

# **REDBOOK:**

**Customer Engineering Standards And Metering Requirements** 

**July 2025** 

# CUSTOMER ENGINEERING AND METERING REQUIREMENTS INDEX

For more information or if you have questions on these requirements, please contact our Benton PUD Engineering Department at 509-582-1230

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TITLE:

**GENERAL INFORMATION** Q-1 Series

SHT. REV DATE: 05/19/25 1 of 1 DWG. NO. **Q-1** 

Self Contained Meter Base

(Furnished and provided by customer)

No. Clips Socket

Max Amp.

# Notes:

Voltage

Wires

1. Manual block by pass required on all 200 Amp non-residential installations, and all 320 Amp installations.

В

2. No automatic, plunger, or lever type by pass devices allowed.

D Purchased From Vendor

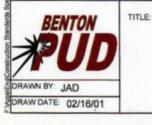
- Meters are required to be mounted external to the building. Exceptions will need to be approved by District Engineering and Metering Departments prior to construction.
- 4. Sockets A,B,D, will be provided by the customer.

A

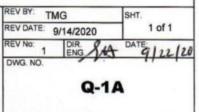
5. Sockets C & E will be provided by the District for the customer to install.

 $\Box$ 

- The meter base for single phase, two wire service, shall be the same as a single phase, three wire service, with the upper right terminal tied to the neutral. Three phase, three wire service shall be metered as a three phase four wire service.
- Socket B will have the 9 o'clock terminal position tied to the neutral.
- 8. Ringless meter bases will not be approved by the District.
- The addition of customer owned equipment between the socket and utility owned electric meter, such as an intermediate internal transfer switch, is not allowed.



Meter Socket
Terminal Clip Configuration



**Current Transformer Meter Base** 

(Provided by District)

Socket

C/Test SW

E/Test SW

E/Test SW

E/Test SW

E/Test SW

C

 $\Box$ 

Ш

**Provided by District** 

No. Clips

No. CT.

mmmmmmm

E

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Service and Conduit Requirements			
Residential	Meter Base Type	Minimum Conduit	Maximum Service
UG Services		Size, Type	Conductor Length
200A	Self Contained	3" Sch 40	200FT *
400A, (320A Class)	Self Contained	3" Sch 40	250FT *
400A - 600A	CT Meter	4" Sch 40	250FT *
800A and Over	CT Meter	See Note 6	See Note 6

Service Requirements		
Commercial UG Services	Meter Base Type	
200A, 1Ø 400A, 1Ø (320A Class) 400A, 1Ø Over 400A, 1Ø 200A, 3Ø Over 200A, 3Ø	Self Contained Self Contained CT Meter CT Meter Self Contained CT Meter	

<sup>\*</sup> Distances are based on measurements from the padmount transformer, remember to account for the extra 50 feet for pole mount transformer installations.

- Details shown are minimum District standards and are not intended to depict the Washington State Labor and Industries requirements.
- 2. Conduit may not exceed maximum allowable length, or have bends exceeding 270 degrees including sweeps at the meter base and transformer or pole.
- 3. Customer owned and installed service wires for single phase services are limited to (4) sets of conductors and shall not exceed 500 kcmil aluminum or copper.
- Customer owned and installed service wires for three phase services are limited to (6) sets of conductors and shall not exceed 750 kcmil aluminum or copper.
- 5. Commercial underground service entrance conductor is considered to be customer owned and installed for both self-contained and instrument rated metering (CT metering) regardless of the meter location (i.e. transformer, CT cabinet, or other self-contained unit), and is subject to the requirements of currently adopted National Electrical Code and Washington Administrative Code for size (amperage requirement) and voltage drop.
- 6. Residential services 800A and above will be customer owned and installed service conductor.
- 7. The District will supply conductor for overhead services up to 400A, if adequate support structures are available and service length does not exceed calculated limits.



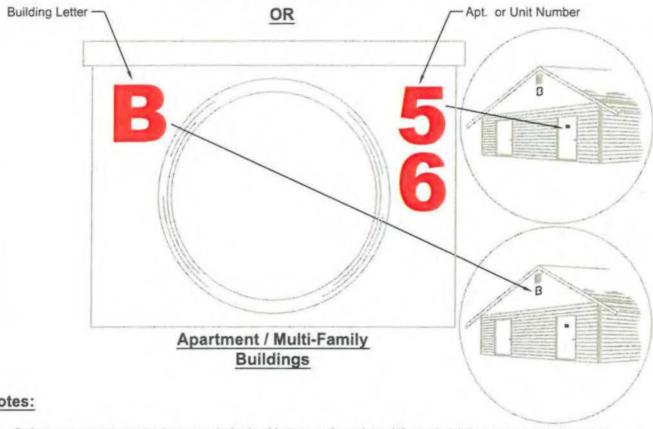
TITLE:

Residential & Commercial Services

Maximum Lengths & Required Conduit Sizes

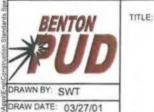
REV BY: MM		SHT
REV DATE: 5/1/2025		1 of 1
REV NO:	DIR SA	DATE 5/19/25
DWG, NO.	Co.	
	Q-1E	2
	Q-11	

Manufactured Home Type



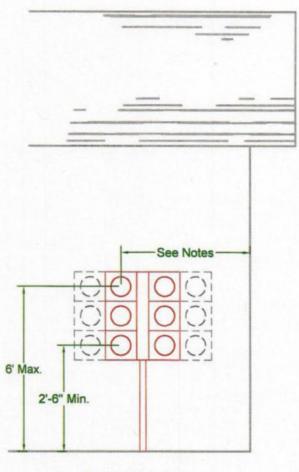
Notes:

1.) Before permanent service is connected raised letters and numbers (1" min. height) or engraved placard as approved by the District must be permanently attached to the meter base, apartment door and apartment panel. No adhesive non-raised letters or numbers allowed.



Multiple Meter Base Identification Numbering Requirements for Multi- Unit Mobile Home Parks & Multi Unit Buildings

REV BY: JWV	SHT. 1 of 1
REV DATE: 10/01/13	
REV No: 1 DIR ENG. 75	DATE 1/14
DWG. NO.	
Q-1	C

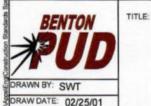


# Side Of Building

# Acceptable Installation

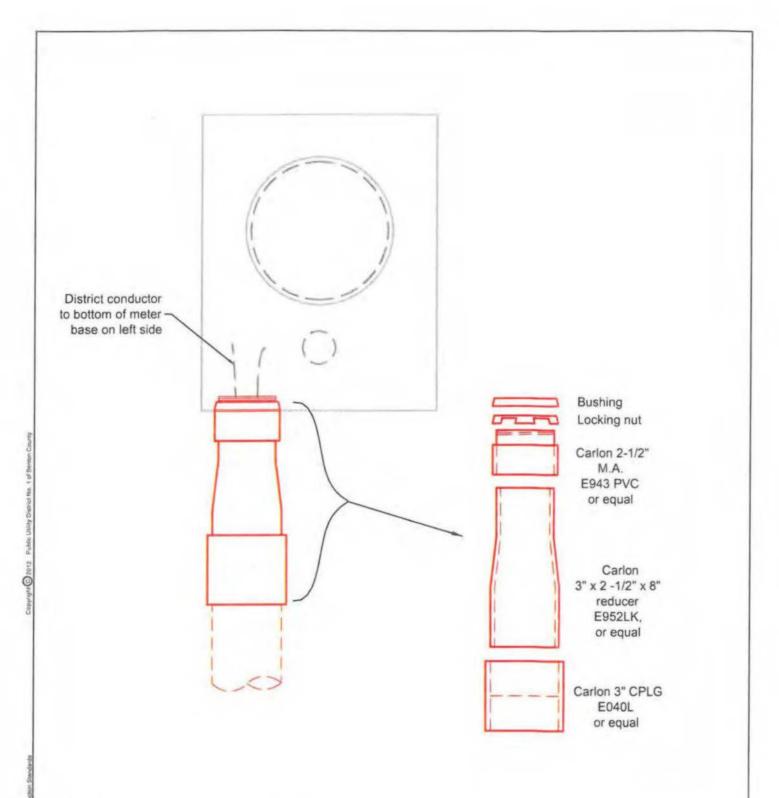
#### Notes:

- Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- Permanent service will not be connected without proper meter base identification, refer to Q-1C for meter base identification requirements.
- 3. Access to supply conductors must be capable of being sealed by the District.
  - District approval must be obtained in writing for any of the following:
    - A. If any disconnect is installed on the delivery side of meters.
    - B. If meter installation is over 4' from the front, on the side of the building.
    - C. If other than outside installation.
- 5. All multi-pack meter bases must be pre-approved by District Engineers.
- 6. All service Conductor is to be furnished and installed by the customer.

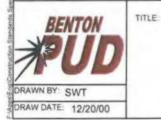


Multi-Tennant Meter Base Installation For Apartments, Strip Malls, etc.

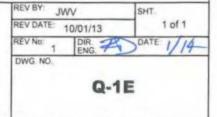
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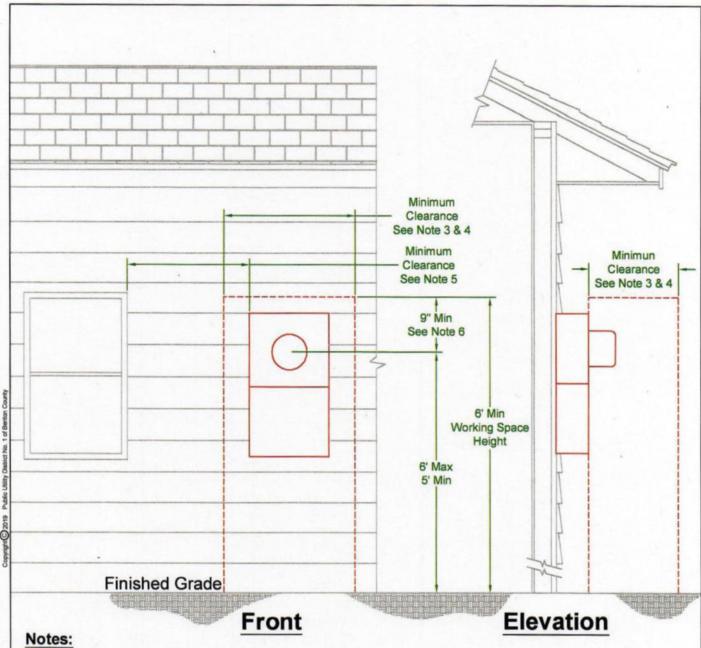


- 1. Reducer (supplied by customer) 3" x 2-1/2" x 8" shall not have sharp internal edges.
- 2. Carlon adapters are supplied by customer and must be pre-approved to meet District requirements.

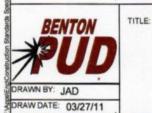


2 1/2" x 3" Conduit Adapter for 200 Amp Meter Base





- Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- 2. Clearance space will be measured from the front of meter enclosure.
- 3. 250V or less requires 36" total minimum clearance.
- 4. Over 250V requires 48" total minimum clearance.
- 5. Minimum clearance of 36" from meter base to door and window openings.
- 6. Minimum clearance of 9" above meter must be maintained free of obstructions.
- 7. Minimum clearance of 36" from gas meter.
- Meter base must be located within 48" of the front of the building.
- 9. Minimum clearance requirements will be from property line or any obstructions.



Minimum Clearance Requirements
For Self Contained Meter Installations

REV BY: TMG
REV DATE: 8/29/2020
SHT.
1 of 1

REV No: 2 DIR.
ENG. SCH.
DATE: 120

Q-1F

BENTON P-U-D DRAWN BY: JAD

DRAW DATE: 03/05/04

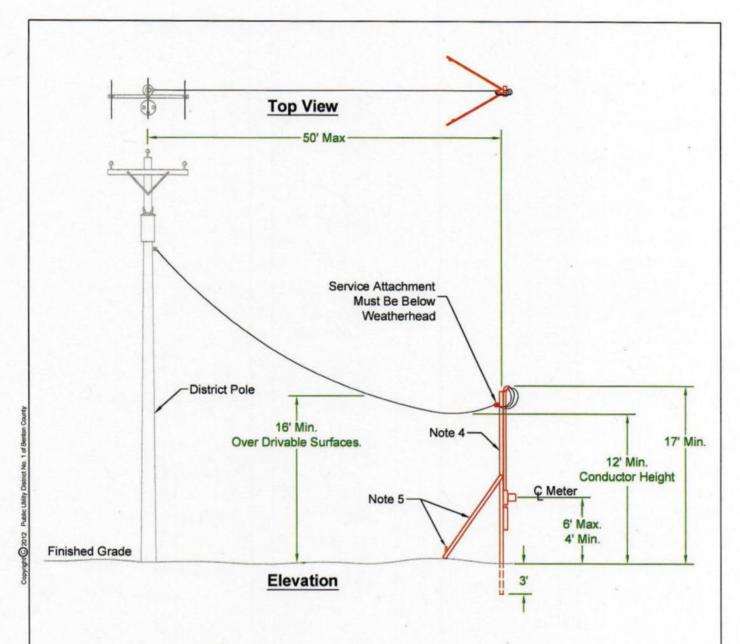
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TEMPORARY SERVICE Q-2 Series REV BY: MM SHT.

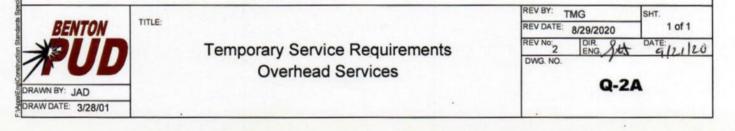
REV DATE: 05/19/25 1 of 1

REV NO: 2 DIR. DATE:
DWG. NO.

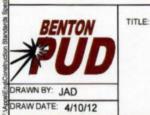
Q-2



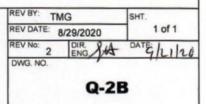
- Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- 2. Applications for temporary service are required in advance of the service being requested.
- 3. All temporary power installations will be metered and will not exceed one year.
- 4. Customer's temporary service pole may be of 4" x 4" solid lumber or two 2" x 4" lumber laminated together.
- 5. Braces will consist of 2" x 4" lumber with stakes solidly driven into the ground and firmly attached to braces.
- 6. All clearances must meet or exceed the National Electrical Safety Code.
- 7. Contact 811 to request utility locates two days prior to digging.

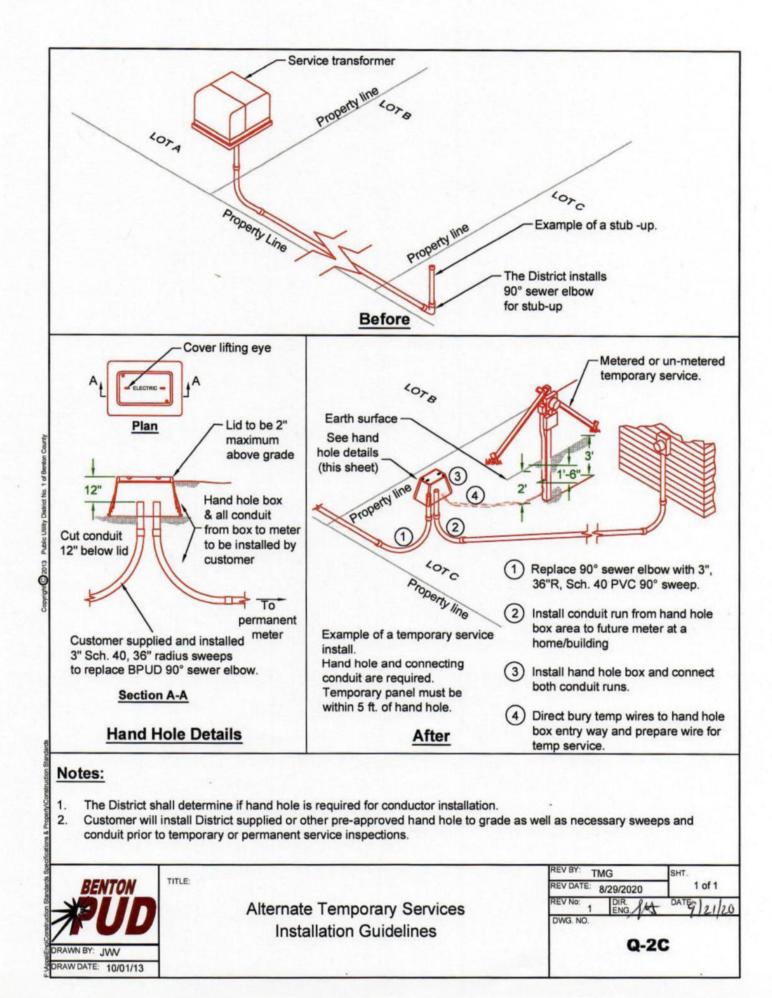


- Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- 2. Applications for temporary service are required in advance of the service being requested.
- 3. All temporary power installations will be metered and will not exceed one year.
- 4. Customer's shall provide all trenching, backfill and sufficient conductor plus 6' to reach District facilities.
- 5. Permanent service stub-outs may not be utilized for temporary power conductor.
- 6. Customer's temporary service pole may be of 4" x 4" solid lumber or two 2" x 4" lumber laminated together.
- 7. Braces will consist of 2" x 4" lumber with stakes solidly driven into the ground and firmly attached to braces.
- 8. All clearances must meet or exceed the National Electrical Safety Code.
- 9. Contact 811 to request utility locates two days prior to digging.



Temporary Service Requirements Underground Services





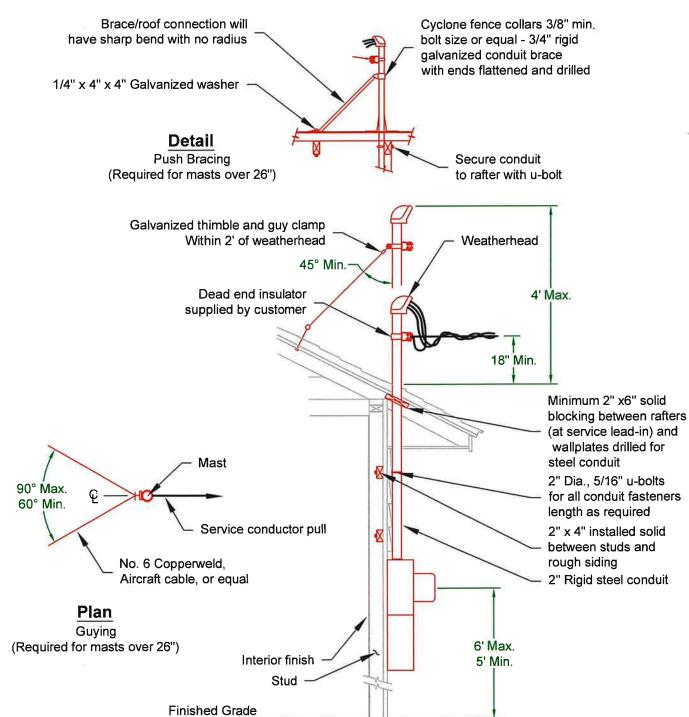
TITLE:

**OVERHEAD SERVICES** Q-3 Series

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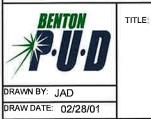






- 1. Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements. Ref. WAC 296-46B-230-028.
- Service drops must maintain minimum ground line clearance requirements at lowest point per the National Electrical Safety Code, Rule 232.

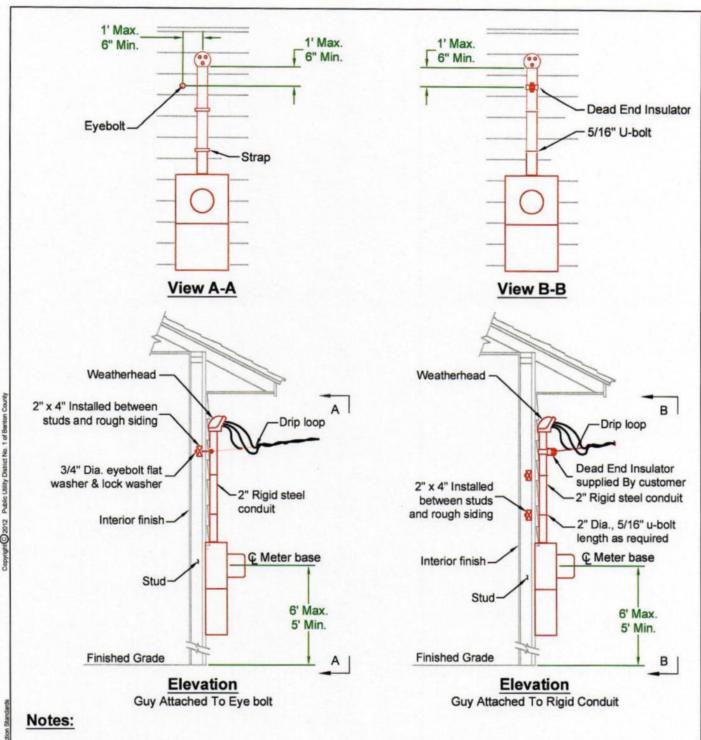
**Front View** 



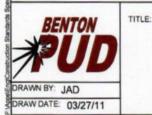
New and/or Altered Service Through Roof 200 Amp or Less

REV BY: MM	SHT.	
REV DATE: 5/5/2025	1 of 1	
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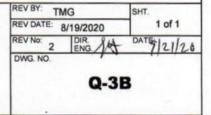
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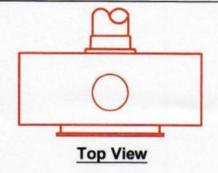


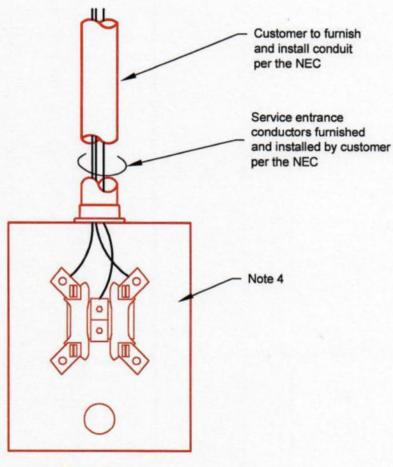
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries
  requirements.
- Service drops must maintain minimum ground line clearance requirements at lowest point per the National Electrical Safety Code, Rule 232.



New and/or Altered Service Below Roof Mast Installation 200 Amp or Less

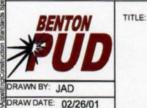




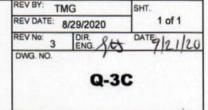


# Front View

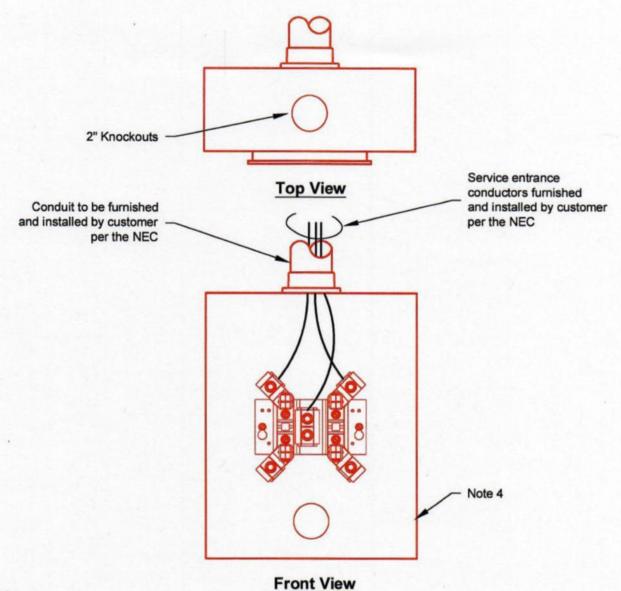
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- 3. The customer shall supply mast, service entrance conductors and meter base.
- 4. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 5. Ringless meter bases will not be approved by the District.
- 6. No condulet type fittings to be installed in conduit containing service conductors.
- 7. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



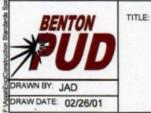
Overhead Feed Single Phase Meter Base 200 Amp, 240/480 Volt 3 Wire Non-Typical





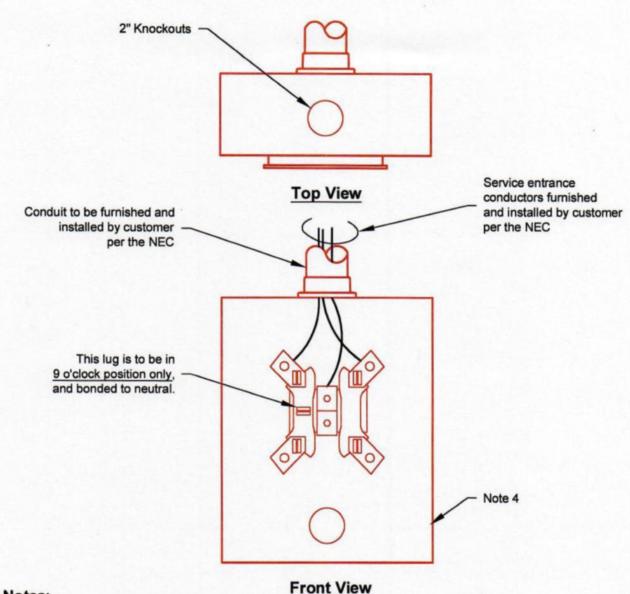


- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- 3. The customer shall supply mast, service entrance conductors and meter base.
- 4. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 5. For pre-approved meter bases, see document Standard Q-4M.
- 6. Ringless meter bases will not be approved by the District.
- 7. No condulet type fittings to be installed in conduit containing service conductors.
- 8. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.

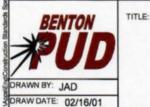


Overhead Feed 200 Amp or Less Meter Base Single Phase, 120/240 Volt Residential

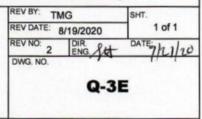
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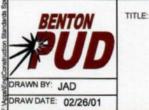
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- 3. The customer shall supply mast, service entrance conductors and meter base.
- 4. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 5. For pre-approved meter bases, see document Standard Q-4M.
- 6. Ringless meter bases will not be approved by the District.
- No condulet type fittings to be installed in conduit containing service conductors.
- 8. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



Overhead Feed 200 Amp or Less Meter Base Network 120/208 Volt Residential



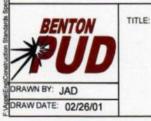
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- The customer shall supply mast, service entrance conductors and meter base.
- Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- For pre-approved meter bases, see document Standard Q-4M.
- Ringless meter bases and safety socket by-passes will not be approved by the District.
- No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 200A non-residential services.
- All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



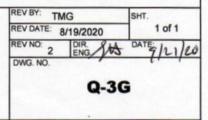
Overhead Feed 200 Amp Meter Base Single Phase 120/240 Volt Non-Residential

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DWG. NO.	11	11010
	Q-31	

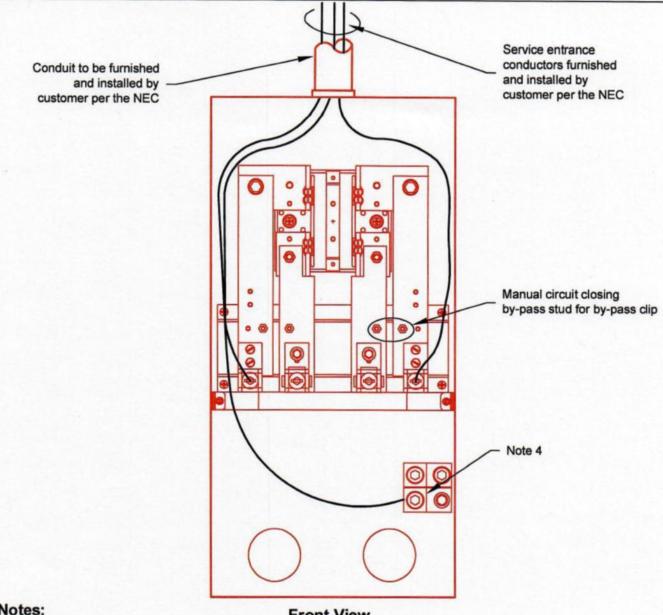
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- 3. The customer shall supply mast, service entrance conductors and meter base.
- Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 5. For pre-approved meter bases, see document Standard Q-4M.
- 6. Ringless meter bases and safety socket by-passes will not be approved by the District.
- 7. No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 200A non-residential services.
- 9. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



Overhead Feed 200 Amp Meter Base Network 120/208 Volt Non-Residential



2018 Public Utility District No. 1 of Benton Co



# Front View

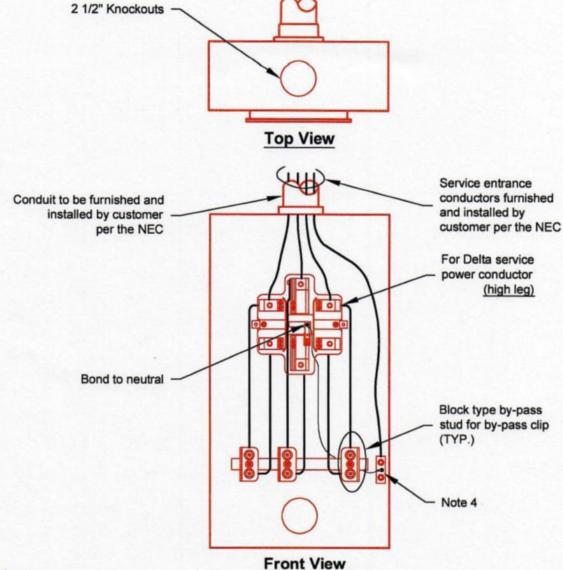
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- The customer shall supply mast, service entrance conductors and meter base. 3.
- 4. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 5. For pre-approved meter bases, see document Standard Q-4M.
- 6. Ringless meter bases, and safety socket and lever by-passes will not be approved by the District.
- 7. All self-contained 320A services must use meter sockets rated for 320A continuous duty.
- No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 320A services.
- Doubling of wires is allowed with factory provided, UL approved connectors, only when conductor type and size are the same.



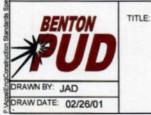
Overhead Feed 320 Amp Meter Base Single Phase, 120/240 Volt Residential and Commerical

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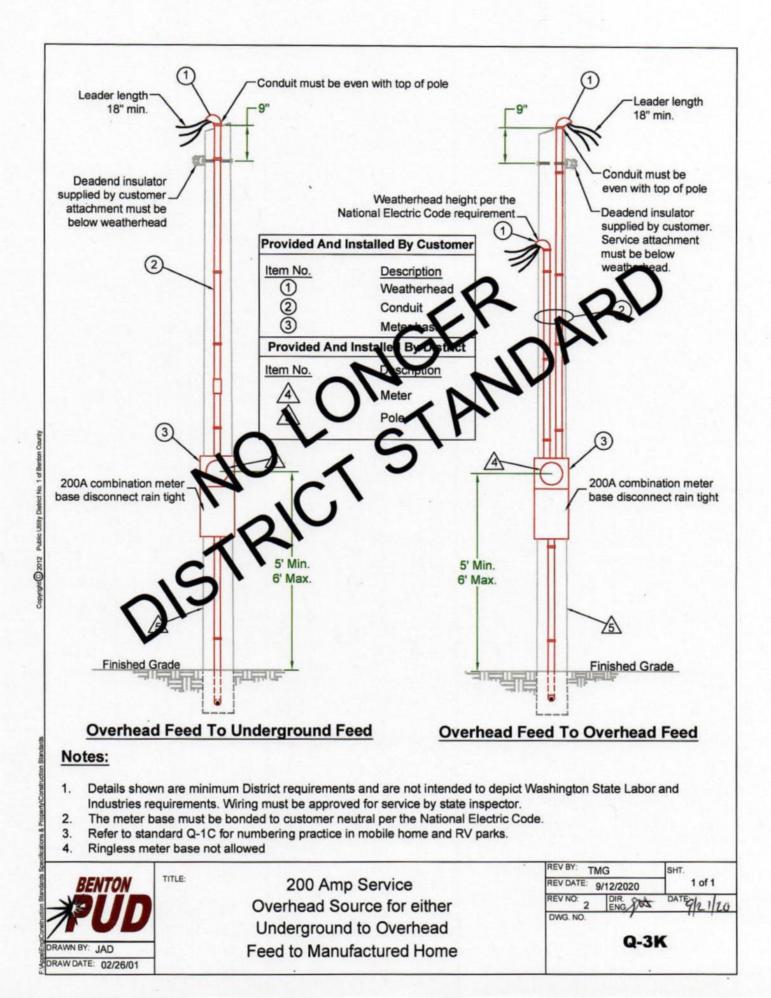


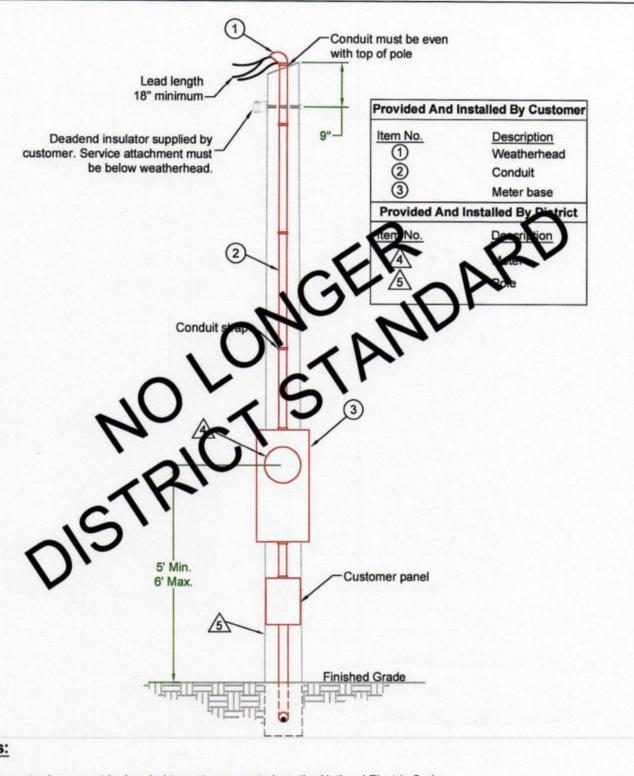
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Customer shall contact Customer Engineering prior to installation.
- 3. The customer shall supply mast, service entrance conductors and meter base.
- Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- For pre-approved meter bases, see document Standard Q-4M.
- Ringless meter bases and safety socket by-passes will not be approved by the District.
- No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 200A non-residential services.
- All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.
- Power conductor (high leg, color coded orange).



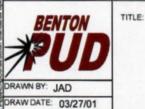
Overhead Feed 200 Amp Meter Base Three Phase Non-Residential

TMG REV DATE: 8/19/2020 1 of 1 Q-3J



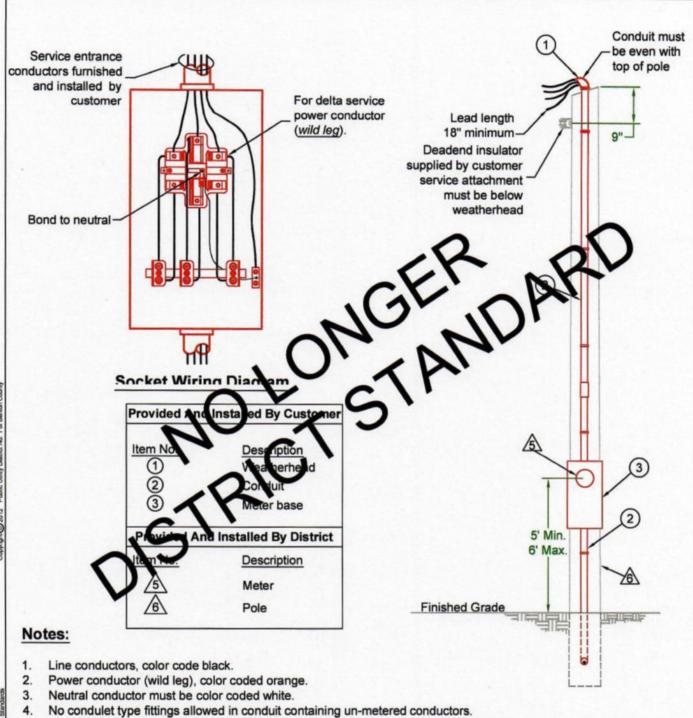


- 1. The meter base must be bonded to customer neutral per the National Electric Code.
- 2. Refer to District standard Q-1C for numbering practice in mobile home and RV parks.
- Ringless meter base not allowed.

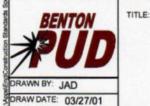


Meter Pole Service Overhead Source with Receptacle REV BY: TMG
REV DATE: 9/12/2020 1 of 1

REV NO: 2 DIR ENG DATE: 2 DATE



- 5. The meter base must be bonded to the customer neutral per the National Electric Code.
- 6. Manual block type by-pass required for three phase 200A services.
- 7. Lever by-pass or safety socket style not allowed.
- Details shown are minimum District requirements and are not intended to depict Washington State Labor and Industries requirements.
- 9. Ringless meter base not allowed.



Overhead Feed to Underground Load Pole Mounted 200 Amp Socket Three Phase 4 Wire

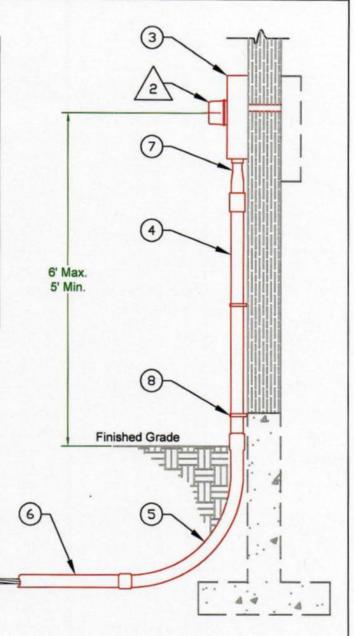
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TITLE:

UNDERGROUND SERVICES Q-4 Series

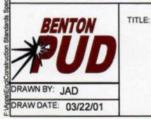
REV BY: SHT. REV DATE: 05/19/25 1 of 1 DATE: DWG. NO. **Q-4** 

Provided And Installed By Customer

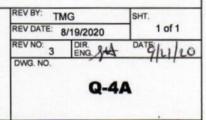


# Notes:

- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. The District's service conductors will connect at the meter socket line terminals.
- 3. Meter base must be installed, plumb and solid, and bonded to customer neutral per NEC, as required.
- For pre-approved meter bases and details, ref. District standards Q4-C through Q-4M.
- Reference District standards Q-7A and Q-7B for trenching details.
- 6. 320A meter bases may only be utilized for single phase installations.
- Ringless meter bases will not be approved by the District.
- 8. No condulet type fittings to be installed in conduit containing service conductors.

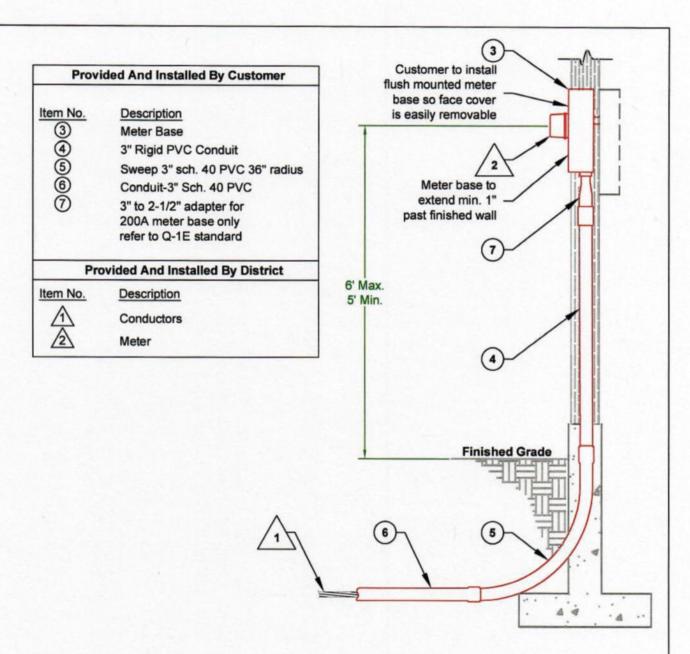


Service Entrance Surface Mounted Underground 400 Amp or Less

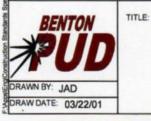


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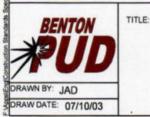
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. The District's service conductors will connect at the meter socket line terminals.
- 3. Meter base must be installed, plumb and solid, and bonded to customer neutral per NEC, as required.
- 4. For pre-approved meter bases and details, ref. District standards Q4-C through Q-4M.
- 5. Reference District standards Q-7A and Q-7B for trenching details.
- 320A meter bases may only be utilized for single phase installations.
- Ringless meter bases will not be approved by the District.
- 8. No condulet type fittings to be installed in conduit containing service conductors.



Service Entrance Flush Mounted Underground 400 Amp or Less

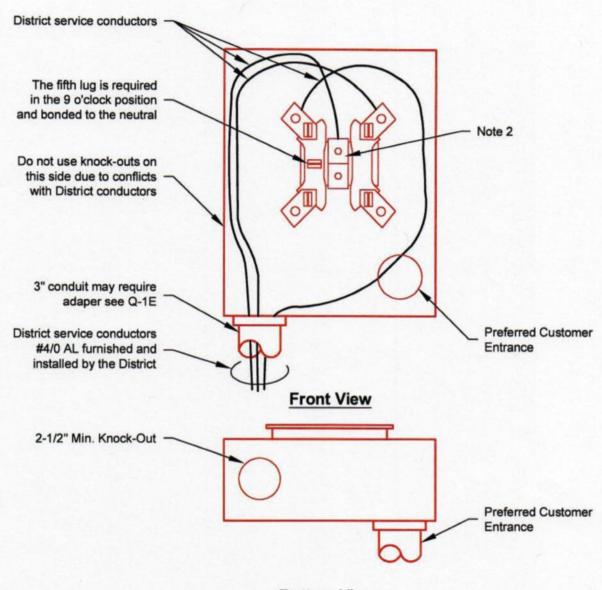
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- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- For pre-approved meter bases, see document Standard Q-4M.
- Ringless meter bases will not be approved by the District.
- No condulet type fittings to be installed in conduit containing service conductors.
- Meter base must have lugs which will accept #4/0 aluminum conductors.
- All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



**Underground Feed** 200 Amp Meter Base Single Phase 120/240 Volt Residential

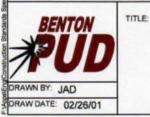
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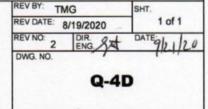
# **Bottom View**

# Notes:

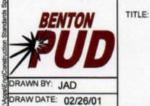
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 3. For pre-approved meter bases, see document Standard Q-4M.
- 4. Ringless meter bases will not be approved by the District.
- 5. No condulet type fittings to be installed in conduit containing service conductors.
- 6. Meter base must have lugs which will accept #4/0 aluminum conductors.
- All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



Underground Feed 200 Amp Meter Base Network, 120/208 Volt Residential



- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- For pre-approved meter bases, see document Standard Q-4M.
- 4. Ringless meter bases and safety socket by-passes will not be approved by the District.
- 5. No condulet type fittings to be installed in conduit containing service conductors.
- 6. Manual block type by-pass is required for 200A non-residential services.
- 7. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.

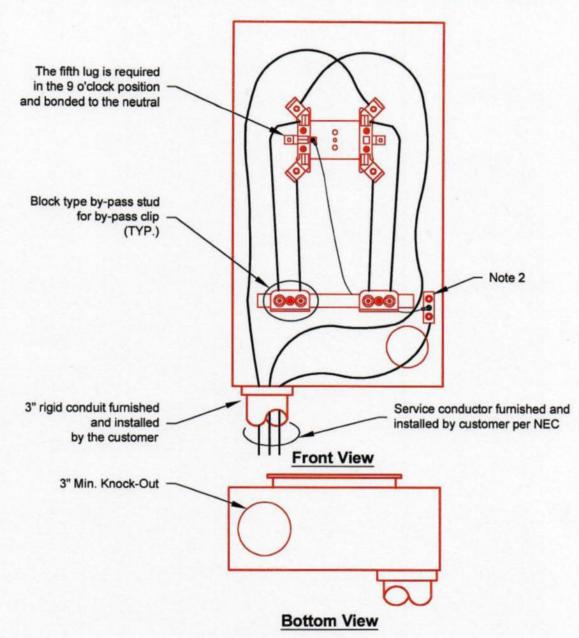


Underground Feed 200 Amp Meter Base Single Phase, 120/240 Volt Non- Residential REV BY: TMG
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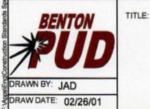
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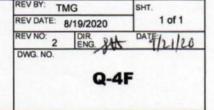
Q-4E

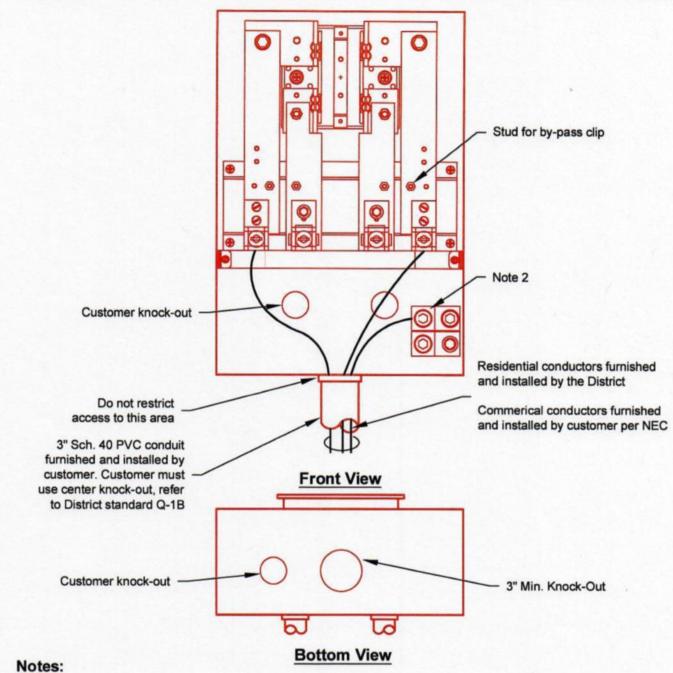


- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 3. For pre-approved meter bases, see document Standard Q-4M.
- 4. Ringless meter bases and safety socket by-passes will not be approved by the District.
- 5. No condulet type fittings to be installed in conduit containing service conductors.
- 6. Manual block type by-pass is required for 200A non-residential services.
- 7. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.



Underground Feed 200 Amp Meter Base Network, 120/208 Volt Non - Residential



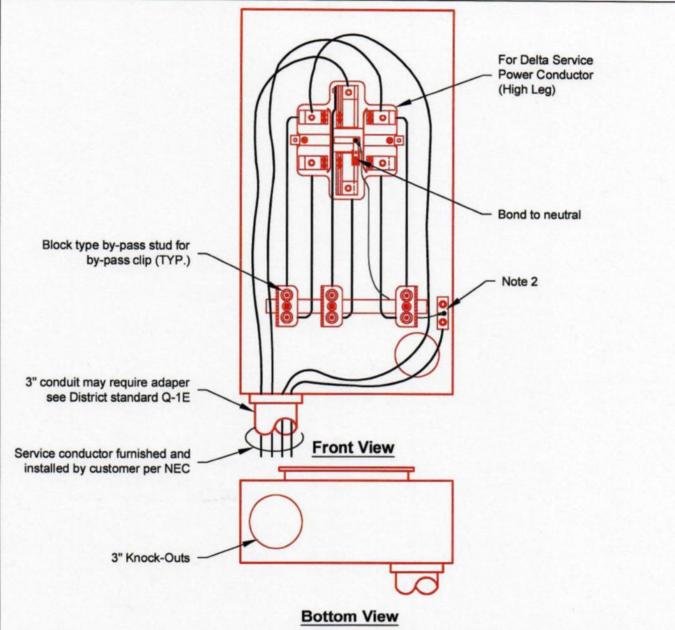


- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- For pre-approved meter bases, see document Standard Q-4M.
- All self-contained 320A services must use meter sockets rated for 320A continuous duty.
- Ringless meter bases, and safety socket and lever by-passes will not be approved by the District. 5.
- No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 320A services.



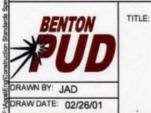
Underground Feed 320 Amp Meter Base Single Phase, 120/240 Volt Residential or Commercial

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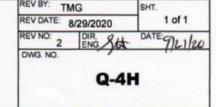


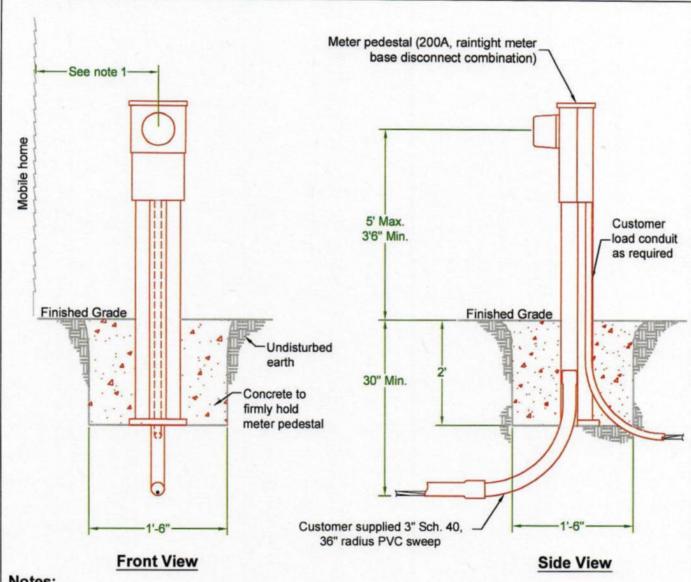
Copyright 2018 Public Utility District No. 1 of Benton

- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base must be installed, plumb and solid, and bonded to customer neutral per the NEC, when required.
- 3. For pre-approved meter bases, see document Standard Q-4M.
- 4. Ringless meter bases and safety socket by-passes will not be approved by the District.
- No condulet type fittings to be installed in conduit containing service conductors.
- Manual block type by-pass is required for 200A non-residential services.
- 7. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.
- 8. Power conductor (high leg, color coded orange).

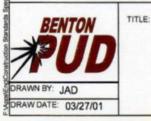


Underground Feed 200 Amp Meter Base Three Phase Non - Residential



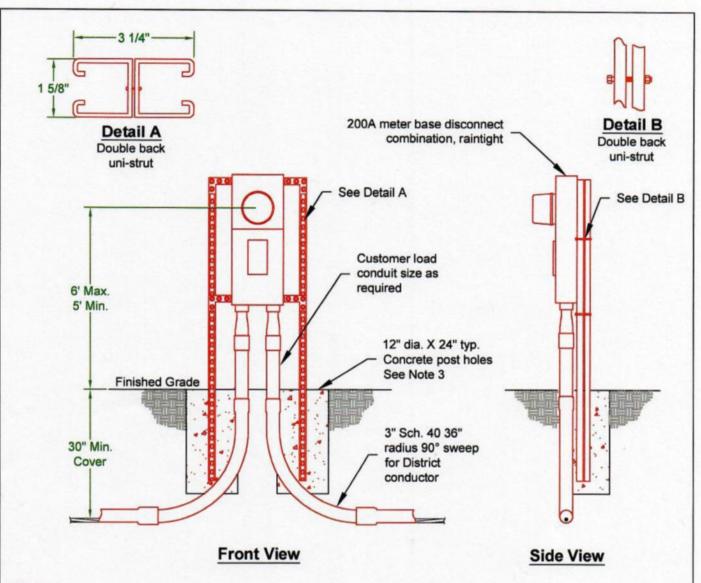


- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- Disconnect distance between manufactured (or mobile) homes must meet NEC requirements.
- Meter base pedestal must be installed in concrete to finished grade, plumb and solid, and bonded to customer neutral per NEC, as required.
- Reference District standards Q-7A and Q-7B for trenching details.
- Ringless meter bases will not be approved by the District.
- Meter base must have lugs which will accept #4/0 aluminum conductors.
- 7. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.
- 8. No condulet type fittings to be installed in conduit containing service conductors.
- Multi-unit mobile home communities must have address identification permanently attached to the front of the meter base, per District standard Q-1C.
- Service conductor and conduit will be customer supplied and installed for services located within mobile home communities.

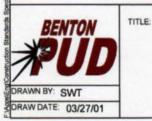


Underground Service 200 Amp Metered Pedestal

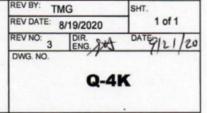
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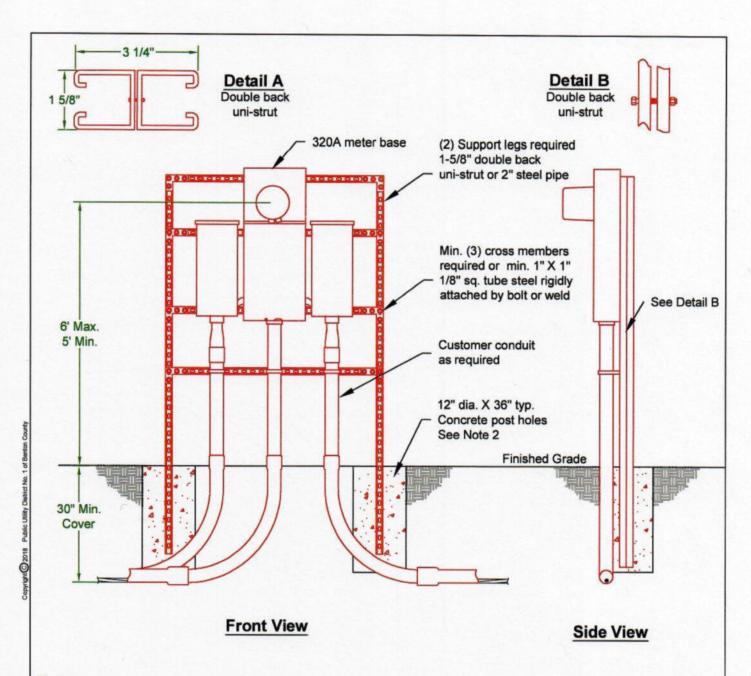


- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Disconnect distance between manufactured (or mobile) homes must meet NEC requirements.
- Meter base vertical structural components must be adequately installed in concrete to finished grade, plumb and solid, and must also be bonded to customer neutral per NEC, as required.
- Reference District standards Q-7A and Q-7B for trenching details.
- 5. Ringless meter bases will not be approved by the District.
- 6. All self-contained services, 200A and below, must use meter sockets rated for 200A continuous duty.
- 7. No condulet type fittings to be installed in conduit containing service conductors.
- Multi-unit mobile home communities must have address identification permanently attached to the front of the meter base, per District standard Q-1C.
- Service conductor and conduit will be customer supplied and installed for services located within mobile home communities.

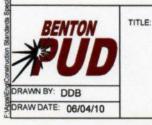


200 Amp Component Meter Pedestal (Mounted on Uni-Strut)

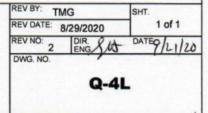




- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- Meter base vertical structural components must be adequately installed in concrete to finished grade, plumb and solid, and must also be bonded to customer neutral per NEC, as required.
- 3. Reference District standards Q-7A and Q-7B for trenching details.
- 4. Ringless meter bases will not be approved by the District.
- 5. All self-contained 320A services must use meter sockets rated for 320A continuous duty.
- No condulet type fittings to be installed in conduit containing service conductors.



320 Amp Component Meter Pedestal (Mounted on Uni-Strut)



# **Q-3D**

Overhead Feed 200A Single Phase, 120/240V (Residential)

B-Line 2M2R (OH)
B-Line 204 MS68 (OH)
Milbank U4517-DL-M4 (OH)
Milbank U4518-XL-W (OH/UG)
Milbank U5169-XTL-200 (OH/UG)

### **Q-3E**

Overhead Feed 200A Network, 120/208V (Residential)

B-Line 204 MS68 w/50365 (5th Jaw Kit) (OH) Milbank U4517-DL-M4 w/K5T (5th Jaw Kit) (OH) Milbank U4518-XL-W w/K5T (5th Jaw Kit) (OH/UG)

### **Q-3F**

Overhead Feed 200A Single Phase, 120/240V (Non-Residential)

> B-Line U264 (OH/UG) Milbank U3514-XL (OH/UG)

### **Q-3G**

Overhead Feed 200A Network, 120/208V (Non-Residential)

B-Line U264 w/50365 (5th Jaw Kit) (OH/UG) Milbank U3514-XL w/K5T (5th Jaw Kit) (OH/UG)

### **Q-3H**

Overhead Feed 320A Single Phase, 120/240V (Residential/Commercial)

> B-Line 324N (OH/UG) Milbank X3548-X (OH/UG) Siemens MM0404L1400SCS (OH/UG)

### **Q-3J**

Overhead Feed 200A Three Phase (Non-Residential)

B-Line U267 (OH/UG) Milbank U3517-XL (OH/UG)

### **Q-4C**

Underground Feed 200A Single Phase, 120/240V (Residential)

B-Line U2M2R (UG)
B-Line U204 (UG)
Milbank U4518-O-W (UG)
Milbank U4518-XL-W (OH/UG)
Milbank U5169-XTL-200 (OH/UG)
Eaton MBER48B200BTS (UG)

### **Q-4D**

Underground Feed 200A Network, 120/208V (Residential)

B-Line U204 w/50365 (5th Jaw Kit) (UG) Milbank U4518-O-W w/K5T (5th Jaw Kit) (UG) Milbank U4518-XL-W w/K5T (5th Jaw Kit) (OH/UG)

### Q-4E

Underground Feed 200A Single Phase, 120/240V (Non-Residential)

> B-Line U264 (OH/UG) Milbank U3514-XL (OH/UG)

### Q-4F

Underground Feed 200A Network, 120/208V (Non-Residential)

B-Line U264 w/50365 (5th Jaw Kit) (OH/UG) Milbank U3514-XL w/K5T (5th Jaw Kit) (OH/UG)

## **Q-4G**

Underground Feed 320A Single Phase, 120/240V (Residential/Commercial)

B-Line 324N (OH/UG), B-Line U4042MCC (UG)
Milbank U3548-X (OH/UG)
Milbank U3251-O-200-CB (UG)
Milbank U6020-0-2/200 (UG)
Siemens MM0404L1400SCS (OH/UG)
Siemens MC0816B1400SCS (UG)

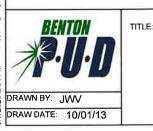
# **Q-4H**

Underground Feed 200A Three Phase (Non-Residential)

B-Line U267 (OH/UG) Milbank 3517-XL (OH/UG) Milbank 127TB (UG)

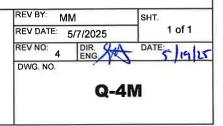
# Notes:

1. Specifications for meter bases not listed may be submitted for review by the District.



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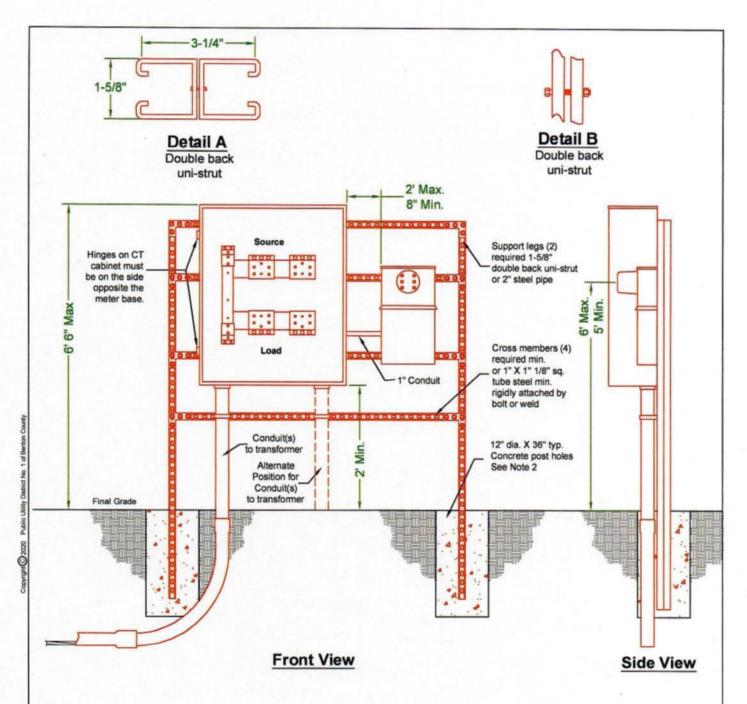
Pre-Approved Meter Bases



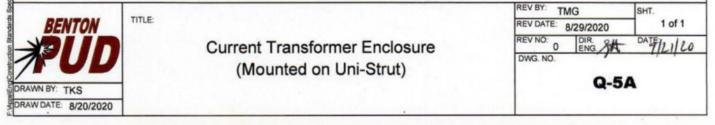
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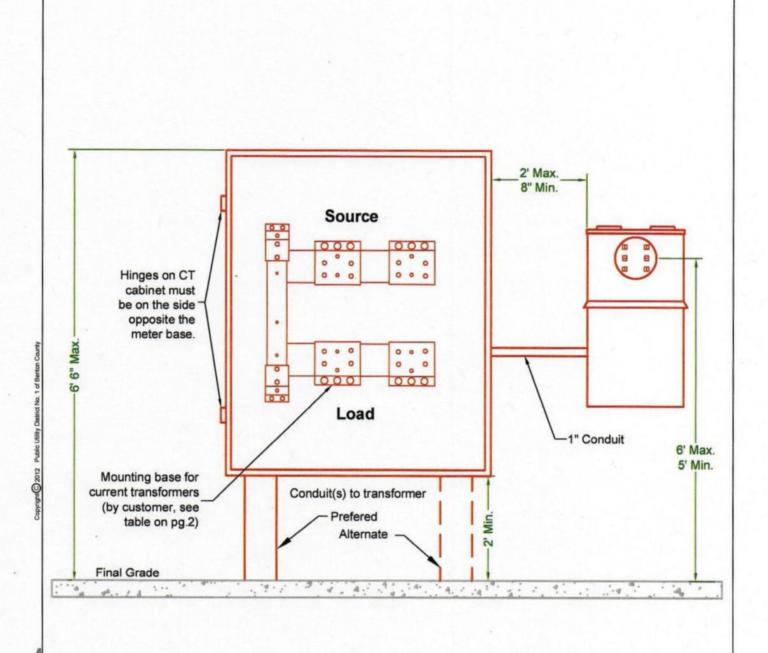
**CURRENT TRANSFORMERS** Q-5 Series

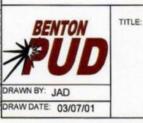
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- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base vertical structural components must be adequately installed in concrete to finished grade.
- 3. Current transformer enclosure and mounting base to be supplied and installed by the customer.
- Reference District standard Q-1B for conduit and conductor requirements.
- 5. Reference District standards Q-5B, Q-5E & Q-5F for current transformer enclosure specifications.
- 6. No condulet type fittings to be installed in conduit containing service conductors.







Current Transformer (CT)
Enclosure Requirements for
Single Phase Services
400-800 Amps

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CT Sen	vice Type	Cabin	et Dimer	nsions	CT Cal	pinets	CT Mountin	g Bases	
Service Size	Number of Load Conductors	Width	Height	Depth	Cooper B-Line Part #	Milbank Part#	Cooper B-Line Part #	Milbank Part #	EUSERC Drawing #
400A	1-2	24" min	48"	11"	244811 HRTCT or 304811 HRTCT	CT244811HC or CT304811HC	6019HA or 6019HAL	K4797 or K4903	328A
400-800A	1-4	36"	48"	11"	364811 HRTCT	CT364811HC	6019HE or 6019HEL	K4797 or K4729	or 328B

### Notes:

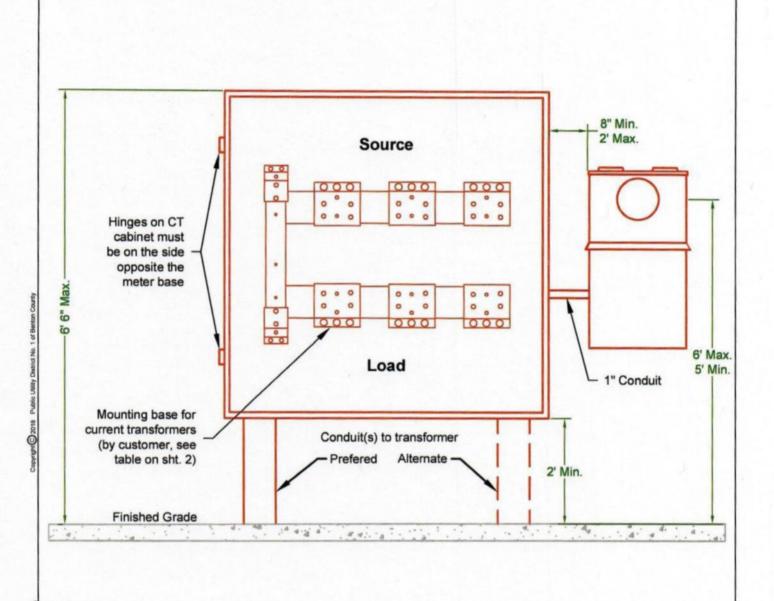
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Current transformer enclosure and mounting base to be supplied and installed by the customer.
- Customer shall ensure the load conductors are compatible with the connectors on the EUSERC 328B style current transformer mounting base. All mechanical cable termination blocks shall be provided by the customer.
- 4. Current transformers to be supplied and installed by District.
- 5. The current transformer mounting base shall have a 50,000 Amp minimum fault current rating.
- 6. The enclosure shall be raintight, with a sealable, hinged, cover.
- 7. Reference District standard Q-1B for conduit and conductor requirements.
- 8. Customer owned and installed service wires for single phase services are limited to (4) sets of conductors and shall not exceed 500 kcmil aluminum or copper.
- 9. The customer shall make up and terminate the load side connections in the current transformer enclosure.
- 10. The customer service entrance conduits must exit the enclosure on the load side of the current transformer mounting base. The District will not allow customer conductors or conduit in the District's terminating and pull space.
- 11. A pre-wired meter base shall be provided by the District and installed by customer.
- 12. Bonding must be in accordance with the current NEC requirements.
- 13. Meter sockets shall be installed within 24" of non-hinge side of enclosure.
- 14. If estimated load is over 50kVA and current transformer metering is needed to facilitate known additional load growth, customer may be allowed to install current transformer enclosure.
- 15. Current transformer metering may be allowed within the secondary compartment of the transformer at the discretion of the District if circumstances are non-typical and minimum requirements are met.

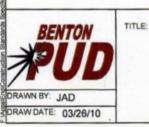
Current Transformer (CT)
Enclosure Requirement for
Single Phase Services
201-800 Amps (Cont.)

REV BY: TMG
REV DATE: 8/21/2020 SHT.

REV NO: 2 DIR.
DATE: NO. DATE: 1/21/20

Q-5B (Cont.)



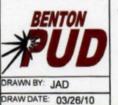


Current Transformer (CT)
Enclosure Requirements for
Three Phase Services
400-800 Amps

REV BY: TMG	SHT.
REV DATE: 8/29/2020	1 of 2
REV NO: 3 DIR. ENG.	A DATE/120
DWG. NO.	" '
Q-	5E

CT Sen	vice Type	Cabine	t Dimens	ions	CT Ca	binets	CT Me	ounting B	ases
Service Size	Number of Load Conductors	Width	Height	Depth	Cooper B-Line Part #	Milbank Part #	Cooper B-Line Part #	Milbank Part #	EUSERC Drawing #
400A	1-2	30"	48"	11"	304811HRTCT	CT304811-HC	6067HA or 6067HAL	K4798 or K4904	329A
400-800A	1-4	36"	48"	11"	364811HRTCT	CT364811-HC	6067HEE or 6067HEEL	K4798 or K4722	or 329B

- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Current transformer enclosure and mounting base to be supplied and installed by the customer.
- Customer shall ensure the load conductors are compatible with the connectors on the EUSERC 328B style current transformer mounting base. All mechanical cable termination blocks shall be provided by the customer.
- 4. Current transformers to be supplied and installed by District.
- 5. The current transformer mounting base shall have a 50,000 Amp minimum fault current rating.
- 6. The enclosure shall be raintight, with a sealable, hinged, cover.
- 7. Reference District standard Q-1B for conduit and conductor requirements.
- 8. Customer owned and installed service wires for single phase services are limited to (6) sets of conductors and shall not exceed 750 kcmil aluminum or copper.
- 9. The customer shall make up and terminate the load side connections in the current transformer enclosure.
- 10. The customer service entrance conduits must exit the enclosure on the load side of the current transformer mounting base. The District will not allow customer conductors or conduit in the District's terminating and pull space.
- 11. A pre-wired meter base shall be provided by the District and installed by customer.
- Bonding must be in accordance with the current NEC requirements.
- 13. Meter sockets shall be installed within 24" of non-hinge side of enclosure.
- 14. If estimated load is over 75kVA (120/208V) or 150kVA (277/480V) and current transformer metering is needed to facilitate known additional load growth, customer may be allowed to install current transformer enclosure.
- 15. Current transformer metering may be allowed within the secondary compartment of the transformer at the discretion of the District if estimated load is at least 100kVA. Current transformer metering, specifically for services which are fed by a District 75kVA or smaller transformer shall be metered within a current transformer enclosure.



Current Transformer (CT)
Enclosure Requirement fror
Three Phase Services
400- 800 Amps

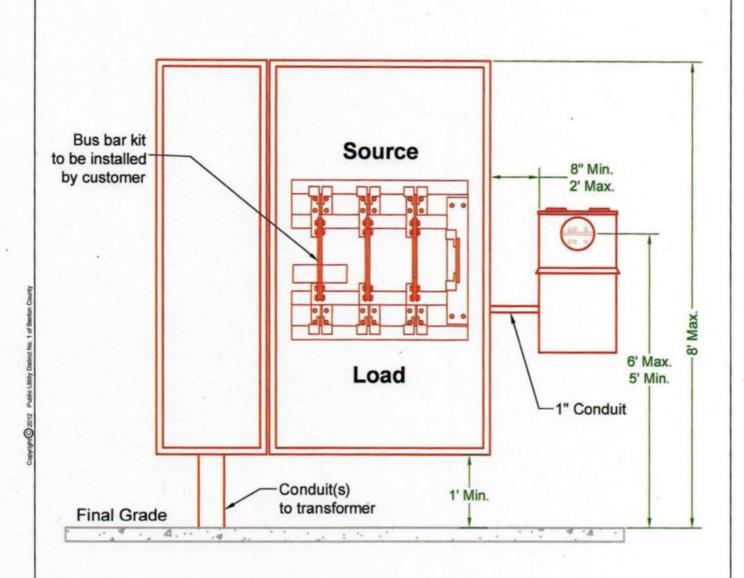
REV BY: TMG
REV DATE: 8/29/2020 2 of 2

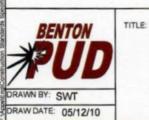
REV NO: 3 DIR. SATE | LI | LO

DWG. NO.

Q-5E (Cont.)

TITLE:





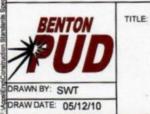
Current Transformer (CT)
Enclosure Requirements for
Commercial Three Phase Services
1200-2500 Amps

REV BY: TN	SHT.		
REV DATE: 8	1 of 2		
REV NO: 2	DIR. SA	DATE 1/20	
DWG. NO.		1/21/	
	Q-5	F	

CT Service Type		Cabinet Dimensions			CT Cabinets with Mounting Bases		
Service Size	Number of Load Conductors	Width	Height	Depth	Erickson Bulletin Numbers	Erickson Catalog Numbers	
1200A	3	55"*	64"	15"	BPCT-07A	CT-124-BP-SG	
1600A	4	61"*	64"	15"	BPCT-07A	CT-164-BP-SG	
2000A	5	65"*	64"	15"	BPCT-07A	CT-204-BP-SG**	
2500A	7	65"*	64"	15"	BPCT-07A	CT-254-BP-SG**	

<sup>\*</sup> INCLUDES SIDE GUTTER

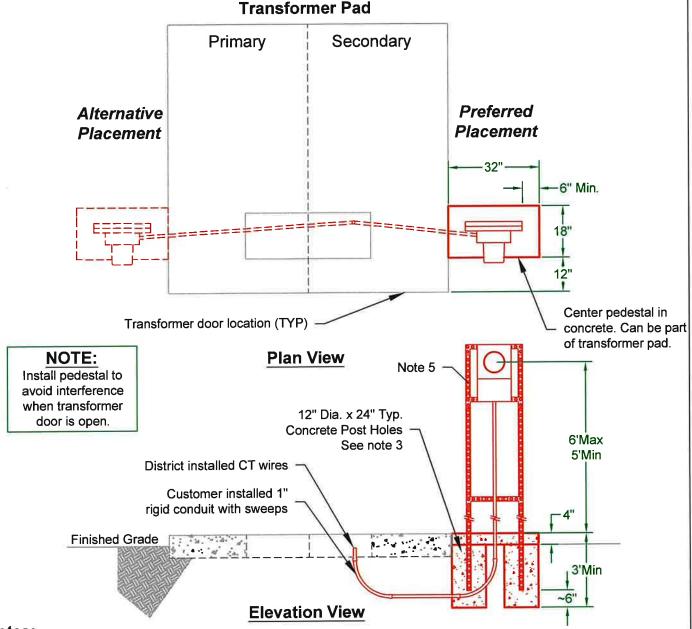
- Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Current transformer enclosure and mounting base to be supplied and installed by the customer.
- Customer shall ensure the load conductors are compatible with the connectors on the EUSERC 328B style current transformer mounting base. All mechanical cable termination blocks shall be provided by the customer.
- 4. Current transformers to be supplied and installed by District.
- 5. The current transformer mounting base shall have a 85,000 Amp minimum fault current rating.
- 6. The enclosure shall be raintight, with a sealable, hinged, cover.
- 7. Reference District standard Q-1B for conduit and conductor requirements.
- 8. Customer owned and installed service wires for single phase services are limited to (6) sets of conductors and shall not exceed 750 kcmil aluminum or copper.
- 9. The customer shall make up and terminate the load side connections in the current transformer enclosure.
- 10. The customer service entrance conduits must exit the enclosure on the load side of the current transformer mounting base. The District will not allow customer conductors or conduit in the District's terminating and pull space.
- 11. A pre-wired meter base shall be provided by the District and installed by customer.
- 12. Bonding must be in accordance with the current NEC requirements.
- 13. Meter sockets shall be installed within 24" of non-hinge side of enclosure.
- 14. Customer will install bus bar and perch for window style current transformers.
- 15. Current transformer metering may be allowed within the secondary compartment of the transformer at the discretion of the District if estimated load is at least 100kVA. Current transformer metering, specifically for services which are fed by a District 75kVA or smaller transformer shall be metered within a current transformer enclosure.



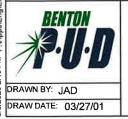
Current Transformer (CT)
Enclosure Requirements for
Commercial Three Phase Services
1200-2500 Amps

REV BY: TM	SHT.	
REV DATE: 8	2 of 2	
REV NO: 2	DIR. SE	DAT5/2/20
DWG. NO.		
	Q-5	F

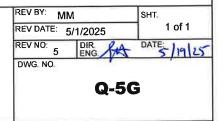
<sup>\*\*</sup> MUST CONTACT BENTON PUD PRIOR TO PURCHASE(NON-STANDARD)



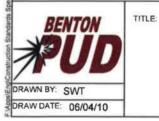
- 1. Details shown are minimum District standards and are not intended to depict Washington State Labor and Industries requirements.
- 2. Meter base vertical structural components must be adequately installed in concrete to finished grade.
- 3. The District will provide a pre-wired meter base mounted on uni-strut to be installed by the customer.
- 4. Refer to transformer pad details, District standards UG6-C, or UG6-C2.
- 5. Refer to District standards Q-5B, Q-5E and Q-5F for current transformer requirements.
- 6. Customer shall install 1" conduit from meter to secondary compartment of the transformer. Only with **PRIOR APPROVAL**, may conduit run up to 25' in length and/or exceed (4) total bends totaling 360 degrees.
- 7. No condulet type fittings to be installed in conduit containing service conductors or low voltage wires.
- 8. Current transformer metering may be allowed within the secondary compartment of the transformer at the discretion of the District



Self Supported CT Meter Pedestal
with CT's Installed in Secondary Compartment
of District Transformer



- 1. Contact Engineering regarding all switchgear installations for prior approval.
- Busways must remain in position when the removable bus link "B" is removed. 2.
- 3. Set the direction of feed from the top. No other customer conductors shall pass through this compartment.
- Bus clearance dimension measured to inside edge of the compartment access opening. 4.
- 5. Reference EUSERC 320 and 322.
- 6. Customer to install and terminate all conductors.
- 7. Current transformers to be supplied and wired by the District.
- Customer shall remove bus links to facilitate CT installation and shall re-torque following completion.



Current Transformer Compartment for Switch Gear/Switch Board 400-3000 Amps

REV BY: TM	SHT.	
REV DATE: 0	1 of 1	
REV NO: 2	DATE 3/18	
DWG. NO.		,,
	Q-5	Н
	<b>4</b> -0	

Capyright (C) 2017 Public Utility District No. 1 of Benton County

# TRANSFORMER PADS AND CLEARANCES

PRAWN BY: JAD

DRAW DATE: 03/05/04

AM F:\Apps\Eng\Eng\engineering Drawings\Construction Standards Drawings\Construction Standards Folders Copyright © 2025 Public Utility District No. 1 of Benton County

TITLE:

TRANSFORMER PADS
& CLEARANCES
Q-6 Series
UG6 Series

REV BY: MM	SHT.							
REV DATE: 05	1 of 1							
REV NO: 2	DIR. ENG.	DATE:						
DWG. NO.								
Q-6								
	UG6							

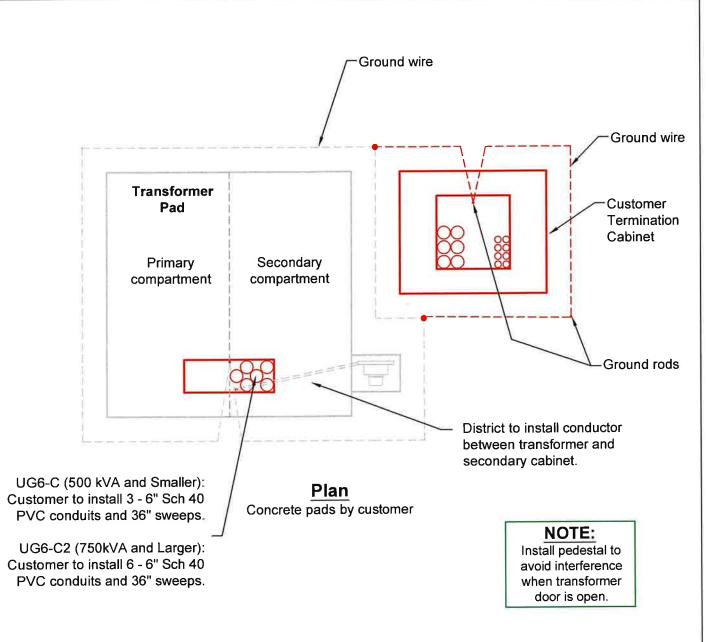
uction Standards Drawings\Construction Standards\ Q-6 Series

- 1. All dimensions are minimum.
- 2. No obstructions are allowed over transformer.
- 3. Landscaping must maintain a 12' clearance from the front and a 3' clearance from all other sides, except for vegetation above 3" from grade shall have a clearance of 5' from sides and behind. The District shall not be responsible for damages to landscaping violating the minimum clearance requirements.
- 4. Clearance of unoccupied structures (such as fences, signs, retaining wall, pole, mailbox, etc.) shall be 1' minimum from one side, 3' minimum from other side (i.e. continuing fencing & walls) and 3' minimum from behind.
- 5. Installation must not violate WAC-296-46B-450 transformers.

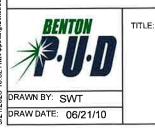


Installation Clearances for Commercial and Residential Transformers

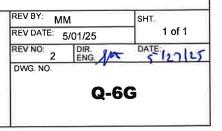
	REV BY: DF	SHT
l	REV DATE: 12/11/25	1 of 1
V	REV NO: 2 DIR ENG	DATE: 12/25
	DWG. NO.	71.00
	Q-60	;

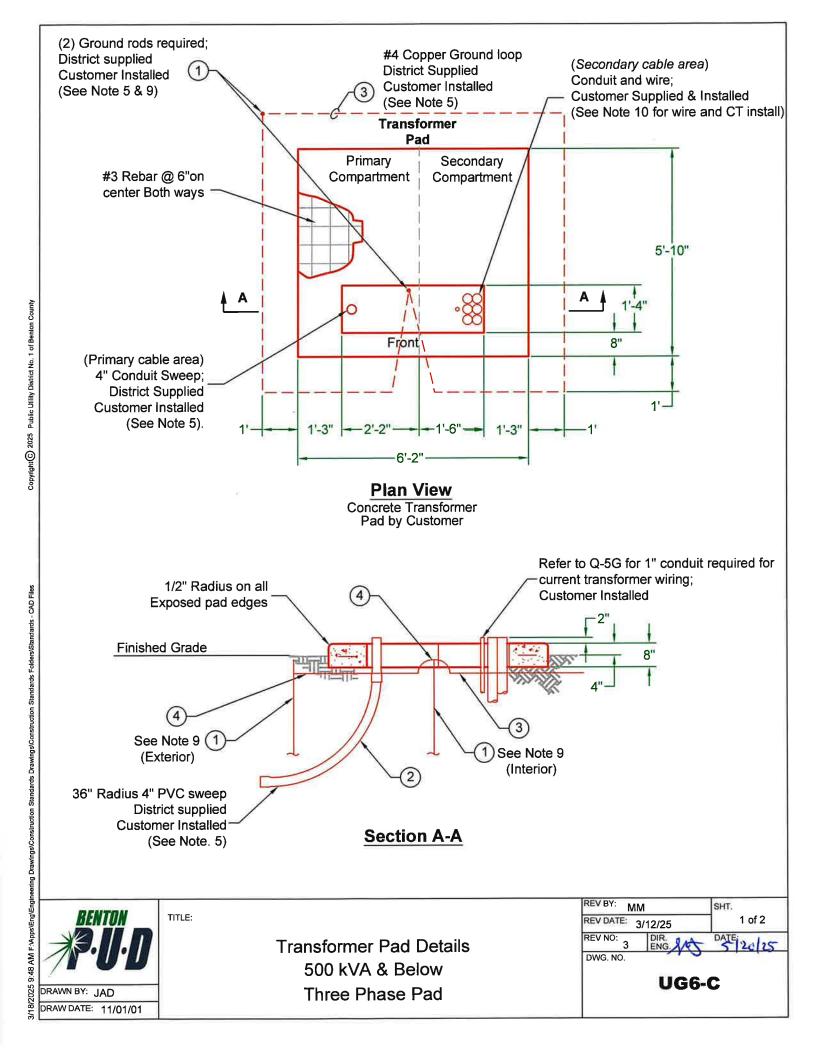


- 1. Secondary termination cabinet shall be installed within 10' of transformer pad and be lockable.
- 2. Terminations of customer owned wire in secondary cabinet will be made by the customer.
- 3. Reference transformer pad details, District standard UG6-C or UG6-C2.
- 4. Reference CT meter base construction, District standard Q-5G.
- 5. Primary cable area conduit and ground wire will be District supplied and customer installed.
- 6. When required by the District current transformers may be installed in the secondary compartment of transformer.
- 7. Termination cabinet grounds shall be bonded with transformer pad grounds.
- 8. Termination cabinet specifications shall be submitted to the District for approval prior to installation.
- 9. Coordinate termination cabinet location with District.



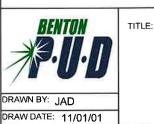
600V Termination Cabinet Guideline



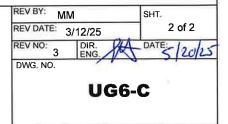


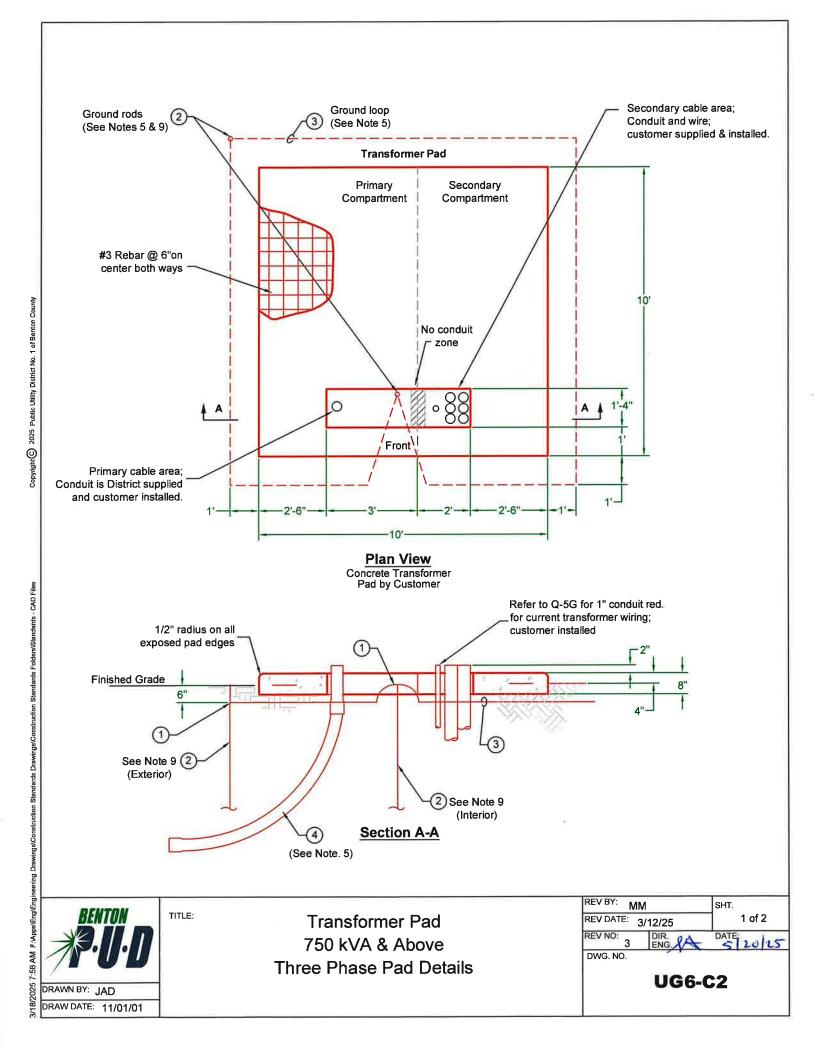
UG6-C			
Item	Item Code	Description	Qty.
1	327100	Clamp, Ground Rod 5/8	2
2	337381	Ground Rods 5/8 X 8 FT	2
3	400300	Wire, Copper, #4-7, Hard Drawn Strand 50'	
4	633651	Bend 90 PVC S/80 4in 36R	1

- 1. Ground under pad shall be 95% minimum compaction.
- 2. Concrete shall be Portland Cement concrete, 5 sack mix, attaining 3000 P.S.I. at 28 days.
- 3. Top of pad shall be level and finished smooth. Surface shall not contain honeycomb or segregation.
- 4. Barricade traffic bollards provided and installed by customer contact District engineering to determine location of posts. When required, bollards shall not interfere with swing of transformer doors.
- 5. Customer to pick up 4" primary conduit sweep, 2 ground rods, and #4 Str. bare CU. ground wire from the District warehouse located at 1500 S. Ely street, Kennewick.
- Maximum number of 6 conductors per phase of 750 kcml. Contact the District if additional conductors per phase will be required.
- 7. For pad location, reference District standard Q-6C for clearance to existing structures.
- 8. For pads located near regulated bodies of water contact the District for an alternative design with oil containment provisions.
- Exterior ground rod shall be driven flush with grade or in such a manner that eliminates possible tripping hazards and allows for future inspection with minimal effort. Interior ground rod shall be driven such that no more than 4" extends above grade.
- 10. District personnel may be required to assist in pulling conductor into transformer compartment. District personnel will make all transformer terminations. Current transformer installation and wiring shall be completed by District personnel when required.
- 11. Transformer pad shall be placed on bedding material which shall be minimum 3 inches in depth with 5/8" 7/8" gravel or undisturbed ground.



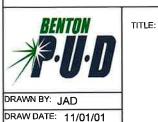
Transformer Pad Details 500 kVA & Below Three Phase Pad





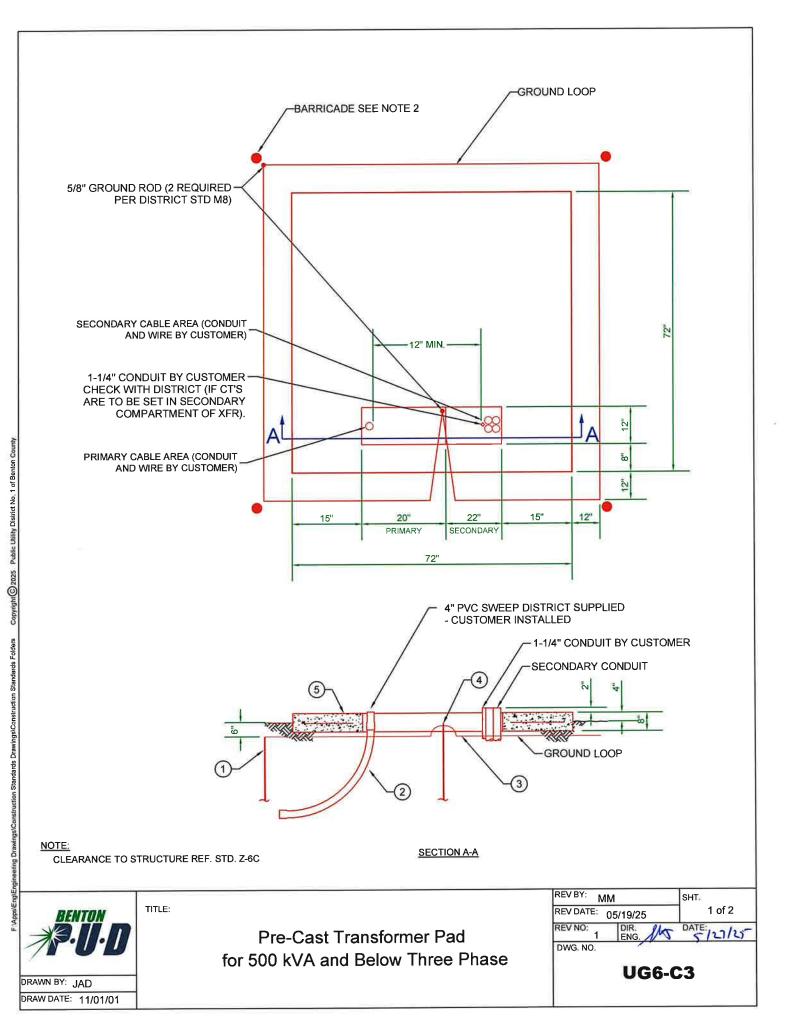
	UG6-C2			
Item	Item Code	Description	Qty.	
1	327100	Clamp, Ground Rod 5/8	2	
2	337381	Ground Rods 5/8 X 8 FT	2	
3	400300	Wire, Copper, #4-7, Hard Drawn Strand 50'		
4	633651	Bend 90 PVC S/80 4in 36R	1	

- 1. Ground under pad shall be 95% minimum compaction.
- 2. Concrete shall be Portland Cement concrete, 5 sack mix, attaining 3000 P.S.I. at 28 days.
- 3. Top of pad shall be level and finished smooth. Surface shall not contain honeycomb or segregation.
- 4. Barricade traffic bollards provided and installed by customer contact District engineering to determine location of posts. When required, bollards shall not interfere with swing of transformer doors.
- 5. Customer to pick up 4" primary conduit sweep, 2 ground rods, and #4 Str. bare CU. ground wire from the District warehouse located at 1500 S. Ely street, Kennewick.
- 6. Maximum number of 6 conductors per phase of 750 kcml. Contact the District if additional conductors per phase will be required.
- 7. For pad location, reference District standard Q-6C for clearance to existing structures.
- 8. For pads located near regulated bodies of water contact the District for an alternative design with oil containment provisions.
- 9. Exterior ground rod shall be driven flush with grade or in such a manner that eliminates possible tripping hazards and allows for future inspection with minimal effort. Interior ground rod shall be driven such that no more than 4" extends above grade.
- 10. District personnel may be required to assist in pulling conductor into transformer compartment, and will make all transformer terminations.
- 11. Current transformer installation and wiring to be completed by District personnel when required.
- 12. Transformer pad shall be laid on bedding material which shall be minimum 3" in depth with 5/8" 7/8" gravel or undisturbed ground.



Transformer Pad 750 kVA & Below Three Phase Pad Details

REV BY: MM		SHT	
REV DATE: 3/	2 of 2		
REV NO: 3	DIR. SA	DATE: /20/25	
DWG. NO.			
UG6-C2			



UG6-C3			
Item	Item Code	Description	Qty.
1	337381	Ground, Rod, 5/8x8 8 ft	2
2	633651	Bend PVC 90 Sch 80 4in 36R	1
3	400300	Wire, Copper, #4-7, Hard Drawn Strand	50'
4	327100	Clamp, Ground Rod 5/8	2
5	690600	Transformer Pad 3PH 500 kVA & Under	1

- 1. Transformer pad shall be placed on bedding material which shall be a minimum of 3 inches in depth with 5/8" 7/8" gravel or undisturbed ground.
- 2. Barricade Posts by Customer Contact engineering to determine location of posts when required. (Posts must not interfere with the swing of the transformer doors.)



TITLE:

Pre-Cast Transformer Pad for 500 kVA and Below Three Phase

REV BY: MM		SHT.	
REV DATE: 5/	2 of 2		
REV NO: 1	DIR. SH	DATE 27 25	
DWG. NO.			
UG6-C3			

TITLE:

**TRENCHING** Q-7 Series

REV BY: MM	SHT.			
REV DATE: 05/19/25	5 1 of 1			
REV NO: 2 DIR. ENG.	DATE:			
DWG. NO.				
<b>Q-7</b>				

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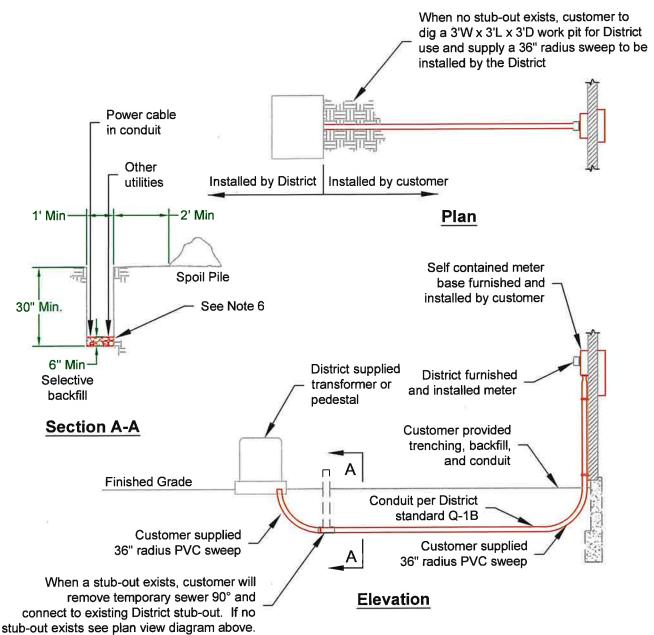
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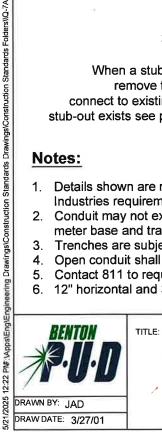
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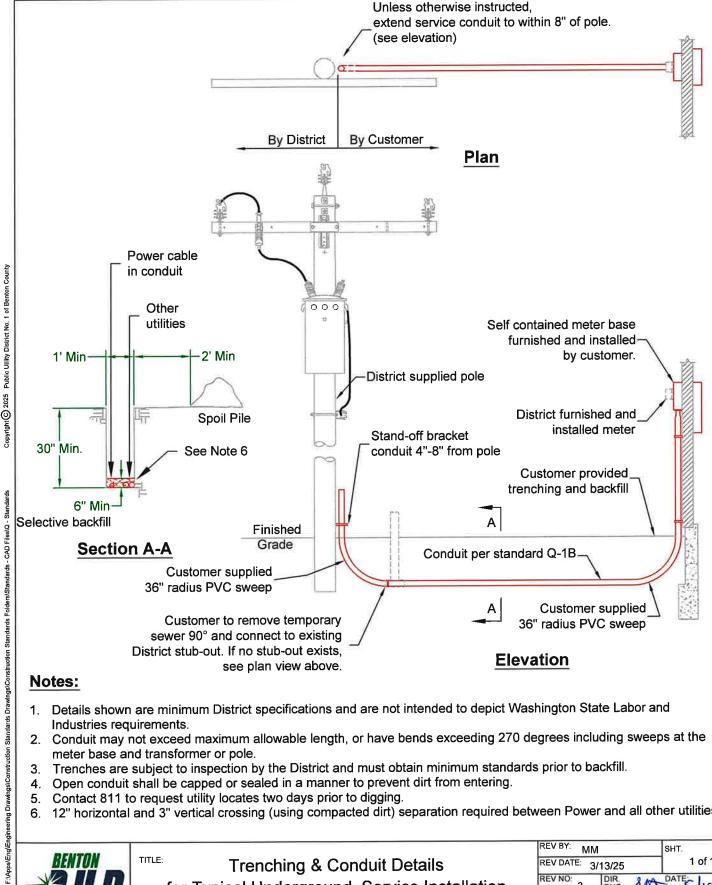


- Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- 2. Conduit may not exceed maximum allowable length, or have bends exceeding 270 degrees including sweeps at the meter base and transformer or pole.
- Trenches are subject to inspection by the District and must obtain minimum standards prior to backfill.
- 4. Open conduit shall be capped or sealed in a manner to prevent dirt from entering.
- 5. Contact 811 to request utility locates two days prior to digging.
- 6. 12" horizontal and 3" vertical crossing (using compacted dirt) separation required between power and all other utilities,

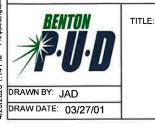


Trenching & Conduit Details for Typical Underground Service Installation from Pad Mount Transformer

REV BY: MM		SHT	
REV DATE: 5	1 of 1		
REV NO: 4	1 DATE 127/3		
DWG NO			
Q-7A			



- 1. Details shown are minimum District specifications and are not intended to depict Washington State Labor and Industries requirements.
- 2. Conduit may not exceed maximum allowable length, or have bends exceeding 270 degrees including sweeps at the meter base and transformer or pole.
- Trenches are subject to inspection by the District and must obtain minimum standards prior to backfill.
- 4. Open conduit shall be capped or sealed in a manner to prevent dirt from entering.
- Contact 811 to request utility locates two days prior to digging.
- 6. 12" horizontal and 3" vertical crossing (using compacted dirt) separation required between Power and all other utilities,



Trenching & Conduit Details for Typical Underground, Service Installation from Overhead Transformer

REV BY: N	4M	SHT
REV DATE:	3/13/25	1 of 1
REV NO:	DIR. ENG.	MATES 19/25
DWG. NO.	,	
	G	Q-7B

BENTON 3.U.D

TITLE:

NET METERING SERVICES
Q-8 Series

REV BY: MM SHT.

REV DATE: 10/01/2013 SHT.

1 of 1

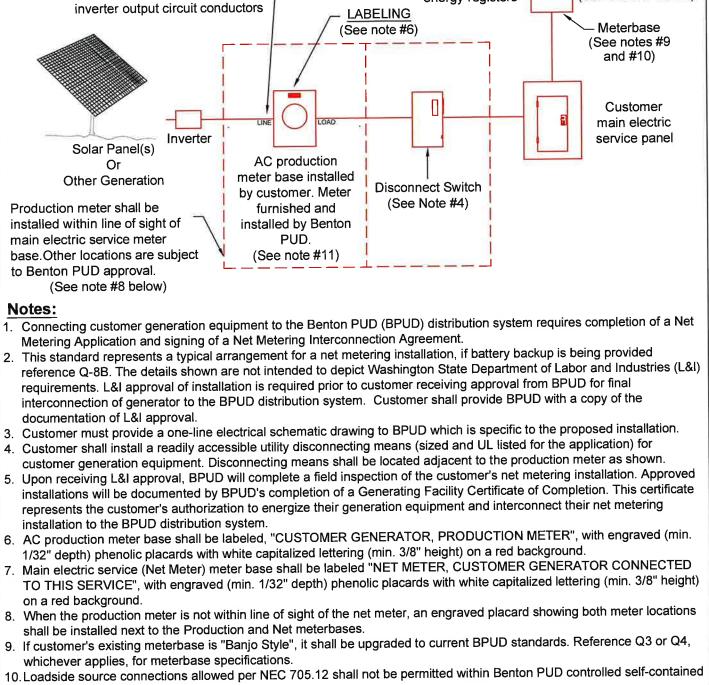
DIR. DATE:

DWG. NO.

Q-8

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DRAWN BY: DDB
DRAW DATE: 03/22/12



Service meter with

bi-directional

energy registers

LABELING

(See note #7 below)

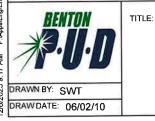
11. Production meter base shall not be affixed to manufactured home or any temporary structure. See Q-1F for additional requirements.

12. If multiple arrays/inverter circuits are utilized a combiner panel shall be provided that connects to a single production meter.

13. Refer to BPUD Standard, Q1-F, for meter base clearances.

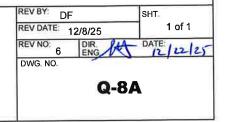
Meter socket source terminals (line

side) shall be connected to the



meter enclosures.

**Customer Generator Net Metering Installation** (No Battery Backup)



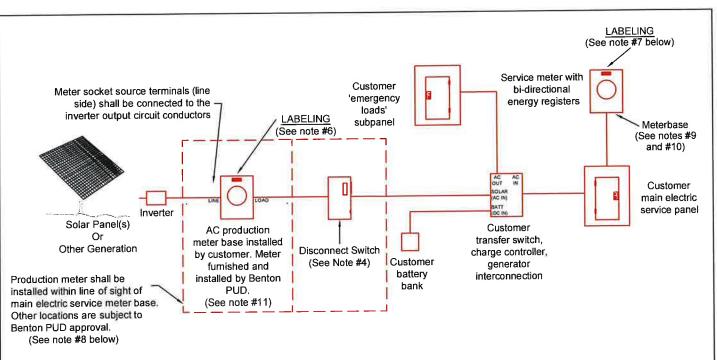
14. Refer to BPU

BENTON

BENTON

DRAWN BY: DAB

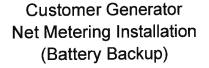
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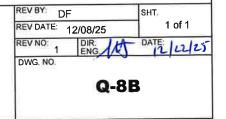


### Notes:

- 1. Connecting customer generation equipment to the Benton PUD (BPUD) distribution system requires completion of a Net Metering Application and signing of a Net Metering Interconnection Agreement.
- 2. This standard represents a typical arrangement for a net metering installation with Battery backed up loads. The details shown are not intended to depict Washington State Department of Labor and Industries (L&I) requirements. L&I approval of installation is required prior to customer receiving approval from BPUD for final interconnection of generator to the BPUD distribution system. Customer shall provide BPUD with a copy of the documentation of L&I approval.
- 3. Customer must provide a one-line electrical schematic drawing to BPUD which is specific to the proposed installation.
- 4. Customer shall install a readily accessible utility disconnecting means (sized and UL listed for the application) for customer generation equipment. Disconnecting means shall be located adjacent to the production meter as shown.
- 5. Upon receiving L&I approval, BPUD will complete a field inspection of the customer's net metering installation. Approved installations will be documented by BPUD's completion of a Generating Facility Certificate of Completion. This certificate represents the customer's authorization to energize their generation equipment and interconnect their net metering installation to the BPUD distribution system.
- 6. AC production meter base shall be labeled, "CUSTOMER GENERATOR, PRODUCTION METER", with engraved (min. 1/32" depth) phenolic placards with white capitalized lettering (min. 3/8" height) on a red background.
- 7. Main electric service (Net Meter) meter base shall be labeled "NET METER, CUSTOMER GENERATOR CONNECTED TO THIS SERVICE", with engraved (min. 1/32" depth) phenolic placards with white capitalized lettering (min. 3/8" height) on a red background.
- 8. When the production meter is not within line of sight of the net meter, an engraved placard showing both meter locations shall be installed next to the Production and Net meterbases.
- 9. If customer's existing meterbase is "Banjo Style", it shall be upgraded to current BPUD standards. Reference Q3 or Q4, whichever applies, for meterbase specifications.
- 10. Loadside source connections allowed per NEC 705.12 shall not be permitted within Benton PUD controlled self-contained meter enclosures.
- 11. Production meter base shall not be affixed to manufactured home or any temporary structure. See Q-1F for additional requirements
- 12. If multiple arrays/inverter circuits are utilized a combiner panel shall be provided that connects to a single production meter.
- 13. Transfer switch shall be an open transition "break before make" style and is required to be submitted for approval.
- 14. Refer to BPUD Standard, Q1-F, for meter base clearances.

TITLE:





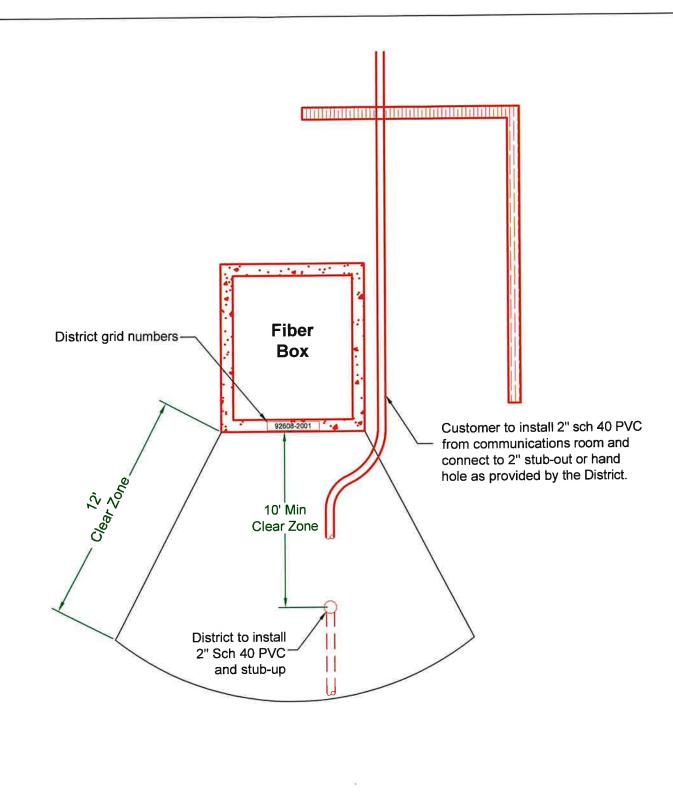
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TITLE:

FIBER SERVICES Q-9 Series

REV BY: MM	SHT.	
REV DATE: 05	1 of 1	
REV NO: 2	DIR. ENG.	DATE:
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	<b>Q-9</b>	
DWG. NO.		

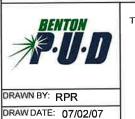
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- 1. All dimensions are minimum.
- No obstructions are allowed over transformer or fiber hand hole.
- 3. Refer to District planting guide for landscaping.



TITLE:

Installation Practices for Customer Fiber Services REV BY: DF

REV DATE: 12/10/25

REV NO: 1 DIR. DATE: 12 | 25

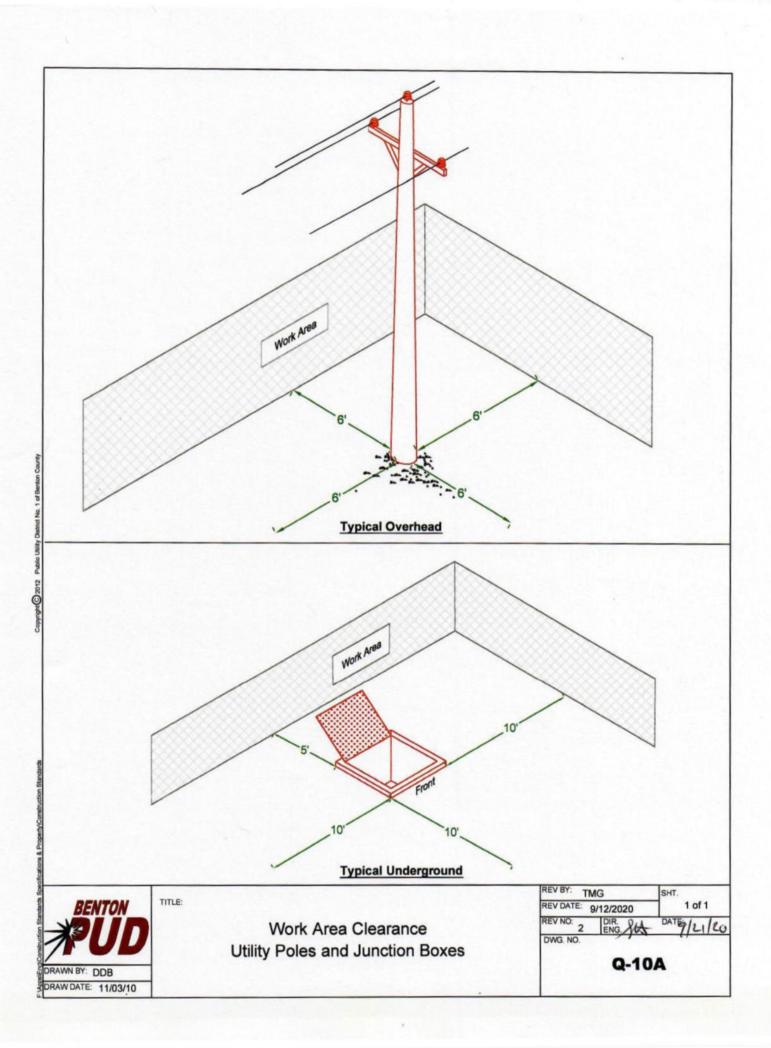
DWG. NO. Q-9A

DRAW DATE: 03/22/12

TITLE:

**WORK AREA CLEARANCES** Q-10 Series

REV BY: SHT. REV DATE: 05/19/25 1 of 1 DATE: DWG. NO. **Q-10** 



# Typical Pedestal

## Note:

1. Vegetation in work area shall be less than 3" above final grade.



TITLE:

Work Area Clearance Pedestals

REV BY: N/A		SHT.
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REV NO: 0	DIR ENG.	DATE / 11/LS
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