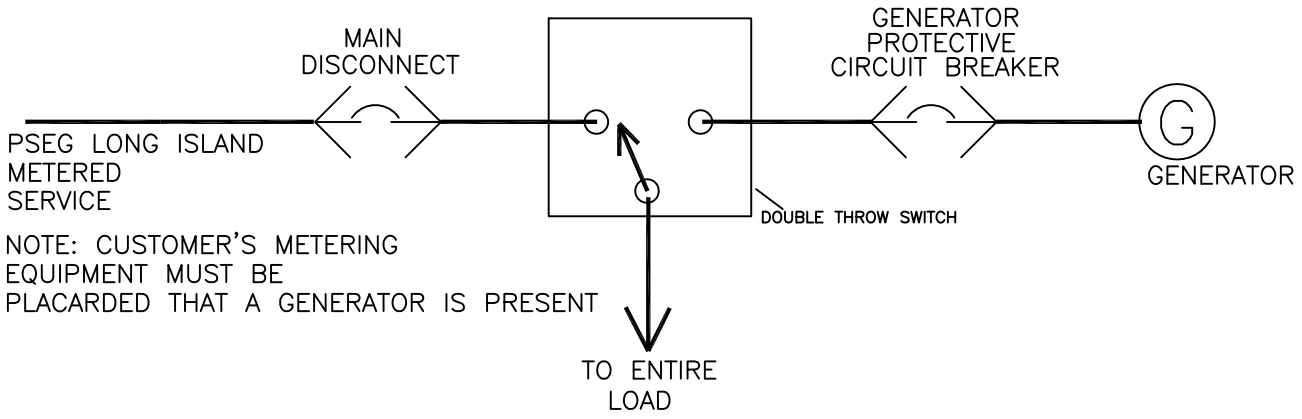


FIG. 1: STANDBY GENERATOR FOR ENTIRE LOAD.

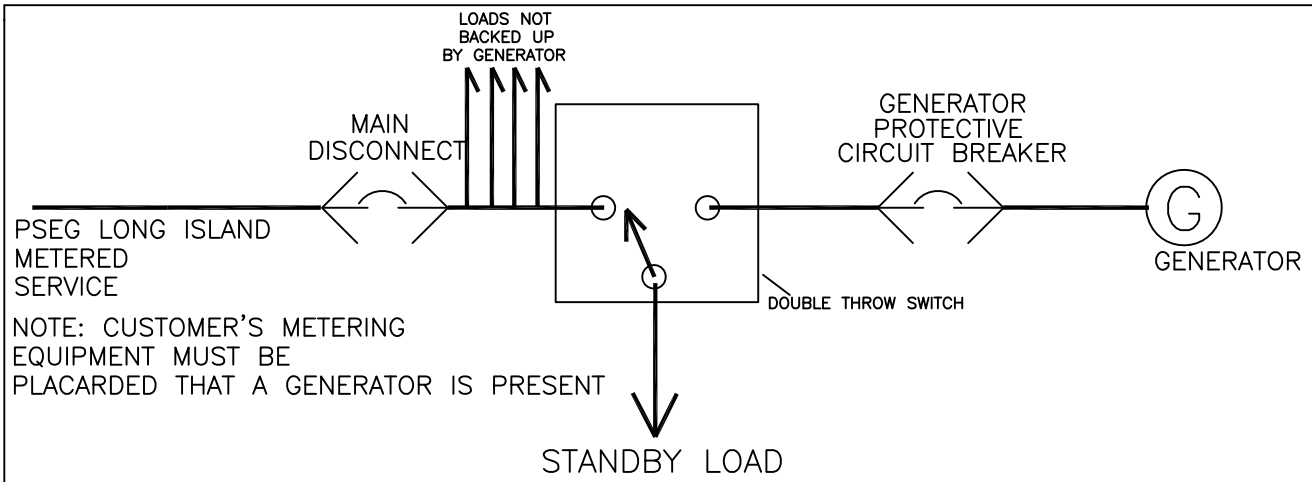


FIG. 2: STANDBY GENERATOR FOR PARTIAL LOADS

OPTIONAL STANDBY SYSTEMS

12. SECONDARY NETWORK AREAS

12.1 Notes to Contractors

Before commencing work in any of the towns on the next page, see the appropriate map to determine if the work location is in the proximity of a secondary network area. If so, contact the appropriate Distribution Design Office to determine if there are any special construction requirements.

The maps indicate certain areas which are secondary “NETWORK” areas.

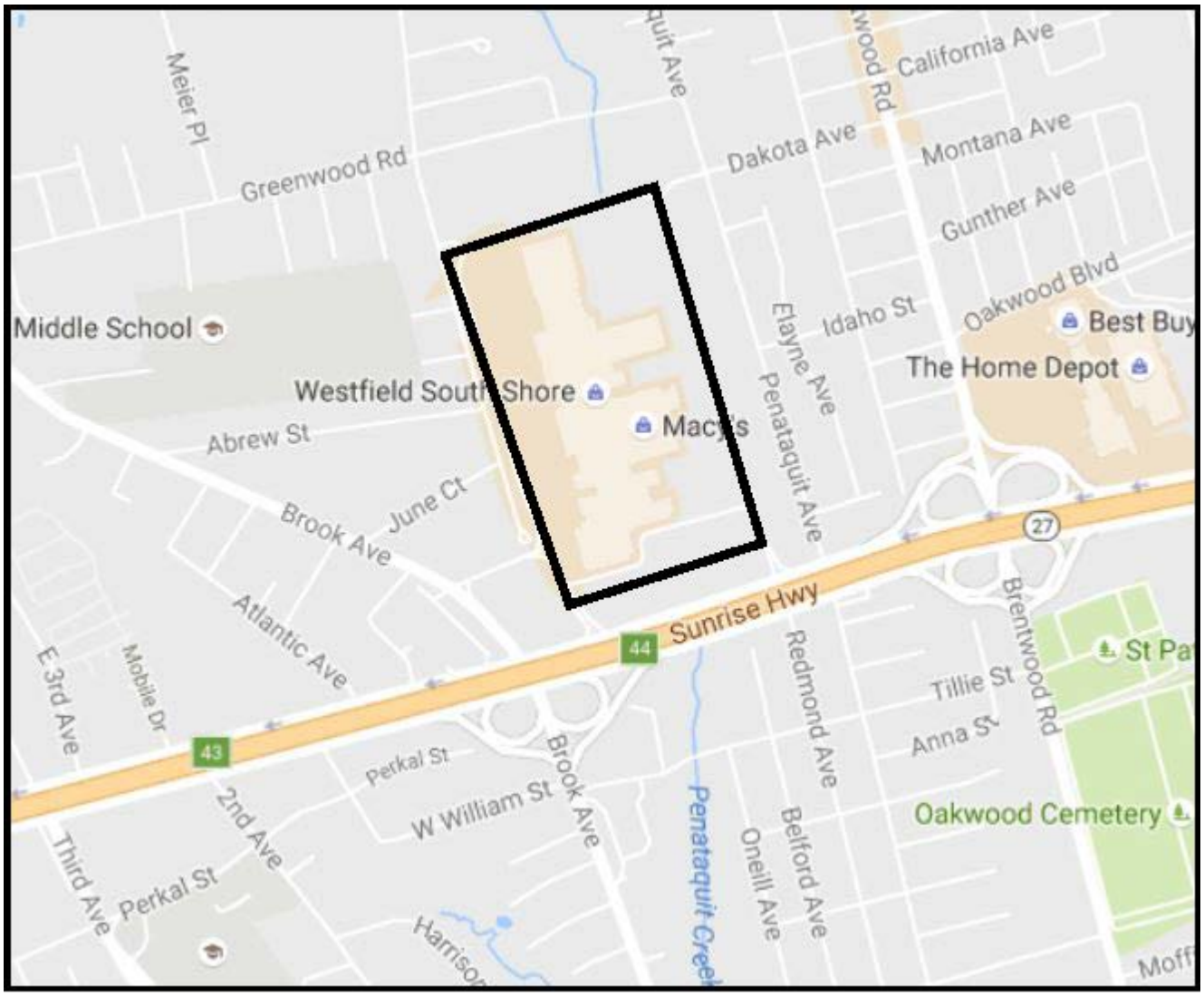
In all of the network areas, only copper conductors may be installed.

To avoid any misunderstanding, complete specifications and voltage characteristics must be obtained from the appropriate Distribution Design Department division office before planning or starting any work in any of these areas.

SECONDARY NETWORK AREA MAPS

Table of Contents

BAYSHORE



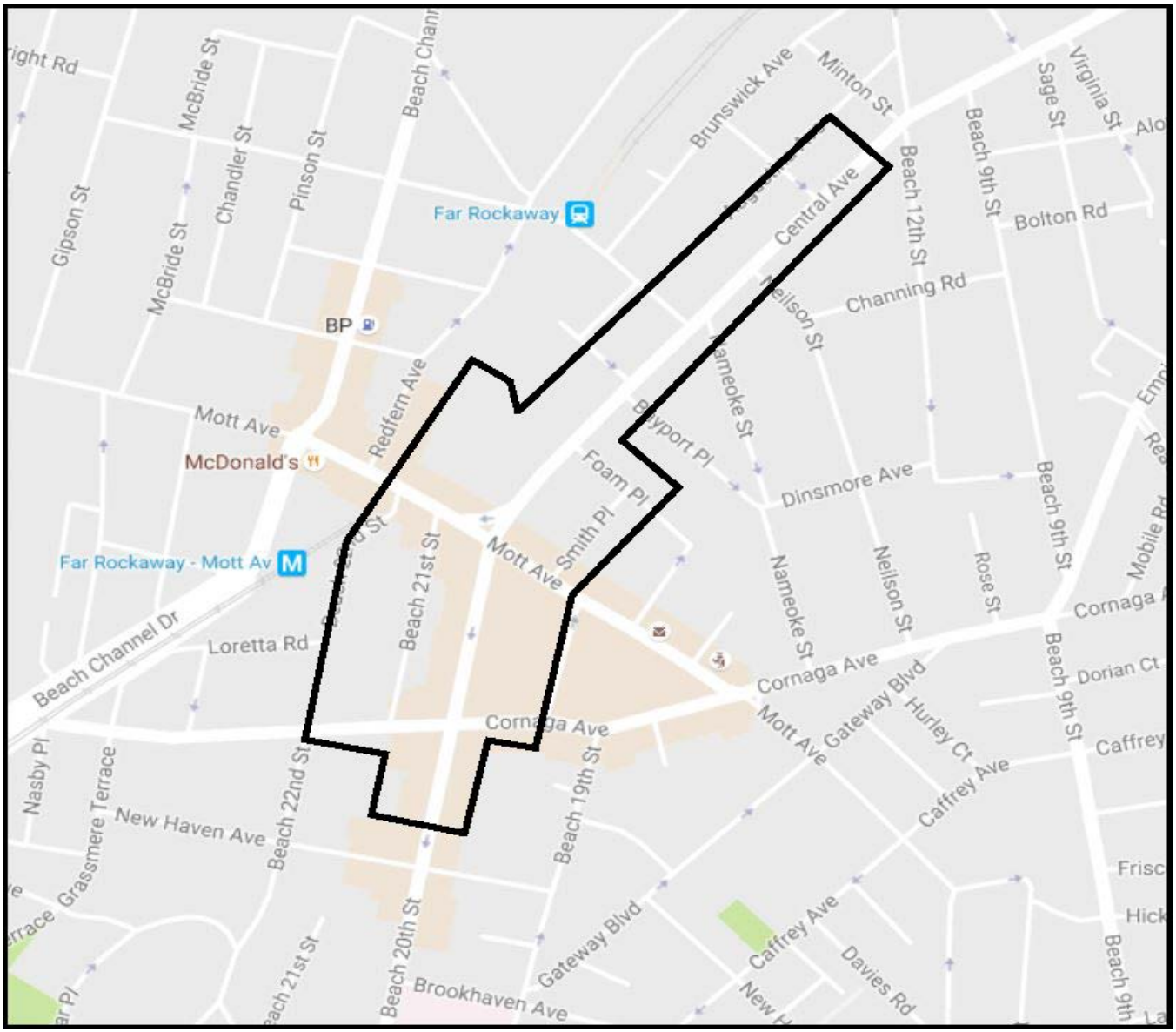
GRID ATLAS

049-42, 049-43

NETWORK AREA MAPS

1 OF 18

FAR ROCKAWAY



GRID ATLAS

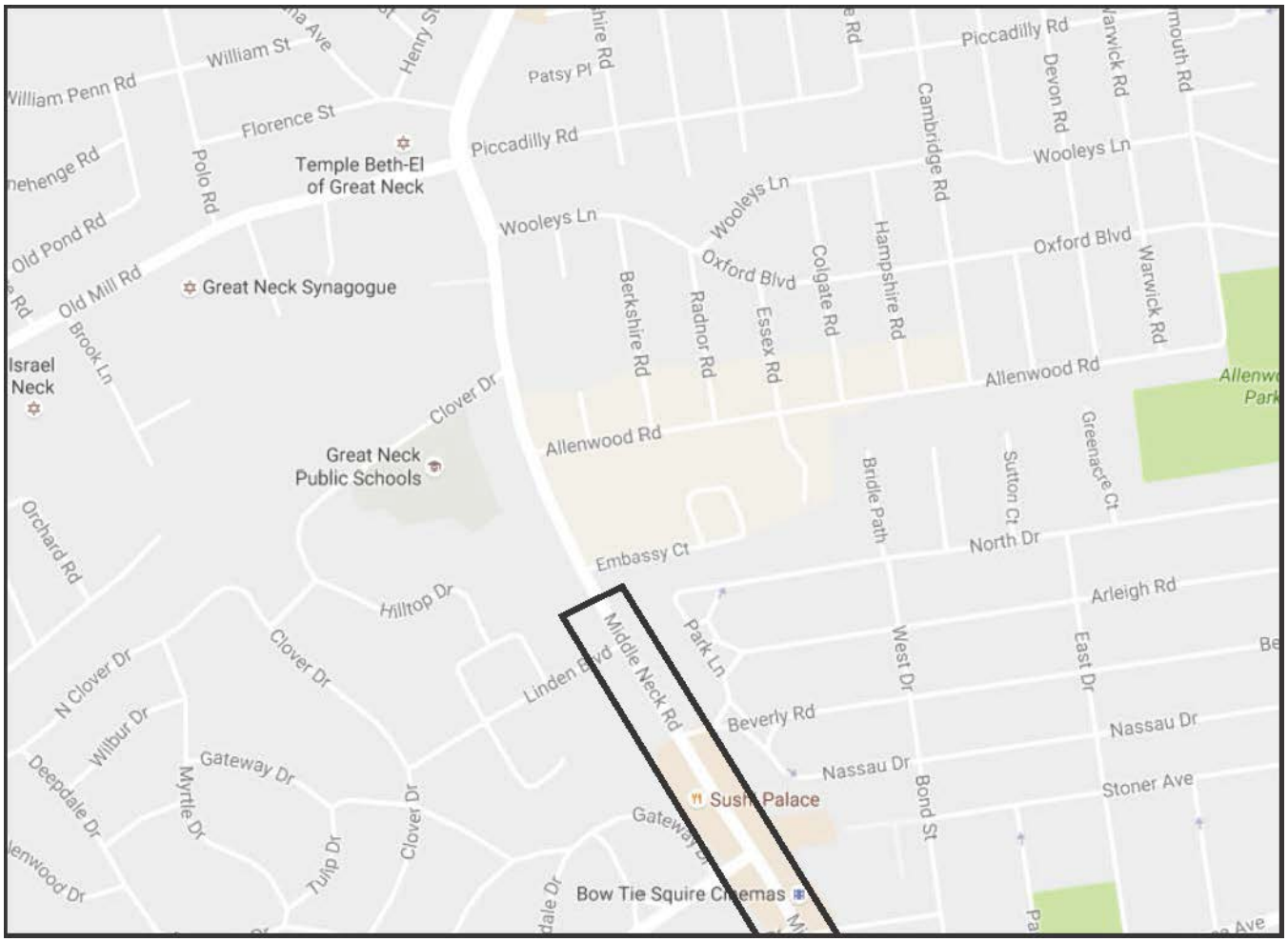
010-18, 010-19, 010-26,010-27

NETWORK AREA MAPS

2 OF 18

GREAT NECK

(SHEET 1 OF 2 - SEE MAP 4)



GRID ATLAS

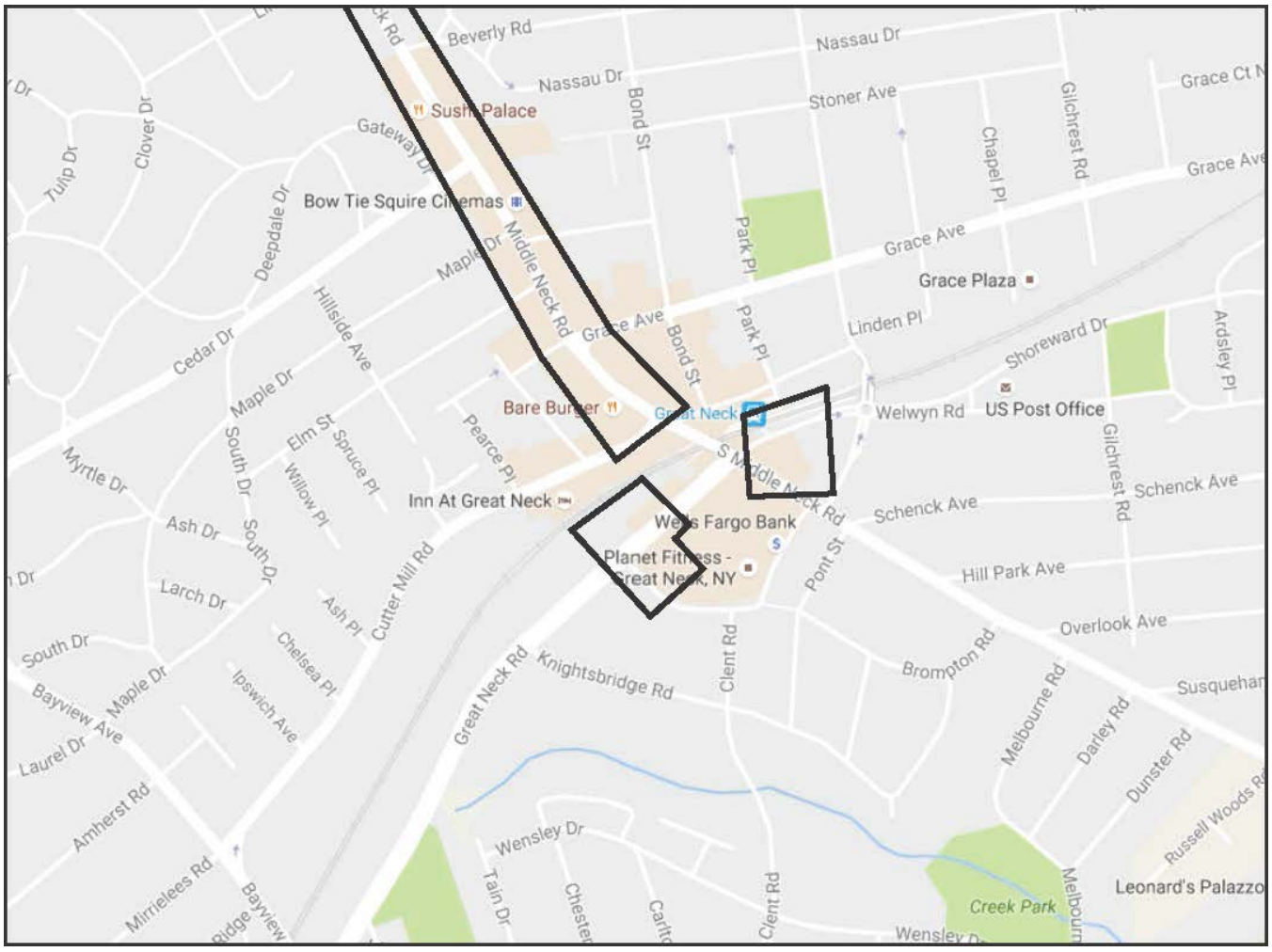
006-34

NETWORK AREA MAPS

3 OF 18

GREAT NECK

(SHEET 2 OF 2 - SEE MAP 3)



GRID ATLAS

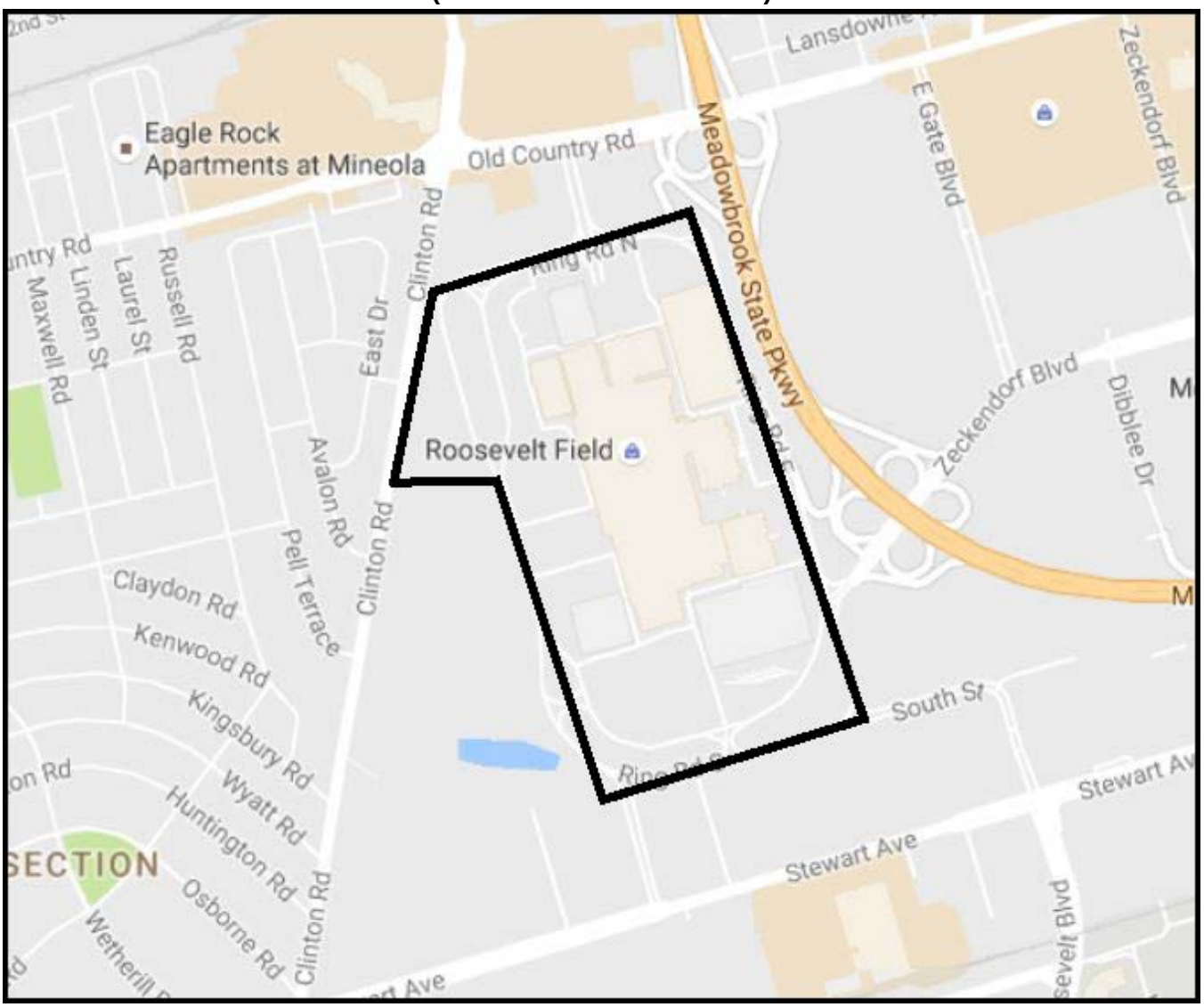
006-35, 006-43

NETWORK AREA MAPS

4 OF 18

GARDEN CITY

(ROOSEVELT FIELD MALL)



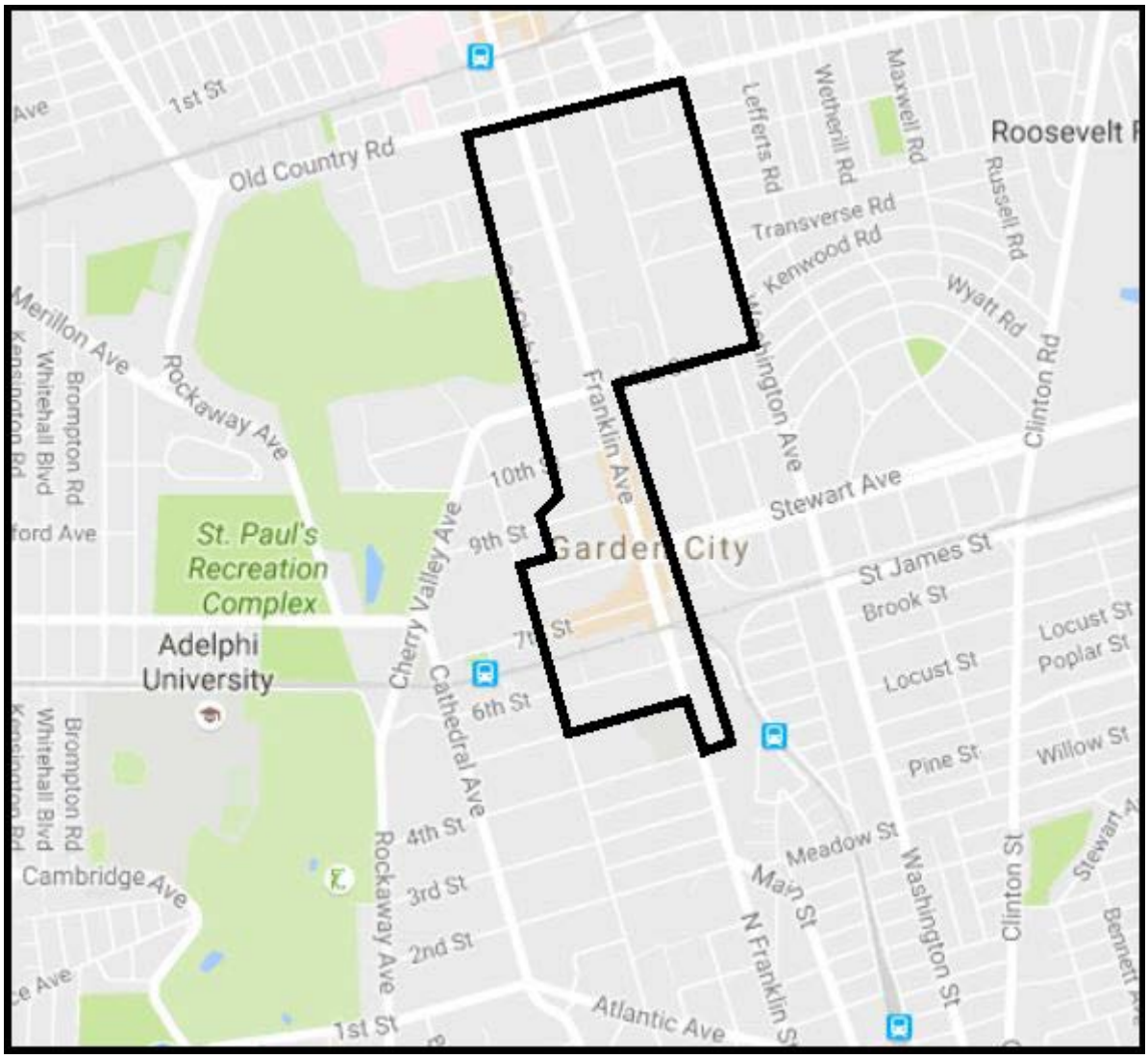
GRID ATLAS

015-51, 015-52, 015-59, 015-60

NETWORK AREA MAPS

5 OF 18

GARDEN CITY



GRID ATLAS

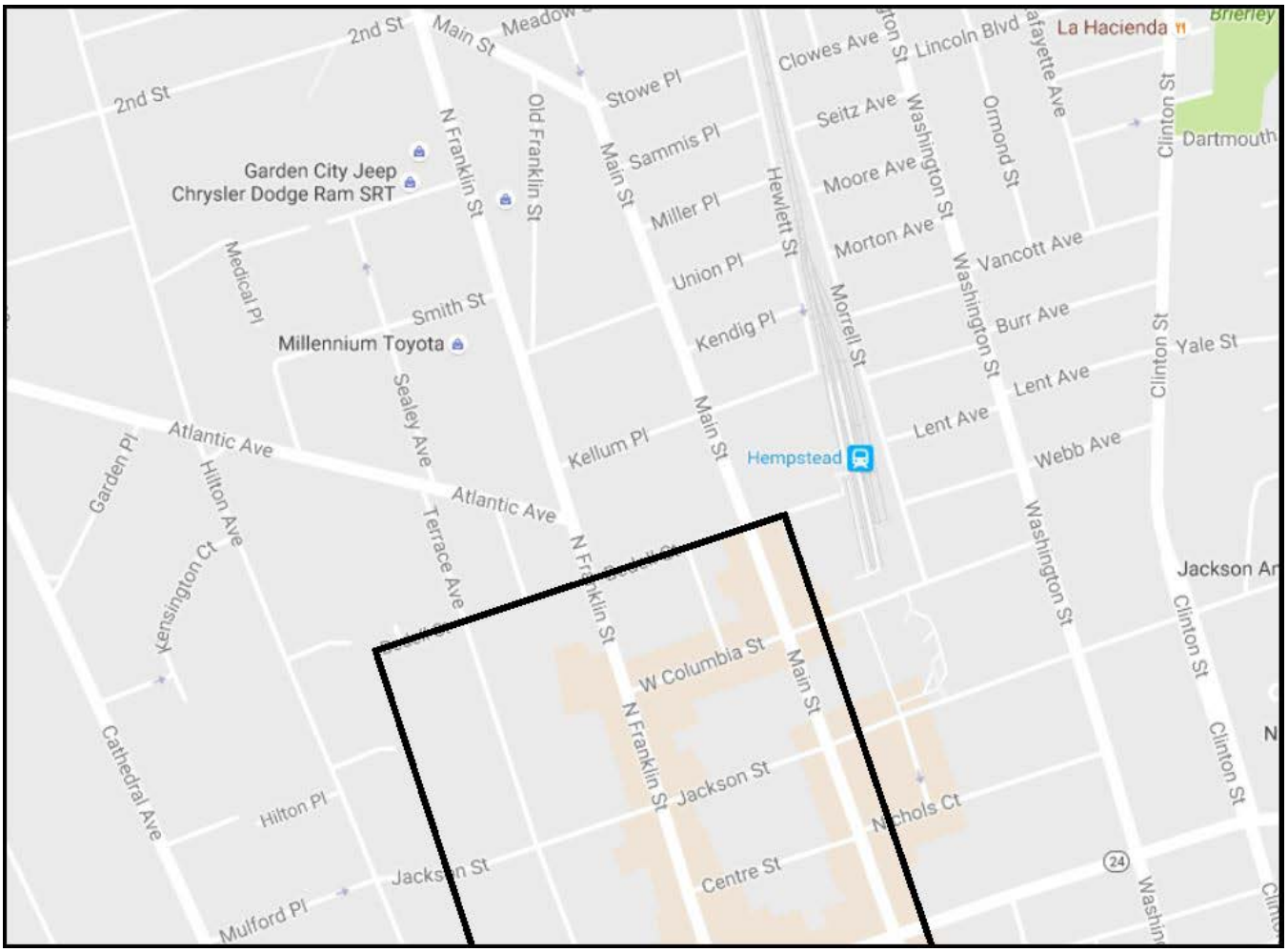
015-35, 015-36, 015-37, 015-43, 015-44, 015-45

NETWORK AREA MAPS

6 OF 18

HEMPSTEAD

(SHEET 1 OF 3 – SEE MAP 8 AND 9)



GRID ATLAS

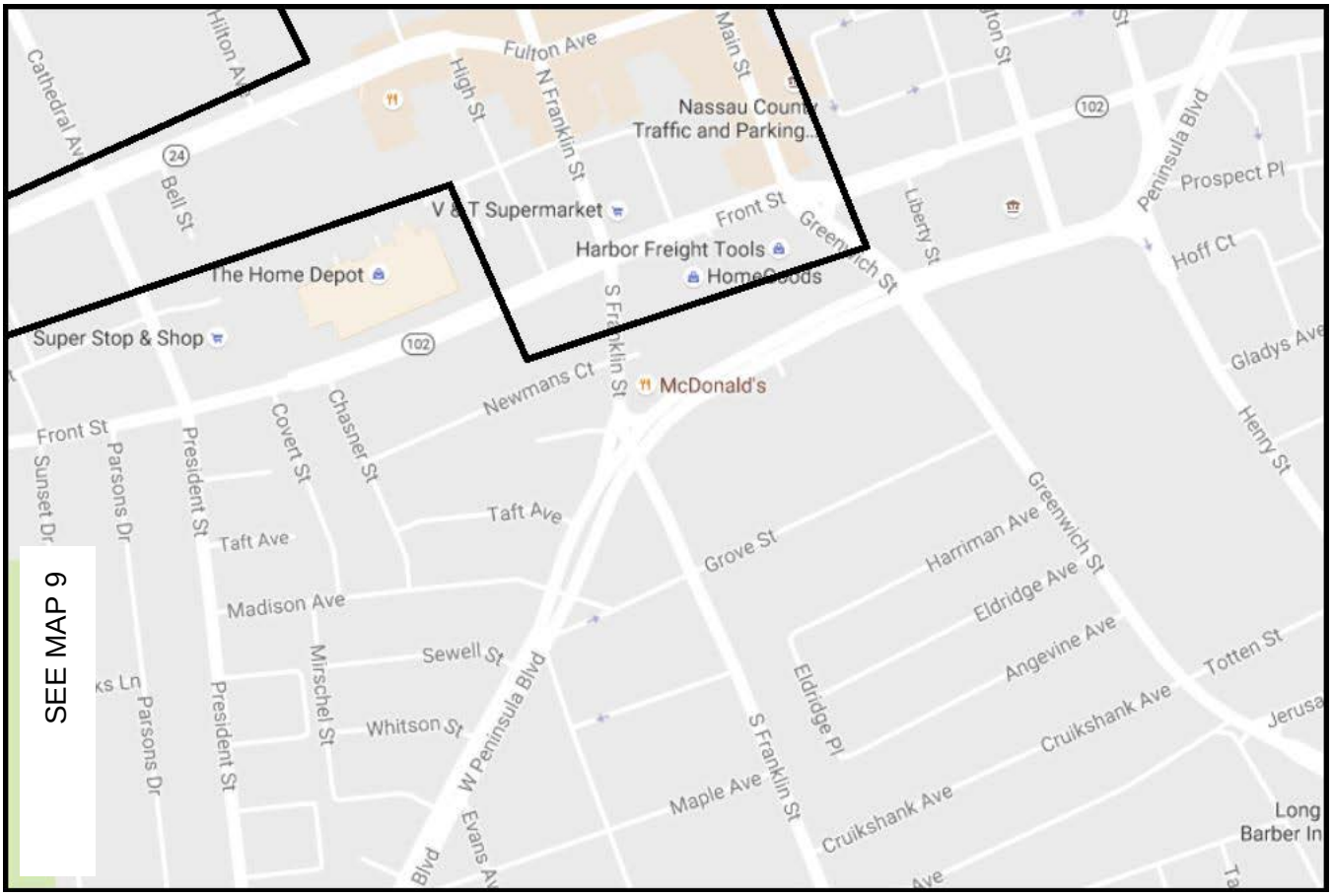
015-48

NETWORK AREA MAPS

7 OF 18

HEMPSTEAD

(SHEET 2 OF 3 – SEE MAP 7 AND 9)



GRID ATLAS

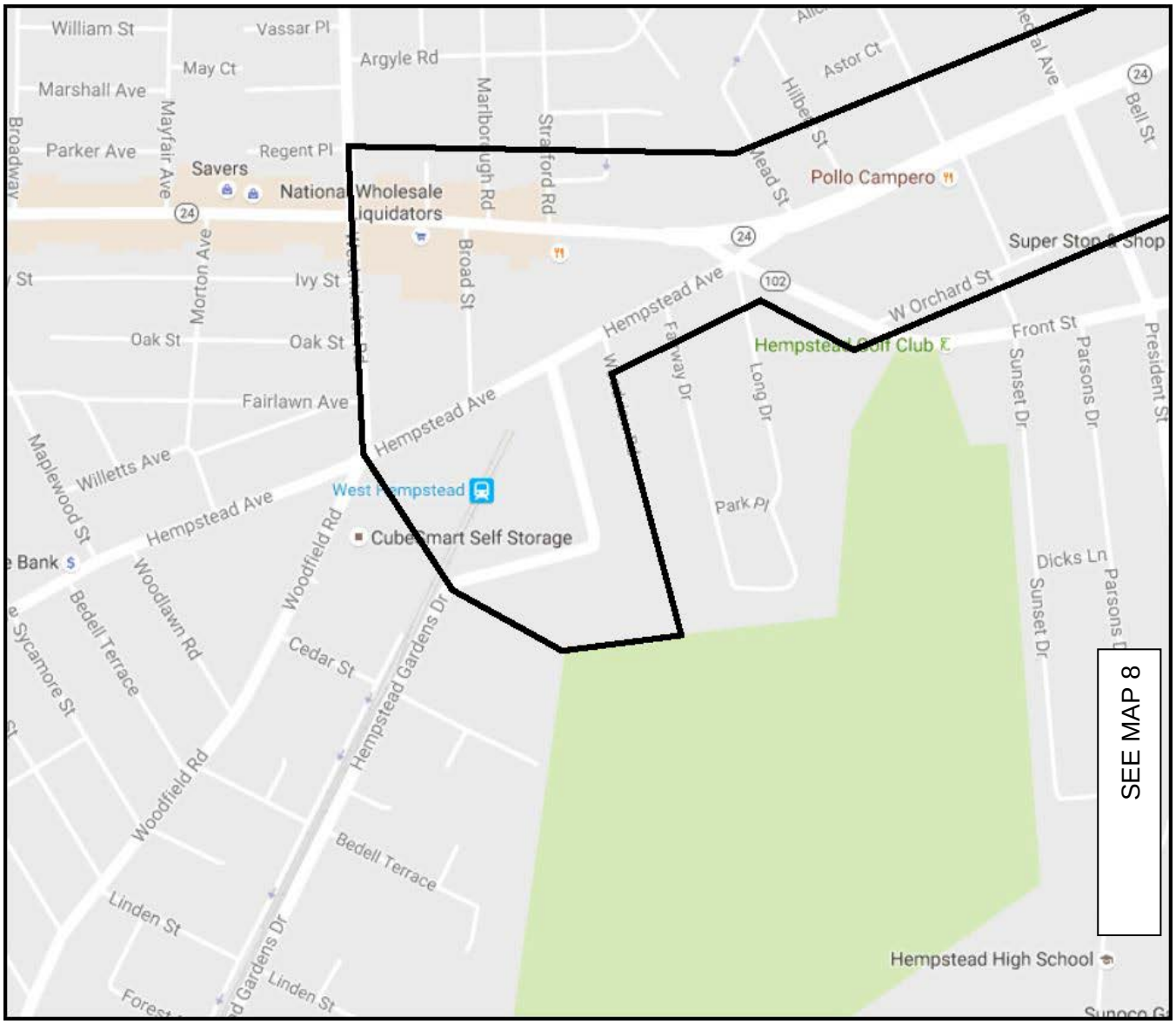
016-41

NETWORK AREA MAPS

8 OF 18

HEMPSTEAD

(SHEET 3 OF 3 – SEE MAP 7 AND 8)



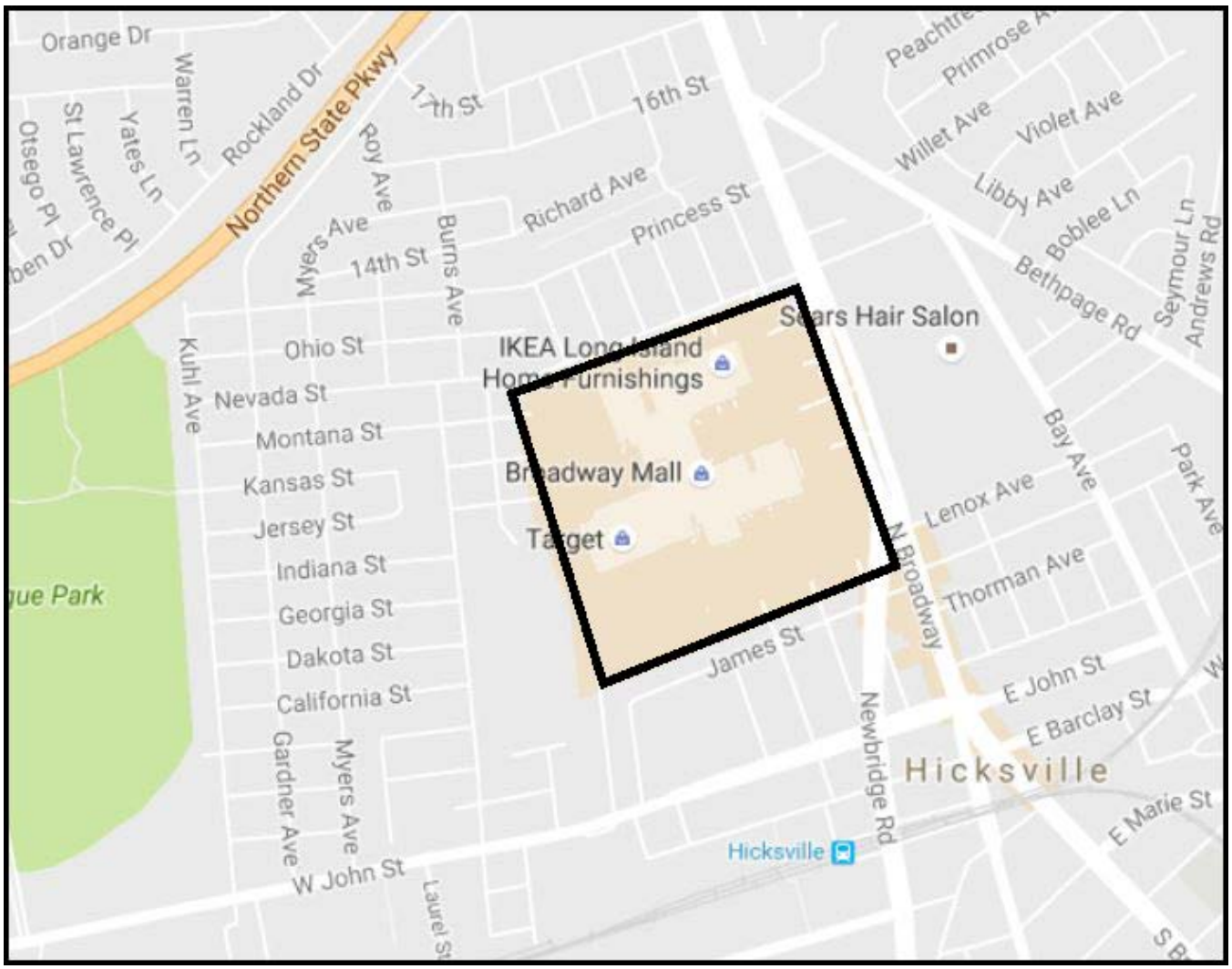
GRID ATLAS

016-33, 016-34, 016-41

NETWORK AREA MAPS

9 OF 18

HICKSVILLE



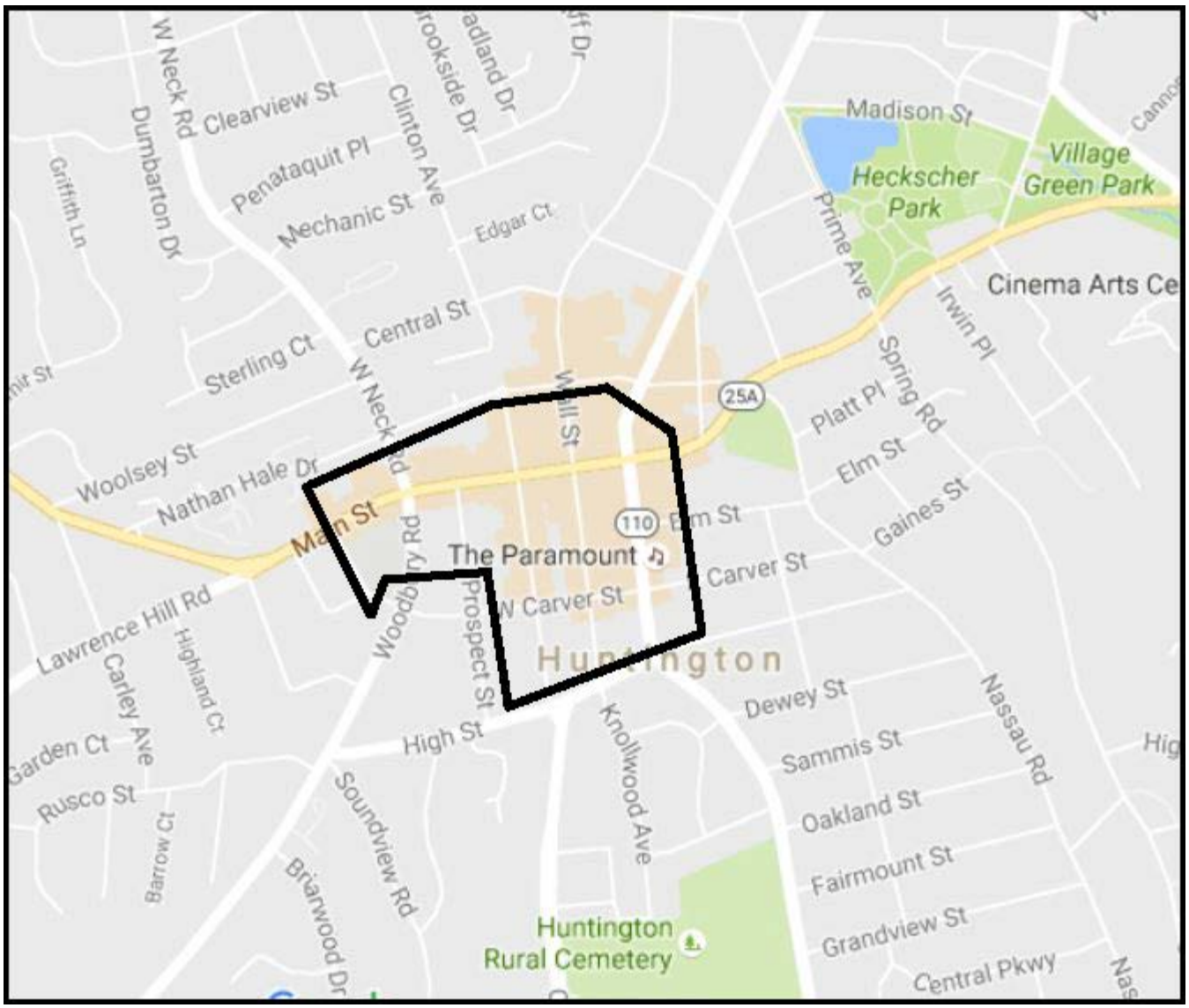
GRID ATLAS

022-45

NETWORK AREA MAPS

10 OF 18

HUNTINGTON VILLAGE



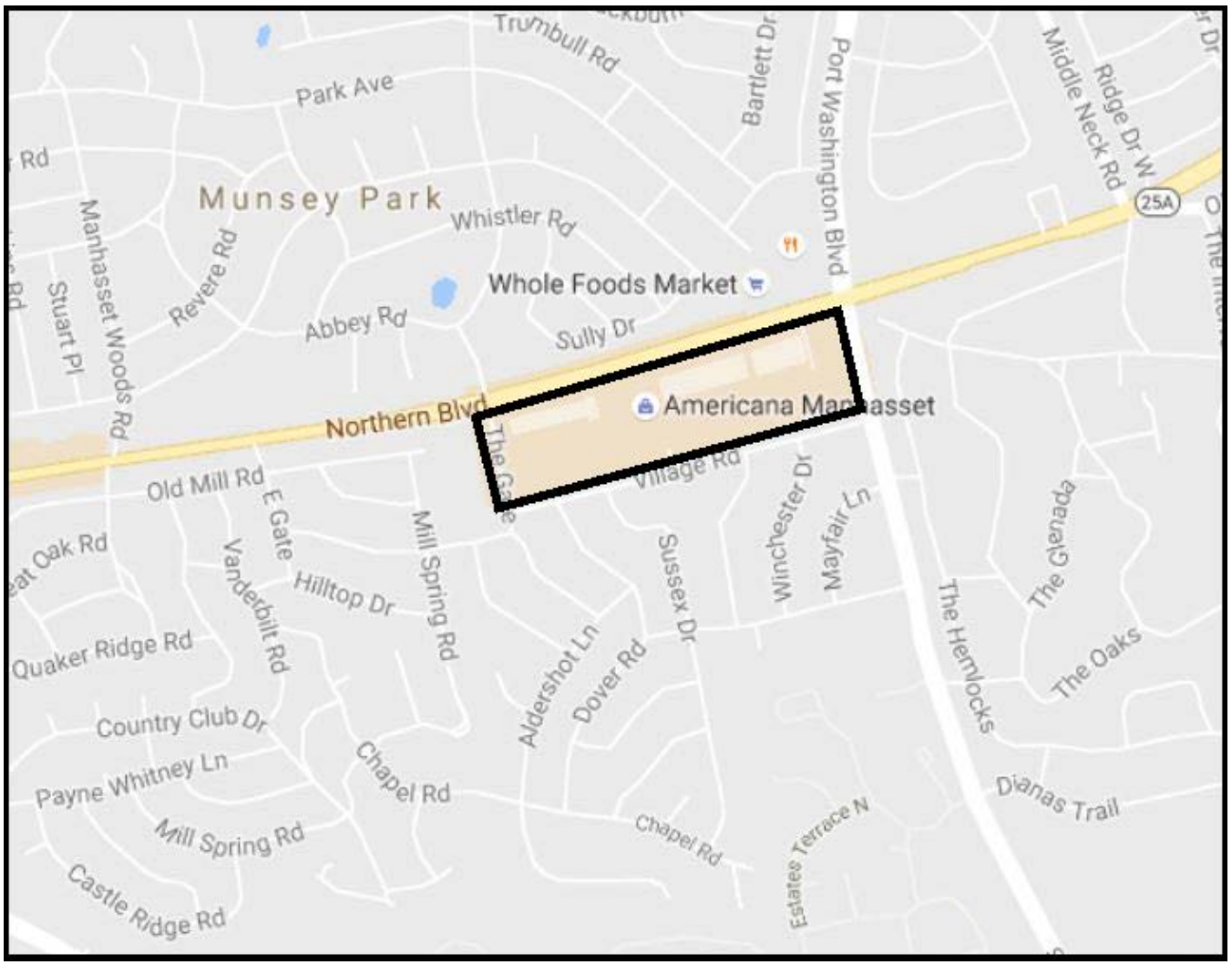
GRID ATLAS

029-44, 022-45, 022-52, 022-53

NETWORK AREA MAPS

11 OF 18

MANHASSET



GRID ATLAS

014-09, 014-10

NETWORK AREA MAPS

12 OF 18

ROCKAWAY PENINSULA

(SHEET 1 OF 2 – SEE MAP 14)

GRID ATLAS

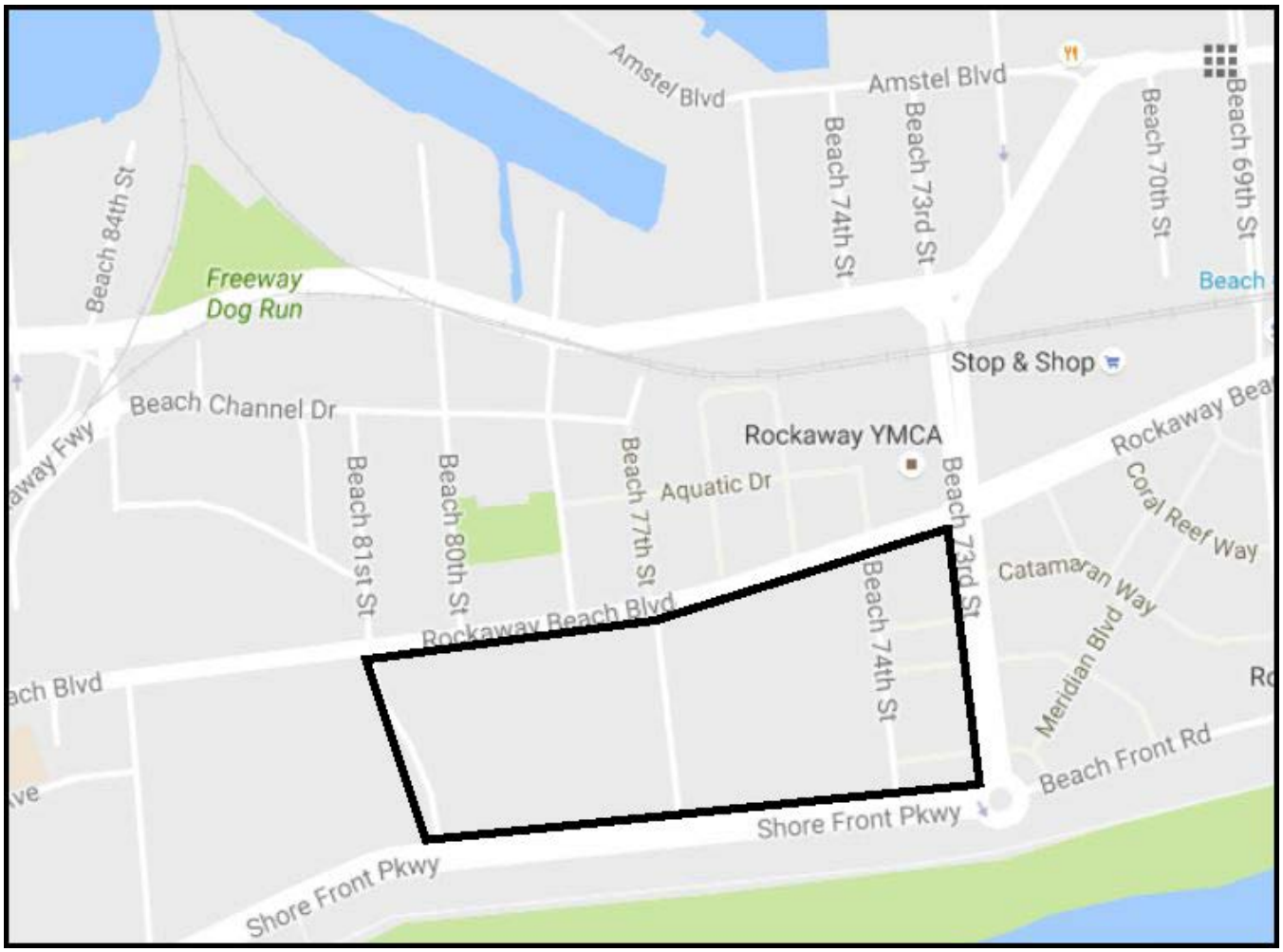
002-38, 002-39, 002-46, 002-47

NETWORK AREA MAPS

13 OF 18

ROCKAWAY PENINSULA

(SHEET 2 OF 2 – SEE MAP 13)



GRID ATLAS

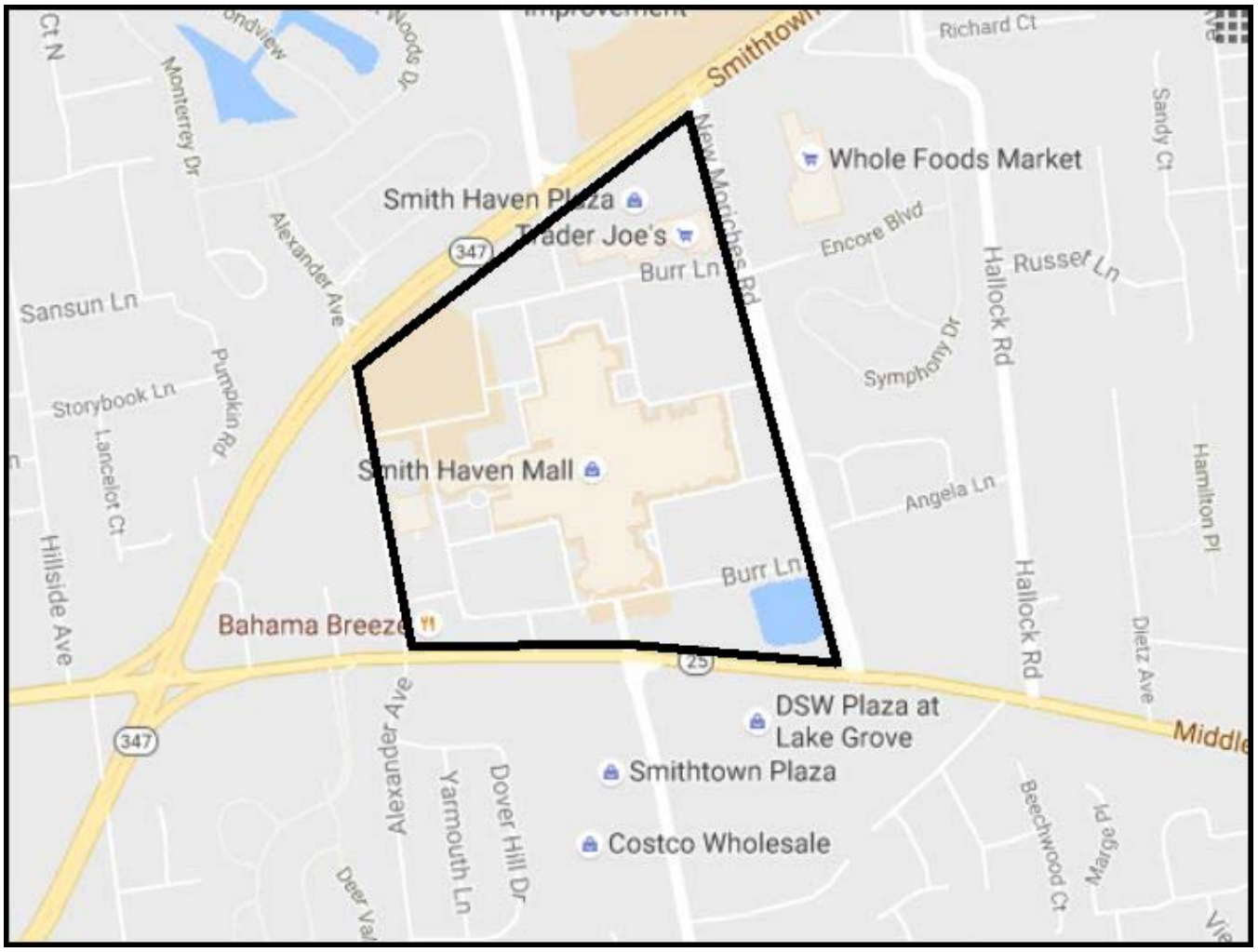
002-53, 002-54

NETWORK AREA MAPS

14 OF 18

SMITHTOWN

(SMITH HAVEN MALL)



GRID ATLAS

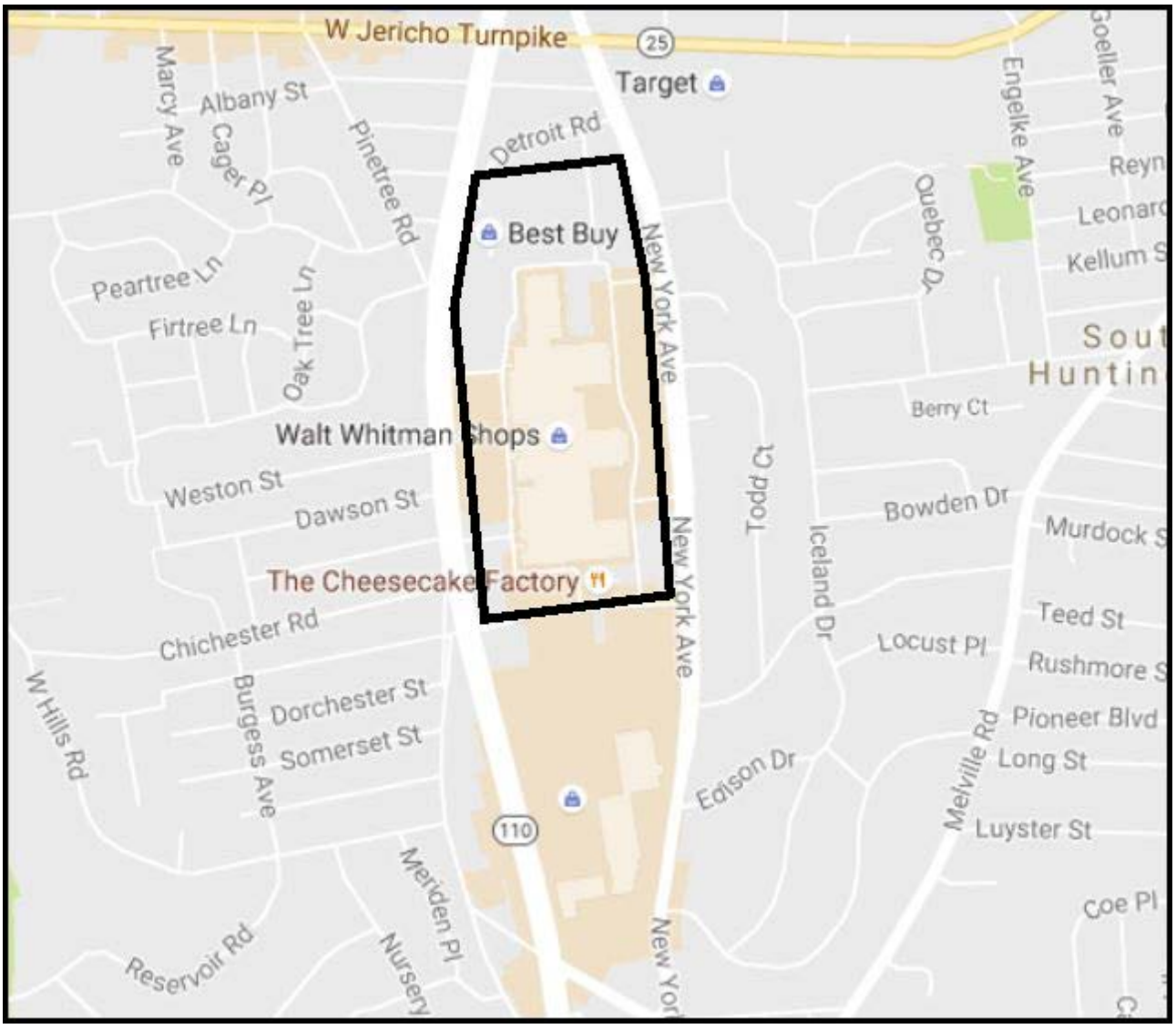
054-53, 054-61

NETWORK AREA MAPS

15 OF 18

SOUTH HUNTINGTON

(WALT WHITMAN MALL)



GRID ATLAS

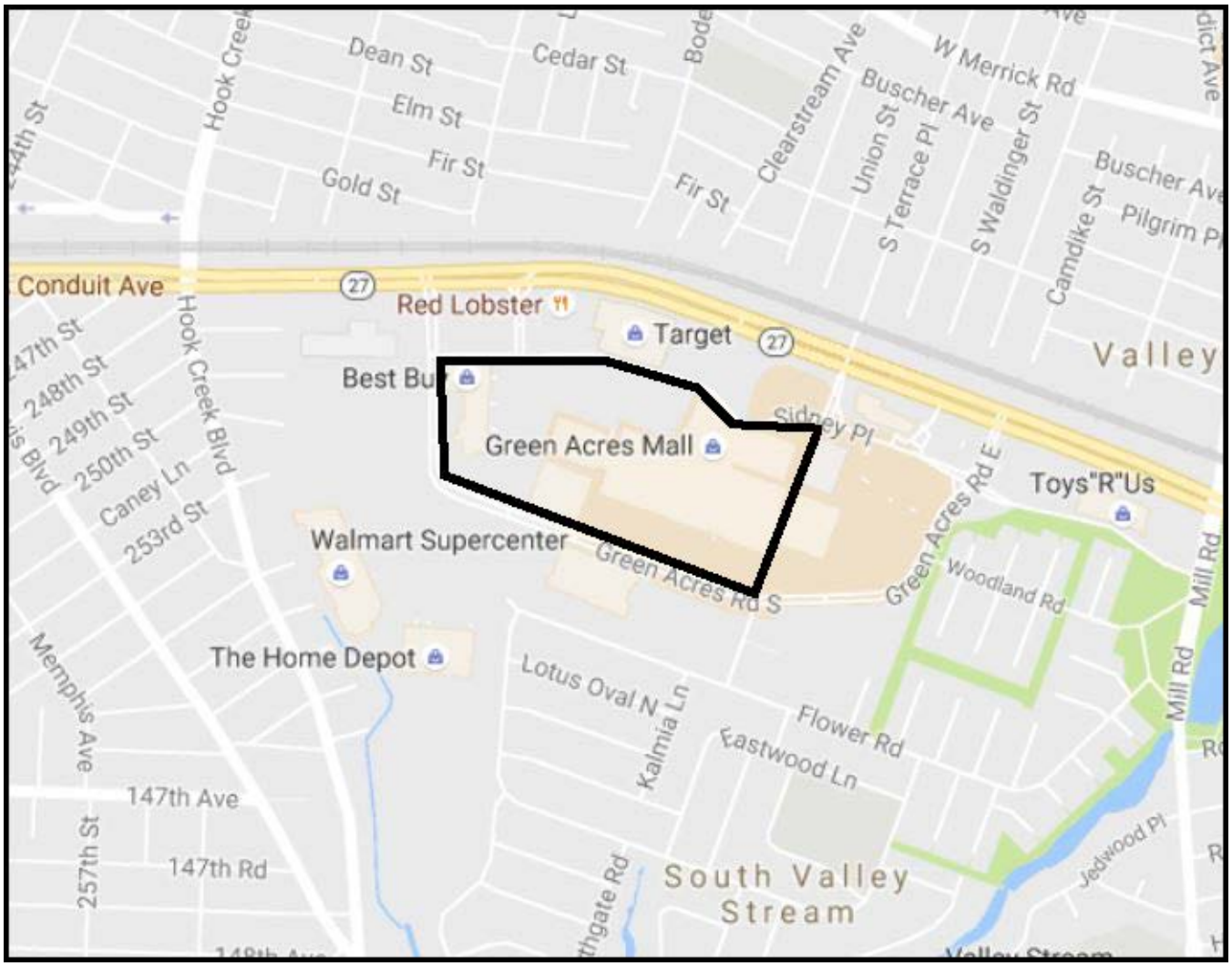
030-60, 030-61

NETWORK AREA MAPS

16 OF 18

VALLEY STREAM

(GREEN ACRES MALL)



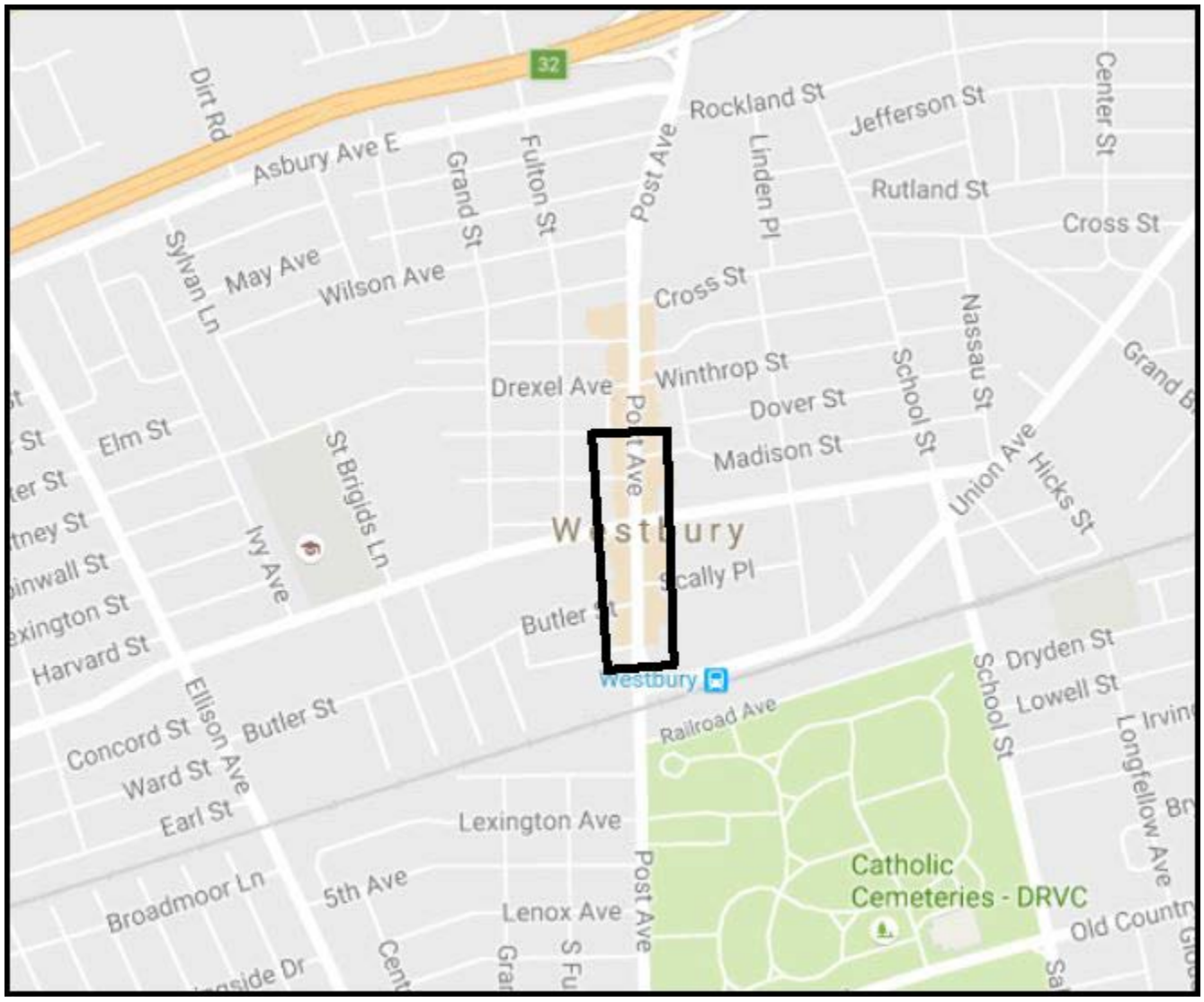
GRID ATLAS

008-48, 009-41, 009-49

NETWORK AREA MAPS

17 OF 18

WESTBURY



GRID ATLAS

022-08

NETWORK AREA MAPS

18 OF 18

PSEG LONG ISLAND

We make things work for you.

2017 Edition

www.psegliny.com