

SIGNS & MARKERS

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
B-30-00	1 - 1	GENERAL INFORMATION	B	-
B-30-10	1 - 4	DANGER SIGNS - INSTALLATION PRACTICE	A/A/A/	-
B-30-12	1 - 1	CUSTOMER INSTALLED GROUND RESISTOR	A	-
B-30-15	1 - 2	RURAL CABLE MARKER	0	A
B-30-16	1 - 1	UNDERGROUND MARKER BALLS	A	-
B-30-20	1 - 1	KIOSK SIGN AND FEEDER DESIGNATION	0	-
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B-30-26	1 - 2	PRIMARY CABLE AND APPARATUS IDENTIFICATION	B	B

SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	INDEX
L. MOEN	A. UHREN	CHKD.	
		2017-08-14	
DATE OF ISSUE: 2017/08/31		DRAWING NO: B-30-INDEX	
		SHEET 1 of 1	REV. H

SIGNS & MARKERS

1. GENERAL

ALL SIGNS AND MARKERS USED IN THE DISTRIBUTION SYSTEM ARE NOT INCLUDED IN THIS SECTION. SIGNS OF GREATEST IMPORTANCE, COMMON USAGE, AND SPECIAL INSTALLATION OR APPLICATION ARE INCLUDED.

2. RURAL CABLE MARKERS

CABLE MARKERS SHOULD BE INSTALLED AT THE FOLLOWING LOCATIONS:

AT THE EDGE OF THE ROAD ALLOWANCE ON BOTH SIDES OF A ROAD CROSSING. IF ROAD ALLOWANCE IS CULTIVATED, A SINGLE CABLE MARKER ON ONE SIDE OF ROAD WILL BE SUFFICIENT.

AT THE EDGE OF THE RAILWAY RIGHT-OF-WAY ON BOTH SIDES OF A RAILWAY CROSSING.

AT SECTION LINES, QUARTER-MILE LINES, AND FENCE LINES.

THE MARKERS SHOULD BE OFFSET 0.6m (TWO FEET) FROM THE CABLE TO AVOID POSSIBLE DAMAGE TO THE CABLE WHEN INSTALLING THE MARKER POST. THE OFFSET SHOULD BE TO THE WEST FOR NORTH-SOUTH CABLES AND TO THE NORTH FOR EAST-WEST CABLES. DOUBLE CABLE RUNS SHALL HAVE TWO MARKERS INSTALLED USING THE SAME OFFSETS USED FOR SINGLE CABLE CONSTRUCTION.

FOR CABLES IN THE SAME TRENCH, ONE POST WITH TWO CABLE MARKER CYLINDERS SHALL BE USED.

SaskPower – DISTRIBUTION STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	GENERAL INFORMATION	
CHKD.					
DATE	DATE	DATE	DATE		
DATE OF ISSUE			DRAWING NO. B-30-00	SHEET 1 of 1	REV. B

DANGER SIGNS

IT IS THE INTENTION OF THESE SIGNS TO PROVIDE ADEQUATE WARNING OF THE DANGER OF HIGH VOLTAGE TO LIFE AND LIMB IN AND AROUND ENERGIZED FACILITIES OF THE S.P.C. THE DIRECTION OF THE WARNING IS TO THE PUBLIC AT LARGE AND S.P.C. DIRECTLY EMPLOYED AND CONTRACT LABOUR.

THE METHOD EMPLOYED TO PROVIDE THE WARNING IS THROUGH THE USE OF CLEARLY LETTERED SIGNS LARGE ENOUGH TO READ FROM A SAFE DISTANCE.

1. THE FOLLOWING CONDITIONS SHOULD BE PREVALENT IN ANY SITUATION:
 - (a) – THAT ALL FENCED AND HOUSE SUBSTATION, REGULATORS AND SIMILAR ENERGIZED FACILITIES BE LOCKED SECURELY ENSURING THAT NO ACCESS CAN BE GAINED AT ALL TIMES.
 - (b) – THAT SIGNS ARE MOUNTED AT A HEIGHT OF 1.5m FROM GRADE LEVEL.
 - (c) – THAT SIGNS ARE PERMANENTLY MOUNTED ON FENCES EVERY 13m OF FENCE LENGTH.
 - (d) – AT LEAST ONE SIGN SHALL APPEAR ON EACH SIDE OF A BUILDING OR OF THE PERIMETER OF FENCE.
 - (e) – A SIGN SHALL BE MOUNTED IN THE IMMEDIATE VICINITY OF EACH LOCKING POINT OF A GATE OR DOOR.
 - (f) – A SIGN SHALL BE PERMANENTLY MOUNTED ON: POLES WHERE CONDUCTORS, CABLES, CABLE IN CONDUIT, GROUND WIRES, SWITCHES, SWITCH HANDLES ETC. ARE ACCESSIBLE FROM GROUND LEVEL.
– POLES OF ALL NON-FENCED PLATFORM MOUNTED EQUIPMENT, THE SIGN SHALL BE ON THE INSIDE FACE OF EACH POLE.
– ALL GUYED POLES.
 - (g) – THAT SIGNS ARE MOUNTED ADJACENT TO THE CLIMBING QUADRANT OF POLE.

2. THE FOLLOWING IS IN ADDITION TO 1 ABOVE:
 - (a) – A SIGN SHALL BE PERMANENTLY MOUNTED ON ALL URBAN UNDERGROUND CABLE TAKE-OFF POLES, DIRECTLY ABOVE GUARD END, IN THE NEUTRAL SPACE LOCATION.
 - (b) – A SIGN SHALL BE PERMANENTLY MOUNTED ON ALL FARM TRANSFORMER POLES, DIRECTLY ABOVE THE SERVICE HEAD (DRIP LOOP) LOCATION OF THE LOAD SERVICE CABLE ON THE CUSTOMER ATTACHMENT POINT.
 - (c) – ALL PADMOUNTED TRANSFORMERS, SWITCHING CUBICLES, AND REACTORS SHALL HAVE SIGNS. THIS INCLUDES KIOSKS, SERVICE PEDISTALS, AND ANY APPARATUS REQUIRING THE PUBLIC OR EMPLOYEES AWARENESS OF THE HIGH VOLTAGE DANGER.

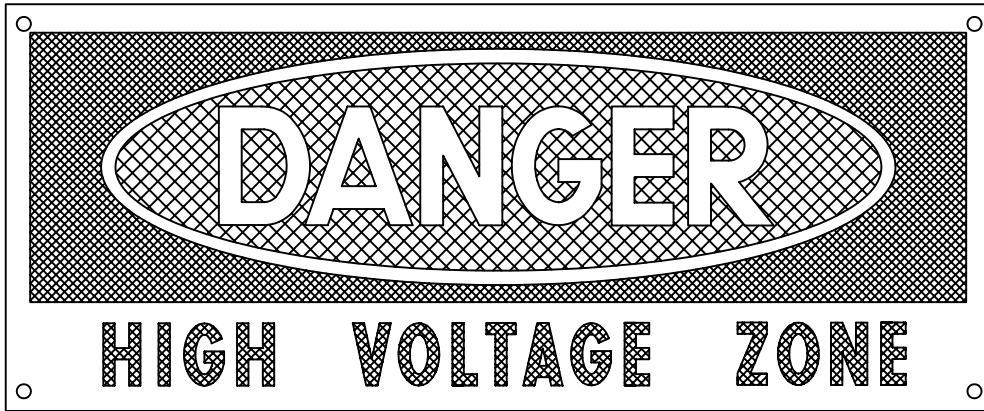
SaskPower – DISTRIBUTION STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	DANGER SIGNS INSTALLATION PRACTICE	
CHKD. <i>FTK</i>					
DATE 87-05-26	DATE	DATE	DATE		
DATE OF ISSUE	87-12-01	DRAWING NO.	B-30-10	SHEET 1 of 4	REV. A

THE FOLLOWING SIGN SHALL BE INSTALLED ON POLES, OR UNFENCED FACILITIES.

CODE 05-640-000

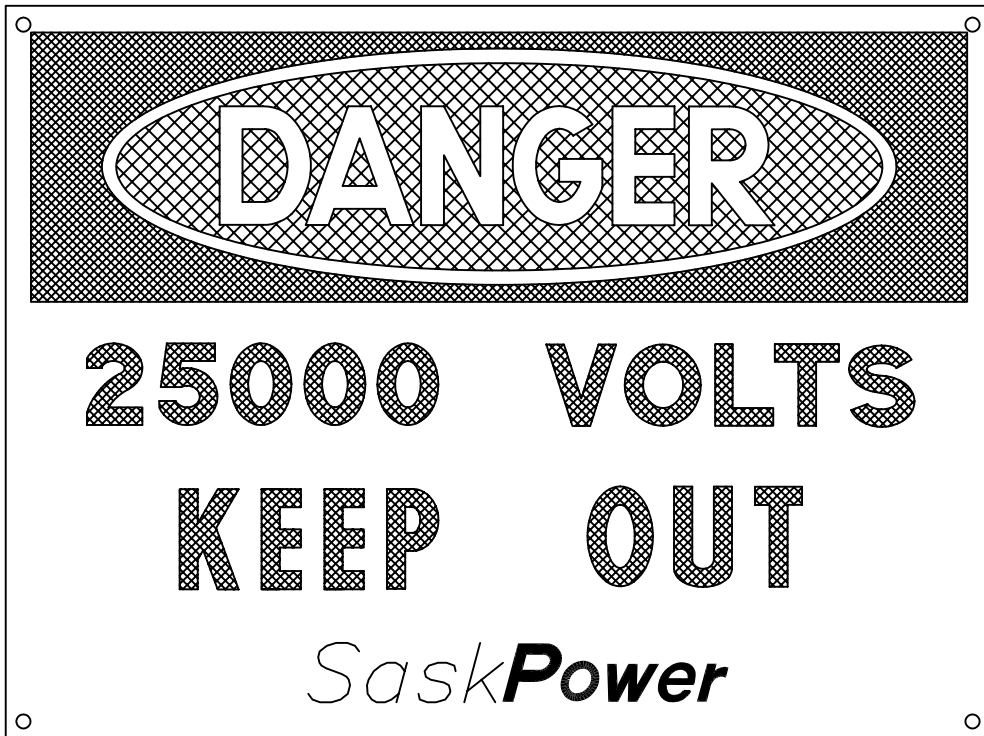
DANGER - HIGH VOLTAGE



THE FOLLOWING SIGN SHALL BE INSTALLED ON FENCED FACILITIES OR BUILDINGS.

CODE 05-640-025

25000 V



NOTE:

1. USE 2 1/2" NAILS (CODE 7-63-10) TO ATTACH SIGNS TO WOOD POLES.
2. USE WIRE STRANDS TO ATTACH SIGNS TO CHAIN LINK FENCES.

SaskPower - DISTRIBUTION STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	DANGER SIGNS INSTALLATION PRACTICE	
CHKD. <i>FTK</i>					
DATE 87-05-25	DATE	DATE	DATE		
DATE OF ISSUE	87-12-01	DRAWING NO.	B-30-10	SHEET 2 of 4	REV. A

GUIDELINE FOR PLACEMENT OF SIGNS CODE 05-648-360 AND 05-649-030

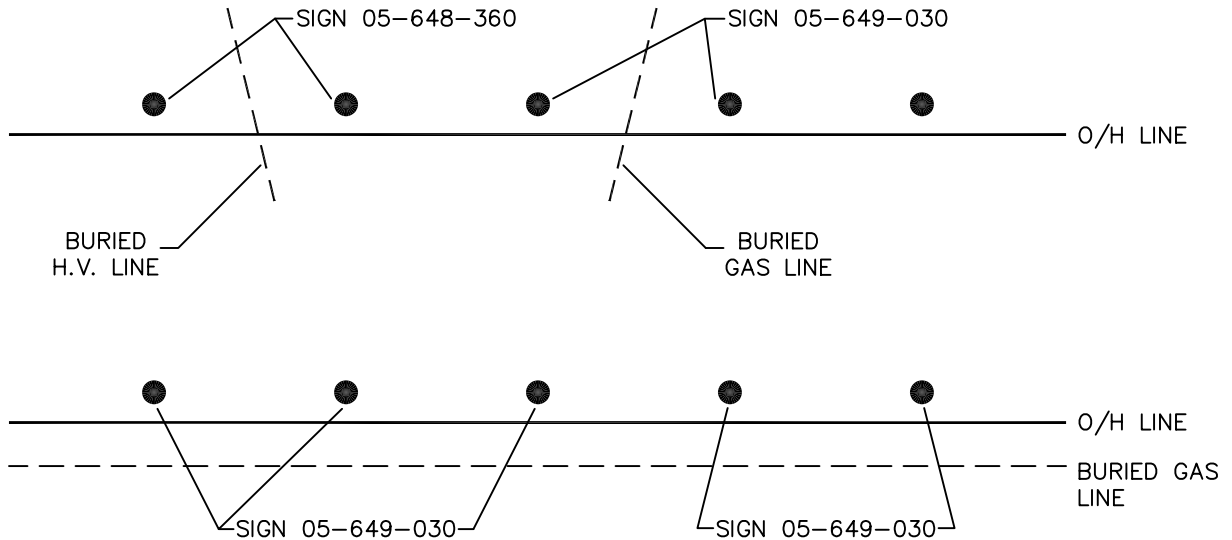
* THE FOLLOWING APPLIES IN RURAL AREAS ONLY.

THESE TWO DANGER SIGNS ARE USED TO DESIGNATE THE LOCATION OF THE CROSSING OF BURIED HIGH VOLTAGE CABLES OR GAS PIPE LINES UNDER AN OVERHEAD LINE. THE SIGN FOR GAS PIPELINES IS ALSO USED FOR A GAS LINE RUNNING PARALLEL TO AN OVERHEAD LINE AND WITHIN 15m OF EACH OTHER. THIS IS TO ALLOW GUYS AND ANCHORS TO BE INSTALLED FOR TAPS AND SIDE GUYS WITHOUT HITTING BURIED LINES.

THE SIGNS SHOULD BE INSTALLED 1.5m ABOVE GRADE AND FACE TOWARDS THE BURIED FACILITIES. IT IS MORE IMPORTANT THAT THE SIGN NOT BE IN THE CLIMBING QUADRANT OF THE POLE AND NOT INTERFERE WITH EQUIPMENT.

A STANDARD "DANGER" SIGN (05-640-000) IS STILL REQUIRED ACCORDING TO ITS OWN RULES.

EXAMPLES:



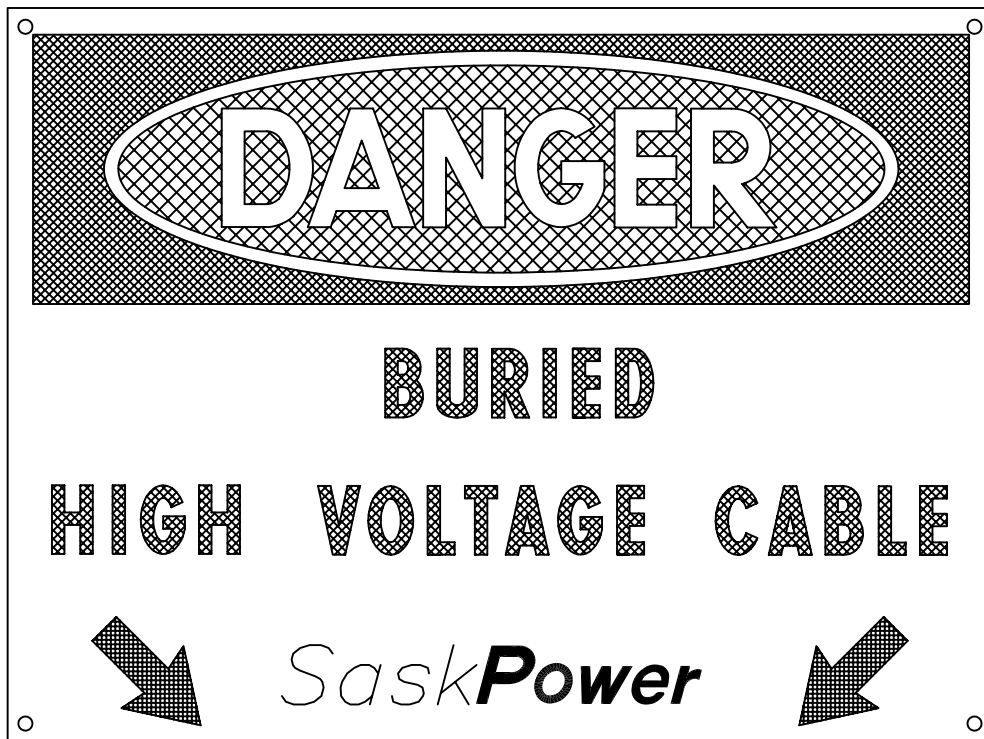
SEE DWG. B-30-10 SHT. 4 FOR DESCRIPTION OF THESE TWO SIGNS.

SaskPower - DISTRIBUTION STANDARDS

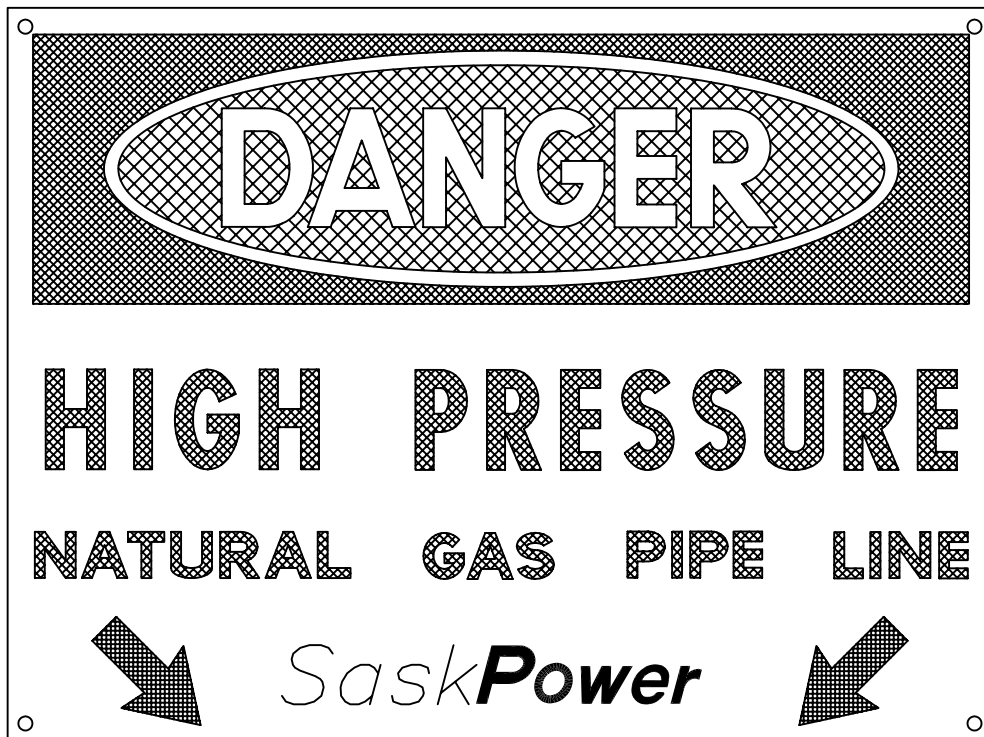
DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	DANGER SIGNS INSTALLATION PRACTICE
CHKD. <i>FTK</i>				
DATE 87-05-25	DATE	DATE	DATE	
DATE OF ISSUE 87-12-01	DRAWING NO. B-30-10		SHEET 3 of 4	REV. A

CODE 05-648-360

SFC/AUTODRAFT



CODE 05-649-030

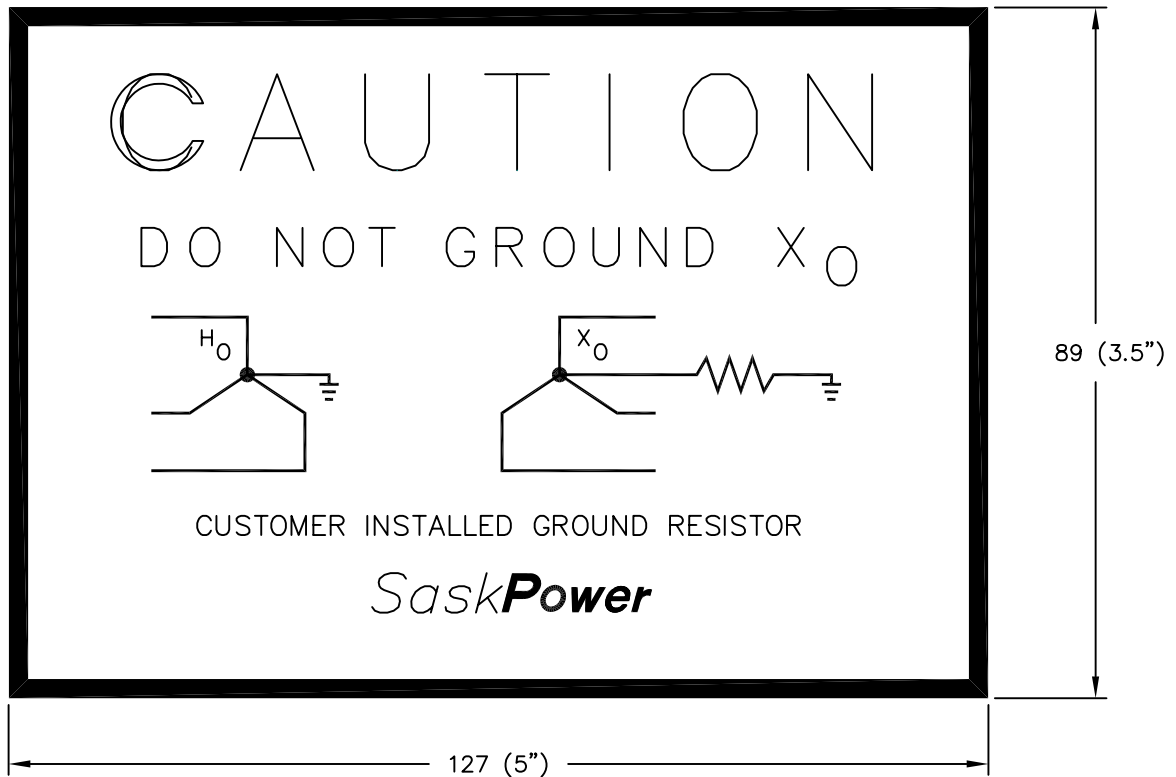


NOTE:

- 1. SEE DWG. B-30-10 SHT. 3 FOR GUIDELINES FOR THE PLACEMENT OF THESE TWO SIGNS.
- 2. USE 2 1/2" NAILS (CODE 7-63-10) TO ATTACH SIGNS TO WOOD POLES.

SaskPower - DISTRIBUTION STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	DANGER SIGNS INSTALLATION PRACTICE
CHKD. <i>FTK</i>				
DATE 87-05-25	DATE	DATE	DATE	
DATE OF ISSUE 87-12-01	DRAWING NO. B-30-10		SHEET 4 of 4	REV. A



SIGN USEAGE & INSTALLATION

1. THIS SIGN IS USED TO IDENTIFY TO PERSONNEL, THAT THE SECONDARY NEUTRAL IS NOT TO BE CONNECTED TO GROUND.
2. THE SIGN IS TO BE INSTALLED NEAR THE X_0 BUSHINGS, OR CONNECTION POINT ON THE APPARATUS, AS APPLICABLE.
3. THE SIGN IS TO BE USED WHERE A CUSTOMER HAS INSTALLED A RESISTOR BETWEEN THE SECONDARY NEUTRAL AND GROUND.
4. THE GROUND RESISTOR ON THIS CONNECTION IS USED BY THE CUSTOMER, FOR FAULT DETECTION.
5. AN INSULATED CONDUCTOR MUST BE USED TO CONNECT X_0 TO THE CUSTOMER'S NEUTRAL BUS.
6. WHEN METERING ON SECONDARY SIDE, METERING TO BE $3\emptyset - 3W$.
7. STOCK CODE No. 05-646-585.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower - DISTRIBUTION STANDARDS

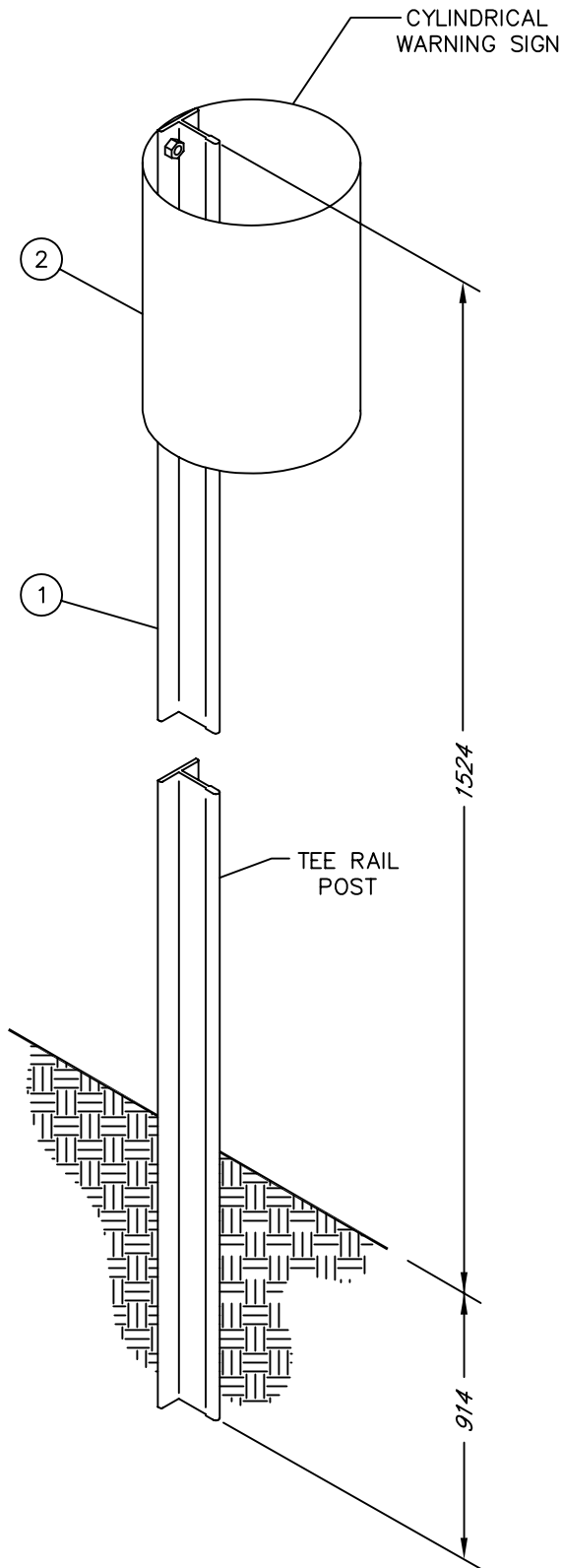
DRN. <i>R</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	CUSTOMER INSTALLED GROUND RESISTOR	
CHKD.					
DATE 91-01-28	DATE	DATE	DATE		
DATE OF ISSUE			DRAWING NO. B-30-12	SHEET 1 of 1	REV. A

BILL OF MATERIAL

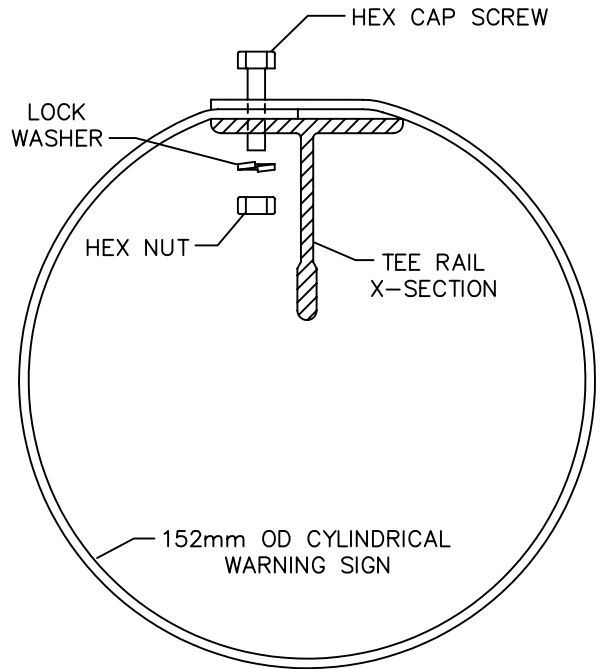
ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	05-537-022	1	0	SIGN POST-RUD
2	05-537-024	1	0	SIGN CYLINDRICAL-RUD (SEE NOTE #3)
3	05-537-026	0	1	MARKER-RUD PASTURE INSTALLATION
<p>NOTE:</p> <p>1. COLUMN A IS USED ON VARIOUS CROSSINGS, FENCE LINES/SECTION LINES.</p> <p>2. USE COLUMN B, IN PLACE OF A, FOR LIVESTOCK.</p> <p>3. ITEM #2 COMES WITH THREE 1/4" DIA. x 1" BOLTS, NUTS, AND SPRING WASHER, WHICH ARE <u>ALL</u> USED IN THE ATTACHMENT.</p>				

SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	RURAL CABLE MARKER
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE 91-11-01		DRAWING NO: B-30-15	SHEET 1 of 2
			REV. A



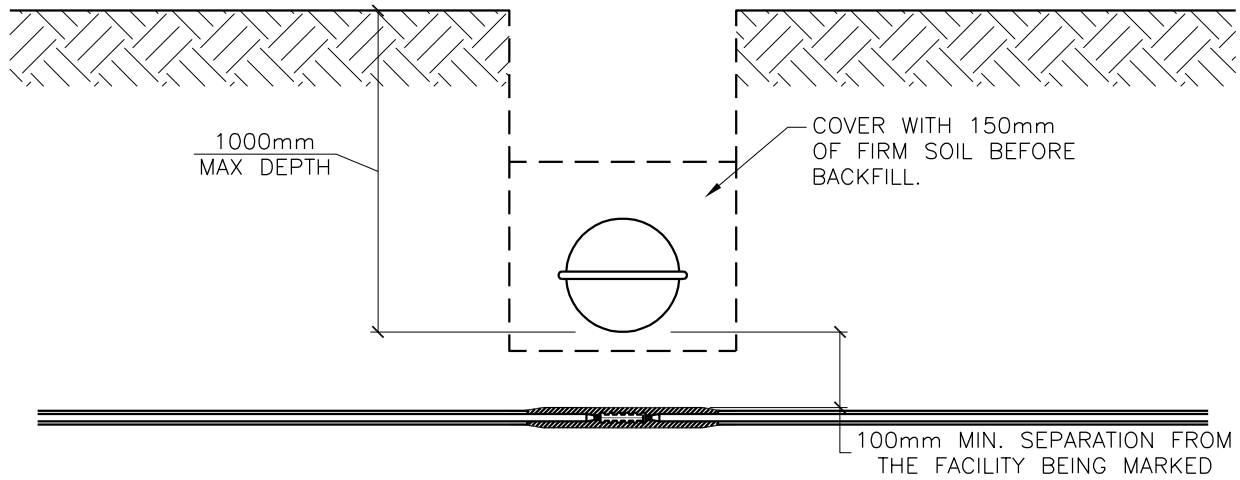
TYPICAL
ASSEMBLY



SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. — DISTRIBUTION ENGINEERING STANDARDS

DRN. <i>DC</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	RURAL CABLE MARKER
CHKD. <i>FTK</i>				
DATE 87-05-22	DATE	DATE	DATE	
DATE OF ISSUE 87-06-01	DRAWING NO. B-30-15		SHEET 2 of 2	REV. 0

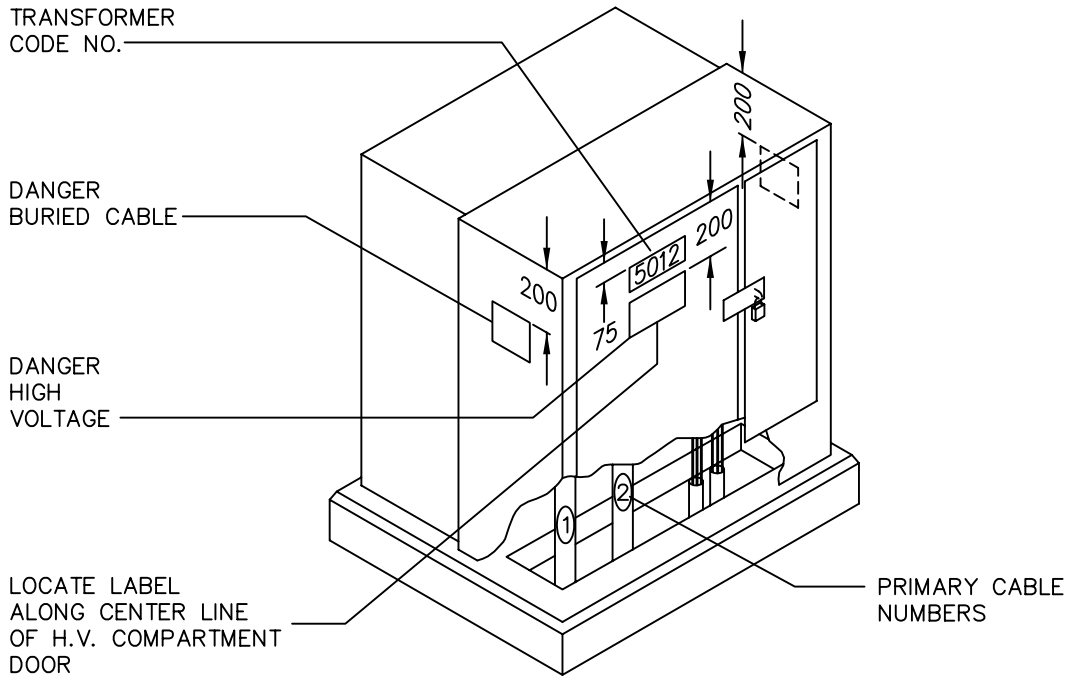


NOTE:

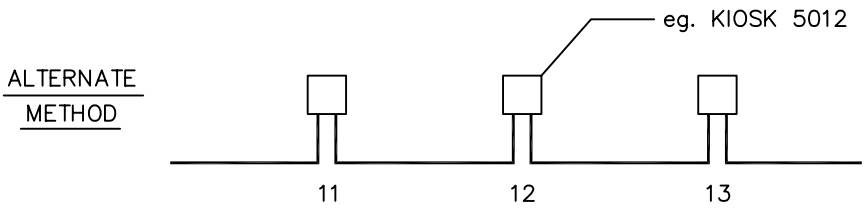
1. FOR BETTER DETECTION AREA, PLACE MARKER BALL AT 750mm DEEP.
2. THE MINIMUM DISTANCE BETWEEN MARKERS SHOULD BE AT LEAST 1100mm FOR CLEAR IDENTIFICATION.
3. MARKER BALLS INTENDED FOR LOCATING SPLICES, SPARE DUCTS, AND OTHER VARIOUS U/G FACILITIES.
4. WHEN FACILITY BEING MARKED IS DEEPER THAN 1000mm BACKFILL TRENCH TO REQUIRED DEPTH BEFORE SETTING MARKER BALL.
5. MARKER BALL STOCK CODE: 5537020.

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. D.REDEKOPP CHKD. 2016-07-27	UNDERGROUND MARKER BALLS	
DATE OF ISSUE	2016/11/08	DRAWING NO. B-30-16		
			REV. A	



PRIMARY CABLE TO BE IDENTIFIED ON CLUSTER OR ON INSIDE OF DOOR USING LAST TWO DIGITS OF CODE NO. OF KIOSK ON EITHER SIDE.



PLACE LABELS INDICATING LAST TWO DIGITS OF KIOSDS ON THE INSIDE OF HIGH VOLTAGE COMPARTMENT DOOR. CENTER NUMBER IS KIOSK BEING WORKED ON.

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

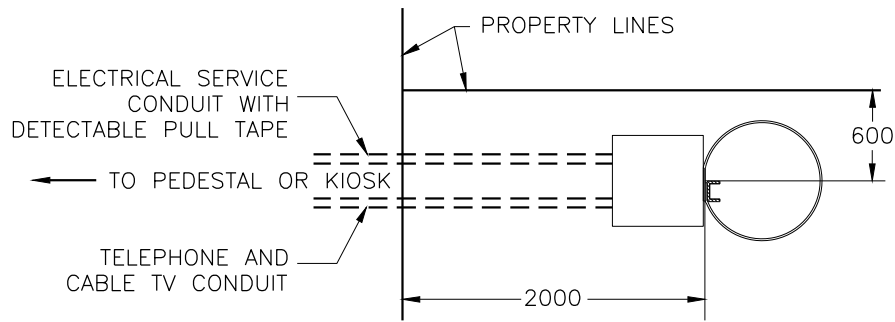
DRN. <i>DC</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	KIOSK SIGN & FEEDER DESIGNATION
CHKD. <i>FTK</i>	DATE	DATE	DATE	
DATE 87-05-24	DATE	DATE	DATE	
DATE OF ISSUE 87-06-01	DRAWING NO. B-30-20		SHEET 1 of 1	REV. 0

BILL OF MATERIAL

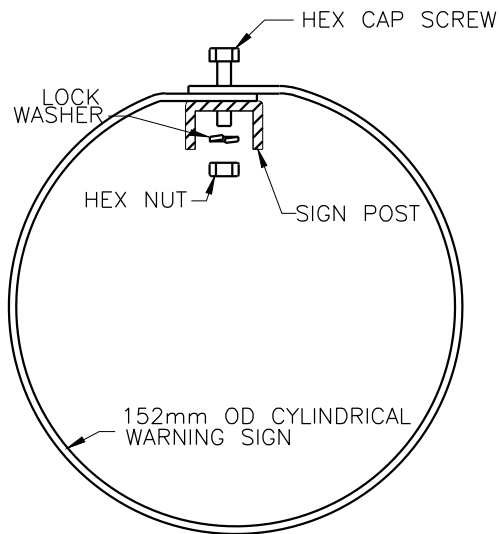
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	5 04 09	1	U/G SERVICE STUB PROTECTION BOX
2	05 537 022	1	SIGN, POST, GALVANIZED, RUD
3	05 537 024	1	SIGN-RUD CYLINDRICAL-DANGER WARNING (SEE NOTE 1)
			<p>NOTE:</p> <p>1. ITEM #3 COMES WITH THREE 1/4" DIA. x 1" BOLTS, NUTS, AND SPRING WASHERS, WHICH ARE ALL USED IN THE ATTACHMENT.</p>

SaskPower - DISTRIBUTION STANDARDS

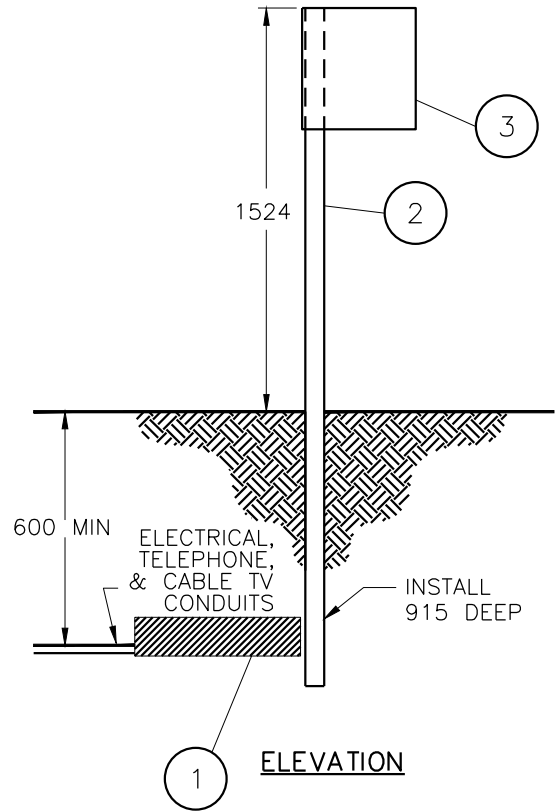
APPROVAL L. MOEN	DESIGN CHK A. UHREN	DRN. ARU CHKD.	RESIDENTIAL CABLE MARKERS
		2016-09-20	
DATE OF ISSUE: 2016/11/08	DRAWING NO: B-30-21	SHEET 1 OF 2	REV. 0



PLAN VIEW



TYPICAL ASSEMBLY



ELEVATION

NOTE:

1. ENDS OF CONDUIT SHALL BE CAPPED.
2. DETECTABLE PULL TAPE SHALL BE GROUNDED TO SIGN POST AND AT PEDESTAL SIDE. UNGROUND PULL TAPE WHEN PULLING CABLES AND REMOVE PULL TAPE FROM CONDUIT ONCE CABLES ARE PULLED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. D.REDEKOPP CHKD. 2016-10-04	RESIDENTIAL CABLE MARKERS
DATE OF ISSUE	2016/11/08	DRAWING NO. B-30-21	
		SHEET 2 of 2	REV. B

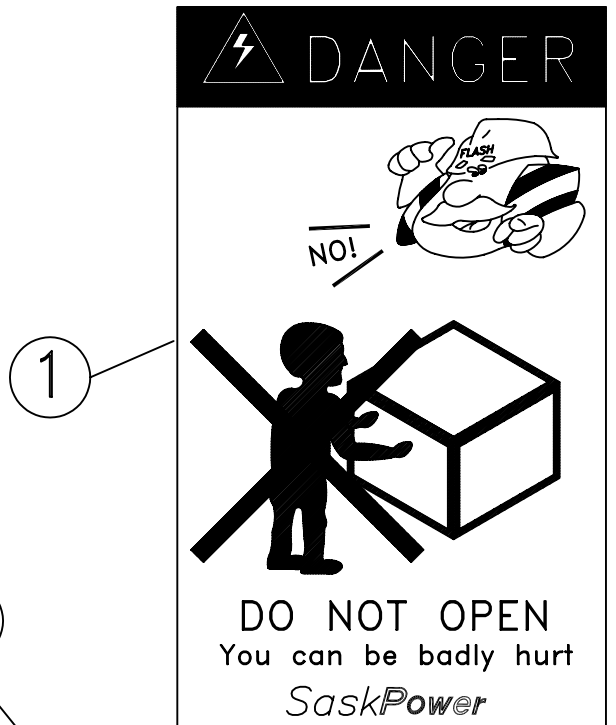
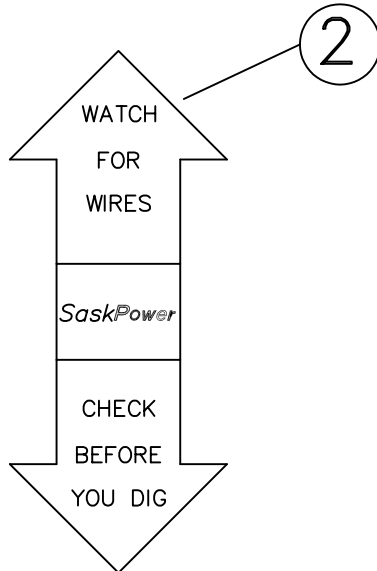
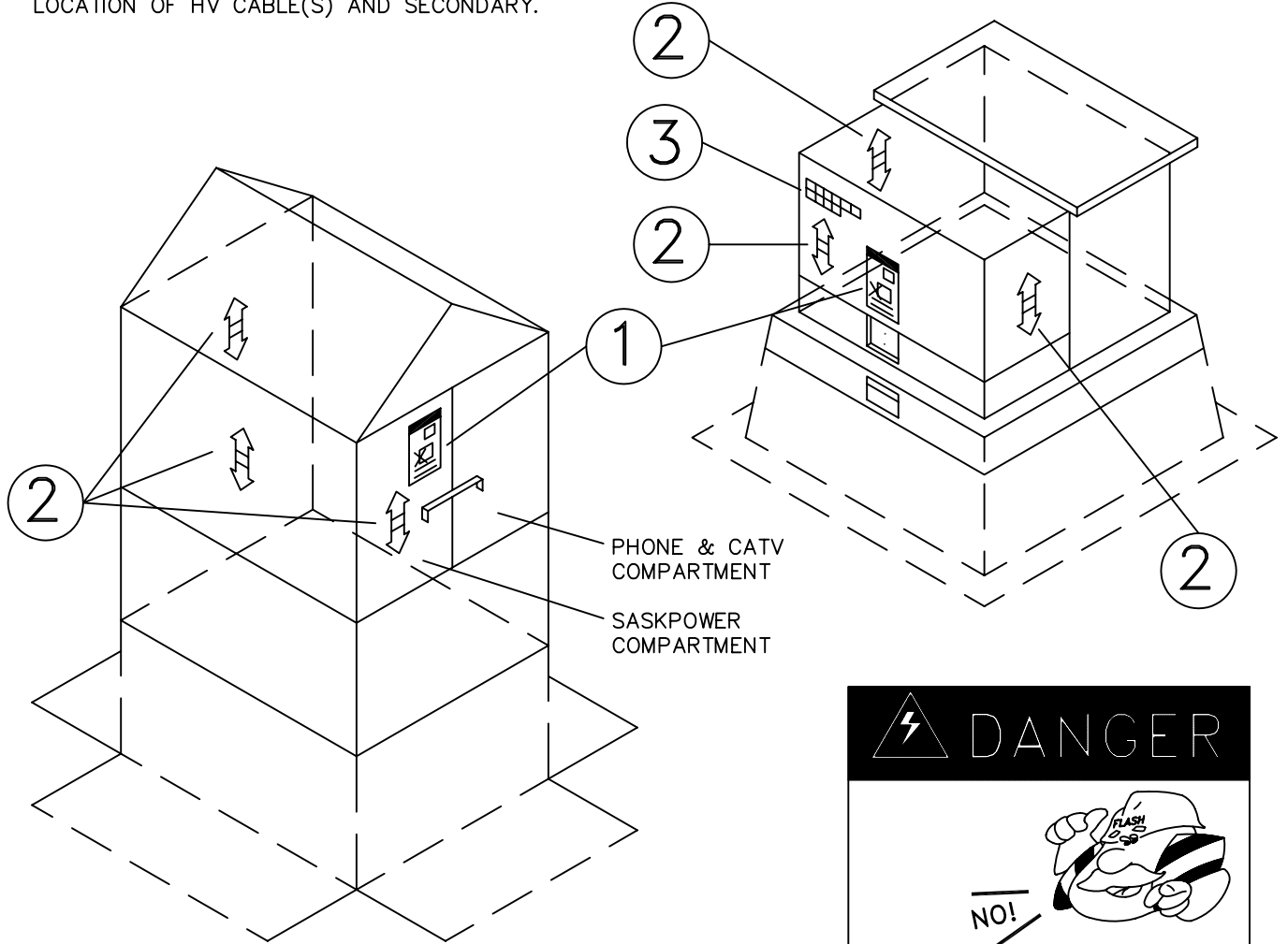
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	05-641-385	1	0	DECAL - DANGER-DO NOT OPEN - 8 1/2" x 6 1/2" (SEE NOTE 3)
2	05-646-582	2	2	DECAL - WATCH FOR WIRES - 3 1/2" x 7 1/4"
3	05-638-220	X	X	NUMBER - DECAL "0" WHITE 1 1/2"
	05-638-221	X	X	NUMBER - DECAL "1" WHITE 1 1/2"
	05-638-222	X	X	NUMBER - DECAL "2" WHITE 1 1/2"
	05-638-223	X	X	NUMBER - DECAL "3" WHITE 1 1/2"
	05-638-224	X	X	NUMBER - DECAL "4" WHITE 1 1/2"
	05-638-225	X	X	NUMBER - DECAL "5" WHITE 1 1/2"
	05-638-226	X	X	NUMBER - DECAL "6" or "9" WHITE 1 1/2"
	05-638-227	X	X	NUMBER - DECAL "7" WHITE 1 1/2"
	05-638-228	X	X	NUMBER - DECAL "8" WHITE 1 1/2"
	05-638-400	0	X	LETTER - DECAL "A" WHITE 1 1/2"
	05-638-401	0	X	LETTER - DECAL "B" WHITE 1 1/2"
	05-638-402	0	X	LETTER - DECAL "C" WHITE 1 1/2"
	05-638-403	0	X	LETTER - DECAL "D" WHITE 1 1/2"
	05-638-404	0	X	LETTER - DECAL "E" WHITE 1 1/2"
	05-638-405	0	X	LETTER - DECAL "F" WHITE 1 1/2"

SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	SIGNS ON 1Ø PAD-MOUNTED APPARATUS AND PEDESTALS
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE 95-07-10		DRAWING NO: B-30-25	SHEET 1 OF 2 REV. C

ITEM 2 TO BE USED TO INDICATE THE APPROXIMATE LOCATION OF HV CABLE(S) AND SECONDARY.



0	1	2	3	4	5	6	7	8
A	B	C	D	E	F			

SaskPower - DISTRIBUTION STANDARDS

DRN. R.J.L.	DESIGN CHK.	SAFETY APP.	APPROVAL	SIGNS ON 1Ø PADMOUNTED APPARATUS AND PEDESTALS
CHKD.				
DATE	DATE	DATE	DATE	
DATE OF ISSUE			DRAWING NO. B-30-25	SHEET 2 of 2 REV. C

BILL OF MATERIAL

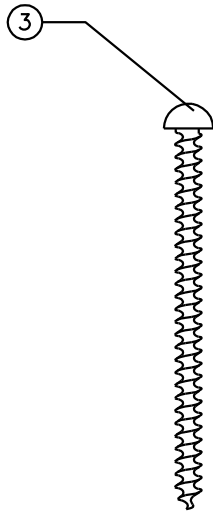
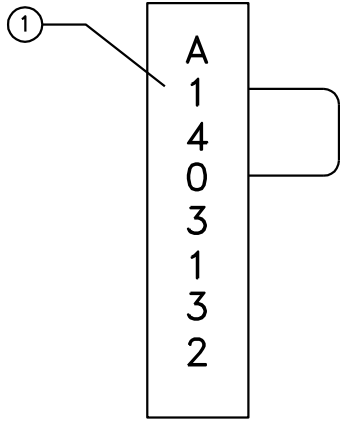
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	05 638 22X	X	NUMBER - DECAL WHITE 1 1/2"
1	05 638 40X	X	LETTER - DECAL WHITE 1 1/2"
2	05 385 150	X	TAG HOLDER FOR POLY TAGS
3	70 29 09	X	TYRAP 7" BLACK WEATHERABLE
3	70 29 11	X	TYRAP 11" BLACK WEATHERABLE
3	7 69 64	0.02	SCREW WOOD - #14 x 2 1/2"
4	05 385 20X	X	TAG NUMBER I.D. YELLOW POLYETHYLENE
4	05 385 25X	X	TAG LETTER I.D. YELLOW POLYETHYLENE
5	05 385 100	1	STORAGE CASE FOR POLY TAGS

SaskPower - DISTRIBUTION STANDARDS

APPROVAL L. MOEN	DESIGN CHK A. UHREN	DRN. ARU CHKD.	PRIMARY CABLE & APPARATUS IDENTIFICATION
		2017-05-23	
DATE OF ISSUE:	2017/08/31	DRAWING NO: B-30-26	SHEET 1 OF 2 REV. B

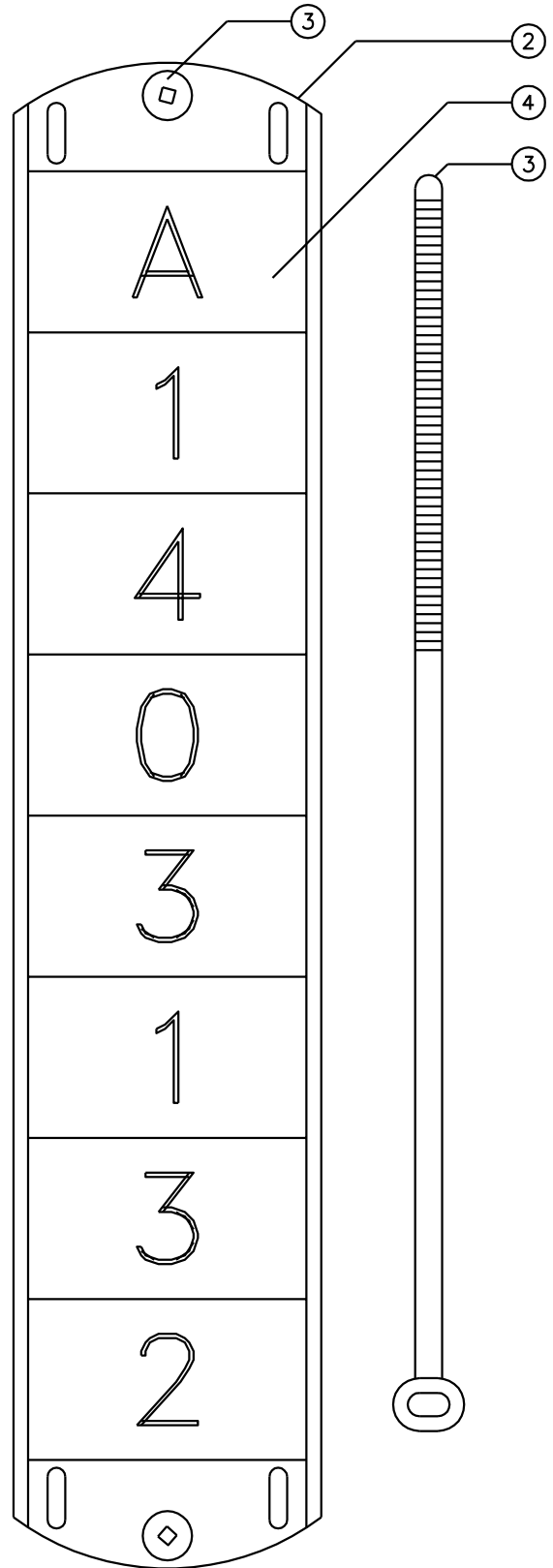
PRIMARY CABLE AND APPARATUS I.D. HOLDER & TAGS

FARM POWER CENTER DECALS FOR I.D. OF PADMOUNTED AND POLEMOUNTED TRANSFORMERS



NOTE:

1. FOR PRIMARY CABLES, THE TAG HOLDER IS INSTALLED NEAR THE CABLE TERMINATION WITH TYRAPS.
2. FOR APPARATUS, THE TAG HOLDER IS INSTALLED AT 8' ABOVE GRADE, NEAR THE CABLE GUARD WITH WOOD SCREWS.
3. ALL PRIMARY CABLES INSIDE A CONCRETE MANHOLE VAULT SHALL BE LABELED SO THAT THE LABEL CAN BE SEEN WHEN LOOKING INTO THE MANHOLE FROM ABOVE GROUND.



SaskPower – DISTRIBUTION STANDARDS

APPROVAL
L.MOEN

DESIGN CHK.
A.UHREN

DRN. E.GOTANA
CHKD.

2017-05-30

PRIMARY CABLE
AND
APPARATUS IDENTIFICATION

DATE OF ISSUE **2017/08/31**

DRAWING NO. B-30-26

SHEET 2 of 2

REV. B