

GUYING AND ANCHORING

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV
A-32-00	1	GENERAL INFORMATION	A	
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A-32-00	5	GUY & ANCHORING CHART 3Ø DEADEND - SHORT DOWN GUY	D	
A-32-00	6	GUY & ANCHORING CHART 3Ø DEFLECTIONS - SINGLE CIRCUIT 45° DOWN GUY	D	
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A-32-00	9	GUY & ANCHORING CHART 3Ø DEFLECTIONS - DOUBLE CIRCUIT SHORT DOWN GUY	D	
A-32-00	10	GUY INSULATOR ATTACHMENT LOCATION	0	
A-32-00	11	SOIL CLASSIFICATION DATA	0	
A-32-00	12	PISA HOLDING STRENGTHS BY SOIL CLASSIFICATION	B	
A-32-00	13	MATERIAL STRENGTH VALUES FOR CALCULATING LOADING	C	
A-32-01	1 – 2	TYPE "A" RURAL PRIMARY DOWN GUY	B	D
A-32-02	1 – 2	TYPE "A" URBAN PRIMARY DOWN GUY	B	D
A-32-03	1 – 2	TYPE "B" RURAL PRIMARY DOWN GUY	D	F
A-32-04	1 – 2	TYPE "B" URBAN PRIMARY DOWN GUY	E	D
A-32-05	1 – 2	TYPE "A" AND "B" OVERHEAD GUYING	B	C
A-32-06	1 – 2	TYPE "A" URBAN SECONDARY DOWN GUY	B	C
A-32-07	1 – 2	SIDEWALK GUY	A	B
A-32-08	1 – 2	TWO OR MORE GUY INSTALLATION	C	B
A-32-09	1 – 2	POLE KEY INSTALLATION	0	A
A-32-10	1 – 2	POLE FOUNDATION STRUCTURE FOR MUSKEG	0	0
A-32-10A	1 – 2	POLE FOUNDATION STRUCTURE FOR MUSKEG WITH ANCHORS	0	0
A-32-11	1 – 2	POLE FOUNDATION STRUCTURE FOR SWAMP OR MARSH CONSTRUCTION	B	C
A-32-11A	1 – 2	TWO POLE TANGENT FOR SWAMP OR MARSH CONSTRUCTION	0	0
A-32-12	1 – 2	TYPE "A" ANCHOR	B	E
A-32-13	1 – 2	TYPE "B" ANCHOR	A	B
A-32-14	1 – 2	TYPE "C" ANCHOR	B	B
A-32-15	1 – 2	TYPE "D" ANCHOR	A	B

SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	INDEX
L MOEN	P PATEL	CHKD. LM	
		2022-05-05	
DATE OF ISSUE: 2022-08-15		DRAWING NO: A-32-INDEX	SHEET 1 of 2 REV. U

GUYING AND ANCHORING

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
A-32-16	1 - 2	ROCK ANCHOR INSTALLATION	0	A
A-32-17	1 - 2	SLOUGH POLE BUTT ANCHOR	C	C
A-32-18	1 - 2	ANCHOR LOG INSTALLATION	A	A
A-32-20	1 - 2	ANIMAL POLE GUARD (DISTRIBUTION)	0	0
A-32-21	1 - 1	SLOUGH CONSTRUCTION CRITERIA	0	-
A-32-22	1 - 2	TYPE 'E' ANCHOR	0	0

SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	INDEX
L MOEN	P PATEL	CHKD. LM	
		2022-02-17	
DATE OF ISSUE: 2022-08-15		DRAWING NO: A-32-INDEX	SHEET 2 of 2 REV. A

GUYING & ANCHORING

1. FOR GUYING ANY STRUCTURE CARRYING CIRCUITS 25kV (PHASE TO PHASE) AND LOWER, THE GUYS WILL INCORPORATE INSULATORS IN THE OVERHEAD OR DOWN GUY WIRE. THIS COMPLIES WITH THE CSA REQUIREMENT TO PROTECT THE PUBLIC FROM CONTACTING A GUY THAT HAS BECOME ACCIDENTALLY ENERGIZED DUE TO EITHER A SUPPLY CONDUCTOR BREAK OR GUY WIRE BREAK. THE PUBLIC MUST BE PROTECTED FROM PRIMARY AND SECONDARY VOLTAGES UP TO A LINE TO GROUND VOLTAGE OF 26kV. COMMUNICATION CIRCUITS AND PERSONNEL MUST BE PROTECTED FROM PRIMARY VOLTAGES (VOLTAGES OVER 750V).
2. THIS IS ACCOMPLISHED BY USING GUY STRAIN INSULATORS. FOR ALL CIRCUITS A FIBREGLASS ROD WITH A PROTECTIVE COATING IS USED. THEY HAVE TWO CLEVIS TYPE END FITTINGS WITH ROLLERS THAT ACCEPT PREFORMED GRIPS. THE GUY STRAIN INSULATORS ARE RATED AT 100kN (22,000 lbf).
3. THE GUY STRAIN INSULATORS MUST NEVER BE USED AS INSULATORS ON SUPPLY CONDUCTORS. THESE ARE INTENDED TO INSULATE IN EMERGENCY SITUATIONS SUCH AS FALLEN SUPPLY CONDUCTORS ON GUYS OR BROKEN GUYS ENTANGLED IN ENERGIZED LINES. THESE SITUATIONS SHOULD BE CORRECTED IMMEDIATELY UPON DISCOVERY. THESE INSULATORS WILL PROTECT THE LOWER PORTION OF THE GUY FROM BEING ENERGIZED BUT CANNOT BE LEFT THAT WAY INDEFINITELY.
4. SEVERAL SHEETS IN THIS SECTION SHOW THE LOCATION OF THE INSULATOR IN THE VARIOUS GUYING CONFIGURATIONS. IN ANY CASE, THE BOTTOM OF A GUY INSULATOR MUST NOT BE CLOSER THAN 2.5m TO GRADE WHEN THE GUY IS BROKEN AND AGAINST THE POLE. THIS IS TO PROTECT THE PUBLIC FROM CONTACTING THE UPPER PORTION OF THE GUY WIRE WHICH MAY BE ENERGIZED.
5. ALL DEAD END, ANGLE, OR BUCKARM STRUCTURES ARE TO BE RAKED 300mm AT THE POLE TOP UNLESS OTHERWISE STATED.
6. SIDEWALK GUYS (DWG. A-32-07) SHOULD BE LIMITED TO THEIR INTENDED USE.
7. WHEN CONVERTING A STRUCTURE FROM SINGLE PHASE TO THREE PHASE, THE GUY AND ANCHOR ARE ALSO TO BE CONVERTED AS NECESSARY.
8. ALL DESIGNS INCLUDE A SAFETY FACTOR OF 1.6 FOR STRENGTH CALCULATIONS IN GUYING AND ANCHORING MATERIALS AND COMPONENTS AND SOIL BEARING CAPACITY FOR ANCHOR HOLDING STRENGTH.

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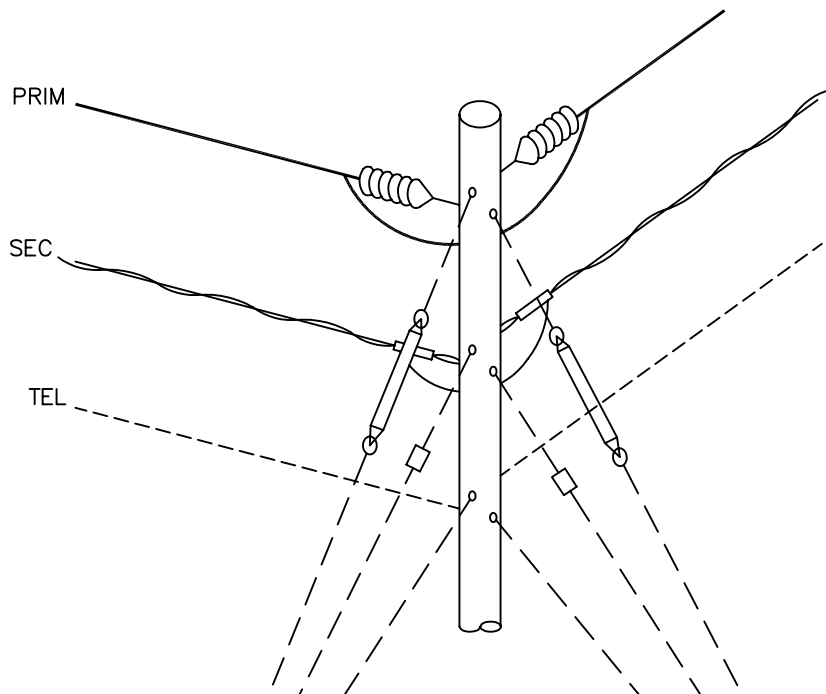
SaskPower - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. ARU	GENERAL INFORMATION	
L. MOEN	A. UHREN	CHKD.		
		2017-09-11		
DATE OF ISSUE: 2017-11-03		DRAWING NO: A-32-00		SHEET 1 of 13
				REV. A

GENERAL GUYING

1. PRIMARY DOWN GUYS – DRAWING A-32-01 TO A-32-04.
2. PRIMARY OVERHEAD GUYS – DRAWING A-32-05.
3. SECONDARY DOWN GUY – DRAWING A-32-06.
4. SIDEWALK GUY – DRAWING A-32-07.
5. THE TYPICAL GUYING CONFIGURATIONS AND APPLICATION TABLES ARE SHOWN ON DRAWINGS A-32-00 SHT. 3 TO SHT. 9, AND THE FRAMING DRAWINGS OF SECTIONS A-12 AND A-14.
6. THE SPECIAL CASES OF GUYING FOR LONGSPAN DOUBLE DEADEND STRUCTURES ARE SHOWN ON DRAWINGS A-12-76 AND A-12-77. THE GUY INSULATORS ARE TO BE INSTALLED AS REQUIRED IN THIS SECTION.

GUY INSULATOR APPLICATIONS

1. THE GUY INSULATOR FIBRE ROD FOR PRIMARY CIRCUIT GUYS IS INSTALLED AND LOCATED AS PER DRAWINGS A-32-01 TO A-32-05 AND A-32-00 SHT. 10.
2. THE LOCATION OF THE INSULATOR FOR RURAL GUYING IS AT 3m DOWN FROM THE POLE ATTACHMENT FOR CONVENIENCE.
3. THE LOCATION OF THE INSULATOR FOR URBAN GUYING IS TO ENSURE THAT IN THE EVENT OF A GUY BREAK THE INSULATOR WILL ISOLATE THE JOINT USE SPACE FROM PRIMARY VOLTAGE (AND SECONDARY WHERE POSSIBLE). THE TABLE ON DRAWING A-32-00 SHT. 10 GIVES THE SPECIFIC LOCATION FOR VARIOUS APPLICATIONS.
4. THE LOWEST PORTION OF ANY GUY INSULATOR MUST NOT BE CLOSER THAN 2.5m ABOVE FINISHED GRADE IF THE GUY IS BROKEN AND HANGING AGAINST THE POLE. THIS IS TO ENSURE ISOLATION OF THE CIRCUITS ON THE POLE FROM THE PUBLIC.



EXAMPLE OF URBAN INSULATOR ATTACHMENT ON A CORNER STRUCTURE. 1Ø SHOWN FOR CLARITY.

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SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

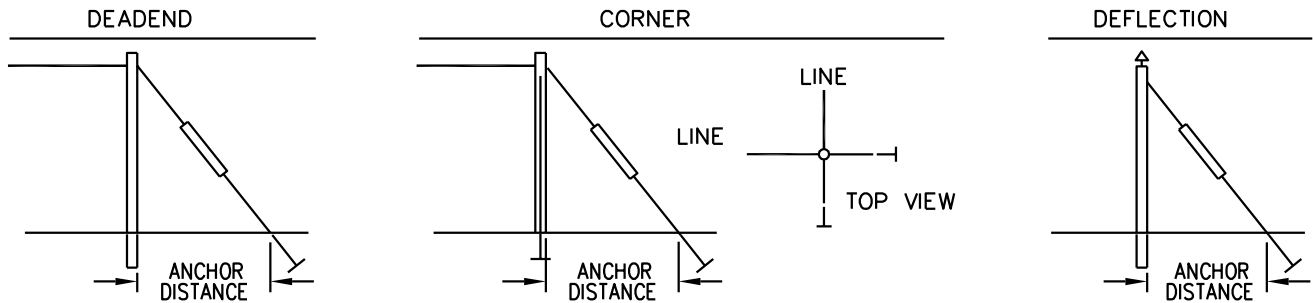
DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	GENERAL GUYING AND INSULATOR APPLICATIONS	
CHKD. <i>FTK</i>					
DATE 87-05-30	DATE	DATE	DATE		
DATE OF ISSUE	87-06-01	DRAWING NO.	A-32-00	SHEET 2 of 13	REV. 0

RURAL

90m RS FOR 1/0 ACSR RAVEN, 3/0 ACSR PIGEON, 4/0 ACSR PENGUIN		
METHOD	GUY/ ANCHOR	ANCHOR DISTANCE (m)
DEADEND 45° DOWN GUY	A/B	—
DEADEND SHORT GUY	A/B	5
CORNER 45° DOWN GUY	A/B	—
CORNER SHORT GUY	A/B	5
DEFLECTION 45° DOWN GUY	A/B	—
DEFLECTION SHORT GUY	A/B	5

NOTES:

- USE CLASS OF POLE REQUIRED FOR NORMAL CONSTRUCTION. SEE A-12-00 SECTION.
- DEFLECTIONS INCLUDE UP TO 59° LINE DEFLECTION.
- CORNERS ARE FROM 60° TO 90°. USE TWO GUYS AND ANCHORS AS LISTED IN THE TABLE.
- BASED ON CLASS 5 SOIL.

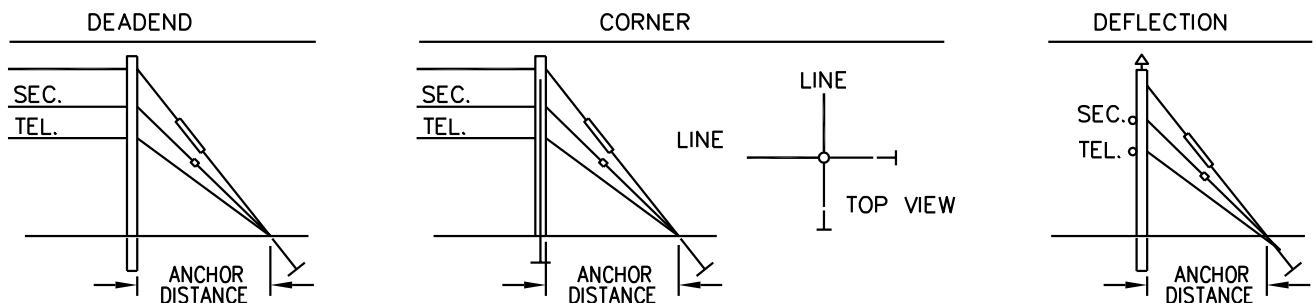


URBAN

60m RS FOR 1/0 ACSR RAVEN, 3/0 ACSR PIGEON, 266.8 AL DAISY, 336.4 AL TULIP, 477 AL COSMOS		
METHOD	GUY/ ANCHOR	ANCHOR DISTANCE (m)
DEADEND 45° DOWN GUY	A/D	—
DEADEND SHORT GUY	A/D	5
CORNER 45° DOWN GUY	A/D	—
CORNER SHORT GUY	A/D	5
DEFLECTION 45° DOWN GUY	A/D	—
DEFLECTION SHORT GUY	A/D	4

NOTES:

- USE CLASS OF POLE REQUIRED FOR NORMAL CONSTRUCTION. SEE A-14-00 SECTION.
- DEFLECTIONS INCLUDE UP TO 59° LINE DEFLECTION.
- CORNERS ARE FROM 60° TO 90°. USE TWO GUYS AND ANCHORS AS LISTED IN THE TABLE.
- BASED ON CLASS 5 SOIL.



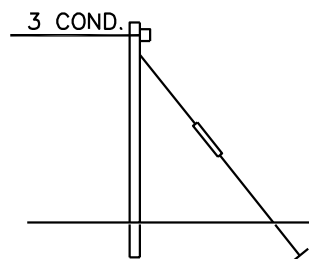
SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. E.GOTANA CHKD. 2017-10-04
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**GUYING & ANCHORING CHART
1Ø DEADEND & DEFLECTIONS**

DEADEND – THREE PHASE SINGLE CIRCUIT

CONDUCTOR	60m RS		90m RS	
	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR
1/0 ACSR RAVEN	4	A/B	4	B/B
3/0 ACSR PIGEON	4	B/B	4	B/B
4/0 ACSR PENGUIN	4	B/B	4	B/D
266.8 AL DAISY	4	B/D	—	—
336.4 AL TULIP (NOTE 3)	3	B/D	—	—
477 AL COSMOS (NOTE 5)	3	B/D	—	—
477 ACSR PELICAN	—	—	1	B/D

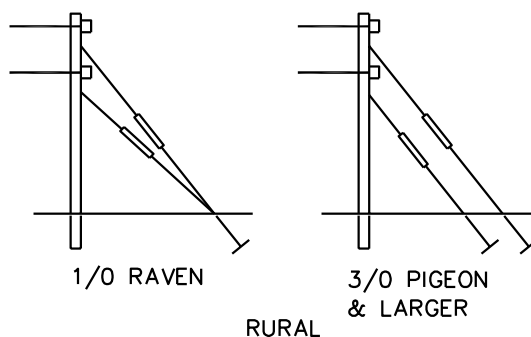


RURAL SHOWN ONLY –

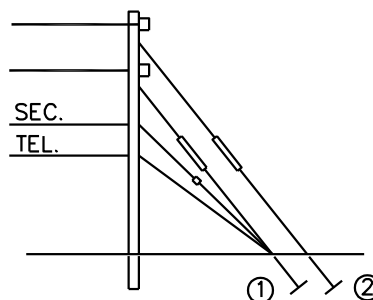
ALL URBAN ANCHORS ARE TYPE "D", GUY AS PER TABLE.

DEADEND – THREE PHASE DOUBLE CIRCUIT 60m RS

CONDUCTOR	RURAL		URBAN	
	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR
1/0 ACSR RAVEN	4	AA/B	4	① ② A/D,A/B
3/0 ACSR PIGEON	4	B/B B/B	4	B/D,B/B
4/0 ACSR PENGUIN	4	B/B,B/B	—	—
266.8 AL DAISY	—	—	4	B/D,B/B
336.4 AL TULIP (NOTE 4)	1	B/D,B/D	H1	B/D,B/D
477 AL COSMOS (NOTE 5)	1	B/D,B/D	H1	B/D,B/D



RURAL



URBAN

NOTES:

1. CLASS 5 SOIL ASSUMED FOR BOTH TABLES.
2. DEFLECTIONS GREATER THAN 30° AND CORNERS (BUCKARMS) ARE TREATED AS TWO DEADENDS.
3. VALUES ARE FOR RURAL STRUCTURES WITH A MAXIMUM SPAN OF 60m ONLY. FOR URBAN RESIDENTIAL OR URBAN INDUSTRIAL STRUCTURES, REFER TO A-14-154.
4. URBAN VALUE IS FOR URBAN INDUSTRIAL STRUCTURES ONLY. FOR URBAN RESIDENTIAL STRUCTURES, REFER TO A-14-164. BOTH THE RURAL AND URBAN INDUSTRIAL STRUCTURES HAVE A MAXIMUM SPAN OF 60m.
5. MAXIMUM SPAN OF 60m.

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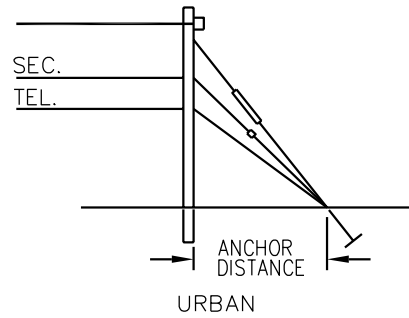
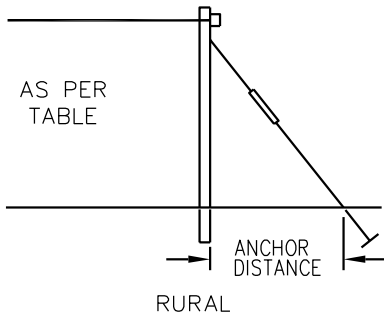
SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. D.DONAIS	DRN.D.REDEKOPP CHKD. 2019-09-05	GUYING & ANCHORING CHART 3Ø DEADEND – 45° DOWN GUY
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00	
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DEADEND – THREE PHASE SINGLE CIRCUIT

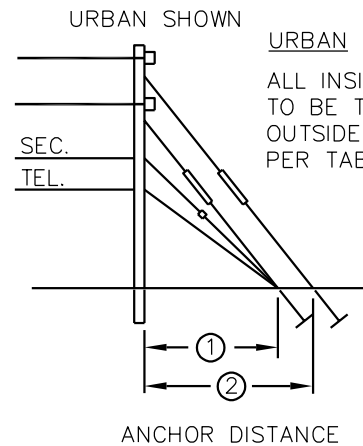
CONDUCTOR	60m RS			90m RS		
	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	B/B	3	4	B/B	5
3/0 ACSR PIGEON	4	B/D	5	4	B/D	7
4/0 ACSR PENGUIN	4	B/D	7	4	B/D	10
266.8 AL DAISY	4	B/D	5	—	—	—
336.4 AL TULIP	NOT ALLOWED			—	—	—
477 AL COSMOS	NOT ALLOWED			—	—	—
477 ACSR PELICAN				NOT ALLOWED		



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DEADEND – THREE PHASE DOUBLE CIRCUIT 60m RS

CONDUCTOR	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	① B/B, ② B/B	① 3 ② 4
3/0 ACSR PIGEON	4	B/D, B/D	① 4 ② 5
4/0 ACSR PENGUIN	4	B/D, B/D	① 6 ② 7
266.8 AL DAISY	4	B/D, B/D	① 4 ② 5
336.4 AL TULIP	NOT ALLOWED		
477 AL COSMOS	NOT ALLOWED		



NOTES:

1. CLASS 5 SOIL ASSUMED FOR BOTH TABLES.
2. IN ABOVE TABLES 3m IS THE MINIMUM PRACTICAL LIMIT.
3. DEFLECTIONS GREATER THAN 30° AND CORNERS (BUCKARMS) ARE TREATED AS TWO DEADENDS.

APPROVED FOR CONSTRUCTION

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APPROVAL L.MOEN	DESIGN CHK. D.DONAIS	DRN.D.REDEKOPP CHKD. 2019-09-05
DATE OF ISSUE 2020/05/12		DRAWING NO. A-32-00

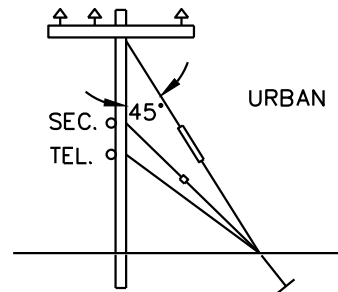
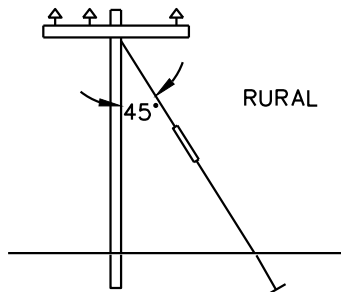
GUYING & ANCHORING CHART
3φ DEADEND – SHORT DOWN GUY

60m RS – RURAL & URBAN

CONDUCTOR	DEFLECTION OF THE LINE – 5°		DEFLECTION OF THE LINE – 10°		DEFLECTION OF THE LINE – 30°	
	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR
1/0 ACSR RAVEN	4	NOT REQ'D	4	A/B	4	A/B
3/0 ACSR PIGEON	4	A/B	4	A/B	4	A/B
4/0 ACSR PENGUIN	4	A/B	4	A/B	4	A/B
266.8 AL DAISY	4	A/D	4	A/D	4	A/D
336.4 AL TULIP (NOTE 3)	—	—	4	A/D	4	B/D
477 AL COSMOS	4	A/D	4	A/D	4	B/D

90m RS – RURAL

CONDUCTOR	DEFLECTION OF THE LINE – 5°		DEFLECTION OF THE LINE – 10°		DEFLECTION OF THE LINE – 30°	
	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR
1/0 ACSR RAVEN	4	A/B	4	A/B	4	A/B
3/0 ACSR PIGEON	4	A/B	4	A/B	4	A/B
4/0 ACSR PENGUIN	4	A/B	4	A/B	4	B/B



NOTES:

1. CLASS 5 SOIL ASSUMED FOR BOTH TABLES.
2. PRIMARY GUYS IN TABLES ONLY.
3. VALUES ARE FOR RURAL STRUCTURES ONLY. FOR URBAN RESIDENTIAL OR URBAN INDUSTRIAL STRUCTURES. REFER TO A-14-151 AND A-14-152. USE 10° STRUCTURE FOR 3-10° DEFLECTIONS.

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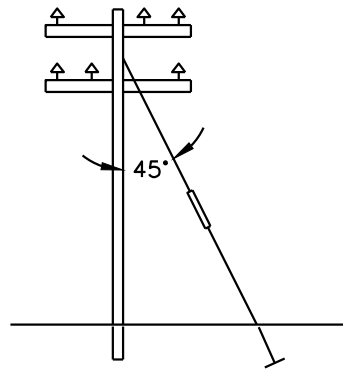
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APPROVAL L.MOEN	DESIGN CHK. B.GEBHART	DRN.D.REDEKOPP CHKD. 2019-09-05	GUYING & ANCHORING CHART 3Ø DEFLECTIONS – SINGLE CIRCUIT 45° DOWN GUY
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00	SHEET 6 of 13 REV. D

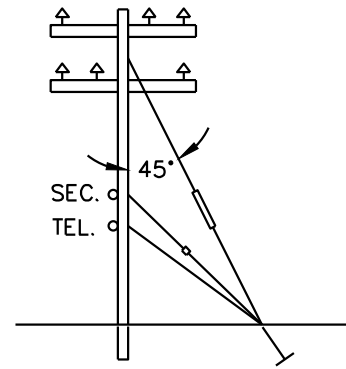
60m RS – RURAL & URBAN

CONDUCTOR	DEFLECTION OF THE LINE – 5°		DEFLECTION OF THE LINE – 10°		DEFLECTION OF THE LINE – 30°	
	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR	POLE CLASS	GUY/ ANCHOR
1/0 ACSR RAVEN	4	A/B	4	A/B	4	B/B
3/0 ACSR PIGEON	4	A/B	4	A/B	4	B/B
4/0 ACSR PENGUIN	4	A/B	4	A/B	4	B/D
266.8 AL DAISY	4	A/D	4	A/D	4	B/D
336.4 AL TULIP (NOTE 2)	3	B/D	3	B/D	2	B/D
477 AL COSMOS	3	B/D	3	B/D	2	B/D

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RURAL



URBAN

NOTES:

1. TABLE ASSUMES CLASS 5 SOIL.
2. VALUES ARE FOR RURAL STRUCTURES ONLY. FOR URBAN RESIDENTIAL OR URBAN INDUSTRIAL STRUCTURES, REFER TO A-14-161 AND A-14-162. USE 10° STRUCTURE FOR 3-10° DEFLECTIONS.

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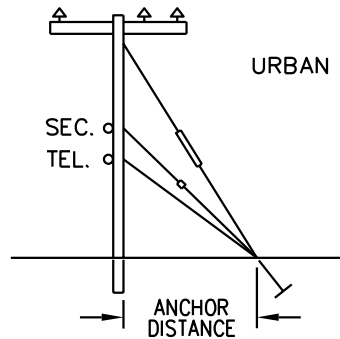
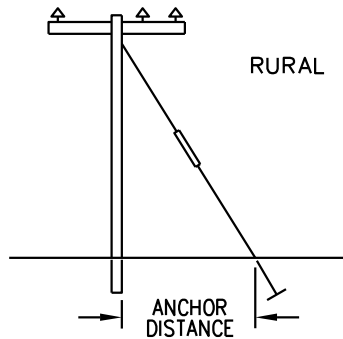
APPROVAL L.MOEN	DESIGN CHK. B.GEBHART	DRN.D.REDEKOPP CHKD. 2019-09-05	GUYING & ANCHORING CHART 3Ø DEFLECTIONS – DOUBLE CIRCUIT 45° DOWN GUY
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00	SHEET 7 of 13 REV. D

60m RS

CONDUCTOR	DEFLECTION OF THE LINE 5'			DEFLECTION OF THE LINE 10'			DEFLECTION OF THE LINE 30'		
	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	NOT REQ'D	—	4	A/B	3	4	B/B	3
3/0 ACSR PIGEON	4	A/B	3	4	A/B	3	4	B/B	4
4/0 ACSR PENGUIN	4	A/B	3	4	B/B	3	4	B/B	4
266.8 AL DAISY	4	A/D	3	4	A/D	3	4	B/D	4
336.4 AL TULIP (NOTE 4)	—	—	—	4	A/D	6	NOT ALLOWED		
477 AL COSMOS	4	A/D	6	4	B/D	6	NOT ALLOWED		

90m RS

CONDUCTOR	DEFLECTION OF THE LINE 5'			DEFLECTION OF THE LINE 10'			DEFLECTION OF THE LINE 30'		
	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	A/B	3	4	A/B	3	4	B/B	4
3/0 ACSR PIGEON	4	A/B	3	4	B/B	3	4	B/B	5
4/0 ACSR PENGUIN	4	A/B	3	4	B/B	3	4	B/B	6
477 ACSR PELICAN	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		



NOTES:

1. CLASS 5 SOIL ASSUMED FOR BOTH TABLES.
2. IN ABOVE TABLES 3m IS THE MINIMUM PRACTICAL LIMIT.
3. ALL URBAN STRUCTURES MINIMUM TYPE D ANCHOR.
4. VALUES ARE FOR RURAL STRUCTURES ONLY. FOR URBAN RESIDENTIAL AND URBAN INDUSTRIAL STRUCTURES, REFER TO A-14-151 AND A-14-152. USE 10' STRUCTURE FOR 3-10' DEFLECTIONS.

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SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. B.GEBHART	DRN.D.REDEKOPP CHKD. 2019-09-05	GUYING & ANCHORING CHART 3Ø DEFLECTIONS – SINGLE CIRCUIT SHORT DOWN GUY
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00	
		SHEET 8 of 13	REV. D

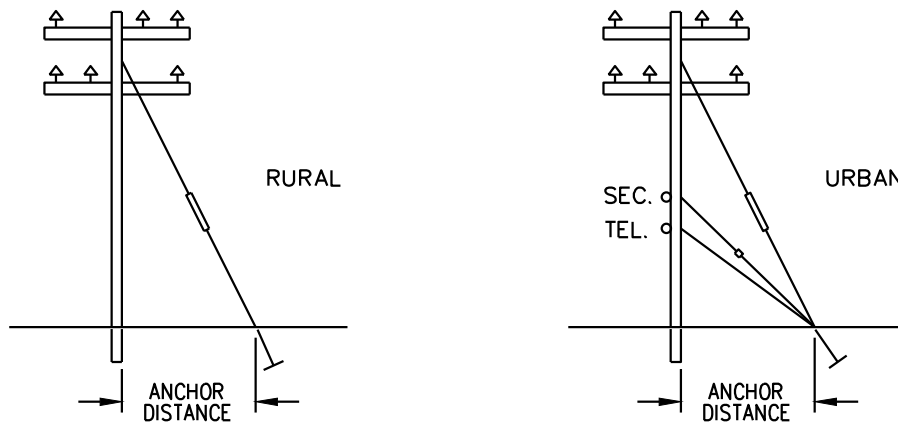
60m RS – RURAL
MINIMUM ANCHOR DISTANCE FROM POLE (m)

CONDUCTOR	DEFLECTION OF THE LINE 5°			DEFLECTION OF THE LINE 10°			DEFLECTION OF THE LINE 30°		
	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	B/B	3	4	B/B	3	4	B/B	3
3/0 ACSR PIGEON	4	B/D	3	4	B/D	3	4	B/D	6
4/0 ACSR PENGUIN	4	B/D	3	4	B/D	3	4	B/D	9
266.8 AL DAISY	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		
336.4 AL TULIP	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		
477 AL COSMOS	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		

60m RS – URBAN
MINIMUM ANCHOR DISTANCE FROM POLE (m)

CONDUCTOR	DEFLECTION OF THE LINE 5°			DEFLECTION OF THE LINE 10°			DEFLECTION OF THE LINE 30°		
	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)	POLE CLASS	GUY/ ANCHOR	ANCHOR DISTANCE (m)
1/0 ACSR RAVEN	4	B/D	3	4	B/D	4	4	B/D	7
3/0 ACSR PIGEON	4	B/D	3	4	B/D	4	4	B/D	9
4/0 ACSR PENGUIN	—	—	—	—	—	—	—	—	—
266.8 AL DAISY	4	B/D	3	4	B/D	4	4	B/D	8
336.4 AL TULIP (NOTE 3)	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		
477 AL COSMOS	NOT ALLOWED			NOT ALLOWED			NOT ALLOWED		

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NOTES:

1. 3m IS THE MINIMUM PRACTICAL LIMIT.
2. CLASS 5 SOIL ASSUMED.
3. VALUES ARE FOR URBAN INDUSTRIAL STRUCTURES ONLY. FOR URBAN RESIDENTIAL STRUCTURES, REFER TO A-14-161 AND A-14-162. USE 10° STRUCTURE FOR 3-10° DEFLECTIONS.

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. B.GEBHART	DRN.D.REDEKOPP CHKD. 2019-09-05
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00

GUYING & ANCHORING CHART
3Ø DEFLECTIONS – DOUBLE CIRCUIT
SHORT DOWN GUY

URBAN STRUCTURES

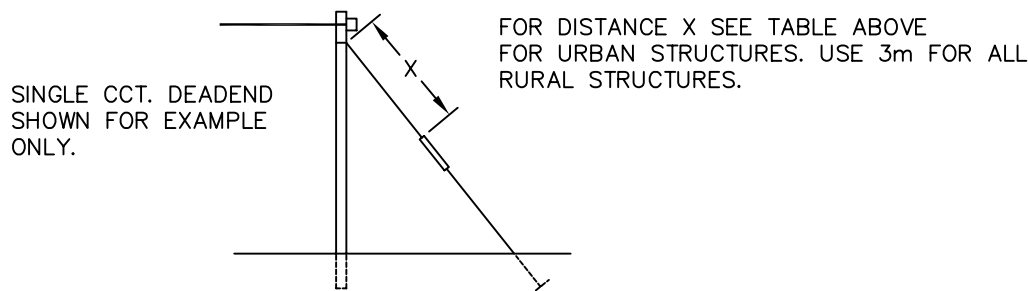
SEE ALSO NOTES AND SKETCH BELOW

STRUCTURE POLE HT.	3Ø & 1Ø DEADEND SINGLE CCT.	3Ø DEADEND DOUBLE CCT.	3Ø & 1Ø CORNER SINGLE CCT.	3Ø CORNER DOUBLE CCT.	TAP-OFF SINGLE CCT.	TAP-OFF DOUBLE CCT.		
12.2m	2m	—	—	—	—	—		
13.7m	3m	—	UPPER	—	2m	—		
			3m					
			LOWER					
			2m					
15.2m	4m	UPPER	UPPER	TOP UPPER	3m	BELOW UPPER		
		4m	4m	4m		TOP LOWER	3m	
				3m				
		LOWER	LOWER	BOTTOM UPPER		BELOW LOWER		
		2m	3m	—		2m	BOTTOM LOWER	2m
						2m		
						2m		

RURAL STRUCTURES

IN ALL CASES ATTATCH GUY INSULATOR AT 3m FROM POLE.
SEE ALSO NOTES AND SKETCH BELOW.

ATTACHMENT LOCATION SKETCH



NOTE:

1. THESE DIMENSIONS APPLY TO ALL PRIMARY CIRCUIT GUYS.
2. SEE FRAMING DWG. IN SECTIONS A-12 AND A-14 FOR GUY ATTACHMENT POINT ON THE POLE.
3. SEE DWG. A-32-01 TO A-32-04 FOR DETAILED PRIMARY GUY APPLICATION.
4. SEE DWG. A-32-05 FOR DETAILED OVERHEAD GUY APPLICATION.

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	GUY INSULATOR ATTATCHMENT LOCATION	
CHKD. <i>FTK</i>	DATE	DATE	DATE		
DATE 87-05-30					
DATE OF ISSUE 87-06-01			DRAWING NO. A-32-00	SHEET 10 of 13	REV. 0

CLASS	DESCRIPTION OF SOIL	PROBE VALUE (in. - lbs)
1	SOLID BED ROCK	—————
2	DENSE CLAY; COMPACT GRAVEL; DENSE FINE SAND; LAMINATED ROCK; SLATE; SCHIST; SANDSTONE;	OVER 600
3	SHALE; BROKEN BED ROCK; HARDPAN, COMPACT CLAY-GRAVEL MIXTURES	500 - 600
4	GRAVEL, COMPACT GRAVEL AND SAND; CLAYPAN	400 - 500
5	MEDIUM-FIRM CLAY; LOOSE SAND AND GRAVEL; COMPACT COARSE SAND	300 - 400
6	SOFT-PLASTIC CLAY; LOOSE COARSE SAND; CLAYEY SILT; COMPACT FINE SAND	200 - 300
7	FILL; LOOSE FINE SAND; WET CLAYS; SILT	100 - 200
8	SWAMP; MARSH; SATURATED SILT; HUMUS	UNDER 100

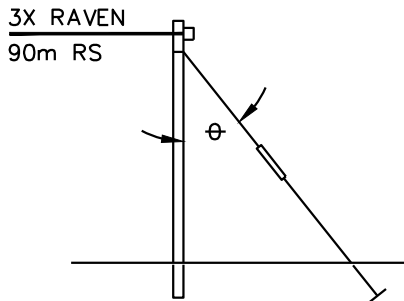
SASKATCHEWAN POWER CORP. - DISTRIBUTION ENGINEERING STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	SOIL CLASSIFICATION DATA	
CHKD. <i>FTK</i>					
DATE 87-05-30	DATE	DATE	DATE		
DATE OF ISSUE	87-06-01	DRAWING NO.	A-32-00	SHEET 11 of 13	REV. 0

ANCHOR	ROD	ULTIMATE ANCHOR HOLDING STRENGTH IN DIFFERENT CLASSES OF SOIL					N LBS
		6	5	4	3	2	
TYPE 'A' 8"	3/4" x 7' (LEGACY)	$\frac{57850}{13000}$	$\frac{71200}{16000}$	$\frac{84550}{19000}$	$\frac{89000}{20000}$	$\frac{89000}{20000}$	
	1" x 7' (LEGACY)	$\frac{57850}{13000}$	$\frac{71200}{16000}$	$\frac{84550}{19000}$	$\frac{97900}{22000}$	$\frac{111250}{25000}$	
TYPE 'B' 11 5/16"	3/4" x 7' (LEGACY)	$\frac{80100}{18000}$	$\frac{89000}{20000}$	$\frac{89000}{20000}$	$\frac{89000}{20000}$	$\frac{89000}{20000}$	
	1" x 7'	$\frac{80100}{18000}$	$\frac{93450}{21000}$	$\frac{106800}{24000}$	$\frac{124600}{28000}$	$\frac{142400}{32000}$	
TYPE 'C' 2x8"	1" x 7' (LEGACY)	$\frac{93450}{21000}$	$\frac{111250}{25000}$	$\frac{133500}{30000}$	$\frac{142400}{32000}$	$\frac{160200}{36000}$	
TYPE 'D' 2x10"	1" x 7'	$\frac{102350}{23000}$	$\frac{129050}{29000}$	$\frac{142400}{32000}$	$\frac{160200}{36000}$	$\frac{160200}{36000}$	
TYPE 'E' 8"-10"-12"	2" x 7'	$\frac{164600}{37000}$	$\frac{200200}{45000}$	$\frac{235700}{53000}$	$\frac{271300}{61000}$	$\frac{306900}{69000}$	

- NO SAFETY FACTORS HAVE BEEN INCLUDED IN THE ABOVE TABLE.
- TO DETERMINE THE TENSION IN A DOWN GUY (TG), DIVIDE THE CONDUCTOR TENSION (TC) BY THE SINE OF THE ANGLE (θ) BETWEEN THE GUY WIRE & THE POLE.
- ANCHOR TYPES 'A' AND 'C' HAVE BEEN SUPERCEDED BY TYPES 'B' AND 'D', RESPECTIVELY.

EXAMPLE



TOTAL HORIZONTAL
CONDUCTOR TENSION = 3 x HEAVY LOADING TENSION
TC = 3 x 8042 N = 24126 N

- IF $\theta = 45^\circ$ TG = $\frac{24126 \text{ N}}{\sin 45^\circ} = \frac{24126}{.707} = 34124 \text{ N}$

- ASSUME CLASS 5 SOIL

- THE SAFETY FACTOR FOR 1-11 5/16" HELIX & 1" ROD
WILL BE $\frac{93450 \text{ N}}{34124 \text{ N}} = 2.73$

THIS IS GREATER THAN
1.6, THEREFORE IT IS SUITABLE.

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN. E.GOTANA CHKD.
		2017-11-23

SCREW ANCHOR
HOLDING STRENGTHS
BY SOIL CLASSIFICATION

DATE OF ISSUE 2018-02-20	DRAWING NO. A-32-00	SHEET 12 of 13	REV. B
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ITEM	CODE NUMBER	UTS kN (lbs)	1.6 SAFETY FACTOR APPLIED kN (lbs)
5/8" MACHINE BOLT	1-13-XX	59.4 (13350)	37.1 (8344)
5/8" EYE BOLT	1-11-XX	59.4 (13350)	37.1 (8344)
5/8" EYE NUT	1-50-00	59.4 (13350)	37.1 (8344)
3/4" ANCHOR ROD	1-01-52	102.4 (23000)	63.9 (14375)
1" ANCHOR ROD	1-01-56	160.2 (36000)	100.1 (22500)
1" EYE BOLT	1-11-XX	142.4 (32000)	89.0 (20000)
GUY FITTING (POLE)	1-31-00	37.8 (8500)	23.6 (5310)
5/16" GUY WIRE (SINGLE)	1-95-16	49.4 (11100)	30.9 (6938)
5/16" GUY WIRE (DOUBLE)	1-95-16	98.8 (22200)	61.7 (13875)
5/16" PREFORMED GRIP	1-33-00	49.4 (11100)	30.9 (6938)
PORCELAIN GUY INSULATOR	1-38-06	89.0 (20000)	55.6 (12500)
FIBRE ROD GUY INSULATOR	1-38-15	67.0 (15000)	41.8 (9400)
FIBRE ROD GUY INSULATOR	1-38-22	100.0 (22500)	62.5 (14000)
5/16" PREFORMED SPLICE	2-57-41	49.8 (11200)	31.1 (6990)

NOTES:

CODES 13806 AND 13815 HAVE BEEN SUPERCEDED BY 13822.

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L. MOEN	DESIGN CHK. J.ARSENAUT	DRN.D.REDEKOPP CHKD. 2019-09-05	MATERIAL STRENGTH VALUES FOR CALCULATING LOADS
DATE OF ISSUE	2020/05/12	DRAWING NO. A-32-00	
		SHEET 13 of 13	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	1 25 25	0	1	CLEVIS – THIMBLE
2	1 31 00	1	0	FITTING – GUY
3	1 33 00	4	4	GRIP – PREFORMED – GUY
4	1 34 16	1	1	MARKER – GUY – SOLID (SEE NOTE 3)
5	1 38 22	1	1	INSULATOR – GUY STRAIN – FIBRE ROD – 100 kN
6	1 93 42	2	2	WASHER – SQUARE – 2-1/4” X 13/16” HOLE
7	1 95 16	14m	14m	WIRE – GUY – 5/16”
8	5 09 27	1	1	CONNECTOR – COMPRESSION
9	7 69 62	0.04	0.04	SCREWS – WOOD – #10 X 1-1/2" (100/BOX)
10	5 640 000	1	1	SIGN – DANGER – HIGH VOLTAGE

NOTE:

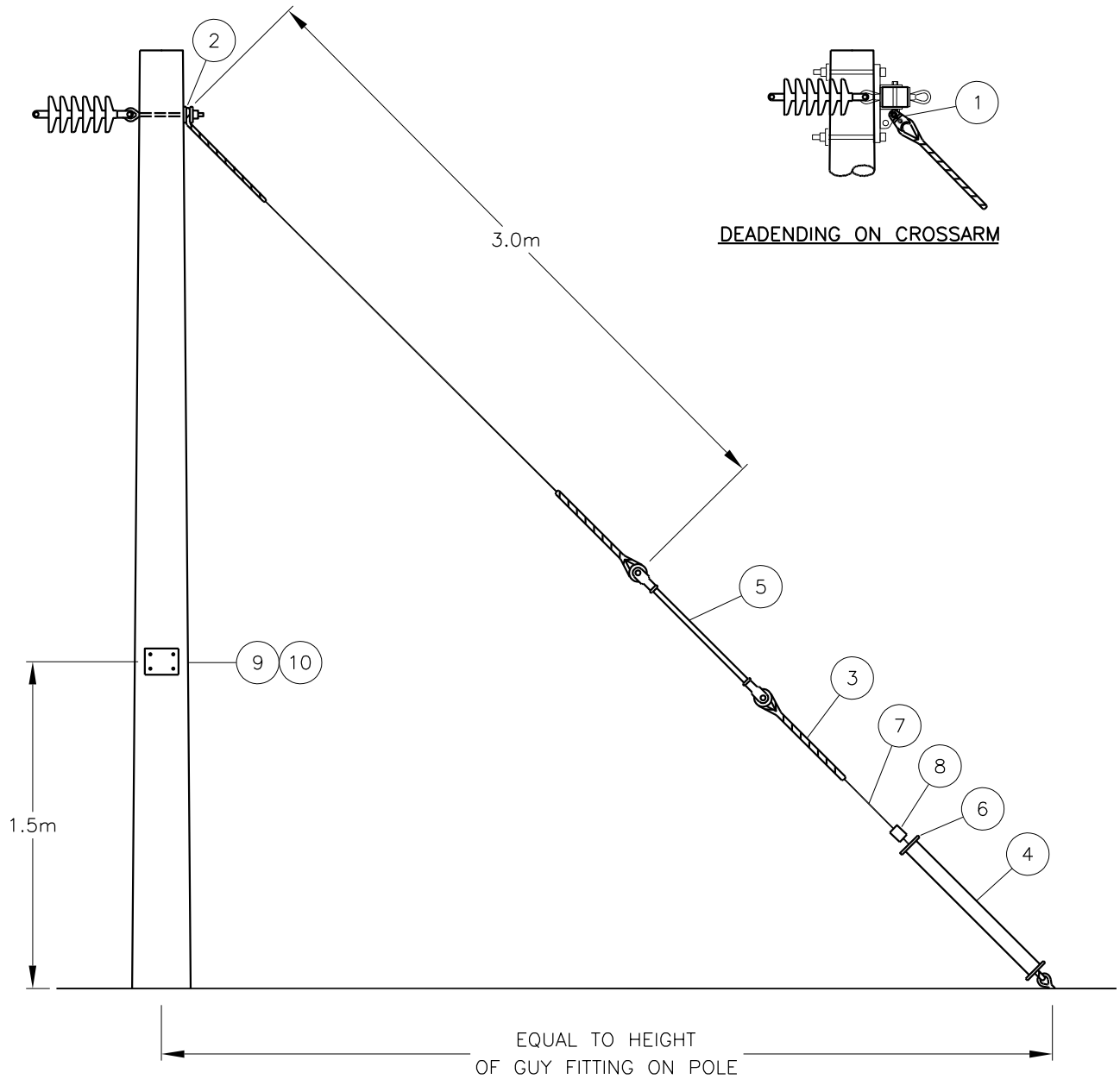
1. ITEM “7” QUANTITY IS BASED ON A 40' (12.2m) POLE.
2. COLUMN ‘A’ IS USED AS SHOWN IN A-32-01, COLUMN ‘B’ IS USED FOR DEADENDING ON THE CROSSARM BRACKET.
3. 1 32 18 CAN BE USED FOR MAINTENANCE ONLY.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	TYPE “A” RURAL PRIMARY DOWN GUY
L MOEN	P PATEL	CHKD. LM	
		2022-05-04	
DATE OF ISSUE	2022-08-15	DRAWING NO: A-32-01	SHEET 1 OF 2 REV. D

BACK TO INDEX PAGE



NOTE:

1. WHERE AREA IS KNOWN TO BE FREQUENTED BY RECREATIONAL VEHICLE TRAVEL, IT IS ADVISABLE TO INCREASE THE GUARD LENGTH TO 16' (ADD ONE MORE EACH OF MATERIALS 4 AND 6).

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

A32_01_02

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK.	DRN.E.GOTANA	TYPE "A" RURAL PRIMARY DOWN GUY	
L.MOEN	L.MOEN	CHKD.		
		2020-03-10		
DATE OF ISSUE	2020-12-18	DRAWING NO.	A-32-01	SHEET 2 of 2
				REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY			DESCRIPTION
		A	B	C	
1	1 13 12	0	1	0	BOLT – MACHINE – 5/8” X 12”
2	1 25 25	0	0	1	CLEVIS – THIMBLE
3	1 31 00	1	1	0	FITTING – GUY
4	1 33 00	4	4	4	GRIP – PREFORMED – GUY
5	1 34 18	1	1	1	MARKER – GUY – SPLIT
6	1 38 22	1	1	1	INSULATOR – GUY STRAIN – FIBRE ROD – 100 kN
7	1 93 42	0	1	1	WASHER – SQUARE – 2-1/4” X 13/16” HOLE
8	1 95 16	14 m	14 m	14 m	WIRE – GUY – 5/16”
9	7 69 62	0.04	0.04	0.04	SCREWS – WOOD – #10 X 1-1/2” (100/BOX)
10	05 640 00	1	1	1	SIGN – DANGER – HIGH VOLTAGE

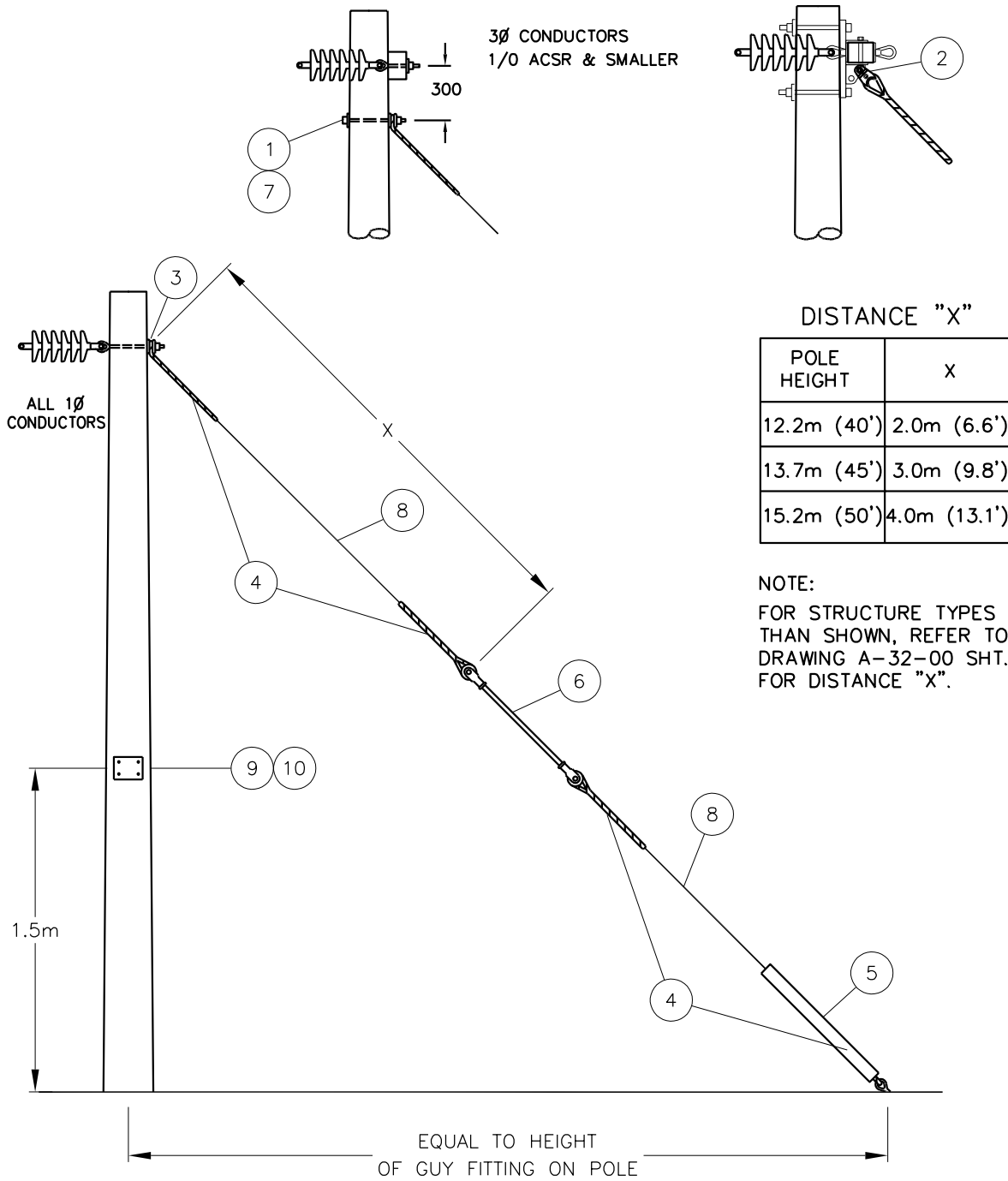
NOTE:

1. ITEM “8” QUANTITY IS BASED ON A 40’ (12.2m) POLE.
2. COLUMN ‘A’ IS USED FOR SINGLE PHASE, COLUMN ‘B’ IS USED FOR THREE PHASE, COLUMN ‘C’ IS USED FOR DEADENDING ON THE CROSSARM BRACKET.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	TYPE “A” URBAN PRIMARY DOWN GUY
L MOEN	P PATEL	CHKD. LM	
		2022-05-04	
DATE OF ISSUE: 2022-08-15		DRAWING NO: A-32-02	SHEET 1 OF 2 REV. D



NOTE:

1. WHERE AREA IS KNOWN TO BE FREQUENTED BY RECREATIONAL VEHICLE TRAVEL, IT IS ADVISABLE TO INCREASE THE GUARD LENGTH TO 16' (ADD ONE MORE EACH OF MATERIALS 5 AND 7).

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

A32_02_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD.	TYPE "A" RURAL PRIMARY DOWN GUY
		2020-03-10	
DATE OF ISSUE	2020-12-18	DRAWING NO. A-32-02	SHEET 2 of 2
			REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	1 10 90	1	0	BOLT – THIMBLE – 1" X 12" (SEE NOTE 1)
2	1 25 25	0	1	CLEVIS – THIMBLE
3	1 33 00	4	4	GRIP – PREFORMED GUY
4	1 34 16	1	1	MARKER – GUY – SOLID (SEE NOTE 4)
5	1 38 22	1	1	INSULATOR – GUY STRAIN – FIBRE ROD – 100 kN
6	1 93 35	1	0	WASHER – CURVED – 5" X 1-1/8" HOLE
7	1 93 42	2	2	WASHER – SQUARE – 2-1/4" X 13/16" HOLE
8	1 95 16	28 m	28 m	WIRE – GUY – 5/16"
9	5 09 27	1	1	CONNECTOR – COMPRESSION
10	7 69 62	0.04	0.04	SCREWS – WOOD – #10 X 1-1/2" (100/BOX)
11	05 640 000	1	1	SIGN – DANGER – HIGH VOLTAGE

NOTE:

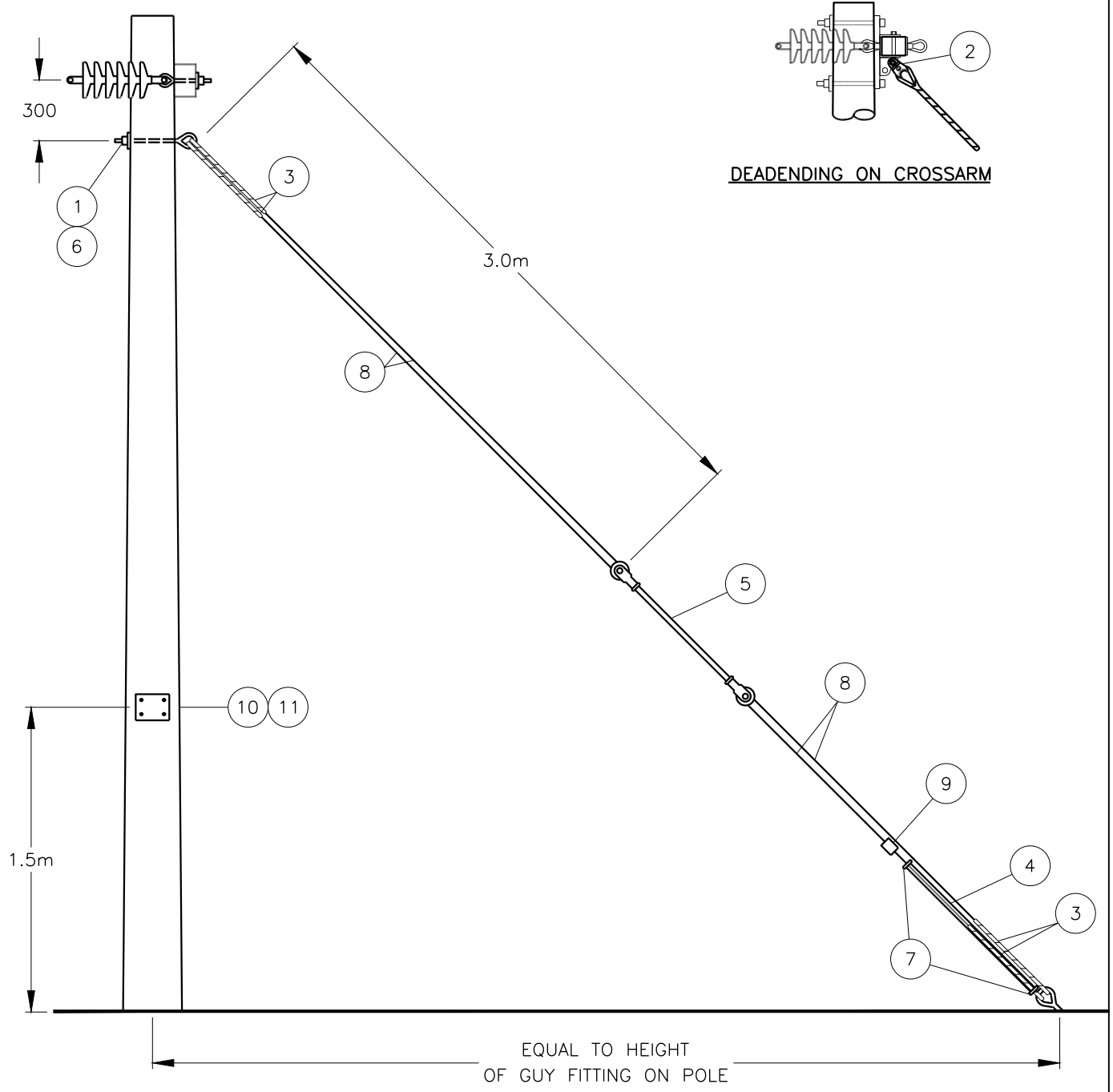
1. LENGTH OF THIMBLE EYEBOLT (ITEM 1) WILL VARY DUE TO POLE CLASS AND HEIGHT OF ATTACHMENT.
2. ITEM "8" QUANTITY IS BASED ON A 40' (12.2m) POLE.
3. COLUMN 'A' IS USED AS SHOWN IN A-32-03, COLUMN 'B' IS USED FOR DEADENDING ON THE CROSSARM BRACKET.
4. 1 32 18 CAN BE USED FOR MAINTENANCE ONLY.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	TYPE "B" RURAL PRIMARY DOWN GUY
L MOEN	P PATEL	CHKD. LM	
		2022-05-05	
DATE OF ISSUE	2022-08-15	DRAWING NO: A-32-03	SHEET 1 OF 2 REV. F

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NOTES:

1. WHERE AREA IS KNOWN TO BE FREQUENTED BY RECREATIONAL VEHICLE TRAVEL. IT IS ADVISABLE TO INCREASE THE GUARD LENGTH TO 16' (ADD ONE MORE EACH OF MATERIALS 4 AND 7).

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

A32_03_02

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD.	TYPE 'B' RURAL PRIMARY DOWN GUY	
		2020-05-06		
DATE OF ISSUE	2020-12-18	DRAWING NO. A-32-03	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	1 10 89	1	0	BOLT – THIMBLE EYE – 1” X 10” (SEE NOTE 1)
2	1 25 25	0	1	CLEVIS – THIMBLE
3	1 33 00	4	4	GRIP – PREFORMED GUY
4	1 34 18	1	1	MARKER – GUY – SPLIT
5	1 38 22	1	1	INSULATOR GUY STRAIN – FIBRE ROD – 100 kN
6	1 93 35	1	0	WASHER – CURVED – 5”
7	1 95 16	28m	28m	WIRE – STEEL GUY – 5/16”
8	7 69 62	0.04	0.04	SCREWS – WOOD #10 – 1-1/2” (100/BOX)
9	05 640 000	1	1	SIGN – DANGER – H.V.

NOTE:

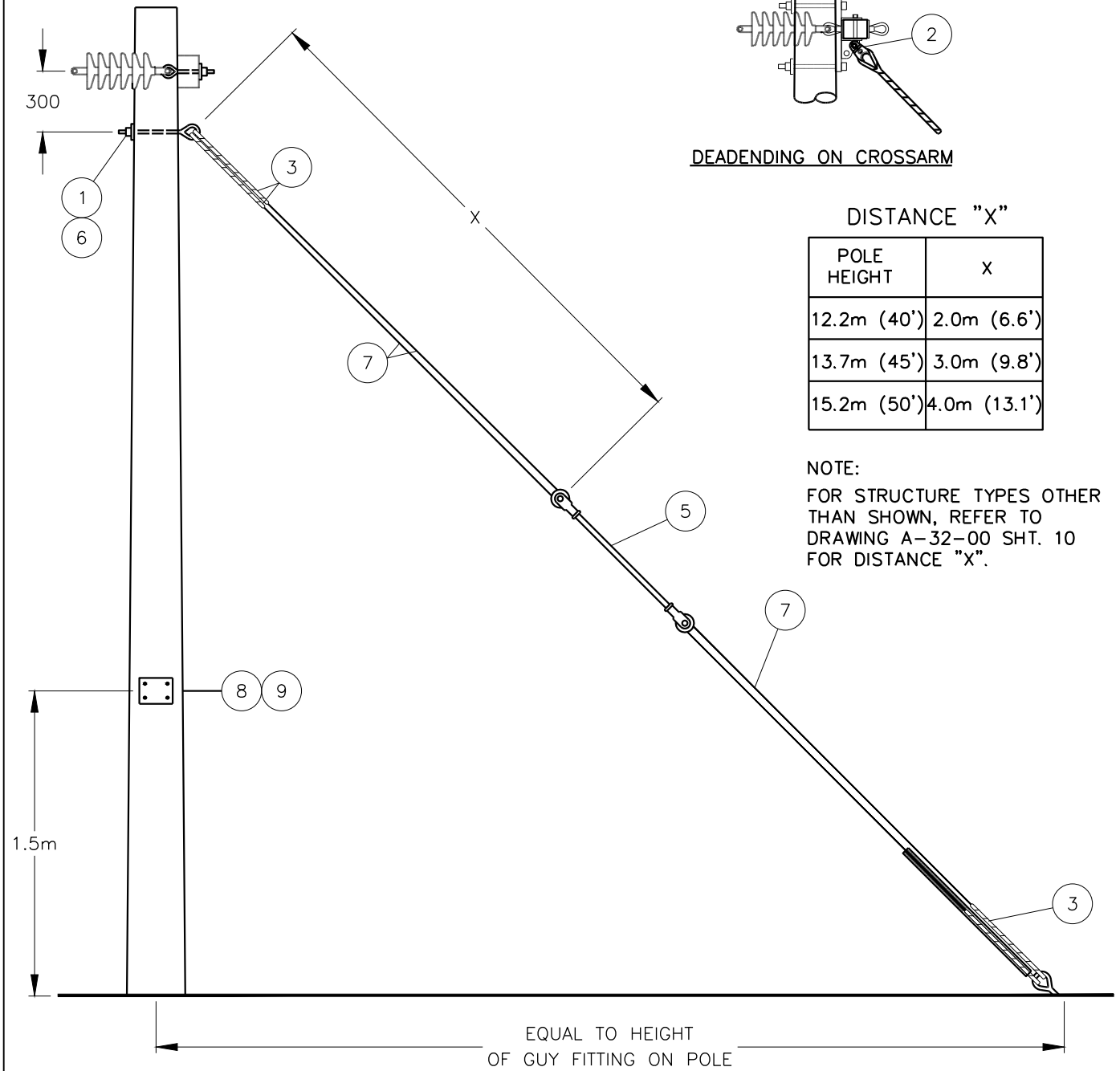
1. LENGTH OF THIMBLE EYE BOLT (ITEM 1) WILL VARY DUE TO POLE CLASS AND HEIGHT OF ATTACHMENT.
2. ITEM “7” QUANTITY IS BASED ON A 12.2m (40') POLE.
3. COLUMN ‘A’ IS AS SHOWN IN A-32-04, ‘B’ IS FOR DEADENDING ON THE CROSSARM BRACKET.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. LM	TYPE “B” URBAN PRIMARY DOWN GUY
L MOEN	L MOEN	CHKD. LM	
		2020/05/13	
DATE OF ISSUE	2020-12-18	DRAWING NO: A-32-04	SHEET 1 OF 2
			REV. D

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NOTES:

- WHERE AREA IS KNOWN TO BE FREQUENTED BY RECREATIONAL VEHICLE TRAVEL, IT IS ADVISABLE TO INCREASE THE GUARD LENGTH TO 16' (ADD ONE EXTRA 1 34 18 GUY MARKER AND ONE 1 93 42 SQUARE WASHER).

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

A32_04_02

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-05-06	TYPE 'B' URBAN PRIMARY DOWN GUY
DATE OF ISSUE	2020-12-18	DRAWING NO. A-32-04	
		SHEET 2 of 2	REV. E

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY			DESCRIPTION
		A	B	C	
1	1 10 89	-	-	2	BOLT-THIMBLE EYE -1" x 10"
2	1 11 12	1	2	-	BOLT-EYE -5/8" x 12"
3	1 50 00	1	-	-	NUT - EYE 5/8"
4	1 33 00	4	4	-	GRIP-PREFORMED 5/16" GUY STEEL
5	1 38 22	1	1	1	INSULATOR GUY STRAIN-FIBRE ROD-100kN
6	1 50 03	-	-	1	NUT-THIMBLE-EYE -1"
7	1 91 12	1	2	-	THIMBLE-GUY -1/2"
8	1 93 35	-	-	1	WASHER-CURVED -5"
9	1 93 42	-	1	-	WASHER-SQUARE -2 1/4" x 2 1/4" x 13/16" HOLE
10	1 95 16	20 m	20 m	40 m	WIRE-STEEL -5/16"
11	2 57 41	-	-	2	SPLICE-PREFORMED -5/16" GUY STEEL

NOTE:

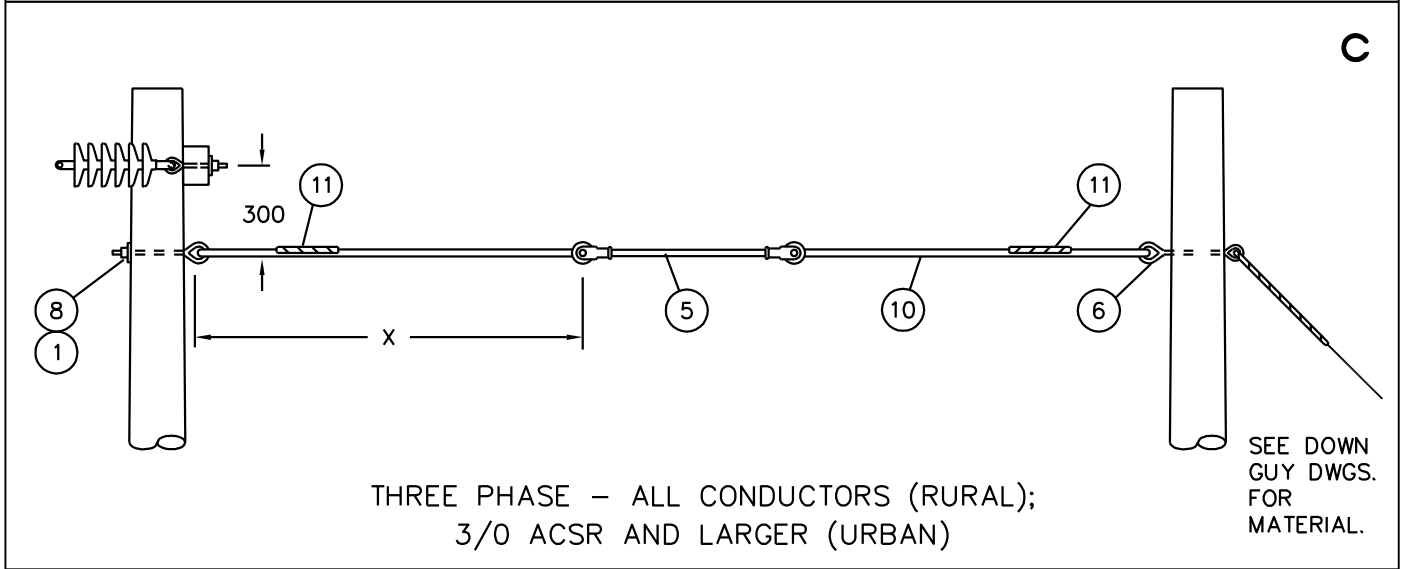
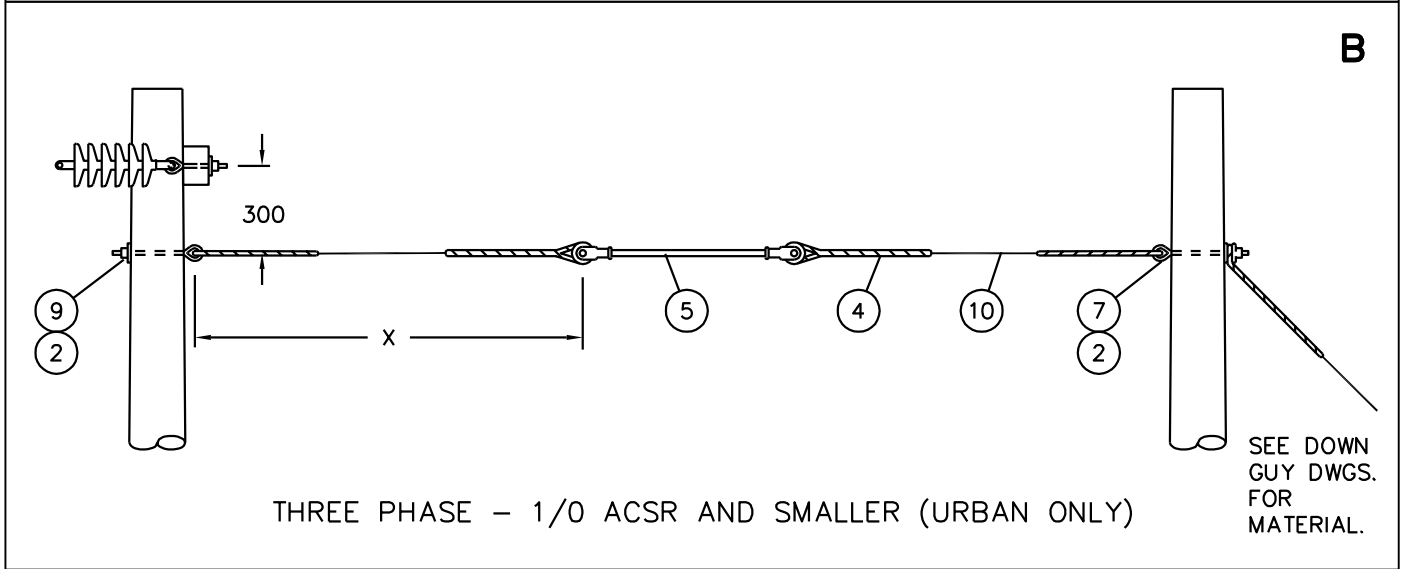
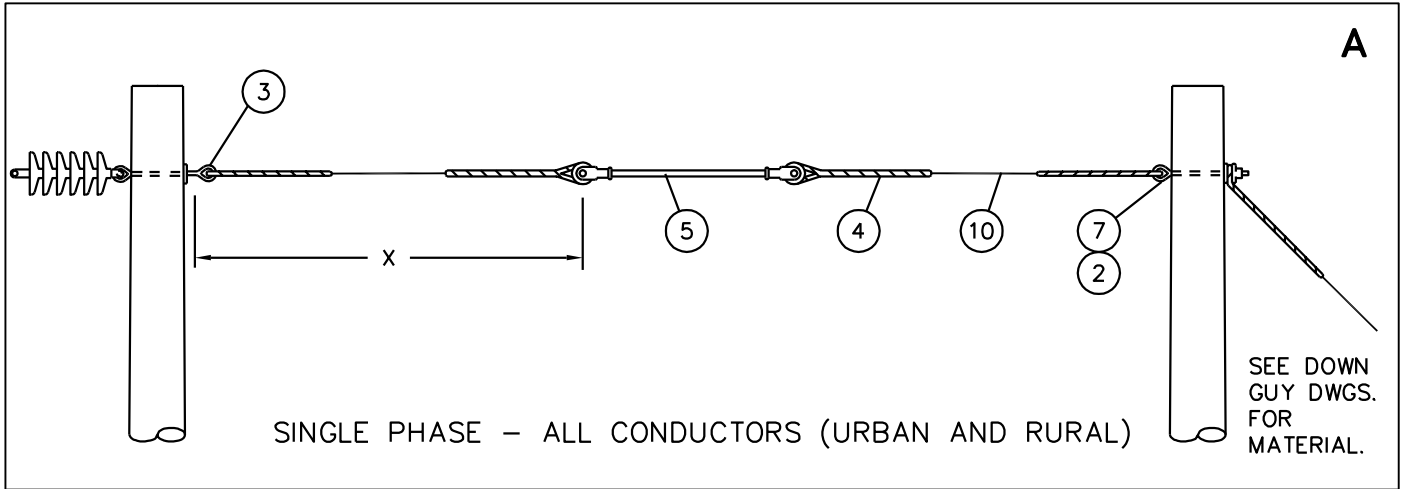
1. ITEM "10" QUANTITY IS BASED ON A 20m ROAD ALLOWANCE.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	TYPE 'A', 'B' AND 'C' OVERHEAD GUYING
L. MOEN	A. UHREN	CHKD.	
		2017-09-11	
DATE OF ISSUE:	2017-11-28	DRAWING NO. A-32-05	SHEET 1 OF 2 REV. C

BACK TO INDEX PAGE



NOTE:

1. GUY POLE TO BE SAME CLASS AS DEADEND POLE.
2. REFER TO DRAWING A-32-00 SHEET 10 FOR DISTANCE "x" SHOWN ABOVE.

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

SaskPower - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK.	DRN. C. ISAAC	TYPE 'A', 'B' AND 'C' OVERHEAD GUYING	
L. MOEN	D. DREIS	CHKD. D. DREIS		
		2017-06-26		
DATE OF ISSUE	2017-11-03	DRAWING NO. A-32-05	SHEET 2 of 2	REV. B

BILL OF MATERIAL

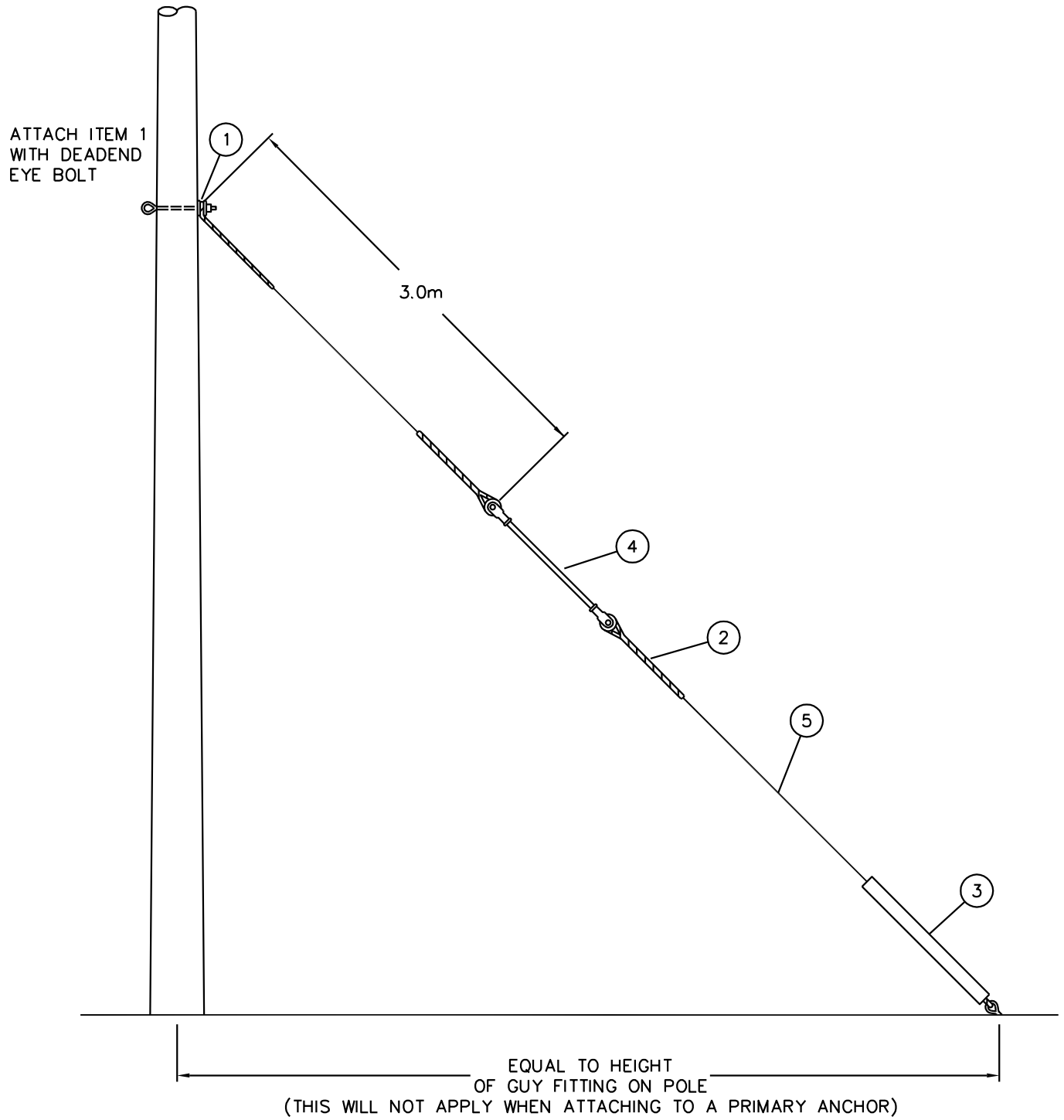
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 31 00	1	FITTING – GUY – GALVANIZED
2	1 33 00	4	GRIPS – PREFORMED – 5/16" – GUY WIRE
3	1 34 18	1	MARKER – GUY – SPLIT
4	1 38 22	1	INSULATOR – GUY STRAIN – FIBRE ROD – 100kN
5	1 95 16	14 m	WIRE – STEEL GUY – 5/16"

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL L MOEN	DESIGN CHK P PATEL	DRN. PP CHKD. LM	TYPE "A" URBAN SECONDARY AND NEUTRAL DOWN GUY
		2022-05-05	
DATE OF ISSUE: 2022-08-15	DRAWING NO: A-32-06	SHEET 1 OF 2	REV. C

BACK TO INDEX PAGE



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

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL L.MOEN	DESIGN CHK. D. DREIS	DRN. C. SIAAC CHKD. D. DREIS	TYPE "A" URBAN	
		2017-06-26	SECONDARY AND NEUTRAL DOWN GUY	
DATE OF ISSUE	2017-11-03	DRAWING NO. A-32-06	SHEET 2 of 2	REV. B

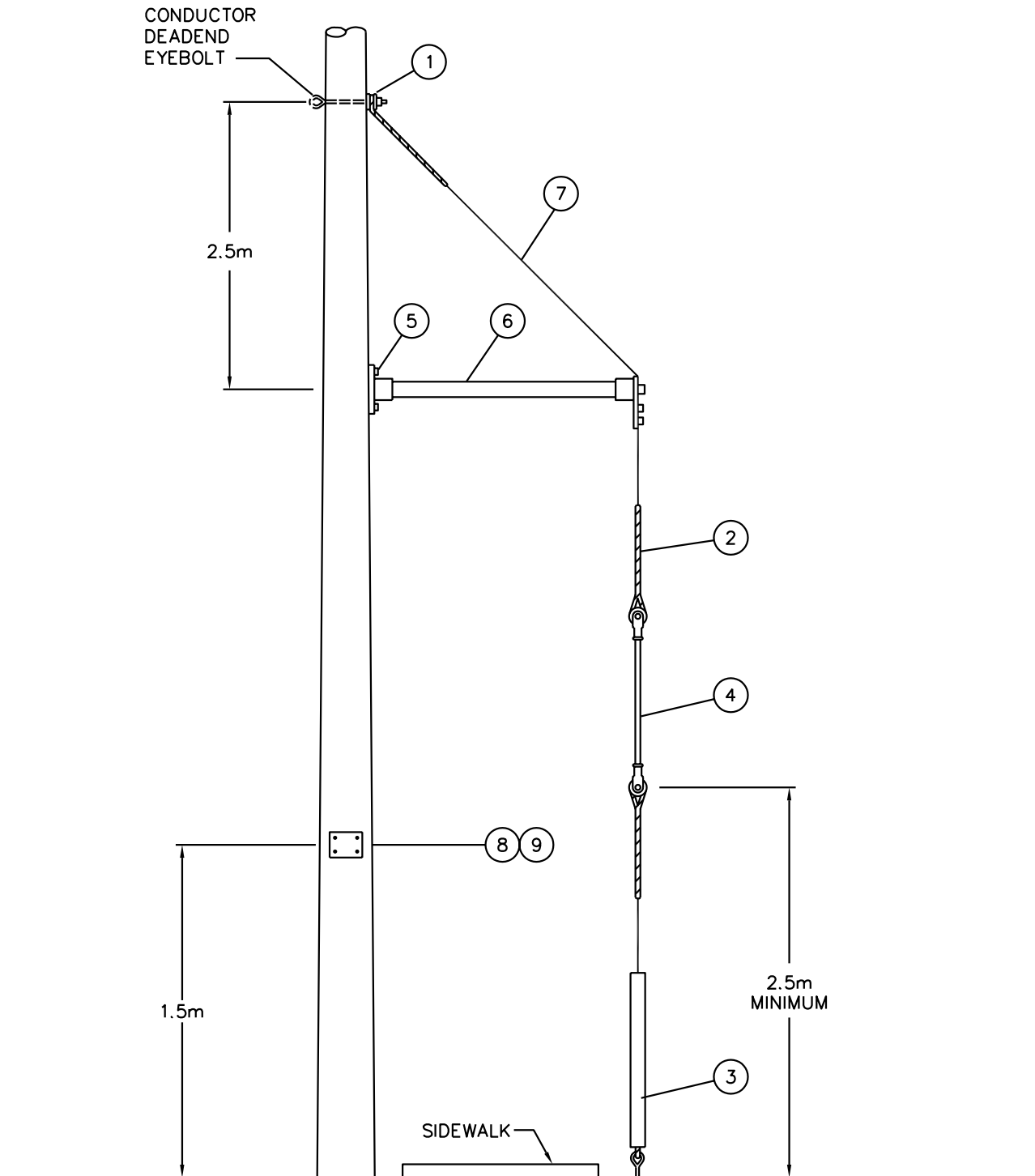
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 31 00	1	FITTING - GUY
2	1 33 00	4	GRIP – PREFORMED GUY
3	1 34 18	1	MARKER-GUY-SPLIT OVERLAPPING-1.8"x8'-ORANGE
4	1 38 22	1	INSULATOR GUY STRAIN – FIBRE ROD – 100 kN
5	1 78 12	4	SCREW – LAG – ½” X 4 ½”
6	1 87 00	1	STRUT – GUY – 2.4m COMPLETE WITH FITTINGS
7	1 95 16	10m	WIRE – STEEL GUY – 5/16”
8	7 69 62	.04	SCREWS - WOOD #10 1 ½ " (100/BOX)
9	5 640 000	1	SIGN - DANGER H.V.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	SIDEWALK GUY
L. MOEN	A. UHREN	CHKD.	
		2017-05-15	
DATE OF ISSUE:	2017/08/31	DRAWING NO: A-32-07	SHEET 1 OF 2 REV. B



NOTE:

1. THIS GUY TO BE USED ONLY WHEN A "SHORT GUY" CANNOT BE USED DUE TO PEDESTRIAN TRAFFIC OR SIMILIAR REQUIREMENT.
2. TOTAL CONDUCTOR HEAVY LOAD TENSION NOT TO EXCEED 7.4 kN.

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

SaskPower – DISTRIBUTION STANDARDS

DRN. DK	DESIGN CHK.	APPROVAL	SIDEWALK GUY
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE: 2003/05/30	DRAWING NO. A-32-07	SHEET 2 of 2	REV. A

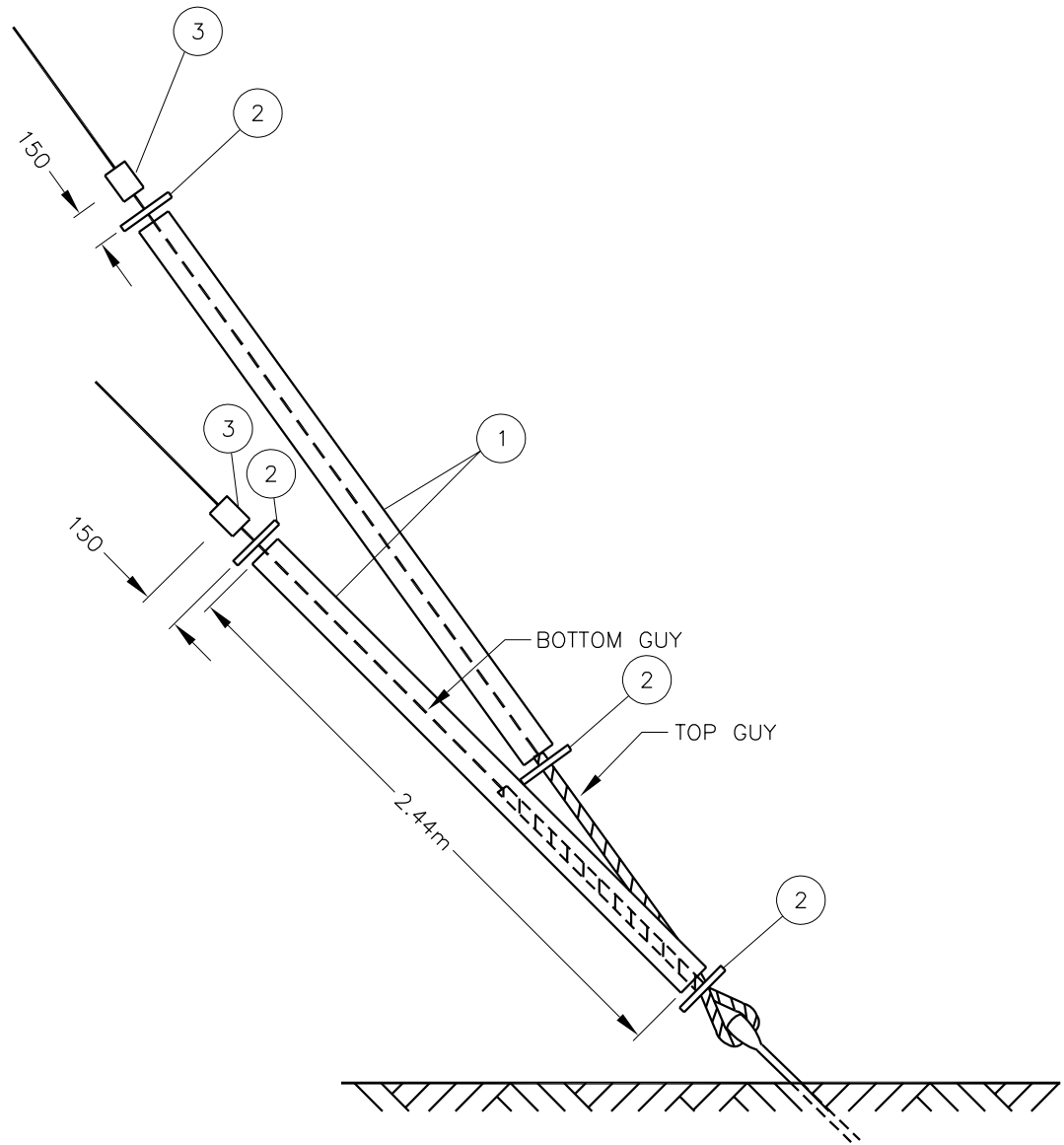
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 34 16	1	GUARD – ANCHOR GUY – ORANGE 1-1/4” x 8’
2	1 93 42	2	WASHER – SQUARE – 2-1/4” X 2-1/4” X 13/16” HOLE
3	5 09 27	1	CONNECTOR – COMPRESSION
NOTE: MULTIPLY THE MATERIALS BY THE NUMBER OF GUYS			

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL L MOEN	DESIGN CHK L MOEN	DRN. LM CHKD. LM	TWO OR MORE GUY INSTALLATION
		2019/07/02	
DATE OF ISSUE: 2020-12-18	DRAWING NO: A-32-08	SHEET 1 OF 2	REV. B



DOUBLE GUY

NOTES:

1. ALL GUYS SHALL HAVE A GUARD INSTALLED. JOINT USE LICENSEES SHALL ENSURE THAT THEIR GUYS ARE GUARDED AS WELL.
2. WHERE AREA IS KNOWN TO BE FREQUENTED BY RECREATIONAL VEHICLE TRAVEL, IT IS ADVISABLE TO INCREASE THE GUARD LENGTH TO 16' (ADD ONE MORE EACH OF MATERIALS 1 AND 2) FOR THE INSIDE GUY.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK.	DRN.D.REDEKOPP	TWO OR MORE GUY INSTALLATION	
L.MOEN	Y.PATEL	CHKD.		
		2021-07-12		
DATE OF ISSUE	2021-08-16	DRAWING NO. A-32-08	SHEET 2 of 2	REV. C

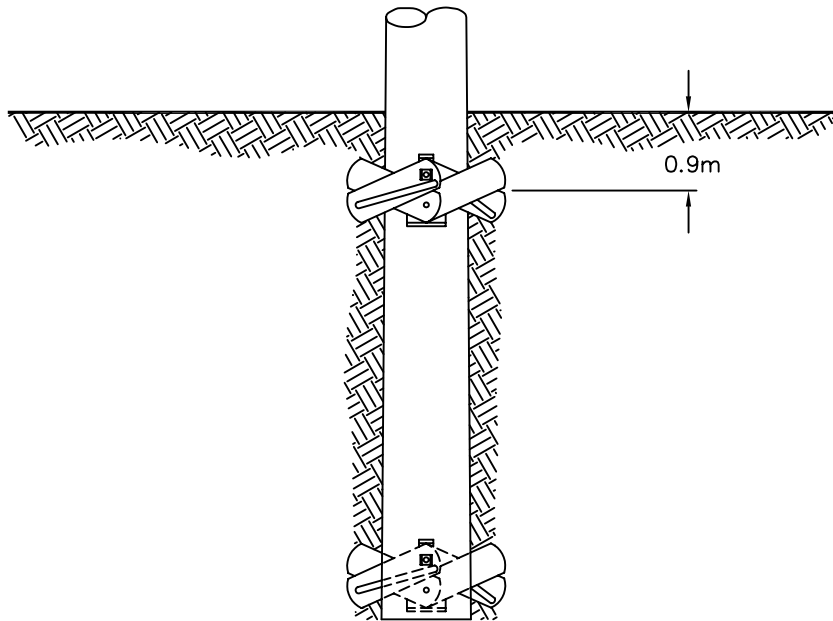
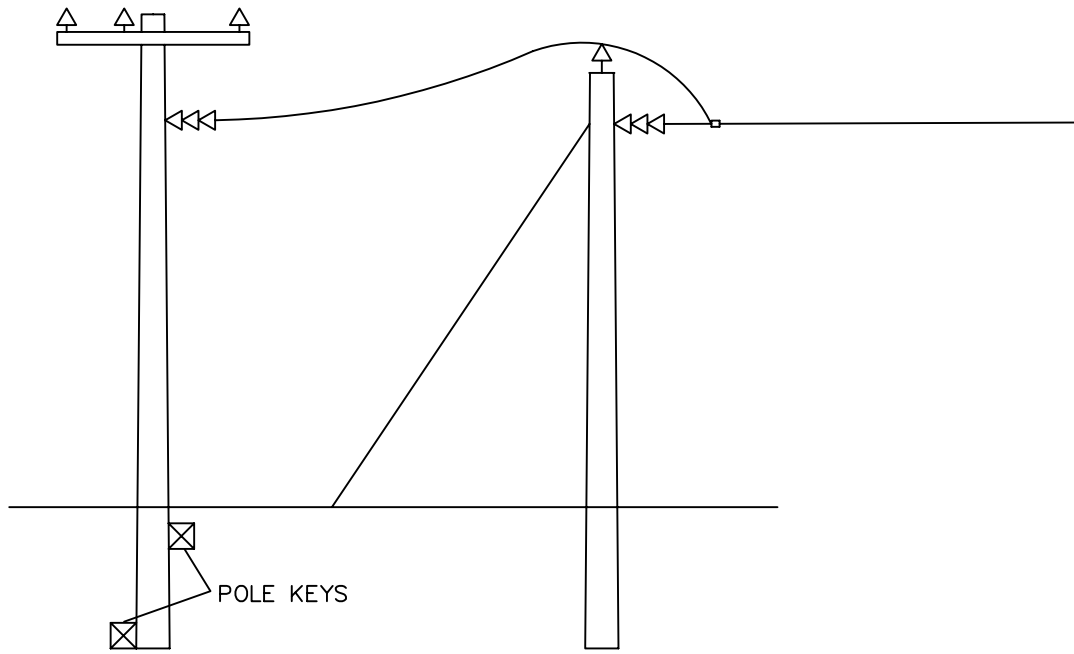
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 92	2	<p>ANCHOR – POLE KEY (SEE NOTE 1)</p> <p>NOTE:</p> <p align="center">1. QUANTITY SHOWN IS FOR NEW POLE INSTALLATION. FOR EXISTING POLE, USE ONLY 1 POLE KEY.</p>

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL L MOEN	DESIGN CHK P PATEL	DRN. PP CHKD. LM	POLE KEY INSTALLATION	
		2022-02-04		
DATE OF ISSUE: 2022-08-15		DRAWING NO: A-32-09	SHEET 1 OF 2	REV. A



NOTE:

1. THIS DRAWING REPLACES THE OLD BREAST-LOG AND POLE KEY STANDARD.

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

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	POLE KEY INSTALLATION
CHKD. <i>FTK</i>				
DATE 87-05-27	DATE	DATE	DATE	
DATE OF ISSUE 87-06-01	DRAWING NO. A-32-09		SHEET 2 of 2	REV. 0

BILL OF MATERIAL

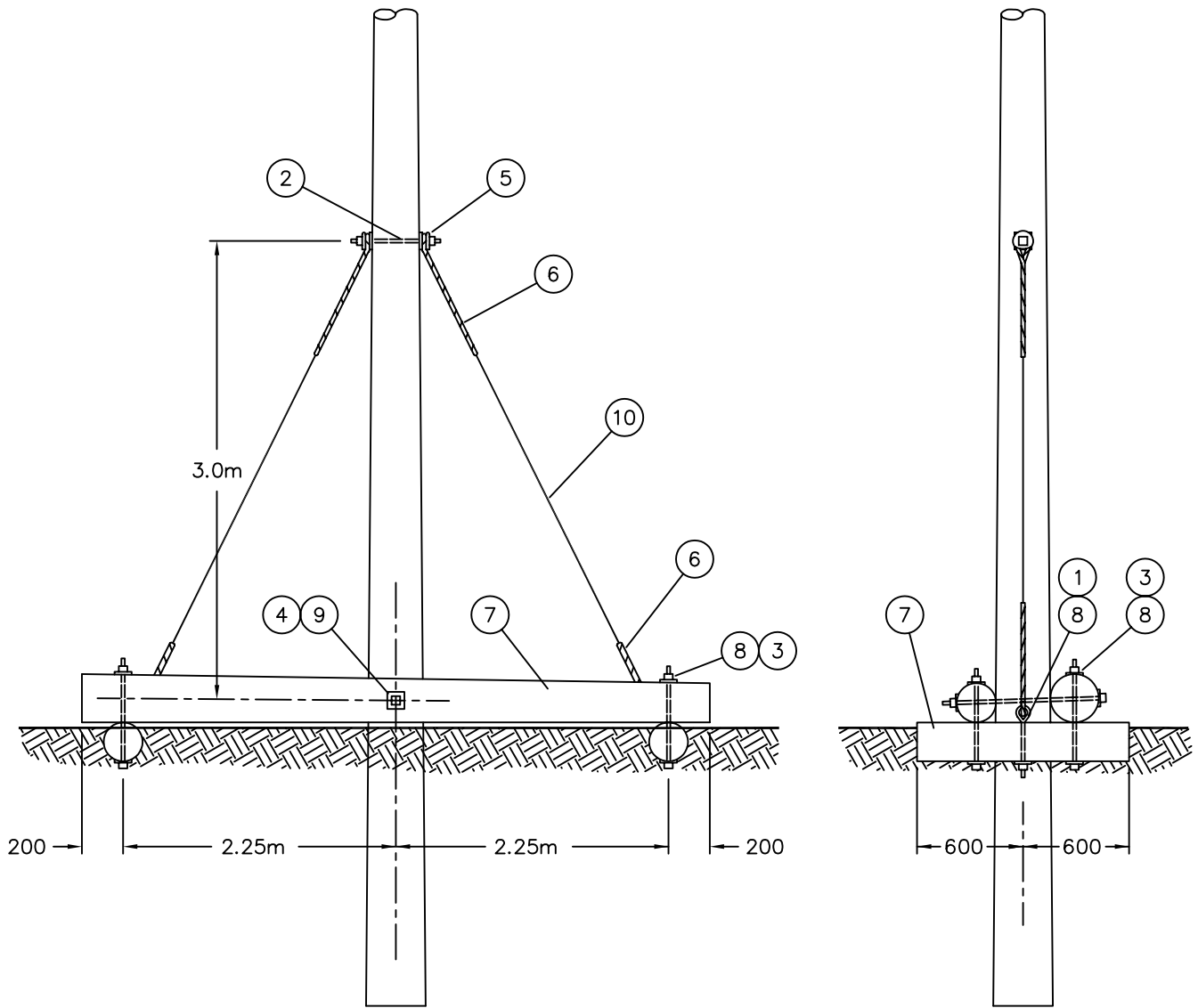
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1-11-14	2	BOLT – EYE – 5/8" x 14"
2	1-13-14	1	BOLT – MACHINE – 5/8" x 14"
3	1-13-22	4	BOLT – MACHINE – 5/8" x 22"
4	1-14-30	1	BOLT – MACHINE – 3/4" x 30"
5	1-31-00	2	FITTING – GUY
6	1-33-00	4	GRIP – PREFORMED GUY
7	1-63-05	1	POLE – WOOD – 12.2m CLASS 5
8	1-93-42	10	WASHER – SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
9	1-93-96	2	WASHER – CURVED – 3"
10	1-95-16	8m	WIRE – STEEL GUY – 5/16"

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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	POLE FOUNDATION STRUCTURE FOR MUSKEG
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE 87-06-01		DRAWING NO: A-32-10	SHEET 1 of 2 REV. 0

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NOTE:

1. ITEM 7 (12.2m CL. 5 POLE) IS TO BE CUT INTO 4 PIECES AS SHOWN.
2. GUY WIRE IS TO BE TIGHTENED USING THE EYEBOLT AS THE ADJUSTMENT POINT.

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

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

DRN. DK	DESIGN CHK.	SAFETY APP.	APPROVAL	POLE FOUNDATION STRUCTURE FOR MUSKEG	
CHKD. FTK	DATE	DATE	DATE		
DATE 87-05-25	DATE	DATE	DATE		
DATE OF ISSUE 87-06-01	DRAWING NO. A-32-10		SHEET 2 of 2	REV. 0	

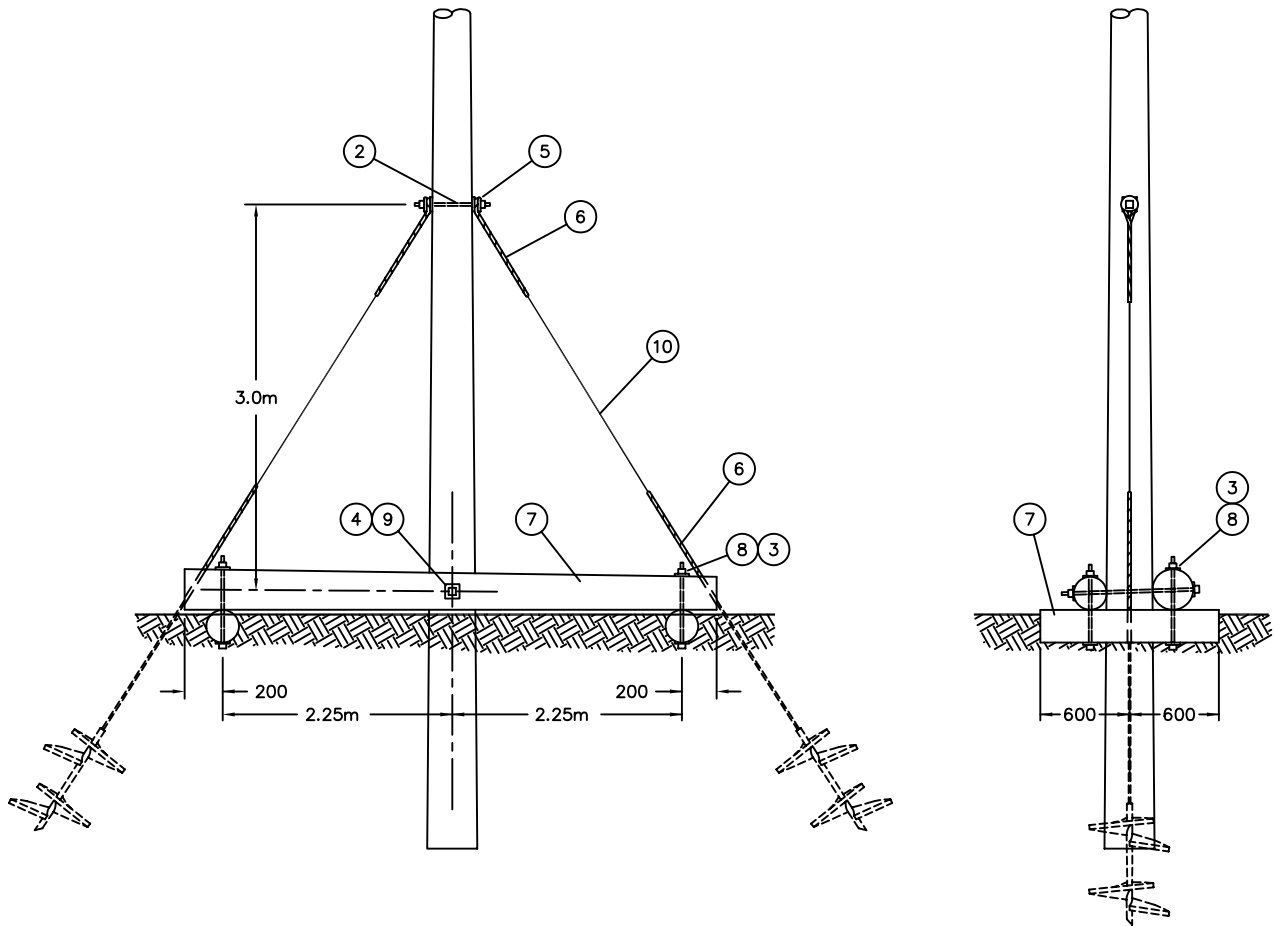
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
2	1-13-14	1	BOLT - MACHINE - 5/8" x 14"
3	1-13-22	4	BOLT - MACHINE - 5/8" x 22"
4	1-14-30	1	BOLT - MACHINE - 3/4" x 30"
5	1-31-00	2	FITTING - GUY
6	1-33-00	4	GRIP - PREFORMED GUY
7	1-63-05	1	POLE - WOOD - 12.2 m CLASS 5
8	1-93-42	6	WASHER - SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
9	1-93-96	2	WASHER - CURVED - 3"
10	1-95-16	8 m	WIRE - STEEL GUY - 5/16"

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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	POLE FOUNDATION STRUCTURE FOR MUSKEG WITH ANCHORS
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE 96-07-26		DRAWING NO: A-32-10A	SHEET 1 OF 2 REV. 0



SEE A-32-15 OR
A-32-18 FOR ANCHORS

NOTE:

1. ITEM 7 (12.2m CL. 5 POLE) IS TO BE CUT INTO 4 PIECES AS SHOWN.

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

SaskPower - DISTRIBUTION STANDARDS

DRN. DK	DESIGN CHK.	APPROVAL	POLE FOUNDATION STRUCTURE FOR MUSKEG WITH ANCHORS
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE	DRAWING NO. A-32-10A	SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 80 50	1	CULVERT – GALVANIZED – 1 PIECE – 750MM x 3500MM
2	PURCHASE LOCALLY	1.25	CRUSHED ROCK (CUBIC METERS)

NOTE:

THE QUANTITY OF CRUSHED ROCK IS BASED ON A 12”
AVERAGE DIAMETER POLE.

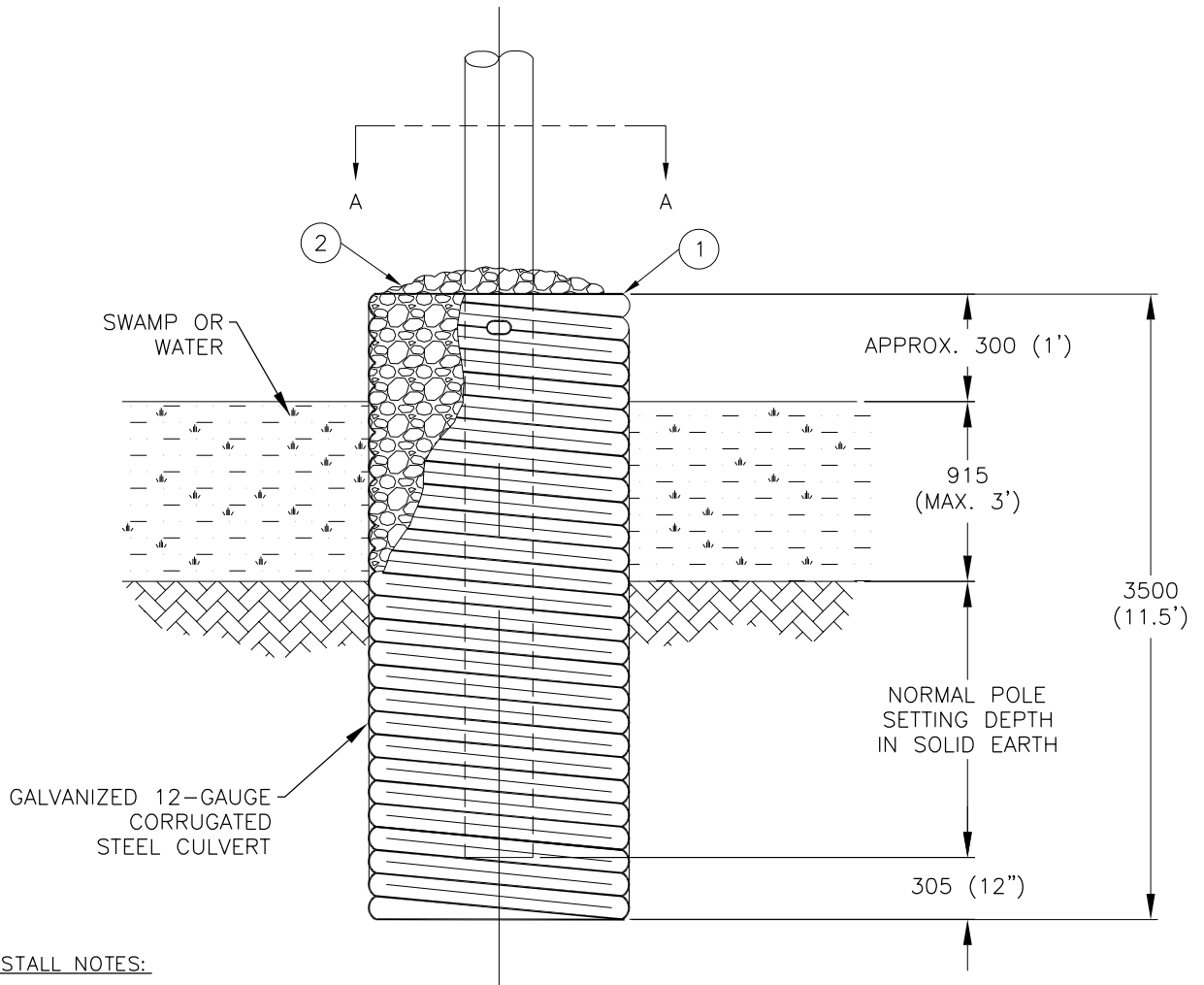
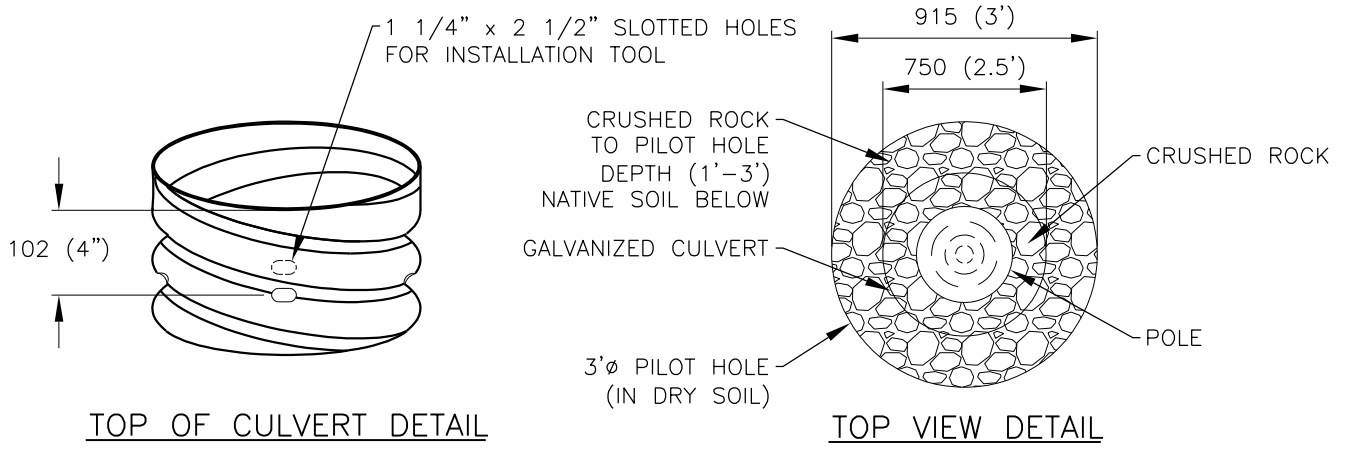
TOOLS:

INSTALLATION TOOL: STOCK CODE 3100270
REPLACEMENT KELLY BAR ADAPTER: STOCK CODE 3100159
REPLACEMENT HITCH PINS: STOCK CODE 3100264

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SaskPower - DISTRIBUTION STANDARDS			
APPROVAL	DESIGN CHK	DRN. LM	CULVERT - POLE FOUNDATION REINFORCEMENT FOR SWAMP OR MARSH CONSTRUCTION
L MOEN	P PATEL	CHKD. PP	
		2021-05-10	
DATE OF ISSUE:	2021-08-16	DRAWING NO: A-32-11	SHEET 1 OF 2

REV. **C**



INSTALL NOTES:

1. USE INSTALL DEVICE TO SCREW CULVERT INTO GROUND.
2. AUGER OUT SOIL INSIDE CULVERT.
3. CRUSHED ROCK BASE.
4. SET POLE - NO APPARATUS ALLOWED ON POLE.
5. BACKFILL WITH CRUSHED ROCK.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

APPROVED FOR CONSTRUCTION

SaskPower - DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. B.GEBHART	DRN.D.REDEKOPP CHKD. 2020-05-26	CULVERT-POLE FOUNDATION REINFORCEMENT FOR SWAMP OR MARSH CONSTRUCTION	
DATE OF ISSUE	2020-12-18	DRAWING NO. A-32-11		
			REV. B	

BILL OF MATERIAL

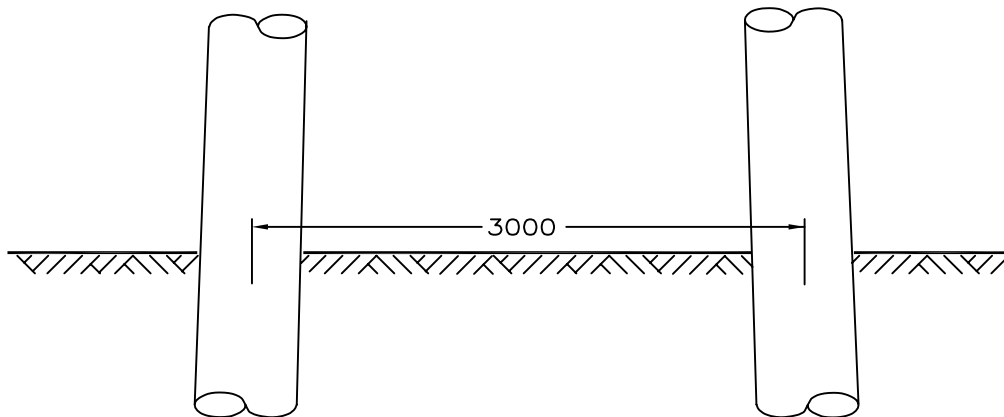
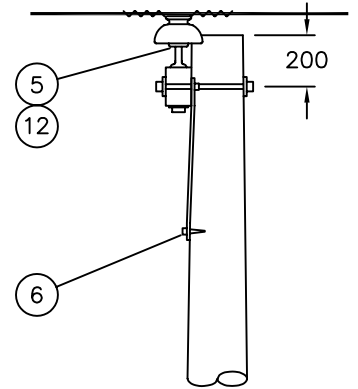
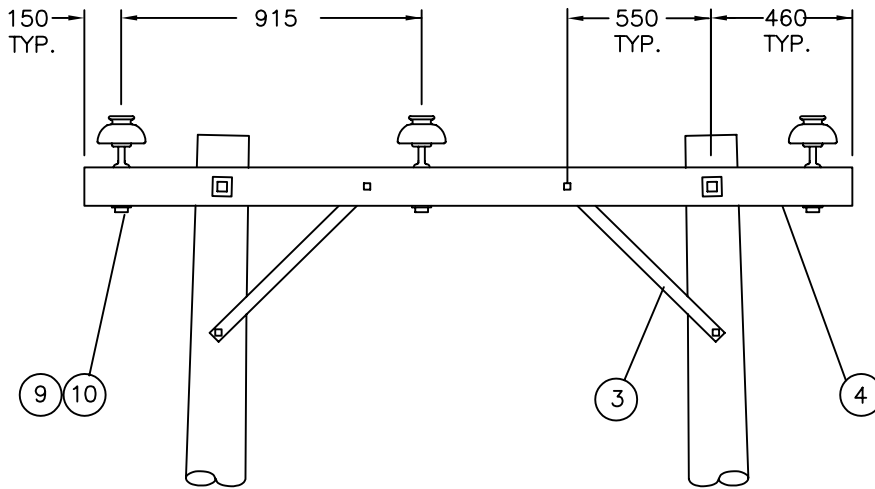
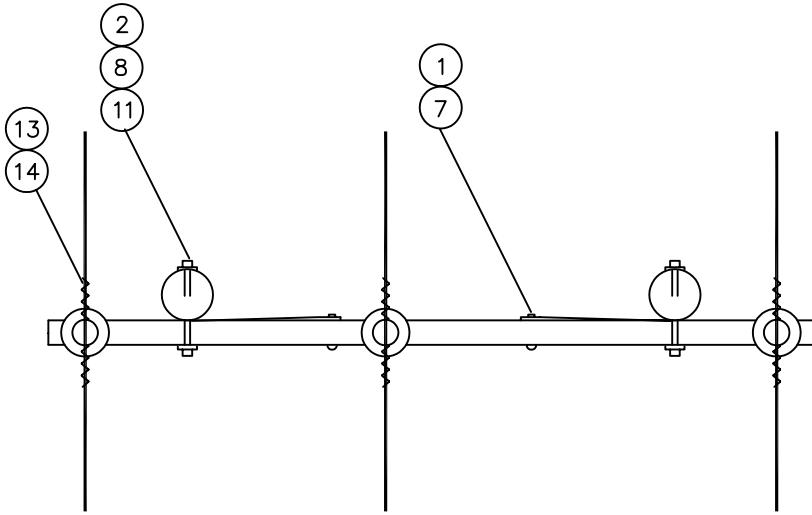
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1-08-38	2	BOLT-CARRIAGE 3/8" x 4 1/2"
2	1-13-14	2	BOLT-MACHINE 5/8" x 14"
3	1-19-32	2	BRACE-CROSSARM 32"
4	1-29-10	1	CROSSARM-WOOD 4" x 5" x 10'
5	1-53-09	3	PIN-STEEL
6	1-78-12	2	SCREW-LAG 1/2" x 4 1/2"
7	1-93-25	2	WASHER-DOUBLE COIL LOCK 3/8"
8	1-93-27	2	WASHER-DOUBLE COIL LOCK 5/8"
9	1-93-28	3	WASHER-DOUBLE COIL LOCK 3/4"
10	1-93-34	3	WASHER-ROUND – 2" O.D. – 13/16" HOLE
11	1-93-42	4	WASHER-SQUARE 2 1/4" X 2 1/4" – 13/16" HOLE
12	2-20-23	3	INSULATOR-PIN TYPE
13	2-58-30	3	ROD-ARMOUR 3/0
14	2-97-28	5.1 m	WIRE-TIE #8 STEEL

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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	TWO-POLE TANGENT FOR SWAMP OR MARSH CONSTRUCTION
CHKD.		DATE	
DATE	DATE	DATE	
DATE OF ISSUE 95-02-22		DRAWING NO: A-32-11A	SHEET REV. 0

STRUCTURE USED HERE



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

SaskPower – DISTRIBUTION ENGINEERING

DRN.	M.T.S.	DESIGN CHK.	SAFETY APP.	APPROVAL	TWO POLE TANGENT FOR SWAMP OR MARSH CONSTRUCTION
CHKD.					
DATE		DATE	DATE	DATE	
DATE OF ISSUE			DRAWING NO. A-32-11A		SHEET 2 of 2 REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1-01-37	1	ANCHOR-SCREW-SINGLE 8" PISA 6 (SEE NOTE 1)
2	1-01-56	1	EXTENSION ROD - 1" x 7'
3	1-01-63	1	EYE NUTS-TRIPLE
<p>NOTE:</p> <p>1. FOR INSTALLATION WORKING TORQUES GREATER THAN 6000 FT. LBS., DUE TO SOIL CONDITIONS, USE ANCHOR LOGS AS PER A-32-18.</p>			

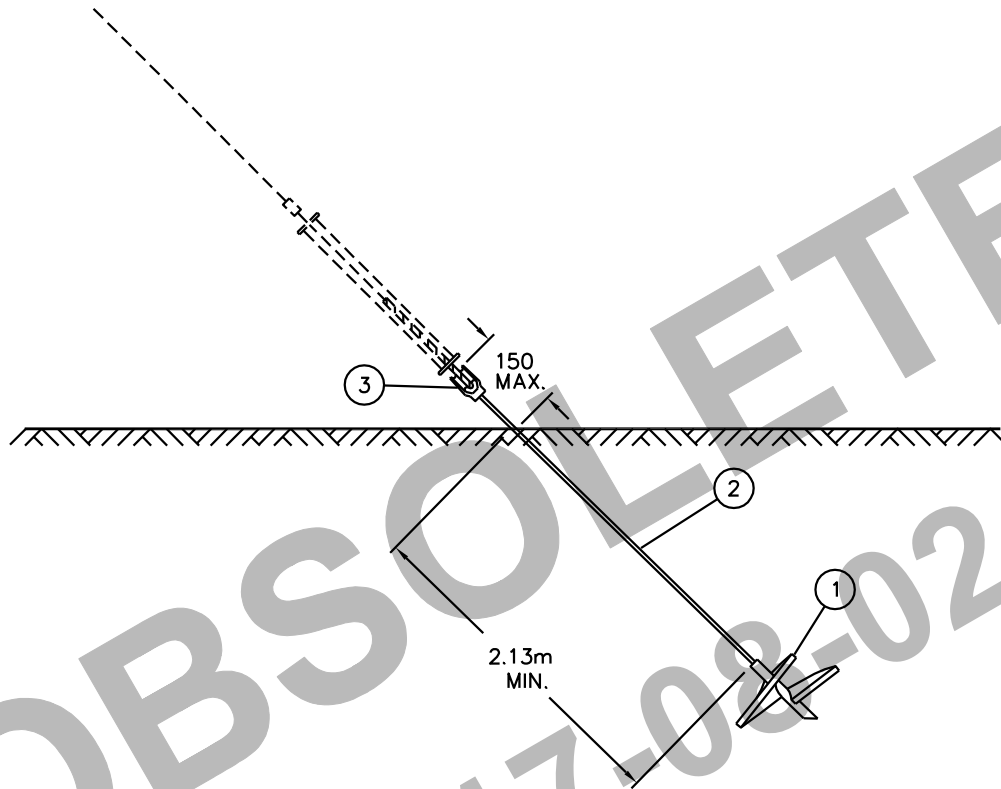
OBSOLETE 2017-08-02

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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	TYPE "A" ANCHOR	
CHKD.		DATE		
DATE	DATE			
DATE OF ISSUE 95-07-10		DRAWING NO: A-32-12	SHEET 1 of 2	REV. E

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CAUTION

TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED 8135 N.M. (6000 FT. LBS.)

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

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK.	DRN. D.K. CHKD.	TYPE "A" ANCHOR	
DATE OF ISSUE	DRAWING NO. A-32-12		SHEET 2 of 2	REV. B

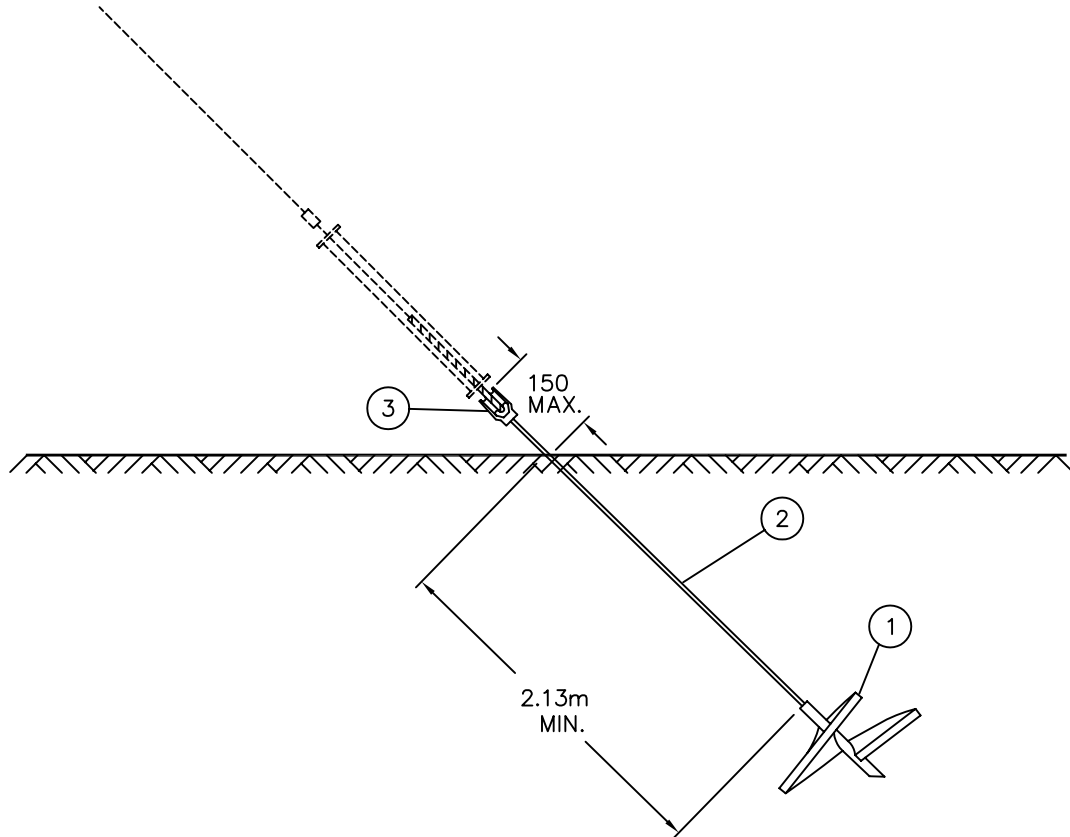
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	1 01 43	1	1	ANCHOR SCREW-SINGLE 11 5/16" PISA 6 (SEE NOTE 1)
2	1 01 56	1	1	EXTENSION ROD-1" X 7'- W/O COUPLING
3	1 01 63	1	-	EYENUT TRIPLE FOR 1" EXTENSION ROD
3	1 01 64	-	1	EYENUT QUAD FOR 1" EXTENSION ROD
<p>NOTE:</p> <ol style="list-style-type: none"> FOR INSTALLATION TORQUES GREATER THAN 6000 FT. LBS, DUE TO SOIL CONDITIONS, USE ANCHOR LOGS AS PER A-32-18. COLUMN 'A' MATERIAL FOR RURAL CONSTRUCTION. COLUMN 'B' MATERIAL FOR URBAN CONSTRUCTION. 				

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	TYPE "B" ANCHOR
L. MOEN	A. UHREN	CHKD.	
		2016-12-21	
DATE OF ISSUE	2017/05/03	DRAWING NO. A-32-13	SHEET 1 OF 2 REV. B



CAUTION

TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED 8135 N.M. (6000 FT.LBS)

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

SaskPower – DISTRIBUTION ENGINEERING

DRN. <i>DK</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	TYPE "B" ANCHOR	
CHKD.					
DATE	DATE	DATE	DATE		
DATE OF ISSUE			DRAWING NO. A-32-13	SHEET 2 of 2	REV. A

BILL OF MATERIAL

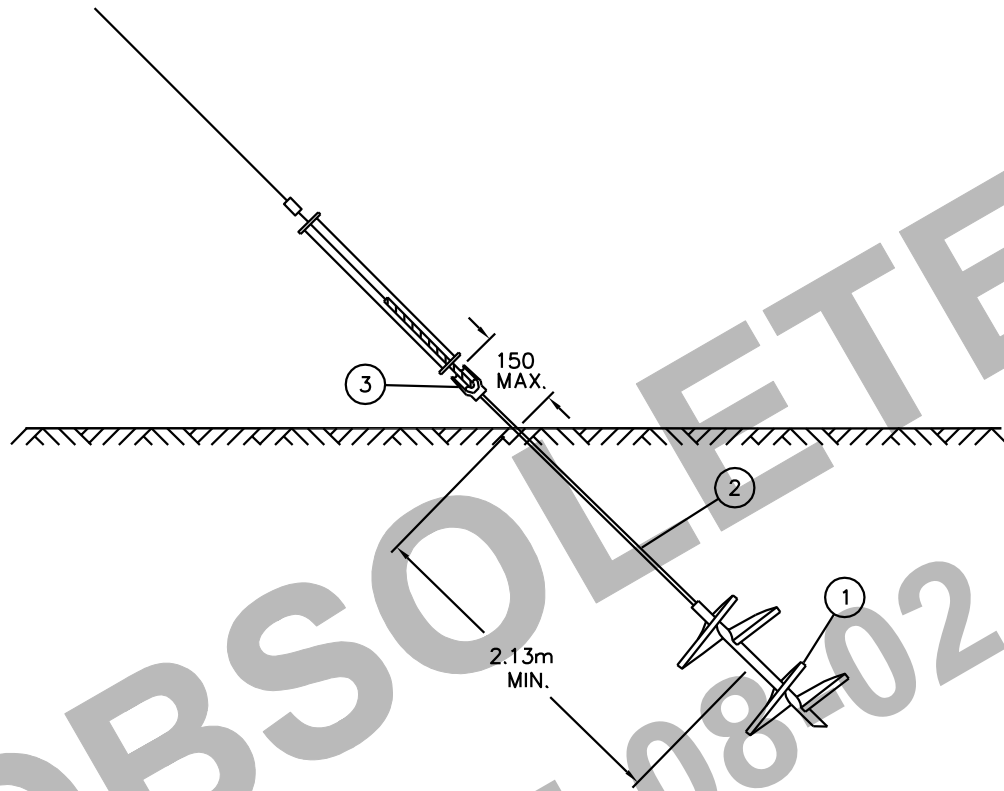
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1-01-45	1	ANCHOR SCREW-DOUBLE 8" PISA 6 (SEE NOTE 1)
2	1-01-56	1	EXTENSION ROD - 1" x 7'
3	1-01-63	1	EYE NUTS-TRIPLE
<p>NOTE:</p> <p>1. FOR INSTALLATION WORKING TORQUES GREATER THAN 6000 FT. LBS., DUE TO SOIL CONDITIONS, USE ANCHOR LOGS AS PER A-32-18.</p>			

OBSOLETE 2017-08-02

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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	TYPE "C" ANCHOR
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE 95-07-10		DRAWING NO: A-32-14	SHEET 1 of 2
			REV. B



CAUTION

TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED 8135 N.M. (6000 FT. LBS.)

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

SaskPower – DISTRIBUTION STANDARDS

APPROVAL

DESIGN CHK.

DRN. D.K.
CHKD.

TYPE "C" ANCHOR

DATE OF ISSUE

DRAWING NO. A-32-14

SHEET 2 of 2

REV. B

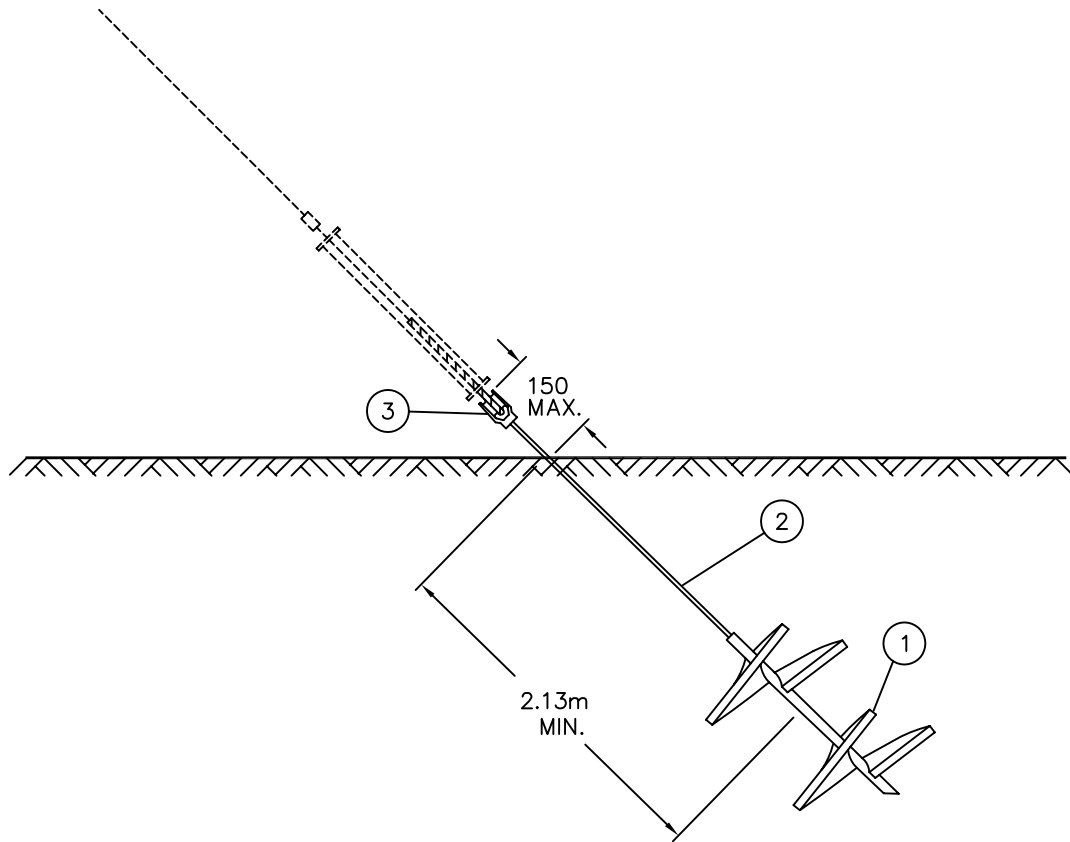
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY		DESCRIPTION
		A	B	
1	1 01 46	1	1	ANCHOR SCREW-DOUBLE 10" PISA 6 (SEE NOTE 1)
2	1 01 56	1	1	EXTENSION ROD-1" X 7'- W/O COUPLING
3	1 01 63	1	-	EYENUT TRIPLE FOR 1" EXTENSION ROD
3	1 01 64	-	1	EYENUT QUAD FOR 1" EXTENSION ROD
<p>NOTE:</p> <ol style="list-style-type: none"> FOR INSTALLATION TORQUES GREATER THAN 6000 FT. LBS, DUE TO SOIL CONDITIONS, USE ANCHOR LOGS AS PER A-32-18. COLUMN 'A' MATERIAL FOR RURAL CONSTRUCTION. COLUMN 'B' MATERIAL FOR URBAN CONSTRUCTION. 				

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	TYPE "D" ANCHOR
L. MOEN	A. UHREN	CHKD.	
		2016-12-21	
DATE OF ISSUE	2017/05/03	DRAWING NO. A-32-15	SHEET 1 OF 2 REV. B



CAUTION

TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED 8135 N.M. (6000 FT.LBS.)

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

SaskPower – DISTRIBUTION ENGINEERING

DRN. DK	DESIGN CHK.	SAFETY APP.	APPROVAL	TYPE "D" ANCHOR	
CHKD.					
DATE	DATE	DATE	DATE		
DATE OF ISSUE			DRAWING NO. A-32-15	SHEET 2 of 2	REV. A

BILL OF MATERIAL

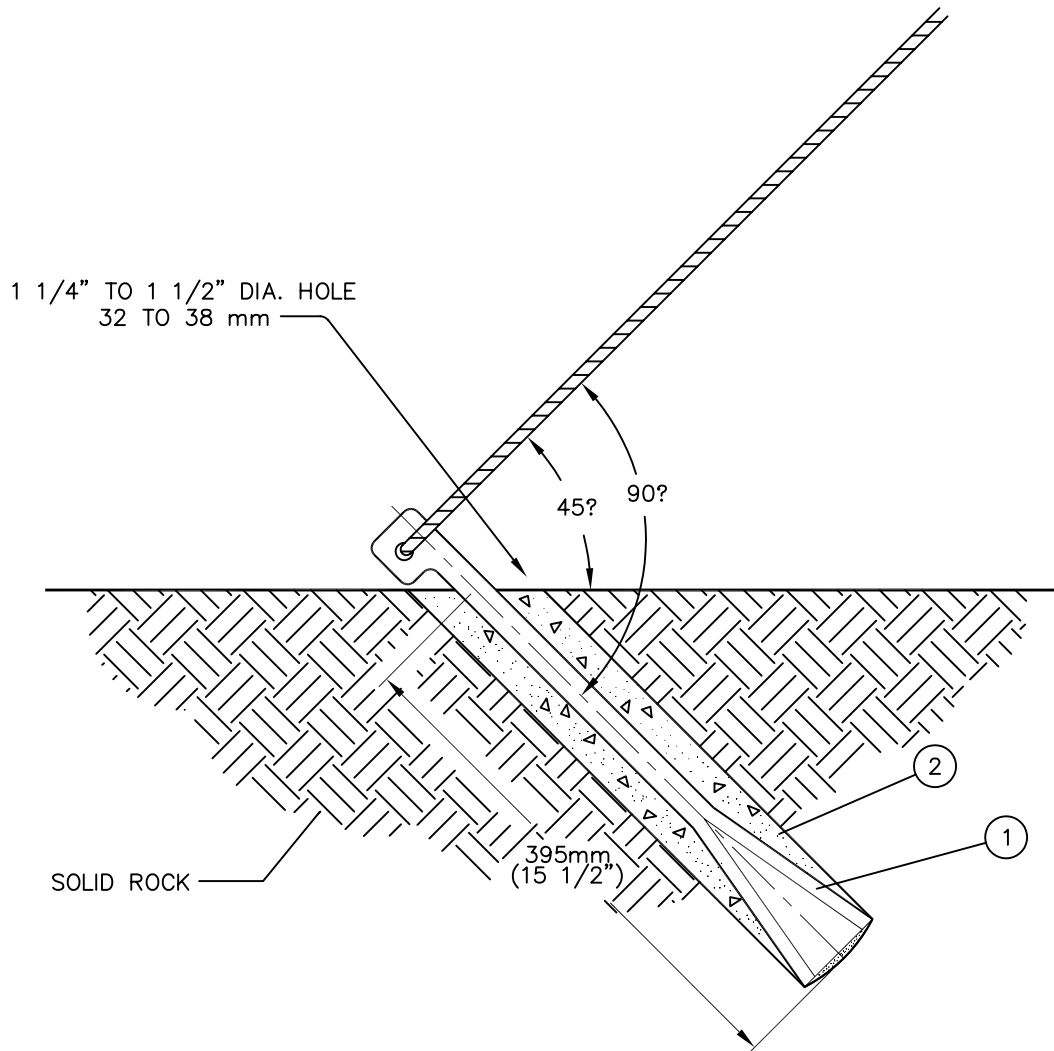
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 18	1	ANCHOR-ROCK-SIDE EYE
2	1 01 29	3/10 KIT	GROUT-2 COMPONENT W/ SUBZERO

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL L. MOEN	DESIGN CHK A. UHREN	DRN. ARU CHKD.	ROCK ANCHOR INSTALLATION
		2016-09-06	
DATE OF ISSUE: 2016/11/08	DRAWING NO: A-32-16	SHEET 1 OF 2	REV. A

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NOTE:
 1. HOLE TO BE BORED AT 45° TO PERPENDICULAR LINE OF POLE.

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

SaskPower - DISTRIBUTION STANDARDS

DRN. <i>DC</i>	DESIGN CHK.	SAFETY APP.	APPROVAL	ROCK ANCHOR INSTALLATION
CHKD. <i>FTK</i>	DATE	DATE	DATE	
DATE 87-11-15	DATE	DATE	DATE	
DATE OF ISSUE 87-12-01	DRAWING NO. A-32-16		SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 46	2	SCREW – ANCHOR – DOUBLE 10" – PISA #6
2	1 01 56	2	ROD – EXTENSION – 1" X 7'
3	1 01 60	2	ROD – EXTENSION – COUPLING – 1"
4	1 09 12	2	BOLT – DOUBLE ARMING – 1" X 12"
5	1 14 XX	1	BOLT – MACHINE – 7/8"
6	1 35 53	2	BRACKET – SLOUGH ANCHOR – 5" X 3" X 5"
7	1 50 60	1	LOCKNUT – 7/8"

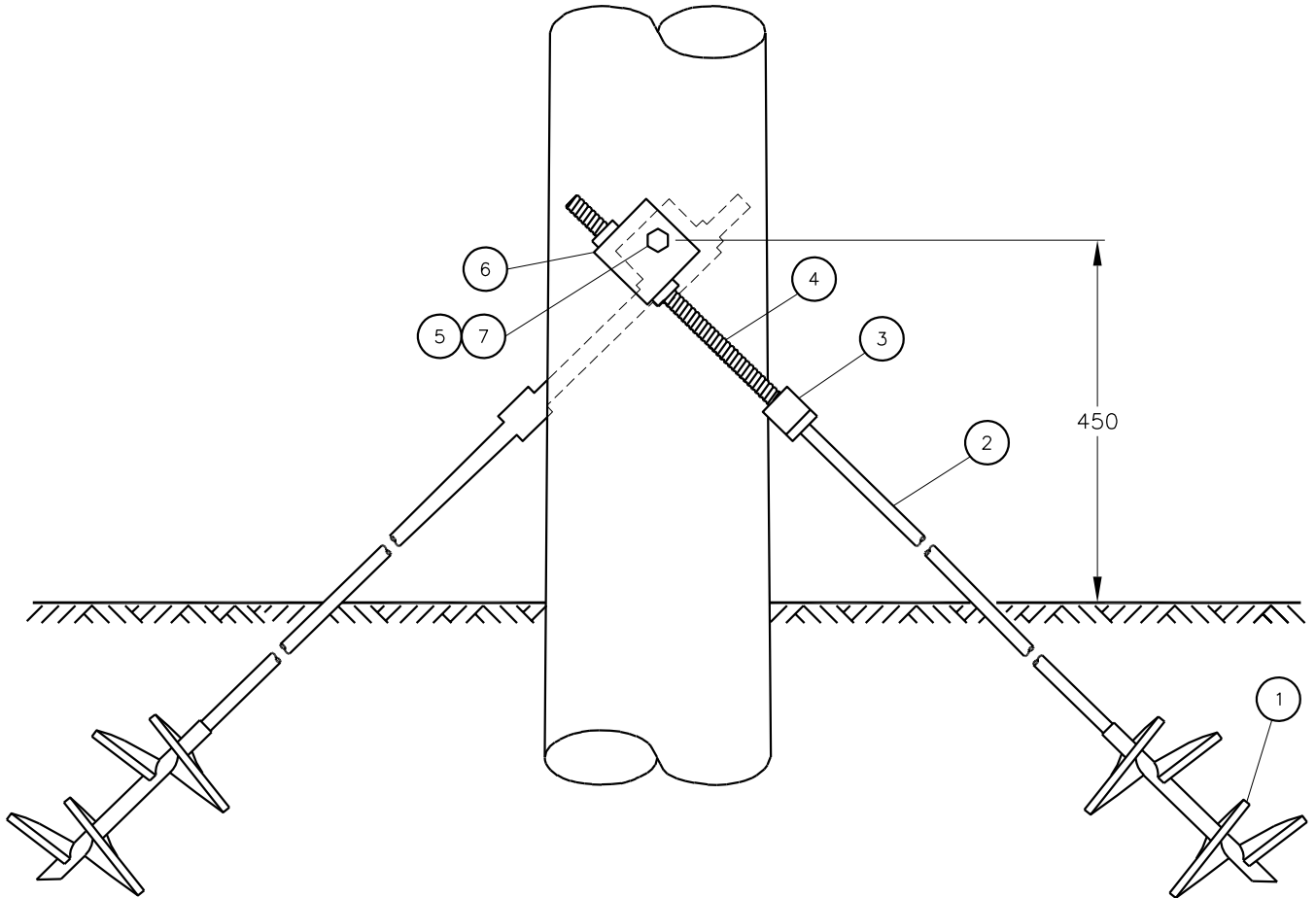
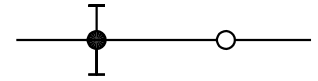
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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. PP	SLOUGH POLE BUTT ANCHOR
L MOEN	P PATEL	CHKD. LM	
		2022-02-16	
DATE OF ISSUE: 2022-08-15		DRAWING NO: A-32-17	SHEET 1 OF 2 REV. C

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STRUCTURE USED HERE



CAUTION
 TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED 8135 N.M. (6000 FT. LBS.)
 FOR PISA #6

NOTES:
 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022-02-16	SLOUGH POLE BUTT ANCHOR	
DATE OF ISSUE	2022-08-15	DRAWING NO.	A-32-17	SHEET 2 of 2
				REV. C

BILL OF MATERIAL

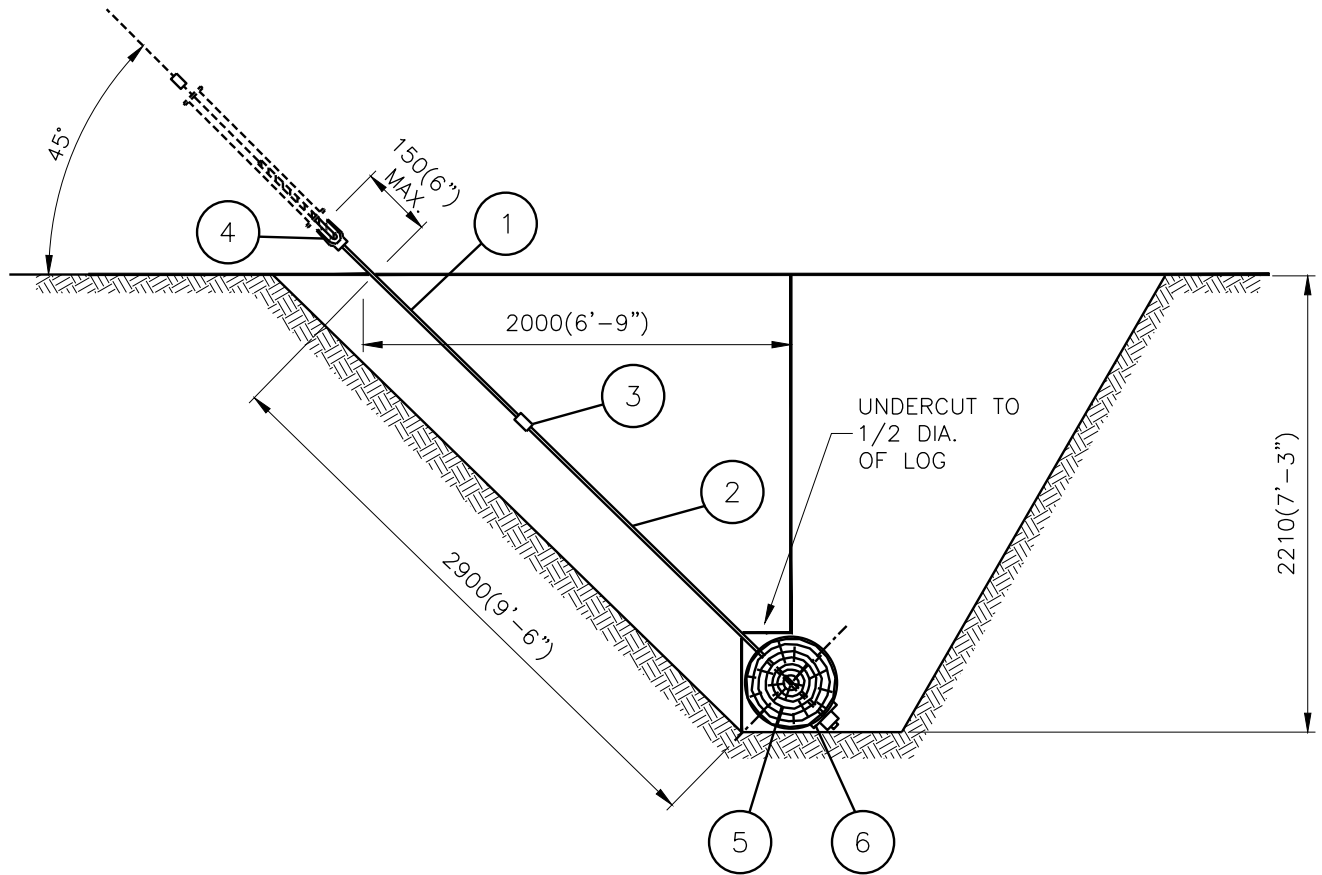
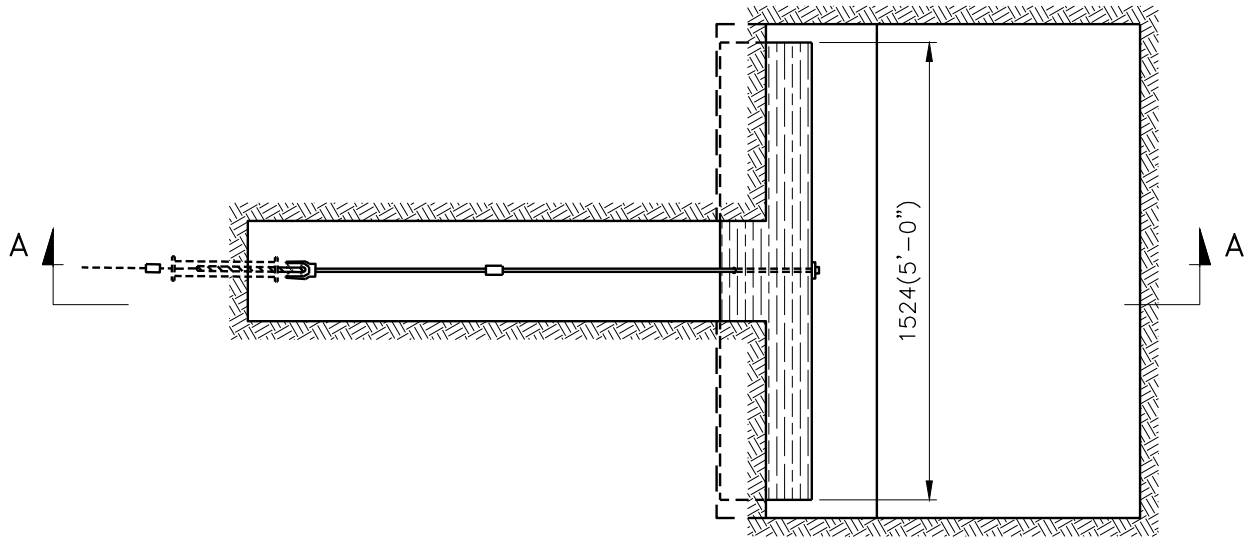
ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 54	1	ANCHOR-EXTENSION ROD - 1" x 3 1/2'
2	1 01 58	1	ANCHOR-EXTENSION ROD - 1" x 7' - SINGLE HEX COLLAR
3	1 01 60	1	COUPLING-1" EXTENSION ROD
4	1 01 63	1	EYENUT-TRIPLE
4	1 01 64	-	EYENUT-QUAD (IF REQUIRED)
5	1 44 05	1	ANCHOR-LOG 5' x 12"
6	1 93 35	1	WASHER-CURVED 5" x 5"

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	ANCHOR LOG INSTALLATION
M. ERETH	A. UHREN	CHKD.	
		2015-03-09	
DATE OF ISSUE:	2015/08/18	DRAWING NO: A-32-18	SHEET 1 OF 2 REV. A

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SECTION A-A

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

SaskPower – DISTRIBUTION STANDARDS				
APPROVAL M.ERETH	DESIGN CHK. A.UHREN	DRN. A.GATZKE CHKD.	ANCHOR LOG INSTALLATION	
		2015-05-06		
DATE OF ISSUE	2015/08/18	DRAWING NO. A-32-18	SHEET 2 of 2	REV. A

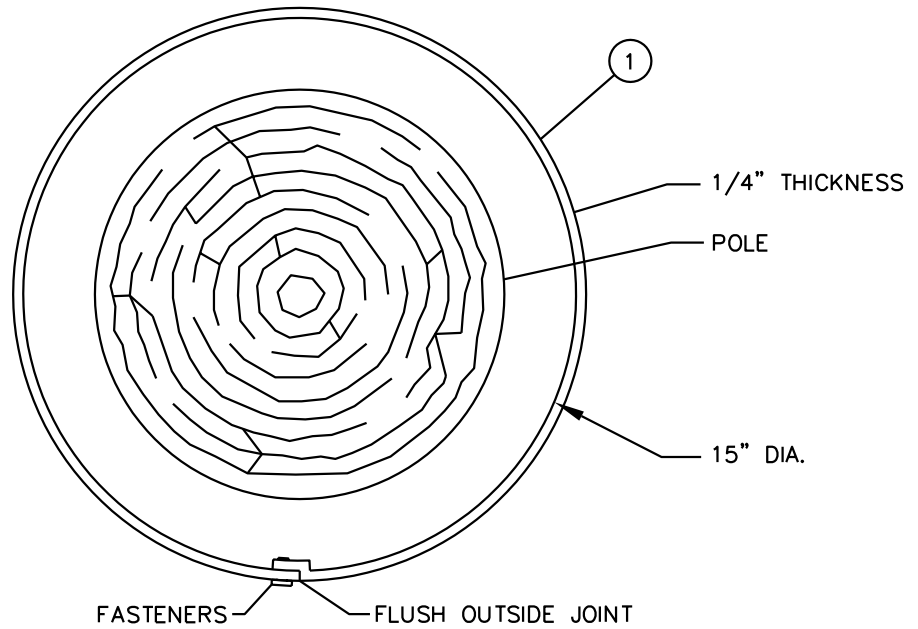
BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 34 20	1	GUARD - POLE ANIMAL (DISTRIBUTION)

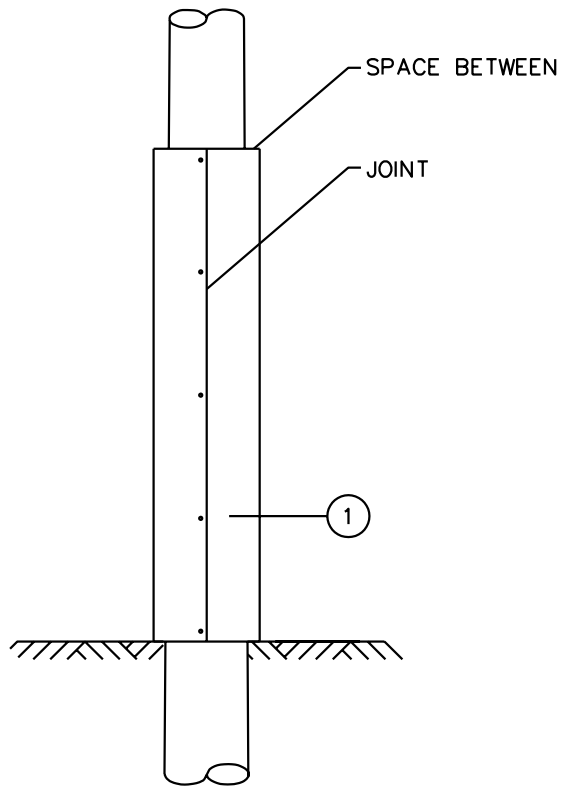
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SaskPower - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	ANIMAL POLE GUARD (DISTRIBUTION)
CHKD.			
DATE	DATE	DATE	
DATE OF ISSUE: 2003/05/30		DRAWING NO: A-32-20 SHEET 1 OF 2	REV. 0



ENLARGED TOP VIEW



NOTE:

1. THE GUARD IS CLOSED AROUND THE POLE WITH A SPACE BETWEEN, PERMITTING IT TO BE ROTATED.

SCALE: N.T.S.

SaskPower - DISTRIBUTION STANDARDS

DRN. D. ROSOM	DESIGN CHK.	APPROVAL	ANIMAL POLE GUARD (DISTRIBUTION)	
CHKD.				
DATE 00-10-27	DATE	DATE		
DATE OF ISSUE: 2003/05/30		DRAWING NO. A-32-20	SHEET 2 OF 2	REV. 0

SLOUGH CONSTRUCTION CRITERIA

DRAWING #	MAXIMUM WATER DEPTH	INSTALL VEHICLE	RELATIVE STRENGTH/ EFFECTIVENESS	PROTECTION FROM SPRING THAW	NOTES
A-12-7x LONG SPANS	NONE	DIGGER	+	+	MEANT TO SPAN OVER WATER. SHOULD NOT BE USED IN WATER.
A-38-07 REGULAR STEEL STUBS	1'	LIGHT VEHICLE	+	++	MAY BE EFFECTIVE FOR SHALLOW WATER DEPTHS. MAY BE MORE MAINTAINABLE IN THE FUTURE.
A-32-17 BUTT ANCHORS	1.5'	DIGGER	++	+	ONLY GOOD FOR QUITE SHALLOW WATER. MAY TEND TO SPLIT ICE THAT IS FORCED TOWARDS POLE BECAUSE OF THE SLOPE OF THE ANCHOR.
A-32-11A H-FRAME	3'	DIGGER	++	+	MAY NOT BE REASONABLE IN ROAD ALLOWANCE, MIGHT BE DIFFICULT TO GET EASEMENT.
A-32-11 CULVERT (ONE PIECE)	4'	DIGGER	+++	++++	CULVERT EXTENDS AT LEAST 8' DEEP. USE IS QUESTIONABLE IN LARGER BODIES OF WATER WHERE ICE SHEETS MAY CAUSE LEANING.
A-38-09 DOUBLE STUBS	4.5'	LIGHT VEHICLE	+++	+++	LIMIT BASED ON INSTALLING STUB WITH HALF THE LENGTH IN EARTH, 3' FOR BANDS ABOVE THE ICE.
A-38-08 SCREW PILES	8'	TRACK - HOE	++++	++++	MOST ROBUST, MAY BE THE ONLY OPTION FOR VERY DEEP WATER. WATCH HIGH WATER MARK, TOP OF SCREW PILE MUST BE ABOVE ICE.

NOTES

1. CONSULTATION WITH SASKPOWER ENVIRONMENTAL DEPARTMENT MUST BE DONE BEFORE INSTALLING IN WATER OR WETLANDS. AN ENVIRONMENTAL PERMIT WILL BE REQUIRED.
2. NEED TO BE MINDFUL OF LINE CLEARANCE OVER THE ICE FOR DEEP WATER. CSA ABSOLUTE MINIMUM VERTICAL CLEARANCE IS 5.78M.
3. SHOULD GIVE CONSIDERATION TO REPLACING POLES MORE THAN FIVE (5) YEARS OLD TO ENSURE THAT THE POLE IS IN THE BEST CONDITION POSSIBLE IN ORDER TO GET THE GREATEST LONGEVITY OUT OF THE REMEDIATION.

SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. LM	SLOUGH CONSTRUCTION CRITERIA
L. MOEN	L. BAILEY	CHKD.	
		2016-05-04	
DATE OF ISSUE:	2016/07/26	DRAWING NO: A-32-21	SHEET 1 of 1 REV. 0

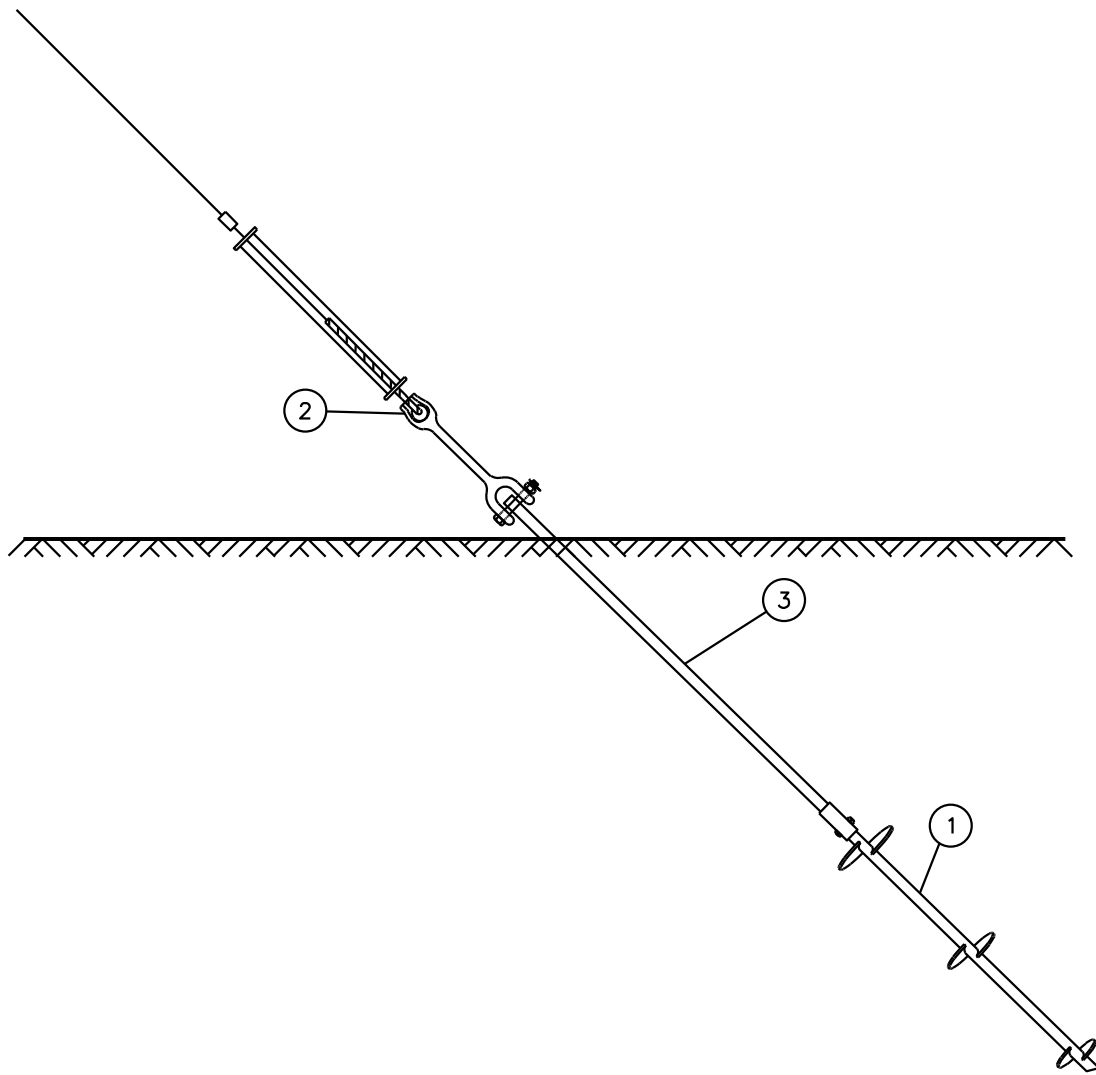
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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 33	1	ANCHOR SCREW – SS200 8"-10"-12"
2	1 01 66	1	ADAPTER TRIPLEYE FOR 2" EXTENSION SECTION
3	1 01 76	1	EXTENSION SECTION – 2" X 5' (NOTE 1)
3	1 01 77	1	EXTENSION SECTION – 2" X 7' (NOTE 1)
			<p>NOTES</p> <p>1) A MINIMUM OF 1 EXTENSION SECTIONS SHALL BE USED. MULTIPLE MAY BE REQUIRED TO SET TO A DEPTH THAT ENSURES MAXIMUM PULLOUT STRENGTH.</p>

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SaskPower - DISTRIBUTION STANDARDS			
APPROVAL	DESIGN CHK	DRN. LPM	TYPE "E" ANCHOR
L. MOEN	L. MOEN	CHKD.	
		2018-02-15	
DATE OF ISSUE:	2018-02-20	DRAWING NO: A-32-22	SHEET 1 OF 2 REV. 0



CAUTION

TO AVOID FAILURE OF THE HELIX, MAX. DIGGER TORQUE SHALL NOT EXCEED
21690 N.M. (16000 FT.LBS.)

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

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN. E.GOTANA CHKD. 2017-11-23
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TYPE 'E' ANCHOR

DATE OF ISSUE	2018-02-20	DRAWING NO. A-32-22	SHEET 2 of 2	REV. -
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