

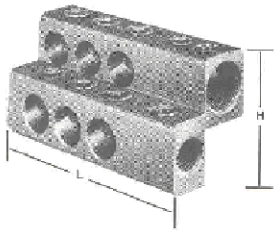
1700

UNDERGROUND SECONDARY

3/13/2020

~	UB30-UB60	Basic Units - Underground Secondary
~	UBDR	120/240 Temporary Pedestal Mounted BDR
C	UE18,UE38	Secondary J-Box 17" x 30" x 18" Deep (Light Duty) Secondary J-Box 24" x 36" x 18"
C	UED6	Secondary Pedestal Assembly
~	US-1	UG Secondary Splice
~	US6	Padmount Transformer Assembly 1Ø Secondary
~	US35-US38	Secondary Connectors 3Ø Padmount Transformer

N	New Standard
R	Redrawn Standard
C	Changed Standard
~	No Change



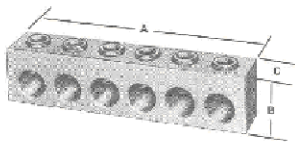
Single Phase Padmount Transformer Terminal

UB30's	Material Descriptions	TDM #	Const. Spec.
	Connector PTL 4-250 UG Al/Cu 6 to 4/0	1439	UB30
	Connector PTL 4-350 UG Al/Cu 6 to 350	539	UB31
	Connector PTL 6-250 UG Al/Cu 6 to 4/0	540	UB32
	Connector PTL 6-350 UG Al/Cu 6 to 350	541	UB33
	Connector PTL 6-500 UG Al/Cu 2 to 500	542	UB34



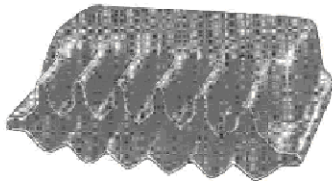
Three Phase Padmount Transformer Terminal

See US35 through US40 for Three Phase Padmount Transformer Terminals



Pedestal and Junction Box Connector

UB50's	Material Descriptions	TDM #	Const. Spec.
	Connector PTL 4-250 UG Al/Cu 6 to 4/0	527	UB50
	Connector PTL 4-350 UG Al/Cu 6 to 350	528	UB51
	Connector PTL 4-500 UG Al/Cu 2 to 500	529	UB52
	Connector PTL 6-250 UG Al/Cu 6 to 4/0	530	UB53
	Connector PTL 6-350 UG Al/Cu 6 to 350	531	UB54
	Connector PTL 6-500 UG Al/Cu 2 to 500	532	UB55
	Connector PTL 6-750 UG Al/Cu 350 to 750	533	UB56
	Connector PTL 8-500 UG Al/Cu 2 to 500	534	UB57
	Connector PTL 8-750 UG Al/Cu 2 to 750	535	UB58



PTL, PET, PED Cover

UB60's	Material Descriptions	TDM #	Const. Spec.
	Cover, Connector 4-350 UG	573	UB60
	Cover, Connector 6-500 UG	574	UB61
	Cover, Connector 8-500 UG	575	UB62
	Cover, Connector 8-750 UG	576	UB63



CONSTRUCTION STANDARDS

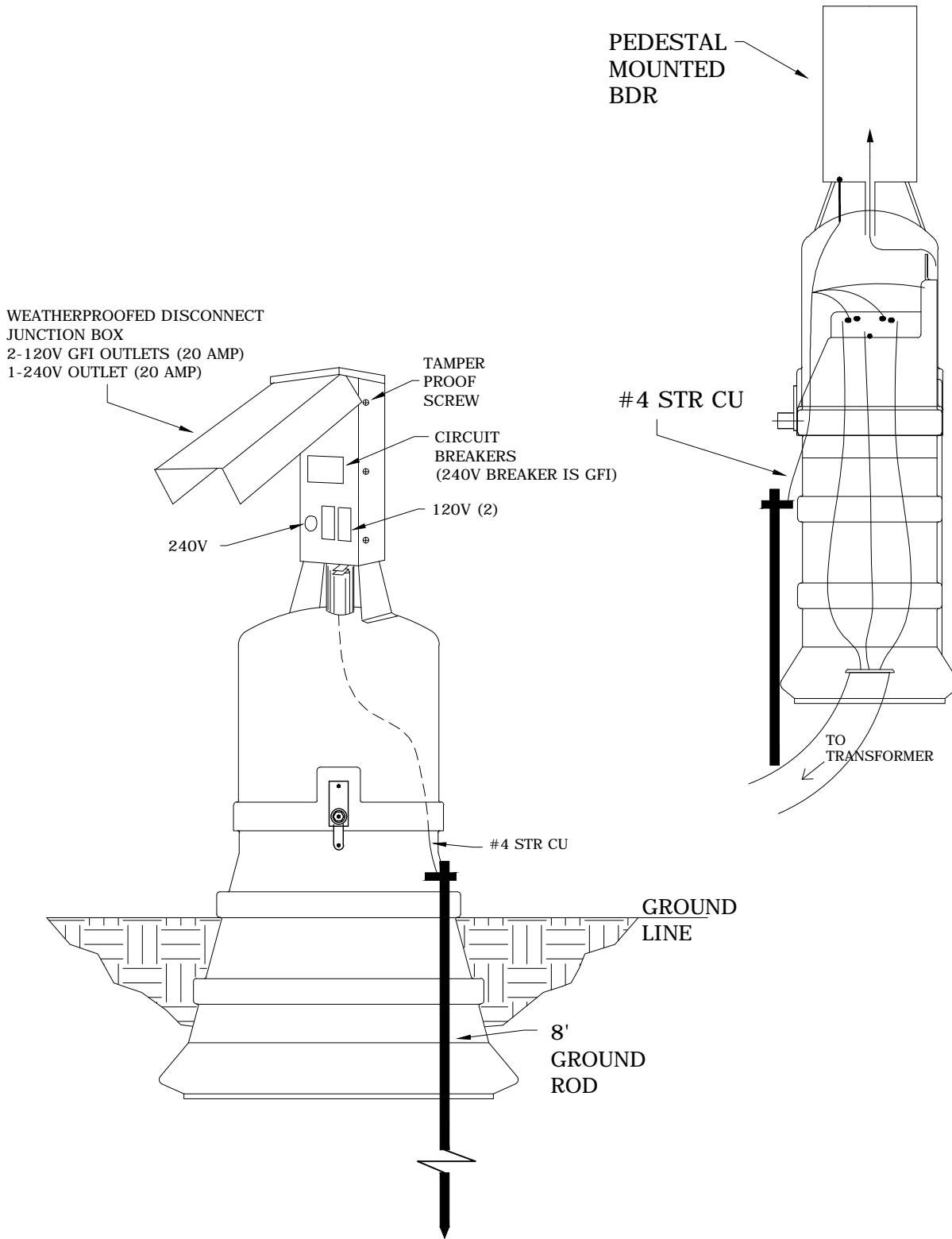
BASIC UNITS UNDERGROUND SECONDARY

PAGE:
1 of 1

UB30, UB40, UB50, UB60

CAD FILE:
UB30

REVISIONS			
Δ	DATE	ENGR	OPS
3	8/16/02		
Δ REDRAWN IN CAD			
APP:	ELM	SECTION	
DATE:	1/22/80	1700	



CONNECTION DIAGRAM

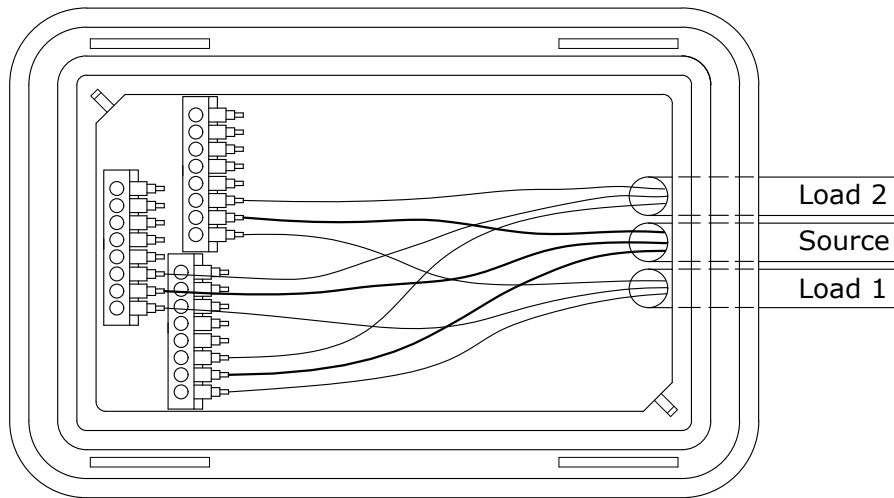
REV 2: Removed note



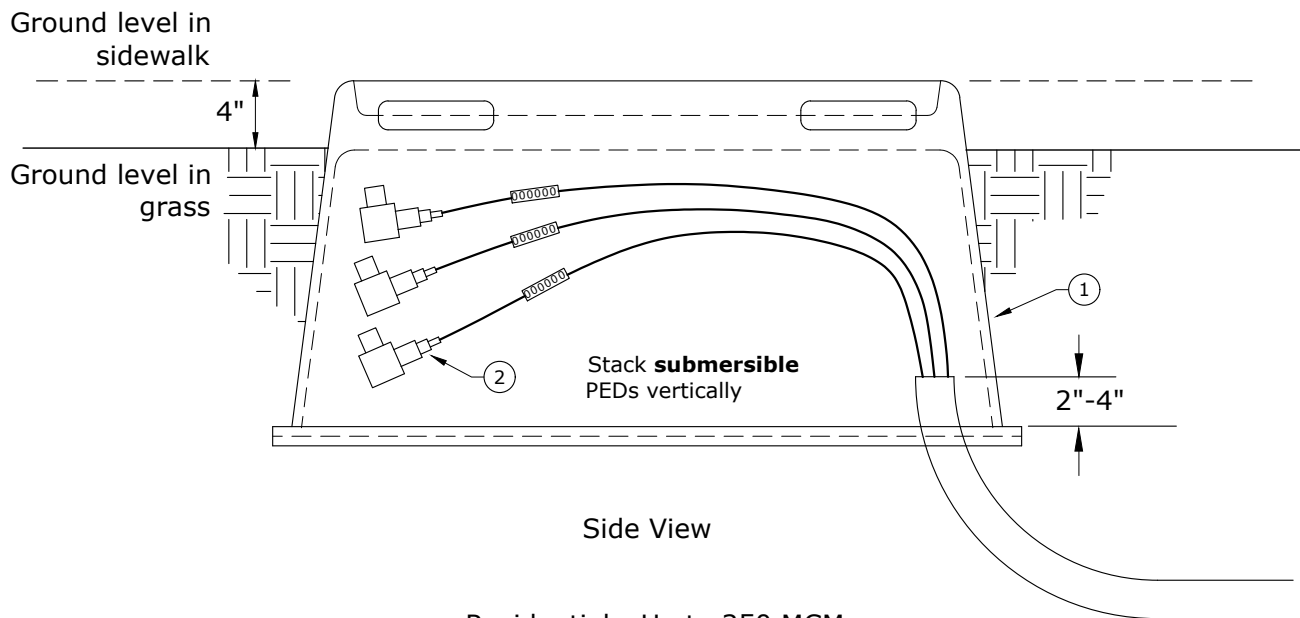
CONSTRUCTION STANDARDS

120/240 TEMPORARY
PEDESTAL MOUNTED BDR

REVISIONS											
NO.	DATE	ENGR	OPS								
0	2/23/00	HWH	MA								
1	4/26/04	LB	AH								
2	5/30/07	LB	AH								
<table border="1"> <tr> <td>APP:</td> <td>JEH</td> <td colspan="2">SECTION</td> </tr> <tr> <td>DATE:</td> <td>2/22/00</td> <td colspan="2">1700</td> </tr> </table>				APP:	JEH	SECTION		DATE:	2/22/00	1700	
APP:	JEH	SECTION									
DATE:	2/22/00	1700									



Top View



Side View

Residential - Up to 350 MCM
Commercial - Up to 500 MCM

Notes:

1. Do not install S/N 2556 in streets, alleys, or highways.
2. Cut all cables long enough to allow makeup to be done above the box top with cables in an approximately vertical position.
3. Bend cables down after makeup so that lid can be installed.
4. Use silicone grease on all allen wrench plugs and cable boots (both ends).
5. if additional depth is needed, place one box upside down, bolt the 2 boxes together and salvage one lid. (S/N 2556 only).

Rev. 6 - Updated drawing and material list.



CONSTRUCTION STANDARDS

SECONDARY JUNCTION BOX
17" x 30" x 18" DEEP (LIGHT DUTY)
24" x 36" x 18" DEEP (HEAVY DUTY)

REVISIONS

REV	DATE	ENGR	OPS
3	10/7/15	JEH	DK
4	10/29/18	KJP	
5	6/24/19	JDK	
6	12/2/19	KJP	

PAGE:
1 of 2

UE18,UE38

CAD FILE:
UE18

APP: GGW/RWG
DATE: 4/92

SECTION
1700

Occasional Traffic Areas (S/N 2556):


- Rated 10,000 pounds
- This box is NOT for use in streets, alley or highways. Do NOT use in driveways if location is part of the normal traveled way

Heavier Traffic Areas (S/N 2608):

- Rated 20,000 pounds
- This box is 24" x 36" x 18"
- May be used in alleys or driveways-only rated 20k
- Do NOT use in streets or highways

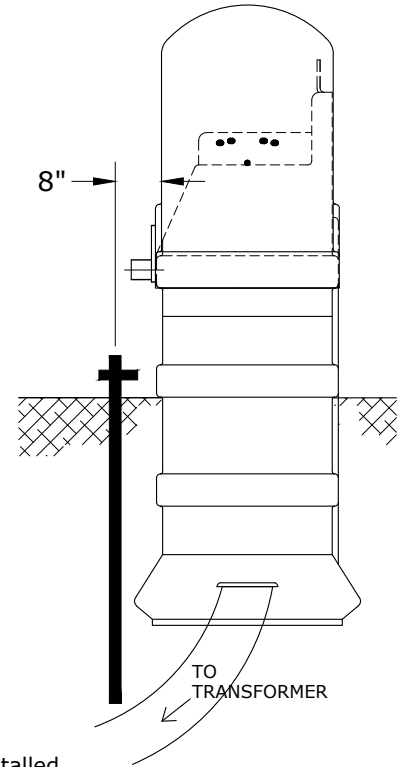
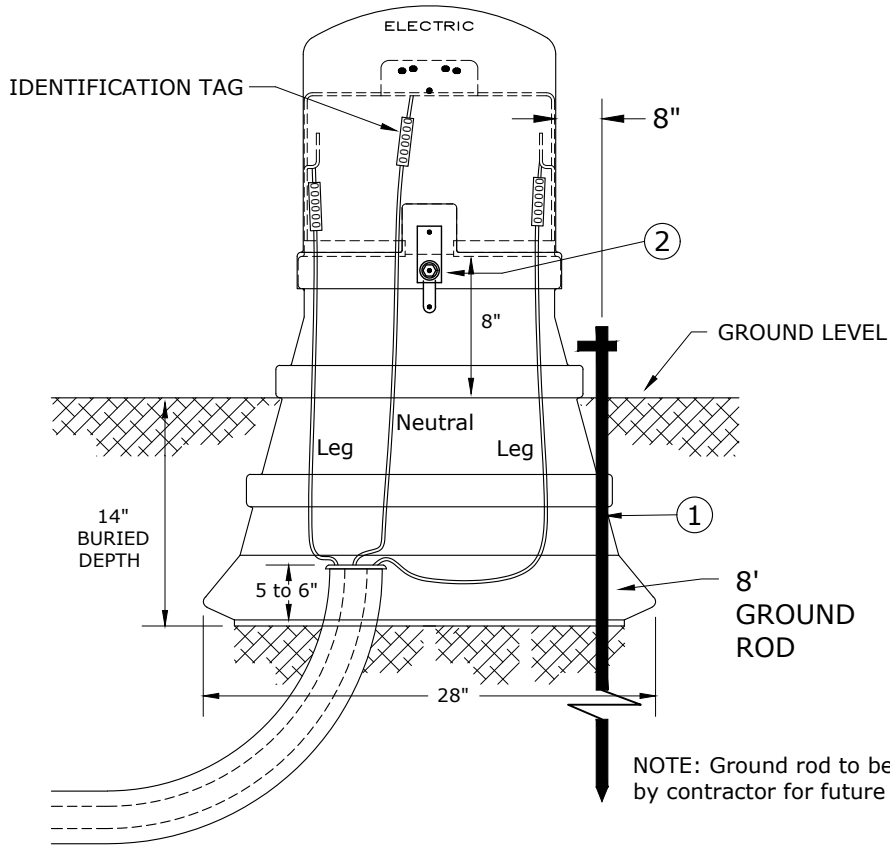
Rev. 6 - Updated drawing and material list.

ITEM NO.	DESCRIPTION	UE18	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Light Duty (10k lb) with Cover, 17" x 30" x 18" with Pentabolts	1	2556
2	Connector, Submersible, Sec., 8 Position, #12 to 500 MCM Al/Cu	3	2264
ITEM NO.	DESCRIPTION	UE18H	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Heavy Duty (20k lb) with Cover, 24" x 36" x 18" with Pentabolts	1	2608
2	Connector, Submersible, Sec., 8 Position, #12 to 500 MCM Al/Cu	3	2264
ITEM NO.	DESCRIPTION	UE38	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Light Duty (10k lb) with Cover, 17" x 30" x 18" with Pentabolts	1	2556
2	Connector, Submersible, Sec., 8 Position, #12 to 500 MCM Al/Cu	4	2264
ITEM NO.	DESCRIPTION	UE38H	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Heavy Duty (20k lb) with Cover, 24" x 36" x 18" with Pentabolts	1	2608
2	Connector, Submersible, Sec., 8 Position, #12 to 500 MCM Al/Cu	4	2264

	CONSTRUCTION STANDARDS SECONDARY JUNCTION BOX 17" x 30" x 18" DEEP (LIGHT DUTY) 24" x 36" x 18" DEEP (HEAVY DUTY)		REVISIONS																							
			<table border="1"> <tr> <th>△</th> <th>DATE</th> <th>ENGR</th> <th>OPS</th> </tr> <tr> <td>3</td> <td>10/7/15</td> <td>CM</td> <td>DK</td> </tr> <tr> <td>4</td> <td>10/29/18</td> <td>KJP</td> <td></td> </tr> <tr> <td>5</td> <td>6/24/19</td> <td>JDK</td> <td></td> </tr> <tr> <td>6</td> <td>12/2/19</td> <td>KJP</td> <td></td> </tr> </table>	△	DATE	ENGR	OPS	3	10/7/15	CM	DK	4	10/29/18	KJP		5	6/24/19	JDK		6	12/2/19	KJP				
	△	DATE	ENGR	OPS																						
3	10/7/15	CM	DK																							
4	10/29/18	KJP																								
5	6/24/19	JDK																								
6	12/2/19	KJP																								
PAGE: 2 of 2	UE18,UE38	CAD FILE: UE18	APP: GGW/RWG DATE: 4/92	SECTION 1700																						

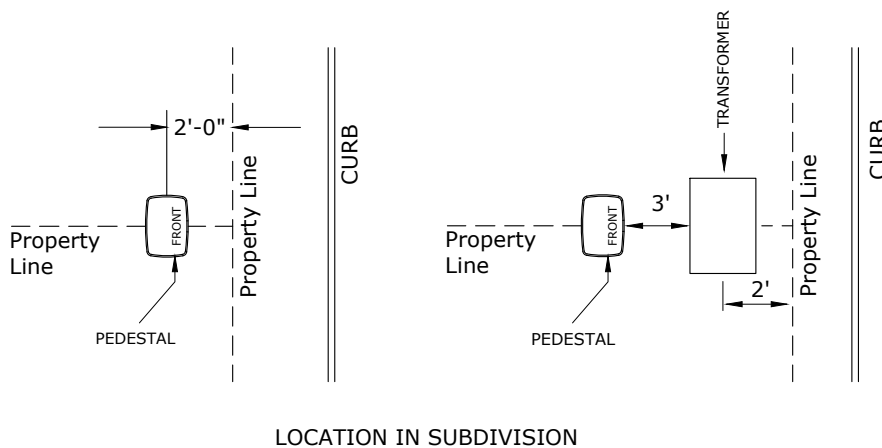
FRONT VIEW

SIDE VIEW



NOTE: Ground rod to be installed by contractor for future BDR.

- Notes: 1.) Leave slack in wire to allow for settling.
 2.) Recommended torque for connectors: 23-38 ft-lb



FOR 480V SERVICE

<p>WARNING</p> <p>Hazardous voltage inside. Will shock, burn, or cause death.</p> <p>If unlocked or open Immediately call Clark Public Utilities 360-892-3000.</p> <p>480Volts</p>	<p>NOTICE</p> <p>We need room to work safely on this electrical supply device. Please keep shrubs and structures 3 ft. away from all sides. Obstructions cause delays when restoring electric service.</p> <p>CAUTION</p> <p>UNRESPONDED POWER CABLES ARE LOCATED IN THIS AREA CALL BEFORE YOU DIG</p>
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Add S/N 794 "480 VOLTS" Label to "WARNING" label when pedestal is used for 480 V service.

Rev. 2 - Added label for 480v service, torque ratings, additional measurements, added notes on connectors and changed "Ø" to "leg" on drawing.

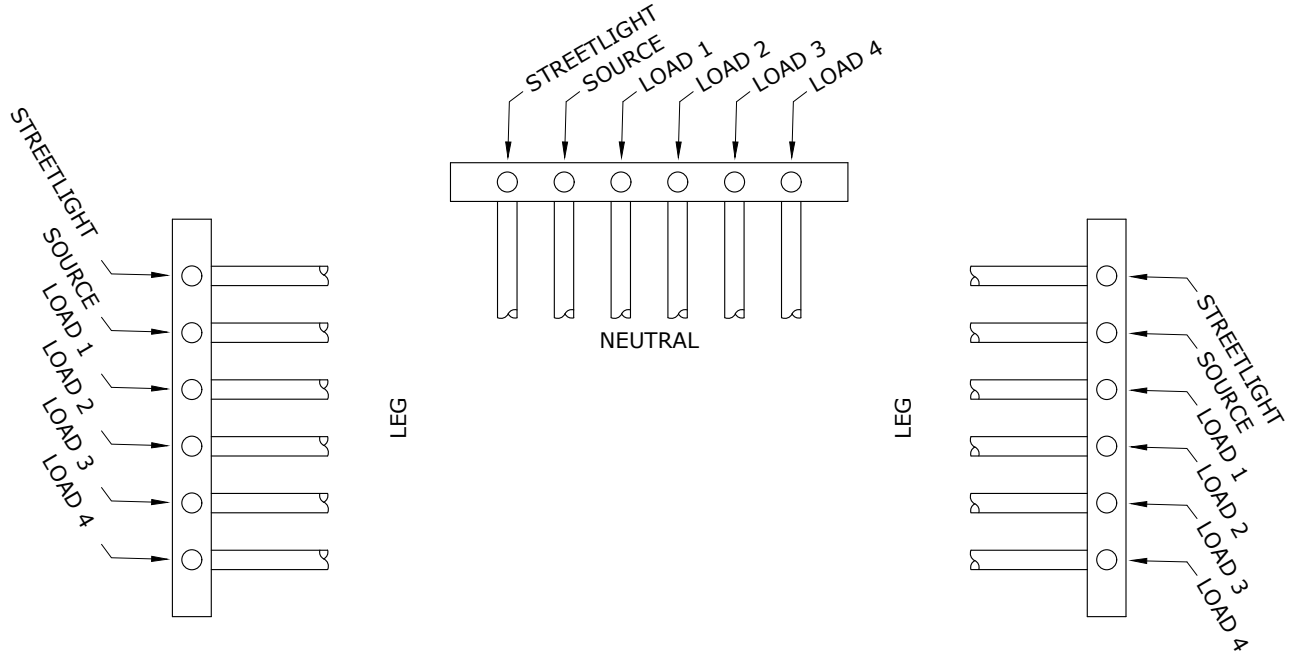


CONSTRUCTION STANDARDS
 SECONDARY PEDESTAL ASSEMBLY

REVISIONS			
RA	DATE	ENGR	OPS
	2/23/00	HWH	MA
1	4/26/04	LB	AH
2	3/12/20	KJP	

DO NOT Cut Zip Ties off Plastic PED Covers
Zip Ties MUST Be Reinstalled

Back of Pedestal



Recommended torque: 23-38 ft-lb
Do NOT Use Impact Driver/Wrench

- Notes: 1.) Maximum cable size is 350 MCM.
 2.) Minimum cable size is #10.
 3.) Maximum number of triplex cables is 6.

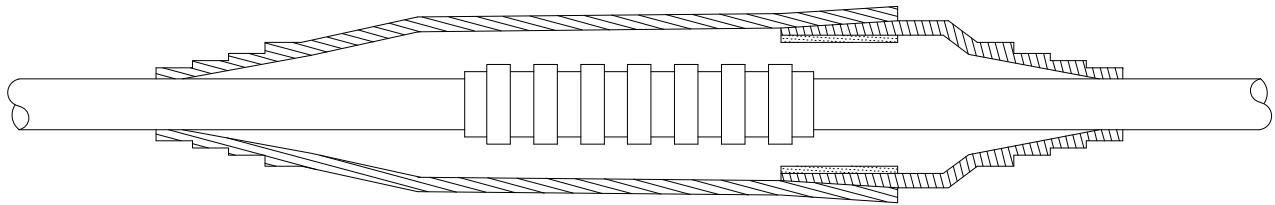
Rev 2: Added label for 480v service, torque ratings, additional measurements, added notes on connectors and changed "Ø" to "leg" on drawing.

ITEM NO.	DESCRIPTION	UED4	
		QTY.	S/N
1	Pedestal, Secondary, Above Ground, W/ Connectors and Covers *	1	2562
2	Lock, Equipment *	1	837



CONSTRUCTION STANDARDS
 SECONDARY PEDESTAL ASSEMBLY

REVISIONS			
DATE	ENGR	OPS	
2/23/00	HWH	MA	
4/26/04	LB	AH	
3/12/20	KJP		



APPLY SILICONE GREASE TO CABLES FOR EASE OF ASSEMBLY.

NOTES:

1. THIS SPLICE IS FOR ANY 600 VOLT OR LESS APPLICATION.
2. THIS SPLICE CAN BE DIRECTLY BURIED OR USED IN A HAND HOLE OR VAULT.
3. OTHER SIZES ARE AVAILABLE FOR SPECIAL APPLICATIONS.

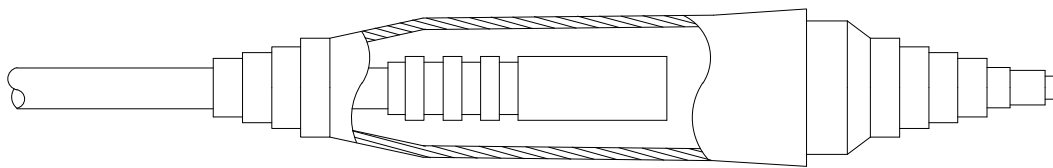
MATERIAL LIST

US-1

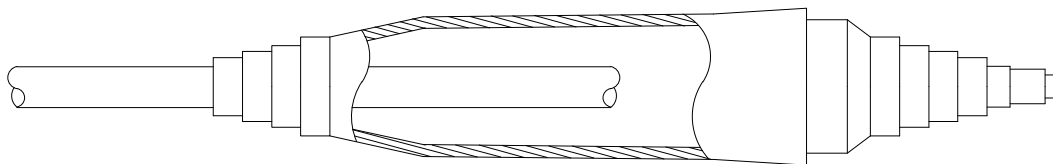
ITEM	QTY.	DESCRIPTION	SIN
1	1	SPLICE KIT, 600V, U.G.	1215
2	1	CONNECTOR, SLEEVE	#

WIRE SIZE	#SIN
2/0 AL	1166
4/0 AL	1167
350 AL	1169
2/0-4/0 AL	1454
4/0-350 AL	1455

OTHER USES



HALF-READY SPLICE



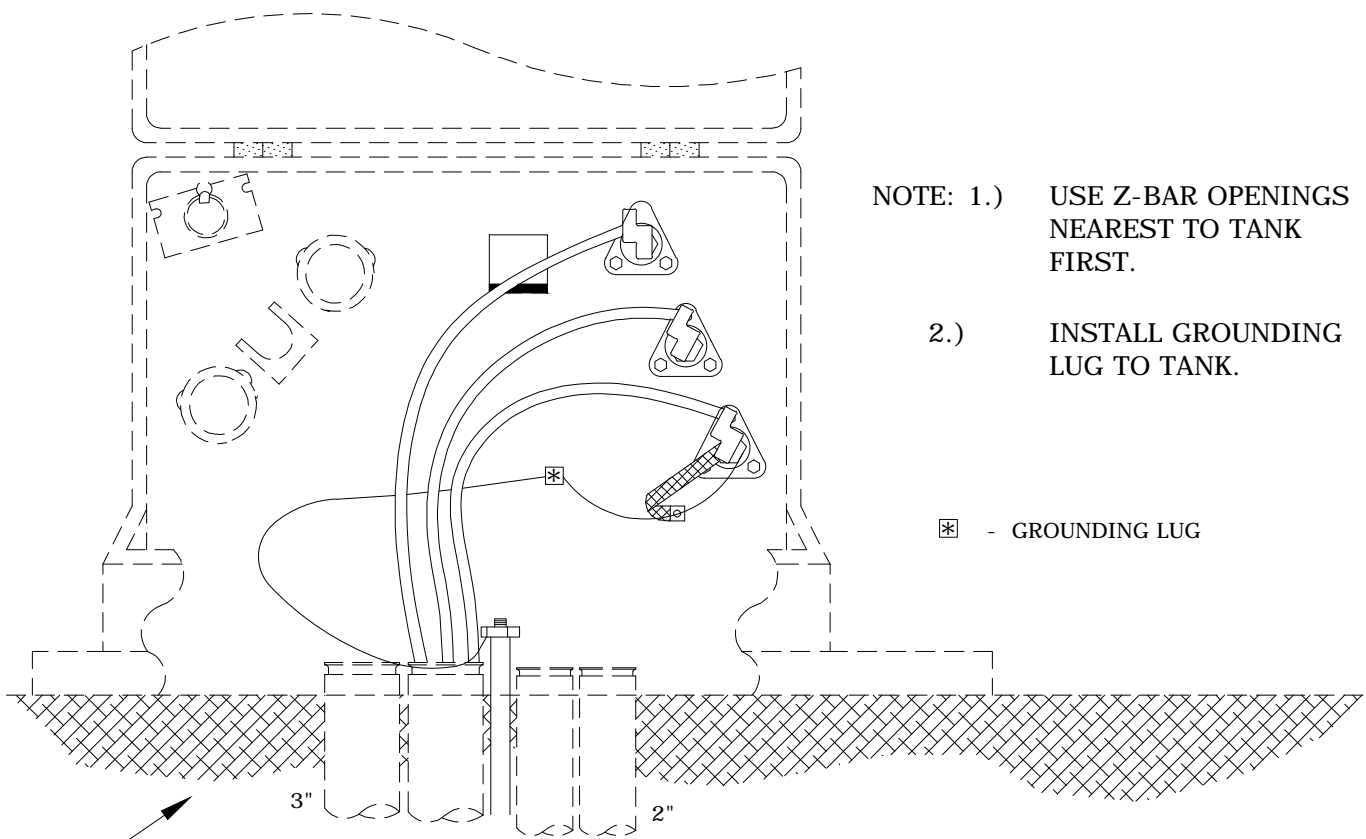
CABLE CAP



CONSTRUCTION STANDARDS
UNDERGROUND SECONDARY
SPLICE

REVISIONS

DATE	ENGR	OPS
2/23/00	HWH	MA

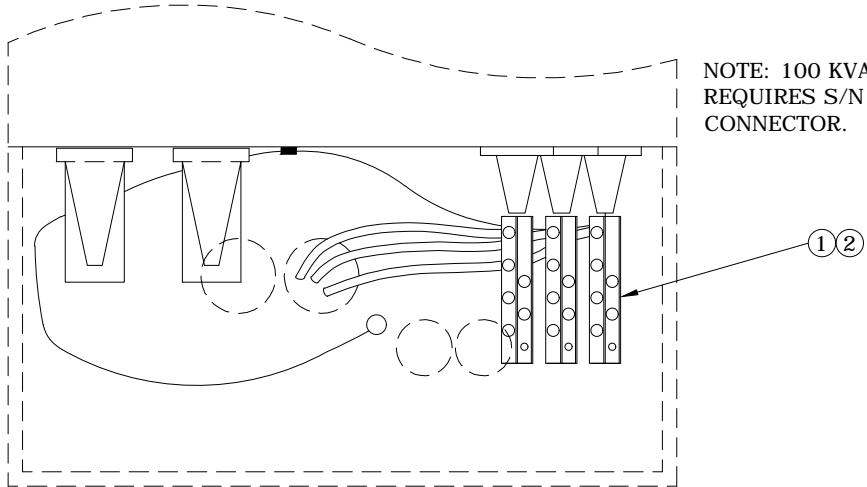


- NOTE: 1.) USE Z-BAR OPENINGS NEAREST TO TANK FIRST.
- 2.) INSTALL GROUNDING LUG TO TANK.

☒ - GROUNDING LUG

SECONDARY CONDUITS AS NEEDED (MAXIMUM 6)

FRONT VIEW OF TRANSFORMER



NOTE: 100 KVA TRANSFORMER REQUIRES S/N #2318 FOR Z-BAR CONNECTOR. *

TOP VIEW OF PAD WINDOW (SHOWING CONDUIT AND CONDUCTOR LOCATION)

REV 1 - ADDED GROUNDING LUG; CHANGED Z-BAR POSITION
 REV 2 - UPDATED FOR ALL-CONDUIT SYSTEM AND ADDED "NOTE" FOR 100KVA Z-BAR CONNECTORS.

ITEM NO.	DESCRIPTION	REVISIONS	
		QTY.	S/N
1	Connector, Z-Bar #2-500KCM + St. Lt.	3	2265
2	Cover, Connector, U.G.	3	2266

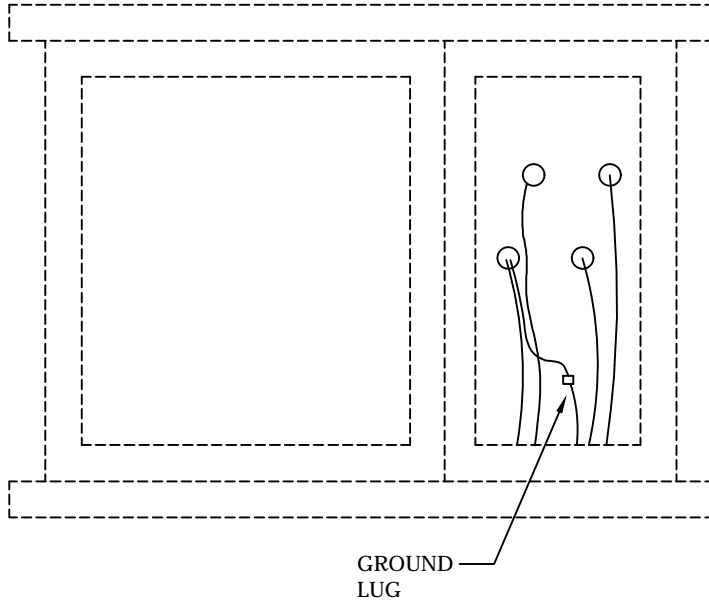


CONSTRUCTION STANDARDS
 PADMOUNT TRANSFORMER ASSEMBLY
 SINGLE PHASE SECONDARY

REVISIONS	DATE	ENGR	OPS
1	2/23/00	HWH	MA
2	12/29/04	LB	AH

△ ADDED GROUNDING LUG

APP: JEH	SECTION
DATE: 2/22/00	1700



US35
US36
US37
US38

NOTES:

1. THIS SPECIFICATION COVERS 3Ø PADMOUNTED TRANSFORMERS 75 THRU 1500KVA, 120/208 VOLTS AND 277/480 VOLTS.
2. CONDUCTOR SIZE RANGE IS 1/0 THRU 750 MCM.
3. SEE STD. UT30-UT32 IN SECTION 1400 FOR MOUNTING ARRANGEMENT.

Rev 1: Changed to Belleville Assembly

ITEM NO.	DESCRIPTION	US35	
		QTY.	S/N
1	Connector, PET, 6-750 Al/Cu 1/0 to 750	4	2129
2	1/2" Belleville Assembly, SS 2" Bolt and Washers W/ Bronze Nut	4	1389
5	Cover, Connector, 6-750	4	2176
ITEM NO.	DESCRIPTION	US36	
		QTY.	S/N
1	Connector, PET, 6-750 Al/Cu 1/0 to 750	4	2129
2	1/2" Belleville Assembly, SS 2 1/2" Bolt and Washers W/ Bronze Nut	4	2584
5	Cover, Connector, 6-750	4	2176
ITEM NO.	DESCRIPTION	US37	
		QTY.	S/N
1	Connector, PET, 8-750 Al/Cu 1/0 to 750	4	2181
2	1/2" Belleville Assembly, SS 2" Bolt and Washers W/ Bronze Nut	4	1389
5	Cover, Connector, 8-750	4	2182
ITEM NO.	DESCRIPTION	US38	
		QTY.	S/N
1	Connector, PET, 8-750 Al/Cu 1/0 to 750	4	2181
2	1/2" Belleville Assembly, SS 2 1/2" Bolt and Washers W/ Bronze Nut	4	2584
5	Cover, Connector, 8-750	4	2182



CONSTRUCTION STANDARDS
SECONDARY CONNECTORS
THREE PHASE PADMOUNT TRANSFORMERS

REVISIONS			
DATE	ENGR	OPS	
11/12/10	KJP		

PAGE:
1 of 1

US35-US38

CAD FILE:
US35

APP: HWH/MA
DATE: 2/23/00

SECTION
1700