

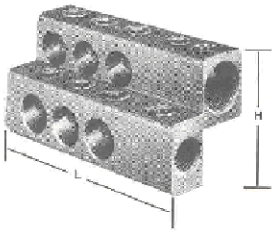
# 1700

## UNDERGROUND SECONDARY

2/11/2025

- ~ UB30-UB60 Basic Units - Underground Secondary
- ~ 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,US7 Padmount Transformer Assembly 1Ø Secondary
- ~ US35-US38 Secondary Connectors 3Ø Padmount Transformer

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



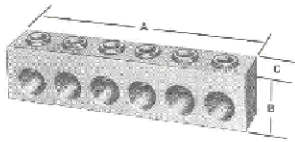
### Single Phase Padmount Transformer Terminal

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



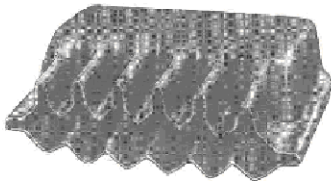
### Three Phase Padmount Transformer Terminal

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

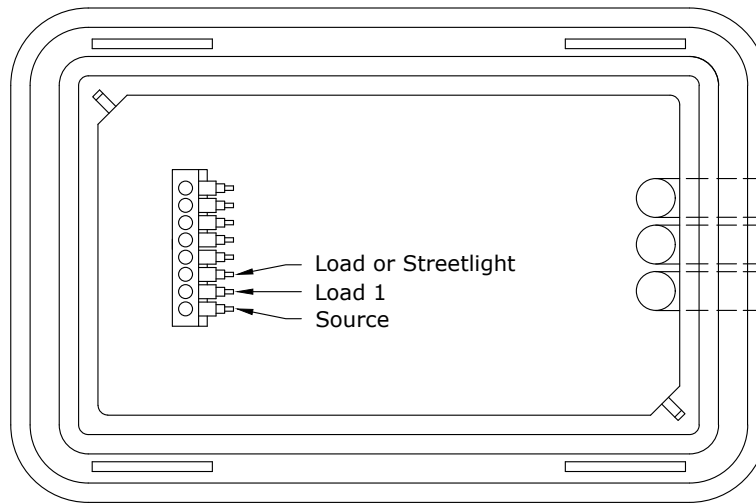
### BASIC UNITS UNDERGROUND SECONDARY

PAGE:  
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UB30, UB40, UB50, UB60

CAD FILE:  
UB30

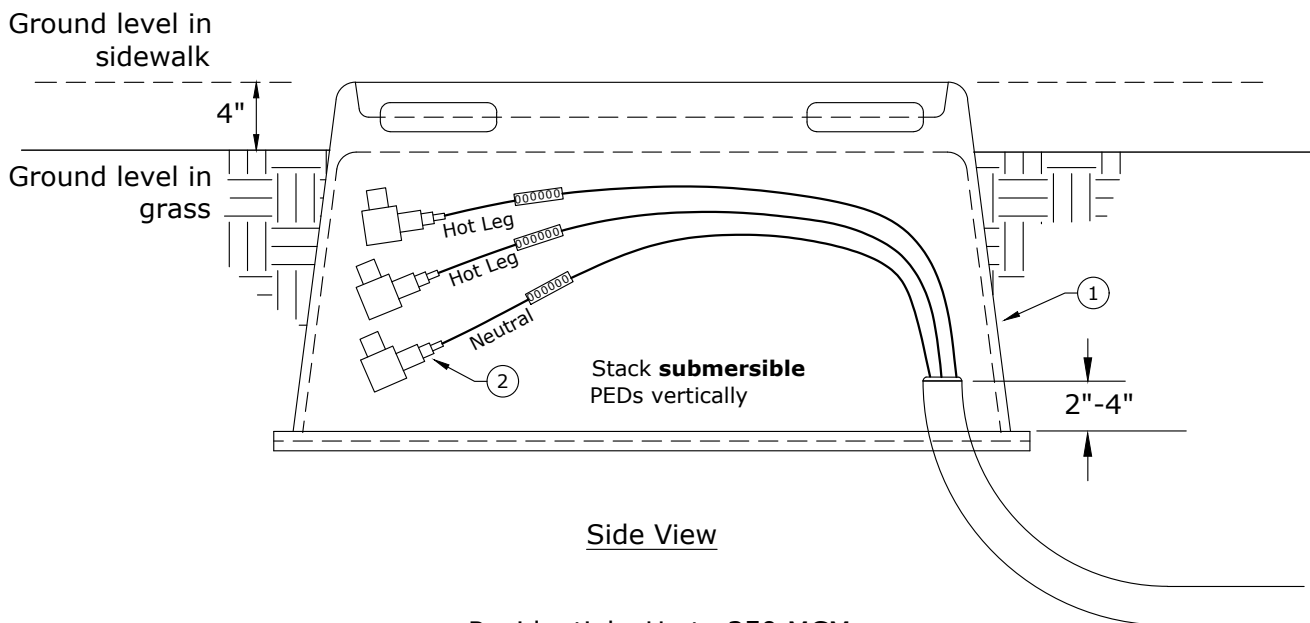
REVISIONS			
DATE	ENGR	OPS	
8/16/02			
3 REDRAWN IN CAD			
APP:	ELM	SECTION	
DATE:	1/22/80	1700	



See page 2 for  
parallel sources  
and loads.

Load or Streetlight
Load 1
Source

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. 7 - Added drawing for parallel source and loads.



## CONSTRUCTION STANDARDS

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

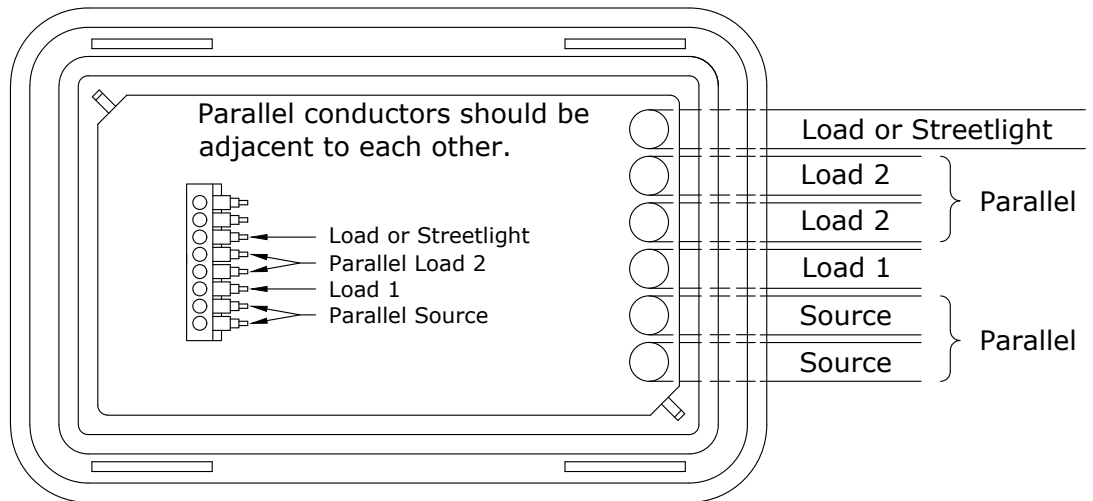
PAGE:  
1 of 2

UE18,UE38

CAD FILE:  
UE18

REVISIONS			
DATE	ENGR	OPS	
10/29/18	KJP		
6/24/19	JDK		
12/2/19	KJP		
12/9/22	CRM	GM	
APP: GGW/RWG		SECTION	
DATE: 4/92		1700	

Zip tie ONE tag  
around each set of  
parallel cables.



Top View  
**Parallel Source and Loads**

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):

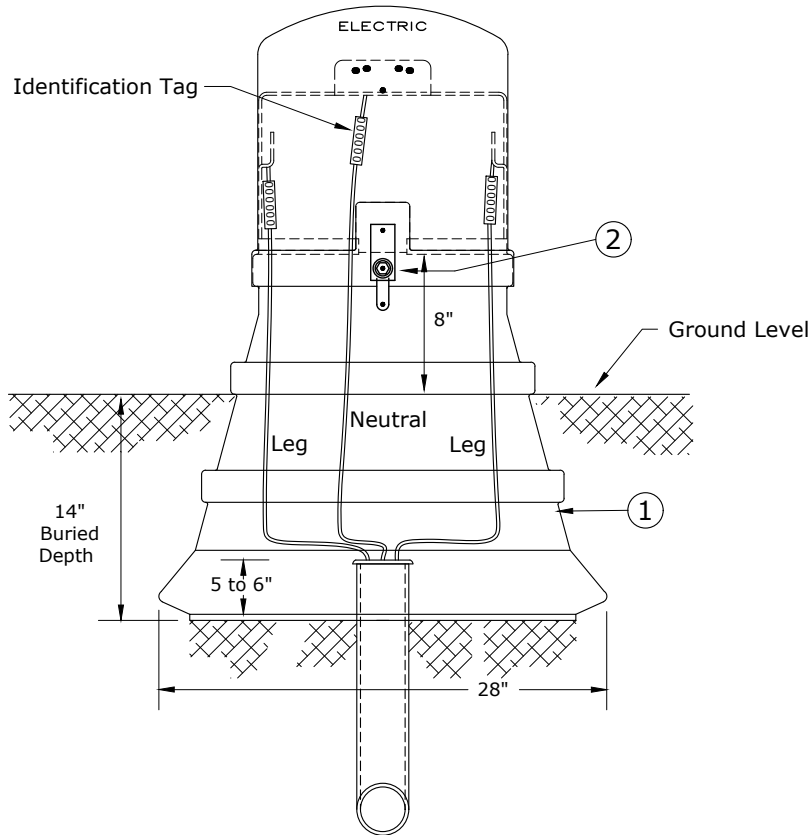
- Rated 20,000 pounds
- This box is 24" x 36" x 18"
- May be used in alleys or driveways-only rated 20k
- Do NOT use in streets or highways

Rev. 7 - Added drawing for parallel source and loads.

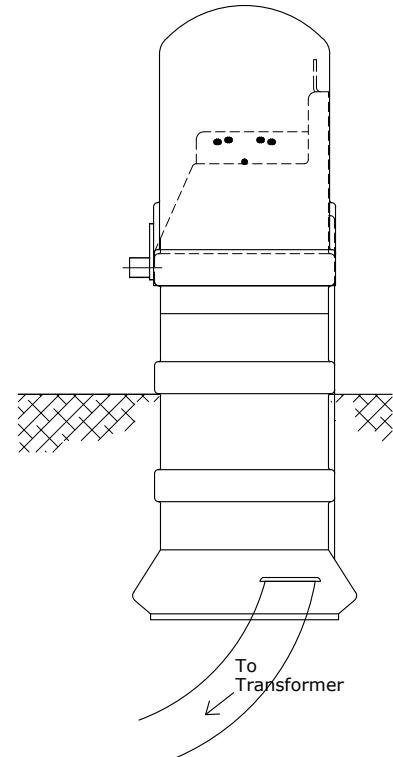
ITEM NO	DESCRIPTION	UE18	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Light Duty (10k lb) with Cover, 17" x 30" x 18" with Pentabolts	1	2556
2	Connector, Submersible, Sec., 8 Position, #12 to 500 MCM Al/Cu	3	2264
ITEM NO	DESCRIPTION	UE18H	
		QTY	S/N
1	Box, Junction, Secondary, Composite, Heavy Duty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

<div><div>Clark Public Utilities</div><div></div></div>	<div>CONSTRUCTION STANDARDS</div> <div>SECONDARY JUNCTION BOX</div> <div>17" x 30" x 18" DEEP (LIGHT DUTY)</div> <div>24" x 36" x 18" DEEP (HEAVY DUTY)</div>		REVISIONS			
			<div><div><div>R</div><div></div></div></div>	DATE	ENGR	OPS
			4	10/29/18	KJP	
			5	6/24/19	JDK	
			6	12/2/19	KJP	
			7	12/9/22	CRM	GM
PAGE: 2 of 2	UE18,UE38	CAD FILE: UE18	APP: GGW/RWG	SECTION 1700		
			DATE: 4/92			

# FRONT VIEW

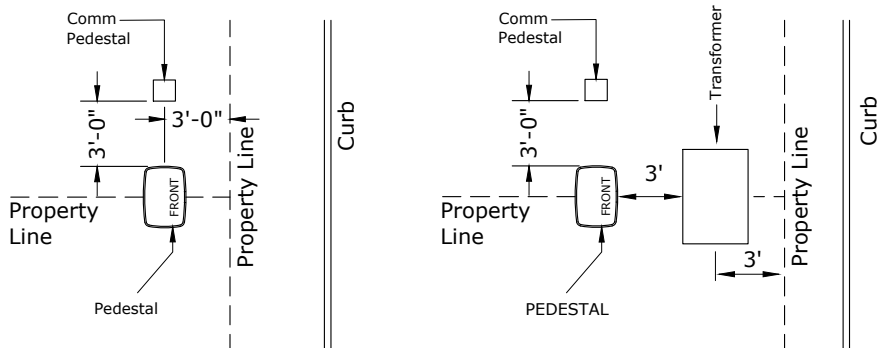


# SIDE VIEW



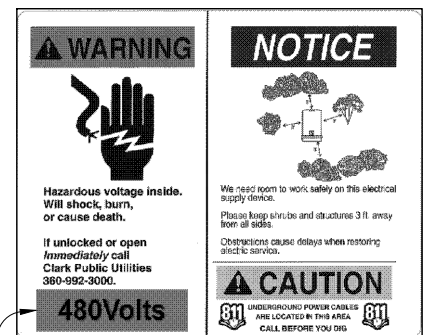
- Notes: 1.) Leave slack in wire to allow for settling.  
2.) Recommended torque for connectors: 23-38 ft-lb

Must maintain 3' clearance from CPU equipment to Communication equipment.



LOCATION IN SUBDIVISION

FOR 480V SERVICE



Add S/N 794 "480 VOLTS" Label to "WARNING" label when pedestal is used for 480 V service.

Rev. 4 - Removed ground rod for BDR.



## CONSTRUCTION STANDARDS SECONDARY PEDESTAL ASSEMBLY

PAGE:  
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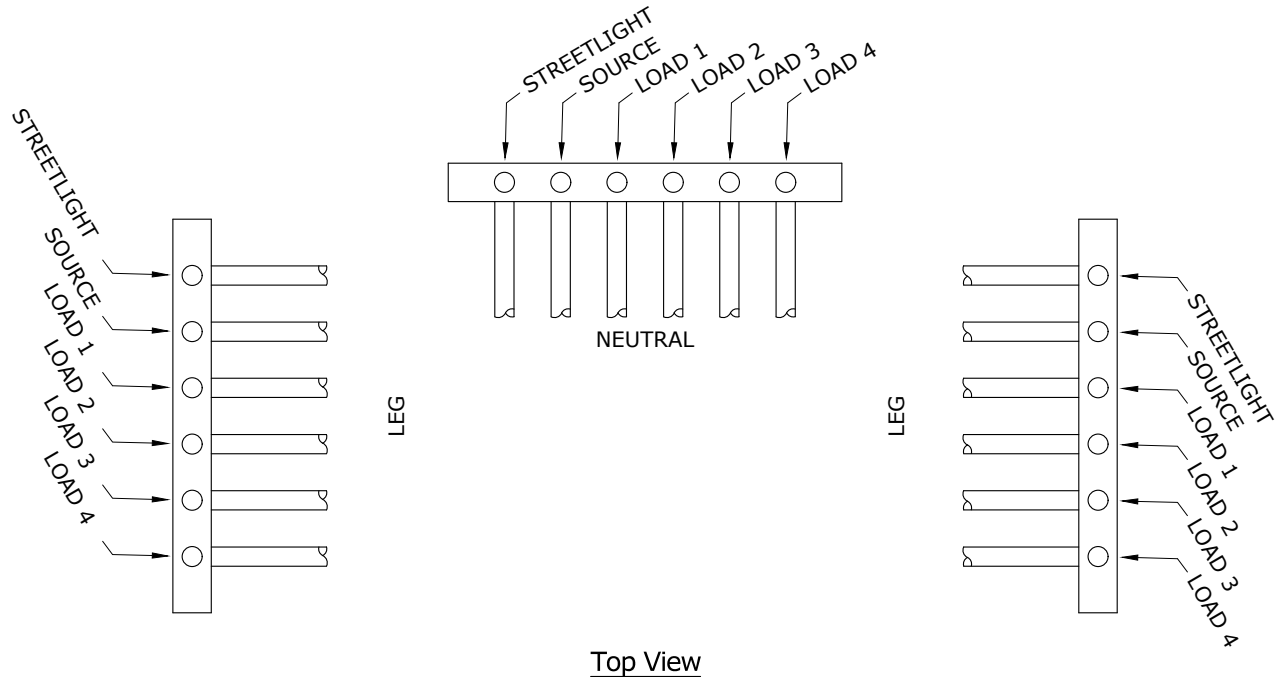
UED6

CAD FILE:  
xUED6

REVISIONS			
R	DATE	ENGR	OPS
1	4/26/04	LB	AH
2	3/12/20	KJP	
3	12/9/22	CRM	GM
4	2/11/25	CM	GM
APP: HWH/ELM SECTION 1700			
DATE: 1980			

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

Back of Pedestal



Top View

**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 of 6 triplex cables.


Rev. 4 - Removed ground rod for BDR.

ITEM NO	DESCRIPTION	UED6	
		QTY	S/N
1	Pedestal, Secondary, Above Ground, W/ Connectors and Covers *	1	2562
2	Lock, Equipment *	1	837

CONSTRUCTION STANDARDS		REVISIONS			
		DATE	ENGR	OPS	
1		4/26/04	LB	AH	
2		3/12/20	KJP		
3		12/9/22	CRM	GM	
4		2/11/25	CM	GM	

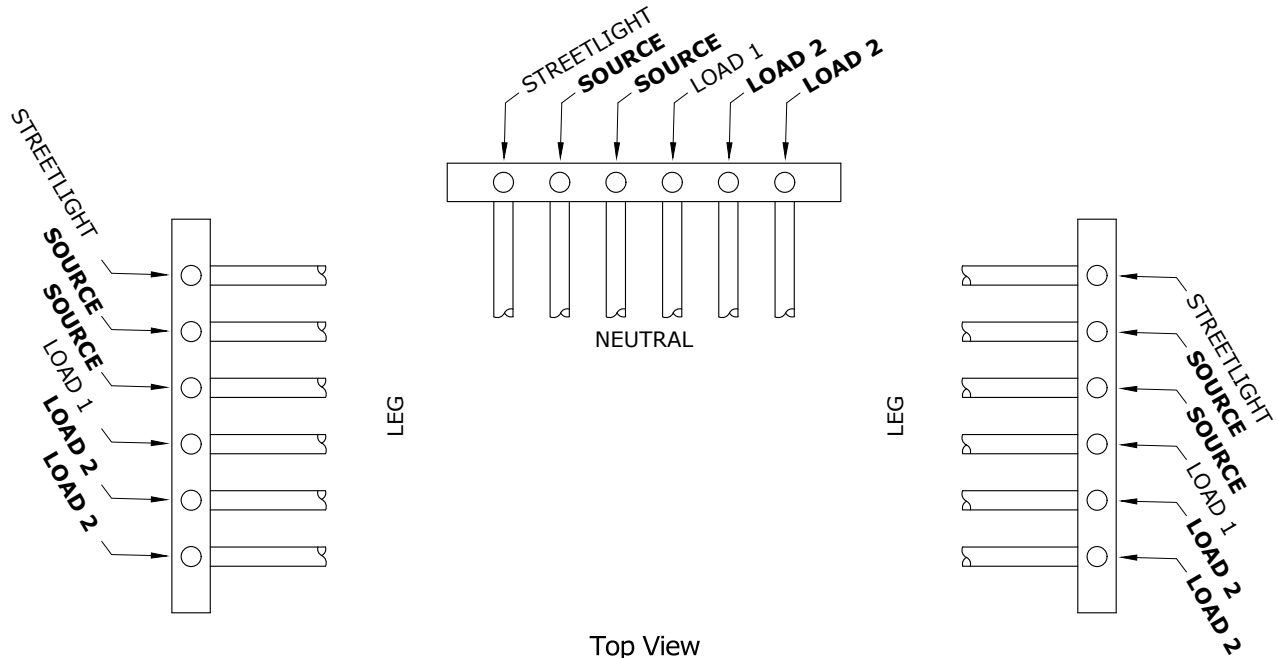
  

		PAGE: 2 of 3		UED6		CAD FILE: UED6		APP: HWH/ELM DATE: 1980		SECTION 1700	
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**DO NOT Cut Zip Ties off Plastic PED Covers**  
**Zip Ties MUST Be Reinstalled**

Zip tie ONE tag around each set of parallel cables

Back of Pedestal



Top View

**Parallel Source and Loads**



**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 of 6 triplex cables.

Rev. 4 - Removed ground rod for BDR.

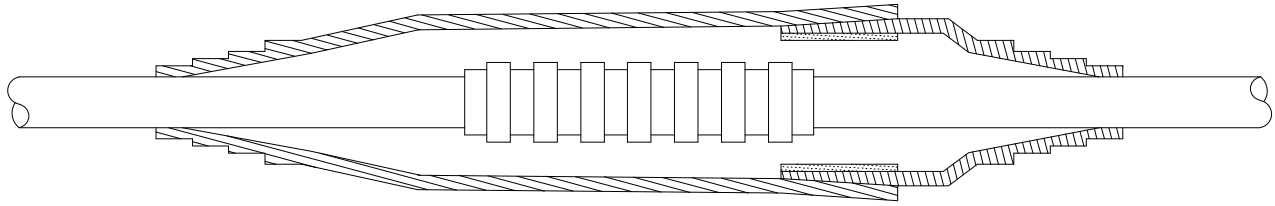
ITEM NO	DESCRIPTION	UED6	
		QTY	S/N
1	Pedestal, Secondary, Above Ground, W/ Connectors and Covers *	1	2562
2	Lock, Equipment *	1	837

		<b>CONSTRUCTION STANDARDS</b> SECONDARY PEDESTAL ASSEMBLY PARALLEL SOURCE AND LOADS		REVISIONS			
					DATE	ENGR	OPS
				1	4/26/04	LB	AH
				2	3/12/20	KJP	
				3	12/9/22	CRM	GM
				4	2/11/25	CM	GM

PAGE: 3 of 3	UED6		CAD FILE: UED6	APP: HWH/ELM DATE: 1980	SECTION 1700
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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.

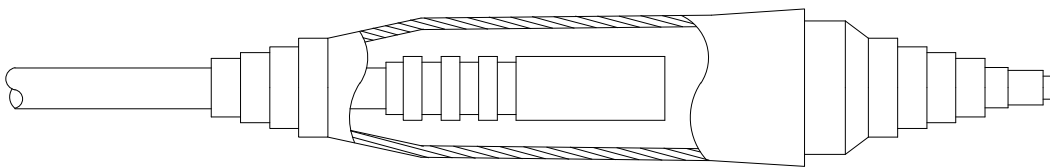
MATERIAL LIST

US-1

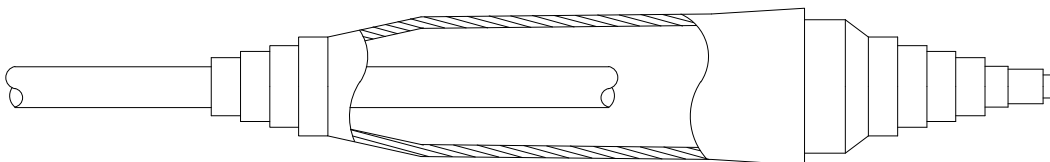
ITEM	QTY.	DESCRIPTION	SIN
1	1	SPLICE KIT, 600V, U.G.	1215
2	1	CONNECTOR, SLEEVE	#

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

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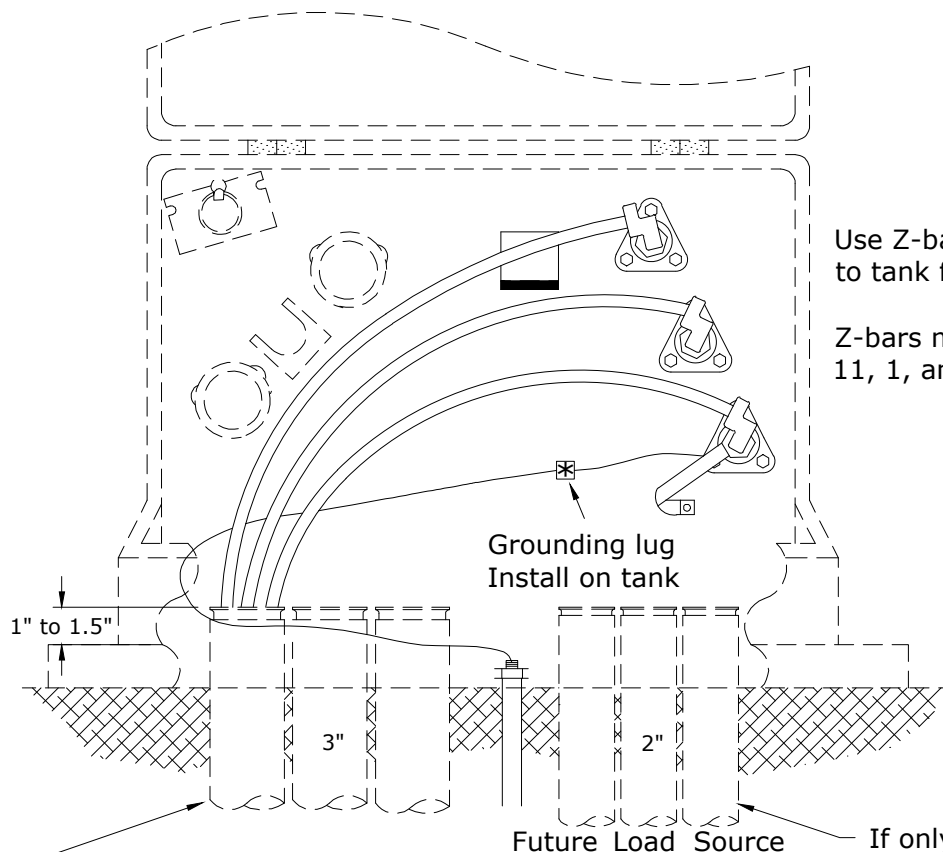
US-1

CAD FILE:  
US-1

REVISIONS

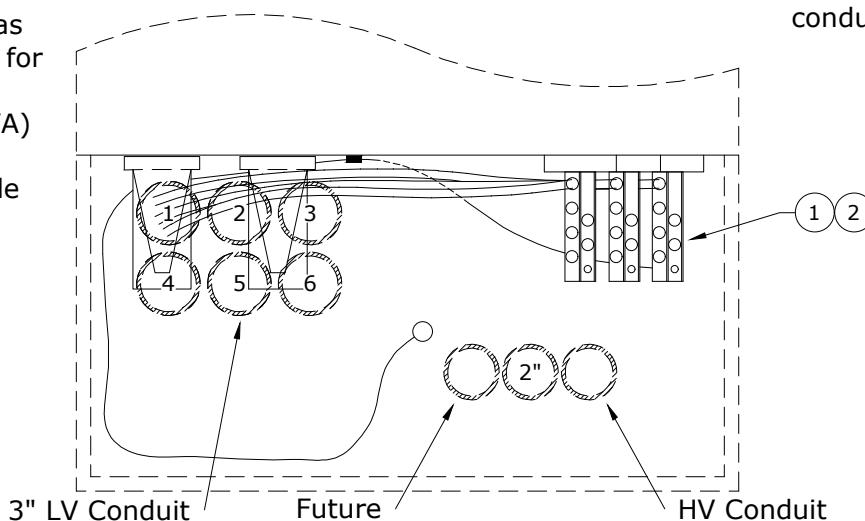
REVISION	DATE	ENGR	OPS
0	2/23/00	HWH	MA
0			
APP:	JEH	SECTION	
DATE:	2/22/00	1700	





Secondary conduits as needed (Maximum 4 for 25 and 50 kVA - Maximum 6 for 75kVA)

Start Makeup of Cable in Back Conduits Left to Right



TOP VIEW OF PAD WINDOW

- Notes:**
1. Use Std US6 for 25 to 75 kVA padmounts with 5/8" stud.
  2. Use Std US7 for 100 kVA padmounts with 1" stud.

Rev 3: Added US7 for 100 kVA padmount 1" stud for Z-bar connector, and updated drawing for maximum conduits.

ITEM NO.	DESCRIPTION	US6		US7	
		QTY.	S/N	QTY.	S/N
1	Connector, Z-bar, Al/Cu, 6-Position, #2-500MCM, w/ Streetlight Position	3	2265	3	2318
2	Cover, Connector, Z-bar, 6-Position	3	2266	3	2266



## CONSTRUCTION STANDARDS

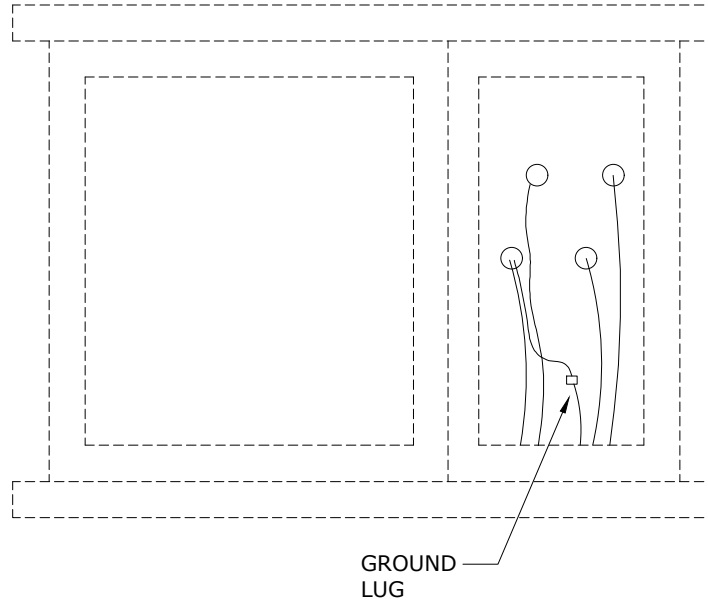
### PADMOUNT TRANSFORMER ASSEMBLY SINGLE PHASE SECONDARY

PAGE:  
1 of 1

US6,US7

CAD FILE:  
US6,US7

REVISIONS			
R	DATE	ENGR	OPS
1	2/23/00	HWH	MA
2	12/29/04	LB	AH
3	5/8/24	DK	
APP: GGW/BG		SECTION	
DATE: 4/1988		1700	






US35  
US36

**Notes:**

1. This specification covers 3ø padmounted transformers 75 through 1500 kVA, 120/208 V and 277/480 V.
2. Conductor size range is 1/0 through 750 kcmil.
3. See Std UT30-UT32 - Underground Transformers - Section 1400 for mounting arrangement.

Rev. 2 - Removed US37 & 38 due to secondary bushing leaks and clearance problems in secondary compartment of transformer.

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
3	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
3	Cover, Connector, 6-750	4	2176

		<b>CONSTRUCTION STANDARDS</b> SECONDARY CONNECTORS THREE PHASE PADMOUNT TRANSFORMERS		REVISIONS			
					DATE	ENGR	OPS
				1	11/12/10	KJP	
				2	9/21/21	JDK	
							
PAGE: 1 of 1		US35-US38		CAD FILE: US35		APP: HWH/MA DATE: 2/23/00	SECTION 1700