

## UNDERGROUND CROSSINGS - RAILWAY

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
<b>C-26-24.01</b>	<b>1 - 3</b>	<b>RAILWAY CROSSING</b>	<b>F / E</b>	<b>H</b>
<b>C-26-24.03</b>	<b>1 - 3</b>	<b>RAILWAY DOUBLE CROSSING</b>	<b>D / D</b>	<b>F</b>

### *SaskPower* - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. <b>ARU</b>	<b>INDEX</b>
<b>L. MOEN</b>	<b>A. UHREN</b>	CHKD.	
		<b>2016-05-04</b>	
DATE OF ISSUE: 2016/05/04		DRAWING NO: <b>C-26-24-INDEX</b>	<b>SHEET 1 of 1</b>   REV. <b>J</b>

## CROSSING SPECIFICATIONS

1. A DETAILED RAILWAY CROSSING DRAWING MUST BE SUBMITTED TO AND APPROVAL OBTAINED FROM THE APPROPRIATE RAILWAY AUTHORITY PRIOR TO ANY DIGGING OR CONSTRUCTION OCCURRING. REQUESTS FOR APPROVAL ARE TO BE ROUTED THROUGH THE APPROPRIATE SASKPOWER REGIONAL OFFICE AT LEAST SIX WEEKS PRIOR TO CONSTRUCTION. THE APPROPRIATE SASKPOWER REGION'S CONSTRUCTION/OPERATING SUPERVISOR SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.
2. STEEL PIPE WITH A MINIMUM WALL THICKNESS OF 4.80mm (0.189") ARE TO BE INSTALLED BELOW EACH OTHER, 0.3 METERS APART, UNDER THE RAIL BED WITH THE TOP PIPE AT A DEPTH OF AT LEAST 1.37 METERS BELOW THE RAIL BED AND 1.0 BELOW THE LOWEST POINT OF EITHER SIDE OF THE RIGHT-OF-WAY. THE PIPES SHALL EXTEND ACROSS THE ENTIRE RIGHT-OF-WAY
3. FOR BARE CONCENTRIC NEUTRAL CABLE, 38mm (1 1/2") POLYETHYLENE PIPE IS REQUIRED. THE POLY PIPE IS PLACED INSIDE OF AND PROJECTS 150mm (6") BEYOND THE ENDS OF THE STEEL PIPE. THE POLY PIPE SHALL BE SEALED, TO THE CABLE, AT BOTH ENDS WITH PUTTY TAPE AND ELECTRICAL VINYL TAPE.
4. ON THE CROSSING DRAWING, FROM THE CROSSING POINT, GIVE A TIE DIMENSION ALONG THE TRACK TO ONE OF THE FOLLOWING: CENTER OF ROAD ALLOWANCE, 1/4 SECTION LINE, TOWN STREET OR BLOCK, OR RAILWAY SWITCH.
5. THE CABLE SHALL CROSS THE RAILWAY AT AN ANGLE OF 90° WHEREVER POSSIBLE. THE CROSSING IS TO BE THROUGH THE SHORTEST PART OF THE RIGHT-OF-WAY. PARALLELING IN THE RIGHT-OF-WAY SHALL BE AVOIDED.
6. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
7. INDICATE PERTINENT DIMENSIONS ON CROSSING PROFILE.
8. SECONDARY CABLE INSIDE OF RIGHT-OF-WAY BUT NOT CROSSING RAIL LINES REQUIRES 2"x6" NON-CREOSOTE PLANK PROTECTION 150mm (6") ABOVE THE CABLE.

<b>SaskPower</b> - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. <b>ARU</b>	<b>RAILWAY CROSSING</b>	
<b>M. ERETH</b>	<b>A. UHREN</b>	CHKD.		
		<b>2014-11-24</b>		
DATE OF ISSUE:	2015/04/28	DRAWING NO: <b>C-26-24.01</b>	<b>SHEET 1 of 3</b>	<b>REV. F</b>

## BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY			DESCRIPTION
		A	B	C	
1	2 65 4X	--	4	--	SLEEVE – COMPRESSION AL
2	2 68 XX	1	--	3	SPLICE – PRIMARY CABLE
3	2 68 XX	1	--	3	SPLICE – COVER PRIMARY JACKET
4	2 68 XX	--	4	--	SPLICE – COVER SECONDARY INSULATION
5	5 12 XX	1	--	3	CRIMPIT – CU
6	70 31 45	1	1	1	DUXSEAL
7	70 45 05	--	5	5	PIPE, PVC 5" (20 FT LENGTHS)
8	70 85 02	100'	--	--	CONDUIT, HDPE 2"
9	71 35 00	1	--	3	KIT – CABLE PREPARATION
10	01 433 722	30 m	--	--	STEEL PIPE – 3 ½" (MIN. W.T. 0.189")
11	01 433 726	--	30 m	30 m	STEEL PIPE – 6" (MIN. W.T. 0.189")

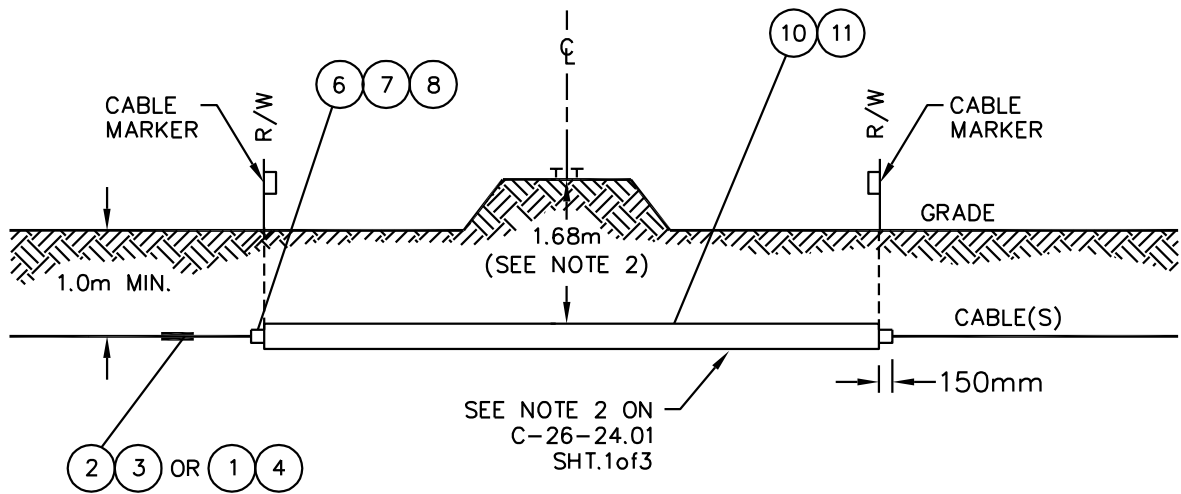
**NOTE:**

1. COLUMN A IS FOR A SINGLE-PHASE PRIMARY JACKETED CONCENTRIC NEUTRAL CABLE.
2. COLUMN B IS FOR A 4-WIRE SECONDARY CABLE. MATERIAL DEFAULTS TO 5" PVC PIPE WITH 6" STEEL PIPE. IF CABLE SIZE PERMITS, 30m OF 2" HDPE CONDUIT WITH 30m OF 3 ½" STEEL PIPE CAN BE USED INSTEAD.
3. COLUMN C IS FOR THREE PRIMARY JACKETED CONCENTRIC NEUTRAL CABLES.

**SaskPower** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. <b>ARU</b>	<b>RAILWAY CROSSING</b>
<b>L. MOEN</b>	<b>A. UHREN</b>	CHKD.	
		<b>2016-02-16</b>	
DATE OF ISSUE:	2016/05/04	DRAWING NO. <b>C-26-24.01</b>	

## CROSSING PROFILE



1. FOR CABLE MARKER SEE B-30-15
2. MAY BE REDUCED TO 1.37m FOR SIDINGS AND INDUSTRIAL TRACKS.

SCALE: N.T.S.

<b>SaskPower</b> – DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK.	DRN. DC	RAILWAY CROSSING	
M. ERETH	L. BAILEY	CHKD.		
		2013-02-11		
DATE OF ISSUE : 2013/08/19		DRAWING NO. C-26-24.01	SHEET 3 of 3	REV. E

## CROSSING SPECIFICATIONS

1. A DETAILED RAILWAY CROSSING DRAWING MUST BE SUBMITTED TO AND APPROVAL OBTAINED FROM THE APPROPRIATE RAILWAY AUTHORITY PRIOR TO ANY DIGGING OR CONSTRUCTION OCCURRING. REQUESTS FOR APPROVAL ARE TO BE ROUTED THROUGH THE APPROPRIATE SASKPOWER REGIONAL OFFICE AT LEAST SIX WEEKS PRIOR TO CONSTRUCTION. THE APPROPRIATE SASKPOWER REGION'S CONSTRUCTION/OPERATING SUPERVISOR SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.
2. TWO STEEL PIPES WITH A MINIMUM WALL THICKNESS OF 4.80mm (0.189") ARE TO BE INSTALLED BESIDE EACH OTHER, 0.3 METERS APART, UNDER THE RAIL BED WITH THE TOP PIPE AT A DEPTH OF AT LEAST 1.37 METERS BELOW THE RAIL BED AND 1.0 BELOW THE LOWEST POINT OF EITHER SIDE OF THE RIGHT-OF-WAY. THE PIPES SHALL EXTEND ACROSS THE ENTIRE RIGHT-OF-WAY.
3. FOR BARE CONCENTRIC NEUTRAL CABLE, 38mm (1 1/2") POLYETHYLENE PIPE IS REQUIRED. THE POLY PIPE IS PLACED INSIDE OF AND PROJECTS 150mm (6") BEYOND THE ENDS OF THE STEEL PIPE. THE POLY PIPE SHALL BE SEALED, TO THE CABLE, AT BOTH ENDS WITH PUTTY TAPE AND ELECTRICAL VINYL TAPE.
4. ON THE CROSSING DRAWING, FROM THE CROSSING POINT, GIVE A TIE DIMENSION ALONG THE TRACK TO ONE OF THE FOLLOWING: CENTER OF ROAD ALLOWANCE, 1/4 SECTION LINE, TOWN STREET OR BLOCK, OR RAILWAY SWITCH.
5. THE CABLE SHALL CROSS THE RAILWAY AT AN ANGLE OF 90° WHEREVER POSSIBLE. THE CROSSING IS TO BE THROUGH THE SHORTEST PART OF THE RIGHT-OF-WAY. PARALLELING IN THE RIGHT-OF-WAY SHALL BE AVOIDED.
6. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
7. INDICATE PERTINENT DIMENSIONS ON CROSSING PROFILE.
8. SECONDARY CABLE INSIDE OF RIGHT-OF-WAY BUT NOT CROSSING RAIL LINES REQUIRES 2"x6" NON-CREOSOTE PLANK PROTECTION 150mm (6") ABOVE THE CABLE.

<b>SaskPower</b> - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. <b>ARU</b>	<b>RAILWAY DOUBLE CROSSING</b>	
<b>M. ERETH</b>	<b>A. UHREN</b>	CHKD.		
		<b>2014-11-24</b>		
DATE OF ISSUE:	2015/04/28	DRAWING NO: <b>C-26-24.03</b>	<b>SHEET 1 of 3</b>	<b>REV. D</b>

**BILL OF MATERIAL**

ITEM NO.	CODE NO.	QUANTITY			DESCRIPTION
		A	B	C	
1	2 65 4X	8	--	--	SLEEVE – COMPRESSION AL
2	2 68 XX	--	2	6	SPLICE – PRIMARY CABLE
3	2 68 XX	8	--	--	SPLICE – COVER SECONDARY INSULATION
4	2 68 XX	--	2	6	SPLICE – COVER PRIMARY JACKET
5	5 12 XX	--	2	6	CRIMPIT – CU
6	70 31 45	2	2	2	DUXSEAL
7	70 45 05	10	--	10	PIPE, PVC 5" (20 FT LENGTHS)
8	70 85 02	--	200'	--	CONDUIT, HDPE 2"
9	71 35 00	--	2	6	KIT – CABLE PREPARATION
10	01 433 722	--	60m	--	STEEL PIPE – 3 ½" (MIN. W.T. 0.189")
11	01 433 726	60m	--	60m	STEEL PIPE – 6" (MIN. W.T. 0.189")

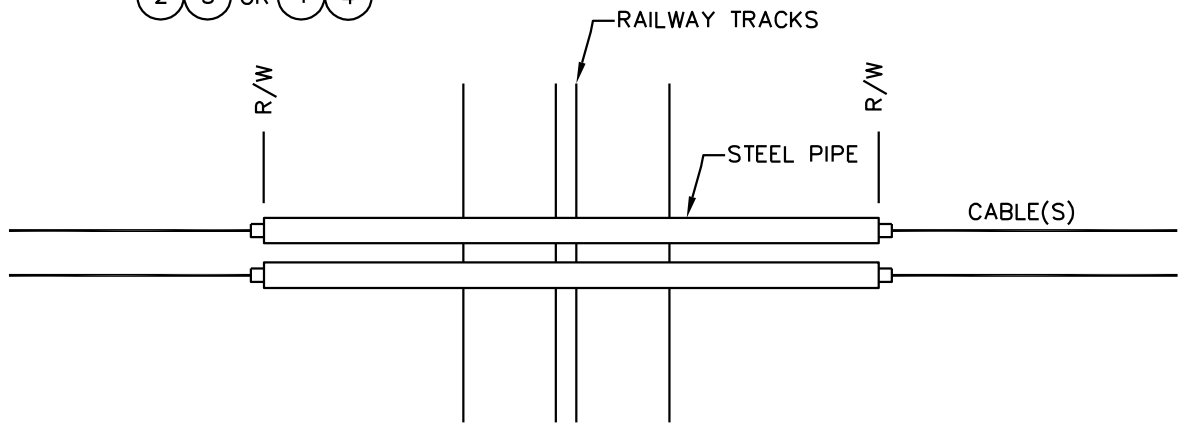
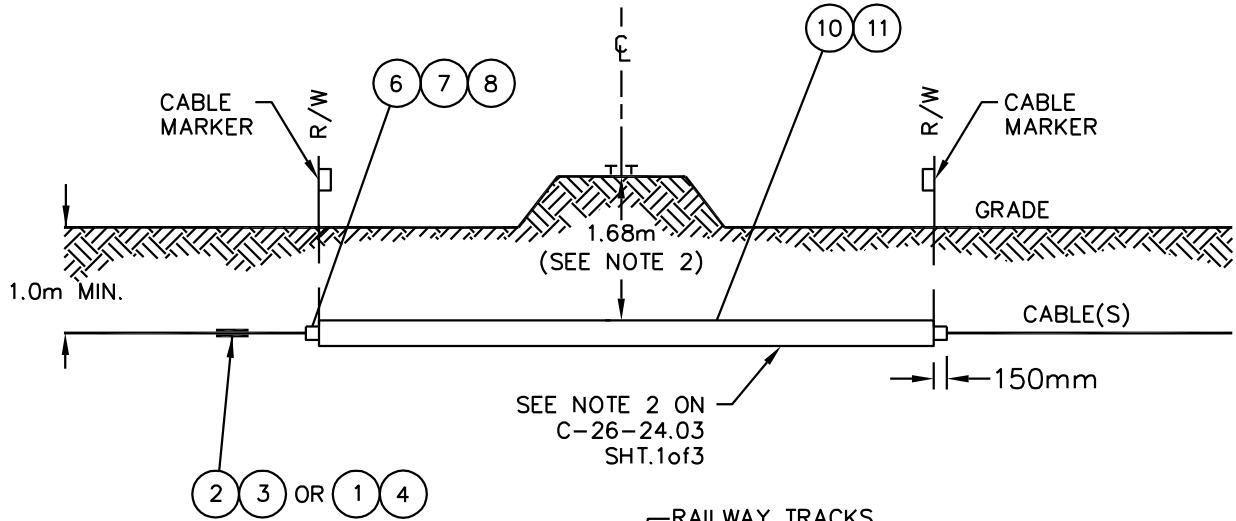
**NOTE:**

1. COLUMN A IS FOR TWO RUNS OF 4-WIRE SECONDARY CABLES. MATERIAL DEFAULTS TO 5" PVC PIPE WITH 6" STEEL PIPE. IF CABLE SIZE PERMITS, 2 x 30m RUNS OF 2" HDPE CONDUIT WITH 30m OF 6" STEEL PIPE CAN BE USED INSTEAD, BY RUNNING BOTH CONDUITS IN ONE CASING PIPE. REFER TO SHEET 3 FOR INSTALLATION DETAILS.
2. COLUMN B IS FOR TWO RUNS OF SINGLE PHASE PRIMARY JACKETED CONCENTRIC NEUTRAL CABLES.
3. COLUMN C IS FOR TWO RUNS OF THREE PRIMARY JACKETED CONCENTRIC NEUTRAL CABLES. (2 - 3Ø PRIMARY CIRCUITS)

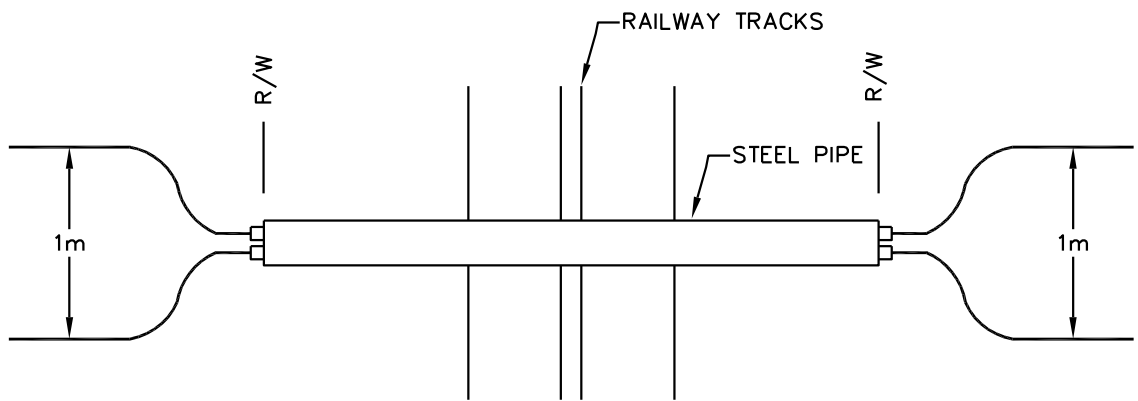
**SaskPower** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	RAILWAY DOUBLE CROSSING
L. MOEN	A. UHREN	CHKD.	
		2016-02-16	
DATE OF ISSUE:	2016/05/04	DRAWING NO. C-26-24.03	SHEET 2 OF 3   REV. F

# CROSSING PROFILE



## OVERHEAD VIEW



## TWO CONDUITS IN ONE CASING PIPE

**NOTE:**

1. FOR CABLE MARKER SEE B-30-15
2. MAY BE REDUCED TO 1.37m FOR SIDINGS AND INDUSTRIAL TRACKS.

SCALE: N.T.S.

<b>SaskPower</b> – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. L. BAILEY	DRN. DC CHKD. 2013-02-11	RAILWAY DOUBLE CROSSING
DATE OF ISSUE : 2013/08/19		DRAWING NO. C-26-24.03	SHEET 3 of 3
			REV. D