

200 x 75 PFC
CHANNELS TOE TO
FOR DETAILS SEE
SHEET 2

120 kN CROSS ARM
CAPACITY

SEE DETAIL 3
SHEET 2

2 SHIELD WIRE STAYS
4 CROSS ARM STAYS SPLAYED

PLAN ON CROSS ARM

60 x 60 x 6 ANGLE

POLE TOP BRACKET
AS PER D-DT 7331

SEE DETAIL 2
SHEET 2

SEE DETAIL 1
SHEET 2

OVERALL POLE LENGTH

CAH

PLANTING
DEPTH

4000

1 STAY AT SHIELD WIRE
2 STAYS PER POLE SPLAYED
AND AT 45° TO GROUND

DETAILS OF 60° STRAIN STRUCTURE

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|-----|------------------------|-----|------|------|----------|-------------|
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AUTH: A BEKKER

DATE: SEPT 2004

CHKD: RAB

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DISTRIBUTION TECHNOLOGY
RETICULATION/SUB-TRANSMISSION LINES
132kV H-POLE STRUCTURES - 8m XARM
60° STRAIN STRUCTURE 70-120kN RANGE

D-DT 7805

3

1

0

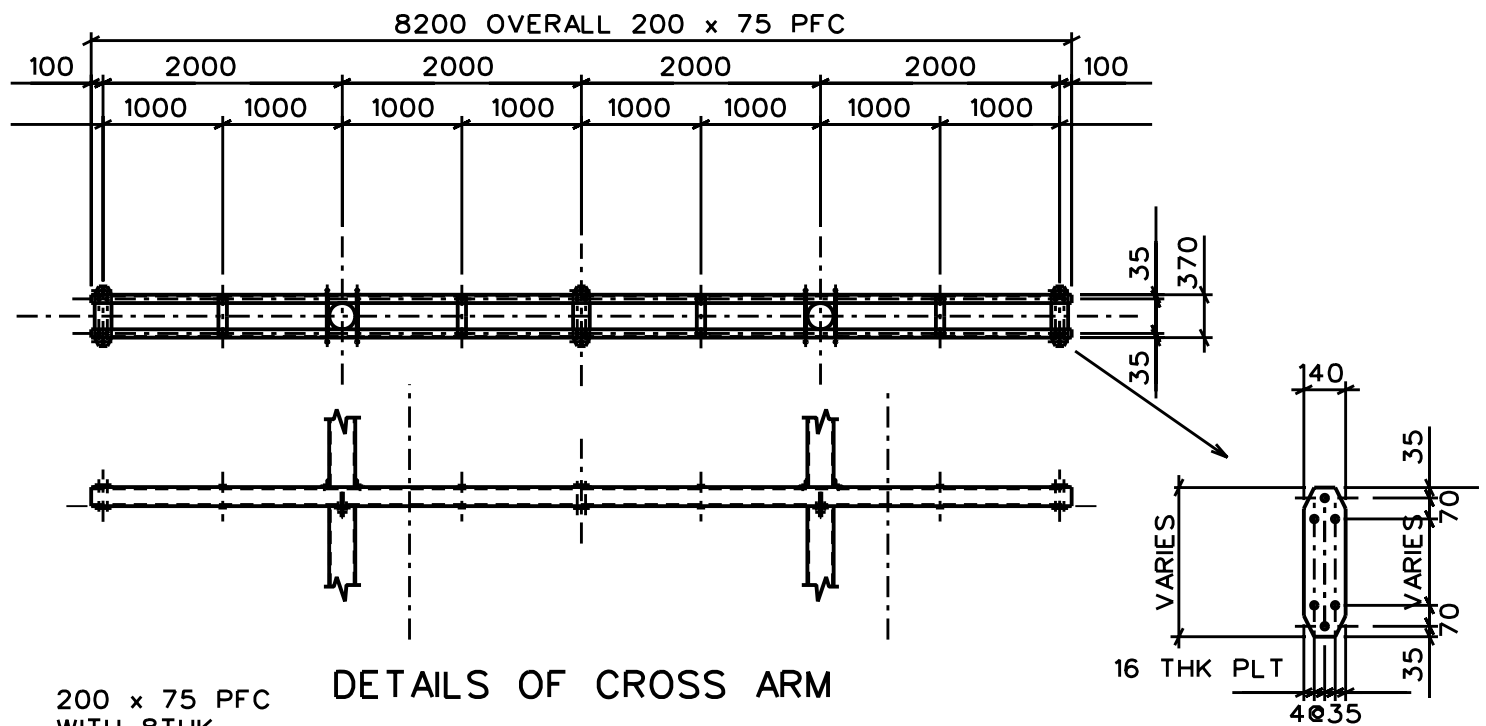
1

2

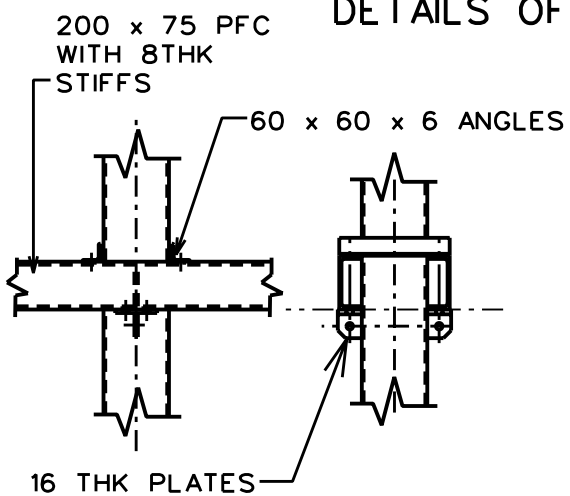
3

4

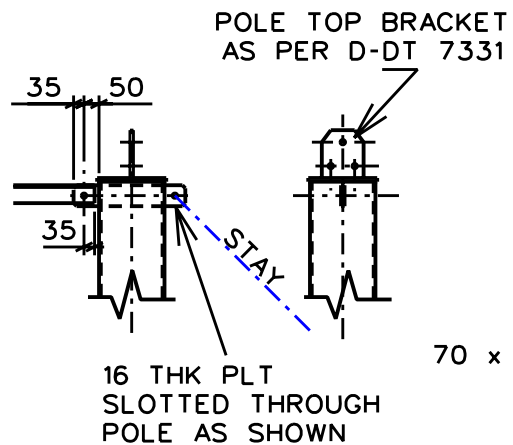
A4L



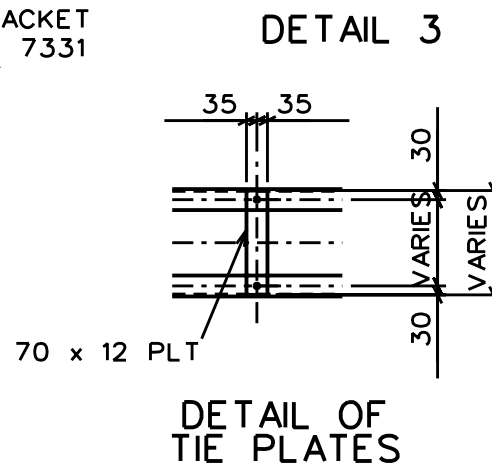
DETAILS OF CROSS ARM



DETAIL 1



DETAIL 2



DETAIL OF TIE PLATES

| | | | | | | |
|-----|------------------------|-----|------|------|----------|-------------|
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D-OT 7805

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| A | | | | B | | | | C | | | | D | | | | E | | | | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------------|----------------|-----------------|---|----------------------------|--------------------------|-----|-------|----------|--|----|----------|------|------|-------------|----------------------------|------------------------|----------------|----------------|--------------------------|----------------------------|--------------------------|-----------------|-------------------|-----|------|-----|------|------|------|-----|-------------------|---------------------|------|-----|------|------|------|-----|-------------------|-----|------|-----|------|------|------|-----|-------------------|----------------------|------|-----|------|------|------|--|-------------------|--|------|-----|------|------|------|--|-------------------|-----|------|-----|----------|------|------|-----|----|----------|--|----|------|------|------|-------------|
| 1 | | | | 2 | | | | 3 | | | | 4 | | | | A4L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DESIGN CRITERIA: ALL STEEL GRADE 300W ALL BOLTS GRADE 8.8 BOLTS POLES AND CROSS ARMS TO BE SUPPLIED WITH FIXING BOLTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th colspan="2">POLES USED FOR H-POLE</th><th>OVERALL HEIGHT</th><th>PLANTING DEPTH</th><th>CROSS ARM ATT HEIGHT AGL</th><th>SHIELD WIRE ATT HEIGHT AGL</th><th colspan="2">CONDUCTOR ATT HEIGHT AGL</th></tr><tr><td colspan="2">219 x 4,5 THK CHS</td><td>15.1</td><td>2.0</td><td>10.6</td><td>13.1</td><td colspan="2">10.6</td></tr><tr><td colspan="2">219 x 4,5 THK CHS</td><td>16.1</td><td>2.0</td><td>11.6</td><td>14.1</td><td colspan="2">11.6</td></tr><tr><td colspan="2">219 x 4,5 THK CHS</td><td>17.1</td><td>2.0</td><td>12.6</td><td>15.1</td><td colspan="2">12.6</td></tr><tr><td colspan="2">219 x 6,0 THK CHS</td><td>18.2</td><td>2.0</td><td>13.7</td><td>16.2</td><td colspan="2">13.7</td></tr><tr><td colspan="2">219 x 6,0 THK CHS</td><td>19.2</td><td>2.0</td><td>14.7</td><td>17.2</td><td colspan="2">14.7</td></tr><tr><td colspan="2">324 x 4,5 THK CHS</td><td>20.1</td><td>2.0</td><td>15.6</td><td>18.1</td><td colspan="2">15.6</td></tr></table> | | | | | | | | | | | | | | | | POLES USED FOR H-POLE | | OVERALL HEIGHT | PLANTING DEPTH | CROSS ARM ATT HEIGHT AGL | SHIELD WIRE ATT HEIGHT AGL | CONDUCTOR ATT HEIGHT AGL | | 219 x 4,5 THK CHS | | 15.1 | 2.0 | 10.6 | 13.1 | 10.6 | | 219 x 4,5 THK CHS | | 16.1 | 2.0 | 11.6 | 14.1 | 11.6 | | 219 x 4,5 THK CHS | | 17.1 | 2.0 | 12.6 | 15.1 | 12.6 | | 219 x 6,0 THK CHS | | 18.2 | 2.0 | 13.7 | 16.2 | 13.7 | | 219 x 6,0 THK CHS | | 19.2 | 2.0 | 14.7 | 17.2 | 14.7 | | 324 x 4,5 THK CHS | | 20.1 | 2.0 | 15.6 | 18.1 | 15.6 | | | | | | | | | |
| POLES USED FOR H-POLE | | OVERALL HEIGHT | PLANTING DEPTH | CROSS ARM ATT HEIGHT AGL | SHIELD WIRE ATT HEIGHT AGL | CONDUCTOR ATT HEIGHT AGL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 219 x 4,5 THK CHS | | 15.1 | 2.0 | 10.6 | 13.1 | 10.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 219 x 4,5 THK CHS | | 16.1 | 2.0 | 11.6 | 14.1 | 11.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 219 x 4,5 THK CHS | | 17.1 | 2.0 | 12.6 | 15.1 | 12.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 219 x 6,0 THK CHS | | 18.2 | 2.0 | 13.7 | 16.2 | 13.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 219 x 6,0 THK CHS | | 19.2 | 2.0 | 14.7 | 17.2 | 14.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 324 x 4,5 THK CHS | | 20.1 | 2.0 | 15.6 | 18.1 | 15.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th colspan="4">70 TO 120kN UTS CONDUCTORS</th></tr><tr><th>POLES USED FOR H-POLE</th><th>WIND SPAN</th><th>WEIGHT SPAN</th><th>ELECTRICAL SPAN</th></tr><tr><td>15.1</td><td>350</td><td>455</td><td>460</td></tr><tr><td>16.1</td><td>350</td><td>455</td><td>460</td></tr><tr><td>17.1</td><td>350</td><td>455</td><td>460</td></tr><tr><td>18.2</td><td>350</td><td>455</td><td>460</td></tr><tr><td>19.2</td><td>350</td><td>455</td><td>460</td></tr><tr><td>20.1</td><td>350</td><td>455</td><td>460</td></tr></table> | | | | | | | | | | | | | | | | 70 TO 120kN UTS CONDUCTORS | | | | POLES USED FOR H-POLE | WIND SPAN | WEIGHT SPAN | ELECTRICAL SPAN | 15.1 | 350 | 455 | 460 | 16.1 | 350 | 455 | 460 | 17.1 | 350 | 455 | 460 | 18.2 | 350 | 455 | 460 | 19.2 | 350 | 455 | 460 | 20.1 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 TO 120kN UTS CONDUCTORS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLES USED FOR H-POLE | WIND SPAN | WEIGHT SPAN | ELECTRICAL SPAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.1 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16.1 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17.1 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.2 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19.2 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20.1 | 350 | 455 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td>0</td><td colspan="15">ISSUED FOR PUBLICATION</td></tr><tr><td>A</td><td colspan="15">ISSUED FOR COMMENTS</td></tr><tr><td>REV</td><td colspan="15">REVISION DESCRIPTION</td></tr><tr><td></td><td>SLR</td><td>RAB</td><td>AB</td><td>FEB 2005</td><td></td><td>SLR</td><td>RAB</td><td>AB</td><td>OCT 2004</td><td></td><td>BY</td><td>CHKD</td><td>AUTH</td><td>DATE</td><td>PROJECT NO.</td></tr></table> | | | | | | | | | | | | | | | | 0 | ISSUED FOR PUBLICATION | | | | | | | | | | | | | | | A | ISSUED FOR COMMENTS | | | | | | | | | | | | | | | REV | REVISION DESCRIPTION | | | | | | | | | | | | | | | | SLR | RAB | AB | FEB 2005 | | SLR | RAB | AB | OCT 2004 | | BY | CHKD | AUTH | DATE | PROJECT NO. |
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|  | | | | DISTRIBUTION TECHNOLOGY RETICULATION/SUB-TRANSMISSION LINES 132kV H-POLE STRUCTURES - 8m XARM 60° STRAIN STRUCTURE 70-120kN RANGE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AUTH: A BEKKER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| CHKD: RAB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| DRAWN: SLR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | SET | | | | SHEET | | | | REVISION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |