



**ELECTRIC
SPECIFICATION
DRAWINGS**



ELECTRIC SPECIFICATION DRAWINGS

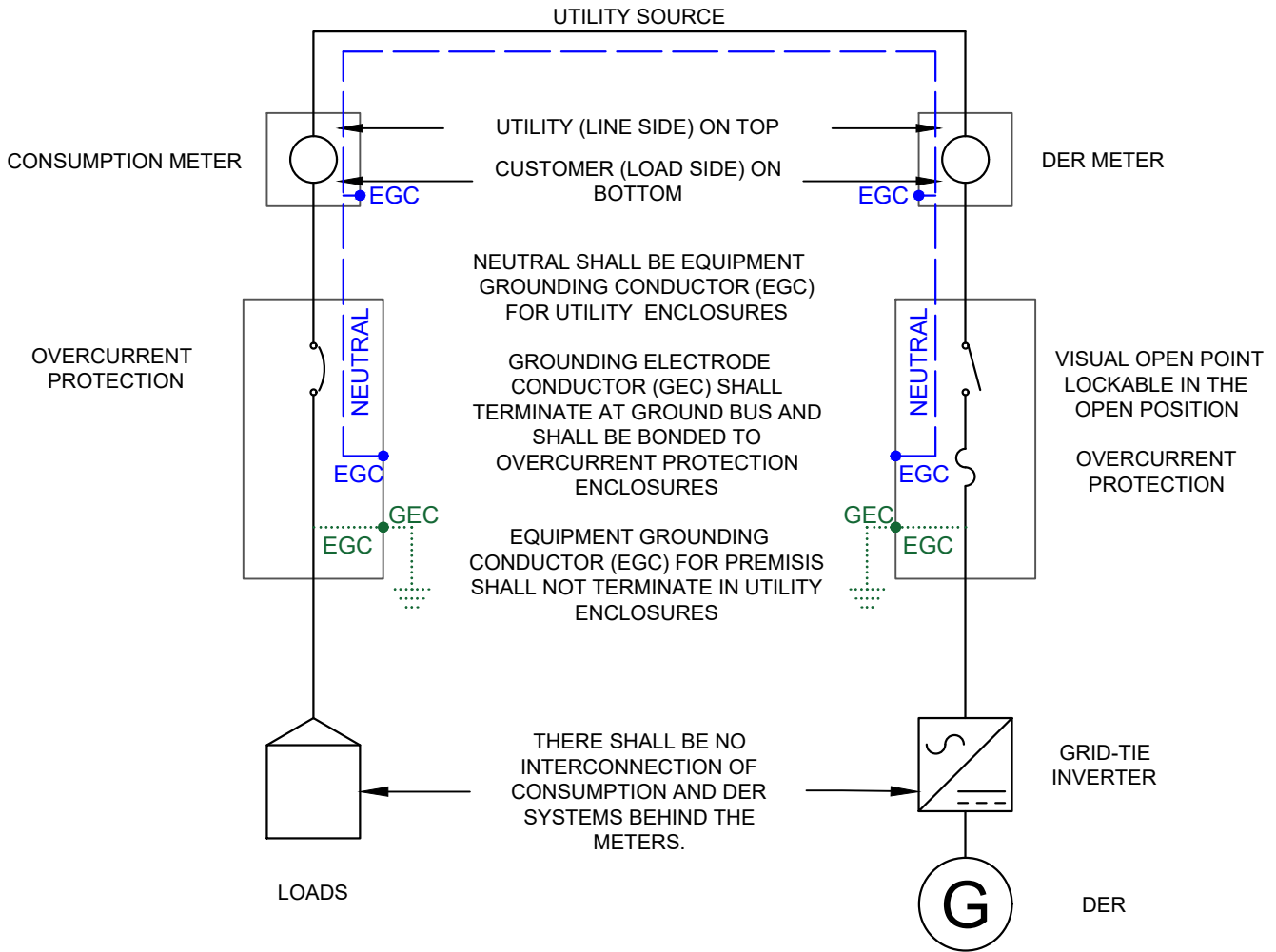
DRAWING NUMBER	TITLE	REVISED
EG-010	Customer-Owned Generation Interconnection	8/21
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This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

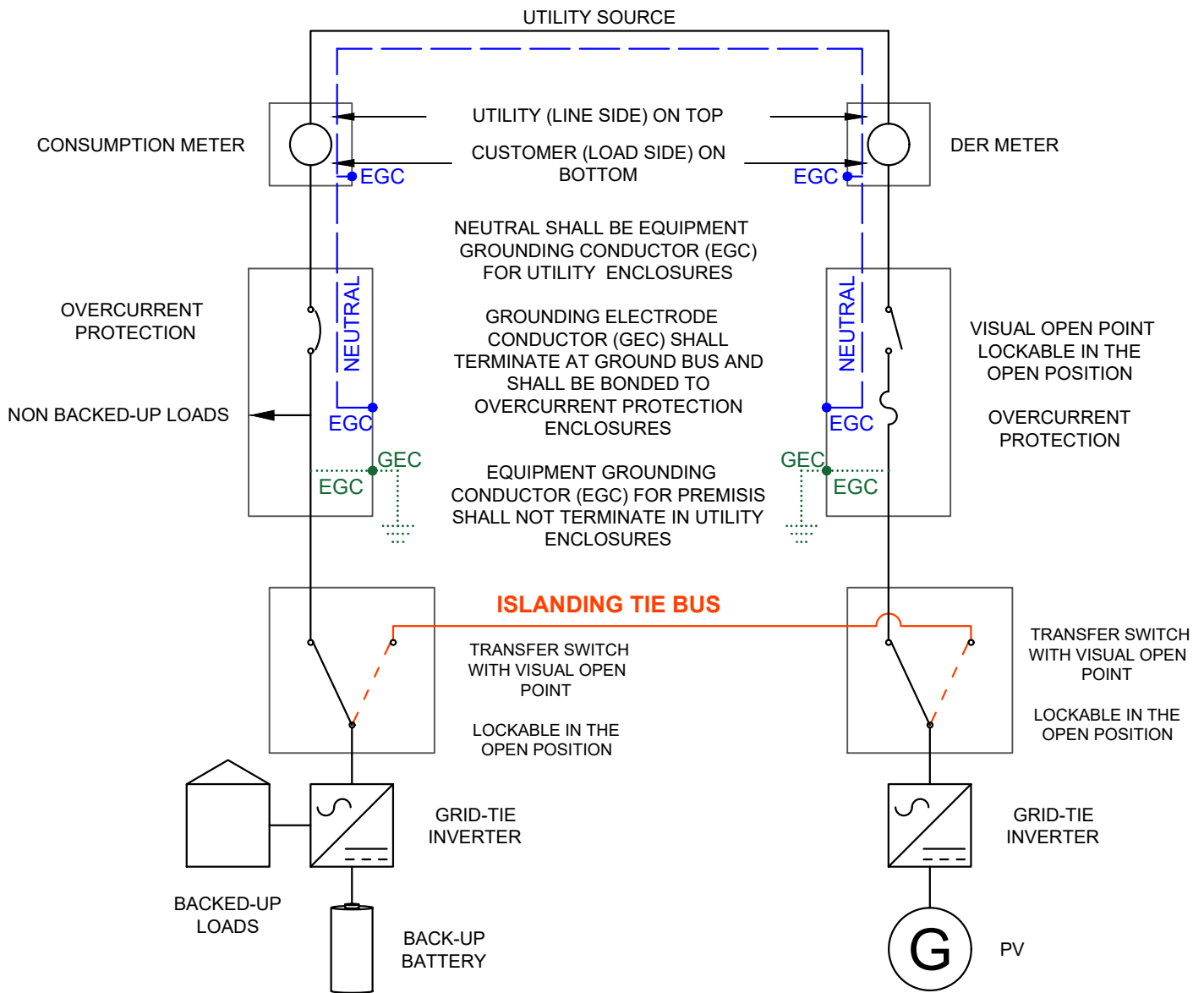
Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception.
Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source.



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CUSTOMER-OWNED GENERATION INTERCONNECTION		
ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-010

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception. Islanding Tie Bus shall be connected using approved manually-operated, open transition, double throw transfer switches. Switching to island configuration must disconnect from each Utility Source before connecting to the Islanding Tie Bus. Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source. There shall be no interconnection of Consumption and DER systems behind the meters while either meter is connected to Utility Source.



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CUSTOMER-OWNED GENERATION INTERCONNECTION WITH ISLAND CAPABLE BATTERY BACKUP

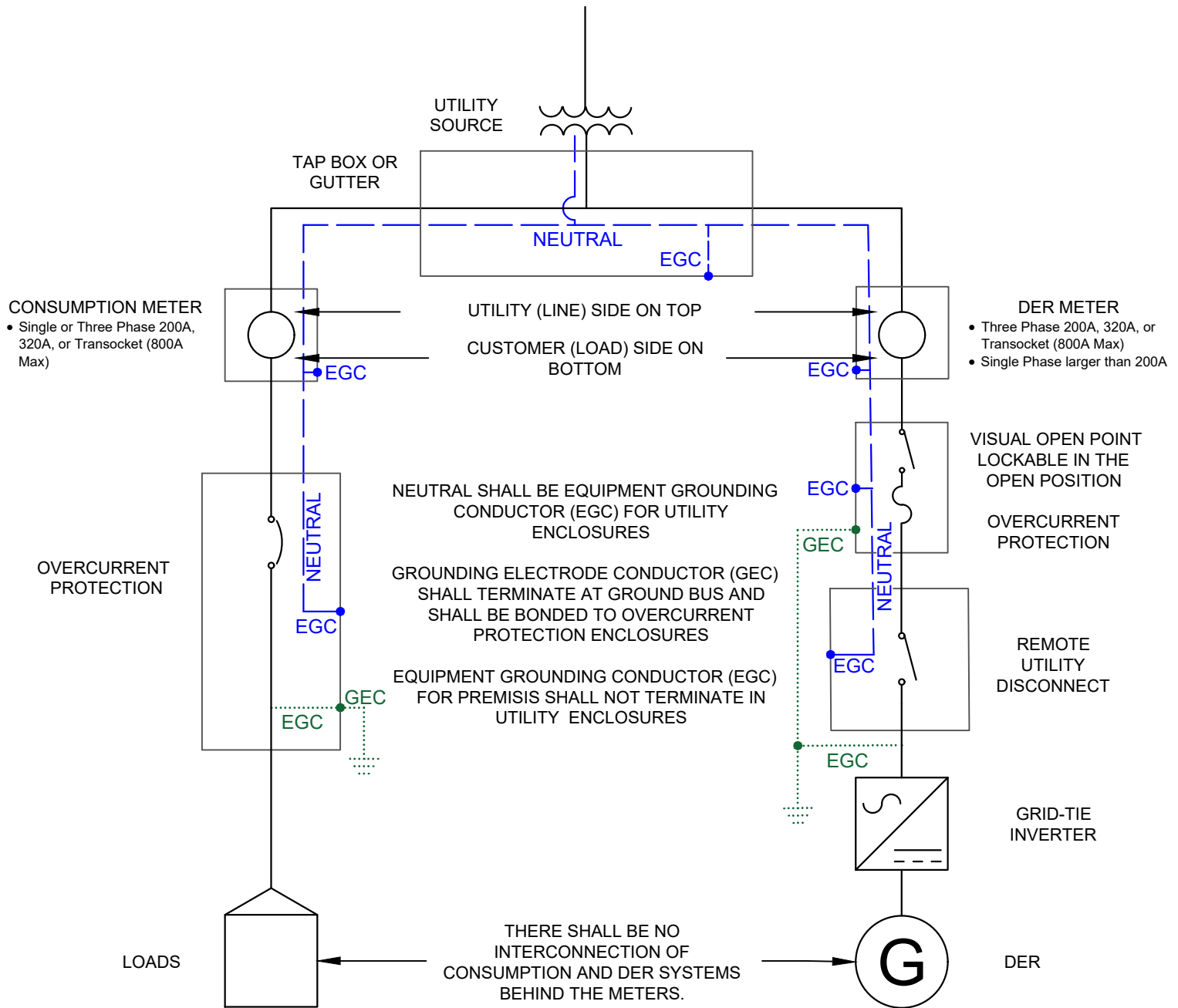
ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-011

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception.

Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source.

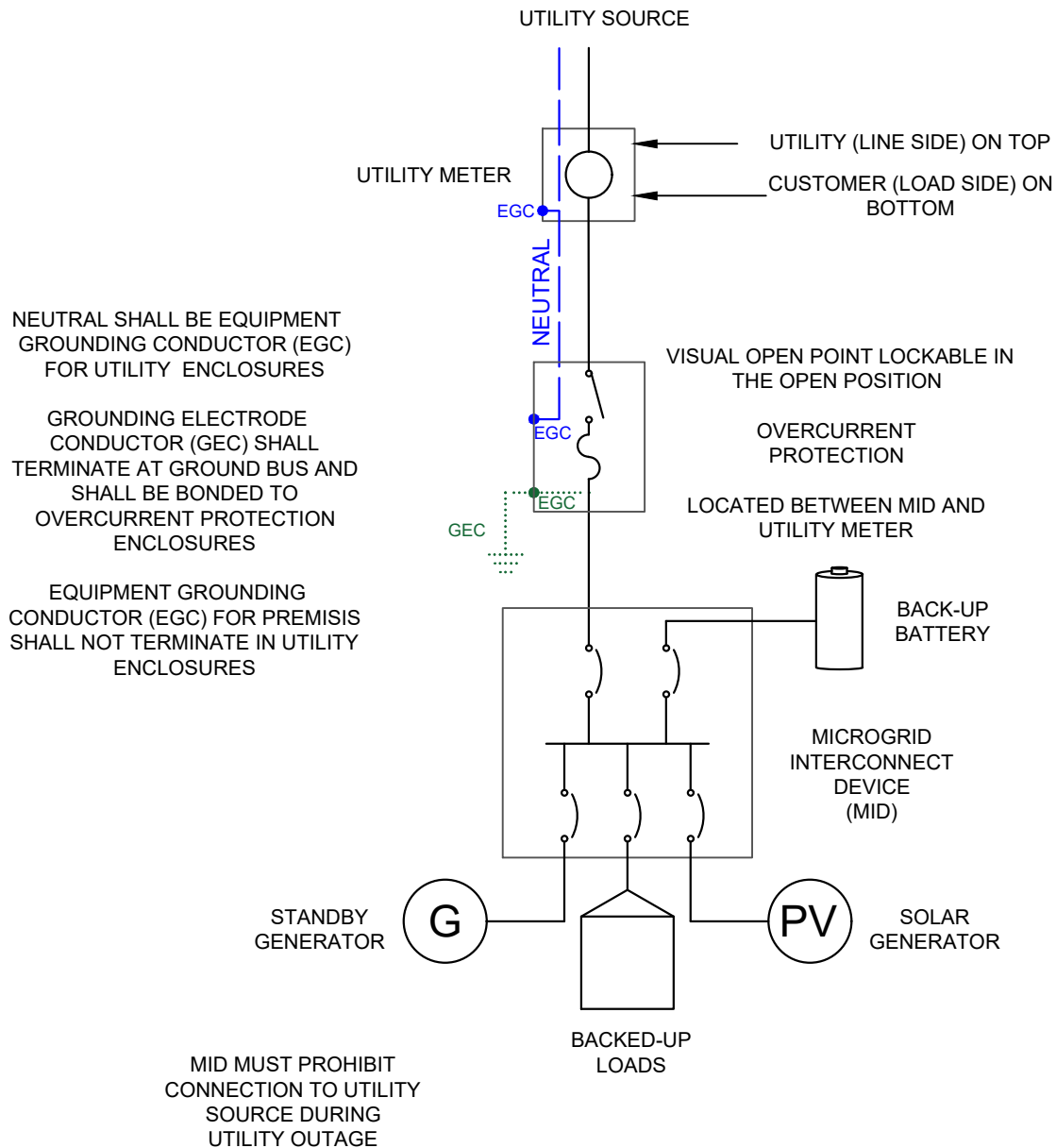


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DER INTERCONNECTION OTHER THAN 200 AMP SINGLE PHASE AT SHARED TRANSFORMER

ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-012

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering. SYSTEMS SHALL COMPLY WITH NEC ARTICLE 705



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ISLAND-CAPABLE, PARALLELING
 MICROGRID INTERCONNECTION

ISSUED

8/21

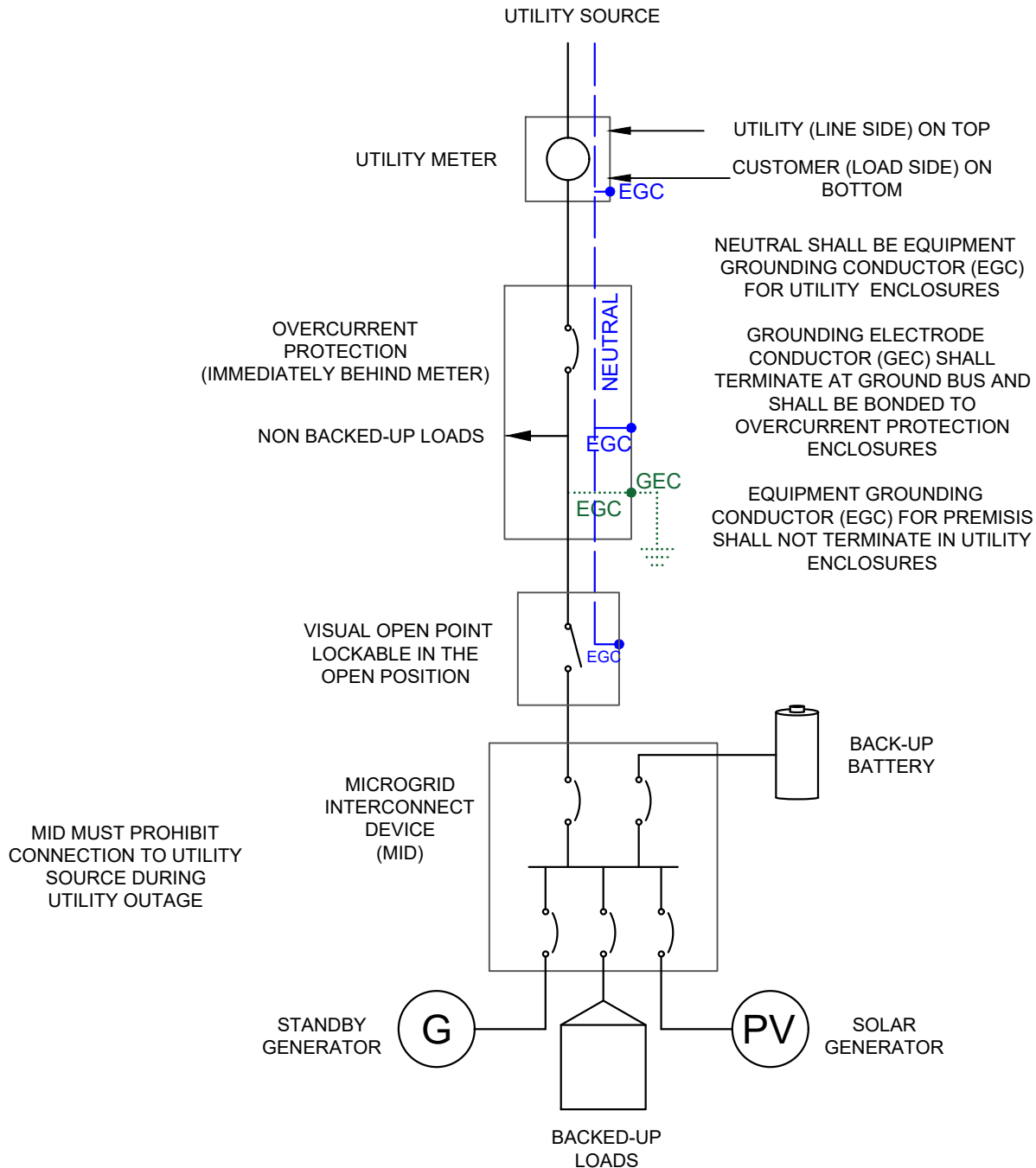
SCALE

NTS

DRAWING NUMBER

EG-014

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering.
 SYSTEMS SHALL COMPLY WITH NEC ARTICLE 705



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ISLAND-CAPABLE, PARALLELING
 SERVICE ENTRANCE MICROGRID INTERCONNECTION

ISSUED

8/21

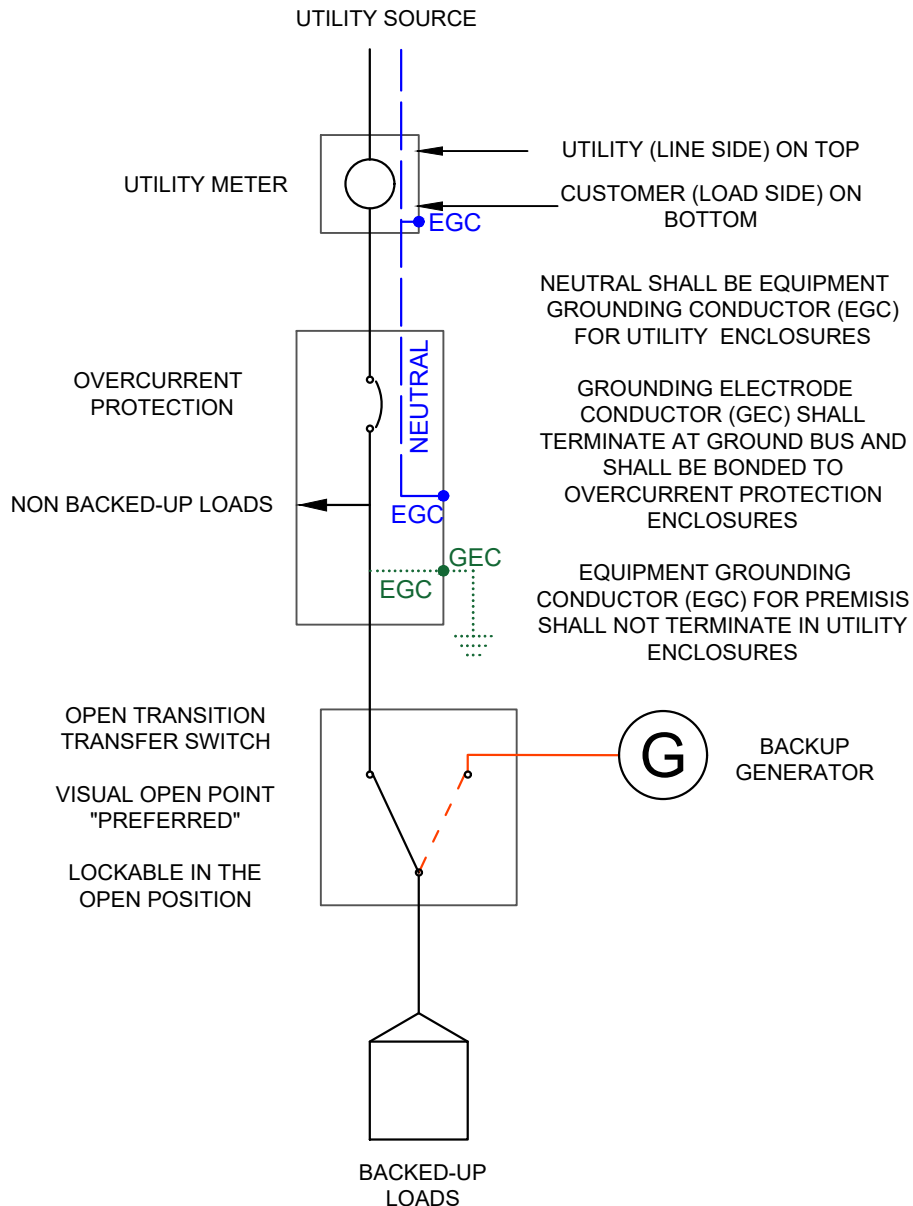
SCALE

NTS

DRAWING NUMBER

EG-015

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. Under no circumstances may the utility meter be subjected to power flow from the customer premises toward the utility source. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering.
SYSTEMS SHALL COMPLY WITH NEC ARTICLE 702



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**CUSTOMER-OWNED BACK-UP
 GENERATION INTERCONNECTION**

ISSUED

8/21

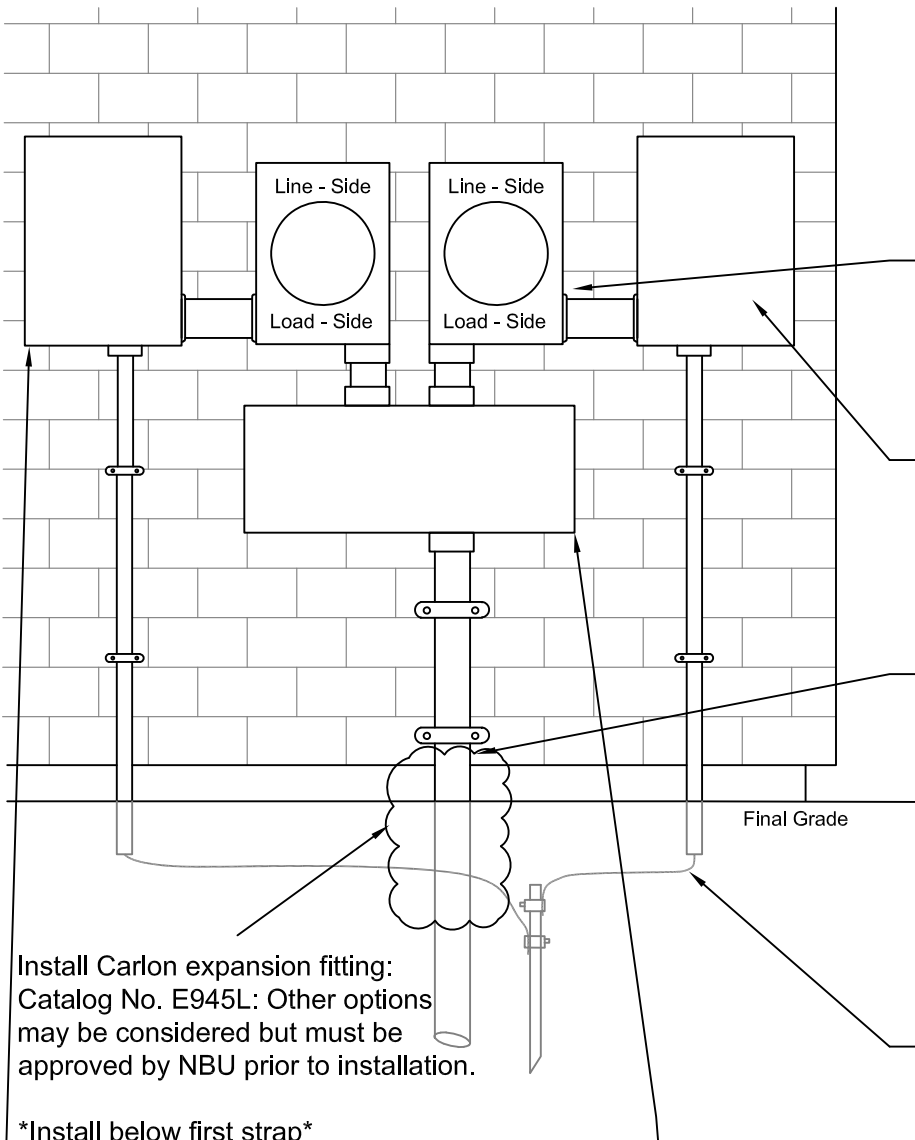
SCALE

NTS

DRAWING NUMBER

EG-016

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured 3' in front of socket. Electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located adjacent to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Utility Conduit: **To be sized by NBU.** Conduit should be secured with two 2-hole straps, sized to fit conduit and attached with galvanized anchors appropriate for the mounting surface. Conduit straps to be placed at a distance from each end equal to 25% of the length of exposed conduit. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Install Carlon expansion fitting:
Catalog No. E945L: Other options
may be considered but must be
approved by NBU prior to installation.

Install below first strap

Weatherproof Tap Enclosure: Must open toward the front. Opening height must be at least two times the depth dimension. Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. Enclosure shall meet requirements of NEC Article 314.

Weatherproof Generator Disconnect: Located adjacent to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.

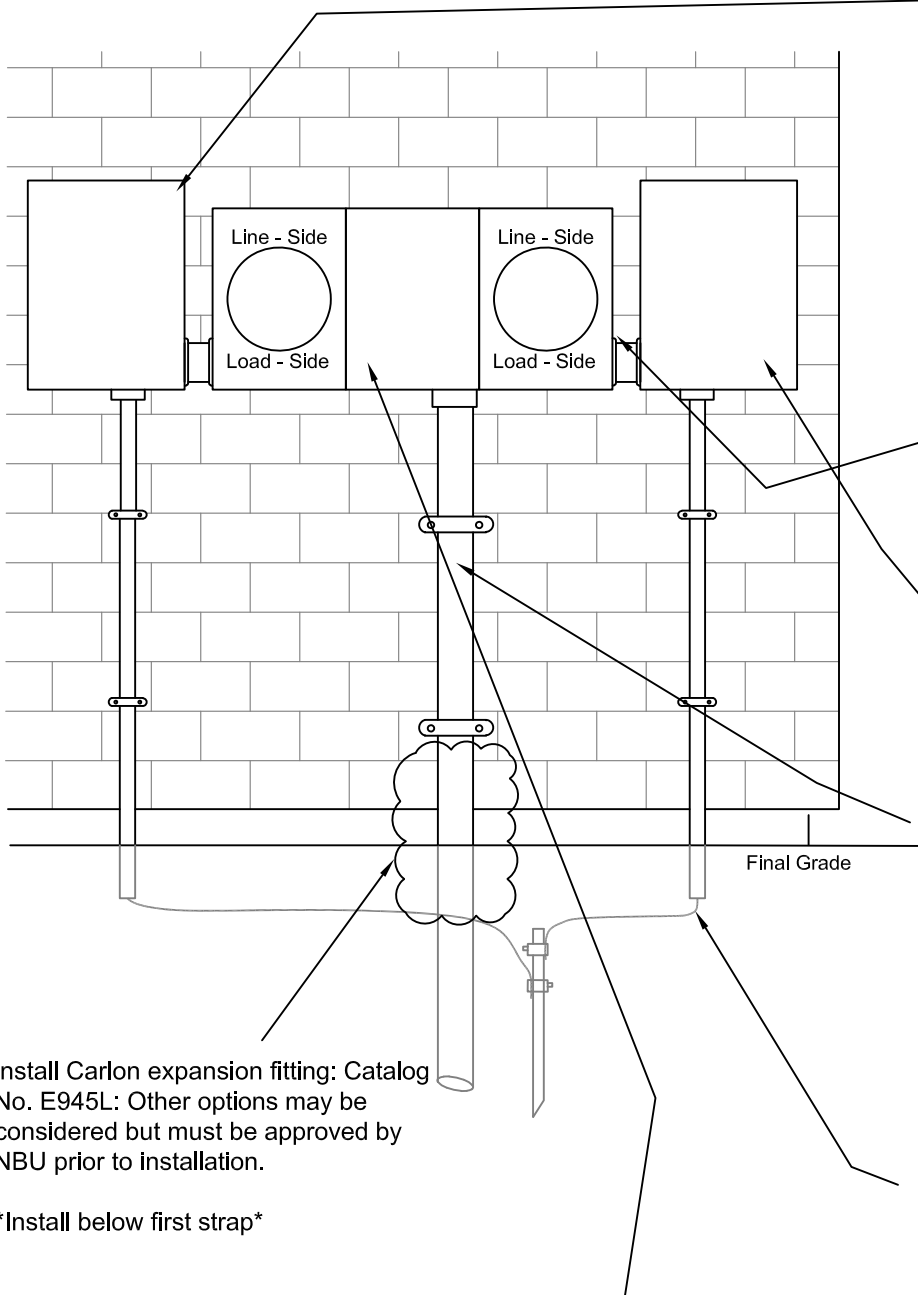


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UNDERGROUND RESIDENTIAL GENERATION
INTERCONNECTION WITH INTERMEDIATE TAP ENCLOSURE

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EG-020

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Weatherproof Generator Disconnect: Located adjacent to Generation Meter Socket. Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 or 694 for labeling and other requirements.

Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of sockets to final ground grade, when measured 3' in front of socket. Electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located adjacent to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Utility Conduit: To be sized by NBU. Conduit should be secured with two 2-hole straps, sized to fit conduit and attached with galvanized anchors appropriate for the mounting surface. Conduit straps to be placed at a distance from each end equal to 25% of the length of exposed conduit. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Install Carlon expansion fitting: Catalog No. E945L: Other options may be considered but must be approved by NBU prior to installation.

Install below first strap

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar)

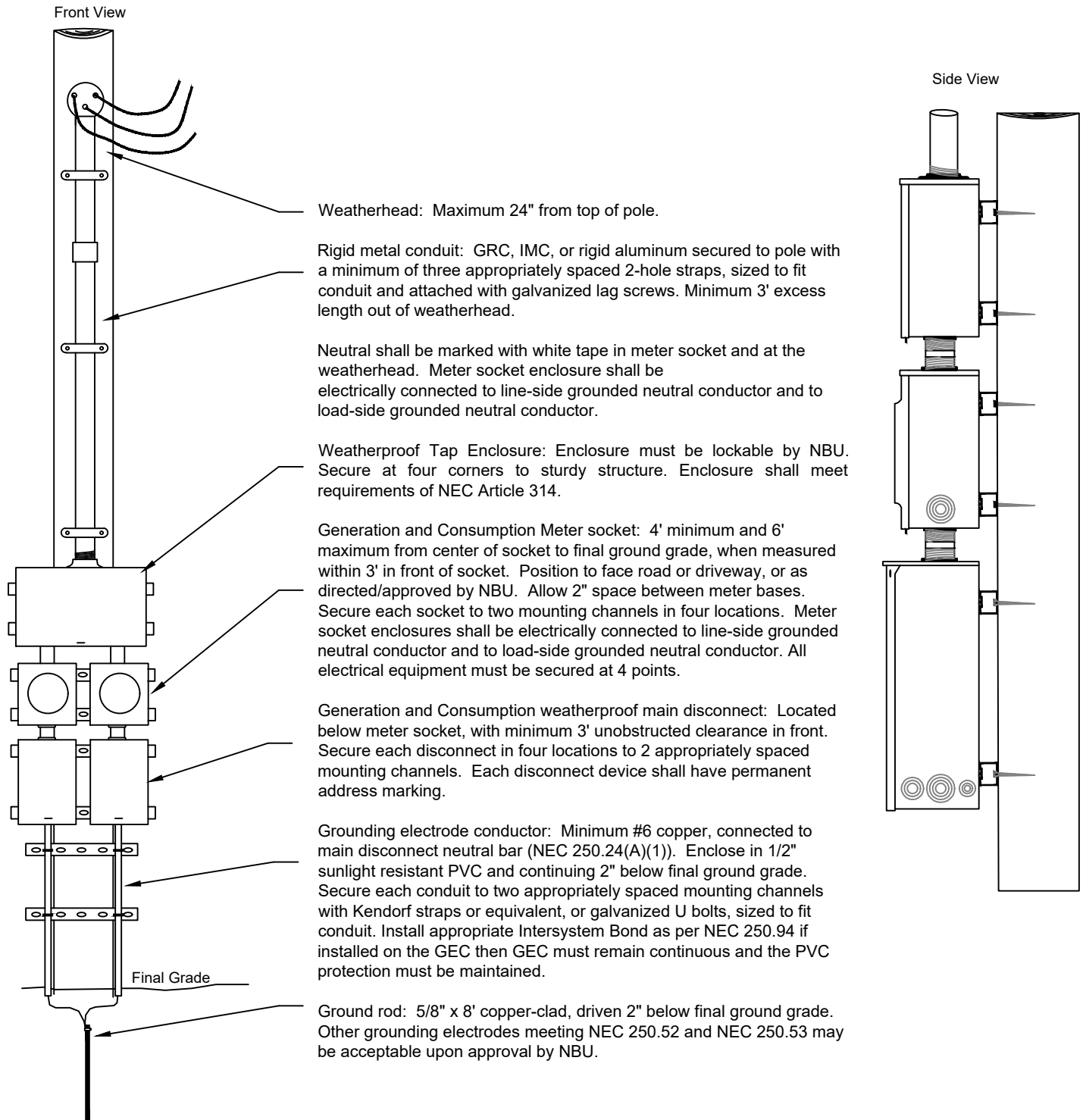


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UNDERGROUND RESIDENTIAL GENERATION INTERCONNECTION WITH GANGED METER MODULE

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EG-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



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OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION
 WITH INTERMEDIATE TAP ENCLOSURE ON POLE

ISSUED

12/22

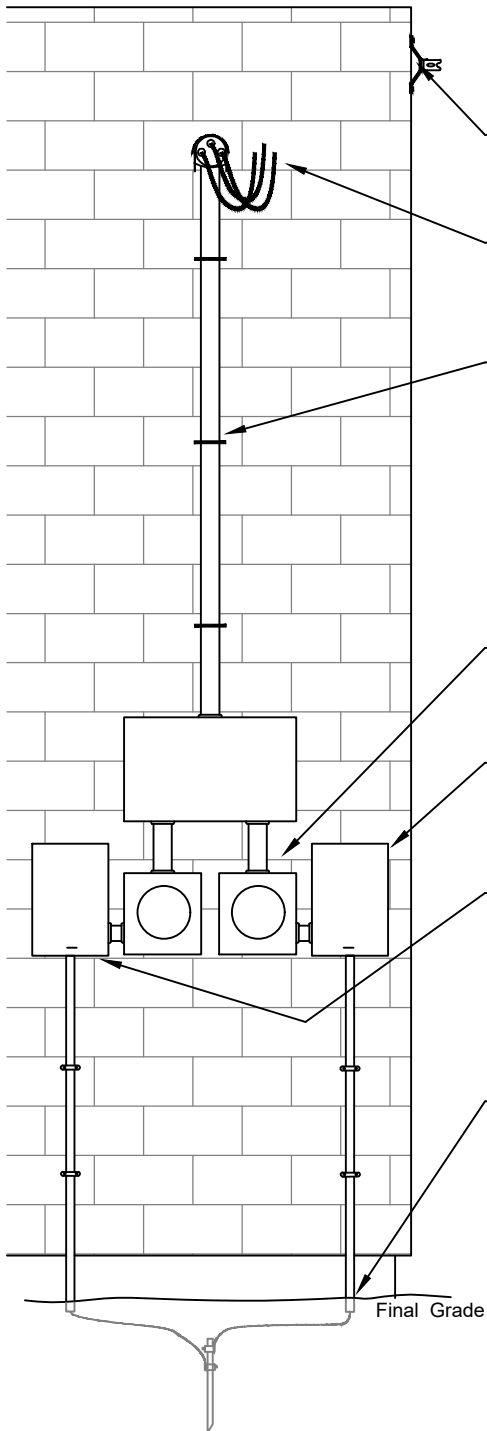
SCALE

NTS

DRAWING NUMBER

EG-030

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures and at the weatherhead.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade. Minimum 3' excess length out of weatherhead.

Rigid metal conduit: Minimum 2" GRC, IMC, or rigid aluminum secured to wall with a minimum of three appropriately spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Weatherproof Tap Enclosure: Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure shall meet requirements of NEC Article 314.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured 3' in front of socket. All electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located next to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Weatherproof Generator Disconnect: Located next to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION WITH INTERMEDIATE TAP ENCLOSURE

ISSUED	SCALE	DRAWING NUMBER
6/22	NTS	EG-035

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures and at the weatherhead.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade. Minimum 3' excess length out of weatherhead.

Rigid metal conduit: Minimum 2" GRC, IMC, or rigid aluminum secured to wall with a minimum of three appropriately spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

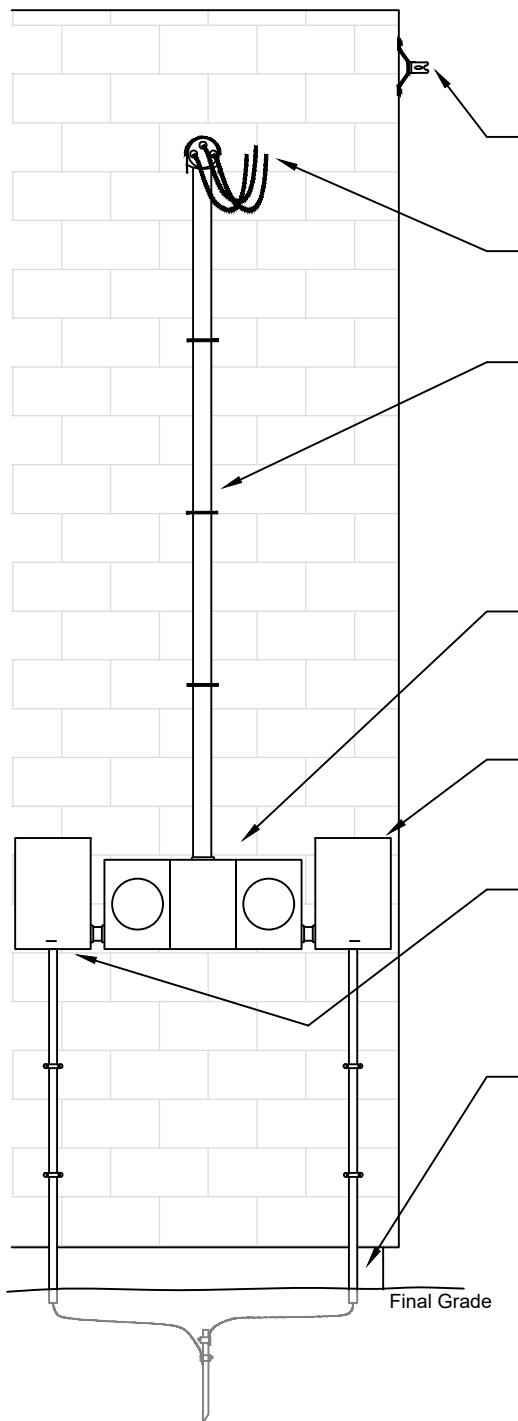
Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar). All electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located next to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Weatherproof Generator Disconnect: Located next to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

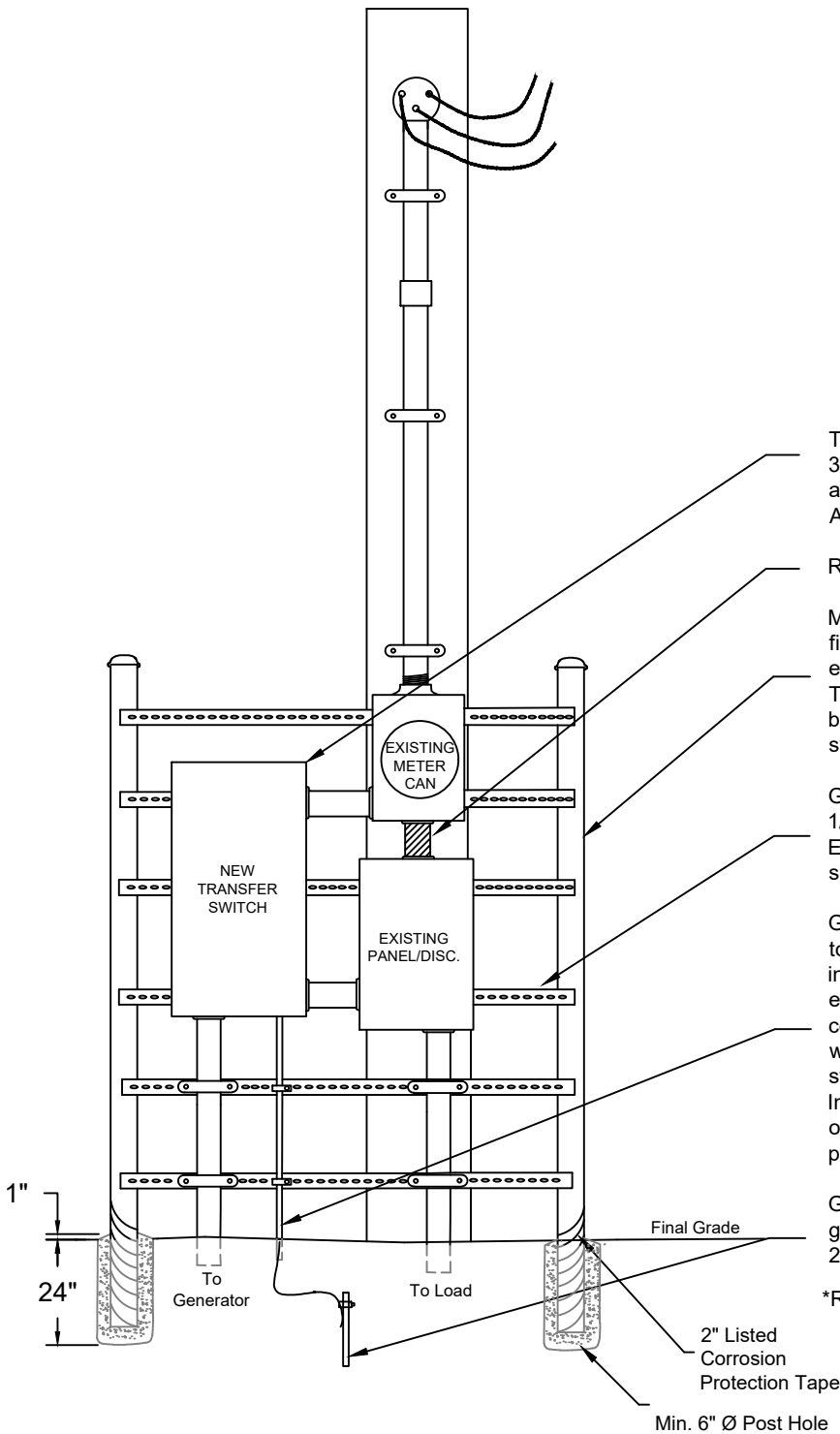


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OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION
 WITH GANGED METER MODULE

ISSUED	SCALE	DRAWING NUMBER
6/22	NTS	EG-040

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. All customer installations require inspection by NBU. GEC and OCPD shall be in first enclosure after the meter.



Transfer switch: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Transfer switch will need to be a double throw switch, either manually or automatically operated. All electrical equipment must be secured at 4 points.

Remove and cap between the meter can and panel/disc.

Meter rack: 2" GRC, or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement. Pole cannot be used as support system.

Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts. All Electrical Equipment must be secured at four points to two appropriately spaced mounting channels.

Grounding electrode conductor: Minimum #6 copper, connected to transfer switch neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to rack with two appropriately spaced mounting channels with Kendork straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Remove Ground wire from existing panel/disconnect



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OVERHEAD RESIDENTIAL BACKUP
GENERATOR SERVICE ON A POLE

ISSUED

12/22

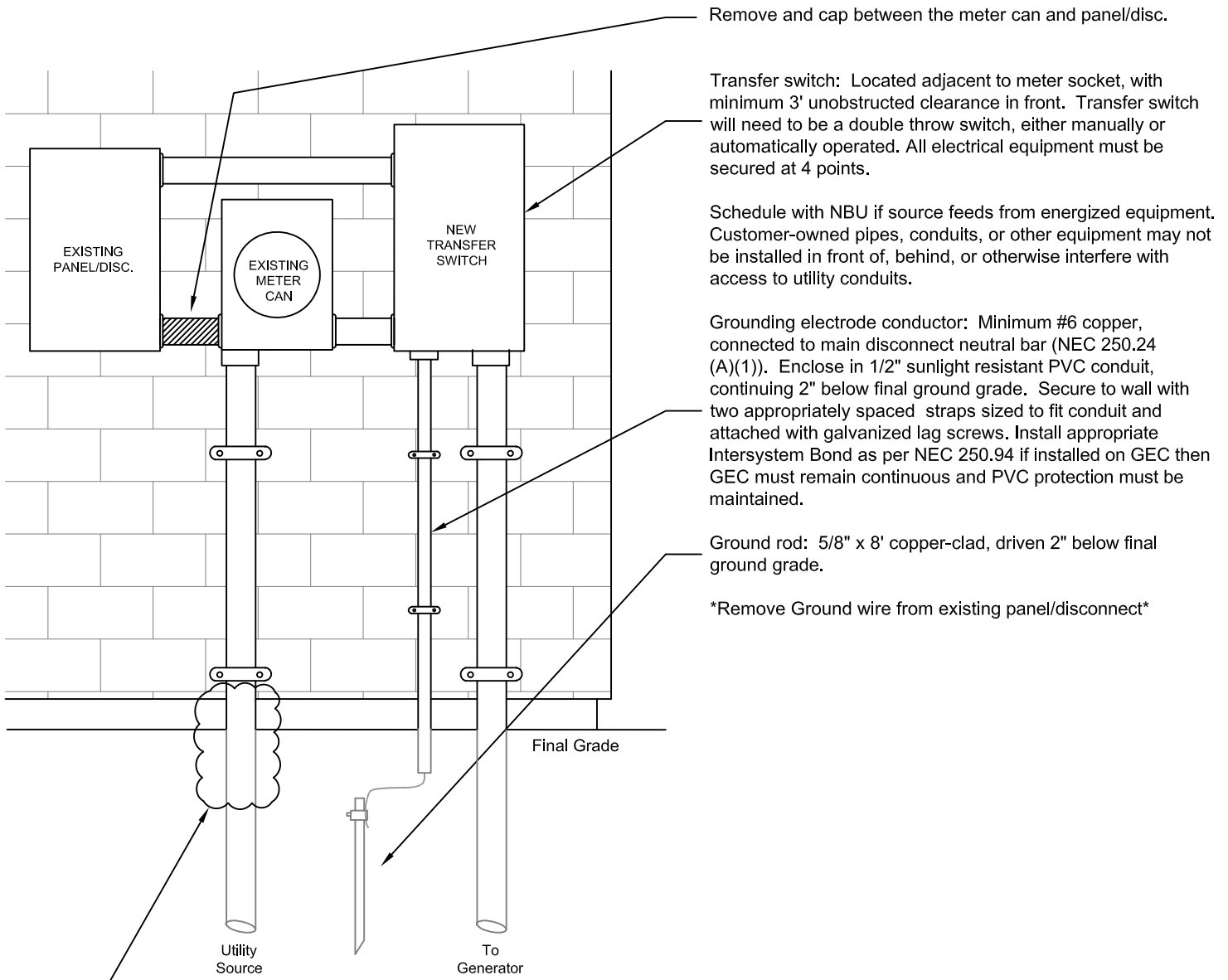
SCALE

NTS

DRAWING NUMBER

EG-045

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. All customer installations require inspection by NBU. GEC and OCPD shall be in first enclosure after the meter.



Install Carlon expansion fitting: Catalog No. E945L: Other options may be considered but must be approved by NBU prior to installation.

Install below first strap

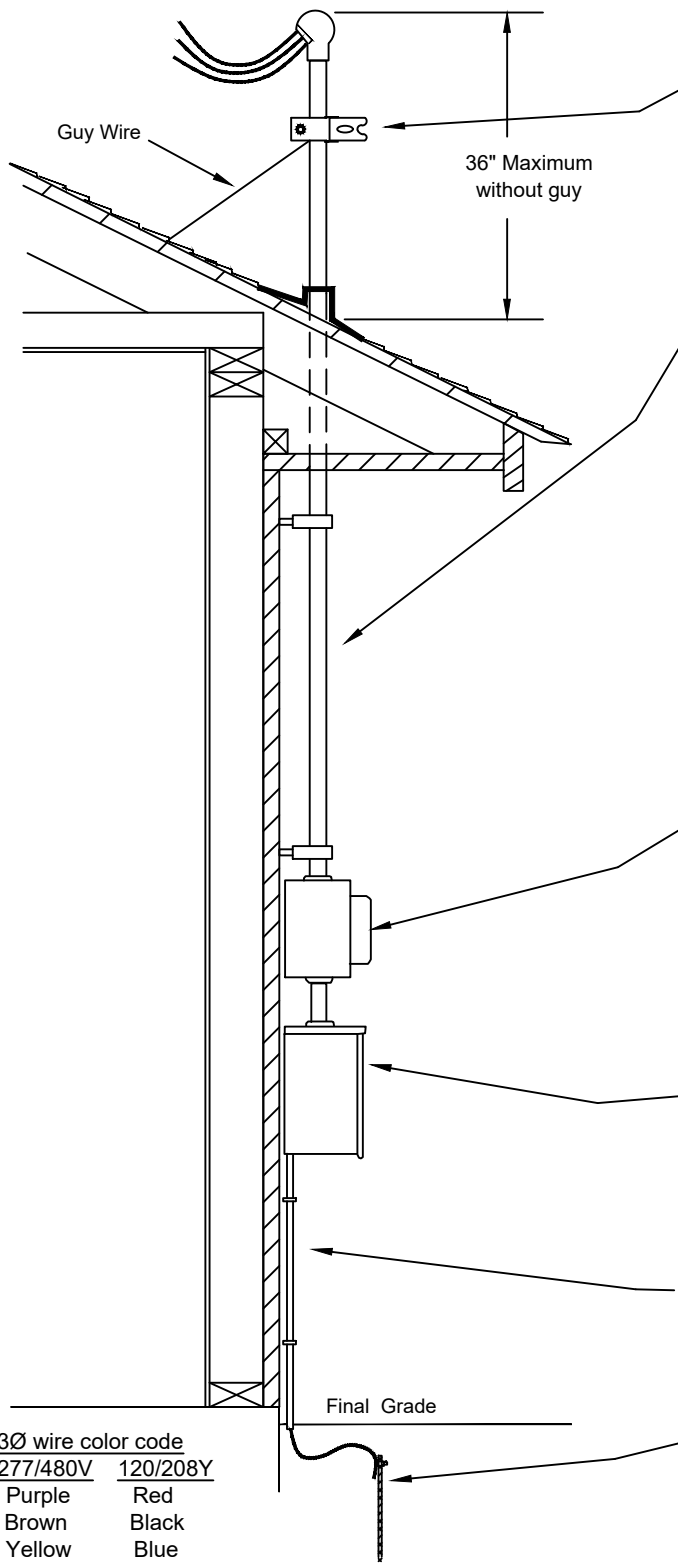


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UNDERGROUND RESIDENTIAL BACKUP
 GENERATOR SERVICE ON BUILDING

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EG-050

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Customer to install point of attachment 6" below and opposite weatherhead, facing toward NBU service lead. Attachment eye part Blackburn 6912 or equivalent. Must be capable of withstanding a pull of 300 lbs.

Metal flashing: If metal roof, plastic may be substituted. Special roof problems shall be coordinated with NBU.

Rigid metal conduit: GRC, or IMC secured to wall with two evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Substitution must be approved by NBU.

Weatherproof main disconnect: Located below or adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

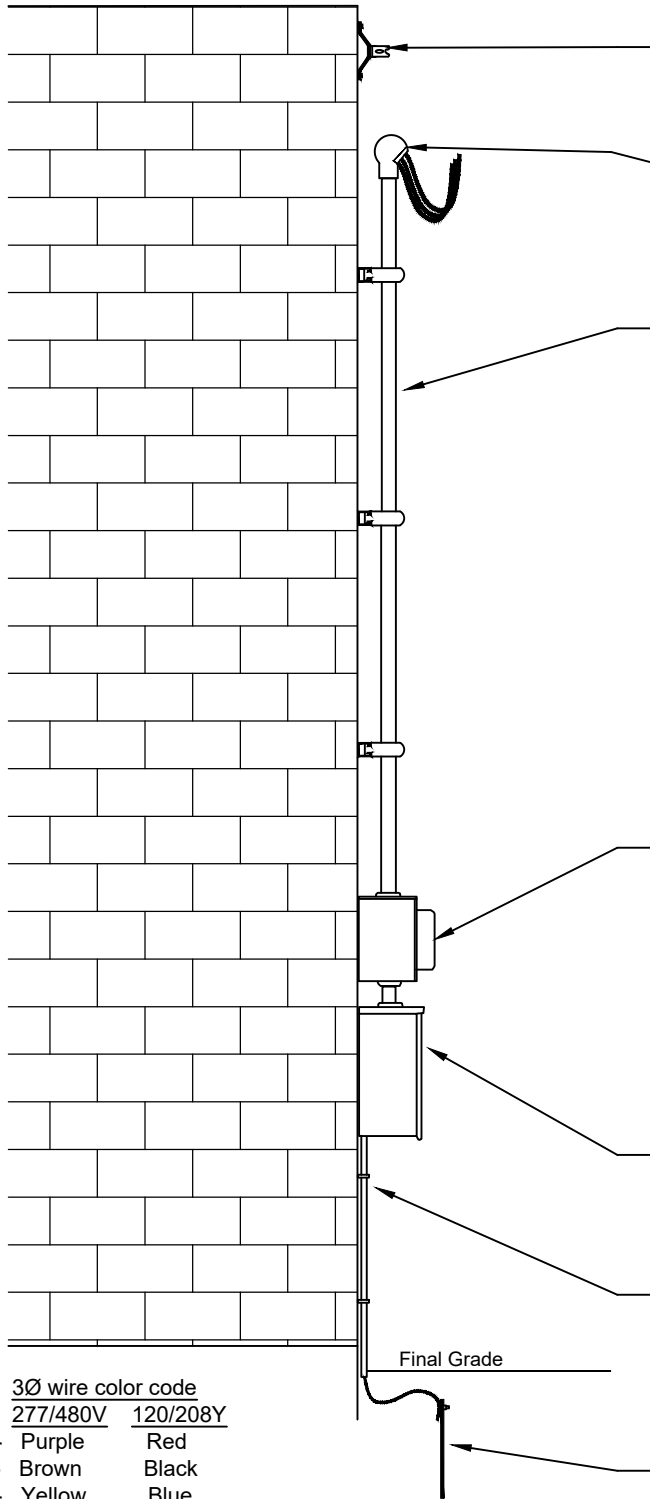


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OVERHEAD METERING ASSEMBLY MAST THROUGH ROOF
100 AMP & 200 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH-010

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade.

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of three evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Substitution must be approved by NBU.

Weatherproof main disconnect: Located below or adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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OVERHEAD METERING ASSEMBLY MAST ON BUILDING
100 AMP & 200 AMP

ISSUED

12/25

SCALE

NTS

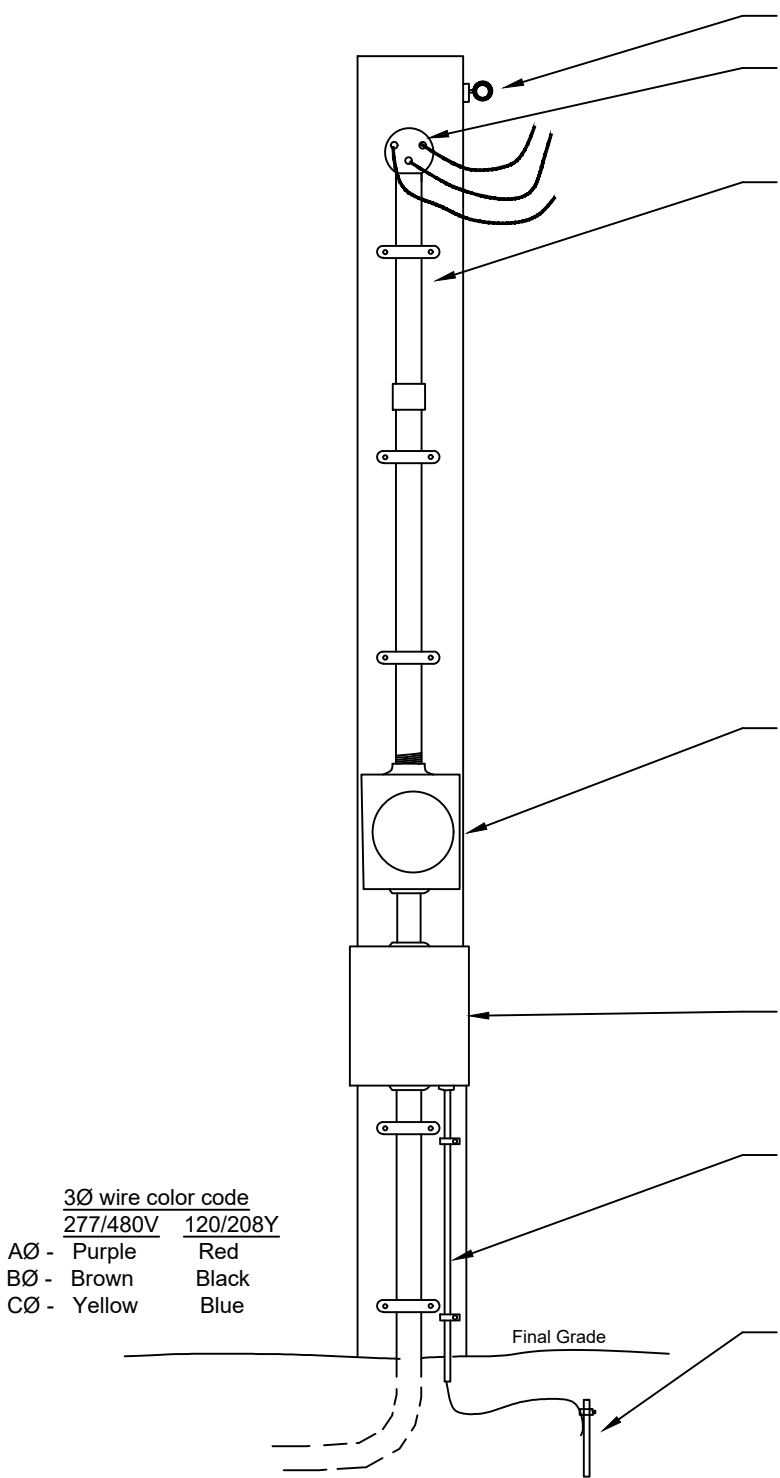
DRAWING NUMBER

EH-015

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Pole and point of attachment installed by NBU.

Weatherhead: Maximum 24" from top of pole.

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to pole with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket.

Position to face road or driveway, or as directed/approved by NBU.

Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp
Substitution must be approved by NBU.

Weatherproof main disconnect: Located below meter socket, with minimum 3' unobstructed clearance in front. Disconnect shall have permanent address marking.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to pole with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Final Grade



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OVERHEAD METERING ASSEMBLY ON POLE
100 AMP & 200 AMP

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EH-020

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Pole and point of attachment installed by NBU.

Weatherhead: Maximum 24" from top of pole.

Rigid metal conduit: GRC, IMC, or Rigid Aluminum secured to pole with a minimum of 4 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.

320 amp loop: 3" minimum, residential application only.

Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Conductors shall be un-spliced from weatherhead to meter socket, and then from meter socket to main disconnects. Neutral shall be marked with white tape in the meter socket and at the weatherhead. Enclosure bonding shall be in accordance with NEC 250.92.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. Secure at four points to two evenly spaced mounting channels. All electrical equipment must be secured at 4 points. Position to face road or driveway, or as directed/approved by NBU.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U2594 = 320amp Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two evenly spaced mounting channels. Disconnect shall have permanent address marking.

Meter rack: 2" GRC, or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

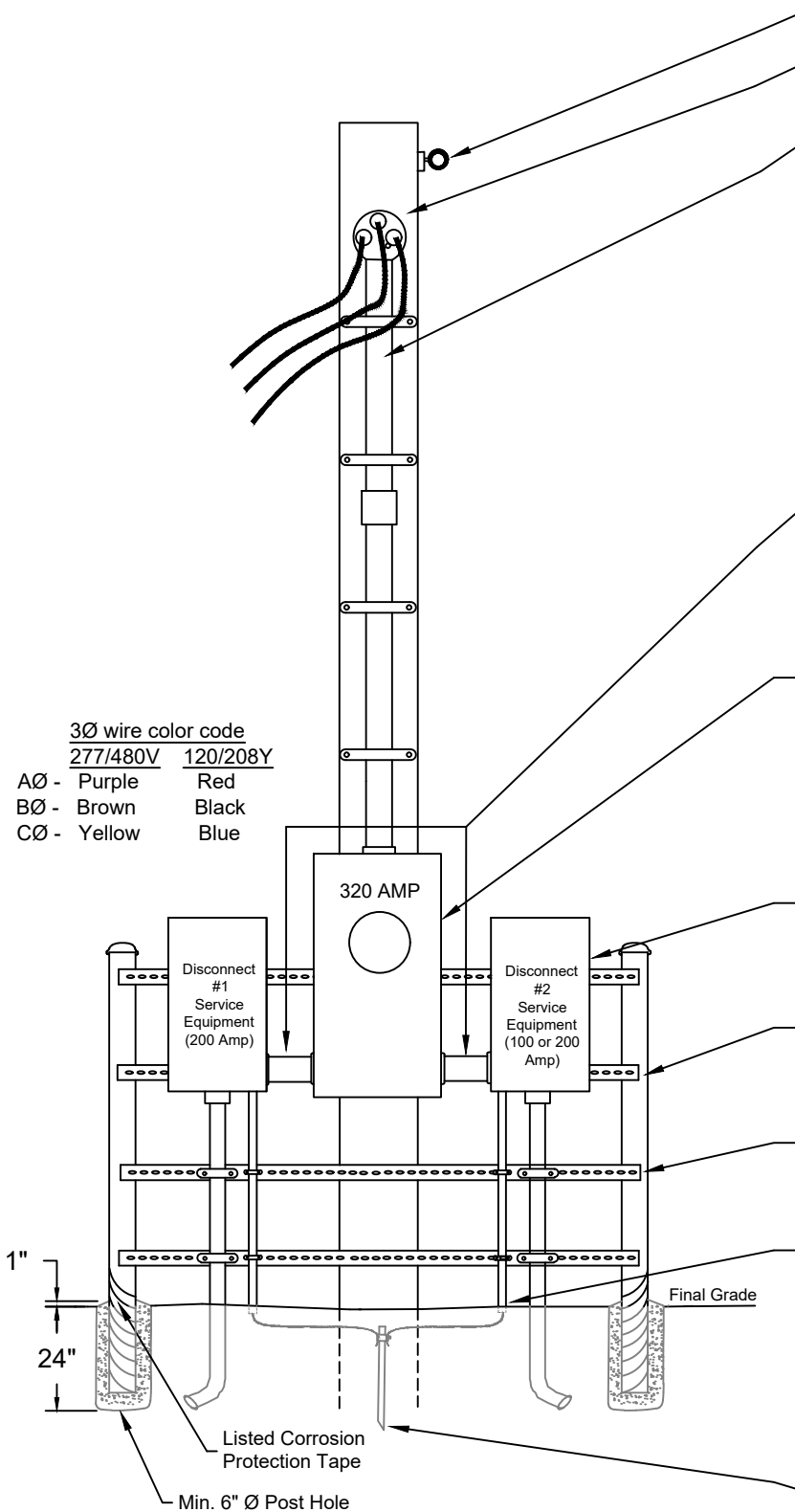
Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to two evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

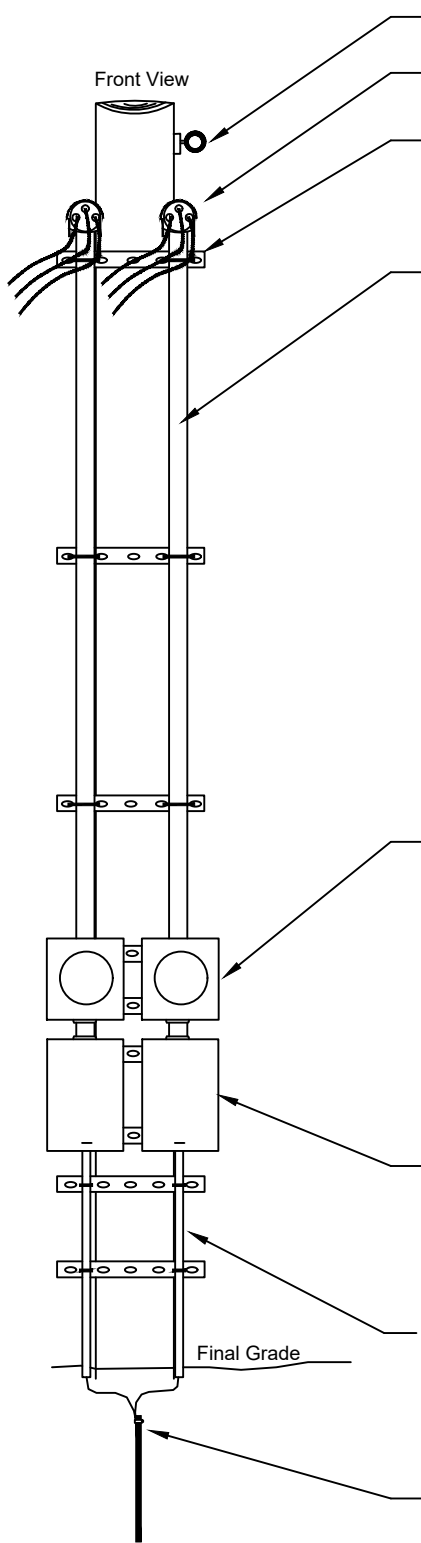


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OVERHEAD METERING ASSEMBLY ON POLE
320 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



- Pole and point of attachment installed by NBU.
- Weatherheads: Maximum 24" from top of pole.
- Galvanized mounting channel(s), Kendorf or equivalent, 1 1/2" x 1 1/2": Secure to pole with 3/8" galvanized lag screws.
- Rigid metal conduit: GRC, IMC, or rigid aluminum secured with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit, to a minimum of 3 evenly spaced mounting channels.
 - 100 amp loop: 1 1/4" minimum, residential application only.
 - 200 amp loop: 2" minimum, residential application only.
- Minimum 3' excess conductor length out of weatherhead. (NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)

Neutral shall be marked with white tape in meter socket and at the weatherhead. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

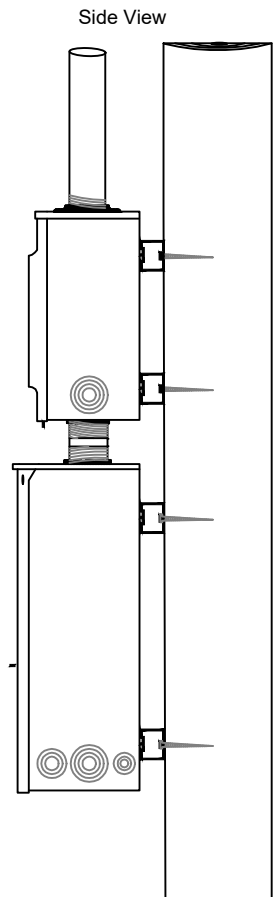
Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Position to face road or driveway, or as directed/approved by NBU. Allow 2" space between meter bases. Secure each socket to two mounting channels in four locations. Meter socket enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof main disconnect: Located below meter socket, with minimum 3' unobstructed clearance in front. Secure each disconnect in four locations to 2 evenly spaced mounting channels. Each disconnect device shall have permanent address marking.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC and continuing 2" below final ground grade. Secure each conduit to two evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and the PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.



3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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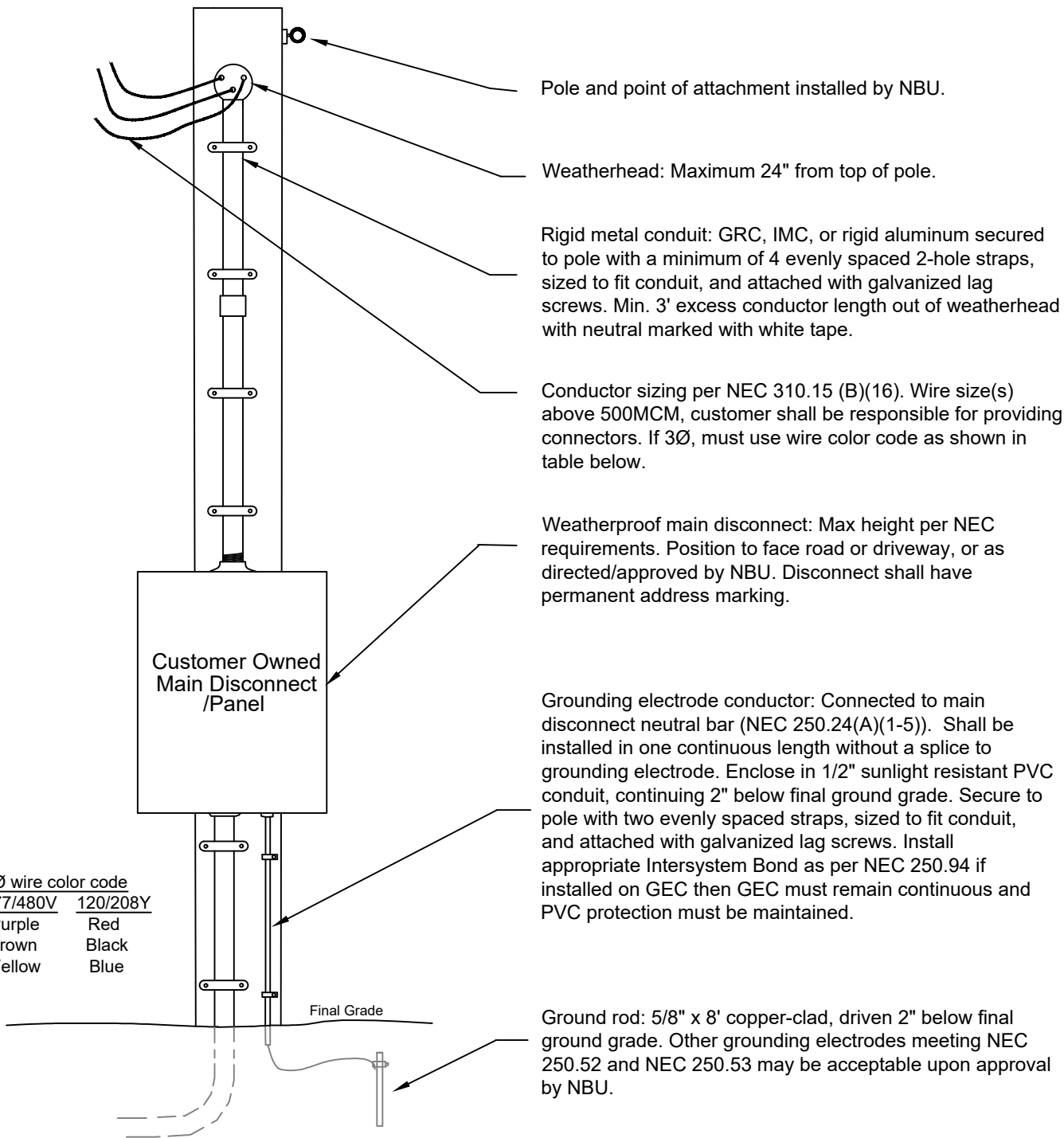
OVERHEAD METERING ASSEMBLY
 TWO METER LOOPS ON POLE

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH-030

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



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**OVERHEAD MAIN DISCONNECT/PANEL ASSEMBLY
 ON POLE (400AMPS AND ABOVE)**

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EH-035

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION(S) DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

Up to 6 meters: May be installed at one location without a main disconnect.

More than 6 meters: Installed at one location require a main disconnect furnished and installed by the customer.

Point of attachment, furnished and installed by customer, shall be properly sized and installed 17' above final ground grade recommended; minimum 12'-6".

Meter mounting equipment shall be commercially available horizontal gang or bussed gutter type. Proposed catalog numbers shall be submitted for approval. Any other design or equipment arrangement shall be submitted for approval. Meter mounting equipment shall be installed such that the center of the highest meter socket will be 4' minimum and 6' maximum from final ground grade.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Conductor to be sized according to NEC and local code requirements, and have minimum 3' excess length out of weatherhead with neutral marked with white tape. Conductor shall be enclosed in properly sized rigid metal conduit, secured to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws.

Properly sized ground wire shall be enclosed in sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Metal conduit acceptable, but must comply with NEC 250.92(b).

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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METERING ASSEMBLY MULTIPLE METERS

ISSUED

12/20

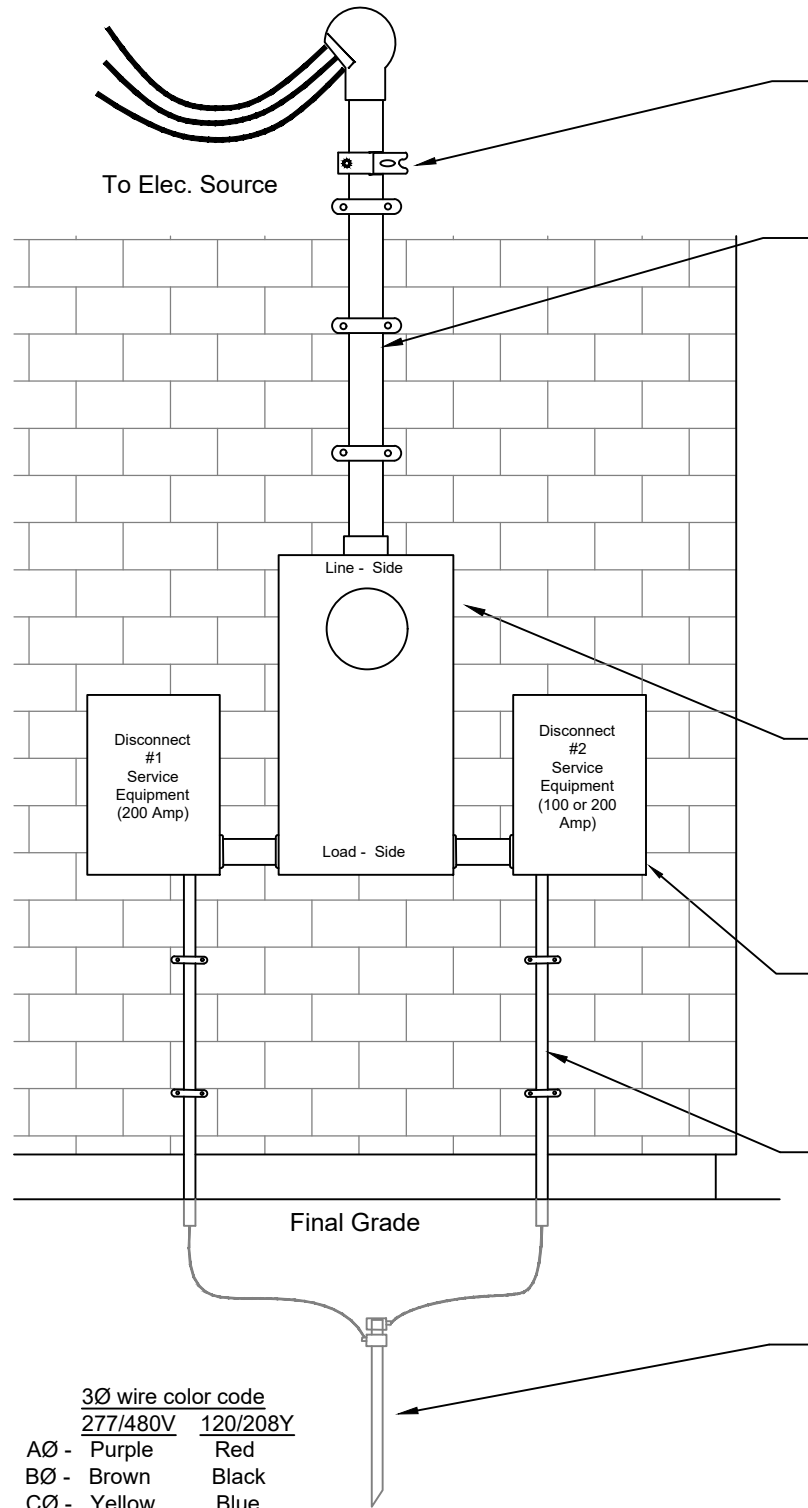
SCALE

NTS

DRAWING NUMBER

EH-045

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or Rigid Aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.
320 amp loop: 3" minimum, residential application only.
Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Conductors shall be un-spliced from weatherhead to meter socket, and then from meter socket to main disconnects. Neutral shall be marked with white tape in the meter socket and at the weatherhead. Enclosure bonding shall be in accordance with NEC 250.92.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U2594 = 320amp Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code

277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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OVERHEAD METERING ASSEMBLY MAST ON BUILDING
320 AMP

ISSUED

12/25

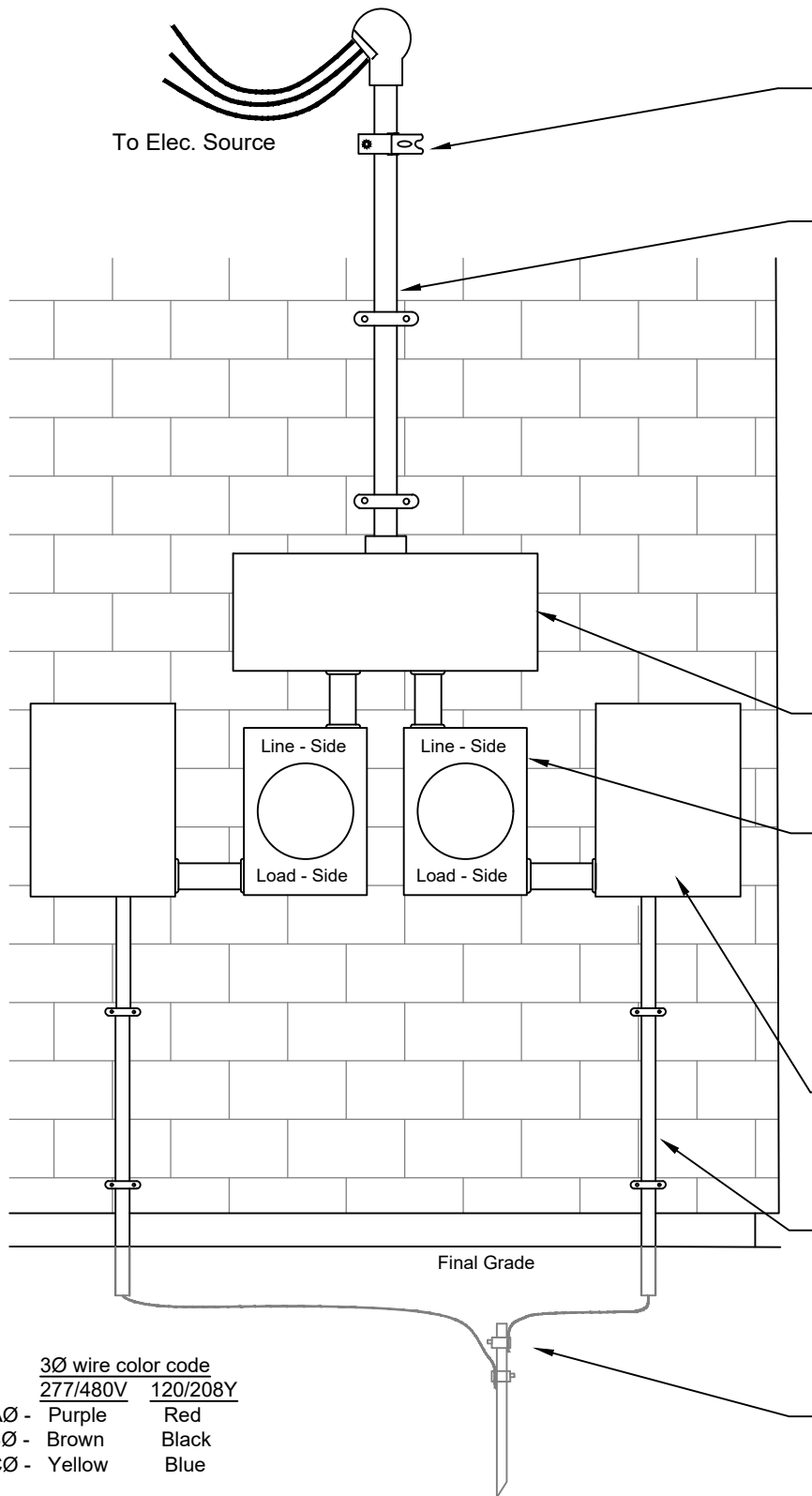
SCALE

NTS

DRAWING NUMBER

EH-050

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.
 100 amp loop: 1 1/4" minimum, residential application only.
 200 amp loop: 2" minimum, residential application only.
 Minimum 3' excess conductor length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Weatherproof Tap Enclosure: Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure shall meet requirements of NEC Article 314.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
 277/480V 120/208Y

AØ - Purple Red
 BØ - Brown Black
 CØ - Yellow Blue



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OVERHEAD METERING ASSEMBLY TWO METER LOOPS WITH TAP ENCLOSURE (OPTION 1)

ISSUED

12/25

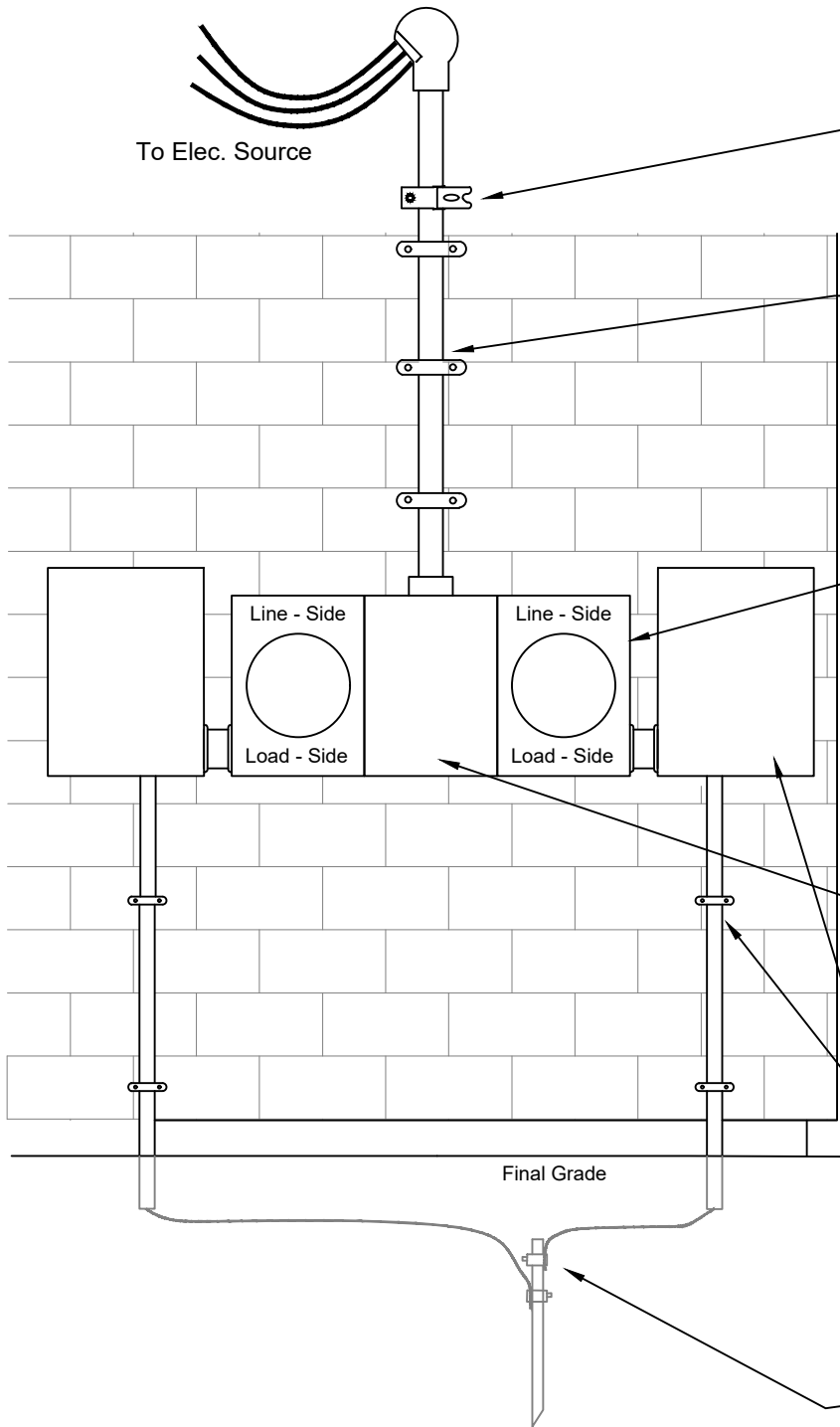
SCALE

NTS

DRAWING NUMBER

EH-055

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.
 100 amp loop: 1 1/4" minimum, residential application only.
 200 amp loop: 2" minimum, residential application only.
 Minimum 3' excess conductor length out of weatherhead.

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. (Milbank Model U1252 or similar)

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

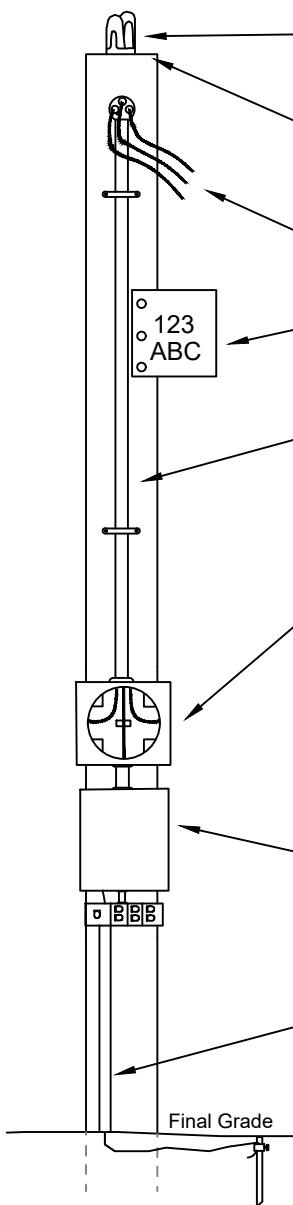


Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

OVERHEAD METERING ASSEMBLY TWO METER LOOPS WITH GANGED METER MODULE (OPTION 2)

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH-060

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: One pointer or eye type screw, Blackman SW 33 B or equivalent, furnished and installed by customer.

Treated 4" x 4" post: Minimum length 14'. Final height above final ground grade shall be 12'; minimum below ground of 2'. Four wood braces required, minimum 2" x 4", secured with 2" x 4" stakes or 3/4" metal rods, driven securely into ground. Braces shall not be attached to trees, other NBU poles, etc.

Drip loop: Minimum 10' from final ground grade.

Site Address: Marked with 3" lettering.

Rigid conduit: GRC, AL, IMC, EMT or Schedule 40 PVC. Secure to post with two evenly spaced straps, sized to fit conduit, and attached with lag screws.

100 amp loop: 1 1/4" minimum.

200 amp loop: 2" minimum.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade and positioned to face road or driveway, or as directed/approved by NBU.

Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

Conductors shall be installed by customer from weatherhead, with minimum 3' excess conductor length to meter socket and from meter socket to main disconnect per table below. Neutral to be marked with white tape in meter socket and at weatherhead.

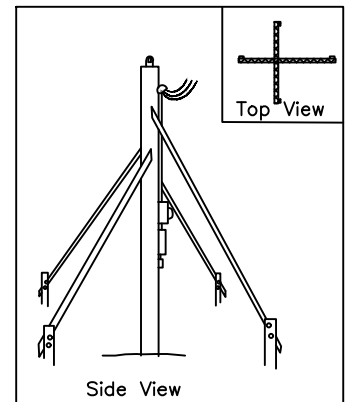
Approved disconnect device(s) in exterior enclosure. Receptacles shall be in weatherproof enclosure per NEC requirements. Circuit shall have minimum of one 240V, 20 amp GFCI receptacle.

Grounding electrode conductor: Minimum #6 soft drawn copper, 1/2" PVC, and Straps; 5/8" x 8' copper-clad ground rod, driven 2" below final ground grade, or a grounding plate at 30" below ground grade per NEC code. Shall be installed in one continuous length without a splice to grounding electrode. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.
Allowable Single Phase Dwelling Services per NEC 310.15 (B)(7)(1)



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OVERHEAD METERING ASSEMBLY
1Ø TEMPORARY SERVICE

ISSUED

12/25

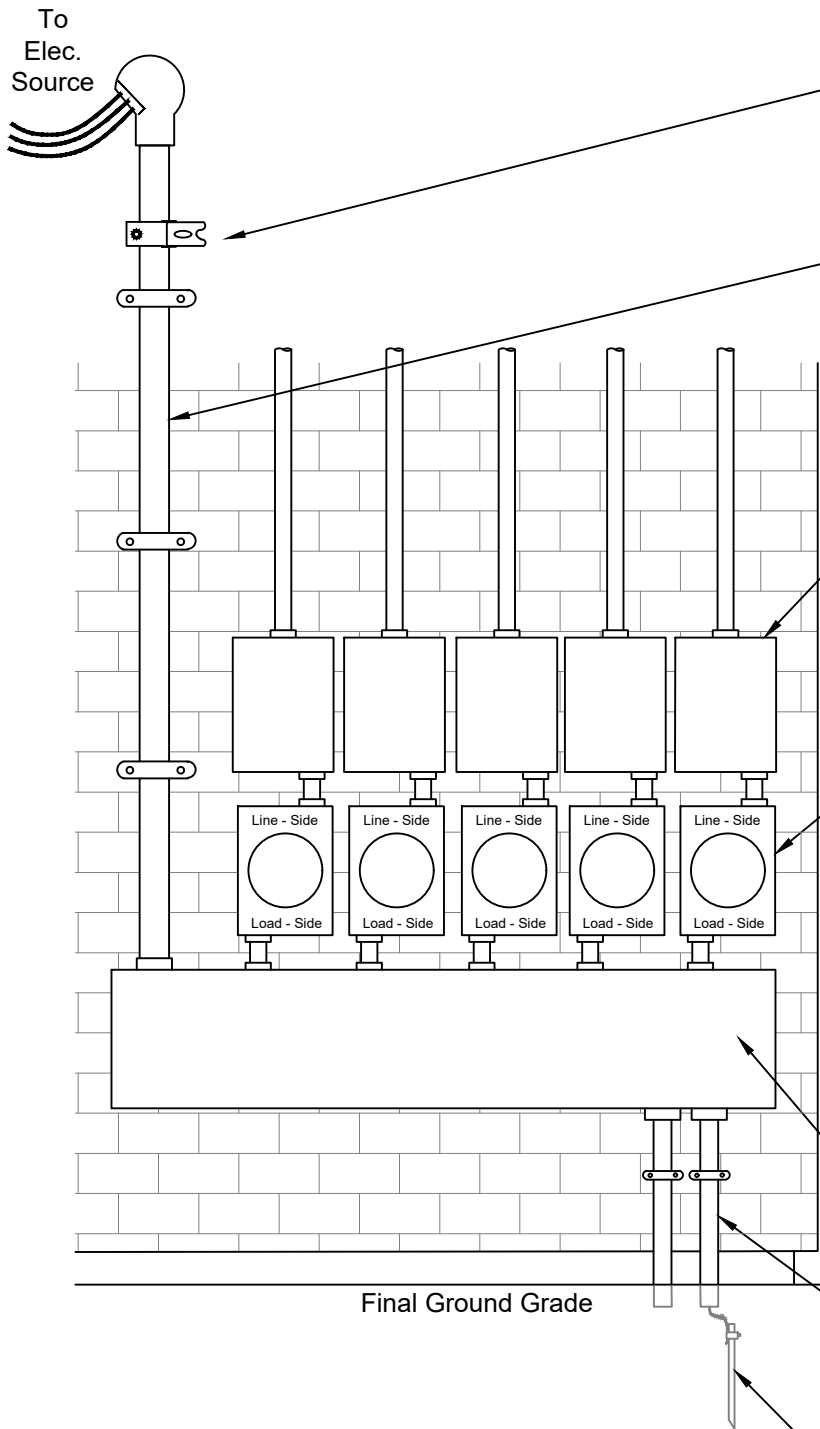
SCALE

NTS

DRAWING NUMBER

EH-110

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with gvanized lag screws. Min. 3' excess conductor length out of weatherhead with neutral marked with white tape. Conductor to be sized according to NEC and local code requirements.

Neutral to be marked with white tape in the meter socket and at the weatherhead.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

More than 6 meters installed at one location shall require a main disconnect furnished and installed by the customer.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket:
 Milbank # U9701 = 200amp
 Milbank # U2594 = 320amp
 Substitution must be approved by NBU.

Gutter must have a means to be lockable by NBU. (Gutter size shall be per NEC requirements)

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94. If installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multi-tenant buildings shall be clearly and durably marked.

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

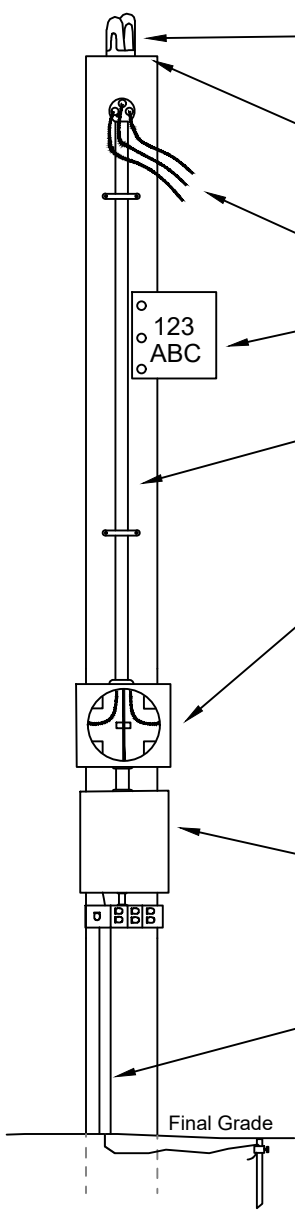


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 830-608-8951

OVERHEAD SERVICE - MULTIPLE OCCUPANCY BUILDING
 200 AMP - 320 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH- 115

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: One pointer or eye type screw, Blackman SW 33 B or equivalent, furnished and installed by customer.

Treated 4" x 4" post: Minimum length 14'. Final height above final ground grade shall be 12'; minimum below ground of 2'. Four wood braces required, minimum 2" x 4", secured with 2" x 4" stakes or 3/4" metal rods, driven securely into ground. Braces shall not be attached to trees, other NBU poles, etc.

Drip loop: Minimum 10' from final ground grade.

Site Address: Marked with 3" lettering.

Rigid conduit: GRC, AL, IMC, EMT or Schedule 40 PVC. Secure to post with two evenly spaced straps, sized to fit conduit, and attached with lag screws.

100 amp loop: 1 1/4" minimum.

200 amp loop: 2" minimum.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade and positioned to face road or driveway, or as directed/approved by NBU.

Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

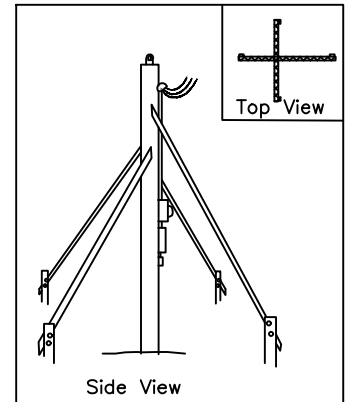
Conductors shall be installed by customer from weatherhead, with minimum 3' excess conductor length to meter socket and from meter socket to main disconnect per NEC. Neutral to be marked with white tape in meter socket and at weatherhead. Must use wire color code as shown in table below.

Approved disconnect device(s) in exterior enclosure. Receptacles shall be in weatherproof enclosure per NEC requirements. Circuit shall have minimum of one 20 amp GFCI receptacle.

Grounding electrode conductor: Minimum #6 soft drawn copper, 1/2" PVC, and Straps; 5/8" x 8' copper-clad ground rod, driven 2" below final ground grade, or a grounding plate at 30" below ground grade per NEC code. Shall be installed in one continuous length without a splice to grounding electrode. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø Meter Socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank #U9701 200amp.

Substitution must be approved by NBU.



3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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OVERHEAD METERING ASSEMBLY
3Ø TEMPORARY SERVICE

ISSUED

12/25

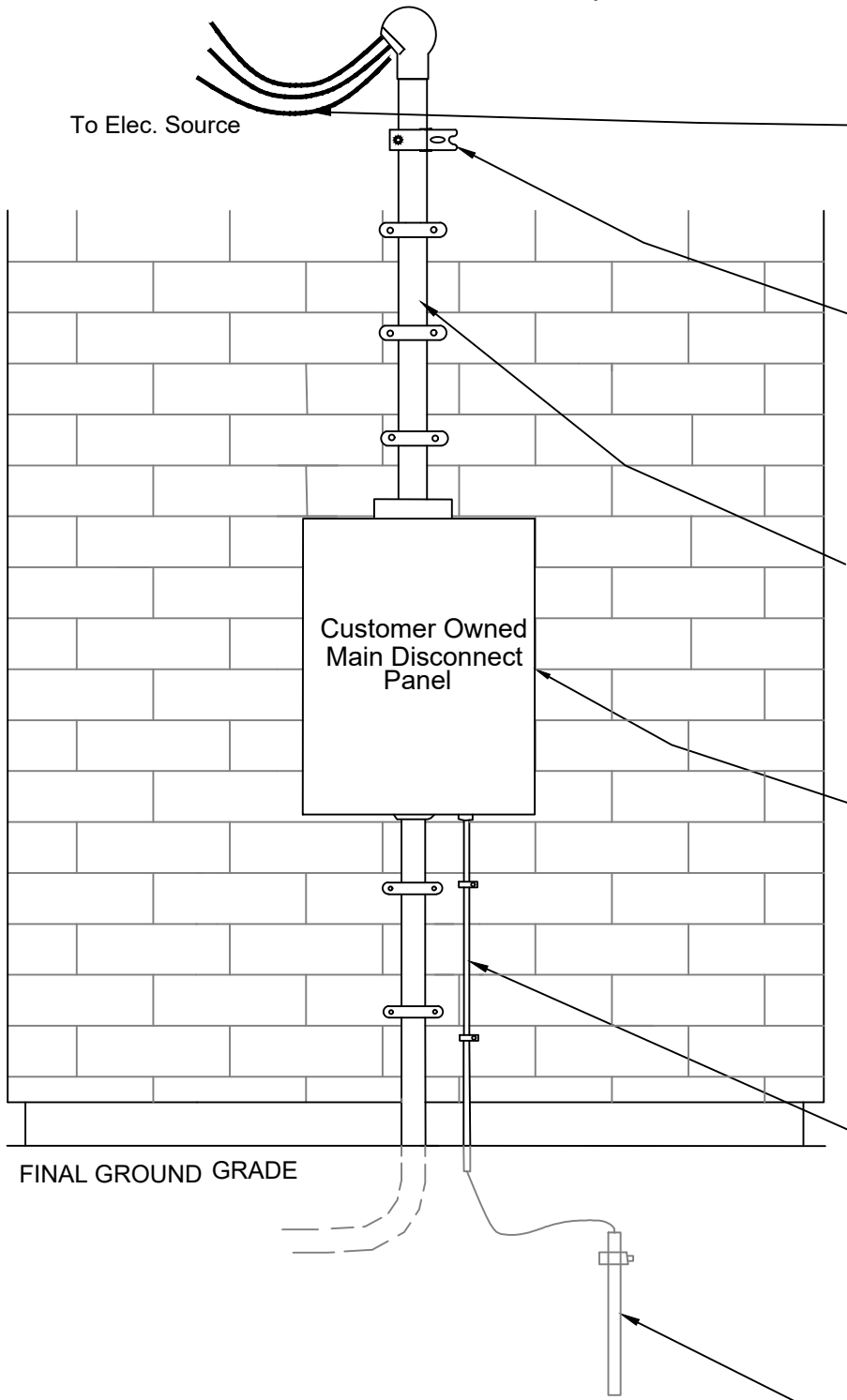
SCALE

NTS

DRAWING NUMBER

EH-120

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Conductor sizing per NEC 310.15 (B) (16). Wire size(s) above 500MCM, customer shall be responsible for providing connectors. If 3Ø, must use wire color code as shown in table below.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment eye part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Min. 3' excess conductor length out of weatherhead with neutral marked with white tape.

Weatherproof main disconnect: Max height per NEC requirements. All electrical equipment must be secured at 4 points.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 evenly spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
 277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

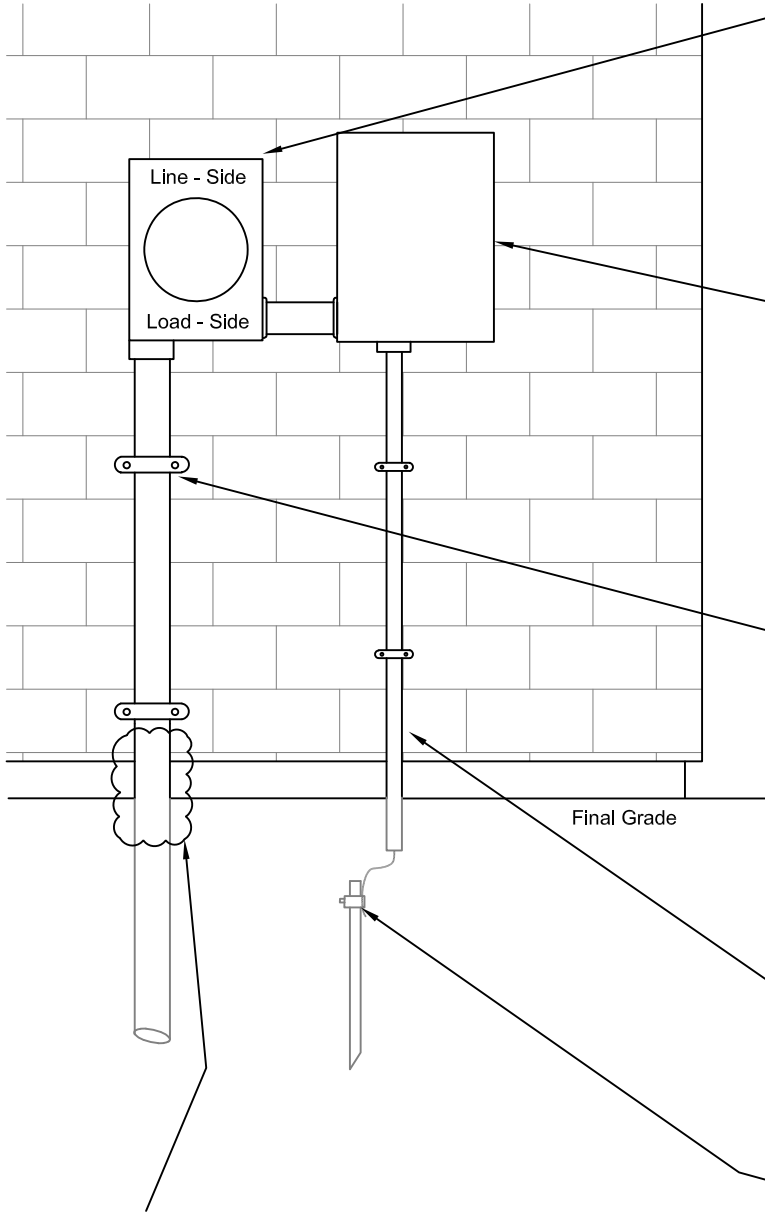


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OVERHEAD MAIN DISCONNECT ASSEMBLY ON WALL

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EH-130

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.
NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. House panel may be located adjacent to main disconnect or inside building (not inside a closet). All electrical equipment must be secured at 4 points.

Neutral shall be marked with white tape in meter socket.

Conduit: **To be sized by NBU.** Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. When required, a reducer supplied by NBU shall be installed at the meter socket. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Install Carlon expansion fitting:
Catalog No. E945L: Other options may be considered but must be approved by NBU prior to installation.

3Ø wire color code

277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

SERVICE MAIN RATING	WIRE TYPE	
	ALUMINUM 75°C	COPPER 75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services NEC 310.15 (B)(7)(1)
Note: Other service rating shall be submitted to NBU Electric Engineering for approval.

Install below first strap



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UNDERGROUND METERING ASSEMBLY SERVICE ON BUILDING
100 AMP - 200 AMP

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-010

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

NBU Approved Meter Pedestals:

Milbank U5136 - 0 - 100 = 100 AMP

Milbank U5136 - 0 - 200 = 200 AMP.

Other manufacturers may be considered, but must be approved by NBU. Meter height shall be 50" above final ground grade. Meter shall face the street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property.

Meter shall have a minimum 3' unobstructed clearance in front.

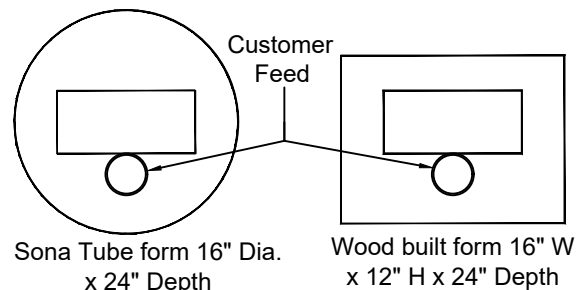
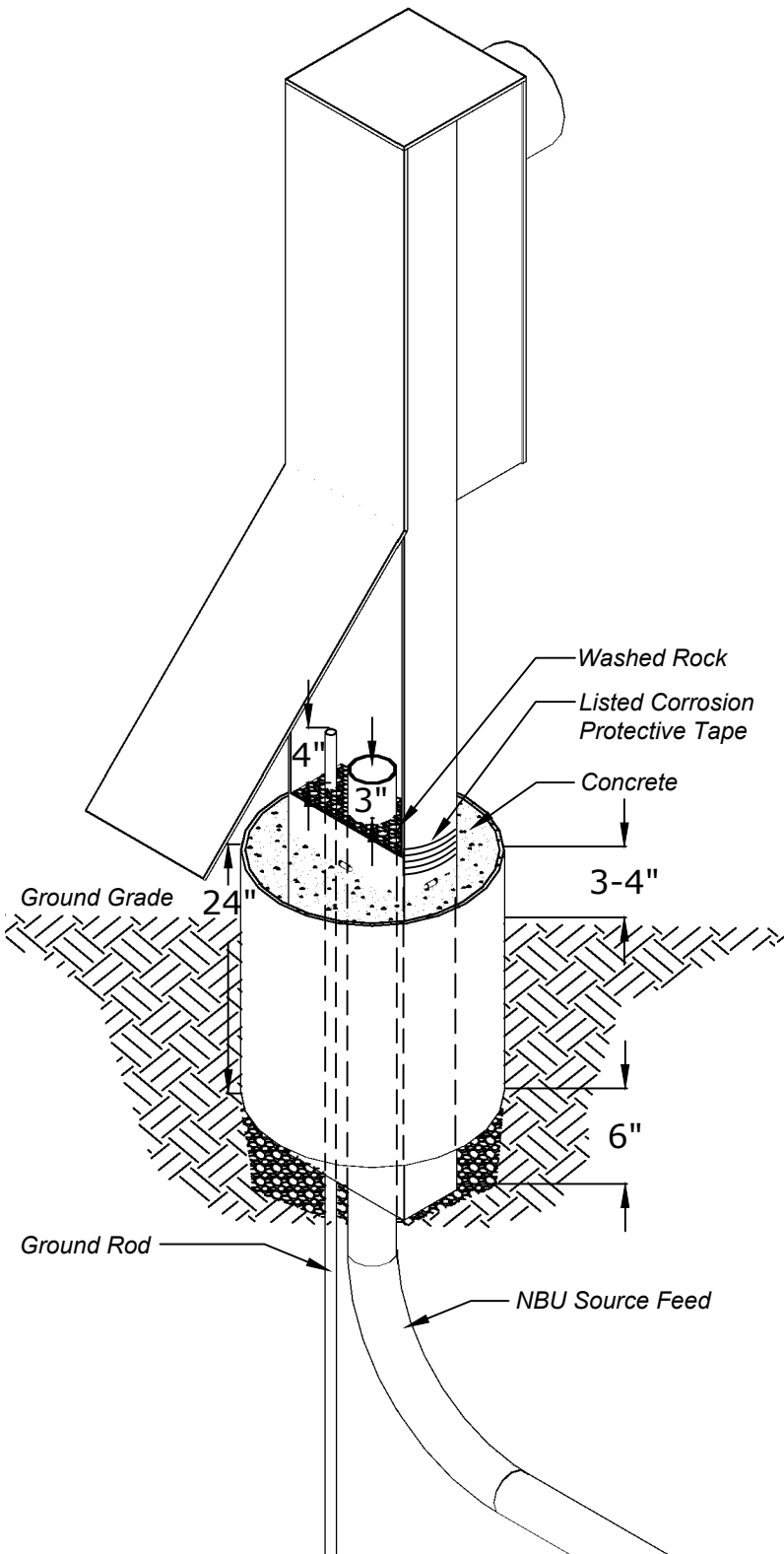
Conduit: **To be sized by NBU.** The source feed conduit will be inside enclosure 3" above opening. Install underground conduit and pullstring according to specification EU-910. Customer shall connect to NBU installed conduit stub. Schedule with NBU if source feeds from energized equipment.

Grounding electrode conductor: Connected to neutral lug or neutral bar on the customer side of the enclosure per NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to the grounding electrode and enclosed in PVC conduit.

Ground rod: 5/8" x 8' copper-clad, installed inside enclosure 4" above opening. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Forms: 16" Dia. Sona Tube or 16" W x 12" H wood form. Protective tar tape, polywrap tape or rubber spray paint from 2" above encased concrete to the bottom of enclosure. All forms must be removed after concrete poured.

Fill inside cavity of pedestal with washed rock up to ground grade to restrict conduit movement.



Pedestal centered inside form.



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 PO Box 310289
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UNDERGROUND METERING ASSEMBLY SERVICE PEDESTAL
 100 AMP and 200 AMP

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-015

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

NBU Approved Meter Pedestals:
 Milbank U5059-X-2/200 = 320 AMP*
 *EPI Enclosures NEMA 3R Pedestal

Other manufacturers may be considered, but must be approved by NBU. Meter height shall be 36" above final ground grade. Meter shall face the street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property.

Meter shall have a minimum 3' unobstructed clearance in front.

Conduit: **To be sized by NBU.** The source feed conduit will be outside of the enclosure. Install underground conduit and pullstring according to specification EU-910. Customer shall connect to NBU installed conduit stub. Schedule with NBU if source feeds from energized equipment.

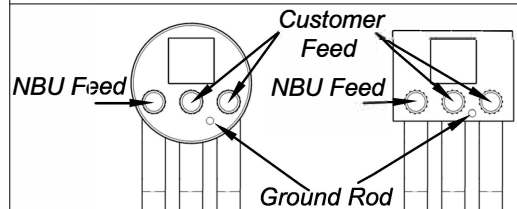
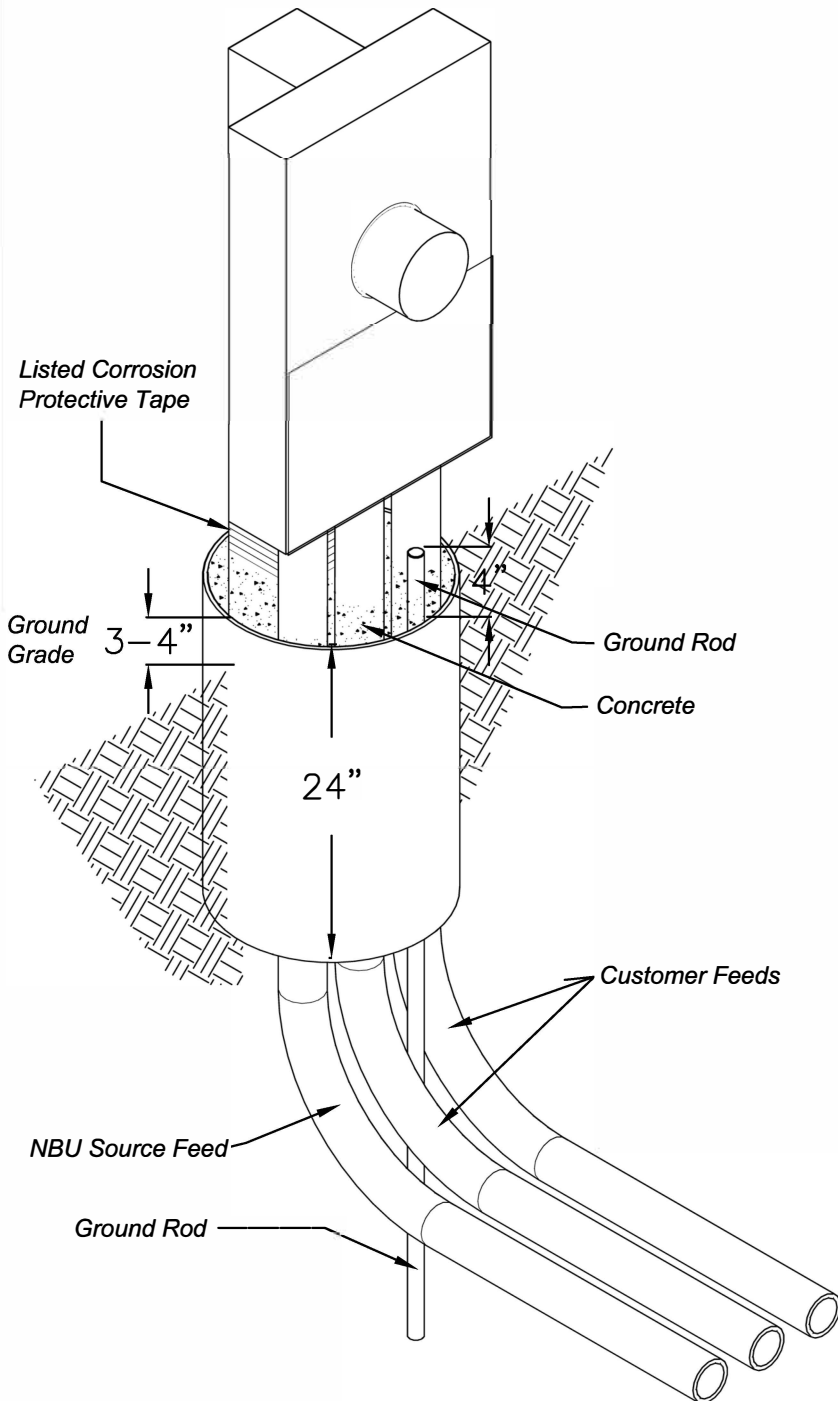
Grounding electrode conductor: Connected to neutral lug or neutral bar on the customer side of the enclosure per (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to the grounding electrode and enclosed in sunlight resistant PVC conduit.

Ground rod: 5/8" x 8' copper-clad, installed outside the enclosure 4" above the concrete level. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Forms: 16" Dia. Sona Tube or 16" W x 12" H wood form. Protective tar tape, polywrap tape or rubber spray paint from 2" above encased concrete to the bottom of enclosure. All forms must be removed after concrete poured.

Pedestal centered inside form.

Sona Tube form 16" Dia. x 24" Depth Wood built form 16" W x 12" H x 24" Depth



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UNDERGROUND METERING ASSEMBLY SERVICE PEDESTAL
 320 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-016

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter stand: 2" GRC, or IMC, continuing a minimum of **30 inches** below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel, Kendorf or equivalent, 1-1/2" x 1-1/2": Welded or bolted to stand with galvanized bolts.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to two evenly spaced mounting channels. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

Neutral shall be marked with white tape in meter socket.

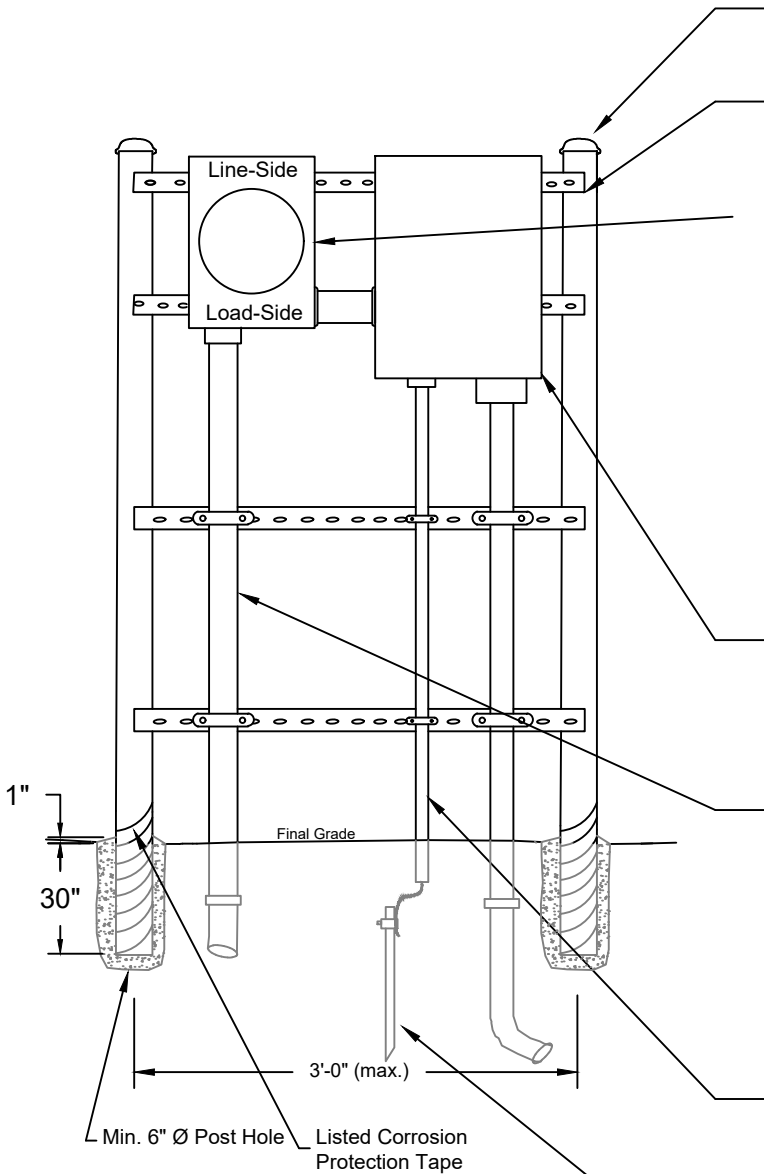
3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two evenly spaced mounting channels. Meter shall face street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property.

Conduit: **To be sized by NBU.** Install conduit to meter socket bottom knockout with greatest distance from main disconnect. Secure conduit to 2 evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit. When required, a reducer supplied by NBU shall be installed at the meter socket. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Install underground conduit and pull string according to NBU specification EU-910. Connect to NBU installed conduit stub. Schedule with NBU if source feeds from energized equipment.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secure to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. If required, install appropriate Intersystem Bond as per NEC 250.94 if installed one the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.



SERVICE MAIN RATING	WIRE TYPE	
	ALUMINUM 75°C	COPPER 75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.
Allowable single phase dwelling services, NEC 310-15 (B)(7)(1)

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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830-608-8951

UNDERGROUND METERING ASSEMBLY SERVICE ON RACK
100AMP - 200 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-020

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to two evenly spaced mounting channels.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U2594 = 320amp Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two evenly spaced mounting channels. Meter shall face street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property.

Meter stand: 2" GRC, or IMC, continuing a minimum of 30 inches below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

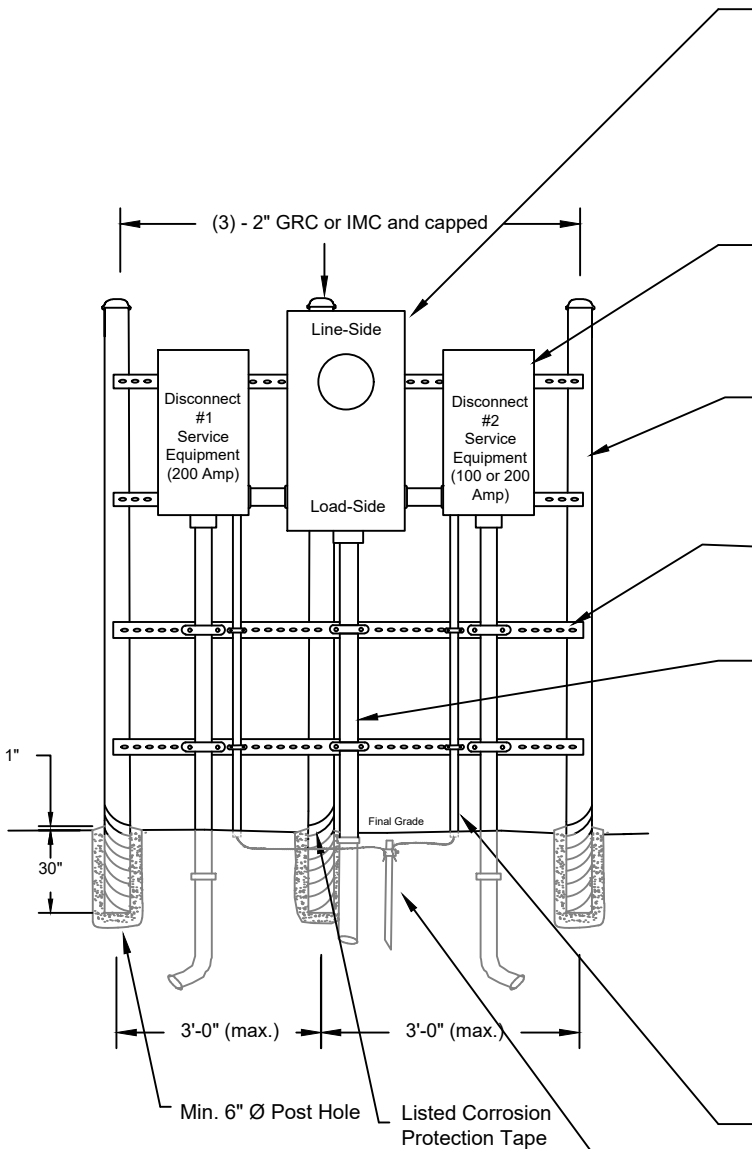
Galvanized mounting channel(s): Kendorf or equivalent, 1-1/2" x 1-1/2", welded or bolted to stand with galvanized bolts.

Conduit: **To be sized by NBU.** Secure conduit to 2 evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.

Customer to install conductors from disconnect to meter socket per NEC specifications. Neutral to be marked with white tape in meter socket. Conductors to comply with 310-16 N.E.C. from load side of meter socket to line side of disconnects. Minimum #6 copper bonding shall be provided where necessary (all non-current carrying parts) to ensure electrical continuity.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to 2 evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 or NEC 250.53 may be acceptable upon approval by NBU.



(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.

Allowable single phase dwelling services, NEC Table 310-15 (B)(7)(1)

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



Electric Engineering
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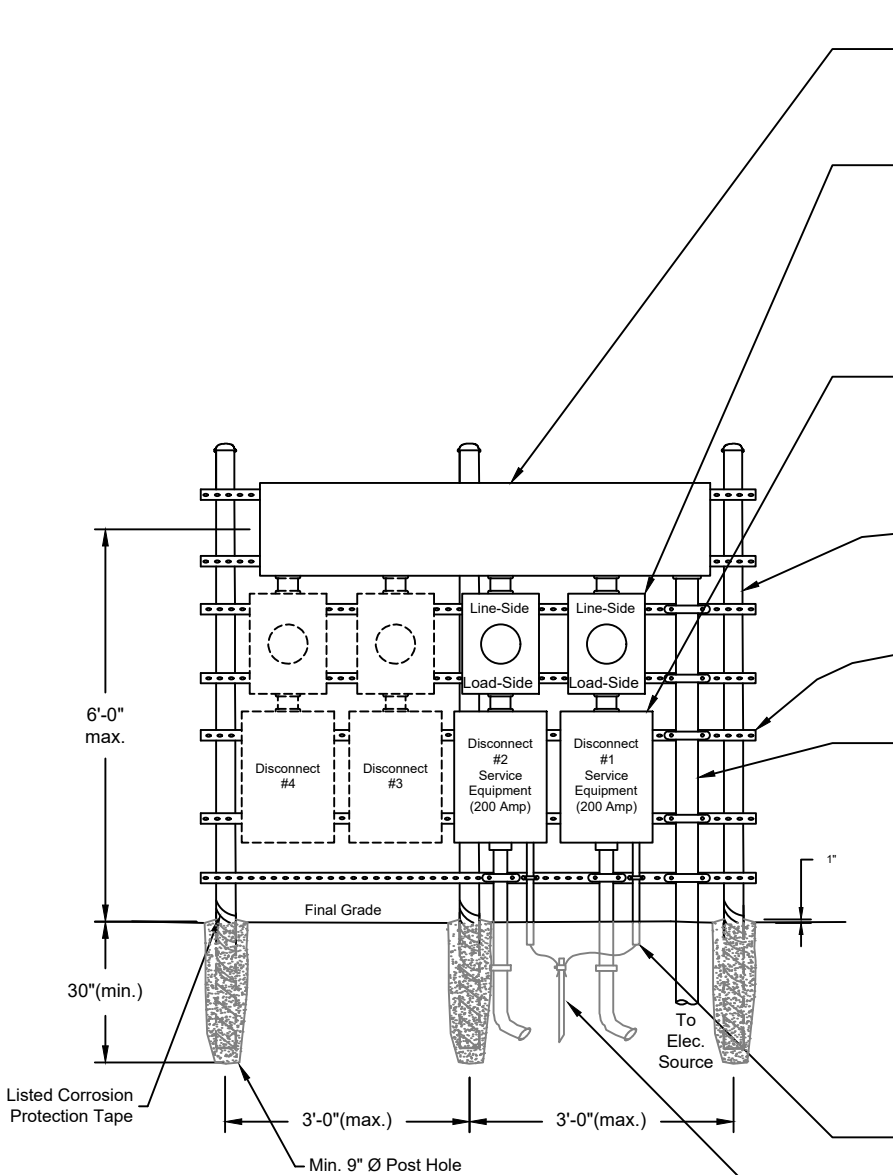
UNDERGROUND METERING ASSEMBLY SERVICE
ON RACK
320 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Gutter: Minimum size of 12"D x 12"H x L for residential and for commercial to be approved by NBU. It must have a means to lock or secure by NBU. Secure at four points to 2 evenly spaced mounting channels.

Meter socket: 3'-0" minimum and 5'-0" maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to 2 evenly spaced mounting channels.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below. NBU approved 3Ø meter socket: Milbank # U9701 = 200amp, Milbank # U2594 = 320amp. Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to 2 evenly spaced mounting channels. Meter shall face street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property.

Meter stand: (3)-3" GRC, or IMC, continuing a minimum of **30 inches** below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, post shall be set in concrete, 3,000 psi min. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel(s): Kendorf or equivalent, 1-1/2" x 1-1/2", welded or bolted to stand with galvanized bolts.

Conduit and Conductor: **To be sized by NBU.** Secure conduit to four evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Underground conduit installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.

Customer to install conductors from gutter to meter socket and meter socket to disconnect per NEC specifications. Neutral to be marked with white tape in meter socket. Conductors to comply with 310-16 N.E.C. from load side of meter socket to line side of disconnects.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to mounting channel with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 or NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code
277/480V 120/208Y

AØ - Purple Red
BØ - Brown Black
CØ - Yellow Blue

UNDERGROUND MULTIPLE METER LOOPS ON A RACK WITH TAP ENCLOSURE
200 AMP - 320 AMP

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-030



Electric Engineering
355 FM 306
PO Box 310289
New Braunfels, TX 78131-0289
830-608-8951

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

Up to 6 meters: May be installed at one location without a main disconnect.

More than 6 meters: Installed at one location require a main disconnect furnished and installed by the customer.

Meter mounting equipment shall be commercially available horizontal gang or bussed gutter type. Proposed catalog numbers and complete description shall be submitted for approval. Any other design or equipment arrangement shall be submitted for approval. Meter mounting equipment shall be installed such that the center of the highest meter will be 4' minimum and 6' maximum from final ground grade.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Conductor to be sized according to NEC and local code requirements. Conductor shall be enclosed in properly sized conduit, secured to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2 for electrical use.

Underground conduit: Installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer.

Where a separate conduit is required for the ground wire, a properly sized ground wire shall be enclosed in sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Metal conduit acceptable, but must comply with NEC 250.92(b).

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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PO Box 310289
New Braunfels, TX 78131-0289
830-608-8951

METERING ASSEMBLY MULTIPLE METERS
UNDERGROUND SERVICES

ISSUED

12/20

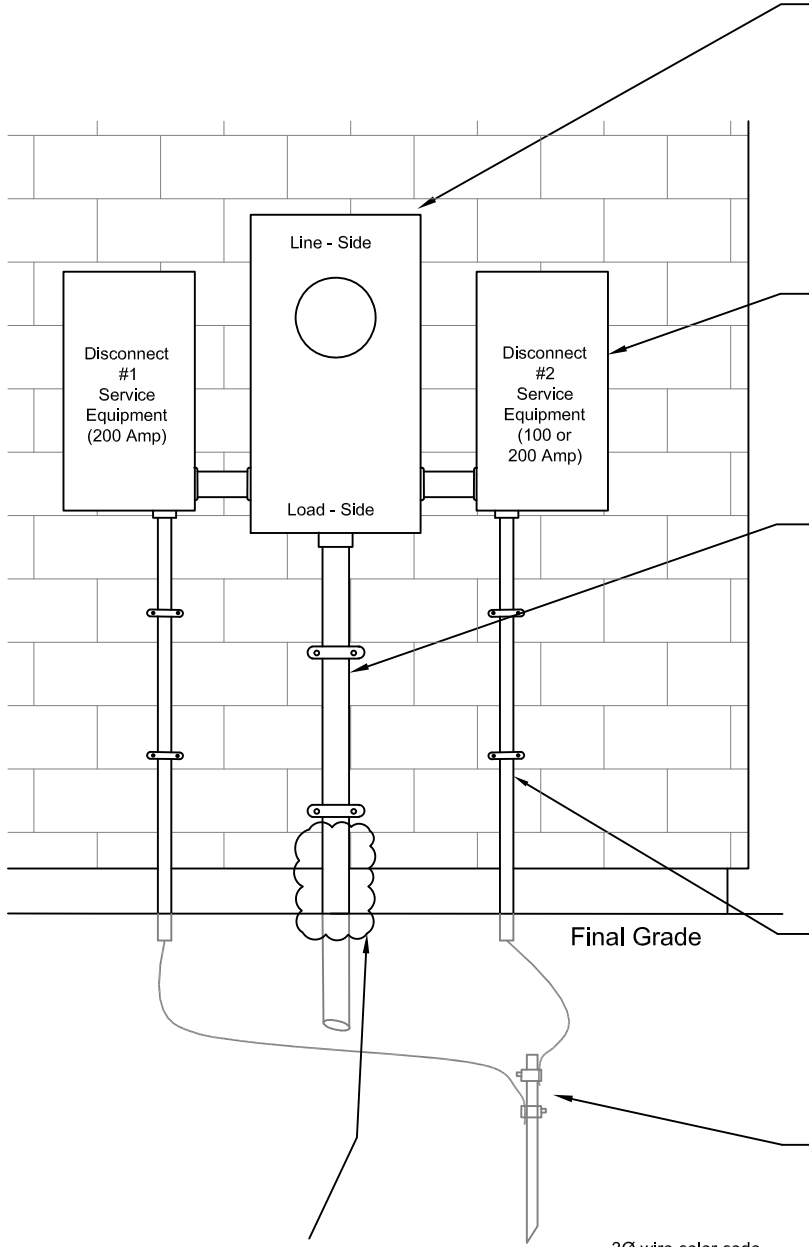
SCALE

NTS

DRAWING NUMBER

EU-045

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp
 Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Neutral to be marked with white tape in meter socket.

Conduit: **To be sized by NBU.** Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24 (A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 or NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code

277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

(NEC Table 310-16)

WIRE TYPE	ALUMINUM	COPPER
SERVICE MAIN		
RATING	75°C	75°C
320 Amp	500	350

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.
 Allowable single phase dwelling services, NEC Table 310-15 (B)(7)(1)

Install Carlon expansion fitting:
 Catalog No. E945L: Other options
 may be considered but must be
 approved by NBU prior to installation.

Install below first strap



Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

UNDERGROUND METERING ASSEMBLY
 SERVICE ON BUILDING
 320 AMP

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-050

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

Neutral conductors to be marked with white tape inside all enclosures.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp
 Substitution must be approved by NBU.

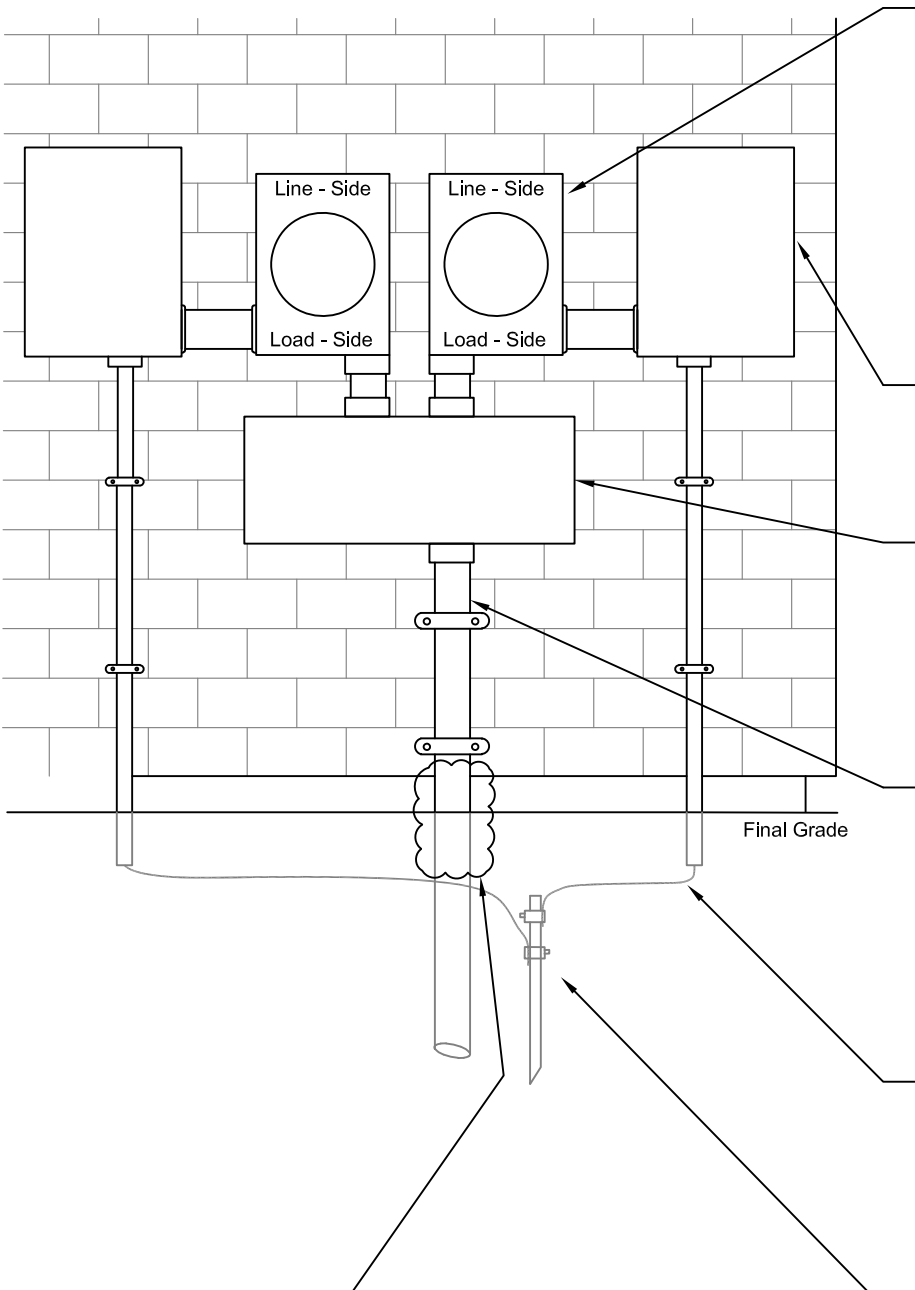
Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Weatherproof Tap Enclosure: Must open toward the front. Opening height must be at least two times the depth dimension. Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. Enclosure shall meet requirements of NEC Article 314.

Conduit: **To be sized by NBU.** Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 or NEC 250.53 may be acceptable upon approval by NBU.



Install Carlon expansion fitting:
 Catalog No. E945L: Other options
 may be considered but must be
 approved by NBU prior to installation.

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Install below first strap



Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

UNDERGROUND METERING ASSEMBLY TWO METER LOOPS
 WITH TAP ENCLOSURE (OPTION 1)

ISSUED

05/26

SCALE

NTS

DRAWING NUMBER

EU-055

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar)

Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

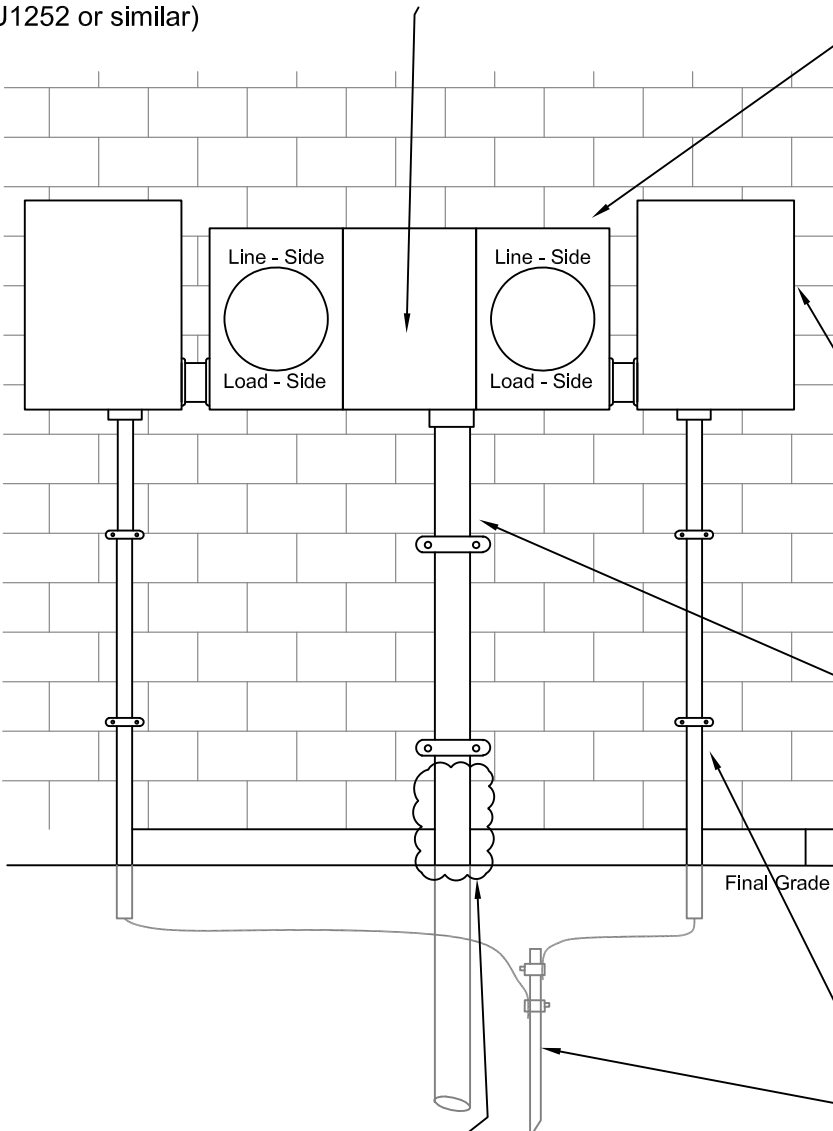
Neutral conductors to be marked with white tape inside all enclosures.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.
 NBU approved 3Ø meter socket: Milbank # U9701 = 200amp
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp
 Substitution must be approved by NBU.

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Conduit: **To be sized by NBU.** Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Connected to main disconnect neutral bar (NEC 250.24(A)(1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.



3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Install Carlon expansion fitting:
 Catalog No. E945L: Other options
 may be considered but must be
 approved by NBU prior to installation.

Install below first strap



Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

UNDERGROUND METERING ASSEMBLY TWO METER LOOPS WITH GANGED METER MODULE (OPTION 2)

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-060

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

This meter stand is used when metering PT's and CT's are located within the secondary compartment of the padmount transformer.

Meter assembly stand must be positioned 4' to the side of the transformer pad. Meter **CANNOT** be located in front of the transformer pad due to hot stick access requirements.

Meter stand: 2" GRC or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

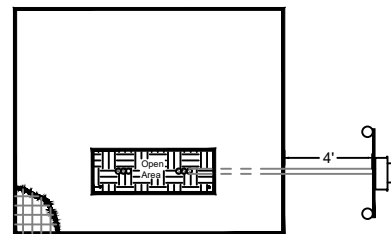
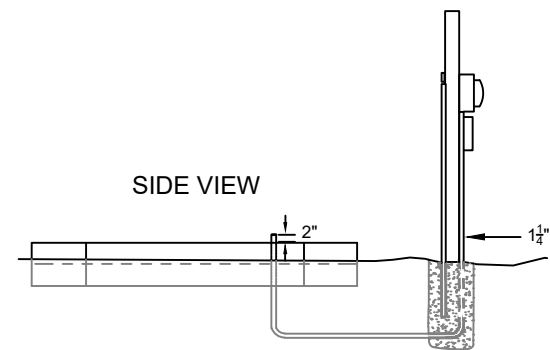
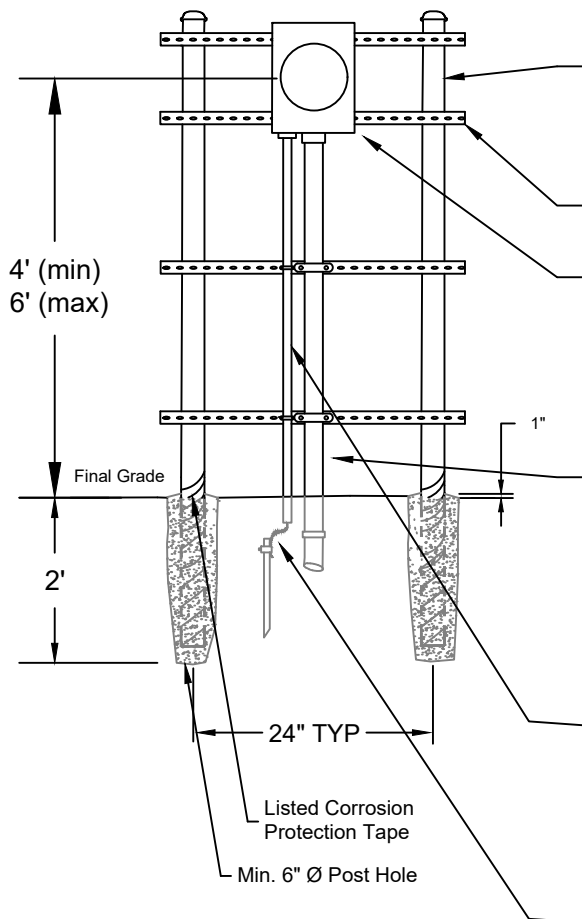
Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. Secure at four points to two evenly spaced mounting channels.

All exposed conduit to be 1-1/4" sunlight resistant Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure conduit to 2 evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Pull string to be installed in conduit by customer. Underground conduit installed according to NBU specification EU-910.

Grounding electrode conductor: Connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94. If installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

CT Meter socket may be mounted on a structure exterior, within 20 ft. to the front of the transformer, and with prior approval from NBU.



FRONT VIEW



Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

UNDERGROUND METERING ASSEMBLY
 CT RACK

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-070

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

This meter stand is used when metering PT's and CT's are located within the secondary compartment of the padmount transformer.

Meter stand: (2) - 2" GRC or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

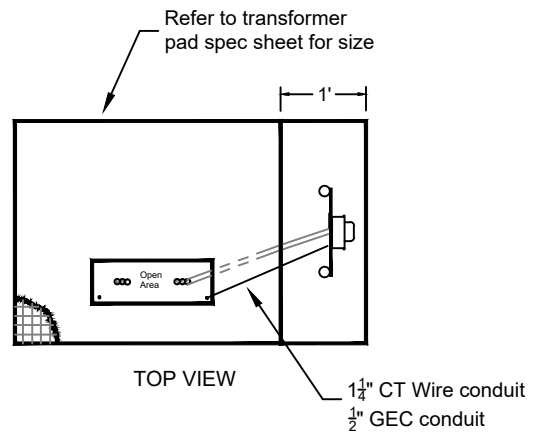
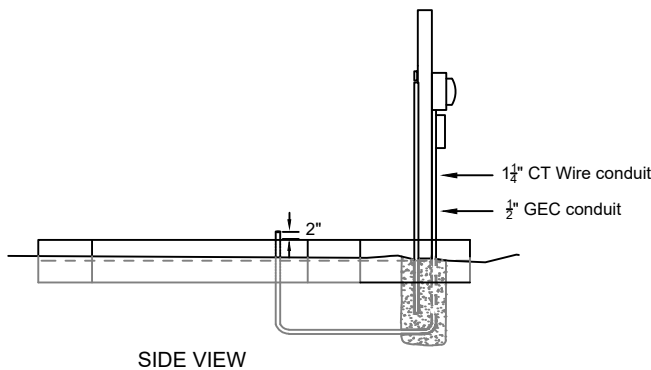
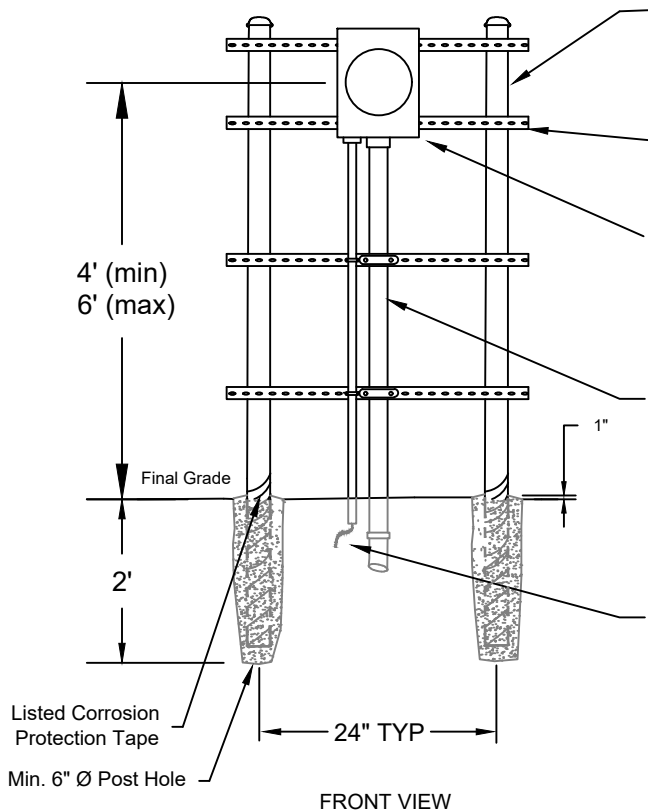
Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. Secure at four points to 2 evenly spaced mounting channels.

All exposed conduit to be 1-1/4" sunlight resistant Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure conduit to 2 evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Pull string to be installed in conduit by customer. Underground conduit installed according to NBU specification EU-910.

Grounding electrode conductor: Connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A) (1-5)), Shall be installed in one continuous length without a splice. Enclose in 1/2" sunlight resistant PVC conduit, continuing to transformer ground rod 24" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94. If installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Note: Final location of CT rack could be relocated at the discretion of NBU Electric Inspector.



Electric Engineering
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New Braunfels, TX 78131-0289
830-608-8951

UNDERGROUND METERING ASSEMBLY
CT RACK BUILT IN WITH TRANSFORMER PAD

ISSUED

12/25

SCALE

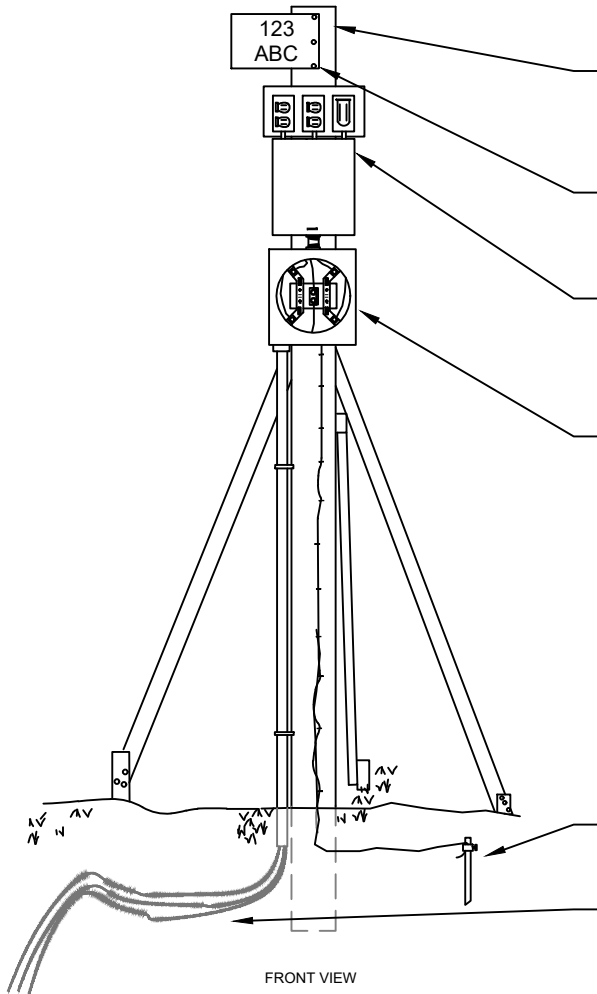
NTS

DRAWING NUMBER

EU-075

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Treated 4" x 4" post: Height above final ground grade shall be 7' and a minimum below ground of 2'. Three wood braces required, minimum 2" x 4", secured with 2" x 4" stakes driven securely into ground. Braces shall not be attached to trees or other structures.
Temp should be placed towards front corner of transformer or secondary box to avoid stub outs. (See detail below).

Site Address: Marked on 1' x 1' exterior (painted) or marine plywood.

Approved disconnect device(s) in exterior enclosure. Receptacles shall be in weatherproof enclosure per NEC requirements. Circuits shall have GFCI protection. Customer to install a minimum of one 120V, 20 amp receptacle and one 240V, 20 amp receptacle, as required.

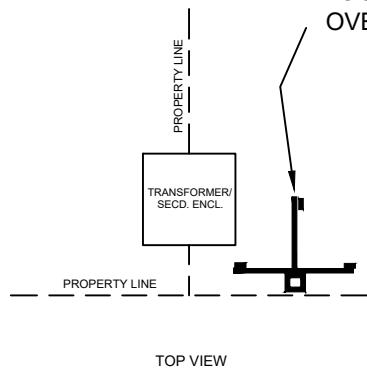
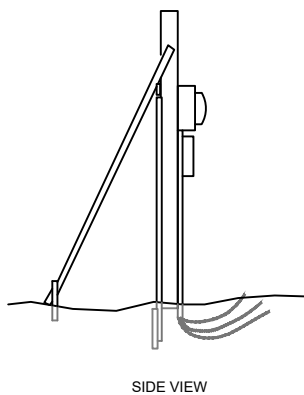
Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade and positioned to face road or driveway, or as directed/approved by NBU. Source connections shall be made on top side of meter socket.

Conductors: Service lateral conductors shall be sized according to the table below, as a minimum, based upon the main bus rating of the disconnect device; unless otherwise approved by NBU. Conductor insulation shall be rated for direct burial (wet locations). Neutral to be marked with white tape in meter socket. Minimum #6 copper bonding shall be provided where necessary (all non-current carrying parts) to ensure electrical continuity.

Grounding electrode conductor: minimum #6 soft drawn copper, stapled to post; 5/8" x 8' copper-clad ground rod, driven 2" below final ground grade, or a grounding plate at 30" below ground grade per NEC code. Shall be installed in one continuous length without a splice to grounding electrode.

Conductor shall be buried from post to within 6" of service equipment, at a minimum depth of 18" and have 10' leads at service equipment.

TEMPORARY SHALL NOT BE LOCATED IN FRONT OR OVER SOURCE



(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM		COPPER	
	75°C	75°C	75°C	75°C
100 Amp	#1	#3	#3	#3
125 Amp	#1	#2	#2	#2
200 Amp	4/0	2/0	2/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.
Allowable Single Phase Dwelling Services per NEC 310.15 (B)(7)(1)



Electric Engineering
355 FM 306
PO Box 310289
New Braunfels, TX 78131-0289
830-608-8951

UNDERGROUND METERING ASSEMBLY
1Ø TEMPORARY SERVICE

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-110

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

More than 6 meters installed at one location shall require a main disconnect furnished and installed by the customer.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

Neutral conductors to be marked with white tape inside all enclosures.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass. Must use wire color code as shown in table below.

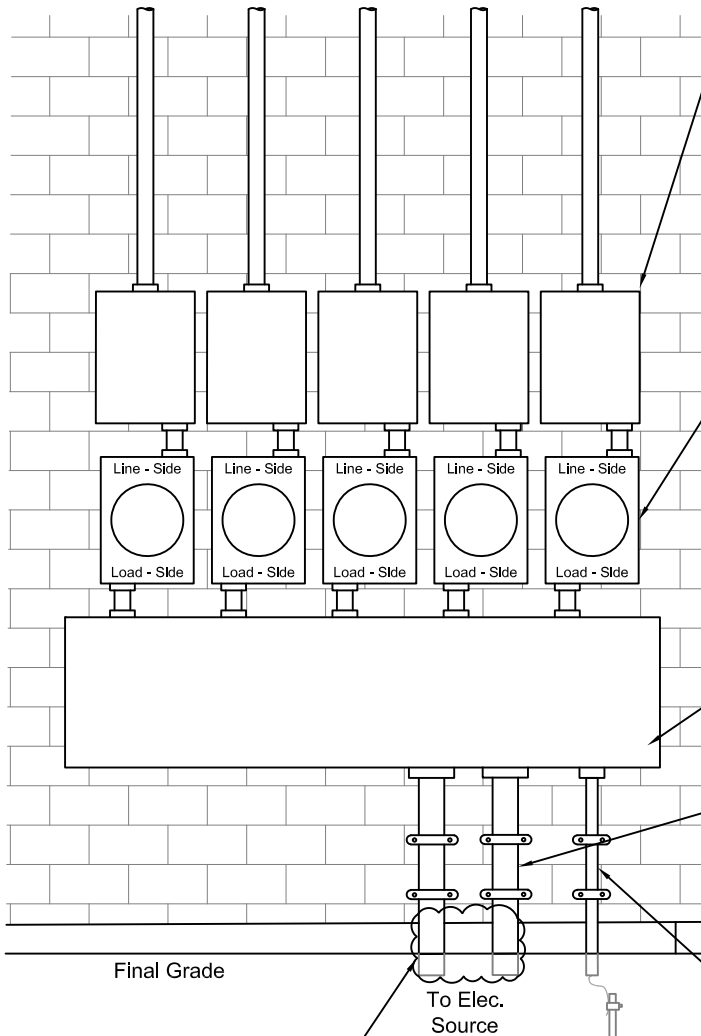
NBU approved 3Ø meter socket: Milbank # U9701 = 200amp
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp
 Substitution must be approved by NBU.

Gutter: It must have a means to lock or secure by NBU. Secure to wall at four points. (Gutter size shall be min. 18" H x 12"D x Length)

Underground conduit: Installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Conduit/conductor shall be sized by NBU. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure conduit with 2 evenly spaced 2-hole straps sized to fit conduit and attached with galvanized lag screws. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits. Schedule with NBU if source feeds from energized equipment.

Grounding electrode conductor: Connected to neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced 2-hole straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 or NEC 250.53 may be acceptable upon approval by NBU.



Install Carlon expansion fitting: Catalog No. E945L or E945N
conduit size is stated on NBU Electric Design: Other options may be considered but must be approved by NBU prior to installation.

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Install below first strap



Electric Engineering
 355 FM 306
 PO Box 310289
 New Braunfels, TX 78131-0289
 830-608-8951

UNDERGROUND SERVICE - MULTIPLE OCCUPANCY BUILDING
 200 AMP - 320 AMP

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-115

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

Trans-socket: 3'-0" minimum from center of socket on rack to final grade. All electrical equipment must be secure at four points to two evenly spaced mounting channels.

Weatherproof main disconnect/panelboard. Located adjacent to trans-socket, with minimum 3'-0" unobstructed clearance in front. Secure at four points to two evenly spaced mounting channels. Meter shall face street or driveway or as directed/approved by NBU. Mark with address number if not otherwise posted on property. Must use wire color code as shown in table below.

Gutter: minimum size of 12"D x 12"H x 30"L. It must have a means to lock or secure by NBU. Secure at four points to 2 evenly spaced mounting channels.

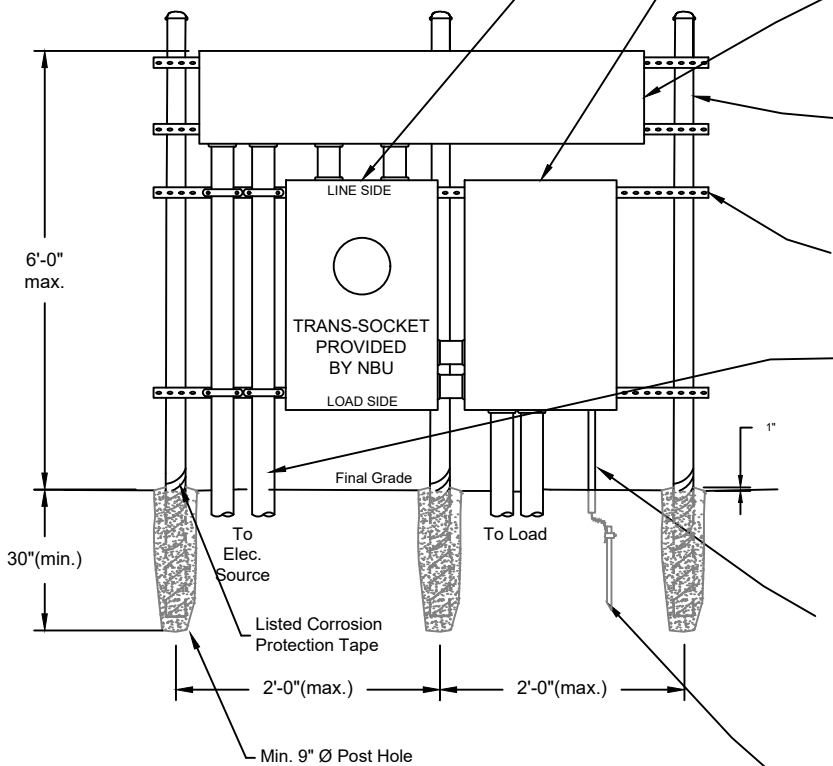
Meter stand: (3) - 3" GRC or IMC continuing a minimum of **30 inches** below final ground grade with listed corrosion protection tape or polywrap extending 2" above, post shall be set in concrete, 3,000 psi minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1/2", welded or bolted to stand with galvanized bolts.

Conduit and Conductor: **To be sized by NBU.** All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure exposed conduit to two evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Underground conduit installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.



3Ø wire color code
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

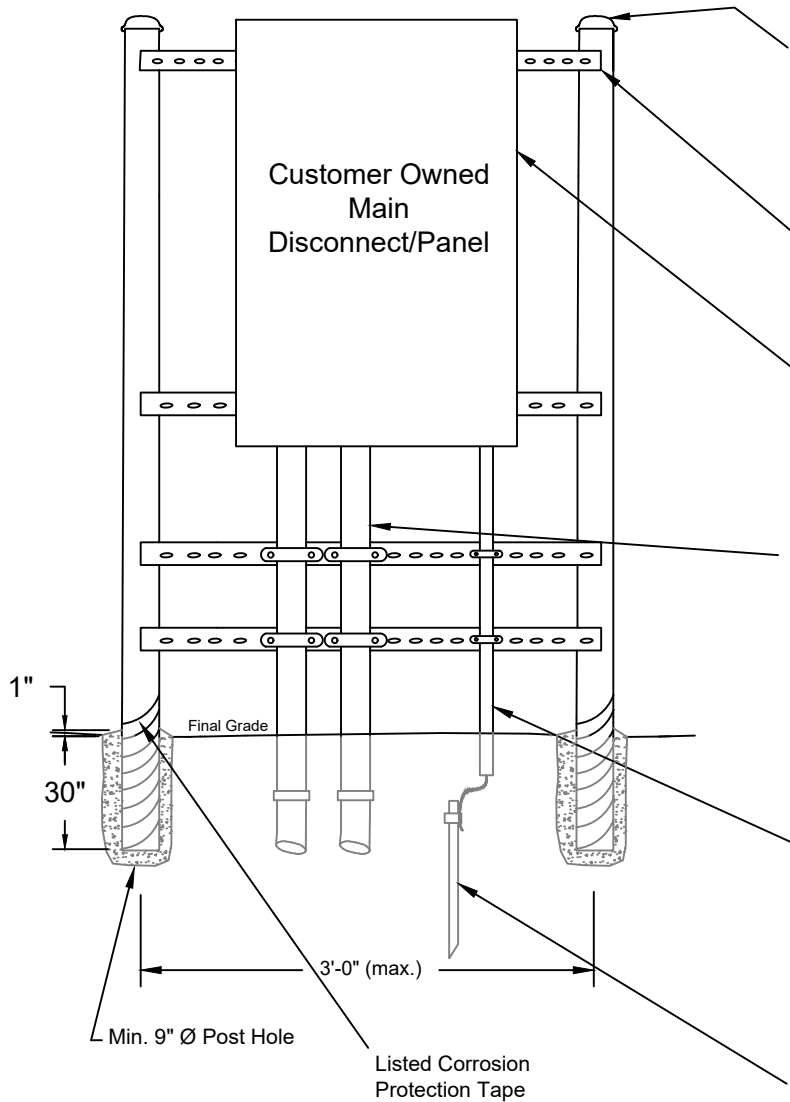


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UNDERGROUND TRANS-SOCKET
METERING ON RACK

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-120

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter stand: (2) 3" GRC, or IMC, continuing a minimum of 30 inches below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

If panel/disconnect is wider than 36", a third post is required and shall have 36" spacing between posts

Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts.

Weatherproof main disconnect: Max height per NEC requirements. Position to face road or driveway, or as directed/approved by NBU. All electrical equipment must be secure at four points to two evenly spaced mounting channels. Disconnect shall have permanent address marking. Must use wire color code as shown in table below.

Conduit and conductor: **To be sized by NBU.** All exposed conduit above grade shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1988 for electrical use. Secure exposed conduit to 2 evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Pull string to be installed in conduit by customer. Underground conduit installed according to NBU specification EU-910.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to 2 mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94. If installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

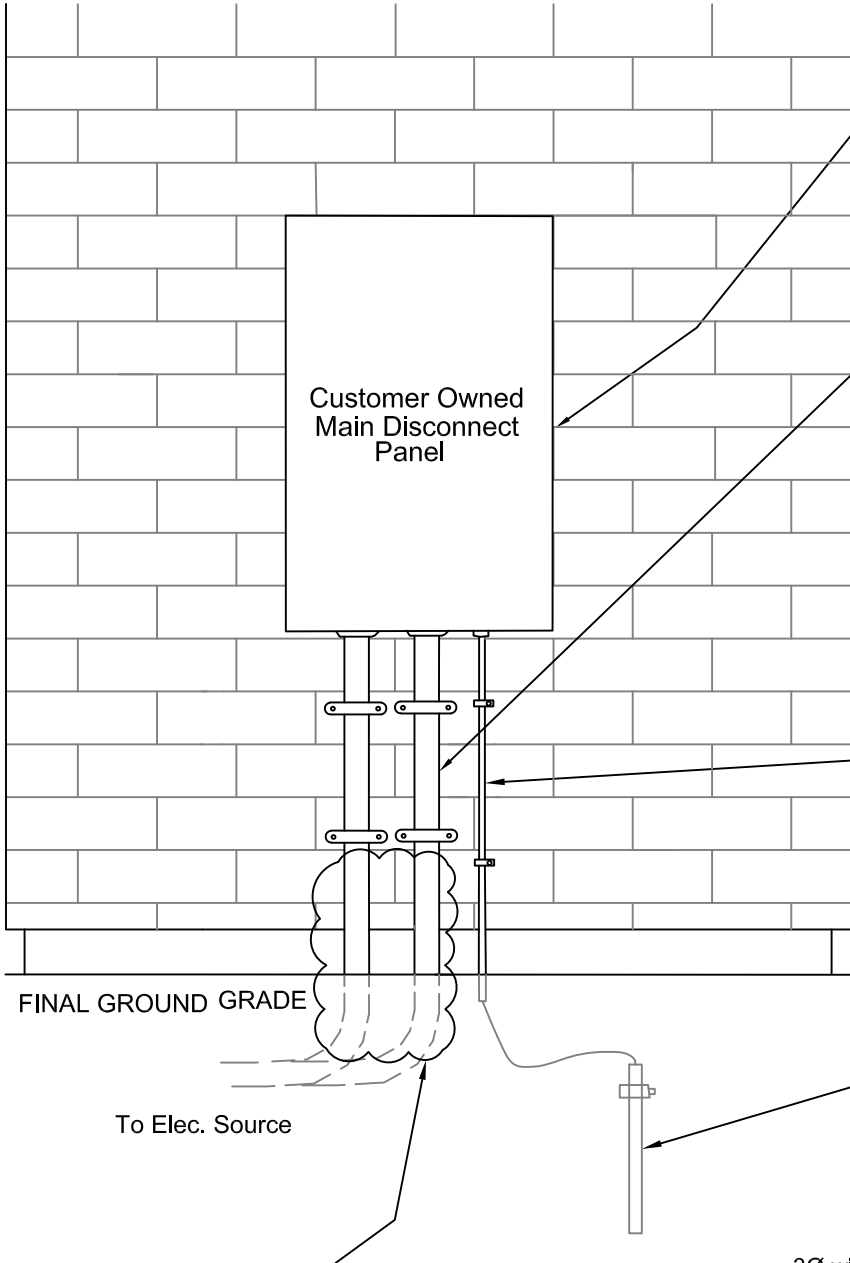


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UNDERGROUND MAIN DISCONNECT/PANEL ASSEMBLY ON RACK

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-125

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Weatherproof main disconnect: Max height per NEC requirements. All electrical equipment must be secured at 4 points. Must use wire color code as shown in table below.

Conduit and conductor: **To be sized by NBU.** All exposed conduit above grade shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1988 for electrical use. Secure conduit with 2 evenly spaced 2-hole straps sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Pull string to be installed by customer. Customer owner-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Connected to main disconnect/panel neutral bar (NEC 250.24 (A) (1-5)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two evenly spaced 2-hole straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94. If installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

Install Carlon expansion fitting: Catalog No. E945L or E945N ***conduit size is stated on NBU Electric Design***. Other options may be considered but must be approved by NBU prior to installation.

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Install below first strap

UNDERGROUND MAIN DISCONNECT ASSEMBLY ON WALL

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-130

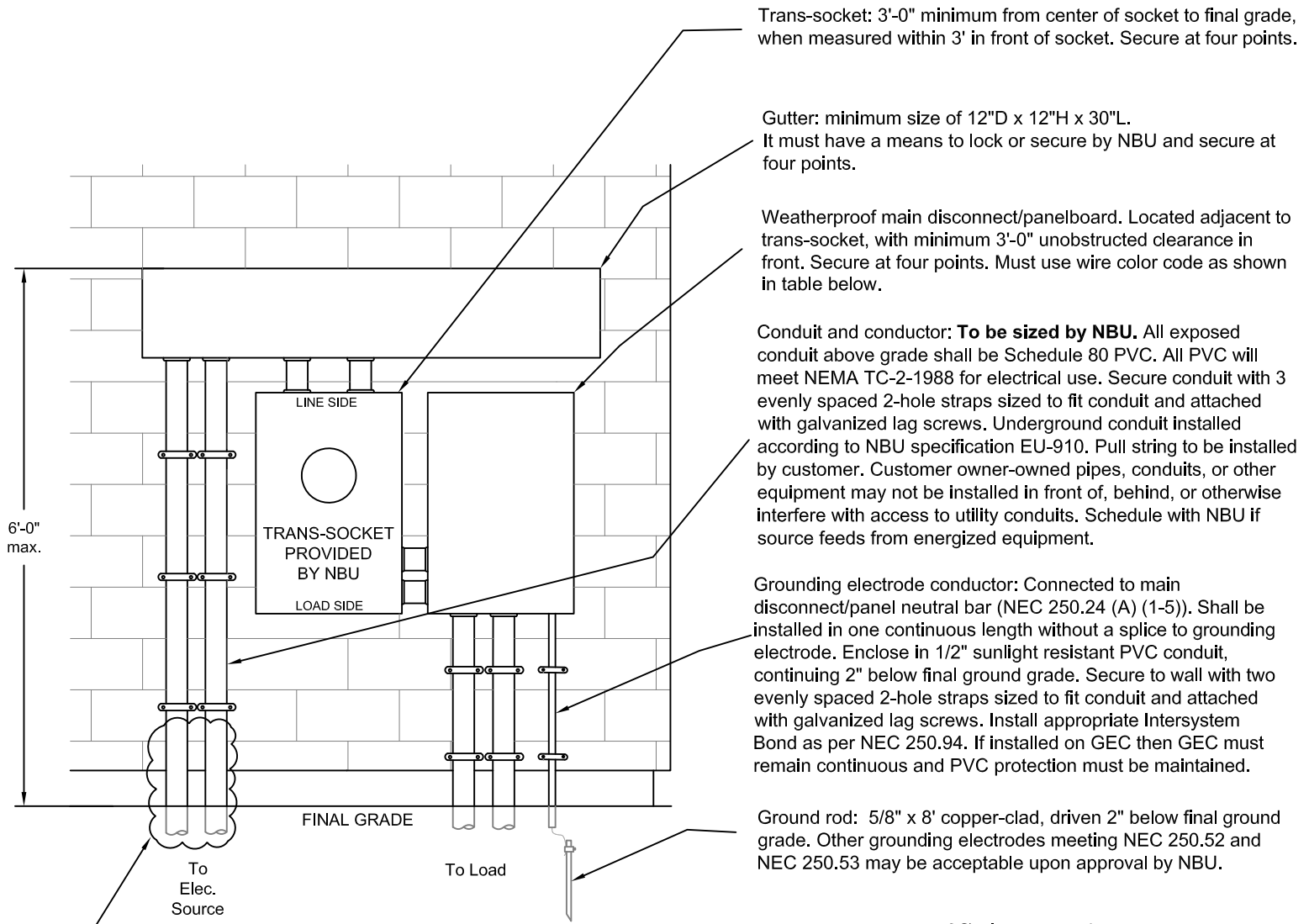


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This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Install Carlon expansion fitting: Catalog No. E945L or E945N *conduit size is stated on NBU Electric

Design*: Other options may be considered but must be approved by NBU prior to installation.

3Ø wire color code

277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

Install below first strap



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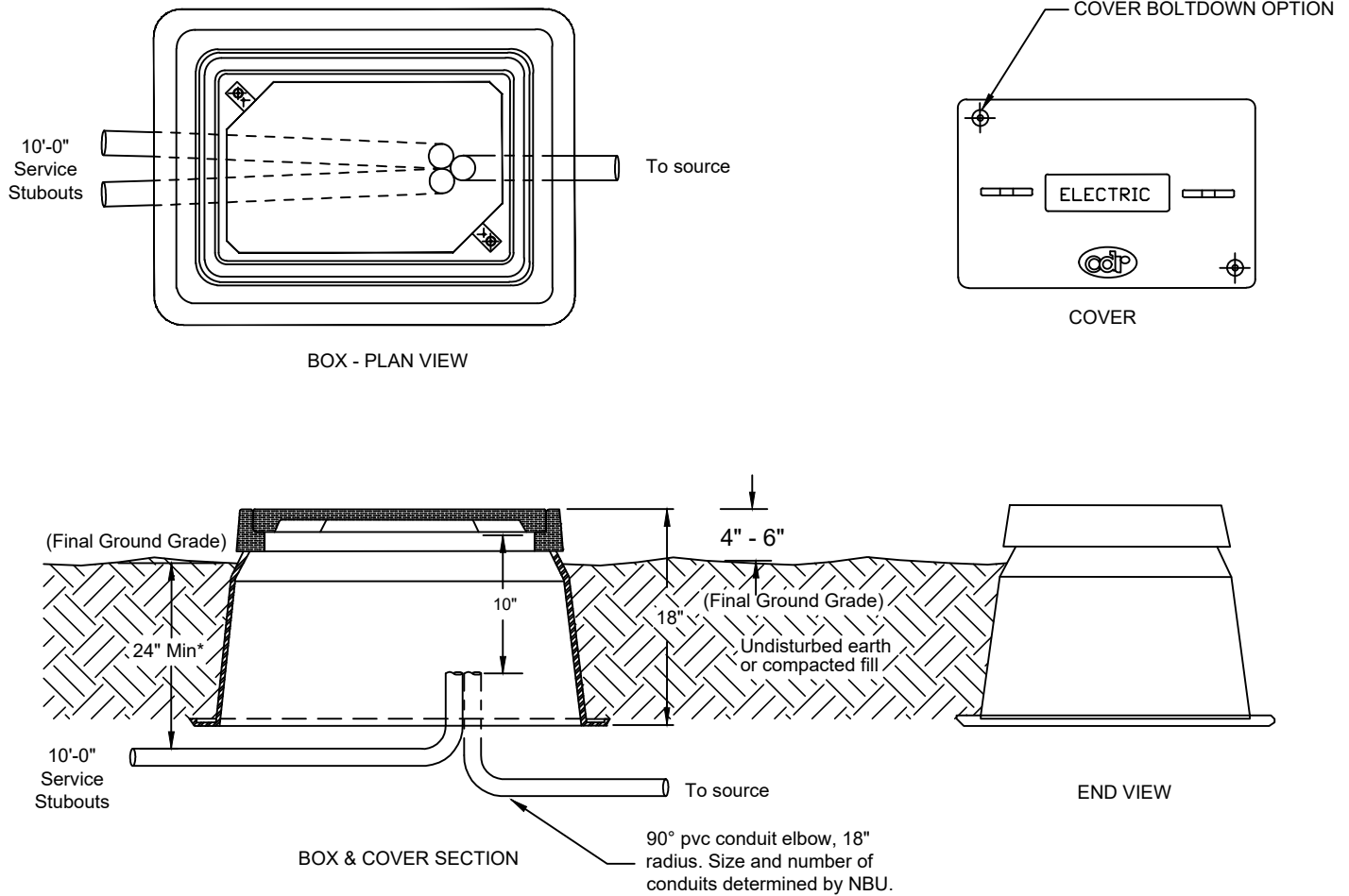
UNDERGROUND TRANS-SOCKET
METERING ON WALL

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-135

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

The electric system layout design to include secondary enclosure locations is determined by NBU. All customer installations require inspection by NBU. Size of enclosure shall be determined by NBU. Conduit shall not be located under lip of box. Secondary stubouts shall be determined by NBU

*Additional depth maybe required at the discretion of an NBU Electric Inspector.



Enclosure furnished and installed by customer/developer.
 Enclosure shall be manufactured by CDR Systems Corporation.
 Other enclosure options may be considered but must be approved by NBU prior to installation.

Box = B10132418A Cover = C10132402A017

If installed in street, alley, or driveway:

Box = B12132418A Cover = C12132402A017



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SECONDARY ENCLOSURE

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-210

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

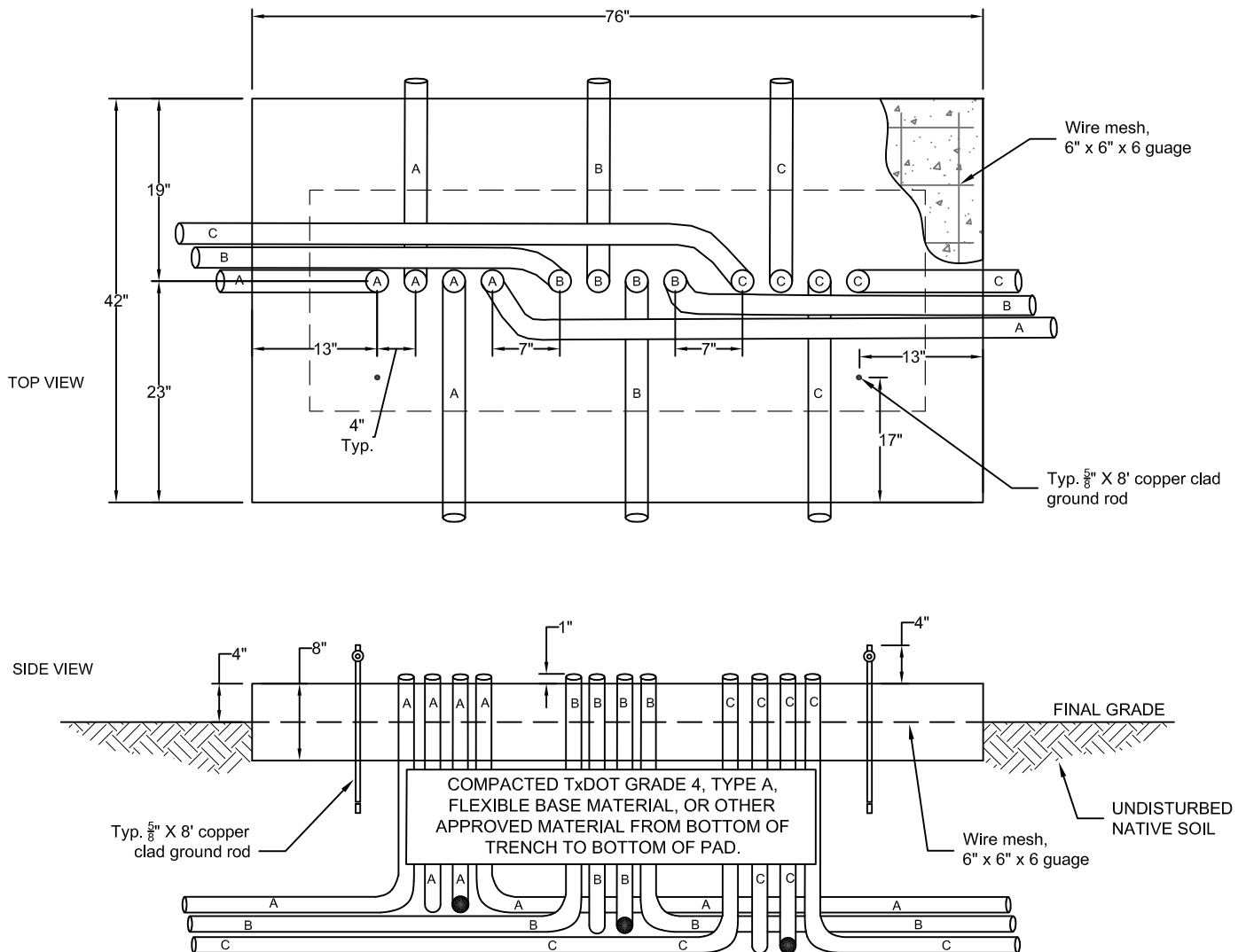
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary stubouts shall be 5' minimum from edge of pad.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 4 PLACE,
 200AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-310

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

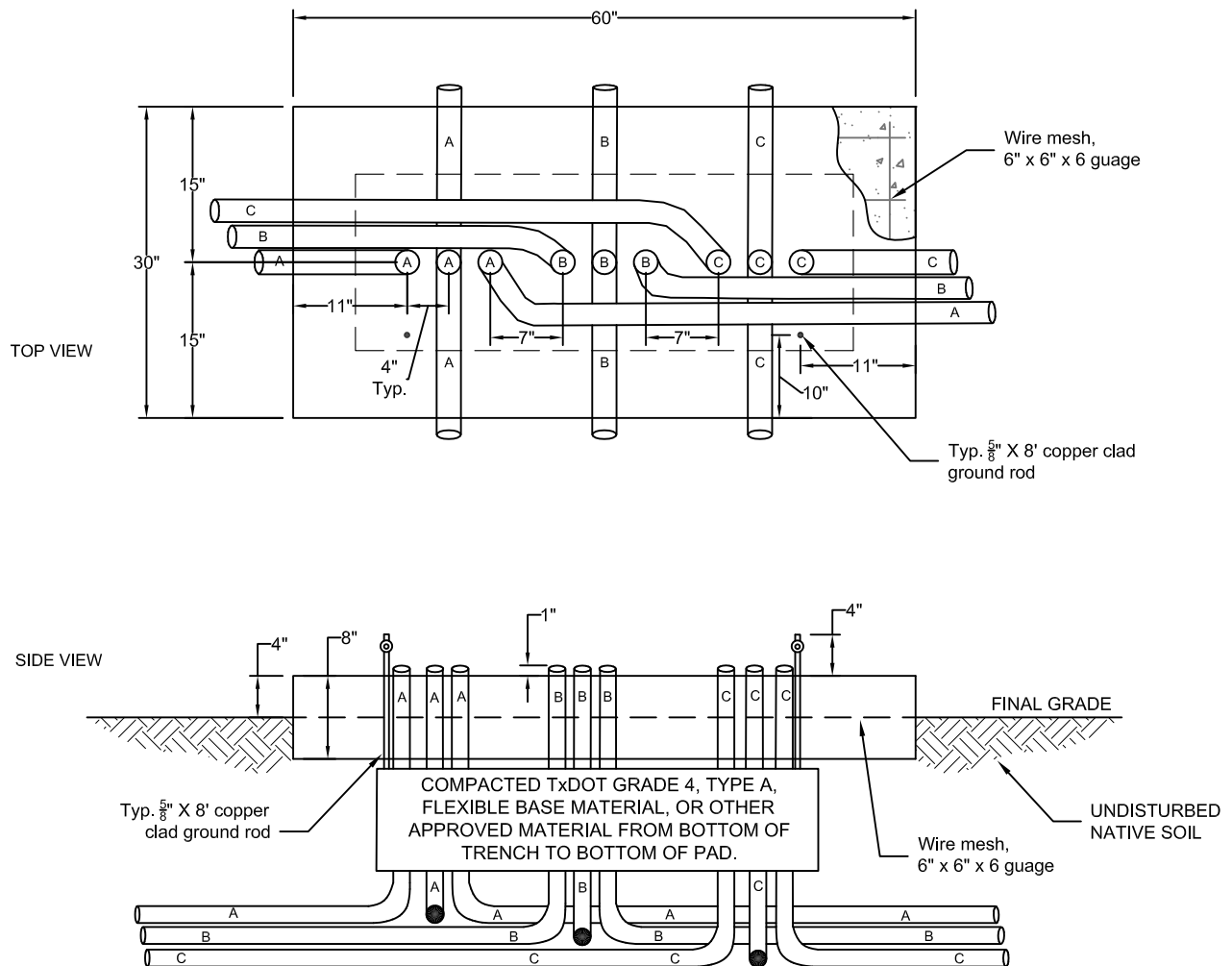
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary stubouts shall be 5' minimum from edge of pad.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 3 PLACE,
 200AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-315

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

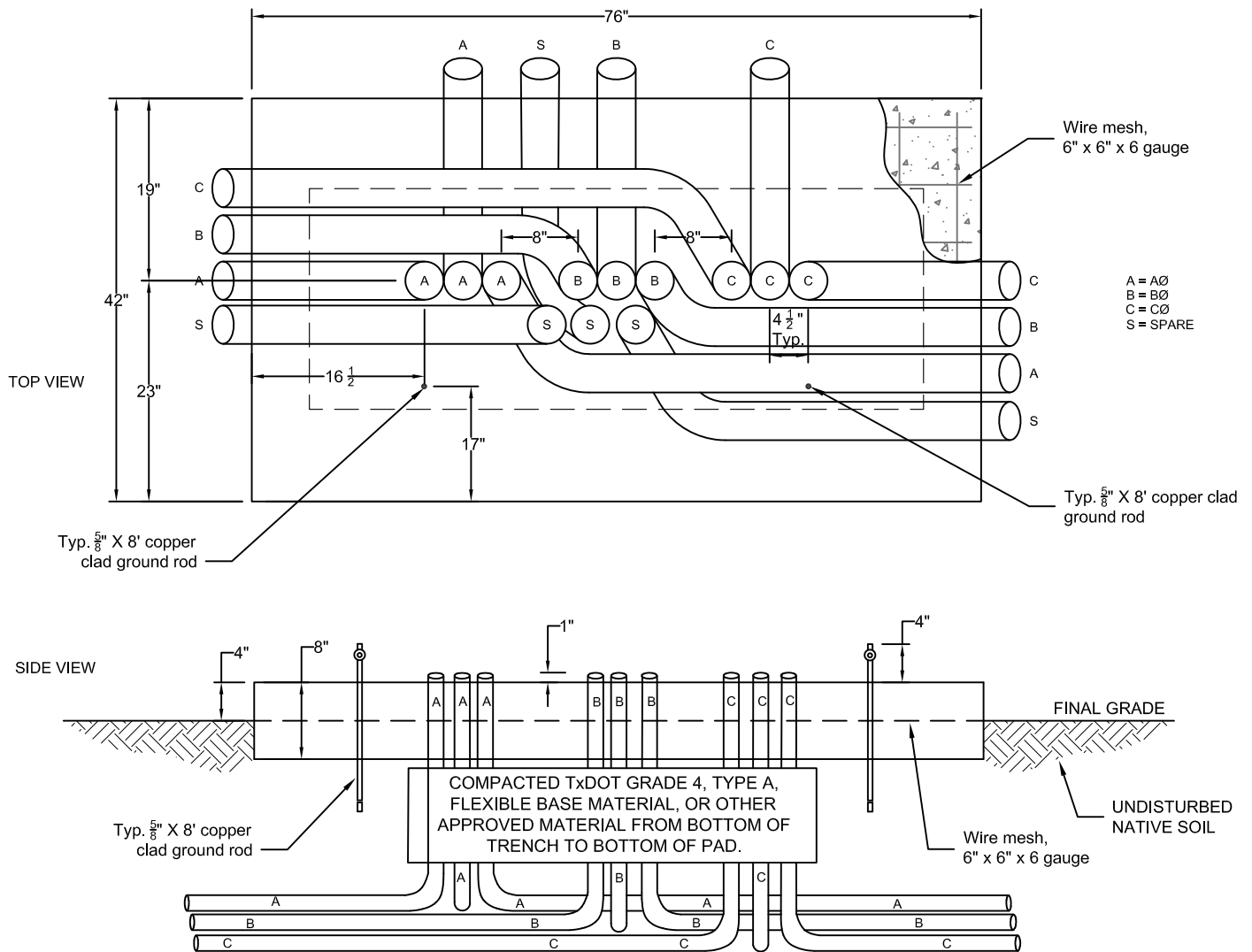
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary stubouts shall be 5' minimum from edge of pad.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 3 PLACE,
600AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-325

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

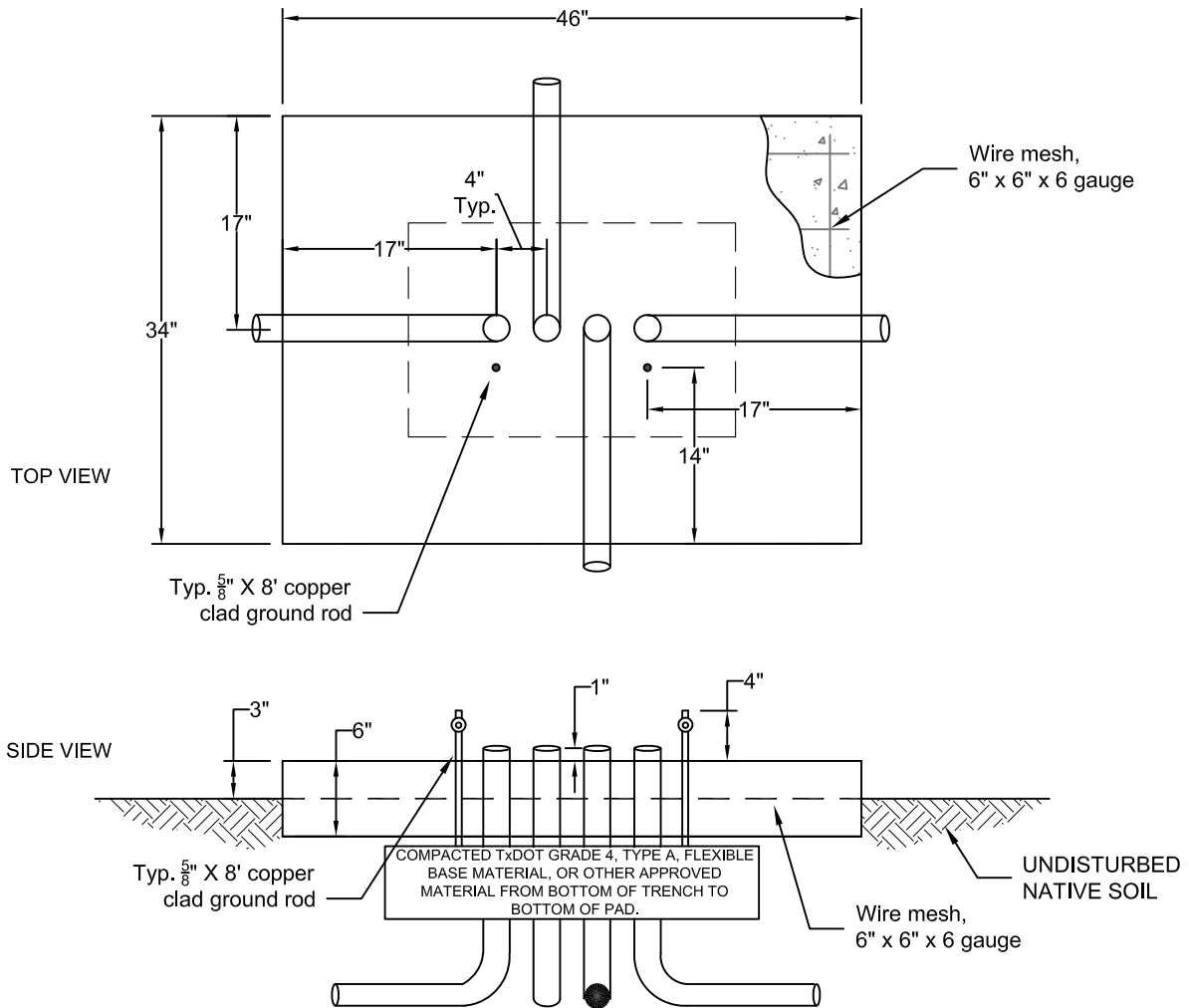
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary stubouts shall be 5' minimum from edge of pad.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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**SINGLE PHASE
 PRIMARY ENCLOSURE PAD**

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

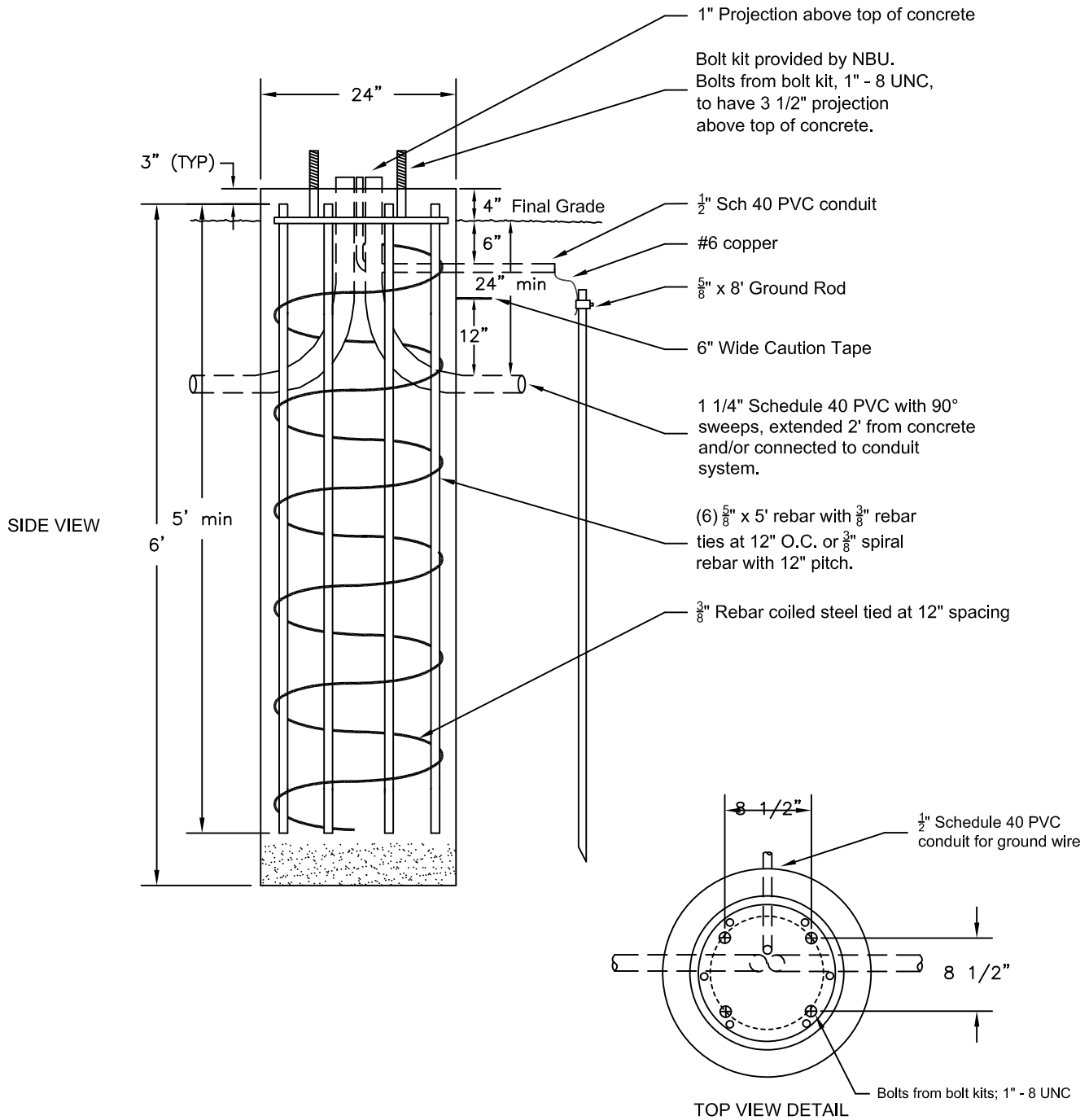
EU-330

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured.

Concrete to be 3000 PSI with a 4" tooled radius on edge.



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STANDARD LIGHT FOUNDATION

ISSUED

12/25

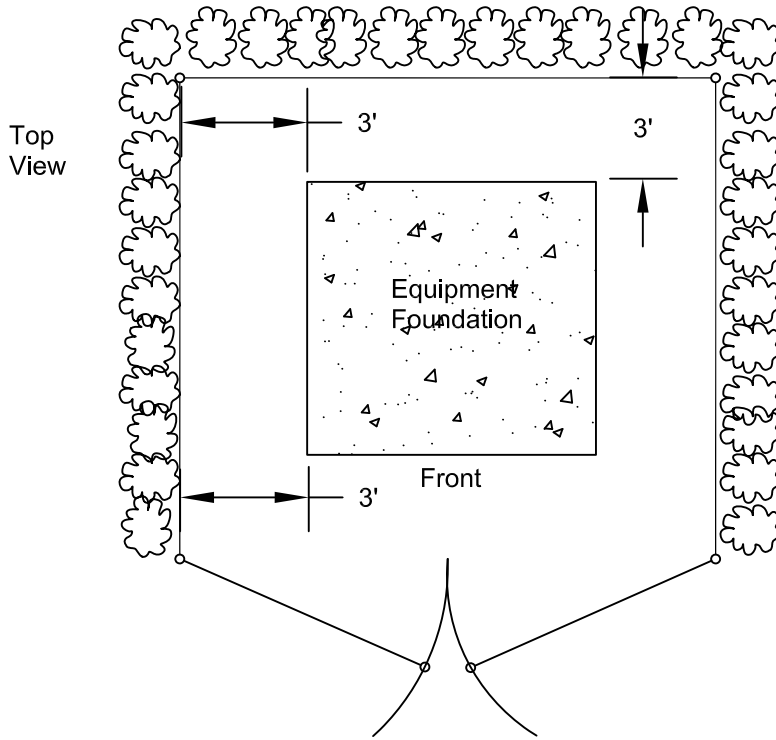
SCALE

NTS

DRAWING NUMBER

EU-410

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

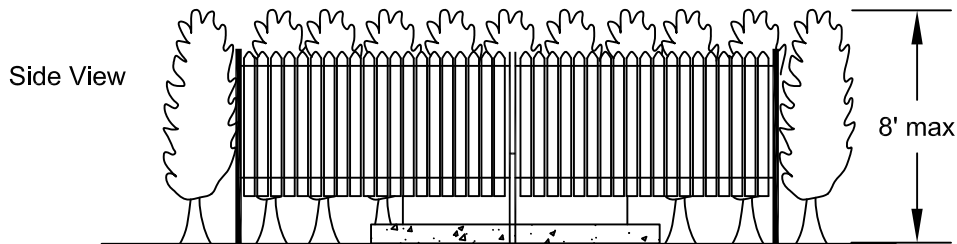


Transformer or pullbox location must be accessible at all times. Clearance around NBU equipment to any barrier shall be 3' minimum.

Any installation that would enclose any metering/disconnect assemble within the barrier shall be approved by NBU.

Barrier can be vegetation, chain link, wood, concrete block, or appropriate material. Fencing/gate material shall be designed to allow for adequate air circulation around equipment and is subject to NBU approval prior to installation.

Site grading within the front 10' of a foundation shall not exceed a 7:1 slope. Access infrastructure, if necessary, shall be built as permanent structures, and shall meet requirements of any applicable right-of-way owner.



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PADMOUNT EQUIPMENT BARRIER CLEARANCES

ISSUED

12/25

SCALE

NTS

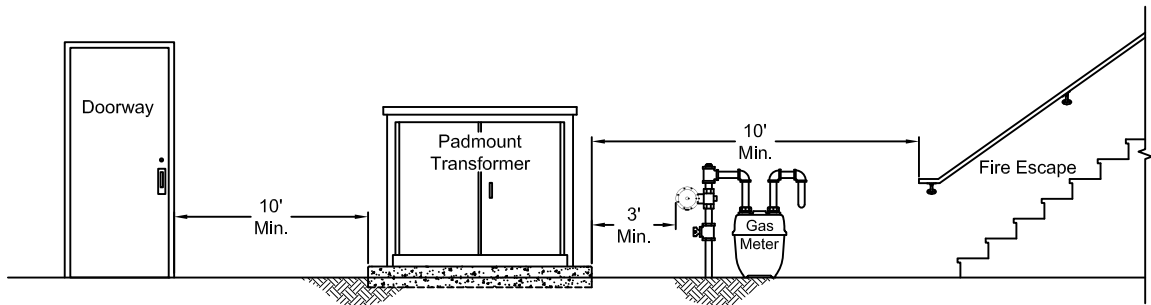
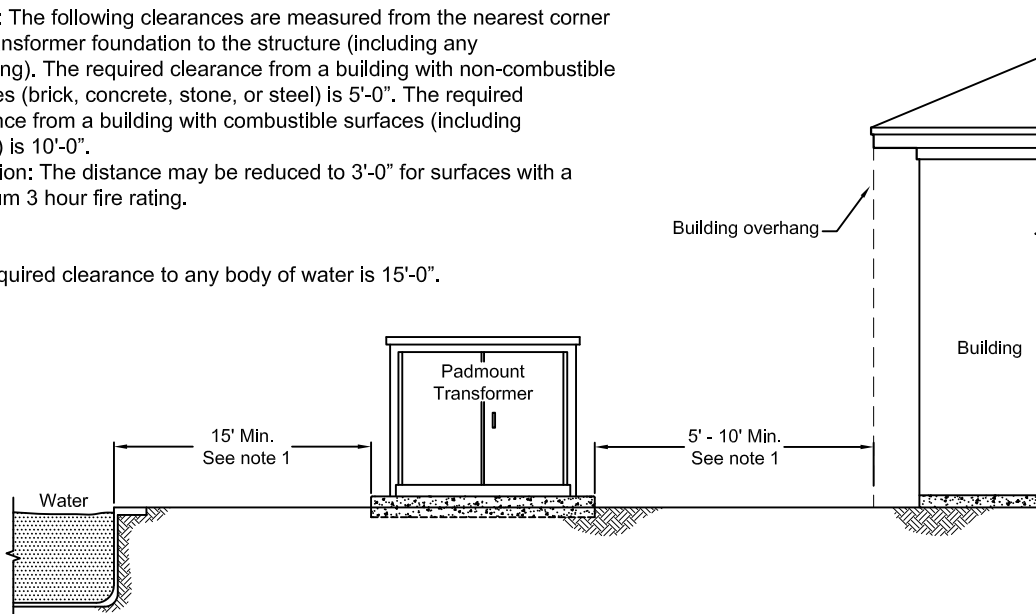
DRAWING NUMBER

EU-500

Note 1: The following clearances are measured from the nearest corner of a transformer foundation to the structure (including any overhang). The required clearance from a building with non-combustible surfaces (brick, concrete, stone, or steel) is 5'-0". The required clearance from a building with combustible surfaces (including stucco) is 10'-0".

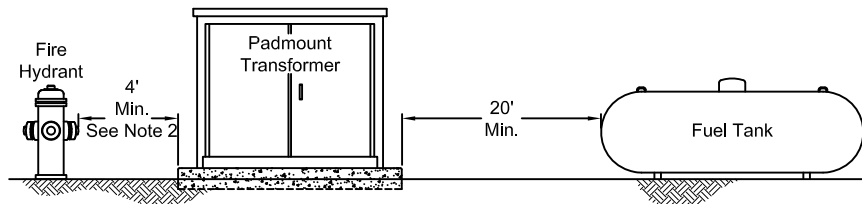
Exception: The distance may be reduced to 3'-0" for surfaces with a minimum 3 hour fire rating.

The required clearance to any body of water is 15'-0".



Note 2: The following clearances are measured from the nearest corner of a transformer foundation. Per the National Electrical Safety Code rule 380D padmounted equipment and other above ground electrical equipment should be located not less than 4'-0" from fire hydrants.

Exception: Where conditions do not permit a clearance of 4'-0", a clearance of not less than 3'-0" is allowed.



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MINIMUM CLEARANCES FROM
 PADMOUNT EQUIPMENT PADS

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-501

Location & quantity of bollards shall be determined by NBU Electric Engineering or at the discretion of an NBU Electric Inspector. All customer installations require inspection by NBU.

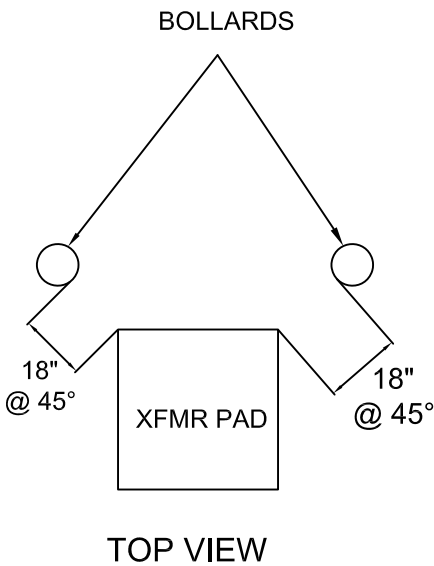
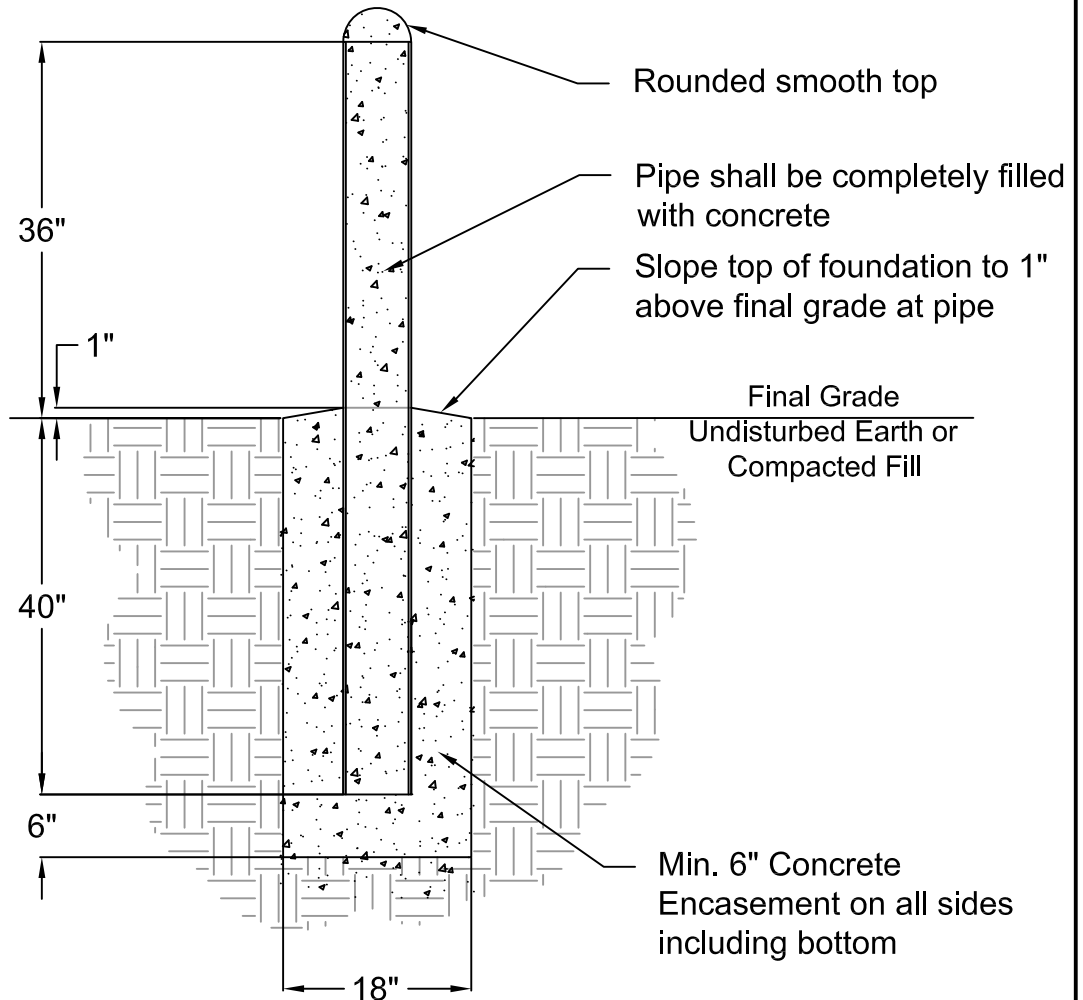
Bollards shall be 6" Diameter Schedule 80 Galvanized Steel Pipe

Concrete shall be minimum 3000 PSI

Exposed portions of Bollards shall be finished with one coat of rust inhibitive primer and two coats of epoxy paint (Safety Yellow)

Bollard foundation shall be 18" Diameter and 46" deep measured from final grade

Bollards shall be required where NBU equipment pads are within 6' to the front face of curb and/or 6' to a readily drivable surface (including driveways).



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EQUIPMENT PROTECTION BOLLARD

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-505

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

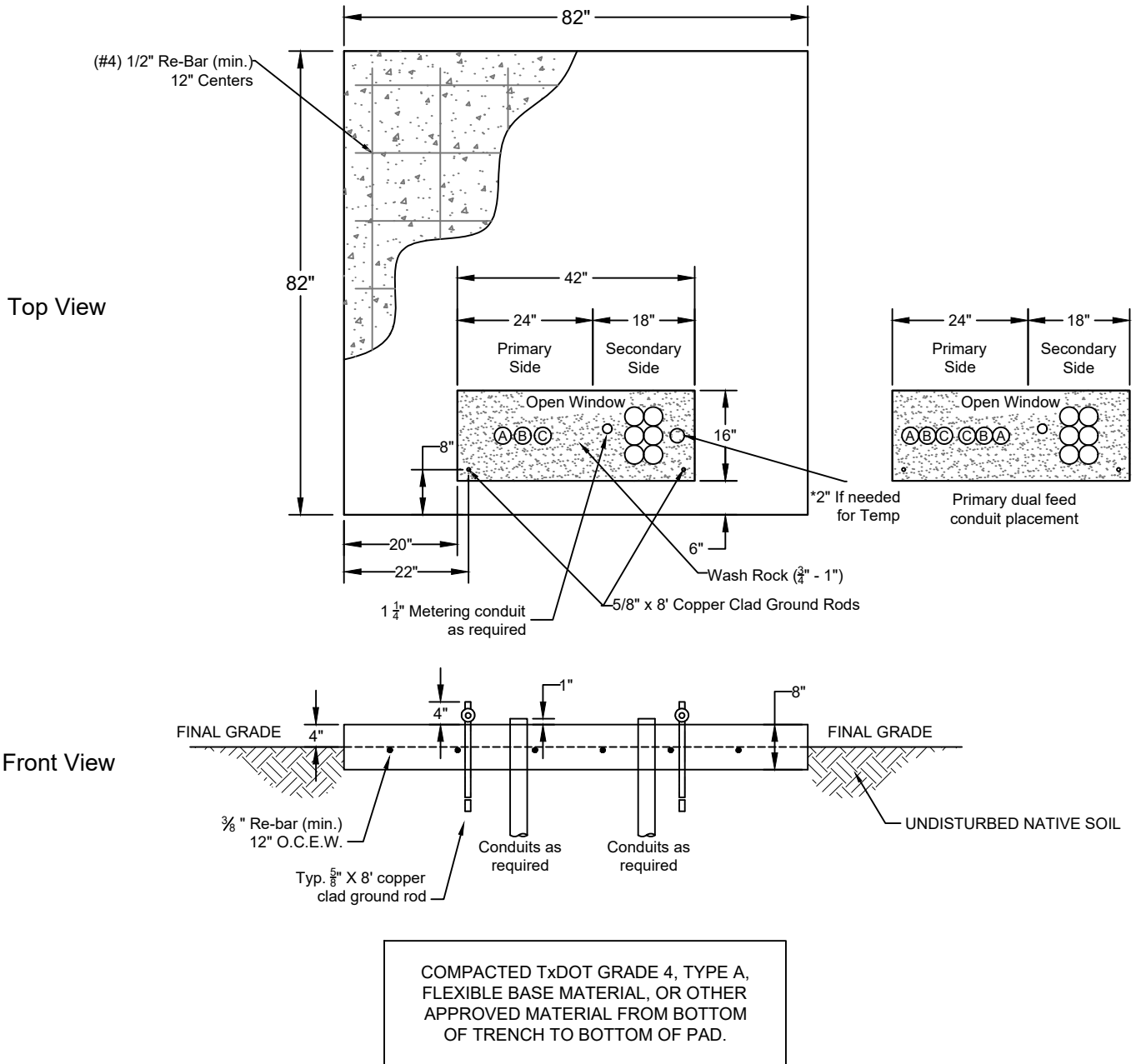
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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**THREE PHASE TRANSFORMER PAD
 75 - 300 kVA**

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-510

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

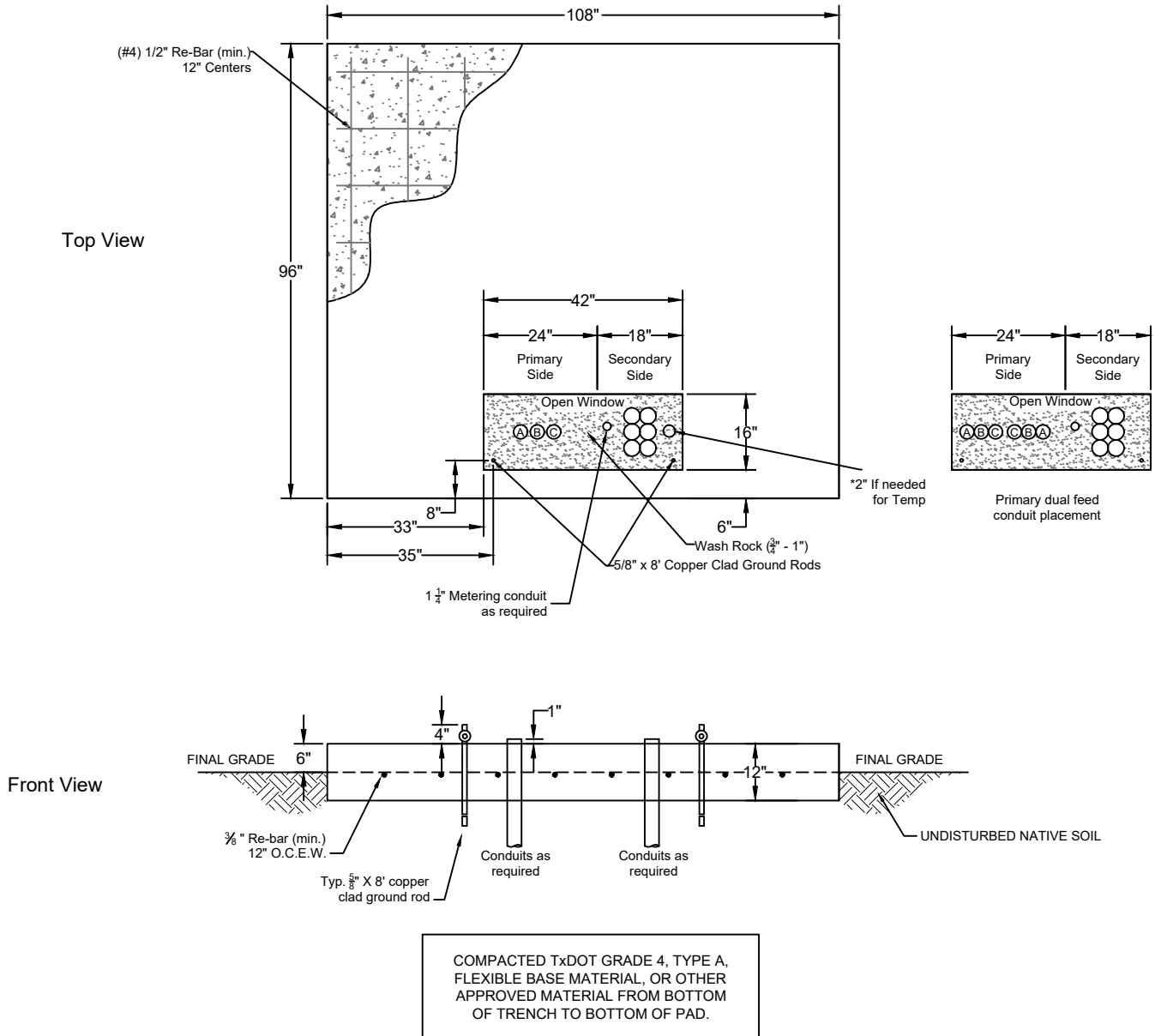
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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**THREE PHASE TRANSFORMER PAD
 75 - 1500 KVA (HYBRID)**

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-515

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

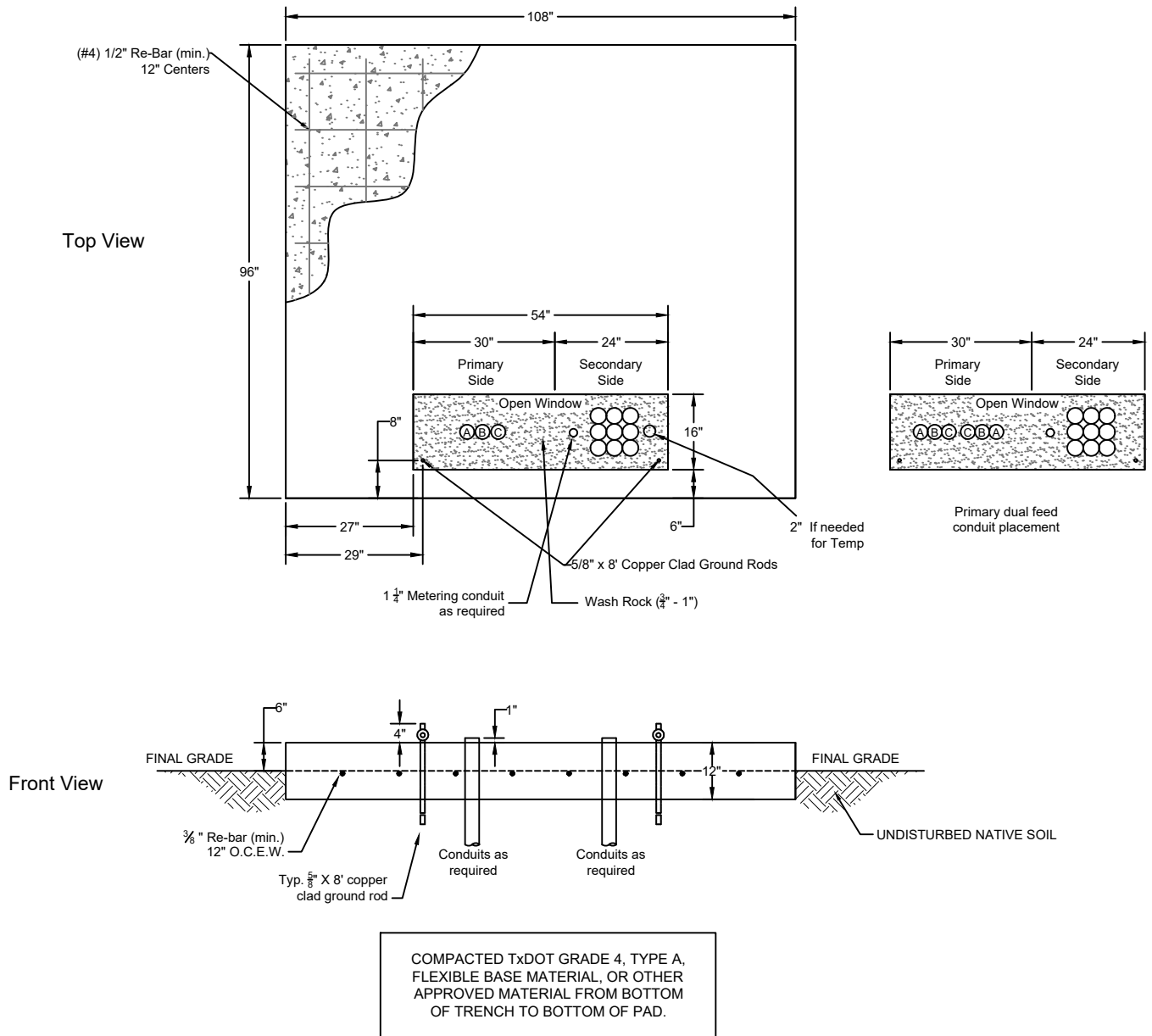
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE TRANSFORMER FOUNDATION
 500 - 2500 kVA

ISSUED

12/25

SCALE

NTS

DRAWING NUMBER

EU-520

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

Underground conduit installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above top of concrete. Pull string to be installed by customer in each conduit.

Install #6 copper inside 1/2" conduit. Connect #6 copper to ground rod and leave 5' coil buried outside of slab at 12" depth.

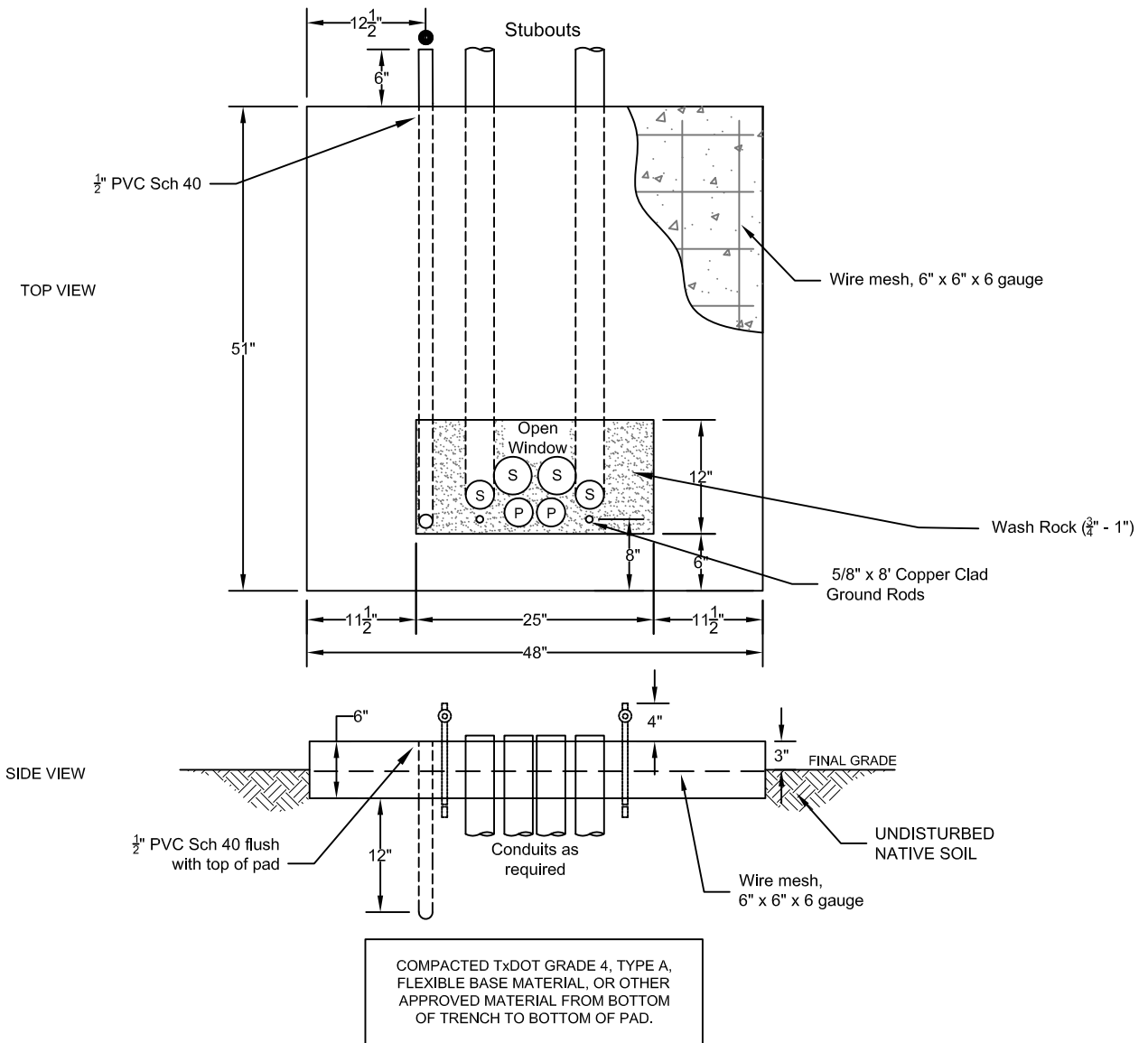
Copper-clad ground rods, 5'8" x 8', 2 required, to have 4" projection above top of concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured

DiversiTech Part # F4851-62CL1225 suitable substitute for poured-in-place.



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SINGLE PHASE TRANSFORMER PAD

ISSUED

12/25

SCALE

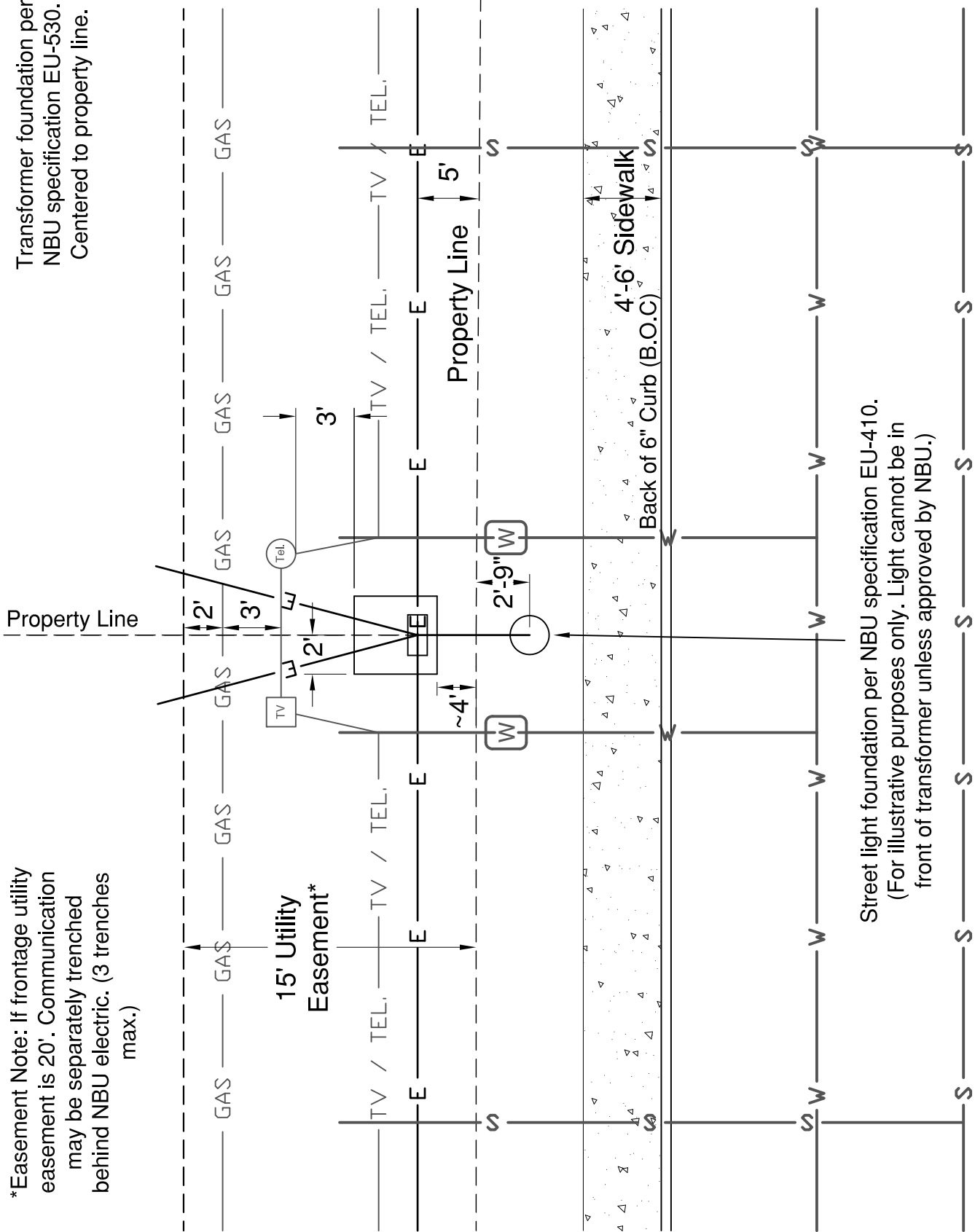
NTS

DRAWING NUMBER

EU-530

Transformer foundation per
NBU specification EU-530.
Centered to property line.

*Easement Note: If frontage utility
easement is 20'. Communication
may be separately trenched
behind NBU electric. (3 trenches
max.)



Street light foundation per NBU specification EU-410.
(For illustrative purposes only. Light cannot be in
front of transformer unless approved by NBU.)

Note: Water/sewer must be a
min. of 5' from the property line.



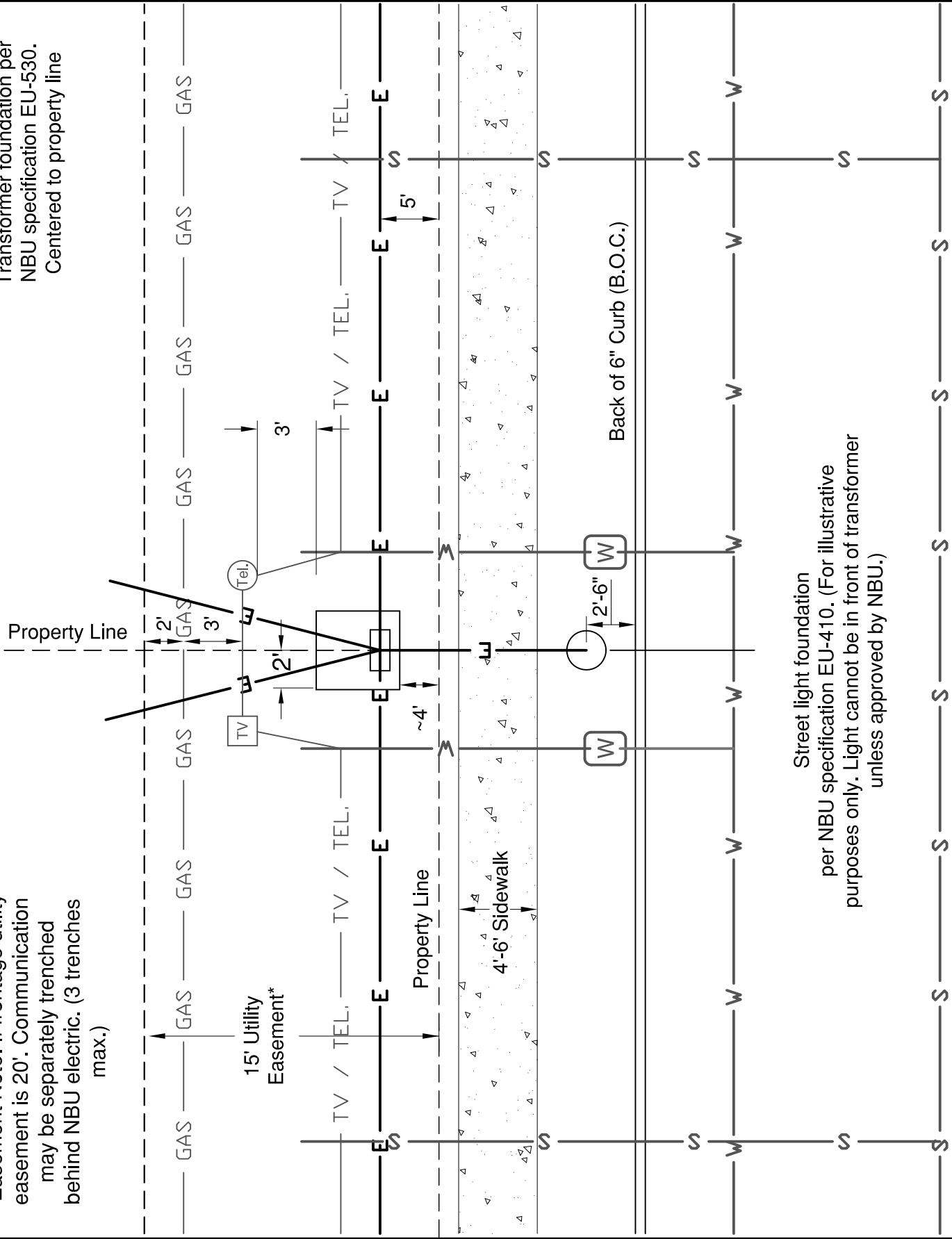
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ELECTRIC PLACEMENT TYPICAL EASEMENT
OPTION 1

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-710

*Easement Note: If frontage utility easement is 20'. Communication may be separately trenched behind NBU electric. (3 trenches max.)

Transformer foundation per NBU specification EU-530. Centered to property line



Street light foundation per NBU specification EU-410. (For illustrative purposes only. Light cannot be in front of transformer unless approved by NBU.)

Note: Water/sewer must be a min. of 5' from the property line



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ELECTRIC PLACEMENT TYPICAL EASEMENT
 OPTION 1.1

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-715

Transformer foundation per NBU specification EU-530.

10' Easement

Property Line

*Easement Note: If frontage utility easement is 20'. Communication may be separately trenched behind NBU electric. (3 trenches max.)

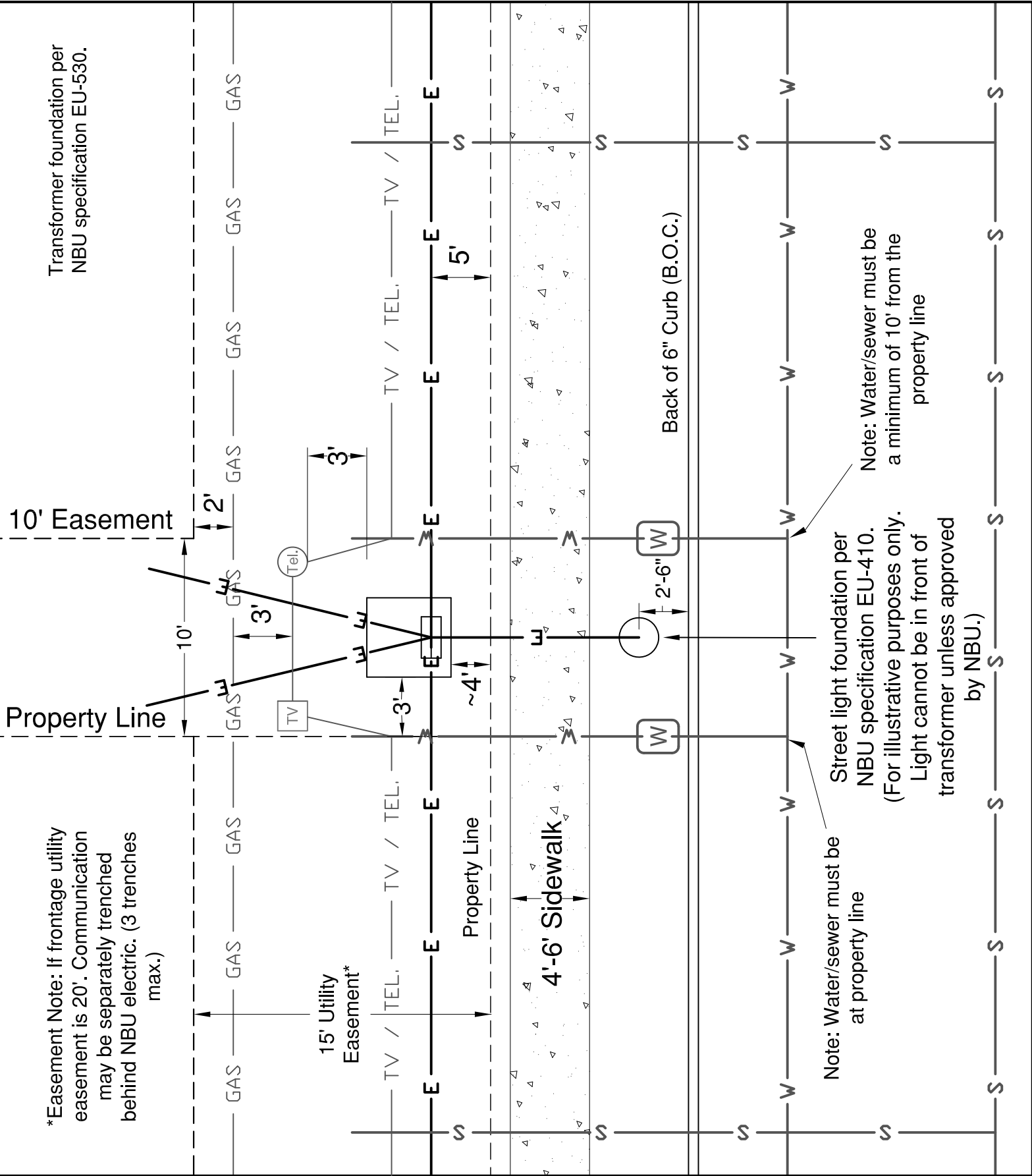
15' Utility Easement*

4'-6" Sidewalk

Back of 6" Curb (B.O.C.)

Note: Water/sewer must be at property line
 Street light foundation per NBU specification EU-410.
 (For illustrative purposes only. Light cannot be in front of transformer unless approved by NBU.)

Note: Water/sewer must be a minimum of 10' from the property line



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ELECTRIC PLACEMENT ZERO LOT LINE EASEMENT
 OPTION 2

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-720

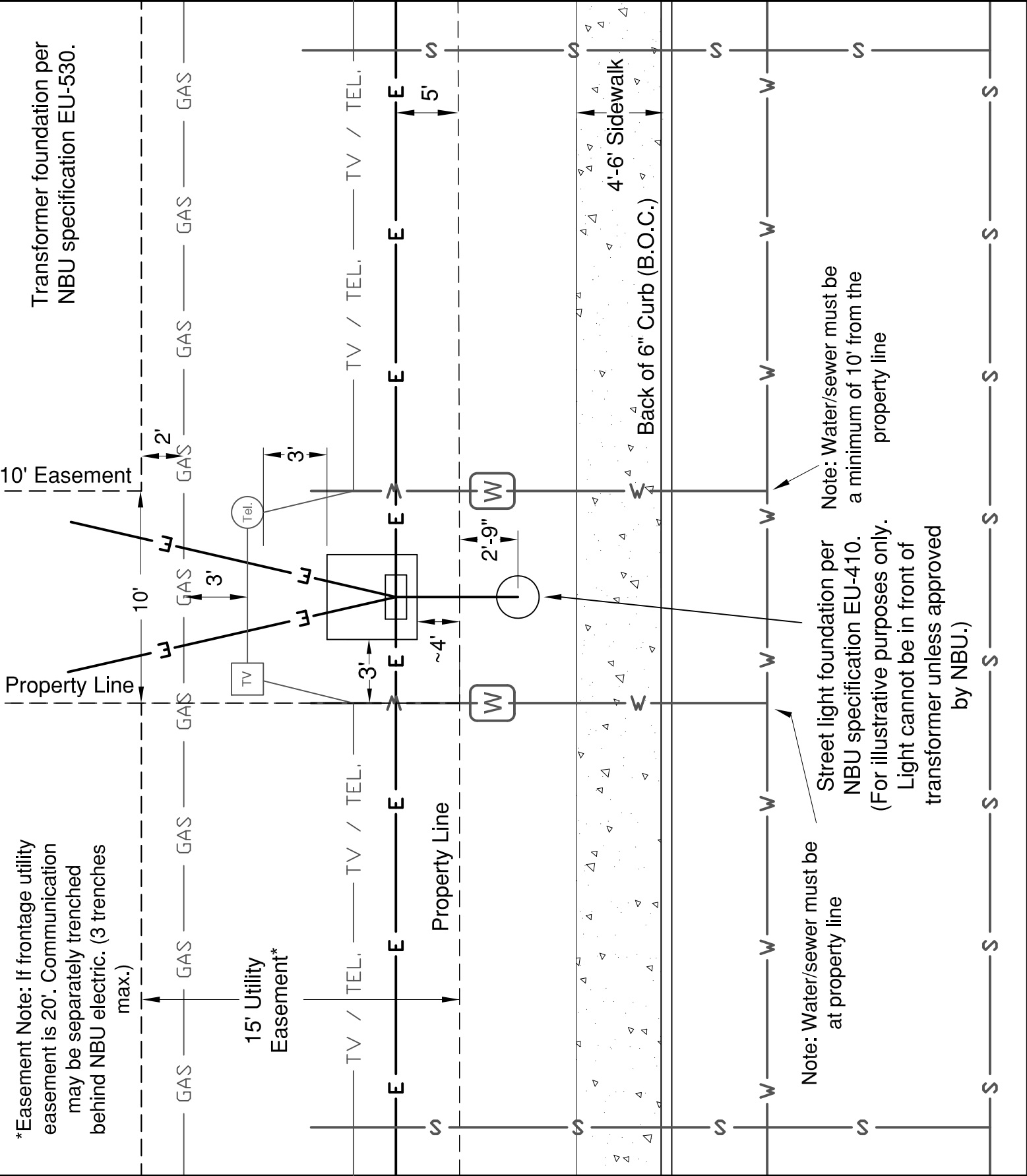
Transformer foundation per NBU specification EU-530.

10' Easement

Property Line

*Easement Note: If frontage utility easement is 20'. Communication may be separately trenched behind NBU electric. (3 trenches max.)

15' Utility Easement*



4'-6" Sidewalk

Back of 6" Curb (B.O.C.)

Note: Water/sewer must be at property line

Note: Water/sewer must be a minimum of 10' from the property line

Street light foundation per NBU specification EU-410. (For illustrative purposes only. Light cannot be in front of transformer unless approved by NBU.)



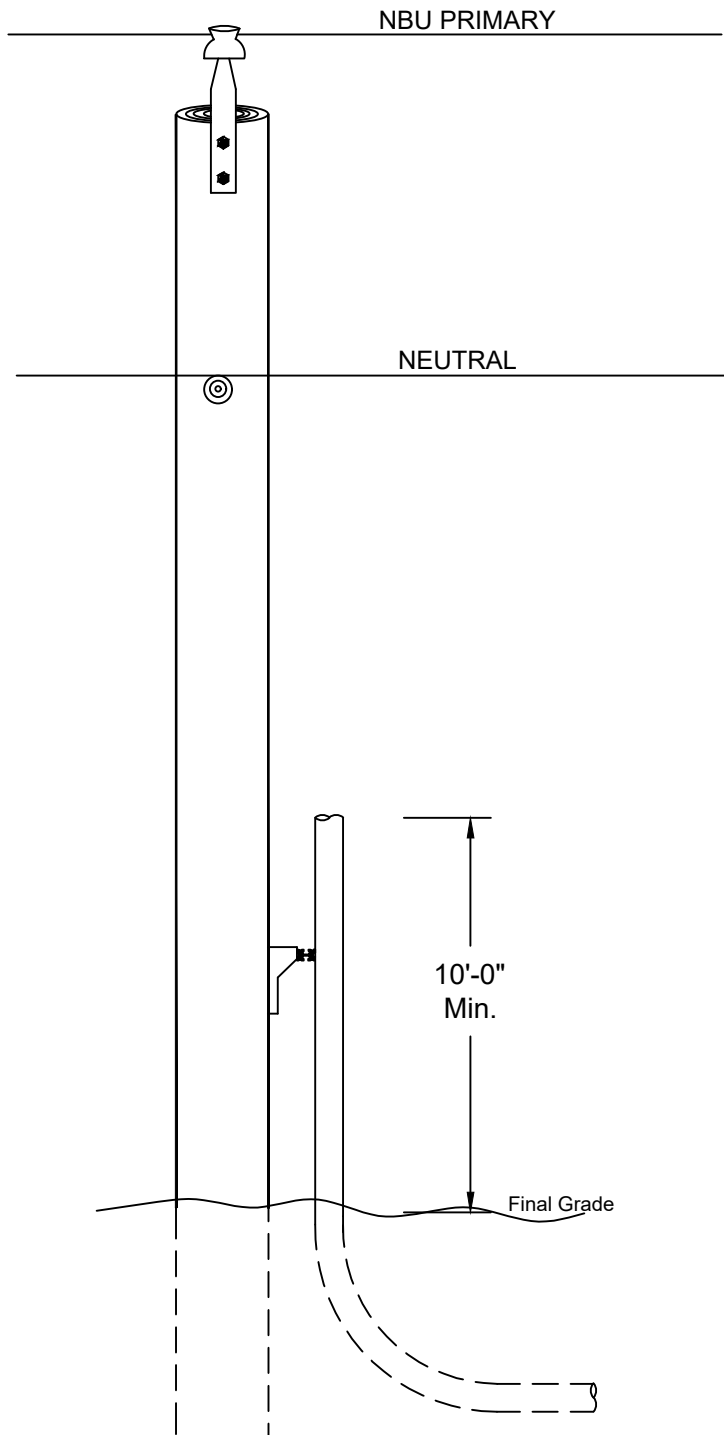
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ELECTRIC PLACEMENT ZERO LOT LINE EASEMENT
 OPTION 2.1

ISSUED	SCALE	DRAWING NUMBER
05/26	NTS	EU-725

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.



Pole and bracket installed by NBU. Email elecopsupport@nbutexas.com when ready for bracket installation if not already installed on pole. Stub out (to NBU installed riser) must be plumb with pole and attached to bracket by temporary means (taped, wired, etc.)

Offset from pole to center of conduit shall be 7 1/2". Extend conduit 10'-0" min. above final ground grade.

Schedule 80 PVC shall be used for all exposed conduit above ground. Underground conduit, including stub out, is sized by NBU and installed according to specification EU-910. Email electricengineeringsupport@nbutexas.com to verify conduit size.



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UNDERGROUND RISER POLE STUB OUT

ISSUED

12/25

SCALE

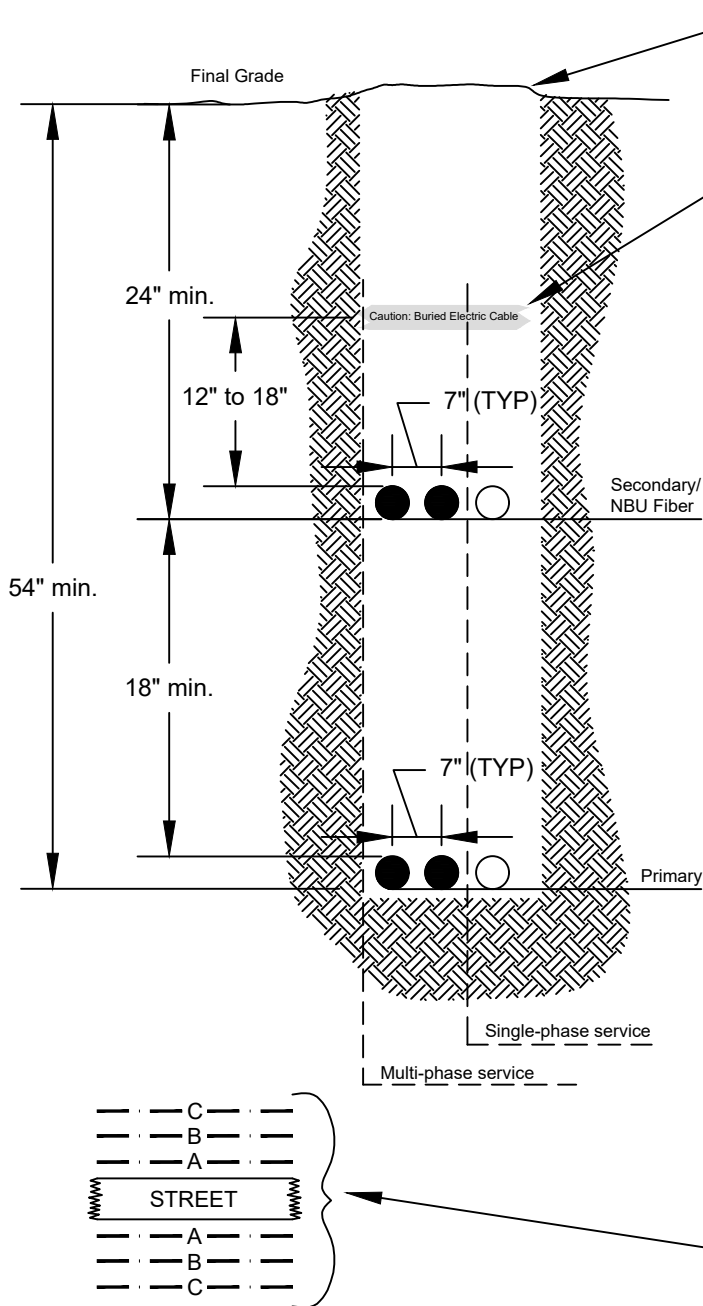
NTS

DRAWING NUMBER

EU-800

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific job.

Locations are determined by NBU. All customer installations require inspection by NBU.



Mound earth 3" to 4" above final ground grade.

A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit. For more than 2 conduits horizontally in trench, 2 tapes shall be installed.

Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have 36" minimum radius. Conduit elbows for secondary shall have 18" minimum radius.

CONDUIT SHALL BE SIZED BY NBU.

Where trenches consist of rock, conduit installations shall have a 3" minimum sand bed below and beside conduit and 12" minimum above. NBU Electric Inspector reserves the right to determine backfill material.

Where electrical equipment foundations (for transformers, junctions boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with approved compacted base material for the entire depth of the trench.

Trenches which cross or will be under streets, commercial driveways, or parking lots shall be back filled with approved compacted base material.

Customer to furnish and install pull string.

No pipe, gas, or water line shall be closer than 36" horizontally from any underground electrical conduit (parallel construction). No pipe, gas, or water line shall be closer than 12" vertically from any underground electrical conduit (perpendicular crossing).

At no time shall any electric line, primary or secondary, be connected for service if found to cross under any building foundation.

Additional depth maybe required at the discretion of NBU Electric Inspector.

For multi-phase service, conductor phase orientation shall be as shown unless approved otherwise by NBU.



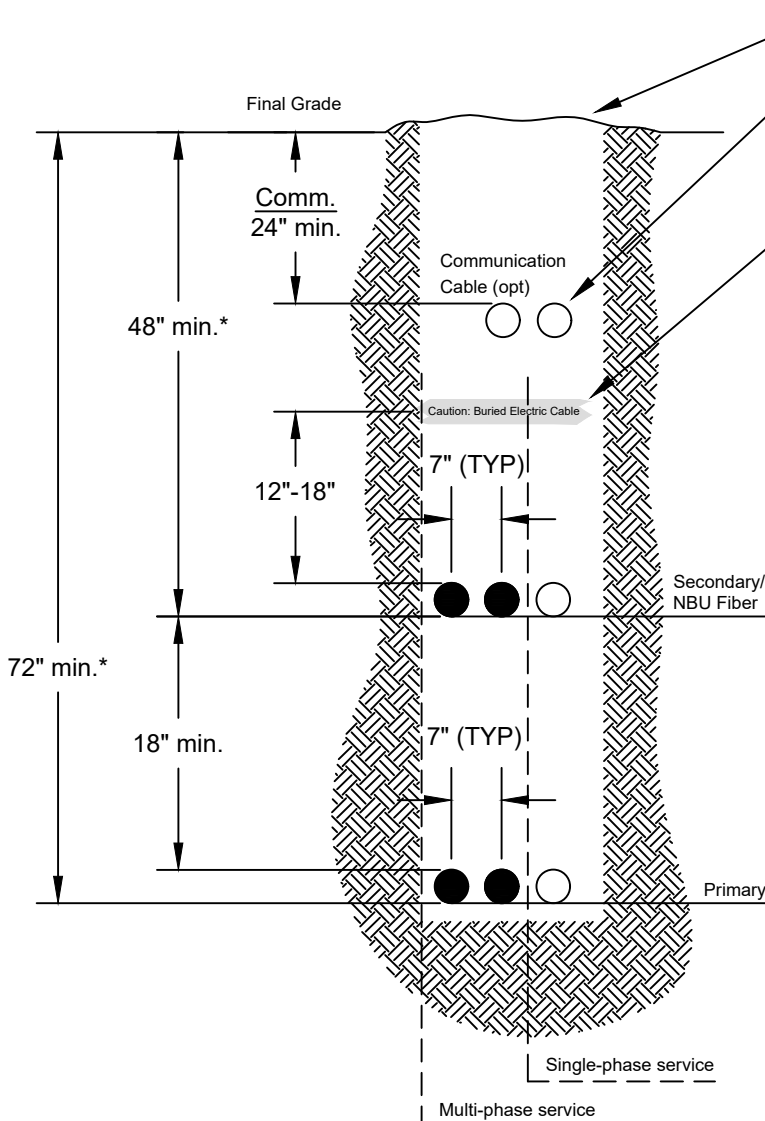
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UNDERGROUND CONDUIT INSTALLATION
 (PRIMARY & SECONDARY ONLY - NON SUBDIVISION)

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-910

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific job.

Locations are determined by NBU. All customer installations require inspection by NBU.



Mound earth 3" to 4" above final ground grade.

Communication cable/conduit shall be installed above all electrical conduit(s) and caution tape. All communication cable(s) shall be pulled through conduit, no direct burial.

A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit but below any communication cables. For more than 2 conduits horizontally in trench, 2 tapes shall be installed.

Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have 36" minimum radius. Conduit elbows for secondary shall have 18" minimum radius.

CONDUIT SHALL BE SIZED BY NBU.

Where trenches consist of rock, conduit installations shall have a 3" minimum sand bed below and beside conduit and 12" minimum above. NBU Electric Inspector reserves the right to determine backfill material.

Where electrical equipment foundations (for transformers, junctions boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with approved compacted base material for the entire depth of the trench.

Trenches which cross or will be under streets, commercial driveways, or parking lots shall be back filled with approved compacted base material.

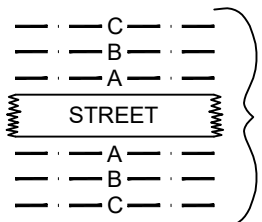
Customer to furnish and install pull string.

No pipe, gas, or water line shall be closer than 36" horizontally from any underground electrical conduit (parallel construction). No pipe, gas, or water line shall be closer than 12" vertically from any underground electrical conduit (perpendicular crossing).

At no time shall any electric line, primary or secondary, be connected for service if found to cross under any building foundation.

***Service conduits from meter back to source shall be installed at 24" min. Additional depth maybe required at the discretion of NBU Electric Inspector.**

For multi-phase service, conductor phase orientation shall be as shown unless approved otherwise by NBU.



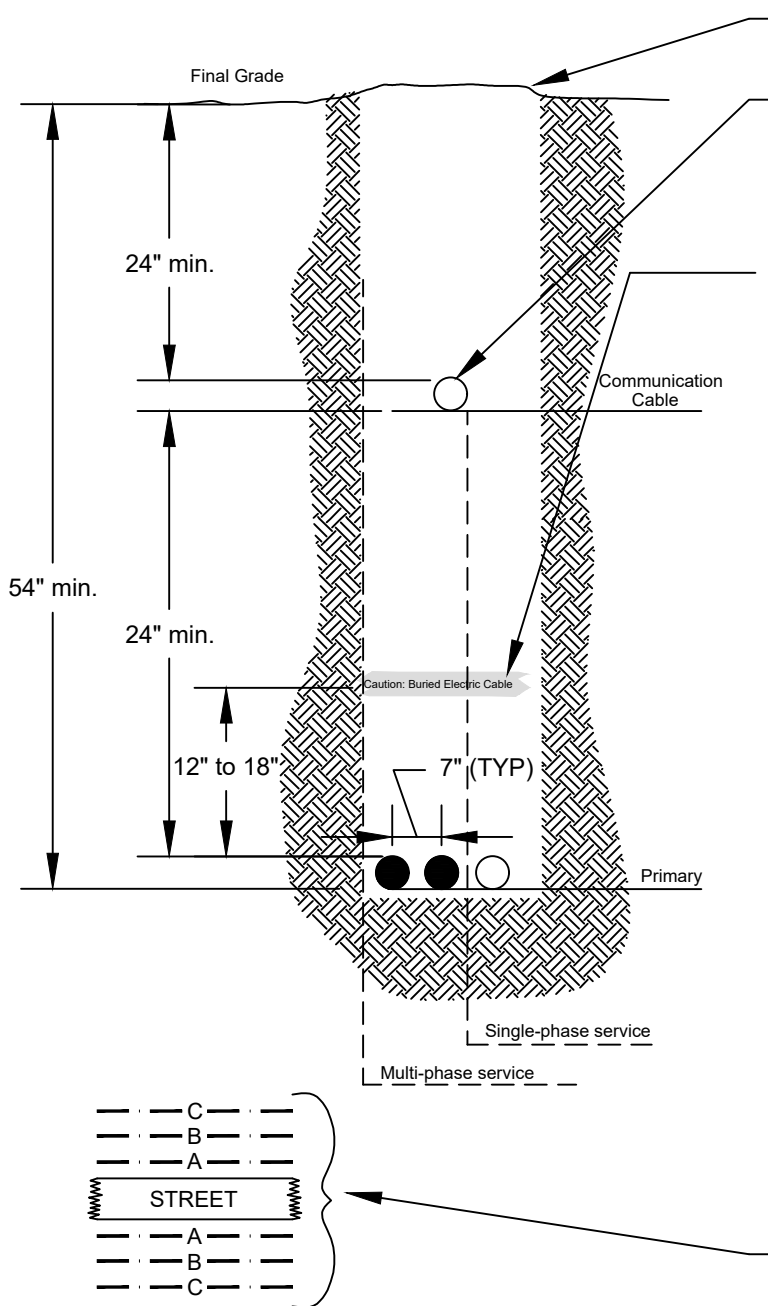
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**UNDERGROUND CONDUIT INSTALLATION
(COMMON TRENCH)**

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-915

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific job.

Locations are determined by NBU. All customer installations require inspection by NBU.



Mound earth 3" to 4" above final ground grade.

Communication cable/conduit shall be installed above all electrical conduit(s) and caution tape. All communication cable(s) shall be pulled through conduit, no direct burial.

A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit. For more than 2 conduits horizontally in trench, 2 tapes shall be installed.

Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have 36" minimum radius.

CONDUIT SHALL BE SIZED BY NBU.

Where trenches consist of rock, conduit installations shall have a 3" minimum sand bed below and beside conduit and 12" minimum above. NBU Electric Inspector reserves the right to determine backfill material.

Where electrical equipment foundations (for transformers, junctions boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with approved compacted base material for the entire depth of the trench.

Trenches which cross or will be under streets, commercial driveways, or parking lots shall be back filled with approved compacted base material.

Customer to furnish and install pull string.

No pipe, gas, or water line shall be closer than 36" horizontally from any underground electrical conduit (parallel construction). No pipe, gas, or water line shall be closer than 12" vertically from any underground electrical conduit (perpendicular crossing).

At no time shall any electric line, primary or secondary, be connected for service if found to cross under any building foundation.

Additional depth maybe required at the discretion of NBU Electric Inspector.

For multi-phase service, conductor phase orientation shall be as shown unless approved otherwise by NBU.



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UNDERGROUND CONDUIT INSTALLATION
 (ELECTRIC PRIMARY AND COMMUNICATION ONLY - NON
 SUBDIVISION)

ISSUED	SCALE	DRAWING NUMBER
12/25	NTS	EU-920