



## **CORE ELECTRIC COOPERATIVE**

# Specification Drawings and Guidelines for Underground Electrical Distribution 12.5/7.2 kV

REVISED DECEMBER 2025





# Specification Drawing and Guidelines for Underground Electrical Distribution 12.5/7.2 kV

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## **GUIDELINES**

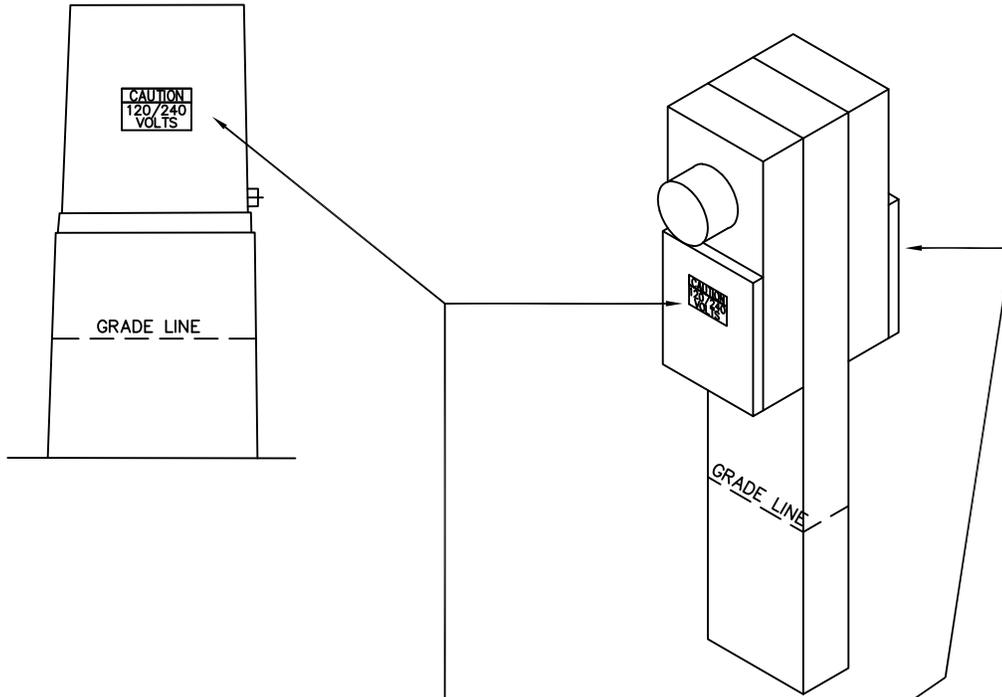
- Equipment Numbering & Warning Signage
- Clearance
- Equipment Placement
- Meter Housing Detail
- Equipment Normal Opens



# GUIDELINES

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1.21	LOCK BOX	LOCK BOX INSTALLATION GUIDELINE

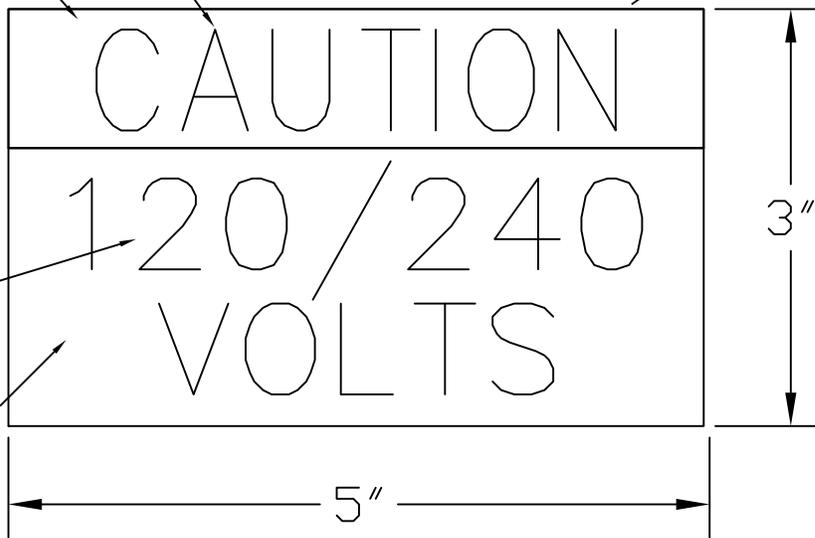




YELLOW LETTERS  
BLACK BACKGROUND

BLACK LETTERS

YELLOW BACKGROUND

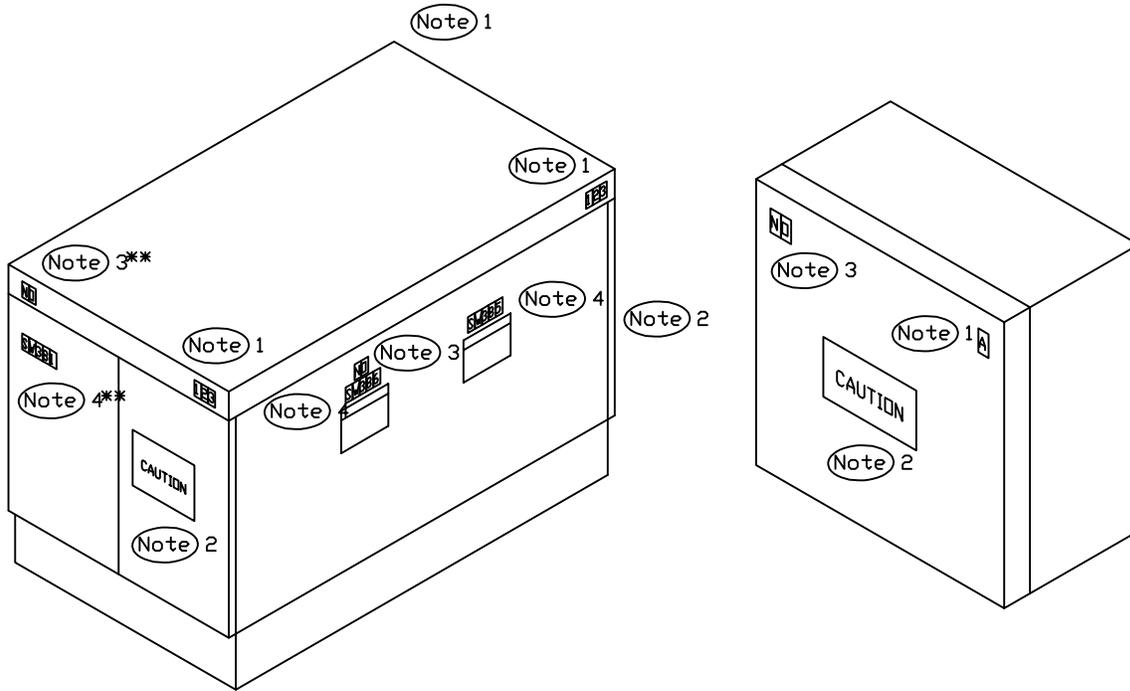


NOTES:

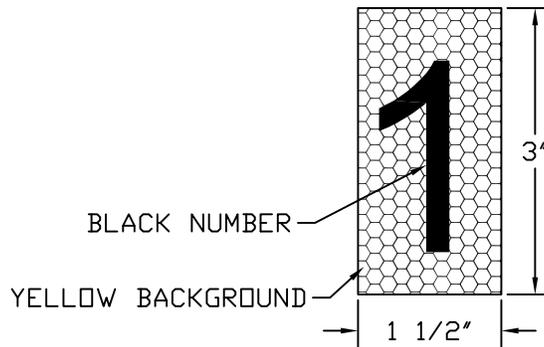
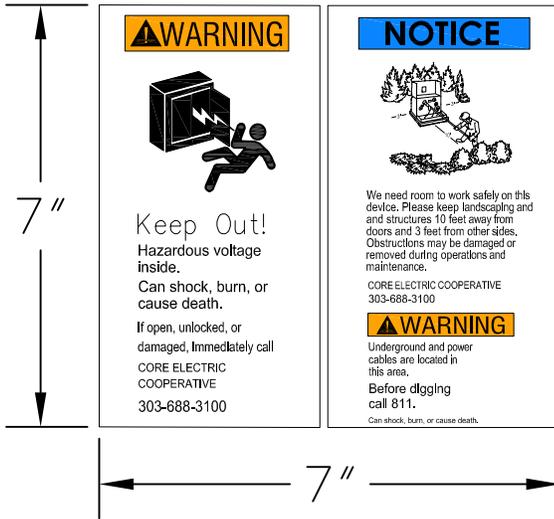
1. WARNING SIGN SHOULD BE PLACED ON BOTH SIDES OF A DOUBLE PEDESTAL.



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\*\* REPRESENTS LOCATION ON OIL GEAR WHICH IS NOT SHOWN.

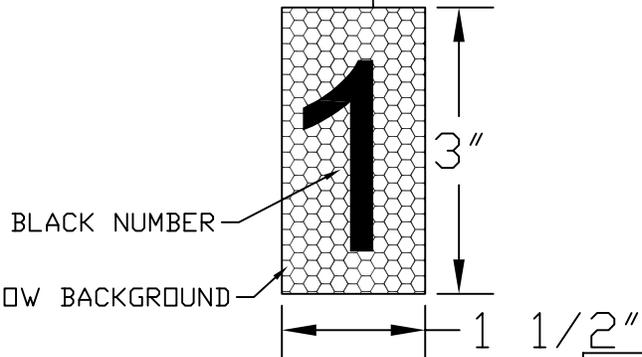
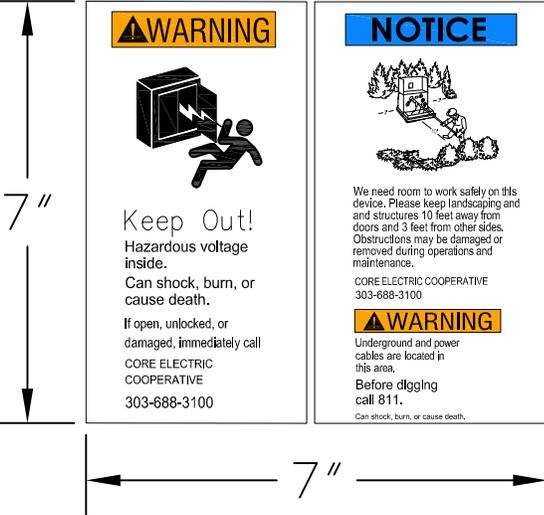
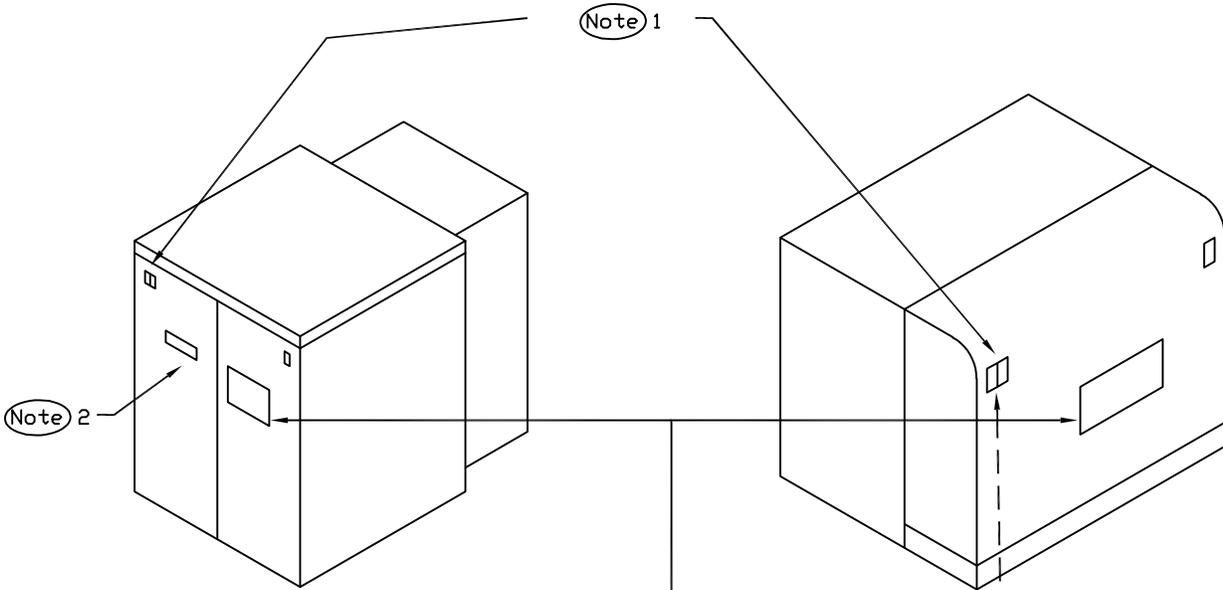


NOTES:

1. CORE ENGINEER WILL ASSIGN DEVICE NUMBER OR FIELD LETTER. ASSIGNED NUMBER SHALL BE PLACED IN UPPER RIGHT CORNER OF DOOR SIDES AND ROAD SIDE OF THE CABINET.
2. WARNING SIGN SHALL BE PLACED ON ALL DOOR SIDES OF CABINET.
3. NORMAL OPEN STATUS SHALL BE LABELED ABOVE HANDLES OF AIR GEAR AND ON THE ACCESS DOORS NEAR THE SIDE SWITCHED FOR OTHER GEAR.
4. CABLE ROUTES SHALL BE LABELED WITH HORIZONTAL NUMBERING ABOVE HANDLES INDICATING THE DEVICE THE CABLE ROUTES TO. OIL GEAR SHOULD HAVE THE SAME INDICATIONS ON THE DOOR SIDE CLOSEST TO THE CABLE ROUTE LABELED.
5. DRILL HOLE FOR FAULT INDICATOR LED OR TARGET ON PANEL TO THE RIGHT OF THE DOOR IN THE TOP LEFT HAND CORNER.

SWITCHGEAR AND CUBICAL WARNING SIGN & NUMBERING GUIDE

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ISSUE	
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SIGN GUIDE 2	
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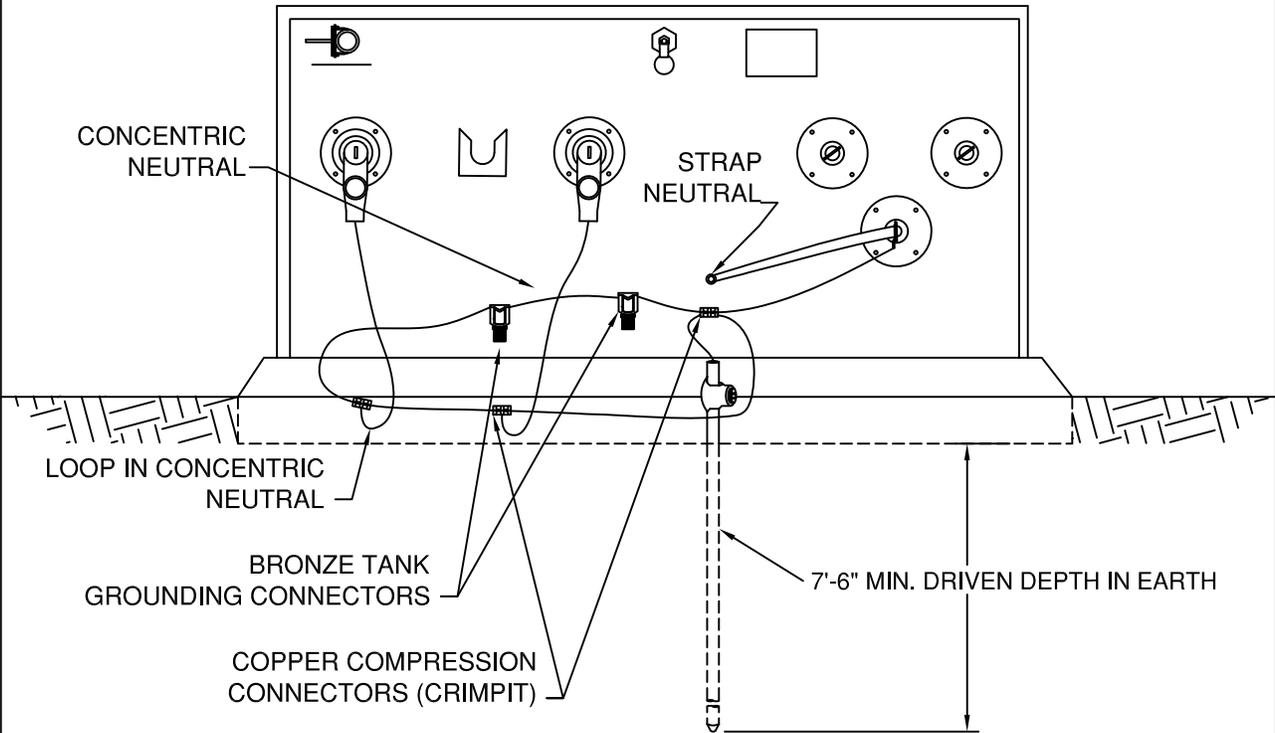
NOTES:

1. CORE ENGINEER WILL ASSIGN NUMBER OR LETTER TO EACH PIECE OF EQUIPMENT SHOWN ON ENGINEERING DOCUMENTS.
2. HIGH & LOW SECONDARY VOLTAGE SHOWN ON ALL 3 PHASE TRANSFORMERS.
3. PERMANENT SWITCHING INFORMATION MAY BE REQUIRED TO BE LABELED ON OUTSIDE OF CABINET.

TRANSFORMER WARNING SIGN AND NUMBERING GUIDE

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SIGN GUIDE 3	
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## TRANSFORMER INSTALLATION (FRONT VIEW)



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**NOTES:**

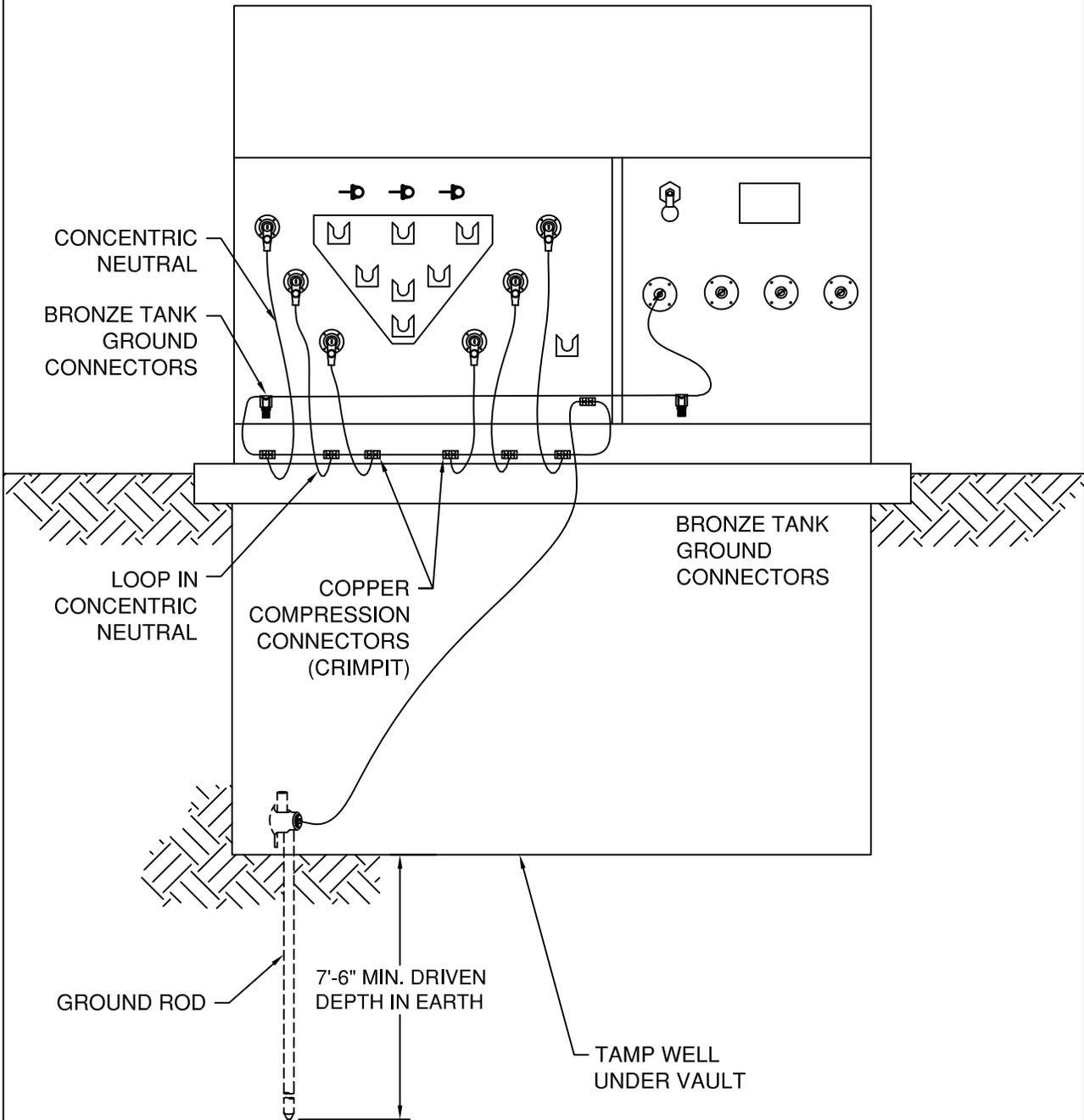
1. ATTACH #2 STR CU GROUND WIRE TO ALL TRANSFORMER MANUFACTURERS CASE GROUNDS.
2. SPLIT BOLT CONNECTORS ARE PROHIBITED. INCLUDING TANK GROUND
3. GROUND WIRE TO LOOP TO THE FRONT OF THE TRANSFORMER
4. CREATE LOOP IN CONCENTRIC NEUTRAL IN BOTTOM OF TRANSFORMER FOR FUTURE MAKEUP.

## GROUNDING GUIDE FOR SINGLE PHASE TRANSFORMER AND ENCLOSURES



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GROUNDING	
GUIDE 1	
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# TRANSFORMER INSTALLATION (FRONT VIEW)



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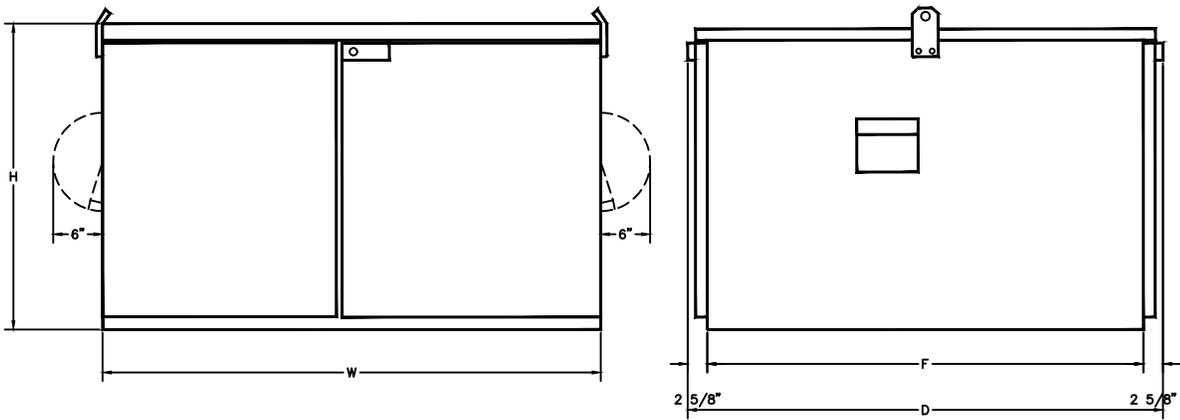
**NOTES:**

1. ATTACH #2 STR CU GROUND WIRE TO ALL TRANSFORMER MANUFACTURERS CASE GROUNDS.
2. SPLIT BOLT CONNECTORS ARE PROHIBITED. INCLUDING TANK GROUND
3. GROUND WIRE TO LOOP TO THE FRONT OF THE TRANSFORMER
4. CREATE LOOP IN CONCENTRIC NEUTRAL IN BOTTOM OF TRANSFORMER FOR FUTURE MAKEUP.



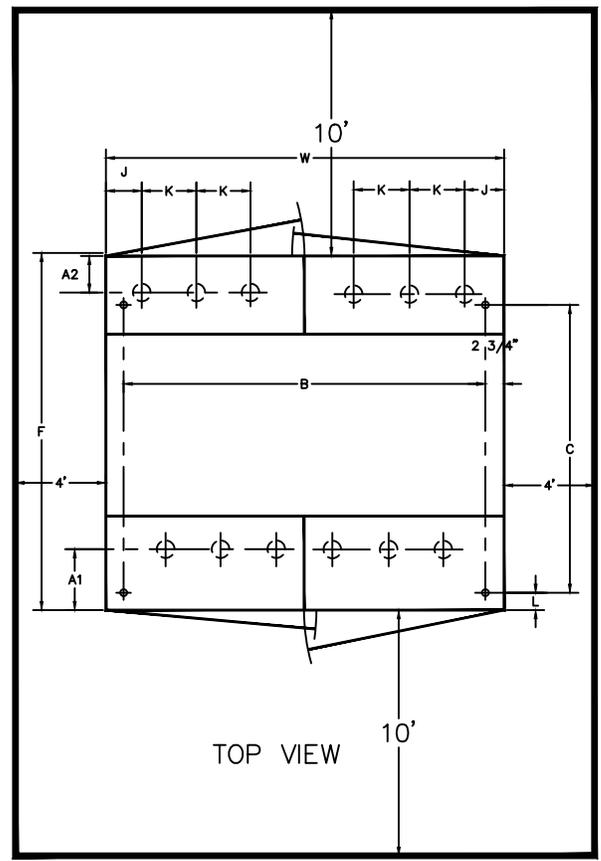
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## GROUNDING GUIDE FOR THREE PHASE TRANSFORMER



FRONT VIEW

SIDE VIEW



TOP VIEW

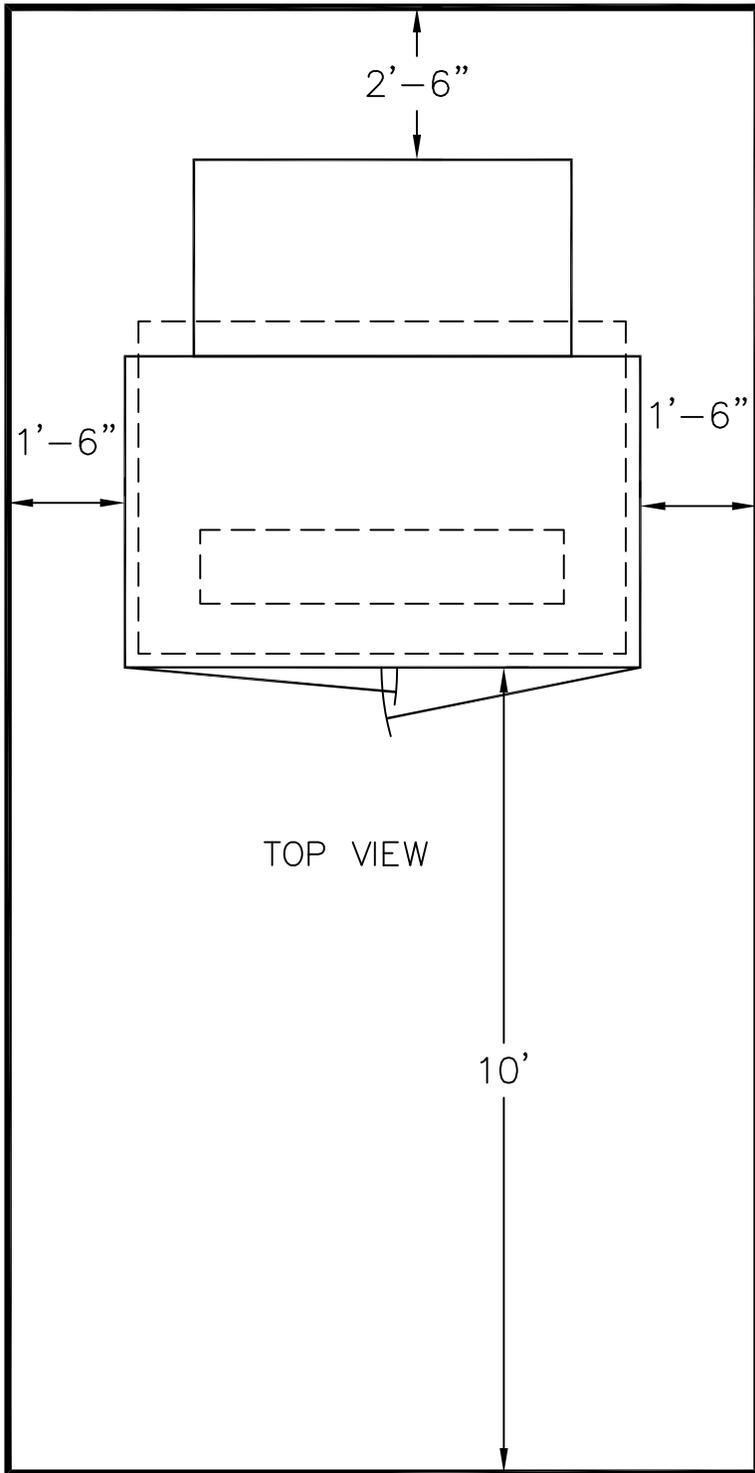
MINIMUM CLEARANCE PLAN



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CLEARANCE	
GUIDE 1	
FILE NAME:	
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Kv. Nominal	A1	A2	B	C	D	E	F	G	H	J	K	L	M	W
14.4	13 3/8	5 7/8	69 1/2	49 1/2	69 3/4	12 3/8	73 1/4	8 1/4	45	5 3/8	10 3/4	7 1/2	38 5/8	75

PAD MOUNTED AIR SWITCHGEAR DIMENSIONS AND MINIMUM WORKING CLEARANCES



MINIMUM CLEARANCE PLAN

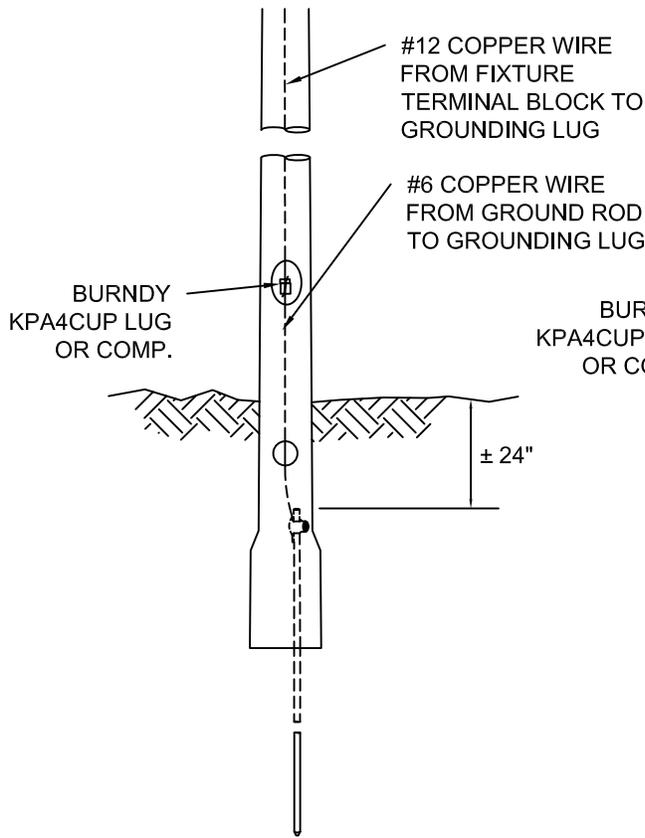
**NOTE:**

1. FOR MINIMUM CLEARANCES FROM WALLS AND STRUCTURES REFER TO DEVELOPER/BUILDER INFORMATION GUIDELINES: PAD-MOUNTED TRANSFORMER LOCATION MAP AND MINIMUM CLEARANCES FROM WALLS AND STRUCTURES.

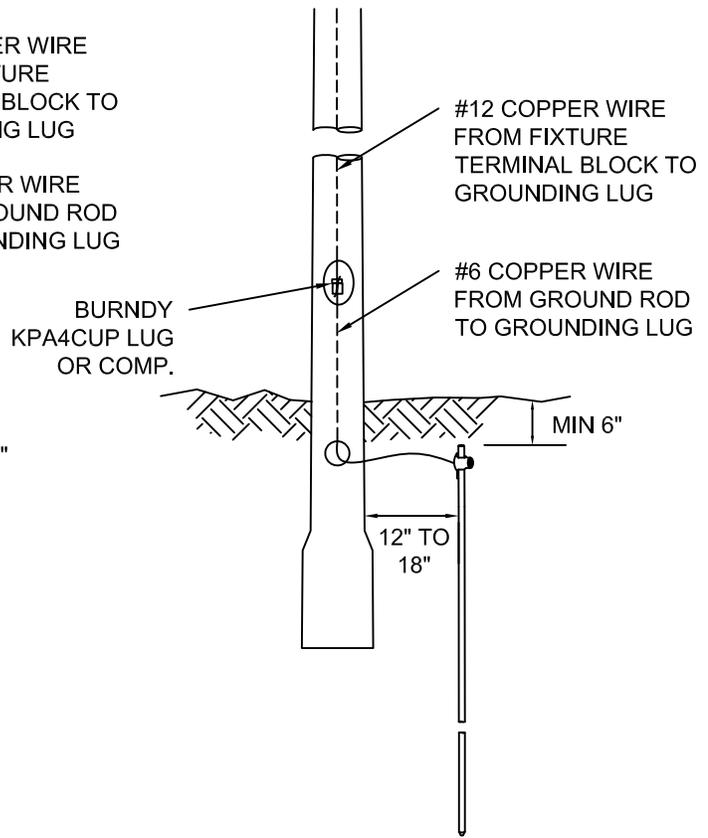
2. UM119 (75" x 69") FIBERGLASS VAULT SHOWN UNDER TRANSFORMER DEPICTING TYPICAL TRANSFORMER AND VAULT INSTALLATION.



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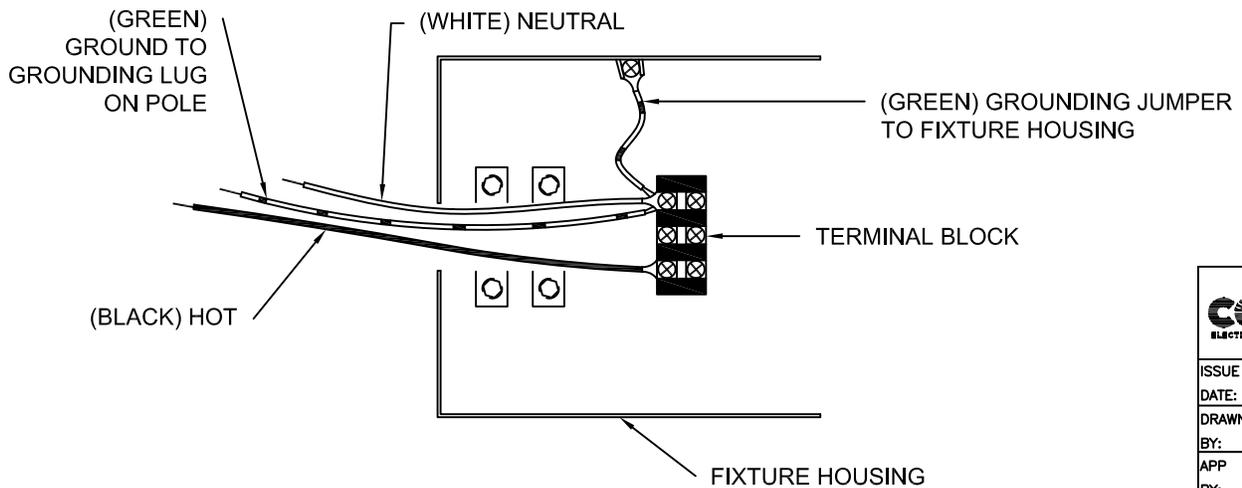


POLE GROUNDING METHOD 1



POLE GROUNDING METHOD 2

GROUNDING LIGHT FIXTURE TO POLE

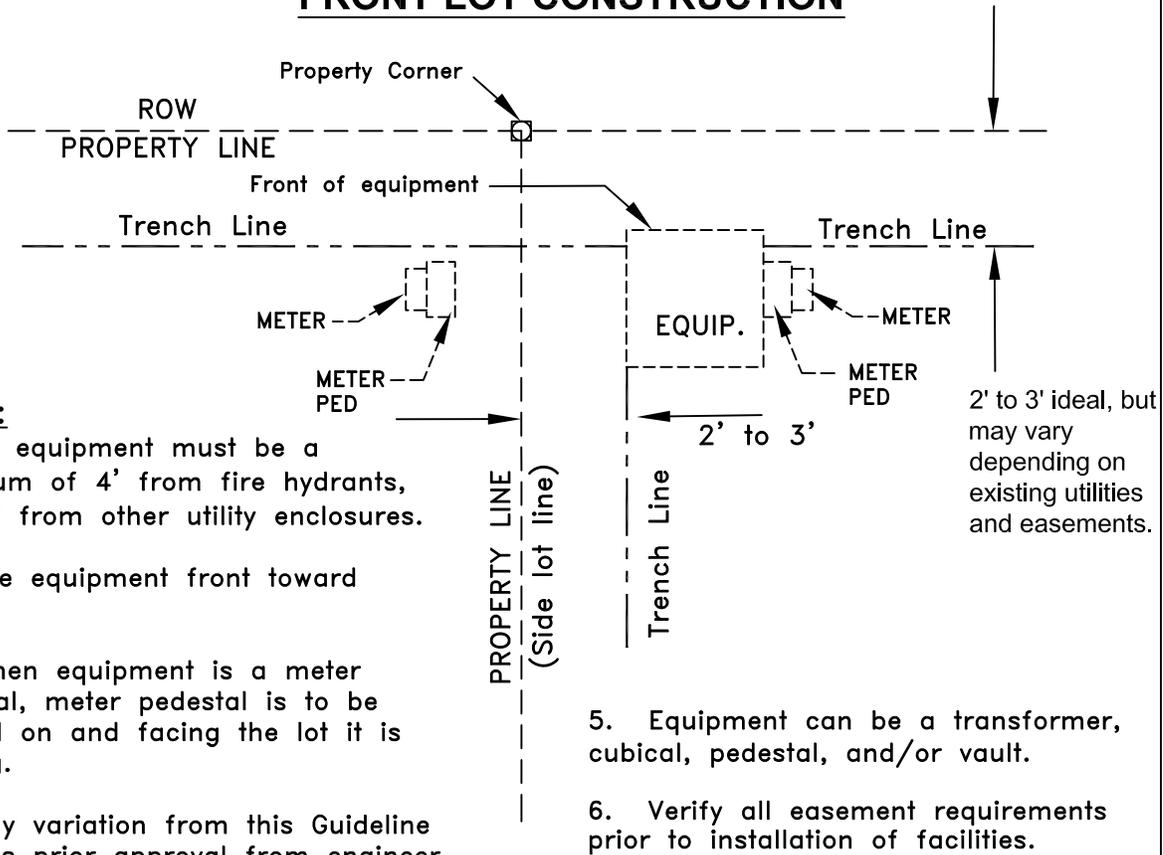


STREET LIGHT GROUNDING GUIDE FOR UGC FED CONDUCTIVE POLES & FIXTURES



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## FRONT LOT CONSTRUCTION

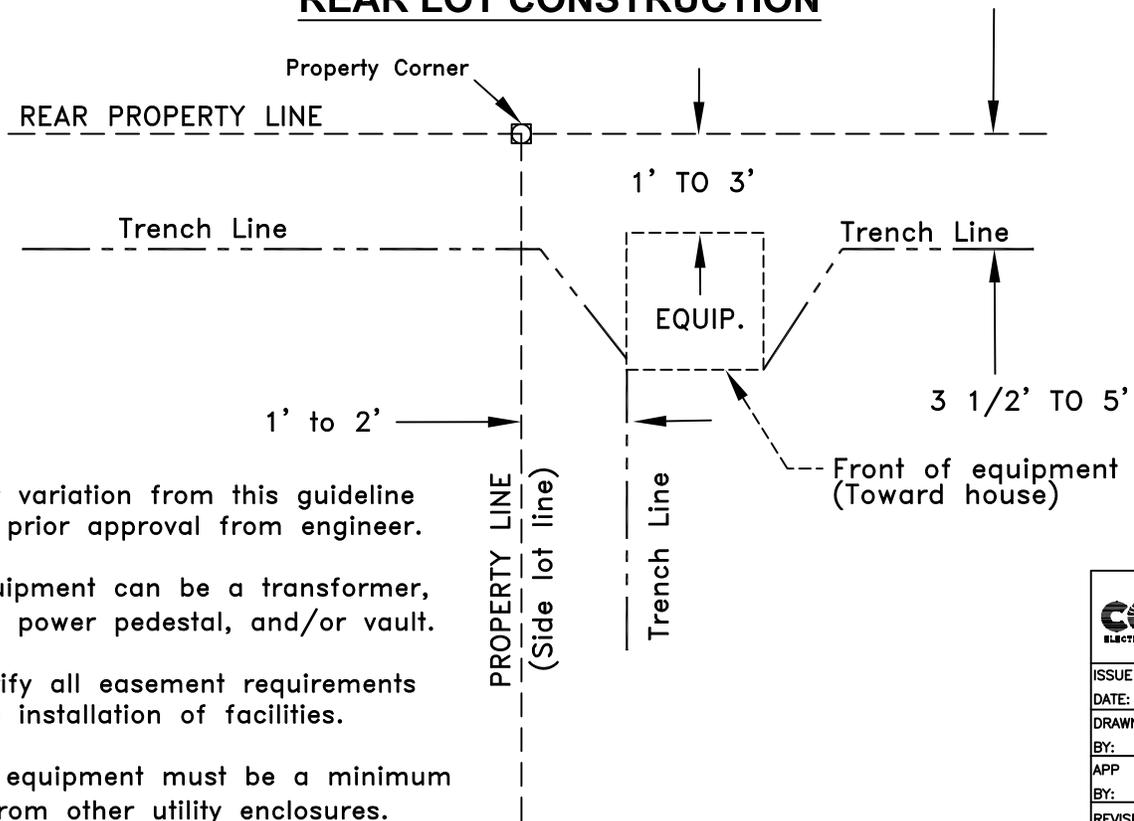


**NOTE:**

1. All equipment must be a minimum of 4' from fire hydrants, and 2' from other utility enclosures.
2. Face equipment front toward street.
3. When equipment is a meter pedestal, meter pedestal is to be located on and facing the lot it is serving.
4. Any variation from this Guideline requires prior approval from engineer.

5. Equipment can be a transformer, cubical, pedestal, and/or vault.
6. Verify all easement requirements prior to installation of facilities.

## REAR LOT CONSTRUCTION



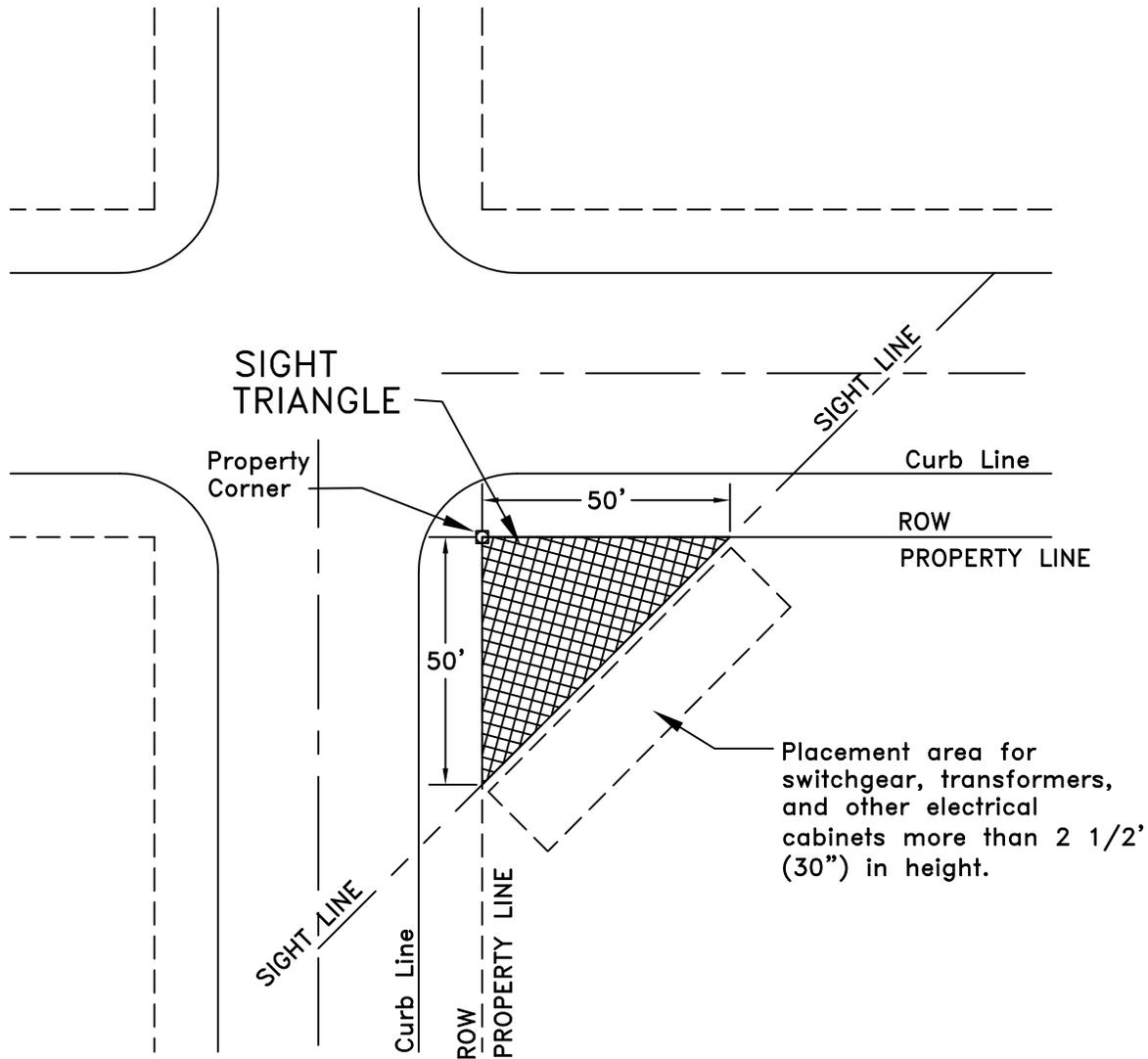
**NOTE:**

1. Any variation from this guideline require prior approval from engineer.
2. Equipment can be a transformer, cubical, power pedestal, and/or vault.
3. Verify all easement requirements prior to installation of facilities.
4. All equipment must be a minimum of 2' from other utility enclosures.

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**TYPICAL RESIDENTIAL EQUIPMENT AND TRENCH PLACEMENT  
FOR FRONT AND REAR LOT CONSTRUCTION**

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DATE:	8/6/98
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DATE:	4/11/22
EQUIPMENT LOCATION GUIDELINE 1	
FILE NAME:	
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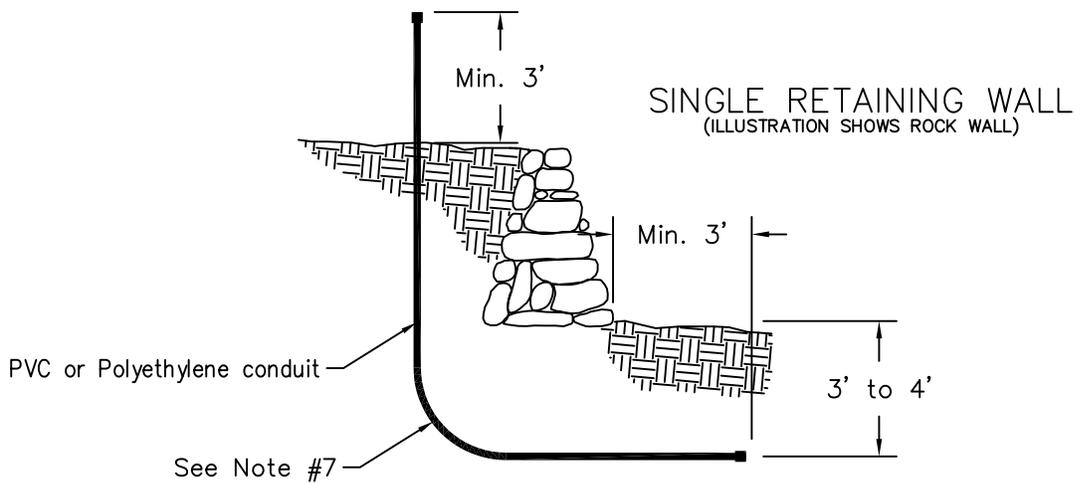
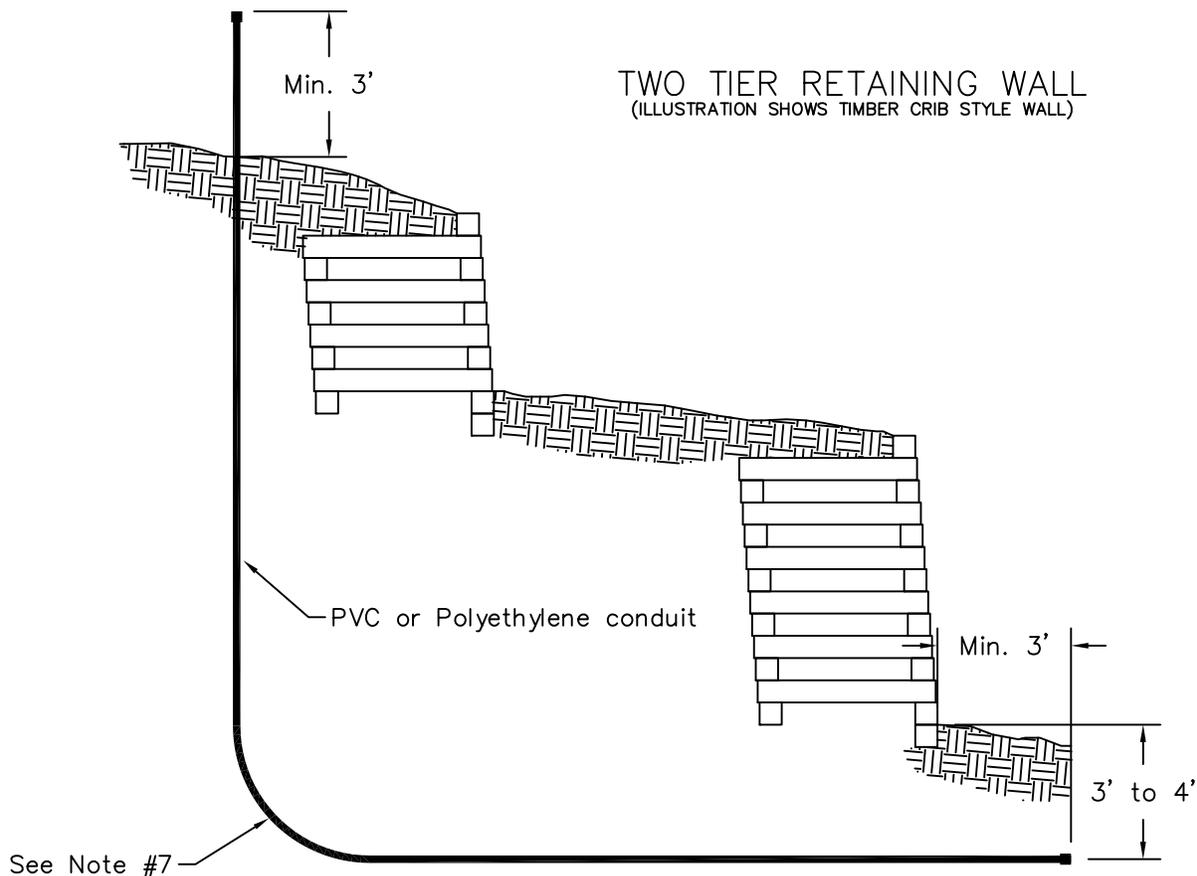
**NOTE:**

1. No equipment more than 2 1/2' (30") in height shall be installed inside the intersection sight triangle. (Street lighting and utility poles excluded.)
2. Any variation from this guideline requires prior approval from either county, city, or state permitting agency.
3. Verify all easement descriptions and requirements prior to installing facilities.
4. Larger sight distance triangles may be required on highways and major collector right-of-ways.
5. All equipment must be a minimum of 4' from fire hydrants.



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EQUIPMENT LOCATION GUIDELINE 2 FILE NAME:	

**TYPICAL INTERSECTION PLACEMENT FOR LARGER EQUIPMENT**



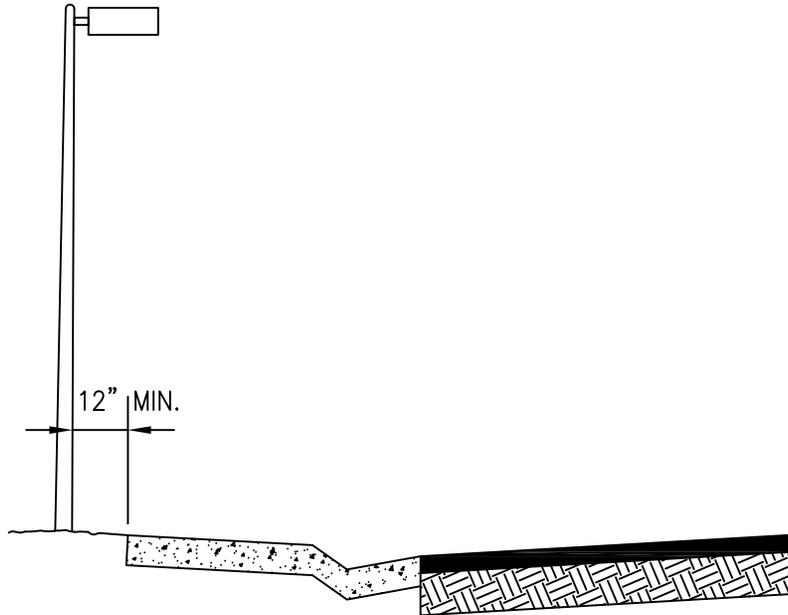
**NOTES:**

1. Conduit type: PVC or Polyethylene equivalent to Schedule 40 or greater. Black with red stripe or grey.
2. Cap both ends of conduit.
3. Conduit must be free of debris and breakage.
4. Conduit located in specified areas along with size and amounts as shown.
5. On high side of wall, stub conduit a minimum of 3' above final grade.
6. Stake conduit end on low side of wall.
7. GRC or fiberglass elbows required with bending radius as follows: 2" & 3" min 18", 4" min 24" & 6" min 36".

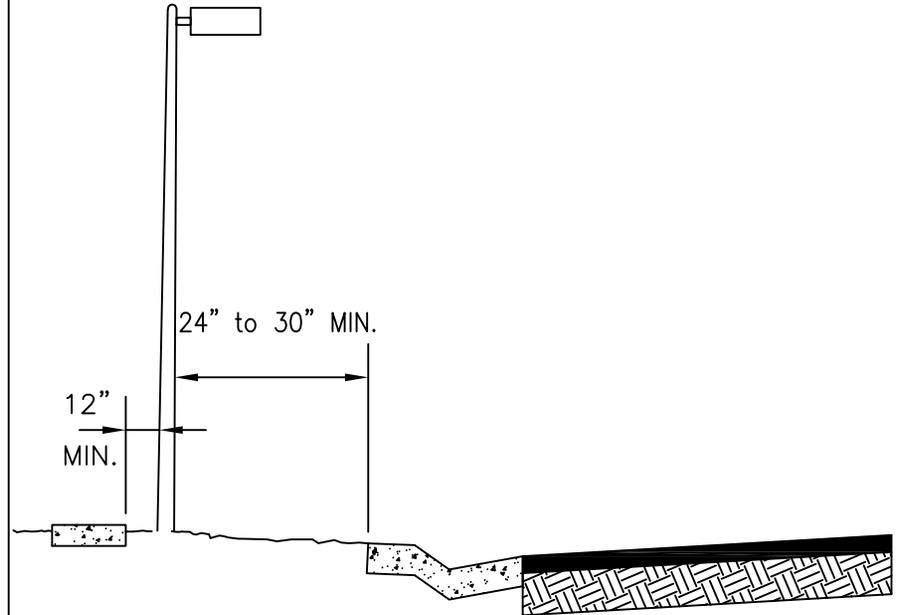
**CONDUIT UNDER RETAINING WALLS**

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<b>WALL GUIDE 1</b>	
FILE NAME:	
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COMBINATION CURB, GUTTER, AND SIDEWALK



COMBINATION CURB, GUTTER, AND DETACHED WALK



**NOTE:**

1. ANY VARIATION FROM THIS GUIDELINE REQUIRES PRIOR APPROVAL FROM ENGINEERING DEPT.
2. ALL STREET LIGHTS MUST BE A MIN. OF 4 FOOT FROM FIRE HYDRANTS.
3. TYPICALLY STREET LIGHT EXCAVATION INSIDE RIGHT OF WAY REQUIRES STATE, COUNTY OR TOWN PERMITTING
4. VERIFY ALL EASEMENTS AND R.O..W. REQUIREMENTS PRIOR TO INSTALLING FACILITIES.

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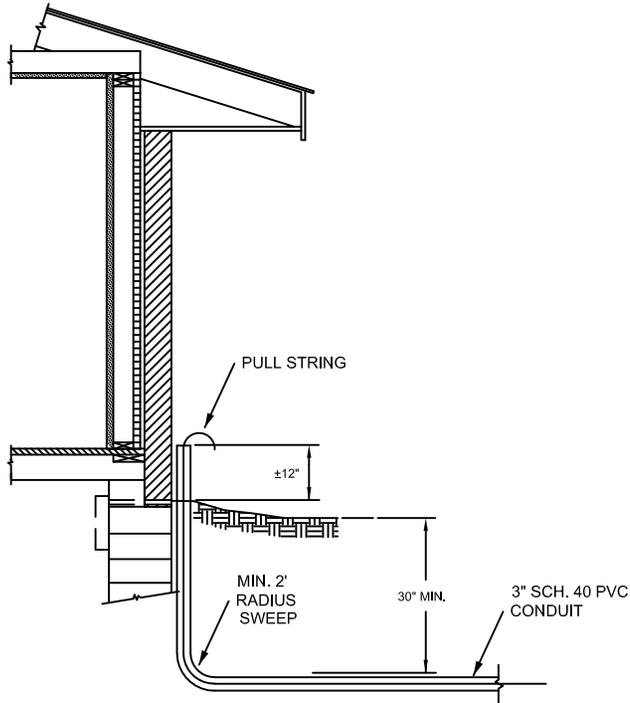
TYPICAL RESIDENTIAL STREET LIGHT CLEARANCES AND SETBACKS  
FOR MINOR COLLECTOR AND ARTERIAL STREETS



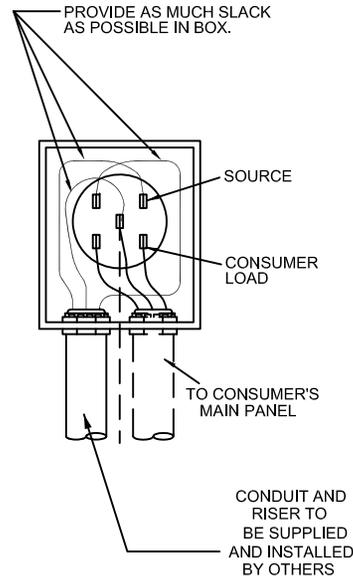
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STREET LIGHT  
GUIDE LINE 1  
FILE NAME:

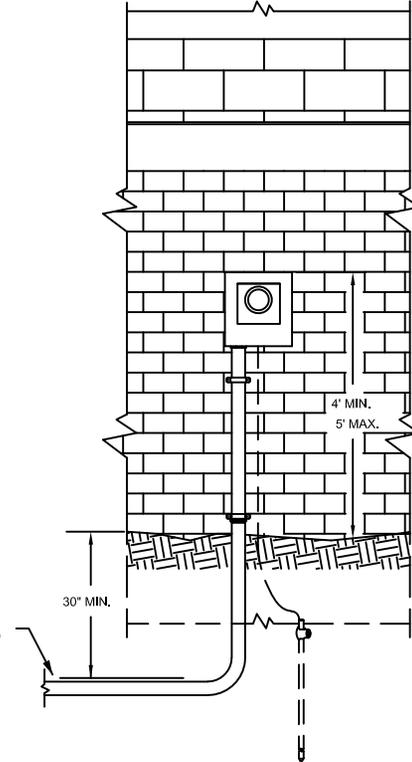
**BUILDER CONDUIT  
DETAIL**



**METER HOUSING  
WIRE TERMINATION  
DETAIL**



**METER HOUSING AND  
RISER LOCATION  
DETAIL**



**NOTES:**

1. CONDUITS AND BENDS SUPPLIED AND INSTALLED BY BUILDER.
2. 3" CONDUIT, SCHEDULE 40 PVC WITH MANUFACTURED BENDS OR SWEEPS (NO ELBOWS) FOR EACH SERVICE.
3. CORE SUPPLIED PULL STRING INSTALLED BY BUILDER FOR EACH SERVICE CONDUIT.
4. CORE SERVICE LATERAL CREW TO PULL SECONDARY WIRE PRIOR TO BUILDER INSTALLING METER HOUSING.
5. ELECTRICIAN TO INSTALL RISER AND TERMINATE SECONDARY WIRE IN METER HOUSING.
6. CONDUIT LENGTH AND ENDING POINT TO BE DETERMINED BY CORE ENGINEER.
7. ALL CONDUIT ENDS TO BE TAPED, FREE OF DEBRIS AND BREAKAGE.
8. CONDUIT END LOCATIONS TO BE MARKED WITH T-POST OR OTHER SEMI-PERMANENT MARKING SYSTEM OR BUILDER SHALL PROVIDE CORE WITH DETAILED AS-BUILT OF THE LOCATION.

**CORE ELECTRIC COOPERATIVE**

**BUILDER INSTALLED LATERAL CONDUIT DETAIL**



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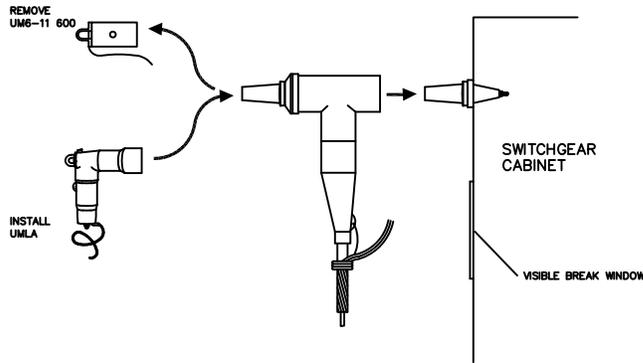
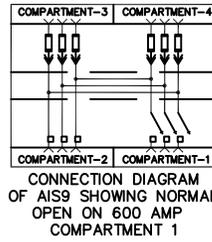
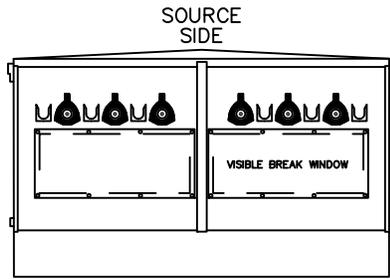


DIAGRAM 1

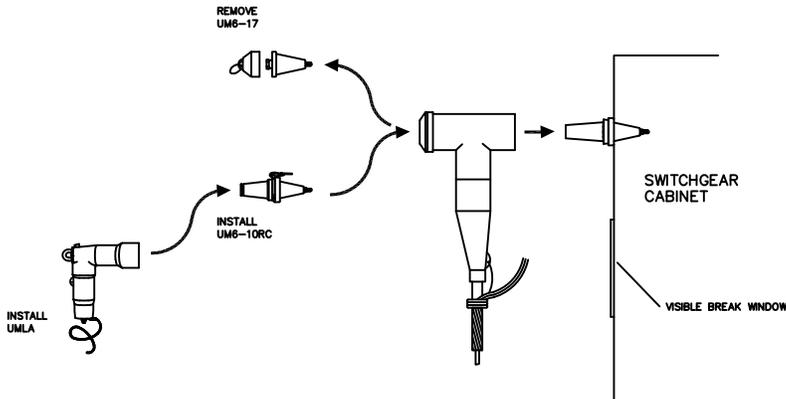


DIAGRAM 2

NOTES:

1. INSTALLING N.O. FOR NEW CONSTRUCTION (REFER TO DIAGRAM 1) ADD UMLA TO UM6-10
2. INSTALLING N.O. IN EXISTING SWITCHGEAR WITH INSULATED PROTECTIVE CAP (REFER TO DIAGRAM 1) REMOVE UM6-11 600 AND ADD UMLA
3. INSTALLING N.O. IN AN EXISTING SWITCHGEAR WITHOUT INSULATED PROTECTIVE CAP (REFER TO DIAGRAM 2) REMOVE THE UM6-17 AND ADD UM6-10RC, UMLA
4. THIS GUIDE IS FOR 600 AMP N.O. ONLY. ENGINEER SHOULD NOT DESIGN 200 AMP TAP SIDE N.O. IN SWITCHGEAR.

NORMAL OPEN 600 AMP SIDE OF SWITCHGEAR



ISSUE	
DATE:	9/18/08
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SWITCHGEAR  
N. O. GUIDE  
FILE NAME:

DIAGRAM 1  
SINGLE PHASE  
NORMAL OPEN

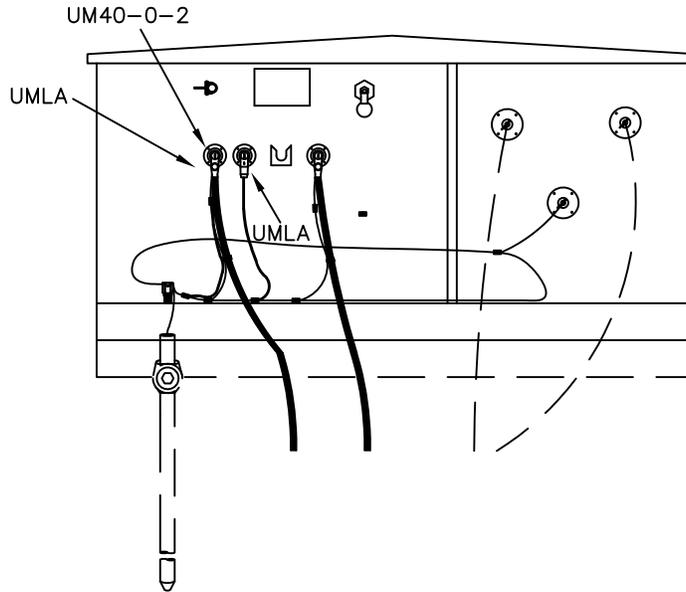
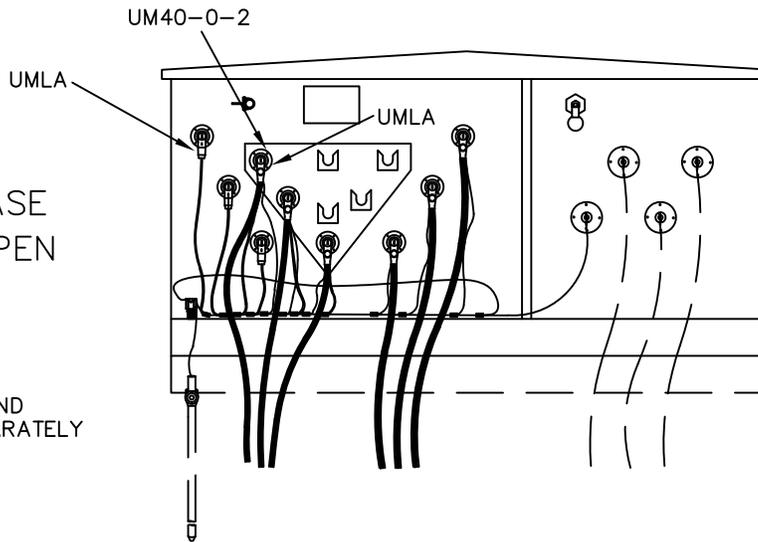


DIAGRAM 1  
THREE PHASE  
NORMAL OPEN



TIE EACH CABLE GROUND  
TO GROUND WIRE SEPARATELY

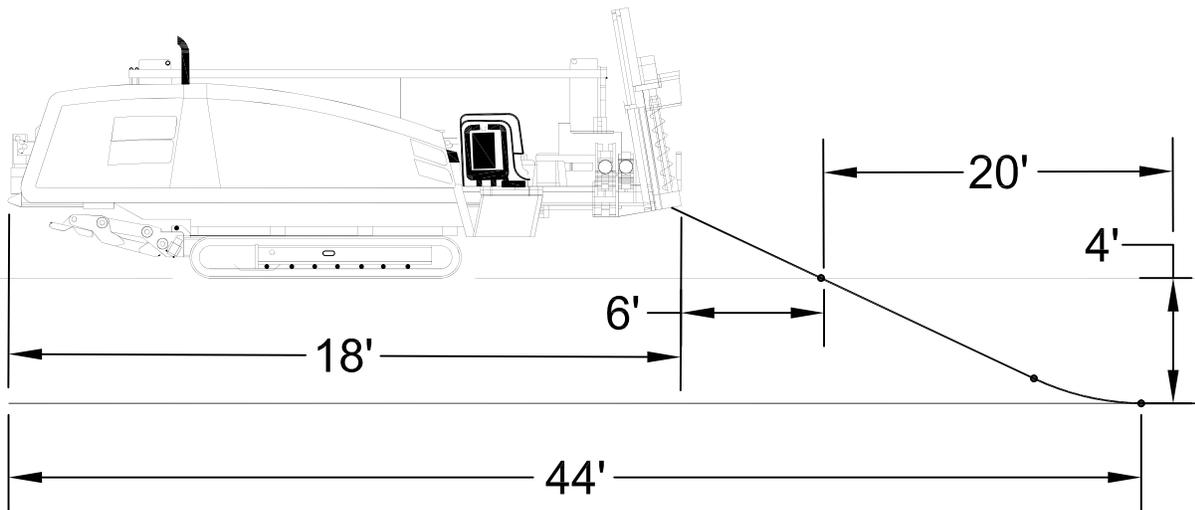
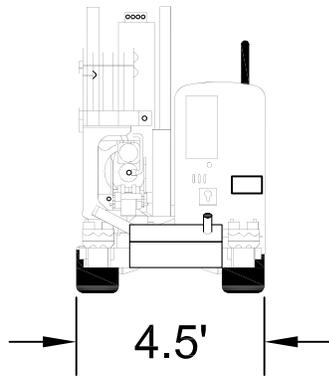
NOTES:

1. ADDITIONAL UNITS REQUIRED FOR SINGLE PHASE NORMAL OPEN (DIAGRAM 1)
  - 2 - UMLA
  - 1 - UM40-0-2
  
2. ADDITIONAL UNITS REQUIRED FOR THREE PHASE NORMAL OPEN (DIAGRAM 2)
  - 6 - UMLA
  - 3 - UM40-0-2

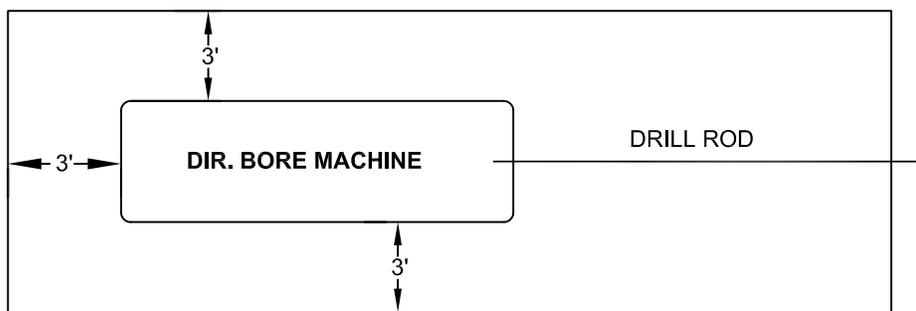
<b>CORE</b> ELECTRIC COOPERATIVE	
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DATE:	9/23/08
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PAD MOUNTED TRANSFORMER N. O. GUIDE	
FILE NAME:	006B

PADMOUNT TRANSFORMER NORMAL OPEN

## MINIMUM GUIDELINE CLEARANCES FOR DIRECTIONAL BORE MACHINE



### MINIMUM CLEARANCES



**NOTES:**

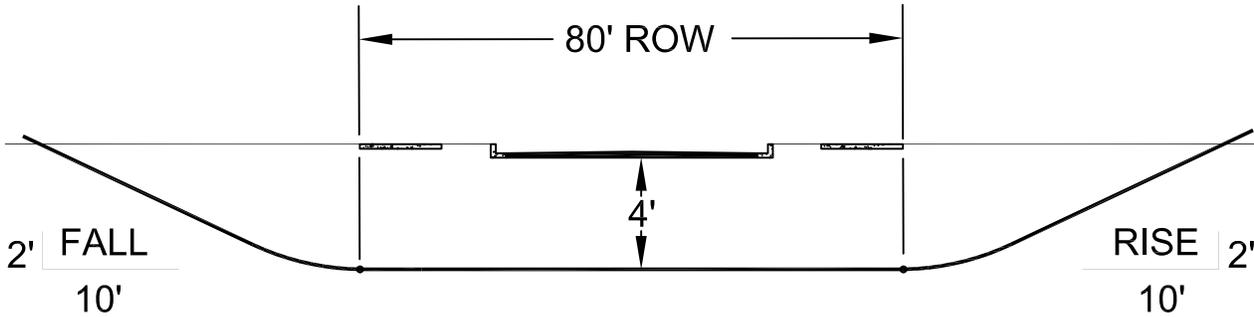
1. WHEN DESIGNING FOR A DIRECTIONAL BORE KEEP IN MIND THE SPACE REQUIRED TO MOVE THE BORE RIG IN AND OUT OF THE SETUP LOCATION, AND MINIMUM CLEARANCES TO OPERATE EQUIPMENT SAFELY.
2. MEASUREMENTS SHOWN ARE A TYPICAL SIZE BORING RIG, BUT WILL VARY DEPENDING ON MACHINE USED.

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DATE:	4/11/22

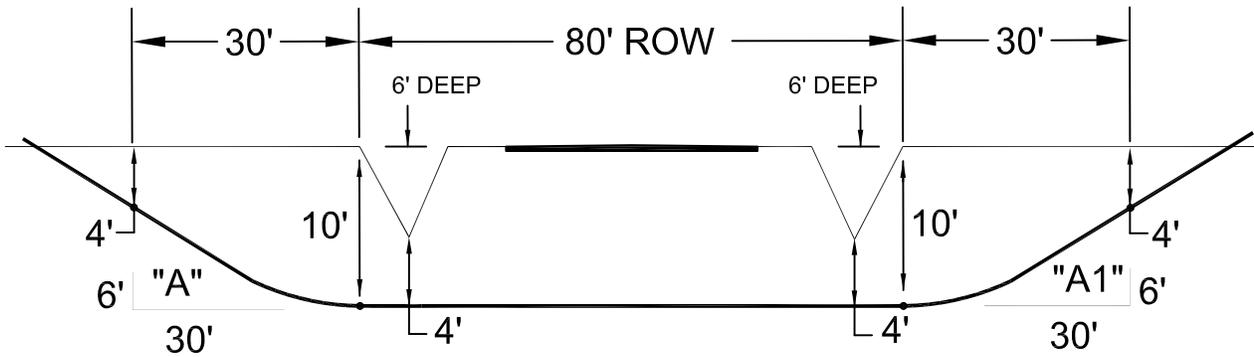
## ESTIMATING GUIDELINE FOOTAGES FOR BORING ON LEVEL GROUND



**NOTES:**

1. WHEN BORING ACROSS RIGHT OF WAY; THE BORE AND PIPE FOOTAGE IS EQUAL TO RIGHT OF WAY.
2. ALL BORE AND PIPE ACTIVITY OUTSIDE OF RIGHT OF WAY IS INCIDENTAL TO BORE FOOTAGE.
3. IN THE EXAMPLE ABOVE THE ENGINEER SHOULD CALL FOR 80' OF BORE.

## ESTIMATING GUIDELINE FOOTAGES FOR BORING UNDER BORROW DITCHES



**NOTES:**

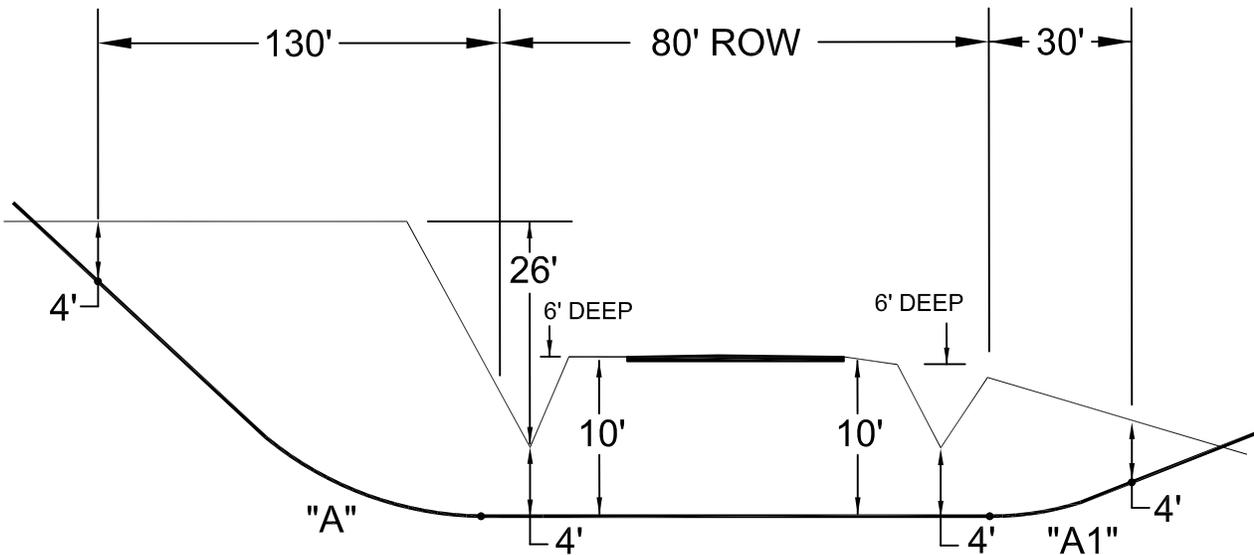
1. WHEN BORING ACROSS RIGHT OF WAY WITH BORROW DITCHES THE BORE SHALL BE 4' BELOW THE LOWEST POINT IN THE DITCH.
2. THE EXAMPLE ABOVE ASSUMES AN 80' ROW WITH A 6' DEEP BORROW DITCH ON BOTH SIDES. USE THE FORMULA 10 HORIZONTAL FEET TO RAISE OR LOWER THE BORE 2' IN ELEVATION. WITH THE BORE 4' BELOW DITCH OR 10' BELOW GRADE IT WOULD TAKE 30' TO RAISE OR AND LOWER THE BORE 6' (10' MINUS BELOW GRADE).
- TOTAL BORE LENGTH = ROW + "A" + "A1" OR 80' + 30' + 30' = 140'
3. ALL BORE AND PIPE ACTIVITY LESS THAN 4' DEPTH ON EACH SIDE OF ROAD IS INCIDENTAL TO BORE FOOTAGE.
4. RULE OF THUMB FOR ELEVATION CHANGE TO HORIZONTAL FOOTAGE IS 2' RISE/FALL IN 10 HORIZONTAL FEET.

CORE ELECTRIC COOPERATIVE



ISSUE	
DATE:	9/30/11
DRAWN	
BY:	CJV
APP	
BY:	MFJ
REVISED	
DATE:	4/11/22

## ESTIMATING GUIDELINE FOOTAGES FOR BORING DIFFERENT ELEVATIONS



**NOTES:**

1. WHEN BORING ACROSS RIGHT OF WAY WITH DIFFERENT ELEVATIONS THE BORE SHALL BE A MINIMUM DEPTH OF 4' BELOW THE LOWEST POINT ON GRADE.
2. THE EXAMPLE ABOVE SHOWS AN 80' R.O.W. WITH 6' BORROW DITCHES ON BOTH SIDES OF ROAD. GRADE IS 26' ABOVE LOWEST POINT IN R.O.W. (SIDE "A"). USE THE FORMULA 10 HORIZONTAL FEET TO RISE OR LOWER THE BORE 2' IN ELEVATION. THE BORE ON SIDE "A" WOULD TAKE 130 HORIZONTAL FEET TO RAISE 26' -  $26' / 2' \times 10' = 130'$ . TOTAL BORE FOOTAGE = A + ROW + A1 = 130' + 80' + 30' = 240'.
3. ALL BORE AND PIPE ACTIVITY LESS THAN 4' DEPTH ON EACH SIDE OF ROAD IS INCIDENTAL TO BORE FOOTAGE.

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DATE:	9/30/11
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BY:	MFJ
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DATE:	4/11/22

Conductor length not exceeded table for pulling cable					
Conductor in conduit	Vertical Bend down	Horizontal Bends	Vertical Bend up	Total bends	Max pulling length
	deg	deg	deg	deg	feet
Single phase 1/0 JEPR in 3"PVC	90	0	90	180	1650
	90	45	90	225	1430
	90	90	90	270	1210
	90	135	90	315	1010
	90	180	90	360	830
Single phase 4/0 JEPR in 3"PVC	90	0	90	180	1390
	90	45	90	225	1200
	90	90	90	270	1020
	90	135	90	315	850
	90	180	90	360	700
3 phase 1/0 JEPR in 4"PVC	90	0	90	180	810
	90	45	90	225	670
	90	90	90	270	550
	90	135	90	315	430
	90	180	90	360	330
3 phase 4/0 JEPR in 6"PVC	45	0	90	135	1350
	45	45	90	180	1150
	45	90	90	225	950
	45	135	90	270	770
	45	180	90	315	620
	45	225	90	360	480

The Pulling Criteria:

1. Maximum pulling tension:
  - 1.1. Single phase
    - 1.1.1 1/0 JEPR T= 633 lbs.
    - 1.1.2.4/0 JEPR T= 12,69 lbs
  - 1.2. Three phase
    - 1.2.1. 1/0 JEPR T= 1,266 lbs
    - 1.2.2. 4/0 JEPR T= 2,538 lbs
    - 1.2.3. 500 JEPR T= 10,000 lbs
    - 1.2.4. 1000 JEPR T= 10,000 lbs
    - 1.2.5. 1100 JEPR T= 10,000 lbs
2. Maximum Sidewalk Pressure
  - 2.1 Single phase cable 500 Lbs. per ft
  - 2.2. Three phase cable 1000 Lbs. per ft
3. Minimum Bending Radius for GRC elbow
  - 3.1.3" GRC - 18"
  - 3.2.4 GRC - 24"
  - 3.3.6 GRC - 36"
4. Coefficient of friction 0.35. all pulling with Polywater J lubricant
5. Weight correction factor for 3 phase conduction with Triangular arranged cables

NOTES:

1. IF CABLE PULLING LENGTH EXCEEDS MAXIMUM PULLING LENGTH FROM TABLE SEPARATE COMPREHENSIVE CALCULATIONS ARE REQUIRED



ISSUE  
 DATE: 1/6/23  
 DRAWN  
 BY: LJO  
 APP  
 BY: MFJ  
 REVISED  
 DATE: XXX

Conductor length not exceeded table for pulling cable					
Conductor in conduit	Vertical Bend down	Horizontal Bends	Vertical Bend up	Total bends	Max pulling length
	deg	deg	deg	deg	feet
3 phase 500 JEPR in 6" PVC	45	0	45	90	<b>1880</b>
	45	45	45	135	<b>1570</b>
	45	90	45	180	<b>1280</b>
	45	135	45	225	<b>1010</b>
	45	180	45	270	<b>780</b>
	45	225	45	315	<b>600</b>
	45	270	45	360	<b>450</b>
3 phase 1000 JEPR in 6" PVC	45	0	45	90	<b>650</b>
	45	45	45	135	<b>530</b>
	45	90	45	180	<b>410</b>
	45	135	45	225	<b>310</b>
	45	180	45	270	<b>220</b>
	45	225	45	315	<b>160</b>
	45	270	45	360	<b>110</b>
3 phase 1100 JEPR in 6" PVC	45	0	45	90	<b>900</b>
	45	45	45	135	<b>740</b>
	45	90	45	180	<b>590</b>
	45	135	45	225	<b>450</b>
	45	180	45	270	<b>340</b>
	45	225	45	315	<b>250</b>
	45	270	45	360	<b>180</b>

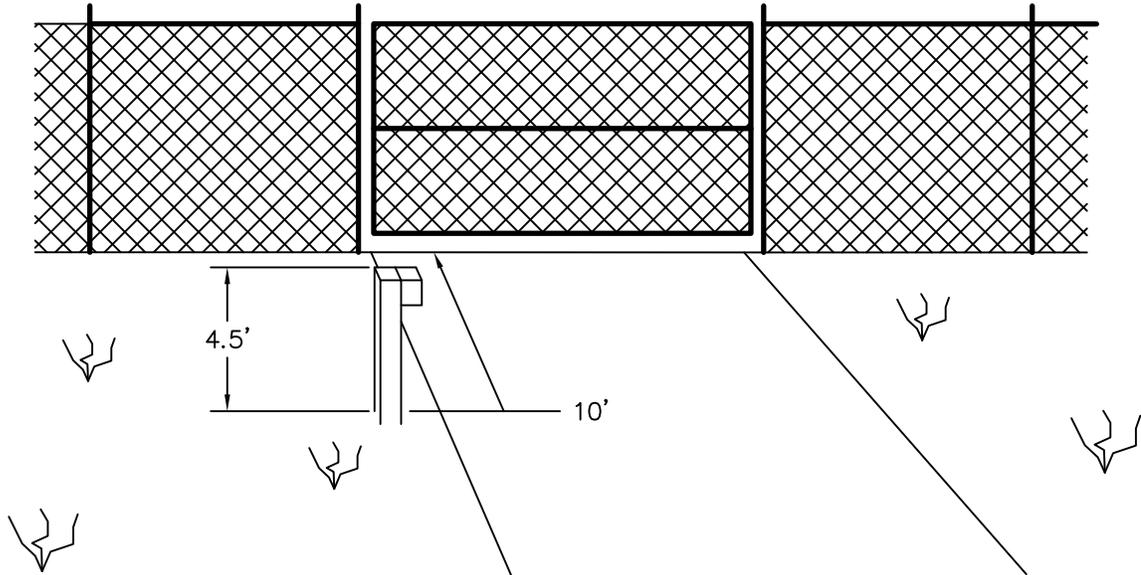
**The Pulling Criteria:**

1. Maximum pulling tension:
  - 1.1. Single phase
    - 1.1.1 1/0 JEPR T= 633 lbs.
    - 1.1.2 4/0 JEPR T= 1,269 lbs
  - 1.2. Three phase
    - 1.2.1. 1/0 JEPR T= 1,266 lbs
    - 1.2.2. 4/0 JEPR T= 2,538 lbs
    - 1.2.3. 500 JEPR T= 10,000 lbs
    - 1.2.4. 1000 JEPR T= 10,000 lbs
    - 1.2.5. 1100 JEPR T= 10,000 lbs
2. Maximum Sidewalk Pressure
  - 2.1 Single phase cable 500 Lbs. per ft
  - 2.2. Three phase cable 1000 Lbs. per ft
3. Minimum Bending Radius for GRC elbow
  - 3.1.3" GRC - 18"
  - 3.2.4 GRC - 24"
  - 3.3.6 GRC - 36"
4. Coefficient of friction 0.35. all pulling with Polywater J lubricant
5. Weight correction factor for 3 phase conduction with Triangular arranged cables

**NOTES:**

1. IF CABLE PULLING LENGTH EXCEEDS MAXIMUM PULLING LENGTH FROM TABLE SEPARATE COMPREHENSIVE CALCULATIONS ARE REQUIRED

	
ISSUE	
DATE:	1/6/23
DRAWN	
BY:	LJO
APP	
BY:	MFJ
REVISED	
DATE:	XXX
Cable Pulling Guideline	
FILE NAME:	



**NOTES:**

1. CORE REQUIRES ALL LOCK BOXES TO BE NO MORE THAN 10' AWAY FROM FENCE GATE. IT IS PREFERRED TO HAVE LOCK BOX MOUNTED ON FENCE NEAR GATE LOCK.
2. LOCK BOX MUST BE MOUNTED 4.5' ABOVE GROUND LEVEL.
3. LOCK BOX MAY BE MOUNTED ON EXISTING RFID GATE ACCESS PEDESTAL. IN THIS CIRCUMSTANCE ALONE IT IS OKAY IF THE GATE AND PEDESTAL ARE FURTHER THAN 10' APART. BOX MAY ALSO BE SLIGHTLY LOWER THAN 4.5' IF THAT DEIMENSION IS PROHIBITED BY EXISITNG PEDESTAL SIZE.
4. LOCK BOX MUST BE INNER-TITE ACCESS LOCK BOX WITH CUSTOM TUMBLER.
5. ACCESS KEY MUST BE A PHYSICAL KEY OR A RFID FOB NO LARGER THAN 1.75" X 1.75". CREDIT CARD SIZED RFID CARDS ARE NOT ALLOWED.



ISSUE  
 DATE: 7/8/2019  
 DRAWN  
 BY:  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 4/11/22

**LOCK BOX INSTALLATION GUIDELINE**

LOCK  
 BOX  
 FILE NAME:  
 I:\REA\_SPCS\0051



## **WIRE**

- Primary
- Secondary
- Splices



# WIRE

PAGE	DRAWING	DESCRIPTION
2.01	PRIMARY CABLE	CABLE-PRIMARY UNDERGROUND (PER FOOT)
2.02	SECONDARY CABLE	CABLE-SECONDARY UNDERGROUND (PER FOOT)
2.03	UM45-1	PRIMARY CABLE SPLICES
2.04	UM45-2 / UM45-3	SECONDARY CABLE SPLICES
2.05	UM45-C	PRIMARY CABLE LIVE END CAP



CORE DESIGNATION	CONDUCTOR	AMPACITY				OVERALL DIAMETER (INCHES)	WT/ 1000 FT (POUNDS)	① USE RESTRICTION	MIN. BEND RADIUS
		DIRECT BURY		IN DUCT					
		75% L.F.	100% L.F.	75% L.F.	100% L.F.				
UD 2 SOLID	SOLID AL	160	147	128	121	.953	432	I & M	-
UD 2 XLP	STRANDED AL	160	147	128	121			I & M	-
UD 1/0 XLP	STRANDED AL	207	191	167	157	1.028	600	I & M	-
UD 1/0 JXLP	STRANDED AL	207	191	167	157	1.175	685	I & M	-
UD 4/0 XLP	STRANDED AL	310	280	248	231	1.212	1014	I & M	-
UD 4/0 JXLP	STRANDED AL	310	280	248	231	1.325	796	I & M	-
UD 500 XLP	STRANDED AL	500	447	400	370	1.542	1416	I & M	-
UD 500 JXLP	STRANDED AL	500	447	400	370	1.671	1485	I & M	-
UD 1/0 JEPR *	STRANDED AL	207	191	167	157	1.150	800	I, D, & M	13.8
UD 4/0 JEPR *	STRANDED AL	310	280	248	231	1.300	1280	I, D, & M	15.6
UD 500 JEPR *	STRANDED AL	500	447	400	370	1.720	1760	I, D, & M	20.7
UD 1000 JEPR	STRANDED AL	646	557	553	502	2.250	3461	I, D, & M	-
UD 1100 JEPR *	STRANDED AL	730	675	620	575	2.000	2833	I, D, & M	24.0

## NOTES

- LOAD FACTOR (L.F.) IS THE RATIO OF THE AVERAGE LOAD TO THE PEAK LOAD DURING ANY 24 HOUR PERIOD.
- DO NOT EXCEED 120% OF DESIGN AMPACITY FOR MORE THAN 100 HOURS IN ANY 12 CONSECUTIVE MONTHS NOR MORE THAN 500 HOURS DURING THE LIFETIME OF THE CABLE.
- "J" INDICATES ENCAPSULATED (JACKETED) CONCENTRIC. ALL OTHER CABLES ARE BARE CONCENTRIC NEUTRAL.
- "X" INDICATES CROSS LINKED POLYETHYLENE INSULATION.
- 1/0, 4/0, 500 PRIMARY CABLE SHALL HAVE 220 MIL EPR INSULATION, JACKETED 15KV
- 1000 MCM PRIMARY CABLE SHALL HAVE 220 MIL EPR INSULATION, JACKETED 15KV
- 1/0 FULL NEUTRAL.
- 4/0, 500 AND 1000 ARE 1/3 REDUCED NEUTRAL.
- \* STANDARD WIRE SIZES
- XX 1/6 REDUCED NEUTRAL

① "I" = RETIREMENT, "D" = PRIMARY, "M" = MAINTENANCE



ISSUE  
DATE: 11/07/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

REVISED  
DATE: 4/12/22  
PRIMARY  
CABLE DATA  
(UD)  
FILE NAME:  
I:\REA\_SPCS\000D

CORE ELECTRIC COOPERATIVE

CABLE-PRIMARY UNDERGROUND (PER FOOT)

① "I" = RETIREMENT, "K" = SECONDARY, "M" = MAINTENANCE  
 \* FROM OKONITE CABLES BULLETIN EHB-81

CORE DESIGNATION	CONDUCTOR	*AMPACITY				CIRCUMSCRIBED DIAMETER (INCHES)	WT/ 1000 FT (POUNDS)	① USE RESTRICTION
		DIRECT BURY		IN DUCT				
		75% L.F.	100% L.F.	75% L.F.	100% L.F.			
* UK 6 DUP	STRANDED AL	100	92	69	66	.62	97	I, K, & M
UK 2 TPX	STRANDED AL	168	153	120	114	.84	262	NON-STOCK
UK 1/0 TPX	STRANDED AL	219	198	159	150	1.10	409	I, K, & M
UK 2/0 TPX	STRANDED AL	249	226	182	172	1.19	504	NON-STOCK
* UK 4/0 TPX	STRANDED AL	322	291	241	226	1.41	740	I, K, & M
UK 300 TPX	STRANDED AL	-	-	-	-	-	-	NON-STOCK
* UK 350 TPX	STRANDED AL	431	385	326	304	1.57	896	I, K, & M
UK 500 TPX	STRANDED AL	525	467	402	372	2.04	1606	NON-STOCK
UK 1/0 QPX	STRANDED AL	219	198	159	150	1.20	568	NON-STOCK
UK 4/0 QPX	STRANDED AL	322	291	241	226	1.54	995	NON-STOCK
UK 350 QPX	STRANDED AL	431	385	326	304	1.96	1622	NON-STOCK
UK 500 QPX	STRANDED AL	525	467	402	372	2.28	2279	NON-STOCK

**NOTES**

1. ALL SECONDARY CABLE INSTALLED SHALL HAVE A COLOR CODED NEUTRAL STRIPE, CROSS-LINKED POLYETHYLENE 600 VOLT INSULATION.
2. LOAD FACTOR (L.F.) IS THE RATIO OF THE AVERAGE LOAD TO THE PEAK LOAD DURING ANY 24 HOUR PERIOD.
3. DO NOT EXCEED 120% OF DESIGN AMPACITY FOR MORE THAN 100 HOURS IN ANY 12 CONSECUTIVE MONTHS NOR MORE THAN 500 HOURS DURING THE LIFETIME OF THE CABLE.
4. \* STANDARD SIZES
5. #6, 1/0, AND 4/0 ARE FULL NEUTRAL, 350 TPX IS A 4/0 NEUTRAL

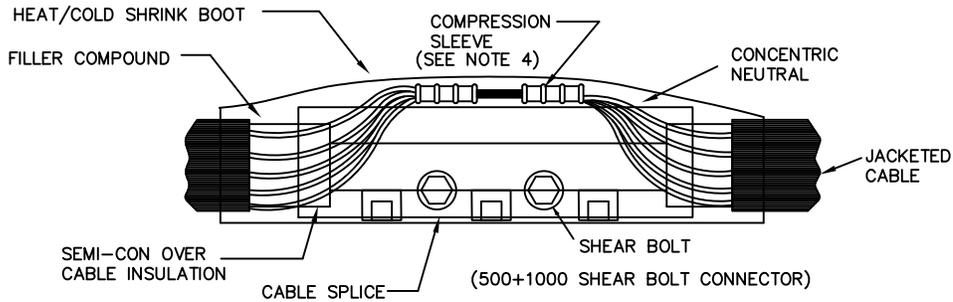


ISSUE  
 DATE: 11/07/90  
 DRAWN  
 BY: CSK  
 APP  
 BY: MFJ

**CORE ELECTRIC COOPERATIVE**

REVISED  
 DATE: 4/12/22  
 SECONDARY CABLE DATA  
 FILE NAME: (UK)

**CABLE-SECONDARY UNDERGROUND (PER FOOT)**



UM45-1

1/0, 4/0, 500, 1100, 1000

1/0	62601015
4/0	62604015
500	62605002
1000/1100	62608000

**NOTES:**

1. OVERALL COVERING COLD SHRINK BOOT WITH A MOISTURE-PROOF SEAL TO THE CABLE JACKET.
2. FILLER COMPOUND SHALL BE COMPATIBLE WITH CABLE INSULATION AND JACKET AND SHALL BE APPLIED TO FORM A SMOOTH SHAPE FOR OUTER COVERING.
3. NEUTRAL JUMPER SHALL HAVE CONDUCTIVITY EQUAL TO CABLE NEUTRAL WIRES.
5. FOR 500 & 1000 MCM 1100 MCM CONDUCTORS SHEAR BOLT CONNECTOR IS REQUIRED.

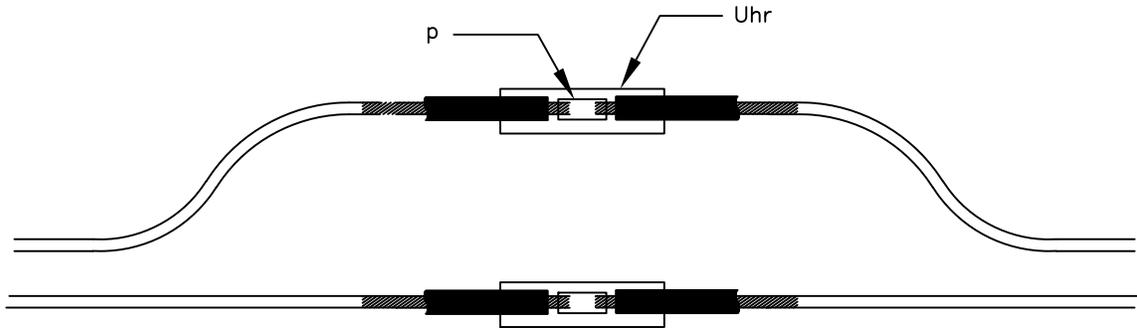
PAGE 1 OF 2



ISSUE  
DATE: 08/30/91  
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BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/12/22

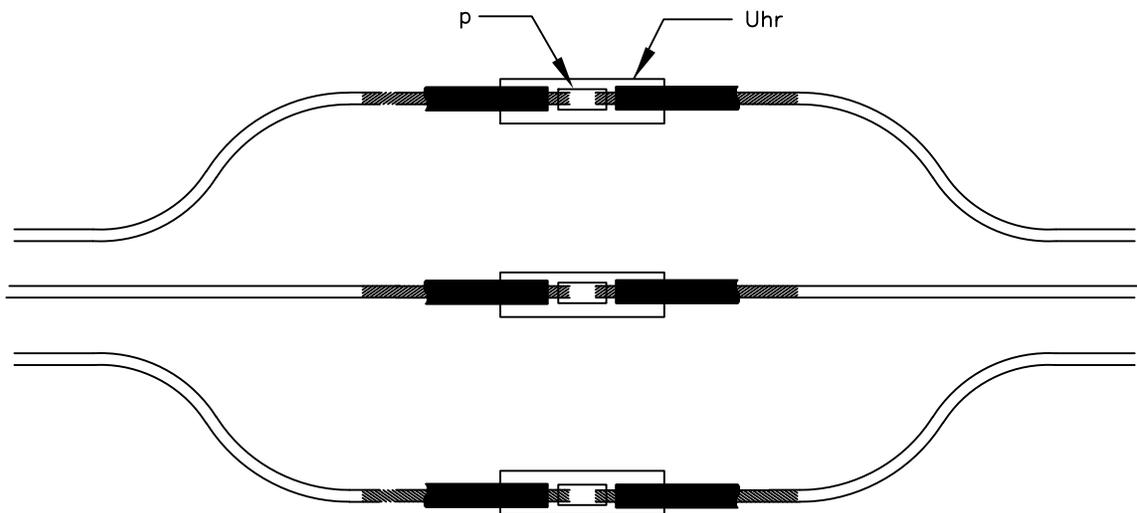
PRIMARY CABLE SPLICES

UM45-1  
FILE NAME:



INVENTORY  
62C10600

UM45-2  
URD #6 DUPLEX



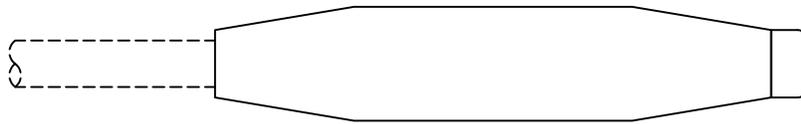
626200XX SPLICE, SECONDARY LUG  
(NOT STREET LIGHT)

UM45-3  
URD TRIPLEX  
1/0, 4/0, 350

626300XX SPLICE, SEC. SPLICE COVER  
(NOT STREET LIGHT)

GUIDELINE ONLY

ITEM	MATERIAL	ASSEMBLY UNITS		ISSUE DATE: 11/09/90 DRAWN BY: CSK APP BY: MFJ REVISED DATE: 4/12/22
		UM45-2 #6 DUPLEX NUMBER REQUIRED	UM45-3 1/0, 4/0, 350 NUMBER REQUIRED	
p	CONNECTOR, SIZE AS REQUIRED	2	3	
Uhr	SPLICE COVER	2	3	



NOTES:

1. UM-EMS AND UM-12 MARKING SYSTEM IS REQUIRED WHEN USING THIS UNIT. (NOT INCLUDED WITH THIS UNIT)
2. SPECIFY WIRE SIZES: 1/0, 4/0, 500, 1000 & 1100 MCM.

1/0 CAP - 10200010  
 4/0 CAP - 10200040  
 500 CAP - 10200050  
 1K: 1000 CAP - 10200100  
 1100 CAP - 10201100

PRIMARY CABLE LIVE END CAP

AUG 2017	REVISED APRIL 2022	1-PHASE PRIMARY 12.47/7.2 kV	UM45-C 1/0, 4/0, 500, 1K, 1100
	APPROVED BY MFJ		



## **TRENCHING**

- Open Trench Details
- Boring
- Conduit
- Compaction
- Marking System



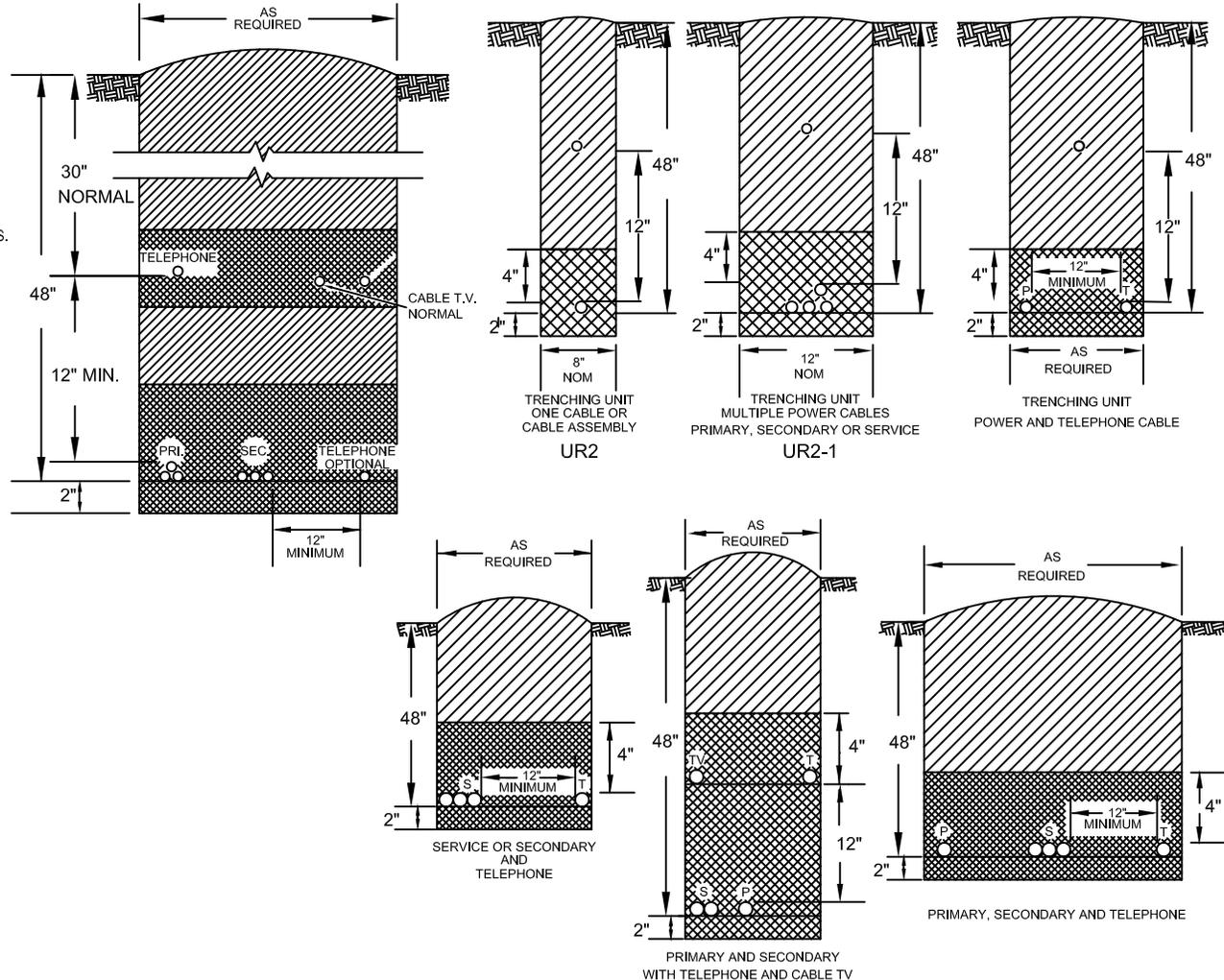
# TRENCHING

PAGE	DRAWING	DESCRIPTION
3.01	UR2, UR2-1, URLT, UR3, URTL, UR LIFT	TRENCHES FOR DIRECTIONAL BURIAL CABLES
3.02		UNITS UR2-1 36/38, 24/48, 12/60, & UR2-60
3.03	UR5-DBC, UR5, UR6, UR5-DB, UR7, UR8, UR5-DBG	CONDUIT AND BORE UNITS
3.04	UR5-DBOB	PERMANENT HARD SURFACE POT HOLE REPAIR
3.05	UR5-DBPHR	EXAMPLE OF OVERBORE UNIT UR5-DBOB
3.06	UM-EMS	ELECTRONIC MARKER SYSTEM
3.07	UM-12	WARNING SIGN CABLE ROUTE



**NOTES:**

1. DEPTHS SPECIFIED ARE TO FINISHED GRADE.
2. OVER-EXCAVATE TRENCHES AS NECESSARY TO ALLOW FOR (a) SAND BEDDING OR (b) LOOSE AND SANDY SOILS OR (c) WHERE MORE THAN ONE CABLE WILL BE INSTALLED IN TRENCH AND LAYING OF FIRST CABLE MAY CAUSE TRENCH DAMAGE AND REDUCTION IN DEPTH.
3. IF CABLE BEDDING IS SPECIFIED, IT SHALL CONFORM TO CORE UR3 SPECIFICATIONS.
4. BACKFILLING TO 85% COMPACTION USING MAXIMUM 1 FOOT LIFT IS PART OF ALL EXCAVATION UNITS.
5. ALL EXCAVATIONS SHALL BE COMPACTED TO 85% STANDARD PROCTOR. WHEN TAMPING (URLT, URLT) IS SPECIFIED, COMPACTION SHALL BE INCREASED TO A MINIMUM OF 95% STANDARD PROCTOR AND BE PERFORMED USING A MAXIMUM 1 FOOT LIFT.
6. ALL CABLE TRENCH SHALL INCLUDE WARNING TAPE (UR TAPE) AT 20" ABOVE AND DIRECTLY OVER THE WIRE.
7. COMPACTION UNITS ARE FOR BACKFILLING OF TRENCH AND ARE USED WHEN 95% COMPACTION IS REQUIRED. COMPACTION TESTING IS REQUIRED FOR ALL TRENCHING THAT OCCURS WITHIN ROAD ROW OR WHEN REQUIRED. COMPACTION UNITS ARE IN ADDITION TO TRENCH UNITS.
8. 12" MINIM SEPARATION BETWEEN CORE FACILITY AND OTHER UTILITY'S.
9. NO UTILITY'S CROSSING UNDER CORE EQUIPMENT LOCATIONS.



TRENCH UNIT	UNIT DESCRIPTION
UR2	4' TRENCHING
UR2-1	4' BACKHOE
UR2-1R	ROCK BACKHOE
UR2-RT	ROCK TRENCHING
COMPACTION UNIT	UNIT DESCRIPTION
URLT	BACKFILL TRENCH AT 95% COMPACTION NO TEST
URTL	BACKFILL TRENCH AT 95% COMPACTION AND TEST
URLT-BH	BACKFILL BACKHOE TRENCH AT 95% COMPACTION NO TEST
URTL-BH	BACKFILL BACKHOE TRENCH AT 95% COMPACTION AND TEST
BEDDING UNIT	UNIT DESCRIPTION
UR3	TRENCH CABLE BEDDING
UR3 BH	BACKHOE CABLE BEDDING

**LEGEND**

- BEDDING SAND OR CLEAN SOIL
- COMPACTED BACKFILL UNLESS OTHERWISE SPECIFIED
- UNDISTURBED EARTH



ISSUE  
DATE: 10/23/90  
DRAWN  
BY: WET  
APP  
BY: MFJ

REVISED  
DATE: 4/12/22

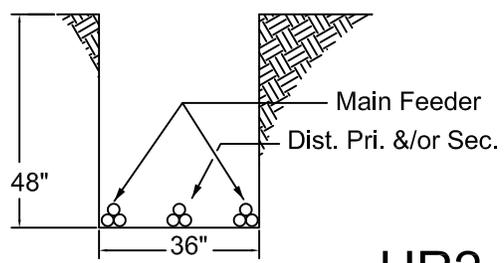
FILE NAME:

CORE ELECTRIC COOPERATIVE

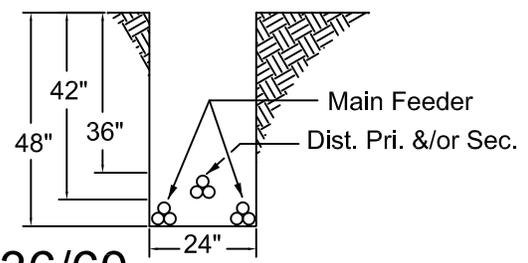
**TRENCHES FOR DIRECT BURIAL CABLES**

UR2- , UR2-1, URLT  
UR3- ,URTL- , UR LIFT

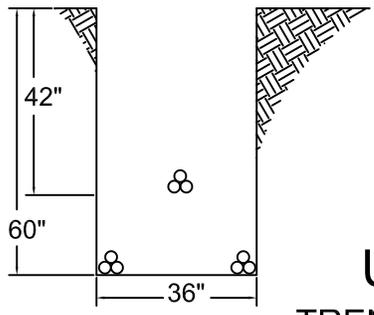
**UR2-1 36/48**  
TRENCH DETAIL 1



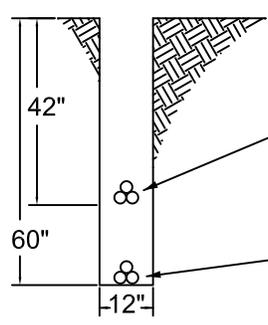
**UR2-1 24/48**  
TRENCH DETAIL 2



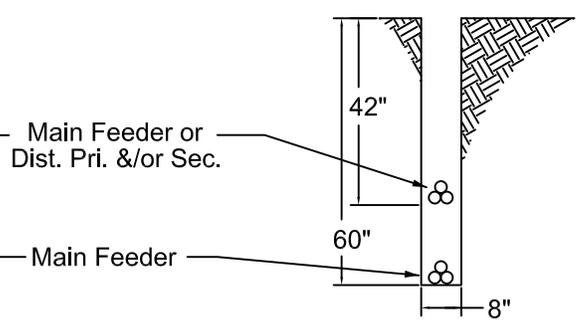
**UR2-1 36/60**  
TRENCH DETAIL 3  
3 CIRCUITS



**UR2-1 12/60**  
TRENCH DETAIL 4



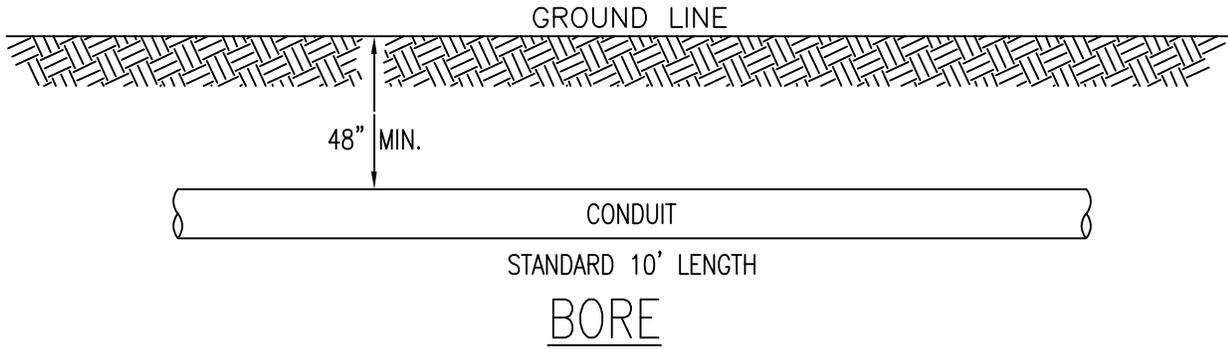
**UR2-60**  
TRENCH DETAIL 5



- NOTE:
1. WHEN COMPACTION IS REQUIRED, INCLUDE THE FOLLOWING UNITS AS APPROPRIATE :  
 URLT 36/48, URLT 36/48  
 URLT 24/48, URLT 24/48  
 URLT 12/60, URLT 12/60  
 URLT 8/60, URLT 8/60  
 URLT 36/60, URLT 36/60
  2. ONE FOOT LIFTS ARE INCLUDED WITH UNIT SPECIFICATION FOR UNITS UR2-1 12/60, UR2-1 36/60, UR2-60
  3. ALL CABLE TRENCH SHALL INCLUDE WARNING TAPE (UR-TAPE) AT ±2'-0" BELOW FINAL GRADE DIRECTLY OVER WIRE.

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	4/24/02
DRAWN	
BY:	DLH
APP	
BY:	MFJ
REVISED	
DATE:	4/12/22
FILE NAME:	

**UNITS UR2-1 36/48, 24/48, 12/60 AND UR2-60**



CONDUIT SIZE	DIRECTIONAL BORE WITH PVC CONDUIT	DIRECTIONAL BORE WITH BORE GUARD	DIRECTIONAL BORE WITH SCHEDULE 80 OR HDPE SDR 13.5 BORE PIPE	DIRECTIONAL BORE WITH NO CONDUIT
2" FIBER	UR5-DBFC			
2"	UR5-DBC2			UR5-DBOB2
3"	UR5-DBC3			UR5-DBOB3
4"	UR5-DBC4			UR5-DBOB4
6"	UR5-DBC6	UR5-DBG6	UR5-DBG6X	UR5-DBOB6

### CONDUIT

CONDUIT SIZE	PVC	45° PVC ELBOW	90° PVC ELBOW	GRC	45° GRC ELBOW	90° GRC ELBOW
2" FIBER	UR6-FC 16442000	-	-	-	-	-
2"	UR6-2 16422000	UR7-2 16422045	UR8-2 16422090	UR6-2G 16412000	UR7-2G 16412045	UR8-2G 16412090
3"	UR6-3 16423000	UR7-3 16423045	UR8-3 16423090	UR6-3G 16413000	UR7-3G 16413045	UR8-3G 16413090
4"	UR6-4 16424000	UR7-4 16424045	UR8-4 16424090	UR6-4G 16414000	UR7-4G 16414045	UR8-4G 16414090
6"	UR6-6 16426000	UR7-6 16426045	UR8-6 16426090	UR6-6G 16416000	UR7-6G 16416045	UR8-6G 16416090

**NOTES:**

1. 2" AND 3" SWEEPS SHALL BE MINIMUM 18" RADIUS.  
4" AND 5" SWEEPS SHALL BE MINIMUM 24" OR AS SPECIFIED.  
6" AND 8" SWEEPS SHALL BE MINIMUM 36" OR AS SPECIFIED.
2. UR5-DB SERIES UNITS INCLUDE EQUIPMENT SETUP, ACCESS PITS AND BACKFILLING, COMPACTION AND RESTORATION OF PITS.
3. EXCAVATION FOR UR6, UR7, AND UR8 SERIES UNIT WILL BE PROVIDED USING SEPARATELY SPECIFIED EXCAVATION UNITS.
4. PVC & FLEX CONDUIT SHALL BE MINIMUM SCH 40 OF ELECTRICAL GRADE POLYETHYLENE PIPE. GREY OR BLACK WITH RED STRIPE.
5. IF A SWEEP IS REQUIRED TO ENTER A VAULT, MANHOLE, ETC., THE UR7 SERIES IS PREFERRED.
6. ALL UNITS INCLUDE COUPLINGS, FITTINGS, ADAPTERS, CONDUIT, CUTTING AND THREADING, PROTECTIVE BUSHINGS, CABLE LUBRICANT, ASSEMBLY AND INSTALLATION, ALL AS REQUIRED TO RESULT IN COMPLETE CONTINUOUS CONDUIT SYSTEM.
7. EMPTY CONDUITS AND GRC PIPE MUST HAVE A WATER TIGHT MANUFACTURED CAP OR PLUG AT BOTH ENDS.
8. BORE GUARD IS REQUIRED FOR 6" BORES OVER 30 FEET IN LENGTH.
9. USE URS-DBG6X UNIT FOR 6" BORES OVER 500 LINEAR FEET IN LENGTH.



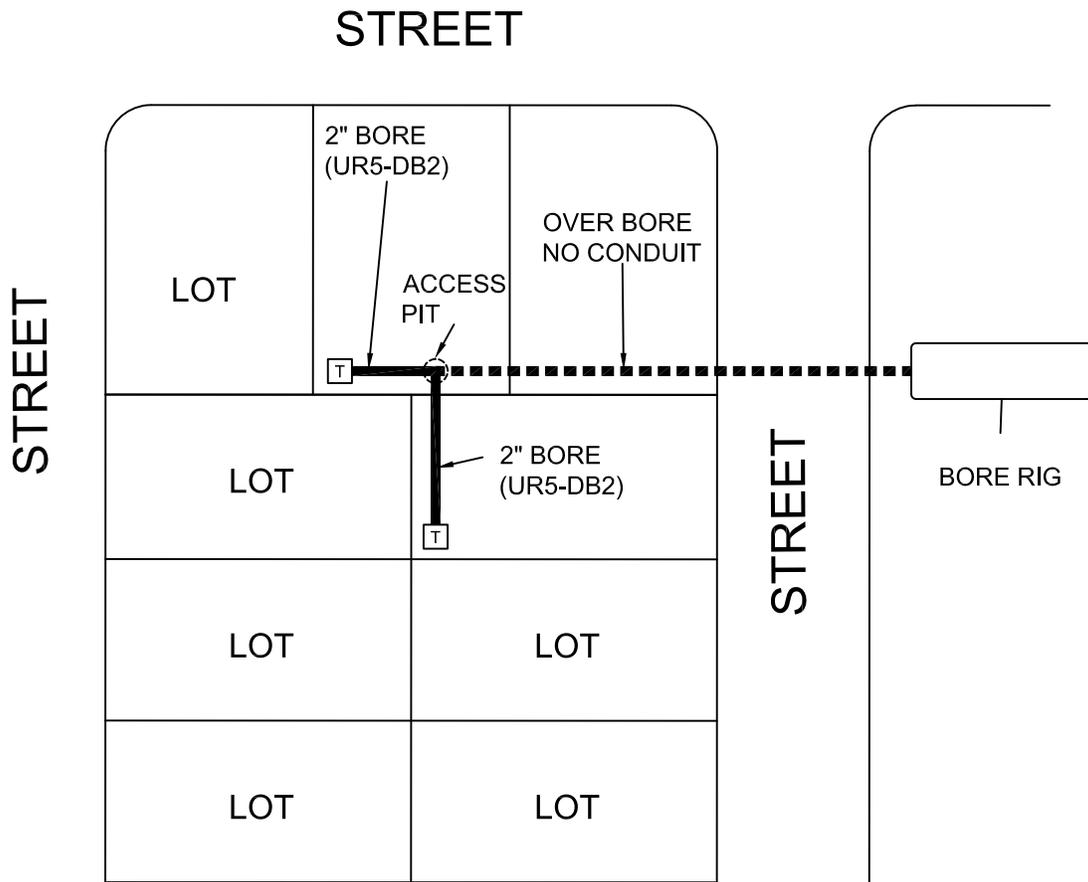
ISSUE	
DATE:	10/25/90
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	9/11/24

## CONDUIT AND BORE UNITS

UR5-DBC UR5 UR6  
UR5-DB UR7 UR8  
UR5-DBCG UR6-FC

FILE NAME:  
:\REA\_SPCS\002N

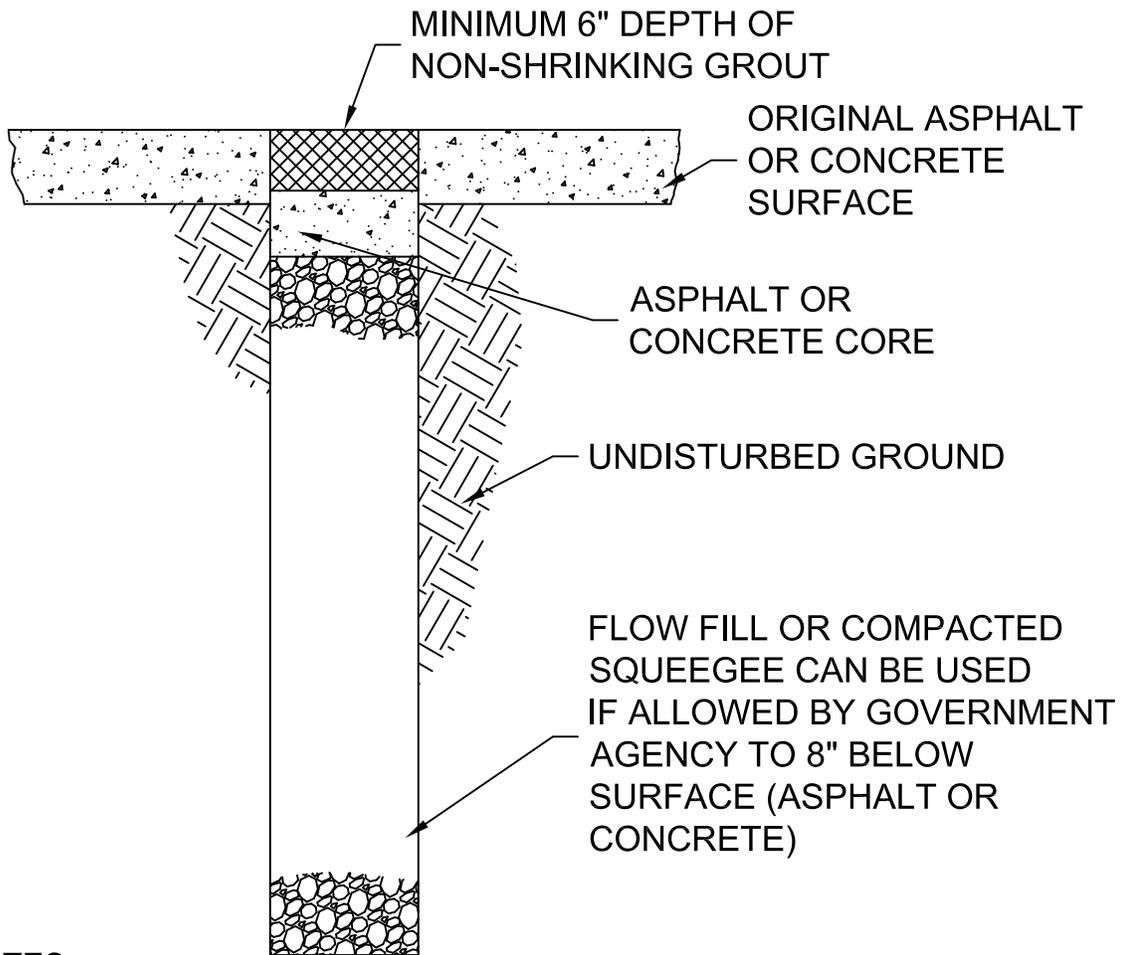
CORE ELECTRIC COOPERATIVE



EXAMPLE OF OVERBORE UNIT UR5-DBOB

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	9/27/12
DRAWN	
BY:	JDP
APP	
BY:	MFJ
REVISED	
DATE:	4/12/22

UR5-DBOB

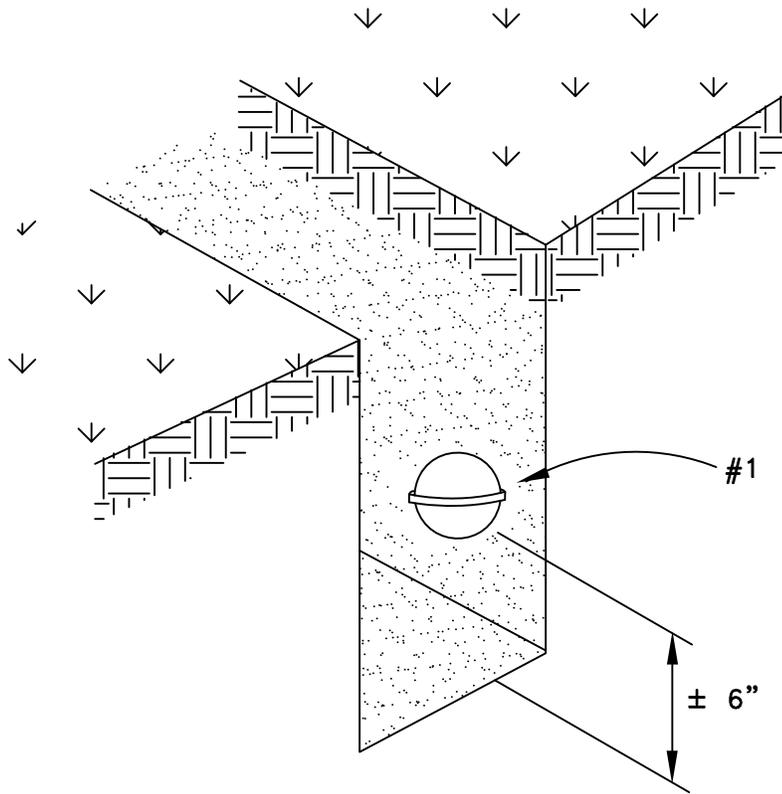


**NOTES:**

1. HARD SURFACE POT HOLE UNIT TO INCLUDE ALL LABOR AND MATERIAL TO BACKFILL AND REPAIR AS SHOWN ABOVE.
2. IF CITY, COUNTY, AND STATE CODES REQUIRE ADDITIONAL LABOR AND MATERIAL FOR HARD SURFACE REPAIRS WHICH ARE NOT INCLUDED IN THIS UNIT, AND WHICH REQUIRE ADDITIONAL SUB CONTRACTOR COSTS FOR SURFACE REPAIRS, SUCH AS LARGER SURFACE PATCH, INFRARED, OR HOT ASPHALT PATCH, DOCUMENT ADDITIONAL COSTS ON STAKING SHEET.
3. DEPTH AND WIDTH OF POT HOLE AS REQUIRED.
4. TEMPORARY REPAIRS IN ROAD SURFACES SHALL BE INCIDENTAL TO URDB BORING UNITS AND NOT ADDITIONAL PAY UNIT.

**PERMANENT HARD SURFACE POT HOLE REPAIR**

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	9/23/08
DRAWN	
BY:	DLH
APP	
BY:	MFJ
REVISED	
DATE:	4/12/22
UR5-DBPHR	
FILE NAME:	006C



ITEM	#	MATERIAL
1	1	ELECTRONIC MARKING SYSTEM

INVENTORY: 40500001

**NOTES:**

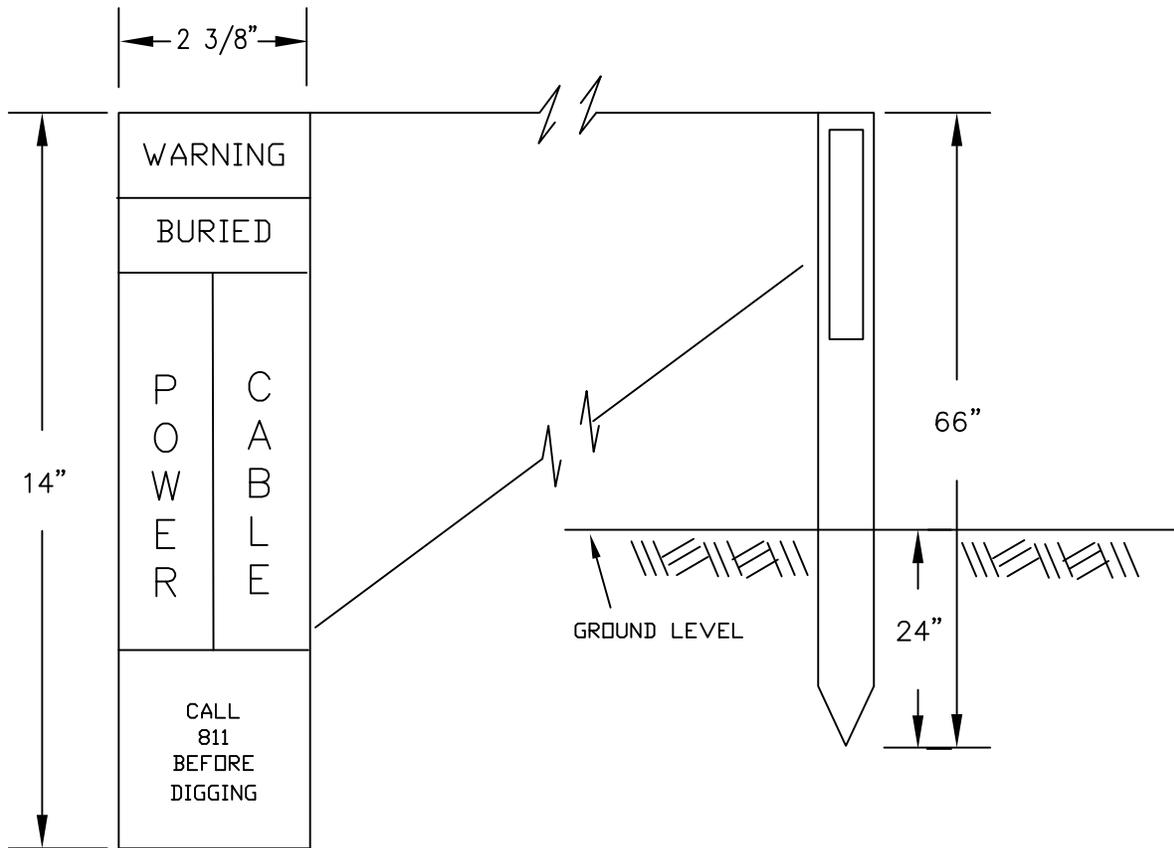
1. THE ELECTRONIC MARKER SYSTEM (EMS), IS AN ELECTRONIC ELEMENT TUNED TO A SPECIFIC FREQUENCY FOR CORE.
2. CARE SHOULD BE TAKEN IN REMOVAL, AS THE EMS IS A REUSABLE ITEM.
3. MARKER SHOULD BE 6" ABOVE CONDUIT OR CABLE TO BE MARKED.
4. NOTE SHOULD BE MADE ON WORK SKETCH THAT CABLE OR CONDUIT ENDS ARE TO BE MARKED WITH EMS.



ISSUE  
 DATE: 08/12/91  
 DRAWN  
 BY: CSK  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 4/12/22

ELECTRONIC MARKER SYSTEM

UM-EMS  
 UM-EMS MO  
 FILE NAME:  
 h:\REA\_SPCS\001K



NOTES:

1. MARKING POST SHALL BE A COMPOSITE FLEXIBLE MATERIAL RESISTING RUST, ROT, COLD, AND U.V. EXPOSURE.
2. POST SHALL BE RED.
3. DECAL SHALL HAVE BLACK PAINT ON A WHITE BACKGROUND.
4. MARKER SHALL MAINTAIN FLEXIBILITY UNDER ALL WEATHER CONDITIONS.
5. CARSONITE CBM-250 IS PREFERRED.
6. WARNING SIGN INVENTORY NUMBER: 40542050



ISSUE  
 DATE: 10/15/90  
 DRAWN  
 BY: CSK  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 4/12/22

WARNING SIGN CABLE ROUTE

UM12  
 FILE NAME:  
 : \REA\_SPCS\001R



## **RISERS**

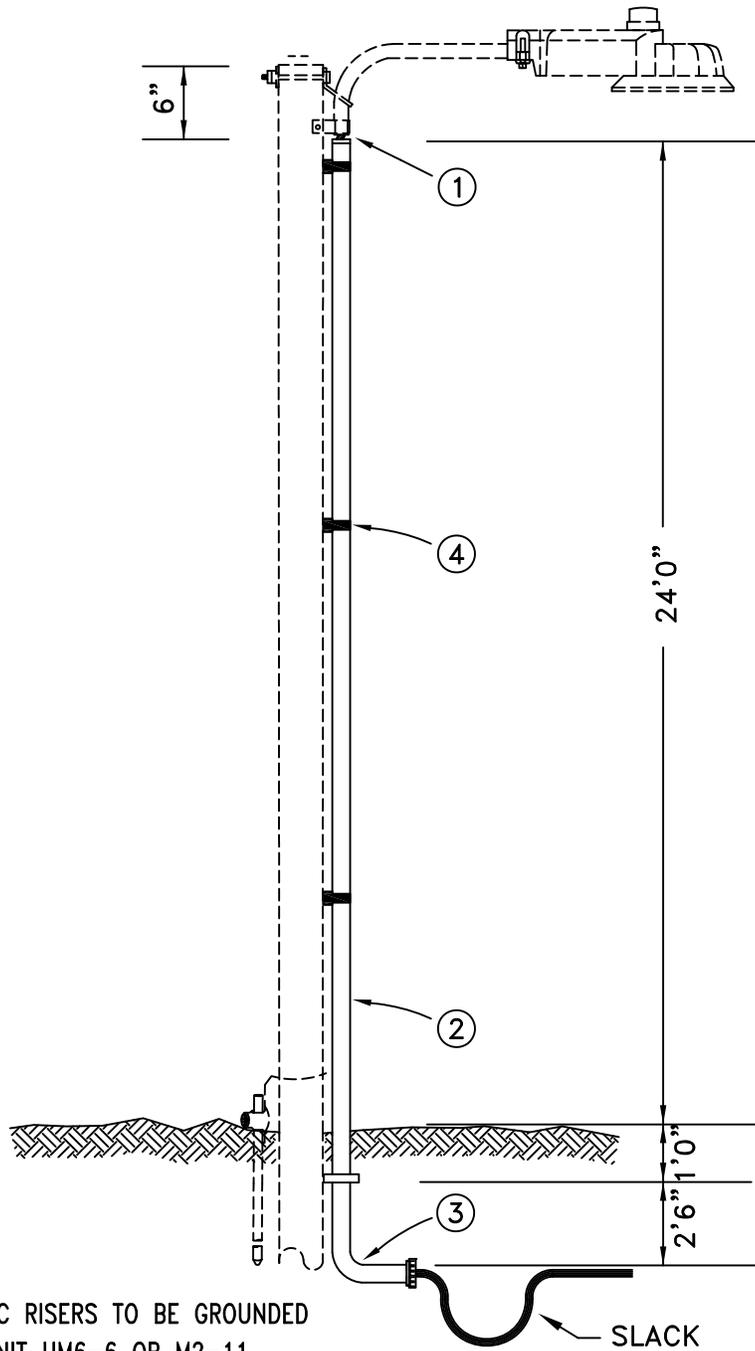


# RISERS

PAGE	DRAWING	DESCRIPTION
4.01	UM5-6	SECONDARY RISER ON EXISTING POLE
4.02	UM5	SECONDARY CABLE TERMINAL POLE
4.03	UM2	SINGLE PHASE CABLE TERMINAL POLE
4.04	UM2-3	SINGLE PHASE CABLE TERMINAL POLE
4.05	UM3-40	SINGLE PHASE RECLOSER ASSEMBLY UNDERGROUND TO OVERHEAD
4.06	UM3-42	THREE PHASE OVERHEAD SOURCE SINGLE PHASE UNDERGROUND WITH RELOCSEER OR SECTIONALZER
4.07	UM2-5-1	THREE PHASE CABLE TERMINAL POLE
4.08	UM2-5-2	THREE PHASE CABLE TERMINAL POLE
4.09	UM2-5-3	THREE PHASE RISER POLE WITH FUSED CUTOUPS-NARROW POLE
4.10	UM2-6	THREE PHASE CABLE TERMINAL POLE WITH INTERMEDIATE ARRESTERS
4.11	UM2-6-1	THREE PHASE CABLE POLE WITH INTERMEDIATE ARRESTERS & HOOD-OPERATED SIDCONNECT SWITCHES
4.12	UM2-S	SUBSTATION FEEDER RISER
4.13	UM2-SPCA	PCA FEEDER STRUCTURE



ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SV 369077	09350602



**NOTE:**

- ALL METALLIC RISERS TO BE GROUNDED  
CALL FOR UNIT UM6-6 OR M2-11
- PVC MAY BE USED ABOVE 8' OF GRC
- 4" STANDOFF BRACKETS MUST BE A  
MIN OF 8' APART. START APPROX 8' FROM GROUND LEVEL

ELEVATION

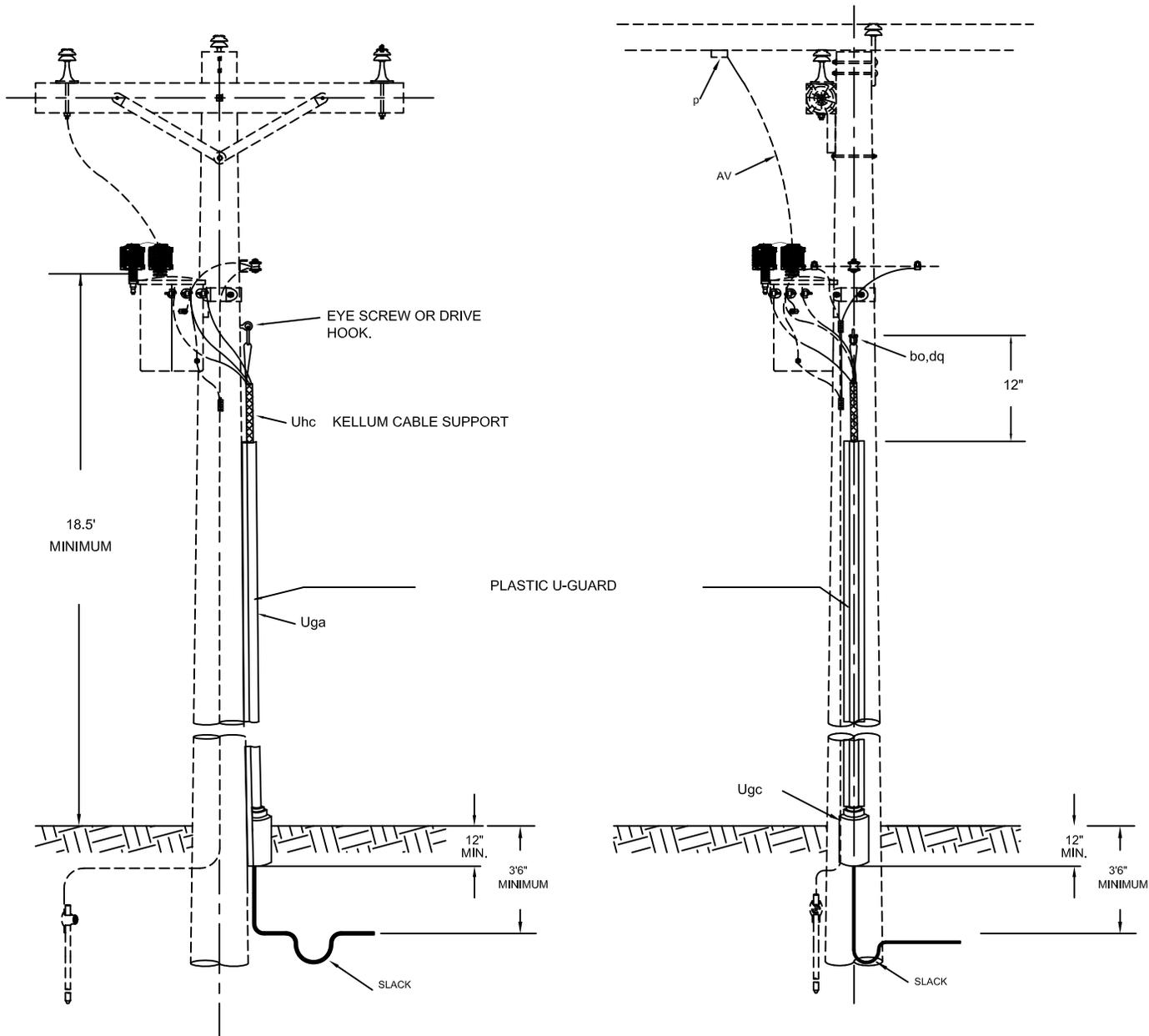
CORE ELECTRIC COOPERATIVE

ITEM	#	MATERIAL	INVENTORY #
1		#6 SECONDARY LENGTH AS REQUIRED	09350602
2	1	1" AS REQUIRED	164101XX
3	1	90° SWEEP, GRC WITH PROTECTIVE BUSHING AND/OR COUPLING	164102XX
4	3	4" STANDOFF BRACKETS	-

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	08/27/91
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	4/12/22

SECONDARY RISER ON EXISTING POLE

UM5-6  
FILE NAME:  
I:\REA\_SPCS\000A



ITEM	QTY.	MATERIAL	INVENTORY NO.
j	56	Screw, Lag, Neoprene Steel Washer 1/4" x 2" as required.	70500185
bo	1	Anchor, shackle. Do not use if drive hook is used.	12302800
dq	1	Eye screw, elliptical or drive hook.	-
	35	Cable, Sec TPX	093000XX
Uga	3	Cable riser shield, U-Guard, Length as req.	705500XX
Ugc	1	U-Guard Riser Boot	70500190
Uhc	1	Cable support, Kellum.	270000XX
	3	Pin Terminations	-
	3	Cold Shrink	626300XX

**NOTES:**

1. NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
2. ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
3. UNDERGROUND SECONDARY WIRE LENGTH AS REQUIRED.
4. USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
5. DO NOT BURY U-GUARD BOOT VENT

**U-GUARD**

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

**CONDUCTOR**

1/0 TPX	09351003
4/0 TPX	09354003
350 TPX	09354350

CORE ELECTRIC COOPERATIVE

SECONDARY CABLE TERMINAL POLE

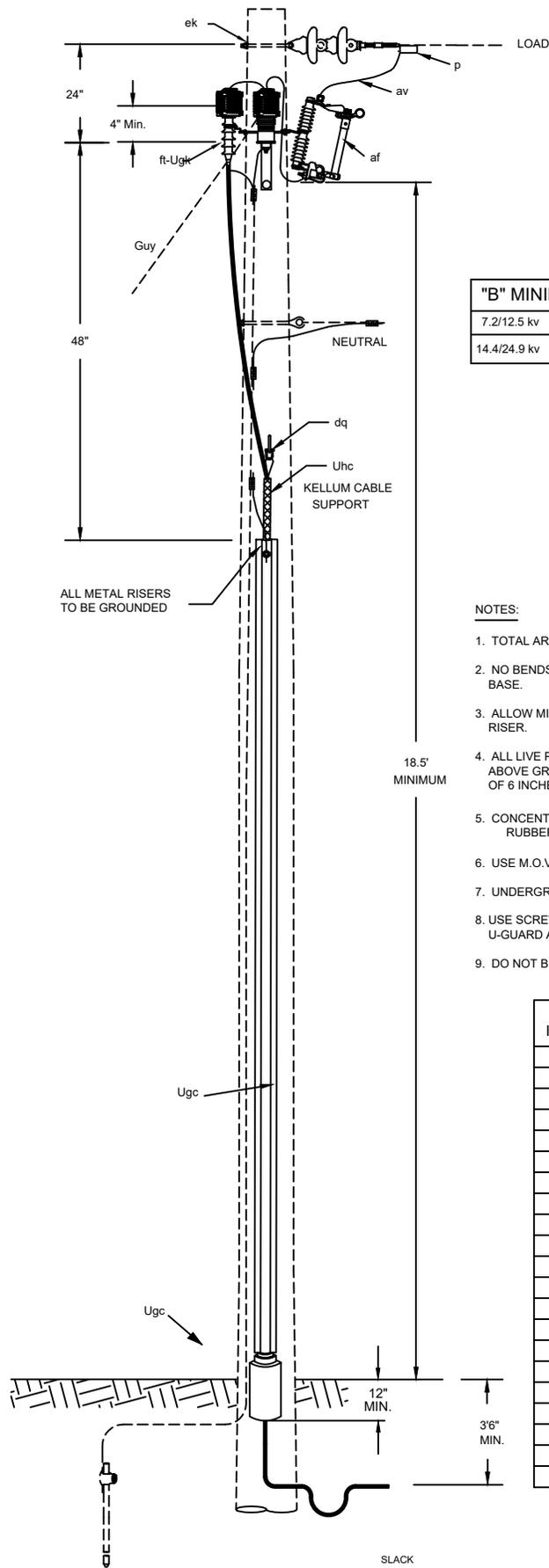


ISSUE  
DATE: 09/20/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

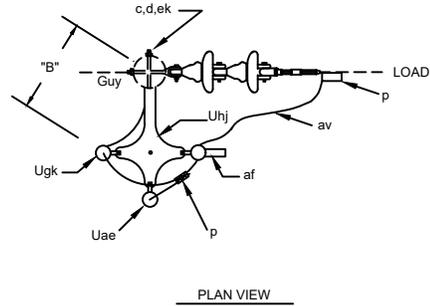
REVISED  
DATE: 4/13/22

**UM5-**  
1/0, 4/0 or 350  
FILE NAME:  
I\REA\_SPCS1002L

ITEM	QTY	ASSET #	INVENTORY NO.
af	1	DT OH 365049	18312111
Uae	1	DT LA 365001	01520991
Ugk	1	DT UD 367016	660000AA



"B" MINIMUM	
7.2/12.5 kv	15"
14.4/24.9 kv	20"



**NOTES:**

- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
- NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
- ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
- ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
- CONCENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT
- USE M.O.V. RISER POLE CLASS ARRESTER
- UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED
- USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT
- DO NOT BURY U-GUARD BOOT VENT

**U-GUARD**

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

**CONDUCTOR**

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

ITEM	QTY.	MATERIAL	INVENTORY NO.
c	2	Bolt, machine, 5/8" x required length.	063805TT
d	2	Washer, square 2 1/4".	-
j	1	Screw, lag, 1/2" x 4", as required.	-
j	56	Screw, lag, Neoprene steel washer 1/4" x 2", as reqd.	-
p	1	Hot Line Connectors	114139XX
fp	2	Squirrel Guard	25001006
af	1	Fuse link or Solid Blade	18391000
af	1	Cutout (load break type).	18312111
av		Jumpers, as required. 10 Kv Insulated	-
bo	1	Anchor, shackle. Do not use if drive hook is used.	12302800
dq	1	Eye screw, elliptical or drive hook.	-
ek	2	Spring washers, as required.	-
ft	1	Bracket Terminator Mount	07800400
Uae	1	Surge arrester	01520991
Ugc	3	Cable Riser Shield, U-Guard	705000XX
Ugc	1	U-Guard, Riser Boot	70500190
Ugk	1	Cable termination.	660000AA
Uhc	1	Cable support, Kellum	270000XX
Uhj	1	Equipment support bracket.	07803500
1	35	Cable, Primary, JEPR	093000XX

**SINGLE PHASE CABLE TERMINAL POLE**

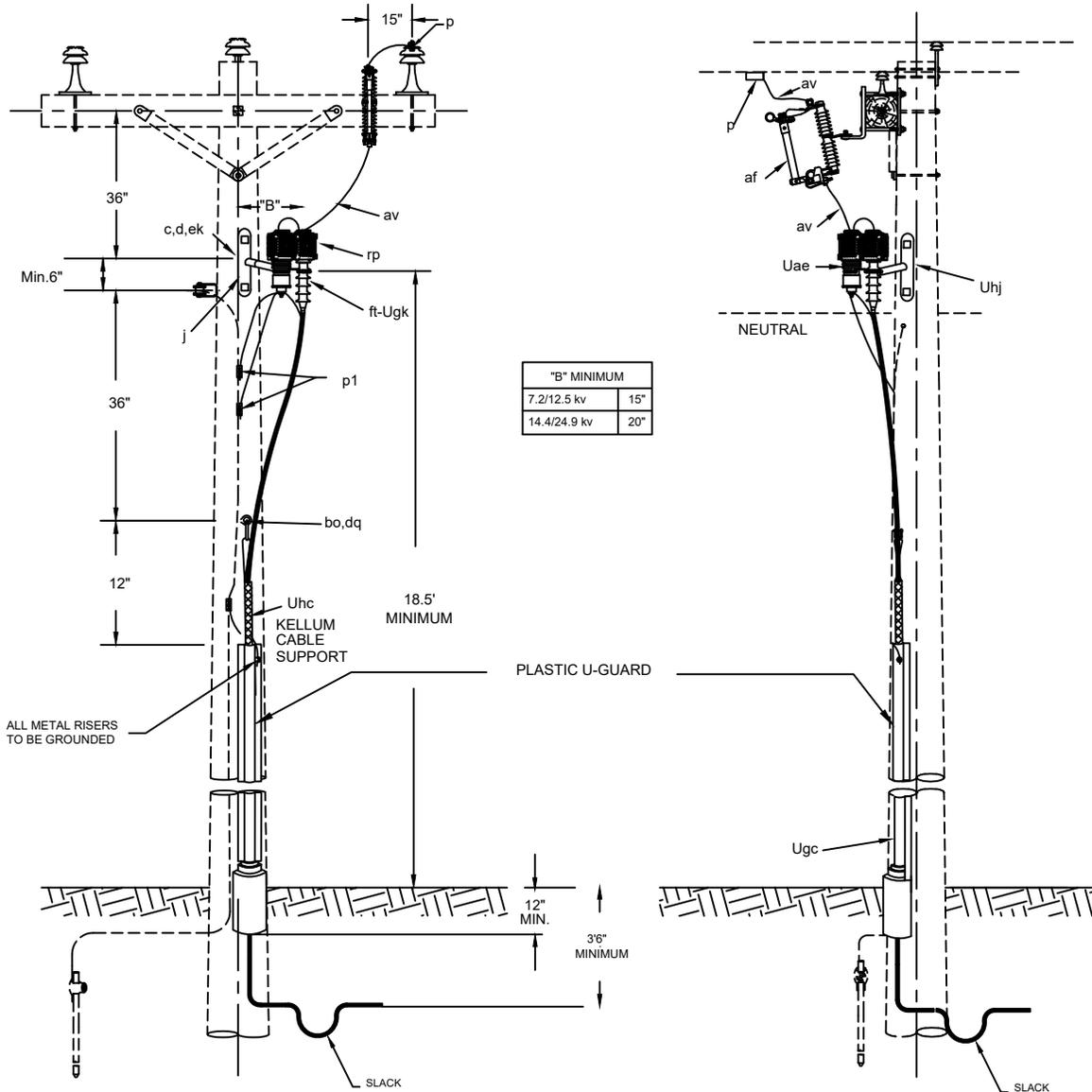
CORE ELECTRIC COOPERATIVE



ISSUE	
DATE:	08/31/90
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	9/11/24

**UM2**  
1/0 or 4/0  
FILE NAME:

ITEM	QTY	ASSET #	INVENTORY NO.
af	1	DT OH 365049	18312111
Uae	1	DT LA 365001	01520991
Ugk	1	DT UD 367016	660000AA



ITEM	QTY.	MATERIAL	INVENTORY NO.
c	1	Bolt, machine, 5/8" x required length.	063805TT
d	1	Washer, square 2 1/4".	-
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, lag, Neoprene steel washer	-
p	1	1/4" x 2", as required.	114139XX
p1		Connectors, as required.	-
af	1	Fuse link or Solid Blade	18391000
af	1	Cutout (load break type).	18312111
av		Jumpers, as required. 10Kv Insulated	-
bo	1	Anchor, shackle.	12302800
dq	1	Eye screw, elliptical or drive hook.	-
ek		Locknuts, as required.	-
ft	1	Bracket Terminator Mount	07800400
rp	2	Squirrel Guard	25001006
Uae	1	Surge arrester	01520991
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot	70500190
Ugk	1	Cable termination.	660000AA
Uhc	1	Cable support, Kellum	270000XX
Uhj	1	Bracket combination.	07803500
1	35	Cable, Primary, JEPR	093000XX

**NOTES:**

- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
- NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
- ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
- ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
- CENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT
- USE M.O.V. RISER POLE CLASS ARRESTER
- UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED
- USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT
- DO NOT BURY U-GUARD BOOT VENT

**U-GUARD**

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

**CONDUCTOR**

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

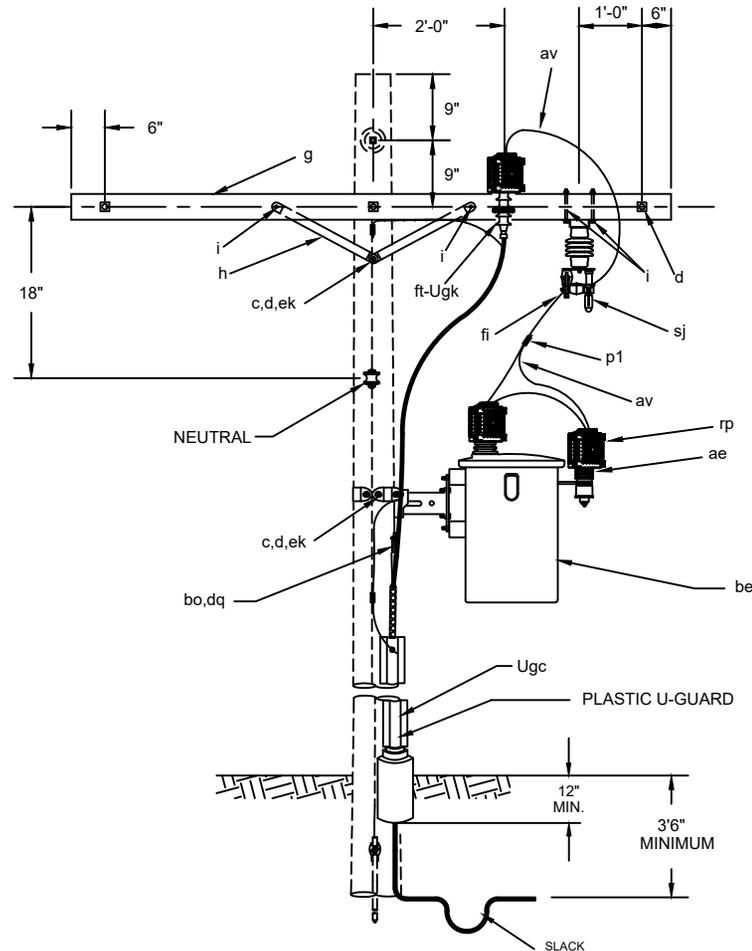
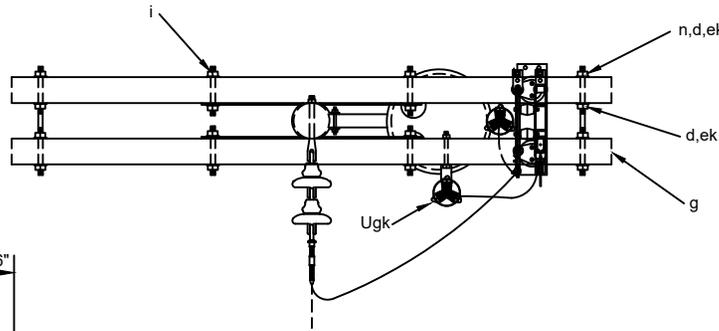


ISSUE	
DATE:	09/04/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	9/11/24

**SINGLE PHASE CABLE TERMINAL POLE**

**UM2-3**  
1/0 or 4/0  
FILE NAME:

ITEM	QTY	ASSET #	INVENTORY NO.
g	2	DT PC 364021	18290311
ae	1	DT LA 365001	01520991
be	1	DT RE 365062	365000AA
sj	1	DT OH 365075	65514000
Ugk	1	DT UD 367076	660000AA



**NOT FOR NEW CONSTRUCTION**

ITEM	QTY.	MATERIAL	INVENTORY NO.
c	*1	Bolt, machine, 5/8" x required length	063805TT
d		Washers, square 2 1/4"x 2 1/4"x 3/16"x 13/16" hole, as required.	-
g	2	Crossarm, 3 5/8" x 4 5/8" x 8'-0	18290311
h	4	Brace, 28"	07535128
i	4	Bolt, carriage 3/8" x 4 1/2"	063103TT
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, lag, Neoprene steel washer 1/4" x 2", as required.	-
n	3	Bolt, double arming 5/8" x required length	063505TT
p1		Connectors, as required.	-
bu	1	Tank ground	37200000
ae	1	Surge arrester	01520491
av		Jumpers, stranded, as required 10Kv Insulated	-
be	1	Recloser, oil circuit	365000AA
bo	1	Anchor, shackle.	12302800
dq	1	Eye screw, elliptical or drive hook.	-
ek		Locknuts, as required.	-
fi	2	Hot line clamp	114139XX
ft	1	Bracket Terminator Mount	07800400
sj	1	Recloser, bypass switch	65514000
rp	4	Squirrel Guard	25001006
		Ground wire, as required	
Ugc	1	U-Guard Riser Boot	70500190
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugk	1	Cable termination.	660000AA
1	35	Cable, Primary, JEPR	093000XX

\* QUANTITY CAN BE 1 OR 2 DEPENDING ON THE RECLOSER SIZE

**U-GUARD**

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

**CONDUCTOR**

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

**NOTES:**

1. THE RECLOSER TERMINAL BUSHING CONNECTED DIRECTLY TO THE COIL SHOULD BE CONNECTED TO THE SOURCE.
2. EACH RECLOSER TANK SHALL HAVE TWO SEPARATE CONNECTIONS TO GROUND.
3. ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND.
4. USE M.O.V. RISER POLE CLASS ARRESTER.
5. UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
6. USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
7. DO NOT BURY U-GUARD BOOT VENT

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 09/20/90

DRAWN  
BY: CSK

APP

REVISOR  
DATE: 9/11/24

**UM3-40**  
1/0 or 4/0  
FILE NAME:

CORE ELECTRIC COOPERATIVE

**SINGLE PHASE RECLOSER ASSEMBLY UNDERGROUND TO OVERHEAD**

ITEM	QTY	ASSET #	INVENTORY NO.
g	1	DT PC 364021	18290311
be	1	DT RE 365062	365000AA
Uae	1	DT LA 365001	01520991
Uax	1	DT OH 365049	18312111
Ugk	1	DT UD 367016	660000AA

DESIGNATE AS:	SINGLE ARRESTER
RECLOSER ASSEMBLY	UM3-42

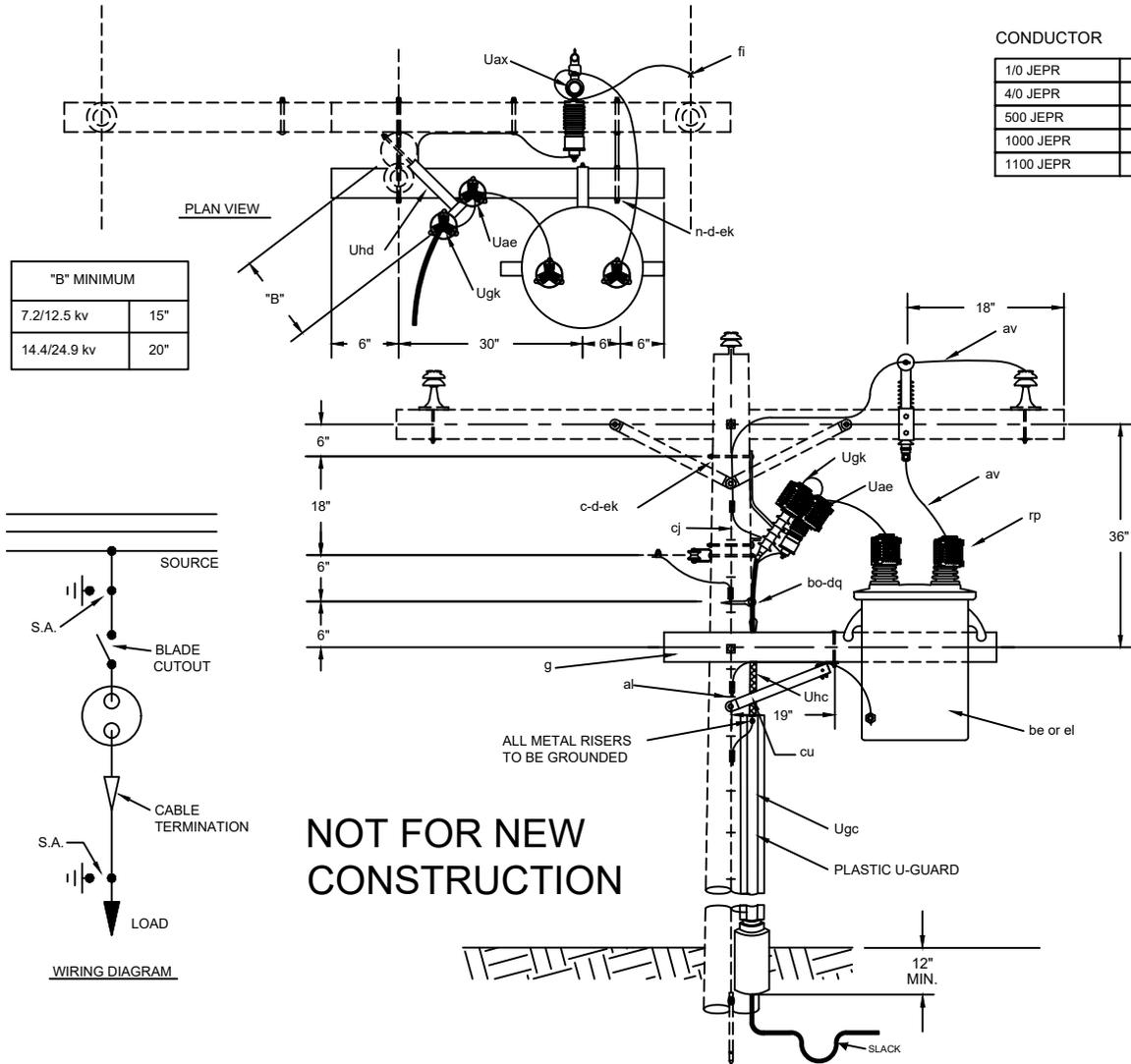
U-GUARD

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

CONDUCTOR

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

ITEM	QTY.	MATERIAL	INVENTORY NO.
c	1	Bolt, machine, 5/8" x required length	063805TT
d	7	Washer, square 2 1/4"	-
g*	1	Crossarm, 3 5/8" x 4 5/8" x 4'-0"	18290311
i	2	Bolt, carriage, 3/8" x 4 1/2"	063100TT
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, lag, Neoprene steel washer 1/4" x 2", as required.	-
n	2	Bolt, double arming, 5/8" x 18"	063305TT
p		Connectors, as required.	-
bu	1	Tank ground	37200000
al		Staples, as required.	-
av		Jumpers, as required. 10Kv Insulated	-
be	1	Recloser, oil circuit (UM3-42)	365000AA
bo	1	Anchor, shackle.	12302800
cj		Ground wire, as required.	-
cu	2	Brace, wood, 28"	07535128
dq	1	Eye screw, elliptical or drive hook.	-
ek		Locknuts, as required	-
fi	1	Hot line clamp	114139XX
ft	1	Bracket Terminator Mount	07800400
rp	4	Squirrel Guard	25001006
Uae	1	Surge arrester	01520991
Uax	1	Cutout	18312111
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot, 2" - 6"	70500190
Ugc	1	Cable riser shield, U-Guard	705000XX
Ugk	1	Cable termination.	660000AA
Uhc	1	Cable support, Kellum.	270000XX
Uhd	1	Bracket, L	07803500
1	35	Cable, Primary, JEPR	093000XX



NOTES:

1. NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
2. ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
3. EACH RECLOSER TANK SHALL HAVE TWO CONNECTIONS TO GROUND.
4. USE STRANDED COPPER JUMPER TO CONNECT CONCENTRIC NEUTRAL TO PRIMARY NEUTRAL EQUAL SIZE COPPER.
5. ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND.
6. USE M.O.V. RISER POLE CLASS ARRESTER.
7. UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
8. CUT 8' CROSSARM IN HALF FOR 2'-4" CROSSARM.
9. USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
10. DO NOT BURY U-GUARD BOOT VENT



ISSUE  
DATE: 10/01/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

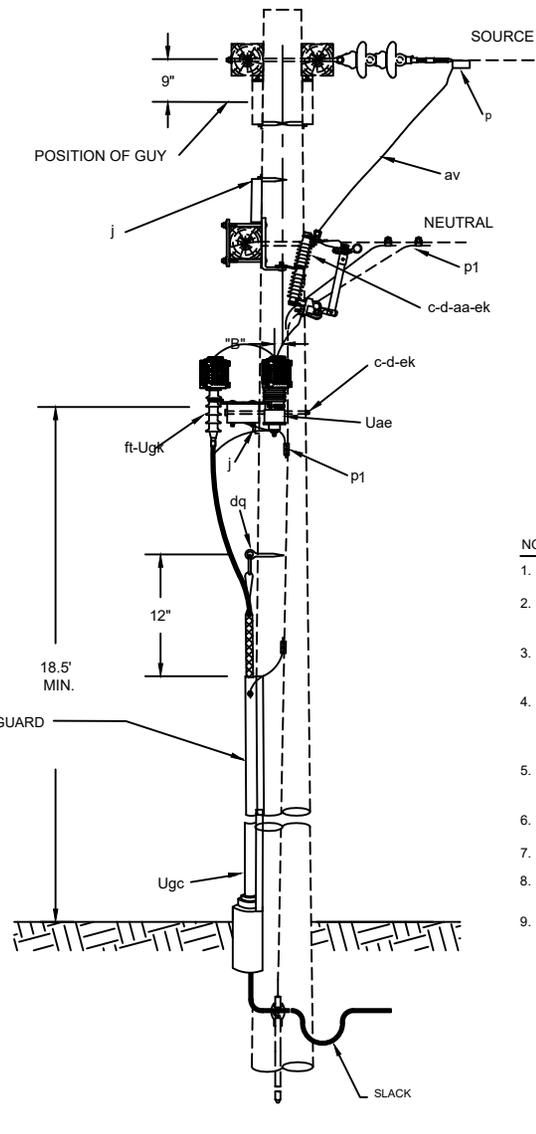
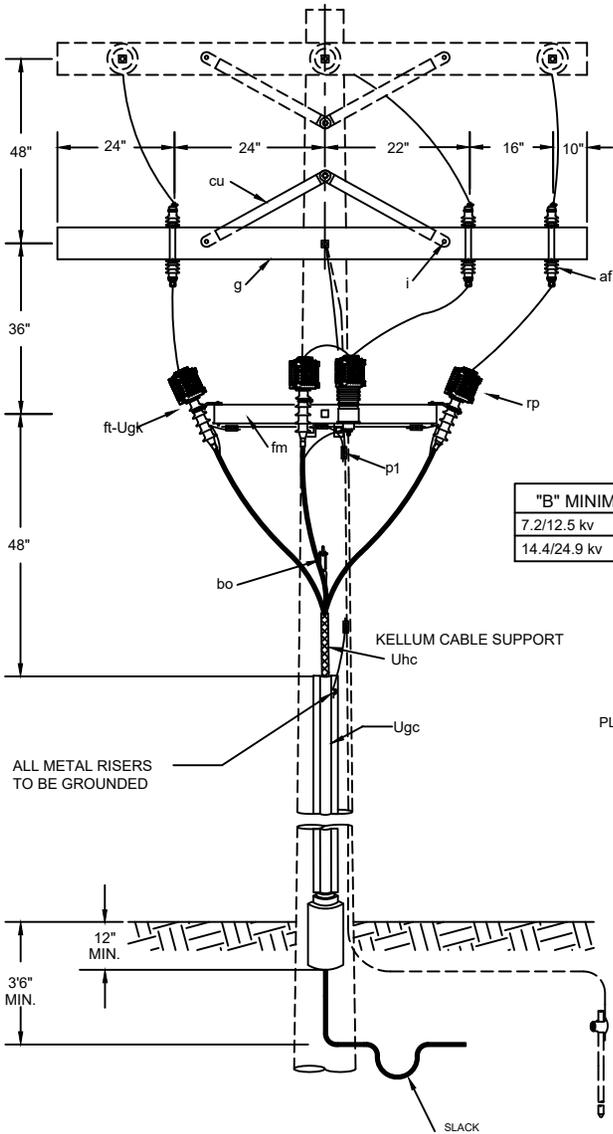
REVISED  
DATE: 9/11/24

**UM3-42**  
1/0 or 4/0  
FILE NAME:

CORE ELECTRIC COOPERATIVE

THREE PHASE OVERHEAD SOURCE SINGLE PHASE UNDERGROUND WITH RECLOSER OR SECTIONALIZER

ITEM	QTY	ASSET #	INVENTORY NO.
g	1	DT PC 364021	18290311
af	3	DT OH 365049	18312111
Uae	3	DT LA 365001	01520991
Ugk	3	DT UD 367016	660000AA



ITEM	QTY.	MATERIAL	INVENTORY NO.
c	2	Bolt, machine, 5/8" x required length.	063805TT
d	4	Washer, square 2 1/4".	-
g	1	Crossarm, 3 5/8" x 4 5/8" x 8'-0". See note 8.	18290311
i	2	Bolt, carriage, 3/8" x 4 1/2"	063103TT
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, lag, Neoprene steel washer 1/4" x 2", as required.	-
p	3	Hot Line Connector	114139XX
p1		Connectors, as required.	-
aa	1	Nut, eye, 5/8"	41904065
af	3	Cutout (load break type).	18312111
av		Jumpers, as required. 10 Kv Insulated.	-
bi	1	Gain Plate	46800260
bo	1	Anchor, shackle.	12302800
cu	2	Brace, wood, 28"	07535128
dq	1	Eye screw, elliptical or drive hook.	-
ek		Locknuts, as required.	-
fm	1	Mounting bracket.	07800500
ft	3	Bracket Terminator Mount	07800400
rp	6	Squirrel Guard	25001006
Uae	3	Surge arrester	01520991
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot, 2" - 6"	70500190
Ugk	3	Cable termination.	660000AA
Uhc	3	Cable support, Kellum.	270000XX
1	105	Cable, Primary, JEPR	093000XX

**NOTES:**

- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
- NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
- ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
- ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
- CONCENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT.
- USE M.O.V. RISER POLE CLASS ARRESTERS
- UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
- USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
- DO NOT BURY U-GUARD BOOT VENT

**U-GUARD**

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

**CONDUCTOR**

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

CORE ELECTRIC COOPERATIVE

THREE PHASE CABLE TERMINAL POLE

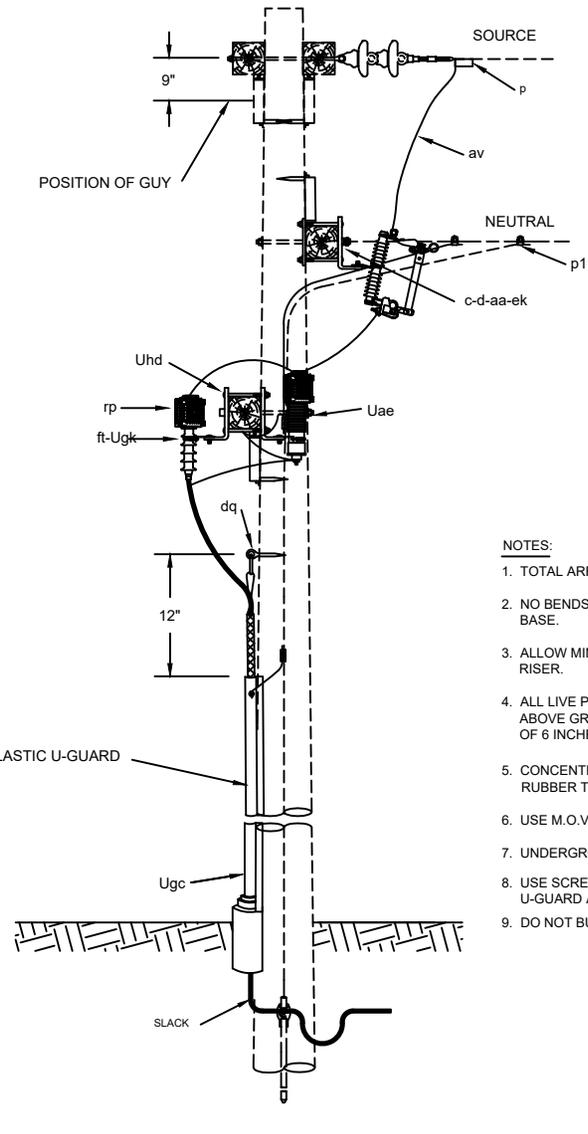
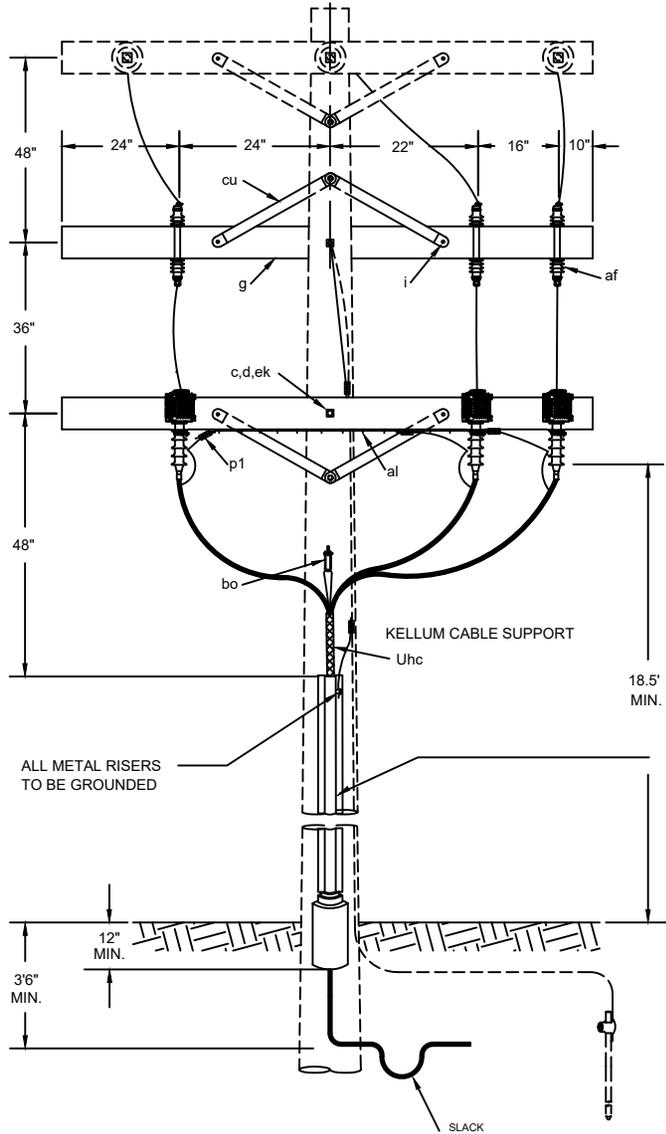
**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 09/12/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

REVISED  
DATE: 9/11/24  
**UM2-5-1**  
1/0,4/0  
FILE NAME:

ITEM	QTY	ASSET #	INVENTORY NO.
g	2	DT PC 364021	18290311
af	3	DT OH 365049	18312111
Uae	3	DT LA 365001	01520991
Ugk	3	DT UD 367016	660000AA

ITEM	QTY.	MATERIAL	INVENTORY NO.
c	2	Bolt, machine, 5/8" x required length.	063805TT
d	4	Washer, square 2 1/4".	-
g	2	Crossarm, 3 5/8" x 4 5/8" x 8'-0". See note 8.	18290311
i	4	Bolt, carriage, 3/8" x 4 1/2"	063103TT
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, Lag, Neoprene steel washer 1/4" x 2", as required.	-
p	3	Hot Line Connector	114139XX
p1		Connectors, as required.	-
aa	1	Nut, eye, 5/8"	41904065
af	3	Fuse link or Solid Blade	18391000
af	3	Cutout (load break type).	18312111
al		Staples, as required.	-
av		Jumpers, as required. 10 Kv Insulated	-
bo	1	Anchor, shackle.	12302800
cu	2	Brace, wood, 28", Pair	07535128
dq	1	Eye screw, elliptical or drive hook.	-
ek		Locknuts, as required.	-
ft	3	Bracket Terminator Mount	07800400
rp	6	Squirrel Guard	25001006
1	105	Cable, Primary, JEP R	093000XX
Uae	3	Surge arrester	01520991
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot	70500190
Ugk	3	Cable termination.	660000AA
Uhc	3	Cable support, Kellum	270000XX



- NOTES:
- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
  - NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
  - ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
  - ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
  - CONCENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT.
  - USE M.O.V. RISER POLE CLASS ARRESTERS
  - UNDERGROUND PRIMARY WIRE LENGH AS REQUIRED.
  - USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
  - DO NOT BURY U-GUARD BOOT VENT

U-GUARD

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

CONDUCTOR

1/0 JEP R	09301030
4/0 JEP R	09304030
500 JEP R	09305030
1000 JEP R	09308000
1100 JEP R	09301100

CORE ELECTRIC COOPERATIVE

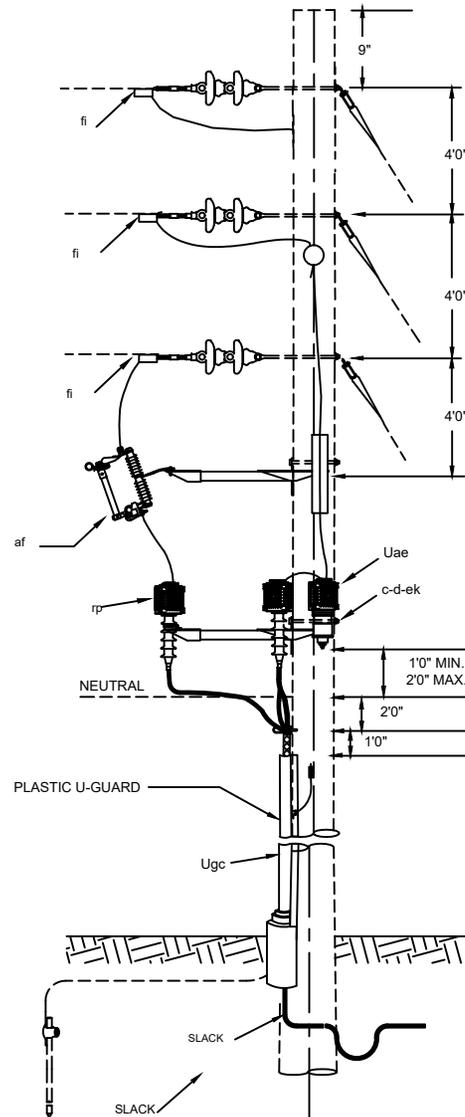
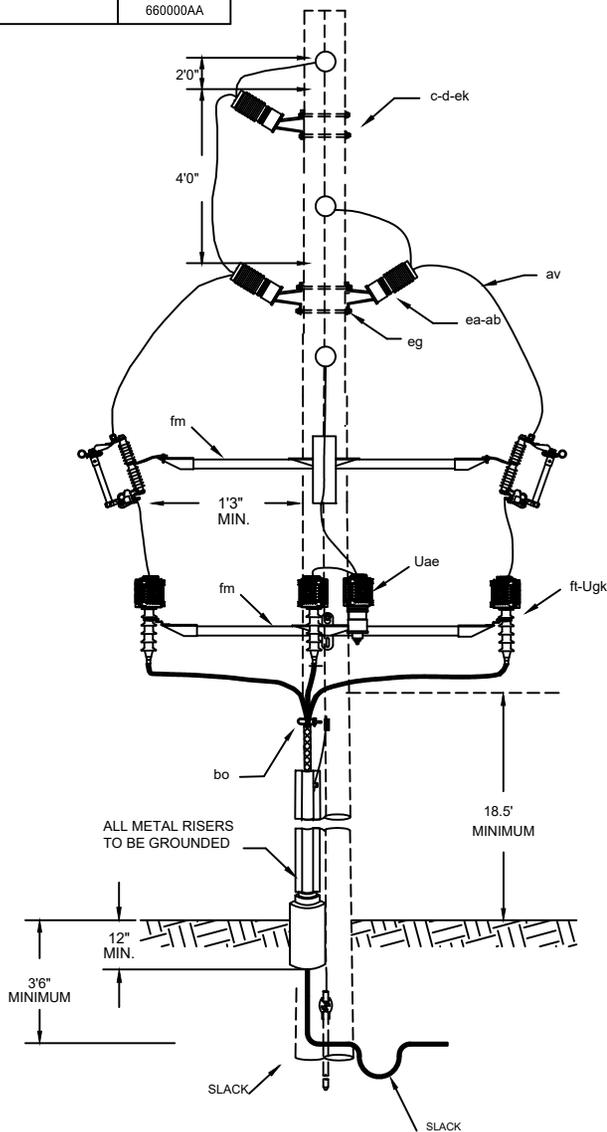
THREE PHASE CABLE TERMINAL POLE

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 09/11/90  
DRAWN BY: CSK  
APP BY: MFJ

REVISED  
DATE: 9/11/24  
**UM2-5-2**  
1/0,4/0  
FILE NAME:

ITEM	QTY	ASSET #	INVENTORY NO.
af	3	DT OH 365049	18312111
ea	3	DT OH 365055	34251010
Uae	3	DT LA 365001	01520991
Ugk	3	DT UD 367016	660000AA



ITEM	QTY.	MATERIAL	INVENTORY NO.
c	6	BOLT, MACHINE, 5/8" X REQUIRED LENGTH.	063805TT
d	5	WASHER, SQUARE 2 1/4"-13/16" HOLE.	-
o	1	BOLT EYE 5/8" X REQUIRED LENGTH.	063615TT
p	3	CONNECTORS AS REQUIRED.	-
j	1	SCREW LAG 1/2" X 4".	-
j	56	SCREW LAG, NEOPRENE STEEL WASHER 1/4" X 2", AS REQUIRED.	-
ac	3	1 3/4" STUD X 3/4".	34301000
af	3	Fuse Link or Solid Blade	18391000
af	3	CUTOUT FUSED.	18312111
av	3	JUMPERS, AS REQUIRED. 10 KV INSULATED.	-
bo	1	ANCHOR, SHACKLE.	12302800
ea	3	INSULATOR (POST).	34251010
ek	1	LOCKNUT AS REQUIRED.	-
eg	3	BRACKET OFFSET 7 1/2".	07807400
fi	3	HOT LINE CONNECTOR.	114139XX
fm	2	MOUNTING BRACKET	07800500
ft	3	Bracket Terminator Mount	07800400
rp	6	SQUIRREL GUARD.	25001006
Uae	3	LIGHTNING ARRESTER.	01520991
Ugc	3	CABLE RISER SHIELD, U-GUARD'	705000XX
Ugc	1	U-GUARD RISER BOOT	70500190
Ugk	3	CABLE TERMINATION.	660000AA
Uhc	3	KELLUM CABLE SUPPORT.	270000XX
1	105	CABLE, PRIMARY, JEPR	093000XX

#### CONDUCTOR

1/0 JEPR	09301030
4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

#### U-GUARD

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500
3" GRC U-GUARD	70550300
5" GRC U-GUARD	70550500

#### NOTES:

- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
- NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
- ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
- ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
- CONCENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT.
- LOOP GROUND ALL EQUIPMENT MOUNTS
- TERMINATOR BRACKET MAY BE CANTED TO OBTAIN CLEARANCE FROM NEUTRAL.
- USE M.O.V. RISER POLE CLASS ARRESTERS
- UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
- USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
- DO NOT BURY U-GUARD BOOT VENT

CORE ELECTRIC COOPERATIVE

THREE PHASE RISER POLE WITH FUSED CUTOUTS-NARROW POLE

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 11/20/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

REVISED  
DATE: 9/11/24

UM2-5-3  
1/0,4/0  
FILE NAME:

ITEM	QTY	ASSET #	INVENTORY NO.
g	1	DT PC 364021	18290511
Uae	3	DT LA 365001	01520991
Ugk	3	DT UD 367016	660000AA
sb	3	DT LT 365006	65216201

ITEM	QTY.	MATERIAL	INVENTORY NO.
c	2	Bolt, machine, 5/8" x as required	063805TT
d	2	Washer, 1 3/8" x 9/16" round	-
d	6	Washer, 2 1/4" square	-
g	1	Crossarm, 3 5/8" x 4 5/8" x 10'-0"	18290511
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, Lag, Neoprene Steel Washer 1/4" x 2" as required.	-
p	3	Hot Line Connector	114139XX
p1	*	Connectors, as required.	-
pa	3	Connector, Arrestor	17040100
av	*	Jumpers, as required. 10 Kv Insulated	-
bo	1	Anchor, shackle.	12302800
cu	1	Brace, crossarm 60" span	07535168
dq	1	Eye screw, elliptical or drive hook.	-
ek	*	Locknuts, as required.	-
fm	1	Mounting Bracket	07800500
ft	3	Bracket Terminator Mount	07800400
rp	6	Squirrel Guard	25001006
sb	3	Disconnect, 600 A load break switch	65216201
Ugc	105	Cable, Primary, JEPR	093000XX
Uae	3	Surge arrester, intermediate	01520991
Ugc	3	Cable Riser Shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot	70500190
Ugk	3	Cable termination.	660000AA
Uhc	3	Cable Support, Kellum	270000XX

CONDUCTOR		U-GUARD	
1/0 JEPR	09301030	3" PVC U-GUARD	70500300
4/0 JEPR	09304030	5" PVC U-GUARD	70500500
500 JEPR	09305030	3" GRC U-GUARD	70503000
1000 JEPR	09308000	5" GRC U-GUARD	70550500
1100 JEPR	09301100		

- NOTES:**
- TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
  - NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
  - ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
  - ALL LIVE PARTS MUST HAVE AN 18.5' FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
  - CONCENTRIC NEUTRALS TO BE SEALED WITH 130 C RUBBER TAPE OR HEAT/COLD SHRINK BOOT.
  - UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
  - USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
  - DO NOT BURY U-GUARD BOOT VENT

**CORE**  
ELECTRIC COOPERATIVE

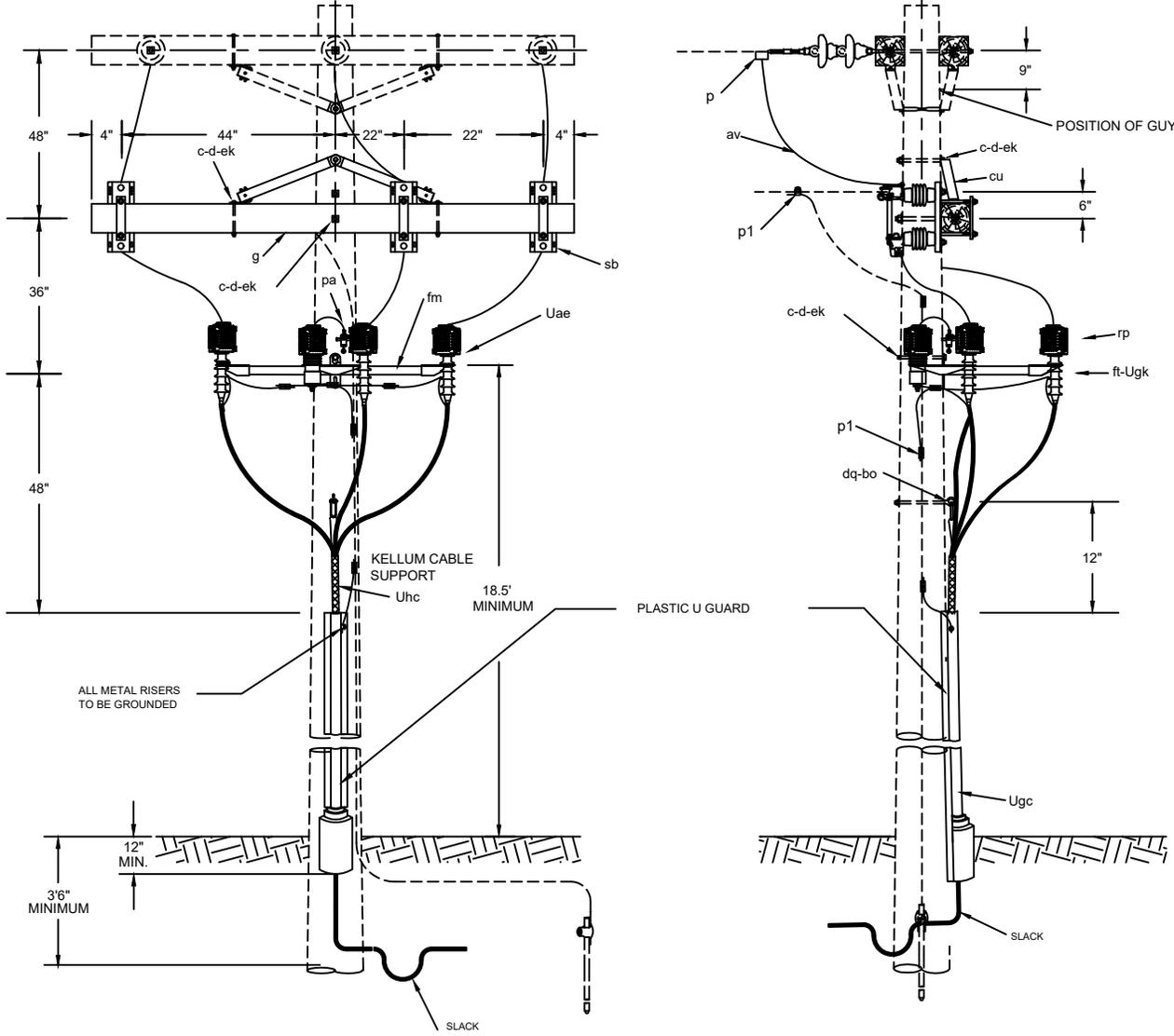
ISSUE  
DATE: 9/12/90

DRAWN  
BY: CSK

APP  
BY: MFJ

REVISED  
DATE: 9/11/24

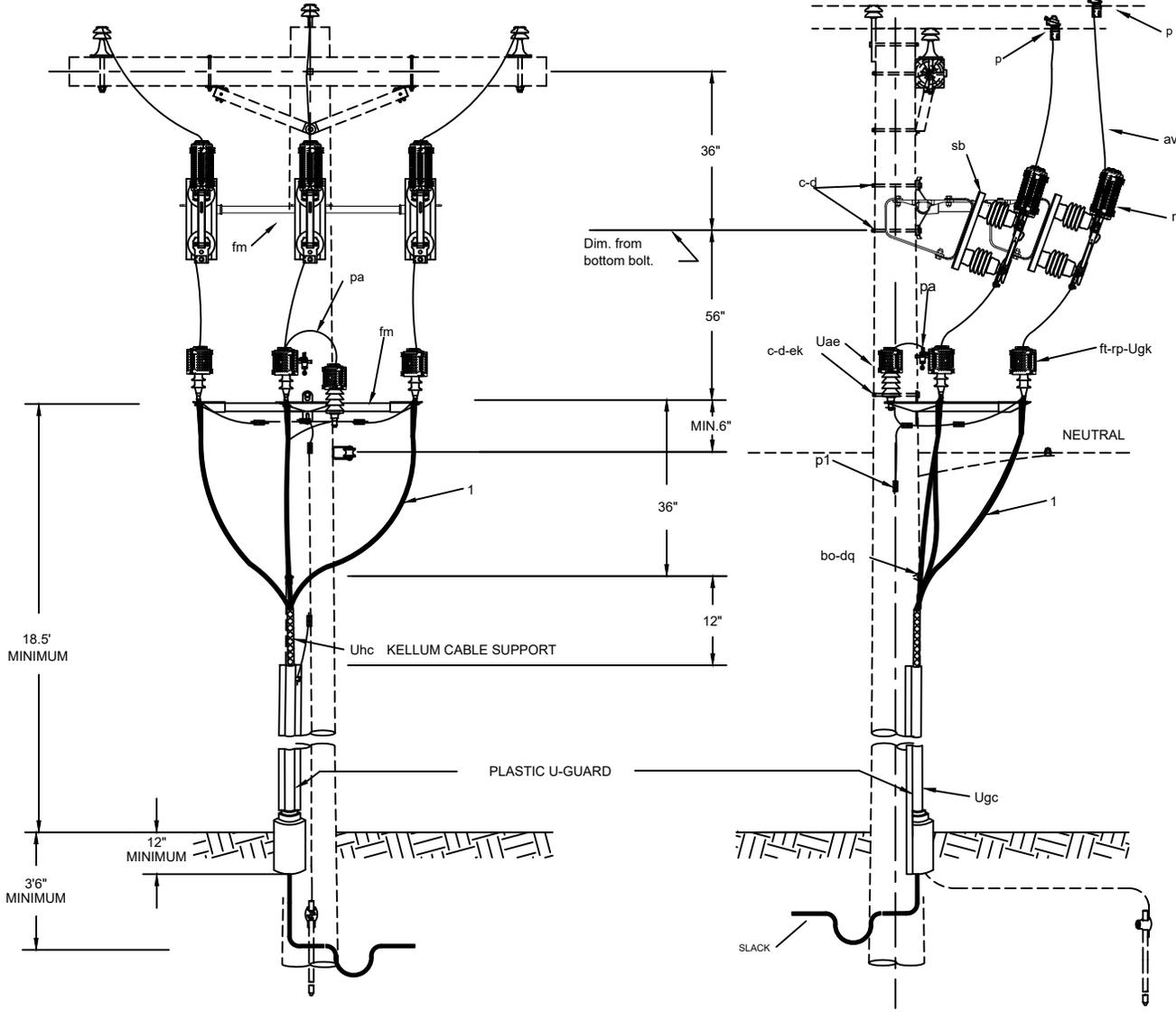
**UM2-6**  
500  
FILE NAME:



CORE ELECTRIC COOPERATIVE

THREE PHASE CABLE TERMINAL POLE WITH INTERMEDIATE ARRESTERS

ITEM	QTY	ASSET #	INVENTORY NO.
sb	3	DT LT 368006	65216201
Uae	3	DT LA 365001	01520991
Ugk	3	DT UD 367016	660000AA



ITEM	QTY.	MATERIAL	INVENTORY NO.
c	4	Bolt, machine, 5/8" x required length.	063805TT
d	5	Washer, square 2 1/4".	-
i	6	Bolt, carriage 3/8" x required length.	063103TT
j	1	Screw, lag 1/2" x 4" as required.	-
j	56	Screw, Lag, Neoprene Steel Washer 1/4" x 2" as required.	-
av		Jumpers, as required. 10 Kv Insulated	17040100
bo	1	Anchor, shackle.	12302800
dq	1	Eye screw, elliptical or drive hook.	-
fm	1	Mounting bracket.	07800500
fs	1	Mounting Bracket, Disconnect Switch	07801005
ft	3	Bracket Terminator Mount	07800400
p	3	Connector Tap Wedge Pad	5400480T
p1	*	Connectors, as required.	-
pa	3	Connector, Arrestor.	17040100
rp	6	Squirrel Guard	25001006
sb	3	Switches, Disconnect, Hook-operated	65216201
rpl	3	Wildlife Bushing Guard, Large	25001012
Uae	3	Surge arrester, intermediate.	01520991
Ugc	3	Cable riser shield, U-Guard	705000XX
Ugc	1	U-Guard Riser Boot	70500190
Ugk	3	Cable termination.	660000AA
Uhc	3	Cable support, Kellum.	270000XX
1	105	Cable, Primary, JEPR	093000XX

CONDUCTOR

4/0 JEPR	09304030
500 JEPR	09305030
1000 JEPR	09308000
1100 JEPR	09301100

U-GUARD

3" PVC U-GUARD	70500300
5" PVC U-GUARD	70500500

NOTES:

1. TOTAL ARRESTER LEAD LENGTH MUST BE UNDER 3'.
2. NO BENDS PERMITTED WITHIN 6" OF CABLE TERMINAL BASE.
3. ALLOW MINIMUM CABLE SLACK OF 24" AT BOTTOM OF RISER.
4. ALL LIVE PARTS MUST HAVE AN 18.5 FOOT CLEARANCE ABOVE GROUND AND MUST BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE NEUTRAL CONDUCTOR.
5. UNDERGROUND PRIMARY WIRE LENGTH AS REQUIRED.
6. INVENTORY NUMBER 25001012 QTY. 3 REQUIRED FOR UM2-6-1 1000
7. USE SCREW, LAG, NEOPRENE STEEL WASHER FOR U-GUARD AND BOOT VENT.
8. DO NOT BURY U-GUARD BOOT VENT



ISSUE	
DATE:	9/14/90
DRAWN	
BY:	CSK
APP	
BY:	MFJ

REVISED	
DATE:	09/11/24

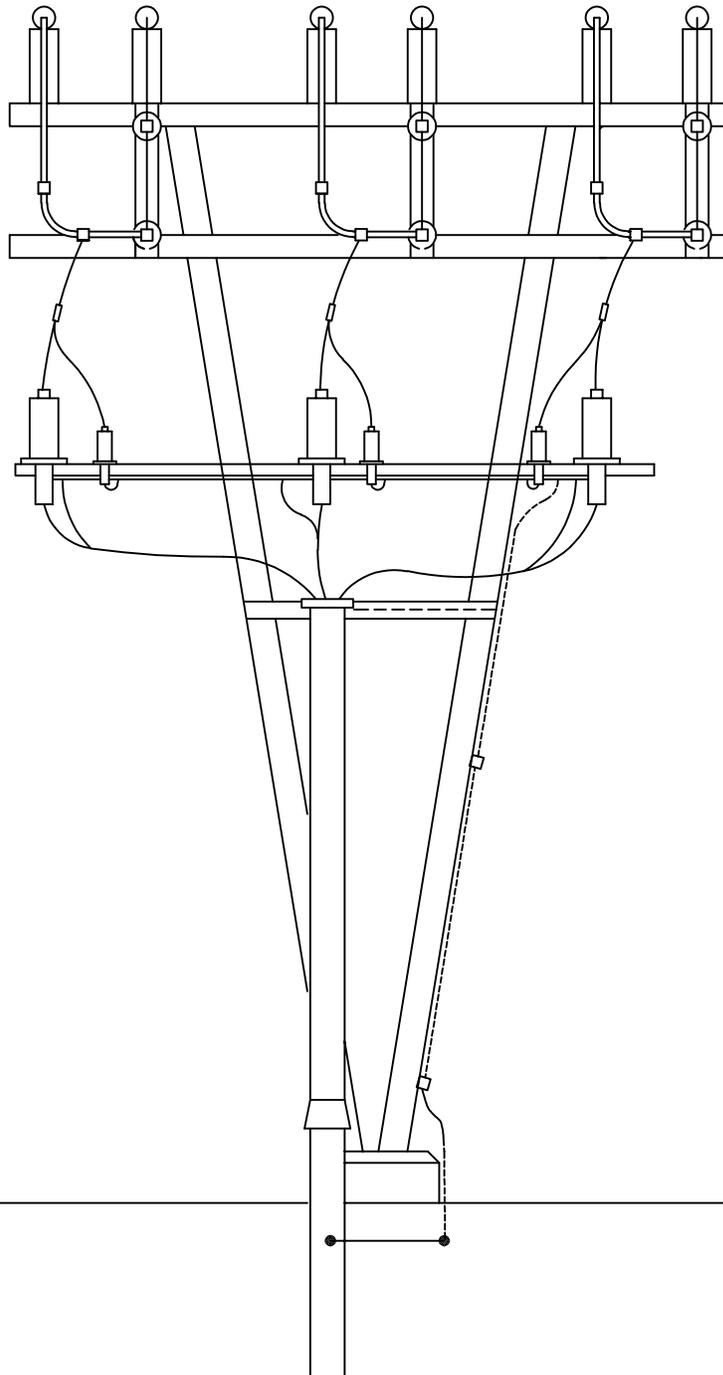
**UM2-6-1**  
4/0, 500 or 1000  
FILE NAME:

CORE ELECTRIC COOPERATIVE

THREE PHASE CABLE POLE WITH INTERMEDIATE ARRESTERS & HOOK-OPERATED DISCONNECT SWITCHES

ITEM	QTY	ASSET #	INVENTORY NO.
	3	DT MT 367016	09304030
	3	DT MT 367016	09305030
	3	DT MT 367016	09308000

4/0 JEPR  
500 JEPR  
1000/1100 JEPR



CORE ELECTRIC COOPERATIVE

**NOTE:**

1. BOM SHOWS QTY PER FEEDER
2. 4/0 JEPR NOT FOR NEW CONSTRUCTION

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 07/08/19  
DRAWN  
BY: JLM  
APP  
BY: MFJ  
REVISED  
DATE: 9/11/24

**UM2-S**  
FILE NAME:

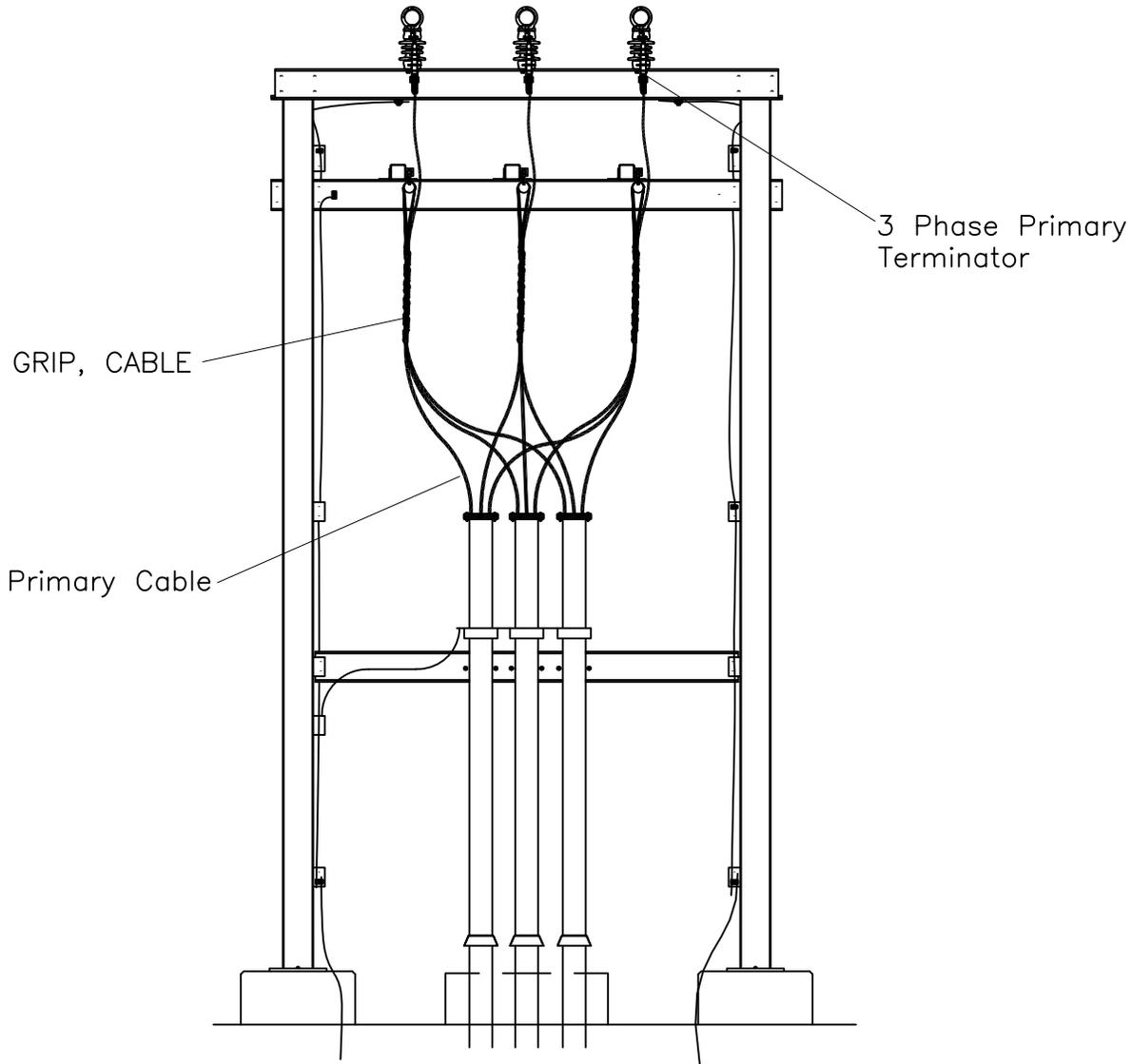
		INVENTORY NO.			
ITEM	QTY	MATERIAL	4/0 JEPR	500 JEPR	1000/1100 JEPR
	3	PRIMARY CABLE	09304030	09305030	09308000

**SUBSTATION FEEDER RISER**

ITEM	QTY	ASSET #	INVENTORY NO.
	3	DT MT 367016	09304030
	3	DT MT 367016	09305030
	3	DT MT 367016	09308000

4/0 JEPR  
500 JEPR  
1000/1100 JEPR

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FRONT VIEW

NOTE:

1. BOM SHOWS QTY PER FEEDER
2. 4/0 JEPR NOT FOR NEW CONSTRUCTION



ITEM	QTY	MATERIAL	INVENTORY NO.		
			4/0 JEPR	500 JEPR	1000/1100 JEPR
	3	3 PHASE, PRIMARY TERMINATOR	66004000	66005022	66008000
	3	PRIMARY CABLE	09304030	09305030	09308000
	3	GRIP, CABLE	27004000	27005000	27008000

ISSUE	
DATE:	07/08/19
DRAWN	
BY:	JLM
APP	
BY:	MFJ
REVISED	
DATE:	4/14/22

PCA FEEDER STRUCTURE

UM2-  
SPCA



## **PAD MOUNTED SWITCHGEAR**



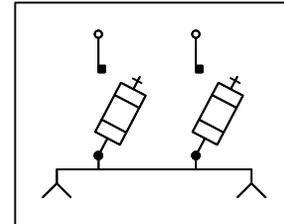
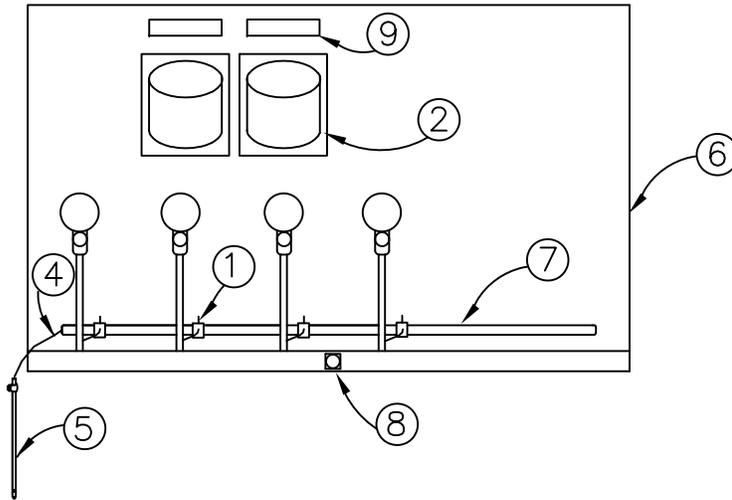
# PAD MOUNTED SWITCHGEAR

PAGE	DRAWING	DESCRIPTION
5.01	UMS3-1-2	SINGLE PHASE PADMOUNT SWITCHGEAR
5.02	UMS3-1-4A	1 PHASE PADMOUNT AIR BREAK SWITCHGEAR
5.03	UMS3-3-6	3 PHASE PADMOUNT SWITCHGEAR (LVS 6)
5.04	UMS3-3-6A	3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (6)
5.05	UMS3-3-9A	3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (9)
5.06	UMS3-3-10A	3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (10)
5.07	UMS3-3-11A	3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (11)



ITEM	QTY	ASSET #	INVENTORY NO.
5	1	DT OH 365051	53828508
6	1	DT US 367078	65951002

NOT FOR NEW  
CONSTRUCTION



K-MATE SL FUSE	15 KV RATING
SL-18	15 AMPS
SL-36	30 AMPS
SL-54	44 AMPS
SL-90	81 AMPS
SL-118	125 AMPS
SL-175	168 AMPS
SL-230	218 AMPS

CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1 6	HOT LINE GROUND CLAMP	114139XX			
2 2	FUSE WELL W/GASKETED BAYONET & CLAMPS	-			
4	#2 COPPER WIRE (GROUND) LENGTH AS REQUIRED	15620200			
5 1	5/8" X 8' COPPERCLAD GROUND ROD W/ CLAMP	53828508			
6 1	A B CHANCE LVS-2	65951002			
7 1	5/8" COPPERCLAD GROUNDING BUS	-			
8 2	EQUIPMENT LOCKS AS SPECIFIED	-			
9 2	FUSE IDENTIFICATION DECAL OR TAG	-			

**NOTES:**

1. SEE CORE STANDARD CONSTRUCTION MATERIALS AND PRACTICES BOOK FOR ORDERING INFORMATION AND PARTS NUMBERS.
2. FOR PAD SPECIFY UM 1-1
3. LOOP GROUND ALL EQUIPMENT GROUNDS.
4. 200 AMP LOAD BREAK ELBOWS AND PRIMARY WIRE ARE NOT INCLUDED IN THIS SPECIFICATION
5. UNIT INCLUDES FUSES AS SPECIFIED BY OWNER.
6. SIGNAGE AS SPECIFIED IN GUIDELINES.

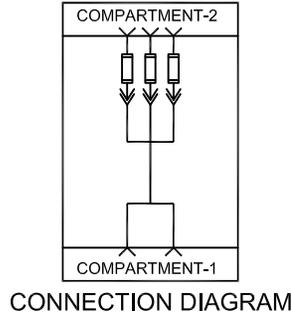


ISSUE	
DATE:	10/25/95
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	4/14/22

SINGLE PHASE PADMOUNT SWITCHGEAR (LVS 2)

UMS3-1-2  
FILE NAME:  
I:REA\_SPCS\0035

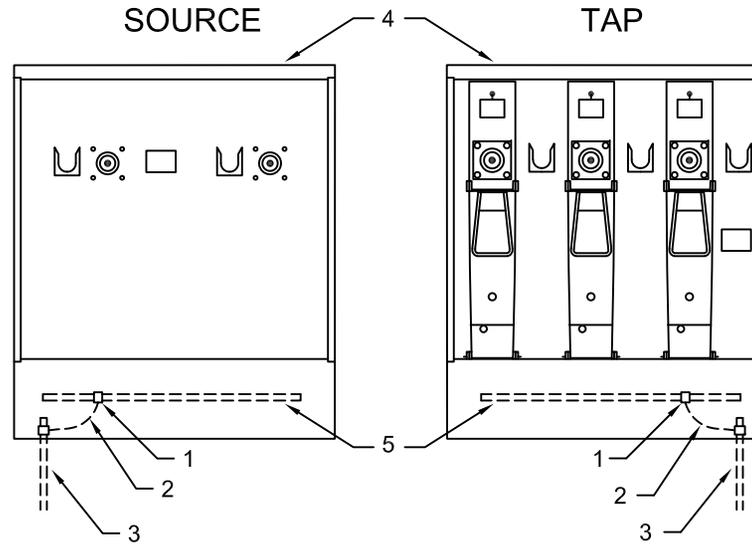
ITEM	QTY	ASSET #	INVENTORY NO.
3	2	DT OH 365051	53828508
4	1	DT US 367078	65951002



**NOT FOR NEW CONSTRUCTION**

**NOTES:**

1. FOR FIBERGLASS GROUND SLEEVE USE SPECIFICATION UM-115.
2. LOOP GROUND ALL EQUIPMENT GROUNDS.
3. UNIT INCLUDES FUSES FOR ALL FUSED BAYS. FOR UNFUSED BAYS, STORE FUSES IN THE DOOR.
4. FUSE SIZES SPECIFIED BY THE OWNER.
5. ITEMS NOT INCLUDED IN THIS SPECIFICATION ARE:  
GROUND SLEEVE, ELBOWS, & PRIMARY WIRE MAKEUP.
6. SIGNAGE AS SPECIFIED IN GUIDELINES.
7. SPACE GROUND RODS MIN. OF 6 FOOT APART.



FUSE CHART		
SMU 20 FUSE	14.4KV RATING	INVENTORY
7E	14 AMPS	24500907
15E	30 AMPS	24500915
25E	50 AMPS	24500925
40E	80 AMPS	24500940
65E	130 AMPS	24500965
80E	160 AMPS	24500980
100E	200 AMPS	24501000



ITEM	QTY'	MATERIAL	INVENTORY #	ITEM	QTY'	MATERIAL	INVENTORY #
1	2	HOT LINE GROUND CLAMP	114139XX	5	2	5/8" COPPERCLAD GROUND BUS	-
2	AS REQ'D	#2 COPPER WIRE (GROUND)	15610200	6	3	200A LOADBREAK BUSHING INSERTS	41620100
3	2	5/8" x 8' COPPERCLAD GROUND ROD	53828508	7	3	S&C SMU FUSES	-
4	1	SWITCHGEAR CABINET	65951004	2	2	Clamp, Ground Rod	11311000

**CORE ELECTRIC COOPERATIVE**

**1 PHASE PADMOUNT AIR BREAK SWITCHGEAR (4)**

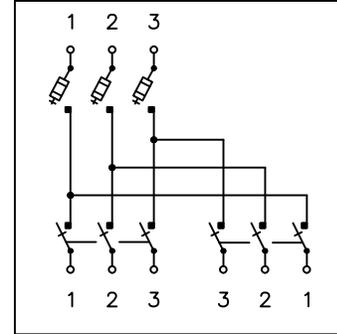
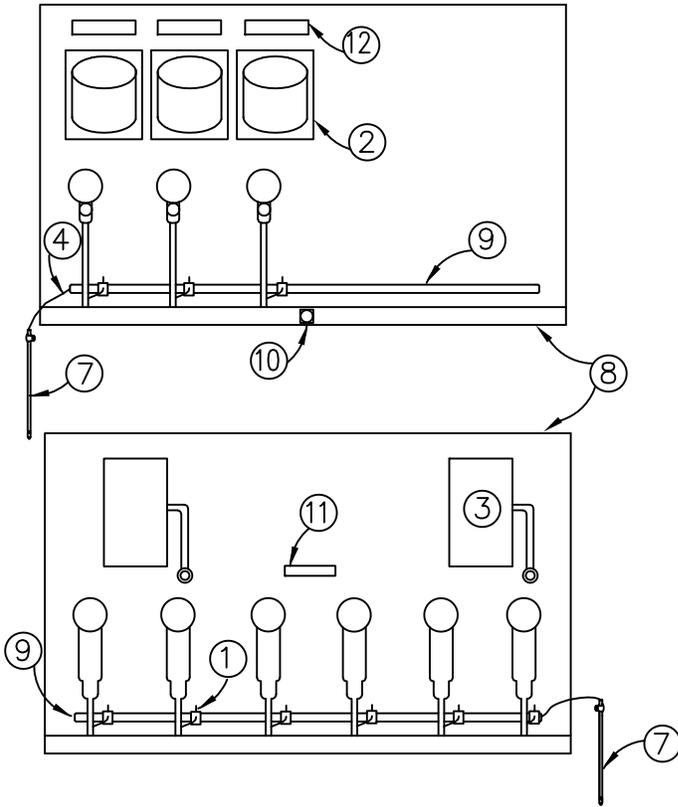
REVIS  
DATE: 4/14/22

UMS3-1-4A

FILE NAME:  
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ITEM	QTY	ASSET #	INVENTORY NO.
7	2	DT OH 365051	53828508
8	1	DT US 367068	65951009

NOT FOR NEW CONSTRUCTION



K-MATE SL FUSE	15 KV RATING
SL-18	15 AMPS
SL-36	30 AMPS
SL-54	44 AMPS
SL-90	81 AMPS
SL-118	125 AMPS
SL-175	168 AMPS
SL-230	218 AMPS

CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	11 HOT LINE GROUND CLAMP	114139XX	10	2 EQUIPMENT LOCKS AS SPECIFIED	-
2	3 FUSE WELL W/GASKETED BAYONET & CLAMPS	-	11	1 NON-LOAD BREAK ELBOW DECAL	-
3	2 600 AMP SWITCH W/ INSIDE HANDLE	65951006	12	3 FUSE IDENTIFICATION DECAL OR TAG	-
4	* #2 COPPER WIRE (GROUND) LENGTH AS REQUIRED	15620200			
7	2 5/8" X 8' COPPERCLAD GROUND ROD W/ CLAMP	53828508			
8	1 A B CHANCE LVS-6 OR RTE R-VAC 6	65951009			
9	2 5/8" COPPERCLAD GROUNDING BUS	-			

**NOTES:**

- SEE CORE STANDARD CONSTRUCTION MATERIALS AND PRACTICES BOOK FOR ORDERING INFORMATION AND PARTS NUMBERS.
- FOR PAD AND VAULT SPECIFY UM 110
- LOOP GROUND ALL EQUIPMENT GROUNDS.
- LEAVE 10' OF EXCESS FOR EACH CABLE IN VAULT.
- UNIT INCLUDES FUSES AS SPECIFIED BY OWNER.
- SWITCH SHALL INCLUDE BUSHINGS & BRACKETS TO ACCEPT RTE 600 AMP PUSH-OP ELBOWS.
- ITEMS NOT INCLUDED IN THIS SPECIFICATION:  
600 AMP ELBOWS, 200 AMP LOAD BREAK ELBOWS, PRIMARY WIRE
- SIGNAGE AS SPECIFIED IN GUIDELINES.

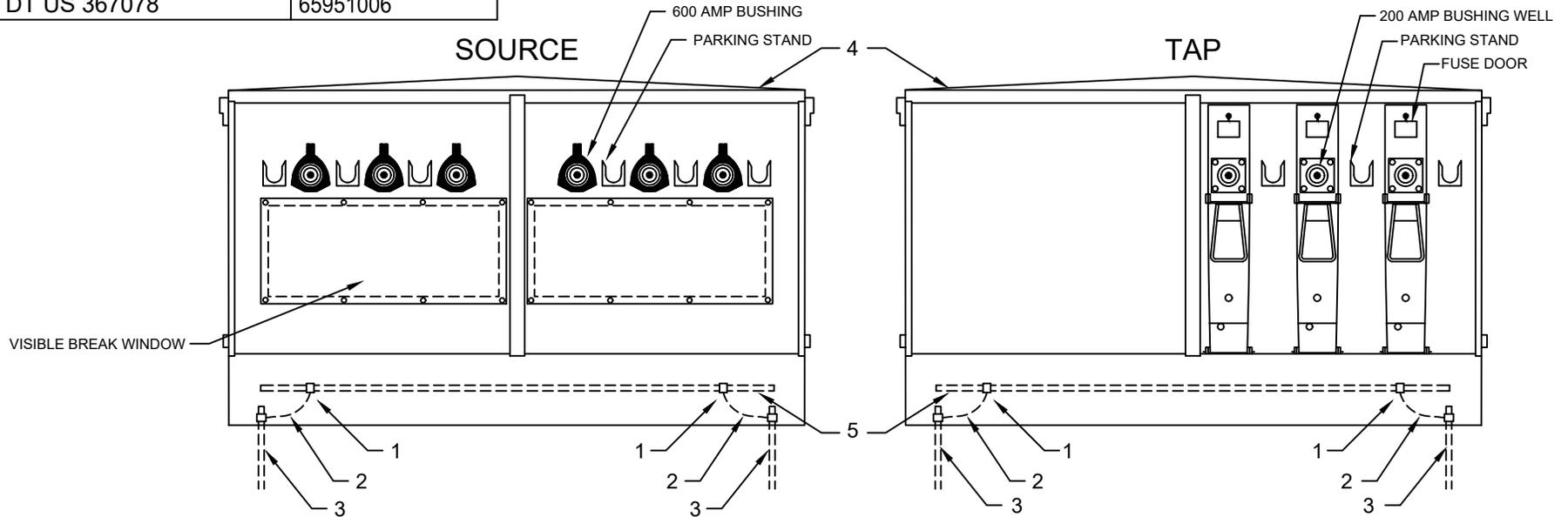
**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 10/25/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

UMS3-3-6  
FILE NAME:  
I:REA\_SPCS\0036

**3 PHASE PADMOUNT SWITCHGEAR (LVS 6)**

ITEM	QTY	ASSET #	INVENTORY NO.
3	2	DT OH 365051	53828508
4	1	DT US 367078	65951006

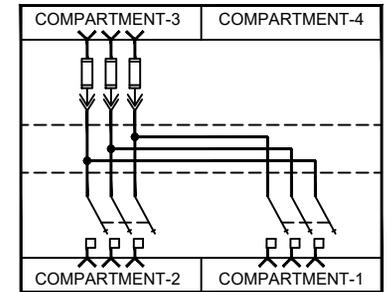


**NOTES:**

1. FOR FIBERGLASS GROUND SLEEVE USE SPECIFICATION UM-116 OR UM-117
2. LOOP GROUND ALL EQUIPMENT GROUNDS.
3. UNIT INCLUDES FUSES FOR ALL 200 AMP BAYS. FOR UNFUSED 200 AMP BAYS, STORE FUSES IN THE DOOR.
4. FUSE SIZES SPECIFIED BY THE OWNER.
5. ITEMS NOT INCLUDED IN THIS SPECIFICATION ARE: GROUND SLEEVE, 600 AMP ELBOWS, 200 AMP ELBOWS, & PRIMARY WIRE MAKEUP.
6. SIGNAGE AS SPECIFIED IN GUIDELINES.
7. SPACE GROUND RODS A MIN. OF 6 FOOT APART.

**NOT FOR NEW CONSTRUCTION**

FUSE CHART		
SMU 20 FUSE	14.4KV RATING	INVENTORY
7E	14 AMPS	24500907
15E	30 AMPS	24500915
25E	50 AMPS	24500925
40E	80 AMPS	24500940
65E	130 AMPS	24500965
80E	160 AMPS	24500980
100E	200 AMPS	24501000



**CONNECTION DIAGRAM**

ITEM	QTY'	MATERIAL	INVENTORY #	ITEM	QTY'	MATERIAL	INVENTORY #	ISSUE DATE:
1	4	HOT LINE GROUND CLAMP	114139XX	5	2	5/8" COPPERCLAD GROUND BUS	-	12/27/95
2	AS REQ'D	#2 COPPER WIRE (GROUND)	15620200	6	3	200A LOADBREAK BUSHING INSERTS	41620100	DRAWN BY: DLH
3	4	5/8" x 8' COPPERCLAD GROUND ROD	53828508	7	3	S&C SMU FUSES	-	APP BY: MFJ
4	1	SWITCHGEAR CABINET	65951006	4	4	Clamp, Ground Rod	11311000	REVISED DATE: 1/8/25

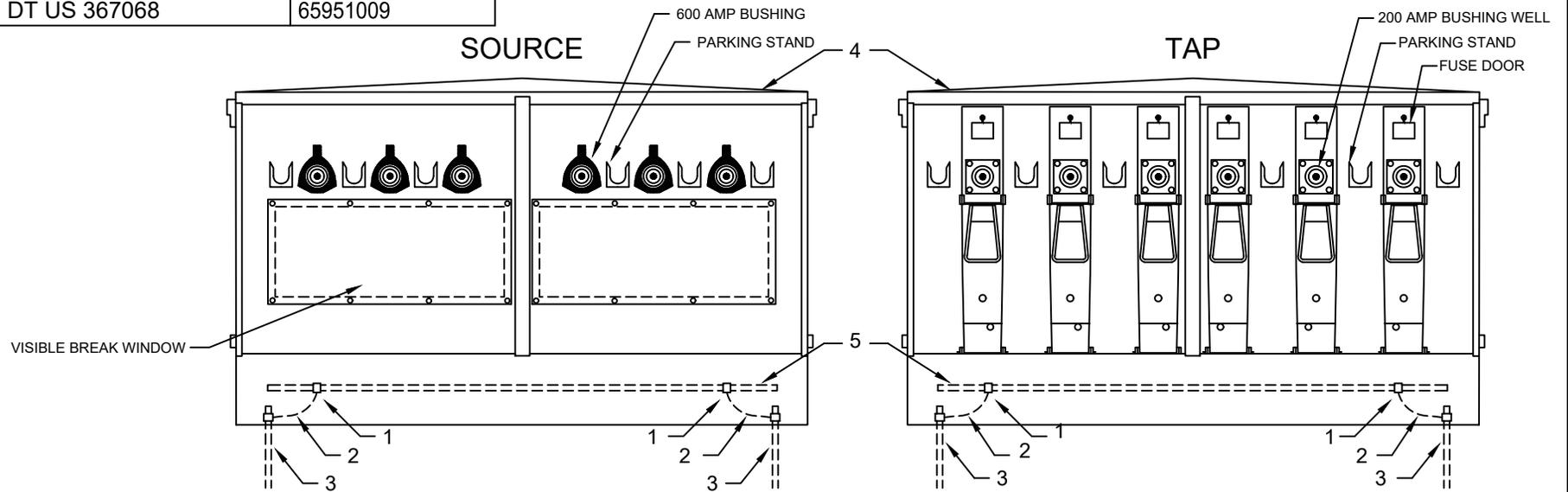
**CORE ELECTRIC COOPERATIVE**

**3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (6)**



UIMS3-3-6A  
FILE NAME: I:\REA\_SPCS\004T

ITEM	QTY	ASSET #	INVENTORY NO.
3	2	DT OH 365051	53828508
4	1	DT US 367068	65951009

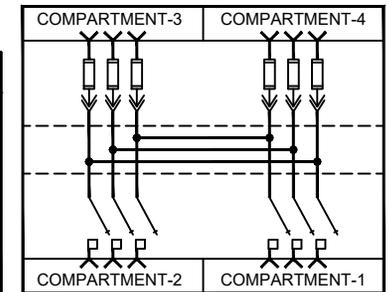


S&C SMU-20 FUSE UNIT  
 CATALOG # 6120-  
 WITH S&C SMU-20 FUSE UNIT  
 END FITTING AND SILENCER  
 CATALOG # 3093

**NOTES:**

- FOR FIBERGLASS GROUND SLEEVE USE SPECIFICATION UM-116 OR UM-117
- LOOP GROUND ALL EQUIPMENT GROUNDS.
- UNIT INCLUDES FUSES FOR ALL 200 AMP BAYS. FOR UNFUSED 200 AMP BAYS, STORE FUSES IN THE DOOR.
- FUSE SIZES SPECIFIED BY THE OWNER.
- ITEMS NOT INCLUDED IN THIS SPECIFICATION ARE:  
 GROUND SLEEVE, 600 AMP ELBOWS, 200 AMP ELBOWS, & PRIMARY WIRE MAKEUP.
- SIGNAGE AS SPECIFIED IN GUIDELINES.
- SPACE GROUND RODS A MIN. OF 6 FOOT APART.

FUSE CHART		
SMU 20 FUSE	14.4KV RATING	INVENTORY
7E	14 AMPS	24500907
15E	30 AMPS	24500915
25E	50 AMPS	24500925
40E	80 AMPS	24500940
65E	130 AMPS	24500965
80E	160 AMPS	24500980
100E	200 AMPS	24501000



CONNECTION DIAGRAM

ITEM	QTY'	MATERIAL	INVENTORY #	ITEM	QTY'	MATERIAL	INVENTORY #
1	4	HOT LINE GROUND CLAMP	114139XX	5	2	5/8" COPPERCLAD GROUND BUS	-
2	AS REQ'D	#2 COPPER WIRE (GROUND)	15620200	6	6	200A LOADBREAK BUSHING INSERTS	41620100
3	4	5/8" x 8' COPPERCLAD GROUND ROD	53828508	7	6	S&C SMU FUSES	-
4	1	SWITCHGEAR CABINET	65951009	4	4	Clamp, Ground Rod	11311000

CORE ELECTRIC COOPERATIVE

3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (9)

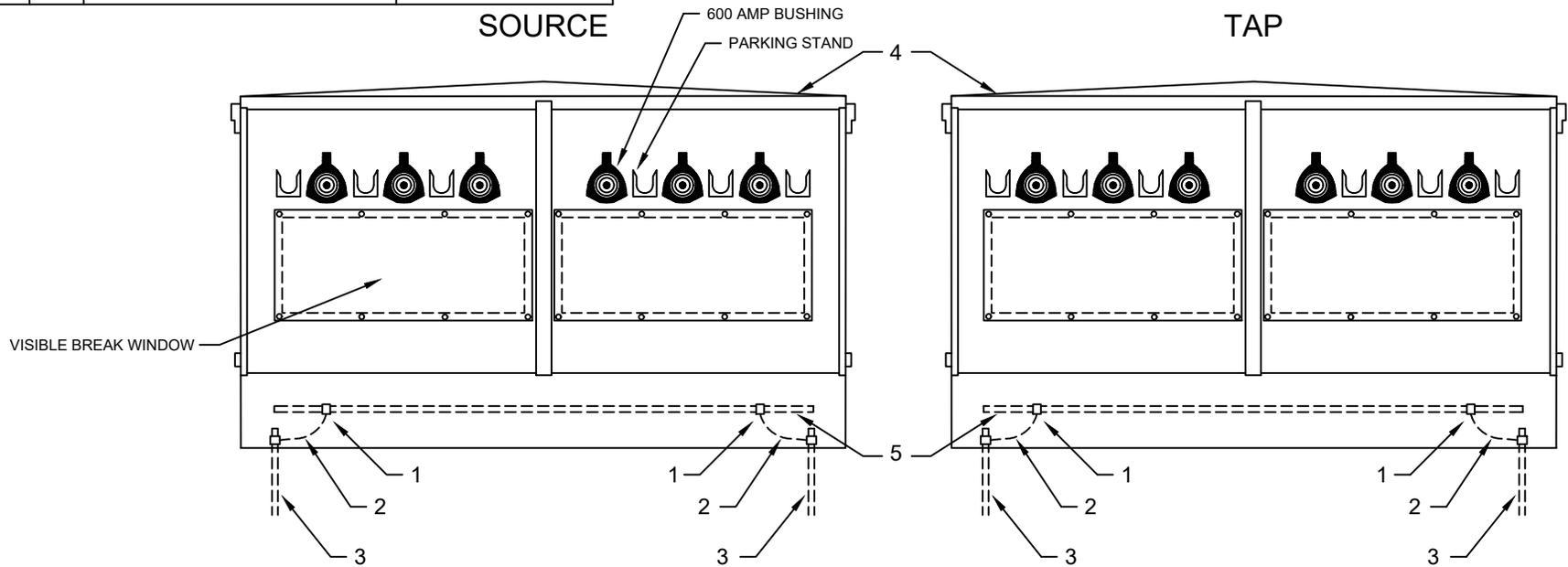


ISSUE DATE: 12/27/95  
 DRAWN BY: DLH  
 APP BY: MFJ

REVISED DATE: 1/8/25

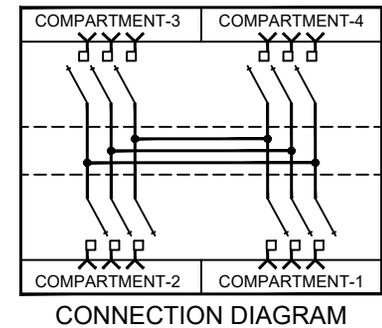
UMS3-3-9A  
 FILE NAME: I:\REA\_SPCS\004S

ITEM	QTY	ASSET #	INVENTORY NO.
3	2	DT OH 365051	53828508
4	1	DT US 367068	65951010



**NOTES:**

1. FOR FIBERGLASS GROUND SLEEVE USE SPECIFICATION UM-116 OR UM-117.
2. LOOP GROUND ALL EQUIPMENT GROUNDS.
3. ITEMS NOT INCLUDED IN THIS SPECIFICATION ARE:  
GROUND SLEEVE, 600 AMP ELBOWS & PRIMARY WIRE MAKEUP.
4. SIGNAGE AS SPECIFIED IN GUIDELINES.
5. SPACE GROUND RODS A MIN. OF 6 FOOT APART.



ITEM	QTY'	MATERIAL	INVENTORY #	ITEM	QTY'	MATERIAL	INVENTORY #
1	4	HOT LINE GROUND CLAMP	114139XX	5	2	5/8" COPPERCLAD GROUND BUS	-
2	AS REQ'D	#2 COPPER WIRE (GROUND)	15620200	6	2	EQUIPMENT LOCKS AS SPECIFIED (NOT SHOWN IN DRAWING)	-
3	4	5/8" x 8' COPPERCLAD GROUND ROD	53828508	4	4	Clamp, Ground Rod	11311000
4	1	SWITCHGEAR CABINET	65951010				

**CORE ELECTRIC COOPERATIVE**

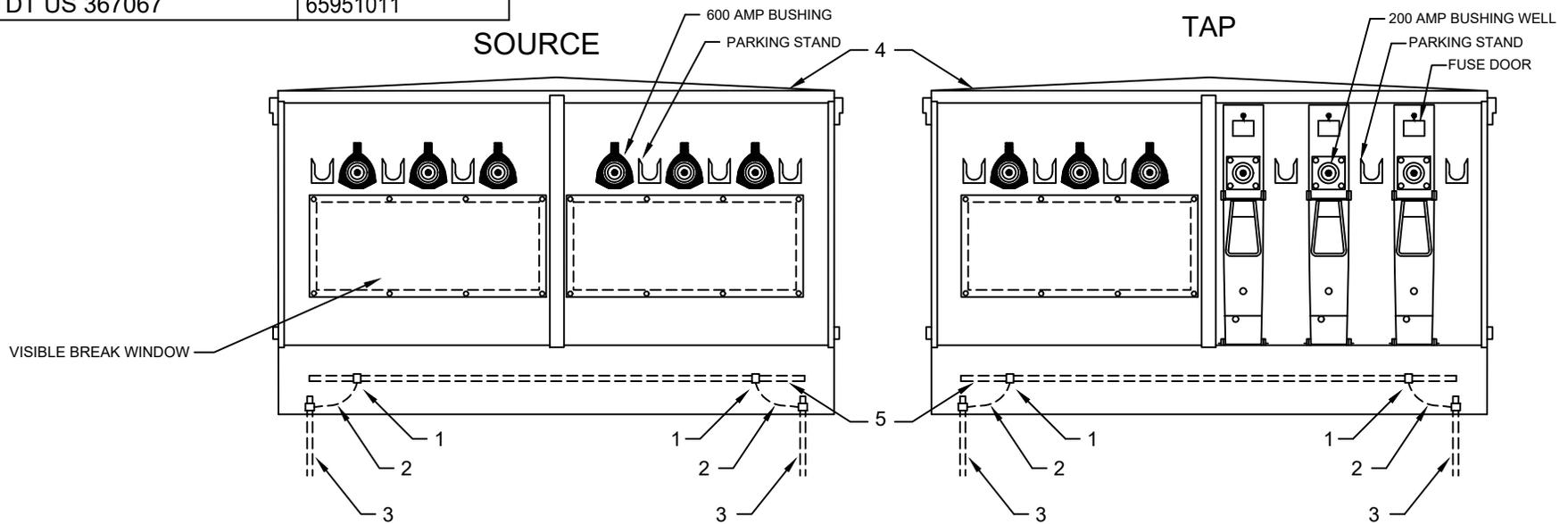
**3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (10)**



ISSUE  
DATE: 12/27/95  
DRAWN  
BY: DLH  
APP  
BY: MFJ  
REVISED  
DATE: 1/8/25

UMS3-3-10A  
FILE NAME:  
I:\REA\_SPCS004R

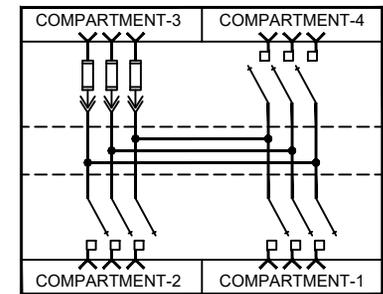
ITEM	QTY	ASSET #	INVENTORY NO.
3	2	DT OH 365051	53828508
4	1	DT US 367067	65951011



**NOTES:**

1. FOR FIBERGLASS GROUND SLEEVE USE SPECIFICATION UM-116 OR UM-117
2. LOOP GROUND ALL EQUIPMENT GROUNDS.
3. UNIT INCLUDES FUSES FOR ALL 200 AMP BAYS. FOR UNFUSED 200 AMP BAYS, STORE FUSES IN THE DOOR.
4. FUSE SIZES SPECIFIED BY THE OWNER.
5. ITEMS NOT INCLUDED IN THIS SPECIFICATION ARE: GROUND SLEEVE, 600 AMP ELBOWS, 200 AMP ELBOWS, & PRIMARY WIRE MAKEUP.
6. SIGNAGE AS SPECIFIED IN GUIDELINES.
7. SPACE GROUND RODS A MIN. OF 6 FOOT APART.

FUSE CHART		
SMU 20 FUSE	14.4KV RATING	INVENTORY
7E	14 AMPS	24500907
15E	30 AMPS	24500915
25E	50 AMPS	24500925
40E	80 AMPS	24500940
65E	130 AMPS	24500965
80E	160 AMPS	24500980
100E	200 AMPS	24501000



**CONNECTION DIAGRAM**



ITEM	QTY'	MATERIAL	INVENTORY #	ITEM	QTY'	MATERIAL	INVENTORY #
1	4	HOT LINE GROUND CLAMP	114139XX	5	2	5/8" COPPERCLAD GROUND BUS	-
2	AS REQ'D	#2 COPPER WIRE (GROUND)	15620200	6	3	200A LOADBREAK BUSHING INSERTS	41620100
3	4	5/8" x 8' COPPERCLAD GROUND ROD	53828508	3	3	S&C SMU 20 FUSES	-
4	1	SWITCHGEAR CABINET	65951011	4	4	Clamp, Ground Rod	11311000

**CORE ELECTRIC COOPERATIVE**

**3 PHASE PADMOUNT AIR BREAK SWITCHGEAR (11)**

ISSUE DATE:	12/27/95
DRAWN BY:	DLH
APP BY:	MFJ
REVISED DATE:	1/8/25
FILE NAME:	1\REA_SPCS\004Q

UMS3-3-11A



## **CUBICLES**

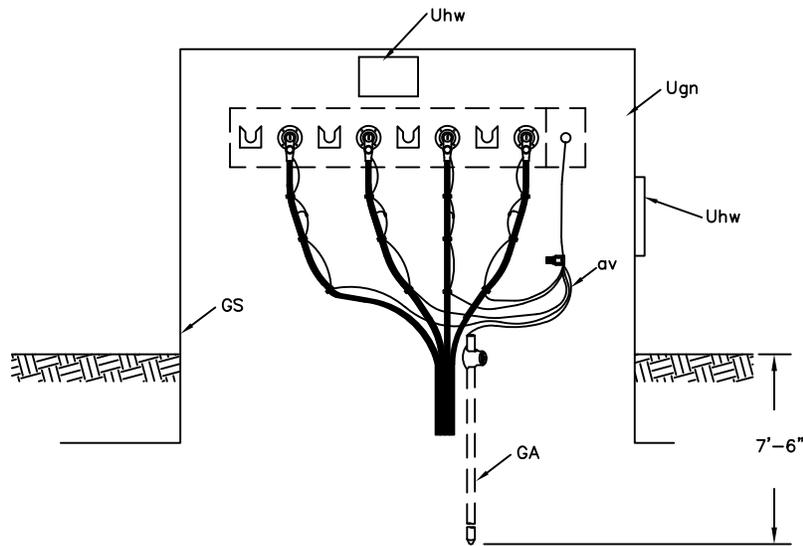


# CUBICLES

PAGE	DRAWING	DESCRIPTION
6.01	UM3-14	SINGLE PHASE SECTIONALIZING ENCLOSURE PAD OR SLEEVE MOUNTED
6.02	UM33	MULTI PHASE SECTIONALIZING ENCLOSURE PAD OR SLEEVE ASSEMBLY
6.03	UMS-33	3 PHASE 600 AMP DEADEND CABINET



ITEM	QTY	ASSET #	INVENTORY NO.
Ugn	1	DT UD 367052	16601040
GA	1	DT OH 365051	53828508



UM3-14

NOTE:

1. THE FOLLOWING UNITS/ASSEMBLIES ARE A PART OF THIS UNIT.
  - A. 4 WAY MULTIPOINT TERMINATION AND OTHER ACCESSORIES
  - B. GROUNDING ASSEMBLY UM6-6 OR OTHER
  - C. GROUND SLEEVE
2. INSTALL SIGNAGE AND TAGGING AS REQUIRED.
3. ALL CABLES PROPERLY IDENTIFIED AND TAGGED.
4. PRIMARY WIRE AND 200 AMP LOAD BREAK ELBOWS ARE NOT PART OF THIS SPECIFICATION.
5. PADLOCK NOT SHOWN ON DRAWING.

ITEM	QTY.	MATERIAL	INVENTORY NO.
p		Connectors, as required	-
av		Jumpers, as required	-
Ugn	1	Enclosure	16601040
Uhw	2	Signs as required	-
	1	Equipment lock as specified	-
GS	1	Ground Sleeve	16605000
GA	1	Ground Rod Assembly (UM6-6)	53828508
	1	Clamp, Ground Rod	11311000

CORE ELECTRIC COOPERATIVE



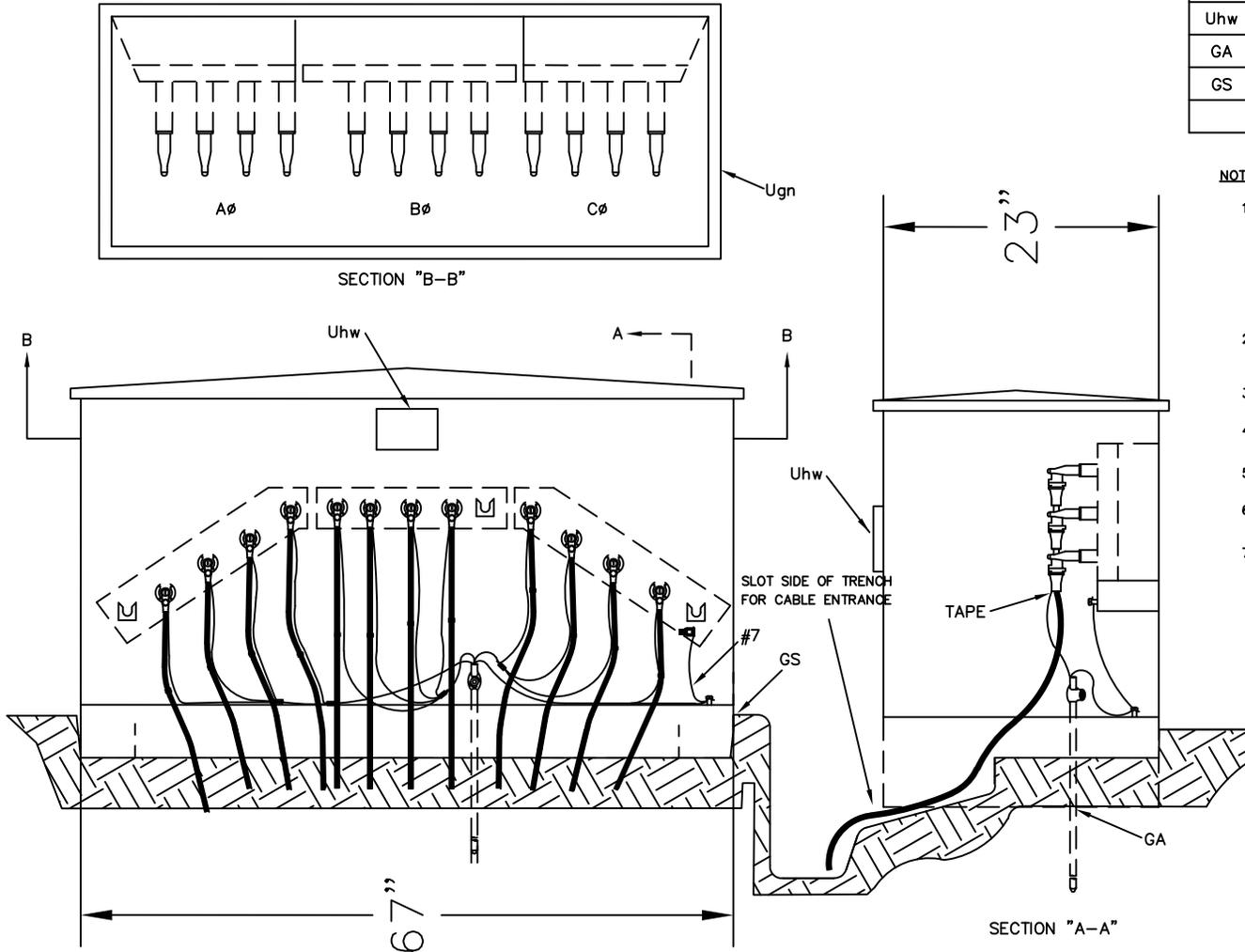
ISSUE  
 DATE: 09/28/90  
 DRAWN  
 BY: CSK  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 4/14/22

SINGLE PHASE SECTIONALIZING ENCLOSURE SLEEVE MOUNTED

UM3-14  
 FILE NAME:  
 : \REA\_SPCS\0022

ITEM	QTY	ASSET #	INVENTORY NO.
Ugn	1	DT UD 367054	16603040
GA	1	DT OH 365051	53828508
GS	1	DT LM 367077	71751600

ITEM	QTY.	MATERIAL	INVENTORY NO.
p		Connectors, as required	—
av		Jumpers, as required	—
	1	Equipment lock as specified.	—
Ugn	1	Enclosure	16603040
Uhw	2	Signs as required	—
GA	1	Ground Rod Assembly (UM6-6)	53828508
GS	1	Ground Sleeve	71751600
	1	Clamp, Ground Rod	1131000



**NOTES:**

1. THE FOLLOWING UNITS/ASSEMBLIES ARE A PART OF THIS UNIT.
  - A. 4 POINT MULTIPOINT TERMINATIONS AND OTHER ACCESSORIES
  - B. GROUNDING ASSEMBLY UM6-6
  - C. GROUND SLEEVE
2. ALL NEUTRALS AND METALLIC NON-CURRENT CARRYING PARTS SHALL BE INTERCONNECTED AND GROUNDED.
3. INSTALL SIGNAGE AND TAGGING AS REQUIRED.
4. UNIT TO INCLUDE LOCKING DEVICE, NOT SHOWN ON DRAWING.
5. ALL CABLES SHALL PROPERLY IDENTIFIED AND TAGGED
6. 200 AMP LOAD BREAK ELBOWS AND PRIMARY WIRE ARE NOT PART OF THIS SPECIFICATION.
7. #2 COPPER GROUND WIRE



ISSUE

DATE: 10/15/90

DRAWN

BY: CSK

APP

BY:

REVISED

DATE: 12/29/21

UM33

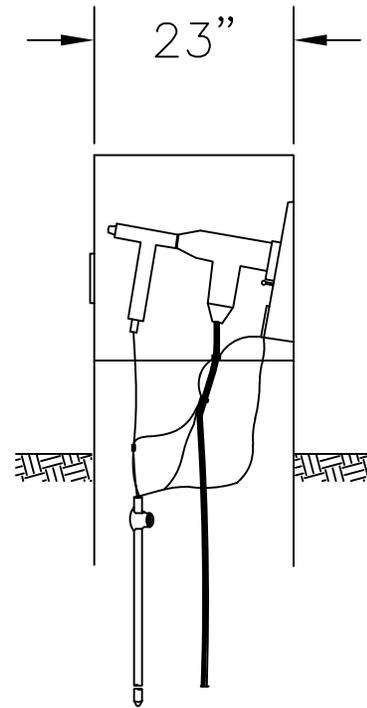
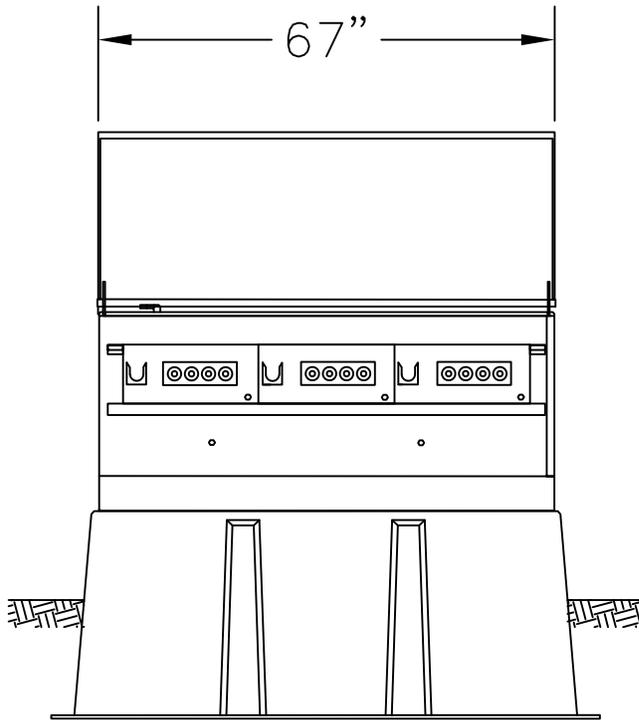
FILE NAME:

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CORE ELECTRIC COOPERATIVE

MULTI PHASE SECTIONALIZING ENCLOSURE PAD OR SLEEVE ASSEMBLY

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT UD 367054	16604000
5	1	DT OH 365051	53828508
2	1	DT LM 367077	71751600



CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.
1	67" CABINET	16604000
2	GROUND SLEEVE	71751600
3	* COMPRESSTION AS REQUIRED	-
4	CONNECTOR, AS REQUIRED	-
5	5/8" X 8' COPPERCLAD GROUND ROD	53828508
6	#2 COPPER GROUND WIRE AS REQUIRED	15620200
11	WARNING SIGN, CABLE TAGS	-
12	LOCKING DEVICE AS SPECIFIED	-
1	CLAMP, GROUND ROD	11311000

**NOTES:**

1. ITEMS NOT INCLUDED IN THIS SPECIFICATION:
  - #7 - 600 AMP "T" BODY ELBOW SPECIFICATION #UM6-10
  - #9 - 600 TO 200 AMP REDUCING TAP INSERT
  - #10 - 9 KV METAL OXIDE DEAD FRONT ELBOW ARRESTER SPECIFICATION #UM-LA
2. LOOP GROUND CABINET, CONCENTRICS AND ARRESTER GROUND LEADS.
3. ATTACH CONCENTRICS AND ARRESTER GROUND LEADS TO GROUND LOOP WITH SPLIT BOLT CONNECTORS. KEEP ARRESTER GROUND LEADS SHORT.
4. THE PORTION OF GROUND LEAD BEYOND THE SPLIT BOLT SHOULD BE TAPED TO THE GROUND LOOP.
5. PRIMARY WIRE IS NOT PART OF THE UNIT SPECIFICATION.
6. ALL CABLES PROPERLY IDENTIFIED AND TAGGED.

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	08/14/91
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	12/29/21

## 3-PHASE 600 AMP CABINET

UMS-33  
FILE NAME:



# **PAD MOUNTED TRANSFORMERS**



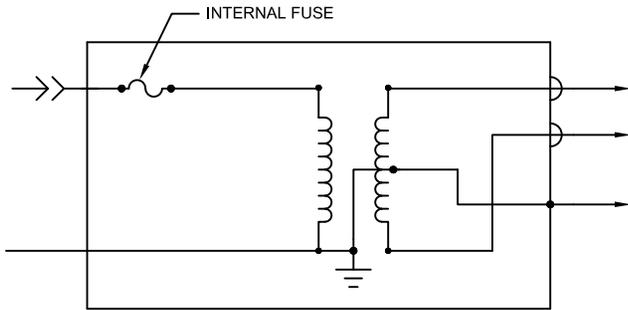
# PAD MOUNTED TRANSFORMERS

PAGE	DRAWING	DESCRIPTION
7.01	UG7	SINGLE PHASE PAD MOUNTED TRANSFORMER (LOOP FEED) 120/240V
7.02	UG17-2	THREE PHASE PAD MOUNTED TRANSFORMER (120/208V, 277/480V)



ITEM	QTY	ASSET #	INVENTORY NO.
GA	1	DT OH 365051	53828508

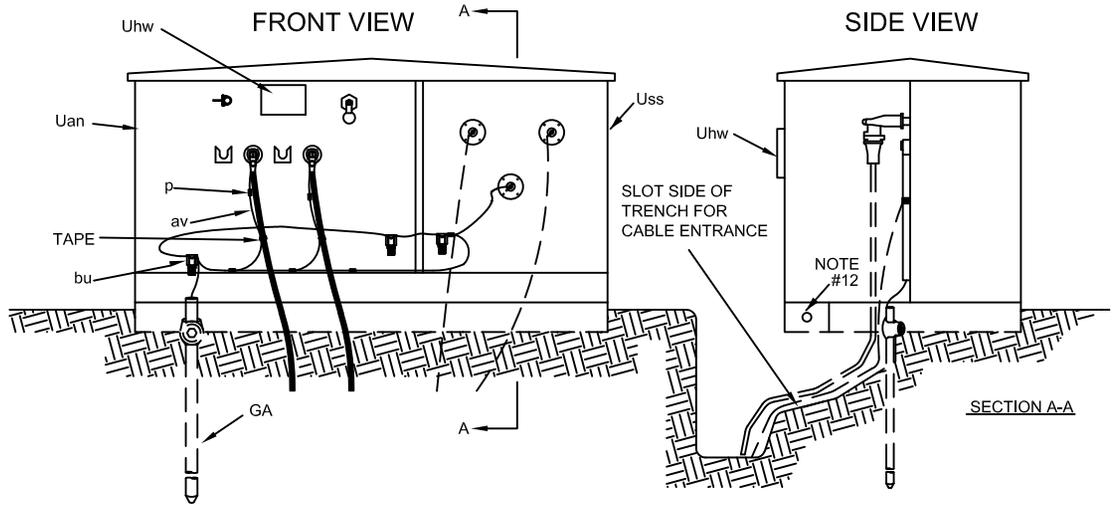
UG7-15	15 kVA	1Ø	120/240	DT UG 368083	36820010
UG7-25	25 kVA	1Ø	120/240	DT UG 368086	36820011
UG7-37.5	37.5 kVA	1Ø	120/240	DT UG 368088	36820012
UG7-50	50 kVA	1Ø	120/240	DT UG 368091	36820013
UG7-75	75 kVA	1Ø	120/240	DT UG 368093	36820014
UG7-100	100 kVA	1Ø	120/240	DT UG 368095	36820015
UG7-167	167 kVA	1Ø	120/240	DT UG 368099	36820016



WIRING DIAGRAM

UG7

- NOTES:
- ONLY THE WYE-WYE CONNECTION SHOULD BE USED TO MINIMIZE FERRO-RESONANCE.
  - TRAIN CABLE AS SHOWN
  - SPECIFY PAD OR VAULT UNIT SEPARATELY. (UM1-1) or (UMH 114)
  - INSTALL SIGNAGE AND TAGGING AS REQUIRED.
  - GROUNDING. #2 GROUND WIRE SHALL BE ATTACHED TO ALL CASE GROUNDS PROVIDED.
  - SECONDARY INSULATED LUGS - 8 WAY.
  - PADLOCK NOT SHOWN ON DRAWING.



DESIGNATE AS:

TRANSFORMER WITHOUT SECONDARY BREAKERS	
UG7	UNIT WITH INTERNAL FUSE

- SEE (UM1-1) FOR CLEARANCE SPECIFICATIONS.
- PRIMARY, SECONDARY WIRE AND 200 AMP LOAD BREAK ELBOWS ARE NOT INCLUDED IN THIS SPECIFICATION.
- ALL CABLES PROPERLY IDENTIFIED AND TAGGED.
- STANDARD KVA SIZES: 15, 25, 37.5, 50, 75, 100, 167.5
- 1 1/2" CONDUIT ENTRY HOLE AND CAP FOR TEMP ACCESS
- TIE EACH CABLE GROUND TO GROUND SEPERATELY
- AFTER TRANSFORMER IS SET, REMOVE LIFTING LUGS FROM UNIT

ITEM	QTY	MATERIAL	INVENTORY NO.	ITEM	QTY	MATERIAL	INVENTORY NO.
p	*	Connectors, as required	-	Uhw	*	Signs, as required	-
av	*	#2, copper ground as required	15620200		1	Tape, as required	-
bu	*	Connectors, equipment ground	17212010		2	Equipment lock as specified	-
Uss	3	8 way secondary connection, insulated	42008502	GA	1	Ground rod assembly	53828508
Uan	1	Transformer, pad mounted, single phase w/ 1 load	-				
	*	Break bushing per phase and internal fuses (UG7)	-				



ISSUE  
DATE: 09/17/90  
DRAWN  
BY: CSK  
APP  
BY: MFJ

REVISED  
DATE: 4/14/22

CORE ELECTRIC COOPERATIVE

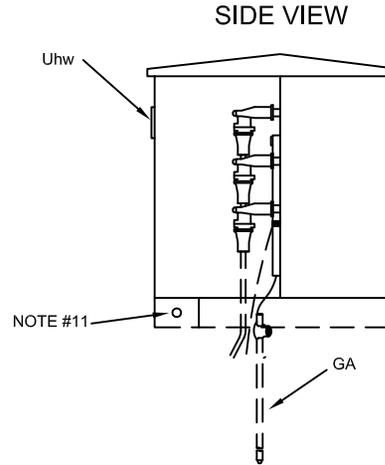
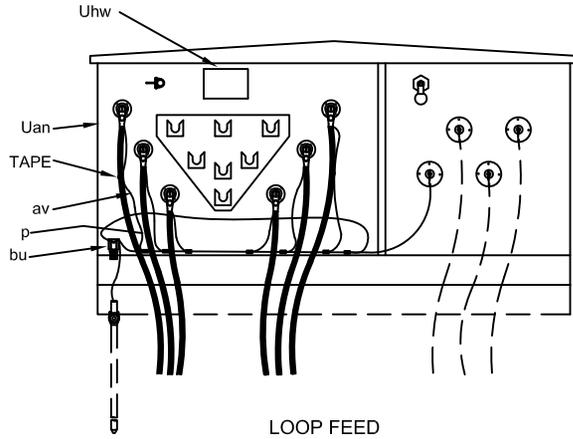
SINGLE PHASE PAD MOUNTED TRANSFORMER (LOOP FEED) 120/240V

UG7  
FILE NAME:  
I:\REA\_SPCS\001D

ITEM	QTY	ASSET #	INVENTORY NO.
GA	1	DT OH 365051	53828508
Uan	1	*see table	*see table

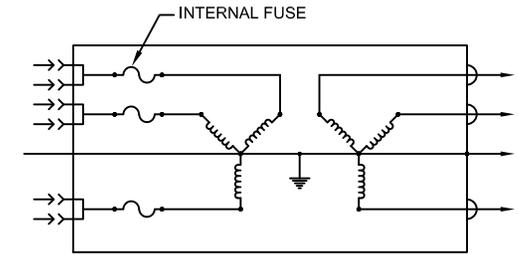
3-PHASE PAD MOUNTED TRANSFORMER (120/208v)

75 kVA	120/208	DT UG 368094	36820030
112 kVA	120/208	DT UG 368145	36820031
150 kVA	120/208	DT UG 368146	36820032
225 kVA	120/208	DT UG 368101	36820033
300 kVA	120/208	DT UG 368103	36820034
500 kVA	120/208	DT UG 368105	36820035
750 kVA	120/208	DT UG 368107	36820036
1000 kVA	120/208	DT UG 368150	36820053



3-PHASE PAD MOUNTED TRANSFORMER (277/480v)

75 kVA	277/480	DT UG 368094	36820042
112.5 kVA	277/480	DT UG 368145	36820043
150 kVA	277/480	DT UG 368146	36820044
225 kVA	277/480	DT UG 368101	36820046
300 kVA	277/480	DT UG 368103	36820047
500 kVA	277/480	DT UG 368105	36820048
750 kVA	277/480	DT UG 368107	36820049
1000 kVA	277/480	DT UG 368137	36820050
1500 kVA	277/480	DT UG 368153	36820051
2000 kVA	277/480	DT UG 368150	36820053
3000 kVA	277/480	DT UG 368148	36820052



NOTES:

- ONLY THE WYE-WYE CONNECTION SHOULD BE USED TO AVOID FERRO-RESONANCE.
- SPECIFY PAD OR VAULT UNIT SEPARATELY.
- INSTALL SIGNAGE AND TAGGING AS REQUIRED.
- EACH LOW VOLTAGE SPADE CONNECTOR SHALL BE 6 HOLE. FOR SIZES 500KVA AND LARGER, CANTILEVER SUPPORTS SHALL BE PROVIDED, ATTACHED TO SPADE AND ANCHORED TO THE TRANSFORMER CABINET.
- PADLOCK NOT SHOWN ON DRAWING.
- SEE SPECIFICATION CLEARANCE GUIDE 2 FOR CLEARANCES.
- PRIMARY, SECONDARY WIRE AND 200 AMP LOAD BREAK ELBOWS ARE NOT INCLUDED IN THIS SPECIFICATION.

8. STANDARD KVA SIZES:

75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 3000  
120/208: 75 - 1000 ONLY  
277/480: ALL STANDARD SIZES

- #2 GROUND WIRE SHALL BE ATTACHED TO ALL CASE GROUNDS PROVIDED.
- ALL PRIMARY CABLES PROPERLY IDENTIFIED AND TAGGED.
- 1 1/2" CONDUIT ENTRY HOLE AND CAP FOR TEMP SERVICE ACCESS.
- TIE EACH CABLE GROUND TO GROUND WIRE SEPARATELY
- AFTER TRANSFORMER IS SET, REMOVE LIFTING LUGS FROM UNIT

ITEM	QTY	MATERIAL	INVENTORY #	ITEM	QTY	MATERIAL	INVENTORY #
p	*	Connectors, as required	-	*	bushing per phase and internal fuses	-	-
Uss	4	6 way secondary connection, insulated	420000XX	Uhw	2	Signs, as required	-
av	*	Jumper, copper as required	15620200	-	Tape, as required	-	-
bu	1	Connector, equipment ground	17212010	1	Equipment lock as specified	-	-
ai	1	Clamp, Ground Rod	11311000	GA	1	Ground Rod	53828508
Uan	1	Transformer, pad mounted, three phase	-				



ISSUE  
DATE: 09/17/90  
DRAWN  
BY: CSK  
APP  
BY:

CORE ELECTRIC COOPERATIVE

REVISED  
DATE: 6/8/22

THREE PHASE PAD MOUNTED TRANSFORMER (120/208v, 277/480v)

UG17-2  
FILE NAME:  
I:\REA\_SPCS\0019



## **CONCRETE UNITS**

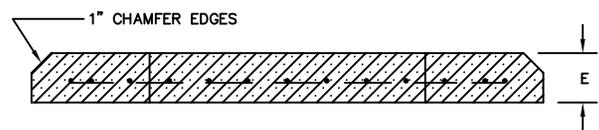
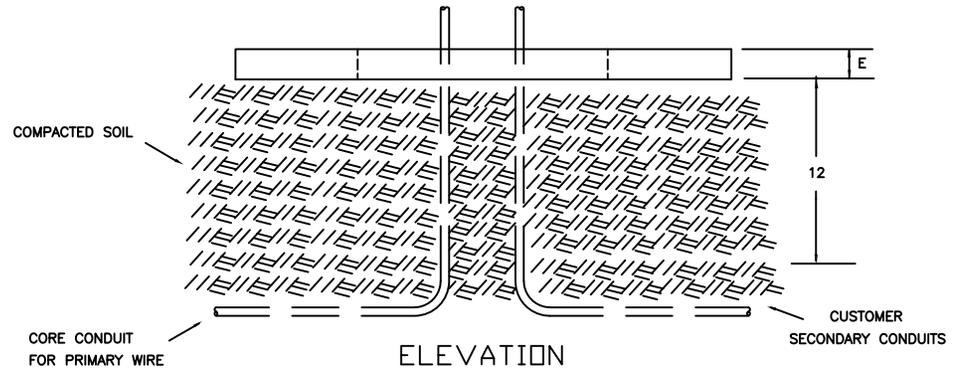
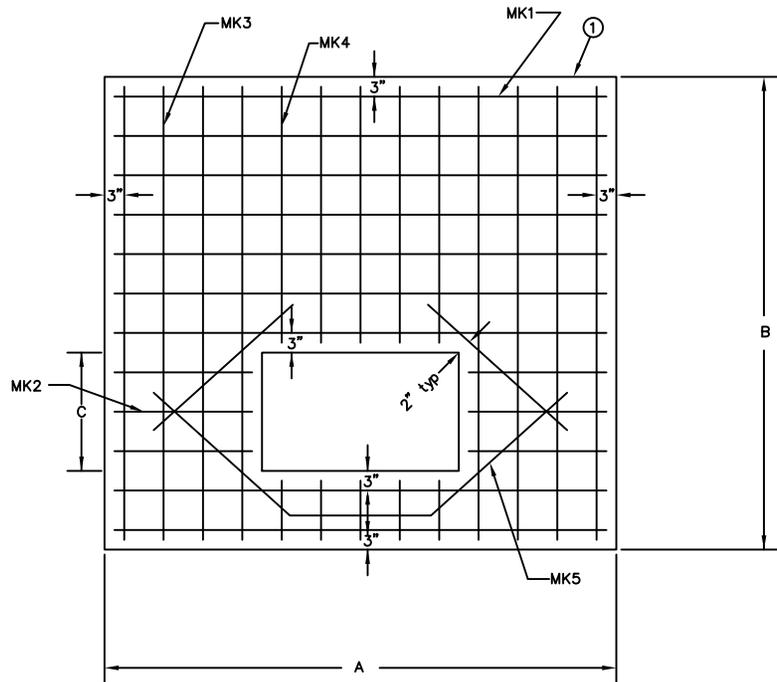


# CONCRETE UNITS

PAGE	DRAWING	DESCRIPTION
8.01	UM1	3 PHASE TRANSFORMER CONCRETE PADS FOR 1000 TO 3000 KVA
8.02	UM1-1	SINGLE PHASE PAD ASSEMBLIES
8.03	UM1-X	SINGLE PHASE PAD ASSEMBLIES
8.04	UM1-5	CONCRETE SWITCH PAD
8.05	UM1-5X	CONCRETE SWITCH PAD
8.06	UM1-6	CONCRETE 1/2 VAULT WITH KNOCKOUTS
8.07	UM1-8	CONCRETE LID FOR VAULT
8.08	UM1-8A	CONCRETE LID FOR VAULT
8.09	UM-100	3 PHASE PAD MOUNT TRANSFORMER VAULT
8.10	UM-110	3 PHASE LVS SWITCHGEAR VAULT
8.11	UM-120	1Ø CONCRETE POWER VAULT
8.12	UM-125	CONCRETE POWER VAULT
8.13	UM-126	4' X 6' CONCRETE VAULT
8.14	UM-127	6' X 9' CONCRETE VAULT
8.15	UM-128	7' X 13'-6" CONCRETE VAULT
8.16	UM-129	7' X 13'-6" CONCRETE VAULT TRAFFIC RATED
8.17	UM-130	TRANSFORMER VAULT
8.18	UM-AB	STREET LIGHT FOUNDATION
8.19	UM-GR1	GRADE RING TRAFFIC RATED
8.20	UM-GR2	GRADE RING TRAFFIC RATED



QTY	ASSET #	INVENTORY NO.
1	DT LM 368125	43400305



3-PHASE TRANSF. KVA 43400305	DIMENSIONS IN INCHES					REINFORCING BARS				
	A	B	C	D	E	MK1	MK2	MK3	MK4	MK5
75, 112.5, 150 225, 300, 500, 750	72	72	8	40	6	10 #4 67"	2 #4 36"	6 #4 67"	6 #4 44"	2 #4 66"

All concrete must meet latest A.S.T.M. C858 requirements along with the following revisions:

- Concrete testing, 4000 pounds per square inch at 28 days of age; 4% to 6% entrained air, 3/4" maximum size aggregate.
- Reinforcing steel, ATSM-A615 grade 60, place approx. 6" O.C. each way and securely tied together.
- Reinforcing bars shall be tied at all corners and crossings by either tack welding or wire tying.
- All reinforcing bars are to be at least 2" from any outside surface.
- All reinforcement bars shall be of size, quantity and spacing that will be sufficient for utility grade normal handling and installation.
- The concrete, after cure time, shall have a finished surface to give a true even surface.
- Outside edges and corners of wire opening shall be chamfered or rounded.
- 10" Min. clearance from combustible walls, windows, doors and air intake.
- To be used with UM1-6 vault(s)



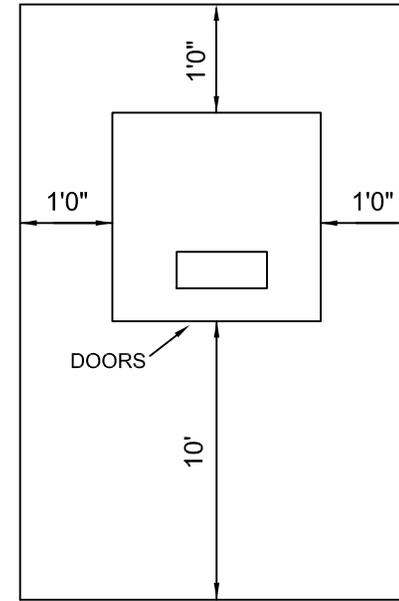
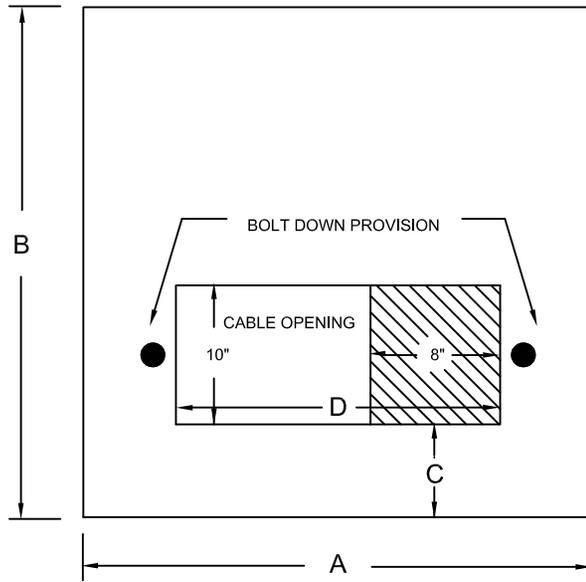
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DATE:	09/24/90
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	4/14/22

CORE ELECTRIC COOPERATIVE

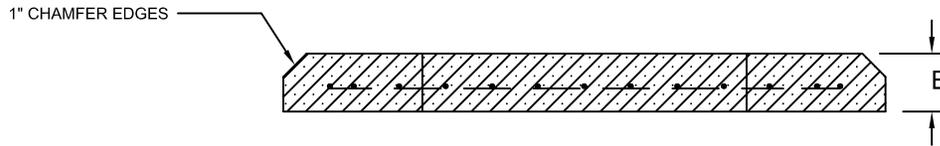
THREE PHASE TRANSFORMER CONCRETE PADS FOR 75 TO 750 KVA

UM1
FILE NAME:

QTY	ASSET #	INVENTORY NO.
1	DT LM 368139	43400102



MINIMUM WORK CLEARANCE PLAN



**NOTES:**

- PAD ASSEMBLIES INCLUDE SITE PREPARATION, BEDDING AND DRAINAGE.
- EQUIPMENT SHALL BE SECURED TO PAD IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- CONCRETE TESTING, 400 POUNDS PER SQUARE INCH AT 28 DAYS OF AGE; 4% TO 6% ENTRAINED AIR, 3/4" MAXIMUM SIZE AGGREGATE.
- TOP OF PAD TO BE 3"± ABOVE FINAL GRADE AND LEVELED.
- 10' MIN. CLEARANCE FROM COMBUSTABLE WALLS, WINDOWS, DOORS AND AIR INTAKE.
- FOR ALL 1Ø TRANSFORMER SIZES
- FOR MINIMUM CLEARANCES FROM WALLS AND STRUCTURES REFER TO DEVELOPER/BUILDER INFORMATION GUIDELINES: PAD-MOUNTED TRANSFORMER LOCATION MAP AND MINIMUM CLEARANCES FROM WALLS AND STRUCTURES.

SINGLE PHASE TRANSF. KVA 43400102	DIMENSIONS IN INCHES				
	A	B	C	D	E
15, 25, 37.5, 50 75, 100, 167	42	46	8	20	6

CORE ELECTRIC COOPERATIVE

SINGLE PHASE PAD ASSEMBLIES

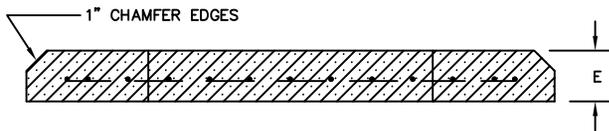
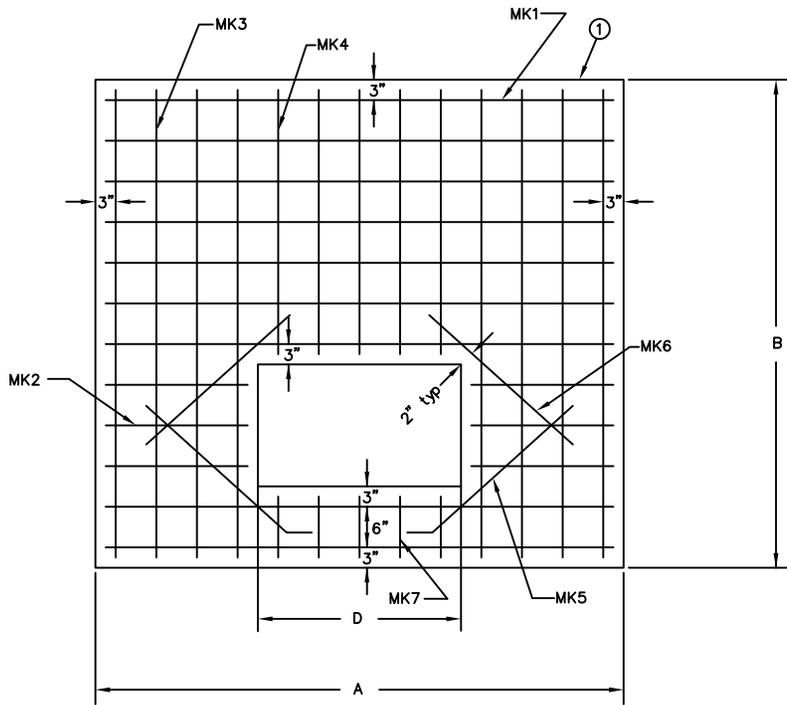


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BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	4/14/22

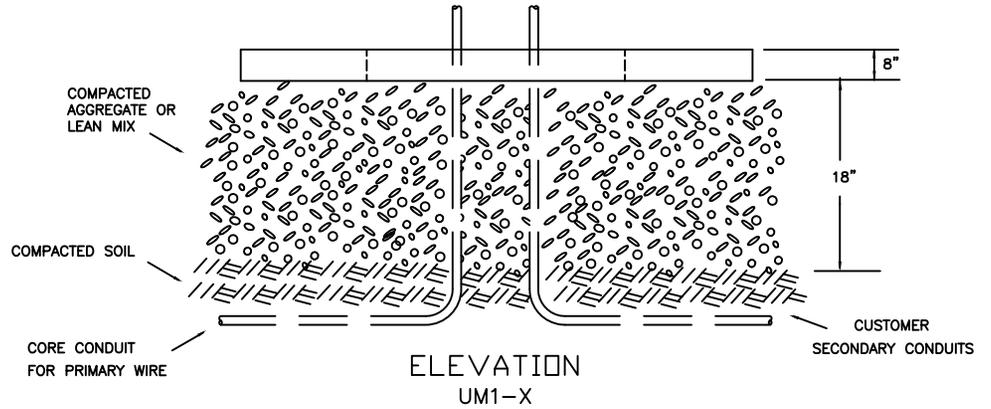
UM1-1

FILE NAME:  
I:\REA\_SPCS\001M

UNIT	QTY	ASSET #	INVENTORY NO.
-	1	DT LM 368125	43400307



3-PHASE TRANSF. KVA 43400307	DIMENSIONS IN INCHES					REINFORCING BARS						
	A	B	C	D	E	MK1	MK2	MK3	MK4	MK5	MK6	MK7
1000, 1500, 3000	96	84	12	48	8	11 #4 91"	6 #4 19"	8 #4 79"	8 #4 49"	2 #4 36"	2 #4 36"	6 #4 8"



All concrete must meet latest A.S.T.M. C858 requirements along with the following revisions:

- Concrete testing, 4000 pounds per square inch at 28 days of age; 4% to 6% entrained air, 3/4" maximum size aggregate.
- Reinforcing steel, ATSM-A615 grade 60, place approx. 6" O.C. each way and securely tied together.
- Reinforcing bars shall be tied at all corners and crossings by either tack welding or wire tying.
- All reinforcing bars are to be at least 2" from any outside surface.
- All reinforcement bars shall be of size, quantity and spacing that will be sufficient for utility grade normal handling and installation.
- The concrete, after cure time, shall have a finished surface to give a true even surface.
- Outside edges and corners of wire opening shall be chamfered or rounded.
- Pad must support a minimum of 18,000 lbs. of transformer loading.

CORE ELECTRIC COOPERATIVE

THREE PHASE TRANSFORMER CONCRETE PADS FOR 1000 TO 3000 KVA

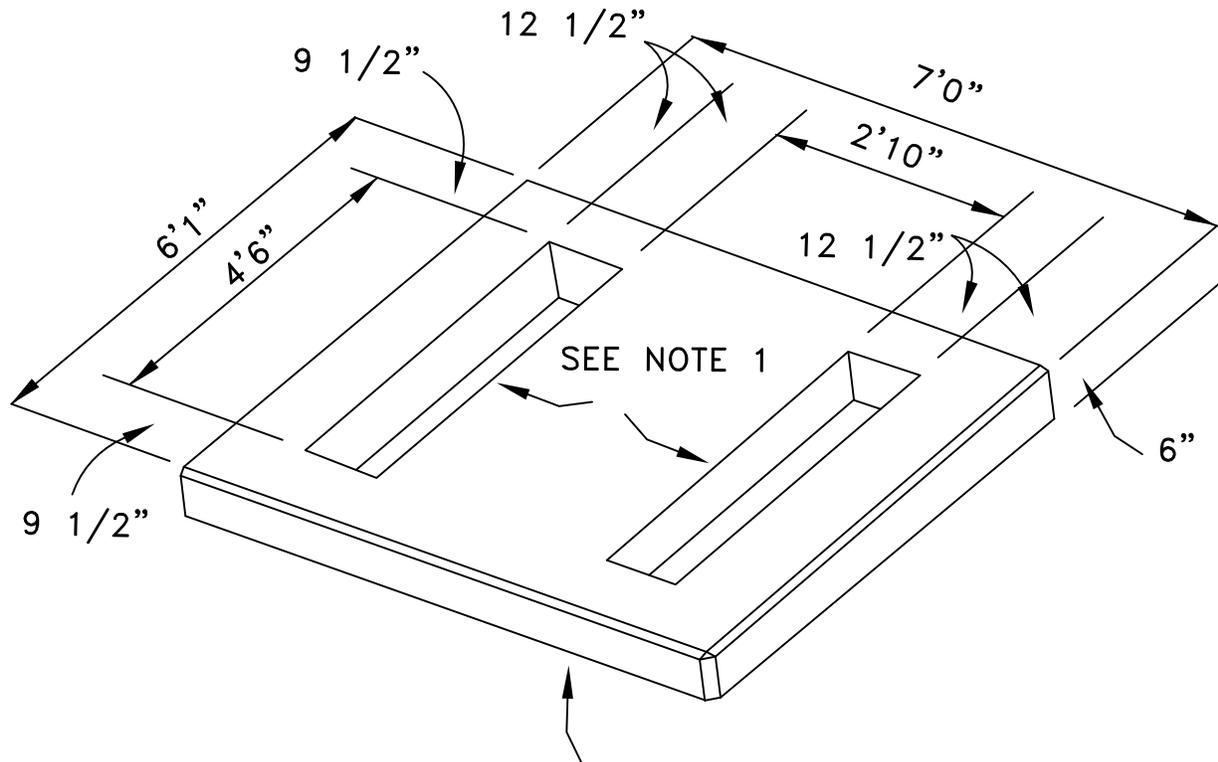


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DATE: 09/24/90  
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BY: CSK  
APP  
BY: MFJ

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DATE: 4/14/22

UM1-X  
FILE NAME:  
:\REA\_SPCS\0010

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368125	43400301



CORE ELECTRIC COOPERATIVE

1" CHAMFER ON ALL EXPOSED EDGES

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	CONCRETE SWITCH PAD	43400301			



ISSUE  
DATE: 05/10/91  
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BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

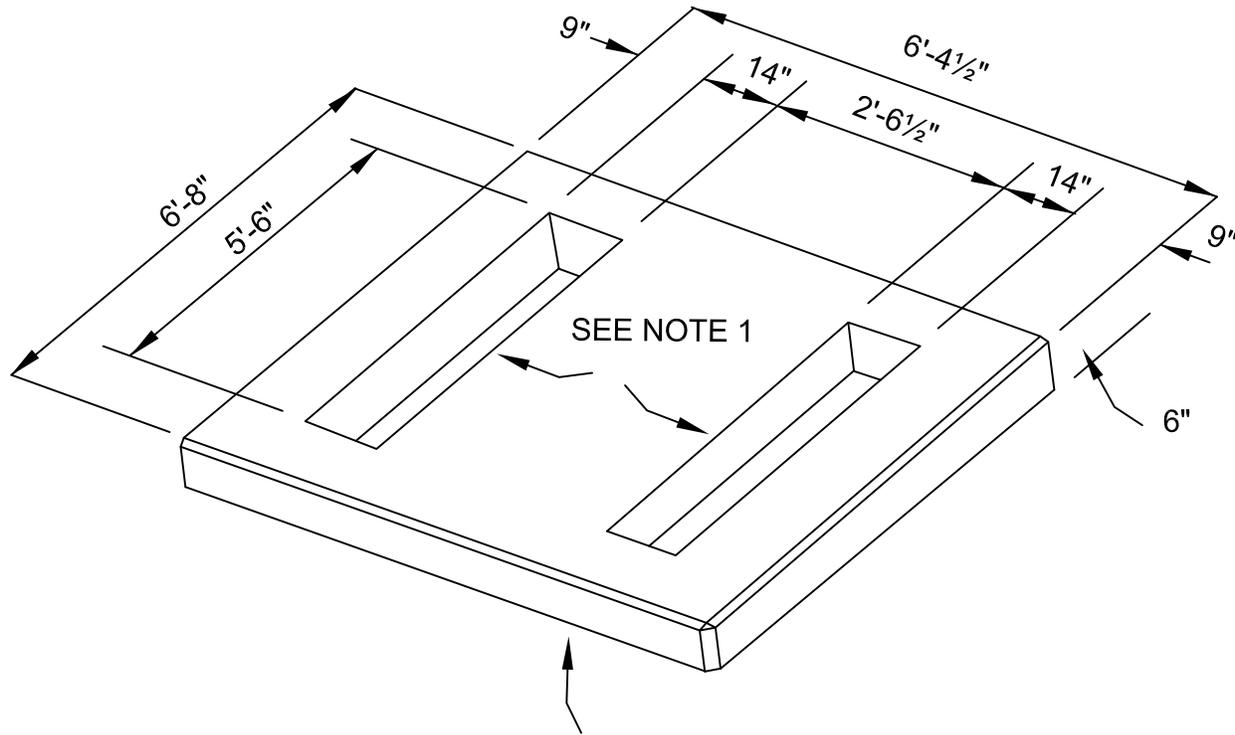
NOTES:

1. EDGES OF CONCRETE KNOCKOUTS AND BLOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE.

CONCRETE SWITCH PAD

UM1-5  
FILE NAME:  
I:\REA\_SPCS\0005

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368125	43400250



CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1 1	CONCRETE SWITCH PAD	43400250			



ISSUE  
DATE: 7/31/12  
DRAWN  
BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

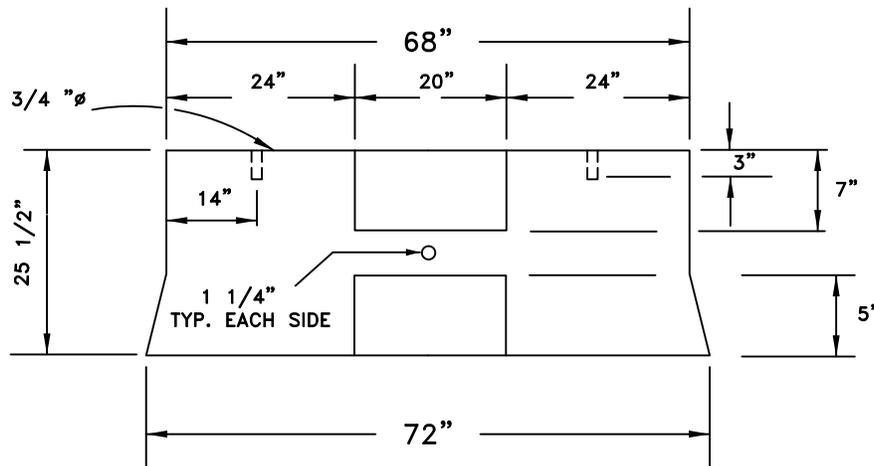
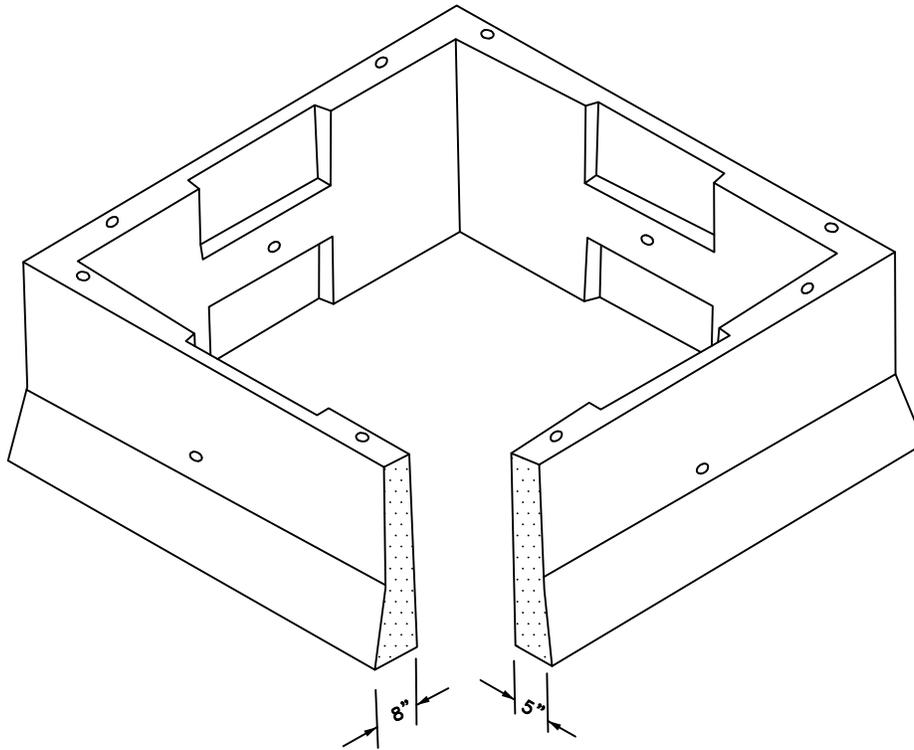
**NOTES:**

1. EDGES OF CONCRETE KNOCKOUTS AND BLOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE.

**CONCRETE SWITCH PAD**

**UM1-5X**  
FILE NAME:  
UM1-5X.dwg

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT US 367077	71755110



CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	1	CONCRETE 1/2 VAULT			71755110



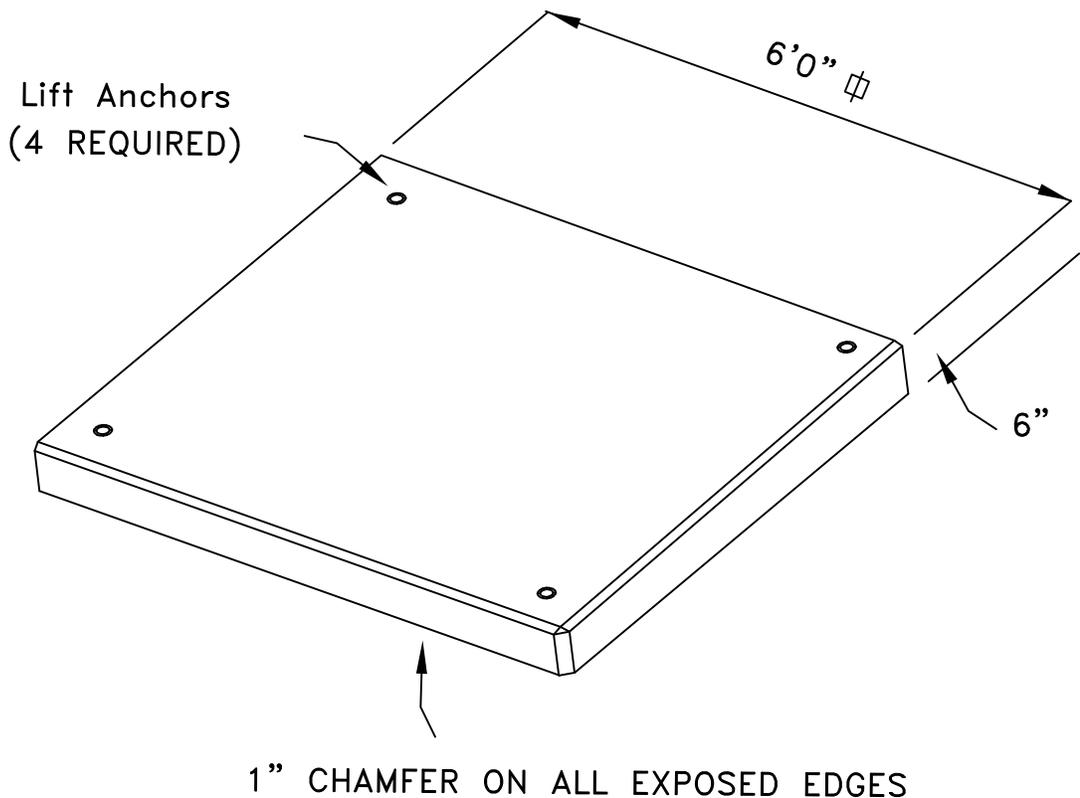
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DATE: 04/10/91  
DRAWN  
BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

**NOTES:**

- TOP AND BOTTOM EDGES OF CONCRETE AND KNOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE.

CONCRETE 1/2 VAULT WITH KNOCKOUTS

UM1-6  
FILE NAME:



NOTE: UNIT TO BE USED WITH UM1-6 VAULTS OR  
UM118 & UM119 FIBERGLASS VAULTS

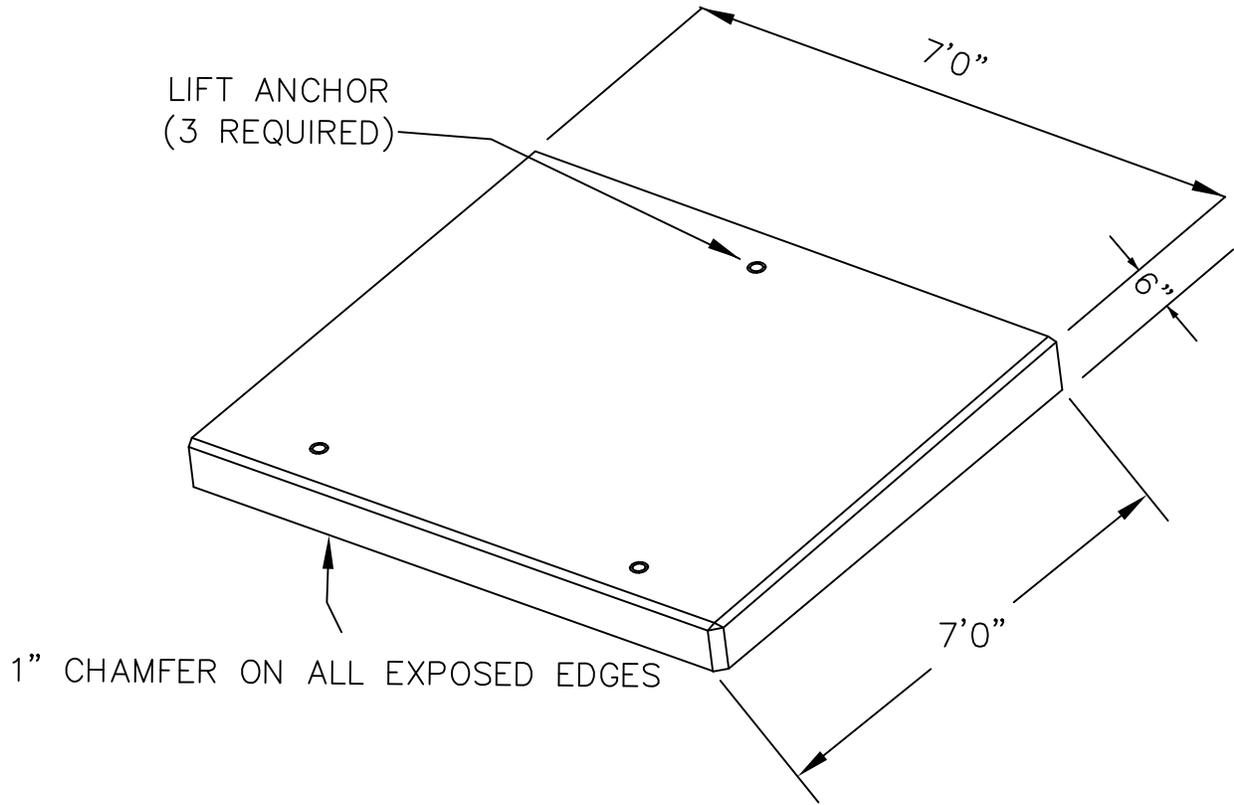
ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	CONCRETE (OR EQUAL) LID	71755100			
	6'x 6'x 6" SOLID				

NOTES:	<b>CORE</b> ELECTRIC COOPERATIVE
	ISSUE DATE: 05/13/91
	DRAWN BY: CSK
	APP BY: MFJ
	REVISED DATE: 4/14/22

CONCRETE LID FOR VAULT	UM1-8 FILE NAME: I:\REA_SPCS\000L
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ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	CONCRETE (OR EQUAL) LID	71755205			
	7'x 7'x 6" SOLID				



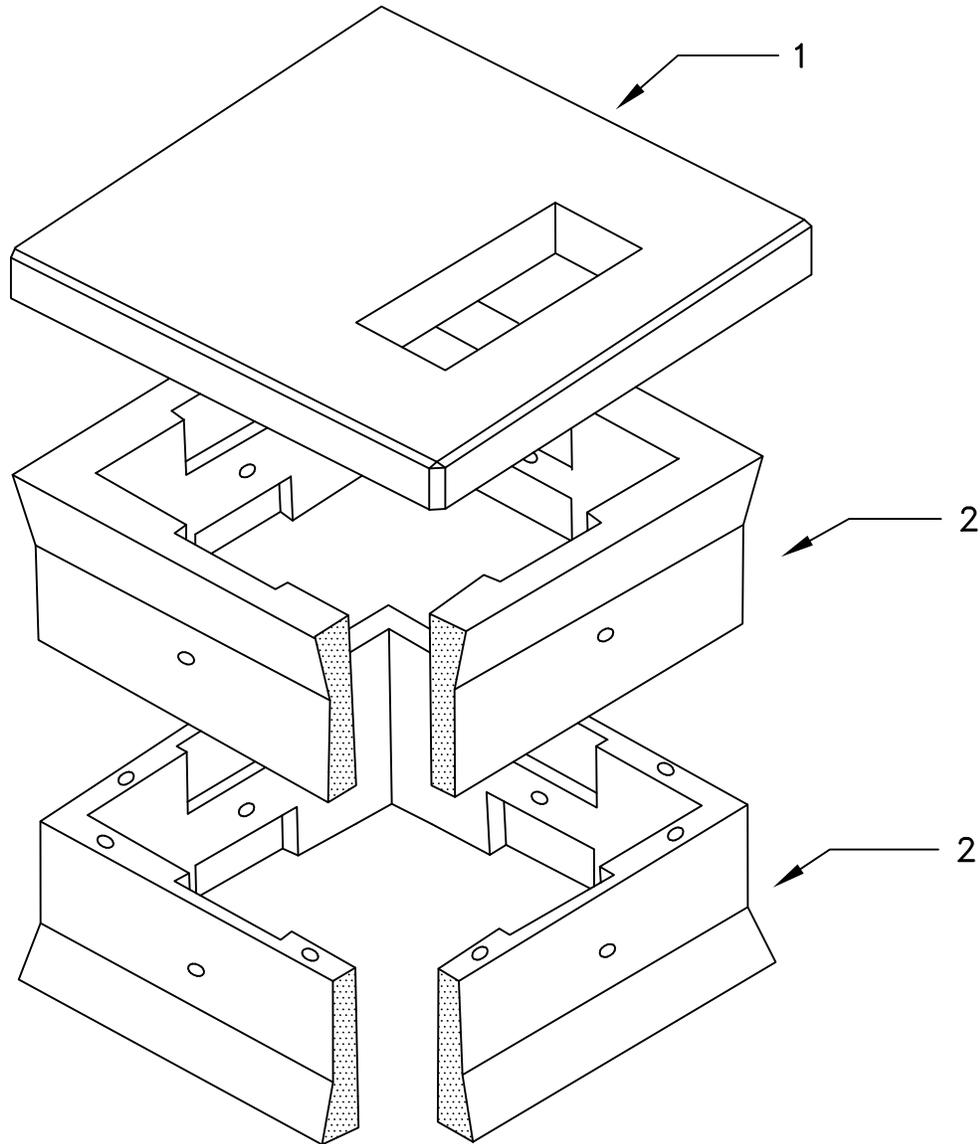
ISSUE DATE: 11/30/95  
 DRAWN BY: DLH  
 APP BY: MFJ  
 REVISED DATE: 4/14/22

NOTES:  
 SOLID PAD FOR FIBERGLASS SWITCHGEAR VAULT

CONCRETE LID FOR VAULT

UM1-8A  
 FILE NAME: REA\_SPCS\004N

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368125	43400305
2	2	DT LM 368142	71755110



CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	CONCRETE TRANSFORMER PAD UM1	43400305			
2	CONCRETE 1/2 VAULT UM1-6	71755110			



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DATE: 05/10/91  
DRAWN  
BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

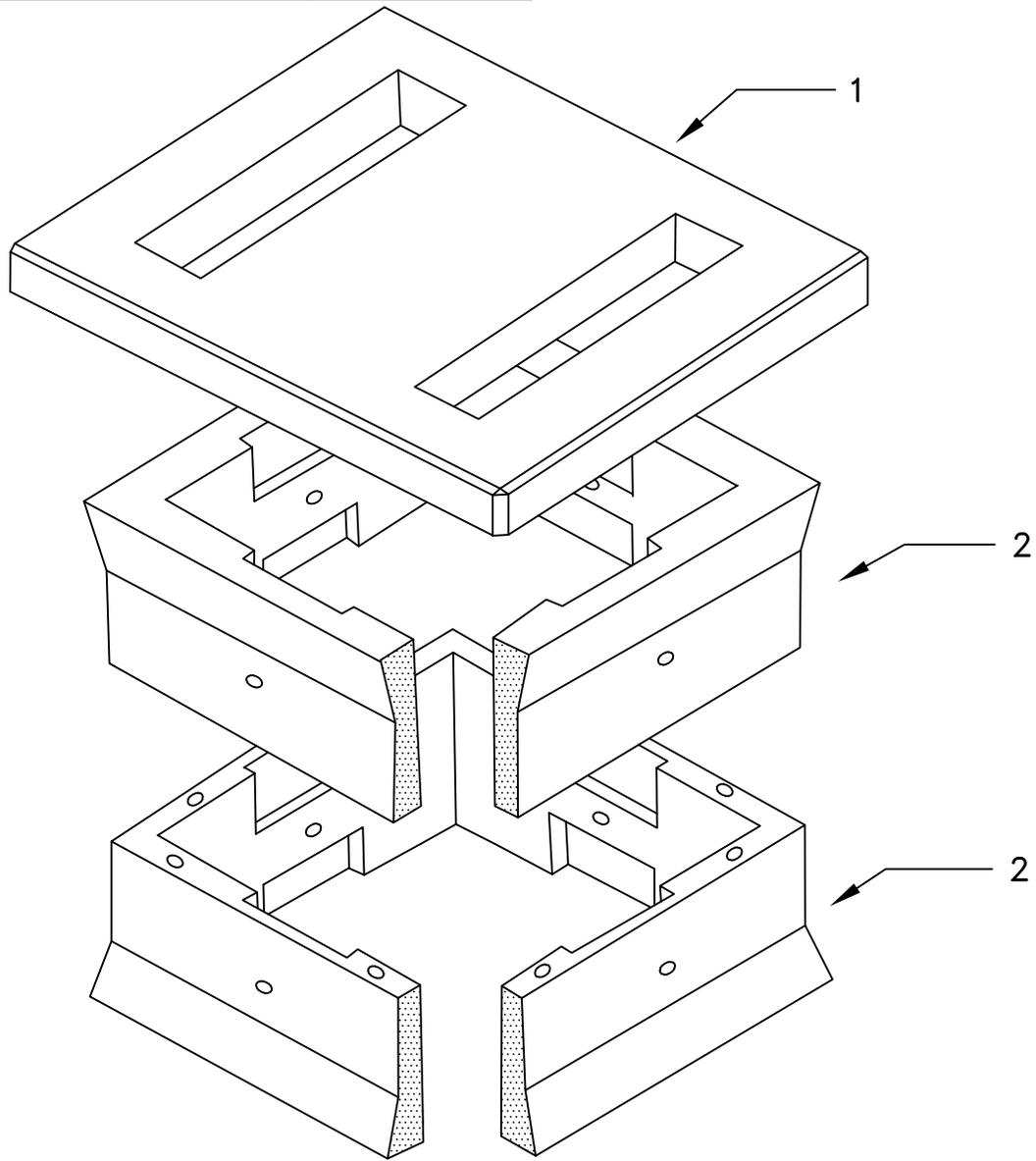
**NOTES:**

1. 20" X 7" KNOCKOUTS ARE CENTERED HORIZONTALLY.
2. EDGES OF CONCRETE KNOCKOUTS AND BLOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE.

**3-PHASE PADMOUNT TRANSFORMER VAULT**

**UM-100**  
FILE NAME:  
I:\REA\_SPCS\000W

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368125	43400301
2	2	DT US 367077	71755110



CORE ELECTRIC COOPERATIVE

ITEM #	MATERIAL	INVENTORY NO.	ITEM #	MATERIAL	INVENTORY NO.
1	CONCRETE SWITCH PAD UM1-5	43400301			
2	CONCRETE 1/2 VAULT UM1-6	71755110			



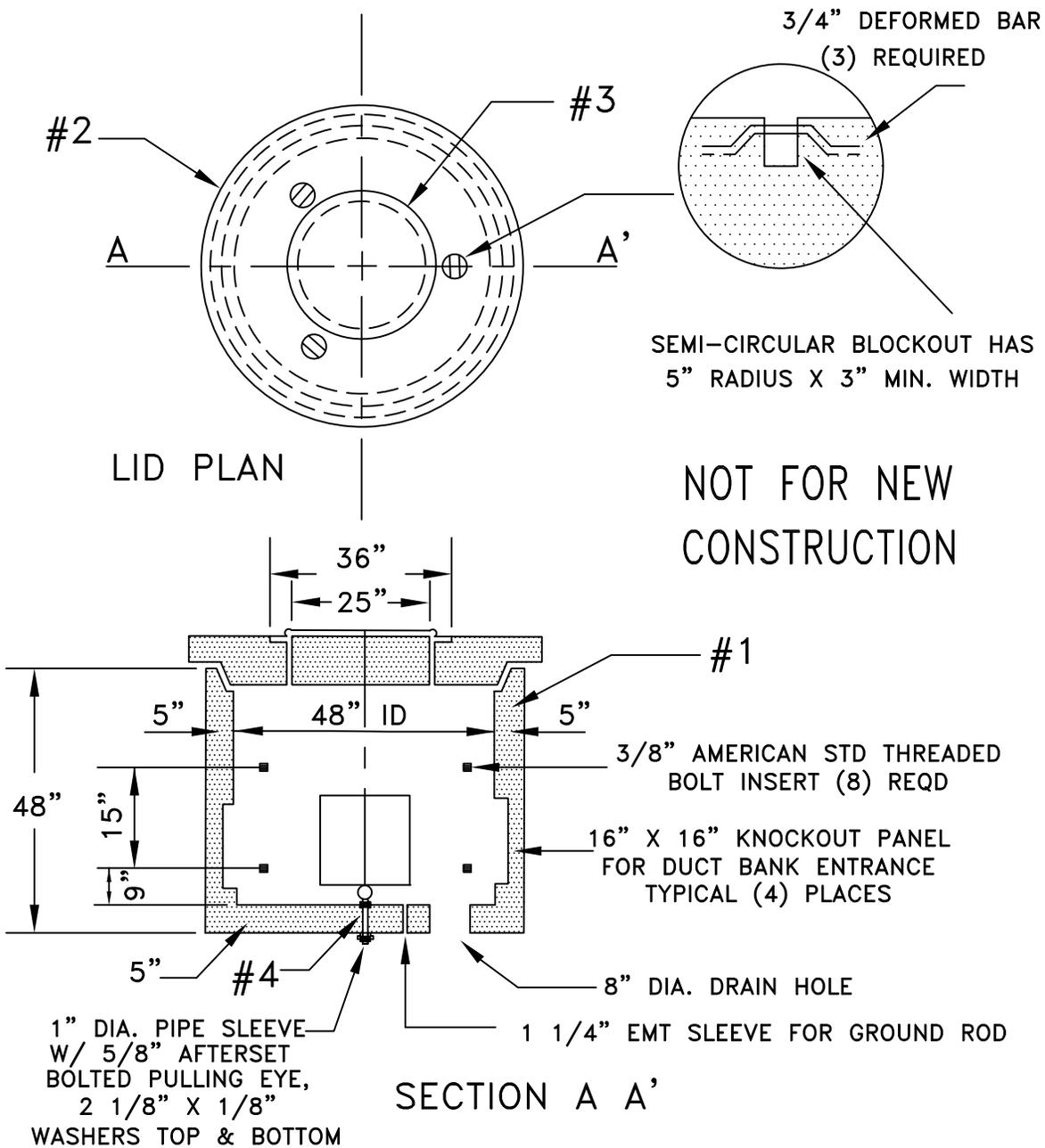
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DATE: 05/03/91  
DRAWN  
BY: CSK  
APP  
BY: MFJ  
REVISED  
DATE: 4/14/22

**NOTES:**  
 1. 20" X 7" KNOCKOUTS ARE CENTERED HORIZONTALLY.  
 2. EDGES OF CONCRETE KNOCKOUTS AND BLOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE.

### 3-PHASE LVS SWITCHGEAR VAULT

UM-110  
FILE NAME:

QTY	ASSET #	INVENTORY NO.
1	DT LM 368139	71755000



CORE ELECTRIC COOPERATIVE

**MATERIAL**

ITEM #	INV. NO.	ITEM #	INV. NO.
1	1	PRE-CAST CONCRETE (OR EQUAL) VAULT	71755000
2	1	PRE-CAST CONCRETE (OR EQUAL) 5' x 8" LID	71755010
3	1	CAST IRON MANHOLE COVER	71755050

- NOTES:
1. REINFORCING STEEL AND WIRE NOT SHOWN.
  2. ALL REINFORCING SHALL BE IN ACCORDANCE ASTM SPECIFICATIONS FOR STREET TRAFFIC DUTY.
  3. CAST IRON COVER INSERT TO BE A TYPE THAT WILL ACCOMADATE STANDARD GRADE RINGS.
  4. MANHOLE COVER WILL IDENTIFY TYPE OF UTILITY.
  5. FOR HEIGHT ADJUSTMENTS SEE UM-GR GRADE RINGS.
  6. VAULT TO BE USED FOR 1 $\phi$  AND SECONDARY APPLICATIONS ONLY.

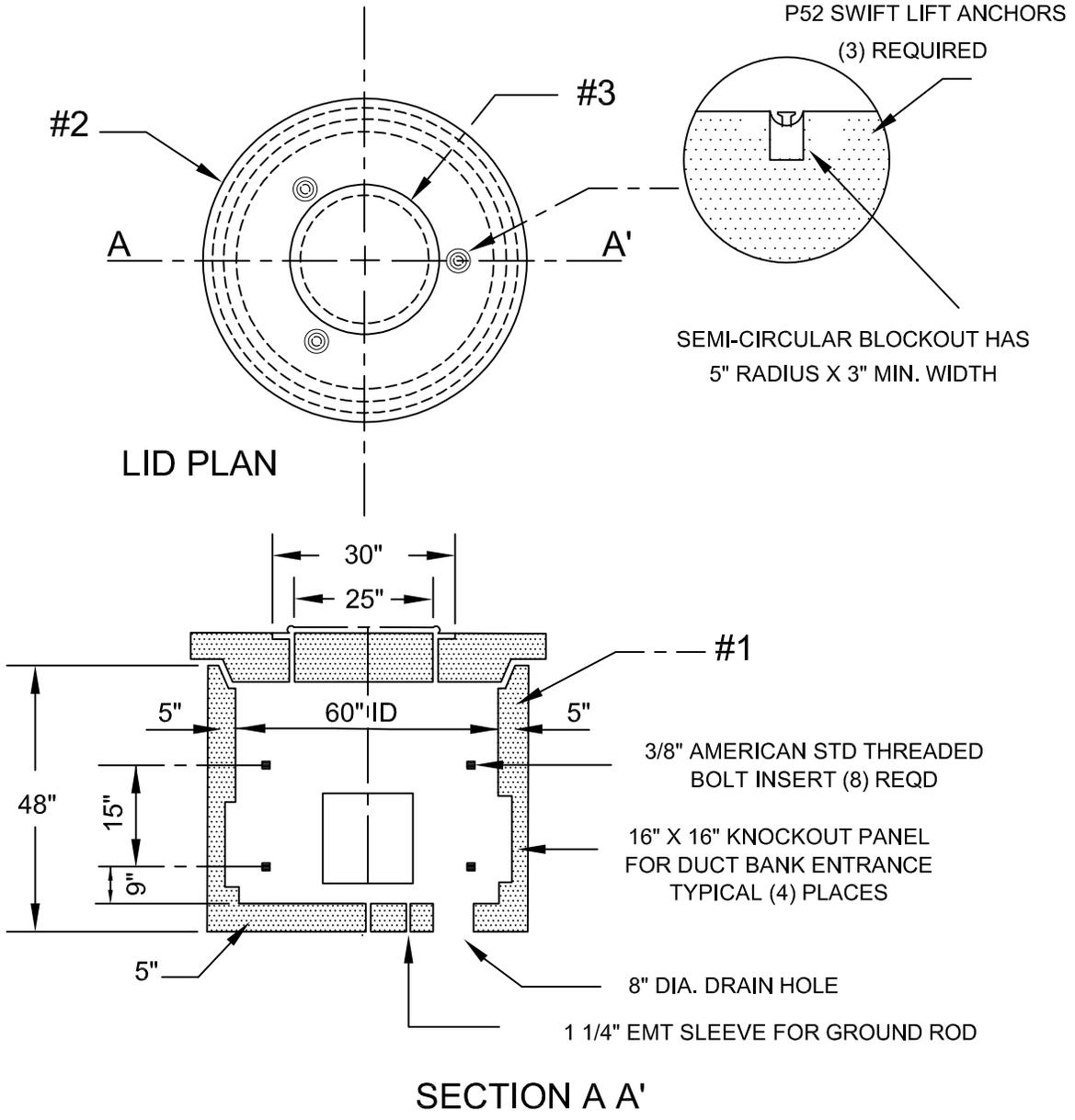


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 DATE: 05/13/91  
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 BY: CSK  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 4/14/22

1 $\phi$  CONCRETE POWER VAULT

UM-120  
 FILE NAME:  
 I:\REA\_SPECS\0006

QTY	ASSET #	INVENTORY NO.
1	DT LM 368139	71755020



CORE ELECTRIC COOPERATIVE

**MATERIAL**

ITEM #	INV. NO.	ITEM #	INV. NO.
1	1	PRE-CAST CONCRETE (OR EQUAL) VAULT	71755020
2	1	PRE-CAST CONCRETE (OR EQUAL) 70" Ø x 8" LID	71755030
3	1	CAST IRON MANHOLE COVER	71755050



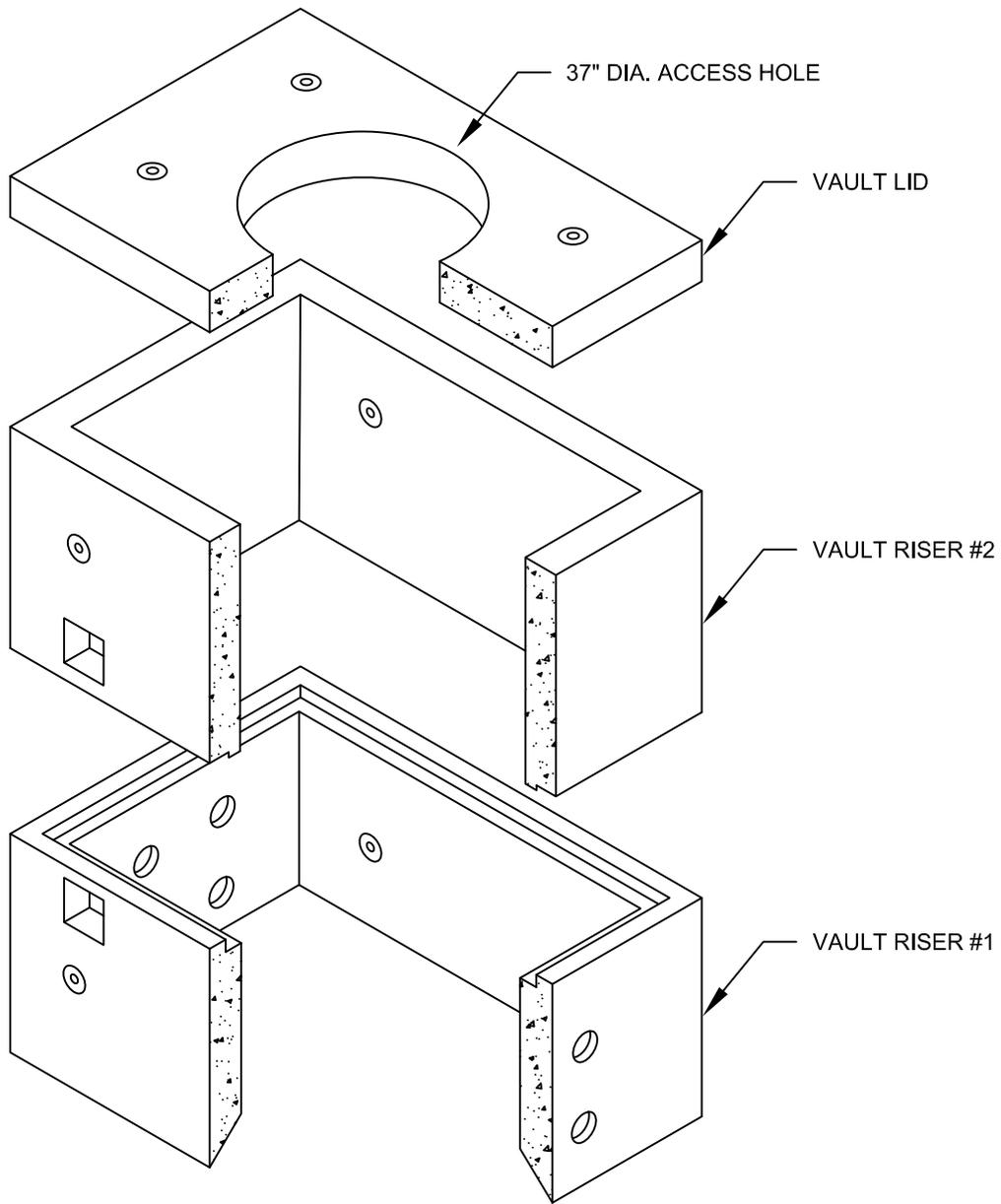
- NOTES:**
1. REINFORCING STEEL AND WIRE NOT SHOWN.
  2. ALL REINFORCING SHALL BE IN ACCORDANCE ASTM SPECIFICATIONS FOR STREET TRAFFIC DUTY.
  3. CAST IRON COVER INSERT TO BE A TYPE THAT WILL ACCOMADATE STANDARD GRADE RINGS.
  4. MANHOLE COVER WILL IDENTIFY TYPE OF UTILITY.
  5. FOR HEIGHT ADJUSTMENTS SEE UM-GR GRADE RINGS.
  6. VAULT TO BE USED FOR 3Ø-1Ø APPLICATIONS ONLY. NO 4Ø,500 OR 1000 MCM.

ISSUE	
DATE:	11/29/95
DRAWN	
BY:	DLH
APP	
BY:	
REVISED	
DATE:	9/11/24

**CONCRETE POWER VAULT**

UM-125  
FILE NAME:

QTY	ASSET #	INVENTORY NO.
1	DT US 367077	71755120
1	DT US 367077	71755119



CORE ELECTRIC COOPERATIVE

	INVENTORY NO.	INSIDE DIMENSIONS			OUTSIDE DIMENSIONS			THICKNESS
		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
VAULT LID	71755121	-	-	-	7'	5'	-	7 1/4"
VAULT RISER #2	71755120	6'	4'	3'-3"	7'	5'	3'-3"	6"
VAULT RISER #1	71755119	6'	4'	3'-3"	7'	5'	3'-3"	6"
CAST IRON MANHOLE COVER	71755055							

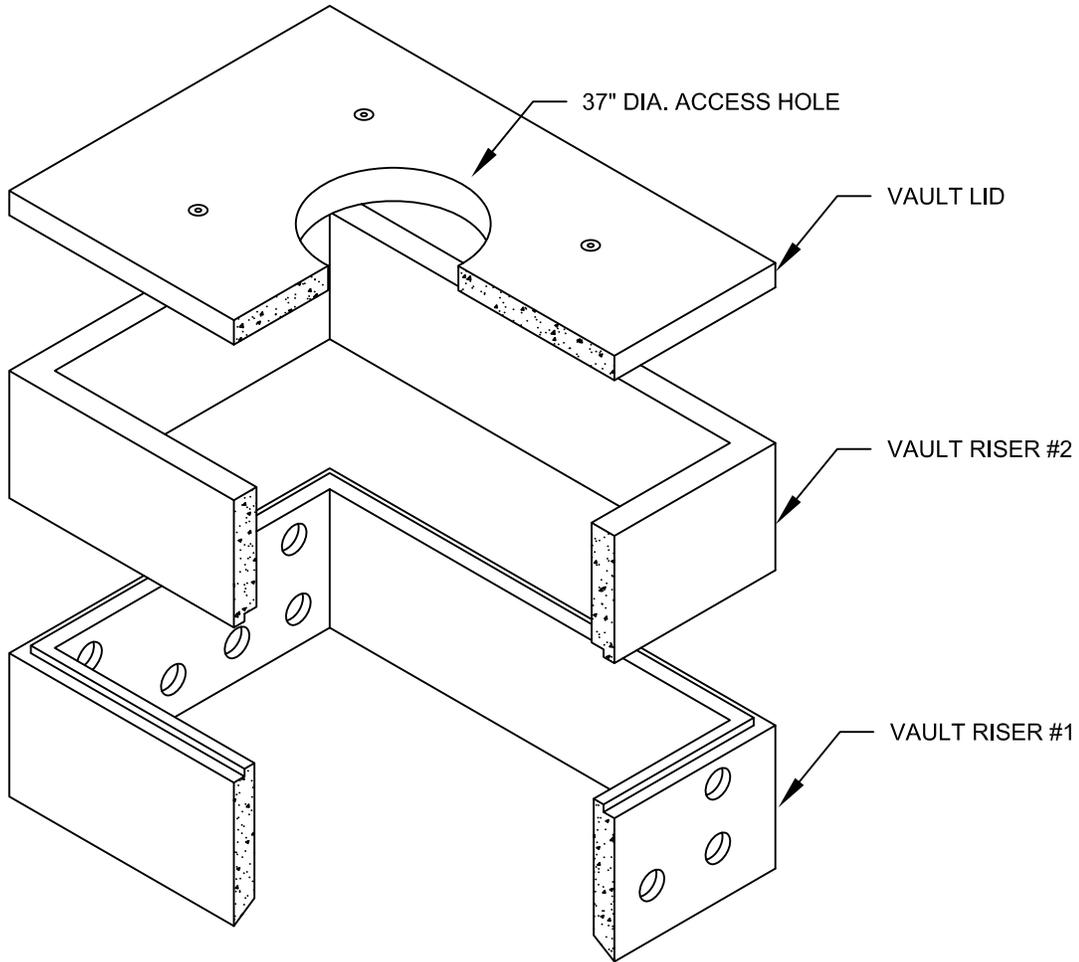


ISSUE  
 DATE: 10/6/22  
 DRAWN  
 BY: WET  
 APP  
 BY: MFJ  
 REVISED  
 DATE: JAN 2023

4' x 6' CONCRETE VAULT

UM-126  
 FILE NAME: 0068

QTY	ASSET #	INVENTORY NO.
1	DT US 367077	717515130
1	DT US 367077	717515129



CORE ELECTRIC COOPERATIVE

	INVENTORY NO.	INSIDE DIMENSIONS			OUTSIDE DIMENSIONS			THICKNESS
		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
VAULT LID	71755131	-	-	-	10'	7'	-	6 1/4"
VAULT RISER #2	71755130	9'	6'	2'-6"	10'	7'	2'-6"	6"
VAULT RISER #1	71755129	9'	6'	2'-10"	10'	7'	2'-10"	6"
CAST IRON MANHOLE COVER	71755055							

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 10/6/22

DRAWN  
BY: WET

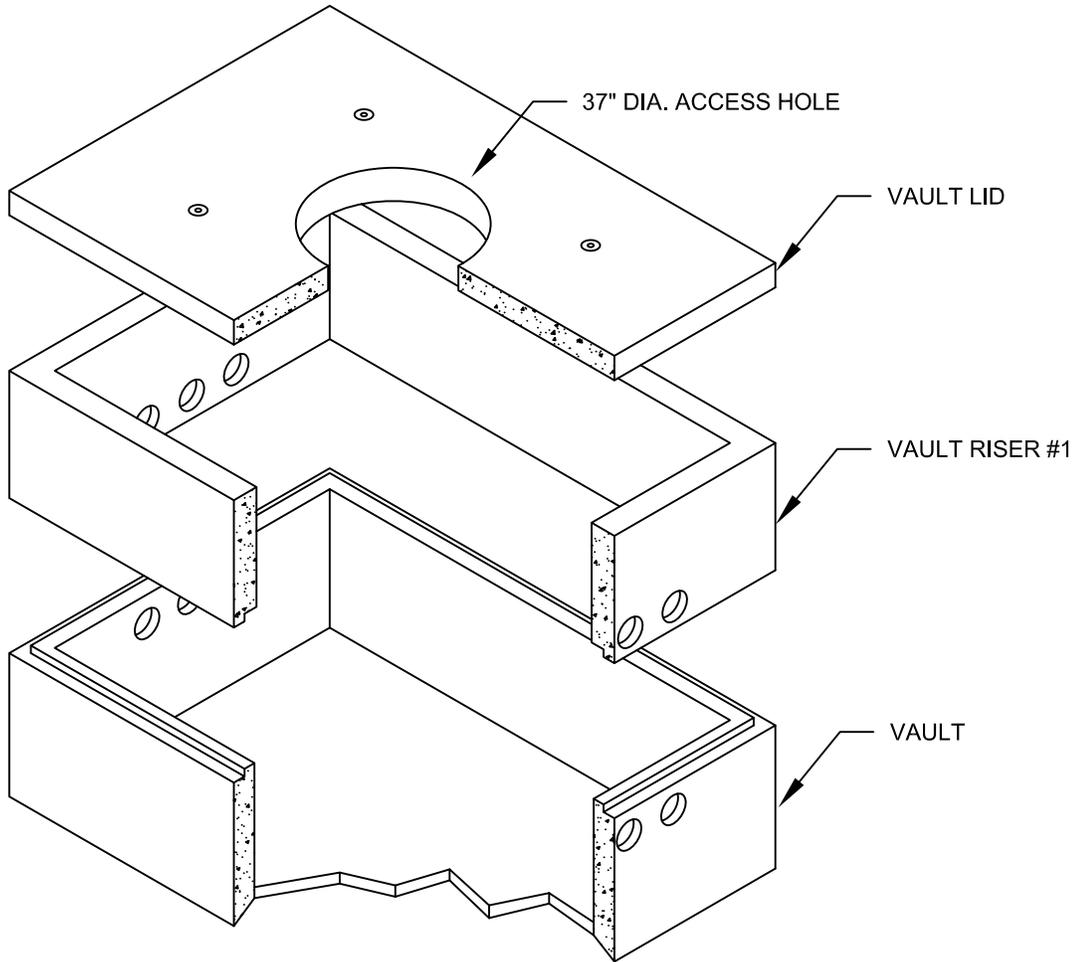
APP  
BY: MFJ

REVISED  
DATE: APR 2020

**UM-127**  
FILE NAME: 0069

6' x 9' CONCRETE VAULT

QTY	ASSET #	INVENTORY NO.
1	DT US 367077	71755210
1	DT US 367077	71755200



CORE ELECTRIC COOPERATIVE

	INVENTORY NO.	INSIDE DIMENSIONS			OUTSIDE DIMENSIONS			THICKNESS
		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
VAULT LID	71755211	-	-	-	13'-6"	7'	-	9 1/4"
VAULT RISER #1	71755210	12'-6"	6'	3'-3"	13'-6"	7'	3'-9"	6"
VAULT (TBD)	71755200	12'-6"	6'	3'-3"	13'-6"	7'	3'-9"	6"
MANHOLE COVER	71755055							

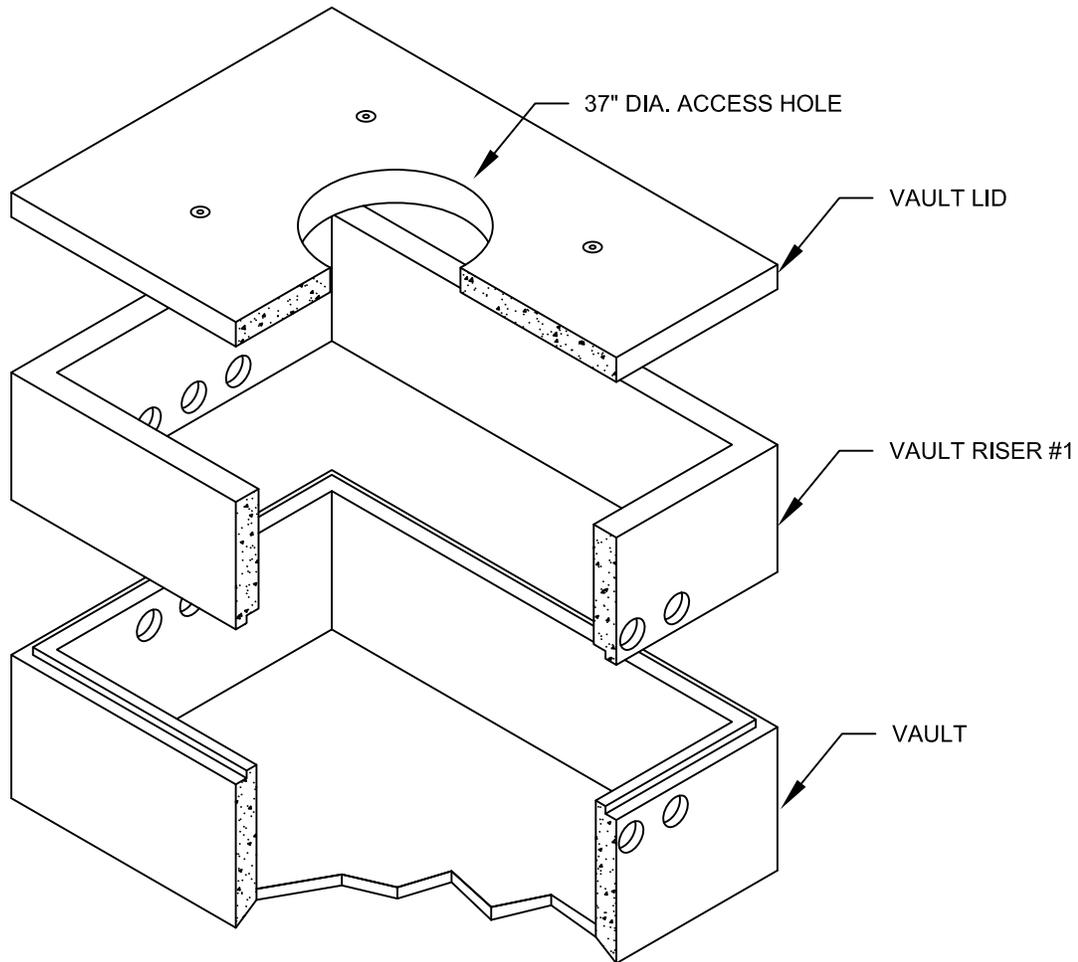


ISSUE  
DATE: 9/16/08  
DRAWN  
BY: DLH  
APP  
BY:  
REVISED  
DATE: 10/6/22

7' x 13'-6" CONCRETE VAULT

UM-128  
FILE NAME: 0069

QTY	ASSET #	INVENTORY NO.
1	DT US 367077	71755210
1	DT US 367077	71755200



CORE ELECTRIC COOPERATIVE

	INVENTORY NO.	INSIDE DIMENSIONS			OUTSIDE DIMENSIONS			THICKNESS
		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
VAULT LID	71755212	-	-	-	13'-6"	7'	-	9 1/4"
VAULT RISER #1	71755210	12'-6"	6'	3'-3"	13'-6"	7'	3'-9"	6"
VAULT (TBD)	71755200	12'-6"	6'	3'-3"	13'-6"	7'	3'-9"	6"
MANHOLE COVER	71755055							

**CORE**  
ELECTRIC COOPERATIVE

ISSUE  
DATE: 07/01/19

DRAWN  
BY: JLM

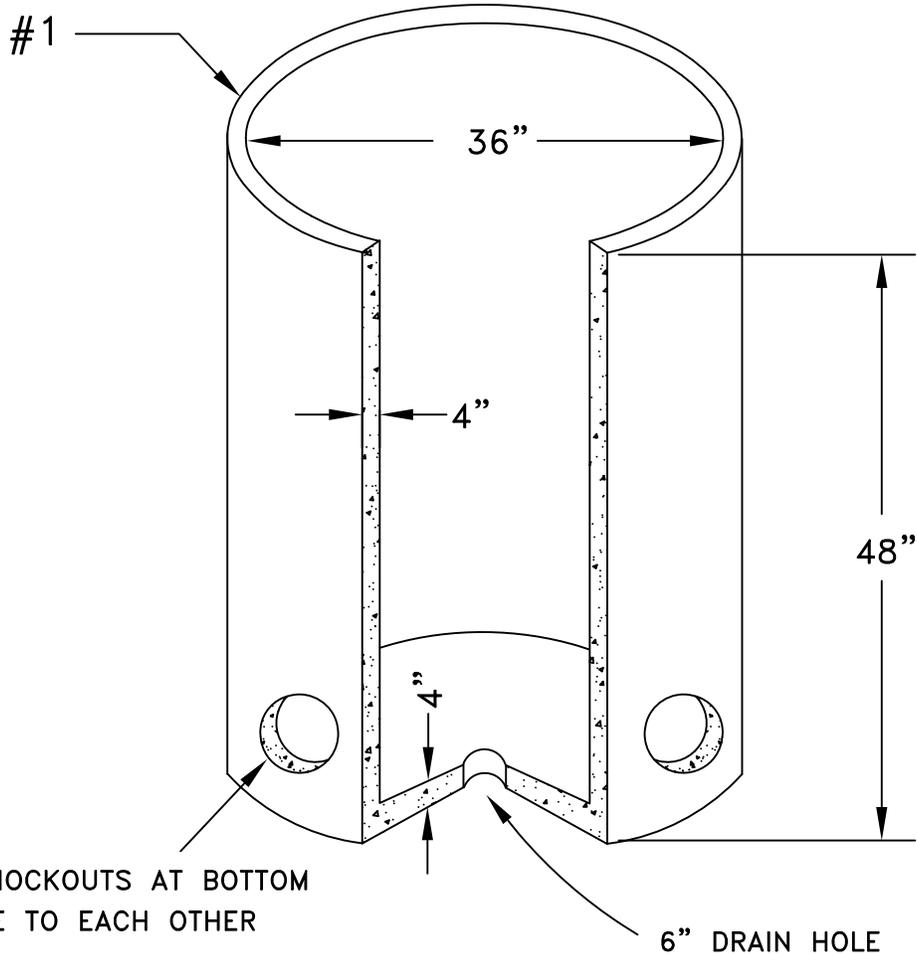
APP  
BY:

REVISED  
DATE: 10/6/22

**UM-129**  
FILE NAME: 0069

7' x 13'-6" CONCRETE VAULT TRAFFIC RATED

QTY	ASSET #	INVENTORY NO.
1	-	-



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ITEM #	MATERIAL	INVENTORY NO.
1 1	TRANSFORMER VAULT	71754000



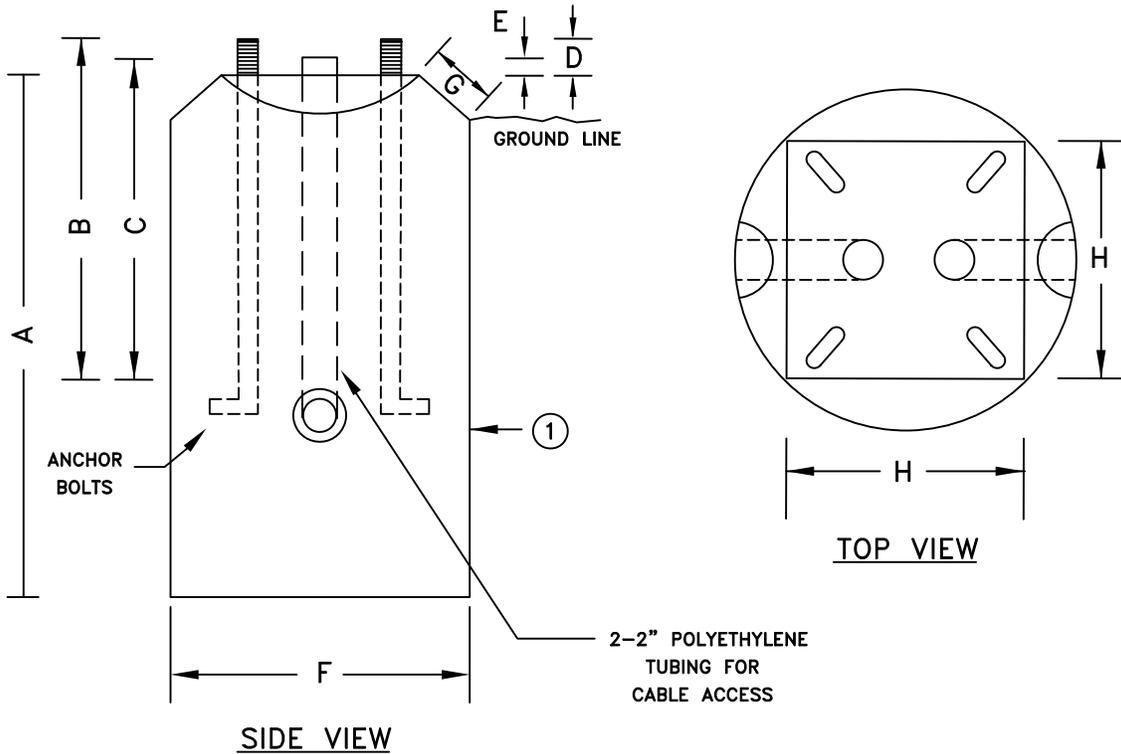
- NOTES:
1. NOT TO BE USED IN TRAFFIC AREAS
  2. USE WITH UM1-1 PAD FOR SINGLE PHASE TRANSFORMER IF:
    - A. LOW PROFILE TRANSFORMER IS REQUIRED OR
    - B. GROUND SLOPE IS SUCH THAT LEVELING UM1-1 PAD WOULD CAUSE EROSION OR SILTING PROBLEMS
  3. EDGES OF CONCRETE KNOCKOUTS NEED CHAMFERS OR ROUNDED EDGES TO PREVENT CABLE DAMAGE

ISSUE	DATE: 08/08/91
DRAWN	BY: CSK
APP	BY:
REVISED	DATE: 10/6/22

TRANSFORMER VAULT

UM-130  
FILE NAME: I:\REA\_SPCS\0040

ITEM	QTY	ASSET #	INVENTORY NO.
UM-AB1	1	DT SL 373024	39003100
UM-AB2	1	DT SL 373024	39003105
UM-AB3	1	DT SL 373024	39003110



CORE SPEC.	UM-AB1	UM-AB2	UM-AB3
DIMENSIONS (INCHES)	SIDEWALK LIGHT POLE	RESIDENTIAL LIGHT POLE	PARKWAY & HIGHWAY LIGHT POLE
A	36	48	60
B	18	36	36
C	24	36	36
D	4	4 1/2	4 1/2
E	0	1/2	1/2
F	16	24	24
G	SQUARED-OFF	5	5
H	NO BEVEL EDGE	16 7/8	16 7/8

**NOT FOR NEW CONSTRUCTION**

CORE ELECTRIC COOPERATIVE

ITEM	#	MATERIAL	SPEC #	INVENTORY NO.
1	1	PRE-CAST LIGHT POLE FOUNDATION WITH REQUIRED ANCHOR BOLTS & NUTS	UM-AB	-

**NOTES:**

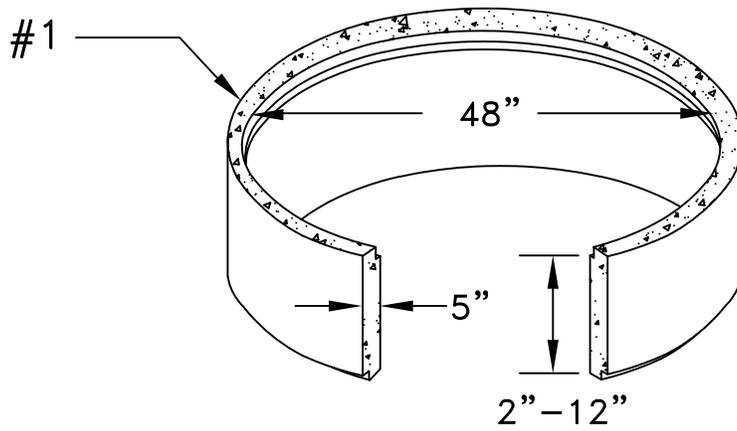
- REFER TO STREET LIGHT SPEC FOR PROPER FOUNDATION SIZE.
- 2 INCH CONDUIT FOR WIRE CONNECTION.
- 1/2 INCH BOLT FOR SIDEWALK LIGHT POLE.
- 1 INCH BOLT FOR RESIDENTIAL AND PARKWAY LIGHT POLE.
- BOLT PATTERN WILL VARY ACCORDING TO STREET LIGHT SPECIFICATIONS.



ISSUE	
DATE:	08/22/91
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/6/22

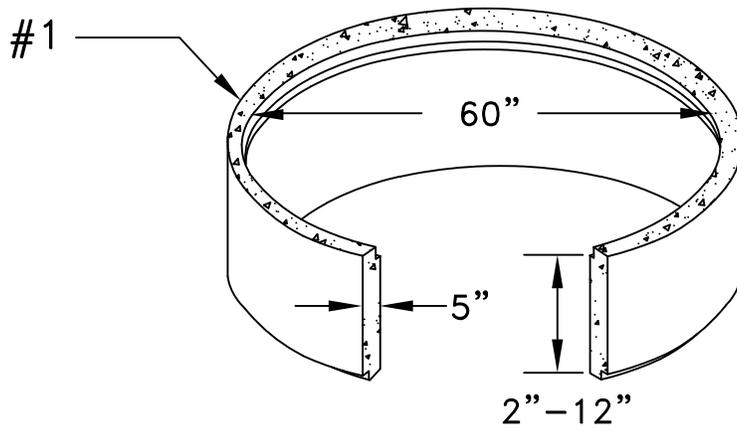
**STREET LIGHT FOUNDATION**

UM-AB 1,2,3  
FILE NAME:  
i:\REA\_SPCS\0000



NOT FOR NEW CONSTRUCTION

ITEM	#	MATERIAL	INVENTORY NO.	
1	1	PRE-CAST CONCRETE (OR EQUAL) GRADE RING	71752000	
NOTES: 1. HEIGHT SPECIFIED AS REQUIRED FOR CHANGE IN GRADE.				ISSUE DATE: 8/9/91 DRAWN BY: CSK APP BY: REVISED DATE: 10/6/22
GRADE RING TRAFFIC RATED				UM-GR1 FILE NAME: I:\REA_SPCS\0064



ITEM	#	MATERIAL	INVENTORY NO.	
1	1	PRE-CAST CONCRETE (OR EQUAL) GRADE RING	71752010	
NOTES: 1. HEIGHT SPECIFIED AS REQUIRED FOR CHANGE IN GRADE.				ISSUE DATE: 08/09/91 DRAWN BY: CSK APP BY: REVISED DATE: 10/6/22
GRADE RING TRAFFIC RATED				UM-GR2 FILE NAME:



## **FIBERGLASS UNITS**

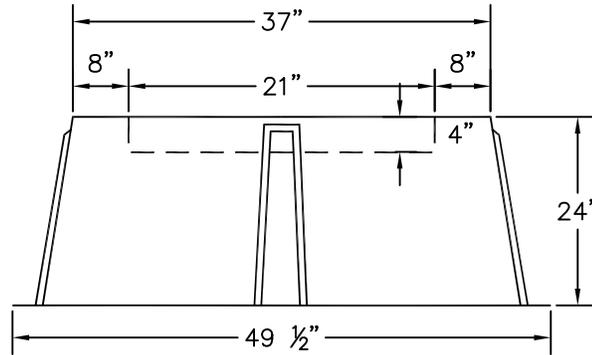
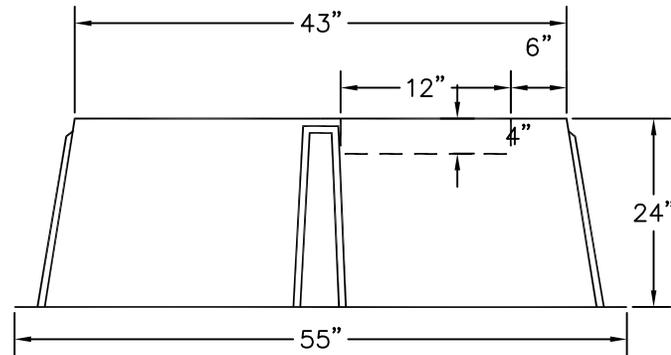
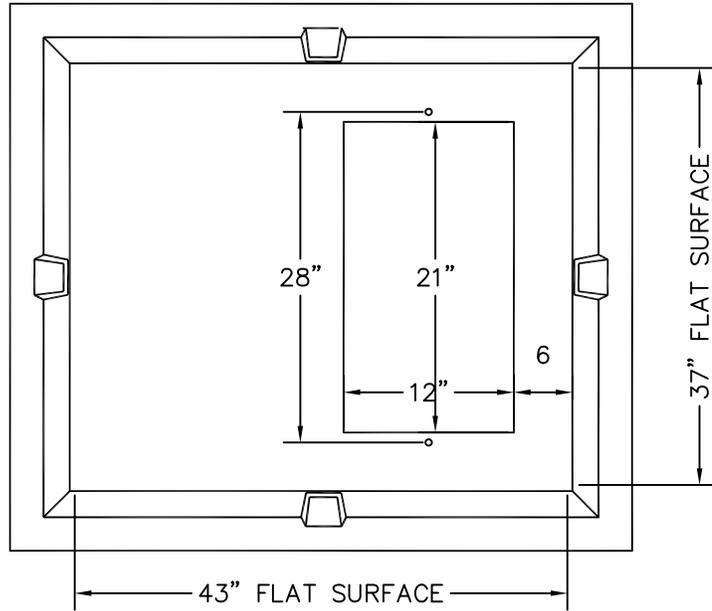


# FIBERGLASS UNITS

PAGE	DRAWING	DESCRIPTION
9.01	UM-114	SINGLE PHASE PAD MOUNT TRANSFORMER BOX
9.02	UM-115	SINGLE PHASE AIR BREAK SWITCHGEAR GROUND SLEEVE
9.03	UM-116	AIR BREAK SWITCHGEAR GROUND SLEEVE 500 URD
9.04	UM-117	AIR BREAK SWITCHGEAR GROUND SLEEVE 1000 URD
9.05	UM-118	THREE PHASE PAD MOUNT SLEEVE 75-300 KVA
9.06	UM-119	THREE PHASE PAD MOUNT SLEEVE 500-1500 KVA



ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 367077	71751000



NOTES:  
1. Vault shall be set 12" above ground level

CORE ELECTRIC COOPERATIVE



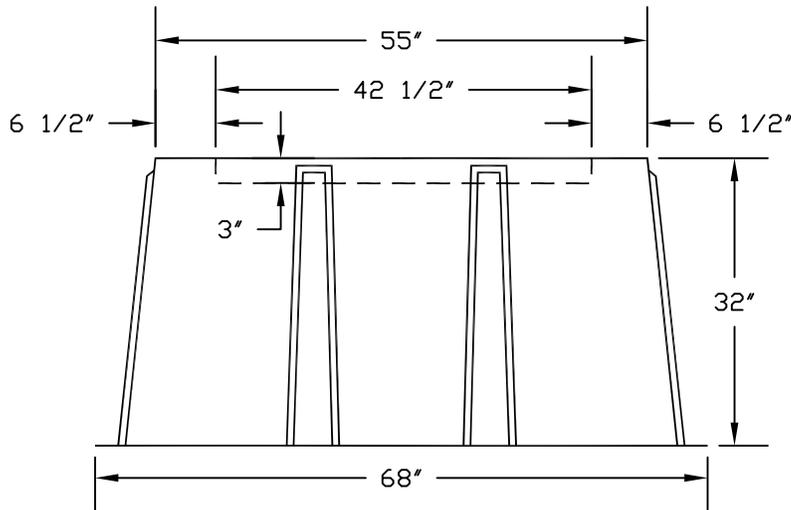
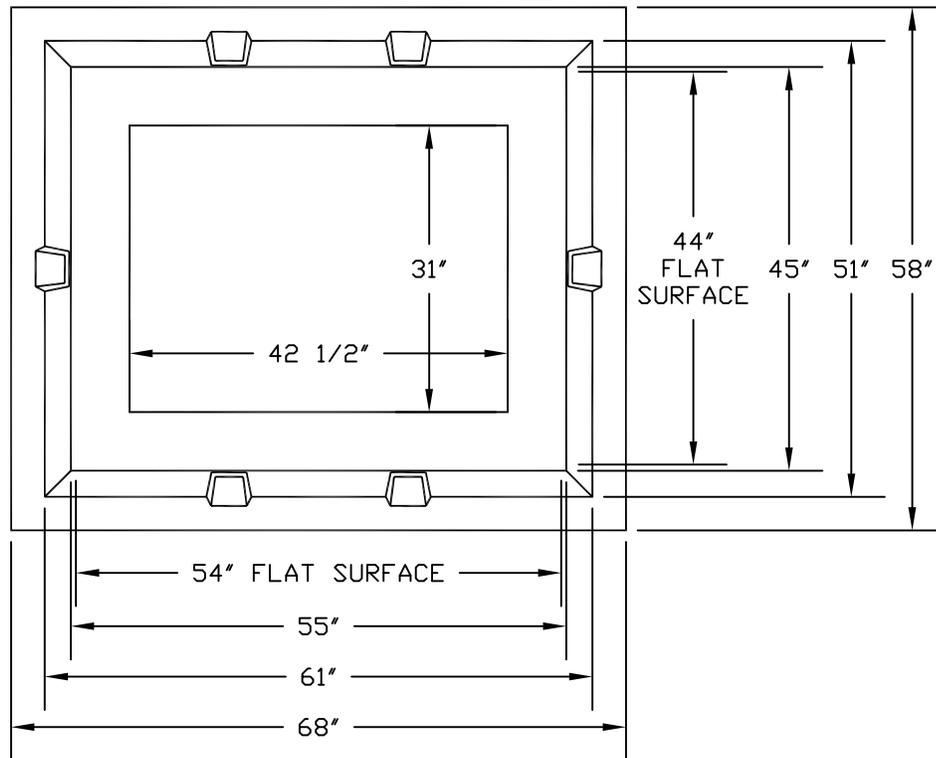
ISSUE	
DATE:	09/10/01
DRAWN	
BY:	RWO
APP	
BY:	
REVISED	
DATE:	10/6/22

ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	TRANSFORMER BOX PADS	71751000

SINGLE PHASE PAD MOUNT TRANSFORMER BOX

UM-114  
FILE NAME:  
E:\REA\_SPCS\0050

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT US 367077	71751500



NOTES:

1. GROUND SLEEVE FOR USE WITH THE AIRBREAK SWITCHGEAR SPECIFICATION UMS3-1-4A.

CORE ELECTRIC COOPERATIVE



ISSUE	
DATE:	12/8/95
DRAWN	
BY:	DLH
APP	
BY:	
REVISED	
DATE:	10/6/22

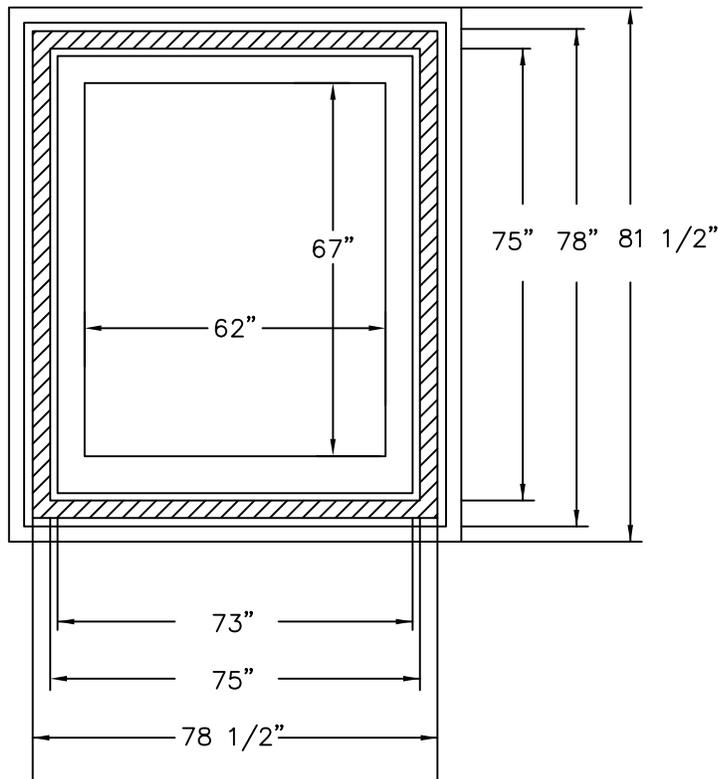
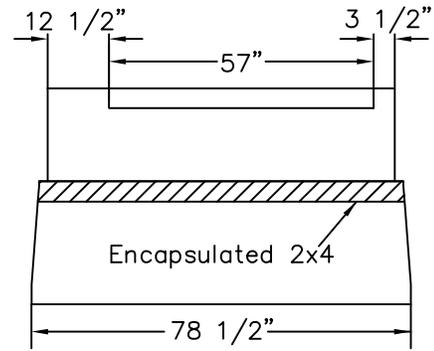
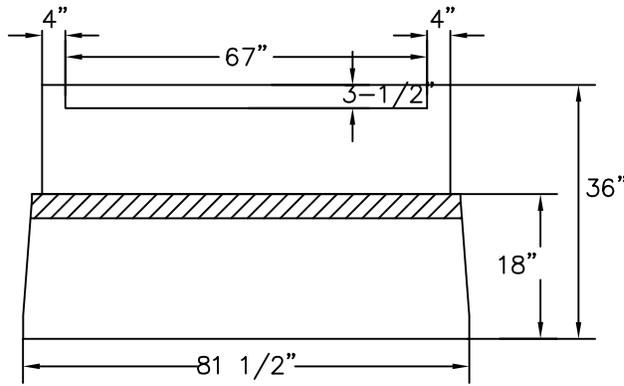
ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	FIBERGLASS GROUND SLEEVE	71751500

INVENTORY NO.	71751500
DATE:	10/6/22

SINGLE PHASE AIR BREAK SWITCHGEAR GROUND SLEEVE

UM-115  
FILE NAME:  
I:\REA\_SPCS\004P

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT US 367077	71751525



CORE ELECTRIC COOPERATIVE

**NOTES:**

- GROUND SLEEVE FOR USE ON AIR BREAK SWITCHGEAR SPECIFICATIONS:  
SPECIFICATIONS: UMS3-3-6A, UMS3-3-9A, UMS3-3-10A, UMS3-3-11A
- THIS GROUND SLEEVE TO BE USED WHEN MAIN FEEDER IS 4/0 OR 500MCM

**CORE**  
ELECTRIC COOPERATIVE

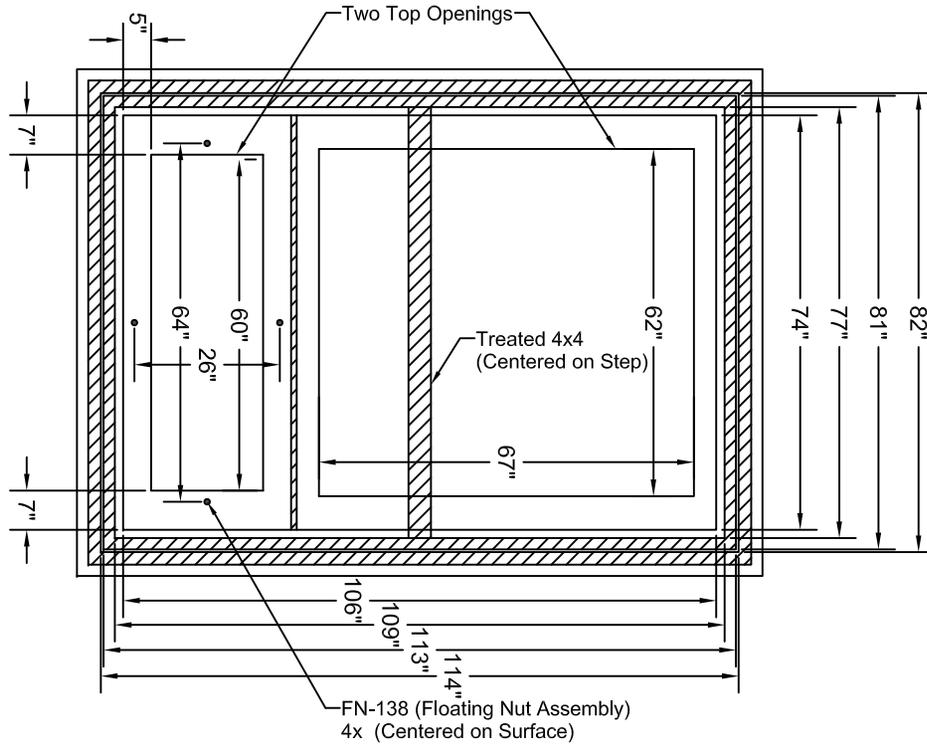
ISSUE  
DATE: 12/07/95  
DRAWN  
BY: DLH  
APP  
BY:  
REVISED  
DATE: 10/6/22  
UM-116  
FILE NAME:  
I:\REA\_SPCS\0065

ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	FIBERGLASS GROUND SLEEVE	71751525

AIR BREAK SWITCHGEAR GROUND SLEEVE 500 URD

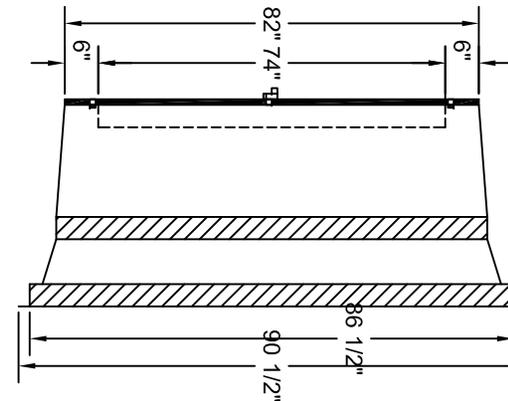
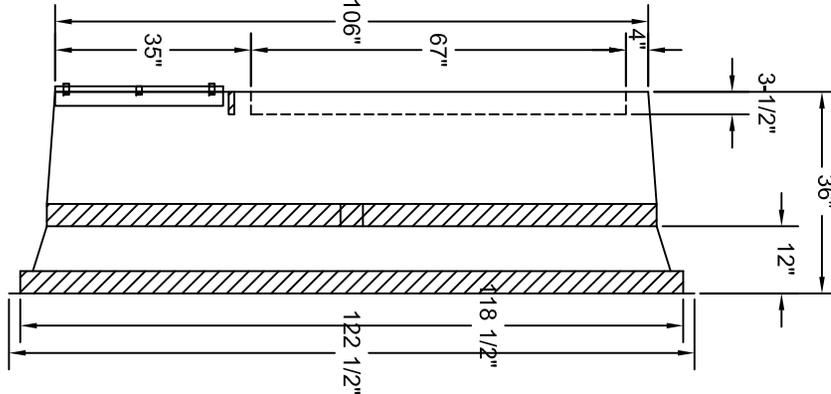
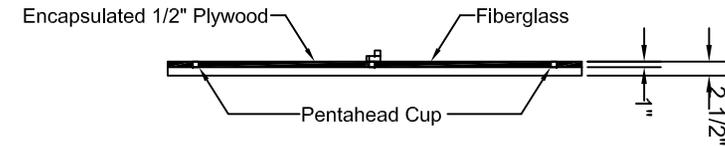
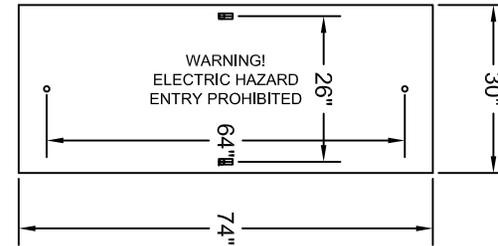
ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368142	71751700

ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	FIBERGLASS GROUND SLEEVE	71751700



**NOTES:**

- GROUND SLEEVE FOR USE ON AIR BREAK SWITCHGEAR SPECIFICATIONS: SPECIFICATIONS: UMS3-3-6A, UMS3-3-9A, UMS3-3-10A, UMS3-3-11A
- THIS GROUND SLEEVE TO BE USED FOR FEEDER 1000MCM



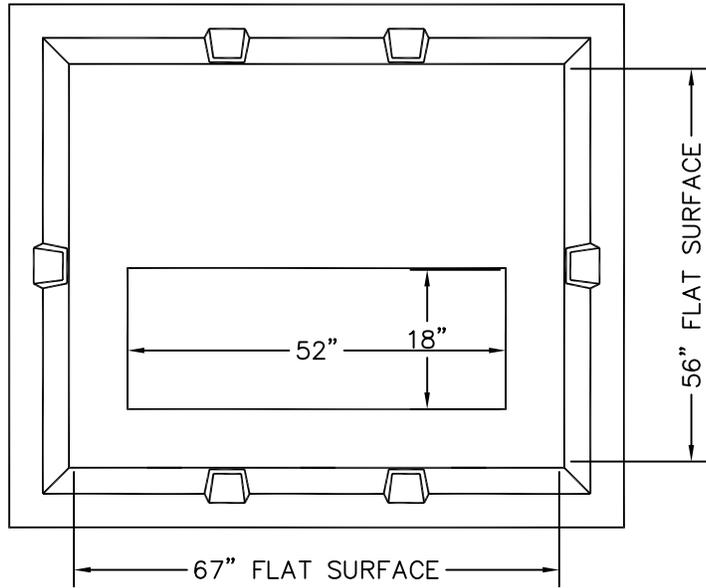
CORE ELECTRIC COOPERATIVE

AIR BREAK SWITCHGEAR GROUND SLEEVE 1000 URD

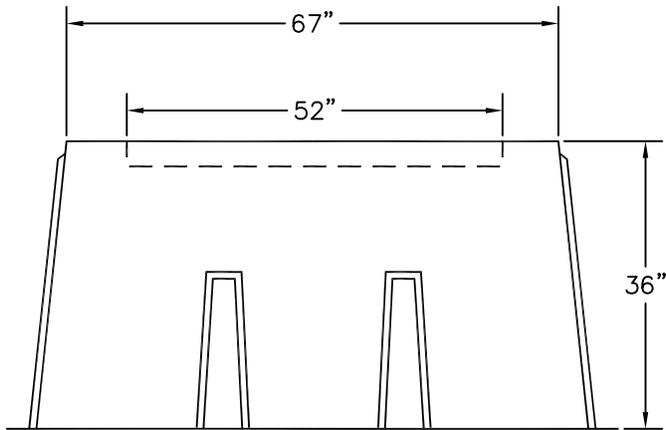
<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	02/01/01
DRAWN	
BY:	RWO
APP	
BY:	
REVISED	
DATE:	10/6/22
UM-117	
FILE NAME:	I:REA_SPECS0040

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 367077	71751575

TOP VIEW



FRONT SIDE VIEW



NOTES:

1. Fiberglass Vault For Use With Three Phase Transformer  
Sizes 75 KVA To 300 KVA
2. Vault shall be set 12" above ground level

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ISSUE
DATE: 07/26/06
DRAWN
BY: CSK
APP
BY:
REVISED
DATE: 10/6/22

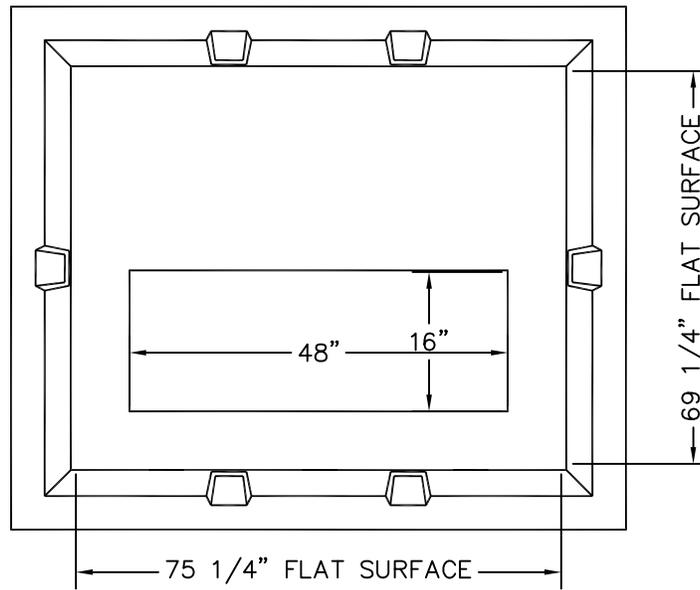
ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	3 PHASE TRANSFORMER BOX PAD	71751575

THREE PHASE PAD MOUNT FIBERGLASS VAULT 75-300 KVA

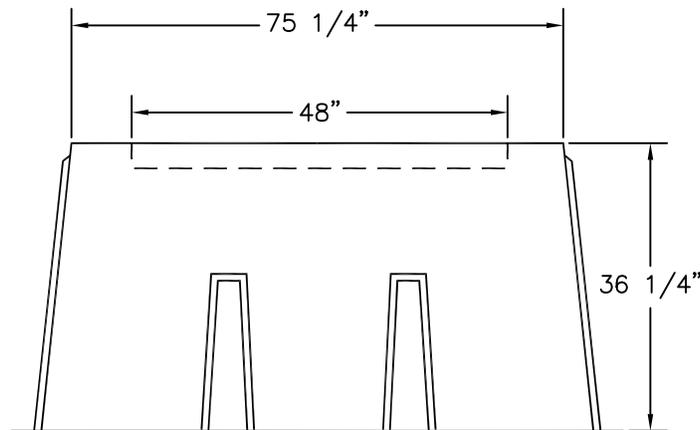
UM-118
FILE NAME:
I:\REA_SPCS\005T

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT LM 368142	71751550

TOP VIEW



FRONT SIDE VIEW



NOTES:

1. Ground Sleeve For Use With Three Phase Transformer
2. Proper installation of a box pad for transformers over 9,000lbs requires the soil to have a compaction level of 98% prior to setting the box pad. If that is not achievable, a cement pad must be poured underneath the box pad prior to installation.
3. Vault shall be set 12" above ground level

CORE ELECTRIC COOPERATIVE



ISSUE	
DATE:	07/26/06
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	10/6/22

ITEM	QTY	MATERIAL	INVENTORY NO.
1	1	3 PHASE TRANSFORMER BOX PAD	71751550

--	--	--	--

THREE PHASE PAD MOUNT SLEEVE 500-1500 KVA

UM-119
FILE NAME:
:\REA_SPCS\005U



# **METERING**

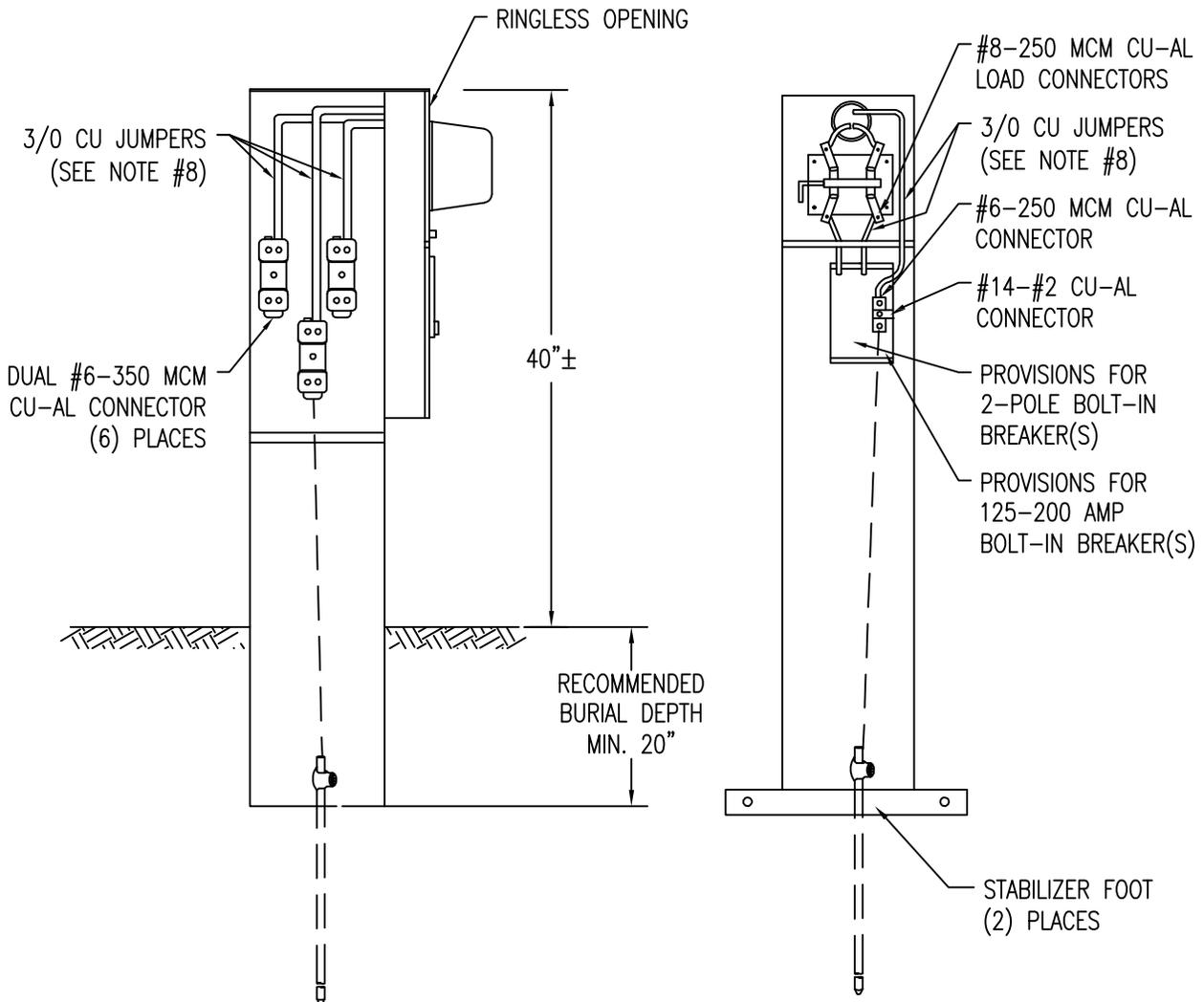


# METERING

PAGE	DRAWING	DESCRIPTION
10.01	UK5-1	SINGLE METER PEDESTAL
10.02	UK5-1 400A	SINGLE 400A METER PEDESTAL
10.03	UK5-2	DOUBLE METER PEDESTAL
	UK5-2 400A	DOUBLE 400A METER PEDESTAL
10.04	UM9-2	POLE MOUNTED AMI AP



ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT OH 365051	53828508
2	1	DT SV 369047	44450100



CORE ELECTRIC COOPERATIVE

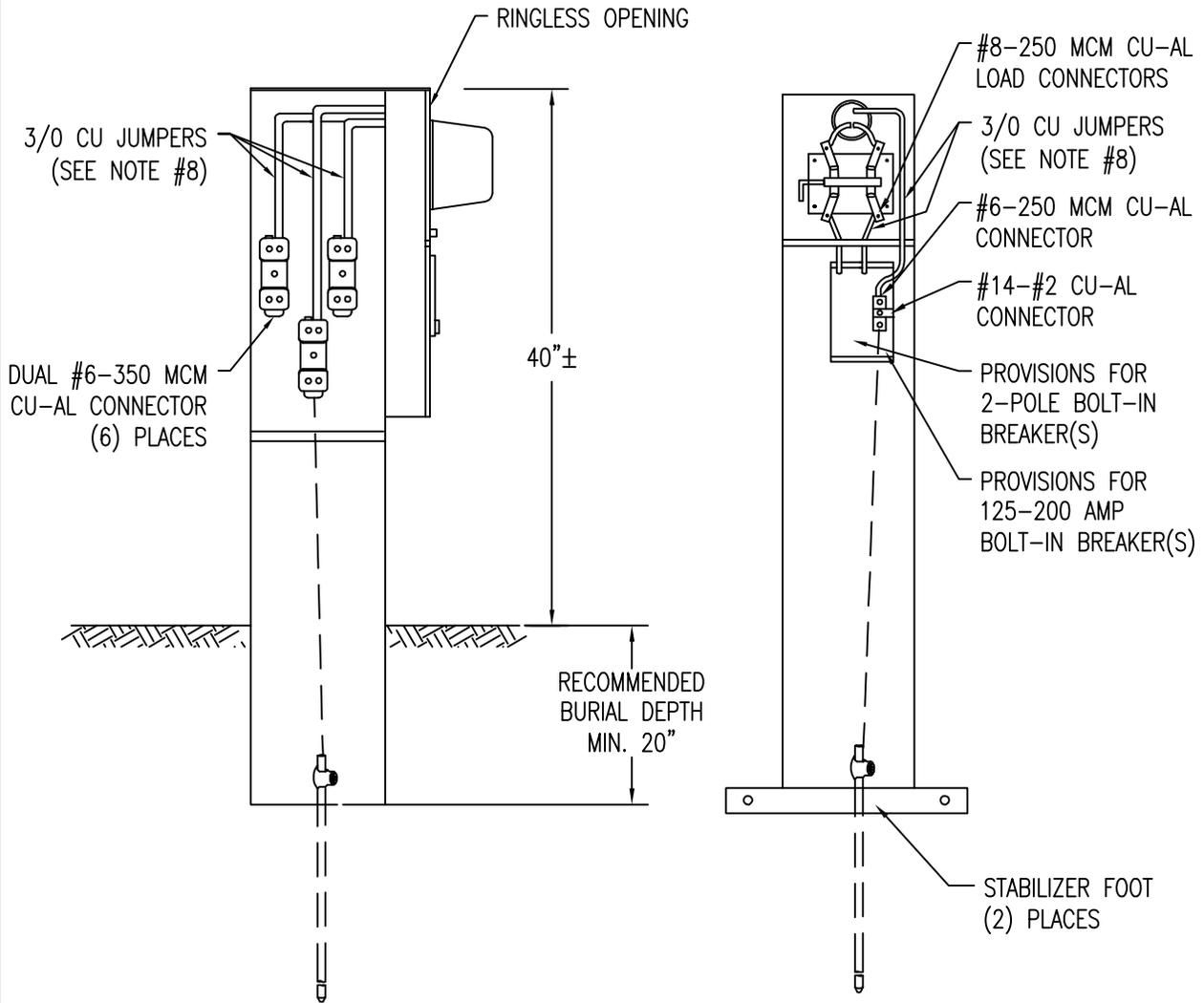
**NOTES:**

1. UNIT TO INCLUDE 5/8" x 8' COPPERCLAD ROD (INVENTORY NO.: 53828508) WITH CLAMP #6 S.D. CU (INVENTORY NO.: 11311000) AS REQUIRED.
2. ELECTRICAL RATINGS: PEDESTAL 200A CONTINUOUS SOCKET/BREAKER 120/240 VOLTS SINGLE PHASE (INVENTORY NO.: 44550401), 3 WIRE.
3. UNIT INCLUDES INSTALLATION AND CONNECTION OF GROUND , BACKFILLING AND TAMPING FOR PLUMB INSTALLATION.
4. SECONDARY BREAKERS SUPPLIED BY CONSUMER. (GETDQ---)
5. UNIT INCLUDES LOCKING DEVICES AND WARNING SIGNS AS SPECIFIED.
6. SECONDARY WIRE IS INCLUDED IN THIS SPECIFICATION.
7. UK5-1 400A PARALLEL 3/0 CU JUMPERS.

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	10/18/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22
UK5-1	
FILE NAME:	

SINGLE METER PEDESTAL (44450100)

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT OH 365051	53828508
2	1	DT SV 369047	44550401



CORE ELECTRIC COOPERATIVE

**NOTES:**

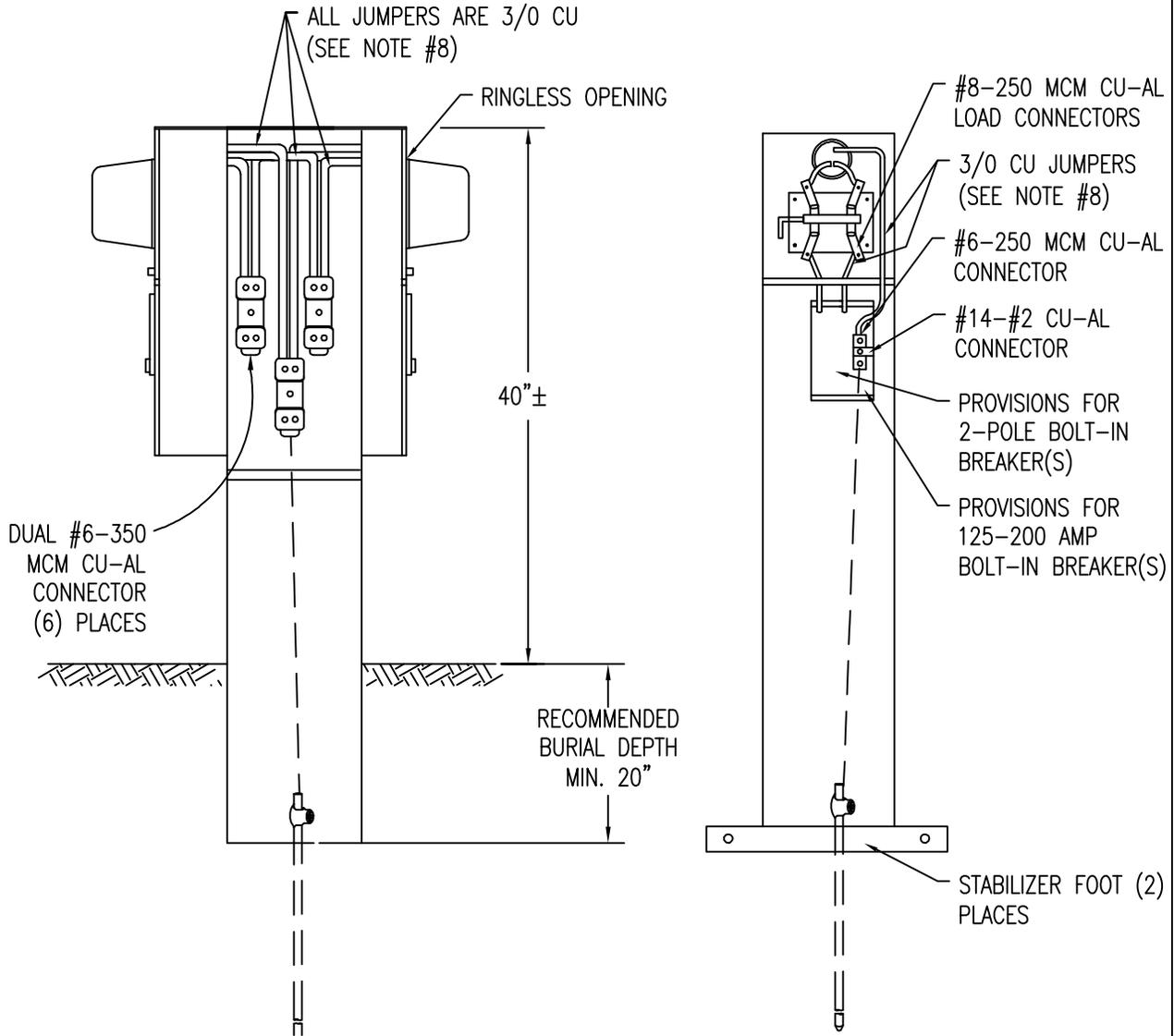
1. UNIT TO INCLUDE 5/8" x 8' COPPERCLAD ROD (53828508 ROD) WITH CLAMP #6 S.D. CU AS REQUIRED (11311000 CLAMP).
2. ELECTRICAL RATINGS UK5-1 200AMP CONTINUOUS, UK5-1 400A-320AMPS CONTINUOUS AMPS BOTH 120/240 VOLTS SINGLE PHASE, 3 WIRE. (44550401)
3. UNIT INCLUDES INSTALLATION AND CONNECTION OF GROUND , BACKFILLING AND TAMPING FOR PLUMB INSTALLATION.
4. 4 TERMINAL LEVER BYPASS SOCKET FOR UK5-1 400A
5. SECONDARY BREAKERS SUPPLIED BY CONSUMER. (GETDQ---
6. UNIT INCLUDES LOCKING DEVICES AND WARNING SIGNS AS SPECIFIED.
7. SECONDARY WIRE IS INCLUDED IN THIS SPECIFICATION.
8. UK5-1 400A PARALLEL 3/0 CU JUMPERS.

SINGLE METER PEDESTAL (44550401)

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	10/18/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22
UK5-1 400A	
FILE NAME:	
:AREA_SPCS001H	

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT OH 365051	53828508
2	1	DT SV 369048	44450102

UK5-2 400A



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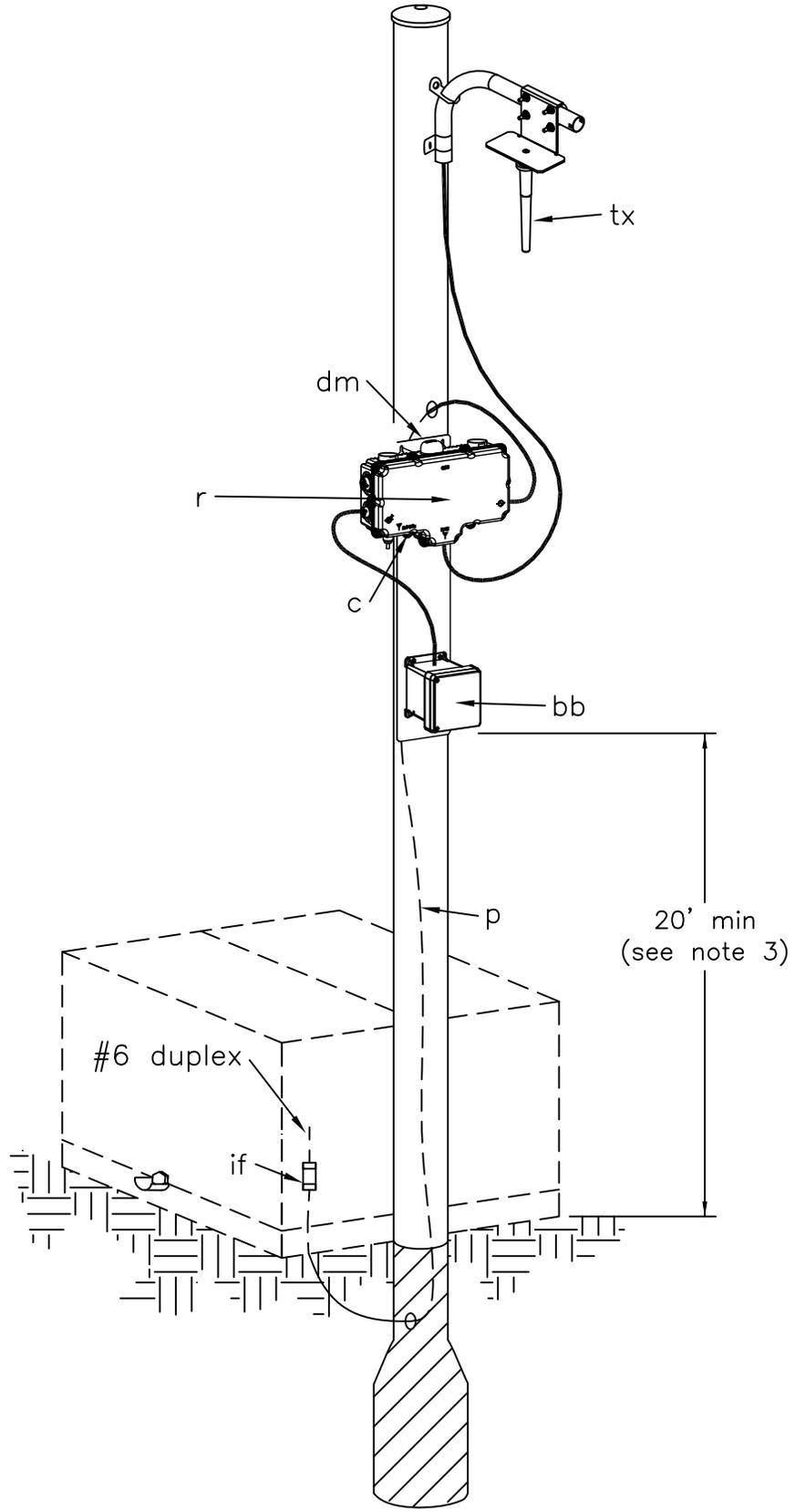
**NOTES:**

1. UNIT TO INCLUDE 5/8" x 8' COPPERCLAD ROD WITH CLAMP #6 S.D. CU AS REQUIRED.
2. ELECTRICAL RATINGS UK5-2 (2) 200AMP CONTINUOUS, UK5-2 400A-(2) 320AMPS CONTINUOUS AMP BOTH 120/240 VOLTS SINGLE PHASE, 3 WIRE.
3. UNIT INCLUDES INSTALLATION AND CONNECTION OF GROUND , BACKFILLING AND TAMPING FOR PLUMB INSTALLATION.
4. 4 TERMINAL LEVER BYPASS SOCKET FOR UK5-2 400A
5. SECONDARY BREAKERS SUPPLIED BY CONSUMER. (GETDQ---)
6. UNIT INCLUDES LOCKING DEVICES AND WARNING SIGNS AS SPECIFIED.
7. SECONDARY WIRE IS INCLUDED IN THIS SPECIFICATION.
8. UK5-2 400A PARALLEL 3/0 CU JUMPERS FOR EACH METER SOCKET.

DOUBLE METER PEDESTAL

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	10/18/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22
UK5-2	
UK5-2 400A	
FILE NAME:	
REA_SPCS\0011	

ITEM	QTY	ASSET #	INVENTORY NO.
r	1	DT MT 370070	77000050



CORE ELECTRIC COOPERATIVE

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	07/01/19
DRAWN	
BY:	JLM
APP	
BY:	MFJ
REVISED	
DATE:	10/13/22
<b>UM9-2</b>	
FILE NAME:	UM9-2 Pole Mounted AMI AP

POLE MOUNTED AMI RELAY  
SHEET 1 OF 2

NOTES:

1. One 1/4"-20" x 3/8" philips head screw is used for a ground screw.
2. One power cable is the main feed power and the other is the backup battery power.
3. Pole size shall be site specific. 8' minimum from base to lowest part of AMI equipment.
4. Cable Colors:  
     Hot - Brown  
     Neutral - Blue  
     Ground - Green/Yellow
5. Antenna shall be set no less than 30" from the pole.

ITEM	QTY	MATERIAL	INVENTORY NO.
c	8	1/4"-20" x 1/2" nut	-
c	8	1/4" Split lock washer	-
p	2	AMI Power cable	77000030
p	1	Street light pole (UMP-35)	49500035
r	1	AMI Relay	77000050
s	9	1/4"-20" x 3/8" philips screw	-
s	8	1/4"-20" x 1" carriage screw	-
bb	1	Backup battery	77000010
bc	*	Band clamps	-
dm	1	Relay/BB Mounting Bracket	77000090
if	1	Inline fuse 10A	-
tx	1	Antenna, Nan	77000040
	*	UV resistant zip tie	-
	1	Fuse Holder	24501501
	2	Fuse Holder, Cover	24501502
	*	Sec Duplex	-
	1	Area Light, Large Arm	77000070
	1	Antenna Bracket, Arm Mount	77000100

\*Quantity as Required

POLE MOUNTED AMI RELAY  
SHEET 2 OF 2



ISSUE  
 DATE: 07/01/19  
 DRAWN  
 BY: JLM  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 0623/20

UM9-2

FILE NAME:  
 UM9-2 Pole  
 Mounted AMI AP



## **MISCELLANEOUS UNITS**

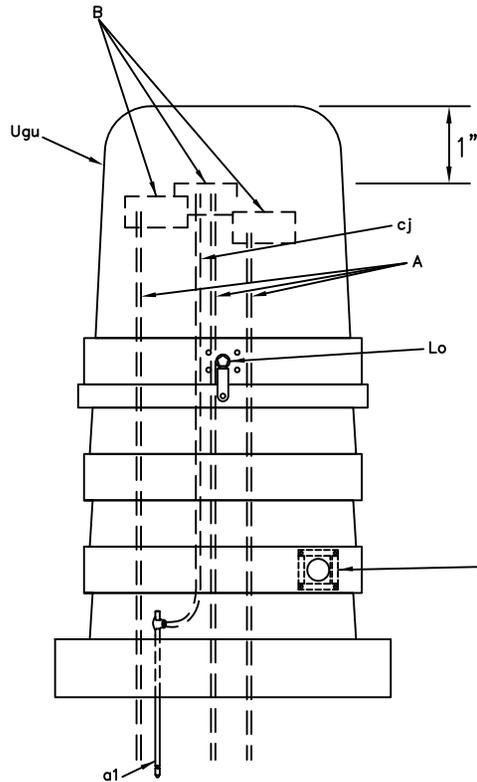


# MISCELLANEOUS UNITS

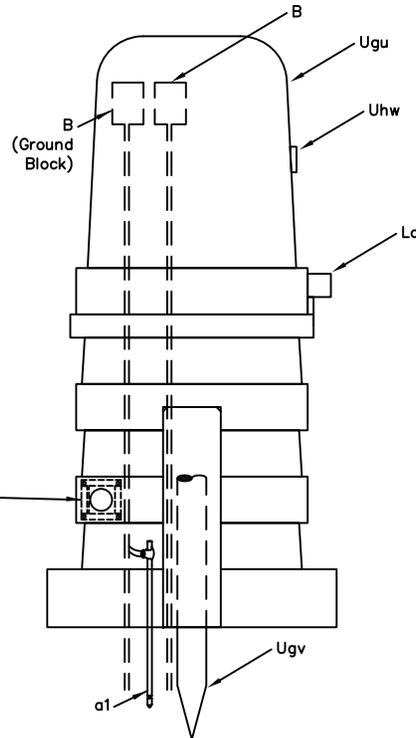
PAGE	DRAWING	DESCRIPTION
11.01	UK5	SECONDARY ASSEMBLY UNDERGROUND CABLE
11.02	UM48	3 PHASE GROUNDING ASSEMBLY FOR UNDERGROUND JACKETED CABLE
11.03	UM48-1	1 PHASE GROUNDING ASSEMBLY FOR UNDERGROUND JACKETED CABLE
11.04	UMGP	POST BARRIER 50000000
11.05	UMLA	ELBOW ARRESTER 01300400
11.06	UMLA-PS	PARKING STAND ARRESTER 01300500
11.07	UJ1-4,6, 8 UJ2-8Z	SECONDARY LUGS
11.08	UJ2-6, 8 UJ2-6N,8N	SECONDARY LUGS
11.09	UJ2-6S,8S,10S,12S	SECONDARY SPADE LUGS
11.10	UM3-1, UM3-2	MISCELLANEOUS ACCESSORIES
11.11	UM6-	SECONDARY SPADE LUGS
11.12	UM6-	MISCELLANEOUS ACCESSORIES
11.13	UM6-	MISCELLANEOUS ACCESSORIES
11.14	UM6-	MISCELLANEOUS ACCESSORIES
11.15	UM6-4	FAULTED CIRCUIT INDICATOR (FCI)
11.16	UM40	MISCELLANEOUS ACCESSORIES
11.17	UMS-	UNDERGROUND FUSE UNITS



ITEM	QTY	ASSET #	INVENTORY NO.
Ugu	1	DT SV 369083	44450103
a1	1	DT OH 365051	53828508



FRONT VIEW



BACK VIEW

ITEM	QTY.	MATERIAL	INVENTORY NO.
Ugu	1	Power pedestal	44450103
Ugv	1	Stake as required	—
Uhw	1	Sign, "CAUTION 120/240 VOLTS"	—
a1	1	5/8" x 8' COPPER CLAD GROUND ROD	53828508
cj	AS REQ'D	#6 COPPER GROUND WIRE	—
Lo	1	LOCKING DEVICE AS SPECIFIED	—
A	AS REQ'D	SECONDARY WIRE MAKEUP	—
B	3	6 WAY INSULATED CONNECTOR BLOCKS	42200635
	1	CLAMP, GROUND ROD	11311000

NOTES:

1. INSTALL SIGNAGE AS SHOWN ON SIGN GUIDE 1.
2. INSULATED 6 WAY CONNECTOR BLOCKS (UJI-6) REQUIRED FOR ALL TERMINALS.
3. 350 TPX SECONDARY WIRE FEEDING PEDESTAL IS INCLUDED IN THIS SPEC.
4. 2 ACCESS HOLES WITH COVERS REQUIRED ON
5. SECONDARY WIRE SHALL BE TERMINATE IN BLOCKS 1" BELOW TOP OF PEDESTAL.
6. INSTALL NEUTRAL TERMINAL BLOCK BEHIND SECONDARY BLOCKS.
7. ALL TERMINAL BLOCKS AT THE SAME ELEVATION.
8. #6 GND & NEUTRAL TO BE TERMINATED ON SAME SIDE OF PEDESTAL, EITHER LEFT OR RIGHT.
9. INSTALL PEDESTAL TO MANUFACTURERS RECOMMENDED GRADE HEIGHT SHOWN ON OUTSIDE OF PEDESTAL.



ISSUE

DATE: 09/18/90

DRAWN

BY: CSK

APP

BY:

REVISED

DATE: 10/13/22

UK5

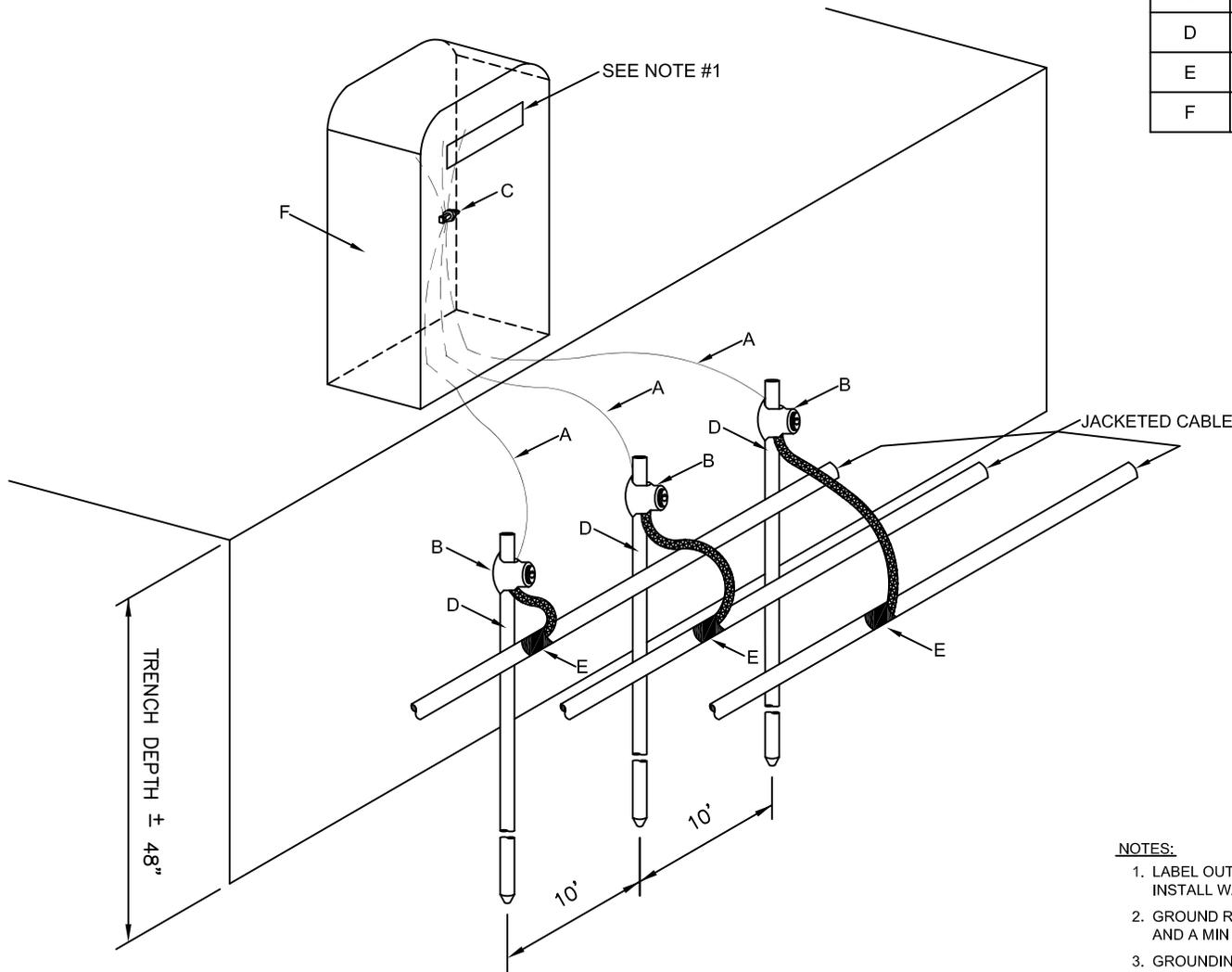
FILE NAME:

CORE ELECTRIC COOPERATIVE

SECONDARY ASSEMBLY UNDERGROUND CABLE

ITEM	QTY	ASSET #	INVENTORY NO.
D	3	DT OH 365051	53828508
F	1	DT SV 369083	44450103

ITEM	QTY.	MATERIAL	INVENTORY NO.
A	3	#6 BARE COPPER WIRE LENGTH AS REQUIRED	15610501
B	3	5/8" GROUND ROD CLAMP	11311000
C	1	#4 COPPER SPLIT BOLT CONNECTOR	17650406
D	3	5/8" GROUND ROD COPPER CLAD	53828508
E	3	JACKETED CABLE GROUNDING KIT (SEE NOTE #3)	28001000
F	1	FIBERGLASS UPRIGHT PEDESTAL	44450103



**NOTES:**

1. LABEL OUTSIDE OF PEDESTAL "CORE GROUNDING ASSEMBLY" AND INSTALL WARNING SIGN AS SHOWN ON CORE SIGN GUIDE #2
2. GROUND RODS TO BE DRIVEN - 6" ABOVE CABLE DEPTH AND A MIN OF 10 FOOT APART
3. GROUNDING KIT INCLUDES:
  - \* HEAT-SHRINKABLE REJACKETING SLEEVE
  - \* CONSTANT-FORCE GROUND CLAMP
  - \* BRAID EXTERNAL GROUNDING LEAD

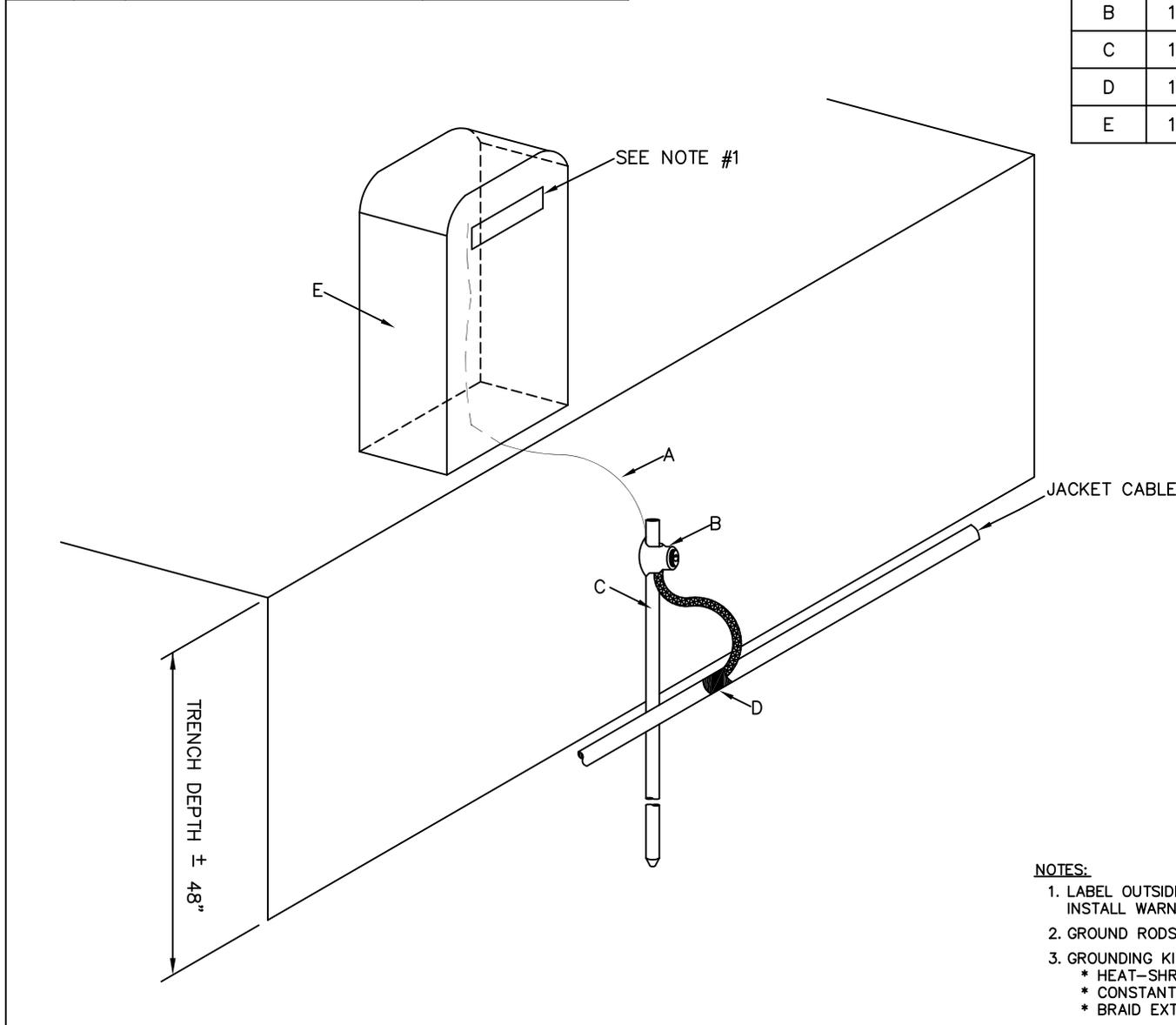
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ISSUE	DATE: 02/27/03
DRAWN	BY: RWO
APP	BY:
REVISED	DATE: 10/13/22
<b>UM-48</b>	
FILE NAME:	\\REA_SPCS\005P

**CORE ELECTRIC COOPERATIVE**

**3 PHASE GROUNDING ASSEMBLY FOR UNDERGROUND JACKETED CABLE**

ITEM	QTY	ASSET #	INVENTORY NO.
C	1	DT OH 365051	53828508
E	1	DT SV 369083	44450103

ITEM	QTY.	MATERIAL	INVENTORY NO.
A	1	#6 BARE COPPER WIRE LENGTH AS REQUIRED	15610501
B	1	5/8" GROUND ROD CLAMP	11311000
C	1	5/8" GROUND ROD COPPER CLAD	53828508
D	1	JACKETED CABLE GROUNDING KIT (SEE NOTE #3)	28001000
E	1	FIBERGLASS UPRIGHT PEDESTAL	44450103



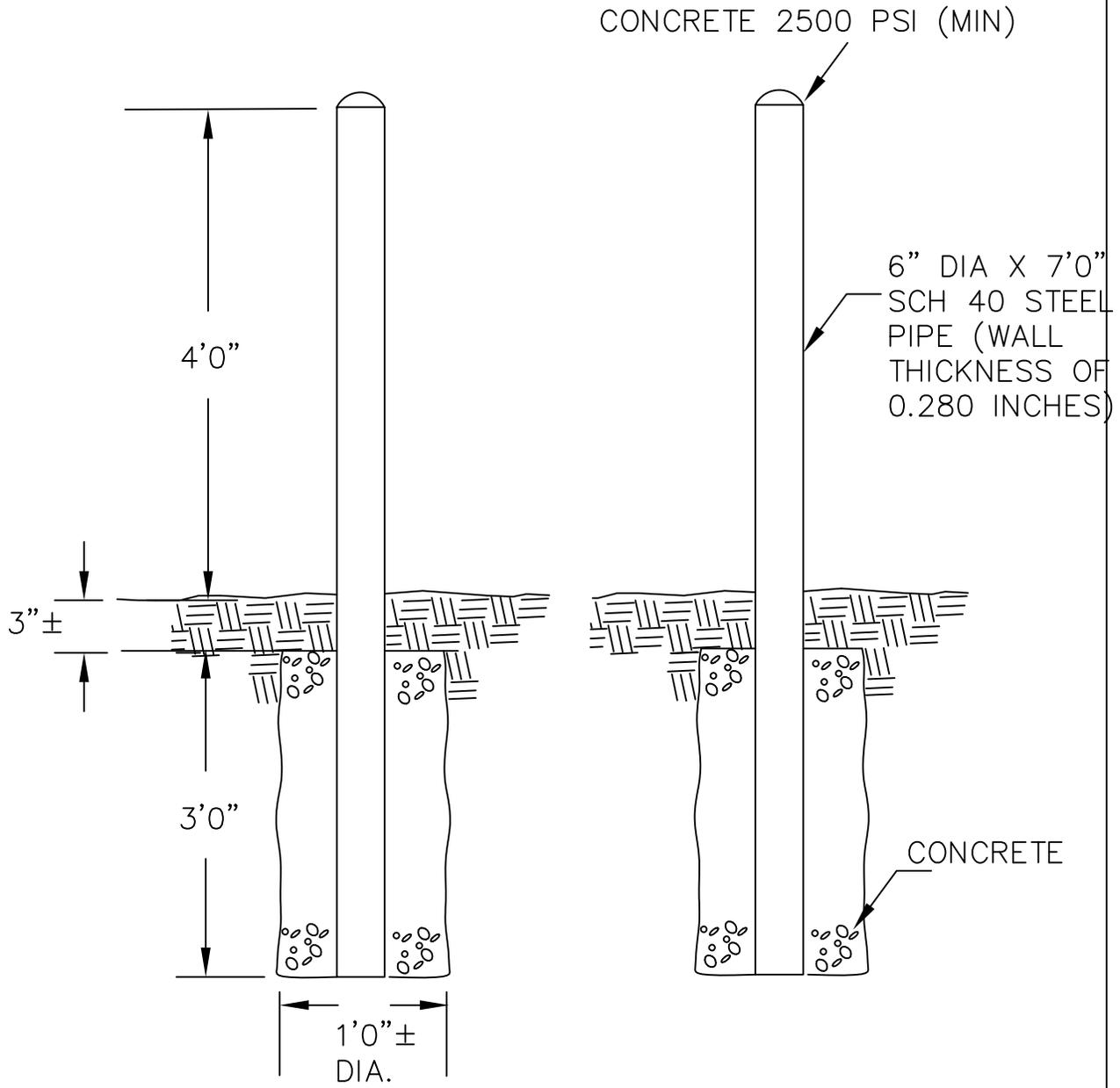
**NOTES:**

1. LABEL OUTSIDE OF PEDESTAL "CORE GROUNDING ASSEMBLY" AND INSTALL WARNING SIGN AS SHOWN ON CORE SIGN GUIDE #2
2. GROUND RODS TO BE DRIVEN - 6" ABOVE CABLE DEPTH
3. GROUNDING KIT INCLUDES:
  - \* HEAT-SHRINKABLE REJACKETING SLEEVE
  - \* CONSTANT-FORCE GROUND CLAMP
  - \* BRAID EXTERNAL GROUNDING LEAD

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	DATE: 05/22/03
DRAWN	BY: RWO
APP	BY:
REVISED	DATE: 10/13/22
UM-48-1	
FILE NAME: \\REA_SPCS\005S	

**CORE ELECTRIC COOPERATIVE**

**1Ø GROUNDING ASSEMBLY FOR UNDERGROUND JACKETED CABLE**



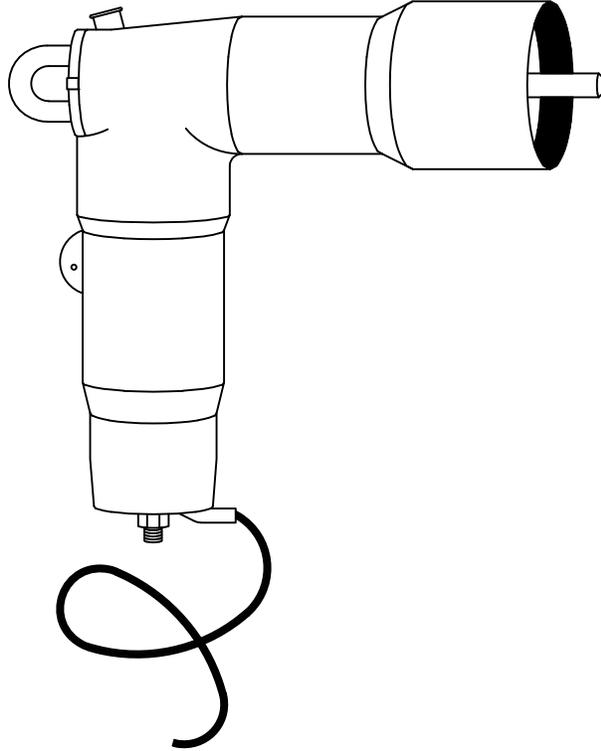
NOTES:

1. CLEAN AND PRIME ALL EXPOSED METAL. PAINT UNIT WITH GLOSS OR SEMI-GLOSS CANARY YELLOW EXTERIOR ACRYLIC.
2. UNIT SHALL NOT OBSTRUCT OR INTERFERE WITH EQUIPMENT OPERATION OR ACCESS TO EQUIPMENT. SEE DWG. UM1 OR UM1-1.
3. FILL PIPE COMPLETELY WITH CONCRETE. TOP OF PIPE SHALL HAVE CONCRETE ROUNDED TO SHED WATER.
4. SURFACE RESTORATION OTHER THAN TAMPING IS NOT PART OF THIS UNIT.

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	11/14/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22
UMGP	
FILE NAME:	
I:\REA_SPCS\0034	

POST BARRIER 50000000

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT UD 367055	01300400



UMLA  
DEAD BREAK M.O.V. ELBOW ARRESTER

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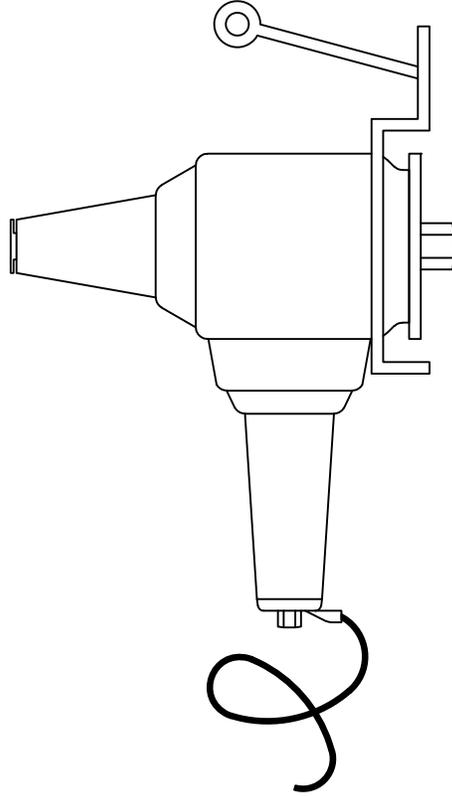


ISSUE  
DATE: 08/30/91  
DRAWN  
BY: CSK  
APP  
BY:  
REVISED  
DATE: 10/13/22

ELBOW ARRESTER 01300400

UMLA  
FILE NAME:  
I:\REA\_SPCS\0049

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT UD 367055	01300500



UMLA-PS  
PARKING STAND ARRESTER

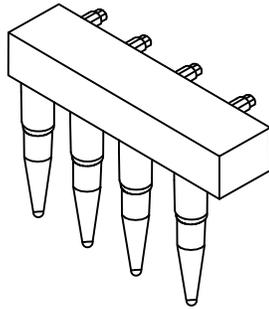
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ISSUE  
DATE: 07/03/19  
DRAWN  
BY: JLM  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

PARKING STAND ARRESTER 01300500

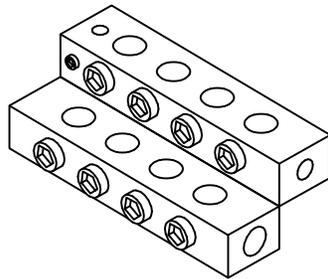
UMLA-PS  
FILE NAME:  
I:\REA\_SPCS\0049



NOTES:

1.) TYPICAL IN POWER PEDESTALS

ITEM	#	MATERIAL	INVENTORY NO.
	1	UJ1-4 POWER PEDESTAL SECONDARY CONNECTION, 4WAY, 350 TPX	42200435
	1	UJ1-6 POWER PEDESTAL SECONDARY CONNECTION, 6WAY, 350 TPX	42200635
	1	UJ1-8 POWER PEDESTAL SECONDARY CONNECTION, 6WAY, 500 TPX	42200650



NOTES:

- 1.) TYPICAL IN 1Ø TRANSFORMER APPLICATIONS
- 2.) MAXIMUM WIRE SIZE OF 500TPX

ITEM	#	MATERIAL	INVENTORY NO.
	1	UJ2-8Z TRANSFORMER SECONDARY CONNECTION, 8WAY, Z-BAR	42008502

NOTES:

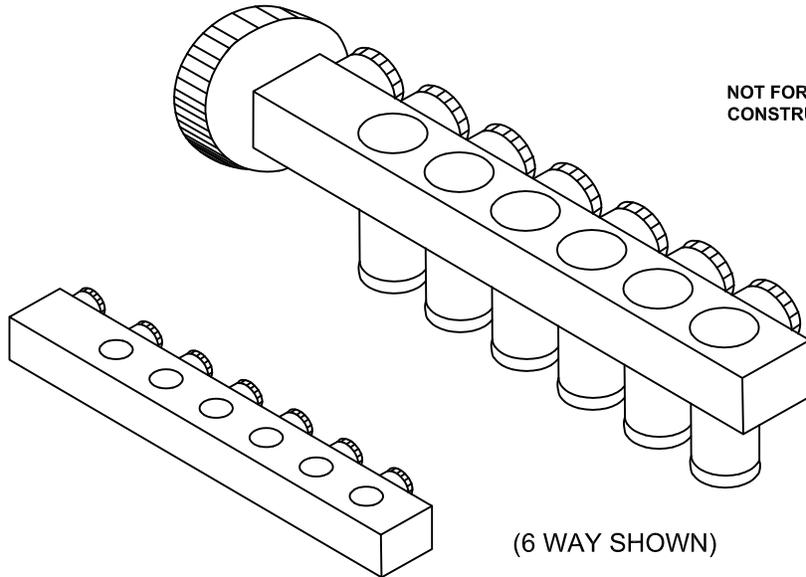
- 1. WIRE BRUSH ALL CONNECTIONS AND APPLY INHIBITOR PASTE.
- 2. TORQUE ALL BOLTS TO MFG'S SUGGESTED VALUES.
- 3. TYPICAL WIRE CONNECTIONS ARE TL LUGS FOR UJ1 SECONDARY PADDLE.
- 4. LAST NUMBER ON UNIT DESIGNATION SPECIFIES MAX. # OF WIRE TERMINATIONS.



ISSUE  
 DATE: 08/13/91  
 DRAWN  
 BY: RMD  
 APP  
 BY: MFJ  
 REVISED  
 DATE: 10/13/22

**SECONDARY LUGS**

UJ1-4,6,8  
 UJ2-8Z  
 FILE NAME:

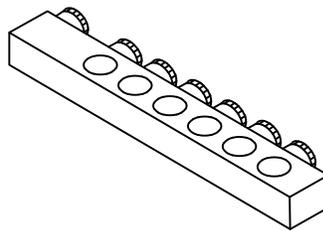


NOT FOR NEW CONSTRUCTION

NOTES:

- 1.) TYPICAL IN 1Ø TRANSFORMER APPLICATIONS
- 2.) MAXIMUM WIRE SIZE OF 350TPX
- 3.) NEW FOR NEW CONSTRUCTION

ITEM	#	MATERIAL	INVENTORY NO.
	1	UJ2-6 TRANSFORMER SECONDARY CONNECTION, 6WAY, WITH SILICON SLEEVE	42006500
	1	UJ2-8 TRANSFORMER SECONDARY CONNECTION, 8WAY, WITH SILICON SLEEVE	42008500



NOT FOR NEW CONSTRUCTION

(NEUTRAL BAR 6 WAY SHOWN)

NOTES:

- 1.) TYPICAL IN 1Ø TRANSFORMER APPLICATIONS
- 2.) MAXIMUM WIRE SIZE OF 350TPX
- 3.) NEW FOR NEW CONSTRUCTION

ITEM	#	MATERIAL	INVENTORY NO.
	1	UJ2-6N TRANSFORMER SECONDARY CONNECTION, 6WAY, NEUTRAL BAR	42106500
	1	UJ2-8N TRANSFORMER SECONDARY CONNECTION, 8WAY, NEUTRAL BAR	42108500



NOTES:

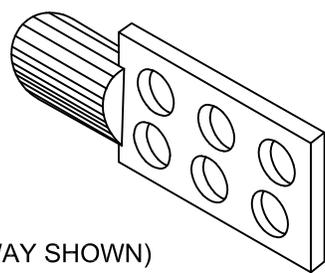
- 1. WIRE BRUSH ALL CONNECTIONS AND APPLY INHIBITOR PASTE.
- 2. TORQUE ALL BOLTS TO MFG'S SUGGESTED VALUES.
- 3. LAST NUMBER ON UNIT DESIGNATION SPECIFIES MAX. # OF WIRE TERMINATIONS.

ISSUE	
DATE:	08/13/91
DRAWN	
BY:	RMD
APP	
BY:	MFJ
REVISED	
DATE:	10/13/22

SECONDARY LUGS

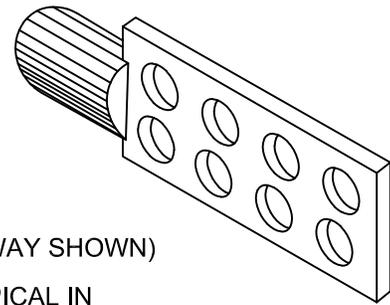
UJ2-6,8  
UJ2-6N,8N  
FILE NAME:  
E:\REA\_SPCS\0041

#1



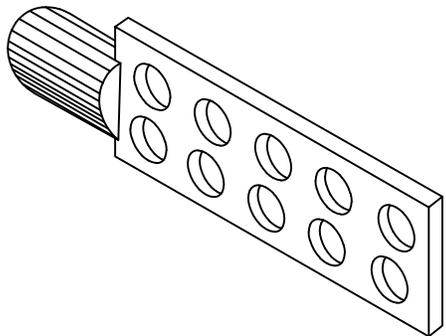
(6 WAY SHOWN)  
TYPICAL IN  
3Ø TRANSFORMER  
APPLICATIONS

#2



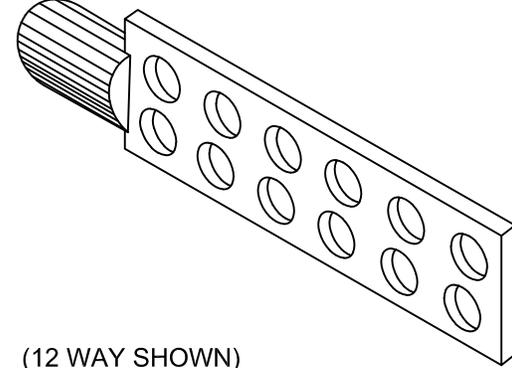
(8 WAY SHOWN)  
TYPICAL IN  
3Ø TRANSFORMER  
APPLICATIONS

#3



(10 WAY SHOWN)  
TYPICAL IN  
3Ø TRANSFORMER  
APPLICATIONS

#4



(12 WAY SHOWN)  
TYPICAL IN  
3Ø TRANSFORMER  
APPLICATIONS

ITEM	#	MATERIAL	INVENTORY NO.
1	1	UJ2-6S SPADE TYPE, TRANSFORMER SECONDARY CONNECTION, 5/8" STUD, 6WAY	42016758
2	1	UJ2-8S SPADE TYPE, TRANSFORMER SECONDARY CONNECTION, 5/8" STUD, 8WAY	42018758
3	1	UJ2-10S SPADE TYPE, TRANSFORMER SECONDARY CONNECTION, 5/8" STUD, 10WAY	42011758
4	1	UJ2-12S SPADE TYPE TRANSFORMER SECONDARY CONNECTION 12WAY	-

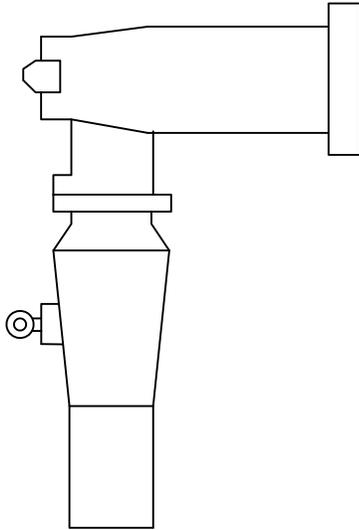
  

<b>NOTES:</b> 1. WIRE BRUSH ALL CONNECTIONS AND APPLY INHIBITOR PASTE. 2. TORQUE ALL BOLTS TO MFG'S SUGGESTED VALUES. 3. LAST NUMBER ON UNIT DESIGNATION SPECIFIES MAX. # OF WIRE TERMINATIONS.	<b>ISSUE</b> DATE: 08/13/91
	<b>DRAWN</b> BY: RMD
	<b>APP</b> BY: MFJ
	<b>REVISED</b> DATE: 10/13/22
	UJ2-6S,8S UJ2-10S,12S FILE NAME: I:\REA_SPCS\0041

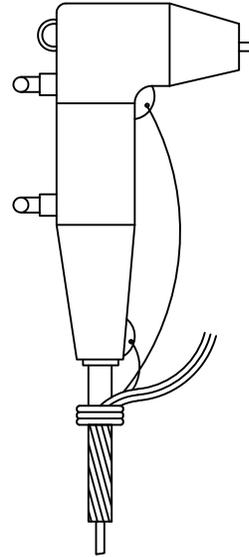
  

<b>SECONDARY LUGS</b>
-----------------------

ITEM	QTY	ASSET #	INVENTORY NO.
UM3-1	1	DT UD 367016	220000AA
UM3-2	1	DT UD 367016	220000AA



UM3-1  
 1/0 OR 4/0  
 LOAD BREAK ELBOW  
 (200 A)  
 ELBOW TO INCLUDE TEST POINT  
 220000AA  
 1/0: 22001000  
 4/0: 22004000



UM3-2  
 #2, 1/0, 4/0  
 FUSED ELBOW TERMINATION  
 (200 A)  
 220000AA  
 #2: 2200500  
 1/0: 22001010

NOT FOR NEW  
 CONSTRUCTION

**NOTES:**

1. UM3-2 MAY BE USED FOR NEW CONSTRUCTION IN LIMITED CASES. APPROVAL SHALL BE REQUIRED FROM THE OPERATIONS MANAGER AND THE DIRECTOR OF PLANNING PRIOR TO INSTALL.
2. UM3-1C IS A CONNECTION UNIT USED TO DISCONNECT AN EXISTING ELBOW, AND THEN REPLACE THAT ELBOW AND RECONNECT.

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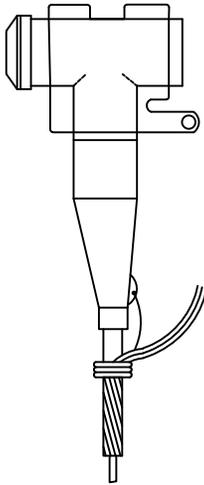


ISSUE	
DATE:	08/29/91
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22

MISCELLANEOUS ACCESSORIES

UM3-  
 FILE NAME:  
 I:\REA\_SPCS\004E

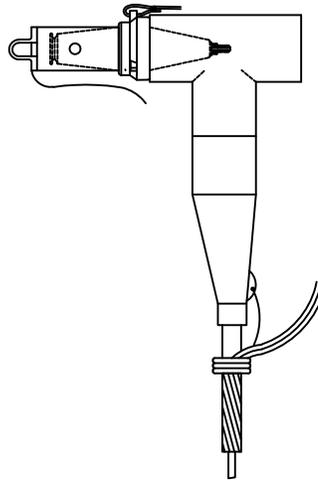
ITEM	QTY	ASSET #	INVENTORY NO.
1		DT UD 367016	220000AA



UM6-10 PO  
PUSHOP DEAD BREAK TERMINATION  
(600 A)

NOT FOR NEW  
CONSTRUCTION

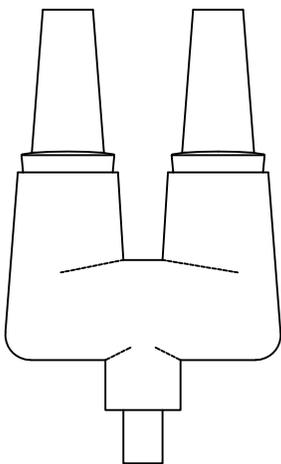
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1		DT UD 367016	220000AA



UM6-10  
DEAD BREAK TERMINATION  
(600 A)

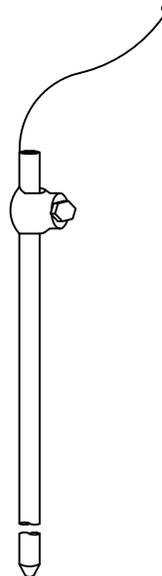
220000AA  
4/0: 22004060  
500: 22007500  
1000: 22008000  
1100: 22008000

ITEM	QTY	ASSET #	INVENTORY NO.
1		DT UD 367016	-



UM6-5 Uhb  
FEED THROUGH LOAD BREAK INSERT

ITEM	QTY	ASSET #	INVENTORY NO.
1		DT UD 365051	53828508



UM6-6 or UM6-6 MO ai, aj, cj  
GROUND ROD ASSEMBLY  
53828508  
CLAMP, GROUND ROD  
11311000

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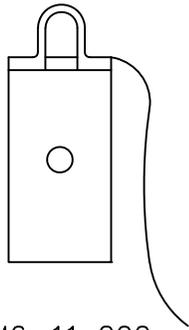


ISSUE	
DATE:	10/11/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22

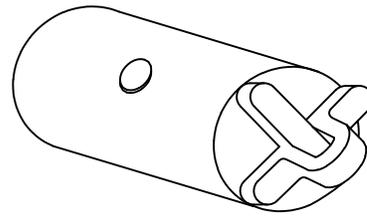
PAGE 1 OF 4

MISCELLANEOUS ACCESSORIES

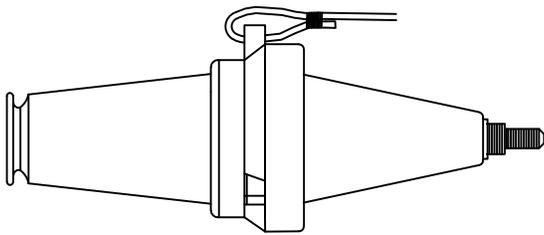
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FILE NAME:  
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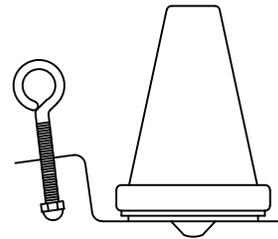
UM6-11 200  
INSULATED PROTECTIVE CAP  
(200 A)  
10100200



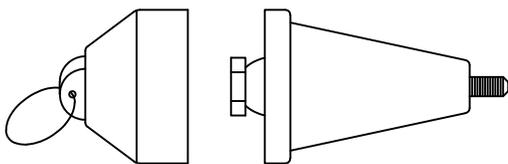
UM6-11 600  
INSULATED PROTECTIVE CAP  
(600 A)  
10100600



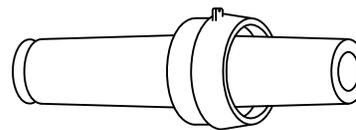
UM6-10 RC  
600 AMP 15 Kv  
LOADBREAK REDUCING TAP  
34100600



UM6-16 Uhq  
STAND-OFF INSULATOR  
(600 A)  
34101006



UM6-17 Uhb  
INSULATING PLUG  
600 AMP CONNECTOR  
10100100

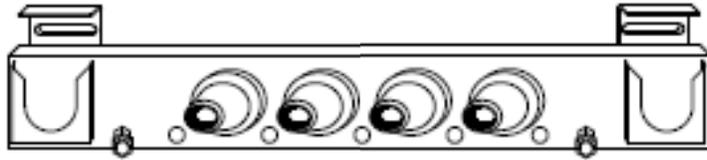


UM6-13  
LOAD BREAK INSERT  
200 AMP 15 KV  
41620100

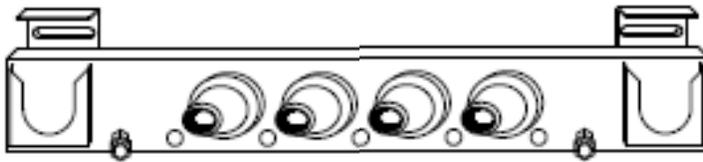
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ISSUE	
DATE:	10/15/90
DRAWN	
BY:	CSK
APP	
BY:	
REVISED	
DATE:	10/13/22



UM6-23  
Tee Connector  
Four Point Junction  
(600 A)  
41600410



UM6-23B  
Tee Connector  
Four Point Junction  
(200 A)  
—

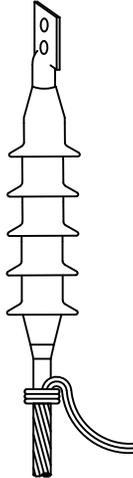
NOTES:

1. THE UM6-23 IS INCLUDED IN THE UMS-33 CUBICLE SPECIFICATIONS.



ISSUE	
DATE:	10/15/90
DRAWN	
BY:	CSK
APP	
BY:	MFJ
REVISED	
DATE:	10/13/22

QTY	ASSET #	INVENTORY NO.
-	-	660000AA



UM6-2A  
 1/0, 4/0 or 500  
 MODULAR OR UNITIZED  
 NON-CERAMIC TERMINATION

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PAGE 4 OF 4

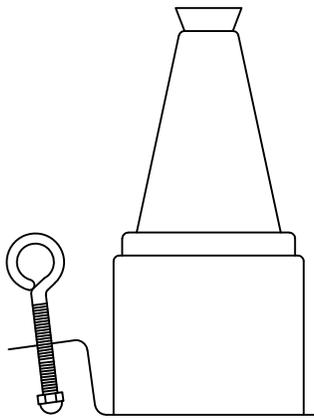


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 APP  
 BY:  
 REVISED  
 DATE: 10/13/22

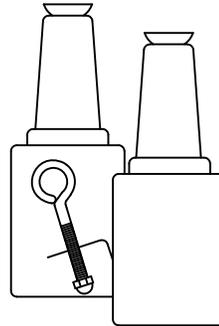
		INVENTORY NO.				
ITEM #	MATERIAL	1/0	4/0	500	1000/1100	JEPR
-	NON-CERAMIC TERMINATION	66001000	66004000	66005022	66008000	

MISCELLANEOUS ACCESSORIES

UM6-  
 FILE NAME:  
 I:\REA\_SPCS\002U



UM 40-0-1  
STAND-OFF INSULATOR  
(200 A)  
34101000



UM 40-0-2  
FEED THROUGH  
(200 A)  
08600400

MISCELLANEOUS ACCESSORIES

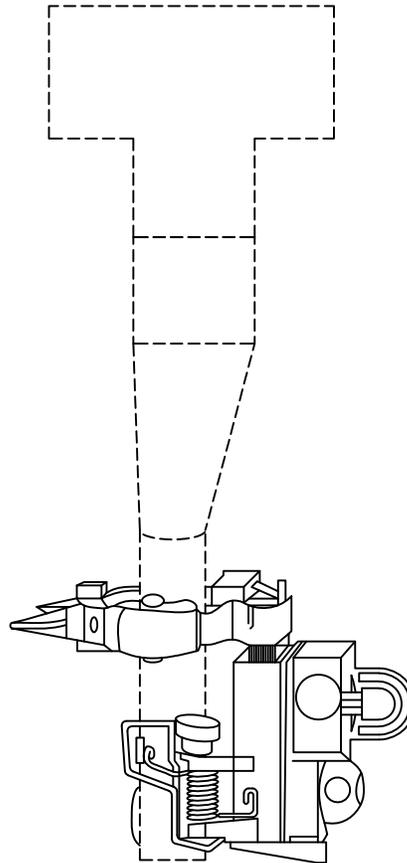
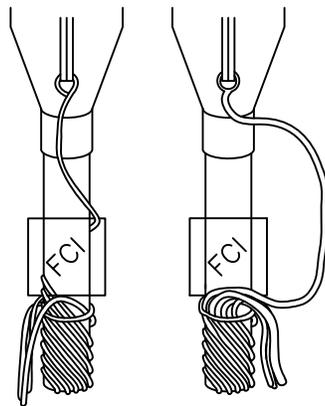


ISSUE  
DATE: 08/30/91  
DRAWN  
BY: CSK  
APP  
BY:  
REVISED  
DATE: 10/13/22

UM40-

FILE NAME:  
I:\REA\_SPCS\003Y

ITEM	QTY	ASSET #	INVENTORY NO.
UM6-4	1	DT UD 367081	230000AA



CORE ELECTRIC COOPERATIVE

**NOTES:**

1. PLACE FCI APPROXIMATELY 4 INCHES BELOW ELBOW.
2. ATTACH ONE STRAND OF CONCENTRIC NEUTRAL WRAPPED AROUND THE CABLE OR OUTSIDE OF FCI AS SHOWN ABOVE.
3. TERMINATE AND GROUND ALL THE REMAINING NEUTRAL WIRES APPROXIMATELY 6 INCHES OR MORE BELOW THE ELBOW.
4. ELBOW IS NOT INCLUDED IN THIS SPEC.

(DRAWING SHOWS 600AMP T-BODY ELBOW, FCI. MAY ALSO BE USED WITH CABLES USING 200AMP LOAD BREAK ELBOWS)



ISSUE
DATE:
DRAWN
BY:
APP
BY:
REVISED
DATE: 10/13/22

230000AA

FAULTED CIRCUIT INDICATOR (FCI)

UM6-4

FILE NAME:

UNDERGROUND FUSE CHART

AU	FUSE SIZE	INVENTORY NUMBER
UMS-7E	14A Min. Melt	24500907
UMS-15E	30A Min. Melt	24500915
UMS-25E	50A Min. Melt	24500925
UMS-40E	80A Min. Melt	24500940
UMS-65E	130A Min. Melt	24500965
UMS-80E	160A Min. Melt	24500980
UMS-100E	200A Min. Melt	24501000
UMS-125E	250A Min. Melt	24501125
UMS-150E	300A Min. Melt	24501150
UMS-200E	400A Min. Melt	24501200

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ISSUE  
DATE: 12/24/20  
DRAWN  
BY: RMD  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

FUSE CHART

UMS-FUSE  
FILE NAME:  
H:\REA\_SPCS\0010



## **STREET LIGHTING**

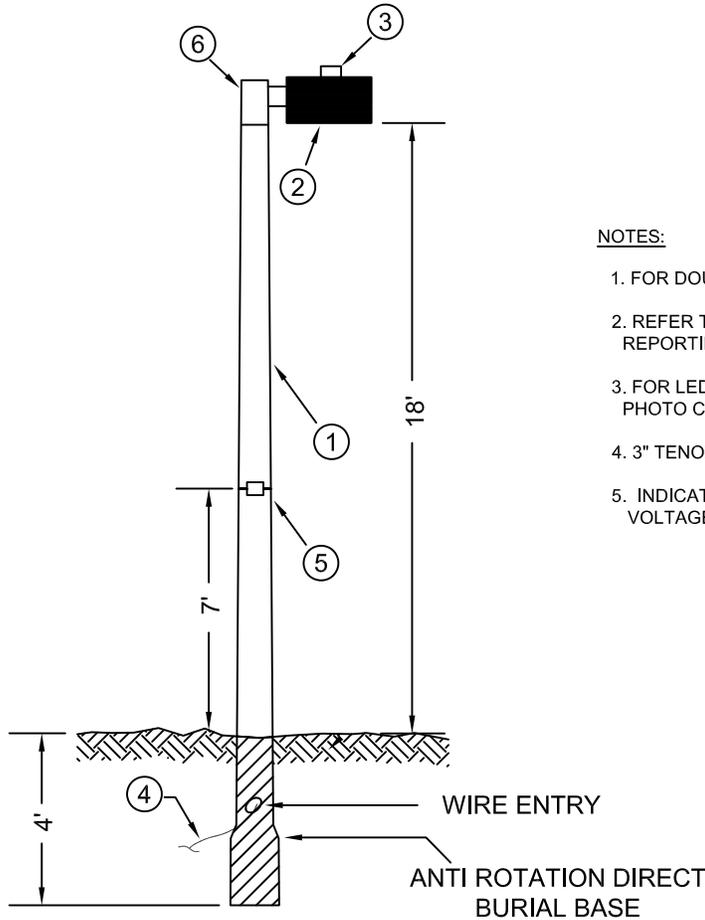
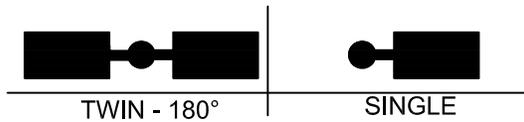


# STREET LIGHTING

PAGE	DRAWING	DESCRIPTION
12.01	UML-MLED	MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE
12.02	UML-MLED DBL	MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE
12.03	UML-MLXED	MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE
12.04	UML-MLXED DBL	MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE
12.05	UML-CLED	COLONIAL STYLE STREET LIGHT
12.06	UML-HLED	COBRA HEAD STYLE STREET LIGHT
12.07	TENON	8.0" X 3.125" I.D. TENON SINGLE FIXTURE MOUNT
12.08	TENON DOUBLE	8.0" X 3.125" I.D. TENON 180° DOUBLE FIXTURE MOUNT



ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373003	49500023
2	1	DT SL 373053	39303000
4	1	DT SV 369077	09350602



**NOTES:**

1. FOR DOUBLE FIXTURE SPECIFY UML-MLED DBL.
2. REFER TO STREET LIGHT DATA COLLECTION REPORTING AND FIELD IDENTITY PROCEDURE.
3. FOR LED FIXTURE USE ONLY SOLID STATE PHOTO CONTROL.
4. 3" TENON WITH 8" ARM STANDARD FIXTURE.
5. INDICATE THE VOLTAGE ON FIXTURE IF VOLTAGE IS HIGHER THAN 120 VOLTS.

**Bulb, Wattage and Spec. Unit**

Bulb Type	Wattage	Full Unit Spec.	Fixture Spec.	Pole Spec.	INVENTORY #
LED	50W	UML-MLED	UMF-MLED	UMP-23	39303000

CORE ELECTRIC COOPERATIVE

ITEM	#	MATERIAL	SPEC #	INVENTORY #
1	1	BLACK ROUND TAPERED FIBERGLASS DIRECT BURIAL 23' POLE - (3" POLE TOP)	UMP-23	49500023
2	1	SHOE BOX FIXTURE WITH TENON, 50W LED	UMF-MLED	39303000
3	1	PHOTO CELL		44501000
4	1	#6 DUPLEX SECONDARY WIRE AS REQUIRED		09350602
5	1	METAL ID TAG AND STRAP		-
6	1	TENON, SINGLE, WITH 8" ARM		39501000
7	1	FUSE, ST. LT. (20 AMP)		24501495
8	1	FUSE HOLDER, ST. LT.		24501501
9	2	FUSE HOLDER COVER, ST. LT.		24501502



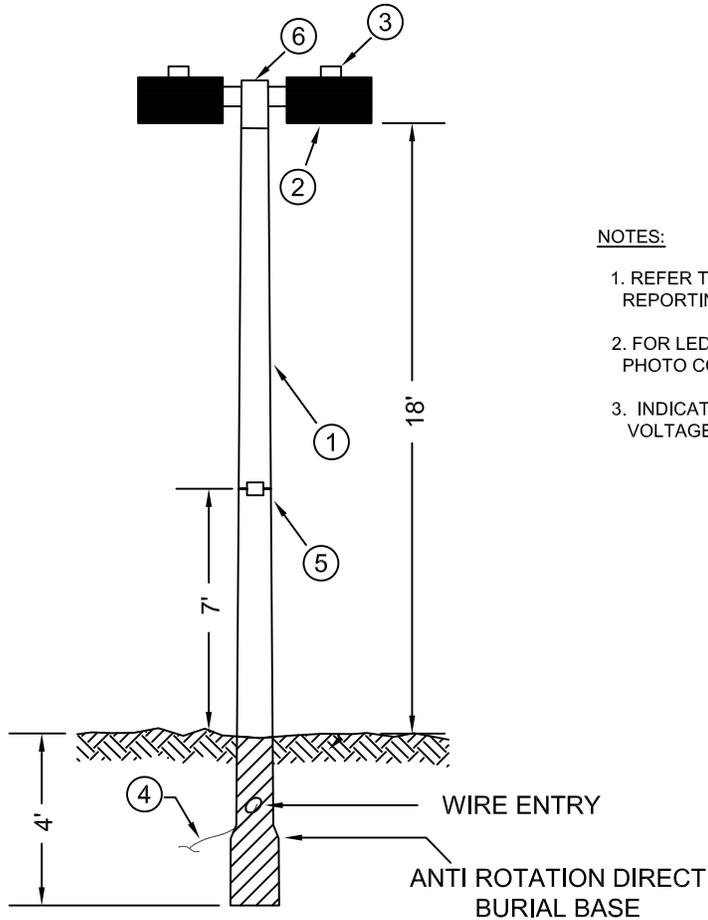
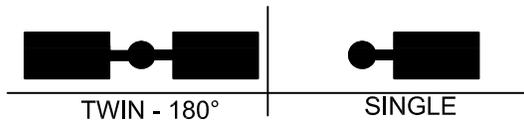
ISSUE	
DATE:	06/24/20
DRAWN	
BY:	RMD
APP	
BY:	MFJ
REVISED	
DATE:	10/13/22

**MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE**

UML-MLED

FILE NAME:  
StreetLight1

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373003	49500023
2	2	DT SL 373053	39303000
4	1	DT SV 369077	09350602



**NOTES:**

1. REFER TO STREET LIGHT DATA COLLECTION REPORTING AND FIELD IDENTITY PROCEDURE.
2. FOR LED FIXTURE USE ONLY SOLID STATE PHOTO CONTROL.
3. INDICATE THE VOLTAGE ON FIXTURE IF VOLTAGE IS HIGHER THAN 120 VOLTS.

CORE ELECTRIC COOPERATIVE

**Bulb, Wattage and Spec. Unit**

Bulb Type	Wattage	Full Unit Spec.	Fixture Spec.	Pole Spec.	INVENTORY #
LED	50W	UML-MLED DBL	UMF-MLED	UMP-23	39303000

ITEM	#	MATERIAL	SPEC #	INVENTORY #
1	1	BLACK ROUND TAPERED FIBERGLASS DIRECT BURIAL 23' POLE - (3" POLE TOP)	UMP-23	49500023
2	2	SHOE BOX FIXTURE WITH TENON, 50W LED	UMF-MLED	39303000
3	1	PHOTO CELL		44501000
4	1	#6 DUPLEX SECONDARY WIRE AS REQUIRED		09350602
5	1	METAL ID TAG AND STRAP		-
6	1	TENON, DOUBLE, WITH 8" ARM		39502000
7	1	FUSE, ST. LT. (20 AMP)		24501495
8	1	FUSE HOLDER, ST. LT.		24501501
9	2	FUSE HOLDER COVER, ST. LT.		24501502

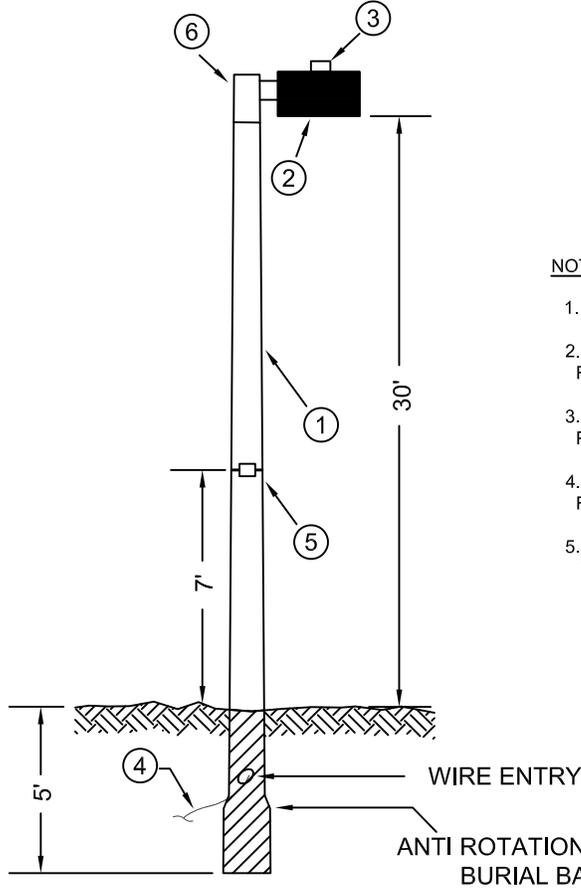
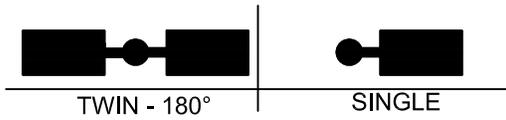


ISSUE  
DATE: 9/27/2012  
DRAWN  
BY: CJV  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

**MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE**

UML-MLED DBL  
FILE NAME:  
StreetLight1

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373003	49500035
2	1	DT SL 373050	39303500
4	1	DT SV 369077	09350602



**NOTES:**

1. FOR DOUBLE FIXTURE SPECIFY UML-MXLED DBL.
2. REFER TO STREET LIGHT DATA COLLECTION REPORTING AND FIELD IDENTITY PROCEDURE.
3. FOR LED FIXTURE USE ONLY SOLID STATE PHOTO CONTROL.
4. 3" TENON WITH 8" ARM STANDARD WITH FIXTURE.
5. INDICATE THE VOLTAGE ON FIXTURE IF VOLTAGE IS HIGHER THAN 120 VOLTS.

**Bulb, Wattage and Spec. Unit**

Bulb Type	Wattage	Full Unit Spec.	Fixture Spec.	Pole Spec.	INVENTORY #
LED	75W	UML-MXLED	UMF-MXLED	UMP-35	39303500

CORE ELECTRIC COOPERATIVE

ITEM	#	MATERIAL	SPEC #	INVENTORY #
1	1	BLACK ROUND TAPERED FIBERGLASS DIRECT BURIAL 35' POLE - (3" POLE TOP)	UMP-35	49500035
2	1	SHOE BOX FIXTURE WITH TENON, 75W LED	UMF-MXLED	39303500
3	1	PHOTO CELL		44501000
4	1	#6 DUPLEX SECONDARY WIRE AS REQUIRED		09350602
5	1	METAL ID TAG AND STRAP		-
6	1	TENON, SINGLE, WITH 8" ARM		39501000
7	1	FUSE, ST. LT. (20 AMP)		24501495
8	1	FUSE HOLDER, ST. LT.		24501501
9	2	FUSE HOLDER COVER, ST. LT.		24501502

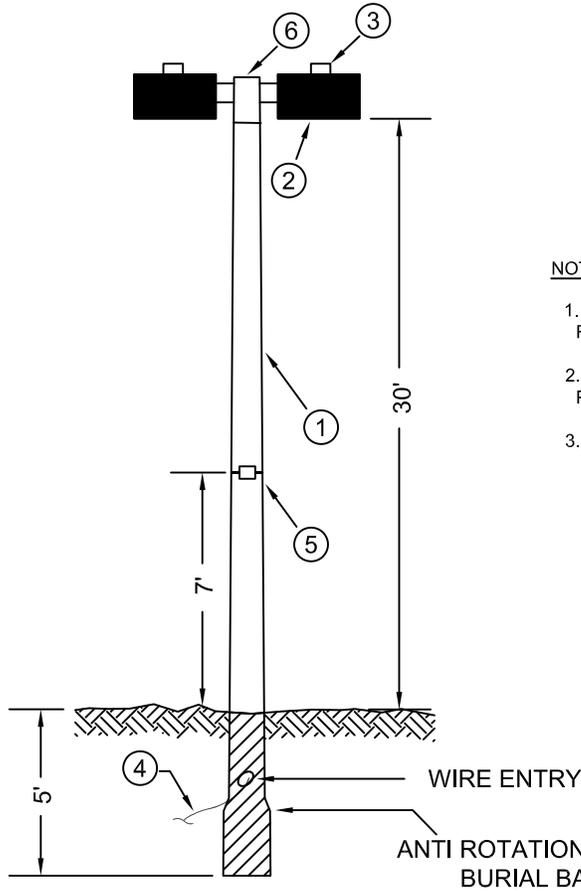
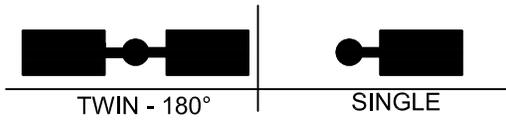


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DATE: 12/24/20  
DRAWN  
BY: RMD  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

**MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE**

UML-MXLED  
FILE NAME:  
StreetLight2

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373003	49500035
2	2	DT SL 373050	39303500
4	1	DT SV 369077	09350602



**NOTES:**

1. REFER TO STREET LIGHT DATA COLLECTION REPORTING AND FIELD IDENTITY PROCEDURE.
2. FOR LED FIXTURE USE ONLY SOLID STATE PHOTO CONTROL.
3. INDICATE THE VOLTAGE ON FIXTURE IF VOLTAGE IS HIGHER THAN 120 VOLTS.

CORE ELECTRIC COOPERATIVE

**Bulb, Wattage and Spec. Unit**

Bulb Type	Wattage	Full Unit Spec.	Fixture Spec.	Pole Spec.	INVENTORY #
LED	75W	UML-MXLED DBL	UMF-MXLED	UMP-35	39303500

ITEM	#	MATERIAL	SPEC #	INVENTORY #
1	1	BLACK ROUND TAPERED FIBERGLASS DIRECT BURIAL 35' POLE - (3" POLE TOP)	UMP-35	49500035
2	2	SHOE BOX FIXTURE WITH TENON, 75W LED	UMF-MXLED	39303500
3	1	PHOTO CELL		44451000
4	1	#6 DUPLEX SECONDARY WIRE AS REQUIRED		09350602
5	1	METAL ID TAG AND STRAP		-
6	1	TENON, DOUBLE, WITH 8" ARMS		39502000
7	1	FUSE, ST. LT. (20 AMP)		24501495
8	1	FUSE HOLDER, ST. LT.		24501501
9	2	FUSE HOLDER COVER, ST. LT.		24501502

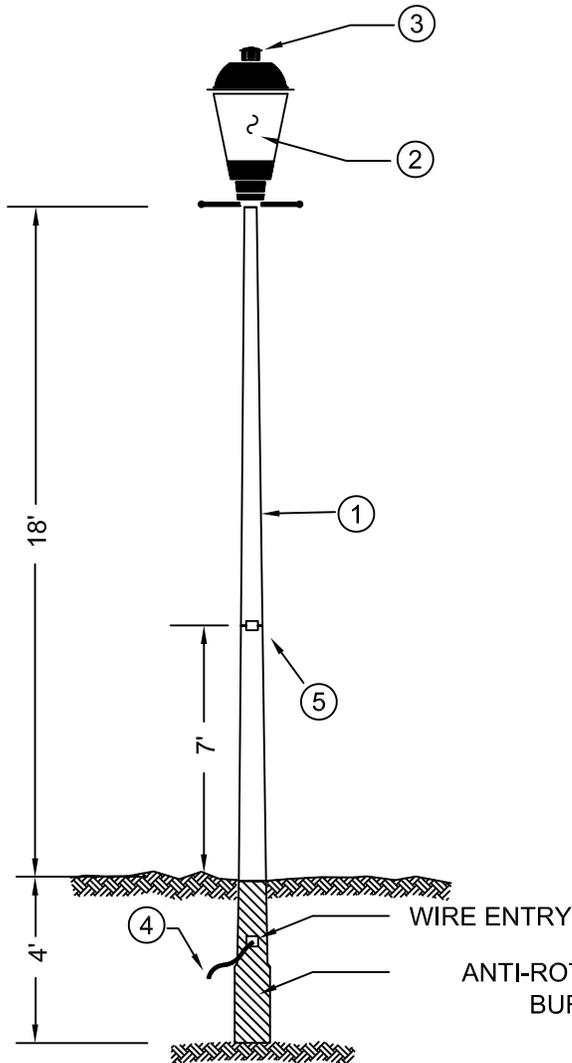


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DATE: 09/27/2012  
DRAWN  
BY: CJV  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

**MODERN SHOE BOX STYLE STREET LIGHT ON ROUND POLE**

UML-MXLED DBL  
FILE NAME:  
StreetLight2

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373003	49500023
2	1	DT SL 373050	39302500
4	1	DT SV 369077	09350602



**NOTES:**

1. REFER TO STREET LIGHT DATA COLLECTION REPORTING AND FIELD IDENTITY PROCEDURE.
2. FOR LED FIXTURE USE ONLY SOLID STATE PHOTO CONTROL.
3. INDICATE THE VOLTAGE ON FIXTURE IF VOLTAGE IS HIGHER THAN 120 VOLTS.

CORE ELECTRIC COOPERATIVE

**Bulb, Wattage and Spec. Unit**

Bulb Type	Wattage	Full Unit Spec.	Fixture Spec.	Pole Spec.	INVENTORY #
LED	50W	UML-CLED	UMF-CLED	UMP-23	39302500

ITEM	#	MATERIAL	SPEC #	INVENTORY #
1	1	BLACK ROUND TAPERED FIBERGLASS DIRECT BURIAL 23' POLE - (3" POLE TOP)	UMP-23	49500023
2	1	COLONIAL STYLE FIXTURE	UMF-CLED	39302500
3	1	PHOTO CELL		44501000
4	1	#6 DUPLEX SECONDARY WIRE AS REQUIRED		09350602
5	1	METAL ID TAG AND STRAP		-
6	1	FUSE, ST. LT. (20 AMP)		24501495
7	1	FUSE HOLDER, ST. LT.		24501501
8	2	FUSE HOLDER COVER, ST. LT.		24501502

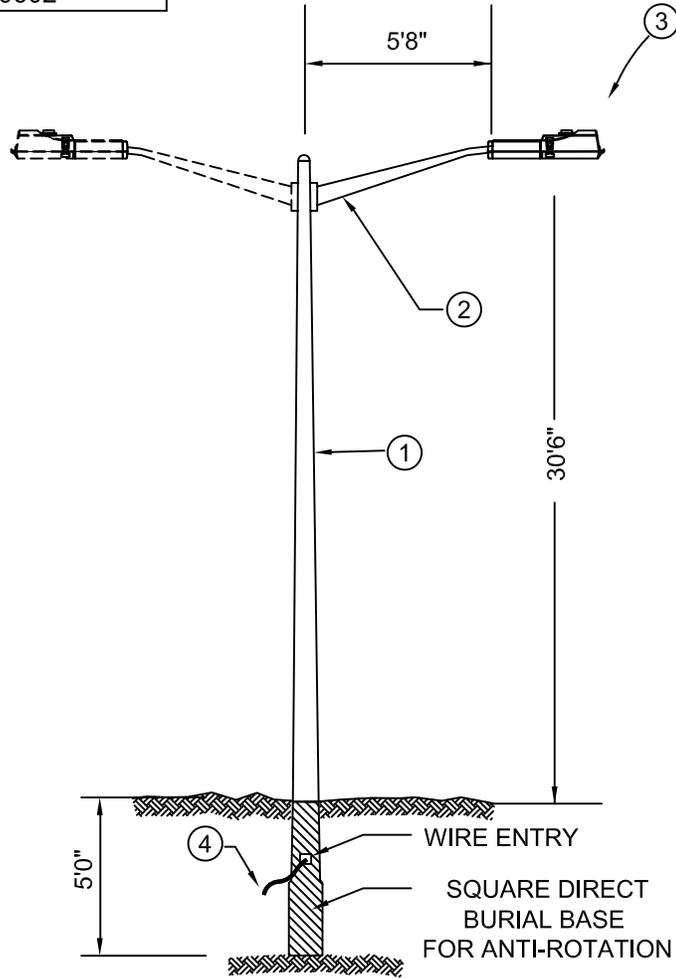
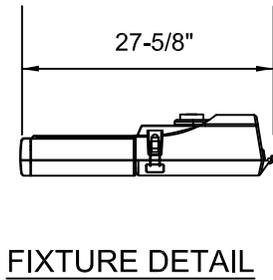


ISSUE  
DATE: 09/27/2012  
DRAWN  
BY: RMD  
APP  
BY: MFJ  
REVISED  
DATE: 10/13/22

**COLONIAL STYLE STREET LIGHT**

UML-CLED  
FILE NAME:  
StreetLight1

ITEM	QTY	ASSET #	INVENTORY NO.
1	1	DT SL 373067	49500040
3	1	DT SL 373050	39304500
4	1	DT SV 369077	09350602



BULB TYPE	WATTAGE	FULL UNIT SPEC.	FIXTURE SPEC.	POLE SPEC.	MAST ARM
LED	154 Watt	UML-HLED	UMF-HLED	UMP-35	UMPA-68

**NOTES:**

1. FOR OPTIONAL DOUBLE FIXTURE SPECIFY SECOND FIXTURE & ARM INDIVIDUALLY.
2. FIXTURE STYLE WILL VARY DEPENDING ON MANUFACTURER.

ITEM	#	MATERIAL	INVENTORY NO.
1	1	GRAY ROUND TAPERED SMOOTH FINISH ALUMINUM DIRECT BURIAL 35' POLE	49500040
2	1	ALUMINUM MAST ARM IN NATURAL ALUMINUM FINISH 68" LONG, 24" RISE.	39304501
3	1	COBRA HEAD FIXTURE W/ PHOTO CELL	39304500
4		SECONDARY WIRE AS REQUIRED	09350602
5	1	FUSE, ST. LT. (20 AMP)	24501495
6	1	FUSE HOLDER, ST. LT.	24501501
7	2	FUSE HOLDER COVER, ST. LT.	24501502

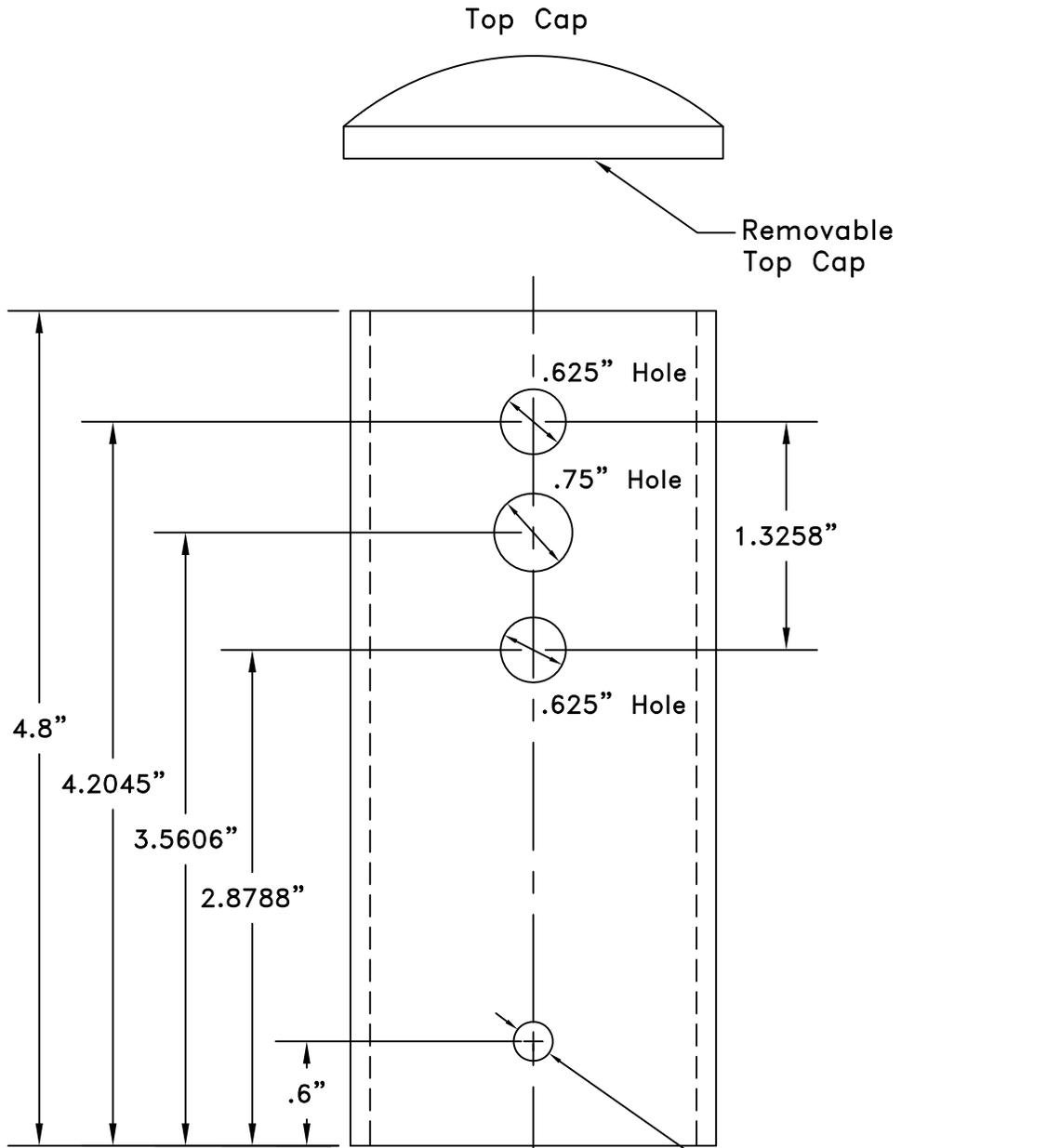


ISSUE  
DATE: 08/20/91  
DRAWN  
BY: CSK  
APP  
BY:  
REVISED  
DATE: 10/13/22

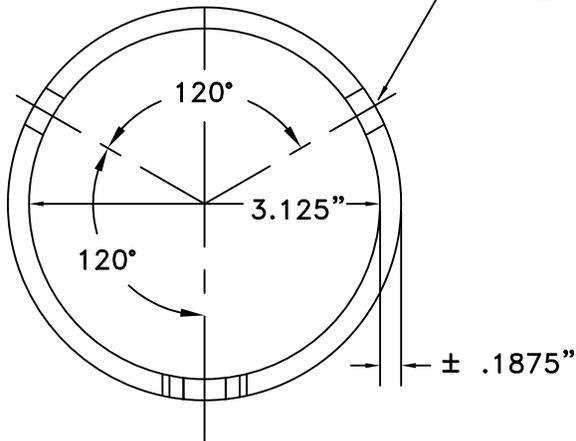
**COBRA HEAD STYLE STREET LIGHT**

UML-HLED  
FILE NAME:  
HREA\_SPCS004G

CORE ELECTRIC COOPERATIVE



3 @ .375" Holes  
Drilled & Tapped  
120° Apart



**NOTES:**

1. SINGLE FIXTURE MOUNT
2. MATERIAL: STEEL
3. 3 - 1" X .375" STAINLESS STEEL BOLTS.
4. COLOR: BLACK (POWDER COAT)
5. REMOVABLE TOP CAP.
6. NOT TO SCALE.



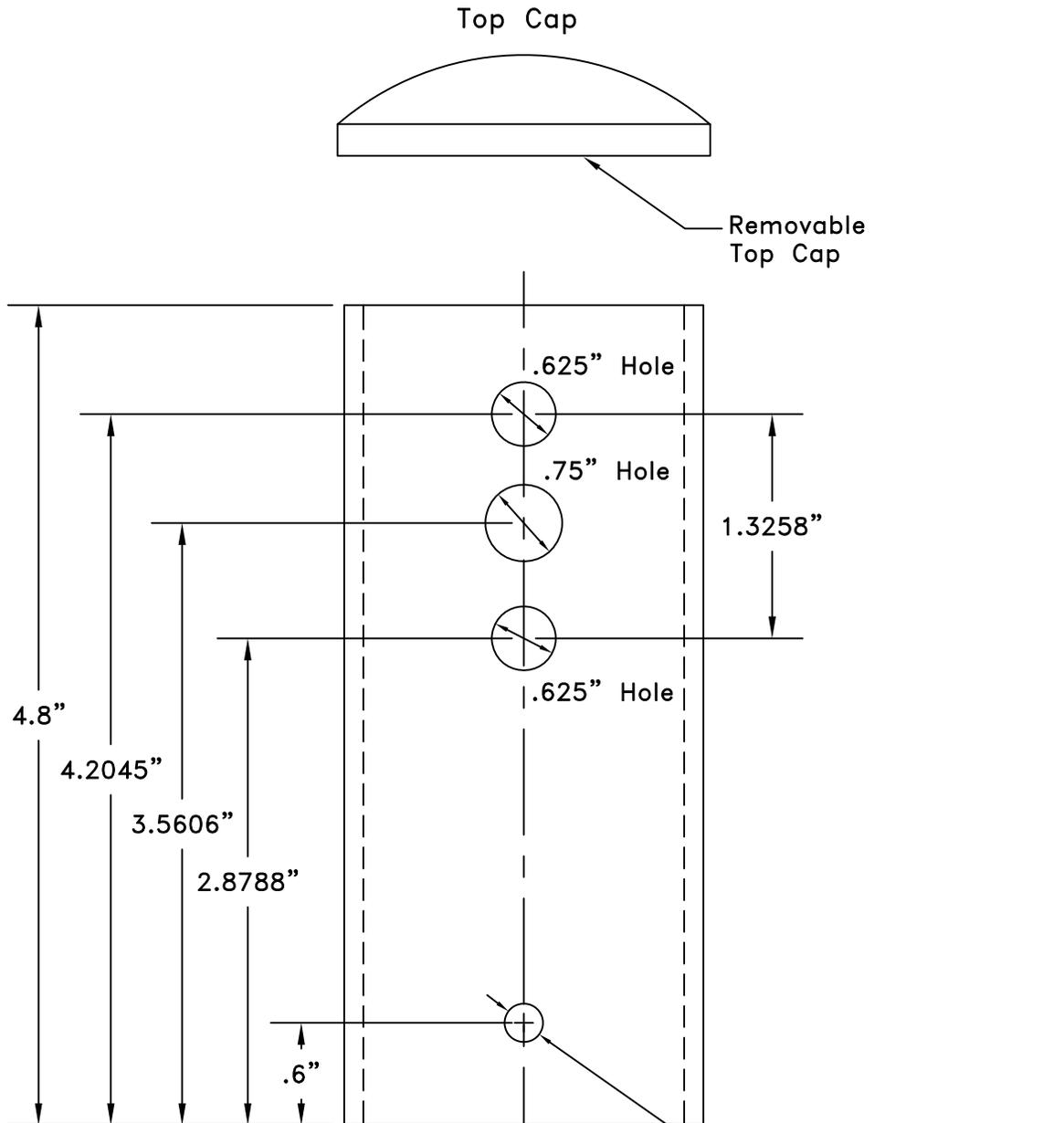
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REVISED	
DATE:	10/13/22

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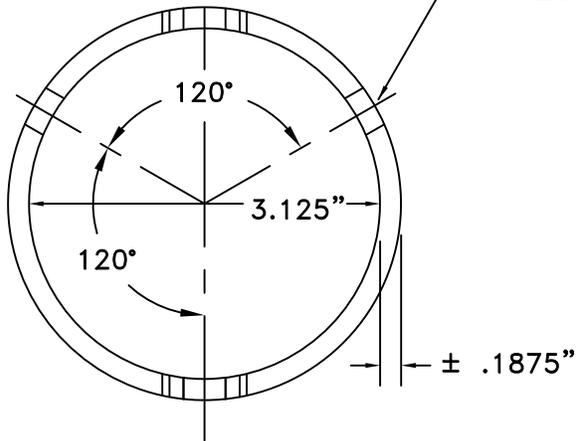
8.0" X 3.125" I.D. TENON  
SINGLE FIXTURE MOUNT

**Tenon**

FILE NAME: Tenon



3 @ .375" Holes  
Drilled & Tapped  
120° Apart



**NOTES:**

1. DOUBLE FIXTURE MOUNT  
180° APART
2. MATERIAL: STEEL
3. 3 - 1" X .375"  
STAINLESS STEEL BOLTS.
4. COLOR: BLACK (POWDER  
COAT)
5. REMOVABLE TOP CAP.
6. NOT TO SCALE.

39502000

8.0" X 3.125" I.D. TENON  
180° DOUBLE FIXTURE MOUNT

<b>CORE</b> ELECTRIC COOPERATIVE	
ISSUE	
DATE:	10/14/12
DRAWN	
BY:	CJV
APP	
BY:	
REVISED	
DATE:	10/13/22
<b>Tenon Double</b>	
FILE NAME:	
Tenon Double	