NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

2026 Edition

Effective January 1, 2026

NOVA SCOTIA POWER INC.
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2026 Utility Service Requirements

Summary of Changes

2026 Revision Effective: January 1st, 2026

Added, changed, or deleted text is indicated by ***bold italicized font.***

Clause	Revision	Action
1	***Consumer's service:*** ***All that portion of the consumer's installation from the service box or its equivalent to the supply service. This includes customer-owned equipment from the point-of-change-of-ownership to the main panel, such as the weatherhead, meter base, or service entrance conduit.***	Change
1	***Firewall:*** ***A type of fire separation of non-combustible construction that subdivides a building or separates adjoining buildings to resist the spread of fire and that fire-resistance rating as prescribed in this Code and has structural stability to remain intact under fire conditions for the required fire-rated time.*** ***Where occupancies of a building are separated by a firewall, the occupancies may be considered as separate buildings for the purpose of electrical service, in accordance with this document. Firewalls shall be constructed in compliance with the National Building Code and confirmed as such in writing by a recognized building inspector, architect, or professional engineer.***	Change
1	***Fire Separation:*** ***A construction assembly that acts as a barrier against the spread of fire.***	Change
1	***Supply services:*** ***Utility-owned equipment between the distribution system and the customer-owned consumer service equipment. Examples: triplex/quadruplex, service poles.***	Addition
3	***Before the construction of swimming pools, hot tubs, and other waterworks, consult the CE Code, Part 1 and the NSPI inspection department for more grounding and bonding requirements.***	Addition
5	***Customer is responsible for preparing a design indicating pole locations, the position of URD boxes, and the conduit system as per NSPI requirements.***	Addition
5.3	***Site Conditions*** ***Before the installation of a utility pole and/or anchor, the site should be graded to within 6 in of its final elevation. If significant grading is still required or existing equipment is preventing grade from reaching its final elevation, then Supply Authority approval must be obtained for the installation to proceed.*** ***If site condition requirements are not ready for NSPI to complete the installation during the scheduled time, then the Customer may be responsible for additional fees in accordance with NSPI standard utility rate structure.*** ***See Section 12 for site condition requirements for the accessibility of service entrances.***	Addition

6	***NSPI will supply no more than one supply service to a structure, unless the structure has been designated as a complex structure by the Supply and Inspection Authorities, except as described in Section 11 clause 3. Supply will be with standard voltage characteristics as specified in this section.*** When multiple supplies of different voltages or characteristics are requested for a single building (complex structure), approval ***shall*** be obtained from the Supply Authority by the Customer or their Agent. Approval from the Inspection Authority for designation as this type of structure ***shall*** also be obtained.	Change
10.2	***6) Notwithstanding paragraphs (1) and (2) above, larger overhead service ampacities may be permitted with Supply Authority approval. These are generally industrial or commercial buildings that are supplied from platform mounted utility transformers that are connected to the building by short conductors of large trade size. This type of installation is not preferred.***	Deletion
10.2	6) Services on which the required transformer capacity exceeds 225 kVA, three-phase, regardless of service voltage, will normally be supplied from a padmount transformer. Installation details for padmount transformers are in Section 14. Other transformer arrangements/designs ***may be*** possible ***at the sole discretion of the*** Supply Authority.	Change
11	1) One set of utility supply conductors ***shall be*** run to a residential multi-occupancy building.	Change
11	2) Where more than one set of utility supply conductors is run to a multiple occupancy building: ***a) The occupancies shall be firewall separated; and*** b) The occupancies shall be completely self-contained (i.e. no indoor access between occupancies); and c) The occupancies shall not be located one above the other; and d) The occupancies shall have a separate entrance with direct access to ground level.	Addition
12.3	1) A temporary service entrance is intended to be used for construction power. ***A temporary service entrance for non-permanent, short-term applications may be approved at the sole discretion of the Supply Authority.***	Change
12.3	2) Overhead temporary services may be mounted on: a) Construction shacks or trailers equipped with a service mast; or b) A Customer-owned pole in accordance with NSPI Standard drawing SS-ED-22M; or c) A Customer-owned tripod structure in accordance with NSPI Standard drawing SS-ED-23 or SS-ED-23A; ***Note: These structures shall not be used to support a span crossing a public roadway.*** or d) A utility secondary service pole; or e) A utility pole that is supporting primary voltage and is dedicated to one customer.	Addition
12.3	3) Where a temporary service is installed on a utility pole as permitted in clause 2 c) and d) above, it shall be installed with the weatherhead at a height that will place it in the secondary zone. ***Refer to the service connection request process (Section 16) and conduit assist procedure (Appendix E).***	Change
12.6	3) Service wires supplying one mobile home ***should*** not pass over the roof of any other home.	Change
12.6	4) Where the service wire crosses over ***the roof of the*** mobile home ***to which it is attaching***, the minimum clearance to the roof shall be ***1.0*** m in accordance with drawings SS-ED-24M and SS-ED-25M.	Change

12.7	***Services attached to sheds, similar small structures, and*** services for recreational vehicles shall be considered permanent regarding the requirements of the CE Code, Part 1. ***All*** services ***shall*** be installed on a structure that is also intended to be permanent***, notwithstanding Section 12.3***.	Change
12.7	Acceptable Customer-owned structures for an overhead supplied service include, but are not limited to, the options listed below. Other structures can be considered with the approval of both the Supply Authority and the Inspection Department. a) A small shed or building that is suitably anchored to the earth in accordance with the National Building Code of Canada (2015), clause 9.23.6.1 and 9.23.6.3 as applicable. ***b) A structure that sits on a poured concrete slab or concrete piles not less than 200 mm in diameter and anchored to the slab/piles at all corners. Refer to standard CSA Z240.10.1:19.*** ***c) Other small structures that are anchored directly to the earth using tie downs where anchorage complies with Section 7 of CSA Z240.10.1.*** d) A Customer-owned pole, as per Inspection Bulletin B-72-000 that meets the requirements of SS-ED-22M, except that the pole shall be a minimum of class 5 strength (as indicated by a manufacturer's stamp). The attachment point shall be able to withstand 750 lb of horizontal pull and provide adequate ground clearance for the service, as determined by the Supply Authority.	Addition
12.8	3) The point of attachment shall be such that it allows the utility to maintain a minimum design clearance of 1.0 m horizontal or 2.5 m vertical between the utility supply conductors and building surfaces that are readily accessible but not normally used (e.g. a roof that is accessed for maintenance ***of rooftop equipment*** only). ***For roofs that have no normal access point (e.g. they do not have a person-door or access hatch and there is no rooftop-mounted equipment such as telecoms, HVAC, or solar panels), vertical clearances may be reduced to 1.0 m at the sole discretion of the Supply Authority. Supply conductors shall not cross over structures to which they do not attach.***	Addition
12.8	***4) The utility supply conductors shall maintain a minimum clearance of 1.0 m horizontal from other rooftop equipment (chimneys, HVAC units, antennas, etc.) and shall not cross underneath rooftop structural equipment (guys, braces, span wires, etc.).***	Addition
12.8	7) Any Customer-owned service attachment structure (including poles), requires a suitable place to attach that can withstand 750 lbs of horizontal pull ***per service attachment to the structure.***	Addition
12.8	***10) The point of attachment*** on the building shall be in direct line of sight to the NSPI utility pole as chosen by the Supply Authority. ***It shall additionally provide sufficient horizontal clearance such that the utility supply conductors in positions of swing do not rub against the building as determined by the Supply Authority.***	Addition
12.8	11) The service attachment shall be located on the building side closest to the NSPI service pole. In cases where the service cannot be accessed by an NSPI bucket truck, the service will be accessed via ladder. Attachment points that are to be accessed via ladder ***should*** be no further than 1.0 m (3 ft) back from the building face closest to the NSPI service pole***, unless otherwise approved by the Supply Authority.***	Change
12.8	***13) For all new construction, any service mast that protrudes above the roofline should be accessible by a bucket truck (see clause 9 above for bucket truck accessibility requirements). Supply Authority approval is required in situations where bucket truck accessibility is not possible.***	Addition

12.8	16) If the point of attachment to a service mast exceeds 1.1 m above the roof line ***or if there is more than one attachment to a service mast***, then the mast shall be guyed or braced. ***Where two service masts are used, they shall be in accordance with NSPI standard SS-ED-32***.	Change
12.9	2) Multiple service weatherheads for a single customer on a building shall be located within 300 mm of each other to allow for connection to a single set of utility supply conductors. ***A maximum of 2 power weatherheads is permitted per supply service.***	Change
12.10	NOTES: a. Prior approval of the Supply Authority is required for installations in accordance with clauses 2, 3, and 4 above. Approval shall include a completed Safe Clearances Report. ***Refer to Appendix E.***	Addition
13.3	***2) As-builts shall be provided for all underground primary and secondary constructions in CAD and pdf format.***	Addition
13.3	4) Final grade shall be known and, if at all possible, rough final grade established prior to the installation of the URD box. ***Refer to Clause 5.3 for more details.***	Addition
14.4	7) The standard duct size shall be 100 mm. When the equivalent of more than three 90-degree bends are required between pulling points, or the duct run is in excess of 90.0 m in length, 125 mm duct shall be used. ***The number of bends may only be increased after approval by NSPI.***	Addition
14.4	12) A ductbank shall not run directly above or below other underground systems such as water, sewer, or communications. An electrical ductbank may cross other underground systems at right angles if a minimum separation of ***300*** mm is maintained***, unless the crossing is a pipeline in which case a separation of 600 mm is required***	Change
14.4	13) Under some conditions, it will be necessary to place some reinforcing steel in the ductbank. Typical examples include fluid or unstable soil conditions or where a ductbank passes under a retaining wall or building foundation. ***For ductbanks requiring rebar, the rebar design shall be completed by a Professional Engineer. Rebar shall not encircle the conduits. Duct sections shall be tied together with rebar.*** Details of the proposed installation must be approved by NSPI.	Addition
14.5	It is recommended that transformers be located as far as practical from buildings, school yards, and other occupied areas. ***The transformer should maintain a 3.0 m clearance from the curb and 2.0 m clearance from any driveway or sidewalk.*** Padmount Transformers shall be installed at least 3.0 m horizontally away from any utility pole, anchor, overhead primary line, or any combustible surface or material on a building.	Change
14.8	3) The area surrounding the transformer shall be kept clear of any obstructions (bushes, trees, posts, etc.) for a distance of ***3.0 m from the transformer door/hood side and*** 1.0 m out from all ***other*** sides of the concrete base.	Addition
14.8	***7) Transformer Pad requirements shall be as follows:*** ***a. A regular pad shall be used for:*** ***i. Up to 5 runs of 250 kcmil/350 kcmil cables.*** ***ii. Up to 3 runs of 500 kcmil/600 kcmil cables.*** ***iii. Up to 1 run of 750 kcmil cable.*** ***b. A deep well pad shall be used for:*** ***i. 6 or more runs of 250 kcmil/350 kcmil cables.*** ***ii. 4 to 6 runs of 500 kcmil/ 600 kcmil cables.*** ***iii. 2 to 4 runs of 750 kcmil cables.*** ***c. For cable runs exceeding these limits, regional engineering shall be consulted.***	Addition

<table>
<tr><td>14.14</td><td>For the ground grid around manholes and pullpits, the customer shall be responsible for the external ground loop, while NSPI shall be responsible for the internal ground loop and connecting the two loops together.
The external ground loop should be 300 mm from the top of the manhole and shall maintain a 1000 mm clearance from the internal ground loop on all four corners. The internal ground tie should be 1500 mm from the bottom of the manhole.
The external ground loop shall form one complete loop around the manhole and be connected to the internal ground loop at two locations. The internal ground loop shall form one complete loop inside the manhole and be connected to the ground wall.</td><td>Addition</td></tr>
<tr><td>15.2</td><td>2) Normally, meter sockets are to be located on the outside of the building for up to a maximum of six meters (refer to NS Electrical Bulletin 2014-02). Utility approval is required for meter sockets to be located inside of buildings with the exception of multiple occupancy buildings with more than six meter positions.</td><td>Addition</td></tr>
<tr><td>15.2</td><td>5) A clear working space of 1.0 m minimum shall be provided in front of all meter panels, free of any temporary or permanent obstruction, including vegetation. Passageways and working space around electrical equipment shall not be used for storage and must be kept free from obstruction. Refer to CE Code, Part 1, Rules 2-300 through 2-322 dealing with these and related items.</td><td>Addition</td></tr>
<tr><td>15.6</td><td>Metering Services table revised.</td><td>Change</td></tr>
<tr><td>Appendix B</td><td>4U-7M, 6U-ED-24M, 6U-ED-25M, 6U-ED-26M, 7U-ED-21M, 8U-ED-35M, 8U-ED-36M, OU-ED-22, SS-ED-23, SS-ED-23A, SS-ED-32</td><td>Change</td></tr>
<tr><td>Appendix B</td><td>6U-ED-12M, 6U-ED-13M, 6U-ED-22M, 6U-ED-23M, 6U-ED-28M, 6U-ED-29M, 6U-ED-38M, J-ED-15M, J-ED-36M, SS-ED-30M</td><td>Deletion</td></tr>
<tr><td>Appendix C</td><td>4U-11M, 4U-12M</td><td>Change</td></tr>
<tr><td>Appendix D</td><td><table><tr><td>C1080</td><td>CONDUIT, RIGID PVC, 45° SWEEP BEND, 16” RADIUS, 4” DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3</td><td>SCEPTER EE5545</td></tr></table></td><td>Addition</td></tr>
<tr><td>Appendix E</td><td>Conduit Assist Procedure</td><td>Addition</td></tr>
</table>

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Preface

The Utility Services Requirements book, as compiled by Nova Scotia Power Incorporated (NSPI), is intended to be a reference that will assist customers, both new and existing, in obtaining a service connection or a change to a service connection to the NSPI system. Included are copies of NSPI standards, as well as regulatory and other requirements that customers and/or their representatives must complete/comply with before a service connection can be made.

This document does not replace or supersede any requirements that are presented by the Inspection Authority before, during, or after inspection.

This book is current at the time of publishing. If there is a discrepancy between any drawing or sketch as included in this book and the same drawing or sketch as published by NSPI in a Standards document, the published standard shall be assumed to be correct. NSPI Distribution Engineering staff shall make all interpretations of standards and requirements, and these shall be final. Such interpretations may vary among different installations as required by site specific conditions.

Any and all deviations from the requirements contained in this book must be approved by the Inspection Authority and/or NSPI Distribution Engineering staff.

The designs and clearances contained in the NSPI Standards Manuals for Overhead and Underground Systems have been developed for the practical construction and operation of the NSPI distribution system. In some instances, they may exceed the applicable standards of the Canadian Standards Association (CSA) as has been deemed appropriate by NSPI.

Where any third party, person, or property is involved with incidents related to NSPI plant, it is the applicable CSA standard in effect at the time of construction that would normally apply. No responsibility is assumed or implied by NSPI for the applicability of any of the content of this book to systems that are owned by others, or in regard to their conformance with CSA or other National standards.

NSPI does not assume any responsibility for the application of these standards by anyone other than those employed by or acting on behalf of Nova Scotia Power Incorporated.

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0 Scope

This document sets forth the minimum utility requirements for electrical service in the province of Nova Scotia, for all areas served by Nova Scotia Power Incorporated (NSPI). It is not to be regarded as a design specification and is not all inclusive with respect to the installation of electrical equipment or wiring.

These utility service requirements are in addition to the Canadian Electrical Code (CE Code), Part 1, the NSPI Electrical Inspection Authority, and NSPI Utility Standards.

Construction shall not be undertaken based solely on this document, contact with both the Supply and Inspection Authorities is required for confirmation of site-specific requirements and/or conditions.

1 Definitions

Complex Structure:
A complex structure is any structure that would be difficult to supply with a single utility service due to its physical characteristics or electrical requirements. The designation of a structure as 'complex' must be mutually agreed upon by both the Supply and Inspection Authorities.

Customer:
A Customer is defined as a person or company who is receiving, intends to receive, or has received electrical energy or electrical services from NSPI. Requests for service may be made by someone acting legally on behalf of the person or company.

Commercial Driveway:
A commercial driveway is any temporary or permanent surface or accessway that is likely to be traveled by high-sided vehicles. Examples of high sided vehicles include but are not limited to large delivery vans (cube vans), transport trucks, buses, waste collection vehicles, bucket trucks, construction machinery, cranes, and commercial snowplows.

Consumer's Service:
All that portion of the consumer's installation from the service box or its equivalent to the supply service. This includes customer-owned equipment from the point-of-change-of-ownership to the main panel, such as the weatherhead, meter base, or service entrance conduit.

Firewall:
A type of fire separation of non-combustible construction that subdivides a building or separates adjoining buildings to resist the spread of fire and that has fire-resistance rating as prescribed in the National Building Code and has structural stability to remain intact under fire conditions for the required fire-rated time. Where occupancies of a building are separated by a firewall, the occupancies may be considered as separate buildings for the purpose of electrical service, in accordance with this document. Firewalls shall be constructed in compliance with the National Building Code and confirmed as such in writing by a recognized building inspector, architect, or professional engineer.

Fire Separation:
A construction assembly that acts as a barrier against the spread of fire.

Inspection Authority:
The Nova Scotia Department of Labour and Advanced Education have responsibility for enforcement of the Electrical Requirements in the Province of Nova Scotia. Nova Scotia Power's Electrical Inspection Department is authorized by their office to enforce the CE Code, Part 1 within NSPI's Service Area. The NSPI Electrical Inspection Department will also enforce the Utility Standards where applicable.

Inspection Department:
Within this document refers to the Nova Scotia Power Electrical Inspection Department.

Linked Homes:
Single dwellings that are separated by a short distance and are linked physically in some way (e.g. breezeway, carport, shared foundation, etc.).

Mobile Home:
A transportable, single or multiple section single family dwelling conforming to the CAN/CSA-Z240 MH Series at time of manufacture. It is ready for occupancy upon completion of set-up in accordance with required factory-recommended installation instructions.

Mobile Industrial or Commercial Structure:
Such structures are built specifically for commercial or industrial use, such as construction offices, bunk houses, wash houses, kitchen and dining units, libraries, TV units, industrial display units, laboratory units, and medical clinics.

Multiple Occupancy Buildings:
This includes strip malls or plazas, duplex, row and semi-detached housing, and other such structures.

Primary:
As used in this document in relation to voltages, primary means voltages in excess of 750 V.

Safe Clearance Report:
A power services safe clearance report is a detailed report identifying any potential safety issues/hazards to the requesting party who is required to complete work in close proximity of NSPI plant (lines or equipment). A copy of this report is provided to the requestor. Contact NSPI's call center at 1-800-428-6230 to request a safe clearance report.

Service Box:
An approved assembly consisting of a metal box or cabinet constructed so that it may be locked or sealed, containing either service fuses and a service switch or a circuit breaker, and of such design that either the switch or circuit breaker may be manually operated when the box is closed.

Service Entrance:
The consumer owned conduit, conductors and/or cables, from the Supply Authority connection point to (but not including) the meter base.

Supply Authority (interchangeable with Utility):
Nova Scotia Power, having the authority to supply electrical energy within its service area.

Supply Services:
Any one set of conductors run by a supply authority from its mains to a consumer service. This includes utility-owned equipment between the distribution system and the customer-owned consumer service equipment.

Utility Approval:
Written or verbal approval from the Utility.

Utility Pole:
All poles on which NSPI has distribution plant.

Utility Supply Conductors:
This term refers to the utility-owned conductors connecting the Consumer's Service conductors to the utility's system or transformer.

2 Deviations from Requirements

Supply Authority and/or Inspection Department approval is necessary for deviations from these requirements.

3 The Canadian Electrical Code

These Utility Service Requirements contain references to the CE Code, Part 1. This document does not, however, constitute a complete explanation of all CE Code rules, which apply to service entrances.

Before the construction of swimming pools, hot tubs, and other waterworks, consult the CE Code, Part 1 and the NSPI inspection department for more grounding and bonding requirements.

Where the CE Code refers to compliance with the requirements of the local Supply Authority, then NSPI shall be consulted for approval.

4 Interference with Utility Equipment

The Supply Authority does not permit unauthorized disconnection or removal of meters, meter seals, utility supply conductors or any of its equipment. Requests for disconnection or removal of utility equipment shall be made to the NSPI's call center at 1-800-428-6230. Unauthorized removal of NSPI revenue meters may result in charges for retesting of the meter.

5 Requirements for Service Connection

Service entrances shall be connected upon compliance with the following requirements:

a) Supply Authority approval of the service entrance location, capacity and provisions for metering equipment.
b) A valid wiring permit, for the installation, issued by NSPI.
c) Authorization for a utility connection from the Inspection Department.
d) Submittal of electrical plans shall comply with NSPI Electrical Inspection Bulletin B-2-014 “Submittal of Electrical Plans for Inspection Department Acceptance” and B-2-014.1 "Plans Review Submittal Form".
e) Compliance of the installation with all other requirements of this document and the CE Code, Part 1.
f) Establishment of all easement and right-of-way requirements as specified in Section 5.1.
g) A valid building permit when the municipal government with jurisdiction requires one for the facility being built by the customer.

Customer is responsible for preparing a design indicating pole locations, the position of URD boxes, and the conduit system as per NSPI requirements.

5.1 Easements and Right-of-Way Requirements

Where a service route as approved by the Supply Authority crosses private property, the Customer shall be responsible for supplying and clearing the route. The Customer has overall responsibility for obtaining any easements or licenses. They shall be responsible for any costs incurred by NSPI in acquiring easements or licenses where regulations do not allow the customer to obtain them on behalf of NSPI. The Customer shall provide NSPI with easements for all NSPI assets such as ductbank, URD, transformer installation and pole lines under the following conditions:

a) The installation crosses the Customer’s property.
b) The installation crosses property not owned by the Customer.
c) The installation supplies multiple Customers, regardless of whose property it is on.

Where an installation supplies one Customer and crosses only that Customer’s property, an easement is not generally required unless specifically indicated by the utility. Where an overhead installation is within 6.0 m [20 ft] to a property line, at the edge of a road right-of-way, an easement may be required as indicated by Supply Authority. Typical right-of-way width requirements are as follows:

a) for primary overhead facilities is 12.0 m [40 ft],
b) for secondary overhead facilities is 5.0 m [16 ft],
c) for primary underground facilities is 6.0 m [20 ft],
d) for secondary underground facilities is 3.0 m [10 ft].

The actual right-of-way dimensions and orientation details may vary by location. **The Supply Authority shall provide and confirm the requirements on a case-by-case basis.**

5.2 Changes in Service Requirements Before Connection

Should the Customer change the service voltage and/or the capacity requirements or any other electrical parameters of the new service after NSPI has installed or modified its facilities to meet the original requirements, then the Customer must pay all additional costs associated with reworking the newly installed or modified NSPI plant.

The customer is responsible for all costs associated with physical changes that arise after utility facilities and equipment are planned, whether or not they have been installed, according to the original site layout.

5.3 Site Conditions

Before the installation of a utility pole and/or anchor, the site should be graded to within 6 inches of its final elevation. If significant grading is still required or existing equipment is preventing grade from reaching its final elevation, then Supply Authority approval must be obtained for the installation to proceed.

If site condition requirements are not ready for NSPI to complete the installation during the scheduled time, then the Customer may be responsible for additional fees in accordance with NSPI standard utility rate structure.

See Section 12 for site condition requirements for the accessibility of service entrances.

6 Supply Voltages

NSPI will supply no more than one supply service to a structure, unless the structure has been designated as a complex structure by the Supply and Inspection Authorities, except as described in Section 11 clause 3. Supply will be with standard voltage characteristics as specified in this section. When multiple supplies of different voltages or characteristics are requested for a single building (complex structure), approval shall be obtained from the Supply Authority by the Customer or their Agent. Approval from the Inspection Authority for designation as this type of structure shall also be obtained.

The Customer shall supply all transformation necessary to serve loads utilizing voltages different from that which is normally supplied by NSPI. The frequency of all supply voltages is 60 Hz.

Refer to Section 14 for requirements associated with service at primary voltages, which includes padmount transformer installations. Contact must be made with the Supply Authority for confirmation of the requirements for each particular installation.

6.1 Secondary Supply Voltages

The following are standard secondary and service voltages:

a) 120/240 V, single-phase, three-wire; or
b) 120/208 V, three-phase, four-wire grounded wye; or
c) 347/600 V, three-phase, four-wire grounded wye.

Where a high resistance grounded installation is requested, the configuration shall require approval by the Supply Authority and shall conform to the CE Code, Part 1.

Electric service may be provided to customers at other voltages with special permission from the Supply Authority. Existing non-standard installations shall be changed to conform with these requirements when alterations are made to the service. Consultation with the Engineering Department for the area in which the service resides is necessary.

7 Large Electric Loads

Operating large loads such as motors, electric furnaces, electric welders, some air conditioners and heat pumps, etc., can produce momentary voltage sag or 'flicker'. It is the responsibility of the Customer to ensure that electric loads which can produce momentary voltage sags or flicker are configured or controlled in such a way that sag or flicker is minimized.

The operating requirements of large loads should be given consideration during design of the service entrance. Consultation with the Supply Authority is required to ensure the adequacy of the Utility supply equipment. Failure to do so will result in charges to the customer for costs associated with any reworking of newly installed NSPI equipment that is required.

8 Electric Motors

8.1 Motor Sizes

1) The maximum motor sizes permitted for starting across the line shall be:
   a) Single-phase, 5.6 kW (7.5 horsepower)
   b) Three-phase 120/208 V, 11.2 kW (15 horsepower)
   c) Three-phase 347/600 V, 30 kW (40 horsepower)

2) Larger motors are permitted where:
   a) The Customer installs reduced voltage or variable frequency start; or
   b) Upon examination of the utility's system capabilities and the motor's characteristics, Utility approval for starting across the line is granted.

8.2 Motor Protection

The Customer shall be responsible to provide all motor protection as per the CE Code.

Note: Normal overload protection will likely not provide adequate protection during loss of one supply phase. Loss of one phase of the utility supply (or of the building distribution system) may cause overheating and damage to three-phase motors. Therefore, protection against the loss of one supply phase is recommended and shall be the responsibility of the customer.

9 Transfer Equipment for Standby Power Systems

Transfer switches for transferring the source of power from the utility system to a standby power system shall meet the requirements of CE Code 14-612. The switch shall not allow the two sources to operate in parallel to prevent energizing or back-feeding a de-energized utility distribution line on which crews may be working.

Where a design is such that a transfer switch will momentarily connect the Utility Supply and Generator Supply together in a synchronized manner using a closed transition transfer switch, the Utility shall be consulted prior to doing so and the installation shall meet the requirements as prescribed by the Utility prior to placing the transfer switch into service.

Other devices such as purpose-built meter base accessories that accommodate the connection of standby generators are also acceptable and shall have the approval of the Inspection Authority.

10 Service Capacity

10.1 Single-Phase

The maximum single-phase service entrance capacity shall be 600 A unless permitted by the Utility in accordance with paragraph (4) below. Except as permitted by paragraph (4), the maximum single-phase service entrance shall be sized as follows:

a) 600 A for a service switch rated at 80% capacity
b) 500 A for a service switch rated at 100% capacity

1) Single-phase overhead service entrance capacity shall not exceed 400 A unless approved by the Supply Authority. Single-phase overhead service entrances of 600 A may be permitted at the sole discretion of the Supply Authority.

2) The maximum single-phase underground service entrance capacity when terminating at a utility pole shall be 400 A and may be increased to 600 A at a service pole equipped with primary conductors. These shall have a maximum of two runs per leg and a maximum individual conductor size of 500 kcmil.

3) The maximum single-phase underground service terminating in a URD box that is supplied from an overhead or padmount transformer shall be 400 A. These shall have a maximum of two runs per leg and a maximum individual conductor size of 500 kcmil.

4) An 800 A single-phase underground service terminating at a padmount transformer may be permitted with Supply Authority approval. Installation shall be in accordance with Section 14.

10.2 Three-Phase

1) The maximum overhead three-phase, 120/208 V service entrance capacity shall be 600 A, provided the Customer's service entrance switch is rated at 80% of nameplate capacity. If the Customer's service entrance switch rated at 100% capacity, a padmount transformer shall be required, in accordance with Section 14. If the Customer has a 100% rated switch, consult with Engineering.

2) The maximum permanent overhead three-phase, 347/600 V service entrance capacity shall be 200 A, with either 80% or 100% rated Customer's service entrance switch.

3) The maximum three-phase, 120/208 V service entrance capacity run underground terminating at a utility pole shall be 600 A. The maximum size Customer service conductor shall be 500 kcmil, with a maximum of two runs per phase.

4) The maximum permanent three-phase, 347/600 V service entrance capacity run underground terminating at a utility pole shall be 400 A, provided the Customer's service entrance switch is fused at maximum of 250 A. The maximum size Customer service conductor shall be 500 kcmil, with a maximum of two runs per phase. If ampacity is rated higher see item 6).

5) The maximum temporary three-phase, 347/600 V service entrance capacity run overhead terminating at a utility pole shall be 400 A, provided the Customers service entrance switch is fused at maximum of 250 A. The service conductor shall be no more than 100.0 m total for all spans.

6) Services on which the required transformer capacity exceeds 225 kVA, three-phase, regardless of service voltage, will normally be supplied from a padmount transformer. Installation details for padmount transformers are in Section 14. Other transformer arrangements/designs may be possible at the sole discretion of the Supply Authority.

10.3 Largest Pole-Mounted Transformer, Single-Phase

The maximum size O/H single-phase transformer to be installed for new services will be 75 kVA.

If a transformer larger than 75 kVA is required, consult with Engineering.

11 Service to Residential Buildings (Single or Multiple Occupancy)

1) One set of utility supply conductors shall be run to a residential multi-occupancy building.

2) Where more than one set of utility supply conductors is run to a multiple occupancy building:

   a) The occupancies shall be firewall separated; and
   b) The occupancies shall be completely self-contained (i.e. no indoor access between occupancies); and
   c) The occupancies shall not be located one above the other; and
   d) The occupancies shall have a separate entrance with direct access to ground level.

3) Fire pumps or other emergency systems may be supplied from a second utility supply. This does not always mean a second utility transformer will be provided. In the case of a padmount transformer supplying the main service, this transformer should also supply fire pumps and other emergency systems through a second separate service fed from the same padmount transformer.

4) Complex structures may have more than one utility supply. Both the Supply and Inspection Authorities must approve all installations where more than one supply service is requested or required.

5) See Section 12 and Appendix A for service entrance guidelines.

12 Service Entrances

12.1 General

Before commencing any service entrance installation (new, relocation, or upgrade of service), the Customer or their agent shall contact NSPI to obtain approval for the route of the utility supply conductors. The location of the service head and the location of the point of attachment for the utility supply conductors shall be in accordance with both the CE Code, Part 1 and NSPI standards.

The responsibility for obtaining easements (in a form specified by NSPI) and developing the right-of-way are the responsibility of the customer as specified previously in Section 5.1.

Any person working in or around energized equipment or power lines shall ensure they are doing so in compliance with the Occupational Health and Safety general regulations Part 11. No person shall work on or around NSPI power poles or lines without having a completed Safe Clearance Report.

12.2 Service Entrance Disconnect

1) As per CE Code Rule 6-206, sub-rule (1), paragraph (c) the main service disconnect shall be located as close as practicable to the point where the Customer's service conductors enter the building. 'As close as practicable' shall not be more than 3.0 m in length and applies to the section of raceway which enters the building before it enters the main service switch.

2) When applied to a mobile home, in particular a skirted mobile home, as close as practicable shall not be more than 7.5 m.

Note: Clause 2 applies only to relocatable structures (factory-built) towable on their own chassis, for use without permanent foundations, and having provision for connection to utilities, including:

a) mobile homes; and
b) mobile commercial and industrial structures.

When a mobile home is placed on a permanent foundation, as close as practicable shall be as per clause 1 above.

12.3 Temporary Service Entrances

1) A temporary service entrance is intended to be used for construction power. A temporary service entrance for non-permanent, short-term applications may be approved at the sole discretion of the Supply Authority.

2) Overhead temporary services may be mounted on:

a) Construction shacks or trailers equipped with a service mast; or
b) A Customer-owned pole in accordance with NSPI Standard drawing SS-ED-22M; or
c) A Customer-owned tripod structure in accordance with NSPI Standard drawing SS-ED-23 or SS-ED-23A;
Note: These structures shall not be used to support a span crossing a public roadway.
or
d) A utility secondary service pole; or
e) A utility pole that is supporting primary voltage and is dedicated to one customer.

3) Where a temporary service is installed on a utility pole as permitted in clause 2 c) and d) above, it shall be installed with the weatherhead at a height that will place it in the secondary zone. Refer to the service connection request process (Section 16) and conduit assist procedure (Appendix E).

4) Temporary services connecting to an underground supply point shall be in accordance with drawing 8U-ED-40M.

12.4 Permanent Services

1) A permanent service shall be installed in accordance with NSPI Standard drawings J-ED-23M, J-ED-24M, SS-ED-10M, SS-ED-11M, SS-ED-12M, SS-ED-13M, and SS-ED-32. Where a permanent service is installed on a Utility pole, it shall meet the minimum requirements of item 12.3.

Note: Copies of drawings referenced above are included in Appendix B.

12.5 Prefabricated Homes

As with buildings constructed on site, the Customer shall obtain approval from the Supply Authority for the route of the utility supply conductors and the location of the service entrance for prefabricated homes (modular homes, mini homes, etc.) being constructed for a specific building lot.

12.6 Mobile Homes

See Definitions in Section 1.

1) As with buildings constructed on site, the Customer shall obtain approval from the Supply Authority for the route of the utility supply conductors and the location of the service entrance for mobile homes.

2) For the maximum length of service conduit permitted, see clause 12.2 (2) - Service Entrance Disconnect.

3) Service wires supplying one mobile home should not pass over the roof of any other home.

4) Where the service wire crosses over the roof of the mobile home to which it is attaching, the minimum clearance to the roof shall be 1.0 m in accordance with drawings SS-ED-24M and SS-ED-25M.

5) The maximum length of triplex service conductor to mobile homes is 23.0 m unless the mobile home is model built to CAN/CSA-Z240 MH Series 92 standard. These have been equipped with an improved mast support system. The maximum unsupported triplex utility service drop, to mobile homes, equipped with a factory installed service raceway support member, meeting or exceeding the above-noted standard and mounted on an acceptable block or concrete foundation, may be increased with utility approval. The Customer must provide proof that the mobile home being installed meets the above standard.

12.7 Services to Sheds, Recreational Vehicles, and Small Structures

Services attached to sheds, similar small structures, and services for recreational vehicles shall be considered permanent regarding the requirements of the CE Code, Part 1. All services shall be installed on a structure that is also intended to be permanent, except as permitted by Section 12.3.

The Customer is responsible for the cost associated with the installation of an acceptable pole or other suitable structure that is acceptable to both the Supply Authority and the Inspection Department, and must be capable of supporting the service entrance equipment.

Acceptable Customer-owned structures for an overhead supplied service include, but are not limited to, the options listed below. Other structures can be considered with the approval of both the Supply Authority and the Inspection Department.

a) A small shed or building that is suitably anchored to the earth in accordance with the National Building Code of Canada (2015), clause 9.23.6.1 and 9.23.6.3 as applicable.

b) A structure that sits on a concrete foundation or piles and is anchored in conformance with CSA standard Z240.10.1.

c) Other small structures that are anchored directly to the earth using both tie downs where anchorage complies with Section 7 of CSA Z240.10.1.

d) A Customer-owned pole, as per Inspection Bulletin B-72-000 that meets the requirements of SS-ED-22M, except that the pole shall be a minimum of class 5 strength (as indicated by a manufacturer's stamp). The attachment point shall be able to withstand 750 lb of horizontal pull and provide adequate ground clearance for the service, as determined by the Supply Authority.

If an NSPI-owned pole is used to support the service entrance, then the meter and service box must be installed on a separate pedestal that meets the requirements of 15.2 clause 8. The service entrance will then be run down the pole, and underground to the pedestal. See 12.10 clause 1.

12.8 Utility Supply Conductors Point of Attachment at Building or Structure

1) The point of attachment at buildings shall be in accordance with the CE Code and NSPI drawings SS-ED-10M, SS-ED-11M, SS-ED-12M, SS-ED-13M, SS-ED-32, J-ED-23M, and J-ED-24M as appropriate.

2) The point of attachment shall maintain a minimum conductor horizontal clearance of 1.0 m from windows, doors, fire escapes and inaccessible portions of porches.

3) The point of attachment shall be such that it allows the utility to maintain a minimum design clearance of 1.0 m horizontal or 2.5 m vertical between the utility supply conductors and building surfaces that are readily accessible but not normally used (e.g. a roof that is accessed for maintenance of rooftop equipment only). For roofs that have no normal access point (e.g. they do not have a person-door or access hatch and there is no rooftop-mounted equipment such as but not limited to telecoms, HVAC, or solar panels), vertical clearances may be reduced to 1.0 m at the sole discretion of the Supply Authority. Supply conductors shall not cross over structures to which they do not attach.

4) The utility supply conductors shall maintain a minimum clearance of 1.0 m horizontal from other rooftop equipment (chimneys, HVAC units, antennas, etc.) and shall not cross underneath rooftop structural equipment (guys, braces, span wires, etc.).

5) The point of attachment shall be such that it allows the utility to maintain a minimum design clearance of 4.2 m vertically if crossing over surfaces that are regularly used by persons such as decks, rooftop patios, yards, or any other area regularly accessed by persons.

6) The point of attachment shall be increased when crossing surfaces used by vehicular traffic such that it allows the utility to maintain a minimum design clearance of 4.5 m over residential driveways and 5.5 m over commercial driveways and any roadways. The final span attaching directly to a residence or residential garage may have a reduced vertical clearance of 3.7 m over residential driveways. This reduction accommodates the minimum service attachment height of 4.5 m.

7) Any Customer-owned service attachment structure (including poles) requires a suitable place to attach that can withstand 750 lb of horizontal pull per service attachment to the structure. The supporting structure shall not have its position or load-bearing elements changed while a service is attached.

8) The point of attachment for the NSPI supply conductors shall be on the same face of the building as the Customer's service entrance or weatherhead as required by CE Code Part 3, No. 1, clause 5.7.2.2:

"*The point of attachment for supply conductors shall be on the same side of the building as the consumer's service head and shall be located such that*

a) the point of emergence of consumer's service conductors from the consumer's service head or the equivalent is a minimum of 150 mm and a maximum of 300 mm above the support for attachment of the overhead service conductors; and

b) A minimum of 150 mm and a maximum of 300 mm horizontally from the consumer's service head."

For 'under eave' installations, the horizontal distance may be increased to 500 mm as shown on SS-ED-11M.

9) Services that are not accessible by bucket truck shall meet the requirements of clauses 11, 12, and 13 to allow for safe ladder work. An attachment point is considered to be accessible by a bucket truck if the following conditions are met:

a) A public roadway or private driveway owned by the Customer (or not owned by the Customer with suitable easement/rights in place) with a reasonably level surface is available to park the bucket truck such that direct access to the service is possible from the bucket.
b) The roadway or driveway is usable 12 months of the year.

10) The point of attachment on the building shall be in direct line of sight to the NSPI utility pole as chosen by the Supply Authority. It shall additionally provide sufficient horizontal clearance such that the utility supply conductors in positions of swing do not rub against the building as determined by the Supply Authority.

11) The service attachment shall be located on the building side closest to the NSPI service pole. In cases where the service cannot be accessed by an NSPI bucket truck, the service will be accessed via ladder. Attachment points that are to be accessed via ladder should be no further than 1.0 m (3 ft) back from the building face closest to the NSPI service pole, unless otherwise approved by the Supply Authority.

12) If the service attachment point is to be on the side of a building, line crews may require a ladder to reach the service location. A ladder ratio of 4:1 must be met by the site conditions. This ratio shall be met when the ladder is against the building, without trespass on a neighbour's property. The roof mast is to be located within 45 cm from the edge of the roof within reach of the installer's ladder. Stairs, plants, and trees shall not interfere with ladder use.

    If the ladder access as noted above cannot be achieved, refer to SS-SK-07M or SS-SK-08M in Appendix A for the required service arrangement.

13) For all new construction, any service mast that protrudes above the roofline should be accessible by a bucket truck (see clause 9 above for bucket truck accessibility requirements). Supply Authority approval is required in situations where bucket truck accessibility is not possible.

14) Where existing service entrances are upgraded or repairs are being made to the service entrance above the meter base, or the disconnecting means for unmetered services, minimum height and clearance requirements as per the CE Code, Part 1 and NSPI Standards shall be met.

15) NSPI will supply the attachment device; the customer shall install it.

16) If the point of attachment to a service mast exceeds 1.1 m above the roof line or if there is more than one attachment to a service mast, then the mast shall be guyed or braced. Where two service masts are used, they shall be in accordance with NSPI standard SS-ED-32.

17) Notwithstanding clause 10 above, a mid-span tap may be used, at the sole discretion of the Supply Authority, where no other practical location is available for attachment. If this is required, a site meeting with a Regional Planner can be arranged to discuss.

Note: At the discretion of the Supply Authority, or the Inspection Agency, and during an emergency repair only, a service may remain in the same location and/or at the same height above ground provided the original installation meets the minimum requirements of the CE Code, Part 1 with respect to clearance of conductors. In all cases where a repair is made, the meter base height and location shall be as per the Utility Standards unless previous authorization is granted prior to the repair.

12.9 Customer's Service Stacks and Conduits

1) The maximum number of service raceways shall not exceed four to any one building.

2) Multiple service weatherheads for a single customer on a building shall be located within 300 mm of each other to allow for connection to a single set of utility supply conductors. A maximum of 2 power weatherheads is permitted per supply service.

12.10 Service Entrances on Utility Poles

Service entrances (no meters) shall only be permitted on utility poles as follows:

1) Customer meters shall not be installed on any pole, except as permitted by items 5 and 6 below.

2) Service entrances may be installed on a service pole that carries only utility secondary conductors. Refer to NSPI Standard J-ED-34M.

3) In the case where a pole is supporting primary voltage and is dedicated to one customer, then service entrances may be installed on the pole. These shall be installed in accordance with drawing OU-ED-22 (meters are not permitted).

4) On a mainline primary pole, service raceway and length of conductor shall be installed in accordance with drawing OU-ED-22.

5) CATV power supplies may be installed on utility poles and shall be in accordance with drawing J-ED-15M. Other powered devices as required by communication companies that are resident on a pole, may be installed when mutually agreed by the utility and the telecommunications company involved.

6) Installations by any parties other than the utility or communications companies that have an attachment agreement must be approved by NSPI Engineering.

7) The preferred service raceway on a pole is PVC conduit as per OU-ED-22 or J-ED-34M. If armoured cable is used on a pole then it must transition to a rigid conduit, a minimum of 300 mm (1 ft) in length that is firmly attached to the pole using 2 clips with minimum 200 mm (8 inch) spacing. The conduit must terminate to a weatherhead (service entrance cap).

8) All service entrances constructed of conduit must have an expansion joint between 300 – 600 mm (1 – 2 ft) above finished grade.

NOTES:

a. Prior approval of the Supply Authority is required for installations in accordance with clauses 2, 3, and 4 above. Approval shall include a completed Safe Clearances Report. Refer to Appendix E.
b. Municipal Bylaws and requirements may have impact on the ability of a customer to install a service entrance in accordance with clauses 2, 3, or 4 above.

13 Underground Residential Service

Before commencing any underground residential secondary service installation, the developer or their agent shall contact NSPI early in the planning stages of a development. At this time service location and design can be determined, arrangements made, and responsibilities discussed.

13.1 Policy

NSPI Regulation 2.11 states, in part:

''Distribution Systems - The Company may supply, install, maintain and own underground distribution systems. A party requesting the installation of an underground distribution system will be required to make a capital contribution to the Company, equivalent to the difference in cost between the underground system installed and overhead distribution facilities it would otherwise provide.

Secondary Services - The Company is not required to install underground secondary services: ... The customer will be responsible for ownership, maintenance and replacement when necessary."

Overhead primary with underground secondary service designs may be applied to individual residential units, semi-detached and row type housing units. The basic arrangement will be a pole mounted transformer plus secondary wires down the pole to an underground prefabricated junction box (URD box). The Customer's individual underground services will be connected in this box. The exception is 600 A single-phase services and larger. See Section 10.1.

An individual Customer who desires an underground service, and is not associated with other nearby customers who may be served overhead, does not require an underground secondary distribution system. The Customer is responsible to extend their own service only and terminate it on a pole approved by the Utility as per Drawings OU-ED-20M, OU-ED-21M, and OU-ED-22 (equivalent to OU-ED-22) and Section 10.1. This Customer may be entitled to a rebate payment as per the rebate policy.

13.2 NSPI Payment Policy and Developer's Contribution

1) NSPI requires a Customer contribution equal to the difference in cost between the cost of the underground secondary installation and the cost of overhead facilities normally provided by NSPI.

2) Costs will be calculated based on the design. The developer's contribution will cover costs associated with the underground installations with an allowance credited based on the number of services planned, present and future. Any change in the design will be negotiated as required.

13.3 General Installation Details and Arrangements

1) All Installation design and details shall comply with NSPI standard drawings.

2) As-builts shall be provided for all underground primary and secondary constructions in CAD and pdf format.

3) The developer and NSPI will establish the exact location of the URD box in the field.

4) Final grade shall be known and, if at all possible, rough final grade established prior to the installation of the URD box. Refer to Clause 5.3 for more details.

5) Driveway locations shall be established in order that proper clearances between boxes and driveways can be maintained and that boxes will not end up under pavement.

6) Access to a URD box shall only be permitted with NSPI approval. Work inside the URD box is permitted when work is not impeded by abnormal factors (e.g. ice, mud, heavily damaged box, etc.). Approval will only be given to a qualified electrician.

7) The use of transformer in conjunction with URD boxes shall comply with Section 14: Services Requiring Primary Equipment for any primary side of the installation.

13.4 Customer Responsibilities

Customer is responsible for all the following at their cost:

1) Prepare a design indicating pole locations, the position of URD boxes, and the conduit system as per NSPI requirements.

2) The customer is responsible to consult with the various other utilities as to their requirements and excavate and prepare the required trenches for the utility's cables to their specifications.

3) The supply and installation of the entire conduit system from the poles or padmount transformers to the URD boxes.

4) Installation of the NSPI URD boxes and locators and supply and installation of the direct-burial warning tape.

5) The supply and installation of the ground tie adjacent to each conduit as per drawings in section 8U.

6) The developer is responsible for all excavation, sand bedding for the conduit and URD boxes, and backfilling of all trenching for the installation to NSPI requirements.

7) The developer and/or Customer shall be responsible for all aspects of the supply and installation of the individual services from the URD box to the residence. The connection of the services in the URD box shall be made by NSPI.

8) Underground conduits installed by the developer and services shall be inspected by NSPI and/or the area electrical Inspection Authority before backfilling.

9) The Customer shall provide NSPI with easements as described in Section 5.1.

10) The homeowner shall own and maintain their own service from the URD box to the residence.

13.5 NSPI Responsibilities

1) NSPI will supply URD boxes to the contractor/developer for installation at their expense.

2) NSPI will supply, install, own and maintain the secondary conductors from the poles to the URD boxes, complete with connectors at the terminal poles and URD boxes and any required ground rods or grounding at terminal poles. NSPI will make these connections to NSPI requirements.

3) NSPI will supply and install the cable guard on the terminal pole.

13.6 Secondary Service Box

1) The URD boxes shall be located 1.5 m from the base of the service pole when serving dwellings on the same side of the street as the pole line (refer to drawing 7U-ED-21M). When on the opposite side of the street as the pole line, the URD box shall be located in line with the boundary line between the two dwellings to be served (refer to drawing 7U-E0-21M).

2) The developer is responsible for providing ducts to extend from the URD boxes onto each of the Customer's properties. This will avoid the possibility of excavation being required under the sidewalk to connect or maintain a customer's service.

3) Below-grade URD boxes will be located 300 mm from the curb or the Customer property line with a maximum of 150 mm (6 in) below final grade level. Sand may not be supplemented by the use of "crusher dust" around the URD boxes.

4) Above-grade URD boxes shall be located as per 7U-ED-10M and 7U-ED-11M with the vehicular protection as required by the standard.

5) Customer secondary cable shall extend 1.5 m above the top cover of the URD box with the cable end positioned in the bottom center of the box.

13.7 Conduit Installation

1) All ducts and fittings shall be CSA approved and installed to NSPI Specification. Ducts shall be carefully installed and glued making certain that all joints are tight. Any ingress of materials into the ducts is not acceptable.

2) Underground conduit shall be in a trench constructed in accordance with drawing 1U-ED-12M for non-traffic areas and drawing 1U-ED-44M for crossing areas with vehicular traffic (crossing driveways, roadways, etc.). All ducts that cross roadways are to be concrete encased including a capped spare for future use.

3) Ducts shall face away from the flow of traffic and shall not be installed on the curb or sidewalk side of the terminal pole. Refer to Drawing JU-ED-25M for duct termination at pole.

4) Refer to drawings 2U-ED-30M and 2U-ED-50M for details on the URD box installation and ducting from a padmount transformer or Pole.

5) All ducts are to be kept clear, swabbed, and provided with a fish line item N1000. Ducts shall be to be capped at both ends.

6) The 90-degree bends at the terminal pole shall be rigid PVC and rigid PVC shall extend up the pole. Rigid PVC type is to be used for the remainder of the duct run.

7) Clearances are to be strictly maintained as shown in drawings 1U-ED-32M, 41M, 42M, 43M, 44M, and 45M.

8) Backfilling - When utilities are complete in the trench and have been inspected, the developer shall backfill using material free of large rocks and acceptable to NSPI for this purpose.

13.8 Ground Tie

1) Ground Tie - This shall be a minimum #2 AWG bare copper conductor installed from the terminal pole adjacent to the direct buried conduit for a minimum length of 15.0 m. All ground connections will be made by NSPI.

2) Conduits extending less than 5.0 m from the pole do not require a ground tie.

13.9 Sewer and Water

1) Cable should not be installed in the same excavation as sewer and water facilities, except under specific circumstances. Right angle crossings are often unavoidable.

2) Sufficient clearance is required between sewer and water pipes and cables to allow for the excavation of the sewer and water facilities without interfering with the cable installation. Refer to drawings 1U-ED-32M and 1U-ED-42M.

3) Where at all possible, sewer and water facilities must be in place and backfilled before the installation of conduits and cables.

14 Services Requiring Primary Equipment

Some larger facilities will require the installation of a transformer that is too large for mounting on a single pole and/or a primary line extension. The Customer will be referred to the local Engineering or Planning Office for particulars and approval.

Where a vault is required for service, the developer shall engage the Supply Authority to provide vault requirements according to Regional Engineering's direction.

All NSPI Standard Drawings referred to in this section are included in Appendix B.

14.1 Policy

NSPI Regulation 2.1 regarding transformer installation states the following:

"When in the Company's opinion, it is impractical to provide the customer's electrical requirements from existing Company facilities the customer must, on the request of the Company, provide suitable transformer(s) space on the customer's premises for the necessary transformers. The type and location of primary service equipment must be approved by the Company for each installation".

The space for the primary service equipment may be in the form of a suitable room inside the building or a designated space on the property outside the building.

14.2 Customer Responsibilities

1) The Customer shall provide NSPI with site drawings and an estimate of connected electrical load at the earliest possible stage of planning. This will permit the Utility to determine an acceptable method of service and point of supply. It will also provide lead time for the ordering of electrical equipment.

2) The Customer shall provide, as soon as possible, electrical plans for the buildings and other facilities/structures which are to be submitted to the Inspection Authority and accepted before service arrangements can be finalized. When field scoping/design is complete and the service arrangements are finalized, materials such as transformers may be ordered subject to the requirements of 14.2.5.

3) The following requirements shall be met before temporary or permanent service connection can be provided:

   a) A building permit shall have been obtained from the applicable municipal authority.
   b) Authorization shall be given by the electrical inspection authority.
   c) An electric service contract shall be completed by the party accepting responsibility for the electric service account. A security deposit may be required as part of the service contract.

4) The Customer shall be responsible for the additional expense of any temporary service required for construction power. Arrangements must be made with NSPI for the connection of a temporary service.

5) The Customer shall be required to make a capital contribution if the service requirements exceed the Utility's normal service allowance. The allowance consists of 92.0 m of overhead line extension or 46.0 m of high voltage underground cable. Payment of the contribution shall be required before electric service can be provided.

6) The Customer shall provide, own and maintain all secondary voltage electrical equipment. This includes the electrical cables from the Customer's main disconnect switch to the padmount transformer and the connectors required for the secondary terminations on the transformer (see Appendix C). The secondary cables shall be installed by the electrical contractor such that the end of each secondary cable extends a minimum of 2.0 m above the transformer base. This is required to ensure sufficient cable for connection to the transformer. The connection of secondary cables to the transformer will be done by NSPI.

7) All Customer-owned electrical equipment shall be inspected and approved by the appropriate Inspection Authority.

8) The Customer shall provide, own and maintain the civil structures necessary to support the high voltage electrical equipment. The civil structures generally consist of a concrete base for the padmount transformer and a concrete encased ductbank for the high voltage cable. The ductbank and the transformer base must be inspected and approved by NSPI. See drawings 6U-ED-10M, 11M, 20M, 21M, 24M, and 25M for details.

9) The Customer shall provide NSPI with easements as described in Section 5.1. The Customer shall be responsible to provide and maintain clear access to the door/hood of the padmount cable entrance compartment. This will be a space that is clear of bushes, trees, etc. that extends out from the padmount equipment for 3.0 m and allows the doors to be open at 90 degrees from the front face of the enclosure/transformer. In addition, a clear distance of not less than 1.0 m from all sides of padmount equipment that do not have access doors shall be required. Where a fire-resisting barrier is used, the 1.0 m of clearance shall be required from the outside of the barrier.

14.3 NSPI Responsibilities

1) NSPI will normally supply, own and maintain the high voltage cable, complete with terminations, and the padmount transformer.

2) In certain cases, the Customer may arrange or be required to supply the high voltage cable and the transformer. These situations will be rare and will be dealt with on an individual basis.

3) Connection of all cables to the transformer unit shall be performed by NSPI.

14.4 Duct Banks

The customer shall provide a suitable underground ductbank as shown on Dwg. 1U-ED-12M and Dwg. J-ED-14M. If telephone ducts are not required, they may be eliminated along with the wooden plank separation. Drawing OU-ED-10M shows details of the non-joint use duct bank. Appendix D contains an approved hardware and materials list to be used in conjunction with the drawings in this document. Item numbers shown in circles or ovals on the drawings are cross-referenced in this listing to the appropriate description and part numbers.

The following specifications must be met:

1) All ducts and fittings shall be approved by a recognized Certification Agency (e.g., CSA or ULC).

2) All Primary Ducts are to be concrete encased unless otherwise specified by NSPI. Secondary ducts may be direct buried unless otherwise specified by NSPI. All ducts (primary and secondary) that cross roadways are to be concrete encased.

3) Ducts shall be supported by approved spacers. Wire or metal ties are not to be used to support the electrical ducts.

4) Duct risers at poles shall face away from the flow of vehicular traffic and shall not be installed on the curb or sidewalk side of the terminal pole.

5) Ducts shall be carefully installed, and all joints are to be glued unless the duct system is specifically designed for friction or snap fit. Such duct systems shall be preapproved by NSPI Engineering. Foreign material is to be kept out of the ducts.

6) Long sweep 90-degree rigid PVC or heavy wall FRE bends shall be used at both the pole and the concrete pad. PVC type, DBII or FRE may be used for the remainder of the duct run.

7) The standard duct size shall be 100 mm. When the equivalent of more than three 90-degree bends are required between pulling points, or the duct run is in excess of 90.0 m in length, 125 mm duct shall be used. The number of bends may only be increased after approval by NSPI.

8) The primary ductbank and concrete pad are to be formed and inspected by the Utility before pouring any concrete. In joint use applications representatives from both NSPI and Bell shall be called for inspection purposes. A 75 mm envelope of concrete is required around the ductbank.

9) All ducts are to be swabbed and a 4 mm polyethylene fish line installed in each duct. Ducts are to be sealed with proper caps at both ends.

10) A 1.5 m separation shall be maintained between the ductbank and a fuel storage system or a steam line. See Drawing No. 1U-ED-41M for details on the required separation between ductbanks and various underground structures.

11) A 1.5 m minimum horizontal separation shall be maintained between a high voltage ductbank and a swimming pool.

12) A ductbank shall not run directly above or below other underground systems such as water, sewer, or communications. An electrical ductbank may cross other underground systems at right angles if a minimum separation of 300 mm is maintained, unless the crossing is a pipeline in which case a separation of 600 mm is required.

13) Under some conditions, it will be necessary to place some reinforcing steel in the ductbank. Typical examples include fluid or unstable soil conditions or where a ductbank passes under a retaining wall or building foundation. For ductbanks requiring rebar, the rebar design shall be completed by a Professional Engineer. Rebar shall not encircle the conduits. Duct sections shall be tied together with rebar. Details of the proposed installation must be approved by NSPI.

14) At the riser pole, there shall be a 12 mm spacer between each duct and the pole.

15) Marker tape approved by NSPI shall be installed above all primary ductbanks. The marker tape shall be located 300 mm below finished grade. Installation of this tape must be verified by NSPI before it is covered.

16) The ductbank shall be placed under the cable compartment portion of the concrete base (the portion adjacent to the rectangular hole). It shall not be placed under the transformer part (the remaining portion) of the concrete base. Refer to Figure 14.6.1 in the following section.

14.5 Transformer Installation

It is recommended that transformers be located as far as practical from buildings, school yards and other occupied areas. Transformers placed on pads shall be located 3.0 m, or as close to 3.0 m as is practicable, from a roadway, sidewalks, parking lot, or other reasonable permanent means of access. Padmount transformers shall be installed at least 3.0 m horizontally away from any utility pole, anchor, overhead primary line, or any combustible surface or material on a building. They shall also be at least 6.0 m from any window, door, or ventilation inlets or outlet on a building, except where:

1) A Fire-Resisting Barrier is installed and has been approved by NSPI as per Section 14.10: Fire-Resisting Barriers.

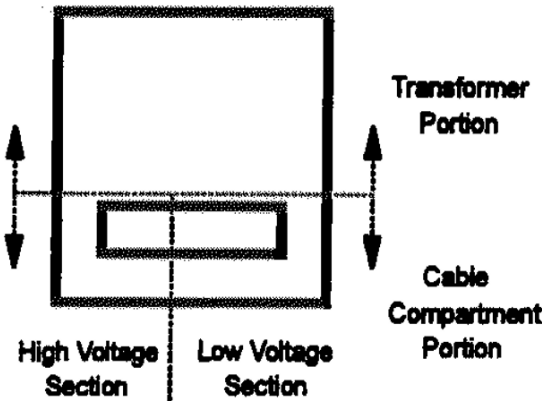
2) The transformer is protected by an internal current-limiting fuse and equipped with a pressure relief device with working space around the transformer of at least 3.0 m on the access side and 1.0 m on all other sides.

A fire-resisting barrier or vehicular protection may be required in certain circumstances. Section 14.10 outlines the requirements for fire-resisting barriers. Section 14.11 outlines the requirements for vehicular protection.

14.6 Customer Owned Secondary Cable

1) Secondary cables, whether directly buried or in duct, shall not be placed under the transformer section of the concrete transformer base (see Figure 14.6.1 for area definitions). The secondary cables are to be placed under the cable compartment section of the transformer base.

Figure 14.6.1: Transformer Pad Allocations



2) Secondary cables shall not to be installed in the high voltage section of the transformer.

3) Secondary cables shall be connected to the transformer using approved compression lugs (see Appendix C). The compression lugs are to be supplied by the Customer and installed by NSPI. NSPI will supply the stainless steel connection hardware.

4) Permanent secondary cables shall not be energized or used for temporary service without permission from NSPI.

5) The maximum number of cables per phase that may be terminated at a transformer shall be as shown in table 4U-7M (Appendix B).

14.7 Ground Tie

The Customer shall provide a ground tie between the padmount transformer and the riser pole (see Drawing No. 1U-ED-12M and JU-ED-14M. The ground tie shall be a bare copper conductor installed beneath the concrete ductbank. It may also be installed immediately adjacent to the ductbank (on either side). When installed under the ductbank, it shall be inspected by NSPI prior to pouring the concrete for the ductbank. When installed beside the ductbank it shall be verified by NSPI prior to backfilling the trench. NSPI will connect the ground tie to the riser pole ground rod.

14.8 Concrete Transformer Base

Where a padmount transformer is required, the Customer shall contact the Utility, and will be referred to the Engineering Department for design and approval requirements regarding transformer pad location and construction standards, trenching and duct installation details, grounding, concrete specifications, cable installation guidelines, etc.

The Customer shall provide a suitable poured-in-place concrete base for the padmount transformer. The base shall be constructed to NSPI specifications using the drawings found in this document. NSPI will select the appropriate transformer size based on estimated load information provided by the customer and other pertinent factors.

1) The transformer base shall be inspected by NSPI during construction and approval given before any backfilling or pouring of concrete.

2) The concrete base shall be located in an area that is permanently accessible by NSPI maintenance vehicles. It shall be located within 3.0 m of a roadway, parking lot, or other reasonable means of access.

3) The area surrounding the transformer shall be kept clear of any obstructions (bushes, trees, posts, etc.) for a distance of 3.0 m from the transformer door/hood side and 1.0 m out from all other sides of the concrete base.

4) Grounding around the concrete base shall be provided by the customer in accordance with Drawings 10U-ED-11M and 10U-ED-30M. Ground rods are not to be installed under the concrete base. The grounding installation shall be inspected by NSPI before it is covered over.

5) The use of pre-cast transformer bases is acceptable if they have been constructed in accordance with NSPI specification and have been approved by NSPI.

6) No padmount transformer shall be installed on a pad until the concrete has been allowed to set for a minimum of forty-eight hours.

7) Three-phase transformer pad requirements shall be as follows:

   a. A regular pad shall be used for:
      i. Up to 5 runs of 250 kcmil/350 kcmil cables.
      ii. Up to 3 runs of 500 kcmil/600 kcmil cables.
      iii. Up to 1 run of 750 kcmil cable.
   b. A deep well pad shall be used for:
      i. 6 or more runs of 250 kcmil/350 kcmil cables.
      ii. 4 to 6 runs of 500 kcmil/ 600 kcmil cables.
      iii. 2 to 4 runs of 750 kcmil cables.
   c. For cable runs exceeding these limits, regional engineering shall be consulted.

14.9 Alternative Transformer Base Construction

Notwithstanding Section 14.8, the customer may provide a suitable base for the padmount transformer that is manufactured from: (1) fiberglass reinforced plastic (FRP), (2) plastic or other composite material, or (3) precast concrete.

Approval of NSPI Distribution Standards Department shall be required before purchase or installation.

14.10 Fire-Resisting Barriers

Fire-resisting barriers shall be constructed between the transformer and the door, window, ventilation opening or combustible surface when required by Section 14.5.

For details on the construction of these barriers, see 6U-ED-12M, 13M, 22M, 23M, 28M, 29M, and 38M.

In case of dispute, the local Inspection Authority in conjunction with the Supply Authority shall determine the barrier requirements.

14.11 Mechanical Protection

Mechanical protection is required to protect the transformer from being accidentally hit by vehicles. This is most commonly applied for transformers close to driveways, parking lots, or loading bay areas. If it is judged by NSPI that the transformer would be in danger of being hit by traffic, protection shall be required on one or more sides. This shall be constructed as shown on Drawing No. 6U-ED-40M for three-phase transformers and 7U-ED-10M and 7U-ED-11M for single-phase transformers.

14.12 Definition of Backfill Materials

The transformer base (or pad) drawings refer to several types of backfill materials.

1) Gravel backfill – shall consist of well graded, clean granular material containing no material larger than 50 mm in size and shall meet the requirements of gravel – Class C as specified by the Department of Transportation.

2) Crushed rock backfill – shall consist of 20 mm clear crushed rock. Crushed rock backfill shall be used as a base for certain construction, as specified.

3) Crushed stone topping – shall consist of angular shaped, hard, igneous rock, crushed, screened and washed. Soft rock, shale, or slate shall not be acceptable. The product shall be of uniform quality throughout and shall be free of flat, elongated, round or other objectionable pieces. No earth, sod, silt, clay or any foreign or vegetative matter shall be allowed in this material. The purpose of the crushed stone topping is to reduce electric shock hazard and provide a stable working surface around the padmount transformer.

14.13 Primary Line Extensions

Individual Customers are entitled to an overhead line extension credit, up to a maximum of 92.0 m. NSPI shall determine the point of attachment at both the Customer's point of connection and NSPI plant. Any length over this amount shall require a capital contribution from the Customer.

Customers shall contact NSPI to determine the suitability of any lines near the site of the new service. Not all lines are suitable for direct attachment of Customers. NSPI shall determine which line(s) are suitable for the installation being considered. Site planning by the Customer should not assume the point of connection or routing for primary lines as this is the responsibility of NSPI.

Refer to NSPI Regulation 2.6 for additional information on line extensions.

14.14 Ground Grid around Manhole/Pullpits

For the ground grid around manholes and pullpits, the customer shall be responsible for the external ground loop, while NSPI shall be responsible for the internal ground loop and connecting the two loops together.

The external ground loop should be 300 mm from the top of the manhole and shall maintain a 1000 mm clearance from the internal ground loop on all four corners. The internal ground tie should be 1500 mm from the bottom of the manhole.

The external ground loop shall form one complete loop around the manhole and be connected to the internal ground loop at two locations. The internal ground loop shall form one complete loop inside the manhole and be connected to the ground wall.

15 Metering

General

All meter installations shall comply with NSPI Metering Standards. Existing non-standard installations shall be changed to conform with these standards when alterations are made to the service.

All new and upgraded three-phase 4-wire meter installations, self-contained or transformer-rated shall require 3-element meters to be installed. Three-phase 2 ½-element meters are only used for replacement of existing 2 ½-element meters.

Specialized metering installations not covered by these standards shall be developed by Regional Engineering and approved by Meter Services.

15.1 Electrical Contractor's Responsibilities

1) The electrical contractor shall supply and install all meter sockets, cabinets, conduit (for CT & PT secondary leads as required) and current transformers lugs.

2) The contractor shall be responsible for the installation of transformers in metal enclosures as per the requirements of CE Code, Part 1 for enclosures for instrument transformers (Rule 6-404). Enclosures shall have provision for sealing.

3) The contractor is responsible for connections to the primary side of current transformers.

4) Where two or more meter bases are present on a structure, the contractor shall install and label the meter base in a permanent and weatherproof manner to identify the unit or portion of premise the meter base serves. Permanent marker is not an acceptable means of identification.

NOTES:

a. NSPI shall supply all revenue class potential and current transformers.
b. NSPI shall supply and install colour-coded secondary wiring from current transformers to meter socket and wiring to the primary and secondary side of potential transformers.

15.2 Meter Locations

1) The Meter and associated metering equipment shall be in locations satisfactory to both Inspection and Supply Authority (refer to CE Code Part I, Rules 6-402 and 6-408, and metering standards MS 7.0). The center of the meter shall not be higher than 1.8 m or lower than 1.4 m from the floor or ground level. Meters and metering equipment may be placed outdoors if they are of weatherproof construction or in weatherproof enclosures.

2) Normally, meter sockets are to be located on the outside of the building for up to a maximum of six meters (refer to NS Electrical Bulletin 2014-02). Utility approval is required for meter sockets to be located inside of buildings with the exception of multiple occupancy buildings with more than six meter positions.

3) Meters shall not be located in bins, closets, bathrooms, stairways, high ambient temperature room, dangerous or hazardous locations, or in any similar undesirable places.

4) For multiple meter installations, as in apartment buildings, office buildings, industrial complexes, etc., the meters shall be conveniently grouped and readily accessible to Meter Readers and Installers during normal business hours.

5) A clear working space of 1.0 m minimum shall be provided in front of all meter panels, free of any temporary or permanent obstruction, including vegetation. Passageways and working space around electrical equipment shall not be used for storage and must be kept free from obstruction. Refer to CE Code, Part 1, Rules 2-300 through 2-322 dealing with these and related items.

6) Meters shall be installed a minimum of 1.0 m from any natural gas discharge opening and 3.0 m from any propane gas discharge opening.

7) Every meter shall be installed in a level position and solidly fixed to a wall or other support supplied by the customer, free from excessive vibration. If the meter location proves to be susceptible to vandalism or frequent breakage by other means, a protective enclosure shall be installed at the customer's expense.

8) A meter base may be located on a pedestal (stump post). These are to be constructed of 150 mm x 150 mm x 250 mm (6 inch x 6 inch x 10 ft) pressure treated wood posts. Suitable alternatives to treated wood include galvanized or stainless steel capped pipe (minimum schedule 80) and struts with matching fasteners. The pedestal shall consist of one post for meter bases rated 200 A or less and 2 posts for meter bases rated greater than 200 A. Wood posts are to be set a minimum of 1.2 m (4 ft) deep. Steel posts must anchor to a suitable concrete base. Meter pedestals shall allow for the meter to be between 1.4 m to 1.8 m from ground. Pedestals are to be at least 3.0 m from Utility poles and anchors. Mechanical protection around the meter pedestal is as required by the CE Code, Part 1.

9) When a customer requires a recessed wall installation, adequate room shall be provided to install/remove meters and faceplate of the meter base.

10) For temporary service enclosures the meter base shall be installed on the outside of the weatherproof box (ref. Electrical Inspection Bulletin B-76-008).

11) A request shall be made to the Supply Authority via the deviation process where there is a requirement to install more than 6 consumer services to any one building. The request will also be made to the Inspection Authority via the process outlined in Rule 2-030 of the CE Code, Part 1. The Supply Authority will not connect the service without approval from the Inspection Authority.

12) Where an addition is built on an existing premise, or renovations to a premise are such that the meter base will be located in an undesirable location in accordance with the Supply Authority, the meter socket shall be relocated to a suitable location.

15.3 Instrument Transformers – 0 to 600 V

1) NSPI will supply the necessary Instrument Transformers; however, the contractor shall arrange to have them installed at their expense at the factory or in the field. Refer to Metering Standard MS 4.0 for standard layouts.

2) In the case of factory-built custom switchgear, space is to be provided for instrument transformers and test blocks which are readily accessible for inspection; the compartment or enclosure for instrument transformers shall have provision for sealing.

3) The instrument transformers are to be electrically connected on the load side of the service box immediately after customer main service switch (CE Code Part 1, Rule 6-402[2]).

15.4 Secondary Wiring

1) Electrical raceway shall be supplied and installed by the contractor from instrument transformer cabinets or primary metering equipment to meters in minimum sizes noted below:

    a) Single-phase service 2- and 3-wire meter, 20 mm (3/4 inch).
    b) Three-phase four-wire service, 25 mm (1 inch).

2) The raceway run shall be as short as practical; however, no run may exceed 30.0 m or contain the equivalent of more than three 90-degree bends.

3) All meters, meter sockets, metal raceways, cabinets, etc. shall be bonded to ground in accordance with CE Code Part 1, Section 10.

15.5 Service (System) Neutral

1) The service (system) neutral conductor is to be connected to all single-phase meter sockets up to and including 200 A. For single-phase transformer rated installations, the instrument transformer cabinet shall be bonded either through metallic conduit or suitably rated conductor (CE Code, Part 1, Table 16A or Table 16B). The neutral shall pass through the cabinet unbroken.

2) Every three-phase, four-wire system being metered with instrument transformers shall have the service neutral available at the main switch. The neutral must be accessible (at a lug) for line to neutral metering.

3) In some installations, the customer does not require phase-to-neutral voltage; however, NSPI is required by Measurement Canada to use phase-to-neutral connections on low potential installations.

4) For further details on system neutral sizing requirements refer to CE Code, Part 1, Rule 4-024.

15.6 Three-Phase Self-Contained Metering Above 300 V

1) All three-phase self-contained metering installations on services or sub-services above 300 V shall have a disconnect on the line side of the meter. This disconnect shall be immediately adjacent to, or integrated with, the meter base.

2) An insulated neutral conductor is required when the meter base is located on the load side of the disconnecting means.

3) Meter bases used in conjunction with instrument transformer type meters shall be combination type to accept the test switch.

METERING ACCESSORIES				
SERVICES	**CT CABINET**	**SOCKETS REQUIRED (METER FORM)**	**INSTRUMENT TRANSFORMERS REQUIRED**	**SEE NOTES**
1-ph, 3-wire, 200 A max	N/A	4 Jaw, Form 2s	N/A	B
1-ph, 3-wire, above 200 A, self-contained	No	4 Jaw, Type CL320 C/W Bypass Form 2s	N/A	B
1-ph, 3-wire, above 200 A, transformer rated	Yes	5 Jaw (9 o'clock pos) Combination C/W Test Switch Compartment, Form 3s	One 3-wire CT (Two 2-wire CTs above 600 A)	C
Network, 120/208 V, 200 A max	N/A	5 Jaw (9 o'clock pos), Form 12s	N/A	B
3-ph, 4-wire, 120/208 V, 200 A max	N/A	7 Jaw, Form 16s	N/A	B
3-ph, 4-wire, 120/208 V, above 200 A	Yes	13 Jaw Combination, Form 9s	Three 2-wire CTs	C, D
3-ph, 4-wire, 347/600 V, 200 A max	N/A	7 Jaw, Form 16s	N/A	A, B
3-ph, 4-wire, 347/600 V, above 200 A	Yes	13 Jaw combination, Form 9s	Three 2-wire Bar CTs and three PTs	C, D

NOTES:

a. All three-phase self-contained services or sub-services above 300 V shall have a disconnect on the line side of the meter and shall be immediately adjacent to or integrated with the meter base.
b. Isolated neutral required when meter base is located on load side of disconnecting means.
c. Meter bases to be used in conjunction with instrument transformer type meters shall be combination type to accept the test switch.
d. Switchgear rated above 1200 A may require window-style CTs instead of 2-wire Bar CTs.

15.7 Primary Metering

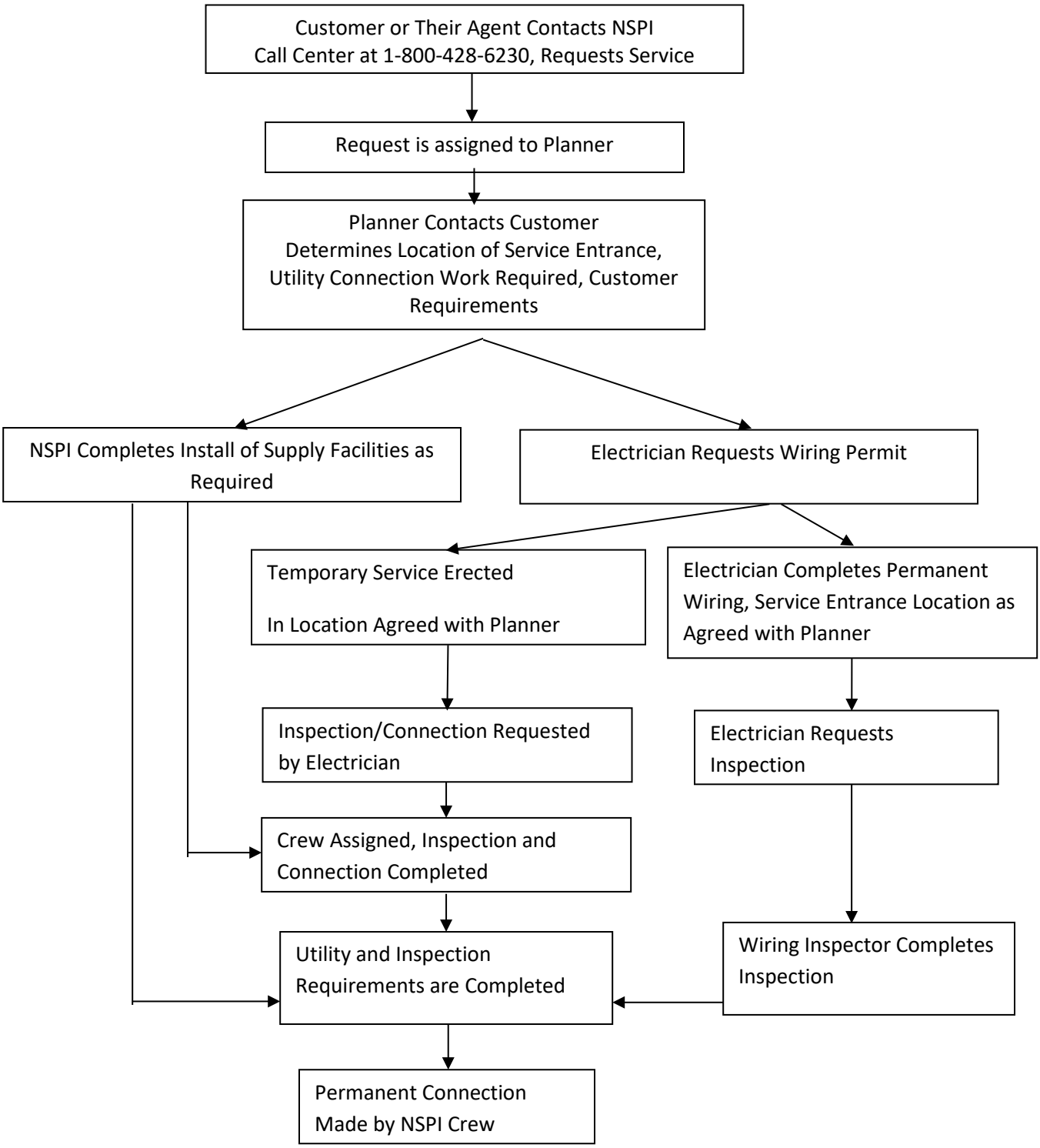
NSPI Regulation 4.4 states the following: "Metering will normally be at the secondary side of the transformer. Should the customer's requirements make it necessary for the Company to provide primary metering, then the customer will be required to make a capital contribution equal to the additional cost of the primary metering."

The additional costs referred to in the regulation as quoted above include full equipment purchase and installation costs (unless otherwise noted) for the following:

a) Primary metering equipment,
b) Installation of any poles, platforms, foundations, or other supporting structures as required for the equipment,
c) Changes and modifications to existing NSPI facilities as required to accommodate the primary metering,
d) Removal of any facilities as required to accommodate the primary metering,
e) Any other modifications or additions as required to accommodate the installation

16 Service Request Process

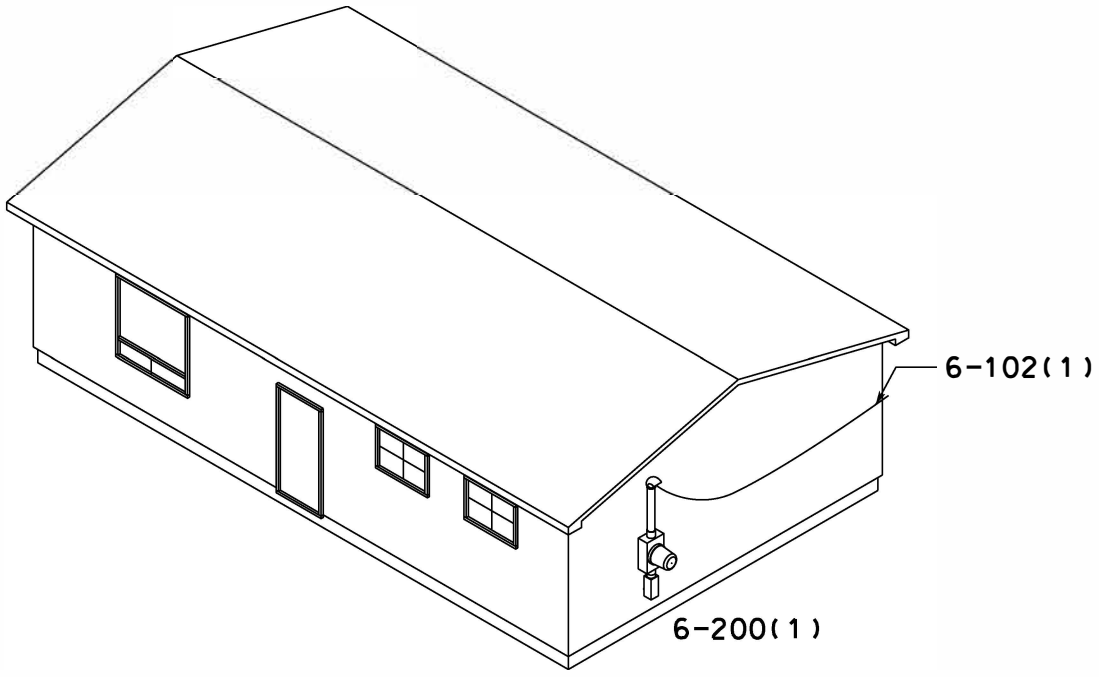
NSPI UTILITY SERVICE REQUEST PROCESS FLOW CHART



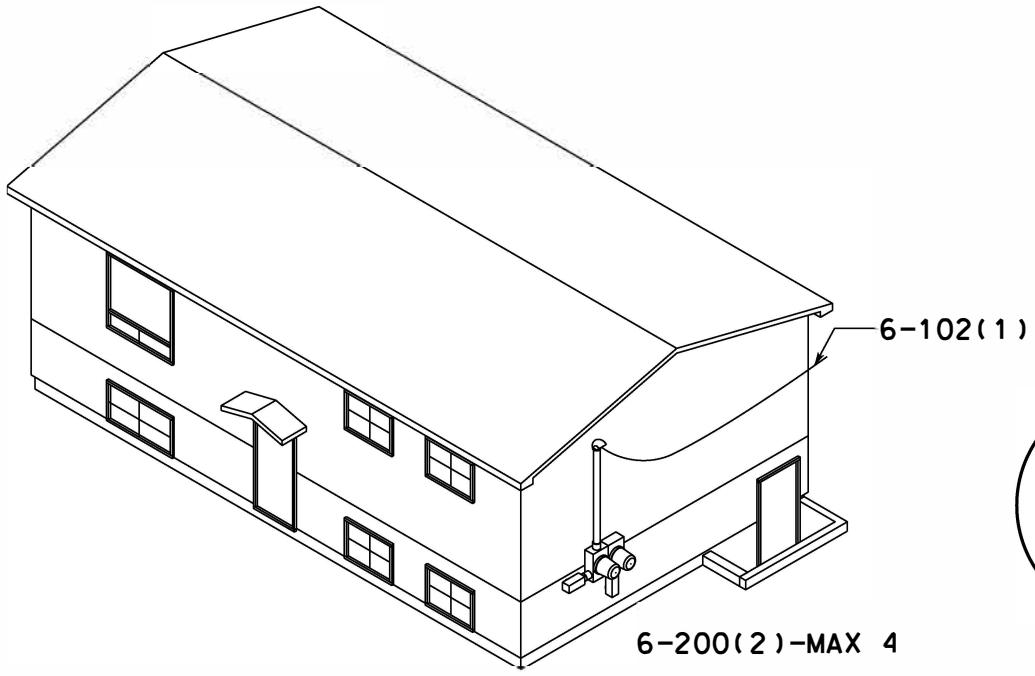
APPENDIX A
SERVICE ENTRANCE AND METERING CONFIGURATIONS

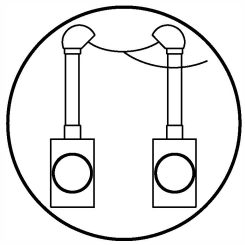
NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

NOVA SCOTIA POWER - DISTRIBUTION STANDARD



SINGLE FAMILY DWELLING



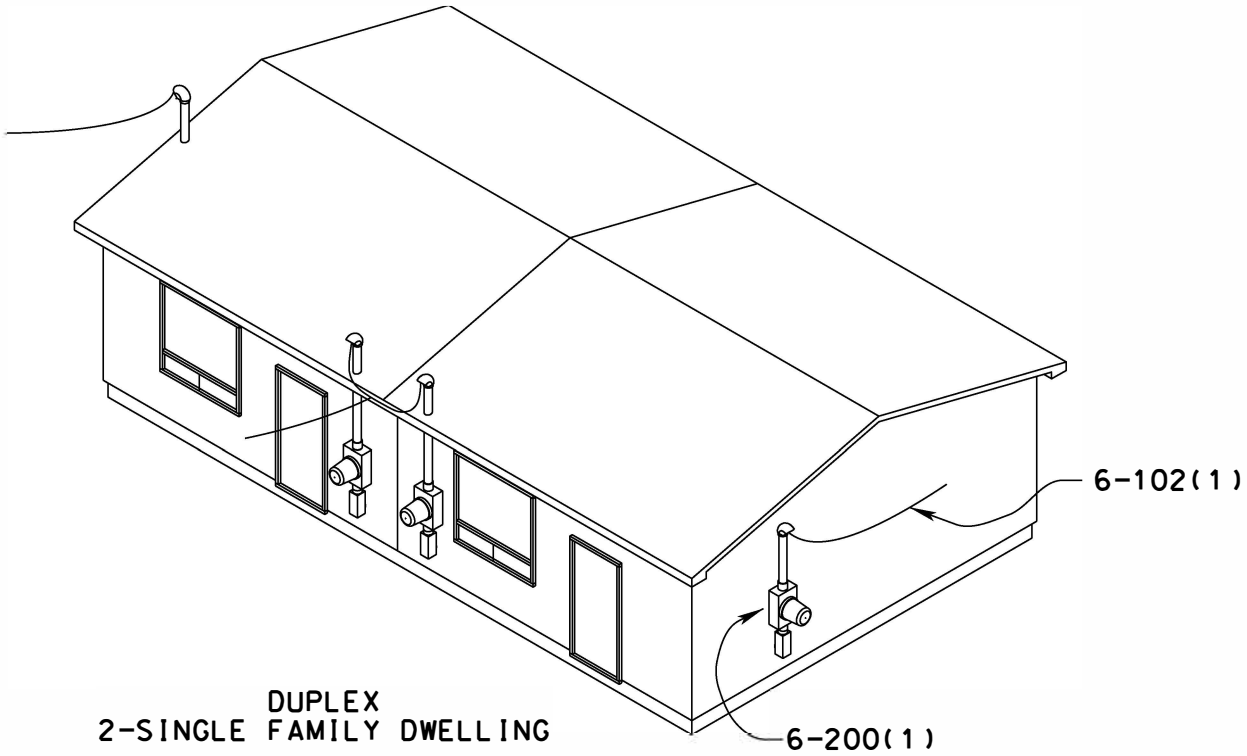


ALTERNATE

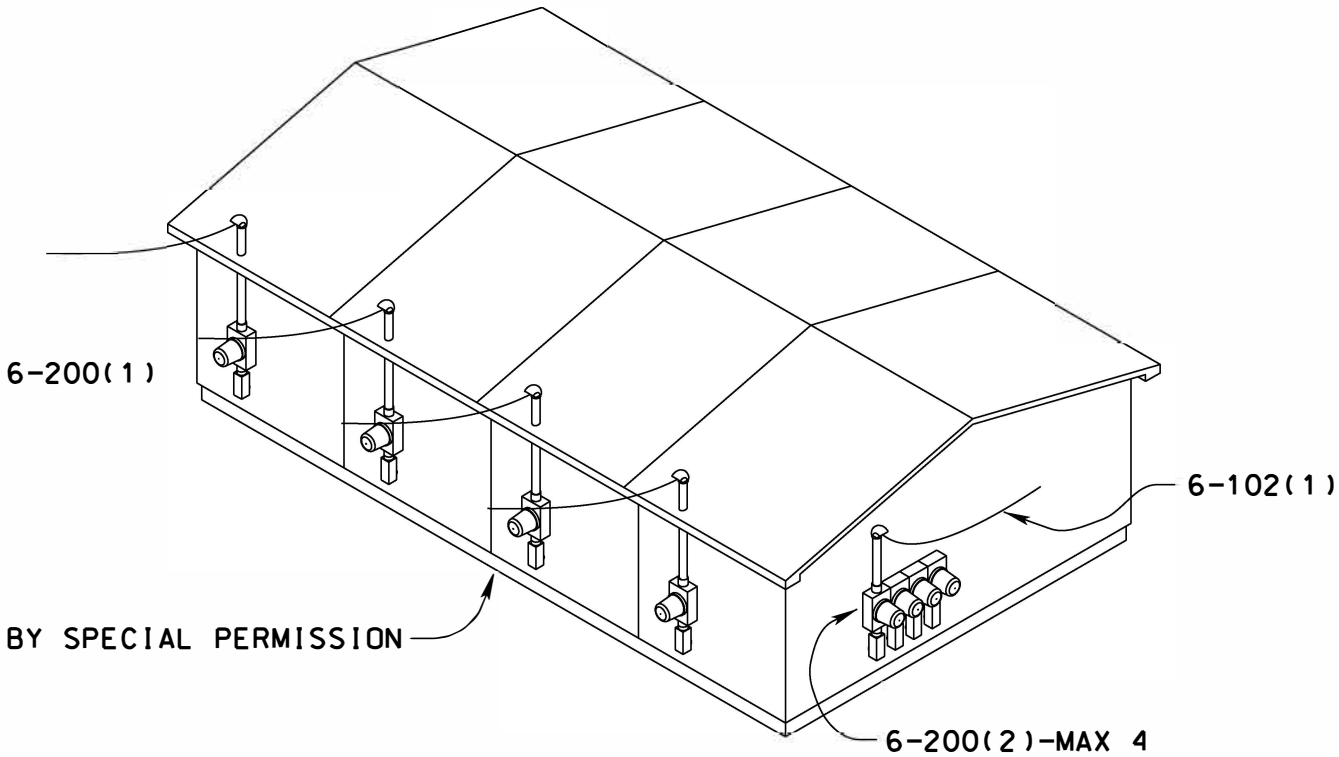
SINGLE FAMILY DWELLING
WITH
BASEMENT APARTMENT

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI STANDARD DETAILS
SCALE NTS	UNITS NOTED	DRAWN P.HUBLEY	
CHECKED J.MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE AND METERING CONFIGURATIONS SINGLE OCCUPANCY
NSPI APPROVAL:			SS-SK-01M / REV 0

DWG.NO.



DUPLEX
2-SINGLE FAMILY DWELLING



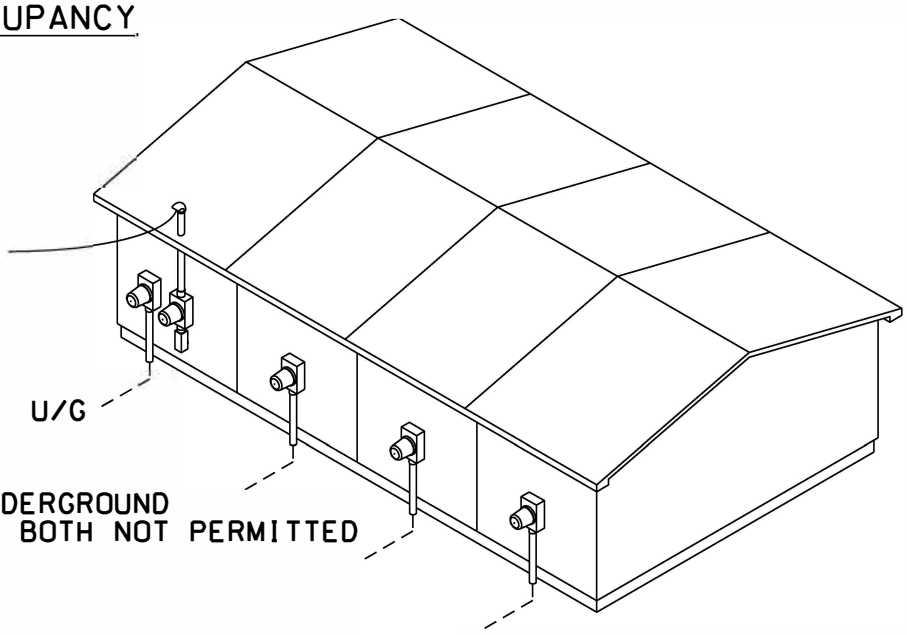
CONDOMINIUM OR
BUILDING COMPLEX HAVING
ONE OWNER

NOTE: UP TO 6 METERS CAN BE INSTALLED AT THE DISCRETION OF THE SUPPLY AUTHORITY

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI STANDARD DETAILS
SCALE NTS	UNITS NOTED	DRAWN P.HUBLEY	
CHECKED J.MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE AND METERING CONFIGURATIONS MULTIPLE OCCUPANCY
NSPI APPROVAL:			SS-SK-02M / REV 0

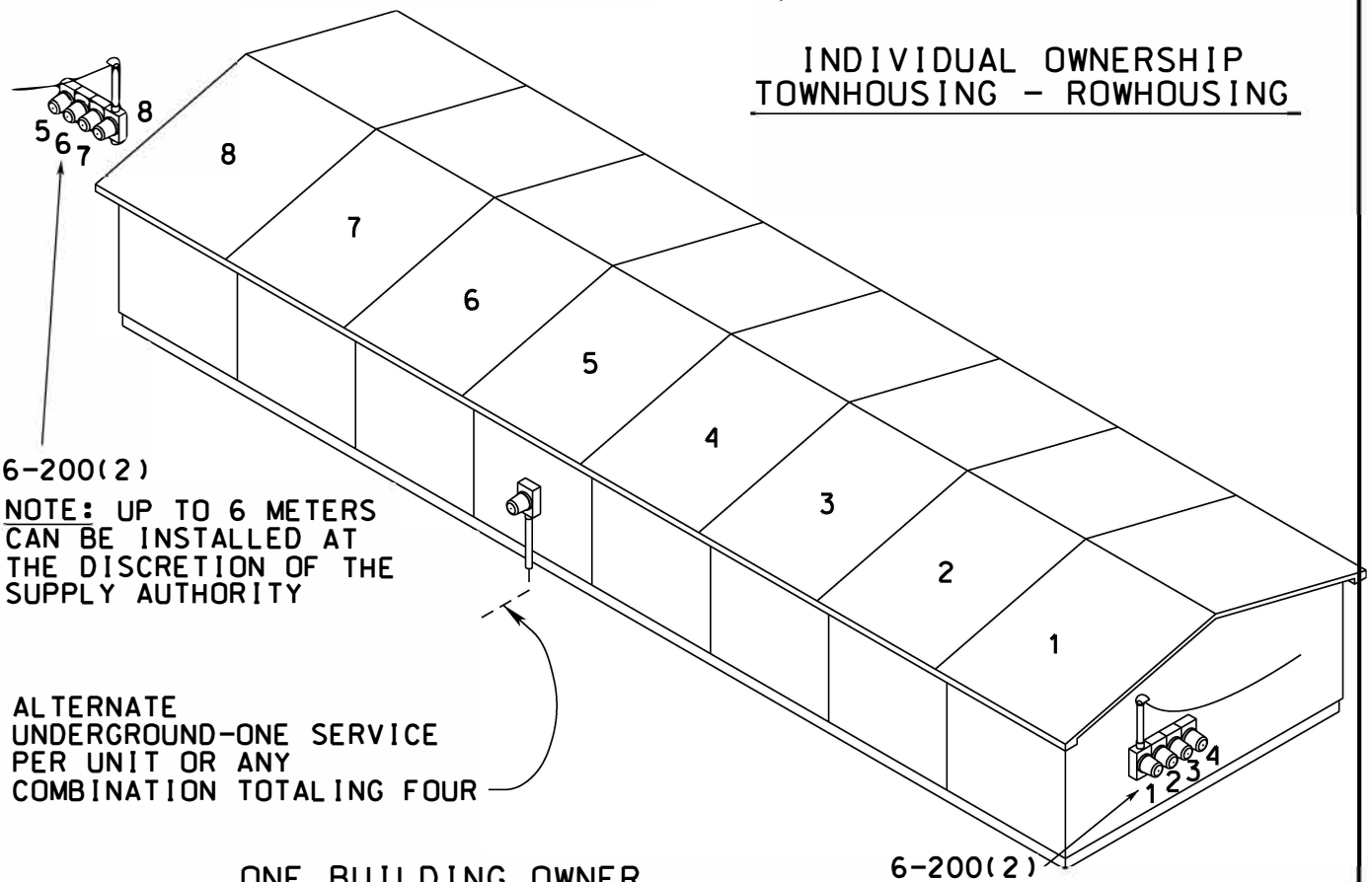
DWG.NO.

MULTIPLE OCCUPANCY



OVERHEAD OR UNDERGROUND
COMBINATION OF BOTH NOT PERMITTED

INDIVIDUAL OWNERSHIP
TOWNHOUSING - ROWHOUSING



6-200(2)

NOTE: UP TO 6 METERS CAN BE INSTALLED AT THE DISCRETION OF THE SUPPLY AUTHORITY

ALTERNATE
UNDERGROUND-ONE SERVICE
PER UNIT OR ANY
COMBINATION TOTALING FOUR

ONE BUILDING OWNER
NO INDIVIDUAL OWNERSHIP

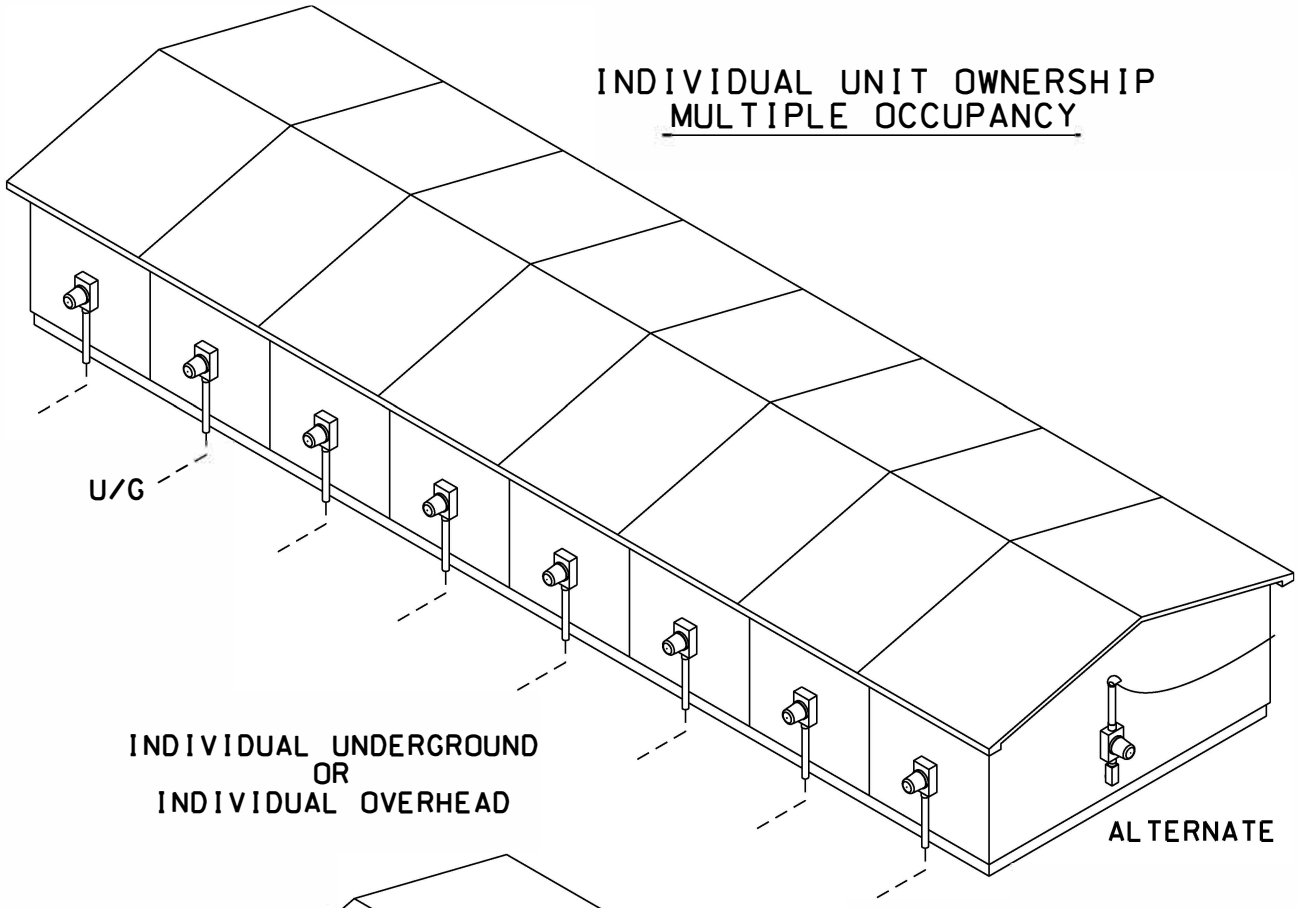
6-200(2)

NOTE: UP TO 6 METERS CAN BE INSTALLED AT THE DISCRETION OF THE SUPPLY AUTHORITY

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE NTS	UNITS NOTED	DRAWN P.HUBLEY	
CHECKED J.MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE AND METERING CONFIGURATIONS MULTIPLE OCCUPANCY
NSPI APPROVAL:			SS-SK-03M REV 0

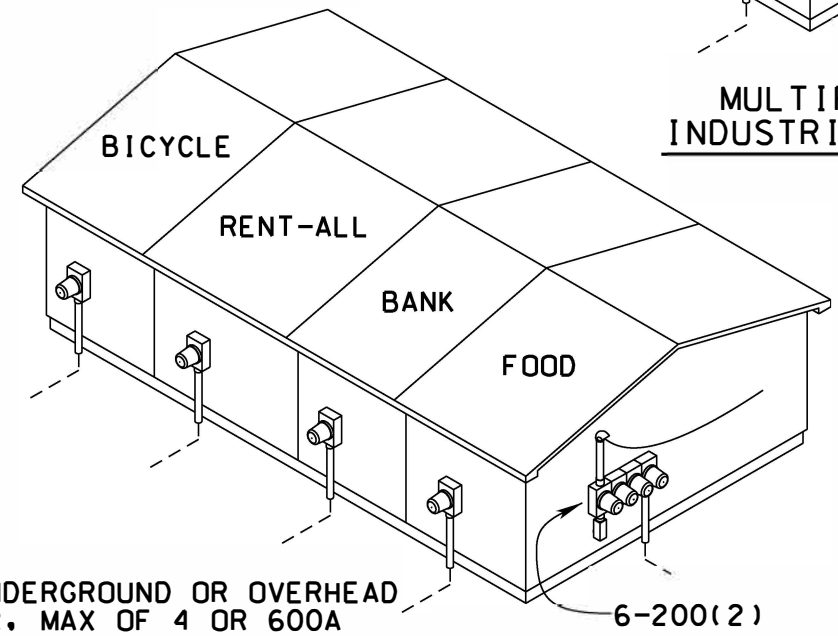
DWG.NO.

INDIVIDUAL UNIT OWNERSHIP
MULTIPLE OCCUPANCY



INDIVIDUAL UNDERGROUND
OR
INDIVIDUAL OVERHEAD

MULTIPLE TENNANT
INDUSTRIAL COMMERCIAL



INDIVIDUAL UNDERGROUND OR OVERHEAD
MULTIMETER, MAX OF 4 OR 600A

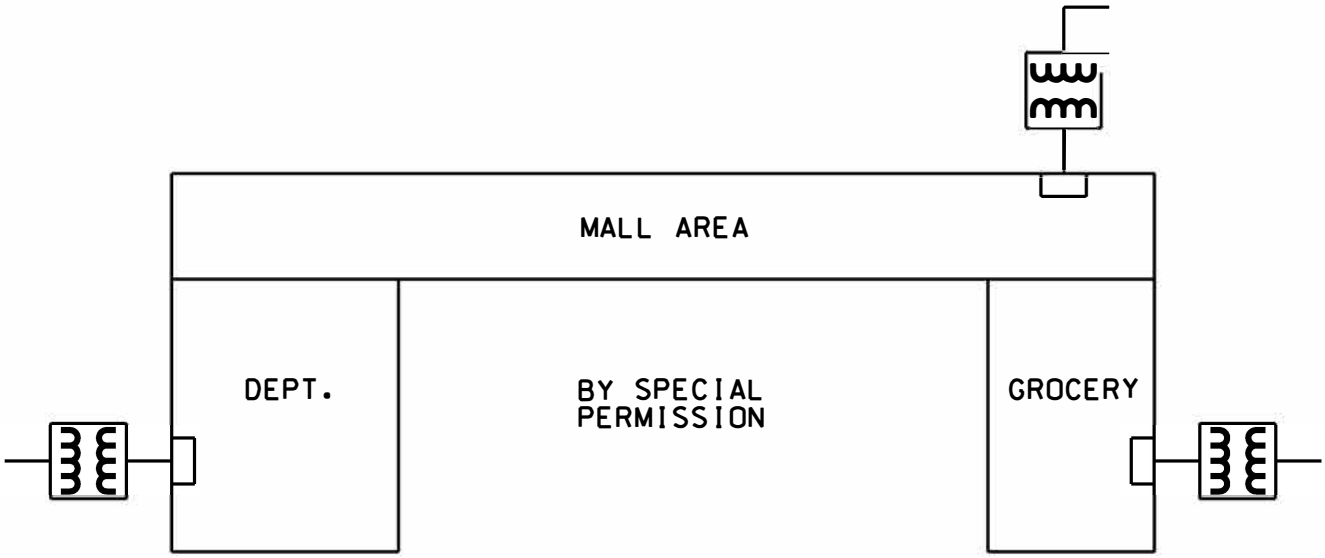
6-200(2)

NOTE: UP TO 6 METERS CAN BE INSTALLED AT THE DISCRETION OF THE SUPPLY AUTHORITY

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE NTS	UNITS NOTED	DRAWN P.HUBLEY	
CHECKED J.MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE AND METERING CONFIGURATIONS MULTIPLE OCCUPANCY
NSPI APPROVAL:			SS-SK-04M REV 0

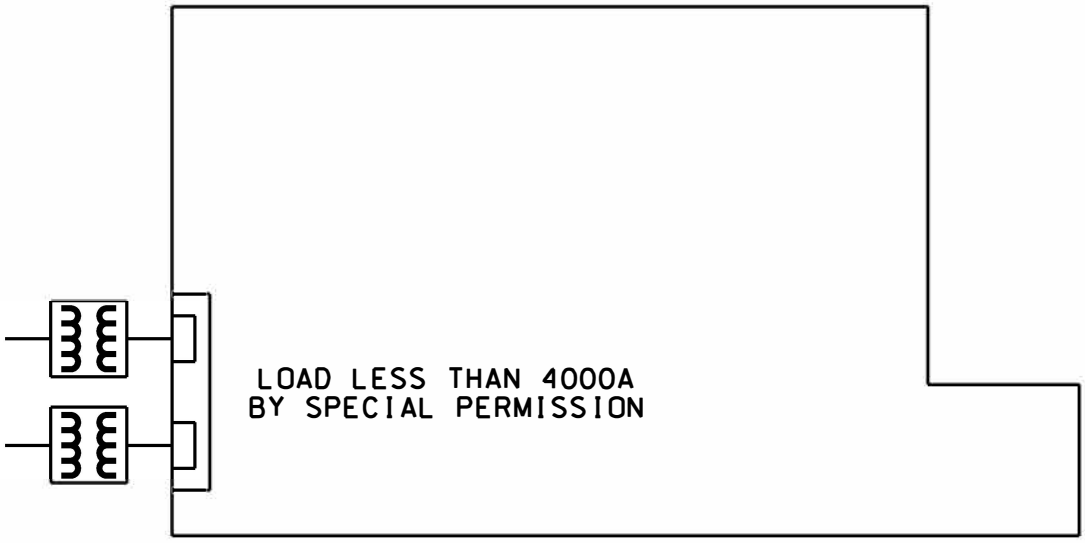
DWG.NO.

MALL COMPLEX INSTALLATION



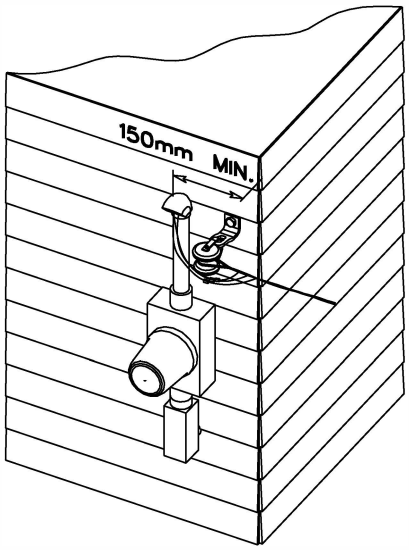
UNDERGROUND OR OVERHEAD
PER LOAD

LARGE FACTORY

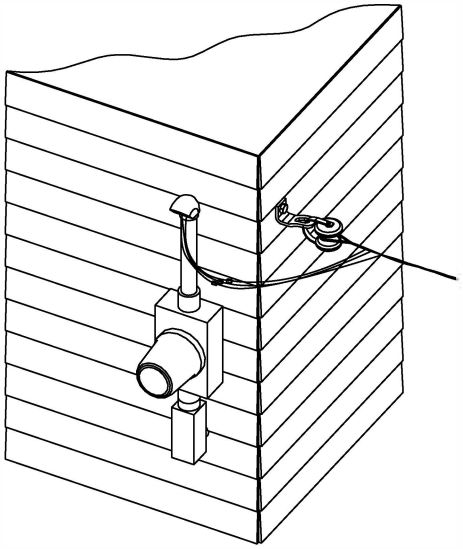


REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE NTS	UNITS NOTED	DRAWN P.HUBLEY	
CHECKED J.MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE AND METERING CONFIGURATIONS LARGE COMMERCIAL / INDUSTRIAL
NSPI APPROVAL:			SS-SK-05M REV 0

DWG.NO.



ACCEPTABLE



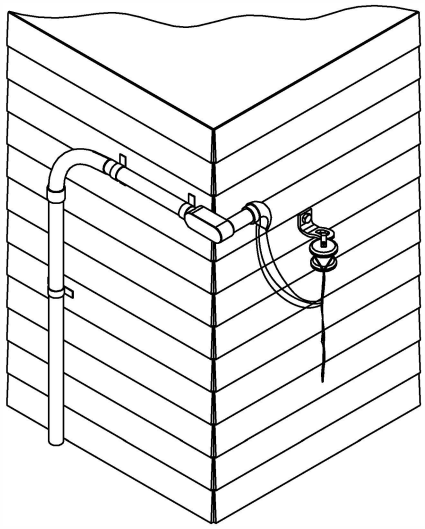
UNACCEPTABLE

NOTE:

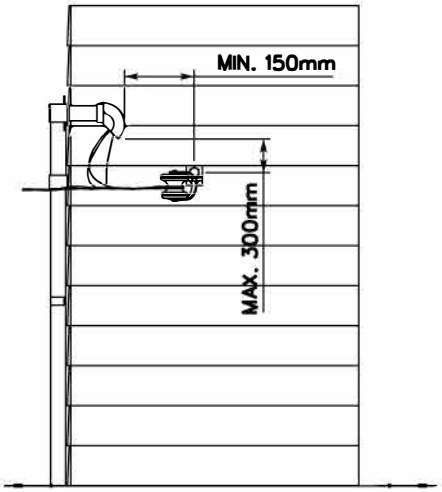
REFER TO CLAUSE 12.7 (D) OF THE UTILITY SERVICES REQUIREMENTS BOOK.

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE NTS	UNITS NOTED	DRAWN M. HALASZ	
CHECKED J. MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE CONFIGURATIONS
NSPI APPROVAL:			SS-SK-06M / REV 0

DWG.NO.



ISOMETRIC
NTS



ELEVATION
NTS

A
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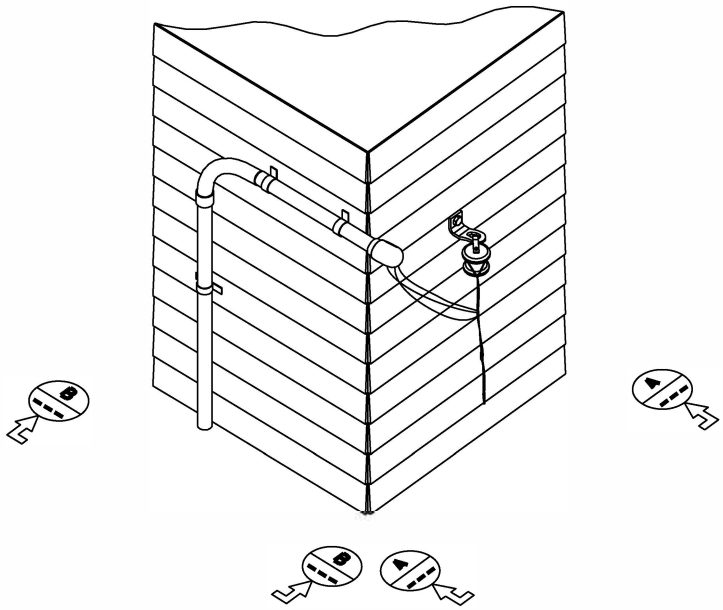
NOTE:

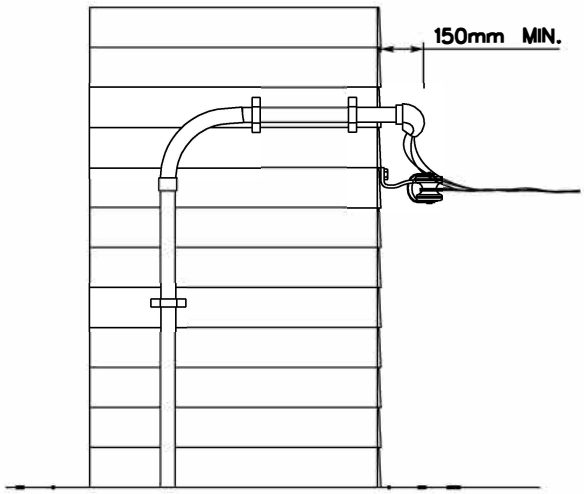
REFER TO CLAUSE 12.7 (D) OF THE UTILITY SERVICES REQUIREMENTS BOOK.

REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE **NTS**	UNITS **NOTED**	DRAWN **M. HALASZ**	
CHECKED **J. MCFADGEN**	DATE **2016-03-08**	W.O. **XXXX**	SERVICE ENTRANCE CONFIGURATIONS ALTERNATIVE 1
NSPI APPROVAL:			SS-SK-07M / REV 0

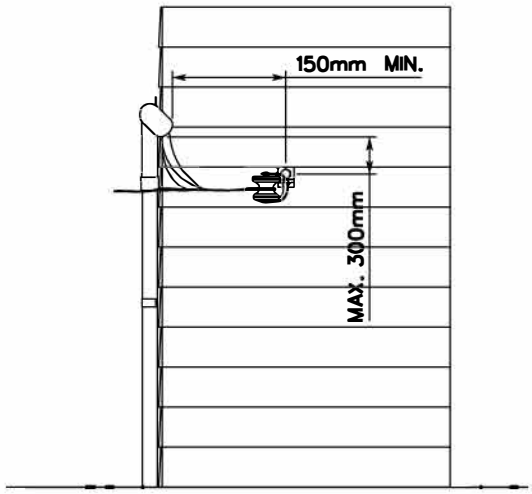
DWG.NO.



ISOMETRIC
NTS



ELEVATION B
NTS



ELEVATION A
NTS

NOTES:

1.) THE MINIMUM DISTANCE FROM THE CORNER OF THE STRUCTURE TO THE TIP OF THE SERVICE ENTRANCE FITTING MUST BE 150mm.

2.) IF THERE WILL BE A DOWN SPOUT FOR A RAIN WATER COLLECTION SYSTEM ON THE SAME CORNER AS THE SERVICE, THEN THE DISTANCE MUST BE INCREASED SUCH THAT THE SERVICE ENTRANCE CONDUCTORS WILL NOT BE TOUCHING THE DOWN SPOUT.

3.) ALL DIMENSIONS IN RELATION TO THE POSITION OF THE SERVICE ENTRANCE TO THE POINT OF ATTACHMENT OF THE SUPPLY CABLES WILL BE MEASURED ON THE SIDE OF THE STRUCTURE WHERE THE SUPPLY CABLE IS ATTACHED.

4.) IF THERE ARE MORE THAN ONE CONDUIT ON A SERVICE ENTRANCE, THEN ALL WEATHER HEADS MUST PROTRUDE THE SAME AMOUNT FROM THE CORNER OF THE STRUCTURE.

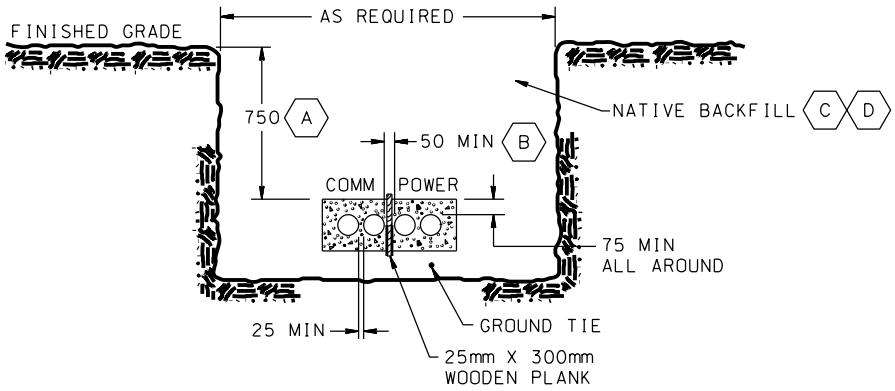
REFERENCE			Nova Scotia POWER An Emera Company
			NSPI DISTRIBUTION STANDARD
SCALE NTS	UNITS NOTED	DRAWN M. HALASZ	
CHECKED J. MCFADGEN	DATE 2016-03-08	W.O. XXXX	SERVICE ENTRANCE CONFIGURATIONS ALTERNATIVE 2
NSPI APPROVAL:			SS-SK-08M / REV 0

DWG.NO.

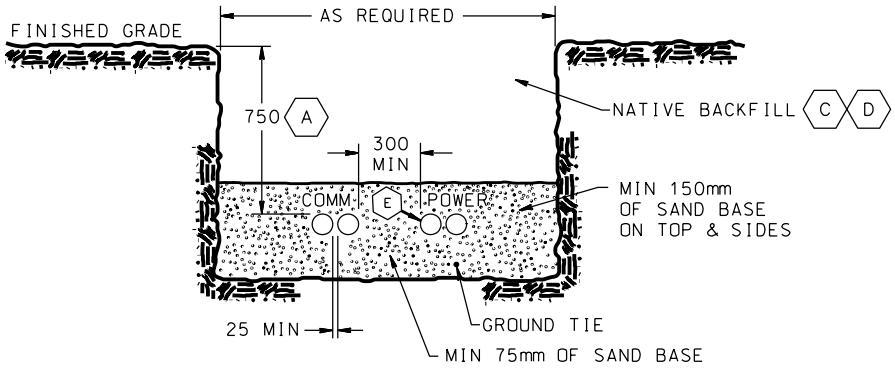
NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

APPENDIX B
NSPI STANDARD DRAWINGS

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS



CONCRETE ENCASED DUCTS



DIRECT BURIED DUCTS

NOTES:

A. DEPTH SHALL BE INCREASED TO 1000 mm IN VEHICULAR AREAS. MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE.

B. MUST BE INCREASED TO 300 mm IF ONE UTILITY'S DUCTS ARE NOT CONCRETE ENCASED.

C. NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER DUCTS OR CABLES. CLASS 'A' GRAVEL IS ACCEPTABLE.

D. BACKFILL TO BE COMPACTED EVERY 300 mm MINIMUM.

E. IF POWER CABLES OPERATING AT DIFFERENT VOLTAGES ARE INSTALLED IN THE SAME TRENCH THE LOWEST VOLTAGE CABLES SHALL BE INSTALLED ADJACENT TO THE COMMUNICATIONS CIRCUIT.

F. ALL CROSSINGS OF THE COMMUNICATIONS AND NSPI DUCTS SHALL BE AT RIGHT ANGLES
WITH A MINIMUM CLEARANCE OF 300 mm.

G. NUMBER. SIZE AND TYPE OF CONDUIT/DUCTS TO BE SPECIFIED BY THE USER UTILITY.

H. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

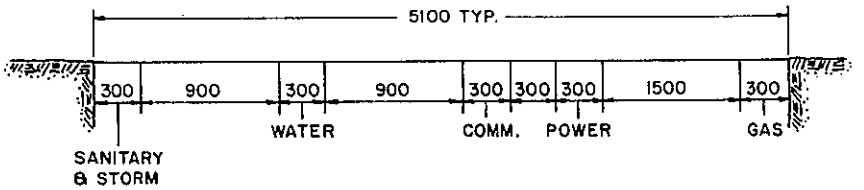
JOINT USE TRENCH DETAILS

DATE:	2008-08-14	REV DATE:	2008-08-14
DRAWN:	H. V. HUYNH	STD NO:	**1U-ED-12M**
APPROVED:		SHEET:	**1** of **1** **(R1)**

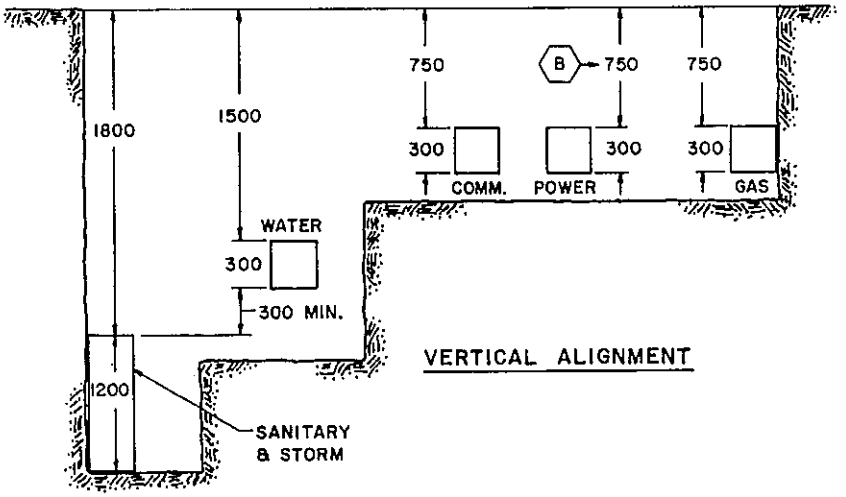
IU-ED-32M

SPACE ALLOCATION FOR CUSTOMER SERVICES

JUNE 1986



HORIZONTAL ALIGNMENT



VERTICAL ALIGNMENT

NOTES:

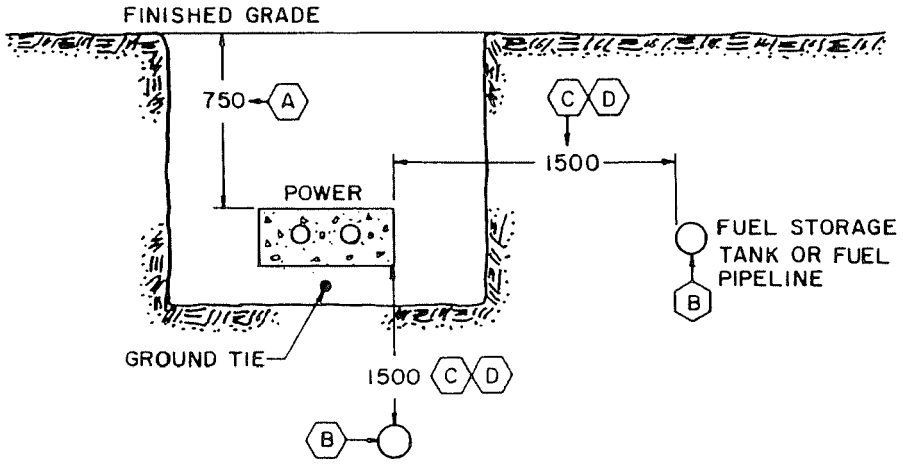
A. ALL DIMENSIONS GIVEN ARE PREFERRED, BUT MAY BE REDUCED DUE TO EARTH CONDITIONS (i.e. BEDROCK) WITH THE PRIOR WRITTEN APPROVAL OF ALL UTILITIES CONCERNED.

B. REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS. MAY BE REDUCED TO 600mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE.

C. ALL CROSSINGS SHALL BE AT RIGHT ANGLES WITH A MINIMUM CLEARANCE OF 300 mm.

D. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

drawn Craig N. Foisy designed approved
Standards Committee



NOTES:

A . REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE .

B . FUEL STORAGE APPLIES TO OIL , PROPANE OR GASOLINE TANKS OR PIPELINES

C . 1500 mm IS THE REQUIRED CLEARANCE WHETHER THE DUCTS ARE CONCRETE ENCASED OR DIRECT BURIED .

D . MAY BE REDUCED TO 600 mm WHERE THE FUEL STORAGE TANK HOLDS LESS THAN 7600 LITRES .

E . UNDERGROUND POWER CABLES SHALL NOT BE ROUTED UNDER STORAGE TANKS CONTAINING FLAMMABLE LIQUIDS OR GAS.

F . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF NOVA SCOTIA
DATE 14/04/2016
F. TAWIL
10412

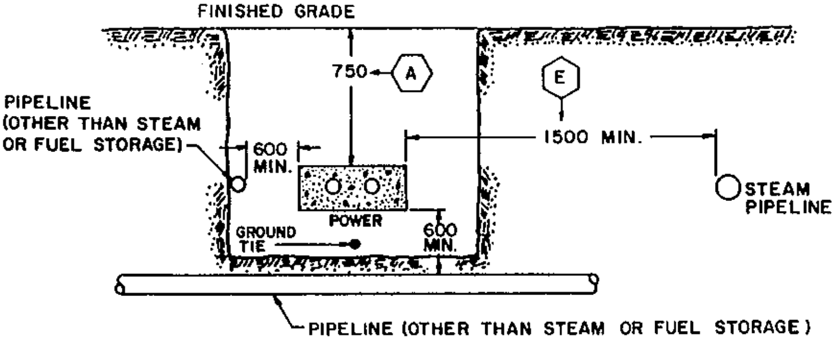
DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

MINIMUM CLEARANCE BETWEEN POWER DUCTS AND FUEL STORAGE TANKS OR PIPE LINES

DATE: 2008-09-15	REV DATE: 2016-04-11
DRAWN: H. V. HUYNH	STD NO: **1U-ED-41M.**
APPROVED:	SHEET: **1** of **1** **(R1)**

MINIMUM CLEARANCES BETWEEN POWER DUCTS AND PIPELINES



NOTES:

A. REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS. MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE.

B. ALL CROSSINGS SHALL BE AT RIGHT ANGLES WITH A MINIMUM CLEARANCE OF 600 mm.

C. THE MINIMUM CONCRETE COVER OVER THE DUCTS SHALL BE 75 mm AND SHALL HAVE A MINIMUM STRENGH OF 20 MPa @ 28 DAYS.

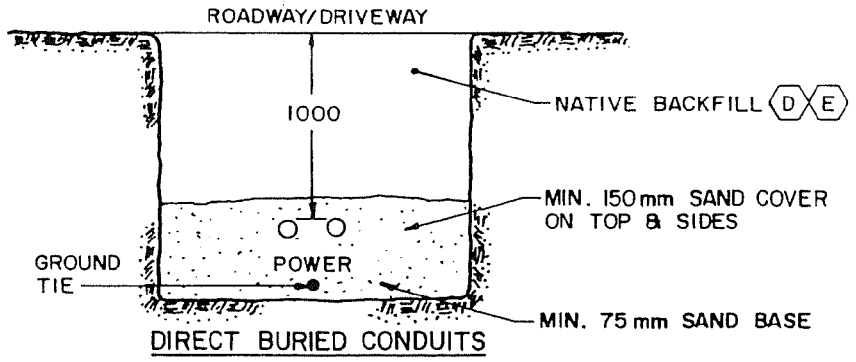
D. IF THE WIDTH OF THE DUCTBANK EXCEEDS 550 mm, THEN ADDITIONAL STRENGTHENING MAY BE REQUIRED AS DEFINED IN CSA STANDARD C22.3, NO. 7-M.

E. FOR PARALLEL STEAM LINES THE GREATER THE SEPARATION FROM POWER CABLES THE BETTER, AS STEAM LINES ARE A MAJOR SOURCE OF CABLE HEATING WHEN PRESENT.

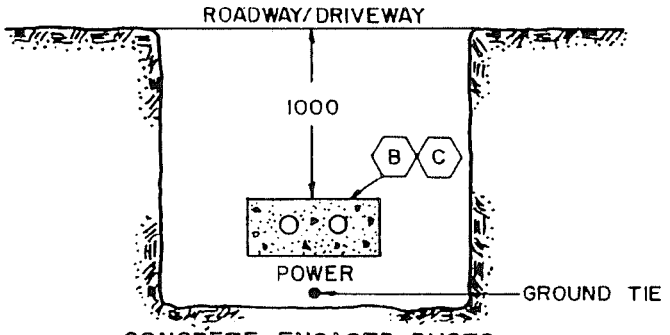
F. ALL CLEARANCES APPLY TO DIRECT BURIED OR CONCRETE ENCASED DUCTS. THE CABLE SHALL BE INSTALLED AT A UNIFORM DEPTH FOR THE FULL WIDTH OF RIGHT-OF-WAY CONCERNED.

G. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

drawn [signature] designed [signature] approved [signature]
Standards Committee



DIRECT BURIED CONDUITS



CONCRETE ENCASED DUCTS

NOTES:

A . ALL CROSSINGS SHALL BE AT RIGHT ANGLES WITH A MINIMUM CLEARANCE OF 300 mm .

B . THE MINIMUM CONCRETE COVER OVER THE DUCTS SHALL BE 75 mm AND SHALL HAVE A MINIMUM STRENGTH OF 20 MPa @ 28 DAYS .

C . IF THE WIDTH OF THE DUCTBANK EXCEEDS 550 mm , THEN ADDITIONAL STRENGTHENING MAY BE REQUIRED AS DEFINED IN CSA STANDARD C22.3 , No. 7-M .

D . NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER DUCTS OR CABLES . CLASS 'A' GRAVEL IS ACCEPTABLE .

E . BACKFILL TO BE COMPACTED EVERY 300 mm .

F . WHERE THE DUCTBANK/CONDUIT IS INSTALLED BENEATH A DRAINAGE DITCH THE MINIMUM DEPTH OF BURIAL SHALL BE MAINTAINED FROM THE BOTTOM OF THE DRAINAGE DITCH .

G . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

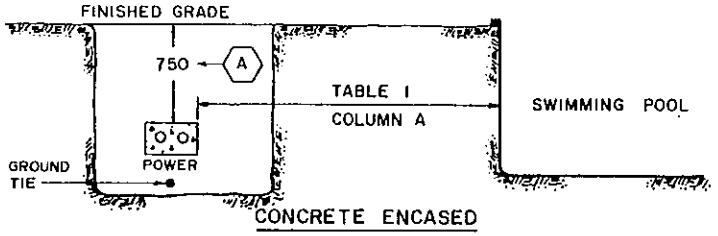
Nova Scotia POWER
An Emera Company

MINIMUM CLEARANCES UNDER ROADWAYS/DRIVEWAYS

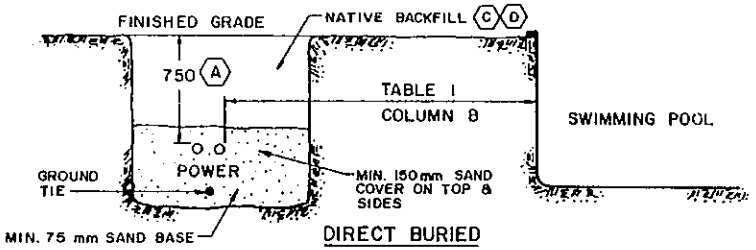
DATE: 2008-09-15	REV DATE: 2016-04-11
DRAWN: H. V. HUYNH	STD NO: **1U-ED-44M**
APPROVED:	SHEET: **1** of **1** **(R1)**

IU-ED-45M
REV. AUG. 1988

MINIMUM CLEARANCES BETWEEN POWER DUCTS AND SWIMMING POOLS



CONCRETE ENCASED



DIRECT BURIED

TABLE I		
VOLTAGE (B)	COLUMN A	COLUMN B
0 - 750 V	750	1500
750 V - 15 kV	1500	3000
15 kV - 22 kV	2000	4000

NOTES:

A . REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS . MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE .

B . VOLTAGES ARE RMS PHASE TO GROUND .

C . NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER DUCTS OR CABLES . CLASS 'A' GRAVEL IS ACCEPTABLE .

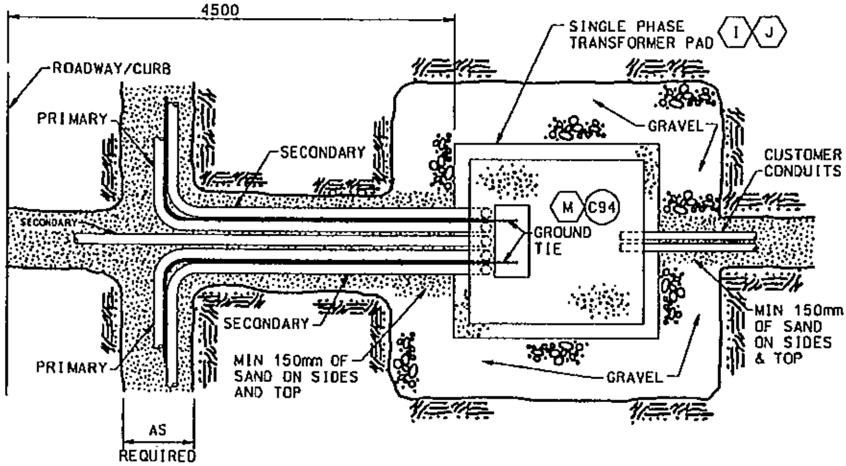
D . BACKFILL TO BE COMPACTED EVERY 300 mm MINIMUM .

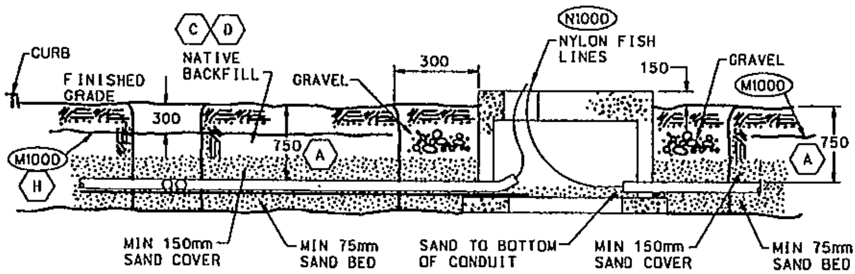
E . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

drawn Gregg J. Fairn designed Terry Moore approved

Standards Committee

SINGLE PHASE PADMOUNT TRANSFORMER TRENCH DETAILS





NOTES:

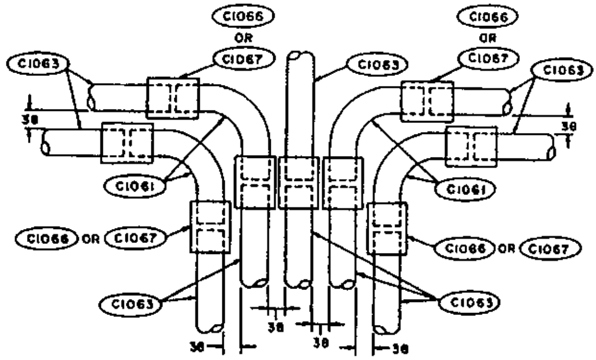
A. REFER TO DWG. NO. 1U-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS. MAY BE REDUCED TO 600mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE.
B. CONDUIT TO BE BEDDED WITH SAND AS SHOWN.
C. NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50mm IN DIAMETER FOR THE FIRST 300mm OVER CONDUIT.
D. BACKFILL TO BE COMPACTED EVERY 300mm MINIMUM.
E. FOR JOINT USE DETAILS REFER TO DWG. NO. 1U-ED-12M.
F. ALL CONDUIT MUST BE CLEANED AND SWABBED, THEN CAPPED FOR PROTECTION.
G. ALL CONDUIT SHALL HAVE A NYLON FISH LINE INSTALLED PRIOR TO CAPPING.
H. MARKER TAPE (ITEM M1000) SHALL BE INSTALLED AS SHOWN.
I. FOR TRANSFORMER PAD CONSTRUCTION REFER TO SECTION '6U'.
J. FOR TRANSFORMER PAD LOCATION REFER TO DWG. NO. 7U-ED-10M.
K. FOR CONDUIT DETAILS REFER TO DWG. NO. 2U-ED-21M.
L. FOR CABLE TRAINING DETAILS REFER TO DWG. NO. 2U-ED-22M.
M. GROUND TIE TO INTERCONNECT PADMOUNT TRANSFORMER GROUND(S) AND RISER POLE GROUND(S). REFER TO DWG. NO. 10U-ED-30M.
N. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

drawn ____ designed ____ approved ____
uSTN FILE NAME: UGS:[300,XXX]2UED20M.DGN
STANDARDS COMMITTEE

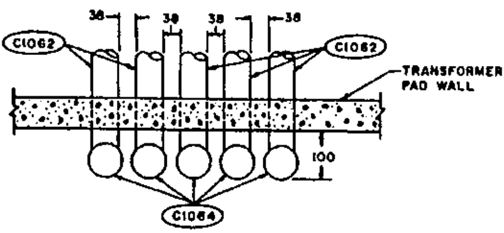
2U-ED-21M

JUNE 1986

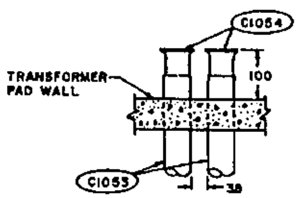
1Ø PAD-MOUNT TRANSFORMER CONDUIT DETAILS



PRIMARY & SECONDARY CONDUITS
AT SERVICE TRENCH



PRIMARY & SECONDARY CONDUITS
AT TRANSFORMER PAD

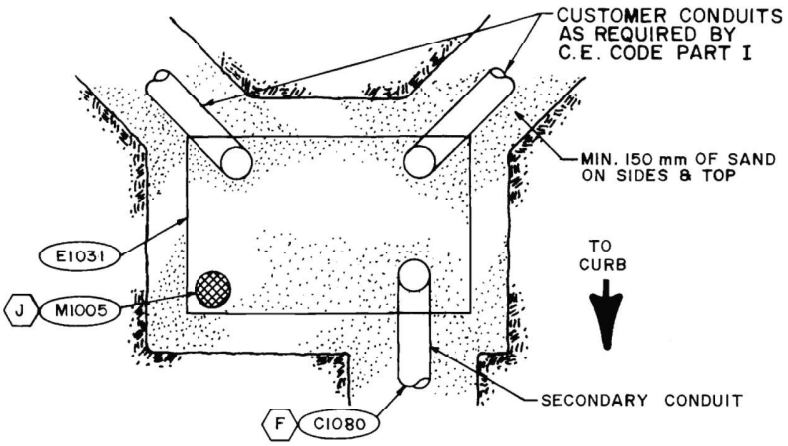


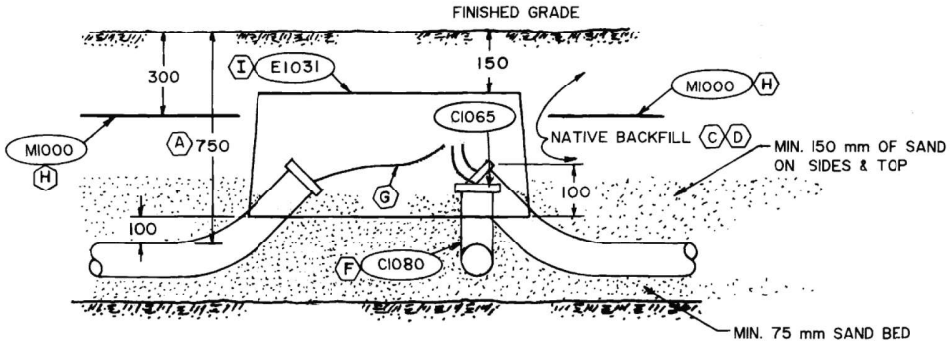
CUSTOMER SERVICE CONDUITS
AT TRANSFORMER PAD

NOTES:

A. FOR TRENCHING DETAILS REFER TO DWG. NO. 2U-ED-20M.
B. FOR DESCRIPTION OF HARDWARE ITEMS REFER TO SECTION '17U'.
C. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

drawn Greg W. Foisy designed [signature] approved [signature]
Standards Committee





NOTES:

A. REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS, MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE.
B. CONDUIT TO BE BEDDED WITH SAND AS SHOWN.
C. NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER CONDUIT.
D. BACKFILL TO BE COMPACTED EVERY 300 mm MINIMUM.
E. FOR JOINT USE DETAILS REFER TO DWG. NO. IU-ED-12M.
F. ALL CONDUIT MUST BE CLEANED AND SWABBED, THEN CAPPED FOR PROTECTION.
G. ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING.
H. MARKER TAPE (ITEM M1000) SHALL BE INSTALLED AS SHOWN.
I. URD BOX (ITEM E1031) SHALL COMPLETELY COVER CAPPED ENDS OF CONDUIT.
J. LOCATOR (ITEM M1005) MUST BE INSTALLED INSIDE URD BOX.
K. FOR URD BOX LOCATION REFER TO DWG. NO. 7U-ED-20M.
L. FOR CABLE TRAINING DETAILS REFER TO DWG. NO. 2U-ED-31M.
M. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

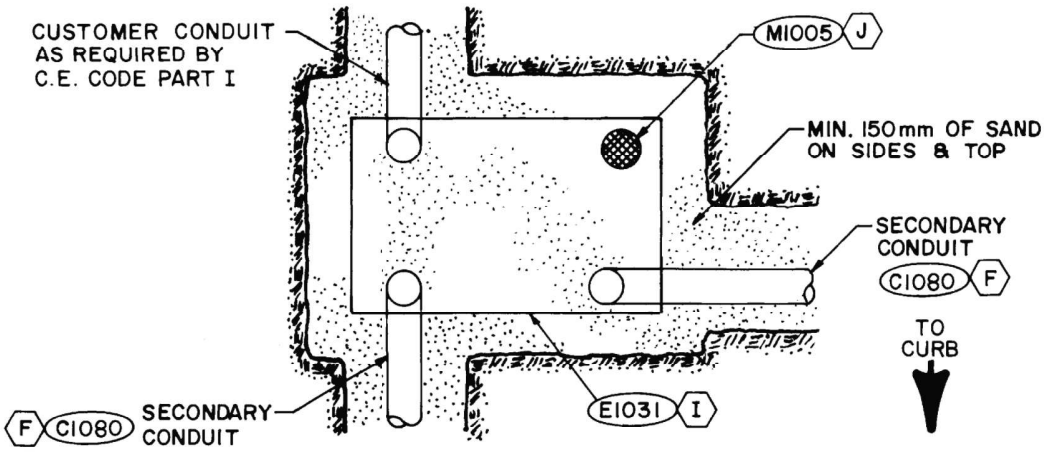
REGISTERED PROFESSIONAL ENGINEER
DATE 2018-11-07
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

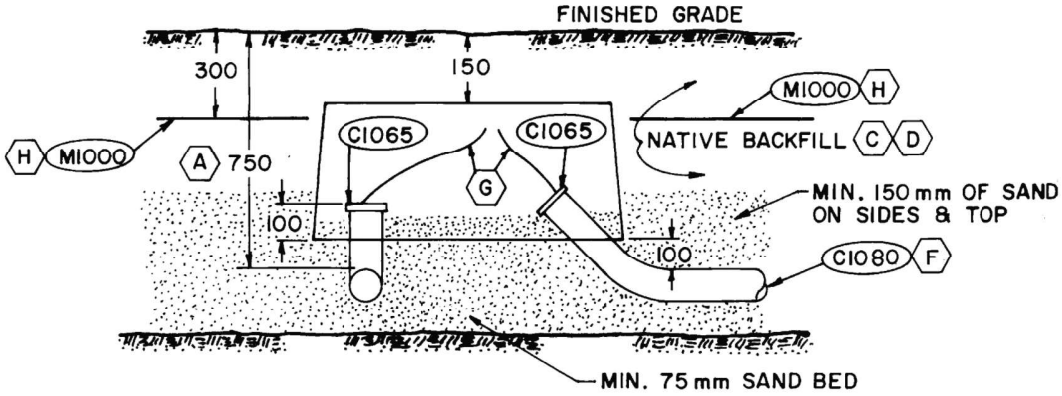
DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

URD BOX AND CONDUIT DETAILS SHOWING SECONDARY AND CUSTOMER'S CONDUITS FOR SINGLE FAMILY HOMES

DATE:	1988-08-15	REV DATE:	2018-10-09
DRAWN:	P. HUBLEY	STD NO:	2U-ED-30M
APPROVED:		SHT NO:	1 OF 1 (R2)





NOTES:

A . REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS. MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE .

B . CONDUIT TO BE BEDDED WITH SAND AS SHOWN .

C . NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER CONDUIT .

D . BACKFILL TO BE COMPACTED EVERY 300 mm MINIMUM .

E . FOR JOINT USE DETAILS REFER TO DWG. NO. IU-ED-12M .

F . ALL CONDUIT MUST BE CLEANED AND SWABBED , THEN CAPPED FOR PROTECTION .

G . ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING .

H . MARKER TAPE (ITEM M1000) SHALL BE INSTALLED AS SHOWN .

I . URD BOX (ITEM E1031) SHALL COMPLETELY COVER CAPPED ENDS OF CONDUIT .

J .LOCATOR (ITEM M1005) MUST BE INSTALLED INSIDE URD BOX .

K . FOR URD BOX LOCATION REFER TO DWG. NO. 7U-ED-20M .

L . FOR CABLE TRAINING DETAILS REFER TO DWG. NO. 2U-ED-37M .

M . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

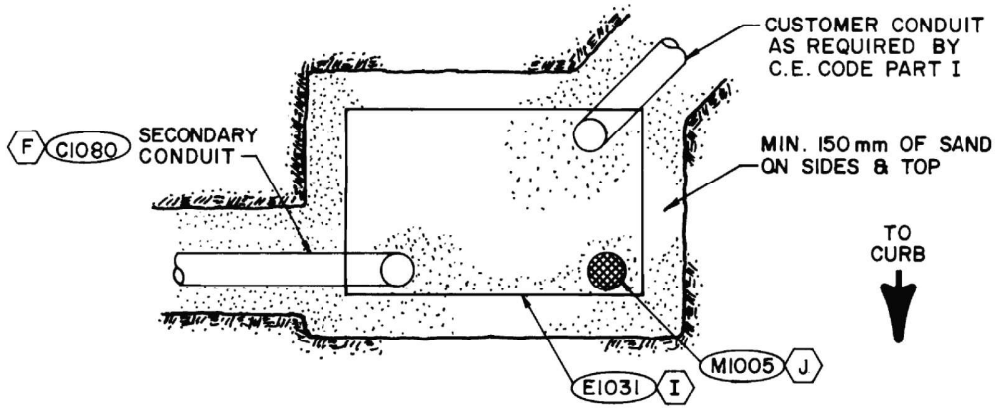
REGISTERED PROFESSIONAL ENGINEER
DATE 2018-11-07
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

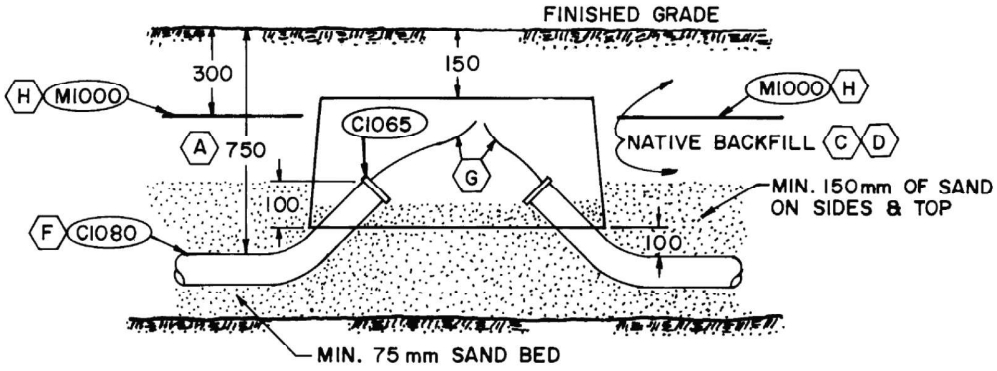
DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

URD BOX AND CONDUIT DETAILS SHOWING THROUGH SECONDARY AND CUSTOMER SERVICE FOR CONDOMINIUMS

DATE:	1988-08-15	REV DATE:	2018-10-09
DRAWN:	P. HUBLEY	STD NO:	2U-ED-36M
APPROVED:		SHT NO:	1 OF 1 (R2)





NOTES:

A . REFER TO DWG. NO. IU-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS . MAY BE REDUCED TO 600 mm IF VOLTAGE DOES NOT EXCEED 750 VOLTS PHASE TO PHASE .
B . CONDUIT TO BE BEDDED WITH SAND AS SHOWN .
C . NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50 mm IN DIAMETER FOR THE FIRST 300 mm OVER CONDUIT .
D . BACKFILL TO BE COMPACTED EVERY 300 mm MINIMUM .
E . FOR JOINT USE DETAILS REFER TO DWG. NO. IU-ED-12M .
F . ALL CONDUIT MUST BE CLEANED AND SWABBED , THEN CAPPED FOR PROTECTION .
G . ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING .
H . MARKER TAPE (ITEM M1000) SHALL BE INSTALLED AS SHOWN .
I . URD BOX (ITEM E1031) SHALL COMPLETELY COVER CAPPED ENDS OF CONDUIT .
J . LOCATOR (ITEM M1005) MUST BE INSTALLED INSIDE URD BOX .
K . FOR URD BOX LOCATION REFER TO DWG. NO. 7U-ED-20M .
L . FOR CABLE TRAINING DETAILS REFER TO DWG. NO. 2U-ED-39M .
M . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

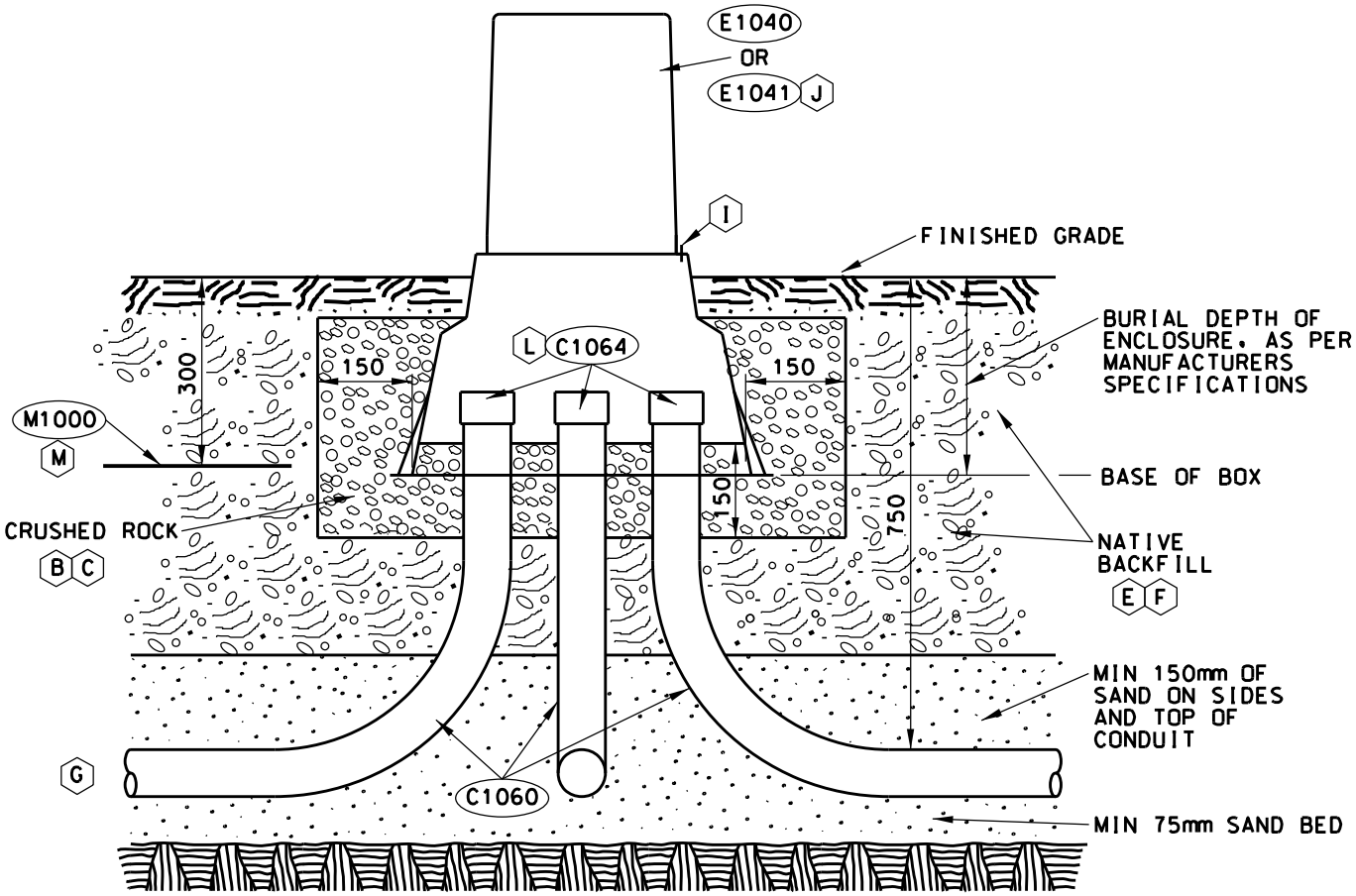
REGISTERED PROFESSIONAL ENGINEER
DATE 2018-11-07
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

URD BOX AND CONDUIT DETAILS SHOWING SECONDARY AND CUSTOMER SERVICE FOR CONDOMINIUMS

DATE:	1988-08-15	REV DATE:	2018-10-09
DRAWN:	P. HUBLEY	STD NO:	2U-ED-38M
APPROVED:		SHT NO:	1 OF 1 (R2)



NOTES:

A. LOCATIONS. SETBACKS AND PROTECTION MUST BE AS PER 7U-ED-10M OR 7U-ED-11M AS APPLICABLE.

B. BASE OF CRUSHED ROCK MUST BE COMPACTED BEFORE SETTING THE BOX. CRUSHED ROCK TO BE 9.5 TO 19mm (3/8" TO 3/4").

C. CARE TO BE TAKEN WHEN COMPACTING/BACKFILLING URD BASE SO NOT TO DISTORT SHAPE OF BASE (CAN CAUSE TOP OF URD TO FIT INCORRECTLY OR NOT AT ALL).

D. PLACE 50mm OF STONE INSIDE THE BOX FIRST THEN FILL OUTSIDE.

E. NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50mm IN DIAMETER FOR THE FIRST 300mm OVER CONDUIT.

F. BACKFILL TO BE COMPACTED EVERY 300mm MINIMUM.

G. FOR JOINT USE DETAILS REFER TO DWG NO 1U-ED-12M.

H. ALL SIDES OF URD BASE MUST BE COVERED (CRUSHED ROCK/ BACKFILLING). IN SUBDIVISIONS WITH DITCHES PROVISIONS MUST BE TAKEN TO ENSURE THIS (i.e. EASEMENT ON PRIVATE PROPERTY. CRIBBING).

I. HEX NUT MUST BE INSTALLED.

J. SMALLER SIZE ABOVE GRADE URD BOX E1041 MAY BE USED IF USED AS LAST BOX (DOES NOT FEED ANOTHER URD BOX) SMALL MOLDS WILL ALSO BE REQUIRED.

K. CONDUIT MUST BE AT LEAST 25mm (1") ABOVE THE STONE.

L. ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING.

M. MARKER TAPE (ITEM M1000) SHALL BE INSTALLED AS SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 2018-11-16
J.A. MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

ABOVE GROUND URD BOX AND CONDUIT INSTALLATION DETAILS

DATE:	2013-10-28	REV DATE:	2018-11-07
DRAWN:	P. HUBLEY	STD NO:	2U-ED-54M
APPROVED:		SHT NO:	1 OF 1 (R2)

TX RATING (kVA)	VOLTAGE RATING OF TRANSFORMER (V)	
	600 Y / 347	208 Y / 120
150	4 - FIG 1	6 - FIG 2
300	4 - FIG 1	6 - FIG 2
500	6 - FIG 2	8 - FIG 3
750	6 - FIG 2	8 - FIG 3
1000	6 - FIG 2	8 - FIG 3
1500	8 - FIG 3	N/A
2000	8 - FIG 3	N/A
2500	8 - FIG 3	N/A

NUMBER OF ACCEPTABLE CABLE CONNECTIONS

FIG 1

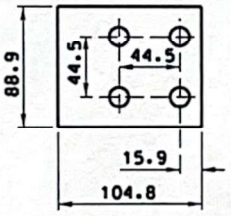


FIG 2

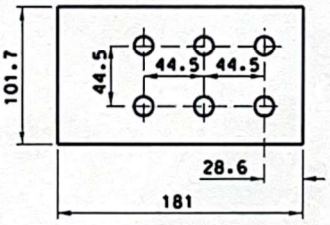
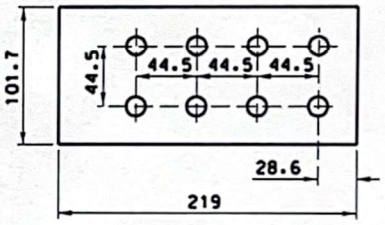


FIG 3



NOTES:

A. ALL DIMENSIONS ARE IN MILLIMETRES

B. TWO HOLE TERMINALS ARE TO BE USED.

C. ALL HOLES ARE 14.3mm ± 0.8mm DIAMETER

D. REFER TO 4U-11M AND 4U-12M FOR NSPI APPROVED SECONDARY TERMINALS.

E. SECONDARY TERMINALS ARE NOT TO BE STACKED ON ONE SIDE OF THE LV BUSHING.

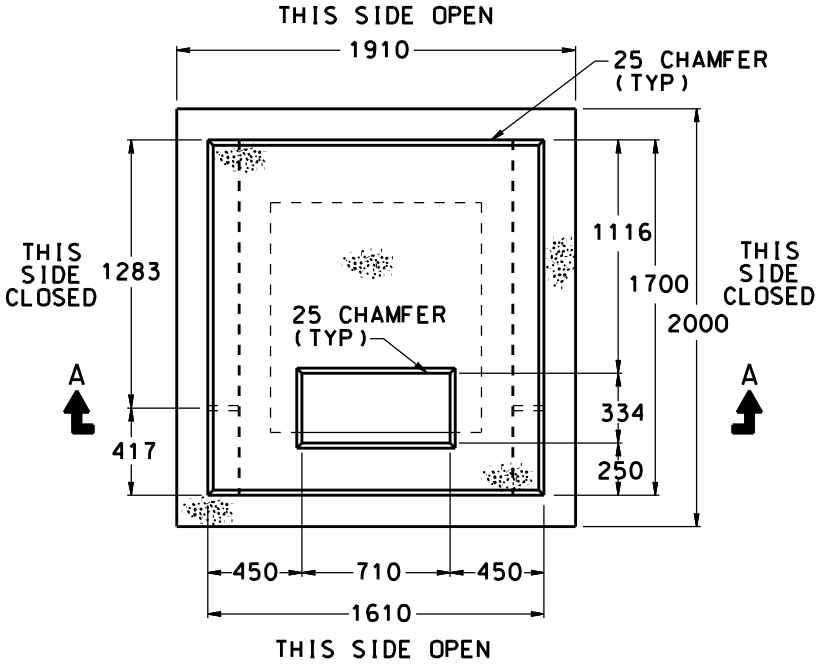
ORIGINAL DRAWING SEALED BY:
F.TAWIL
DATE: 2016-04-12

DISTRIBUTION STANDARDS

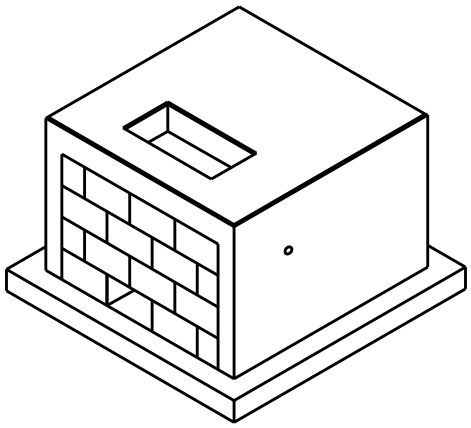
Nova Scotia POWER
An Emera Company

MAXIMUM NUMBER OF SECONDARY CABLES ON 3 PHASE PADMOUNTS

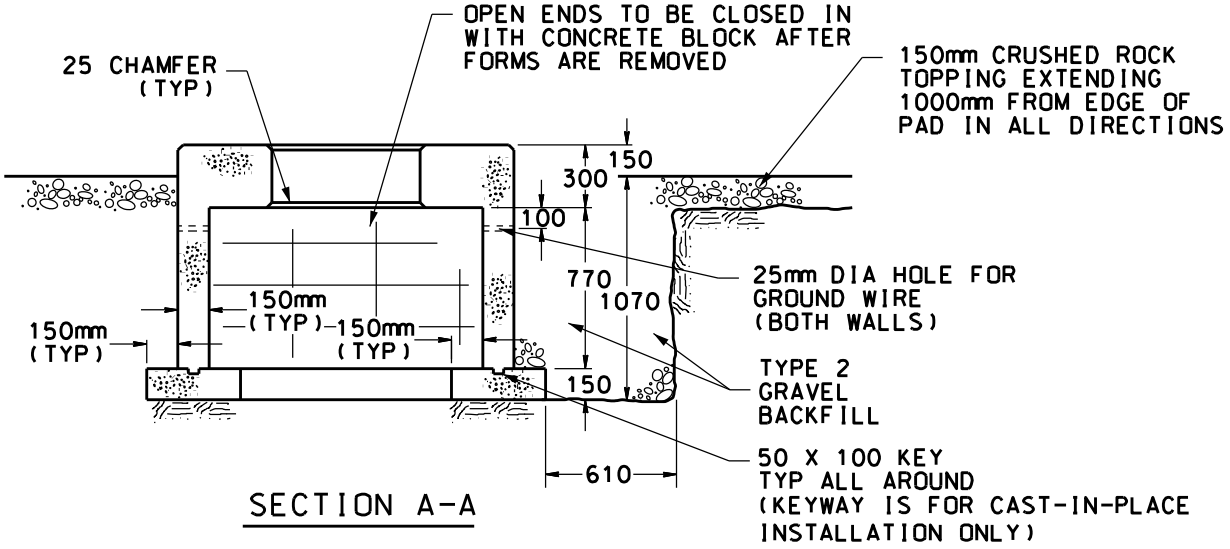
DATE:	2016-01-06	REV DATE:	2025-11-04
DRAWN:	PAUL HUBLEY	STD NO:	530-35 (4U-7M)
APPROVED:		SHT NO:	1 OF 1 (R2)



PLAN VIEW



ISO VIEW



SECTION A-A

NOTES:

A. CONCRETE - 30 MPa @ 28 DAYS.
B. REFER TO DWG. NO. 6U-ED-11M FOR REINFORCING DETAILS .
C. REFER TO DWG. NO. 6U-ED-12M FOR FIRE-RESISTING BARRIER IF REQUIRED.
D. REFER TO DWG. NO. 10U-ED-30M FOR GROUNDING DETAILS.
E. REFER TO DWG. NO. 2U-ED-20M FOR CONDUIT DETAILS.
F. REFER TO DWG. NO. 2U-ED-22M FOR CABLE TRAINING DETAILS.
G. LEAVE A MINIMUM OF 2000mm OF SECONDARY CABLE ABOVE THE PAD TO ALLOW FOR CABLE TRAINING AND TERMINATING ON THE TRANSFORMER.

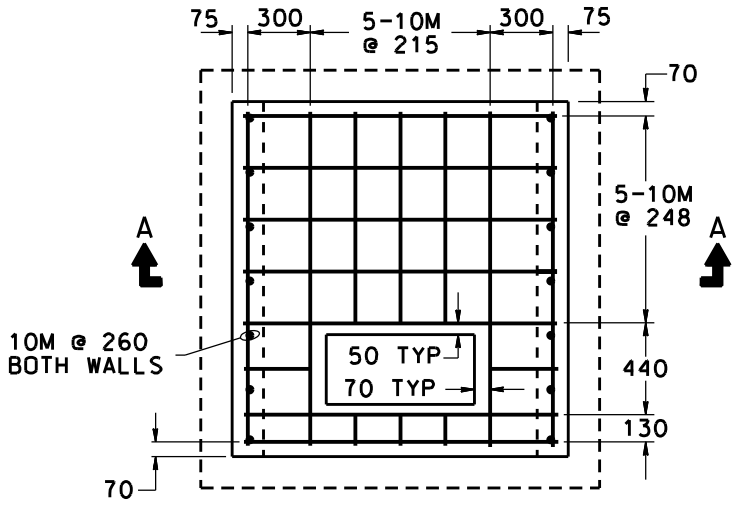
REGISTERED PROFESSIONAL ENGINEER
DATE 15/02/2017
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

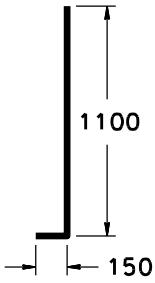
Nova Scotia POWER
An Emera Company

CONCRETE PAD FOR SINGLE - PHASE PADMOUNT TRANSFORMER 50kVA - 167kVA

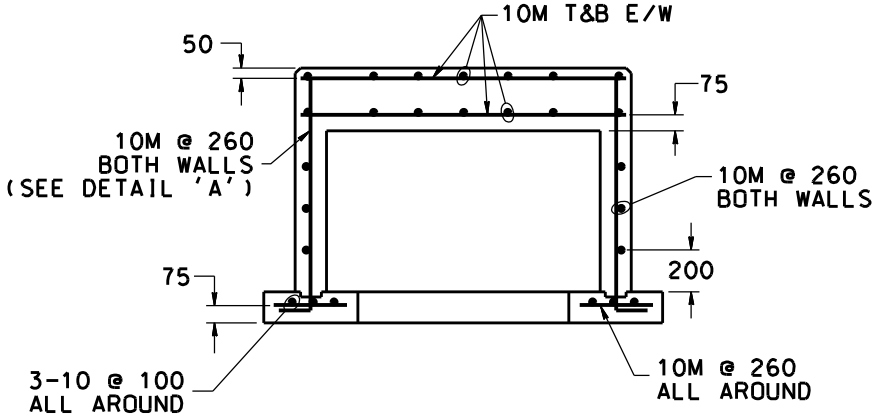
DATE:	2008-09-15	REV DATE:	2017-02-03
DRAWN:	P. HUBLEY	STD NO:	6U-ED-10M
APPROVED:		SHT NO:	1 OF 1 (R2)



PLAN VIEW



DETAIL 'A'



SECTION A-A

NOTES:
A. REINFORCING - 400 MPa YIELD.
B. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

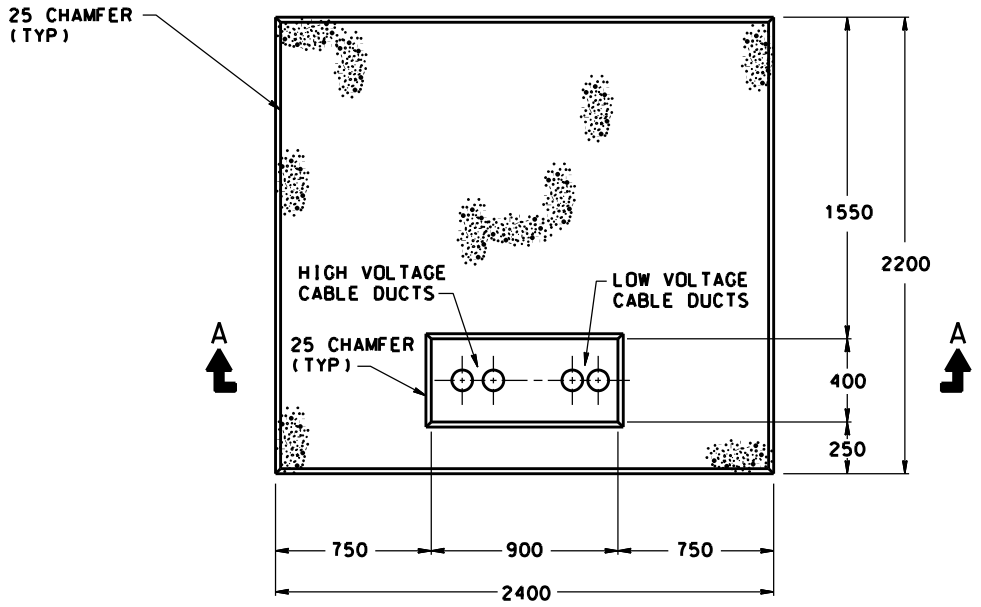
REGISTERED PROFESSIONAL ENGINEER
DATE 15/02/2017
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

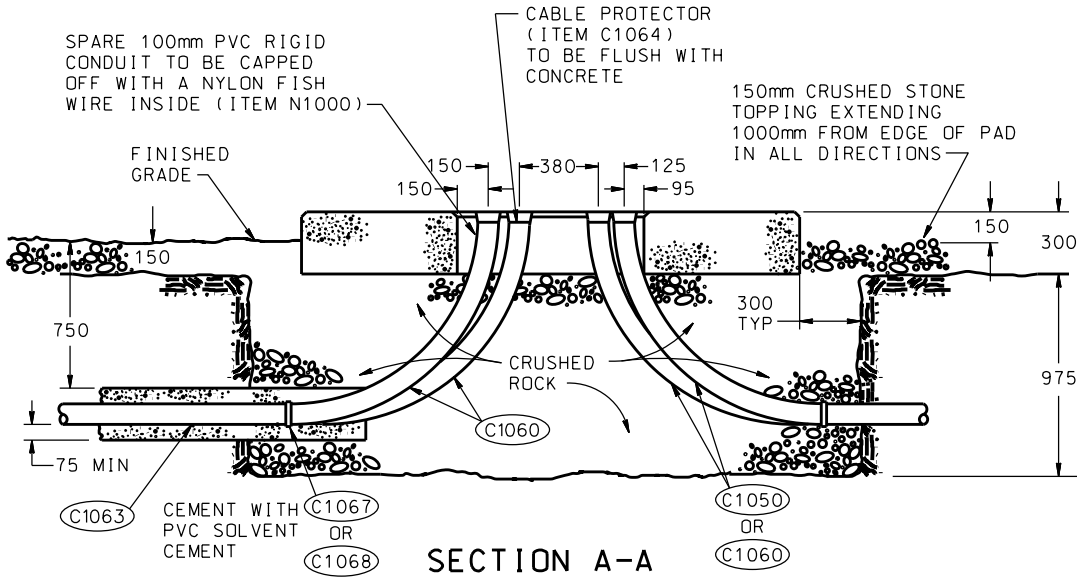
REINFORCING DETAILS FOR CONCRETE PAD SINGLE - PHASE PADMOUNT TRANSFORMER 50kVA - 167kVA

DATE:	2008-09-15	REV DATE:	2017-02-03
DRAWN:	P. HUBLEY	STD NO:	6U-ED-11M
APPROVED:		SHT NO:	1 OF 1 (R2)



PLAN VIEW

* FOR OIL CONTAINMENT SLAB SEE 6U-ED-50M



SECTION A-A

NOTES:

A. CONCRETE - 30 MPa @ 28 DAYS.
B. REFER TO DWG. NO. 6U-ED-21M FOR REINFORCING DETAILS .
C. REFER TO DWG. NO. 6U-ED-22M FOR FIRE-RESISTING BARRIER IF REQUIRED.
D. REFER TO DWG. NO. 10U-ED-30M FOR GROUNDING DETAILS.
E. LEAVE A MINIMUM OF 2000mm OF SECONDARY CABLE ABOVE THE TOP OF THE PAD.

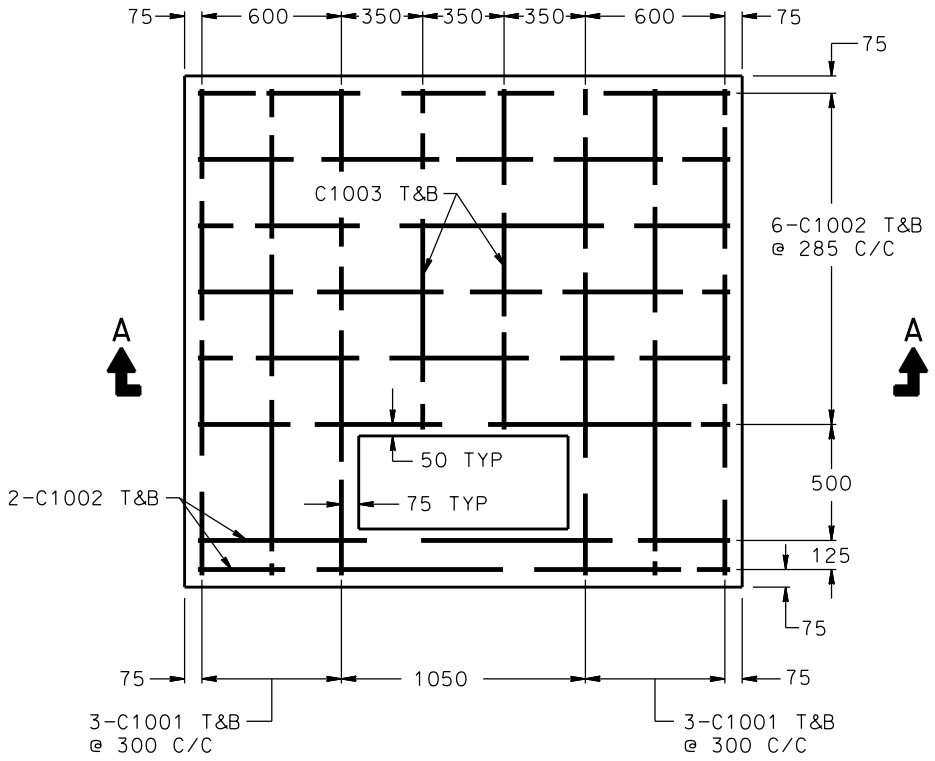
REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

CONCRETE PAD FOR THREE-PHASE PADMOUNT TRANSFORMER 150 kVA - 500 kVA

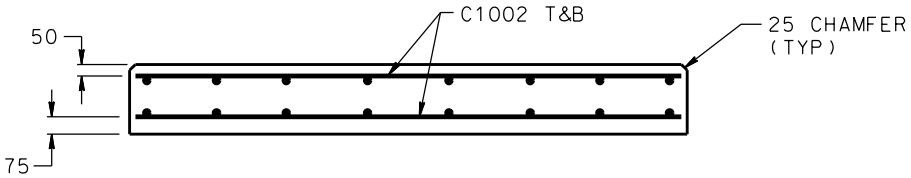
DATE: 2008-09-15	REV DATE: 2016-04-11
DRAWN: H. V. HUYNH	STD NO: **6U-ED-20M**
APPROVED:	SHEET: **1** of **1** **(R1)**



PLAN VIEW

REBAR SCHEDULE

C1001 - #10M BAR X 2100mm LG - 12 REQ'D
C1002 - #10M BAR X 2300mm LG - 16 REQ'D
C1003 - #10M BAR X 1450mm LG - 4 REQ'D



SECTION A-A

NOTES:
A. REINFORCING - 400 MPa YIELD.
B. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

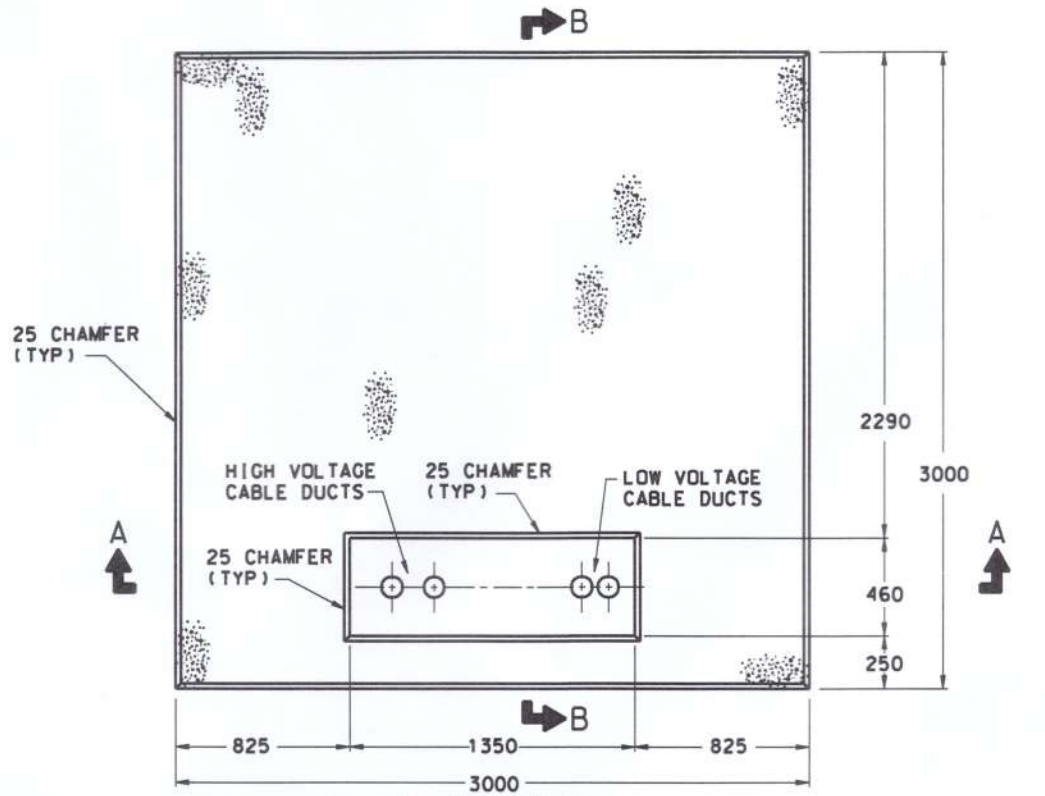
REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

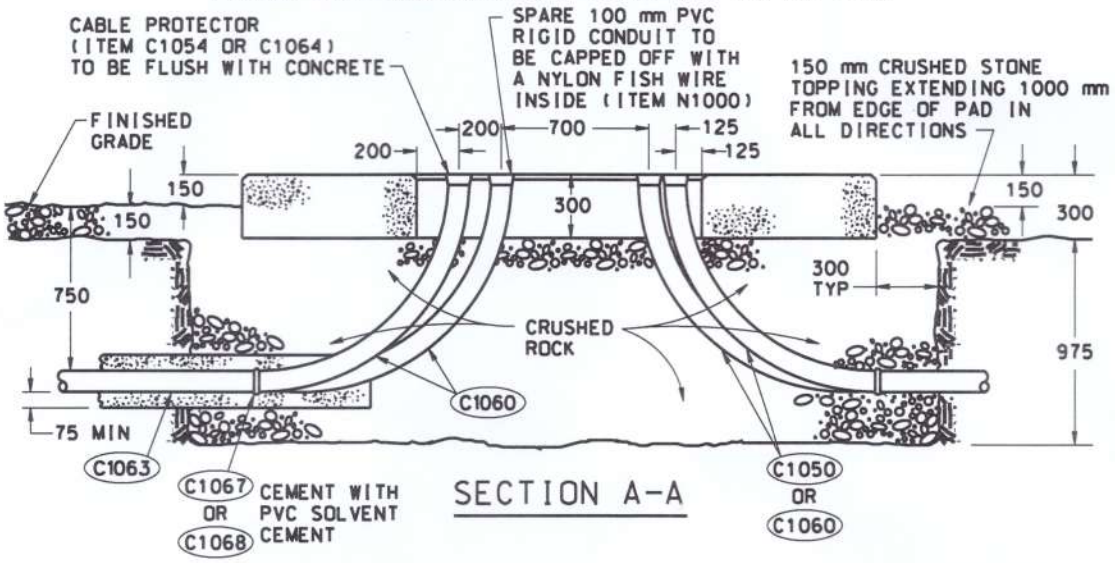
REINFORCING DETAILS FOR CONCRETE PAD THREE-PHASE PADMOUNT TRANSFORMER 150 kVA - 500 kVA

DATE:	2008-09-15	REV DATE:	2016-04-11
DRAWN:	H. V. HUYNH	STD NO:	**6U-ED-21M**
APPROVED:		SHEET:	**1** of **1** **(R1)**



PLAN VIEW

* FOR OIL CONTAINMENT SLAB SEE 6U-ED-51M



SECTION A-A

NOTES:
A. CONCRETE - 30 MPa @ 28 DAYS.
B. REFER TO DWG. NO. 6U-ED-25 FOR REINFORCING DETAILS.
C. REFER TO DWG. NO. 10U-ED-30 FOR GROUNDING DETAILS.
D. LEAVE A MINIMUM OF 2000 mm OF SECONDARY CABLE ABOVE TOP OF PAD.

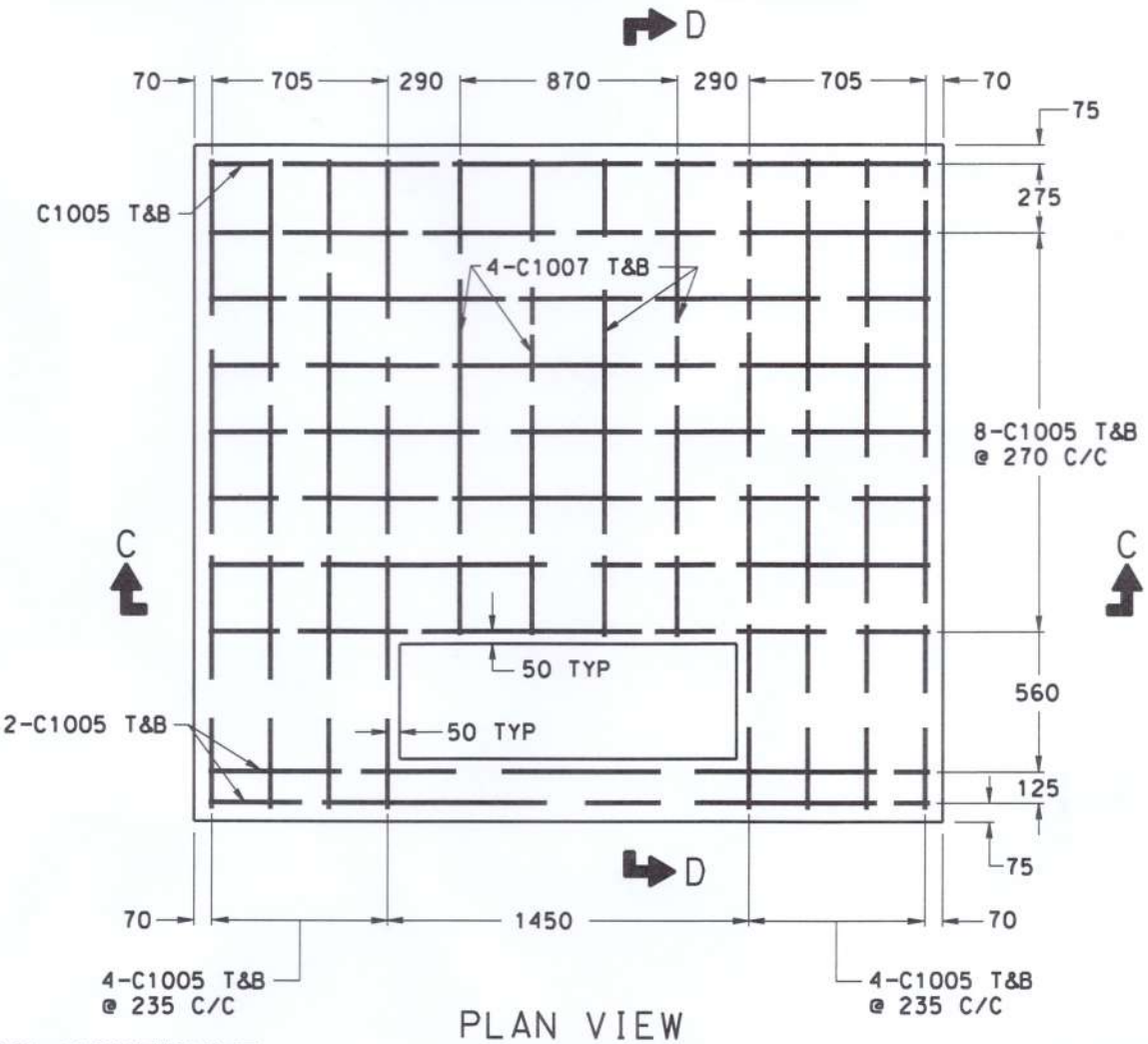
ORIGINAL
DRAWING SEALED
BY: F.TAWIL
DATE: 2016-04-14

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CONCRETE PAD FOR
THREE-PHASE PADMOUNT TRANSFORMER
750 kVA - 2500 kVA (STANDARD VERSION)

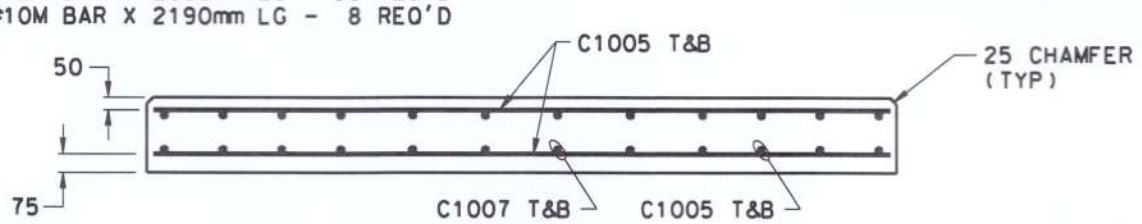
DRAWN:	M.HALASZ	REV DATE:	2024-06-25
CHECKED:	F.GALIB	STD NO:	***6U-ED-24***
APPROVED:	E.WIEBE	SHT NO:	1 OF 1 (R2)



PLAN VIEW

REBAR SCHEDULE

C1005 - #10M BAR X 2900mm LG - 38 REQ'D
C1007 - #10M BAR X 2190mm LG - 8 REQ'D



SECTION C-C

NOTES:
A. REINFORCING - 400 MPa YIELD.

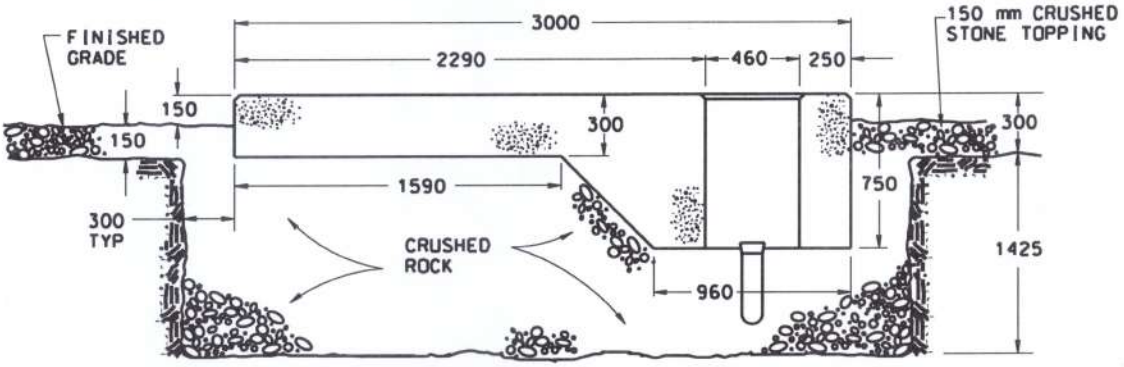
ORIGINAL DRAWING
SEALED BY:
F.TAWIL
DATE: 2016-04-14

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

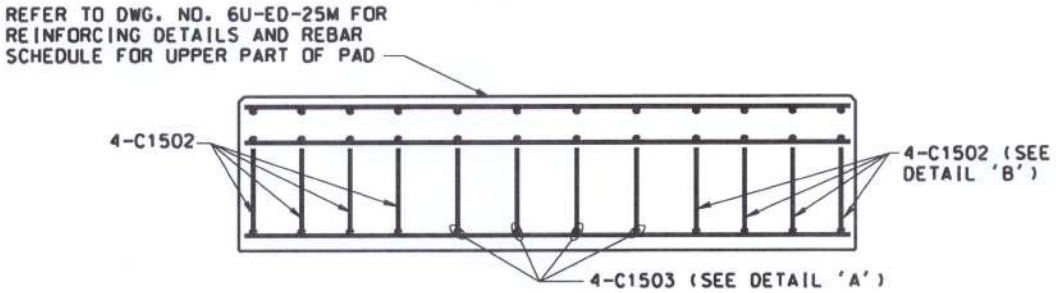
REINFORCING DETAILS FOR CONCRETE PAD
THREE-PHASE PADMOUNT TRANSFORMER
750 kVA - 2500 kVA (STANDARD VERSION)

DRAWN:	M.HALASZ	REV DATE:	2024-06-25
CHECKED:	F.GALIB	STD NO:	***6U-ED-25***
APPROVED:	E.WIEBE	SHT NO:	1 OF 1 (R2)



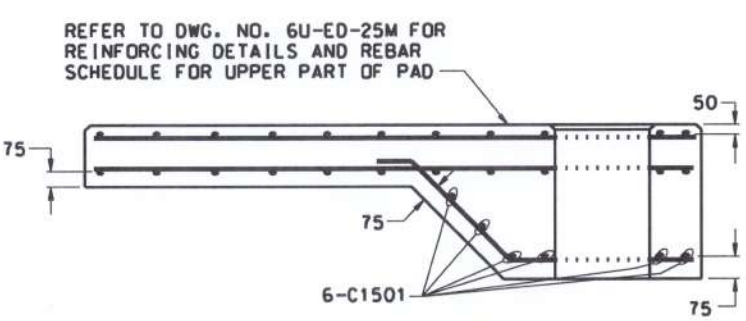
SECTION B-B

(DWG. NO. 6U-ED-24M)



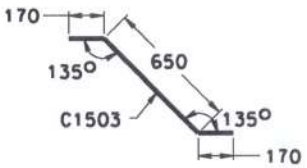
SECTION C-C

(DWG. NO. 6U-ED-25M)



SECTION D-D

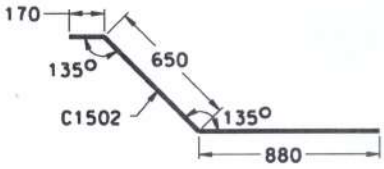
(DWG. NO. 6U-ED-25M)



DETAIL 'A'

REBAR SCHEDULE

C1501 - #15M BAR X 2900 mm LG - 6 REQ'D
C1502 - #15M BAR X 1700 mm LG - 8 REQ'D
C1503 - #15M BAR X 990 mm LG - 4 REQ'D



DETAIL 'B'

NOTES:
A. REINFORCING - 350 MPa YIELD.
B. LEAVE A MINIMUM OF 2000mm OF SECONDARY CABLE ABOVE SLAB.

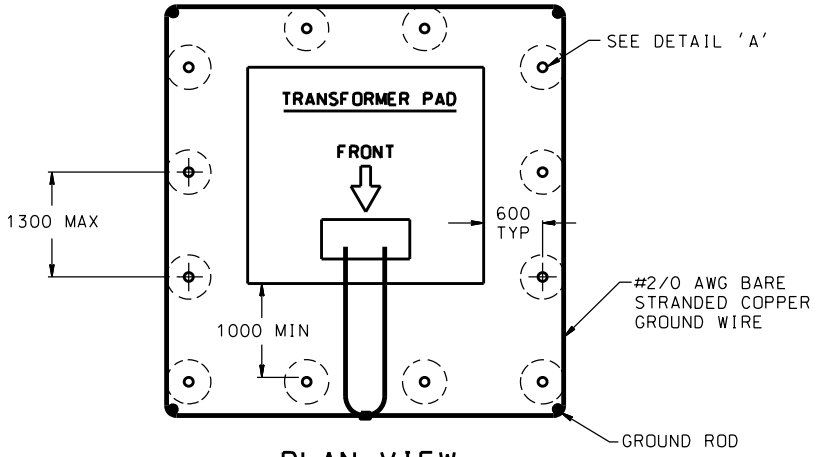
ORIGINAL DRAWING SEALED BY:
F. TAWIL
DATE: 2017-02-15

DISTRIBUTION STANDARDS

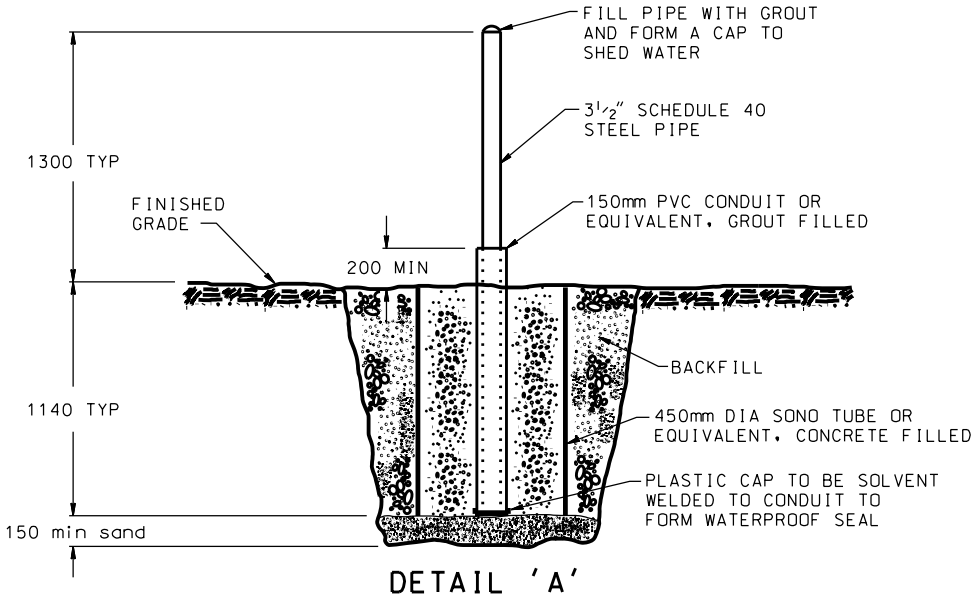
Nova Scotia POWER
An Emera Company

CONCRETE PAD FOR THREE-PHASE PADMOUNT TRANSFORMER 750 kVA - 2500 kVA (DEEP-WELL DESIGN)

DRAWN:	M. HALASZ	REV DATE:	2024-06-25
CHECKED:	F. GALIB	STD NO:	**6U-ED-26**
APPROVED:	E. WIEBE	SHT NO:	1 OF 1 (R2)



PLAN VIEW



DETAIL 'A'

NOTES:

A. THE PVC CONDUIT, OR EQUIVALENT, MUST BE INSTALLED TO INSULATE THE STEEL PIPE AND THUS PREVENT TRANSFER OF DANGEROUS TOUCH POTENTIAL IN THE EVENT OF A FAULT.

B. STAND-OFFS SHALL BE PLACED SO AS TO NOT OBSTRUCT ANY DOORS OR RESTRICT THE SAFE OPERATION OF THE UNIT. IN ALL CASES, THEY SHALL BE A MINIMUM OF 1000mm FROM THE EDGE OF THE PAD ALONG THE FRONT SIDE.

C. THE MAXIMUM ALLOWABLE DISTANCE BETWEEN STAND-OFFS SHALL BE 1300mm.

D. GROUNDING SHALL EXTEND OUT BEYOND THE STAND-OFF FOOTINGS. THEREFORE, THE SPACING OF THE GROUND RODS FROM THE BASE MAY BE INCREASED ABOVE THAT SHOWN IN DWG. NO. 10U-ED-30M TO ACCOMMODATE THE STAND-OFF FOOTINGS. WHERE NO STAND-OFFS ARE REQUIRED GROUNDING SHALL BE AS PER DWG. NO. 10U-ED-30M.

E. STAND-OFFS NEED ONLY BE LOCATED ON SIDES WHERE VEHICULAR TRAFFIC MAY BE A HAZARD.

REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

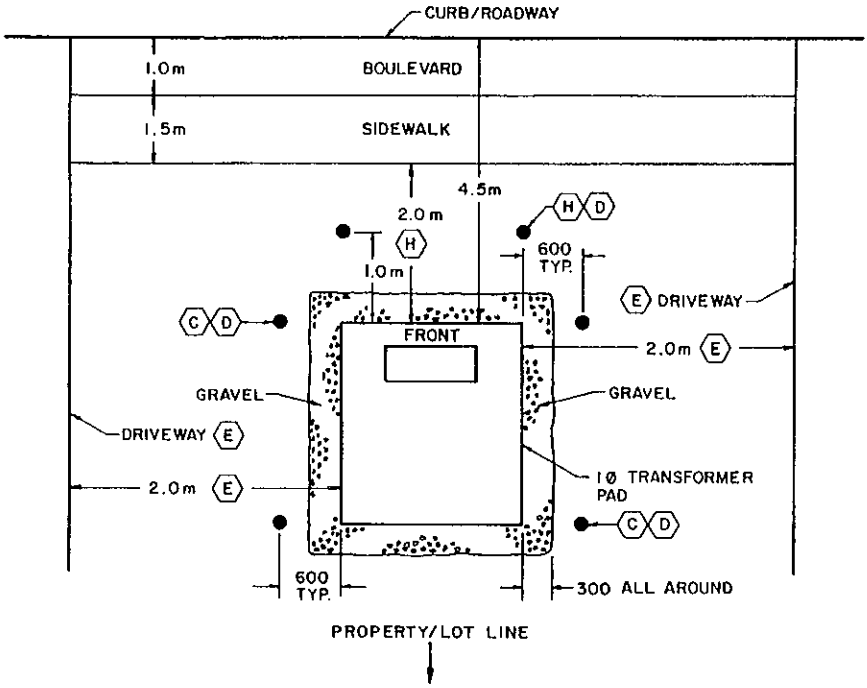
DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

TRANSFORMER PAD PROTECTION AGAINST VEHICULAR TRAFFIC

DATE:	2008-09-15	REV DATE:	2016-04-12
DRAWN:	H. V. HUYNH	STD NO:	**6U-ED-40M**
APPROVED:		SHEET:	**1** of **1** **(R1)**

1Ø PADMOUNT TRANSFORMER TO CUSTOMER SERVICES FOR SINGLE FAMILY HOMES

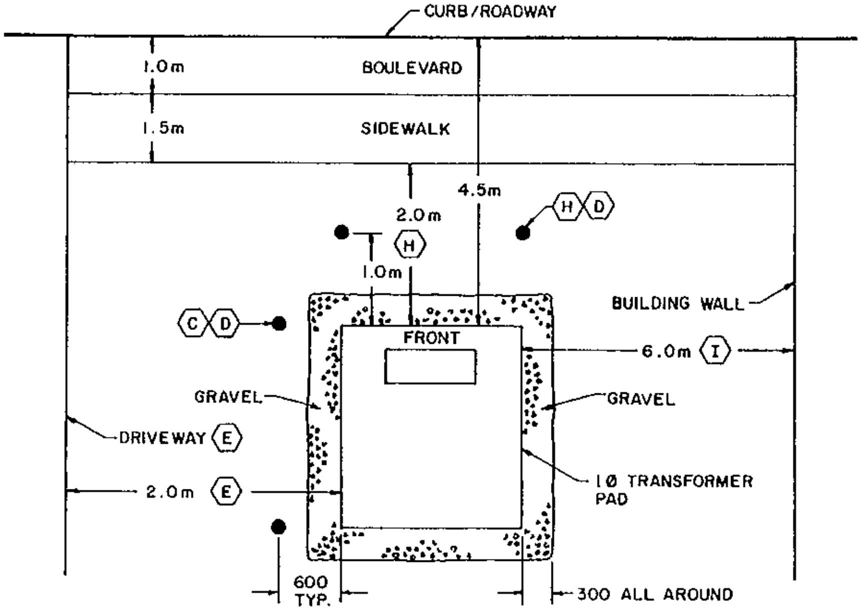


NOTES:

A. FOR TRANSFORMER PAD CONSTRUCTION REFER TO SECTION '6U'.
B. TRANSFORMER PAD TO BE SURROUNDED BY GRAVEL AS SHOWN.
C. SIDE POSTS ARE ONLY REQUIRED IF A DRIVEWAY OR ROADWAY IS LOCATED WITHIN 2.0m OF THE TRANSFORMER PAD.
D. ALL POSTS ARE TO BE INSTALLED AS PER DWG. NO. 6U-ED-40M.
E. NO DRIVEWAY IS TO BE LOCATED WITHIN 1.3m OF THE TRANSFORMER PAD.
F. EACH TRANSFORMER SHALL DISPLAY A 'DANGER HIGH VOLTAGE' SIGN AS PER DWG. NO. 6U-ED-16M.
G. FOR CONDUIT/TRENCH DETAILS REFER TO DWG. NO.'S 2U-ED-20M AND 2U-ED-21M.
H. FRONT POSTS ARE ONLY REQUIRED IF THE SIDEWALK IS LOCATED WITHIN 2.0m OF THE PAD.
I. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

awn Carey N. Fowler designed approved
Standards Committee

1Ø PADMOUNT TRANSFORMER TO CUSTOMER SERVICES FOR CONDOMINIUMS AND DUPLEX, LINK AND ROW/TOWN HOUSES

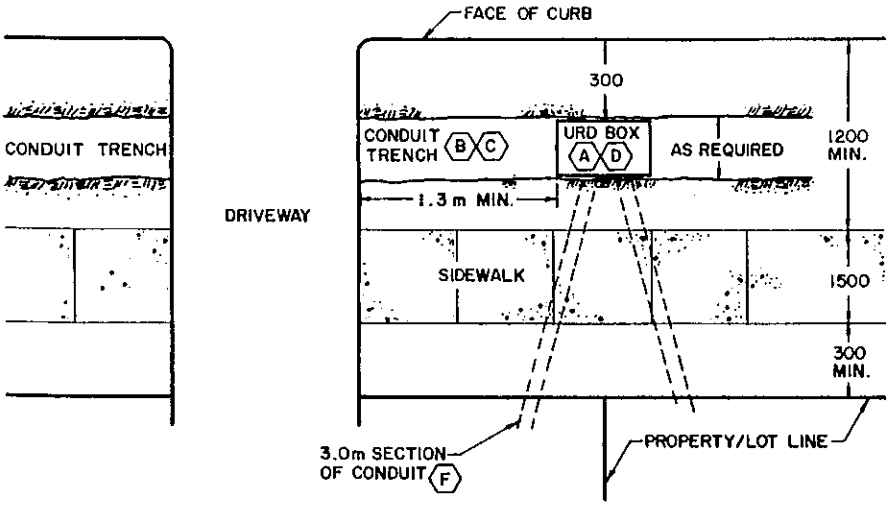


NOTES:

A . FOR TRANSFORMER PAD CONSTRUCTION REFER TO SECTION '6U' .
B . TRANSFORMER PAD TO BE SURROUNDED BY GRAVEL AS SHOWN .
C . SIDE POSTS ARE ONLY REQUIRED IF A DRIVEWAY OR ROADWAY IS LOCATED WITHIN 2.0 m OF THE TRANSFORMER PAD .
D . ALL POSTS ARE TO BE INSTALLED AS PER DWG. NO. 6U-ED-40M .
E . NO DRIVEWAY IS TO BE LOCATED WITHIN 1.3 m OF THE TRANSFORMER PAD.
F . EACH TRANSFORMER SHALL DISPLAY A 'DANGER - HIGH VOLTAGE' SIGN AS PER DWG. NO. 6U-ED-16M .
G . FOR CONDUIT/TRENCH DETAILS REFER TO DWG. NO.'S 2U-ED-20M AND 2U-ED-21M .
H . FRONT POSTS ARE ONLY REQUIRED IF THE SIDEWALK IS LOCATED WITHIN 2.0 m OF THE PAD .
I . PADMOUNT TRANSFORMER IS NOT TO BE LOCATED WITHIN 6.0 m OF BUILDING UNLESS A FIRE RESISTING BARRIER IS EMPLOYED . REFER TO DWG. NO. 6U-ED-12M FOR CONSTRUCTION DETAILS .
J . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

drawn ________ designed ________ approved ________
Standards Committee

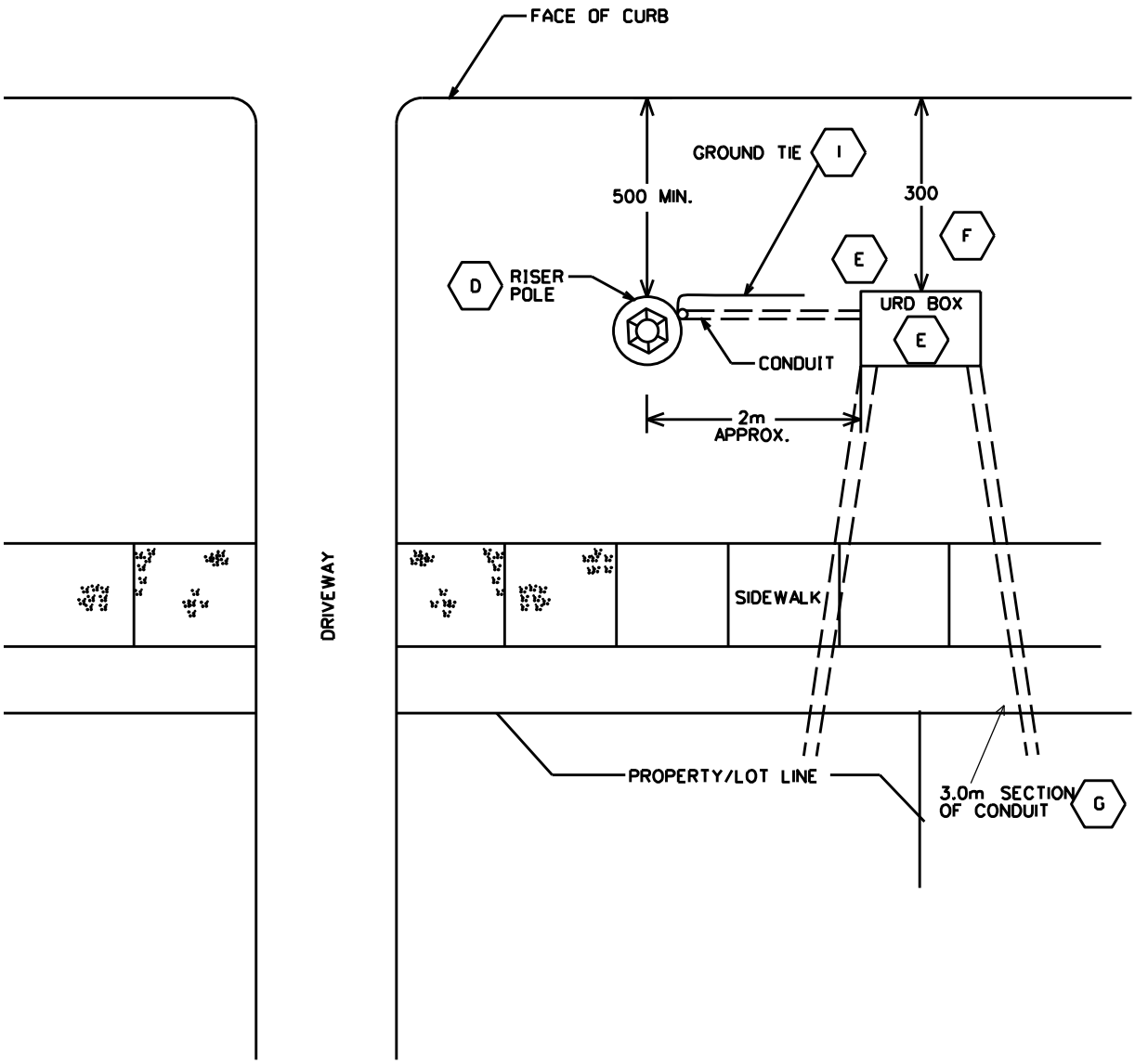
CONDUIT AND URD BOX
- NO RISER POLE -



NOTES:

A . URD BOX SHALL BE LOCATED ON THE PROPERTY/LOT LINE , BUT NOT CLOSER THAN 1.3m TO A DRIVEWAY .
B . FOR CLEARANCES AND JOINT USE DETAILS REFER TO SECTION 'IU' .
C . FOR TRENCHING DETAILS REFER TO DWG. No. 2U-ED-10M .
D . FOR URD BOX DETAILS REFER TO DWG. No.'s 2U-ED-30M TO 2U-ED-35M FOR SINGLE FAMILY HOMES AND DWG. No.'s 2U-ED-36M TO 2U-ED-39M FOR CONDOMINIUMS , AND DWG. No.'s 2U-ED-40M TO 2U-ED-43M FOR DUPLEX , LINK AND ROW/TOWN HOUSES .
E . URD BOX SHALL NOT BE LOCATED UNDERNEATH THE SIDEWALK .
F . CUSTOMER CONDUITS AS REQUIRED BY C.E. CODE PART I , WHICH SHALL BE INSTALLED AT TIME OF URD BOX INSTALLATION .
G . ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN .

drawn Craig N. Fairn designed Larry Mac approved
Standards Committee



NOTES:

A. SEE SHEET 2 OF 2 FOR DETAIL SHOWING URD BOX ON PROPERTY LOT.
B. SEE SHEET 2 OF 2 NOTES.

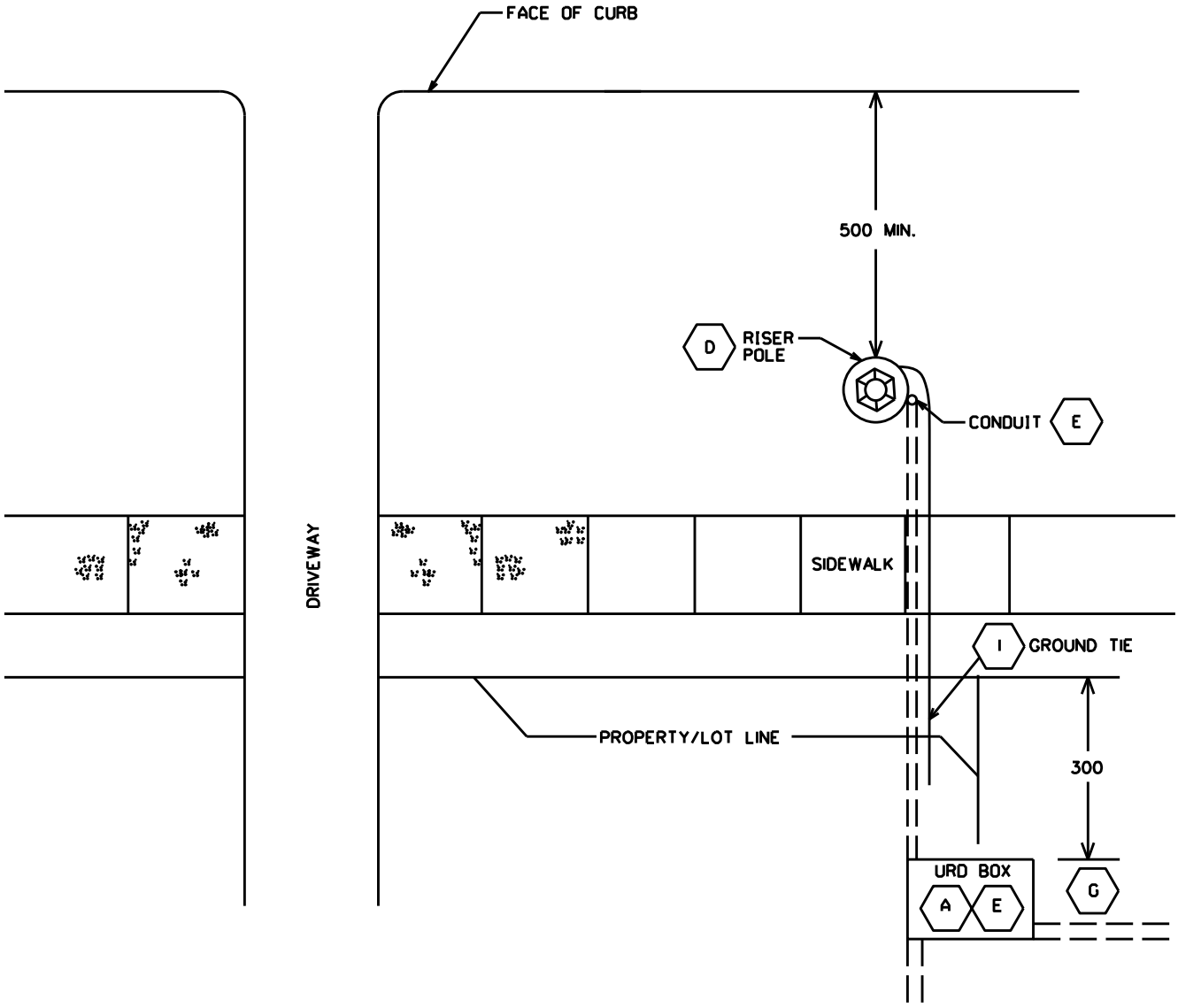
REGISTERED PROFESSIONAL ENGINEER
DATE 10/15/25
K.F. SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CONDUIT AND URD BOX RISER POLE

DATE:	2025-03-05	REV DATE:	2025-05-25
DRAWN:	A. BILKHU	STD NO:	**7U-ED-21M**
DESIGNED:	FAHIM GALIB	SHT NO:	1 OF 2



NOTES:

A. URD BOX SHOULD BE LOCATED ON THE PROPERTY/LOT LINE, IF POSSIBLE, BUT NOT CLOSER THAN 1.3 METERS TO A DRIVEWAY.
B. FOR CLEARANCES AND JOINT USE DETAILS, REFER TO SECTION 'IU'.
C. FOR TRENCHING DETAILS, REFER TO DRAWING NO. 2U-ED-10M.
D. FOR RISER POLE DETAILS, REFER TO DRAWING NO. OU-ED-20M.
E. FOR URD BOX DETAILS, REFER TO:DRAWINGS 2U-ED-50M TO 2U-ED-53M FOR SINGLE-FAMILY HOMES.DRAWINGS 2U-ED-40M AND 2U-ED-41M FOR DUPLEX, LINK, AND ROW/TOWNHOUSES.
F. URD BOX SHALL NOT BE LOCATED UNDERNEATH THE SIDEWALK.
G. CUSTOMER CONDUITS MUST COMPLY WITH C.E. CODE PART I AND BE INSTALLED AT THE TIME OF URD BOX INSTALLATION.
H. AN EASEMENT IS REQUIRED FOR THE URD BOX TO BE LOCATED ON THE PROPERTY LOT.
I. GROUND TIE SHALL BE A MINIMUM OF #2 AWG. CONNECT THE GROUND TIE TO THE GROUND ROD AT THE RISER POLE, AND INSTALL IT ADJACENT TO THE CONDUIT FOR A MINIMUM OF 15 METERS, OR TO THE END OF THE CONDUIT INSTALLATION IF THE TOTAL LENGTH IS LESS THAN 15 METERS. THE GROUND WIRE SHALL BE LEFT OUTSIDE THE URD BOX.
J. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.

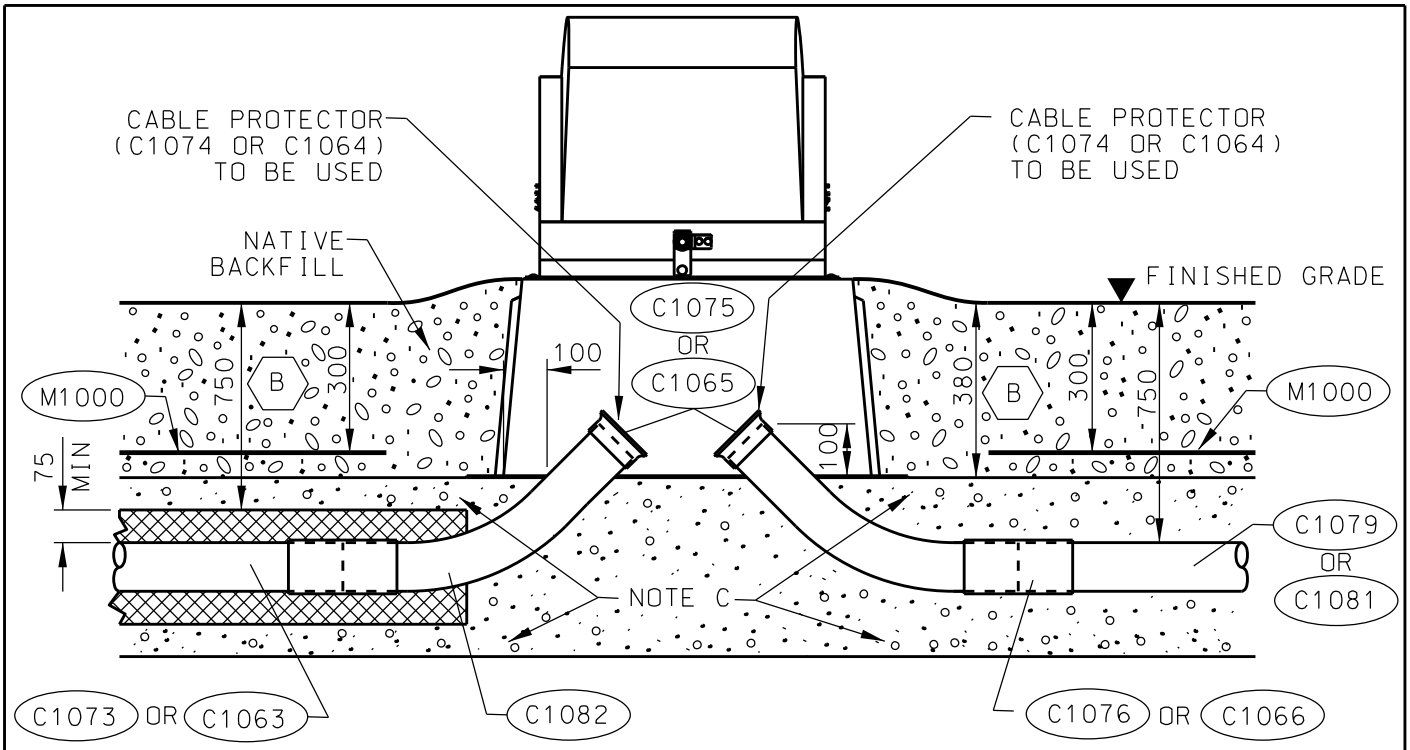
REGISTERED PROFESSIONAL ENGINEER
DATE 10/15/25
K.P. SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CONDUIT AND URD BOX RISER POLE

DATE:	2025-03-05	REV DATE:	2025-05-25
DRAWN:	A. BILKHU	STD NO:	**7U-ED-21M**
DESIGNED:	FAHIM GALIB	SHT NO:	2 OF 2



FOR USE WITH CABLE SIZE 3/0 OR SMALLER

NOTES:

A. LOCATIONS, SETBACKS AND PROTECTION MUST BE AS PER 7U-ED-10M OR 7U-ED-11M AS APPLICABLE.

B. BURIAL DEPTH MAY BE INCREASED DEPENDING ON THE MANUFACTURER RECOMMENDATION, BURIAL DEPTH SHOWN FOR NORDIC ND-2202442-MG AND HUBBELL P1342542MD.

C. CONCRETE ENCASED AND OR DIRECT BURIED CONDUITS ARE ACCEPTABLE. FOR DIRECT BURIED CONDUIT CRUSHER DUST IS TO BE USED, FOR CONCRETE ENCASED CONDUIT CRUSHED ROCK TYPE 2 IS TO BE USED, FOR COMBINATION OF DIRECT BURIED CONDUIT AND CONCRETE ENCASED CONDUIT CRUSHER DUST IS TO BE USED.

D. NATIVE BACKFILLING MATERIAL SHALL NOT CONTAIN ROCKS OVER 50mm IN DIAMETER FOR THE FIRST 300mm OVER CONDUIT.

E. NATIVE BACKFILL TO BE COMPACTED EVERY 300mm MINIMUM.

F. PLACE AT LEAST 100mm OF EXCESS FILL AROUND THE JUNCTION BOX TO COMPENSATE FOR SETTLING.

G. ALL CONDUITS MUST BE CLEANED AND SWABBED, THEN CAPPED FOR PROTECTION.

H. ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING.

I. MARKER TAPE (M1000) SHALL BE INSTALLED AS SHOWN.

J. REFER TO DWG NO 10U-ED-31M FOR GROUNDING DETAILS.

K. REFER TO DWG NO 6U-ED-40M FOR PROTECTION AGAINST VEHICULAR TRAFFIC.

L. FOR CABLE TRAINING,CONDUIT BEND SHOULD BE LONG SWEEP 90° AT THE FRONT, AND SWEEP 45° AT THE BACK AND SIDES.

M. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

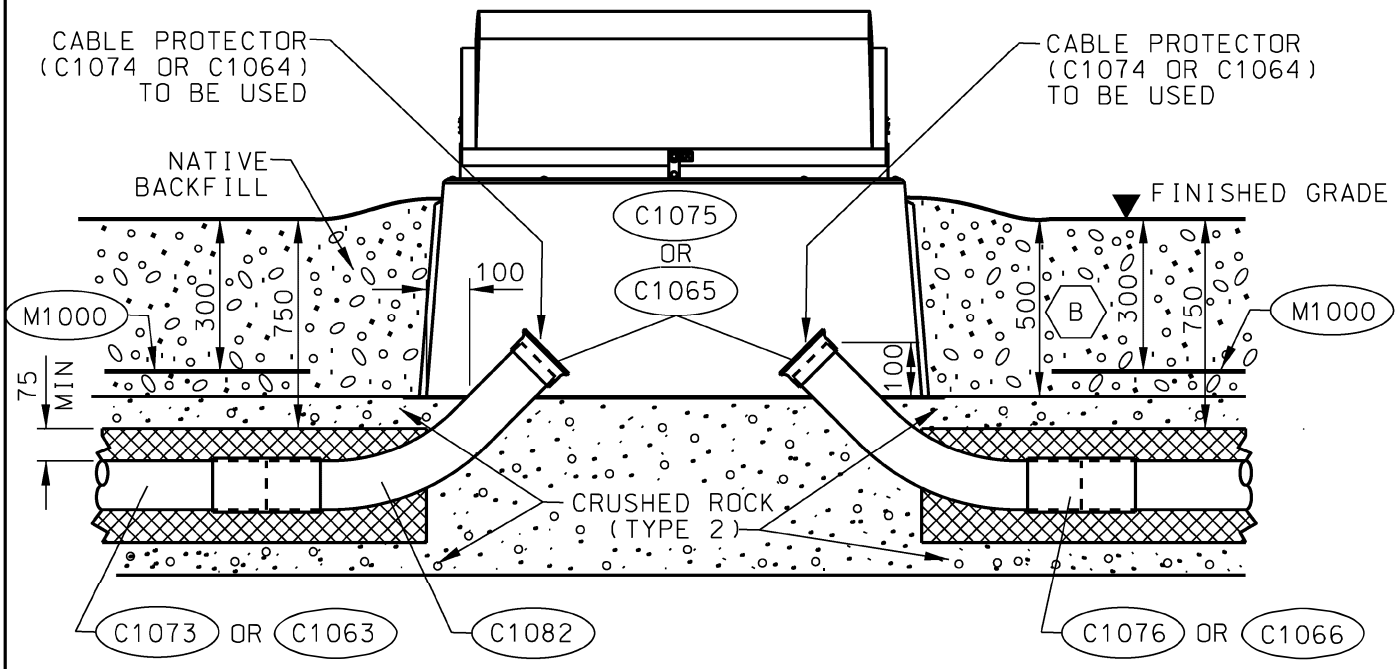
REGISTERED PROFESSIONAL ENGINEER
DATE 10/12/25
K.F.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

INSTALLATION DETAILS FOR SINGLE PHASE ABOVE GROUND MV JUNCTION BOX

DATE:	2016-04-12	REV DATE:	2025-05-25
DRAWN:	A. BILKHU	STD NO:	8U-ED-35M
APPROVED:	K.F.SPENCE	SHT NO:	1 OF 1 (R2)



FOR USE WITH CABLE SIZE 3/0 OR SMALLER

NOTES:

A. LOCATIONS, SETBACKS AND PROTECTION MUST BE AS PER 7U-ED-10M OR 7U-ED-11M AS APPLICABLE.

B. BURIAL DEPTH MAY BE INCREASED DEPENDING ON THE MANUFACTURER RECOMMENDATION, BURIAL DEPTH SHOWN FOR NORDIC ND-2552450-MG AND HUBBELL P3582548MD.

C. NATIVE BACKFILLING MATERIAL SHALL NOT CONTAIN ROCKS OVER 50mm IN DIAMETER FOR THE FIRST 300mm OVER CONDUIT.

D. NATIVE BACKFILL TO BE COMPACTED EVERY 300mm MINIMUM.

E. PLACE AT LEAST 100mm OF EXCESS FILL AROUND THE JUNCTION BOX TO COMPENSATE FOR SETTLING.

F. ALL CONDUITS MUST BE CLEANED AND SWABBED, THEN CAPPED FOR PROTECTION.

G. ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM N1000) INSTALLED PRIOR TO CAPPING.

H. MARKER TAPE (M1000) SHALL BE INSTALLED AS SHOWN.

I. REFER TO DWG NO 10U-ED-31M FOR GROUNDING DETAILS.

J. REFER TO DWG NO 6U-ED-40M FOR PROTECTION AGAINST VEHICULAR TRAFFIC.

K. FOR CABLE TRAINING,CONDUIT BEND SHOULD BE LONG SWEEP 90°AT THE FRONT, AND SWEEP 45°AT THE BACK & SIDES.

L. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

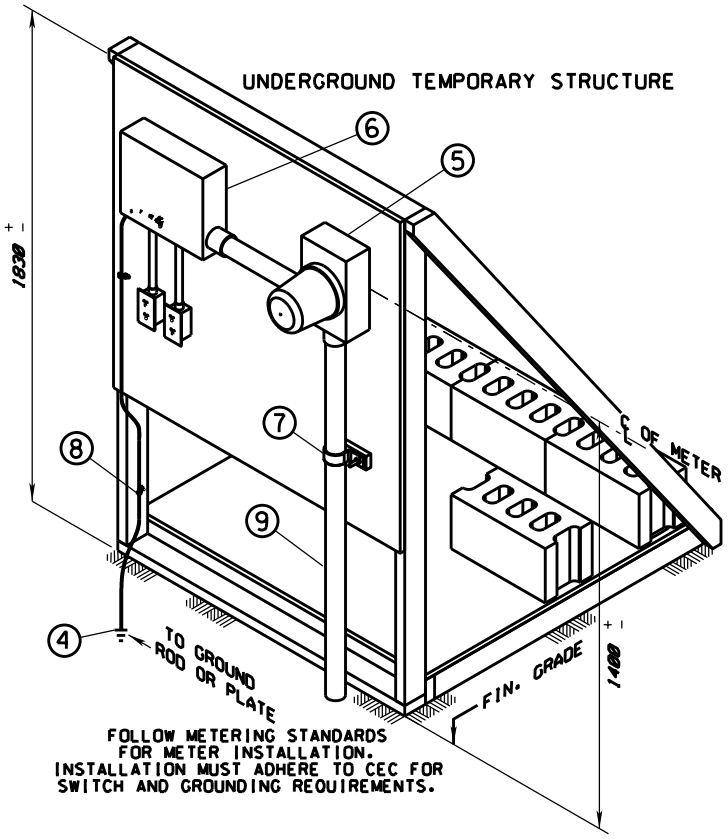
REGISTERED PROFESSIONAL ENGINEER
DATE 10/15/25
K.F.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

INSTALLATION DETAILS FOR THREE PHASE ABOVE GROUND MV JUNCTION BOX

DATE:	2016-04-12	REV DATE:	2025-09-03
DRAWN:	A. BILKHU	STD NO:	8U-ED-36M
APPROVED:	K.F.SPENCE	SHT NO:	1 OF 1 (R2)



CUSTOMER MATERIAL

1 FACE - MINIMUM 4'-0"x 2'-0"x 3/4" PLYWOOD OR BOARDS
2 FRAMING - 2"X 4" LUMBER
3 BASE - MINIMUM 4'-0"x 2'-0"x 3/4" (SAME AS FACE)
4 10' GROUND ROD OR GROUND PLATE
5 SQUARE METER SOCKET
6 WEATHERPROOF SERVICE ENTRANCE RATED SWITCH
7 CONDUIT OR CABLE CLAMP
8 GROUND WIRE CLAMP
9 RIGID CONDUIT (PVC OR METAL) OR ARMOURED CABLE (TECK 90 OR ACWU90)

WEIGHT ON BASE - MINIMUM 330 kg. (ROCK.BLOCK.CONCRETE)

ELECTRICAL - MUST MEET CANADIAN ELECTRICAL CODE FOR TEMPORARY SERVICES. CENTER OF METER TO BE MINIMUM 1.4 M FROM GROUND.

NOTES

1. CARE SHOULD BE TAKEN IF DRIVING GROUND ROD. NOT TO HIT UNDERGROUND CABLE. GROUND PLATE IS RECOMMENDED.
2. STRUCTURE IS TO BE SECURELY ASSEMBLED TO ASSURE RIGIDITY & MOUNTED ON LEVEL GROUND.
3. CONDUIT TO BE SECURELY FASTENED TO STRUCTURE.
4. STRUCTURE MUST NOT IMPEDE ACCESS TO URD BOX.
5. CARE SHOULD BE TAKEN THAT URD BOX AREA IS LEFT IN A SAFE MANNER.
6. SERVICE SWITCH MUST BE CAPABLE OF BEING LOCKED.
7. WHEN MORE THAN ONE SET OF WIRE CONDUCTOR IS INSTALLED IN URD BOX.TEMPORARY WIRE CONDUCTOR MUST BE IDENTIFIED BY LABELLING.
8. STRUCTURE TO BE PLACED ON CUSTOMER PROPERTY - NOT TO IMPEDE PEDESTRIAN AREA ON SIDEWALKS OR BLOCK FIRE HYDRANTS.

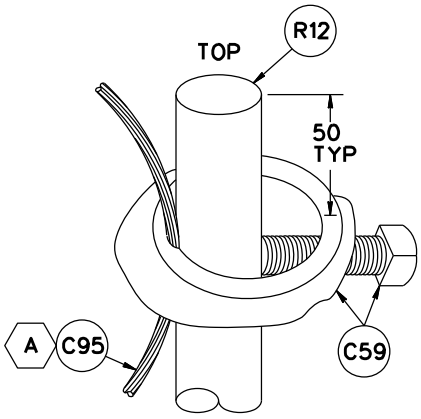
REGISTERED PROFESSIONAL ENGINEER
DATE 04/14/2016
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

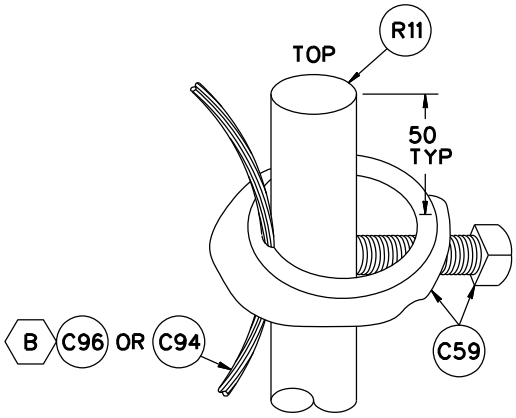
Nova Scotia POWER
An Emera Company

UNDERGROUND TEMPORARY SERVICE

DATE: 2008-08-14	REV DATE: 2016-04-12
DRAWN: H. V. HUYNH	STD NO: **8U-ED-40M**
APPROVED:	SHEET: **1** of **1** **(R1)**



PADMOUNT TRANSFORMERS



DISTRIBUTION LINES

NOTES:

A. FOR PADMOUNT TRANSFORMER INSTALLATIONS THE GROUND WIRE SHALL PASS THROUGH THE CONNECTOR IN A CONTINUOUS LOOP AROUND THE TRANSFORMER PAD. REFER TO DWG. No. 10U-ED-30M.
B. FOR DISTRIBUTION LINES WHERE THREE GROUND RODS ARE USED THE GROUND WIRE SHALL PASS THROUGH THE CONNECTOR IN A CONTINUOUS LOOP AROUND THE POLE. REFER TO DWG. No. 10U-ED-10M.

(SAME AS G-ED-11M)

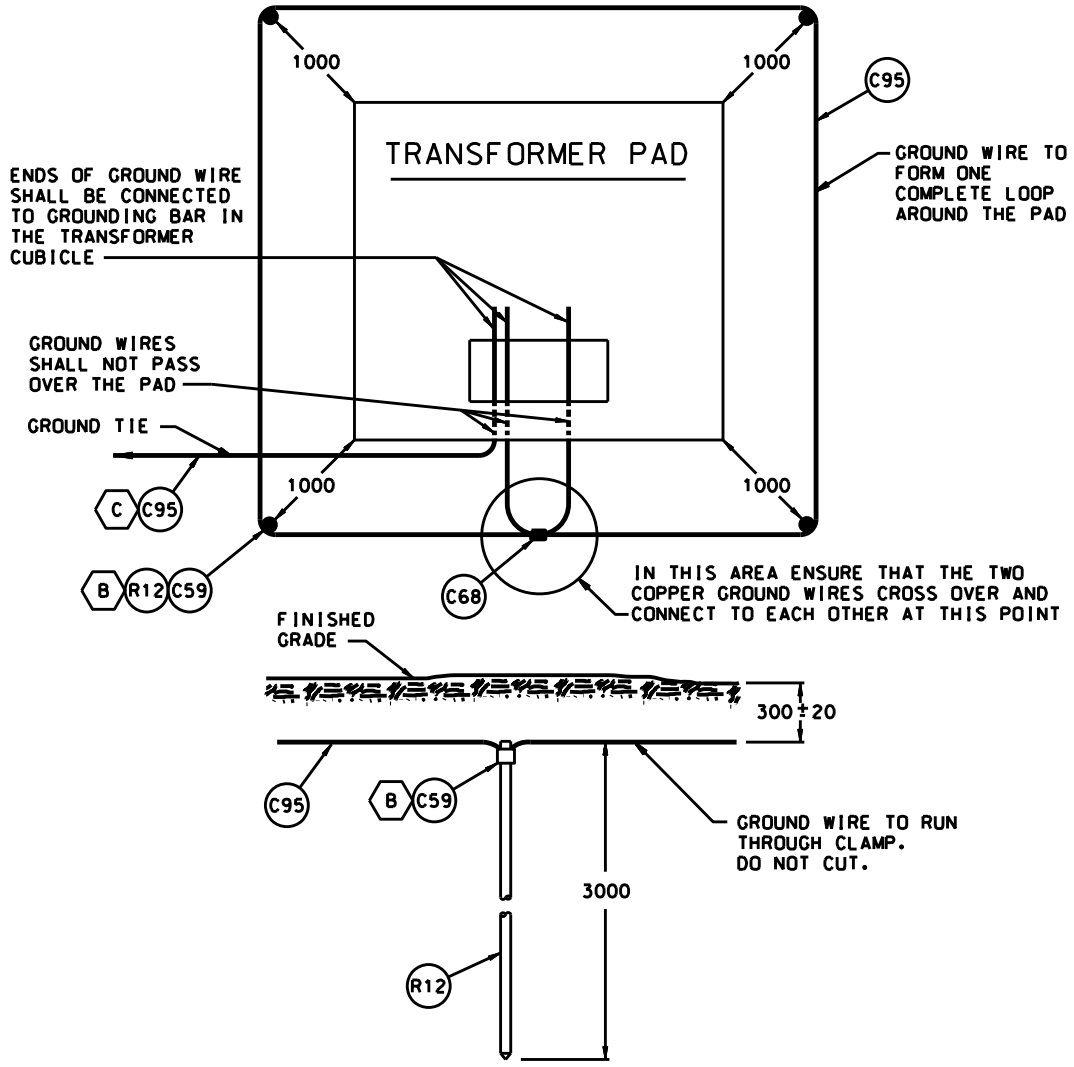
REGISTERED PROFESSIONAL ENGINEER
DATE 17/FEB/2017
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CONNECTION DETAILS FOR GROUND RODS

DATE:	2008-08-14	REV DATE:	2016-04-12
DRAWN:	M.HALASZ	STD NO:	***10U-ED-11M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R1)



GROUND ROD AND
CONNECTOR DETAIL

NOTES:

A. GROUNDING SHALL BE IN ACCORDANCE WITH SECTION 36 OF THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE. PART I.
B. REFER TO DWG. NO. 10U-ED-11M FOR GROUND ROD CONNECTION DETAILS.
C. THE GROUND TIE SHALL BE A BARE COPPER CONDUCTOR INSTALLED UNDERNEATH THE CONCRETE ENCASED DUCTBANK OR ADJACENT TO THE DIRECT BURIED CONDUITS.
D. THE MINIMUM WIRE SIZE SHALL BE #2/0 AWG.
E. THE GROUND TIE SHALL INTERCONNECT THE PADMOUNT GROUND TO THE RISER POLE GROUND ROD(S) AND ANY OTHER PADMOUNT GROUND.
F. UNDER SPECIAL CIRCUMSTANCES A CUSTOMER GROUND TIE FROM THE PAD TO THE CUSTOMER SERVICE SWITCH MAY BE REQUIRED BY THE INSPECTION AUTHORITY.

SAME AS ***(G-ED-30M)***

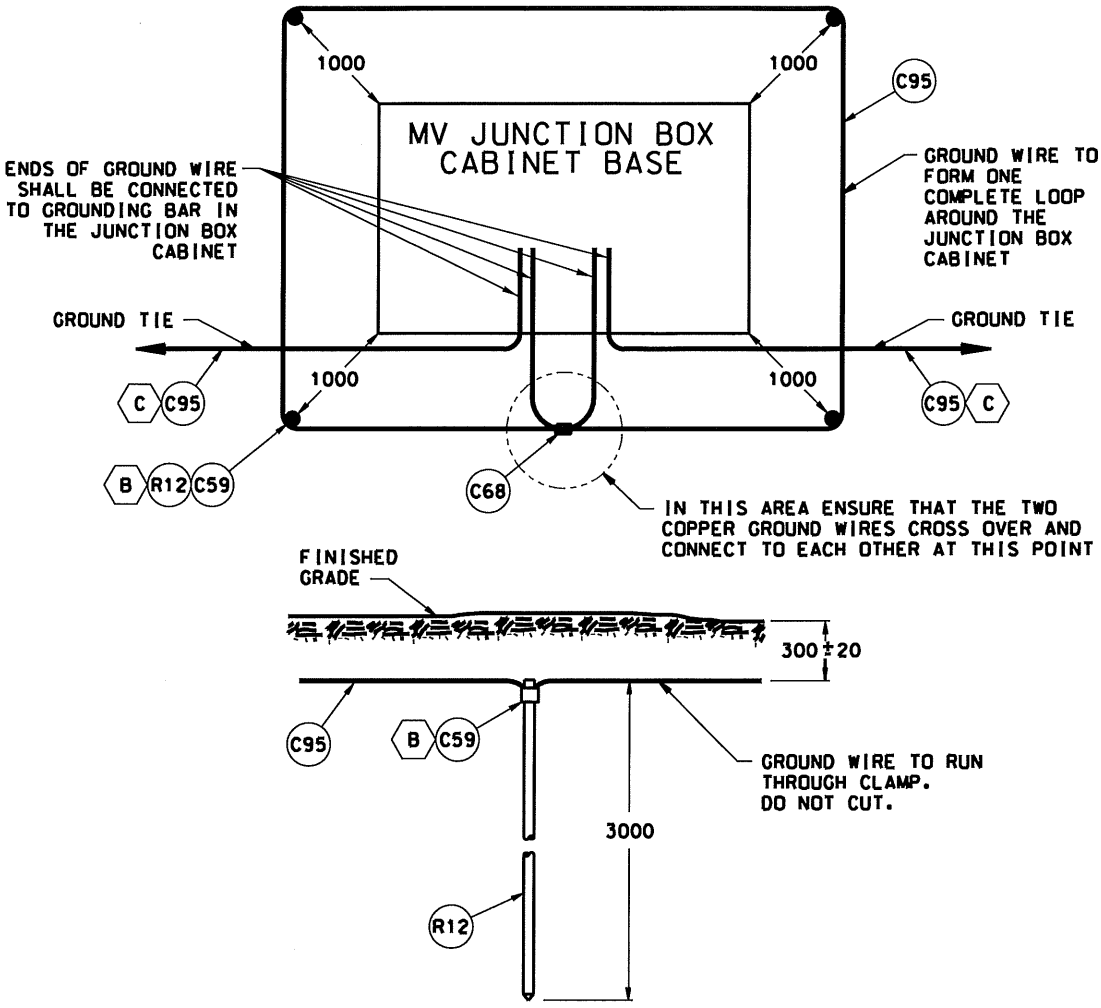
REGISTERED PROFESSIONAL ENGINEER
DATE 14/04/2016
F. TAWIL
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

GROUNDING DETAILS FOR PADMOUNT TRANSFORMER

DATE: 2008-04-14	REV DATE: 2016-04-12
DRAWN: H. V. HUYNH	STD NO: ***10U-ED-30M***
APPROVED:	SHEET: ***1*** of ***1*** ***(R1)***



GROUND ROD AND CONNECTOR DETAIL

NOTES:

A. GROUNDING SHALL BE IN ACCORDANCE WITH SECTION 36 OF THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE, PART ONE.

B. REFER TO DWG. NO. 10U-ED-11M FOR GROUND ROD CONNECTION DETAILS.

C. THE GROUND TIE SHALL BE A BARE COPPER CONDUCTOR INSTALLED UNDERNEATH THE CONCRETE ENCASED DUCTBANK OR THE DIRECT BURIED CONDUITS.

D. THE MINIMUM WIRE SIZE SHALL BE #2/0 AWG.

E. THE GROUND TIE SHALL INTERCONNECT TO THE JUNCTION BOX GROUND TO THE RISER POLE GROUND ROD(S) AND ANY OTHER JUNCTION BOX/PADMOUNT GROUND.

F. UNDER SPECIAL CIRCUMSTANCES A CUSTOMER GROUND TIE FROM THE JUNCTION BOX TO THE CUSTOMER SERVICE SWITCH MAY BE REQUIRED BY THE INSPECTION AUTHORITY.

G. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOW.

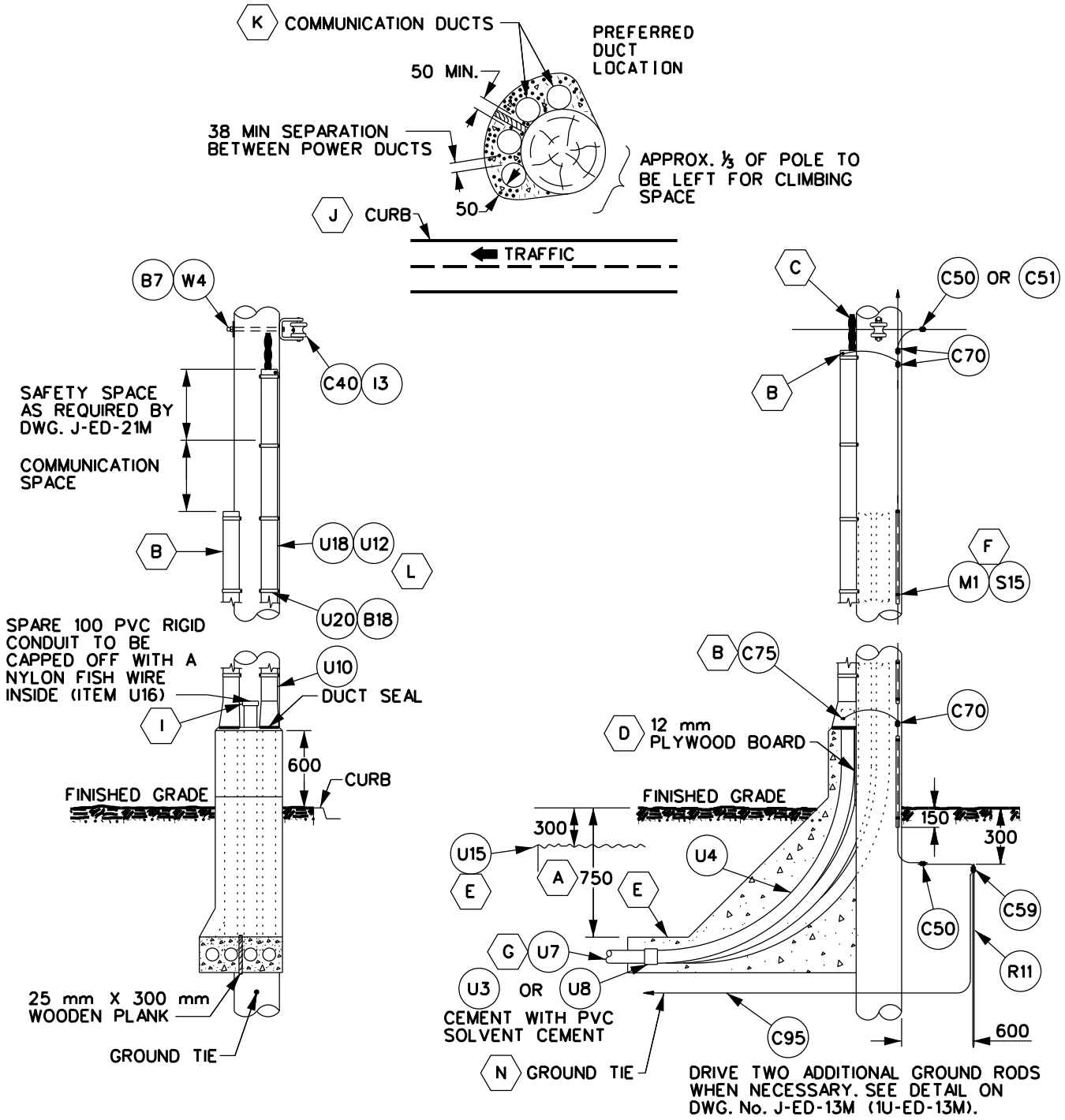
REGISTERED PROFESSIONAL ENGINEER
DATE 11,02,16
F. Tawil
10412
PROVINCE OF NOVA SCOTIA

DISTRIBUTION UNDERGROUND STANDARDS

Nova Scotia POWER
An Emera Company

GROUNDING DETAILS FOR ABOVE GROUND MV JUNCTION BOX

DATE: 2015-07-09	STD NO: **10U-ED-31M**
DRAWN: PEH	Sheet **1** of **1**
APPROVED:	



NOTES:
SEE SHEET 2 OF 2 FOR NOTES

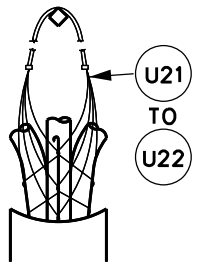
NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT USE DUCT TERMINATION FOR UNDERGROUND PRIMARY SERVICE (MORE THAN 750 VOLTS)

DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-14M***
SHT:	1 OF 2

Jim McFadgen P. Eng.
FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger
FOR BELL;
STEPHEN CUMMINGER, P.ENG



DETAIL OF KELLEMS GRIP

NOTES:

A. FOR ROADWAY/DRIVEWAY REQUIREMENTS, DEPTH OF BURIAL TO BE 1000mm. (NSPI: REFER TO DWG. No. 1U-ED-44M).
B. REFER TO DWG. No. 10U-ED-12M FOR BONDING OF POWER CABLE GUARDS. TELECOMMUNICATIONS CABLE GUARD AND/OR CONDUITS ARE TO BE BONDED TO GROUND IF THEY ARE METALLIC.
C. REFER TO SECTION '5U' FOR OVERHEAD POWER TERMINATION DETAILS.
D. DUCTS SHALL BE SECURED TO THE POLE WITH CONDUIT STRAPS AND HAVE A 12mm THICK PLYWOOD BOARD SPACER BEFORE CONCRETE IS POURED.
E. DUCT RUNS SHALL BE FORMED BY THE CUSTOMER OR THEIR AGENT AND INSPECTED BY NSPI AND COMMUNICATION REPRESENTATIVES PRIOR TO POURING OF CONCRETE. MARKER TAPE TO BE INSTALLED AS SHOWN.
F. FOR GROUNDING DETAILS REFER TO J-ED-13M.
G. 100mm DUCTS SHALL NORMALLY BE USED BY NSPI. IN SPECIAL CIRCUMSTANCES, WHEN MORE THAN THREE 90° BENDS ARE NEEDED BETWEEN CABLE PULLING POINTS, OR DUCT RUN EXCEEDS 92mm, 125mm DUCTS SHALL BE USED.
H. ANY METAL USED FOR FORMING CONCRETE AT THE BASE OF POLE SHALL BE REMOVED.
I. ALL DUCTS MUST BE CLEANED AND SWABBED, THEN CAPPED FOR PROTECTION.
J. DUCTS SHALL NOT BE INSTALLED ON THE CURB OR TRAFFIC SIDE OF THE POLE.
K. ON DEADEND STRUCTURES THE POSITION OF THE DUCTS MAY BE REVERSED TO FACILITATE COMMUNICATIONS DEADENDING.
L. STRAP CABLED UNDER GUARD EVERY 3000mm AND CABLE GUARD TO POLE EVERY 1200mm.
M. NUMBER, SIZE AND TYPE OF CONDUITS/DUCTS TO BE SPECIFIED BY THE USER UTILITY.
N. GROUND TIE TO BE INSTALLED BENEATH THE DUCTBANK AND CONNECTED TO THE DOWN STREAM DISTRIBUTION EQUIPMENT GROUND.
O. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT USE DUCT TERMINATION FOR UNDERGROUND PRIMARY SERVICE (MORE THAN 750 VOLTS)

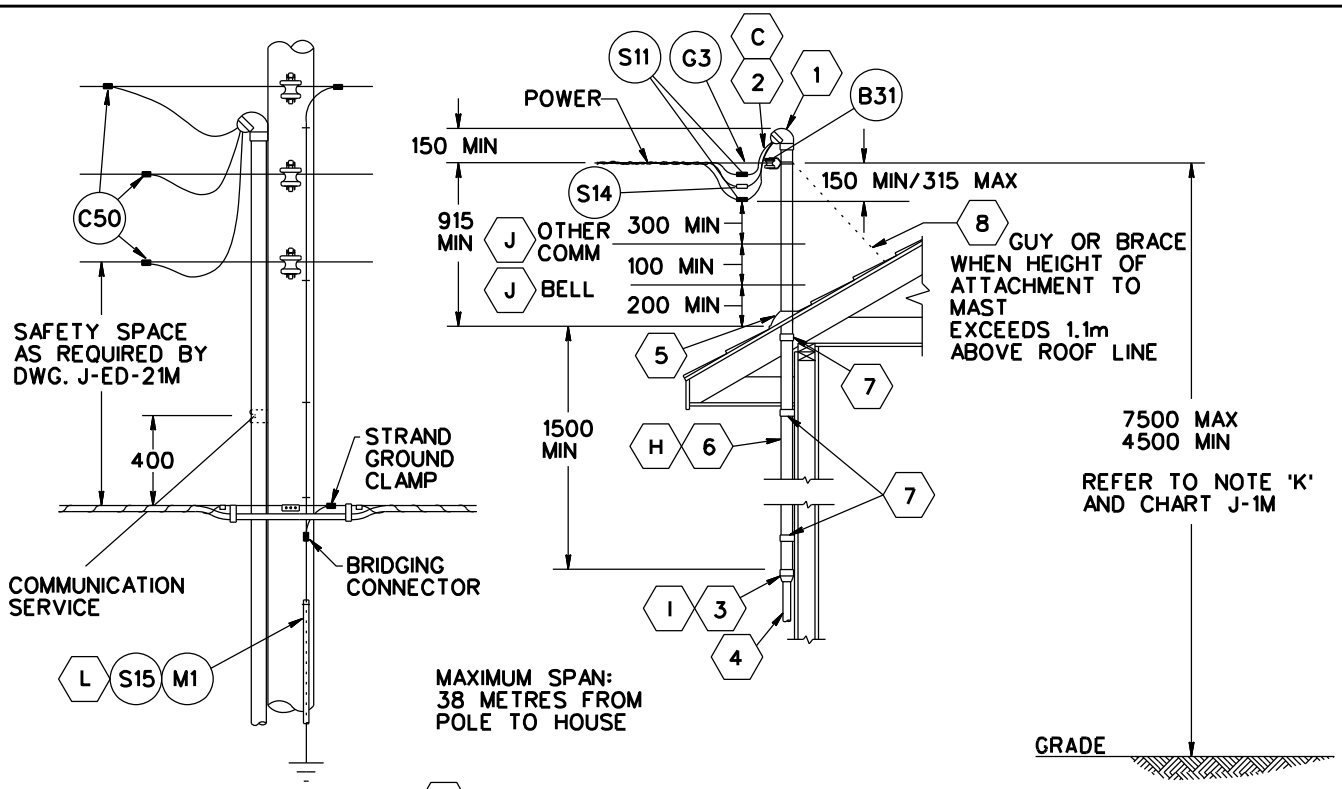
Jim McFadgen P. Eng.

FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG

DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-14M***
SHT:	2 OF 2



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR, INSULATED
3. OFFSET CONDUIT REDUCER
4. RIGID CONDUIT
5. ROOF FLASHING
6. MAST SUPPORT MEMBER
7. SERVICE MAST CLAMP, GALVANIZED, 2½"
8. 6mm GALVANIZED STEEL WIRE
9. METER BASE

NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE BRACKET AND THE MAST IN A LOCATION SATISFACTORY TO BOTH THE INSPECTION DEPT. AND THE SUPPLY AUTHORITY, AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSP.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 750mm BEYOND THE SERVICE HEAD.
D. SERVICE ATTACHMENT SHALL BE INSTALLED A MINIMUM OF 150 mm BELOW THE SERVICE HEAD.
E. DRIP LOOP ON SERVICE CONDUCTOR TO BE LEFT AT THE POLE AND HOUSE CONNECTION.
F. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
G. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTION 'A'.
H. 2 1/2" GALVANIZED STEEL MAST TUBING OR 2 1/2" MINIMUM GALVANIZED RIGID STEEL CONDUIT ARE ACCEPTABLE AS SERVICE MASTS. RIGID ALUMINUM CONDUIT IS NOT ACCEPTABLE.
I. ITEM No. 3 IS NOT REQUIRED WHEN THE MAST IS CONNECTED DIRECTLY TO A 2 1/2" HUB ON THE METER CONNECTION BOX.
J. COMMUNICATION DROP WIRE MAY BE ATTACHED TO THE MAST WITH MINIMUM CLEARANCES AS SHOWN.
K. AT THE DISCRETION OF THE NSP FIELD ENGINEER, OR THEIR REPRESENTATIVE, AND BELL DISTRICT MANAGER (O.P.E.) OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M.
L. FOR GROUNDING DETAILS REFER TO DWG. J-ED-13M.
M. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

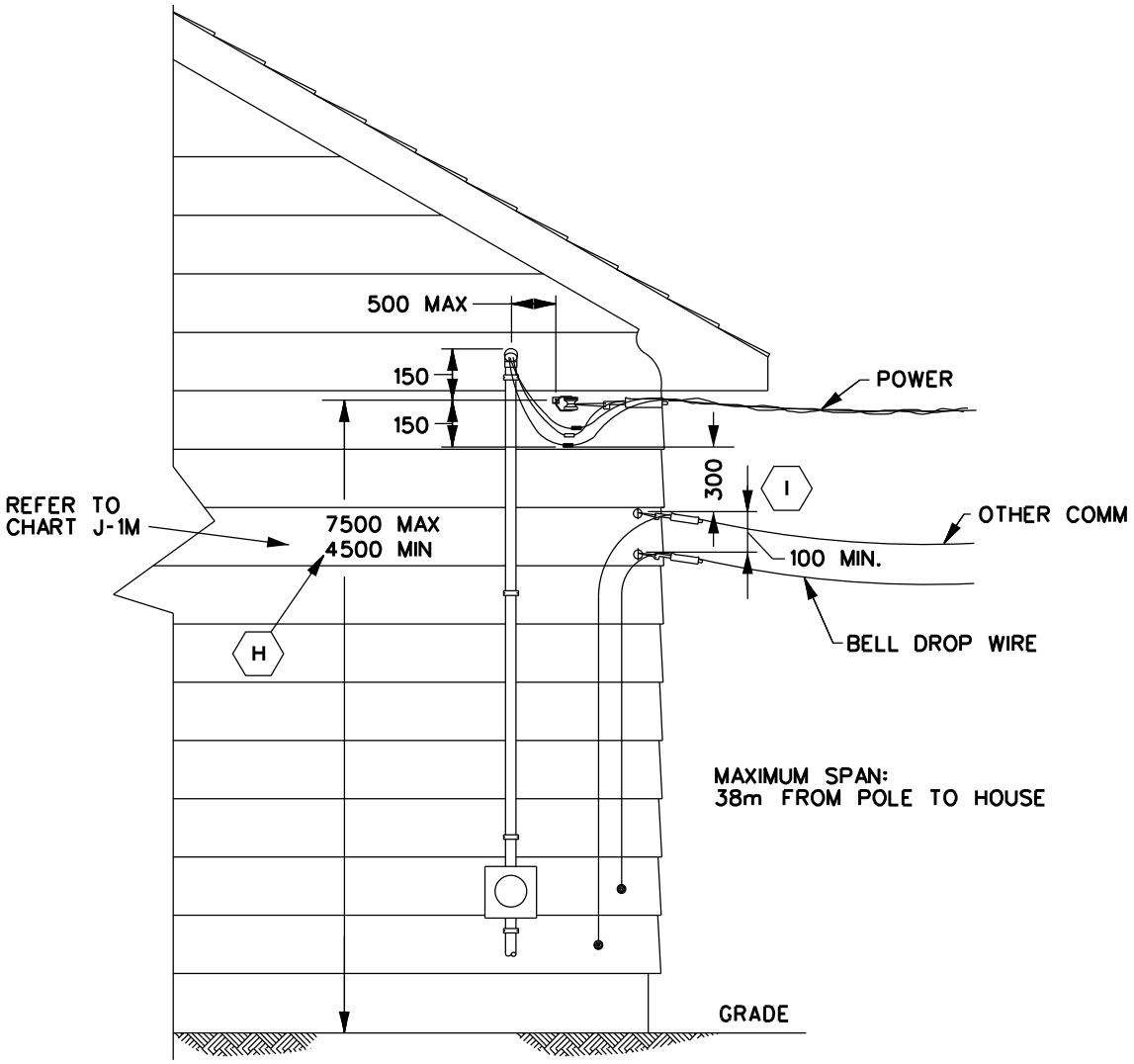
NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT-USE CLEARANCES SERVICE ATTACHMENTS FOR SINGLE FAMILY DWELLINGS

DRAWN:	M.HALASZ
REV DATE:	2022-05-20
STD NO:	**J-ED-23M**
SHT:	1 OF 1

FOR NSPI;
JIM MCFADGEN, P.ENG

FOR BELL;
STEPHEN CUMMINGER, P.ENG



NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE POWER SERVICE ATTACHMENT DEVICE ON NEW HOMES AT THE TIME OF CONSTRUCTION AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN.
B. MATERIAL REQUIRED FOR POWER SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSP.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTOR SHALL EACH EXTEND NOT LESS THAN 750mm BEYOND THE SERVICE HEAD.
D. SERVICE ATTACHMENT SHALL BE INSTALLED A MINIMUM OF 150 mm BELOW THE SERVICE HEAD.
E. DRIP LOOP ON SERVICE CONDUCTORS TO BE LEFT AT THE POLE AND HOUSE CONNECTIONS.
F. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
G. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTION 'A'.
H. AT THE DISCRETION OF NSPI FIELD ENGINEERING, OR THEIR REPRESENTATIVE, AND BELL DISTRICT MANAGER (O.P.E.) OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M.
I. COMMUNICATION DROP WIRE SHALL BE ATTACHED WITH MINIMUM CLEARANCES AS SHOWN.
J. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

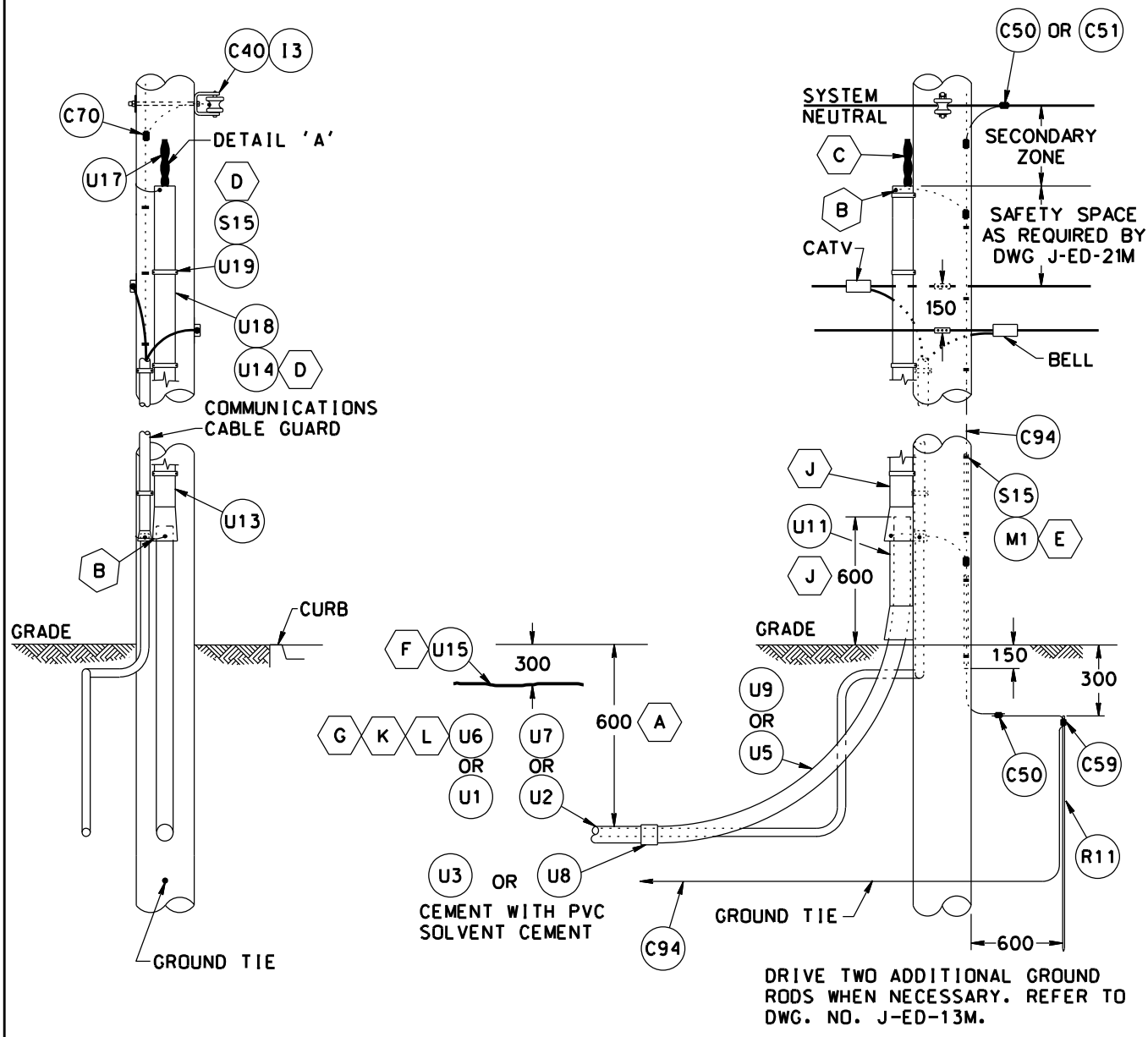
NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT-USE CLEARANCES AT SERVICE ATTACHMENTS TERMINATED ON SINGLE FAMILY DWELLINGS

DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-24M***
SHT:	1 OF 1

FOR NSPI;
JIM MCFADGEN, P.ENG

FOR BELL;
STEPHEN CUMMINGER, P.ENG



NOTES:

REFER TO SHEET 2 OF 2 FOR GENERAL NOTES.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT USE DUCT TERMINATION FOR UNDERGROUND SECONDARY SERVICES (750 VOLTS OR LESS)

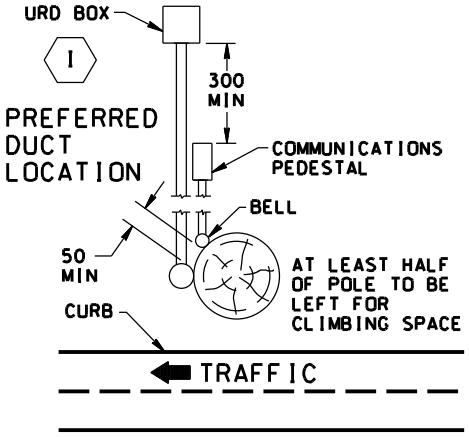
DRAWN:	M.HALASZ
REV DATE:	2022-03-11
STD NO:	***J-ED-25M***
SHT:	1 OF 2

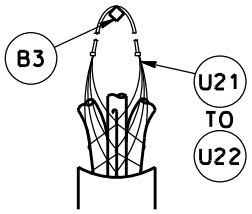
Jim McFadgen P. Eng.

FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG





DETAIL OF
KELLEMS GRIP

DETAIL 'A'

NOTES:

A. DEPTH SHALL BE INCREASED TO 1000mm IN VEHICULAR AREAS.
B. REFER TO DWG. NO. G-ED-12M FOR BONDING OF POWER CABLE GUARD.
C. REFER TO SECTION 'OU' FOR OVERHEAD POWER TERMINATION DETAILS.
D. STRAP CABLES UNDER GUARD EVERY 3000mm AND CABLE GUARD TO POLE EVERY 1200mm.
E. FOR GROUNDING DETAILS REFER TO DWG. J-ED-13M.
F. MARKER TAPE (ITEM U15) SHALL BE INSTALLED AS SHOWN.
G. ALL CONDUITS AND FITTINGS SHALL BE CSA APPROVED. CONDUIT RUNS SHALL BE CONSTRUCTED BY THE CUSTOMER OR THEIR AGENT AND INSPECTED BY NSP AND BELL REPRESENTATIVES PRIOR TO BACKFILLING.
H. REFER TO DWG. NO. J-ED-12M FOR SERVICE TRENCH DETAILS.
I. NSP: REFER TO U/G STANDARDS MANUAL FOR CONDUIT AND URD BOX LOCATION. CONDUITS SHALL NO BE INSTALLED ON THE CURB OR TRAFFIC SIDES OF THE POLE.
J. RIGID PVC CONDUIT TO EXTEND UP THE POLE 600mm WITH CABLE GUARD OVERLAPPING THE CONDUIT.
K. RIGID PVC CONDUIT MUST BE CLEANED AND SWABBED THEN CAPPED FOR PROTECTION.
L. ALL CONDUIT SHALL HAVE A NYLON FISH LINE (ITEM U16) INSTALLED PRIOR TO CAPPING.
M. NUMBER, SIZE AND TYPE OF CONDUITS/DUCTS TO BE SPECIFIED BY THE USER UTILITY.
N. CABLE GUARD IS NOT REQUIRED WHEN ARMORED CABLE (TECK) IS USED.
O. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

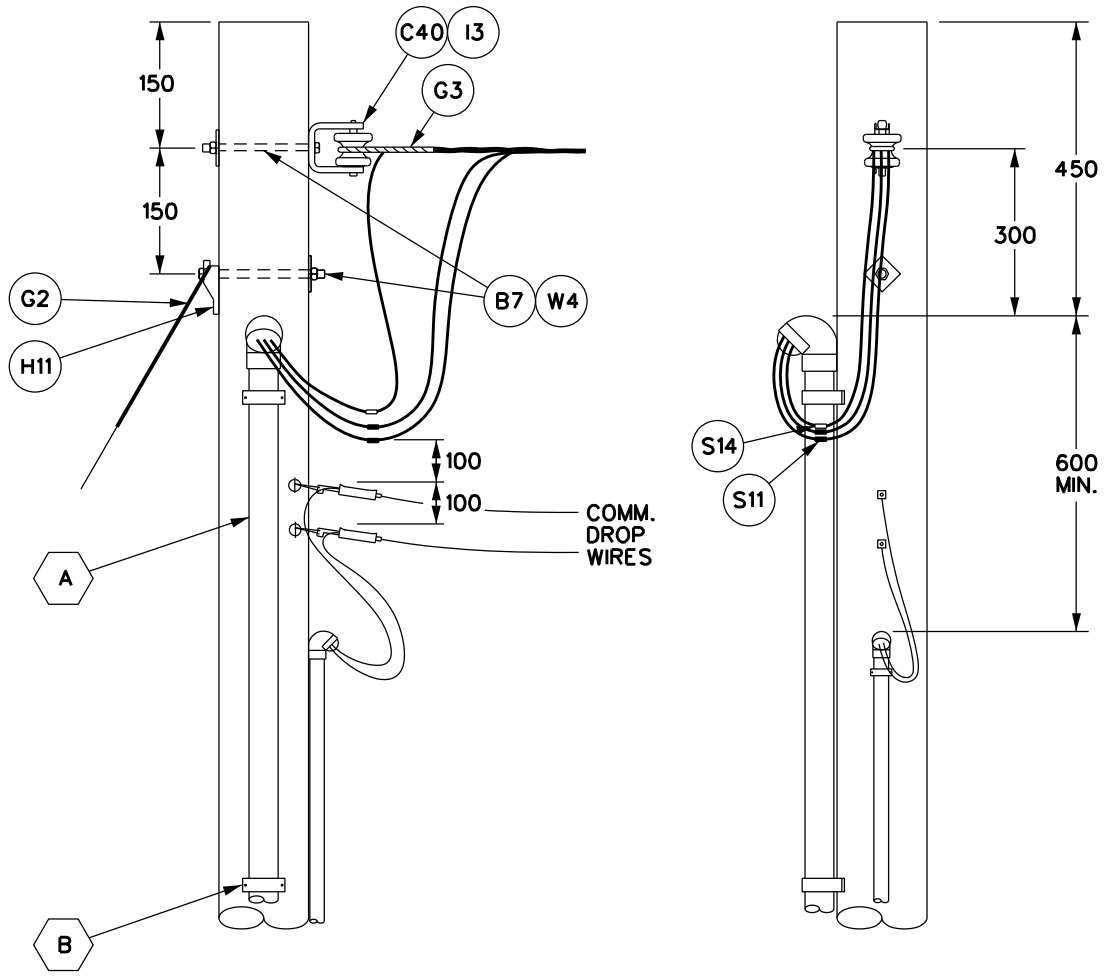
NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT USE DUCT TERMINATION FOR UNDERGROUND SECONDARY SERVICES (750 VOLTS OR LESS)

DRAWN:	M.HALASZ
REV DATE:	2022-03-11
STD NO:	***J-ED-25M***
SHT:	2 OF 2

FOR NSPI;
JIM MCFADGEN, P.ENG

FOR BELL;
STEPHEN CUMMINGER, P.ENG



NOTES:

A. TECK CABLE MAY BE USED INSTEAD OF CONDUIT, BUT STILL REQUIRES A WEATHERHEAD.
B. STRAP CONDUIT OR TECK CABLE TO THE POLE EVERY 1200 MAXIMUM.
C. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

JOINT-USE UNDERGROUND SERVICE POLE

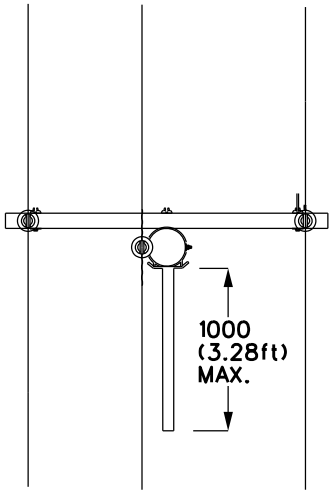
DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-34M***
SHT:	1 OF 1

Jim McFadgen P. Engs.

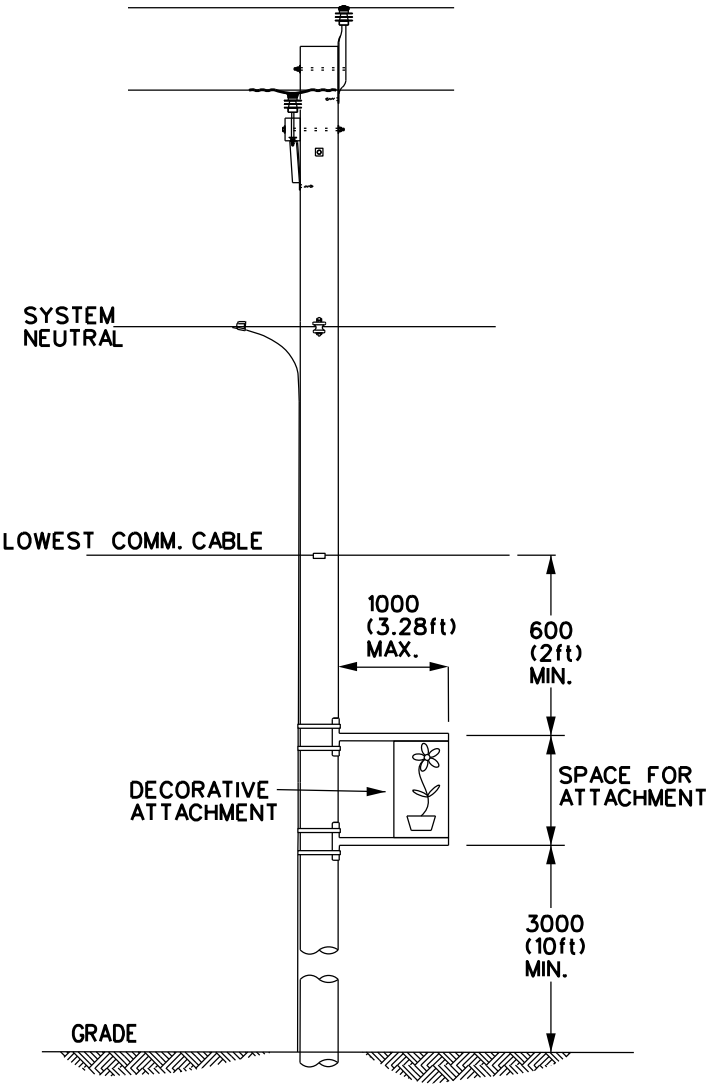
FOR NSPI;
JIM MCFADGEN, P.ENG

Steph Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG



TOP VIEW



SIDE VIEW

NOTES:

A. ALL CLEARANCES SHOWN ARE MINIMUMS. DECORATIVE ATTACHMENTS MAY BE ANY SIZE THAT DOES NOT CAUSE A VIOLATION OF ONE OF THE MINIMUM CLEARANCES SHOWN OR QUOTED.

B. THE PREFERRED ORIENTATION OF THE DECORATIVE ATTACHMENT IS PARALLEL TO THE CABLES AS SHOWN IN THE SKETCH

C. IF THE DECORATIVE ATTACHMENT IS TO BE INSTALLED SUCH THAT THE BRACKET IS PERPENDICULAR TO THE CABLES, REFER TO SHEET 3 OF 3 FOR NOTES AND DETAILS.

D. OWNER OF THE DECORATIVE ATTACHMENT IS RESPONSIBLE TO ENSURE THAT THE METHOD OF ATTACHMENT IS SUFFICIENT TO SUPPORT THE ATTACHMENT.

E. BANDING OF THE ATTACHMENT TO POLES IS PREFERRED (STAINLESS STEEL BANDS). MINIMUM WIDTH OF THE BANDS IS TO BE 25mm (1 INCH). BANDS MUST NOT BE APPLIED OVER CONDUITS, CABLES OR GROUND WIRES.

F. ATTACHMENT WITH GALVANIZED LAG SCREWS NOT MORE THAN 75mm (3 INCHES) LONG IS ACCEPTABLE. ACCEPTANCE STANDARD FOR LAG SCREW IS HUBBEL POWER SYSTEMS PART NUMBER DFL250 OR UTILITY APPROVED EQUIVALENT (THIS IS $\frac{3}{8}$ INCH BY $2\frac{1}{2}$ INCH LONG LAG SCREW).

G. THE MAXIMUM WEIGHT OF ANY DECORATIVE ATTACHMENT SHALL BE 22.7 KG (50lbs).

H. NO DECORATIVE ATTACHMENTS ARE PERMITTED THAT ARE CONNECTED TO TWO POLES AT ONCE. E.G. - NO BANNERS THAT SPAN A ROADWAY.

I. THIS DRAWING APPLIES TO NON-POWERED DECORATIVE ATTACHMENTS ONLY.

J. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

DECORATIVE ATTACHMENT POLE HANGING BANNER ON JOINT USE POLE

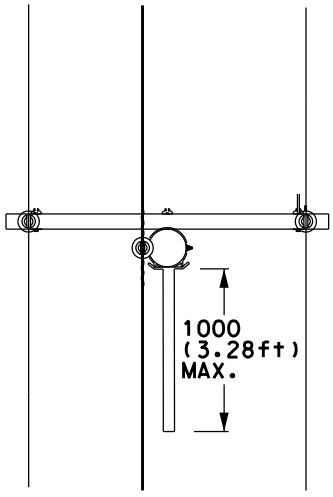
DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-37M***
SHT:	1 OF 3

Jim McFadgen P. Eng.

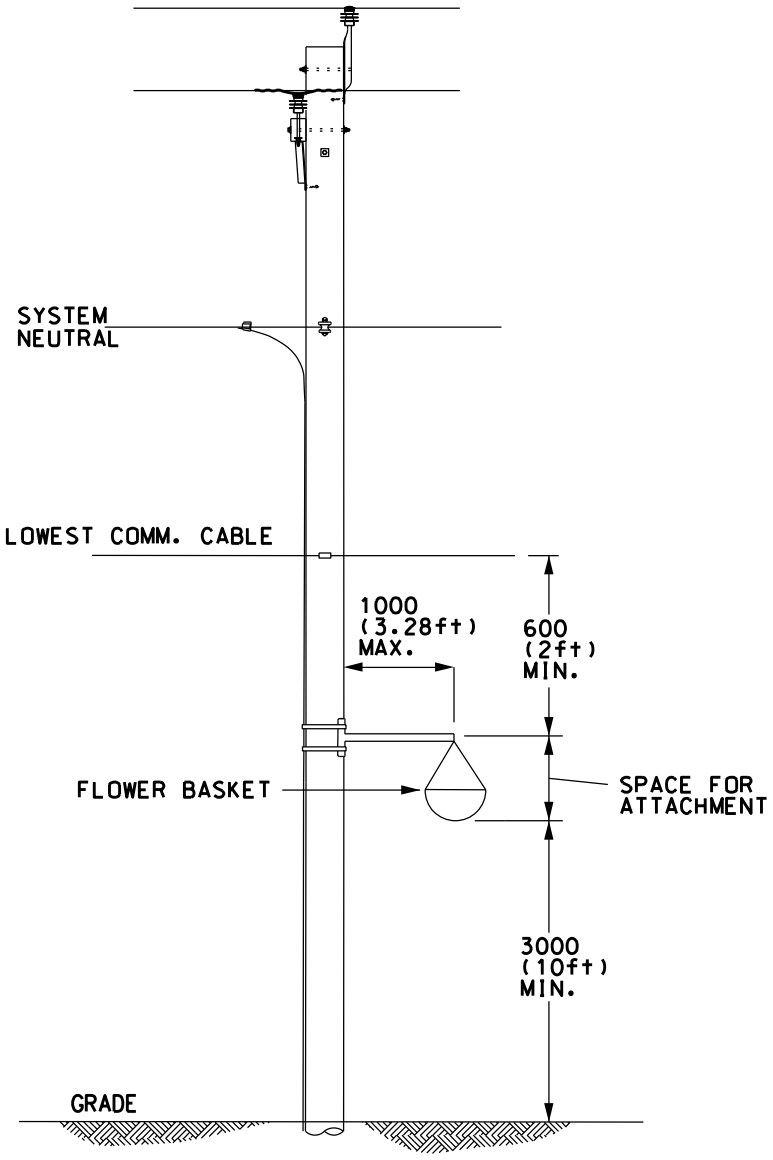
FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG



TOP VIEW



NOTES:

A. ALL CLEARANCES SHOWN ARE MINIMUMS. DECORATIVE ATTACHMENTS MAY BE ANY SIZE THAT DOES NOT CAUSE A VIOLATION OF ONE OF THE MINIMUM CLEARANCES SHOWN OR QUOTED.

B. THE PREFERRED ORIENTATION OF THE DECORATIVE ATTACHMENT IS PARALLEL TO THE CABLES AS SHOWN IN THE SKETCH

C. IF THE DECORATIVE ATTACHMENT IS TO BE INSTALLED SUCH THAT THE BRACKET IS PERPENDICULAR TO THE CABLES, REFER TO SHEET 3 OF 3 FOR NOTES AND DETAILS.

D. OWNER OF THE DECORATIVE ATTACHMENT IS RESPONSIBLE TO ENSURE THAT THE METHOD OF ATTACHMENT IS SUFFICIENT TO SUPPORT THE ATTACHMENT.

E. BANDING OF THE ATTACHMENT TO POLES IS PREFERRED (STAINLESS STEEL BANDS). MINIMUM WIDTH OF THE BANDS IS TO BE 25mm (1 INCH). BANDS MUST NOT BE APPLIED OVER CONDUITS, CABLES OR GROUND WIRES.

F. ATTACHMENT WITH GALVANIZED LAG SCREWS NOT MORE THAN 75mm (3 INCHES) LONG IS ACCEPTABLE. ACCEPTANCE STANDARD FOR LAG SCREW IS HUBBEL POWER SYSTEMS PART NUMBER DFL250 OR UTILITY APPROVED EQUIVALENT (THIS IS $^{3}/_{8}$ INCH BY $2^{1}/_{2}$ INCH LONG LAG SCREW).

G. THE MAXIMUM WEIGHT OF ANY DECORATIVE ATTACHMENT SHALL BE 22.7 KG (50lbs).

H. NO DECORATIVE ATTACHMENTS ARE PERMITTED THAT ARE CONNECTED TO TWO POLES AT ONCE. E.G. - NO BANNERS THAT SPAN A ROADWAY.

I. THIS DRAWING APPLIES TO NON-POWERED DECORATIVE ATTACHMENTS ONLY.

J. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

DECORATIVE ATTACHMENT POLE HANGING FLOWER BASKET ON JOINT USE POLE

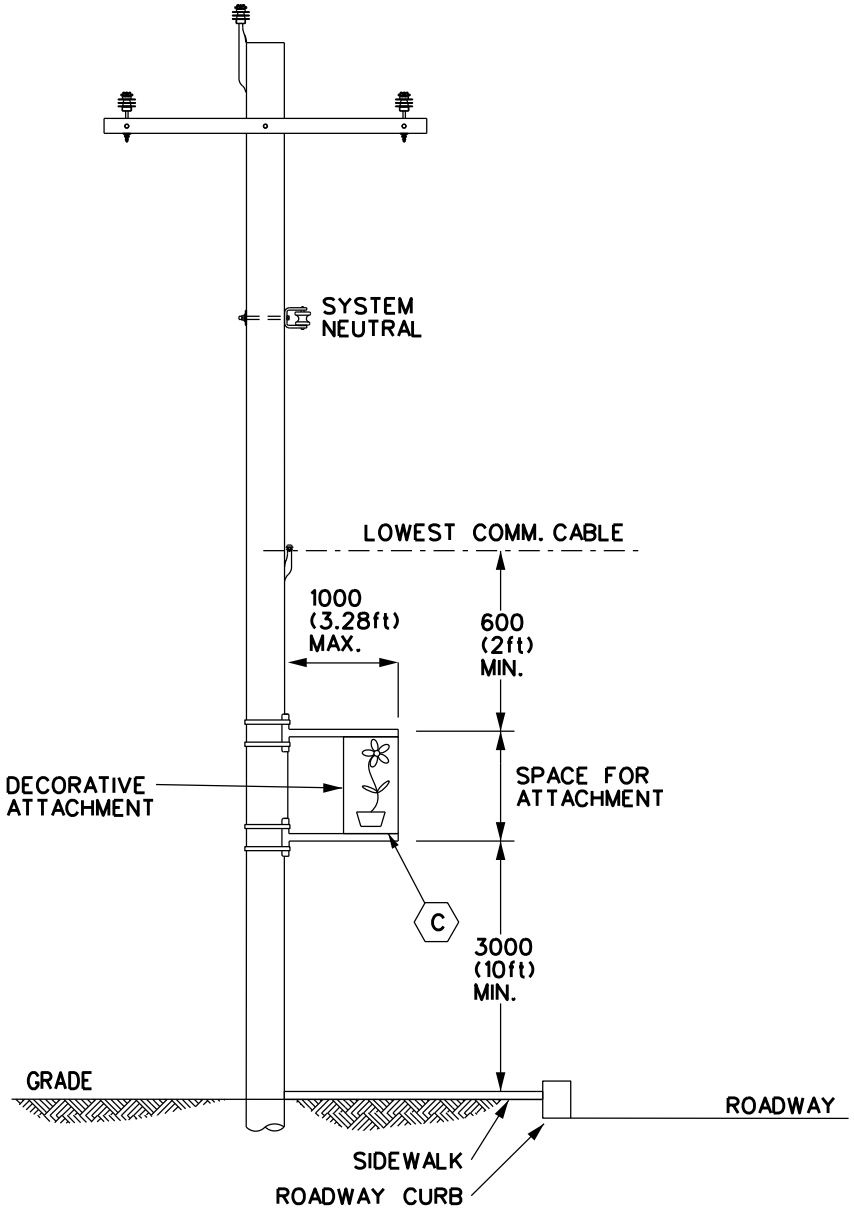
Jim McFadgen P. Eng.

FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG

DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-37M***
SHT:	2 OF 3



NOTES:

A. IF THE DECORATIVE ATTACHMENT IS TO BE INSTALLED SUCH THAT THE BRACKET IS PERPENDICULAR TO THE CABLES, THEN THE FOLLOWING RESTRICTIONS APPLY:
B. THE DECORATIVE ATTACHMENT MUST NOT PROTRUDE SUCH THAT THEY ARE LESS THAN 0.3m (1ft) AWAY FROM THE ROAD FACE OF A CURB (WHERE PRESENT.
C. ATTACHMENT SHALL NOT TO EXTEND PAST THE ROADWAY FACE OF CURB OR SHOULDER OF THE ROAD. WHERE THERE IS NO CURB, THE ATTACHMENT MUST NOT PROTRUDE INTO THE TRAVELLED ROADWAY (INCLUDING THE SHOULDER).
D. IF THE DECORATIVE ATTACHMENT PROJECTS OVER THE VEHICLE TRAVELLED SURFACE; THE MINIMUM HEIGHT FROM BOTTOM OF DECORATIVE ATTACHMENT TO THE GROUND MUST BE 4.57m (15ft).
E. IF THE DECORATIVE ATTACHMENT IS ON THE SIDEWALK SIDE OF THE POLE, THE MINIMUM CLEARANCE OVER THE SIDEWALK MUST BE 3m (10ft) FOR THE LOWEST POINT ON THE ATTACHMENT.
F. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NSPI & BELL CANADA JOINT-USE DISTRIBUTION STANDARDS

DECORATIVE ATTACHMENT POLE HANGING CLEARANCES ON JOINT USE POLE

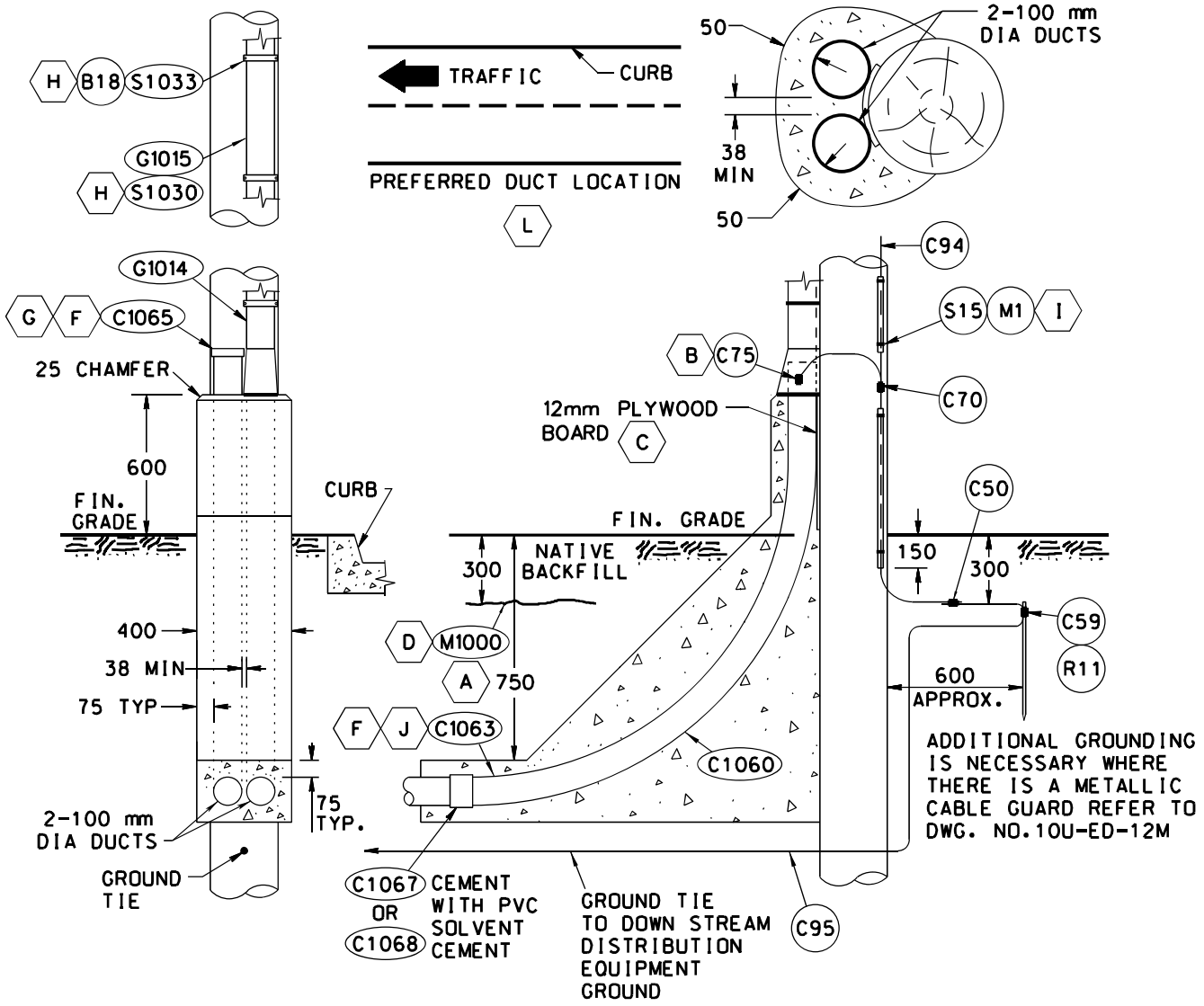
Jim McFadgen P. Eng.

FOR NSPI;
JIM MCFADGEN, P.ENG

Stephen Cumminger

FOR BELL;
STEPHEN CUMMINGER, P.ENG

DRAWN:	M.HALASZ
REV DATE:	2021-12-13
STD NO:	***J-ED-37M***
SHT:	3 OF 3



NOTES:

A. REFER TO DWG. NO. 1U-ED-44M FOR ROADWAY/DRIVEWAY REQUIREMENTS.
B. REFER TO DWG. NO. 10U-ED-12M FOR BONDING OF CABLE GUARDS.
C. DUCTS SHALL BE SECURED TO THE POLE WITH CONDUIT STRAPS AND HAVE A 12 mm THICK PLYWOOD BOARD SPACER BEFORE CONCRETE IS POURED.
D. DUCT RUNS SHALL BE FORMED BY THE CUSTOMER OR HIS AGENT AND INSPECTED BY NSPI REPRESENTATIVES PRIOR TO POURING OF THE CONCRETE. MARKER TAPE TO BE INSTALLED AS SHOWN.
E. FOR JOINT USE DETAILS REFER TO DWG. NO. 1U-ED-14M.
F. ALL DUCTS MUST BE SWABBED. THEN CAPPED FOR PROTECTION.
G. ALL DUCTS SHALL HAVE A NYLON FISH LINE (ITEM N1000 INSTALLED PRIOR TO CAPPING.
H. STRAP CABLES UNDER GUARD EVERY 3000 mm AND CABLE GUARD TO POLE EVERY 1200 mm.
I. STAPLED GROUND WIRE MOULDINGS TO POLE EVERY 1200 mm.
J. 100 mm DUCTS SHALL NORMALLY BE USED. IN SPECIAL CIRCUMSTANCES WHEN MORE THAN THREE 90 BENDS ARE NEEDED BETWEEN CABLE PULLING POINTS, OR DUCT RUN EXCEEDS 92 m, 125 mm DUCTS SHALL BE USED.
K. FOR TERMINATION DETAILS REFER TO DWG. NO.'S 5U-ED 11M TO 5U-ED-13M.
L. DUCTS SHALL NOT BE INSTALLED ON THE CURB OR TRAFFIC SIDES OF THE POLE.

(SAME AS 5U-ED-10M)

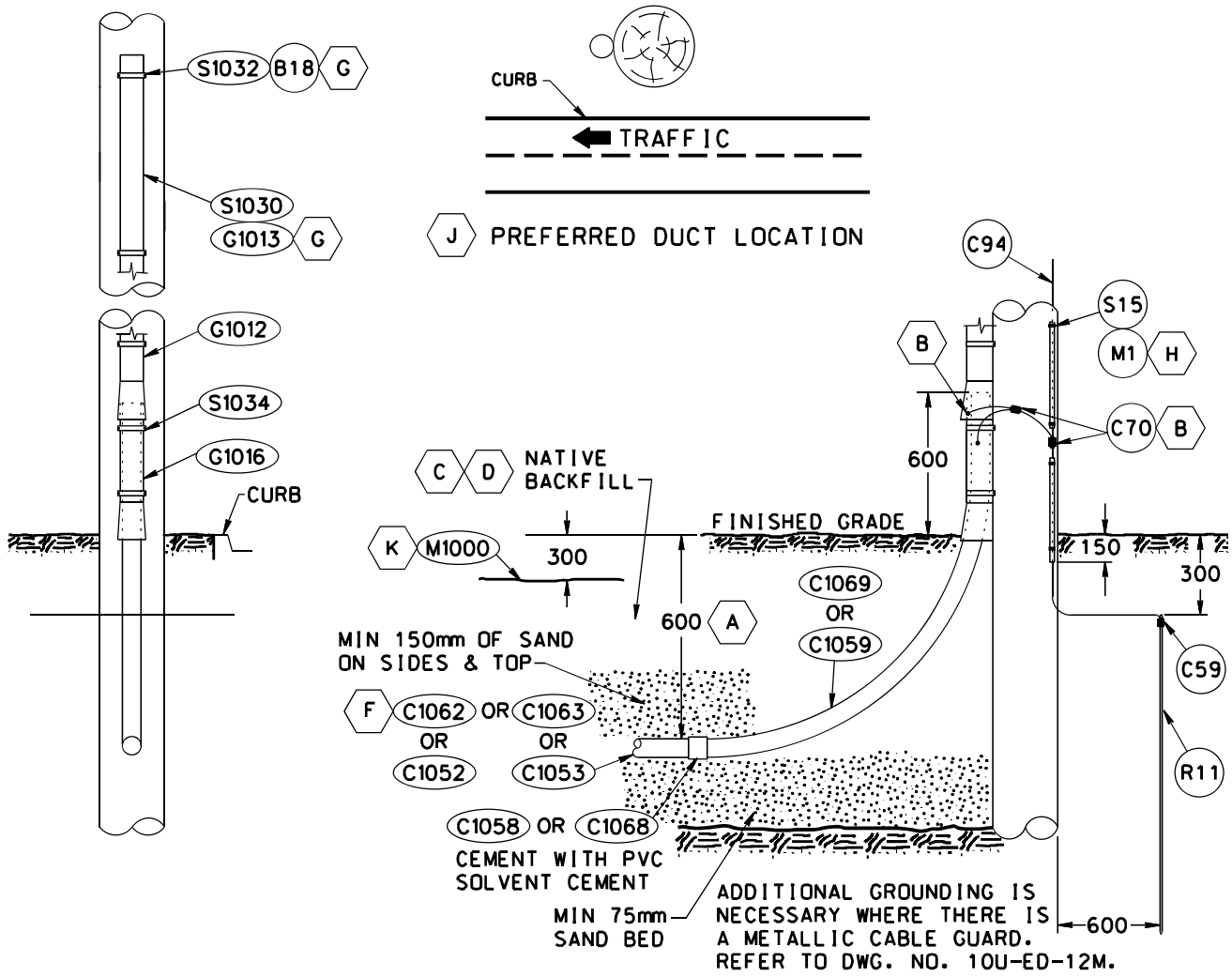
REGISTERED PROFESSIONAL ENGINEER
DATE 17/FEB/2017
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

DUCT TERMINATION AT POLE FOR UNDERGROUND PRIMARY SERVICE

DATE:	2008-08-14	REV DATE:	2016-04-12
DRAWN:	M.HALASZ	STD NO:	***OU-ED-10M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R2)



NOTES:

A. MINIMUM COVER REQUIREMENTS FOR DIRECT BURIED CONDUIT IN VEHICULAR AREAS IS 1000mm.
B. FOR BONDING OF CABLE GUARDS, REFER TO DWG. NO. 10U-ED-12M.
C. NATIVE BACKFILL MATERIAL SHALL NOT CONTAIN ROCKS OVER 50mm IN DIAMETER FOR THE FIRST 300mm ABOVE CONDUIT.
D. BACKFILL SHALL BE COMPACTED EVERY 300mm MINIMUM.
E. FOR JOINT USE DETAILS, REFER TO DWG. NO. 1U-ED-25M.
F. ALL CONDUIT MUST BE CLEANED, HAVE NYLON FISH LINE (ITEM N1000) INSTALLED, AND THEN CAPPED FOR PROTECTION.
G. STRAP CABLE TO THE POLE EVERY 3000mm AND THE CABLE GUARD TO THE POLE EVERY 1200mm.
H. STAPLE GROUND WIRE MOULDING TO THE POLE EVERY 600mm.
I. CONDUIT RUNS SHALL BE CONSTRUCTED BY THE CUSTOMER OR HIS AGENT AND BE INSPECTED BY NSPI REPRESENTATIVES PRIOR TO BACKFILLING.
J. THE CONDUIT SHALL NOT BE INSTALLED ON THE CURB OR TRAFFIC SIDE OF THE POLE.
K. MARKER TAPE (ITEM M1000) SHALL BE INSTALLED ABOVE THE CONDUIT FOR ITS ENTIRE LENGTH, AS SHOWN.
L. NOT APPLICABLE TO CUSTOMER OWNED SERVICE ENTRANCE.

(SAME AS 5U-ED-20M)

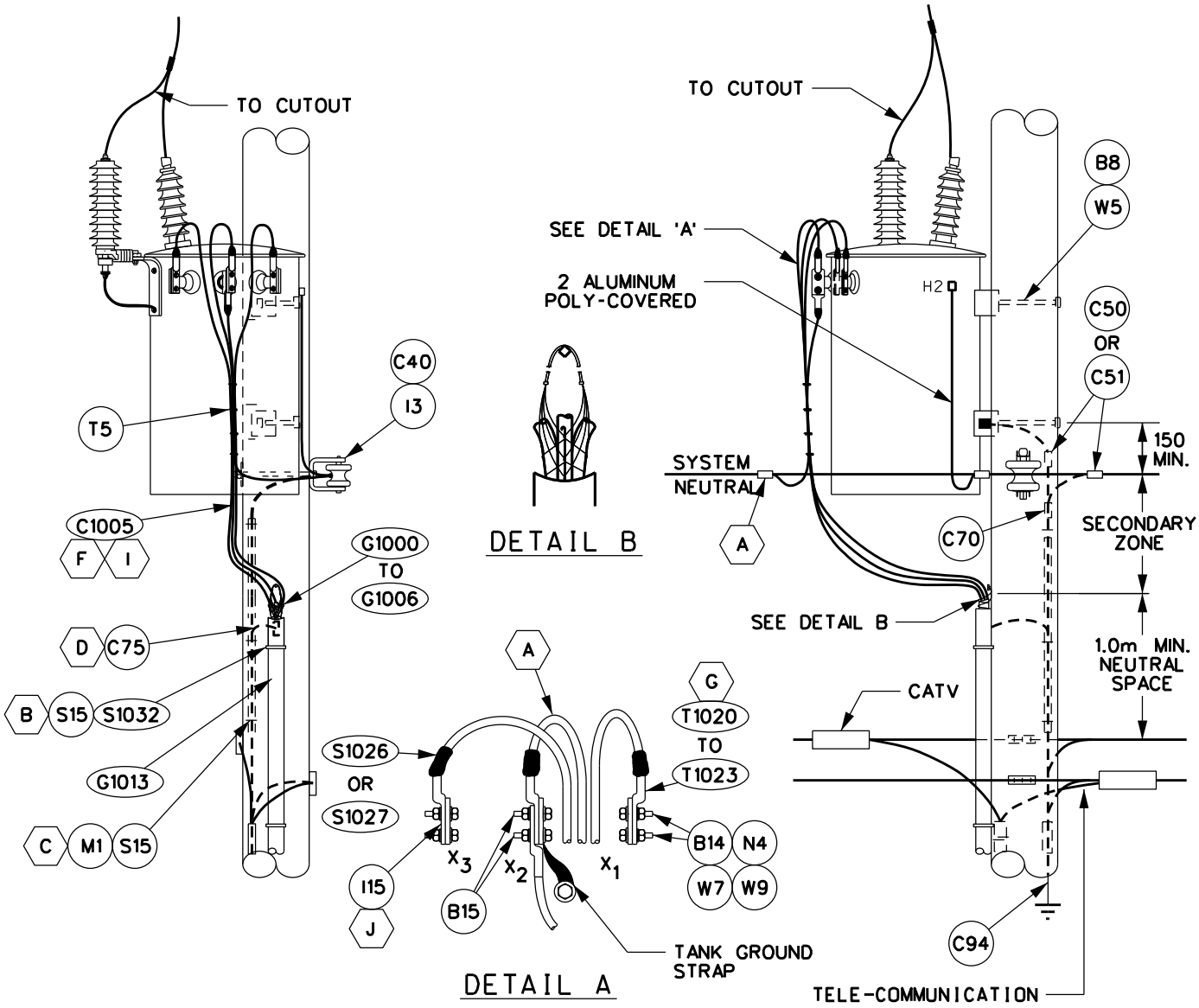
REGISTERED PROFESSIONAL ENGINEER
DATE 19/JUN/2018
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CONDUIT TERMINATION AT POLE FOR UNDERGROUND SERVICES (URD SUPPLY,750 VOLTS AND LESS)

DATE:	2008-08-14	REV DATE:	2018-05-29
DRAWN:	M.HALASZ	STD NO:	***OU-ED-20M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R3)



NOTES:

A. MINIMUM #1/0 ALUMINUM POLY-COVERED SHALL BE USED FOR X2 BOND TO SYSTEM NEUTRAL.
B. CABLE GUARD TO BE STRAPPED TO POLE EVERY 1200 mm.
C. GROUND WIRE MOULDING TO BE STRAPPED TO POLE EVERY 600 mm.
D. ALL CABLE GUARDS SHALL BE CONNECTED TOGETHER AND BONDED TO GROUND WIRE WITH A #2 AWG STRANDED COPPER WIRE. REFER TO DWG. G-ED-12M.
E. FASTEN CABLES TO POLE WITH KELLEMS GRIP. SEE DETAIL B.
F. FOR CABLE DATA REFER TO SECTION "3U".
G. FOR TERMINAL INSTALLATION DETAILS REFER TO SECTION '4U' OF THE U/G STANDARDS MANUAL.
H. FOR CONDUIT TERMINATION DETAILS REFER TO DWG. NO. OU-ED-20M.
I. MINIMUM LENGTH OF SECONDARY CABLE FOR MAKING CONNECTIONS AND FORMING DRIP LOOP SHALL BE 1.5 m MEASURED FROM THE TOP OF CONDUIT.
J. USE AN APPROVED INHIBITOR WHEN THE TRANSFORMER TERMINAL IS OF DISSIMILAR MATERIAL THAN THE CONDUCTOR TERMINAL.
K. FOR URD BOX LOCATION REFER TO DWG. 7U-ED-21M.
L. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

(SAME AS 5U-ED-21M)

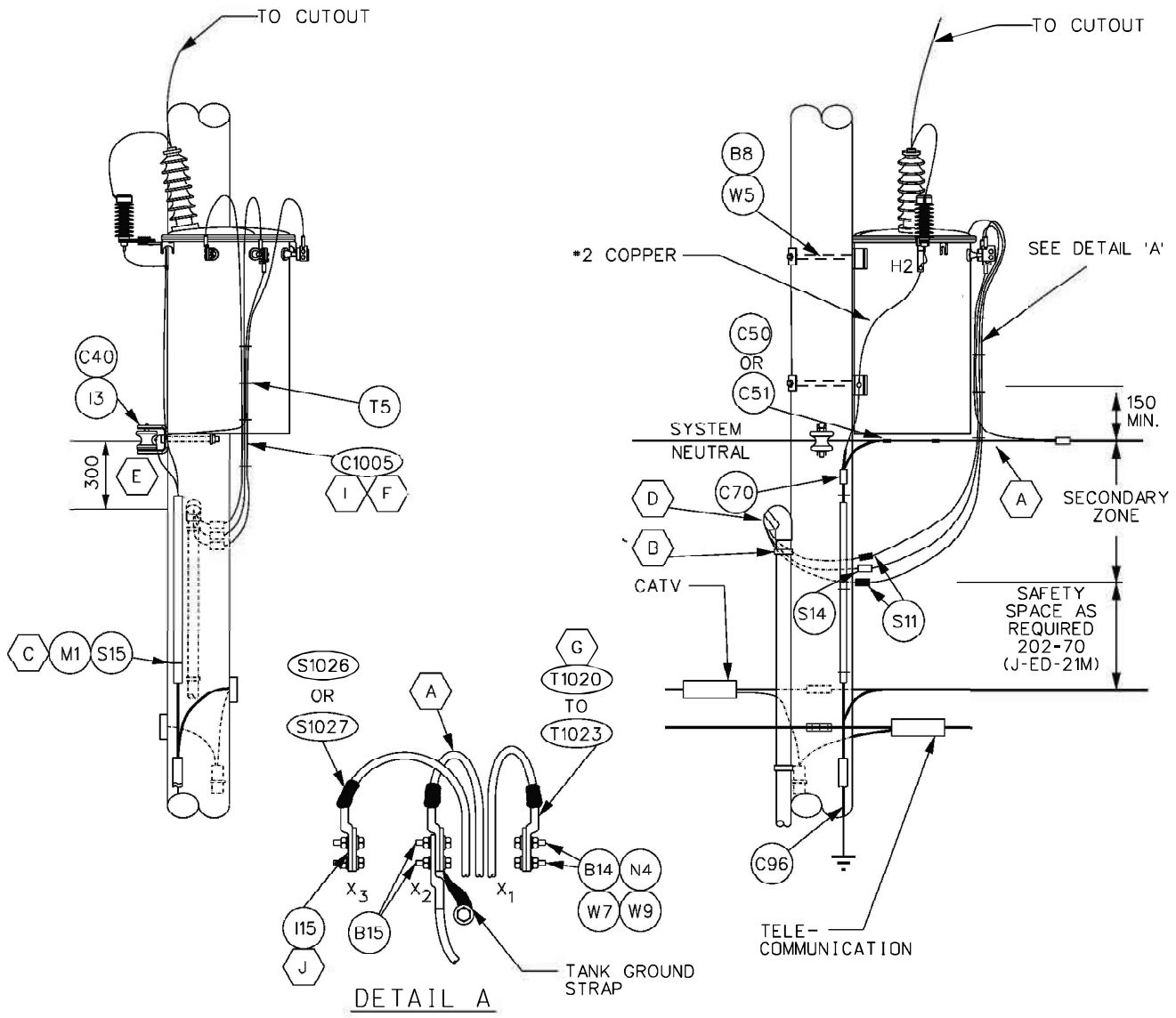
REGISTERED PROFESSIONAL ENGINEER
DATE 15/NOV/2016
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

OVERHEAD TRANSFORMER TERMINATION DETAILS
UNDERGROUND SERVICE DIRECTLY TO A URD BOX

DATE:	1987-12-01	REV DATE:	2016-11-14
DRAWN:	M.HALASZ	STD NO:	***OU-ED-21M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R1)



NOTES:

A. MINIMUM #1/0 ALUMINUM POLY-COVERED CONDUCTOR SHALL BE USED FOR X2 BOND TO SYSTEM NEUTRAL.
B. PVC CONDUIT TO BE STRAPPED TO POLE EVERY 1200 mm.
C. GROUND WIRE MOULDING TO BE STAPLED TO POLE EVERY 600 mm.
D. THE CUSTOMER IS RESPONSIBLE FOR SUPPLYING AND INSTALLING THE SERVICE HEAD, CABLE AND RIGID PVC CONDUIT.
E. TOP SERVICE HEAD TO BE LOCATED 300 mm BELOW SYSTEM NEUTRAL.
F. FOR CABLE DATA REFER TO SECTION 520 (3U).
G. FOR TERMINAL INSTALLATION DETAILS REFER TO SECTION 530 (4U).
H. FOR CONDUIT TERMINATION DETAILS REFER TO DWG. 102-45 (OU-ED-20M).
I. MINIMUM LENGTH OF SECONDARY CABLE AS MEASURED FROM WEATHERHEAD TO END OF CONDUCTOR FOR MAKING CONNECTIONS AND FORMING DRIP LOOP SHALL BE 3.0 m WHEN CONNECTING DIRECTLY TO THE TRANSFORMER TERMINALS AND 1.5 m WHEN CONNECTING DIRECTLY TO THE SECONDARY CONDUCTORS.
J. USE AN APPROVED INHIBITOR WHEN THE TRANSFORMER TERMINAL IS OF DISIMILAR MATERIAL THAN THE CONDUCTOR TERMINAL.
K. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

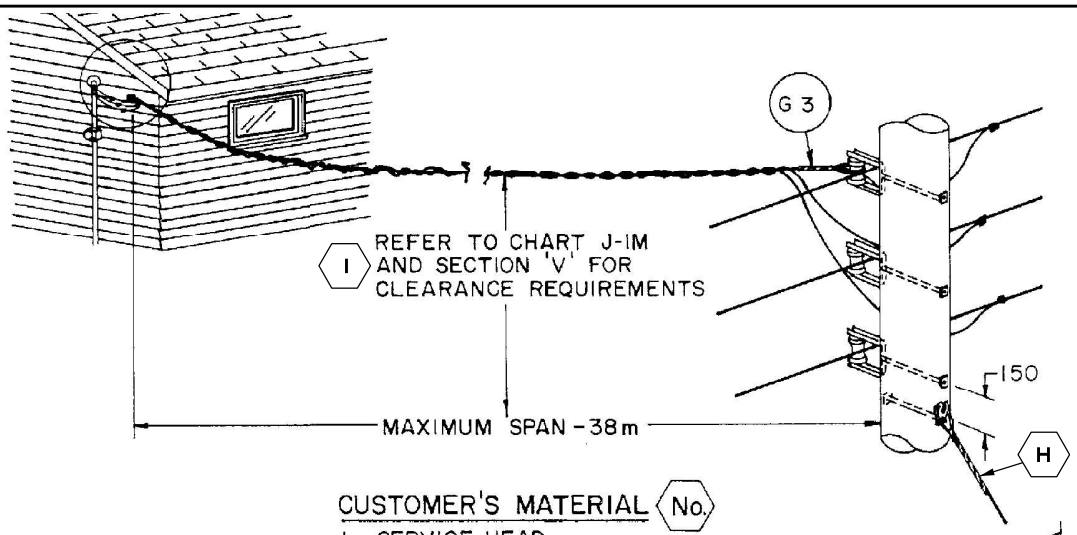
REGISTERED PROFESSIONAL ENGINEER
DATE 08/22/25
K.P. SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

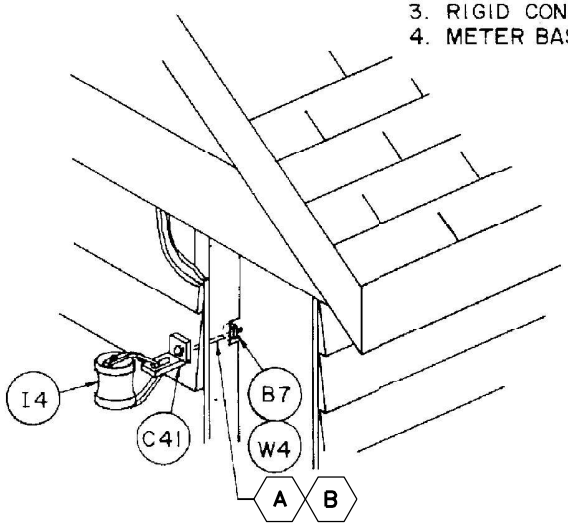
OVERHEAD TRANSFORMER TERMINATION DETAILS UNDERGROUND SERVICE DIRECTLY TO A CUSTOMER

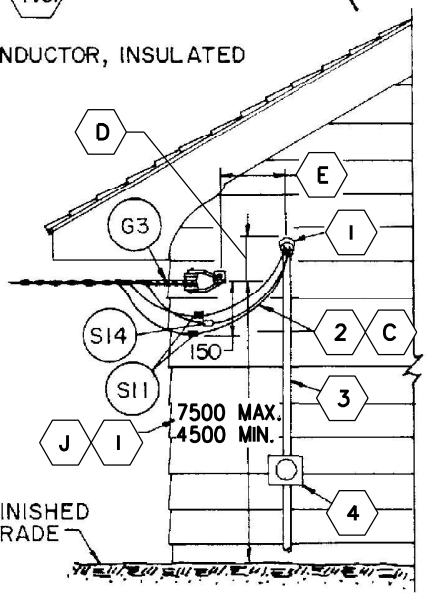
DATE:	2008-10-20	REV DATE:	2025-06-24
DRAWN:	M. HALASZ	STD NO:	***102-55 (OU-ED-22)***
APPROVED:	K. SPENCE	SHT NO:	1 OF 1 (R3)



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR, INSULATED
3. RIGID CONDUIT
4. METER BASE





NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE ATTACHMENT DEVICE TO THE BUILDING AT THE TIME OF CONSTRUCTION AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN IN ANY DIRECTION.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSPI.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000 BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
D. SERVICE ATTACHMENT SHALL BE INSTALLED A MINIMUM OF 150 MIN AND 300 MAX BELOW THE SERVICE HEAD.
E. SERVICE ATTACHMENT SHALL BE INSTALLED A MINIMUM OF 150 MIN AND 300 MAX HORIZONTAL DISTANCE FROM THE SERVICE HEAD.
F. 150 DRIP LOOP TO BE LEFT AT THE POLE AND HOUSE CONNECTION.
G. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
H. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTION 'A'.
I. AT THE DISCRETION OF FIELD ENGINEER, OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M AND SECTION "V".
J. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED, WITH THE APPROVAL OF NSPI, IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
K. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

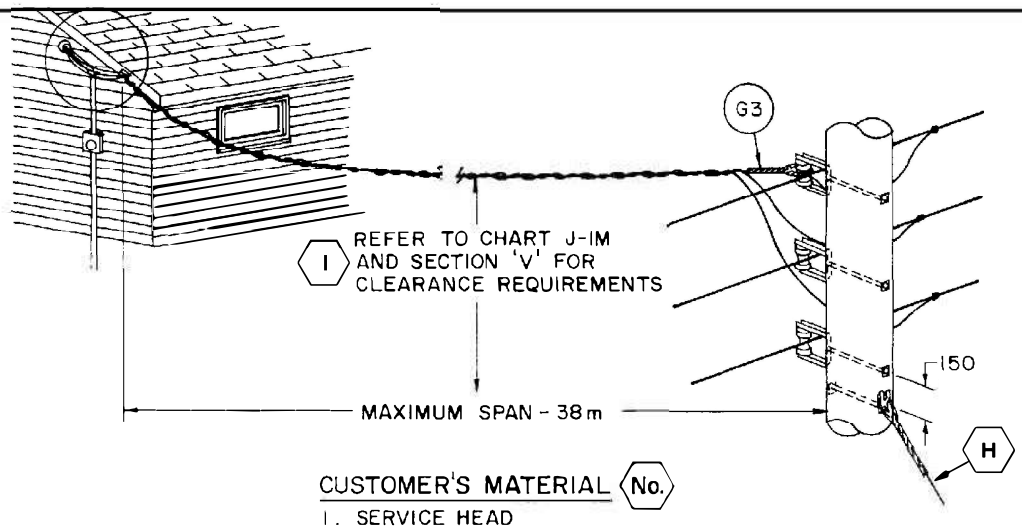
REGISTERED PROFESSIONAL ENGINEER
DATE 2022/02/16
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

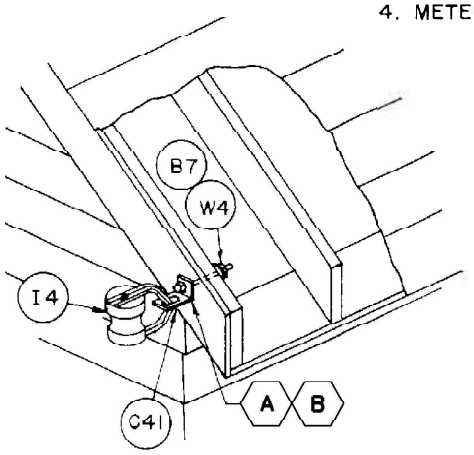
TRIPLEX SERVICE CONNECTION FOR SINGLE DWELLING (NEW CONSTRUCTION - WALL ATTACHMENT) 120/240V (400A OR LESS)

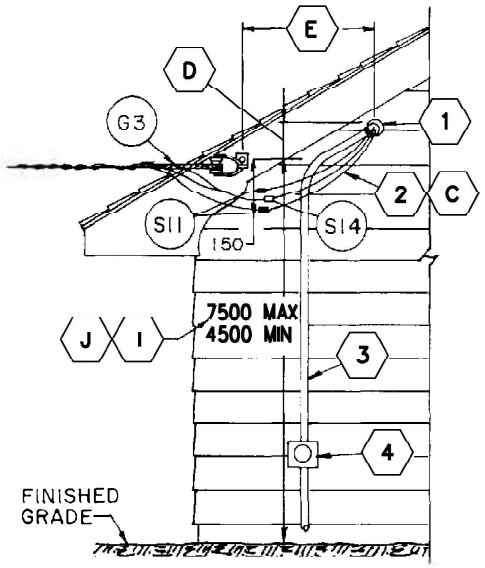
DATE:	2007-05-07	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	**SS-ED-10M**
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R4)



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR, INSULATED
3. RIGID CONDUIT
4. METER BASE





NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE ATTACHMENT DEVICE TO THE BUILDING AT THE TIME OF CONSTRUCTION AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSPI.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000 BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
D. SERVICE ATTACHMENT SHALL BE INSTALLED A 150 MIN AND 300 MAX BELOW THE SERVICE HEAD.
E. SERVICE ATTACHMENT SHALL BE INSTALLED A 150 MIN AND 300 MAX HORIZONTAL DISTANCE FROM THE SERVICE HEAD. THE MAXIMUM MAY BE INCREASED TO 500MM FOR UNDER EAVE INSTALLATIONS.
F. 150 DRIP LOOP TO BE LEFT AT THE POLE AND HOUSE CONNECTION.
G. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLE CABLE TO BE USED.
H. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTION 'A'.
I. AT THE DISCRETION OF THE FIELD ENGINEER. OR THEIR REPRESENTATIVE. MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M AND SECTION 'V'.
J. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND THIS REQUIREMENT MAY BE WAIVED. WITH THE APPROVAL OF NSPI. IF THE SERVICE IS REACHABLE WITH BOOM TRUCK FROM THE DRIVEWAY.
K. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

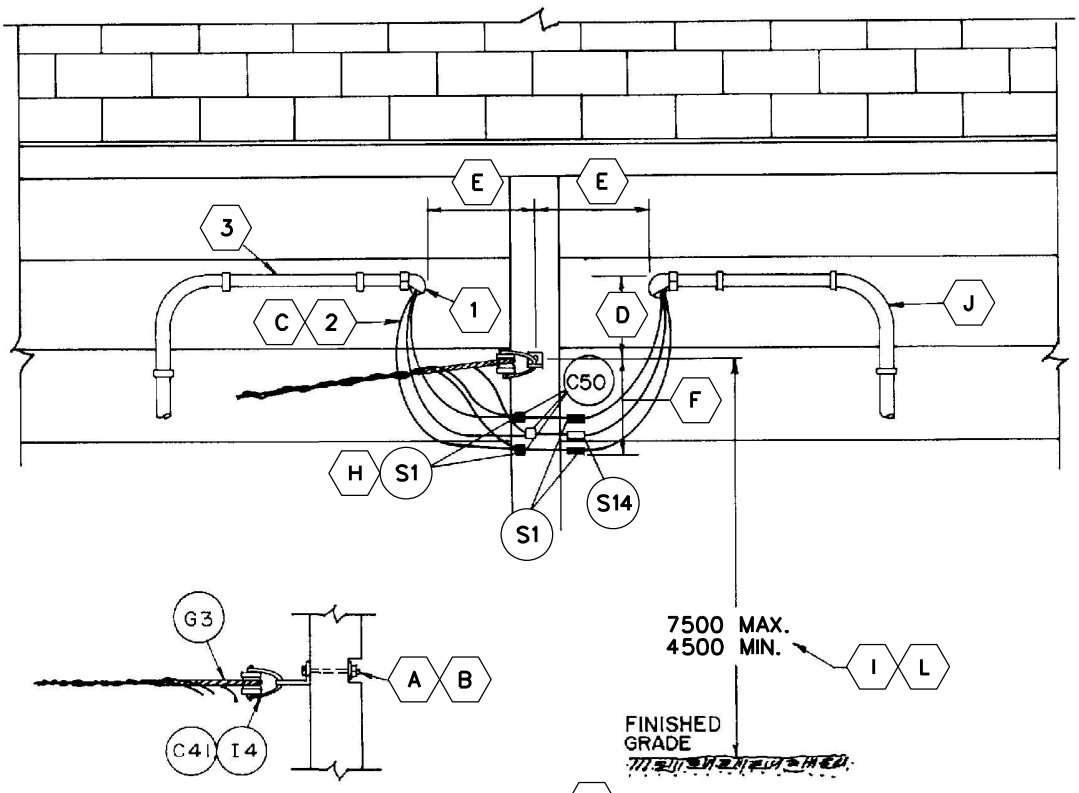
REGISTERED PROFESSIONAL ENGINEER
DATE 2023/03/20
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TRIPLEX SERVICE CONNECTION FOR SINGLE DWELLING (NEW CONSTRUCTION - EAVE ATTACHMENT) 120/240V (400A OR LESS)

DATE:	2008-08-14	REV DATE:	2023-03-20
DRAWN:	M. HALASZ	STD NO:	**SS-ED-11M**
APPROVED:	J. A. MCFADGEN	SHT NO:	1 OF 1



CUSTOMER'S MATERIAL No.

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR. INSULATED
3. RIGID CONDUIT
4. METER BASE

NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE INSTALLING THE SERVICE ATTACHMENT DEVICE TO THE BUILDING AT THE TIME OF CONSTRUCTION AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLED BY NSPI.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000 BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
D. SERVICE ATTACHMENT SHALL BE INSTALLED 150 MIN AND 300 MAX BELOW THE SERVICE HEAD.
E. SERVICE ATTACHMENT SHALL BE INSTALLED 150 MIN AND 300 MAX HORIZONTAL DISTANCE FROM THE SERVICE HEAD.
F. 150 DRIP LOOP TO BE LEFT AT THE POLE AND HOUSE CONNECTION.
G. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
H. SEALING COMPOUND SHALL BE APPLIED TO PHASE CONNECTIONS. NEUTRAL CONNECTIONS SHALL BE BARE.
I. AT THE DISCRETION OF FIELD ENGINEERING. OR THEIR REPRESENTATIVE. MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M AND SECTION 'V'.
J. THE RIGID CONDUIT MAY BE INSTALLED IN SUCH A MANNER AS TO LOCATE A METER AT EACH END OF THE STRUCTURE.
K. A DUPLEX HOUSE MAY HAVE SEPARATE CUSTOMER SERVICE WEATHERHEADS AT EITHER END OF THE STRUCTURE. THIS WOULD REQUIRE SEPARATE UTILITY SERVICE CONDUCTOR INSTALLATIONS BUILT AS PER SS-ED-10M AND SS-ED-11M. AN ADDITIONAL CHARGE IS TO BE APPLIED IN THIS CONFIGURATION (THE COST OF THE SECOND SERVICE CABLE INSTALLATION).
L. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURE FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED. WITH APPROVAL OF NSPI. IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
M. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

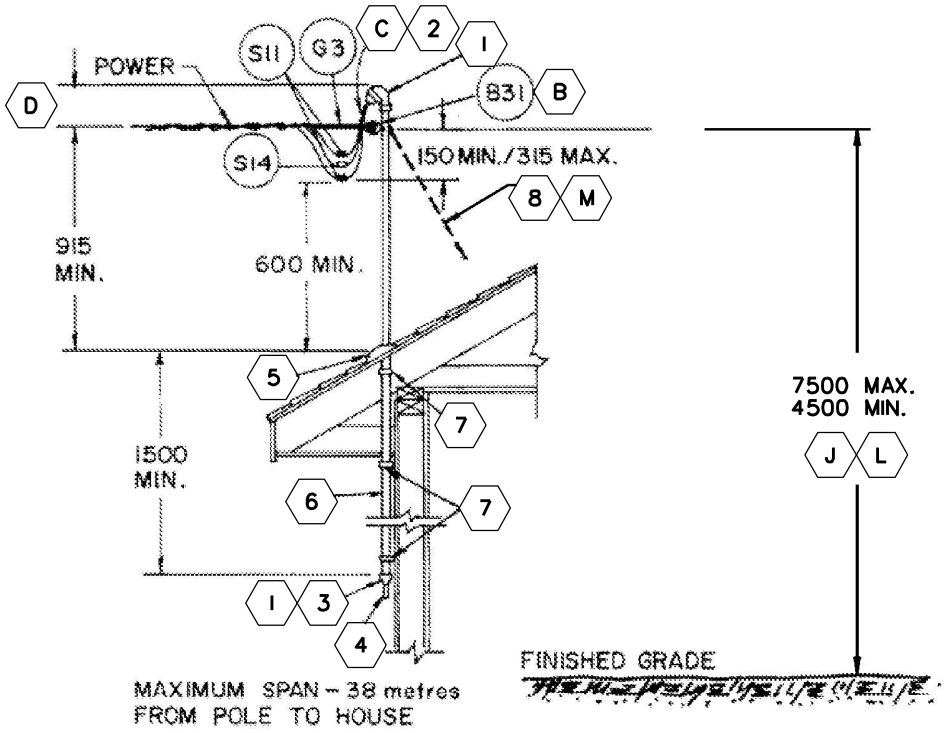
REGISTERED PROFESSIONAL ENGINEER
DATE 2022/02/16
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TRIPLEX SERVICE CONNECTION FOR DUPLEX HOUSE (NEW CONSTRUCTION 120/240V

DATE:	2008-08-14	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	**SS-ED-12M**
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R4)



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR, INSULATED
3. OFFSET CONDUIT REDUCER
4. RIGID CONDUIT
5. ROOF FLASHING
6. MAST SUPPORT MEMBER
7. SERVICE MAST CLAMP, GALV.,
8. 6mm GALVANIZED STEEL WIRE
9. METER BASE

NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE BRACKET AND MAST IN A LOCATION SATISFACTORY TO BOTH THE INSPECTION DEPT. AND THE SUPPLY AUTHORITY, AND ENSURING THE ATTACHMENT SHALL BE SUPPLIED BY NSPI.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSPI.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000 BEYOND THE SERVICE HEAD TO ALLOW FOR UTILTIY CONNECTIONS.
D. SERVICE ATTACHMENT SHALL BE INSTALLED 150 MIN AND 300 MAX BELOW THE SERVICE HEAD.
E. 150 DRIP LOOP TO BE LEFT AT THE POLE AND HOUSE CONNECTION.
F. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
G. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTION 'A'.
H. 2 1/2" GALVANIZED STEEL MASTS. RIGID ALUMINUM CONDUIT IS NOT ACCEPTABLE.
I. ITEM No.3 IS NOT REQUIRED WHEN THE MAST IS CONNECTED DIRECTLY TO A 2 1/2" HUB ON THE METER CONNECTION BOX.
J. AT THE DISCRETION OF FIELD ENGINEERING, OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M AND SECTION "V".
K. REFER TO SWM 4.02 FOR CONNECTOR INSTALLATIONS.
L. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED. WITH THE APPROVAL OF NSPI. IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
M. GUY OR BRACE WHEN ATTACHMENT POINT EXCEEDS 1100 ABOVE THE ROOFLINE.
N. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

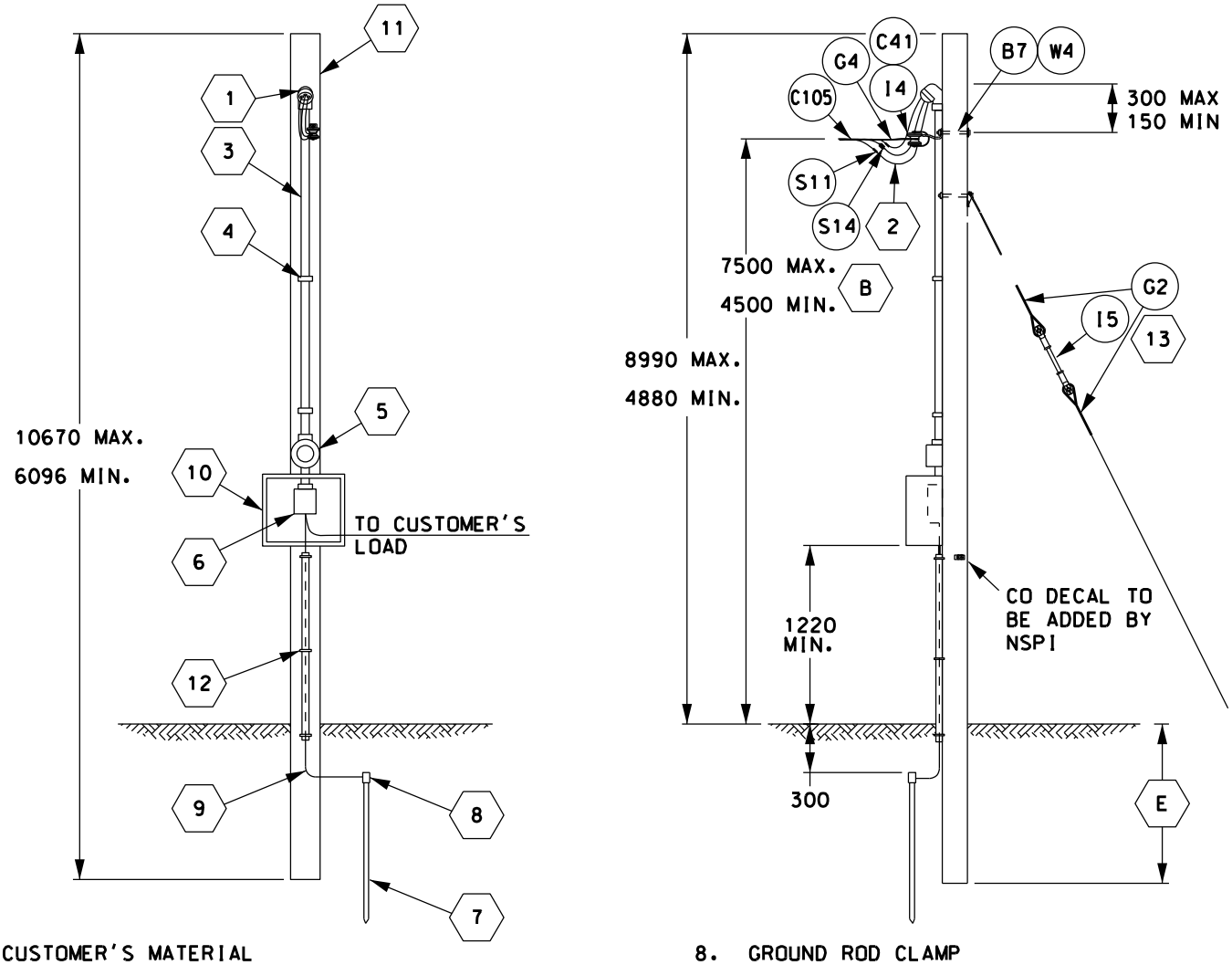
REGISTERED PROFESSIONAL ENGINEER
DATE 2022/02/16
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TRIPLEX SERVICE CONNECTION ON SERVICE MAST 120/240V (400A OR LESS)

DATE:	2008-08-14	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	**SS-ED-13M**
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R4)



CUSTOMER'S MATERIAL

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTOR, INSULATED
3. CONDUIT
4. SERVICE MAST CLAMPS, GALVANIZED
5. SOCKET METER BASE
6. SERVICE ENTRANCE SWITCH RATED NEMA3
7. GROUND ROD IN ACCORDANCE WITH C.E. CODE PART I
8. GROUND ROD CLAMP
9. GROUND WIRE IN ACCORDANCE WITH C.E. CODE PART I
10. 20mm WOOD MOUNTING BOARD OR WEATHERPROOF BOX
11. SUPPORTING STRUCTURE TO BE SUPPLIED BY CONTRACTOR - WOOD POLE MINIMUM CLASS 7 (25FT AND UNDER) AND CLASS 5 (UP TO 35FT)
12. COVERING, GROUND WIRE MOLDING PER C.E. CODE PART 1.
13. GUYING ASSEMBLY

NOTES:

A. FASTEN MOUNTING BOARD/BOX SECURELY TO POLE.
B. SERVICE ATTACHMENT HEIGHT SHALL BE INCREASED, TO A MAXIMUM OF 7.5M, WHERE ADDITIONAL GROUND CLEARANCE IS REQUIRED. FOR TEMPORARY POLES 25FT AND UNDER, A MINIMUM CLASS 7 POLE IS REQUIRED. FOR ALL OTHER POLES UP TO 35FT, POLE SHALL BE MINIMUM CLASS 5. A MANUFACTURERS STAMP IS REQUIRED TO INDICATE POLE CLASS.
C. CUSTOMER SET POLES TALLER THAN 25FT MUST BE BUCKET TRUCK ACCESSIBLE.
D. POLES SHALL BE TREATED WOOD, UNLESS OTHERWISE APPROVED BY SUPPLY AUTHORITY. POLES SHALL BE IN GOOD CONDITION, FREE OF CRACKS, CHECKS AND ROT.
E. SETTING DEPTH IS TO BE 10% OF THE POLE LENGTH PLUS 2 FEET.
F. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

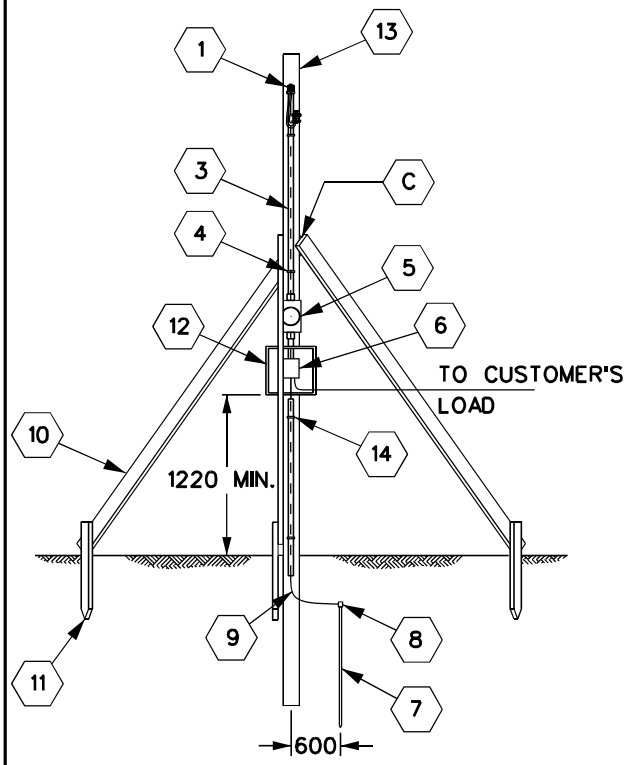
REGISTERED PROFESSIONAL ENGINEER
DATE 2023-03-20
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

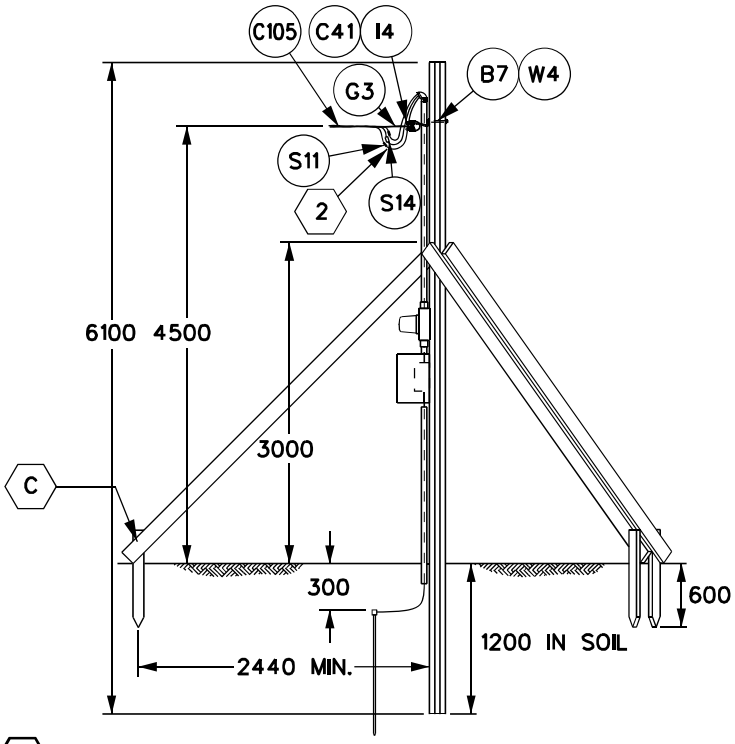
DISTRIBUTION STANDARDS

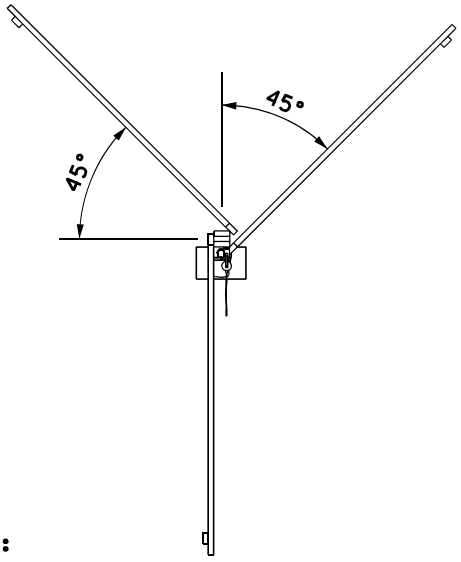
Nova Scotia POWER
An Emera Company

TEMPORARY SERVICE STRUCTURE WITH WOOD POLE 120/240 VOLTS (200 AMP OR LESS)

DATE:	2008-08-14	REV DATE:	2023-03-20
DRAWN:	M.HALASZ	STD NO:	***SS-ED-22M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R2)







NO. CUSTOMER'S MATERIAL

1. SERVICE HEAD.
2. SERVICE ENTRANCE CONDUCTOR. INSULATED.
3. CONDUIT.
4. SERVICE MAST CLAMPS. GALVANIZED.
5. SOCKET METER BASE.
6. SERVICE ENTRANCE SWITCH RATED NEMA3
7. GROUND ROD IN ACCORDANCE WITH CANADIAN ELECTRICAL CODE. PART 1.
8. GROUND ROD CLAMP.
9. GROUND WIRE IN ACCORANCE WITH C.E. CODE PART 1.
10. 50mm X 150mm (2 INCH X 6 INCH) WOOD PLANKS.
11. 50mm X 100mm (2 INCH X 4 INCH) WOOD STAKES.
12. 20mm (3/4 INCH) WOOD MOUNTING BOARD OR WEATHERPROOF BOX.
13. SUPPORTING STRUCTURE TO BE SUPPLIED BY CONTRACTOR - THREE 50mm X 150mm (2 INCH X 6 INCH) SPRUCE PLANKS OR SOLID 150mm X 150mm (6 INCH X 6 INCH) WOOD TIMBER.
14. COVERING. GROUND WIRE MOLDING PER C.E. CODE PART 1.

NOTES:

A. FASTEN MOUNTING BOARD/BOX SECURELY TO POLE.
B. THIS STRUCTURE SHALL NOT BE USED TO SUPPORT A SPAN CROSSING A PUBLIC ROADWAY.
C. PLANKS SHALL BE FASTENED WITH FOUR NAILS OR STRUCTURAL SCREWS. 75mm TO 90mm IN LENGTH. CAST SCREWS (DECK SCREWS) SHALL NOT BE USED.
D. THE ELECTRICAL INSPECTOR OR FIELD ENGINEER. OR THEIR REPRESENTATIVES MUST ENSURE THE TEMPORARY SUPPORT IS SAFE FOR SERVICE ATTACHMENT AND REJECT ALL THOSE CONSIDERED TO BE INADEQUATE.
E. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 08/22/25
K.F.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

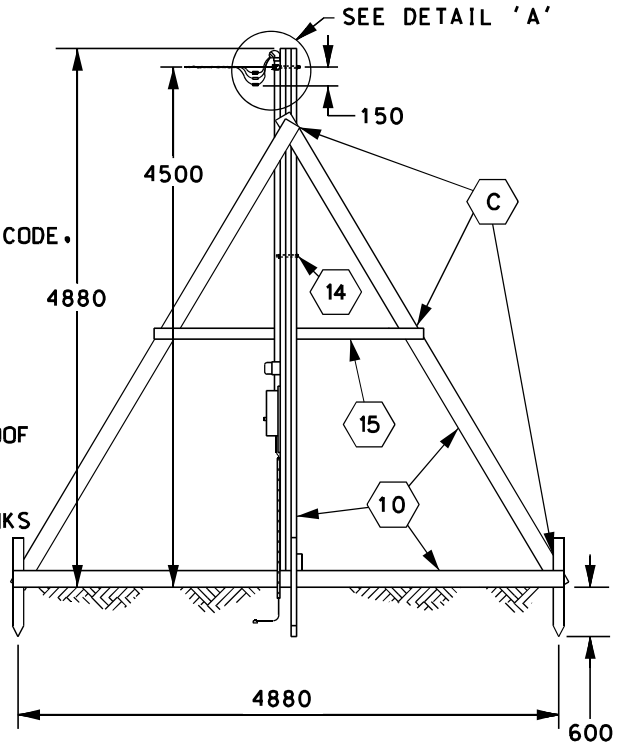
Nova Scotia POWER
An Emera Company

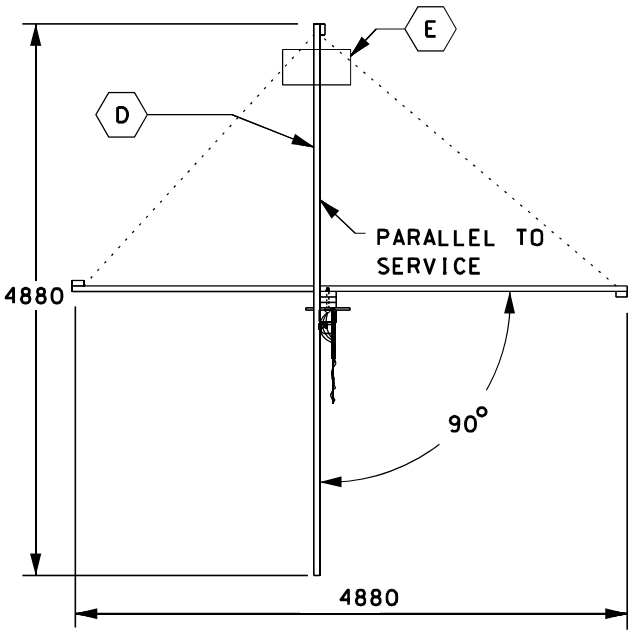
TEMPORARY SERVICE STRUCTURE WITH PLANKS 120/240 VOLTS (200 AMPS OR LESS)

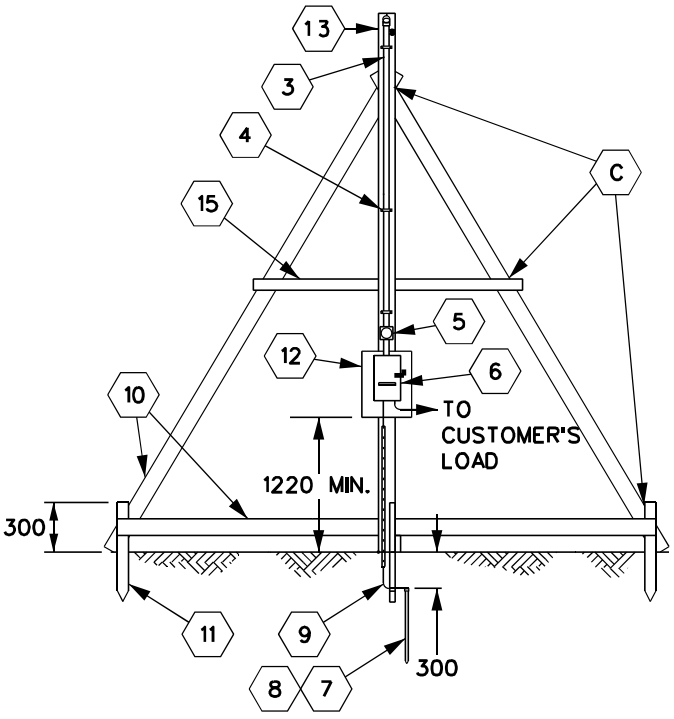
DATE:	2008-08-14	REV DATE:	2025-08-06
DRAWN:	A. BILKHU	STD NO:	***162-75 (SS-ED-23)***
APPROVED:	K.F.SPENCE	SHT NO:	1 OF 1 (R4)

No. CUSTOMER'S MATERIAL

1. SERVICE HEAD.
2. SERVICE ENTRANCE CONDUCTOR. INSULATED.
3. CONDUIT.
4. SERVICE MAST CLAMPS.
5. SOCKET METER BASE.
6. SERVICE ENTRANCE SWITCH RATED NEMA3
7. GROUND ROD IN ACCORDANCE WITH CANADIAN ELECTRICAL CODE. PART 1.
8. GROUND ROD CLAMP.
9. GROUND WIRE AND COVERING. PER C.E. CODE PART 1.
10. 50 mm X 150 mm X 4880 mm (2 INCH X 6 INCH X 16 FT) WOOD PLANKS.
11. 50 mm X 100 mm (2 INCH X 4 INCH) WOOD STAKES.
12. 20 mm (3/4 INCH) WOOD MOUNTING BOARD OR WEATHERPROOF BOX. METER TO BE LOCATED OUTSIDE OF BOX.
13. SUPPORTING STRUCTURE TO BE SUPPLIED BY CONTRACTOR THREE 50 mm X 150 mm (2 INCH X 6 INCH) SPRUCE PLANKS OR SOLID 150 mm X 150 mm (6 INCH X 6 INCH) WOOD TIMBER.
14. 16 mm GALVANIZED MACHINE BOLTS THROUGH PLANKS.
15. 50 mm X 100 mm (2 INCH X 4 INCH) CROSS BRACES.







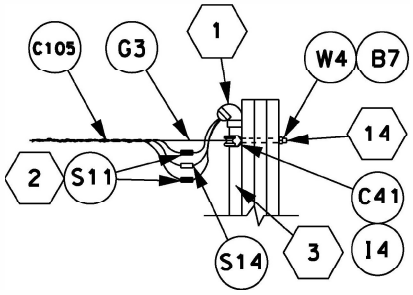
REGISTERED PROFESSIONAL ENGINEER
DATE 8/22/25
K.F.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TEMPORARY SERVICE STRUCTURE WITH PLANKS SURFACE MOUNT 120/240 VOLTS (200 AMPS OR LESS) PLAN, ELEVATIONS, MATERIAL LIST

DATE:	2008-08-14	REV DATE:	2025-08-06
DRAWN:	A. BILKHU	STD NO:	**162-80 (SS-ED-23A)**
APPROVED:	K.F.SPENCE	SHT NO:	1 OF 2 (R4)



DETAIL 'A'

NOTES:

A. THE ELECTRICAL INSPECTOR, FIELD ENGINEER OR THEIR REPRESENTATIVE MUST ENSURE THE TEMPORARY SUPPORT IS SAFE FOR SERVICE ATTACHMENT AND REJECT ALL THOSE CONSIDERED TO BE INADEQUATE.
B. THIS STRUCTURE SHALL NOT BE USED TO SUPPORT A SPAN CROSSING A PUBLIC ROADWAY.
C. PLANKS SHALL BE FASTENED WITH FOUR NAILS OR STRUCTURAL SCREWS, 75 mm TO 90 mm IN LENGTH. CAST SCREWS (DECK SCREWS) SHALL NOT BE USED.
D. STRUCTURE SHOULD BE INSTALLED ON AS LEVEL GROUND AS POSSIBLE WITH FOUR 50 mm X 150 mm WOOD PLANKS FOR BRACING DOWN TO THE 50 mm X 150 mm CROSS MEMBERS ON THE GROUND.
E. IF PROPER STAKING CANNOT BE OBTAINED THEN MINIMUM 50 kg WEIGHTS PLACED ON 20 mm PLYWOOD NAILED TO CROSS BRACES SHALL BE USED.
F. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

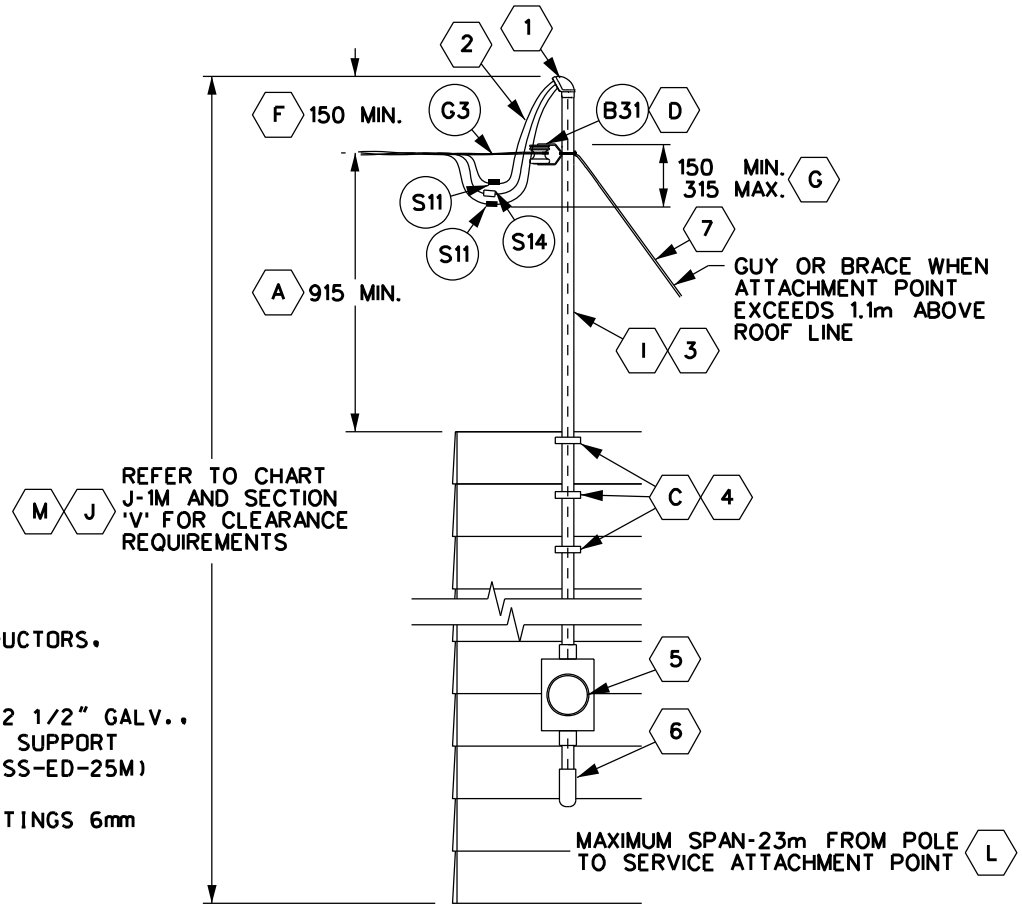
REGISTERED PROFESSIONAL ENGINEER
DATE 8/22/25
K.F.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TEMPORARY SERVICE STRUCTURE WITH PLANKS SURFACE MOUNT
120/240 VOLTS (200 AMPS OR LESS)
DETAIL 'A' AND NOTES

DATE:	2008-08-14	REV DATE:	2025-08-06
DRAWN:	A.BILKHU	STD NO:	162-80 (SS-ED-23A)
APPROVED:	K.F.SPENCE	SHT NO:	2 OF 2 (R4)



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE ENTRANCE CONDUCTORS, INSULATED
3. MAST SUPPORT MEMBER
4. SERVICE MAST CLAMPS, 2 1/2" GALV., BOLTED TYPE (FOR WALL SUPPORT DETAILS SEE DWG. No. SS-ED-25M)
5. METER BASE
6. RIGID CONDUIT AND FITTINGS 6mm GALVANIZED STEEL WIRE

NOTES:

A. WHERE THE SERVICE CROSSES OVER, OR RUNS PARALLEL TO, THE MOBILE HOME ROOF TO ATTACH TO THE SERVICE BRACKET, MINIMUM CLEARANCES TO THE ROOF LINE SHALL BE 1.0m.
B. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE BRACKET AND MAST IN A LOCATION SATISFACTORY TO BOTH THE INSPECTION DEPT. AND THE SUPPLY AUTHORITY AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3 kN.
C. THE CUSTOMER SHALL BE RESPONSIBLE FOR PROVIDING WALL SUPPORT FOR THE MAST IN ACCORDANCE WITH DISTRIBUTION STANDARD DWG. No. SS-ED-25.
D. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSP.
E. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000mm BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
F. SERVICE ATTACHMENT SHALL BE INSTALLED A MINIMUM OF 150mm AND MAXIMUM OF 300mm BELOW THE SERVICE HEAD.
G. DRIP LOOP TO BE LEFT AT POLE AND HOUSE CONNECTION.
H. REFER TO CHART SS-1M FOR RECOMMENDED SIZES OF TRIPLEX CABLE TO BE USED.
I. 2 1/2" GALVANIZED STEEL MAST TUBING OR 2 1/2" MINIMUM RIGID STEEL CONDUIT ARE ACCEPTABLE AS SERVICE MASTS. RIGID ALUMINUM CONDUIT IS NOT ACCEPTABLE.
J. AT THE DISCRETION OF THE FIELD ENGINEER OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1M AND SECTION 'V'
K. REFER TO SWM 4.02 FOR CONNECTOR INSTALLATIONS.
L. REFER TO ELECTRICAL INSPECTION BULLETIN B-06-112 FOR MAX. SPAN MAY BE INCREASED TO 38m PROVIDED AN APPROVED MAST SUPPORT SYSTEM IS USED.
M. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED, WITH THE APPROVAL OF NSPI IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
N. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

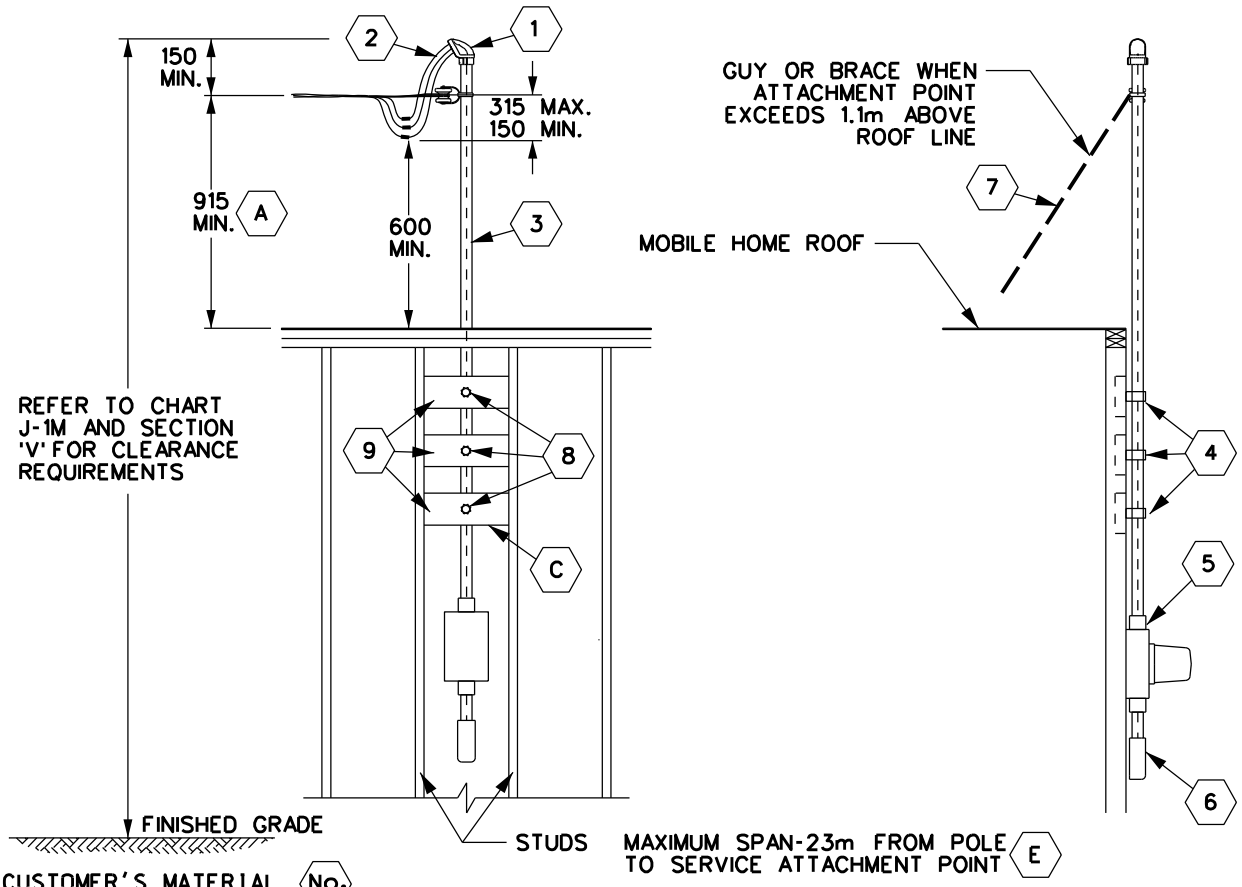
REGISTERED PROFESSIONAL ENGINEER
DATE 2022-02-16
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TRIPLEX SERVICE CONNECTION FOR MOBILE HOME 120/240V (200A OR LESS) EXTERIOR DETAILS OF CUSOMTER'S SERVICE MAST INSTALLATION

DATE:	2008-08-14	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	**SS-ED-24M**
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R2)



CUSTOMER'S MATERIAL (No.)

1. SERVICE HEAD
2. SERVICE CONDUCTORS, INSULATED.
3. MAST SUPPORT MEMBER
4. SERVICE MAST CLAMP, 2 1/2" GALV., BOLTED-TYPE
5. METER BASE
6. RIGID CONDUIT AND FITTINGS
7. 6mm GALVANIZED STEEL WIRE
8. 1/2" GALVANIZED BOLT AND SQUARE WASHER
9. 50mm X 150mm WOODEN MEMBERS SECURED BETWEEN STUDS OR ON INTERIOR WALL SURFACE.

NOTES:

A. WHERE THE SERVICE CROSSES OVER, OR RUNS PARALLEL TO, THE MOBILE HOME ROOF TO ATTACH TO THE SERVICE BRACKET, THE MINIMUM CLEARANCE TO THE ROOF LINE SHALL BE 1.0m.
B. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE BRACKET AND MAST IN A LOCATION SATISFACTORY TO BOTH THE INSPECTION DEPARTMENT AND THE SUPPLY AUTHORITY, AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3 kN.
C. THE CUSTOMER SHALL BE RESPONSIBLE FOR PROVIDING WALL SUPPORT FOR THE SERVICE MAST BY MEANS OF CLAMPS BOLTED THROUGH THE EXTERIOR WALL AND 50mm X 150mm WOODEN MEMBERS SECURED BETWEEN STUDS OR ON AN INTERIOR WALL SURFACE.
D. REFER TO SWM 4.02 FOR CONNECTOR INSTALLATIONS.
E. REFER TO ELECTRICAL INSPECTION BULLETIN B-06-112 FOR MAX. SPAN MAY BE INCREASED TO 38m PROVIDED AN APPROVED MAST SUPPORT SYSTEM IS USED.
F. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED, WITH THE APPROVAL OF NSPI, IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM DRIVEWAY.
G. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

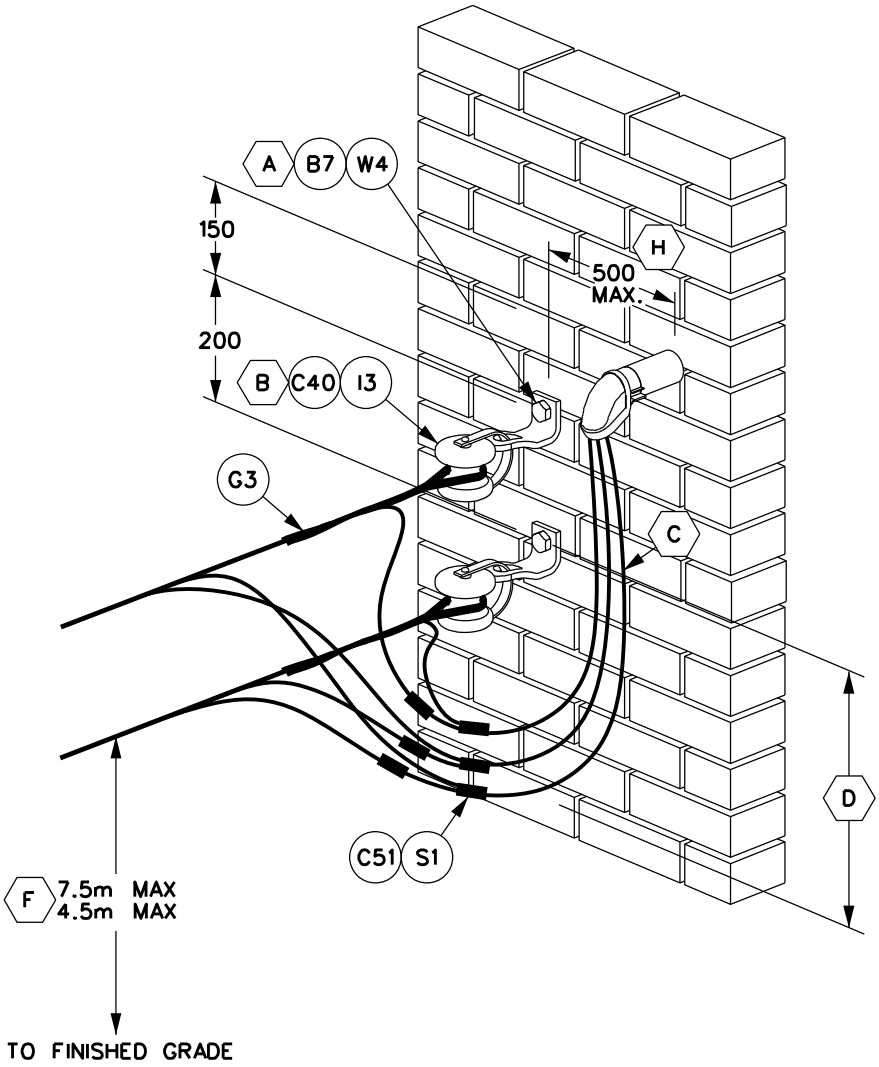
REGISTERED PROFESSIONAL ENGINEER
DATE 2022-02-16
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

TRIPLEX SERVICE CONNECTION FOR MOBILE HOME 120/240V (200A OR LESS) CUSTOMER'S INSTALLATION AND WALL SUPPORT OF SERVICE MAST

DATE:	2008-08-14	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	***SS-ED-25M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R2)



NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE ATTACHEMENT DEVICE IN A LOCATION SATISFACTORY TO BOTH THE INSEPCTION DEPT. AND THE SUPPLY AUTHORITY. AND ENSURING THE ATTACHMENT WILL SUPPORT A HORIZONTAL LOAD OF 3kN.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT TO THE BUILDING SHALL BE SUPPLIED BY NSPI.
C. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EXTEND NOT LESS THAN 1000mm BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
D. 150mm DRIP LOOP TO BE LEFT AT POLE AND HOUSE CONNECTION.
E. REFER TO CHARTS SS-1M - SS-4M FOR RECOMMENDED SERVICE CONDUCTOR SIZES TO BE USED. FOR SINGLE CABLE INSTALLATION OMIT THE BOTTOM CIRCUIT.
F. AT THE DISCRETION OF THE FIELD ENGINEER OR THEIR REPRESENTATIVE. MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE REQUIREMENTS UNDER MAXIMUM SAG CONDITIONS AS SPECIFIED IN CHART J-1. AND SECTION 'V'.
G. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED. WITH THE APPROVAL OF NSPI. IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
H. FOR NEW CONSTRUCTION MAXIMUM OF 300mm FOR EXISTING CONSTRUCTION THIS MAY BE UP TO 500mm.
I. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 2022-02-16
J.A.MCFADGEN
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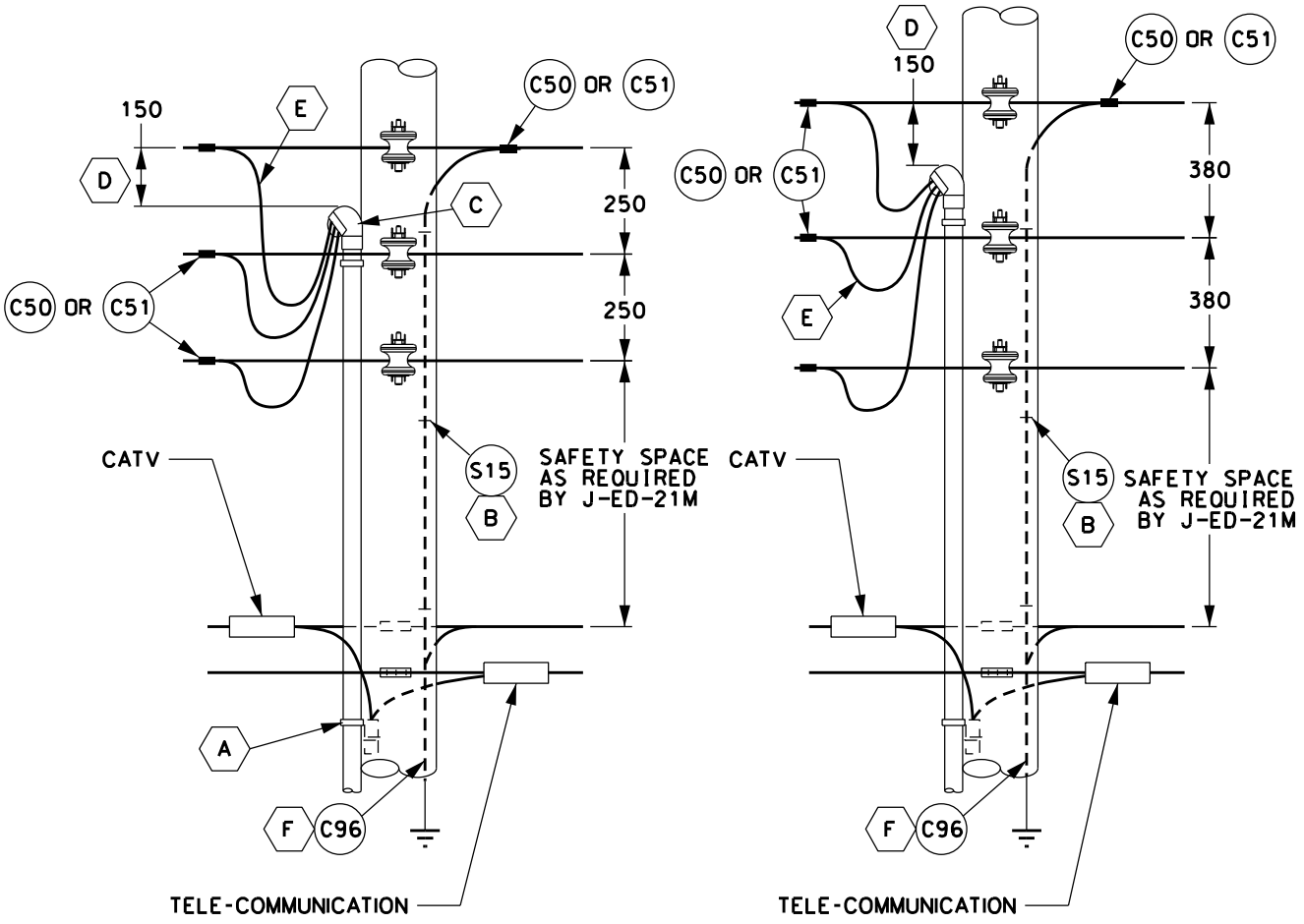
PARALLEL SERVICE CONNECTION AT THE SERVICE ENTRANCE TRIPLEX OR QUADRUPLEX

DATE:	2008-08-14	REV DATE:	2022-02-16
DRAWN:	M.HALASZ	STD NO:	***SS-ED-26M***
APPROVED:	J.A.MCFADGEN	SHT NO:	1 OF 1 (R2)



NOTES:

A. PVC CONDUIT TO BE STRAPPED TO POLE EVERY 1200mm.
B. GROUND WIRE TO BE STAPLED TO POLE EVERY 600mm.
C. THE CUSTOMER IS RESPONSIBLE FOR SUPPLYING AND INSTALLED THE SERVICE HEAD. CABLE AND RIGID PVC CONDUIT.
D. TOP OF THE SERVICE HEAD TO BE LOCATED BETWEEN THE SYSTEM NEUTRAL AND HOTLEG.
E. MINIMUM LENGTH OF SECONDARY CABLE FROM WEATHERHEAD SHALL BE 1000mm FOR MAKING CONNECTIONS AND DRIP LOOP.
F. GROUNDING TO BE IN ACCORDANCE WITH G-ED-10M.
G. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 2022-02-16
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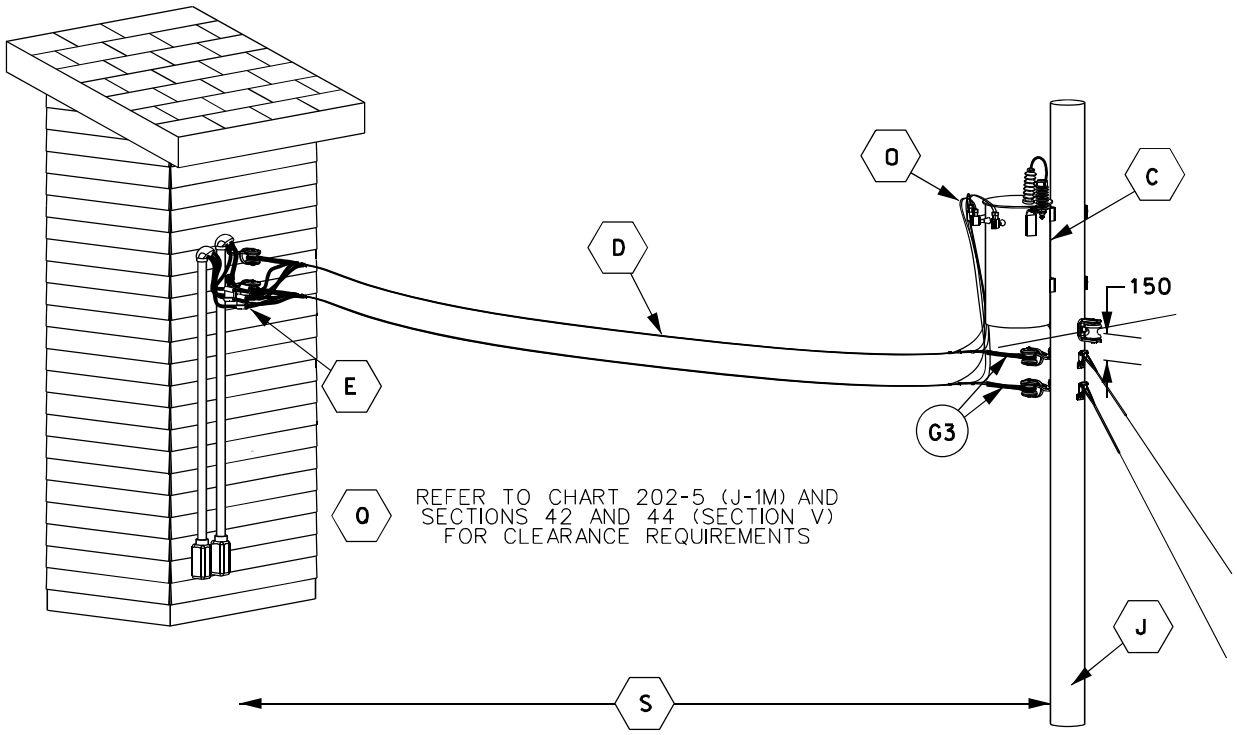
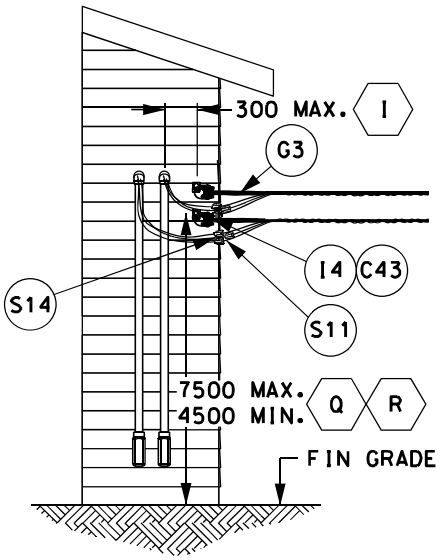
UNDERGROUND SERVICE FROM SECONDARY DIRECTLY TO A CUSTOMER

DATE:	2022-02-16	REV DATE:	
DRAWN:	M. HALASZ	STD NO:	***SS-ED-31M***
APPROVED:	J. A. MCFADGEN	SHT NO:	1 OF 1





ALTERNATIVE A

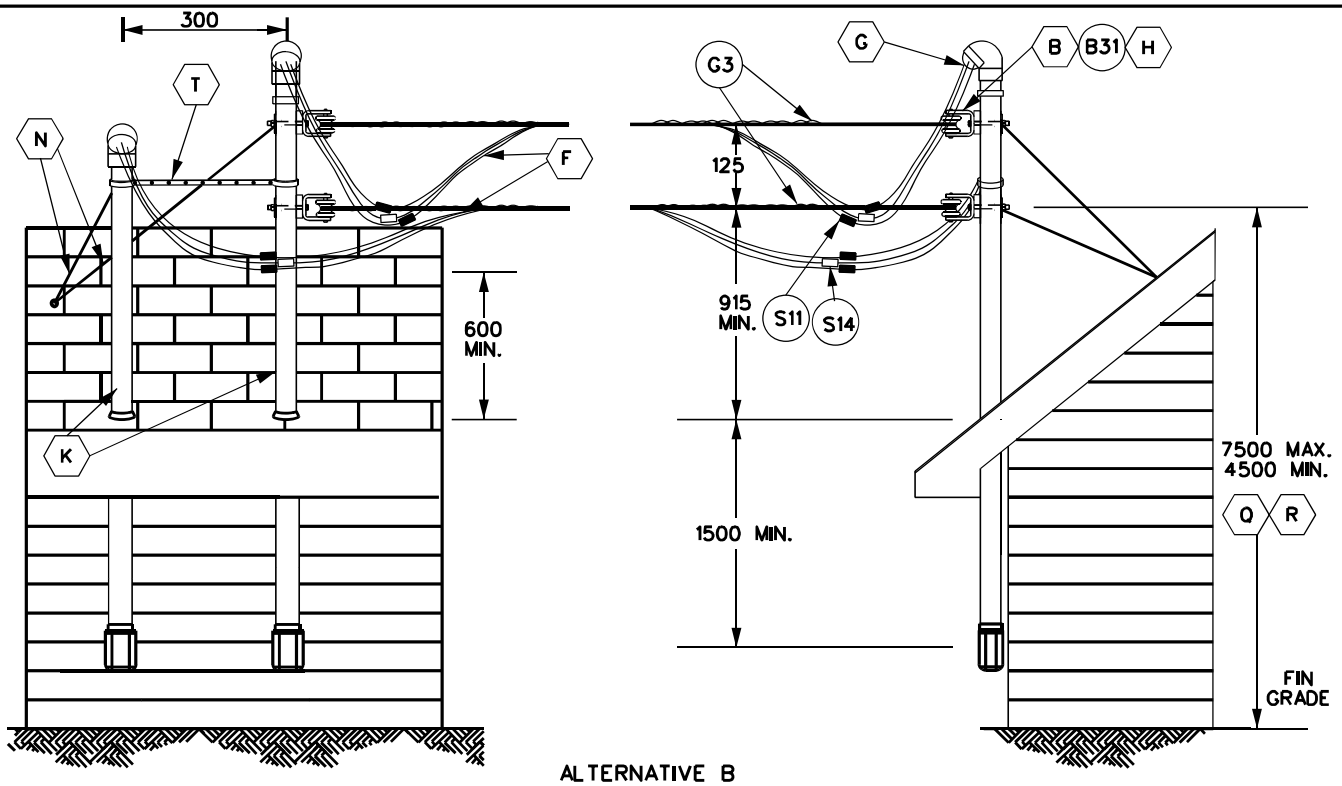
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF NOVA SCOTIA
DATE 08/22/25
K.F.SPENCE
20210371

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

DUAL RUN TRIPLEX SERVICE CONNECTIONS FOR SINGLE DWELLINGS 400A AND 600A SERVICES

DATE:	2023-04-17	REV DATE:	2025-08-06
DRAWN:	A. BILKHU	STD NO:	***162-120 (SS-ED-32)***
APPROVED:	K. SPENCE	SHT NO:	1 OF 2 (R2)



ALTERNATIVE B

NOTES:

A. THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE SERVICE BRACKETS AND MAST IN A LOCATION SATISFACTORY TO BOTH THE INSPECTION DEPT. AND THE SUPPLY AUTHORITY.
B. MATERIAL REQUIRED FOR SERVICE ATTACHMENT SHALL BE SUPPLIED BY NSPI.
C. DUAL RUN SERVICES ARE NOT PERMITTED TO BE SUPPLIED FROM A SECONDARY BUS.
D. #4/0 TRIPLEX SHALL BE USED FOR ALL DUAL RUN SERVICES. DUAL RUNS OF #1/0 SHALL NOT BE USED.
E. FOR INSTALLATIONS BELOW ROOFLINE, 150MM DRIP LOOP TO BE LEFT AT HOUSE CONNECTION.
F. FOR INSTALLATIONS ABOVE ROOFLINE, 150MM MIN AND 315MM MAX DRIP LOOP TO BE LEFT AT POLE AND HOUSE CONNECTION.
G. CUSTOMER'S SERVICE ENTRANCE CONDUCTORS SHALL EACH EXTEND NOT LESS THAN 1000MM BEYOND THE SERVICE HEAD TO ALLOW FOR UTILITY CONNECTIONS.
H. SERVICE ATTACHMENT SHALL BE INSTALLED 150MM MIN AND 300MM MAX BELOW THE SERVICE HEAD.
I. SERVICE ATTACHMENT SHALL BE INSTALLED 150MM MIN AND 300MM MAX HORIZONTAL DISTANCE FROM THE SERVICE HEAD.
J. ANCHORING AND GUYING TO BE IN ACCORDANCE WITH SECTIONS 122.124 AND 126 (SECTION A).
K. 2.5" GALVANIZED STEEL MASTS. RIGID ALUMINUM CONDUIT IS NOT ACCEPTABLE.
L. REFER TO 162-40 (SS-ED-13M) FOR ADDITIONAL DETAILS ON CUSTOMER MATERIALS (ALTERNATIVE B).
M. REFER TO SWM 4.02 FOR CONNECTOR INSTALLATIONS.
N. GUY OR BRACE REQUIRED FOR ALL DUAL RUN SERVICES. GUYING SHALL BE DONE USING FACTORY GUY KIT AND 6MM MIN GUY WIRE.
O. REFER TO 162-65 (SS-ED-21M) FOR TRANSFORMER CONNECTION.
P. UNDER EAVE INSTALLATIONS ARE NOT PERMITTED FOR 600A SERVICES.
Q. AT THE DISCRETION OF FIELD ENGINEERING, OR THEIR REPRESENTATIVE, MINIMUM SERVICE ATTACHMENT HEIGHT MAY BE INCREASED OR DECREASED TO MEET CLEARANCE.
R. THE MAXIMUM SERVICE MAST HEIGHT IS MEASURED FROM LEVEL GROUND. THIS REQUIREMENT MAY BE WAIVED, WITH THE APPROVAL OF NSPI, IF THE SERVICE IS REACHABLE WITH A BOOM TRUCK FROM THE DRIVEWAY.
S. REFER TO 44-60 (V-ED-15M) FOR INSTRUCTION ON DETERMINING SERVICE SPAN LENGTH.
T. SERVICE MASTS SHALL BE COUPLED TOGETHER USING GALVANIZED STEEL UNISTRUT BETWEEN SERVICE ATTACHMENT POINTS.
U. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

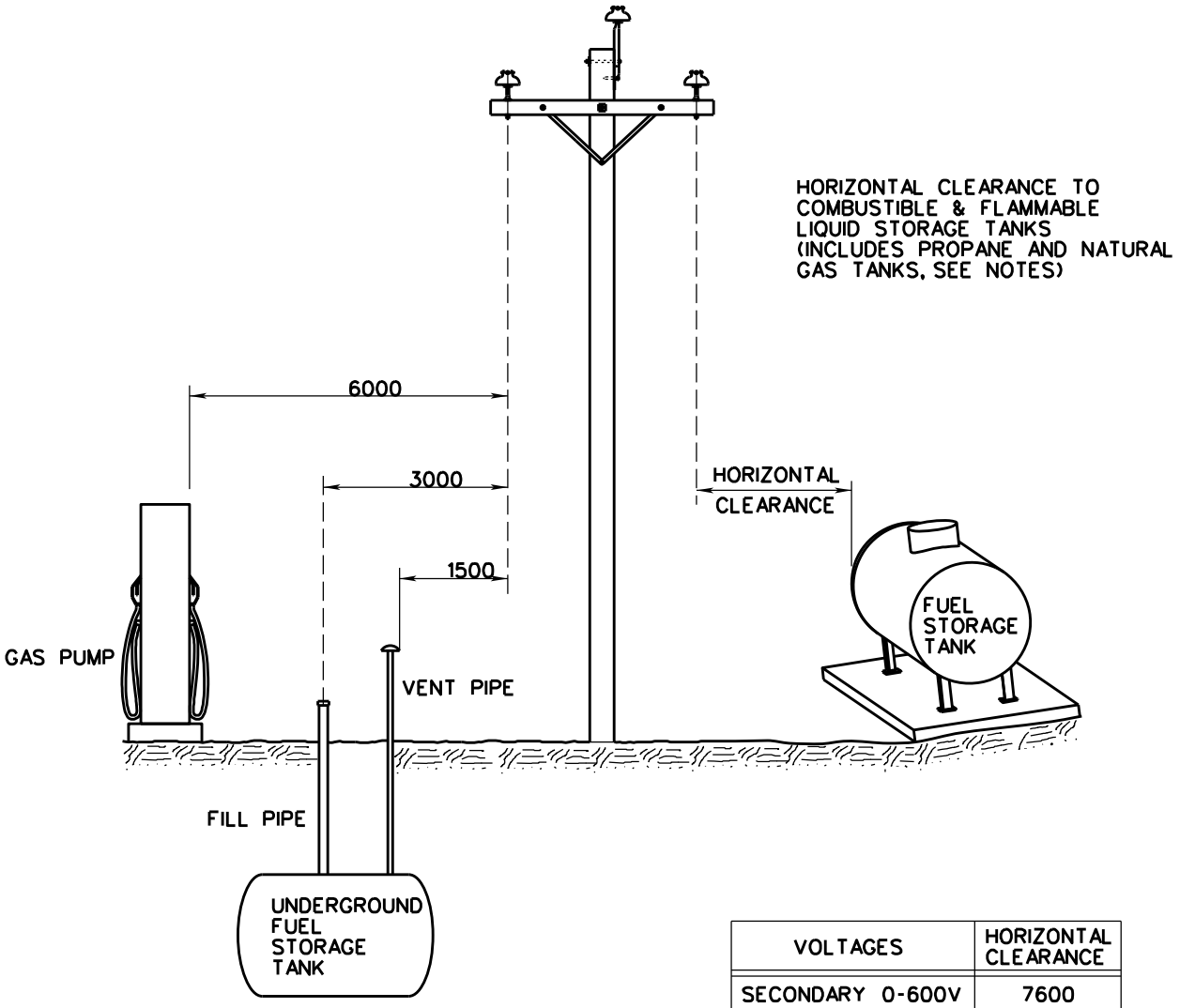
REGISTERED PROFESSIONAL ENGINEER
DATE 08/22/25
K.P.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

DUAL RUN TRIPLEX SERVICE CONNECTIONS FOR SINGLE DWELLINGS 400A AND 600A SERVICES

DATE:	2023-04-17	REV DATE:	2025-08-06
DRAWN:	A. BILKHU	STD NO:	***162-120 (SS-ED-32)***
APPROVED:	K. SPENCE	SHT NO:	2 OF 2 (R2)



VOLTAGES	HORIZONTAL CLEARANCE
SECONDARY 0-600V	7600
2.4-25kV	10000
33-66kV	15000

NOTES:

A. HORIZONTAL CLEARANCES APPLY TO ALL GAS TANKS OF AGGREGATE CAPACITY ≥ 7600 LITRES
B. OVERHEAD LINES, REGARDLESS OF VOLTAGE OR CONSTRUCTION TYPE, MAY NOT PASS OVER ANY FUEL INSTALLATION AS SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 2022-05-20
J.A.MCFADGEN
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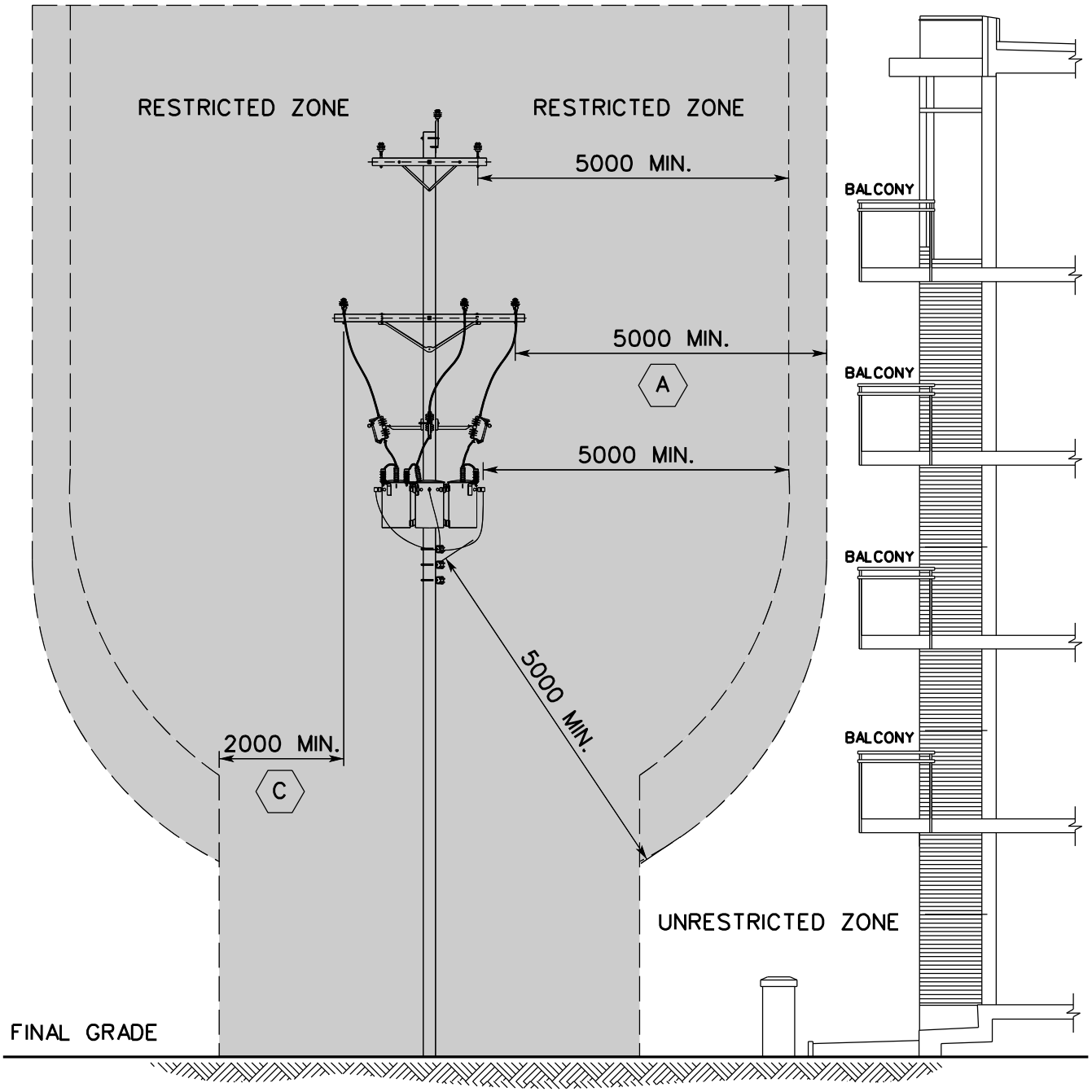
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

MINIMUM CLEARANCES FROM CONDUCTOR TO ABOVE GROUND & UNDERGROUND FUEL STORAGE TANKS

DATE:	2008-09-15	REV DATE:	2022-05-20
DRAWN:	M. HALASZ	STD NO:	***V-ED-12M***
APPROVED:		SHT NO:	1 OF 1



NOTES:

1. SEE SHT. 2 OF 2 FOR GENERAL NOTES.

REGISTERED PROFESSIONAL ENGINEER
DATE 2022-10-24
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

RECOMMENDED CLEARANCES TO ADJACENT STRUCTURES

DATE:	2022-05-20	REV DATE:	2022-10-24
DRAWN:	M.HALASZ	STD NO:	***V-ED-13M***
APPROVED:	J.A.McFadgen P. Eng.	SHT NO:	1 OF 2

NOTES:

A. NO PERMANENT BUILDING OR STRUCTURE SHOULD BE PLACED WITHIN 5000mm MEASURED RADIALLY FROM ANY PRIMARY VOLTAGE CONDUCTOR OR EQUIPMENT. MEASURED FROM THE CLOSEST PRIMARY CONDUCTOR (AT REST) TO THE CLOSEST POINT OF THE BUILDING OR STRUCTURE.

B. A MINIMUM HORIZONTAL SEPARATION OF 5000mm FROM THE BUILDING OR STRUCTURE TO SECONDARY CONDUCTOR (<750V) SHOULD BE MAINTAINED, UNLESS SECONDARY CONDUCTORS CONNECT SUPPLY TO THE BUILDING'S ELECTRICAL SYSTEM.

C. NO PERMANENT BUILDING OR STRUCTURE SHALL BE PLACED UNDER A POWER LINE. THE AREA WITHIN 2000mm HORIZONTALLY FROM THE OUTERMOST CONDUCTORS (IN A RESTING POSITION) ON ANY LINE IS CONSIDERED TO BE 'UNDER THE LINE'.

D. ZERO VOLTAGE SUPPORT WIRES (IE. SPAN GUYS) MAY CROSS OVER THE CUSTOMER'S STRUCTURE AND SHALL MAINTAIN AT LEAST 200mm VERTICAL CLEARANCE TO THE CLOSEST PART OVER THE BUILDING OR STRUCTURE.

E. THIS DRAWING DEMONSTRATES THE MINIMUM RECOMMENDED CLEARANCES TO BUILDINGS IN AN URBAN SETTING. WHERE POSSIBLE, EVERY EFFORT MUST BE MADE TO OBTAIN GREATER CLEARANCES THAN THOSE PRESENTED. WHERE EASEMENTS ARE PRESENT, GREATER CLEARANCES ARE TYPICALLY REQUIRED.

F. CONTACT NSPI DISTRIBUTION STANDARDS ENGINEER TO DETERMINE SPECIFIC MINIMUM CLEARANCES APPLICABLE TO YOUR PROJECT.

G. SCALE: 1/8" = 1'-0"

H. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

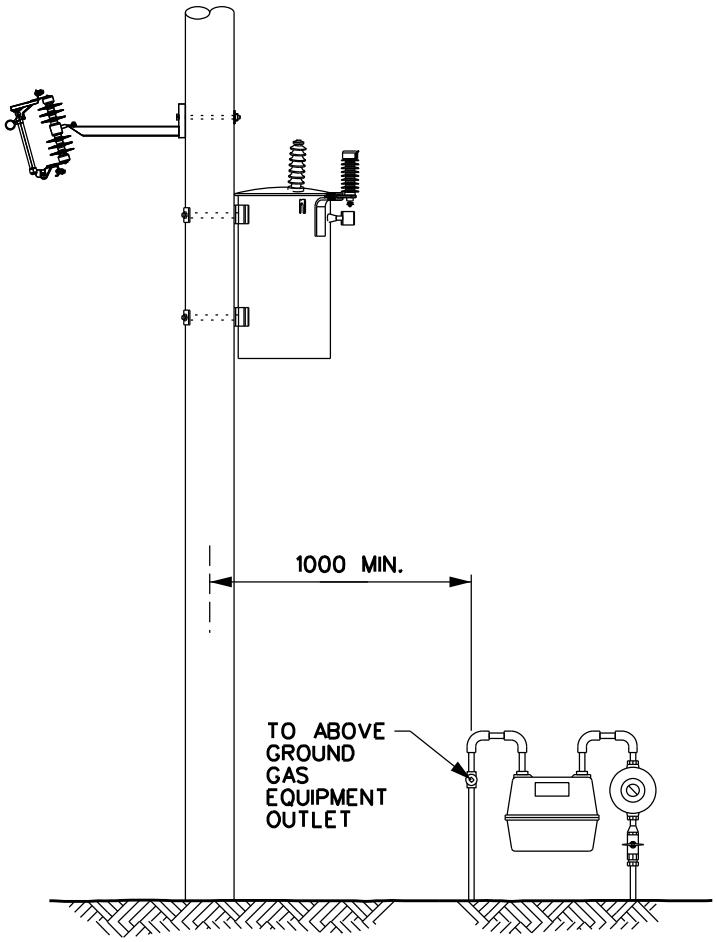
REGISTERED PROFESSIONAL ENGINEER
DATE 2022-10-24
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

RECOMMENDED CLEARANCES TO ADJACENT STRUCTURES

DATE:	2020-07-02	REV DATE:	2022-10-24
DRAWN:	M. HALASZ	STD NO:	***V-ED-13M***
APPROVED:	J.A. McFadgen P. Eng.	SHT NO:	2 OF 2



NOTES:

A. THESE CLEARANCES APPLY FROM ANY ELECTRICAL METERING EQUIPMENT, TRANSFORMERS (POLE TOP OR PADMOUNT), OR OVERHEAD SWITCHING EQUIPMENT TO ANY ABOVE GROUND NATURAL GAS EQUIPMENT.

B. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

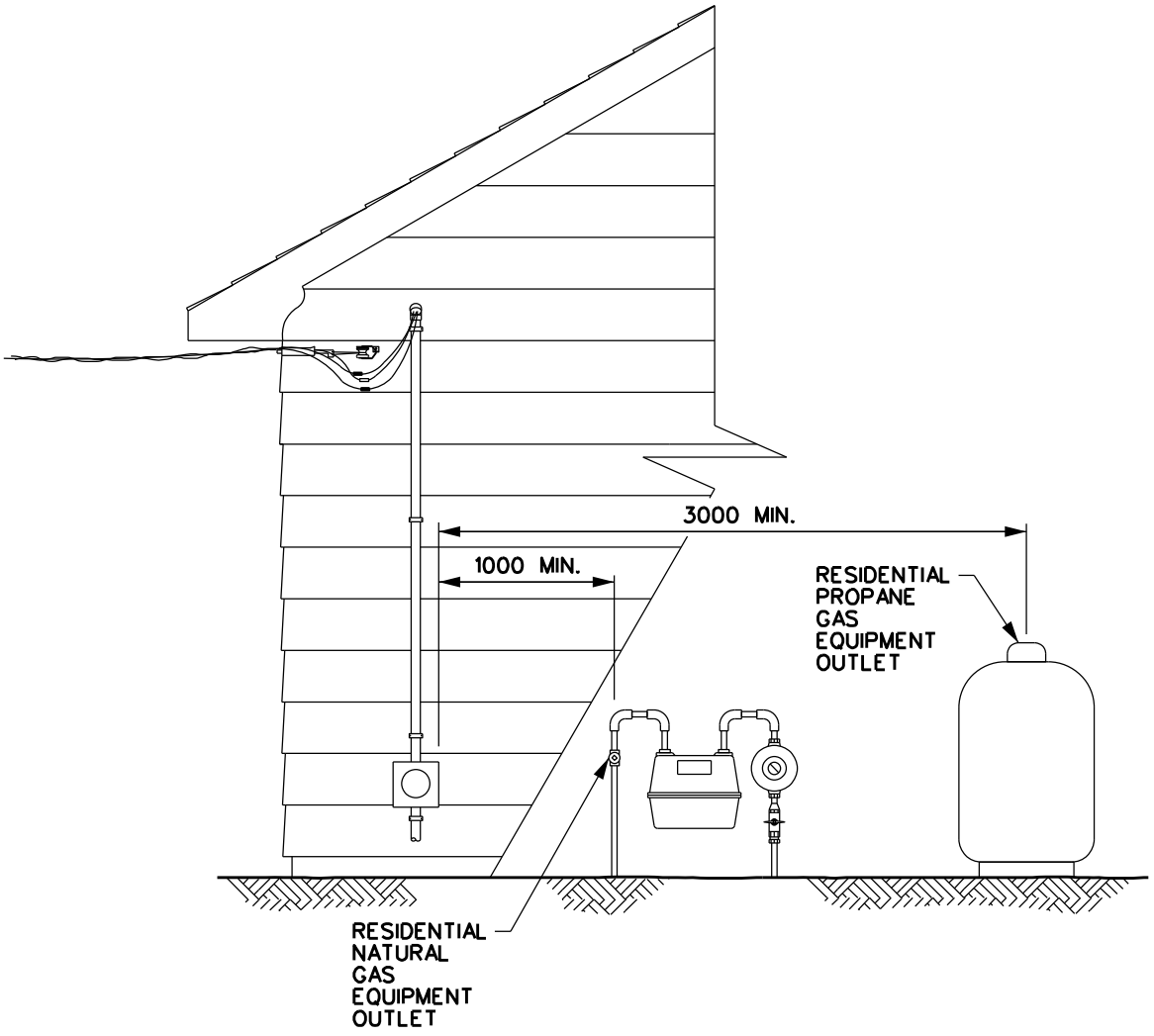
REGISTERED PROFESSIONAL ENGINEER
DATE 2022-10-24
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CLEARANCES TO ABOVE GROUND PROPANE AND NATURAL GAS EQUIPMENT

DATE:	2022-05-20	REV DATE:	2022-10-24
DRAWN:	M. HALASZ	STD NO:	***V-ED-14M***
APPROVED:	J.A. McFadgen P. Eng.	SHT NO:	1 OF 2



NOTES:

A. THESE CLEARANCES APPLY FROM ANY ELECTRICAL METERING EQUIPMENT TO ANY ABOVE GROUND NATURAL GAS EQUIPMENT OR RESIDENTIAL PROPANE EQUIPMENT.

B. IF THE ELECTRICAL METER AND GAS/PROPANE EQUIPMENT ARE SEPARATED BY A CORNER, THE RADIAL DISTANCE SHALL MEET THE ABOVE MINIMUM CLEARANCES.

C. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
DATE 2022-10-24
J.A.MCFADGEN
5069
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

CLEARANCE TO ABOVE GROUND PROPANE OR NATURAL GAS EQUIPMENT

DATE:	2022-05-20	REV DATE:	2022-10-24
DRAWN:	M. HALASZ	STD NO:	***V-ED-14M***
APPROVED:	J.A. McFadgen P. Eng.	SHT NO:	2 OF 2

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

APPENDIX C
NSPI APPROVED CONNECTORS LISTING

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

CABLE SIZE AWG/kcmil	Holes	3M	Blackburn	Burndy	Homac	Panduit	Ilsco	Penn-Union	Anderson
#4 Compact	1	-	ALS1	-	SA6-48	-	ALNS-4-5/16	FKLA-W4-S	-
#4 Compact	2	-	ALS2	YA4CA8DT	SA6-N	-	-	FKLA-W4-D	-
#4 Compressed	1	-	ALS1	-	SA4-48	-	ALNS-4-5/16	FKLA-W2-S	VAUL-4-12
#4 Compressed	2	-	ALS2	YA4CA8DT	SA4-N	-	-	FKLA-W2-D	VAUL-4-12BN
#3 Compact	1	-	-	-	-	-	-	-	-
#3 Compact	2	-	-	YA4CA8DT	-	-	-	-	-
#3 Compressed	1	-	-	-	-	-	-	FKLA-W2-S	-
#3 Compressed	2	-	-	-	-	-	-	FSLA-W2-D	-
#2 Compact	1	40025	ALS3	-	SA3-48	-	ALNS-2-38	FKLA-W2-S	VAUL-4-12
#2 Compact	2	-	ALS4	YA2CA9	SA3-N	-	-	FSLA-W2-D	VAUL-4-12BN
#2 Compressed	1	40025	ALS3	-	SA3-48	-	ALNS-2-38	FKLA-C2-S	VAUL-1-12
#2 Compressed	2	-	ALS4	YA2CA9	SA3-N	-	-	FSLA-C2-D	VAUL-1-12BN
#1 Compact	1	40029	ALS3	-	SA3-48	-	-	FKLA-C2-S	VAUL-1-12
#1 Compact	2	-	ALS4	YA2CA9	SA3-N	-	-	FSLA-C2-D	VAUL-1-12BN
#1 Compressed	1	40029	ALS3	-	SA2-48	-	-	FSLA-R2-S	VAUL-1-12
#1 Compressed	2	-	ALS4	YA1CA9	SA2-N	-	-	FSLA-R2-D	VAUL-1-12BN
1/0 Compact	1	40033	-	YA25A9	SA386-48	LAA1/0-12-L	ALNS-1/0-12	FSLA-R2-S	VAUL-1/0-12
1/0 Compact	2	-	-	YA25A7	SA386-N	-	ALND-1/0-12-134	FSLA-R2-D	VAUL-1/0-12BN
1/0 Compressed	1	40033	ALS5	YA25A9	SA1/0-48	LAA1/0-12-L	ALNS-1/0-12	FSLA-010-S	VAUL-1/0-12
1/0 Compressed	2	-	ALS6	YA25A7	-	-	ALND-1/0-12-134	FSLA-010-D	VAUL-1/0-12BN
2/0 Compact	1	40037	ALS5	YA26A1	SA1/0-48	-	ALNS-2/0-12	FSLA-010-S	VAUL-1/0-12
2/0 Compact	2	40137	ALS6	YA26A3	-	LAB2/0-12-E	ALND-2/0-12-134	FSLA-010-D	VAUL-1/0-12BN
2/0 Compressed	1	40037	ALS7	YA26A1	SA2/0-48	-	ALNS-2/0-12	FSLA-013-S	VAUL-2/0-12
2/0 Compressed	2	40137	ALS8	YA26A3	SA2/0-N	LAB2/0-12-E	ALND-2/0-12-134	FSLA-013-D	VAUL-2/0-12BN
3/0 Compact	1	40041	ALS7	YA27A3	SA2/0-48	LAA3/0-12-E	ALNS-3/0-12	FSLA-013-S	VAUL-2/0-12
3/0 Compact	2	40141	ALS8	YA27A5	SA2/0-N	LAB3/0-12-E	ALND-3/0-12-134	FSLA-013-D	VAUL-2/0-12BN
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3/0 Compressed	2	40141	ALS10	YA27A5	SA3/0-N	LAB3/0-12-E	ALND-3/0-12-134	FSLA-017-D	VAUL-3/0-12BN
4/0 Compact	1	40045	ALS9	YA28A3	SA3/0-48	LAA4/0-12-E	ALNS-4/0-12	FSLA-017-S	VAUL-3/0-12
4/0 Compact	2	40145	ALS10	YA28A5	SA3/0-N	LAB4/0-12-E	ALND-4/0-12-134	FSLA-017-D	VAUL-3/0-12BN
4/0 Compressed	1	40045	ALS11	YA28A3	SA4/0-48	LAA4/0-12-E	ALNS-4/0-12	FSLA-025-S	VAUL-4/0-12
4/0 Compressed	2	40145	ALS12	YA28A5	SA4/0-N	LAB4/0-12-E	ALND-4/0-12-134	FSLA-025-D	VAUL-4/0-12BN
250 Compact	1	40049	ALS13	YA29A1	SA4/0-48	LAA250-12-E	ALNS-250-12	FSLA-025-S	VAUL-4/0-12
250 Compact	2	40149	ALS14	YA29A3	SA4/0-N	LAB250-12-E	ALND-250-12-134	FSLA-025-D	VAUL-4/0-12BN
250 Compressed	1	40049	ALS13	YA29A1	SA4/0-48	LAA250-12-E	ALNS-250-12	-	VAUL-4/0-12
250 Compressed	2	40149	ALS14	YA29A3	SA4/0-N	LAB250-12-E	ALND-250-12-134	-	VAUL-4/0-12BN
300 Compact	1	40053	ALS13	YA30A1	SA300-48	-	ALNS-300-12	FSLA-025-S	VAUL-4/0-12
300 Compact	2	40153	ALS14	YA30A3	SA4/0-N	-	ALND-300-12-134	FSLA-025-D	VAUL-4/0-12BN
300 Compressed	1	40053	ALS15	YA30A1	SA300-48	-	ALNS-300-12	FSLA-030-S	VAUL-300-12
300 Compressed	2	40153	ALS16	YA30A3	SA300-N	-	ALND-300-12-134	FSLA-030-D	VAUL-300-12BN
350 Compact	1	40056	ALS15	YA31A1	-	-	ALNS-350-12	FULA-030-S	VAUL-300-12
350 Compact	2	40156	ALS16	YA31A3	SA300-N	LAB350-12-R	ALND-350-12-134	FSLA-030-D	VAUL-300-12BN
350 Compressed	1	40056	ALS17	YA31A1	SA350-48	LAA350-12-15	ALNS-350-12	FULA-035-S	VAUL-350-12
350 Compressed	2	40156	ALS18	YA31A3	SA350-N	LAB350-12-R	ALND-350-12-132	FSLA-035-D	VAUL-350-12BN
400 Compact	1	-	ALS17	YA32A1	SA350-48	-	ALNS-400-12	FULA-035-S	VAUL-350-12
400 Compact	2	40160	ALS18	YA32A3	SA350-N	LAB400-12-4	ALND-400-12-134	FULA-035-D	VAUL-350-12BN
400 Compressed	1	-	ALS19	YA31A1	SA400-48	-	ALNS-400-12	FULA-R033-S	VAUL-400-12
400 Compressed	2	40160	ALS20	YA31A3	SA400-N	LAB400-12-4	ALND-400-12-134	FULA-R033-D	VAUL-400-12BN
500 Compact	1	-	ALS19	YA34A7	SA400-48	LAA500-12-6	ALNS-500-12	FULA-R033-S	VAUL-400-12
500 Compact	2	40166	ALS20	YA34A3	SA400-N	LAB500-12-24R	ALND-500-12-134	FULA-R033-D	VAUL-400-12BN
500 Compressed	1	-	ALS23	YA34A7	CFA500-48	LAA500-12-6	ALNS-500-12	FULA-050-S	VAUL-500-12
500 Compressed	2	40166	ALS24	YA34A3	SAB500-N	LAB500-12-24R	ALND-500-12-134	FULA-050-D	VAUL-500-12BN
600 Compact	1	-	ALS23	-	CFA500-48	-	ALNS-600-12	-	VAUL-500-12
600 Compact	2	40170	ALS24	YA36A3	SAB500-N	LAB600-12-4	ALND-600-12-134	-	VAUL-500-12BN
600 Compressed	1	-	-	-	-	-	ALNS-600-12	-	-
600 Compressed	2	40170	ALS32	YA36A3	-	LAB600-12-4	ALND-600-12-134	-	VAUL-600-12BN
750 Compact	1		-	YA39A1	-	-	-	-	-
750 Compact	2	40172	ALS32	YA39A5	-	-	-	-	VAUL-750-12BN
750 Compressed	1		-	YA39A1	-	-	-	-	-
750 Compressed	2	40172	ALS44	YA39A5	-	-	-	-	VAUL-750-12BN
1000 Compact	1		-	-	-	-	-	-	-
1000 Compact	2		-	YA44A3	-	-	-	-	-
1000 Compressed	1		-	-	-	-	-	-	-
1000 Compressed	2		ALS60	YA44A3	-	-	-	-	VAUL-1000-12BN

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

APPROVED COMPRESSION TERMINALS FOR ALUMINUM CABLES

DATE:	2016-01-14	REV DATE:	2025-05-29
DRAWN:	A. BILKHU	STD NO:	4U-11M
DESIGNED:	FAHIM GALIB	SHT NO:	1 OF 1 (R1)

Compression Terminals for Copper Cables

CABLE SIZE AWG/kcmil	Holes	3M	Blackburn	Burndy	Homac	Panduit	Ilsco	Penn-Union
#6	1	-	-	-	-	-	CLNS-6-12	-
#4	1	-	-	-	-	-	CLNS-4-12	-
#3	1	-	-	-	-	-	CLNS-3-12	-
#2	1	-	-	-	L2-48	-	CLNS-2-12	-
#1	1	-	-	-	L1-48	LCC2-12-Q	CLNS-1-12	-
1/0	1	-	-	-	L1/0-48	-	CLNS-1/0-12	-
1/0	2	31130	LCN10	YA252N	L1/0-N	LCC1/0-12-X	CLND-1/0-12-134	BBLU-1/0D3
2/0	1	-	-	YA26N	L2/0-48	LCB2/0-12-X	CLNS-2/0-12	BBLU-2/0S1
2/0	2	31137	LCN20	YA262N	L2/0-N	LCC2/0-12-X	CLND-2/0-12-134	BBLU-2/0D
3/0	1	31041	CTL30L-12	YA27	L3/0-48	LCB3/0-12-X	CLNS-3/0-12	BBLU-3/0S
3/0	2	31141	LCN30	YA272N	L3/0-N	LCC3/0-12-X	CLND-3/0-12-134	BBLU-3/0D
4/0	1	31045	CTL40L-12	YA28	L4/0-48	LCB4/0-12-X	CLNS-4/0-12	BBLU-4/0S
4/0	2	31145	LCN40	YA282N	L4/0-N	LCC4/0-12-X	CLND-4/0-12-134	BBLU-4/0D
250	1	31049	CTL250L-12	YA29	L250-48	LCB250-12-X	CLNS-250-12	BBLU-025S
250	2	31149	LCN250	YA292N	L250-N	LCC250-12-X	CLND-250-12-134	BBLU-025D
300	1	31053	CTL300L-12	YA30	L300-48	LCB300-12-X	CLNS-300-12	BBLU-030S
300	2	31153	LCN300	YA302N	L300-N	-	CLND-300-12-134	BBLU-030D
350	1	31056	CTL350L-12	YA31	L350-48	LCB350-12-X	CLNS-350-12	BBLU-035S
350	2	31156	LCN350	YA312N	L350-N	LCC350-12-X	CLND-350-12-134	BBLU-035D
400	1	31060	-	YA32N	L400-48	LCB400-12-6	CLNS-400-12	BBLU-040S1
400	2	31160	LCN400	YA322N	L400-N	LCC400-12-6	CLND-400-12-134	BBLU-040D
500	1	31066	-	YA34N	L500-48	LCB500-12-6	CLNS-500-12	BBLU-050S2
500	2	31166	LCN500	YA342N	L500-N	LCC500-12-6	CLND-500-12-134	BBLU-050D
600	1	31068	-	YA36N	L600-48	LCB600-12-6	CLNS-600-12	-
600	2	31168	LCN600	YA362N	L600-N	LCC600-12-6	CLND-600-12-134	BBLU-060D
750	1	-	-	-	-	-	-	-
750	2	31172	-	YAZ392NNT	L750-N	-	-	-
1000	1	-	-	-	-	-	-	-
1000	2	31178	-	-	L1000-NT	-	-	-

REGISTERED PROFESSIONAL ENGINEER
DATE 10/15/25
K.P.SPENCE
20210371
PROVINCE OF NOVA SCOTIA

DISTRIBUTION STANDARDS

Nova Scotia POWER
An Emera Company

APPROVED COMPRESSION TERMINALS FOR COPPER CABLES

DATE:	2016-01-14	REV DATE:	2025-10-15
DRAWN:	A. BILKHU	STD NO:	4U-12M
DESIGNED:	FAHIM GALIB	SHT NO:	1 OF 1 (R2)

APPENDIX D
NSPI APPROVED UNDERGROUND MATERIALS

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

Approved Material and Hardware List

NOTES:

a. Only the specified manufacturers' material or hardware as listed will be accepted by NSPI.
b. The item numbers refer to the number shown inside a circle (or ellipse) on the drawings.

ITEM NO.	DESCRIPTION	MFG.CAT.NO.
C 1050	CONDUIT, RIGID PVC, 90° UTILITY BEND, 36" RADIUS, 3" DIAMETER, AS PER CSA C22.2 NO. 211.2 OR NO. 211.3	FRE 40-3039 SCEPTER NSL3-36
C 1051	CONDUIT, DB TYPE II, 90° LONG SWEEP BEND, 36" RADIUS, 3" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-3030R36 SCEPTER 83-0405-0030
C 1052	CONDUIT, DB TYPE II, 45° LONG SWEEP BEND, 36" RADIUS, 3" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-3032R36 SCEPTER 83-0401-0030
C 1053	CONDUIT, DB TYPE II, 10 FT. LENGTH, STRAIGHT, 3" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FER 40-3000 SCEPTER 34-030-21-100
C 1054	END BELL, FOR USE ON 3" DIAMETER CONDUIT	FRE 40-3018 SCEPTER EB-45
C 1058	COUPLING, PVC ADAPTER, FOR USE ON 3" DIAMETER UTILITY BENDS	SCEPTER 83-0357-0030
C 1059	CONDUIT, RIGID PVC, 90° BEND, 13" RADIUS, 3" DIA., AS PER CSA C22.2 NO. 211.2 OR NO. 211.3	SCEPTER EE4590
C 1060	CONDUIT, REIGID PVC, 90° UTILITY BEND, 36" RADIUS, 4" DIAMETER, AS PER CSA C22.2 NO. 211.2 OR NO. 211.3	FRE 40-4039 SCEPTER NSL4-36
C 1061	CONDUIT, DB TYPE II, 90° LONG SWEEP BEND, 36" RADIUS, 4" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-4030R36 SCEPTER 83-0405-0040
C 1062	CONDUIT, DB TYPE II, 45° LONG SWEEP BEND, 36" RADIUS, 4" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-4032R36 SCEPTER 83-0401-0040
C 1063	Conduit 4" (100 mm) – PVC DB Type II or FRE	FRE 40-4000 SCEPTER 83-040-21-100
C 1064	END BELL, FOR USE ON 4" DIAMETER CONDUIT	FRE 40-4018 SCEPTER EB-55
C 1065	CONDUIT – END CAP FOR USE ON 4" (100 MM) DIAMETER CONDUIT	SCEPTER CAP55
C 1066	CONDUIT – COUPLING PVC TO PVC, FOR USE ON 4" (100 MM) DB TYPE II CONDUIT	SCEPTER EC55
C 1067	CONDUIT – COUPLING FRE TO FRE, FOR USE ON 4" (100 MM) FRE CONDUIT	FRE 40-4010
C 1068	CONDUIT – ADAPTOR COUPLING, RIGID PVC TO DB TYPE II, FOR USE ON 4" (100 MM) CONDUIT	SCEPTER 83-0357-0040

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

C 1072	CONDUIT, DB TYPE II, 45° LONG SWEEP BEND, 42" RADIUS, 5" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-5032R48 SCEPTER 83-0402-0050
C 1073	CONDUIT, DB TYPE II, 10 FOOT LENGTH, STRAIGHT, 5" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	FRE 40-5032R48 SCEPTER 83-0402-0050
C 1075	END CAP, FOR USE ON 5" DIAMETER CONDUIT	SCEPTER CAP60
C 1077	COUPLING, FRE TO FRE, FOR USE ON 5" DIAMETER CONDUIT	FRE40-5010
C 1080	CONDUIT, RIGID PVC, 45° SWEEP BEND, 16" RADIUS, 4" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	SCEPTER EE5545
C1082	CONDUIT, RIGID PVC, 45° SWEEP BEND, 24" RADIUS, 5" DIAMETER, AS PER CSA C22.2 NO. 211.1 OR NO. 211.3	SCEPTER EE6045
C 59	GROUND ROD CONNECTOR – BRONZE, FOR NO. 20 (3/4) ROD AND #2/0 COPPER CONDUCTOR	ERICO/CPH34S BURNDY GRC3426 T&B JAB 34C
C 68	CONNECTOR – OKLIP, FOR COPPER TO COPPER CONNECTIONS (#1/0 STRD. TO #4/0 STRD.)	PENN UNION VT-2 BURNDY KVS-28 BLACKBURN 2B40 HUBBELL K3
C 94	COPPER WIRE - #2 AWG, BARE, 7 STRAND	Nexans 244160
C 95	COPPER WIRE - #2/0 AWG, BARE, 7 STRAND	Nexans 677294
E 1040	ENCLOSURE, ABOVE GRADE SERVICE, COMPLETE WITH HEX BOLTED TOP	PENCEL AG-20HD NORDIC PSP-151530-MG
E 1041	ENCLOSURE, ABOVE GRADE SERVICE, COMPLETE WITH HEX BOLTED TOP (SMALLER SIZE UNIT)	PENCEL AG-14HD NORDIC PSP-91330-MG
M 1000	MARKER TAPE – CAUTION, BURED ELECTRIC LINE – POLYETHYLENE, BLACK LETTERING ON RED BACKGROUND, 150 MM (6") WIDTH	ALLEN SYSTEMS #0761315 PANDUIT HTU-6Y-E T & B NA-0708
N 1000	NYLON FISH LINE – POLYETHYLENE BRAIDED TWINE, 4 MM DIAMETER	IMP GROUP LTD. COMPUTER #07-0044
R 12	GROUND ROD – STEEL, 20 X 3000 (3/4" X 10'), WITH TOP 250 MM (10") GALVANIZED	SLACAN 9340 HUBBELL 8620
R 11	ROD, GROUND, STEEL, WITH TOP 250mm GALVANIZED, AS PER CSA STD. C83.41M, ROD NO. 20 X 1800	HYDEL 3410G SLACAN 9340

APPENDIX E
CONDUIT ASSIST PROCEDURE

NOVA SCOTIA POWER INC.
UTILITY SERVICE REQUIREMENTS

NSPI CONDUIT ASSIST PROCEDURE For Accessible Poles

Utility Standards J-ED-23M, J-ED-34M, and OU-ED-22

(Effective 2026/01/01)

Purpose

The purpose of this procedure is to clarify for Contractors, Permit Associates, Wiring Inspectors, Regional Planners, and Power Line Technicians (PLT) the requirements for the installation of services on a pole where an assist is required by the Contractor to locate the weatherhead to the required location, as per Utility Standard drawings J-ED-23M, J-ED-34M and OU-ED-22. This will outline the requirements regarding how these assists are to take place and the requirements for the above stated parties.

Permit Center/Customer Care

- The Contractor will contact the permit center/customer care to pull the proper wiring permit and/or book associated scoping.
- Permit Associate will ask if conduit assist is required for pole installed services only and advise of additional truck fees in accordance with NSPI standard utility rate structure.
- Permit Associate shall advise Contractors that they are required to be on site for the scoping.
- Permit Associate should advise Contractors it is recommended they are on site on the day of the scheduled assist.

Requirements for Regional Planner

- A safe clearance report to the Contractor shall be provided at the time of scoping for all poles that will have underground conduit installed onto them regardless of whether or not energized equipment exists on the pole. The Regional Planner will provide instruction on the weatherhead location and conduit height location for the assist to be the last 1.5m on the pole.
- Regional Planner will advise that assists are not provided on dead set poles. However, in rare circumstances where the Contractor may be exposed to excessive risk/danger then approval shall be obtained from the Area Supervisor to provide a conduit assist.
- Regional Planner will determine during scoping the materials needed to complete the job and any additional time and/or resources required for PLT crews to complete the installation.
- Regional Planner will determine the method of installation for the work to be carried out.
- Regional Planner should advise the Contractor that it is recommended they be on site at the time of the assist and the required materials shall be on site for the scheduled assist date. The Regional Planner will attach all notes/drawings to Maximo.

  ***Note – Inaccessible poles will not be used when a conduit assist is required. Area Supervisor approval shall be obtained in circumstances where options are limited.**

  A pole is considered to be accessible if a public roadway or private driveway owned by the customer (or not owned by the customer but with suitable easement/rights in place) with a reasonably level surface is available to park a bucket truck such that direct access to the service is possible from the bucket and the roadway or driveway is usable 12 months of the year.

Requirements for Contractor

- Contractors shall be on site to meet the Regional Planner for the scoping to discuss the installation requirements of conduits no larger than 3" in diameter and conductor size no larger than 350kcmil or ACWU/Teck no larger than 350kcmil.

  ***Note – Contractor should make every effort to use less than 3" diameter conduit and conductor size less than 350kcmil or ACWU/Teck of size less than 350kcmil, however certain applications may require larger conduits. For such situations, approval from the Area Supervisor shall be obtained.**

- It is recommended Contractors make every effort to be on site for all conduit assist procedures to aid the PLT in the installation should it be required.
- If ACWU/Teck is used at the pole, the Contractor should make efforts to install the ACWU/Teck up to the minimum height location on the pole as specified in the scope/safe clearance report issued by the Regional Planner. The Contractor shall ensure that the weatherhead is installed and final weatherhead location will be landed at the proper height.
- Contractors shall provide all the necessary materials, tools, and equipment to complete the job. This includes but is not limited to PVC piping, couplings, weatherhead, glue, straps, screws, etc., as outlined in this document. Material is to be left at the bottom of the pole.
- Contractors shall wear the required PPE.
- Contractors shall obtain a safe clearance report for all jobs where the service is located on a primary or live secondary pole. This will be issued at the time of the scoping.
- Contractors shall install all conduits, wiring, fittings, straps, etc. up to the minimum height location on the pole as specified in the scope/safe clearance report issued by the Regional Planner.
- Contractors shall secure the service conduit to the pole and have a coupler installed allowing for the remaining 1.5m (5ft) of conduit to be rolled over and installed in a safe manner for final connection (see Figure 1).

  ***Note – Contractor will have conduit installed on wires and ready for PLT crew to complete.**

- Contractors shall follow all CE Code, NSPI and Dept. of Labor Bulletins, and the latest Utility Service Requirements and Standards for their installations.

  ***Note – Contractors are subject to full-service charges in the event an assist could not happen due to the items under their responsibility in this document not being followed.**

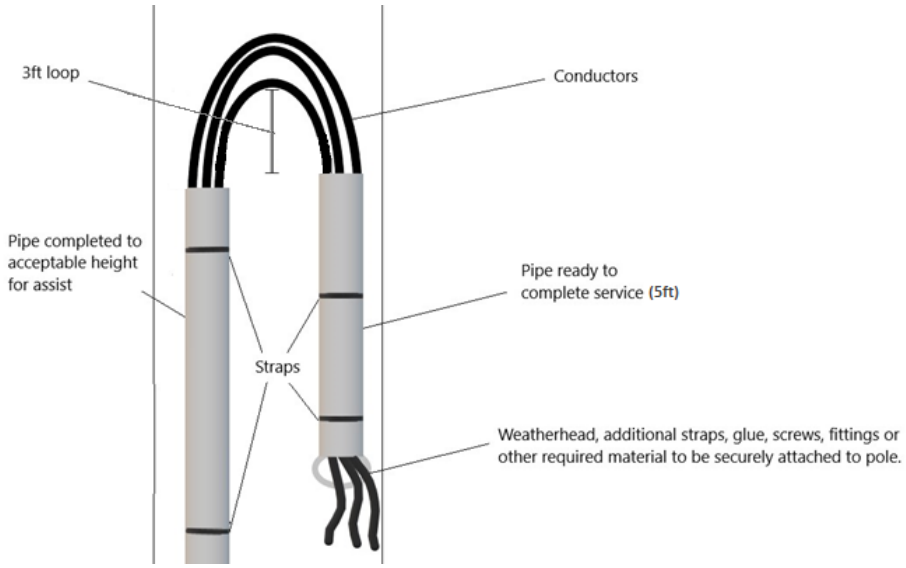

Figure 1. Conduit secured to pole and rolled over ready for final installation

Inspector

- Inspectors will perform inspection, megger the service conductors, and install silver inspection sticker on the meter base if the service passes inspection.
- Inspectors shall note in their report if the service passed inspection and meets the criteria of the assist requirements as per this document and specifications from the scope/safe clearance report.
- Inspector shall ensure the Contractor has all associated material on site for the assist.

Power Line Technician (PLT)

- PLT should complete the conduit assist as determined by the Regional Planner from the installation methods outlined in their report.
- PLT will have all the necessary tools, equipment, etc. not required to be supplied by the Contractor to complete the installation.
- PLT shall do associated checks prior to installing the meter as defined in NSPI Standard Work Methods 5.10 (single phase) or 5.11 (three phase).

***Note – NSPI personnel shall follow all applicable SWP and SWM.**

Figures for weatherhead locations (for visual reference only; always confirm heights with the latest version of the utility standards)

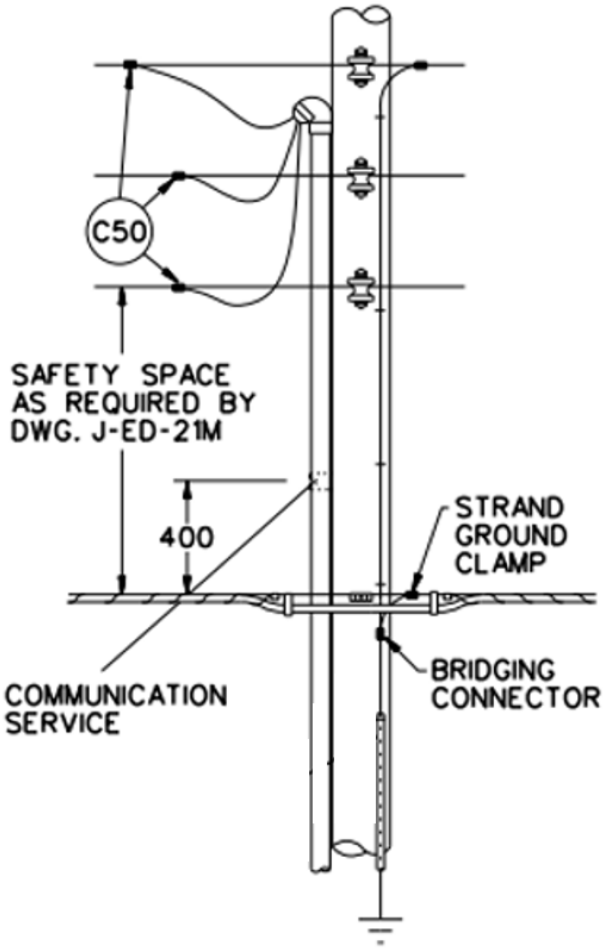

Figure 2. Installation Methods J-ED-23M

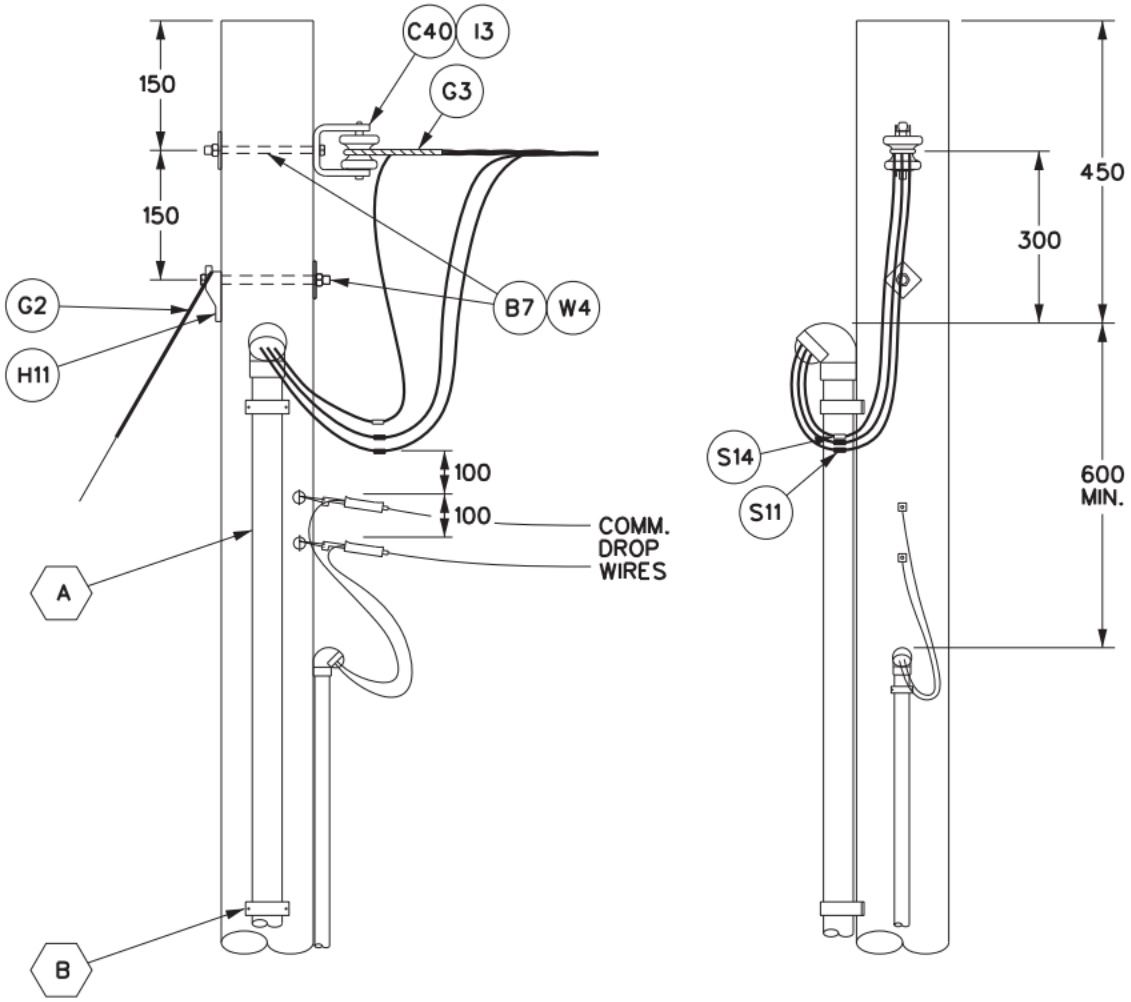

Figure 3. Installation Methods J-ED-34M

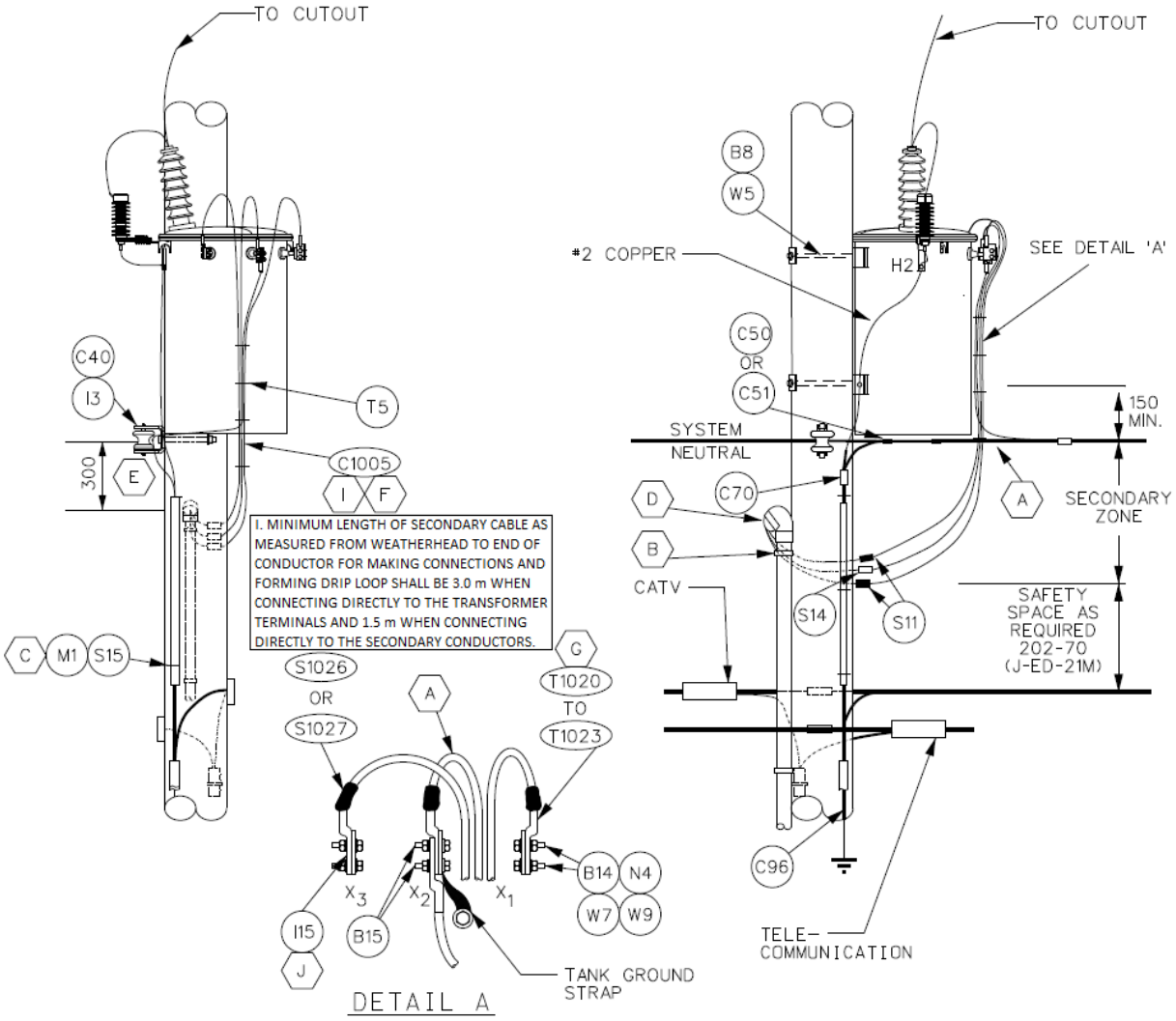

Figure 4. Installation Methods OU-ED-22