DISTRIBUTION CONSTRUCTION STANDARDS MANUAL

Part 2

Date Published: 31 May 2021

R - Reference

For application to

Horizon Power

Electricity Distribution Networks

Part 2 – Reference – Drawing Register

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R4	Insulator Pin and Bolt Details
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R6-2	Earthing Pole Top Switch
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Number	Description
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R29	25kVA Padmount Tx LV Distribution Board - 240V Street Feeder / Consumer Mains – 240 V Terminal Block
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R36	Nulec N-Series Recloser Control Box Connection Detail
R38	Overhead Fault Indicator Solar Connection
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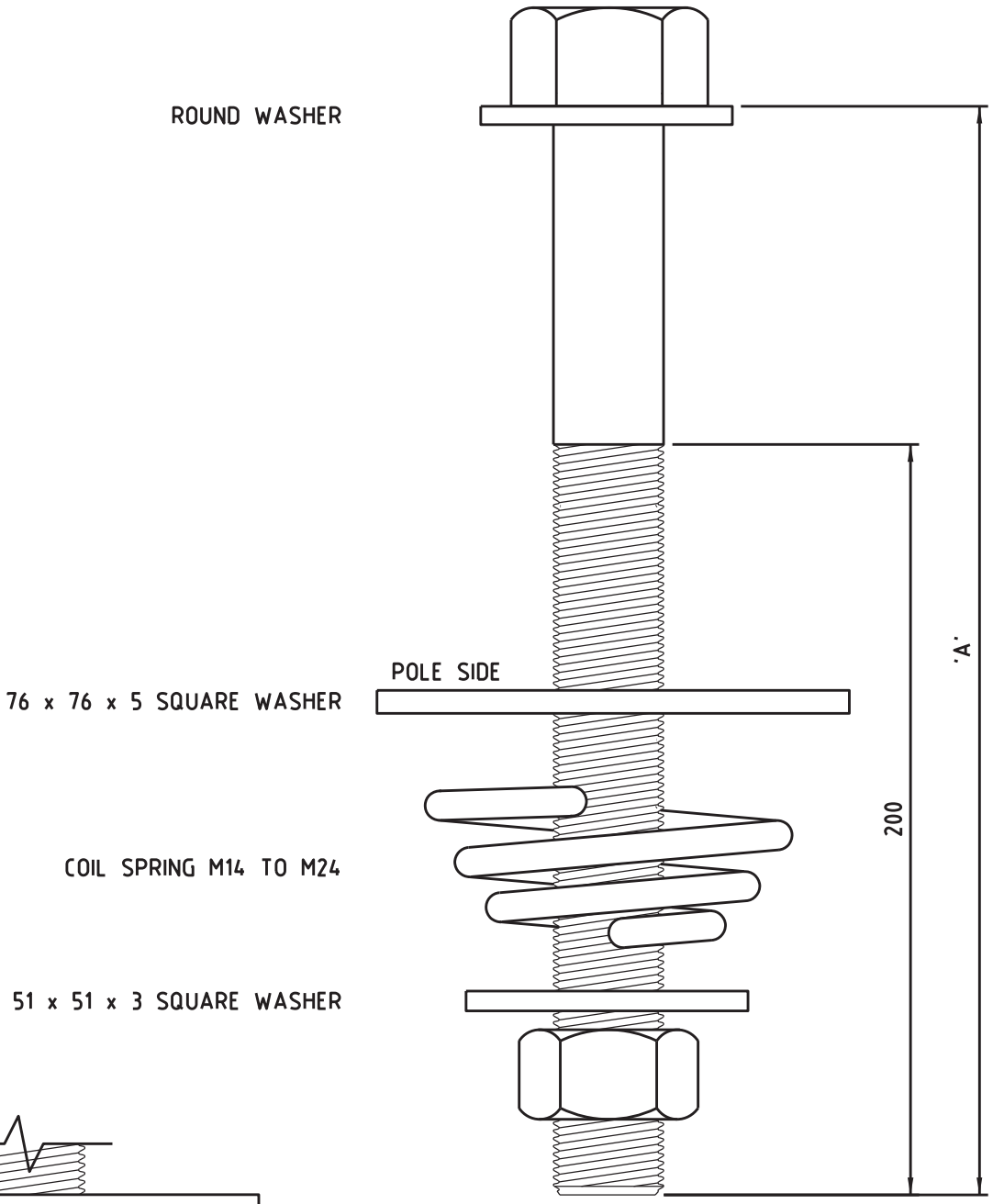
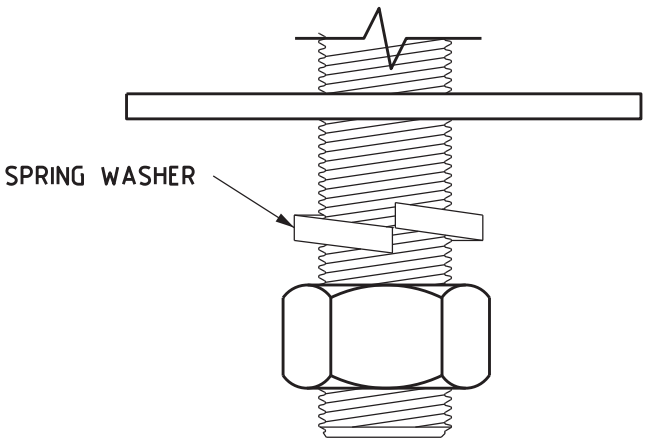
R51	Placement of Duct Beneath Road Crossings
R52	Cable and Duct Placements on Truncations
R53	Cross Section Details of Cable Easement
R54	Placement of Duct Beneath Open Drain
R55	Cable Trench Layout Green Field Site Two Layers (1 Tx and 5 LV Cables)
R56	Cable Trench Layout Green Field Site Two Layers (1 HV Feeder, 1 Tx and LV Cables)
R57	Cable Trench Layout Green Field Site Two Layers (1 HV Feeder, 1 Tx and 2 LV Cables)
R58	Cable Trench Layout Green Field Site One Layer (1 Tx and 3 LV Cables)
R59	Cable Trench Layout Green Field Site One Layer (1 HV Feeder and LV Cables)



CUT EXCESS THREAD TO WITHIN 10mm OF NUT



FOR STEEL POLES, USE SPRING WASHER AS SHOWN ABOVE

BOLT DIMENSIONS	
DIMENSION A	DIAMETER OF POLE BOLTS
PB1 = 300mm	12mm 16mm 20mm
PB2 = 400mm	12mm 16mm 20mm
PB3 = 550mm	12mm 16mm 20mm

HORIZON POWER

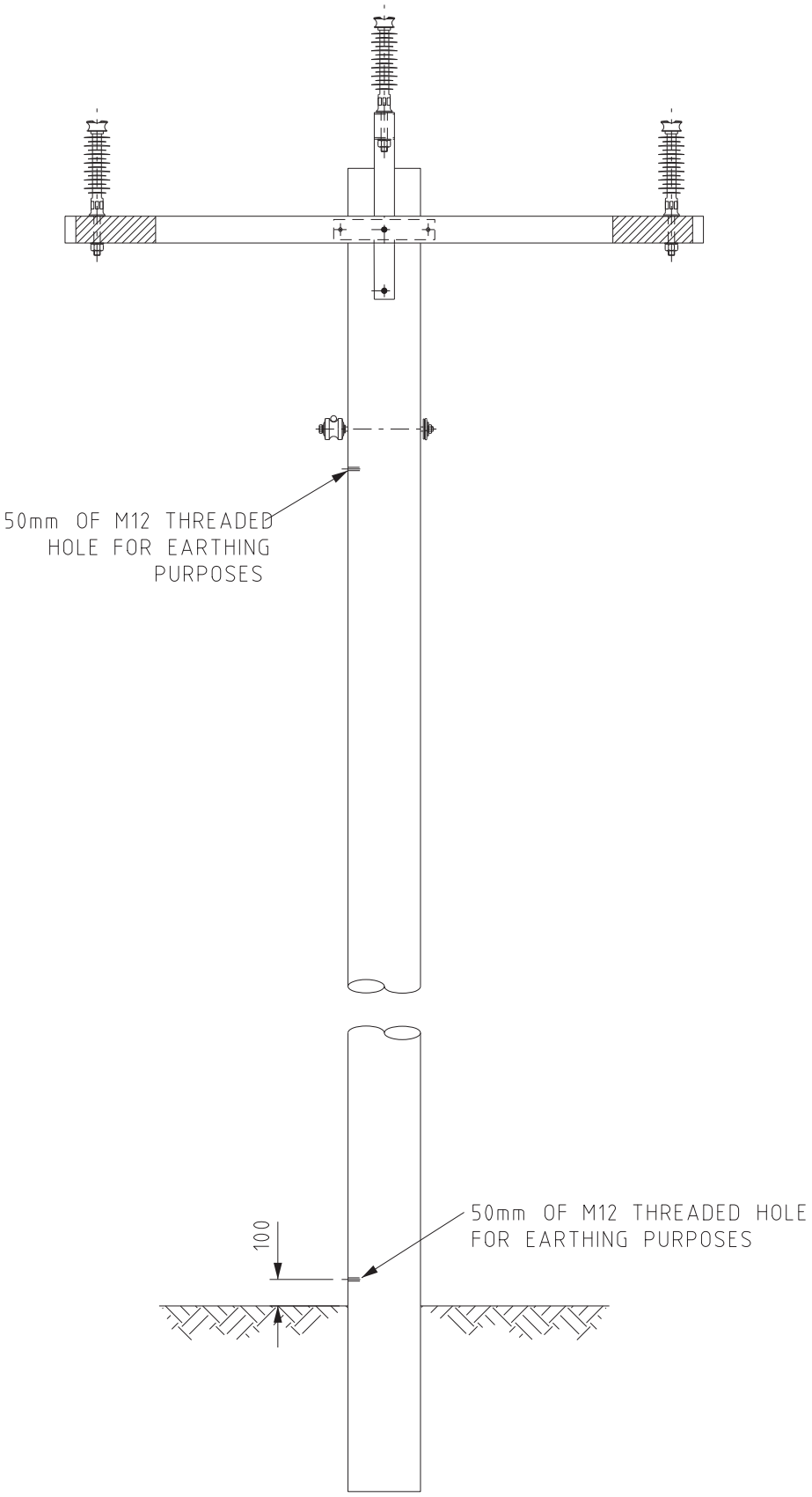
DISTRIBUTION CONSTRUCTION STANDARDS

POLE BOLT DETAILS

REVISION	DATE
C	OCT 17

DRAWING No.

R1



HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

OPERATIONS

REFERENCE DRAWING

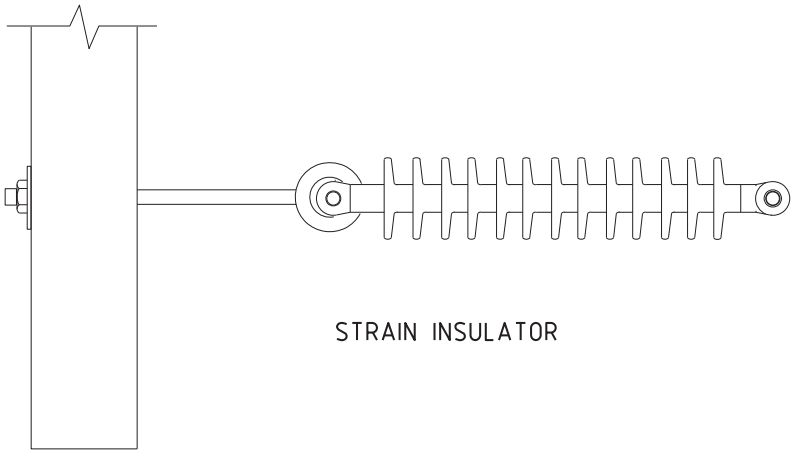
BONDING
INTERMEDIATE

REVISION	DATE
B	JUNE 2011

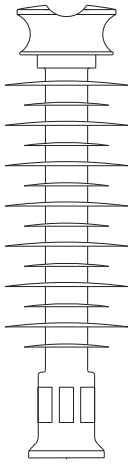
DRAWING No.

R2-1

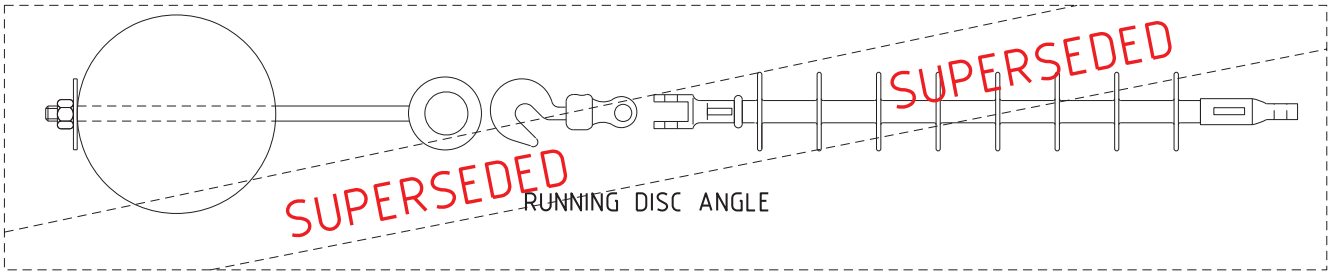
HIGH VOLTAGE (33,22,11,6.6kV)



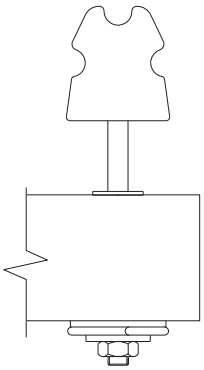
STRAIN INSULATOR



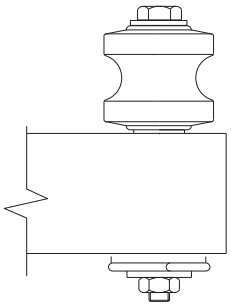
HIGH POLLUTION
POST INSULATOR



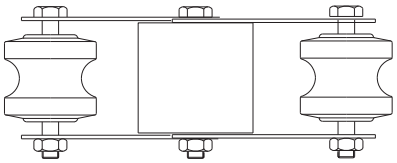
LOW VOLTAGE



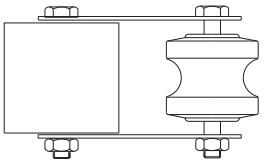
INTERMEDIATE



ANGLE UP
TO 20 DEG

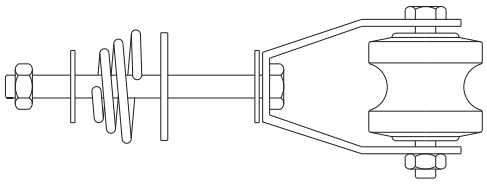


INLINE STRAIN
OR ANGLE 20-45 DEG

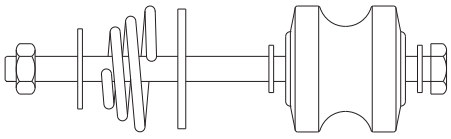


TERMINATION

RUNNING EARTH



TERMINATION



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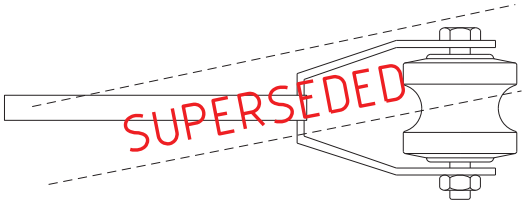


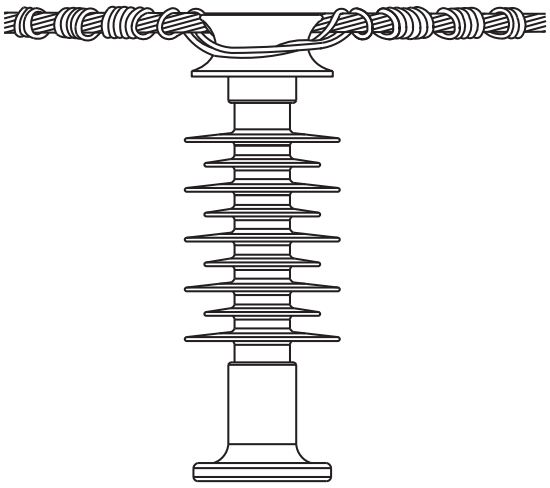
20mm BAND-IT STRAP TYPE

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION C	DATE OCT 17
	INSULATORS	DRAWING No. R3-1	

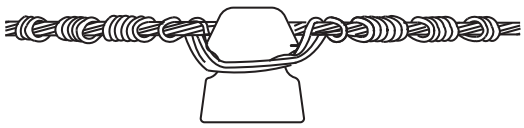
SEQUENCE OF OPERATIONS FOR HV & LV

HALVE TIE. START WITH MIDDLE OF TIE AT BACK OF INSULATOR.

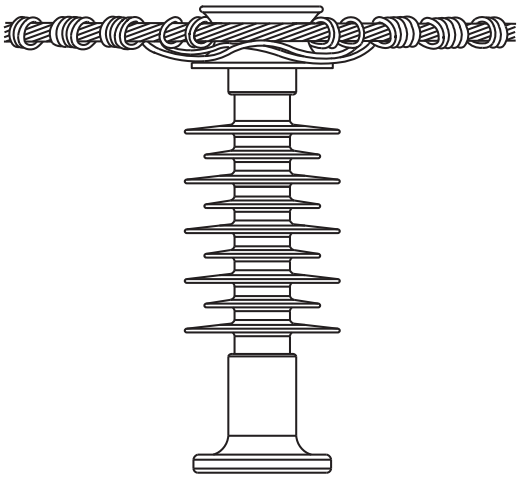
A) TAKE HALF TURN AROUND INSULATOR, UNDER AND AROUND CONDUCTOR FOR ONE TURN.
B) CROSS TIE AT THE FRONT OF INSULATOR AND CONTINUE UNDER AND AROUND CONDUCTOR FOR ONE TURN.
C) CROSS TIE AT THE BACK OF INSULATOR AND CONTINUE UNDER AND AROUND CONDUCTOR FOR SIX TURNS.
D) ONE OPEN TURN.
E) FIVE TURNS.
F) ONE OPEN TURN.
G) THREE TURNS.
H) TURN ENDS OF TIE DOWN AGAINST THE CONDUCTOR.



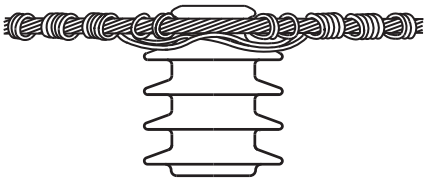
HIGH VOLTAGE
TOP TIE



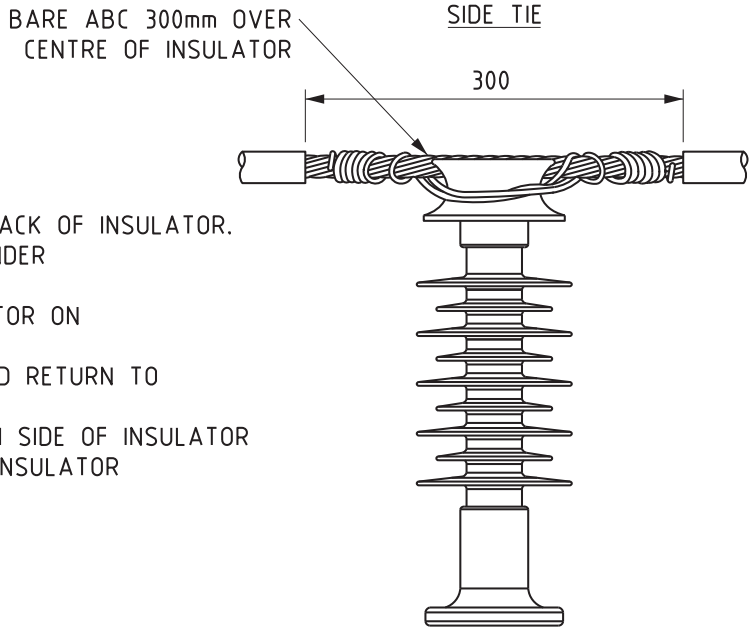
LOW VOLTAGE
TOP TIE



HIGH VOLTASGE
SIDE TIE



LOW VOLTAGE
SIDE TIE



95 & 150 mm2 ABC
TOP TIE

SEQUENCE OF OPERATIONS

HALVE TIE. START WITH MIDDLE OF TIE AT BACK OF INSULATOR.

A) TAKE HALF TURN AROUND INSULATOR AND UNDER CONDUCTOR ON EACH SIDE.
B) TAKE ONE AND HALF TURNS AROUND CONDUCTOR ON EACH SIDE OF INSULATOR.
C) CROSS ENDS AROUND BACK OF INSULATOR AND RETURN TO BOTTOM OF CONDUCTOR ON EACH SIDE.
D) TAKE ONE TURN AROUND CONDUCTOR ON EACH SIDE OF INSULATOR
E) PASS ENDS OVER AND ACROSS IN FRONT OF INSULATOR CARRYING EACH END TO BOTTOM OF CONDUCTOR.
F) TAKE FIVE TURNS AROUND CONDUCTOR.
G) ONE OPEN TURN.
H) FIVE TURNS.
J) ONE OPEN TURN.
K) THREE TURNS.
L) TURN ENDS OF TIE DOWN AGAINST CONDUCTOR.

HORIZON POWER

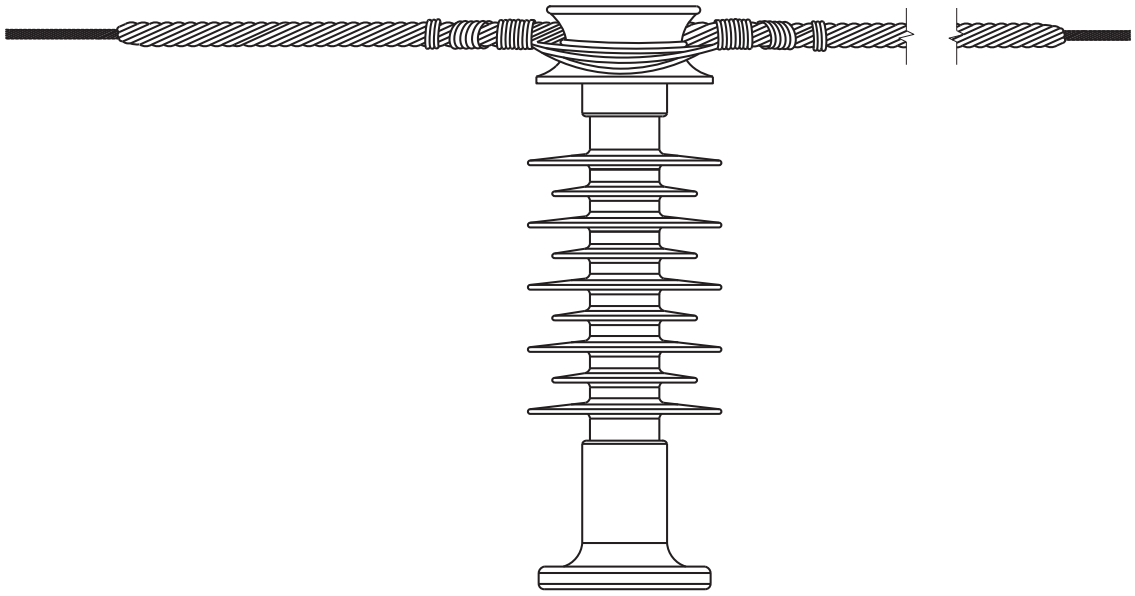
DISTRIBUTION CONSTRUCTION STANDARDS

INSULATOR TIES

REVISION	DATE
C	APRIL 18

DRAWING No.

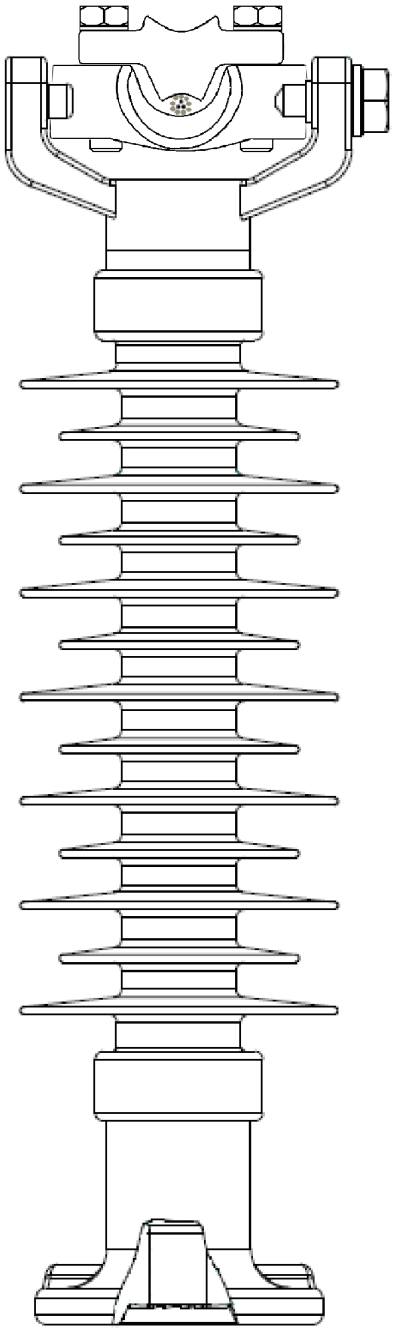
R3-2

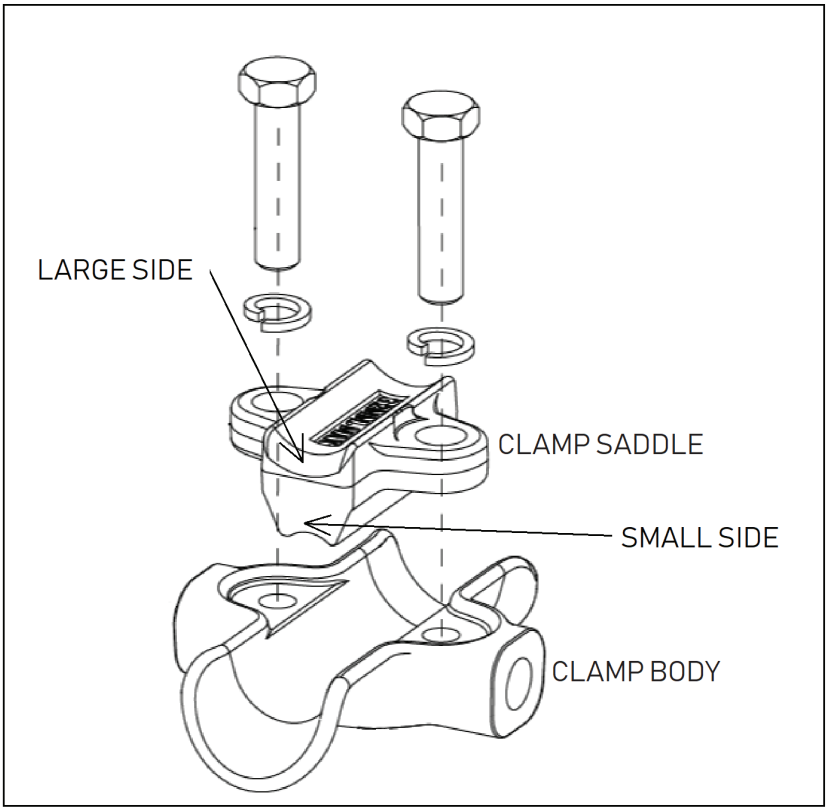


ARMOUR ROD

ARMOUR RODS ARE TO BE USED ON ALL BAYS OVER 60m (WAS 80m.)

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE OCT.17
	ARMOUR RODS	DRAWING No. R3-3	





DETAIL A - CLAMP ASSEMBLY.

CLAMP SELECTION				
CONDUCTOR TYPE	DIAMETER (mm)	CLAMP	SADDLE SIDE	REMARKS
AAAC 19/3.25	16.3	ICH0091	SMALL	
AAAC 7/4.75	14.3	ICH0091	SMALL	
AAAC 7/2.50	7.5	ICH0091	SMALL	
AAC 7/3.00	9	ICH0091	SMALL	
AAC 19/3.25	16.3	ICH0091	SMALL	
SC/AC 3/2.75	5.9	ICH0090	SMALL	NOTE 1
SC/GZ 3/2.75	5.9	ICH0090	SMALL	NOTE 1

ACCEPTABLE CONDUCTOR SIZES			
STOCK #	CLAMP TYPE	SMALL SADDLE-SIDE CONDUCTOR DIAMETER	LARGE SADDLE-SIDE CONDUCTOR DIAMETER
ICH0090	FERROUS	8.9mm - 11.3mm	12.8mm - 21.3mm
ICH0091	ALUMINIUM ALLOY	7mm - 18mm	19mm - 32mm

NOTES:
1) ARMOUR ROD MUST BE USED TO INCREASE CONDUCTOR DIAMETER.
2) TORQUE ALL BOLTS IN ASSEMBLY TO 35Nm.

HORIZON POWER
DISTRIBUTION CONSTRUCTION STANDARDS

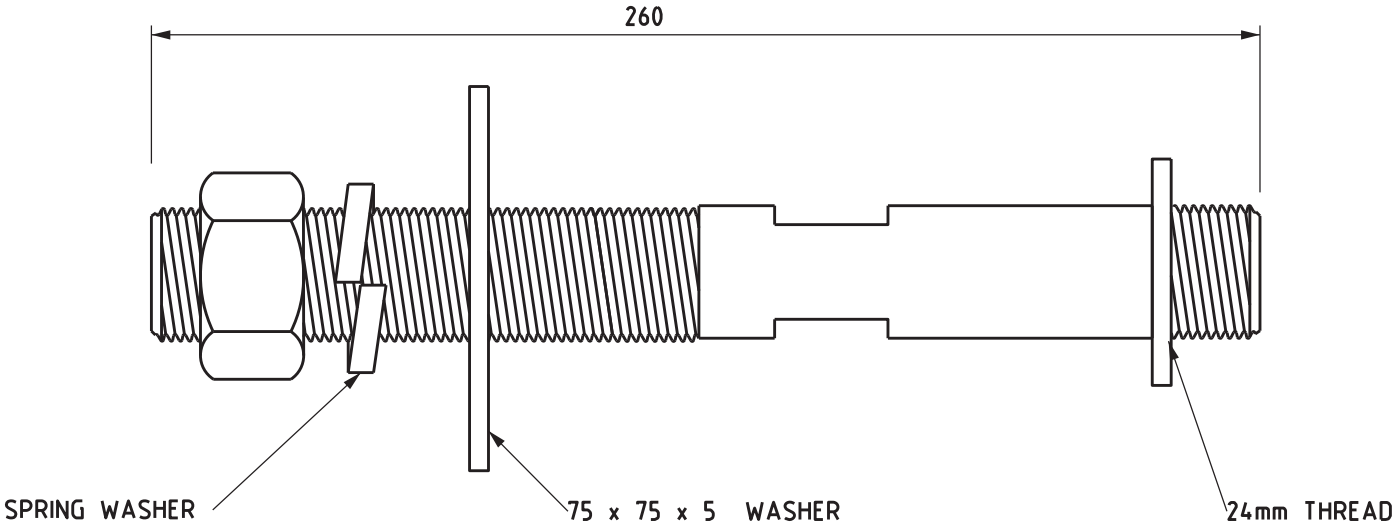
REFERENCE DRAWING

VERTICAL CLAMP-TOP INSULATOR

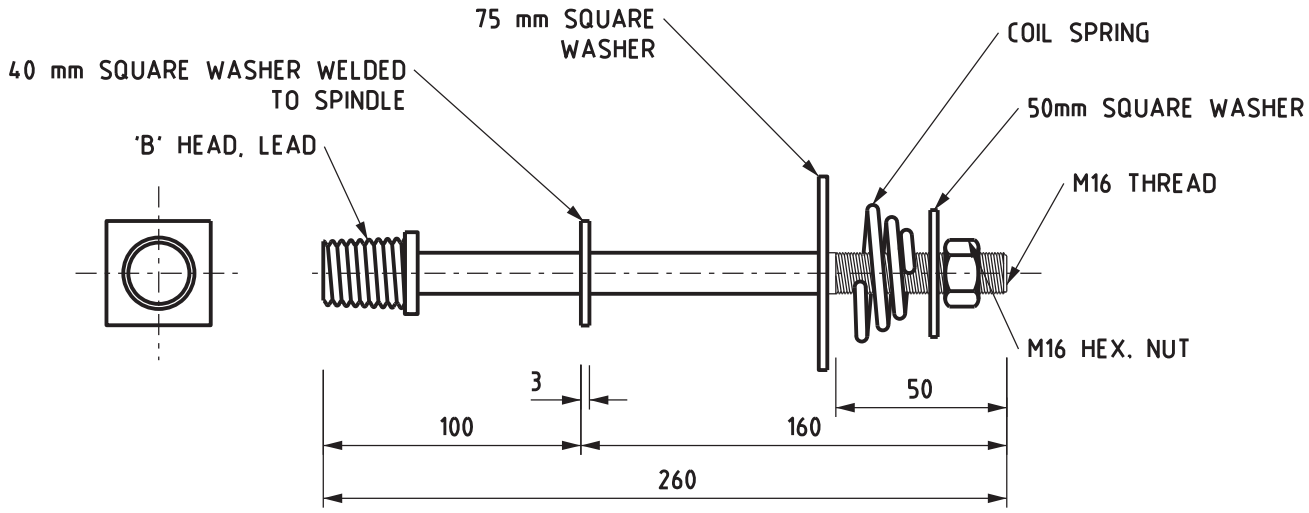
REVISION A | DATE OCT 2018

DRAWING No. R3-4

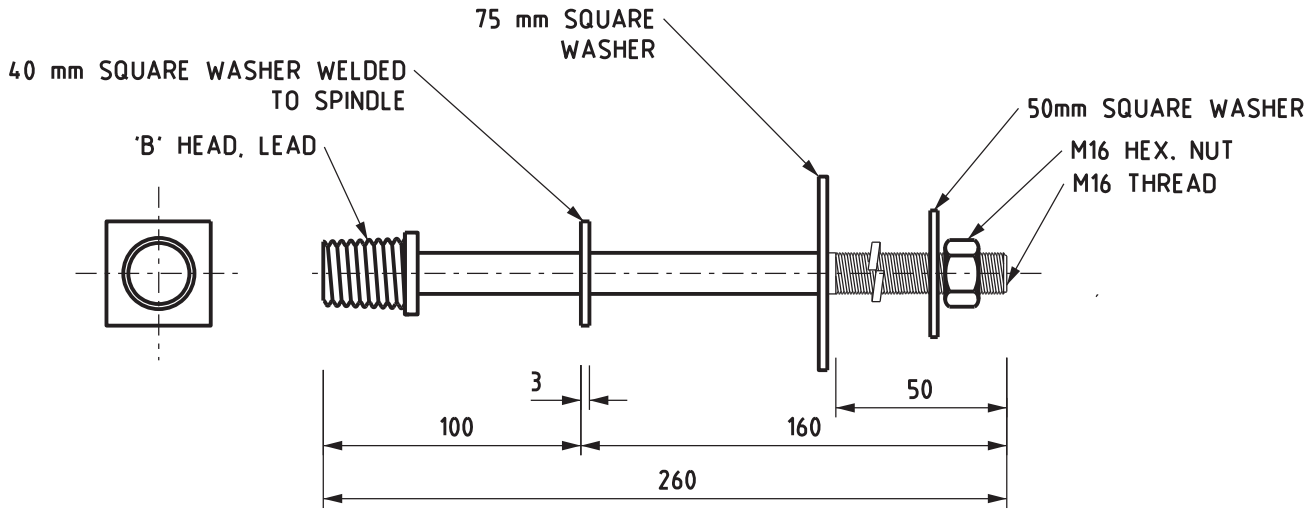
HV INSULATOR BOLT
(STEEL CROSSARM)



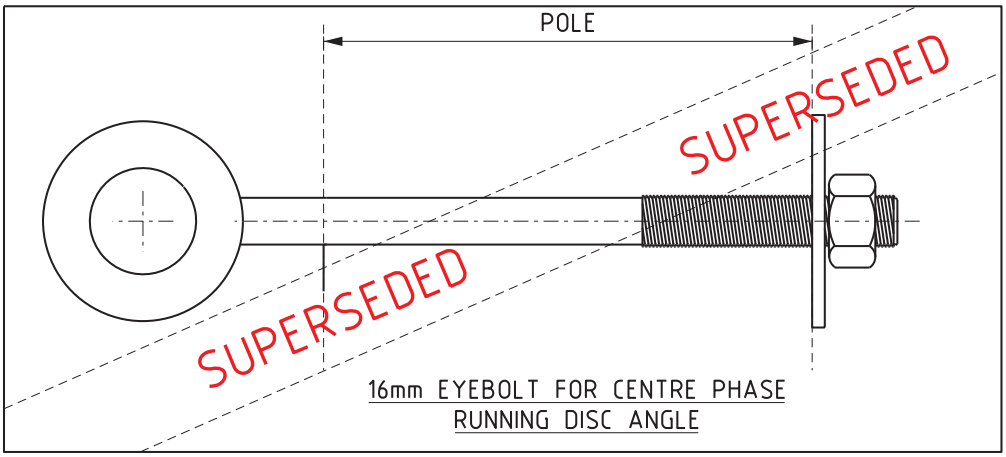
LV INSULATOR PIN
(WOOD CROSSARM)



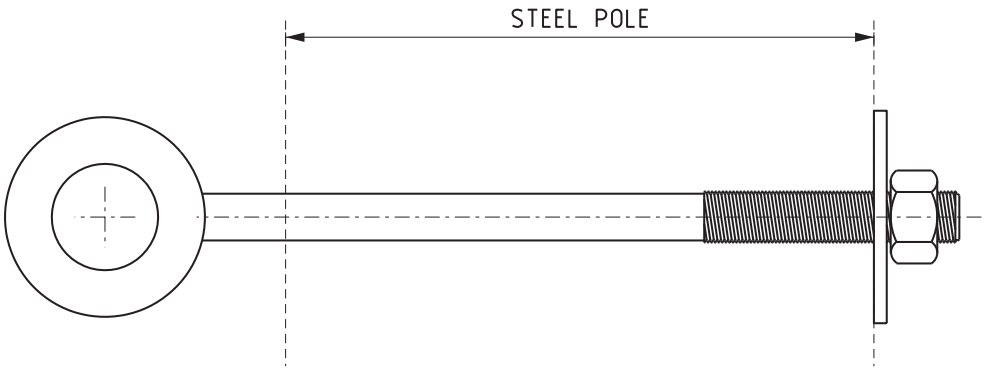
LV INSULATOR PIN
(STEEL CROSSARM)



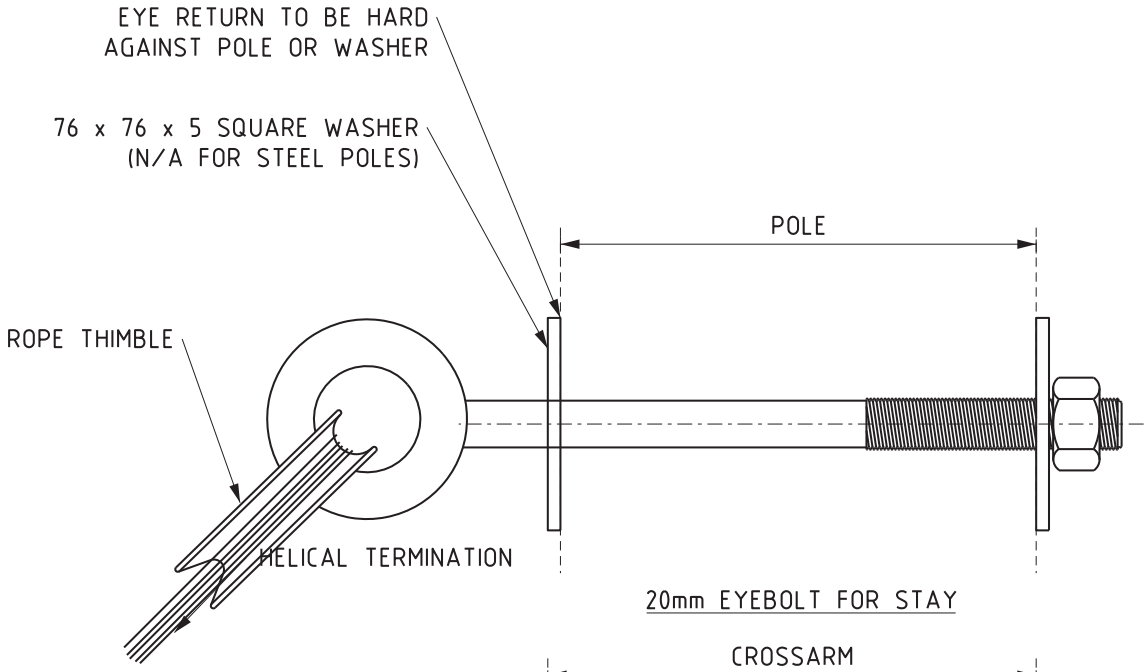
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION C	DATE OCT 17
	INSULATOR PIN AND BOLT DETAILS	DRAWING No. R4	



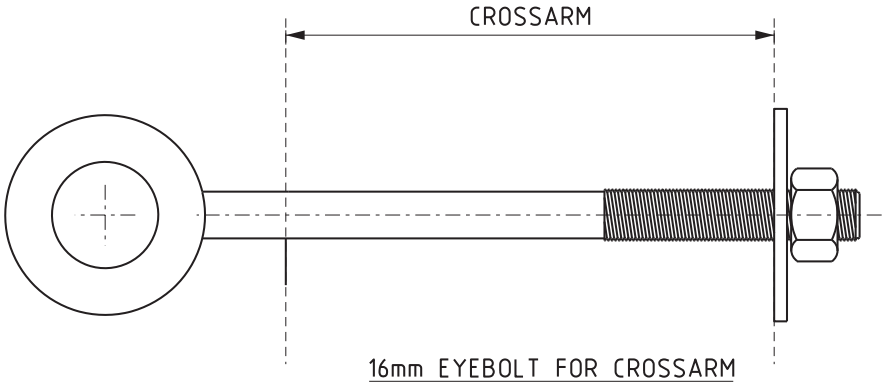
16mm EYEBOLT FOR CENTRE PHASE
RUNNING DISC ANGLE



16mm EYEBOLT FOR STEEL POLE



20mm EYEBOLT FOR STAY



16mm EYEBOLT FOR CROSSARM

HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

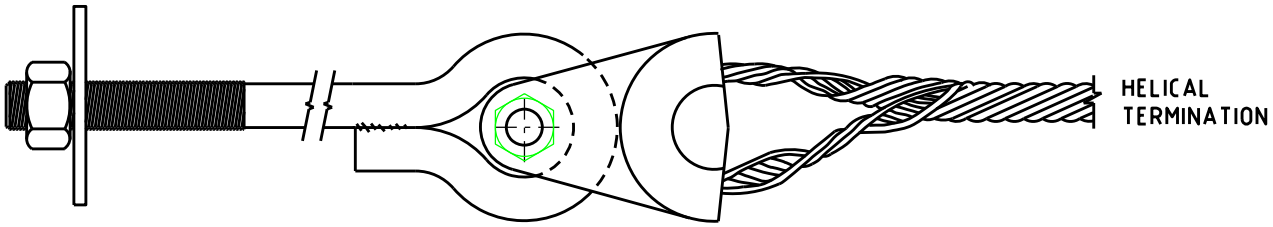
EYEBOLT DETAILS

REVISION	DATE
C	OCT 17

DRAWING No.

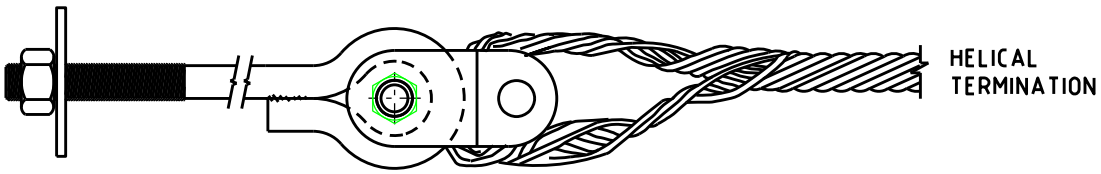
R5-1

ALUMINIUM
CLEVIS THIMBLE

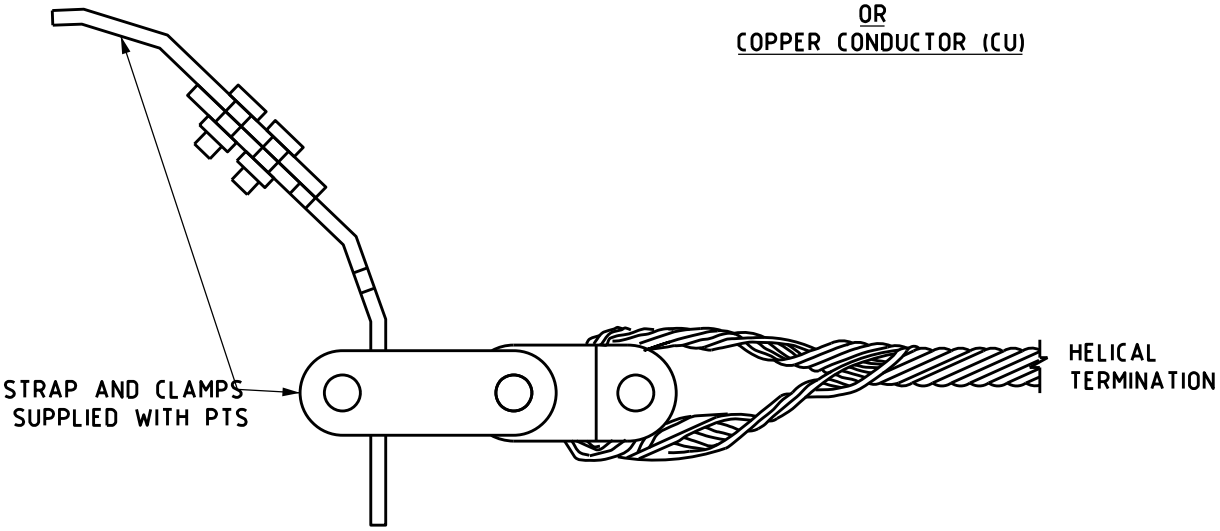


ALUMINIUM CONDUCTOR (AAC & AAAC)
OR
STEEL CONDUCTOR (SCAC)

MALLEABLE CAST IRON
CLEVIS THIMBLE



STEEL CONDUCTOR (SCGZ)
OR
COPPER CONDUCTOR (CU)

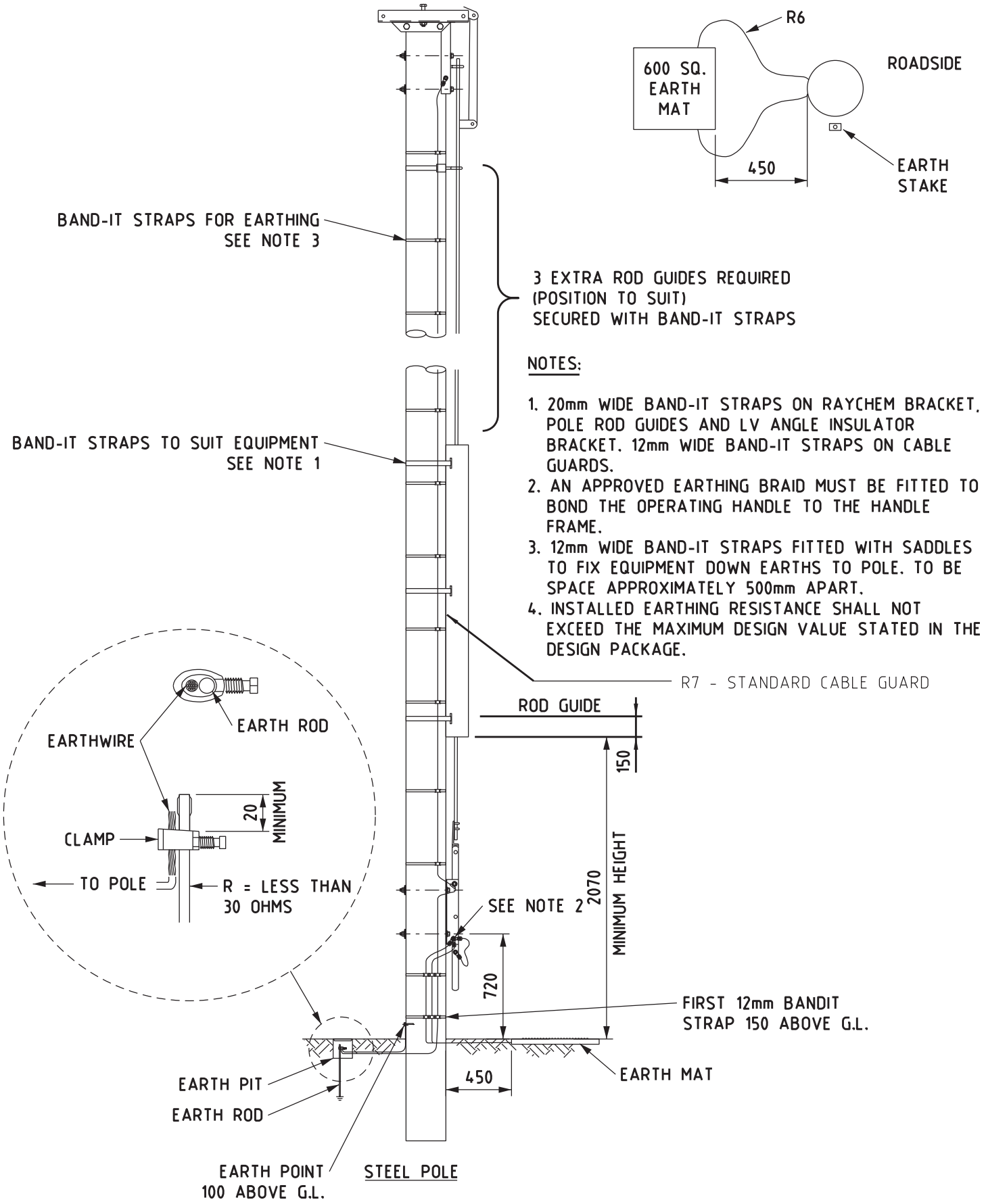


FOR PTS ARRANGEMENT

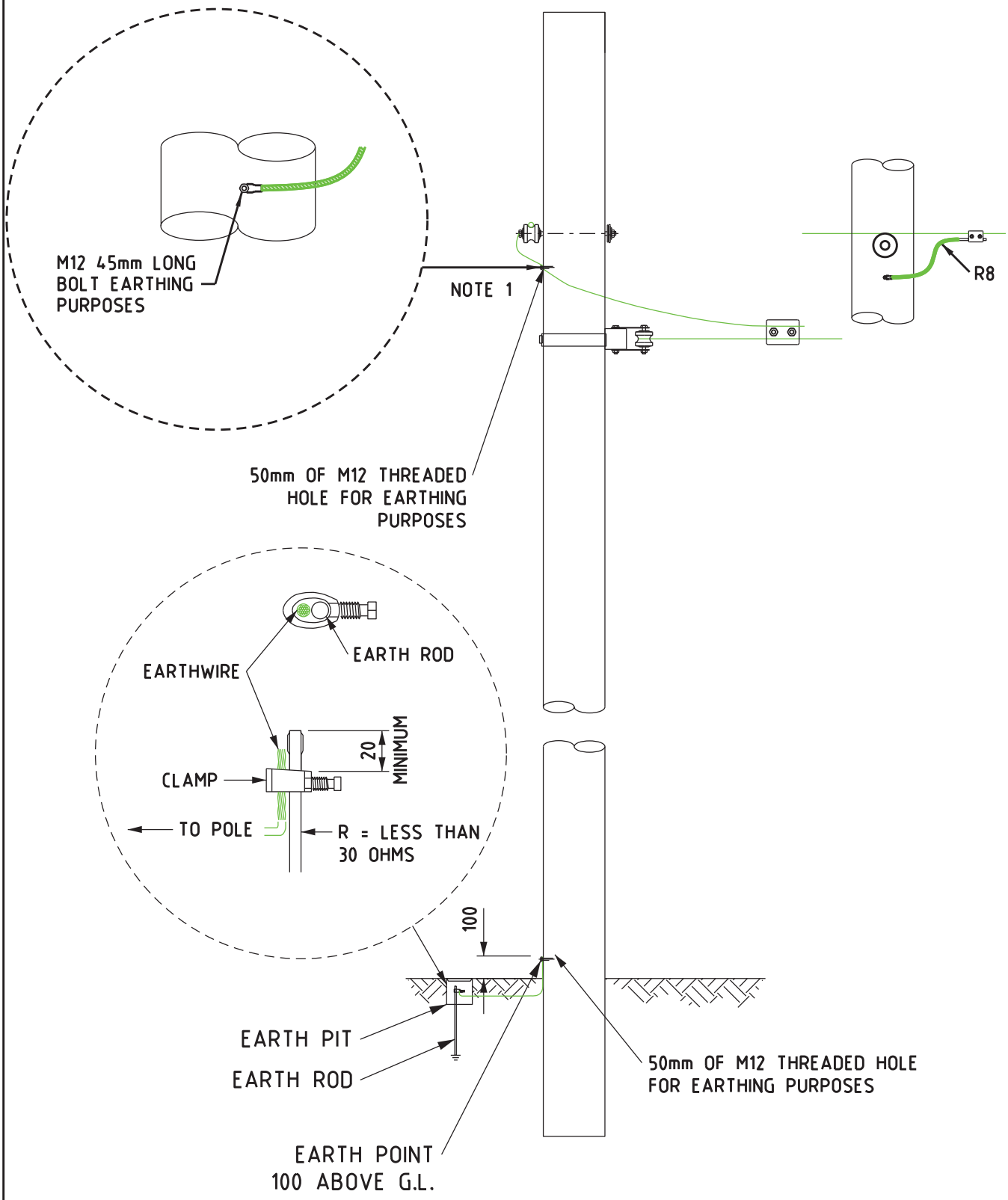
NOTES

REFER TO TECHNICAL BULLETIN ISSUE 2022-04 (DM 39324256) FOR PREVENTATIVE MEASURES FOR INSTALLATION OF PREFORMED DEAD-END TO AVOID CONDUCTOR SLIPPAGE

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION D	DATE 11/01/23
	CONDUCTOR TERMINATIONS	DRAWING No R5-2	



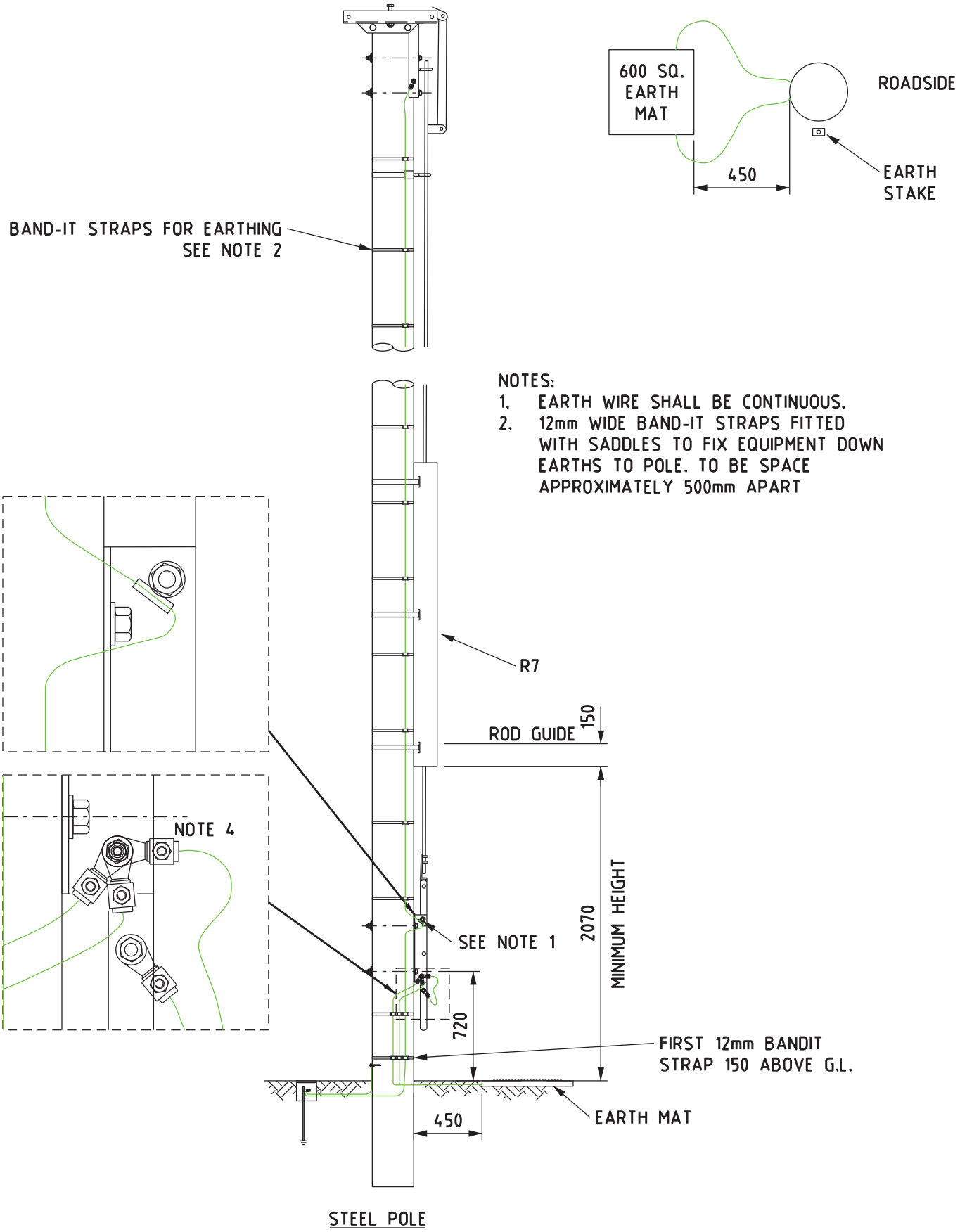
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE OCT 17
	EARTHING		DRAWING No. R6



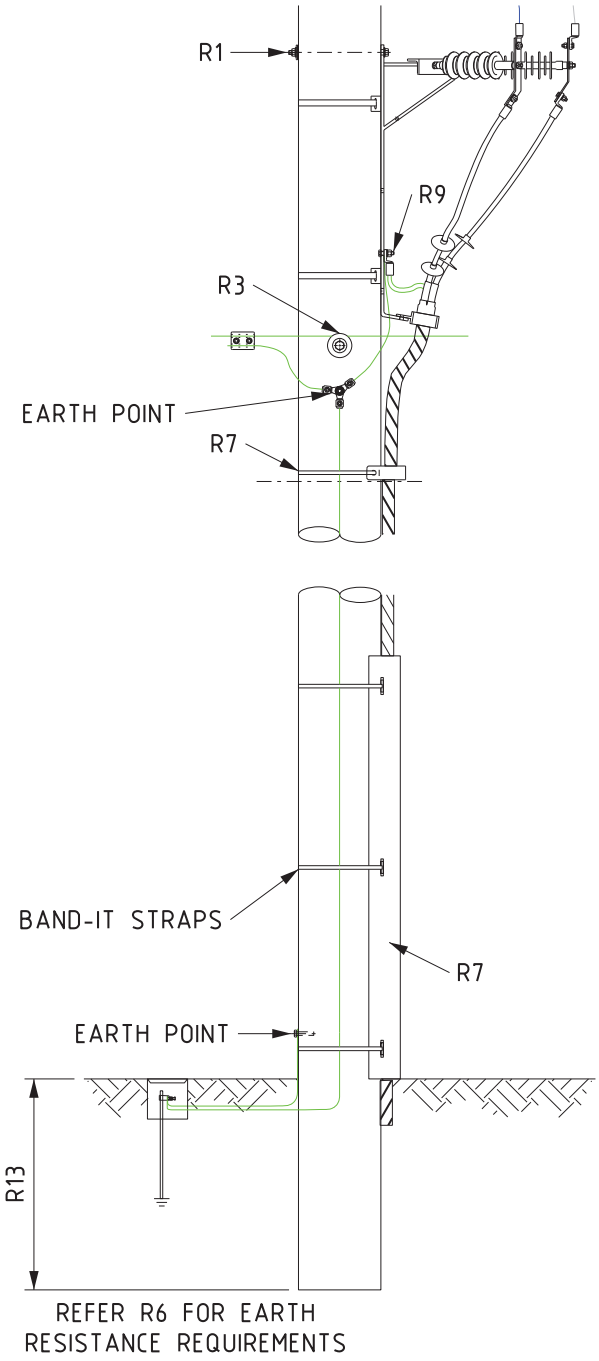
NOTE:

1) RUNNING EARTH NOT TO BE CONNECTED TO POLE ON TRANSFORMER INSTALLATIONS WITH SINGLE PHASE AND RUNNING EARTH.
2. INSTALLED EARTHING RESISTANCE SHALL NOT EXCEED THE MAXIMUM VALUE STATED IN THE DESIGN PACKAGE.

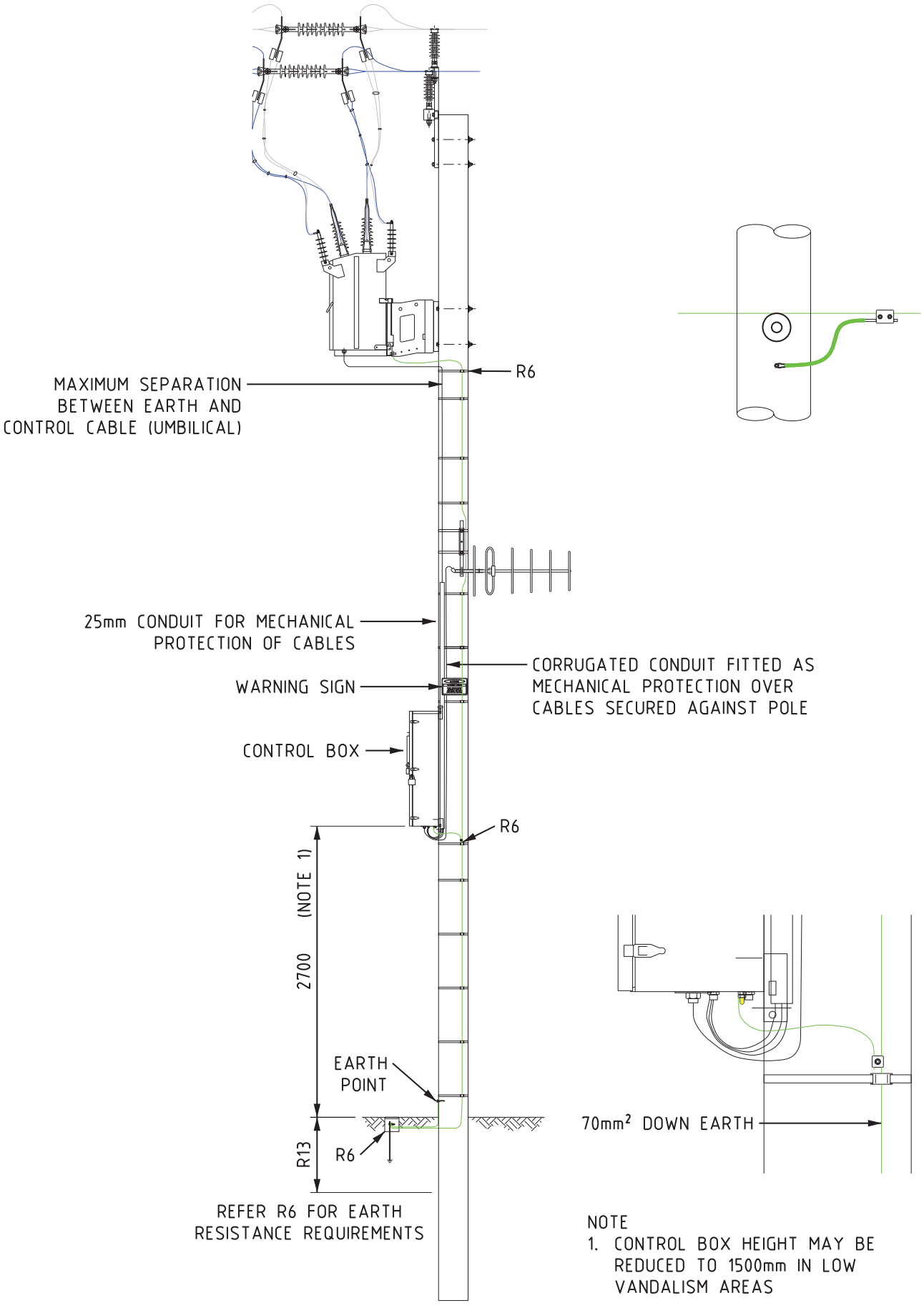
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION A	DATE OCT 17
	EARTHING STEEL POLE		DRAWING No. R6-1



HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION A	DATE OCT 17
	EARTHING POLE TOP SWITCH		DRAWING No. R6-2



HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE OCT 17
	EARTHING CABLE		DRAWING No. R6-3



NOTE
1. CONTROL BOX HEIGHT MAY BE REDUCED TO 1500mm IN LOW VANDALISM AREAS

HORIZON POWER

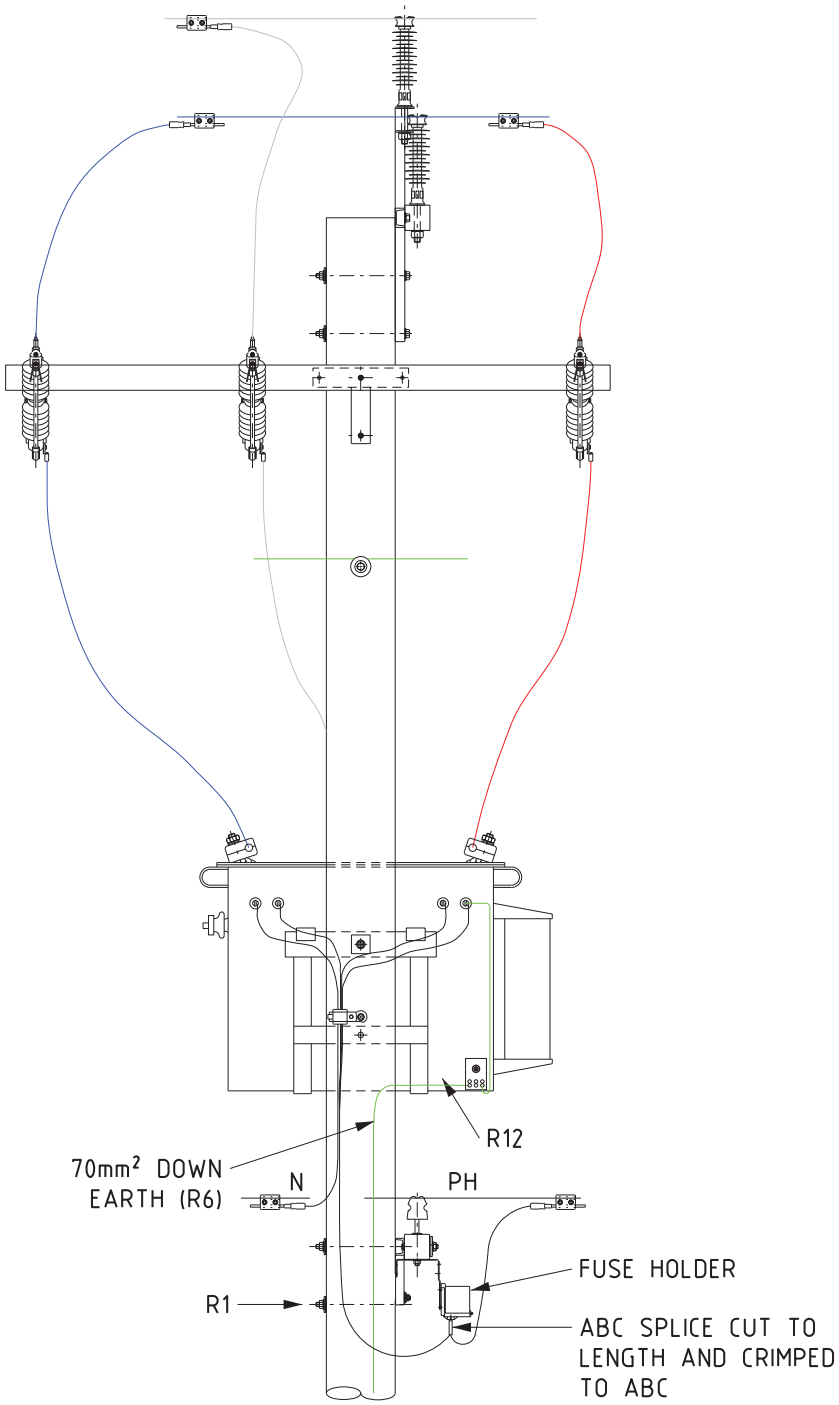
DISTRIBUTION CONSTRUCTION STANDARDS

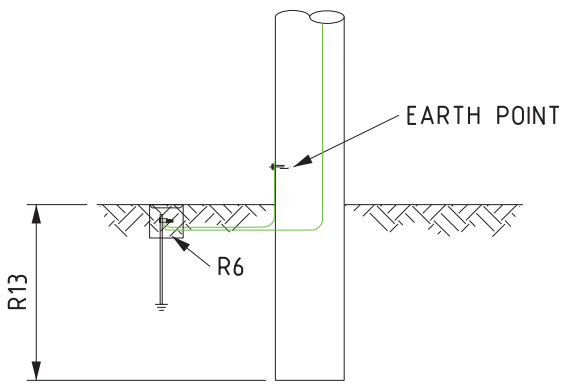
EARTHING
RECLOSER AND LOAD BREAK SWITCH SECTIONALISER

REVISION	DATE
A	APRIL 18

DRAWING No.

R6-4





REFER R6 FOR EARTH
RESISTANCE REQUIREMENTS

HORIZON POWER

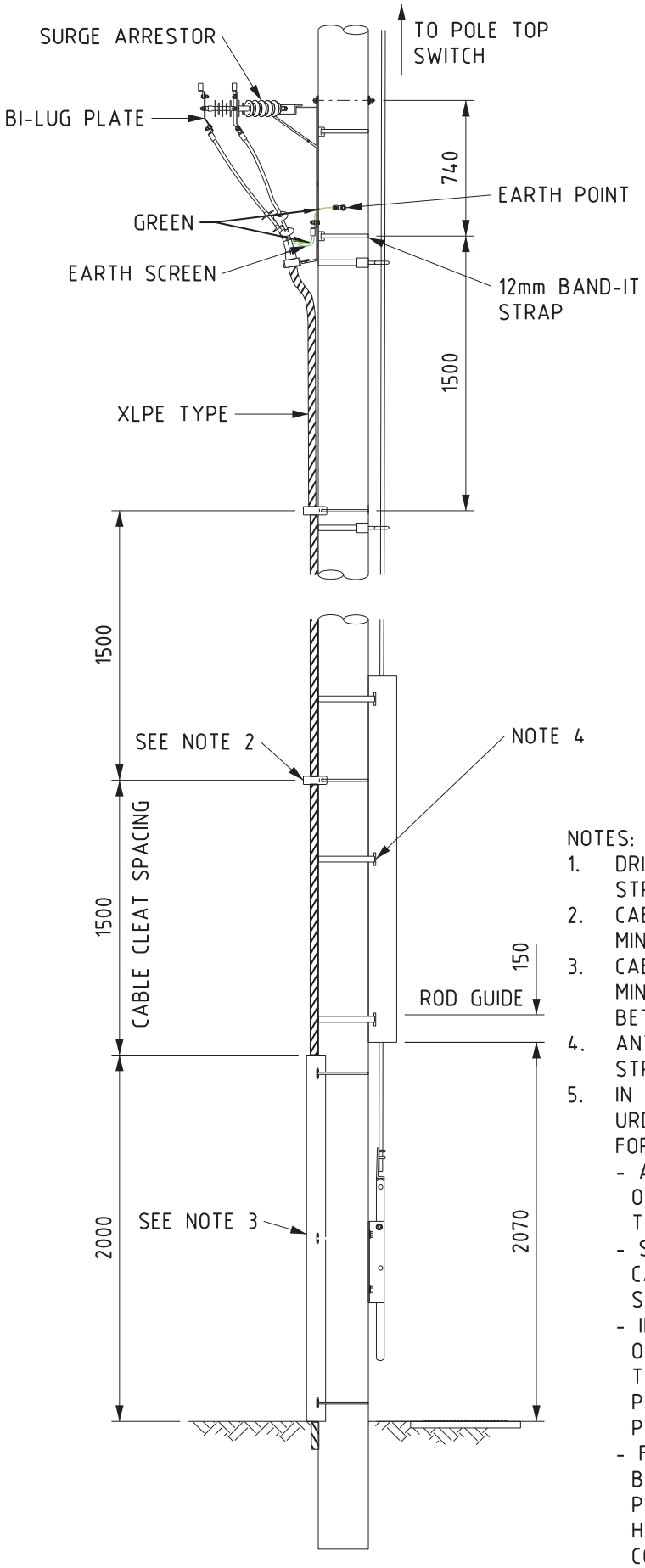
DISTRIBUTION CONSTRUCTION
STANDARDS

EARTHING
TRANSFORMERS

REVISION	DATE
F	APRIL 18

DRAWING No.

R6-5



NOTES:

1. DRILL AND TAP METHOD PREFERED TO BANDIT STRAPS REFERED TO IN NOTES BELOW.
2. CABLE CLEATS SECURED WITH 12mm BANDIT STRAPS MINIMUM OF 2 REQUIRED.
3. CABLE GUARD SECURED WITH 12mm BANDIT STRAPS MINIMUM OF 2 REQUIRED. MINIMUM GAP POSSIBLE BETWEEN F.G.L. AND GUARD SHALL BE MAINTAINED.
4. ANTICLIMBING GUARD SECURED WITH 12mm BANDIT STRAPS MIN 2 REQUIRED.
5. IN ALL SECTIONS WHERE POLES ARE DRAWN WITH URD CABLES ON THEM THE FOLLOWING WILL APPLY FOR THE CABLE INSTALLATION.
   - ALL CABLES SHALL BE INSTALLED ON THE OPPOSITE SIDE OF THE POLE TO ONCOMING TRAFFIC.
   - SHOULD POINT ABOVE BE IMPRACTICAL, THE CABLES MAY BE INSTALLED ON THE FOOTPATH SIDE. (BETWEEN POLE AND PROPERTY BOUNDARY)
   - IF THE CONNECTION POINT AT THE POLE TOP IS ON THE OPPOSITE SIDE OF THE INSTALLED CABLE, THEN THE CABLE MUST BE ROLLED AROUND THE POLE ON THE FOOTPATH SIDE (BETWEEN POLE AND PROPERTY BOUNDARY) UP TO THE CONNECTION.
   - FOR POLE TOP SWITCH POLES THE CABLE MUST BE INSTALLED ON THE FOOTPATH SIDE (BETWEEN POLE AND PROPERTY BOUNDARY) THEN ROLLED AS HIGH UP AS POSSIBLE TO THE SIDE OF THE CONNECTION.

HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

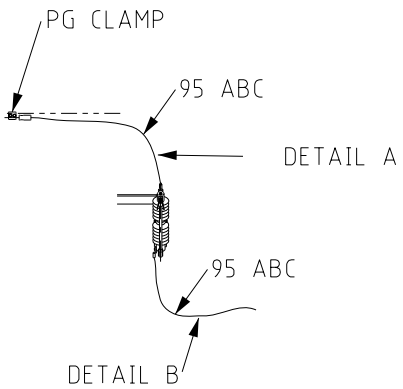
CABLE CLEAT / GUARD AND POLE TOP SWITCH ANTI CLIMBING GUARD DETAIL

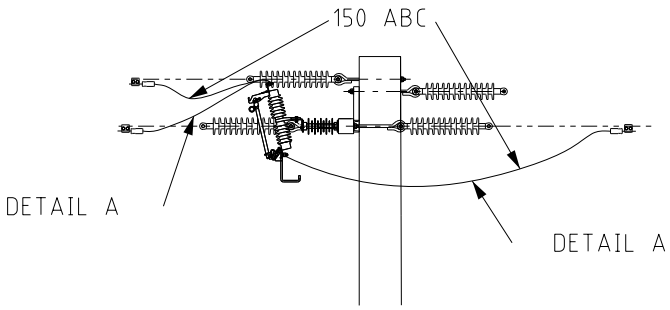
REVISION	DATE
B	APRIL 18

DRAWING No.

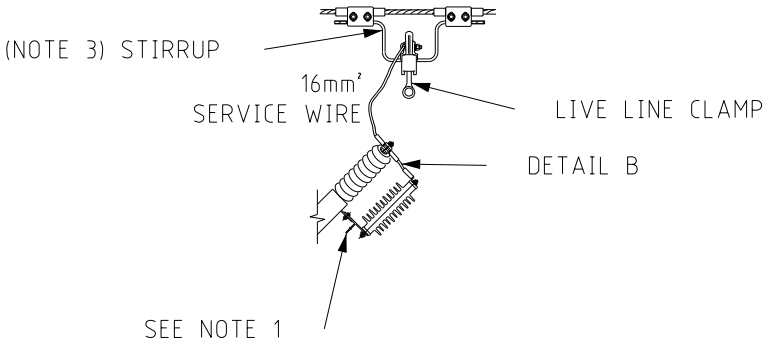
R7-1

1. LINE TAPS TO DROPOUT FUSE or CABLE SURGE ARRESTOR

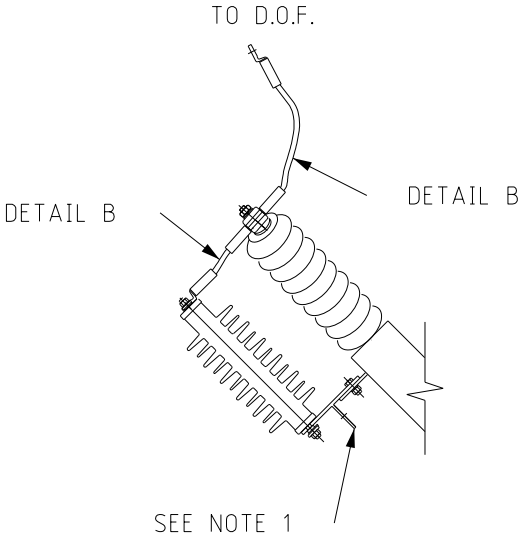


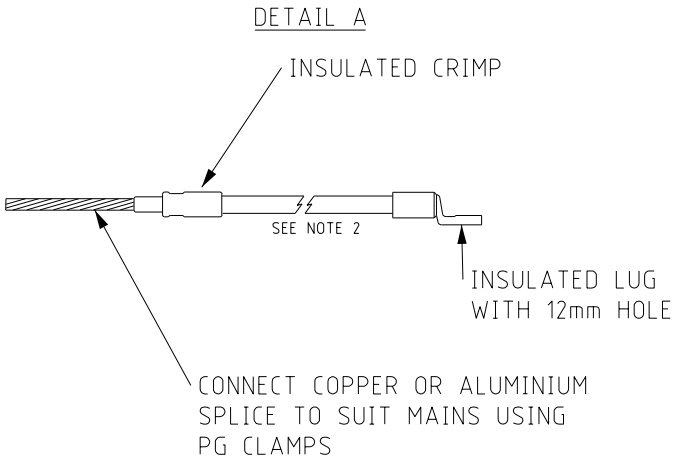


2. LIVE STIRRUP TO SINGLE PHASE TRANSFORMER



3. DROPOUT FUSE TO TRANSFORMER WITH SURGE ARRESTER





NOTE:

1. CLEAN OFF PAINT TO ENSURE GOOD ELECTRICAL CONTACT BEFORE APPLYING CONDUCTIVE GREASE.
2. WHERE THE INSULATED SPLICE CRIMP IS NOT USED FOR LINE TAPS, A 20mm LENGTH OF INSULATION MUST BE REMOVED BEHIND THE INSULATED LUG TO ALLOW MOISTURE TO DRAIN. SEE R8/2 FOR PG CLAMP APPLICATION.
3. REFER TO R8-6 IF LIVE LINE CLAMP AND STIRRUP IS USED.

HORIZON POWER

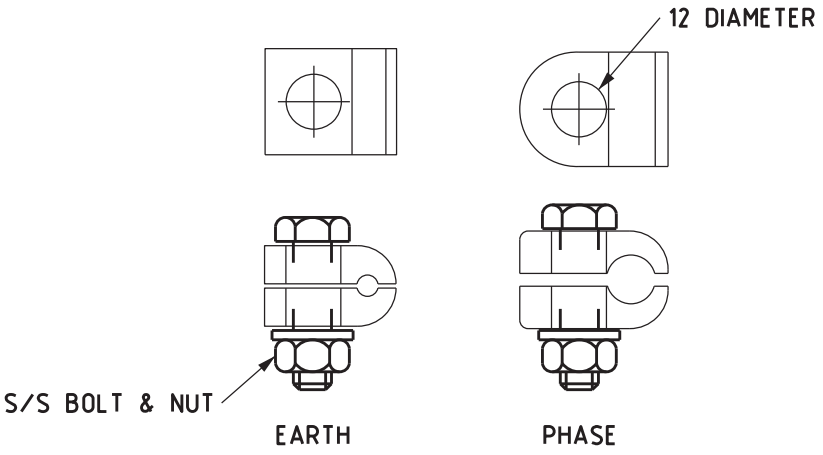
DISTRIBUTION CONSTRUCTION STANDARDS

ABC TAPS FOR TRANSFORMER AND CABLE TERMINATION

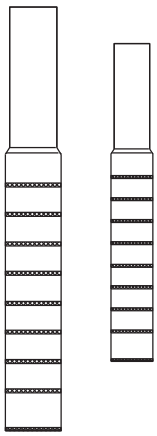
REVISION	DATE
D	15/04/2021

DRAWING No.

R8-1



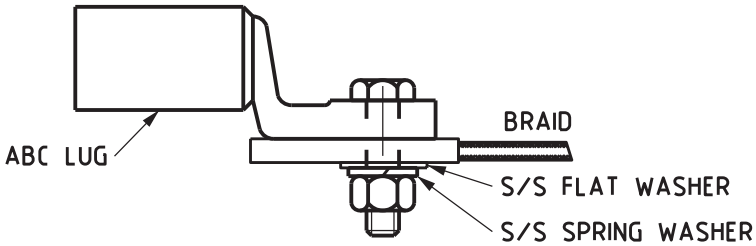
TRANSFORMER & EARTH LUGS

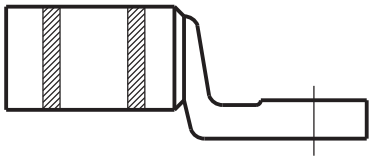


ABC TO AERIAL

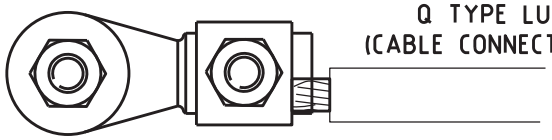
CRIMP MARK

CABLE CRIMP





LUG BI-METAL



HORIZON POWER

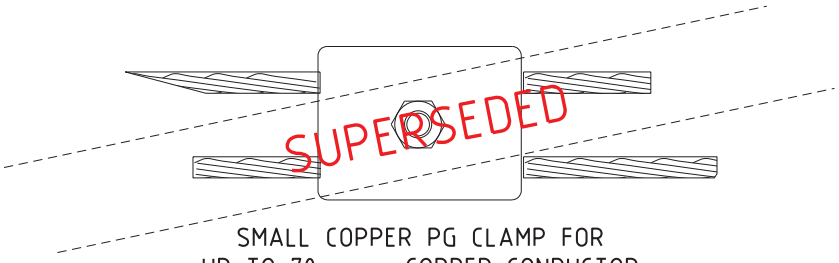
DISTRIBUTION CONSTRUCTION STANDARDS

LUGS AND CONNECTORS TRANSFORMER AND CABLE

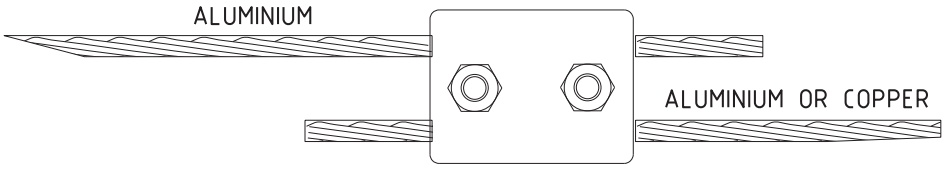
REVISION	DATE
E	APRIL 18

DRAWING No.

R8-2



SMALL COPPER PG CLAMP FOR
UP TO 70mm sq COPPER CONDUCTOR
INCLUDING Cu DOWN EARTH JOINS



(NOTE 1)

PARALLEL GROOVE CLAMPS

STEP 1

WIRE BRUSH SURFACE OF CONDUCTOR AND JAWS OF CLAMP. THEN IMMEDIATELY APPLY ALUMINIUM JOINTING COMPOUND.
STOCK No. PG 0002

STEP 2

FIT CLAMP AND TIGHTEN BOLTS SECURELY.
IF COPPER TO ALUMINIUM THEN ALUMINIUM CONDUCTOR TO BE ABOVE THE COPPER

STEP 3

IN AREAS OF HIGH POLLUTION
(TYPICALLY WITHIN 5 Kms OF COAST)
APPLY GREASE TO COVER ALL PARTS OF JOINT.
USE SHELL MP2 - STOCK No PG0125.

IN EXTREMELY CORROSIVE ENVIRONMENTS WHERE THIS HAS PROVEN INADEQUATE, THEN APPLY 510 DENSO TAPE OVER GREASE AND JOINT TO EXCLUDE ALL MOISTURE - STOCK No HTH0001

REUSE OF PG CLAMPS

DO NOT REUSE PG CLAMPS WHICH HAVE BEEN SUBJECTED TO HEAVY FAULT CONDITIONS AND EXCESSIVE CORROSION

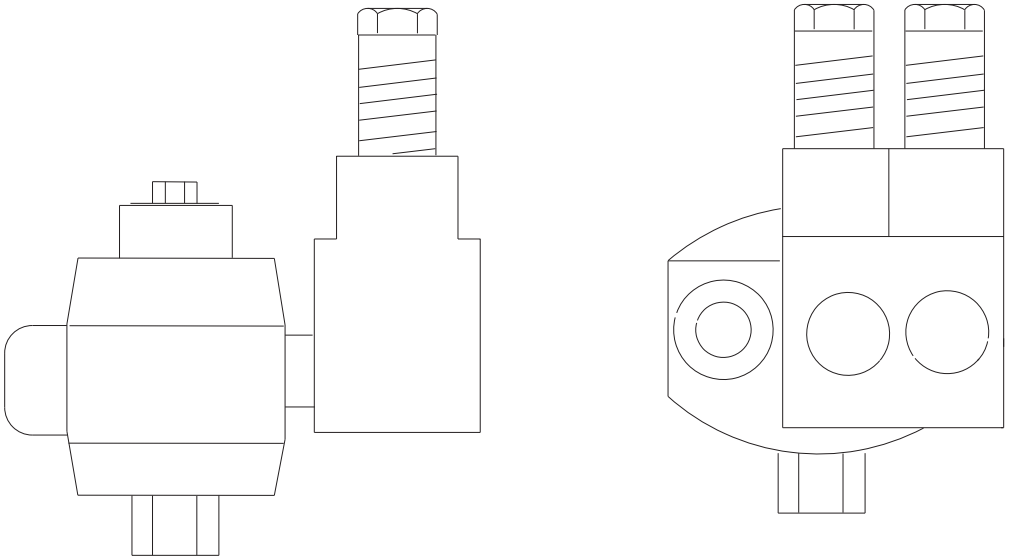
CONTACT GROOVES OF THE PG CONDUCTOR INTERFACE MUST BE THOROUGHLY CLEANED TO BRING THE SURFACE BACK TO "AS NEW" CONDITION

APPLY CONTACT PROTECTION GREASE TO REINSTATE ENVIRONMENTAL PROTECTION AT THE INTERFACE

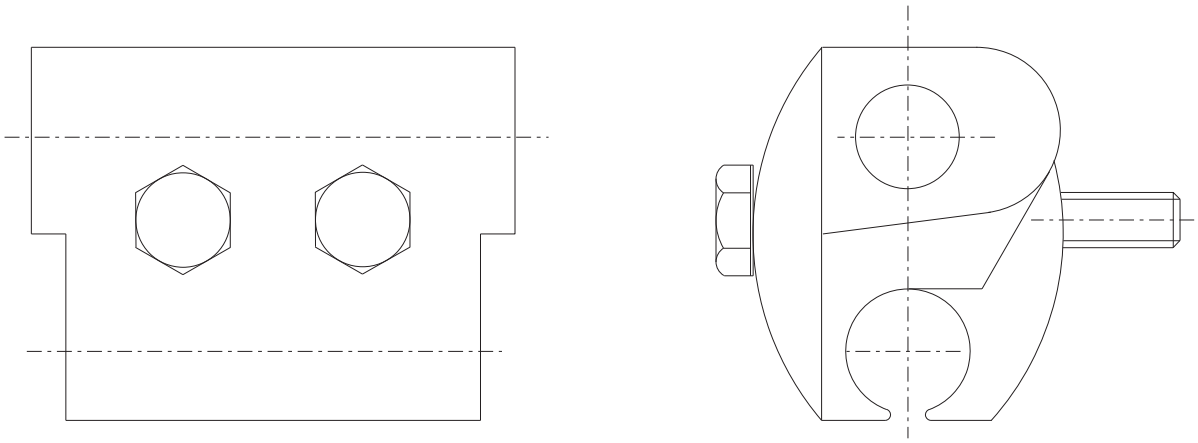
NOTES:

1. DOUBLE PG CLAMPS MUST BE USED ON ALL NEUTRAL CONNECTIONS.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION E	DATE OCT 17
	PG CLAMPS INSTALLATION INSTRUCTION	DRAWING No. R8-3	



ABC TO SERVICE 95/35-6 & 150/35-6



LV MAINS IPC - ABC TO ABC

HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

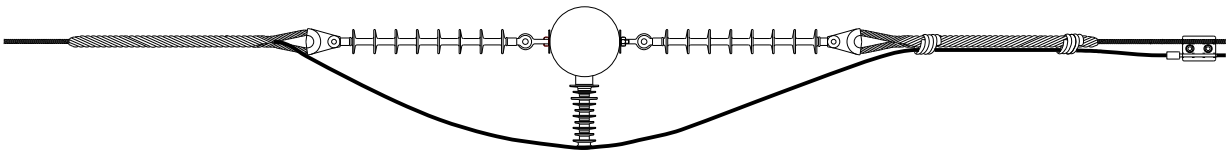
LUGS AND CONNECTORS
INSULATION PIERCING CLAMPS

REVISION	DATE
C	APRIL 18

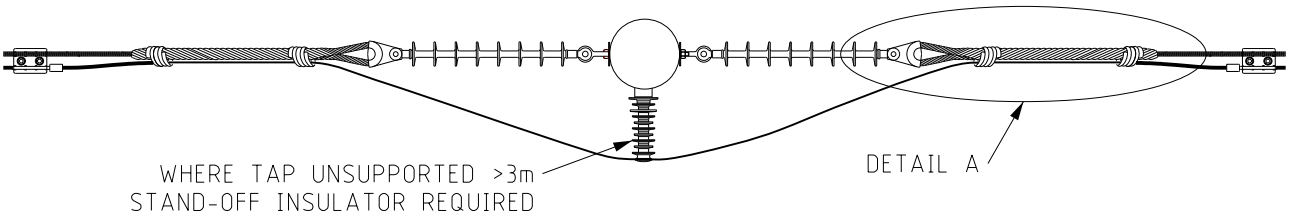
DRAWING No.

R8-4

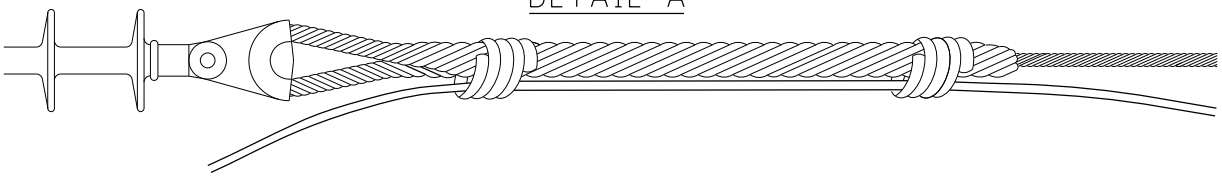
PREFERRED WHERE POSSIBLE TO USE EXISTING BARE CONDUCTOR WITH ONE CONNECTOR.



ALTERNATIVELY USE 150mm² LV ABC CONDUCTOR.



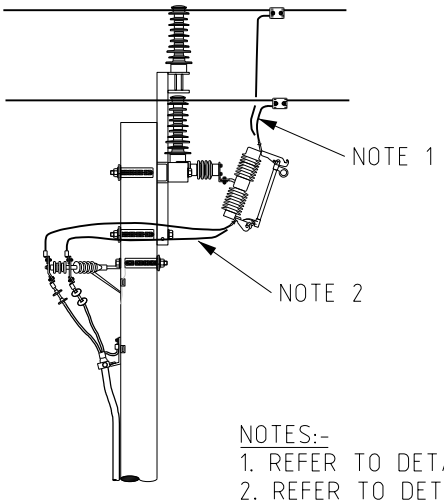
DETAIL A

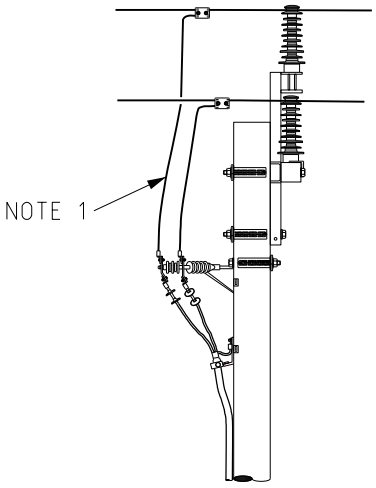


SUPPORT TAP USING TIE WIRE - 4 WRAPS, TWITCH ENDS WITH PLIERS AND FOLD BACK.
CABLE OR ZIP TIES NOT TO BE USED

CABLE TERMINATION

- USE 95mm² LVABC FOR 35/50/95mm² CABLES.
- USE 150mm² LVABC FOR ALL OTHER CABLES.
  i.e. 185/240/400mm² CABLES





NOTES:-
1. REFER TO DETAIL A ON R8-1.
2. REFER TO DETAIL B ON R8-1.

HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

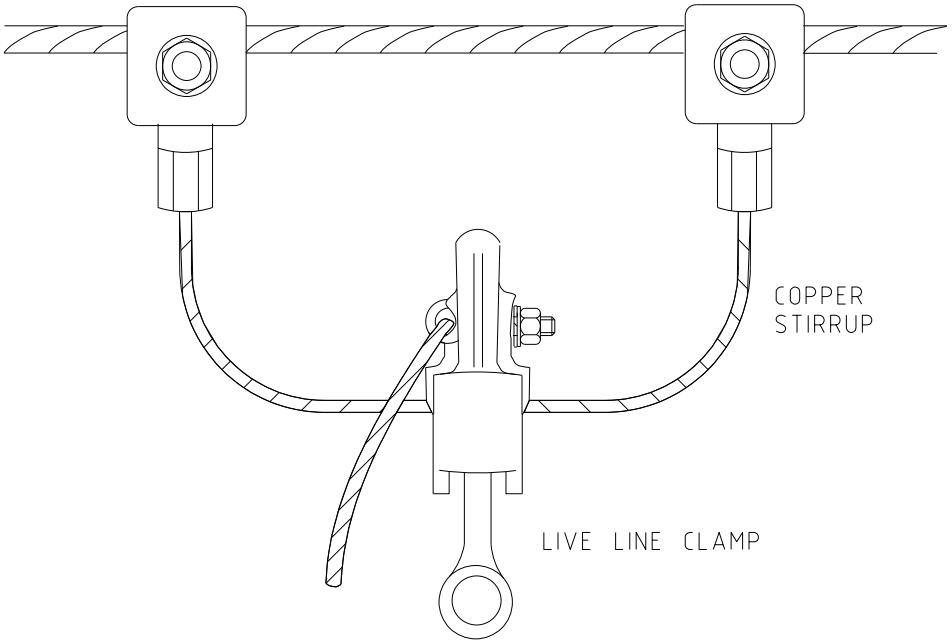
TAPS ON HV MAIN LINE CONNECTIONS

REVISION	DATE
A	15/04/2021

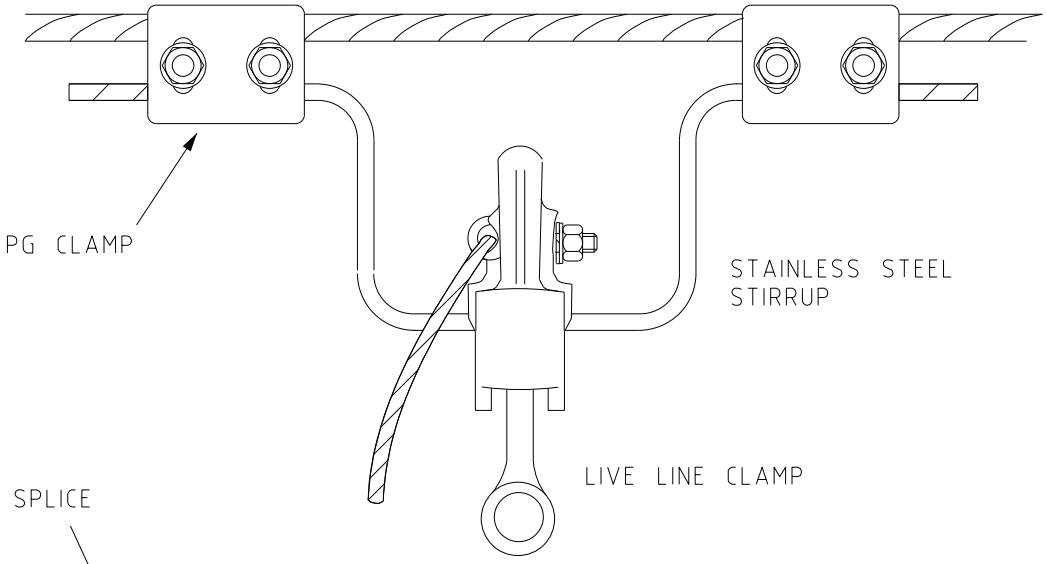
DRAWING No.

R8-5

AAC/AAAC, COPPER, SCGZ CONDUCTORS

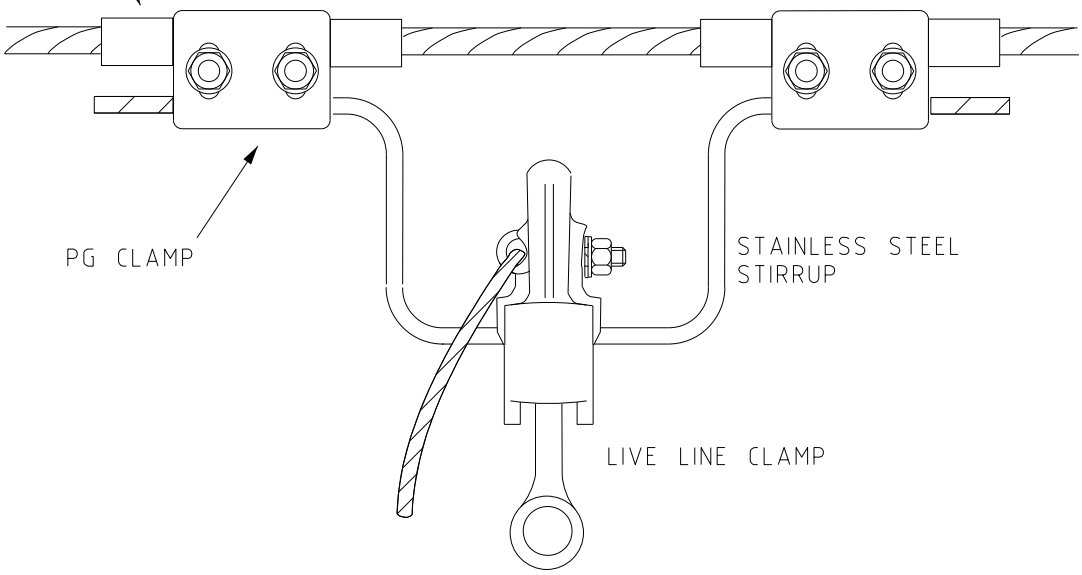


3/2.75 STEEL CONDUCTOR



SPLICE

7/1.60 SC/GZ CONDUCTOR



HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

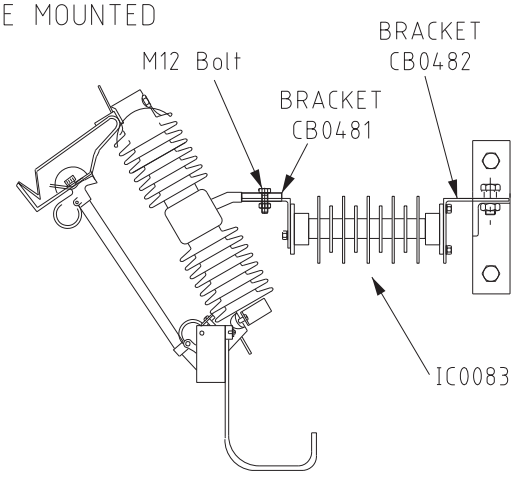
STIRRUP LIVE LINE CLAMP TAP OFF

REVISION	DATE
A	12/03/2021

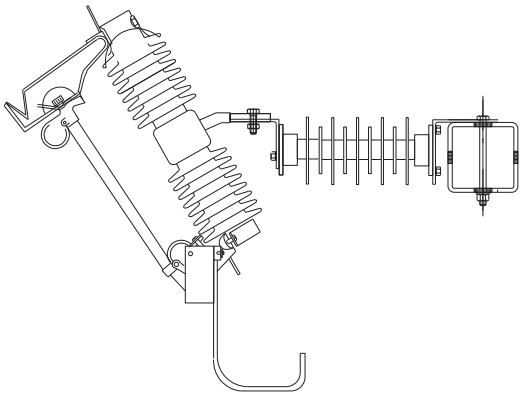
DRAWING No.

R8-6

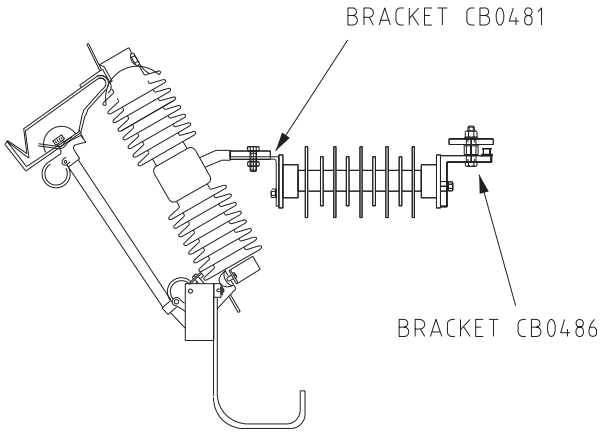
POLE MOUNTED



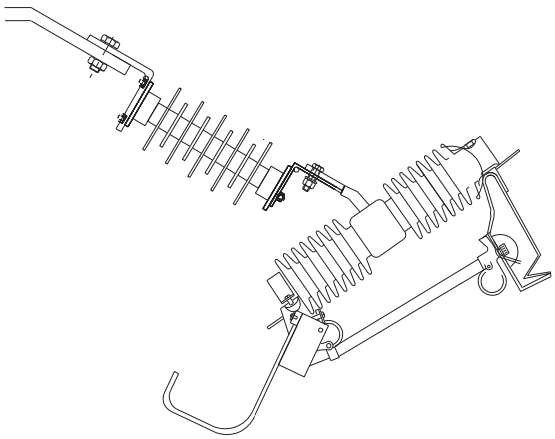
CROSS-ARM MOUNTED



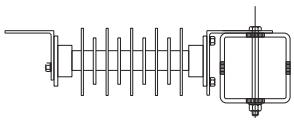
TERMINATION POLE TOP SWITCH



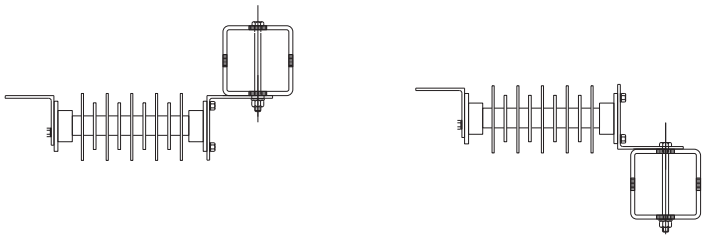
EXTENTION ARM MOUNTED



ALTERNATE CROSS-ARM MOUNTING



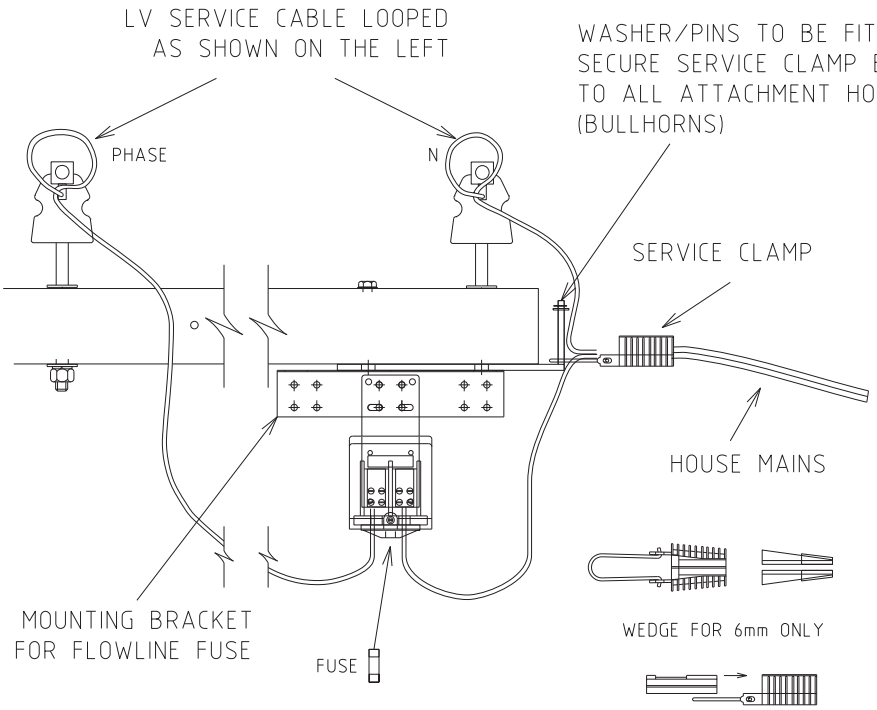
STANDARD MOUNTING



MOUNTING VARIATIONS ON
EXISTING STRUCTURES FOR FITTING
& BARREL SWING CLEARANCE

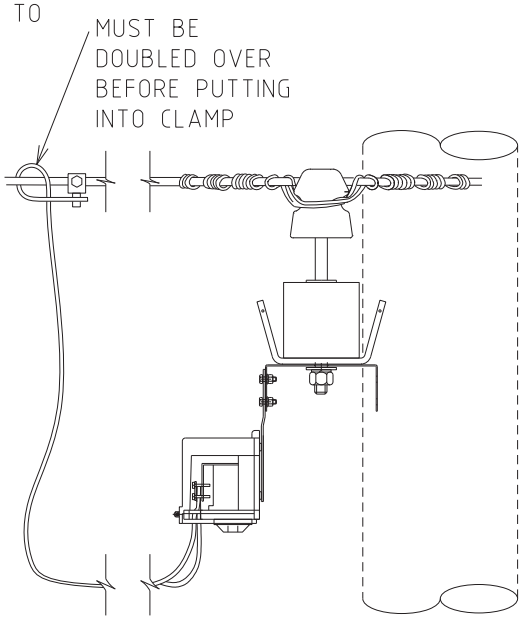
NOTES:
1. STANDARD 170kV BIL EXPULSION DROPOUT FUSE UP TO 33kV WITH STANDOFF INSULATOR FOR ALL INSTALLATIONS.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	DROPOUT FUSE MOUNTING DETAILS WITH MOUNTING BRACKET	REVISION E	DATE 06/11/2020
		DRAWING No. R10-1	

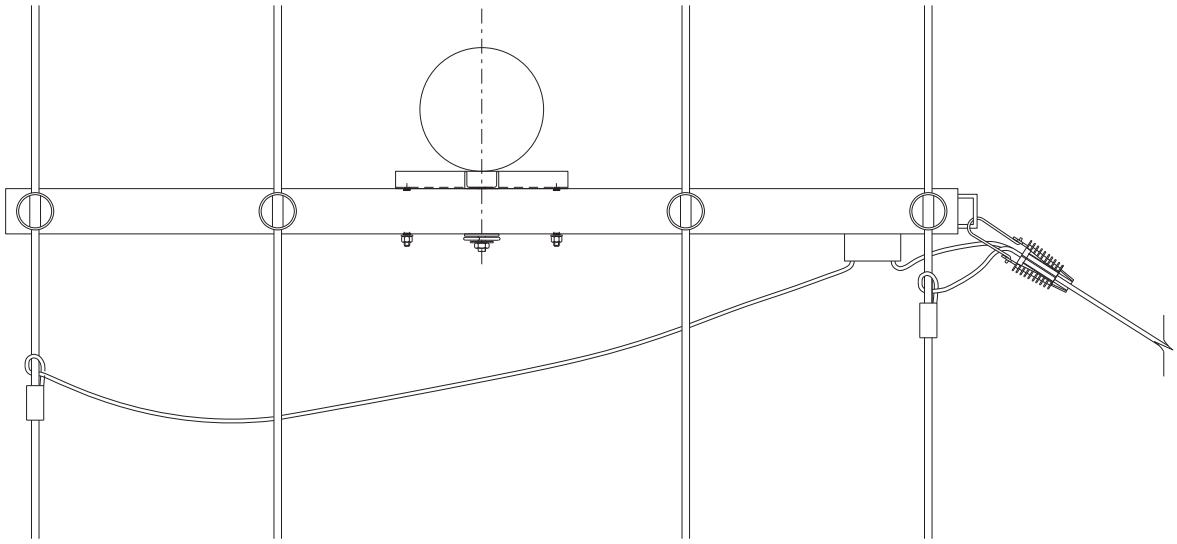


SERVICE CABLE CONNECTION FRONT VIEW

HOUSE SERVICE CLAMP



SERVICE CABLE CONNECTION SIDE VIEW



SERVICE CABLE CONNECTION CROSSING THE POLE

NOTES:

1. SERVICE WIRE TO BE INSTALLED AT A SAFE DISTANCE FROM THE POLE WITH ENOUGH CLEARANCE TO NOT TOUCH THE POLE.
2. FLOWLINE BOX WHEN MOUNTED ON THE SAME SIDE OF THE CROSSARM THAT THE SERVICE IS ATTACHED, WILL PROVIDE BETTER CLEARANCE.
3. WHEN THERE IS INADEQUATE CLEARANCE A RISK ASSESSMENT IS REQUIRED AND ADDITIONAL INSULATION OR SECURING METHOD MUST BE APPLIED.
4. ALL SERVICES MUST BE FUSED

HORIZON POWER

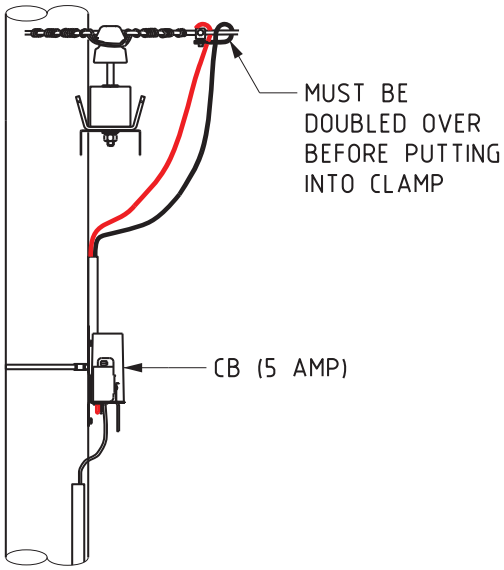
DISTRIBUTION CONSTRUCTION STANDARDS

FLOWLINE FUSE MOUNTING AND SERVICE TERMINATION

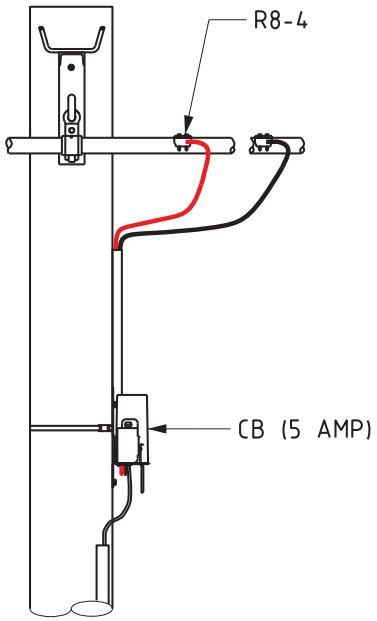
REVISION	DATE
E	APRIL 18

DRAWING No.

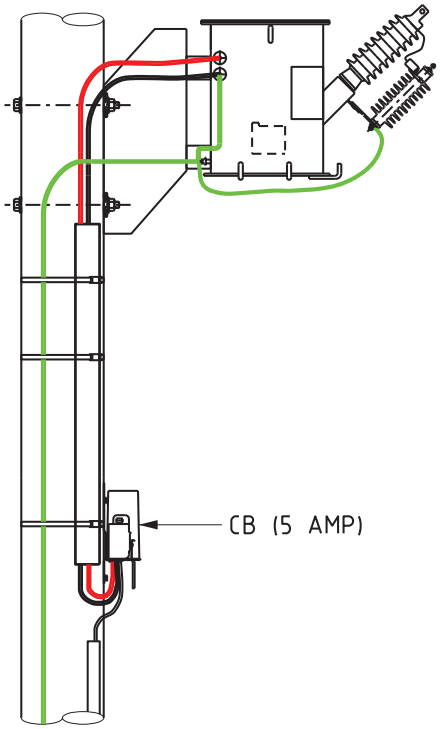
R11



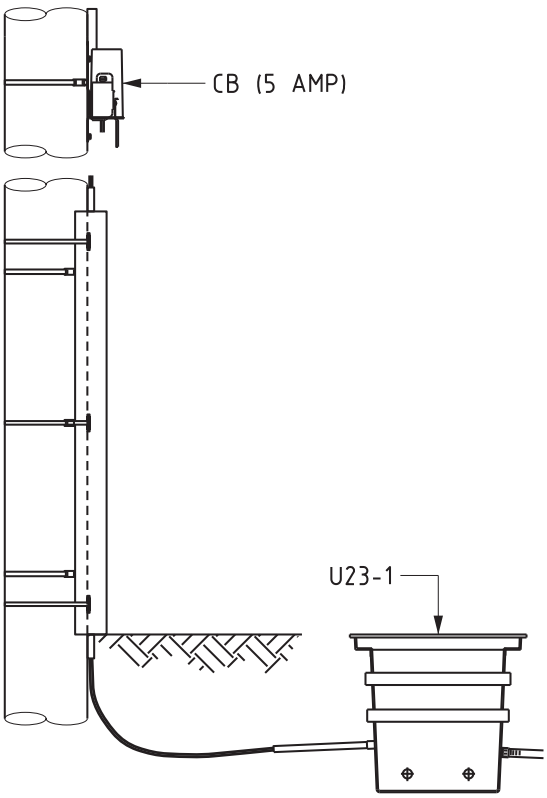
LV AERIAL CONNECTION SIDE VIEW



LV ABC CONNECTION SIDE VIEW



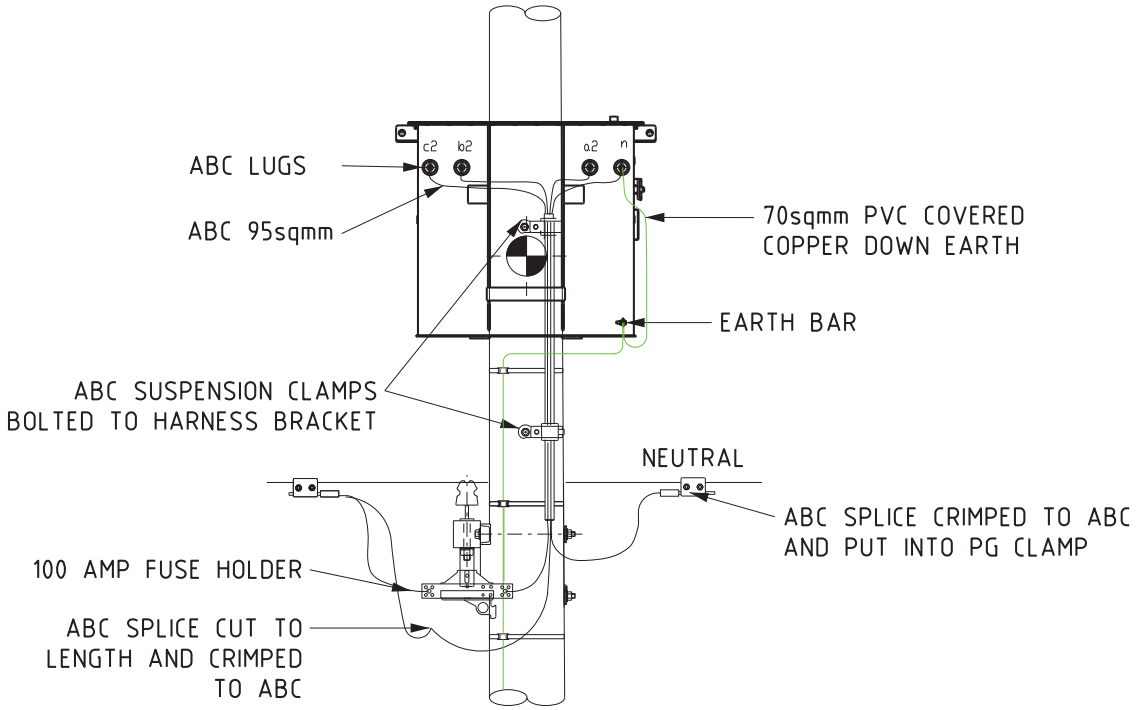
LV TRANSFORMER CONNECTION SIDE VIEW



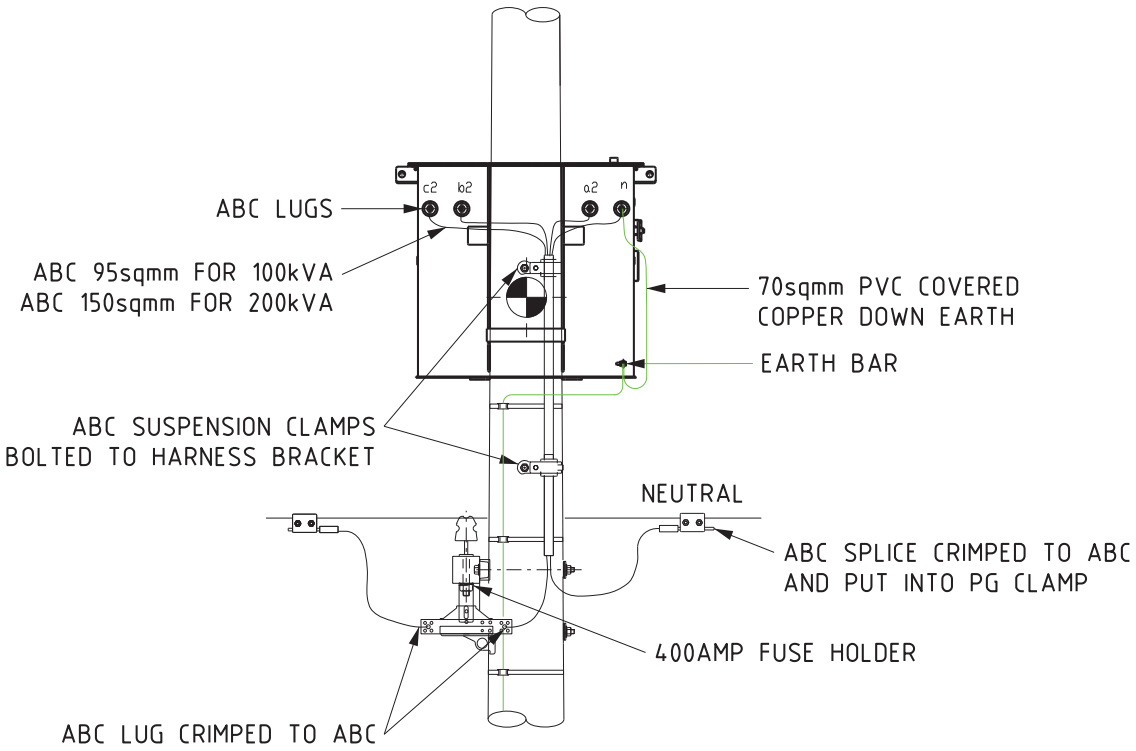
LV UMS CONNECTION SIDE VIEW

NOTE 1
THIS DRAWING SHOWS LV SUPPLY ARRANGMENT ONLY.
REFER TO RELEVANT POLE MOUNTED EQUIPMENT FOR
DETAILS OF CONSTRUCTION

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	LV SUPPLY TO POLE MOUNTED EQUIPMENT	REVISION B	DATE APRIL 18
		DRAWING No. R11-1	

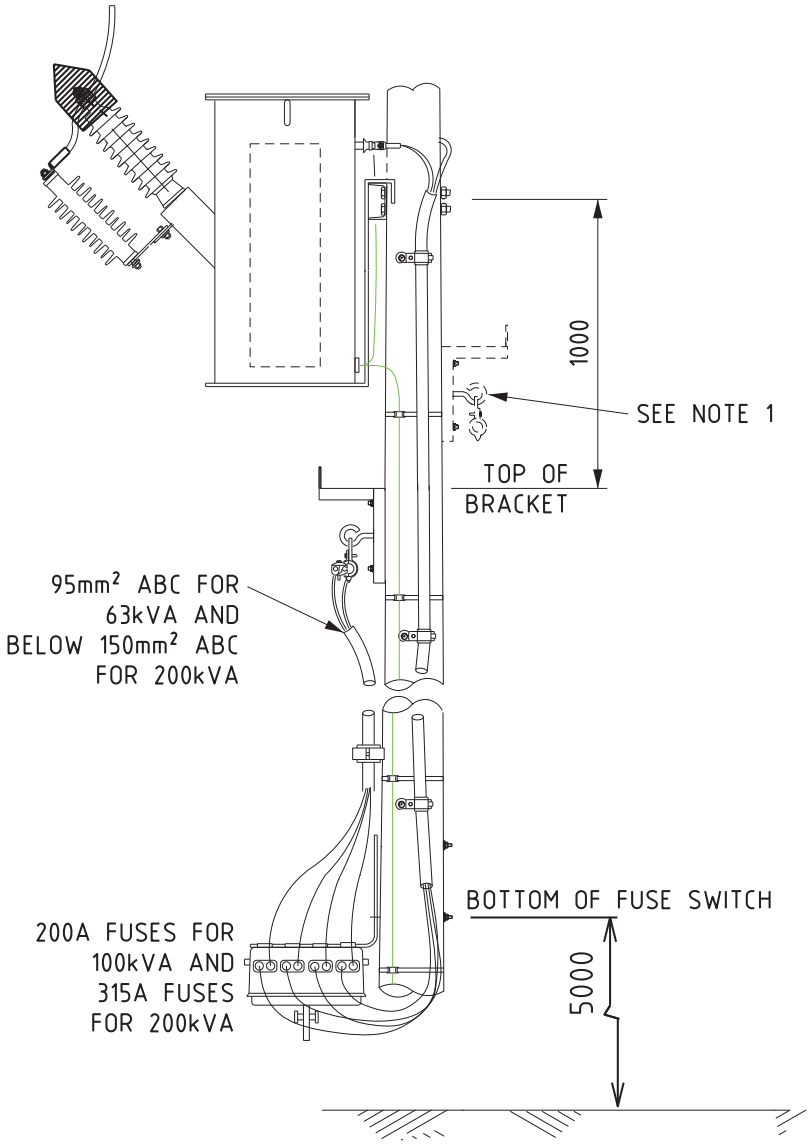


25 AND 63kVA TO BARE CONDUCTOR

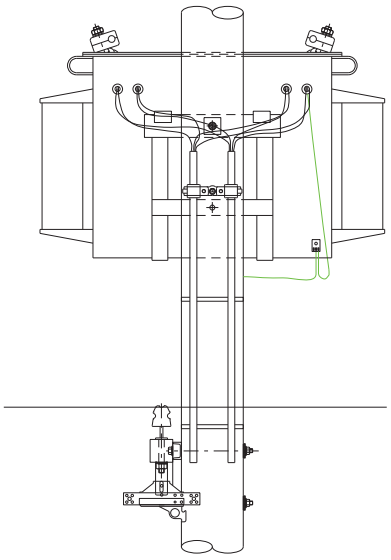


100 AND 200kVA TO BARE CONDUCTOR

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE 01/10/17
	TRANSFORMER BARE LV FUSING DETAILS		DRAWING No. R12-1



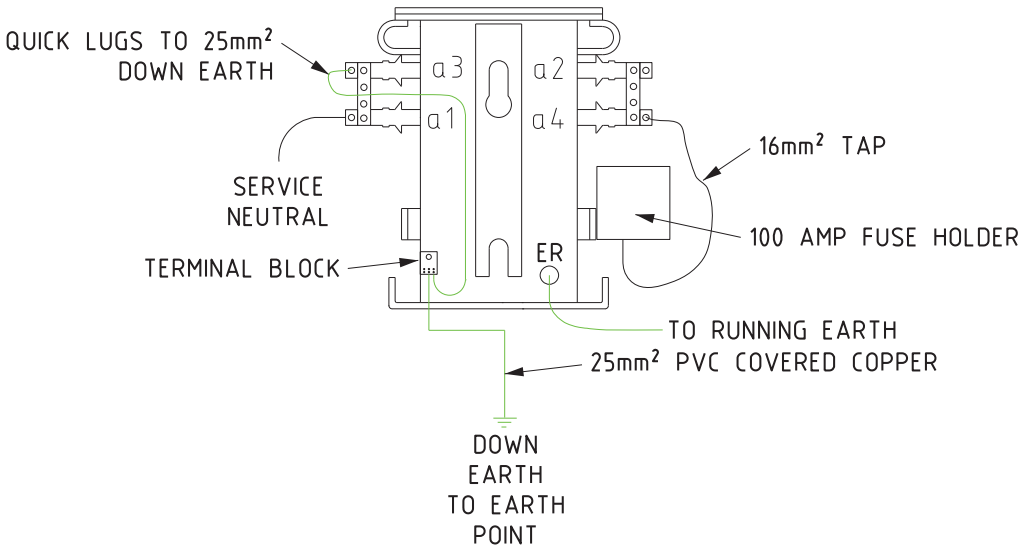
100 and 200kVA TO ABC



315kVA TO ABC OR LV BARE
REFER TO R12-3
FOR OPTIONS

NOTES:

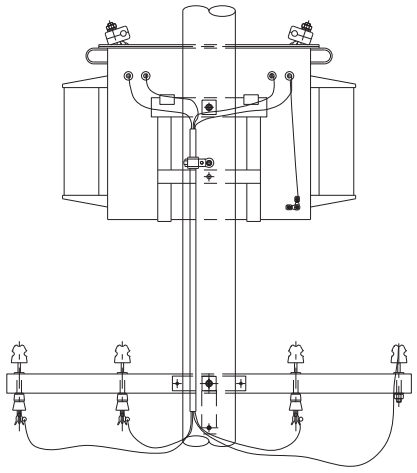
1. ALTERNATIVE POSITION FOR BRACKET IF CABLE CLEARANCE CANNOT BE OBTAINED
2. FUSES PREFERABLY ON ROADSIDE



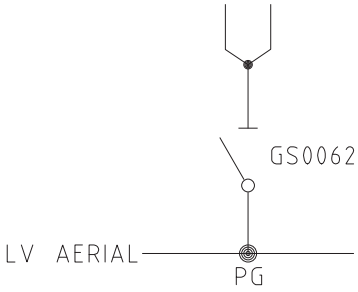
SINGLE PHASE 10 AND 25kVA

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE OCT 17
	TRANSFORMER LV FUSING DETAILS		DRAWING No. R12-2

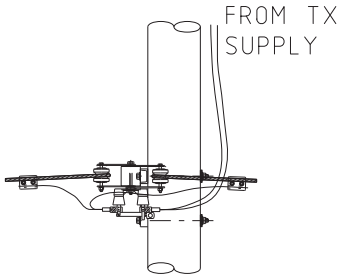
OPTION 1

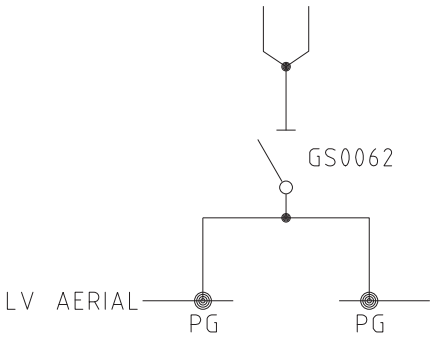


1 PHASE ONLY
SHOWN FOR CLARITY
SINGLE LINE REPRESENTATION



OPTION 2





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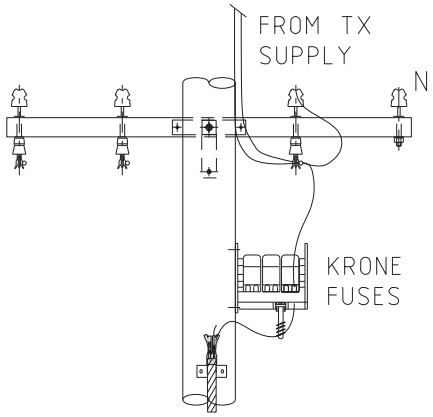

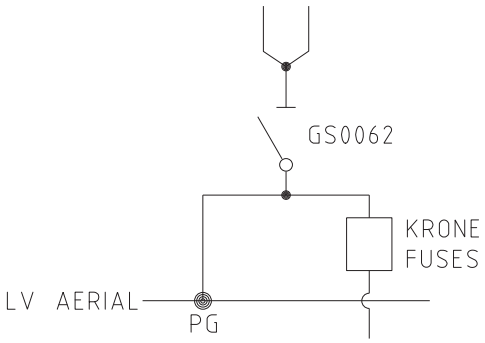

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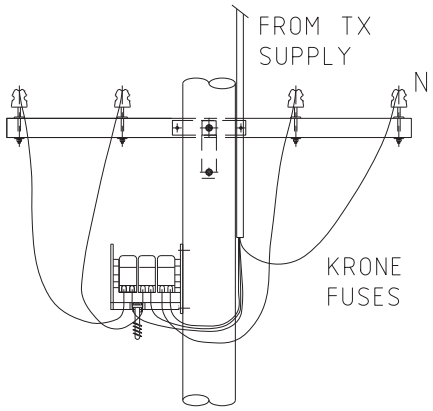
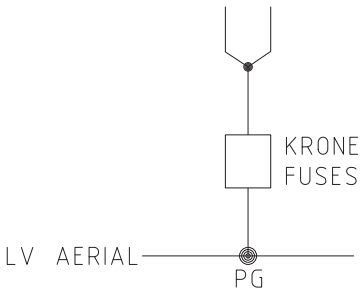




HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

OPERATIONS

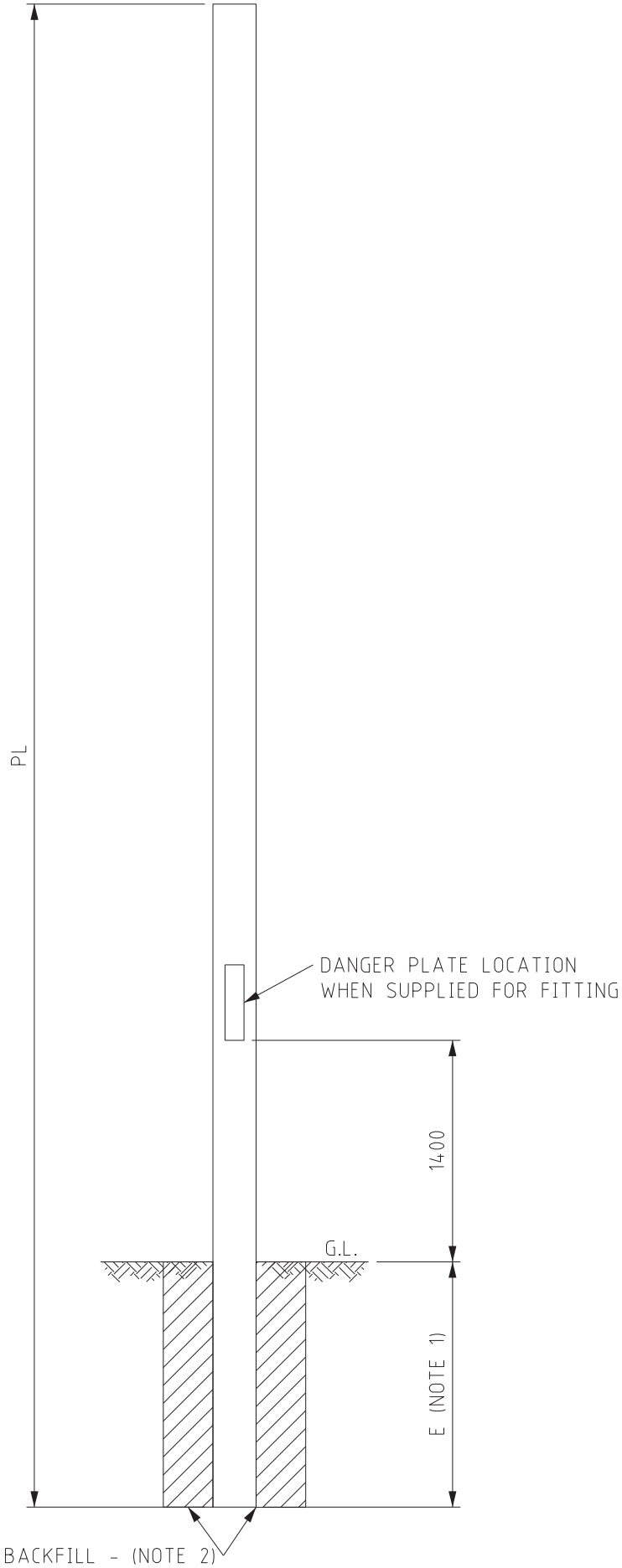
REFERENCE DRAWING

TRANSFORMER LV
ISOLATION DETAILS

REVISION	DATE
B	JUNE 2011

DRAWING No.

R12-3



NOTE:

1. STANDARD POLE EMBEDMENT DEPTH

POLE LENGTH	EMBEDMENT DEPTH
9.5m	1.55m
11.0m	1.70m
12.5m	1.85m
14.0m	2.00m

EXAMPLE 9.5m POLE

E = (PL + 6.0) / 10
= (9.5 + 6.0) / 10
= (15.5) / 10
= 1.55m

2. BACKFILL SHOULD BE MECHANICALLY COMPACTED IN 300mm LAYERS AND IN STEPS OF 150mm LAYERS IF HAND COMPACTED.
3. REFER TO R13-2 WHERE CONCRETE BACKFILL IS REQUIRED TO ENHANCE POLE FOUNDATION STRENGTH.
   SCENARIOS INCLUDE:
   A. INSTALLATION IN CYCLONIC REGION C & D (MANDATORY)
   B. INSTALLATION IN AREAS WITH POOR SOIL EVALUATION BY ENGINEERED ASSESSMENT.
   C. SELF SUPPORTIVE POLE DETERMINED BY ENGINEERED ASSESSMENT.

HORIZON POWER

DISTRIBUTION CONSTRUCTION STANDARDS

POLE EMBEDMENT DEPTH AND DANGER PLATE

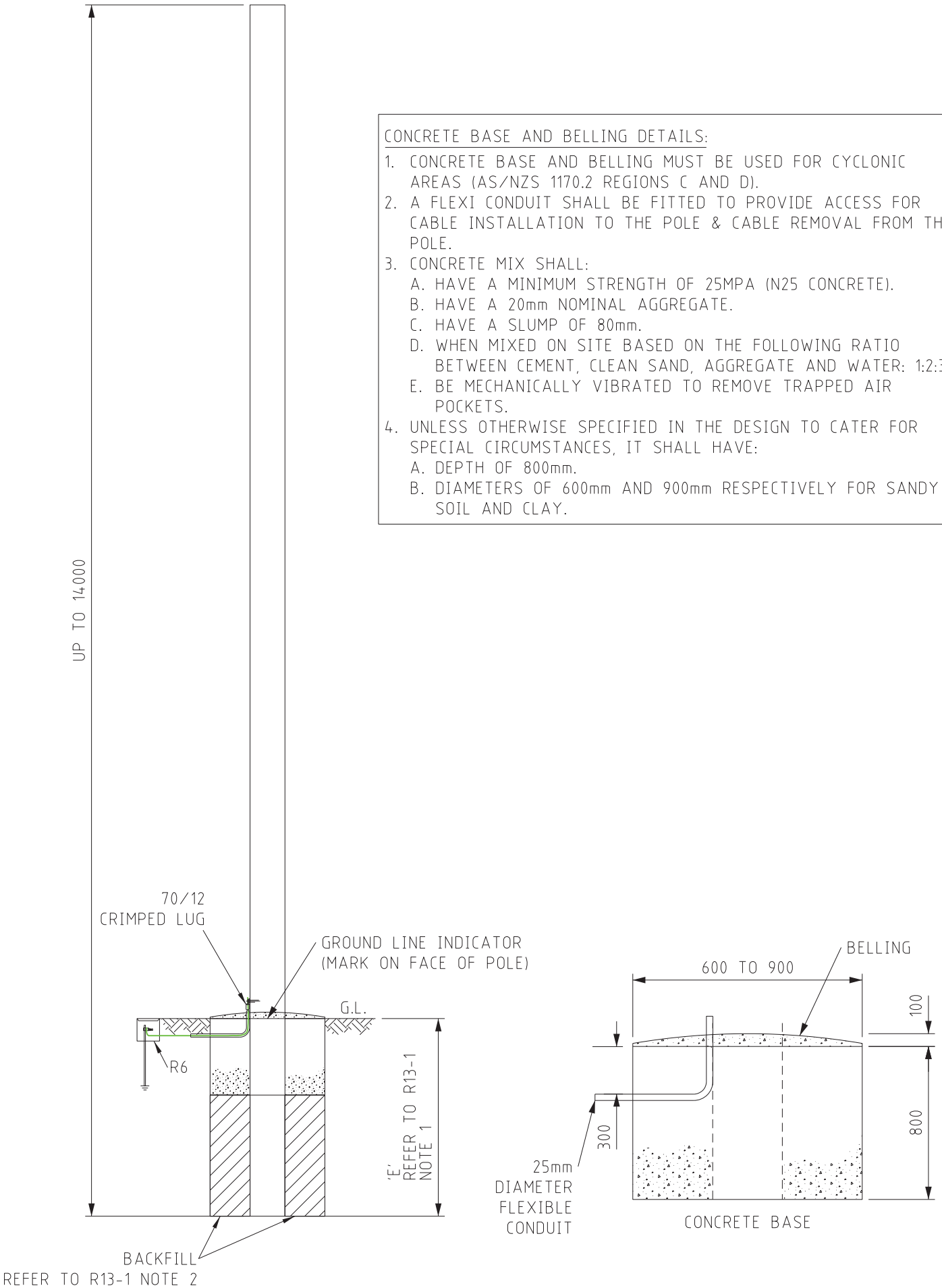
REVISION	DATE
C	22/02/2021

DRAWING No.

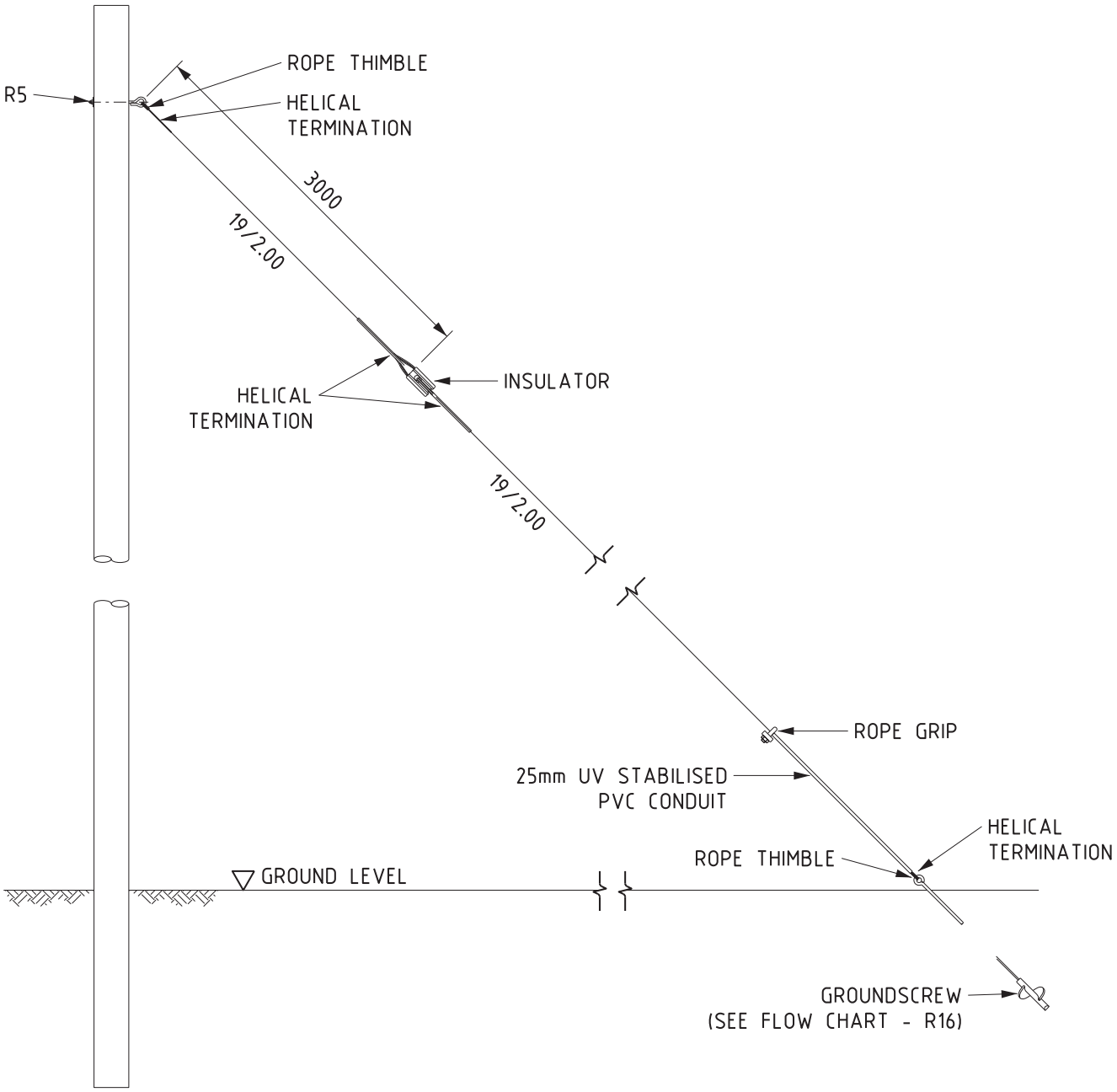
R13-1

CONCRETE BASE AND BELLING DETAILS:

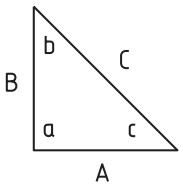
1. CONCRETE BASE AND BELLING MUST BE USED FOR CYCLONIC AREAS (AS/NZS 1170.2 REGIONS C AND D).
2. A FLEXI CONDUIT SHALL BE FITTED TO PROVIDE ACCESS FOR CABLE INSTALLATION TO THE POLE & CABLE REMOVAL FROM THE POLE.
3. CONCRETE MIX SHALL:
   A. HAVE A MINIMUM STRENGTH OF 25MPA (N25 CONCRETE).
   B. HAVE A 20mm NOMINAL AGGREGATE.
   C. HAVE A SLUMP OF 80mm.
   D. WHEN MIXED ON SITE BASED ON THE FOLLOWING RATIO BETWEEN CEMENT, CLEAN SAND, AGGREGATE AND WATER: 1:2:3:1.
   E. BE MECHANICALLY VIBRATED TO REMOVE TRAPPED AIR POCKETS.
4. UNLESS OTHERWISE SPECIFIED IN THE DESIGN TO CATER FOR SPECIAL CIRCUMSTANCES, IT SHALL HAVE:
   A. DEPTH OF 800mm.
   B. DIAMETERS OF 600mm AND 900mm RESPECTIVELY FOR SANDY SOIL AND CLAY.



HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION D	DATE 22/02/2021
	STEEL DISTRIBUTION POLE CONCRETE BASE AND BELLING DETAILS	DRAWING No. R13-2	



INSTALLATION ANGLES AND TENSIONS OF STAYS					
ANGLE a (DEGREES)	ANGLE b (DEGREES)	ANGLE c (DEGREES)	A= (LENGTH)	C= (LENGTH)	C (TENSION)
90	60	30	Bx1.73	Bx2	SUM OF LINE LOAD x 1.15
90	45	45	B	Bx1.41	SUM OF LINE LOAD x 1.41
90	30	60	Bx0.57	Bx1.15	SUM OF LINE LOAD x 2

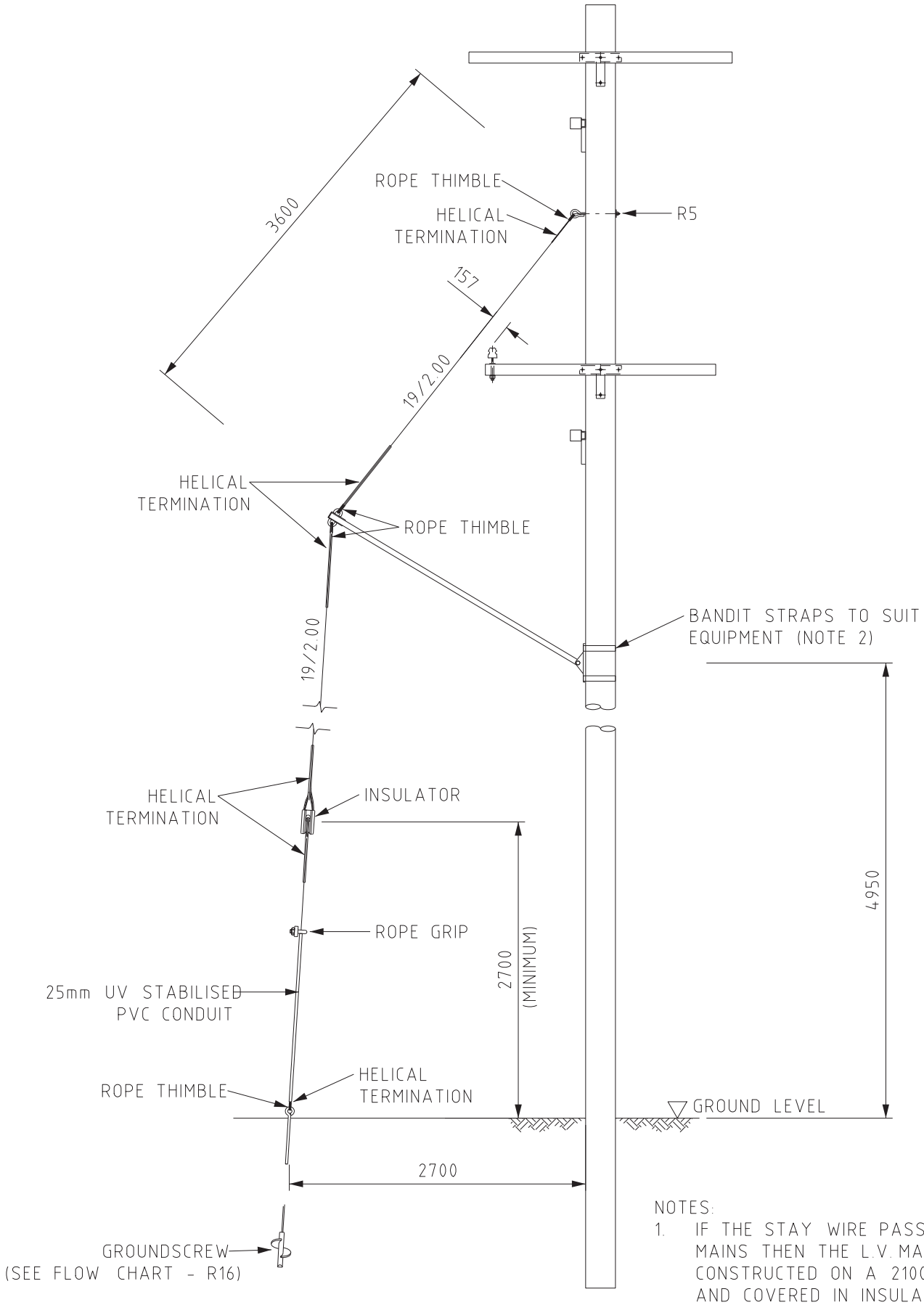


A = POSITION OF STAY ROD FROM BASE OF POLE
B = HEIGHT OF STAY ATTACHMENT ABOVE GROUND
C = LENGTH OF STAY WIRE

NOTE:

1. IF THE STAY WIRE PASSES THROUGH L.V. MAINS THEN THE L.V. MAINS MUST BE CONSTRUCTED ON A 2100mm CROSSARM AND COVERED IN INSULATING MATERIAL
2. STAY INSULATOR CAN BE ELIMINATED ONLY IF RISK OF EPR ZONE EXTENSION HAS BEEN ASSESSED.

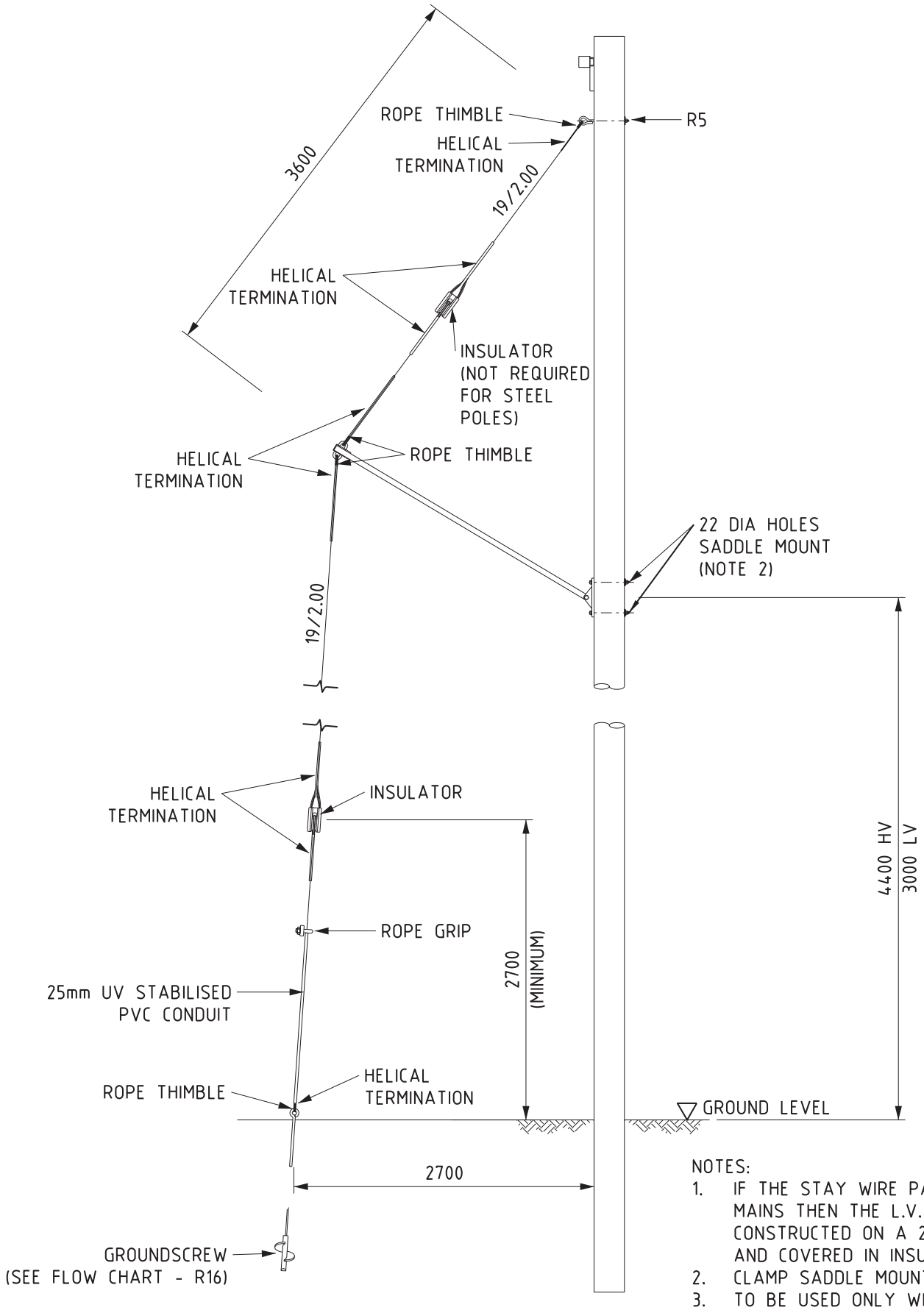
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION B	DATE NOV 18
	GROUND STAY	DRAWING No. R14-1	



NOTES:

1. IF THE STAY WIRE PASSES THROUGH L.V. MAINS THEN THE L.V. MAINS MUST BE CONSTRUCTED ON A 2100mm CROSSARM AND COVERED IN INSULATING MATERIAL
2. 32mm WIDE BANDIT STRAP ON OUTRIGGER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS OPERATIONS	REFERENCE DRAWING	REVISION B	DATE MARCH 14
	OUTRIGGER STAY HV AND LV TEE-OFF	DRAWING No. R14-2	



NOTES:

1. IF THE STAY WIRE PASSES THROUGH L.V. MAINS THEN THE L.V. MAINS MUST BE CONSTRUCTED ON A 2100mm CROSSARM AND COVERED IN INSULATING MATERIAL
2. CLAMP SADDLE MOUNT (SI # FM0900).
3. TO BE USED ONLY WHERE GROUND STAY CANNOT BE USED.
4. STAY ANGLE IF VARIED MUST BE AS PER DESIGN.

HORIZON POWER

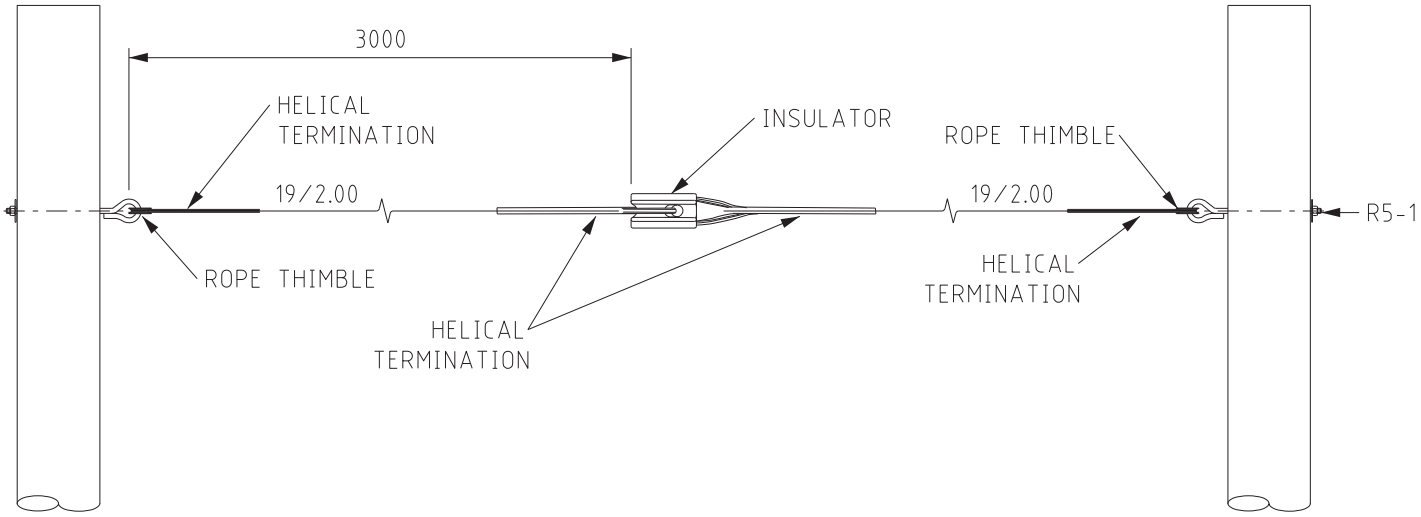
DISTRIBUTION CONSTRUCTION STANDARDS

OUTRIGGER STAY
HV OR LV TERMINATION ONLY
HV AND LV INTERMEDIATE ONLY

REVISION	DATE
C	NOV 18

DRAWING No.

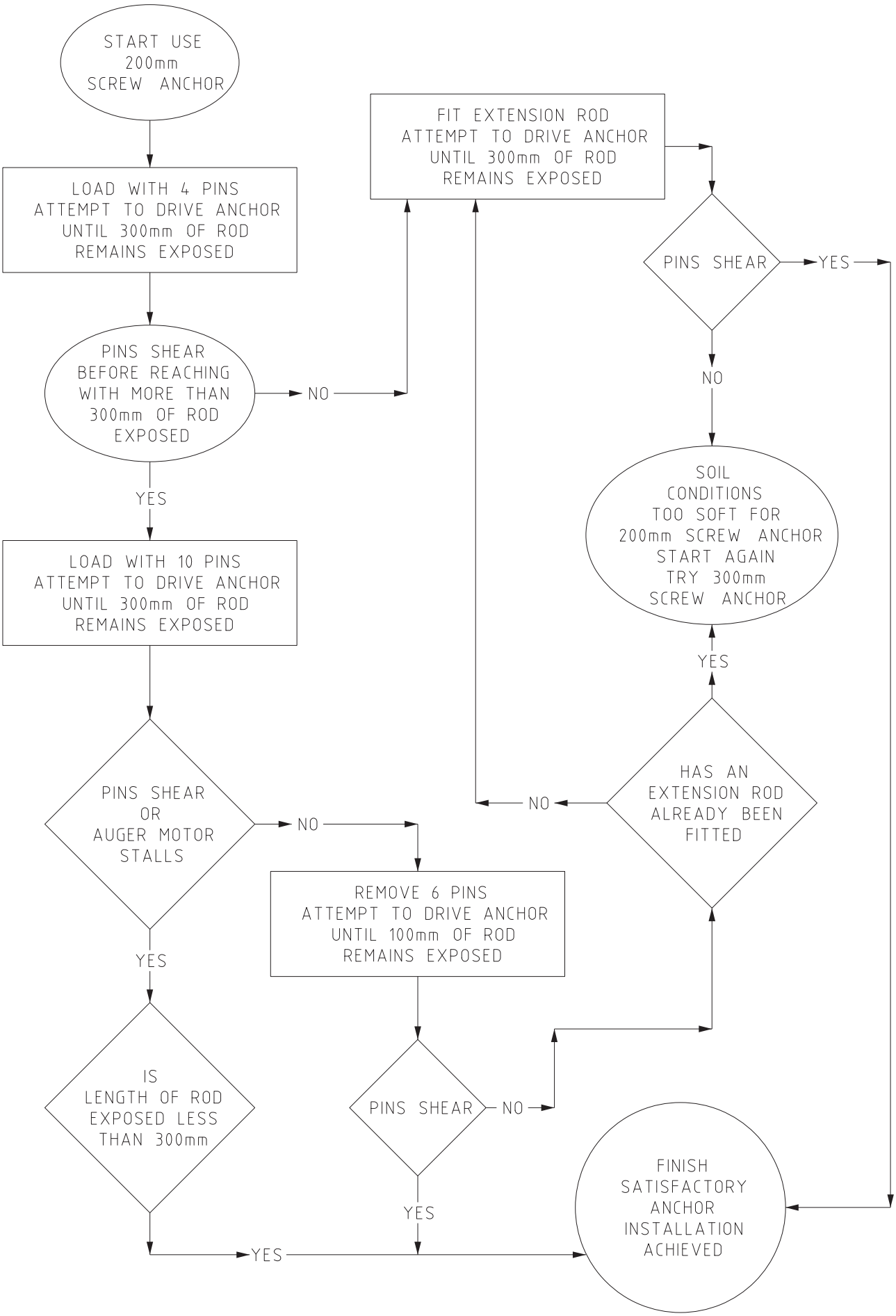
R14-3



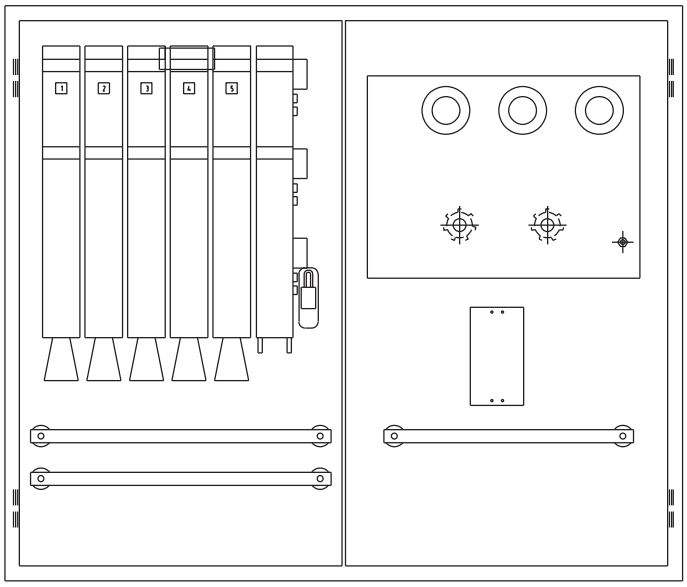
NOTES:

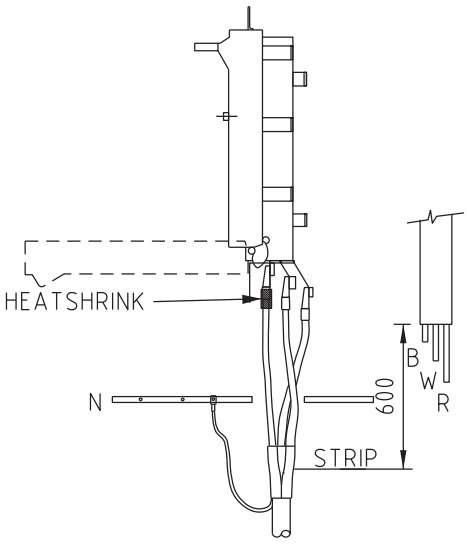
1. STAY INSULATOR/S MUST BE FITTED 3.0m FROM POLE. STAY MAY REQUIRE TWO INSULATORS IF OVER CONDUCTOR AT BOTH ENDS.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION C	DATE 20/01/2021
	AERIAL STAY	DRAWING No. R14-5	



HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION B	DATE JUNE 2011
	SCREW IN ANCHOR FLOW CHART	DRAWING No. R16	
OPERATIONS			

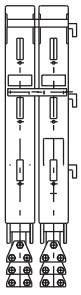




CABLE TO FUSE SWITCH
(REF R25)

5 x 400 AMP COVERS SUPPLIED WITH MPS

630 AMP COVER WITH 600 AMP LINKS - OPTIONAL



2 X 630 COVERS FIXED TOGETHER WITH
600 AMP LINKS
1200 AMP ARRANGEMENT - OPTIONAL

NOTES:

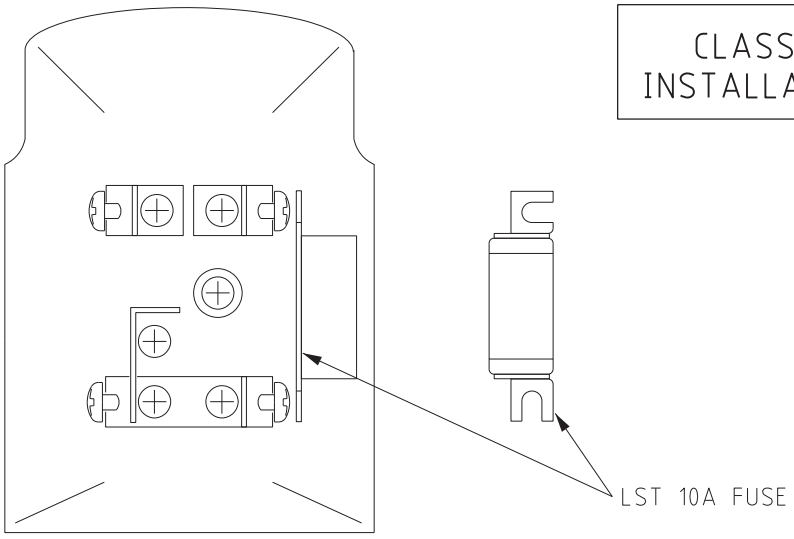
1. MPS COMES COMPLETE WITH TRANSFORMER AND 5 x LV SWITCHES INCLUDING 630 AMP BASES.
2. CABLE SUPPLIED WITH MPS TRANSFORMER RANGE - 160, 315 AND 630 kVA

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION A	DATE JUNE 18
	MPS SUBSTATION UP TO 630 kVA	DRAWING No. R22	

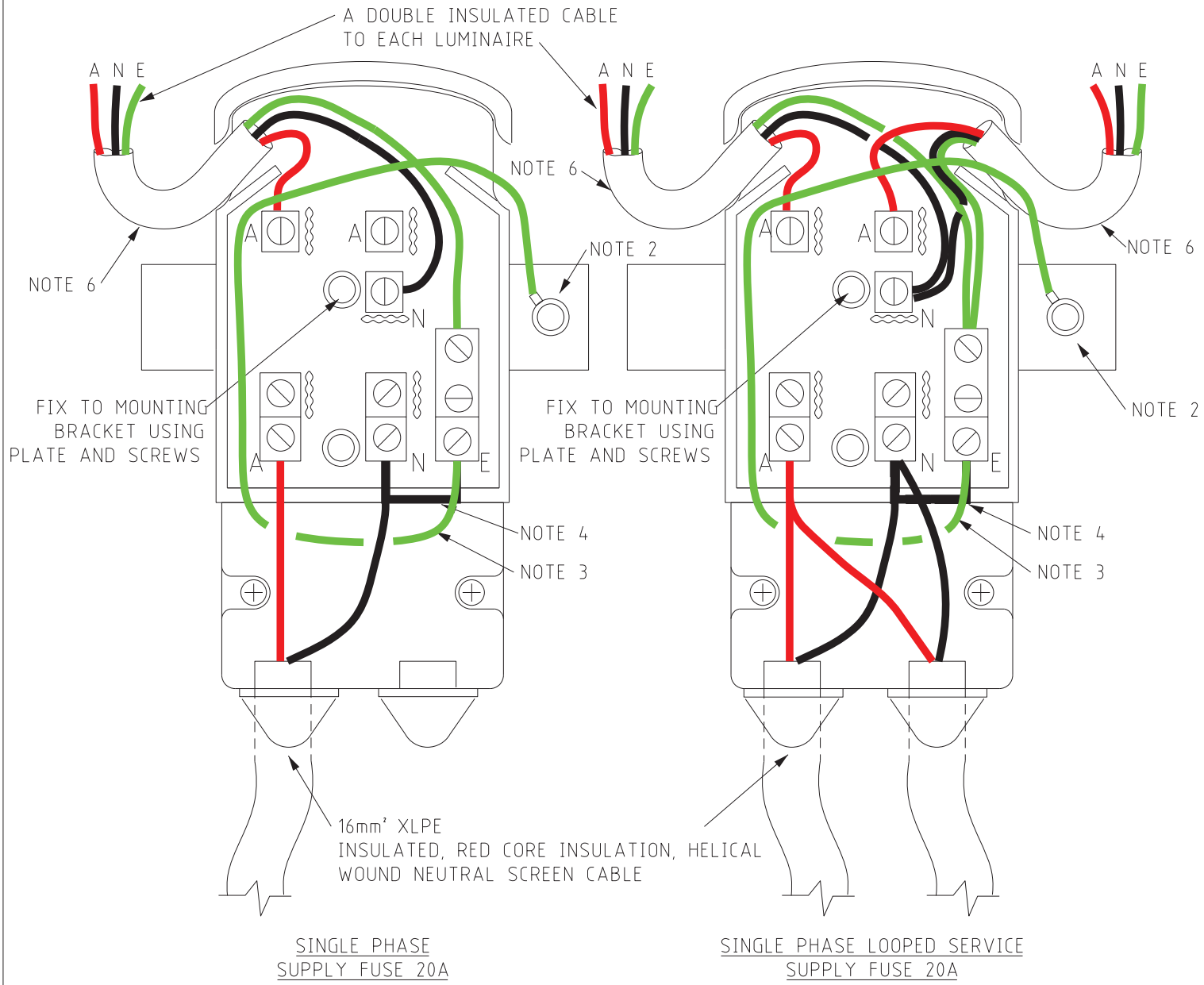
NOTE:

1. LST 10A FUSE (STOCK CODE: GF1300) MUST BE INSTALLED FOR ALL INSTALLATIONS.
2. CONNECT EARTH WIRE TO MOUNTING BRACKET USING TERMINAL LUG (FL0163) AND M6 SCREW (AB2820).
3. CONNECT 6mm EARTH WIRE (EE1364) TO POLE MOUNTING BRACKET FROM EARTH TERMINAL.
4. MEN BRIDGE OR 6mm EARTH WIRE (EE1364) LOOP.
5. IF EXISTING LUMINAIRE CABLE IS TPS TYPE OR OLDER, THEN INSTALLATION REMAINS AS CLASS I. OTHERWISE REFER TO R26-4 FOR CLASS II INSTALLATION.
6. LUMINAIRE CABLE SHEATH MUST ENTER CUT-OUT HOUSING AS SHOWN.

CLASS I INSTALLATION



VIEW ON INSIDE OF FRONT COVER



SINGLE PHASE SUPPLY FUSE 20A

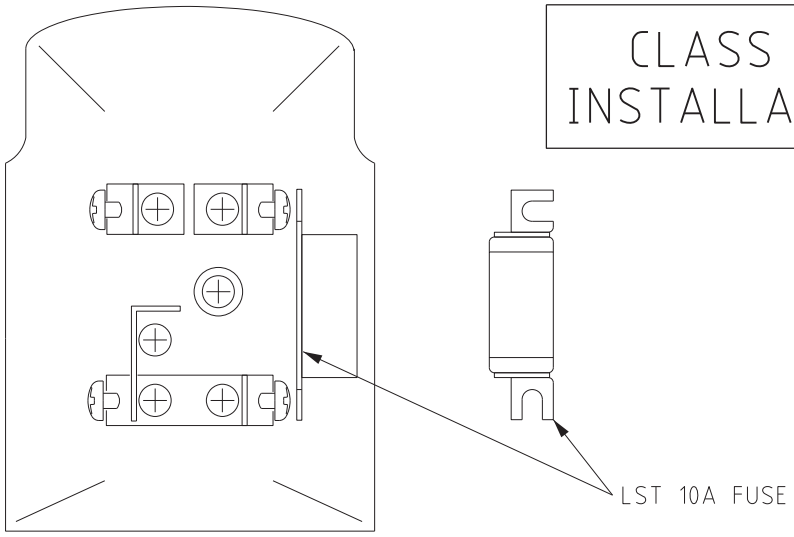
SINGLE PHASE LOOPED SERVICE SUPPLY FUSE 20A

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	CLASS I STREETLIGHT CUTOUT SINGLE PHASE SUPPLY FOR CLASS I LUMINIARES	REVISION D DATE 23/07/2020 DRAWING No. R26-3

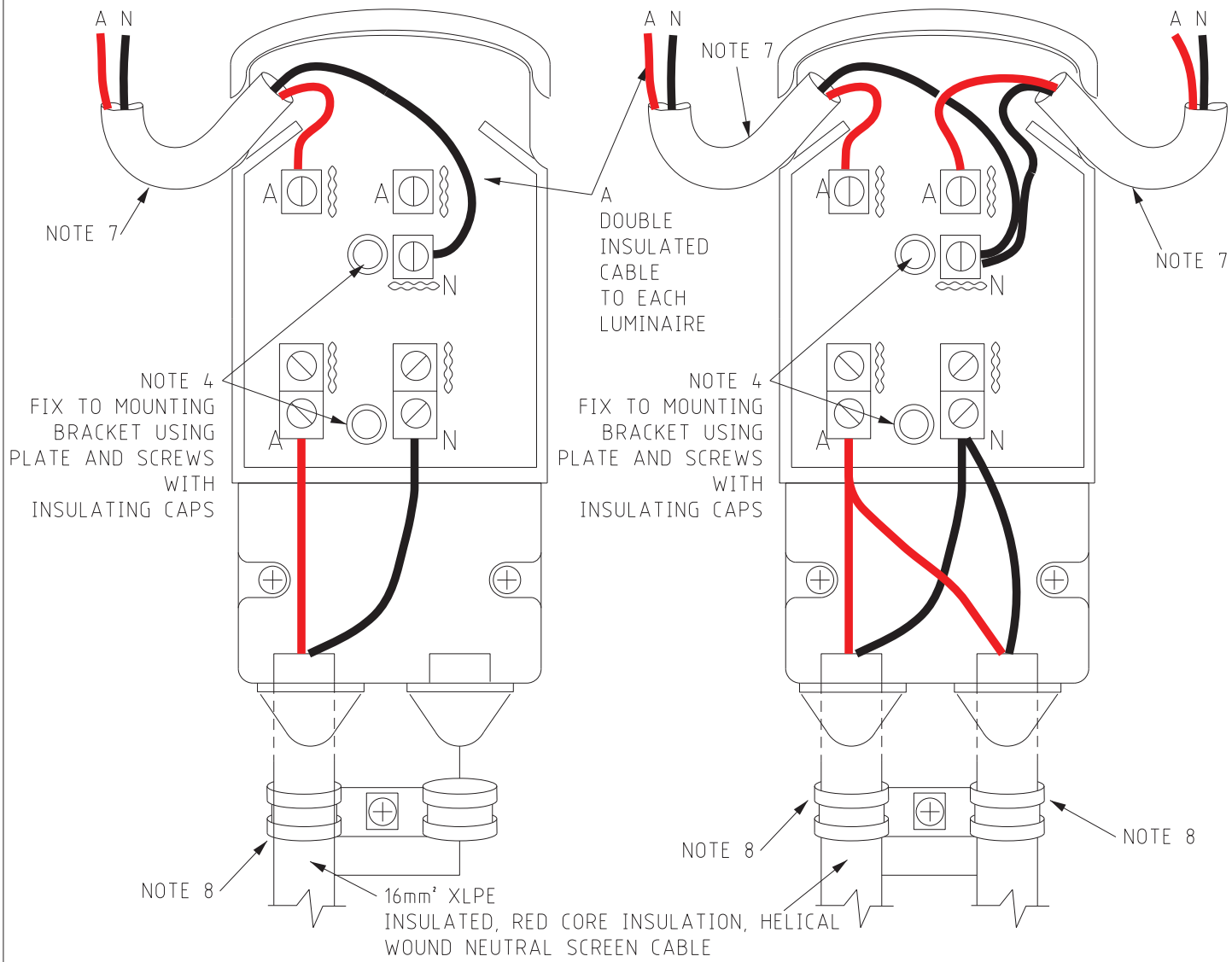
CLASS II INSTALLATION

NOTE:

1. LST 10A FUSE (STOCK CODE: GF1300) MUST BE INSTALLED FOR ALL INSTALLATIONS.
2. ONLY SUITABLE FOR CLASS II LED LUMINAIRES WITH A, N PREWIRED CABLE (NO EARTH)
3. DO NOT INSTALL MEN, EARTH TERMINALS OR EARTH CONNECTIONS FOR CLASS II.
4. FIT INSULATING CAPS OVER CUT-OUT MOUNTING SCREW HEADS.
5. FIT "CLASS II" IDENTIFICATION LABEL ON CUT-OUT COVER.
6. IF LUMINAIRE CABLE HAS EARTH WIRE R26-3 CLASS I MUST BE APPLIED.
7. LUMINAIRE CABLE SHEATH MUST ENTER CUT-OUT HOUSING AS SHOWN.
8. SUPPLY CABLES TO BE SECURED USING PROVIDED CABLE CLAMPS.



VIEW ON INSIDE OF FRONT COVER



SINGLE PHASE SUPPLY FUSE 20A

SINGLE PHASE LOOPED SERVICE SUPPLY FUSE 20A

HORIZON POWER

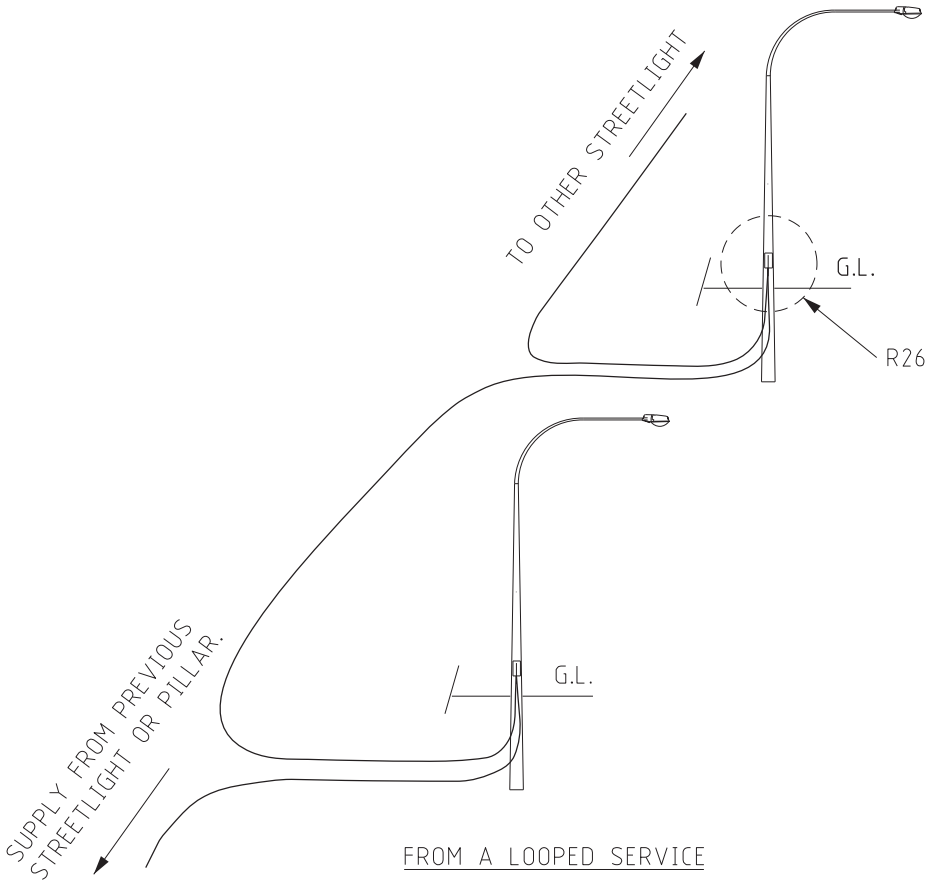
DISTRIBUTION CONSTRUCTION STANDARDS

CLASS II STREETLIGHT CUTOUT
SINGLE PHASE SUPPLY
FOR CLASS II LUMINIARES

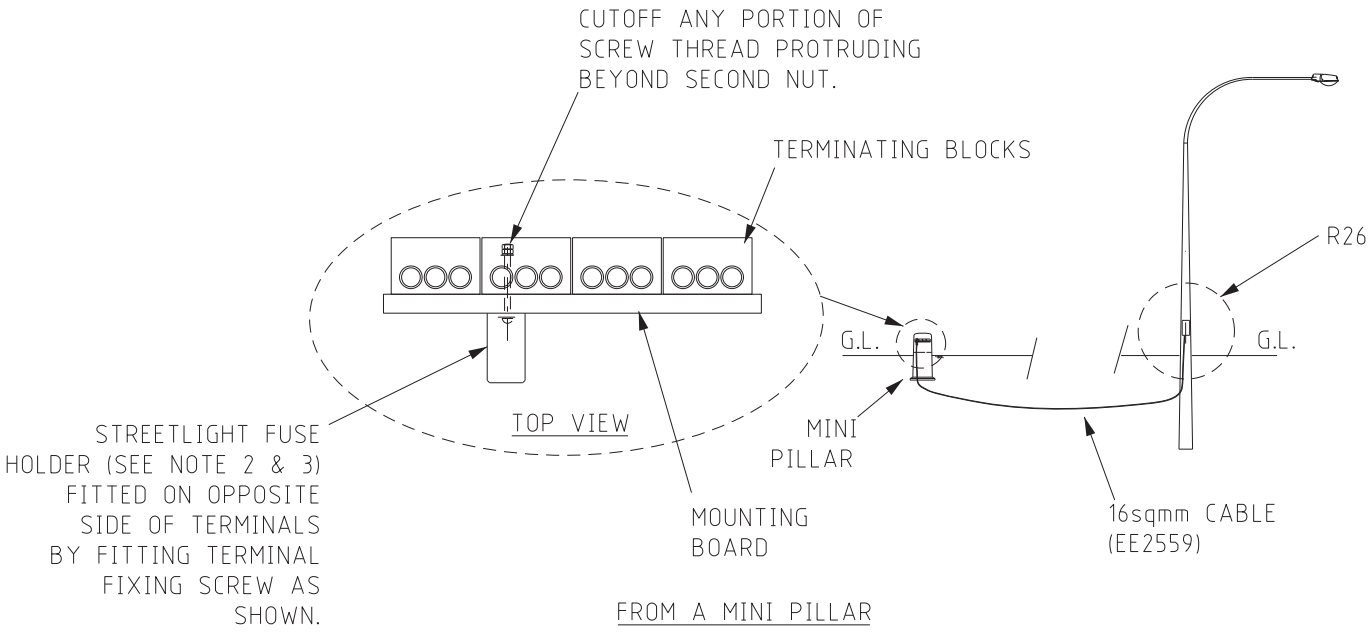
REVISION	DATE
A	23/07/2020

DRAWING No.

R26-4



FROM A LOOPED SERVICE

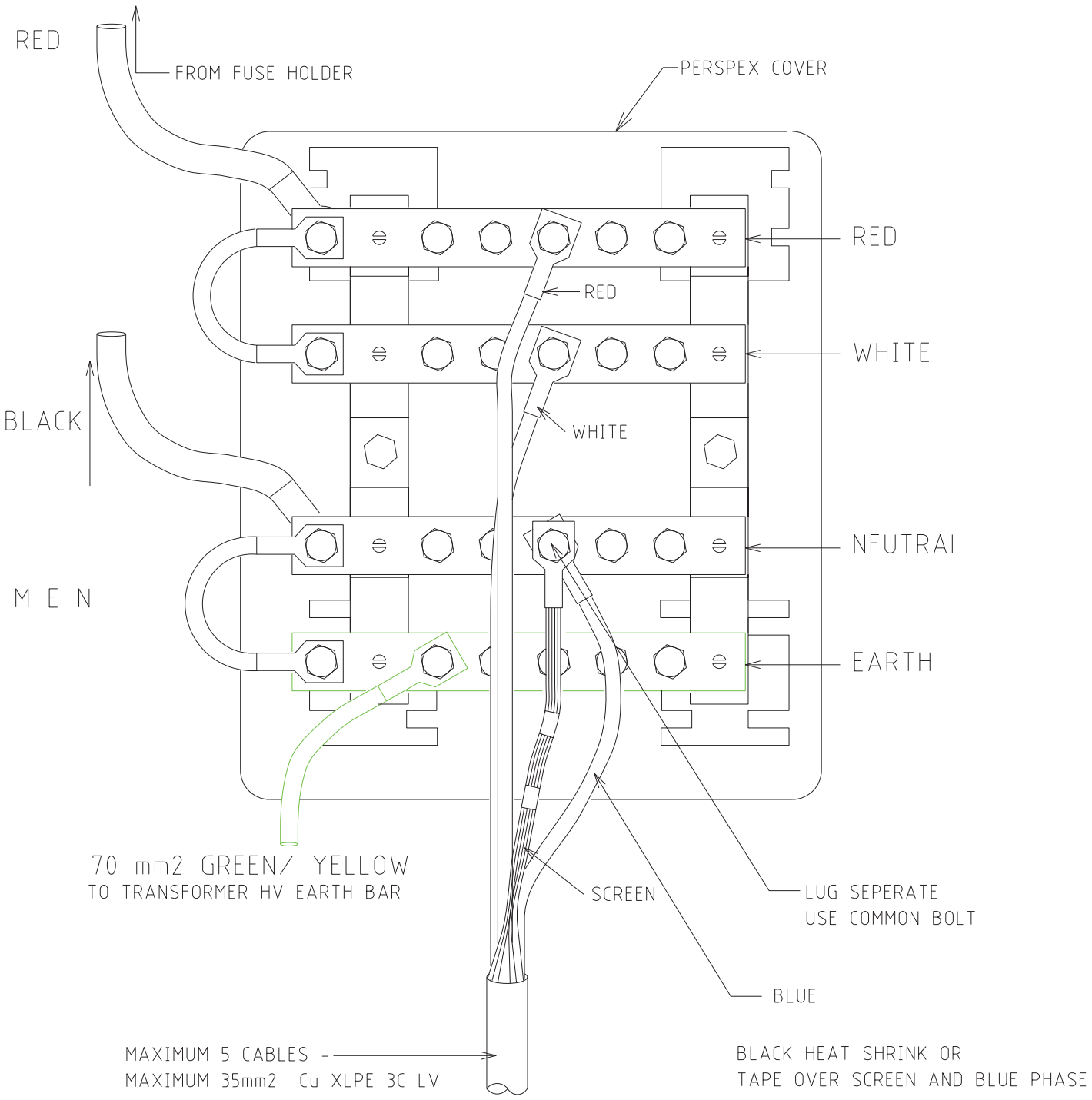


FROM A MINI PILLAR

NOTES FOR PILLAR CONNECTIONS.

1. DISTRIBUTE LIGHTING LOAD ACROSS THE PHASES WITHIN THE DEVELOPMENT.
2. DESIGNER TO USE EARTH FAULT LOOP CALCULATOR DM# 11672288 TO DETERMINE REDSPOT FUSE SIZE.
3. REFER TO U9-1 FOR UNI PILLAR INSTALLATION AND U8-2 FOR MINI PILLAR INSTALLATION.
4. REFER TO DETAILS IN DRAWING R26 SERIES.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	FUSING ARRANGEMENTS FOR STREETLIGHT COLUMNS	REVISION E | DATE 04/09/2020 DRAWING No. R27

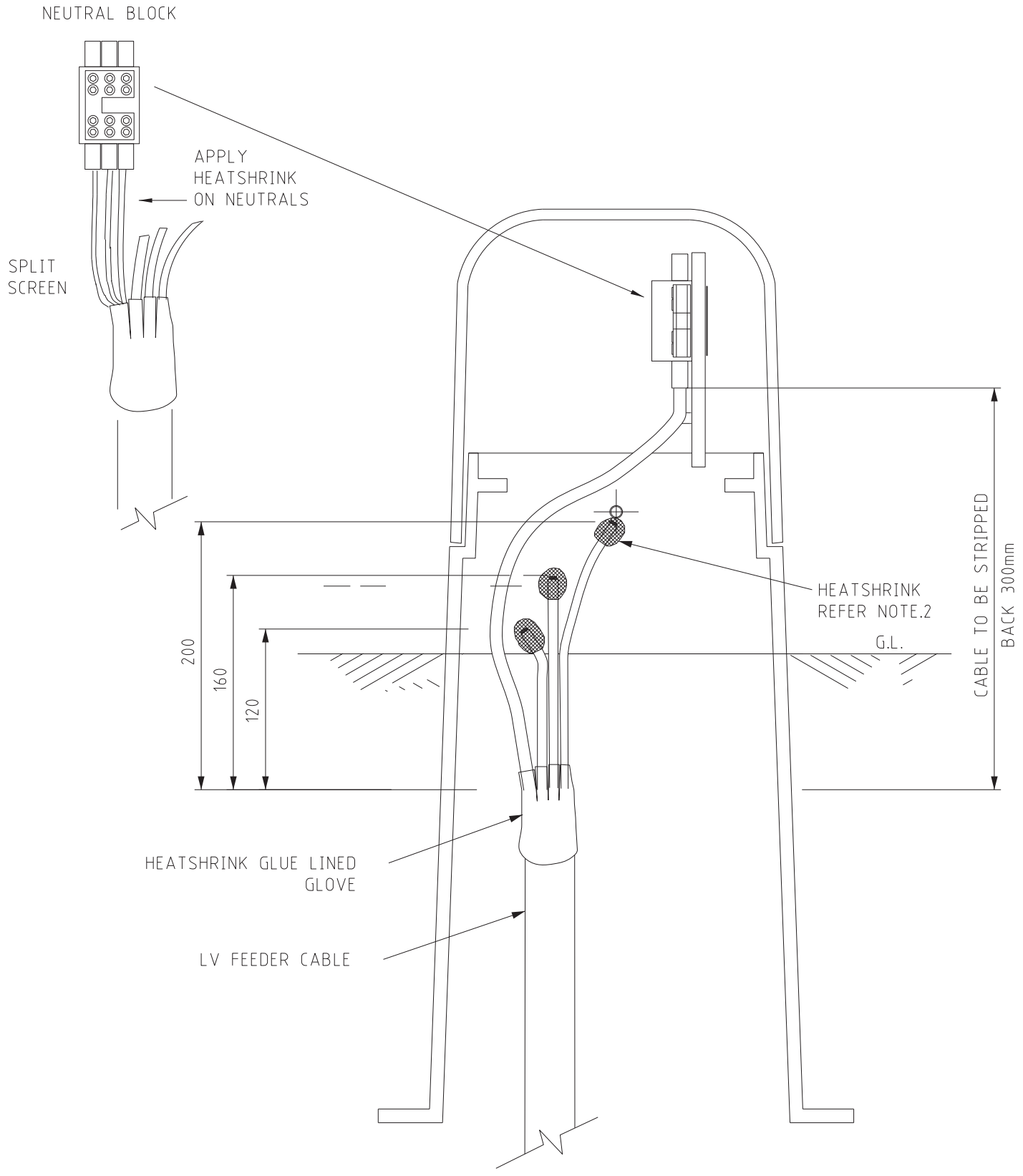


SEE R35

240V CONFIGURATION

12.7kV OR 22kV 25kVA/240 - 480V TRANSFORMER

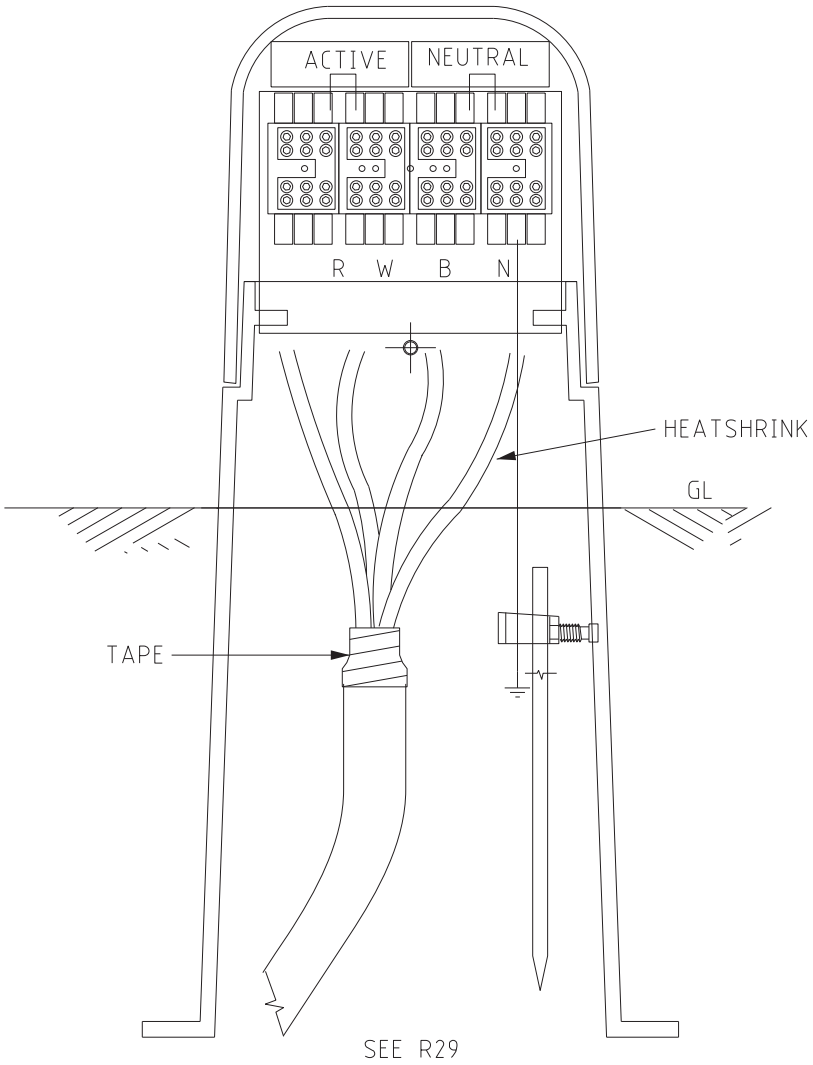
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS OPERATIONS	REFERENCE DRAWING	REVISION A	DATE 15/09/2020
	25kVA PADMOUNT TX LV DISTR BOARD 240V STREET FEEDER/CONSUMER MAINS 240V TERMINAL BLOCK	DRAWING No. R29	

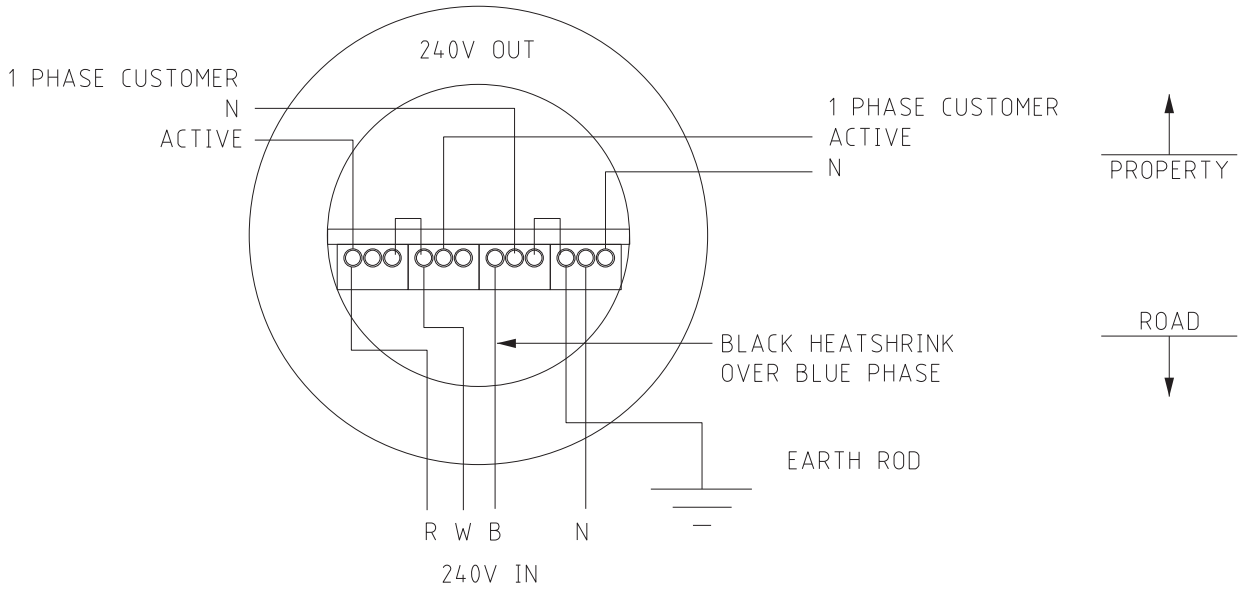


NOTES:

1. MINI PILLAR ENCLOSED WORKING END, LID OF PILLAR TO BE PIANTED WHITE.
2. TWO LAYERS OF HEATSHRINK REQUIRED AT WORKING END.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	MINI PILLAR LV FEEDER CABLE WORKING END	REVISION D DATE 04/09/2020 DRAWING No. R33



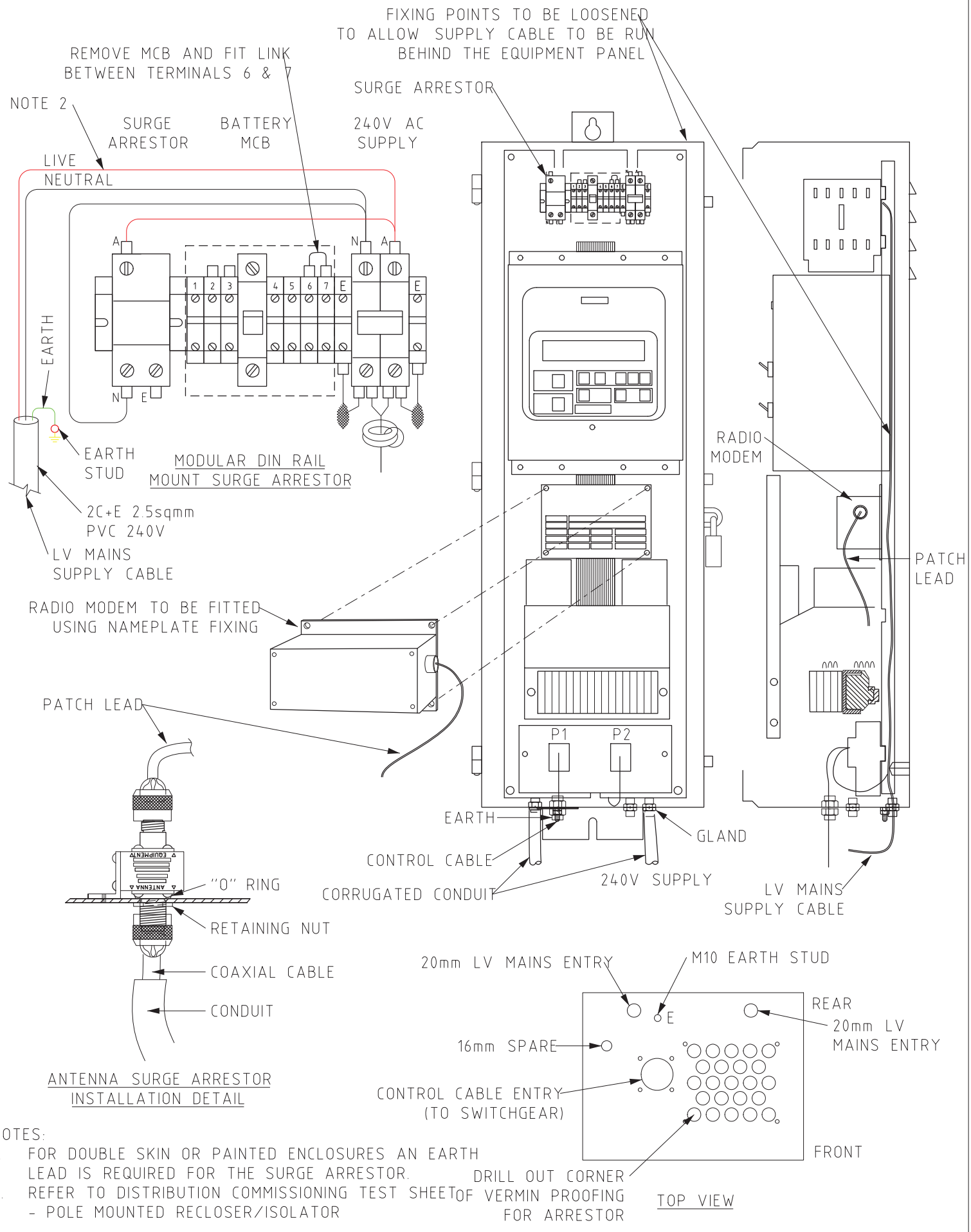


240V 1 PHASE SUPPLY ARRANGEMENT

NOTES:

1. MAXIMUM CABLE SIZE 35mm2

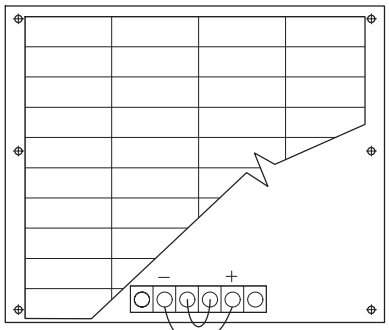
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS OPERATIONS	REFERENCE DRAWING	REVISION D	DATE 15/09/2020
	SPUDS MINI PILLAR 240V SUPPLY FROM R29 ARRANGEMENT	DRAWING No. R35	



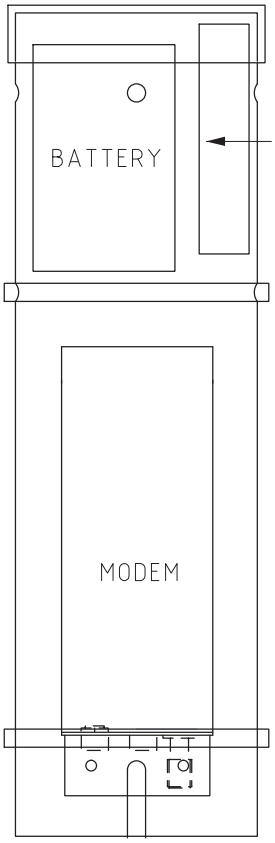
NOTES:

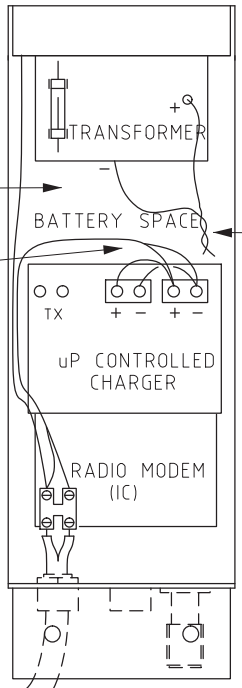
1. FOR DOUBLE SKIN OR PAINTED ENCLOSURES AN EARTH LEAD IS REQUIRED FOR THE SURGE ARRESTOR.
2. REFER TO DISTRIBUTION COMMISSIONING TEST SHEET - POLE MOUNTED RECLOSER/ISOLATOR

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS OPERATIONS	REFERENCE DRAWING	REVISION D	DATE MARCH 14
	NULEC N-SERIES RECLOSER CONTROL BOX CONNECTION DETAIL	DRAWING No. R36	

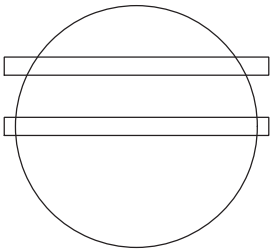


NOTE 4 & 5

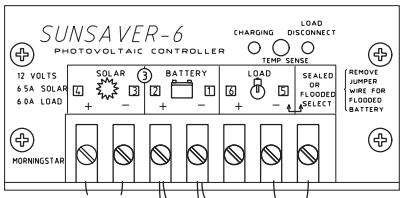




RADIO MODEM RTU



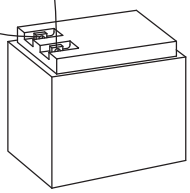
ENCLOSURE (TOP VIEW)



SOLAR CONTROLLER

NOTE 7

NOTE 6

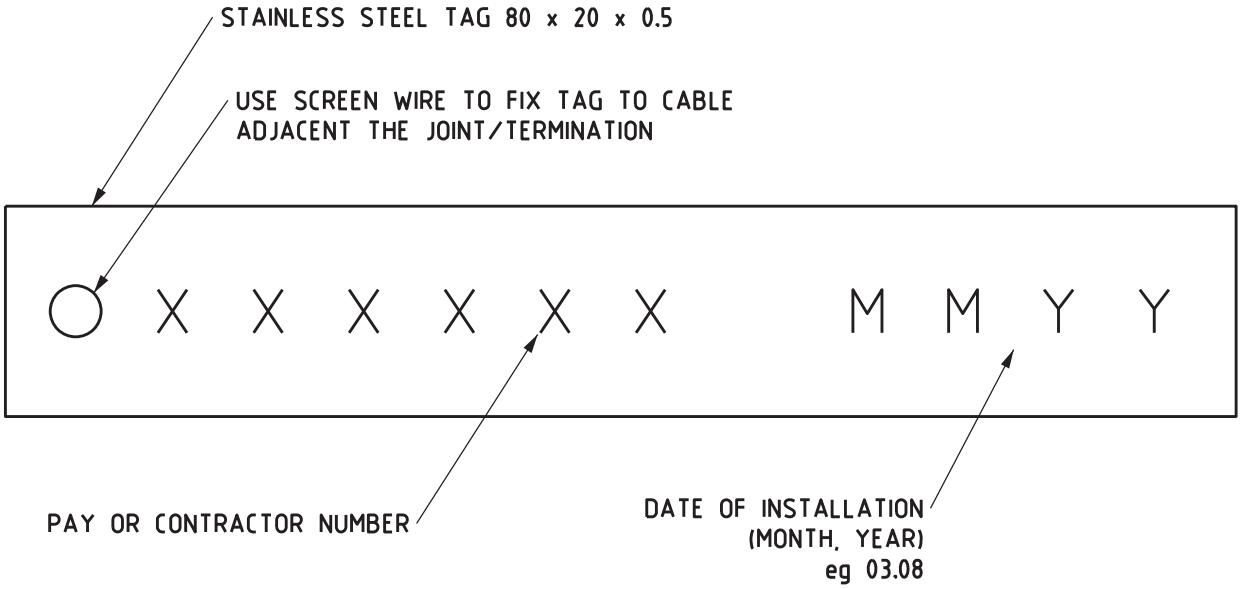


BATTERY

NOTES:

1. REMOVE BATTERY AND TAILS. (ALLOW FOR RETERMINATING)
2. REMOVE TRANSFORMER CONNECTION.
3. PROVIDE LOOP AT BATTERY AND SOLAR TERMINALS.
4. SOLAR PANEL MAY BE PROVIDED WITH FLEXIBLE CABLE TAIL.
5. FOR 2 x 10W SOLAR PANELS REQUIRED AT SOLAR PANEL OR REGULATOR.
6. DO NOT USE LOAD TERMINALS FOR CONTROLLERS WITH LOAD DISCONNECT.
7. LINK REQUIRED FOR SEALED LEAD ACID BATTERY.
8. CONSTRUCTION USING 2 x 7Ah BATTERIES REQUIRES LARGER VERSION OF ENCLOSURE

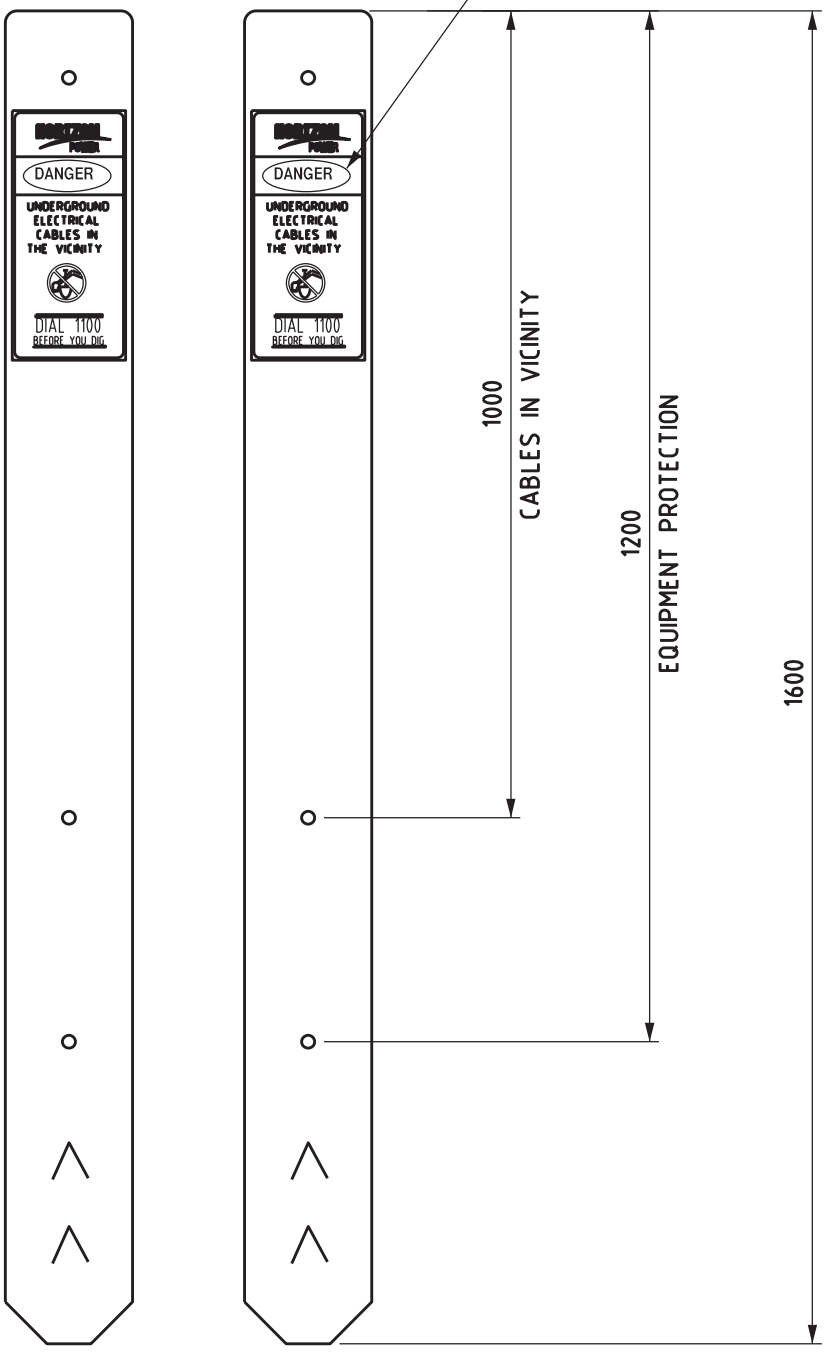
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS OPERATIONS	REFERENCE DRAWING	REVISION B	DATE JUNE 2011
	OVERHEAD FAULT INDICATOR SOLAR CONNECTION	DRAWING No. R38	

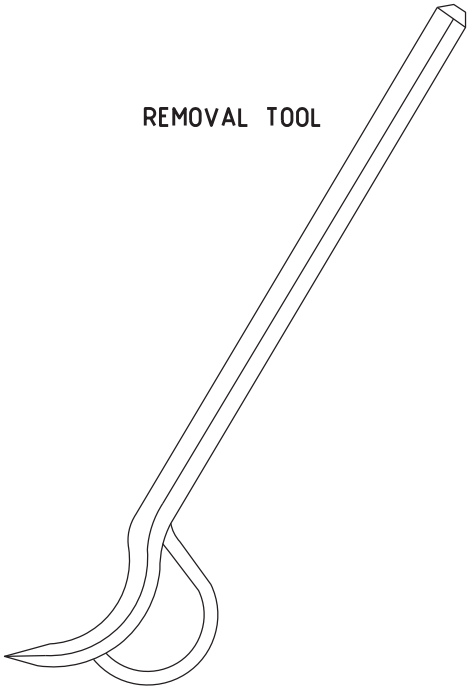


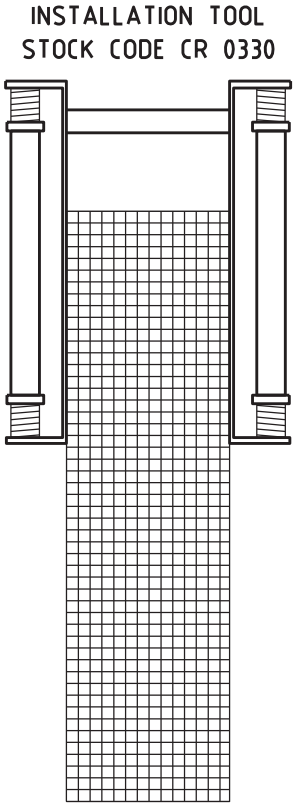
NOTES:

1. INSTALLER TO MARK TAG AS DETAILED WITH SUITABLE PUNCH SET
2. ONE TAG IS REQUIRED WHERE A 3 PHASE SET IS INSTALLED

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION C	DATE MAY 18
	INSTALLER IDENTIFICATION TAG	DRAWING No. R39	







NOTES:

1. REMOVAL TOOL TO BE ORDERED FROM SUPPLIER AS NEEDED

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	REFERENCE DRAWING	REVISION C	DATE MAY 18
	INSTALLATION OF ABOVE GROUND CABLE MARKER	DRAWING No. R40	

DANGER!!

EQUIPMENT IS OPERATIONAL

TREAT AS ENERGISED

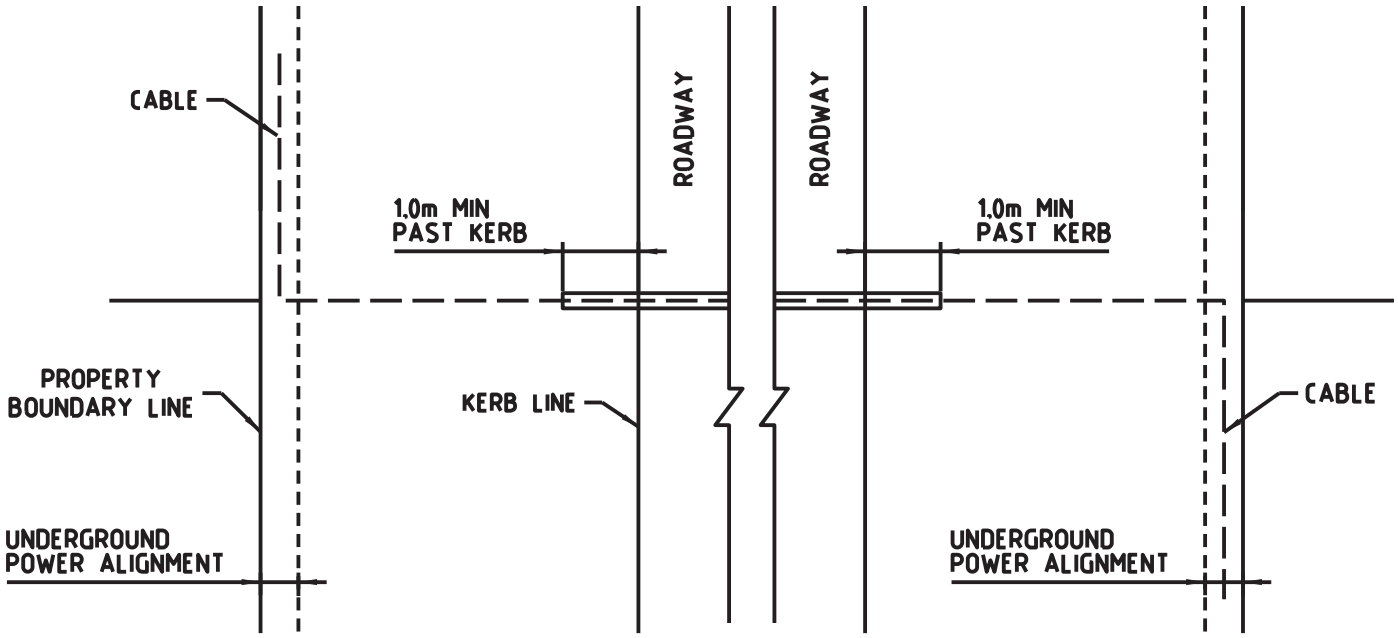
LABEL SPECIFICATIONS

- ALUMINIUM, SELF ADHESIVE, WEATHERPROOF.
- DIMENSIONS : 100mm (WIDTH) x 80mm (DEPTH).
- "DANGER" TO APPEAR IN RED, OTHER TEXT IN BLACK.
- MOUNTED IN PROMINENT POSITION ON EQUIPMENT E.G. SIDE OF MINI AND UNIVERSAL PILLAR OR FRONT DOOR OF SUBSTATION.
- OTHER TAGS AVAILABLE:

  - DANGER : OTHER END NOT TERMINATED

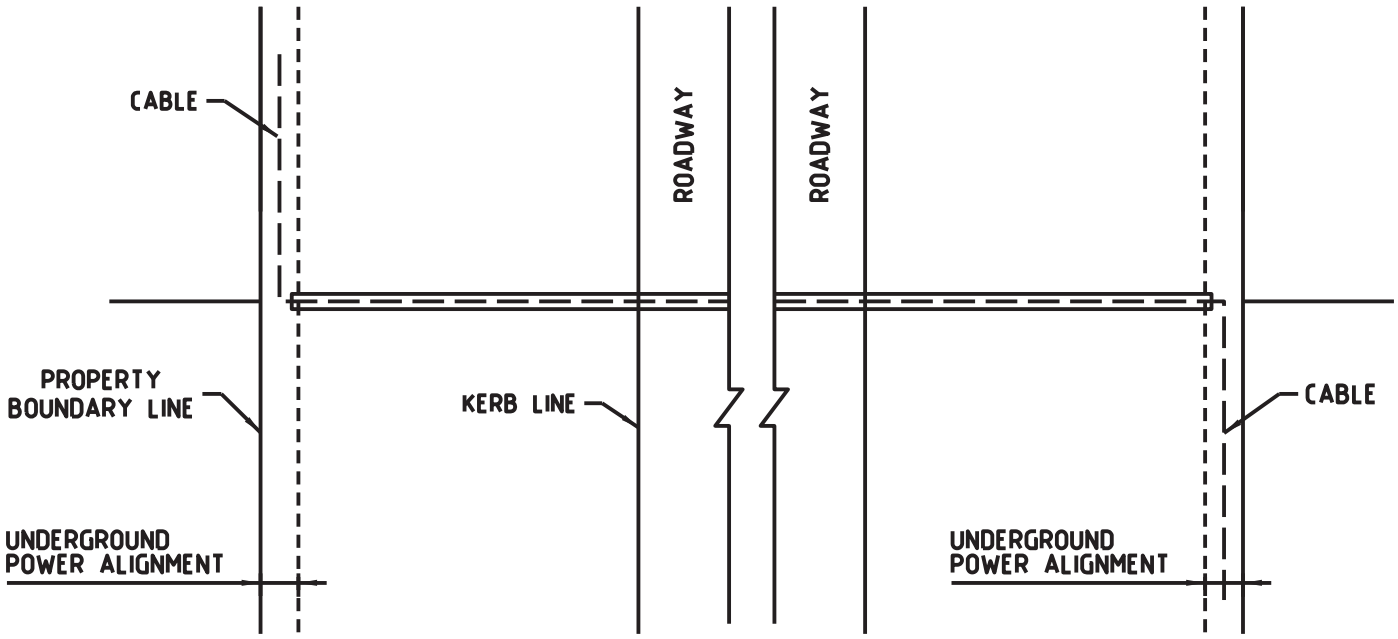
  - DO NOT ENERGISE

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	SAMPLE OPERATIONAL LABEL	DRAWING No.	R50



CONDUIT INSTALLATION REQUIREMENTS FOR HV & LV CABLES

PROTECT CABLES BETWEEN EDGE OF ALIGNMENT AND END OF CONDUIT WITH PROTECTION SLABS



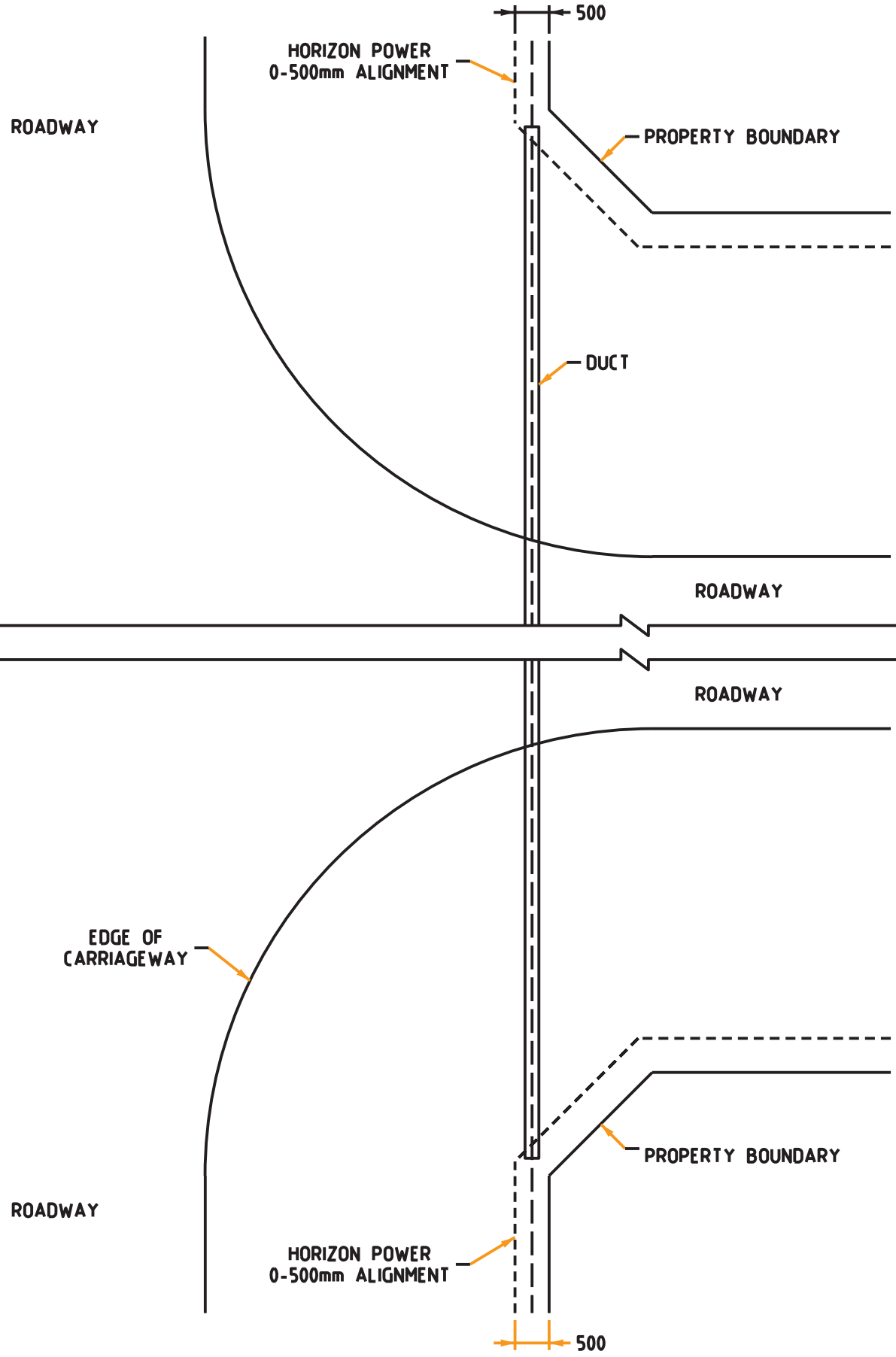
CONDUIT INSTALLATION REQUIREMENTS FOR SERVICE & STREET LIGHT CABLES

CONDUIT SHALL BE INSTALLED TO EDGE OF CABLE ALIGNMENT

NOTES:

1. REFER TO HORIZON POWER UNDERGROUND CABLE INSTALLATION MANUAL FOR SPECIFIC REQUIREMENTS.

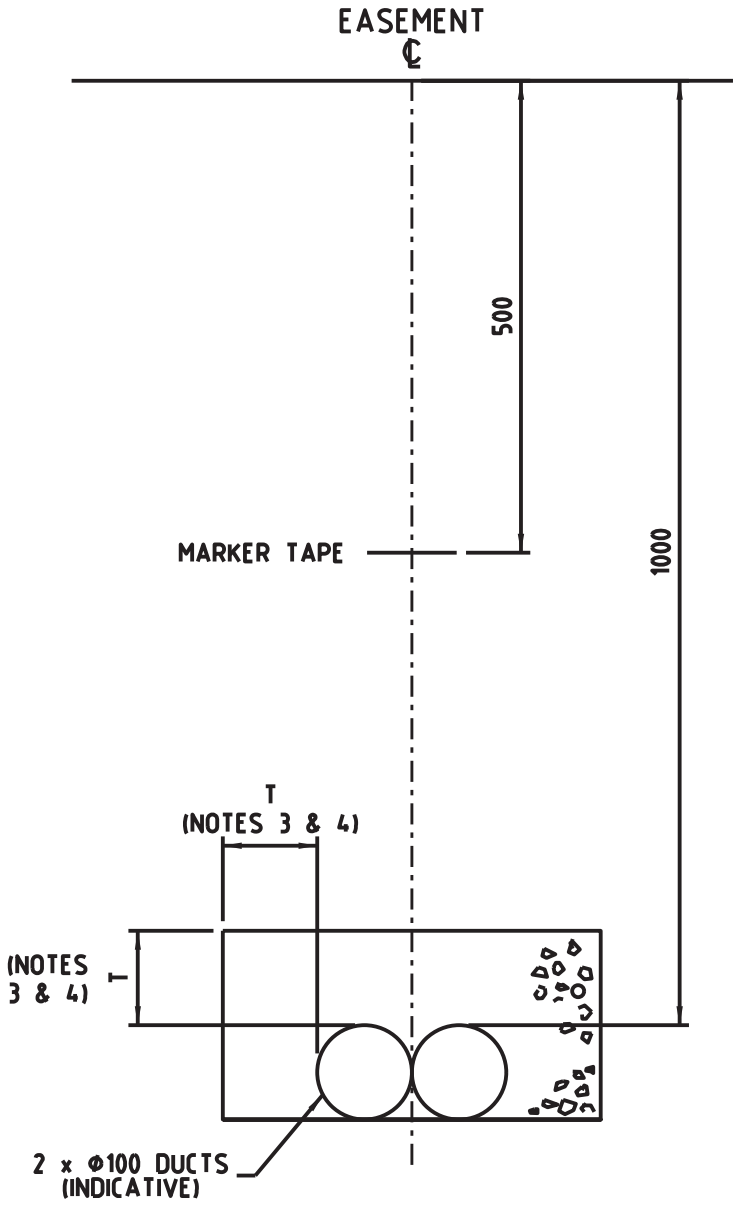
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	PLACEMENT OF DUCT BENEATH ROAD CROSSINGS	DRAWING No. R51	



NOTE:

THE DUCT SHALL BE INSTALLED FROM EDGE TO EDGE OF THE CABLE ALIGNMENT.

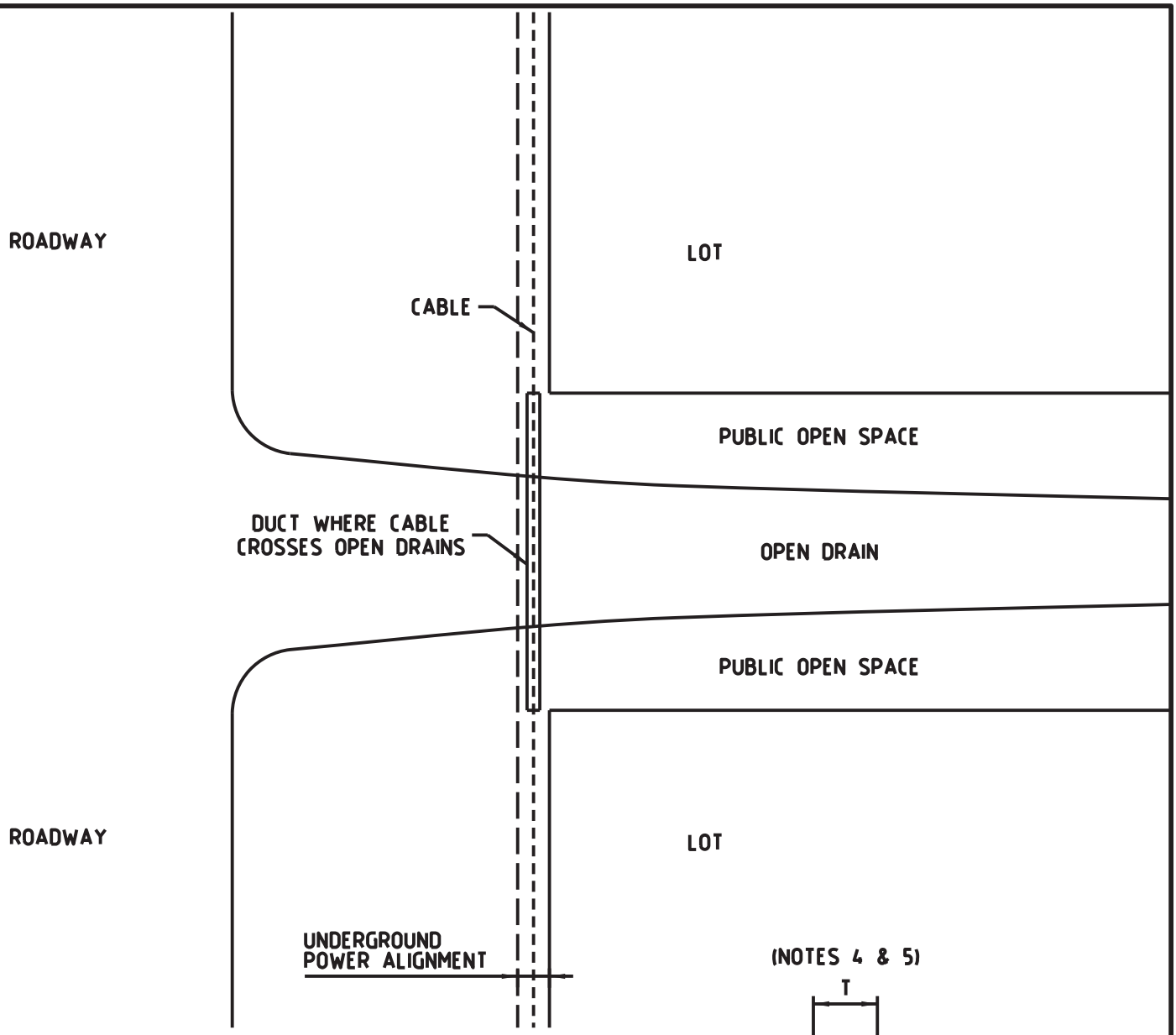
DISTRIBUTION CONSTRUCTION STANDARDS	CABLE AND DUCT PLACEMENTS ON TRUNCATIONS	REVISION B	DATE MAY 18
		DRAWING No. R52	

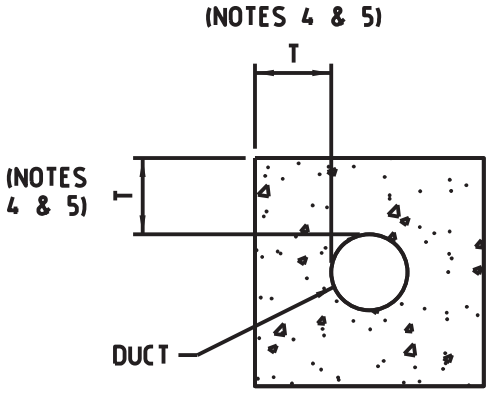


NOTES:

1. WHERE DUCT IS HEAVY DUTY AND MEETS THE RQUIREMENT OF CATEGORY A (AS DEFINED BY AS/NZS 3000 WIRING RULES). CONCRETE ENCASEMENT IS NOT REQUIRED.
2. CONDUITS SHALL BE CENTRED IN EASEMENT.
3. ENCASEMENT THICKNESS "T" SHALL BE AT LEAST 75mm OR 75% OF THE LARGEST CONDUIT NOMINAL DIAMETER, WHICHEVER IS GREATER.
4. ENCASEMENT THICKNESS "T" SHALL BE AT MOST 150mm OR 200% OF THE LARGEST CONDUIT NOMINAL DIAMETER, WHICHEVER IS SMALLER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	CROSS SECTION DETAILS OF CABLE EASEMENT	DRAWING No. R53	



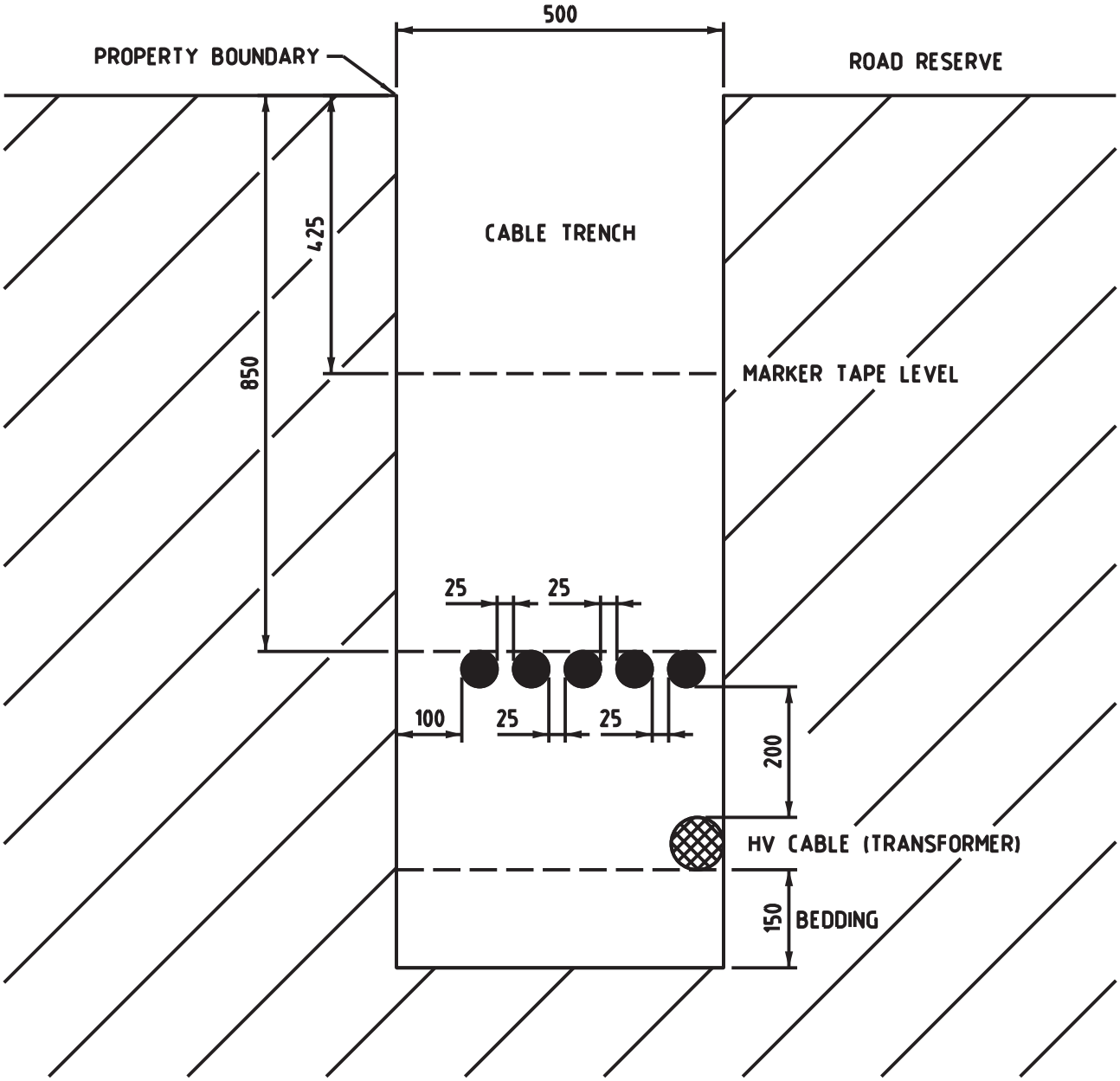


CONCRETE ENCASEMENT DETAIL

NOTES:

1. DUCTS SHALL BE CONCRETE ENCASED AND HAVE A MINIMUM COVER OF 850mm BELOW THE BOTTOM OF WATER COURSE OR OPEN DRAIN.
2. DUCTS SHALL EXTEND TO THE PROPERTY BOUNDARY EITHER SIDE OF THE WATER COURSE OR OPEN DRAIN.
3. WHERE DIRECTIONAL DRILLING IS USED, CONCRETE ENCASEMENT IS NOT REQUIRED. DEPTH SHALL BE BETWEEN 900mm AND 1500mm AND DUCTS SHALL EXTEND 1500mm BEYOND EXTENT OF WATER COURSE EACH SIDE.
4. ENCASEMENT THICKNESS "T" SHALL BE AT LEAST 75mm OR 75% OF THE LARGEST CONDUIT NOMINAL DIAMETER, WHICHEVER IS GREATER.
5. ENCASEMENT THICKNESS "T" SHALL BE AT MOST 150mm OR 200% OF THE LARGEST CONDUIT NOMINAL DIAMETER, WHICHEVER IS SMALLER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS	PLACEMENT OF DUCT BENEATH OPEN DRAIN	REVISION A	DATE 21/08/15
		DRAWING No. R54	



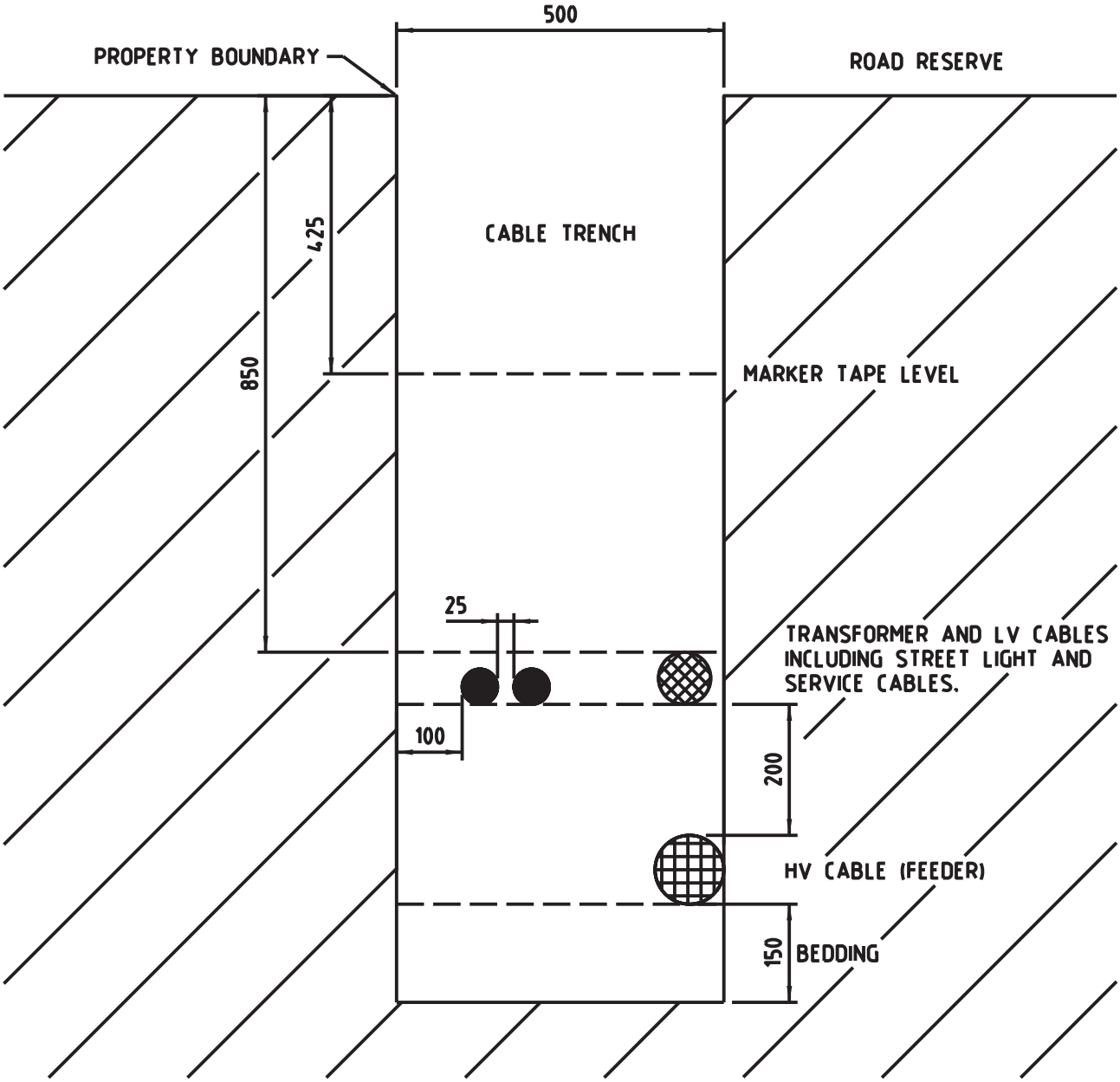
LV CABLE

35mm² OR 50mm² HV CABLE (TRANSFORMER)

NOTES:

1. LV CABLES SHALL BE ON THE TOP LAYER WITH THIS LAYER CONSISTING OF A MAXIMUM OF 5 LV CABLES.
2. LV CABLE JOINTS ARE APPROXIMATELY Φ170mm.
3. LV CABLE JOINTS SHALL BE INSTALLED ABOVE OTHER LV CABLES.
4. LV CABLE JOINTS SHALL BE INSTALLED AT STAGGERED LOCATIONS.
5. LAYOUT OF HV CABLES SHALL START FROM THE ROAD SIDE OF THE TRENCH.
6. THE MINIMUM DEPTH OF COVER OF CABLES SHALL BE 850mm. THE DEPTH OF COVER OF CABLES IN A NOMINAL CABLE ALIGNMENT SHALL BE INCREASED AS REQUIRED SO THAT THE CABLE JOINTS ALSO HAVE THE NECESSARY DEPTH OF COVER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	CABLE TRENCH LAYOUT GREEN FIELD SITE TWO LAYERS (1 Tx AND 5 LV CABLES)	DRAWING No. R55	



LV CABLE

35mm² OR 50mm² HV CABLE (TRANSFORMER)

HV CABLE (FEEDER)

NOTES:

1. LV CABLES SHALL BE ON THE TOP LAYER WITH THIS LAYER CONSISTING OF NO MORE THAN 2 LV CABLES AND 1 X 35mm² HV CABLE.
2. LV CABLE JOINTS ARE APPROXIMATELY Ø170mm.
3. LV CABLE JOINTS SHALL BE INSTALLED ABOVE OTHER LV CABLES.
4. LV CABLE JOINTS SHALL BE INSTALLED AT STAGGERED LOCATIONS.
5. LAYOUT OF HV CABLES SHALL START FROM THE ROAD SIDE OF THE TRENCH.
6. THE MINIMUM DEPTH OF COVER OF CABLES SHALL BE 850mm. THE DEPTH OF COVER OF CABLES IN A NOMINAL CABLE ALIGNMENT SHALL BE INCREASED AS REQUIRED SO THAT THE CABLE JOINTS ALSO HAVE THE NECESSARY DEPTH OF COVER.

HORIZON POWER

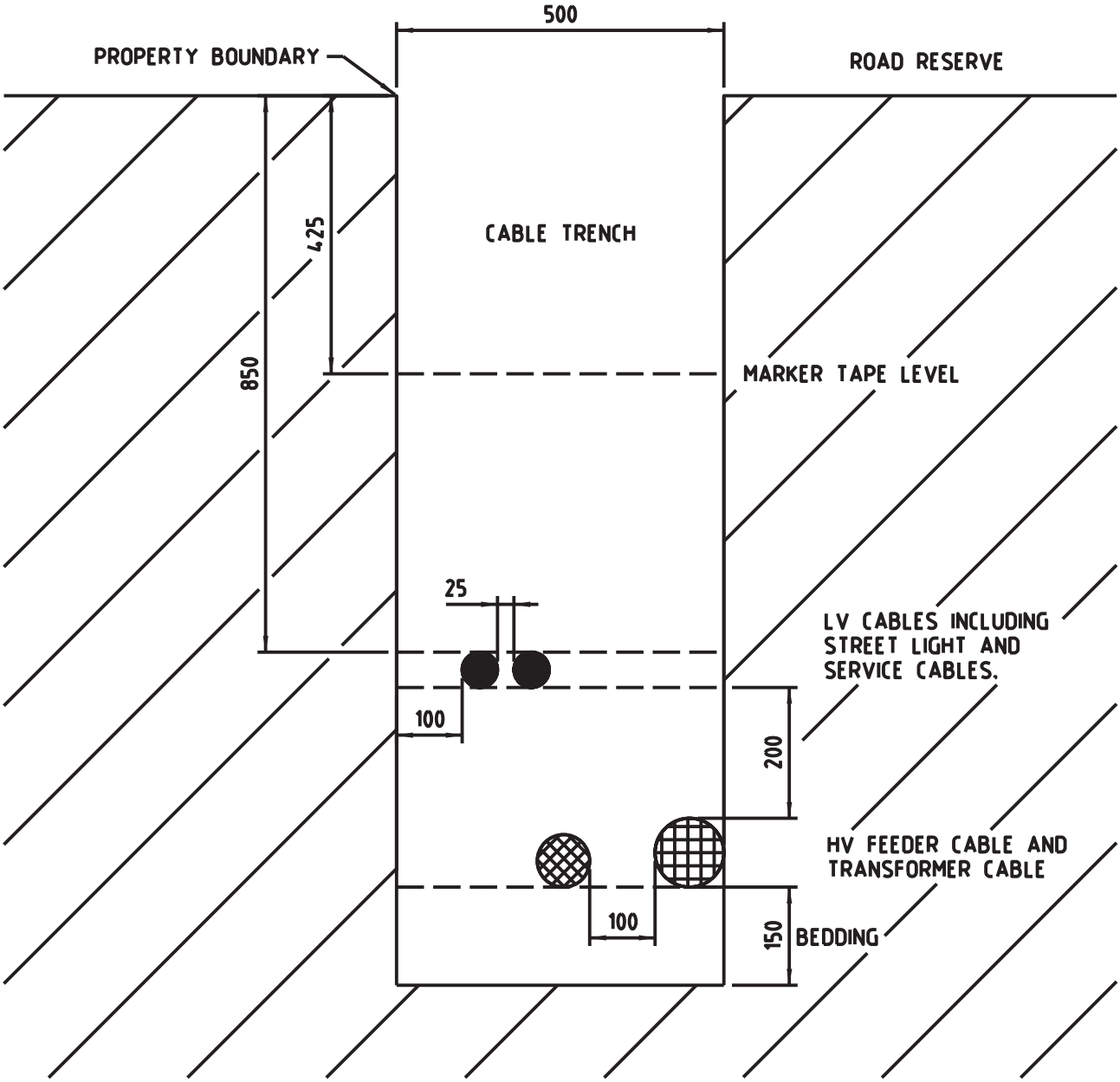
DISTRIBUTION CONSTRUCTION STANDARDS

CABLE TRENCH LAYOUT GREEN FIELD SITE TWO LAYERS (1 HV FEEDER, 1 Tx & LV CABLES)

REVISION	DATE
B	MAY 18

DRAWING No.

R56



LV CABLE

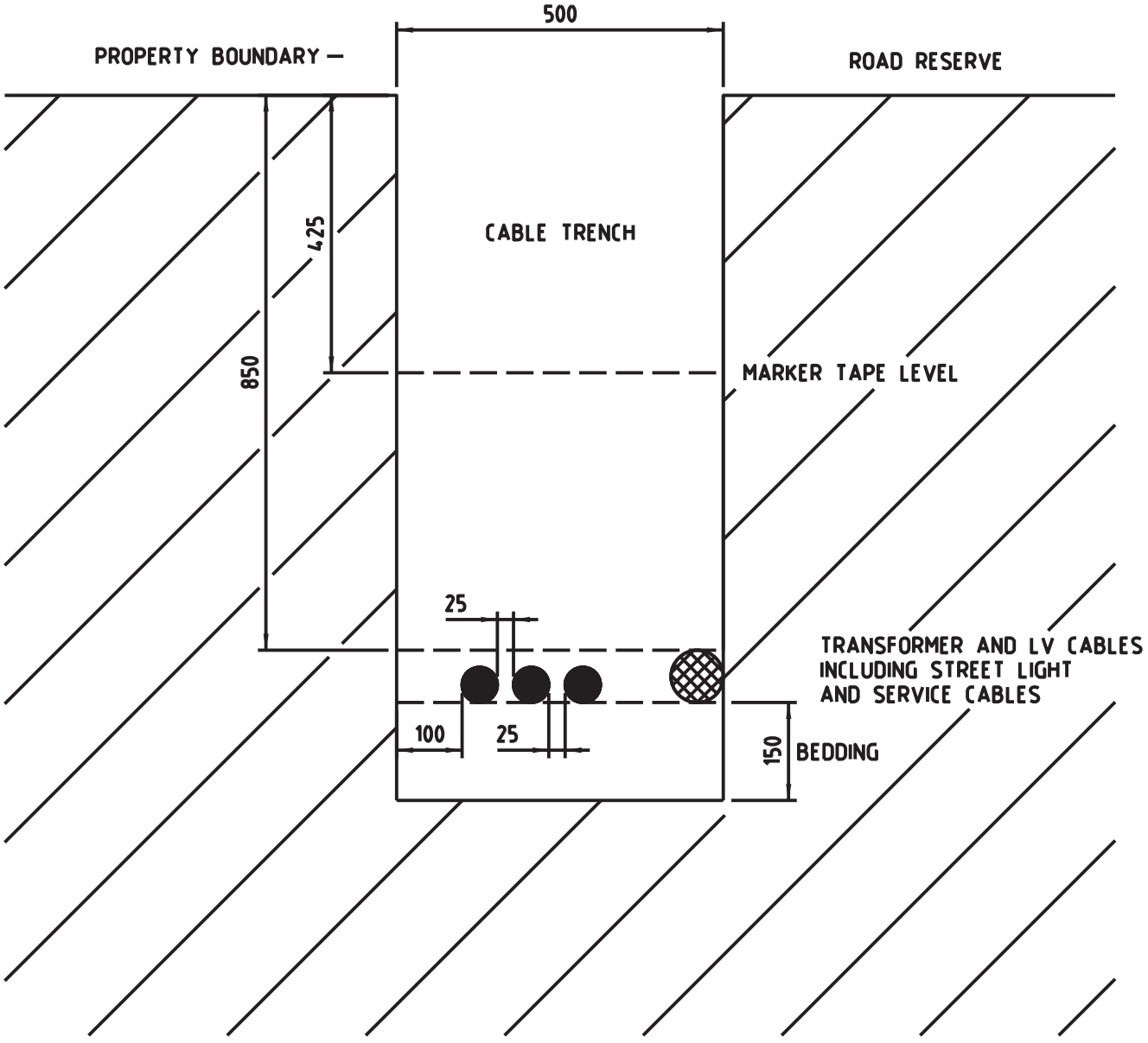
35mm² OR 50mm² HV CABLE (TRANSFORMER)

HV CABLE (FEEDER)

NOTES:

1. LV CABLES SHALL BE ON THE TOP LAYER WITH THIS LAYER CONSISTING OF NO MORE THAN 2 LV CABLES.
2. LV CABLE JOINTS ARE APPROXIMATELY Φ170mm.
3. LAYOUT OF THE HV CABLES SHALL START FROM THE ROAD SIDE OF THE TRENCH.
4. IF THE 35mm² HV CABLE IS NOT ON THE BOTTOM LAYER IT SHALL BE NEAREST TO THE ROADSIDE.
5. THE MINIMUM DEPTH OF COVER OF CABLES SHALL BE 850mm. THE DEPTH OF COVER OF CABLES IN A NOMINAL CABLE ALIGNMENT SHALL BE INCREASED AS REQUIRED SO THAT THE CABLE JOINTS ALSO HAVE THE NECESSARY DEPTH OF COVER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	CABLE TRENCH LAYOUT GREEN FIELD SITE TWO LAYERS (1 HV FEEDER, 1 Tx & 2 LV CABLES)	DRAWING No. R57	



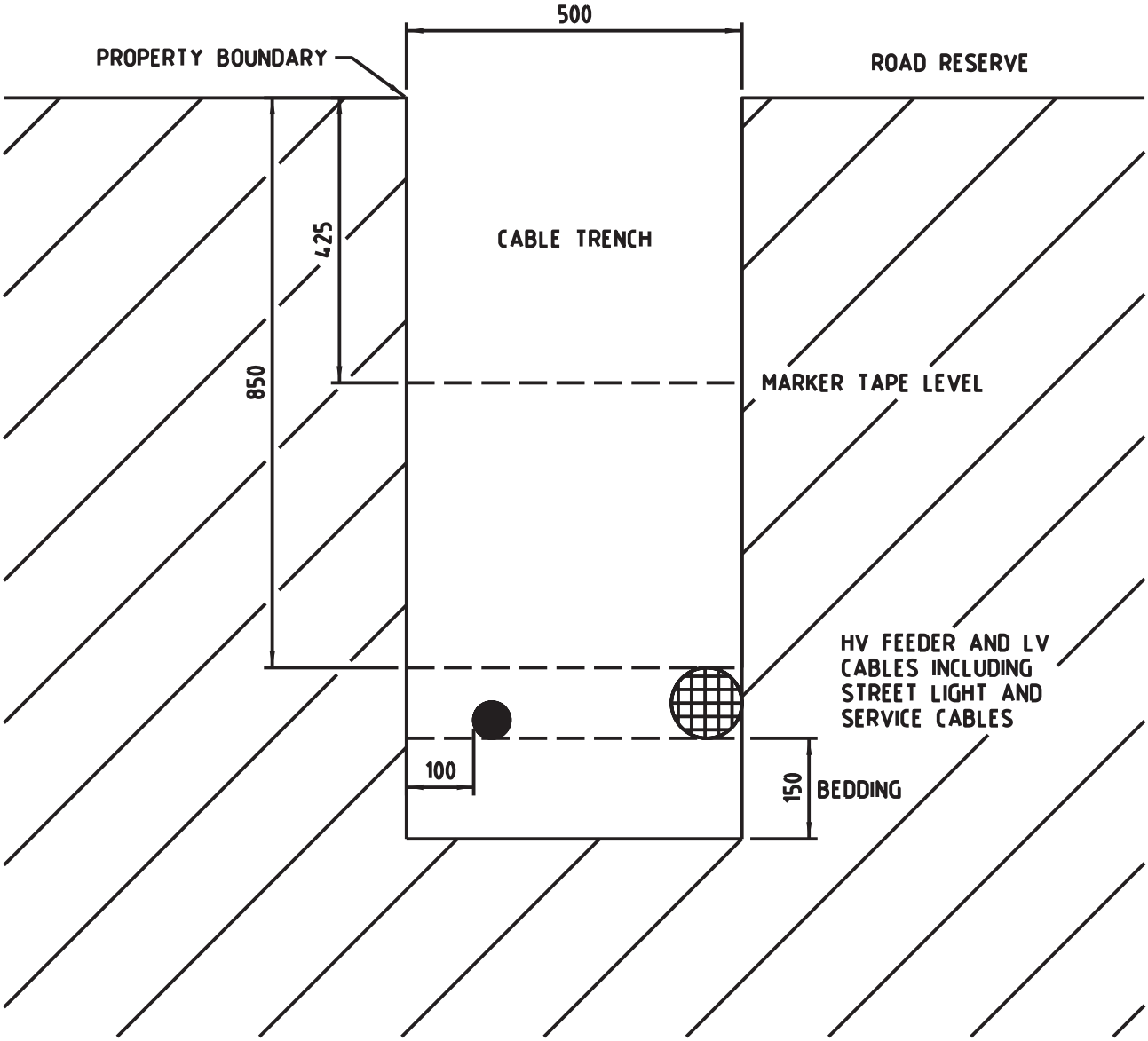
LV CABLE

35mm² OR 50mm² HV CABLE (TRANSFORMER)

NOTES:

1. FOR A ONE LAYER CABLE TRENCH NO MORE THAN 4 X 185mm² OR 3 X 240mm² LV CABLES AND 1 X 35mm² HV CABLE CAN BE INSTALLED.
2. LV CABLE JOINTS ARE APPROXIMATELY Φ170mm.
3. LV CABLE JOINTS SHALL BE INSTALLED ABOVE OTHER LV CABLES.
4. LV CABLE JOINTS SHALL BE INSTALLED AT STAGGERED LOCATIONS.
5. LAYOUT OF HV CABLES SHALL START FROM THE ROAD SIDE OF THE TRENCH.
6. THE MINIMUM DEPTH OF COVER OF CABLES SHALL BE 850mm. THE DEPTH OF COVER OF CABLES IN A NOMINAL CABLE ALIGNMENT SHALL BE INCREASED AS REQUIRED SO THAT THE CABLE JOINTS ALSO HAVE THE NECESSARY DEPTH OF COVER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	CABLE TRENCH LAYOUT GREEN FIELD SITE ONE LAYER (1 Tx AND 3 LV CABLES)	DRAWING No. R58	



LV CABLE

HV CABLE (FEEDER)

NOTES:

1. LV CABLE JOINTS ARE APPROXIMATELY Ø170mm.
2. LV CABLE JOINTS SHALL BE INSTALLED ABOVE OTHER LV CABLES.
3. LV CABLE JOINTS SHALL BE INSTALLED AT STAGGERED LOCATIONS.
4. LAYOUT OF HV CABLES SHALL START FROM THE ROAD SIDE OF THE TRENCH.
5. THE MINIMUM DEPTH OF COVER OF CABLES SHALL BE 850mm. THE DEPTH OF COVER OF CABLES IN A NOMINAL CABLE ALIGNMENT SHALL BE INCREASED AS REQUIRED SO THAT THE CABLE JOINTS ALSO HAVE THE NECESSARY DEPTH OF COVER.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS		REVISION B	DATE MAY 18
	CABLE TRENCH LAYOUT GREEN FIELD SITE ONE LAYER (1 HV FEEDER AND LV CABLES)	DRAWING No.	R59