



**DESIGN
STANDARDS
For
URBAN
INFRASTRUCTURE**

STREET LIGHTING

SECTION 12

DRAWINGS

12 STREET LIGHTING DRAWINGS

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| Streetlighting Contactor Panel Pole Mounted | DS12-01-04 | 0 |
| Slip Base Column Base Wiring | DS12-01-05 | 0 |
| Link Panel for Integral Luminaires on Energy Absorbing Columns | DS12-01-06 | 0 |
| Link Panel for Integral Luminaires on 3.5m Column | DS12-01-07 | 0 |
| Link Panel for Integral Luminaires on Slip Base Columns | DS12-01-08 | 0 |
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| Streetlight Control Panel for 250W MV Single Non-Integral Luminaires | DS12-01-13 | 0 |
| Streetlight Control Panel for 250W Metal Halide Lamps | DS12-01-14 | 0 |
| Streetlight Control Panel for Single Line Diagram | DS12-01-15 | 0 |
| Streetlight Control Cubicle | DS12-01-16 | 0 |
| Streetlight Control Cubicle ActewAGL Service Connection Arrangement | DS12-01-17 | 0 |
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| Sports Oval Lighting Control Box Pole Mounted | DS12-01-19 | 0 |
| MEN Earthing of Streetlight | DS12-01-20 | 0 |
| Streetlighting 1Ø Neutral Screen Straight Through Joint | DS12-01-21 | 0 |
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| Streetlight Column Identification Plate | DS12-01-23 | 0 |
| PEC Activation Time Graph | DS12-01-24 | 0 |

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|--|------------|---|
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| Concrete Footing Details & Streetlight Control Cubicle | DS12-02-02 | 0 |
| Indicative Footing Details for Octagonal Columns | DS12-02-03 | 0 |

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| | | |
|--|------------|---|
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| 4.0m Tapered Streetlight Column | DS12-03-02 | 0 |
| 4.5m Tapered Streetlight Column | DS12-03-03 | 0 |
| 6.5m Tapered Streetlight Column with Ladder Rest | DS12-03-04 | 0 |
| 6.5m Tapered Octagonal Single Streetlight | DS12-03-05 | 0 |
| 9.0m Impact Absorbing Column Base Plate Mounted | DS12-03-06 | 0 |

| | | |
|---|------------|---|
| 9.0m Impact Absorbing Column in Ground Mounted | DS12-03-07 | 0 |
| 10.5m Impact Absorbing Column Base Plate Mounted | DS12-03-08 | 0 |
| 10.5m Impact Absorbing Column in Ground Mounted | DS12-03-09 | 0 |
| 12.0m Impact Absorbing Column Base Plate Mounted | DS12-03-10 | 0 |
| 12.0m Impact Absorbing Column in Ground Mounted | DS12-03-11 | 0 |
| 9.0m Slip Base | DS12-03-12 | 0 |
| 10.5m Slip Base | DS12-03-13 | 0 |
| 12.0m Slip Base | DS12-03-14 | 0 |
| 6.5m Dual Streetlight Column | DS12-03-15 | 0 |
| 6.5m Decorative Streetlight Column | DS12-03-16 | 0 |
| 4.5m Forde Type 1 in Ground Mounted Decorative Streetlight Column | DS12-03-17 | 0 |
| 4.5m Forde Type 2 in Ground Mounted Decorative Streetlight Column | DS12-03-18 | 0 |
| 6.5m Forde Type 3 in Ground Mounted Decorative Streetlight Column | DS12-03-19 | 0 |
| 6.5m Forde Type 2 in Ground Mounted Decorative Streetlight Column | DS12-03-20 | 0 |
| 9.0m Forde Type 3 in Ground Mounted Decorative Streetlight Column | DS12-03-21 | 0 |
| 9.0m Forde Type 4 in Ground Mounted Decorative Streetlight Pole | DS12-03-22 | 0 |
| Canberra Multipole Streetlight | DS12-03-23 | 0 |
| 12.0 m Tapered Octagonal Column | DS12-03-24 | 0 |

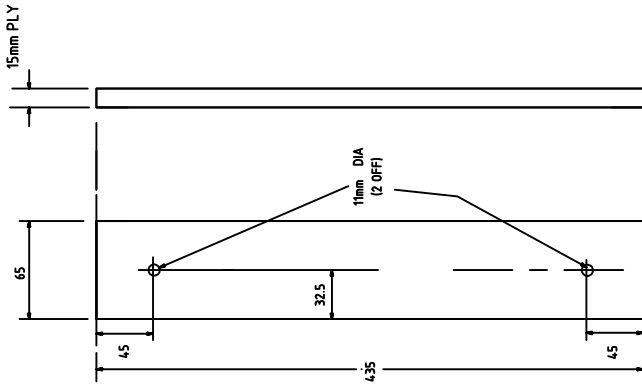
DS12-04 Outreach Arms & Brackets

| | | |
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| Electrical Pole Bracket | DS12-04-01 | 0 |
| Streetlight Bracket Arm for Wood Poles | DS12-04-02 | 0 |
| Pedestrian Lighting Bracket | DS12-04-03 | 0 |
| Mid Arm Mounting Bracket for Pedestrian Flood Lights | DS12-04-04 | 0 |
| 0.5m Outreach Pole Mounted Bracket | DS12-04-05 | 0 |
| 3.5m Timber Pole Bracket Arm | DS12-04-06 | 0 |
| VPACTOR750 R-2 Streetlight Outreach | DS12-04-07 | 0 |
| Dual 1.5m Outreach | DS12-04-08 | 0 |
| VPACTORW1.5S 1.5m Single Outreach | DS12-04-09 | 0 |
| VPACTORW3.0D Dual 3m Outreach | DS12-04-10 | 0 |
| VPACTORW3.0S 3m Single Outreach | DS12-04-11 | 0 |
| VPACTORW3.7D Dual 3.5m Outreach | DS12-04-12 | 0 |
| VPACTORW3.7D-90 Dual 3.5m Outreach 90 Degree | DS12-04-13 | 0 |
| VPACTORW3.75S 3.5m Single Outreach | DS12-04-14 | 0 |
| VPACTORW4.5D Dual 4.5m Outreach | DS12-04-15 | 0 |
| VPACTORW4.5S Single 4.5m Outreach | DS12-04-16 | 0 |
| VPACTORW4.5D-90 Dual 4.5m Outreach 90 Degrees | DS12-04-17 | 0 |

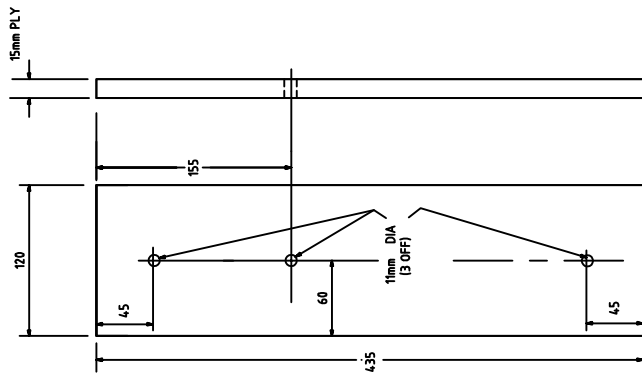
12.1 DS12-01 Wiring, Cables & Information

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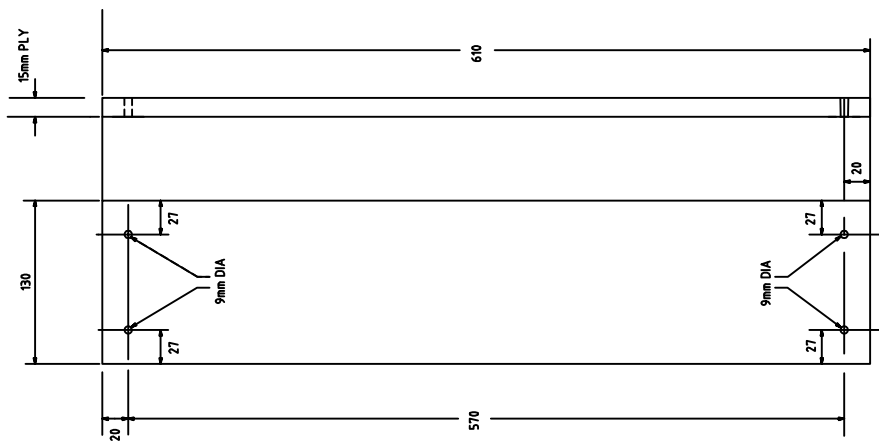
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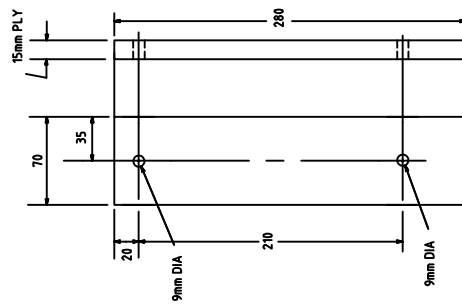
KIM LIGHTING PANEL
FOR 4.8m AND 6.0m COLUMNS
STOCK CODE No 1163814



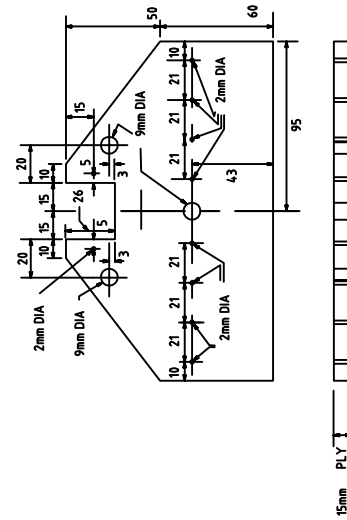
INTERMEDIATE S/L PANEL
FOR 3.5m POST TOP COLUMNS
STOCK CODE No 1088476



MAJOR S/L PANEL
9.10.5 & 12m COLUMNS
STOCK CODE No 1088488



MINOR S/L PANEL
FOR 6.5m COLUMNS
STOCK CODE No 1088506



PANEL BASE FOR SLIP BASE COLUMNS
STOCK CODE No 1088518

NOTES

1. PANELS TO BE CONSTRUCTED FROM BB GRADE "A" BOND EXTERIOR HOOP PINE VENEER PLY AS SHOWN ON DRAWING
2. ALL ROUGH EDGES TO BE SANDED AND PANELS COATED WITH CLEAR MARINE VARNISH OR SIMILAR
3. ALL MEASUREMENTS IN MILLIMETRES



DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorised Signature

Drawn NC * * * * *

Date

Project Engineer WC * * * * *

Date

BLANK PANELS FOR
STREETLIGHT COLUMNS

Scale

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Date

14/09/06

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Drawing No.

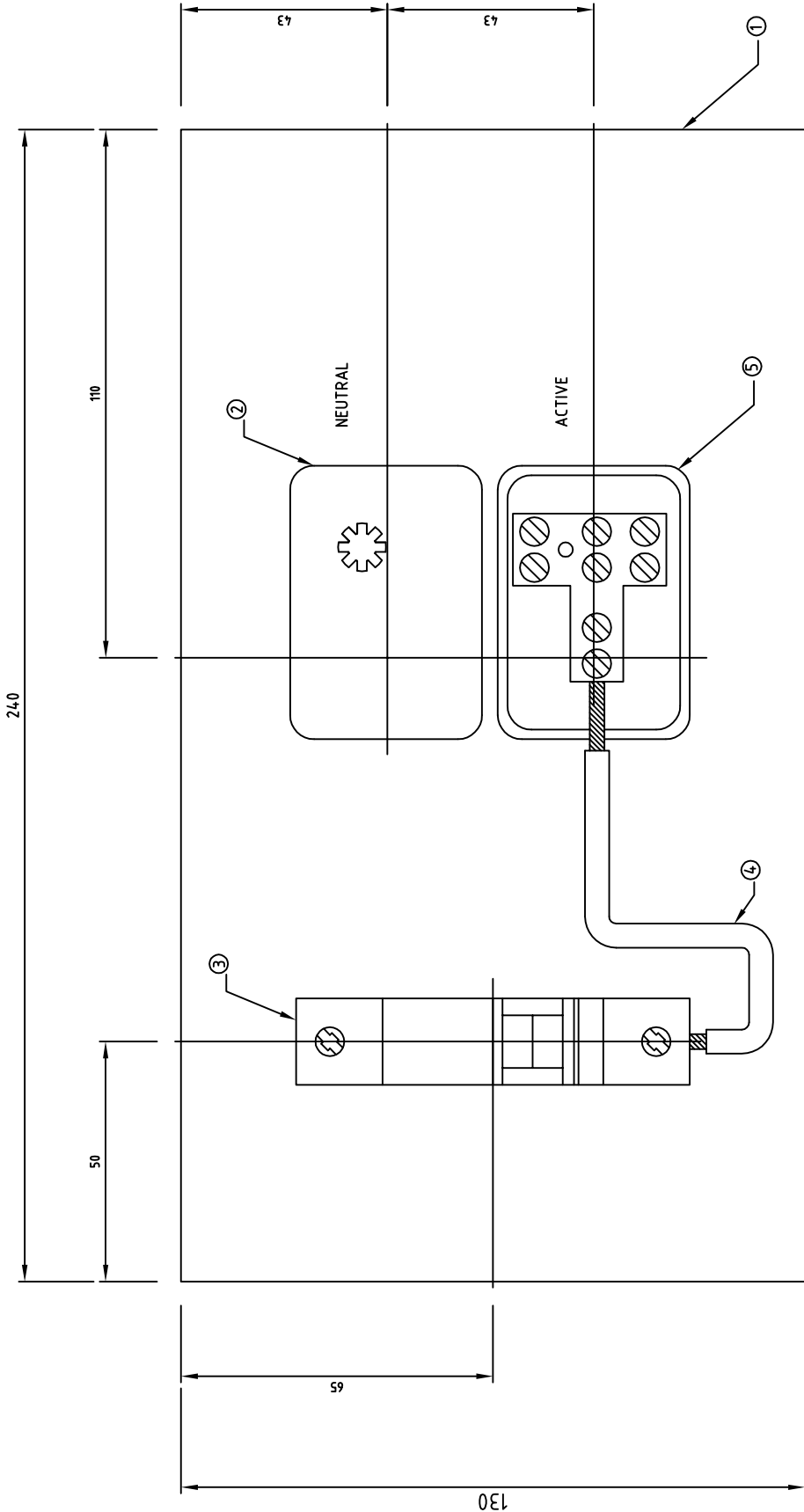
DS12-01-01

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| Item | Description | Quantity |
|------|--|----------|
| 1 | Panel Base, insulation, natural paper laminate 3.2mm | 1 |
| 2 | Insulated connector block (Black) | 1 |
| 3 | MCB 10A 1 Phase | 1 |
| 4 | 2.5mm ² SDI cable (Red Core) | 0.2m |
| 5 | Insulator Connector Block (Red) | 1 |
| 6 | Rail, Terminal Mounting KLIPPON Type TSK 35 | 0.02 |

Complete Assembly

NOTES

1. MOUNTING HOLES TO BE DRILLED ON SITE TO SUIT COLUMN.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES



ACT GOVERNMENT
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URBAN INFRASTRUCTURE

Drawn: NC * Date: *
Project Engineer: WC * Date: *

**MINOR STREETLIGHT PANEL
FOR INTEGRAL LUMINAIRE
ON CONCRETE POST TOP
COLUMNS**

Scale: **NOT TO SCALE**

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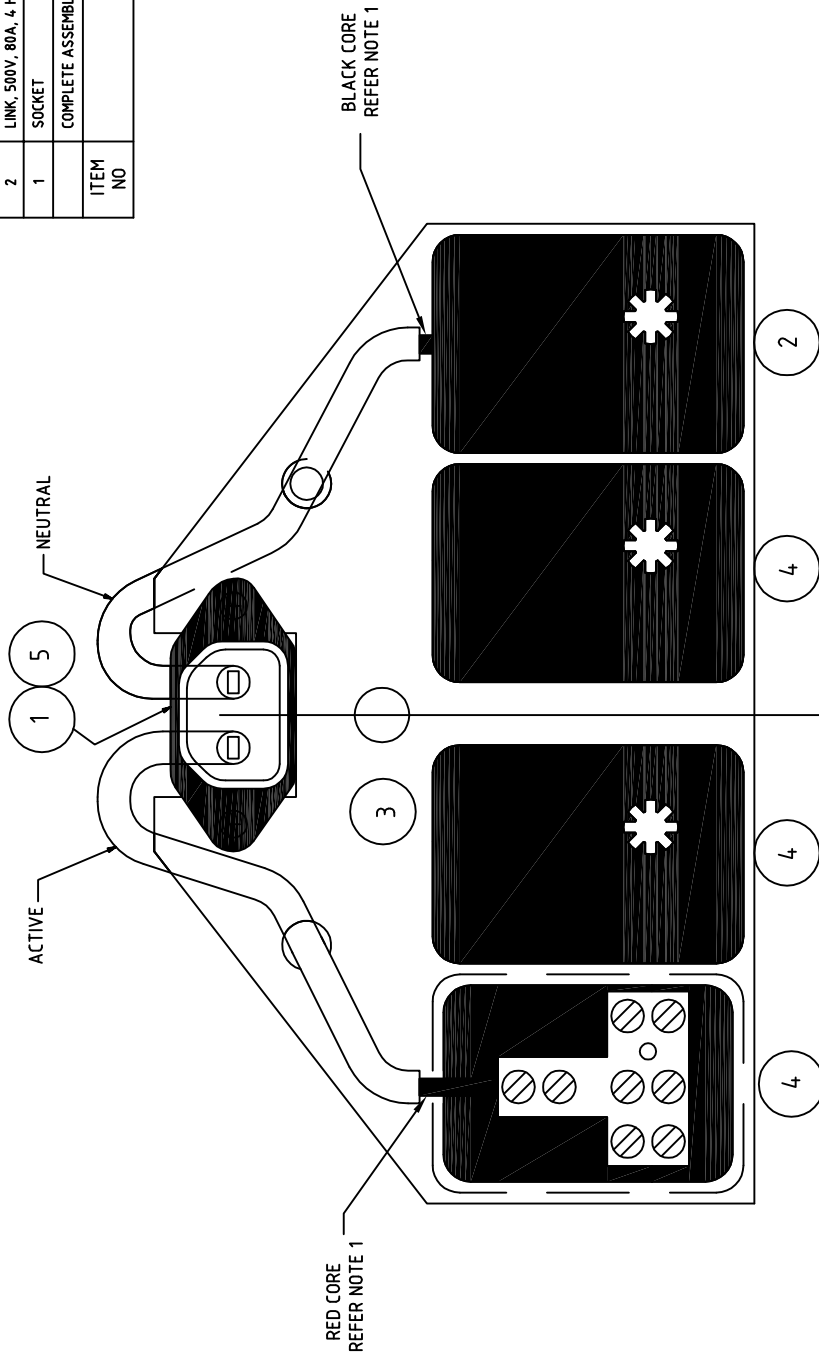
Date: 14/09/06

Drawing No. **DS12-01-02**

Revision No. **0**

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| 5 | PLUG, WITH ONE METRE LONG BLACK OR GREAY SHEATH, 3 CORE, 10A RATED CABLE | 3 |
|-------------------|--|-----|
| 4 | LINK, 500V, 80A, 4 HOLE ACTIVE/NEUTRAL METER TYPE RED | 1 |
| 3 | PANEL, STREETLIGHT, SLIP BASE, 190x10x15 | 1 |
| 2 | LINK, 500V, 80A, 4 HOLE ACTIVE/NEUTRAL METER TYPE BLACK | 1 |
| 1 | SOCKET | 1 |
| COMPLETE ASSEMBLY | | |
| ITEM NO | DESCRIPTION | QTY |



- NOTES
1. CABLE SHEATH TO BE STRIPPED TO EXPOSE CORE COLOURS BY 13mm AT THE CONNECTOR END SO THAT THE COLOUR IS VISIBLE WHEN THE COVER IS IN PLACE.
 2. ALL WIRING IS TO BE 2.5mm² Cu SINGLE CORE DOUBLE INSULATED CONDUCTOR

ACT GOVERNMENT

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Authorised Signature _____ Date _____
 Drawn NC * Date _____
 Project Engineer WC * Date _____

SLIP BASE PANEL LAYOUT
WIRING DIAGRAM

Scale NOT TO SCALE Date 14/09/06
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Drawing No. **DS12-01-03** Revision No. **0**

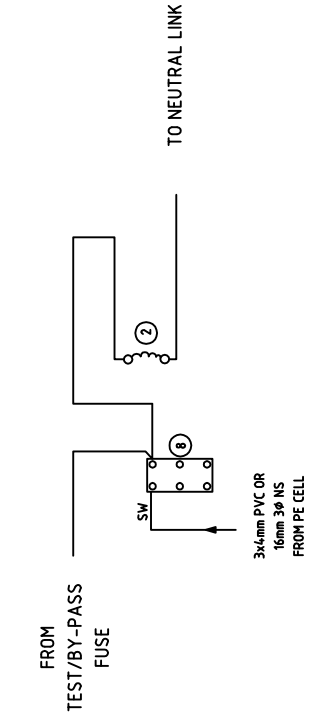
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FUSE GRADING

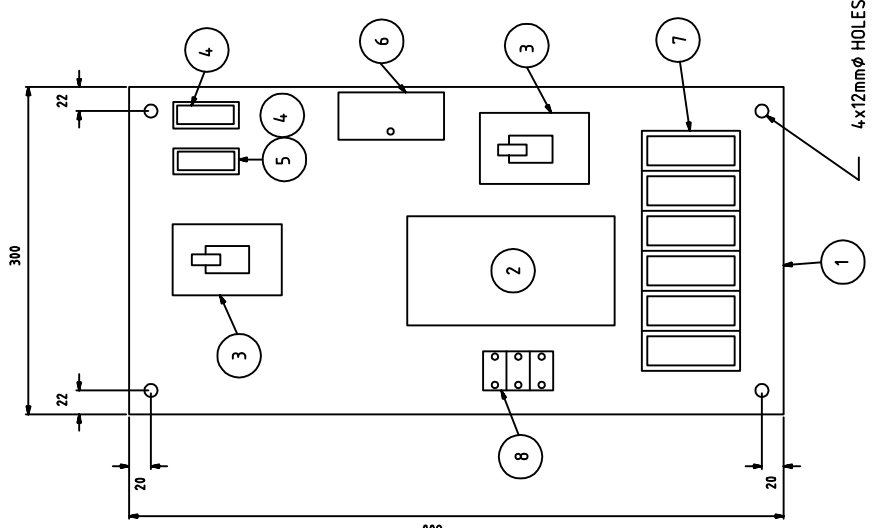
- SERVICE FUSES 80 AMP
- CIRCUIT FUSES 60 AMP
- TEST CONTROL FUSE 10 AMP

LEGEND

- LABELS ON PANEL (MAIN SWITCH RED, OTHERS WHITE)
- MAIN 3φ WIRING
- MAIN NEUTRAL WIRE 16mm
- EARTH WIRES (6mm)
- 1φ CONTROL WIRING
- CONTROL NEUTRAL WIRING 4mm

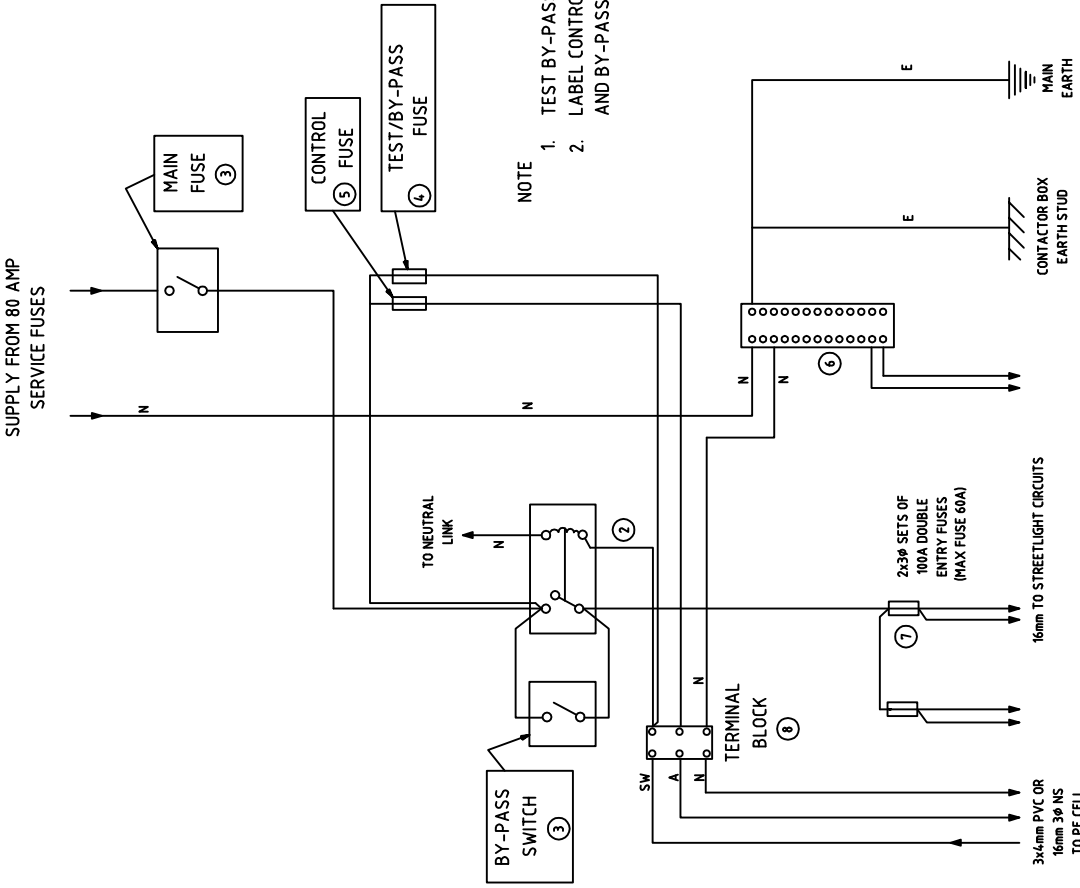


CIRCUIT FOR TRIGGER OPERATION



PANEL LAYOUT

| ITEM | DESCRIPTION |
|------|------------------------------------|
| 1 | PANEL, 600x300x1 |
| 2 | MAGNETIC CONTACTOR 240V, 100A, 3φ |
| 3 | MAIN SWITCH 440V, 80A, 3 POLE |
| 4 | CONTROL FUSE HOLDER 440V, 32A |
| 5 | 10 AMP FUSE CARTRIDGE |
| 6 | NEUTRAL LINK 500V, 300A 13 HQLE |
| 7 | CCT FUSES, FUSE HOLDERS, 500V 100A |
| 8 | TERMINAL BLOCK |



NOTE

1. TEST BY-PASS FUSE BASE IS MOUNTED WITHOUT FUSE LINK.
2. LABEL CONTROL FUSE, TEST/BY-PASS FUSE, MAIN SWITCH AND BY-PASS SWITCH SUITABLY.

ACT GOVERNMENT

DESIGN STANDARD

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Authorized Signature _____ Date _____

Drawn NC * Date _____

Project Engineer WC * Date _____

STREETLIGHTING

CONTACTOR PANEL

POLE MOUNTED

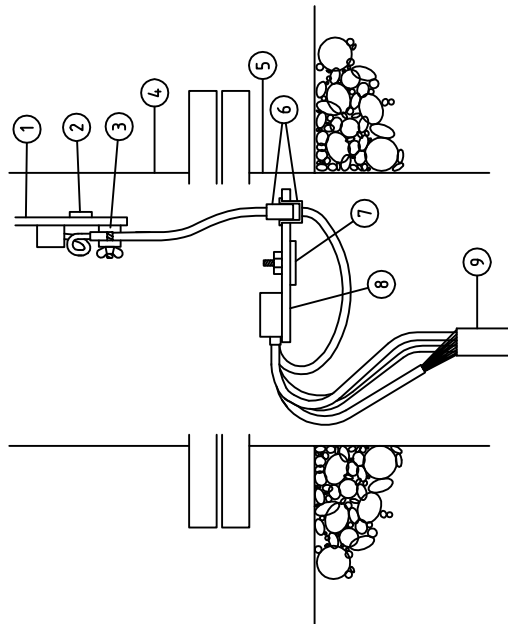
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Date 14/09/06

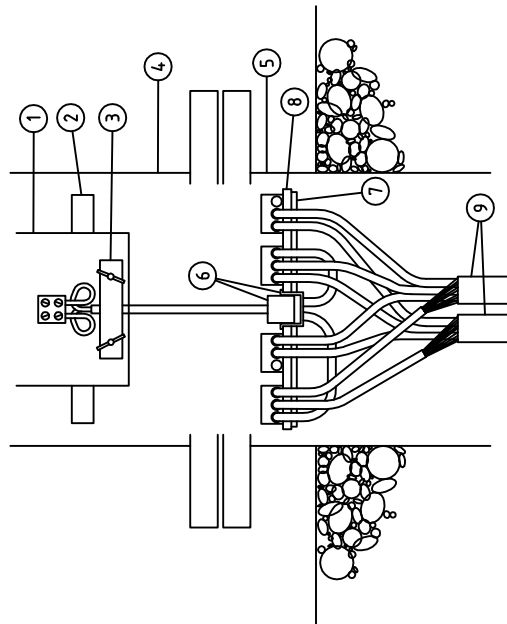
Revision No. **0**

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LEGEND:

1. CONTROL PANEL (MAY HAVE CONTROL GEAR, FUSE, ECT)
2. COLUMN PANEL MOUNTING STRAP
3. FLEXIBLE CABLE CLAMP
4. COLUMN-TOP SECTION
5. COLUMN-BASE SECTION
6. DISCONNECTING "JUG" PLUG & SOCKET. (EXPOSED VIEW)
7. BASE PANEL MOUNTING STRAP
8. BASE PANEL WITH TERMINAL LINKS
9. SUPPLY CABLES.



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 URBAN INFRASTRUCTURE

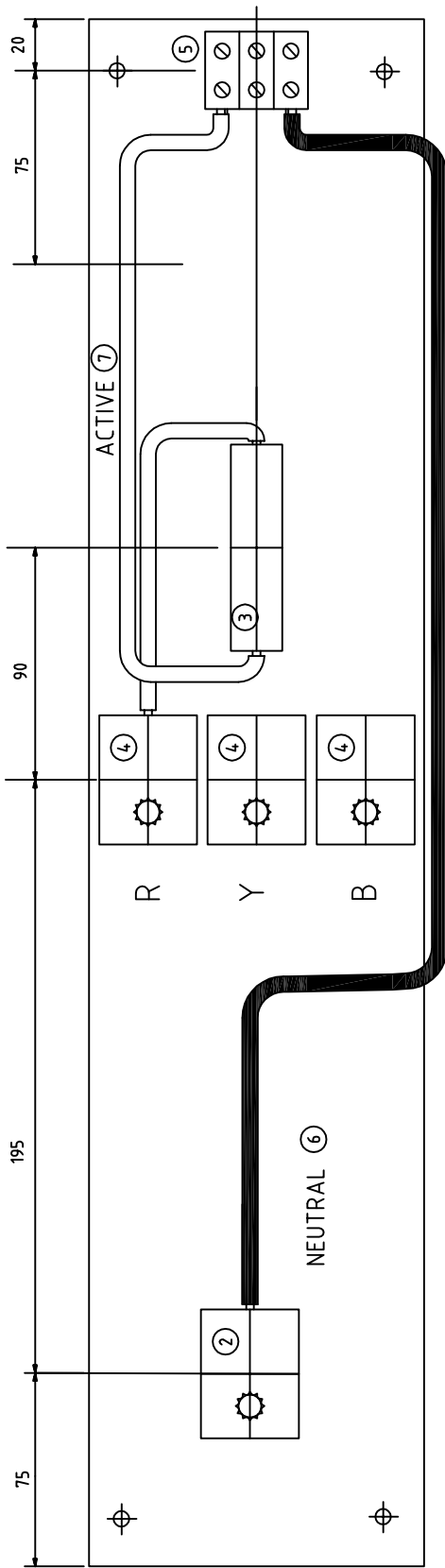
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| Authorized Signature | | Date | |
| Drawn | NC | Date | |
| Project Engineer | WC | Date | |

SLIP BASE
 COLUMN BASE
 WIRING

| | | | |
|--------------|--------------|------|----------|
| Scale | NOT TO SCALE | Date | 14/09/06 |
| AutoCAD File | | | |

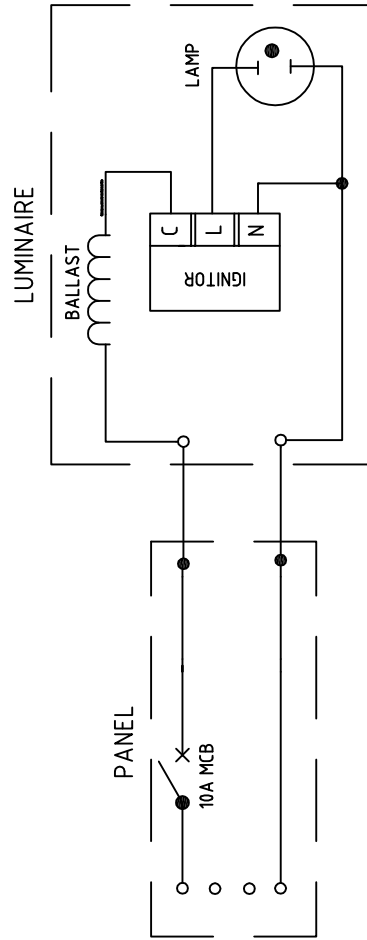
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| Drawing No. | DS12-01-05 | Revision No. | 0 |
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PLAN
SCALE 1 : 2

| COMPLETE ASSEMBLY | | 1 |
|-------------------|--|------|
| ITEM No | DESCRIPTION | QTY |
| 7 | RAIL TERMINAL MOUNTING, KLIPPON TYPE | 1 |
| 6 | CABLE, SDI, 2.5mm ² INSULATED SHEATHED BLACK CORE | 0.6m |
| 5 | CABLE, SDI, 2.5mm ² INSULATED SHEATHED RED CORE | 1.1m |
| 4 | PLASTIC TERMINAL STRIP (BP535) | 3 |
| 3 | INSULATED CONNECTOR LINK (RED) | 3 |
| 2 | 1 PHASE 10 AMP MCB | 1 |
| 1 | INSULATED CONNECTOR LINK (BLACK) | 1 |
| | MAJOR S/L PANEL BASE (130 X 610) | 1 |



SCHEMATIC DIAGRAM

NOTE:
FOR DETAILS OF BASE (ITEM 1)
REFER DRAWING 795-1-010

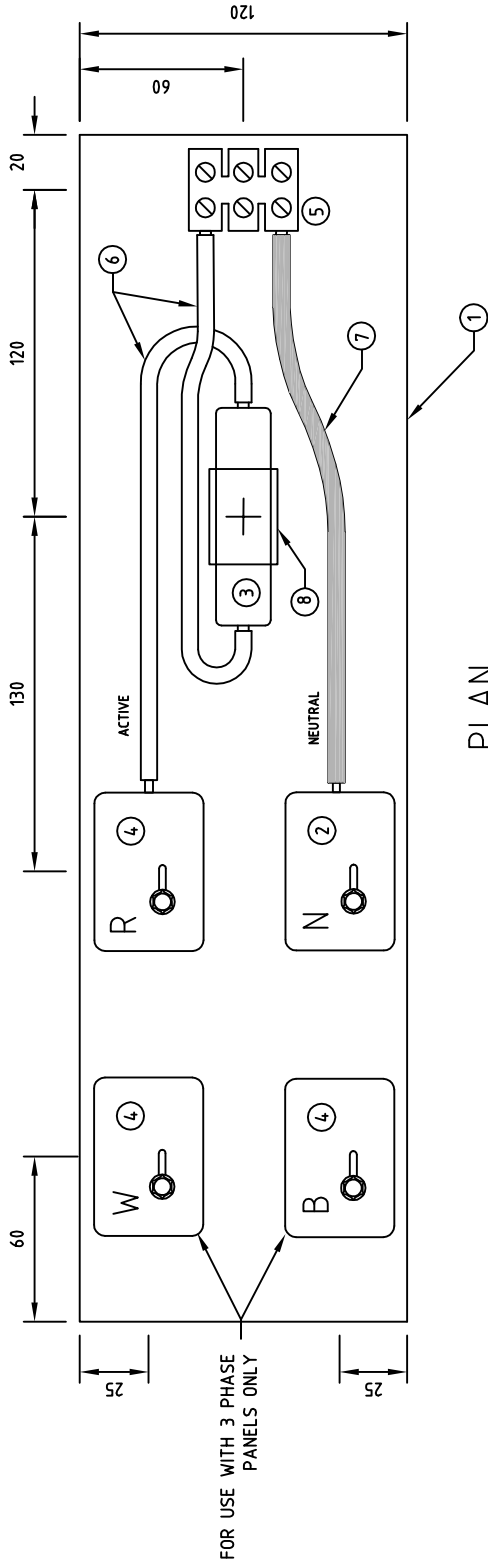
ACT GOVERNMENT

DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorized Signature _____ Date _____
 Drawn NC * Date _____
 Project Engineer WC * Date _____

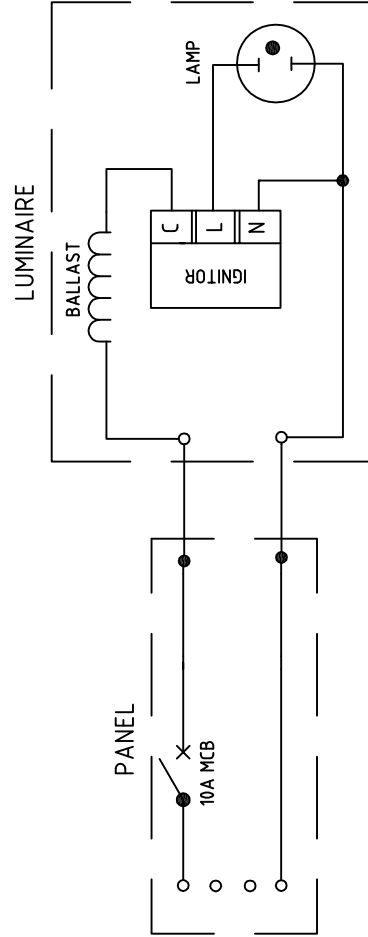
LINK PANEL
FOR INTEGRAL LUMINAIRES
ON ENERGY ABSORBING
COLUMNS

Scale NOT TO SCALE Date 14/09/06
 AutoCAD File _____
 Drawing No. **DS12-01-06** Revision No. **0**

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 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWA GL DRAWING NO. 795-9-006 REVISION H - DATED 11/04/03



PLAN
Scale 1:2

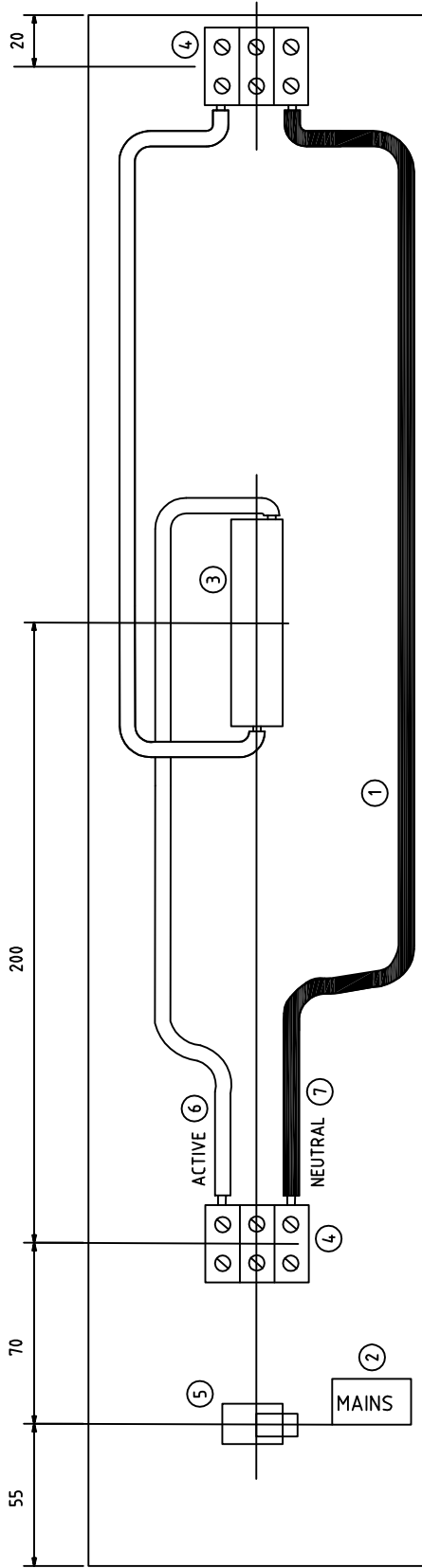


SCHEMATIC DIAGRAM

NOTE

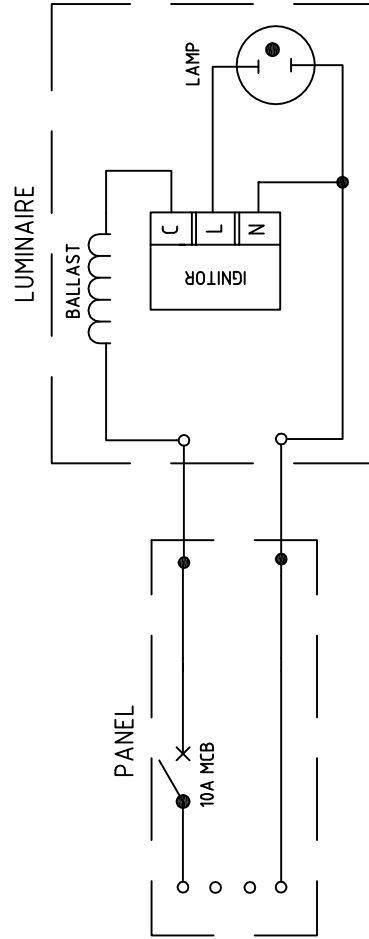
1. USE WITH INTEGRAL LUMINAIRE (70W SON etc.)

| COMPLETE ASSEMBLY | | | |
|-------------------|--|-------|--|
| ITEM | DESCRIPTION | QTY | |
| 8 | RAIL TERMINAL MOUNTING KLIPPON TYPE TSK 35 | 0.02m | |
| 7 | CABLE 2.5mm ² 1 CORE DOUBLE INSULATED BLACK | 0.4m | |
| 6 | CABLE 2.5mm ² 1 CORE DOUBLE INSULATED WHITE | 0.5m | |
| 5 | PLASTIC TERMINAL STRIP (BP535) | 1 | |
| 4 | INSULATED CONNECTOR LINK (RED) | 3 | |
| 3 | 1 PHASE 10 AMP MCB | 1 | |
| 2 | INSULATOR CONNECTOR LINK (BLACK) | 1 | |
| 1 | INTERMEDIATE S/L PANEL BASE (120x435) | 1 | |



PLAN
SCALE 1 : 2

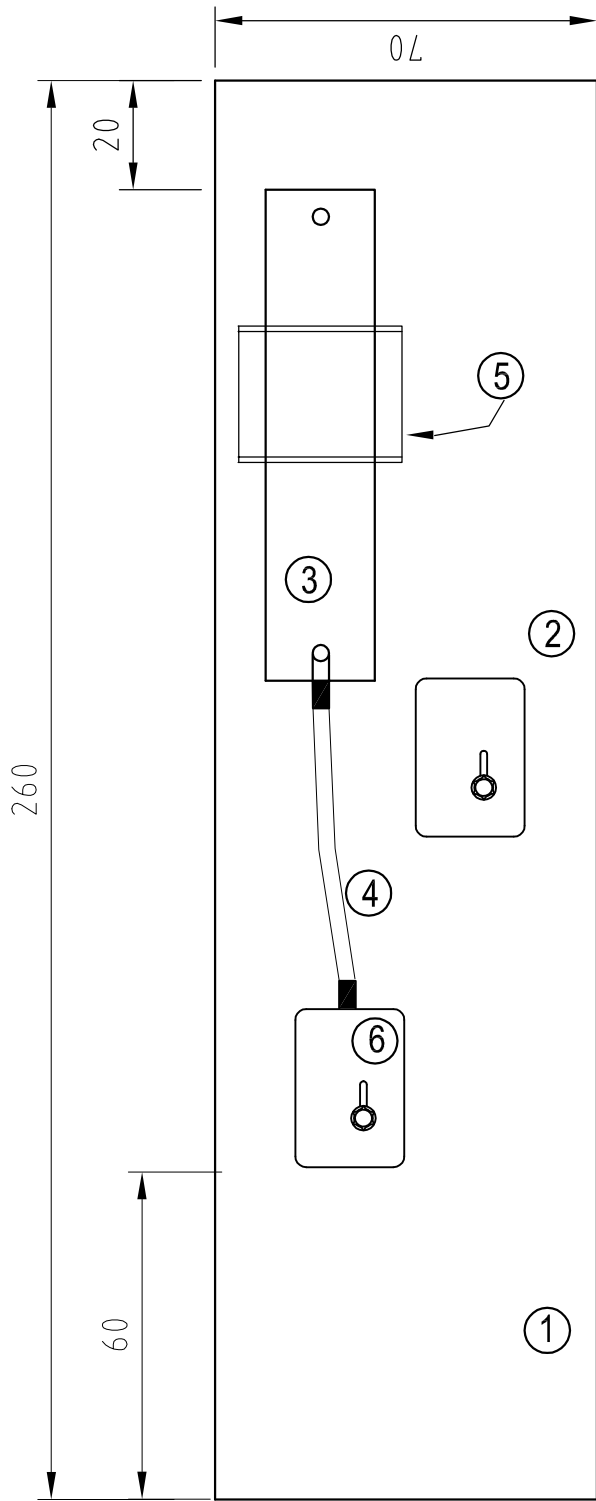
| COMPLETE ASSEMBLY | |
|-------------------|---|
| ITEM No | DESCRIPTION |
| 7 | CABLE,SDI,2.5mm ² INSULATED SHEATHED BLACK CORE |
| 6 | CABLE,SDI,2.5mm ² INSULATED SHEATHED RED CORE |
| 5 | CABLE CLAMP SUITABLE FOR 7mm DIA CABLE (FARNELL ORDER CODE 434-03 OR EQUIVALENT) |
| 4 | PLASTIC TERMINAL STRIP (BP535) |
| 3 | 1 PHASE 10 AMP MCB |
| 2 | LABELS (MAINS) SIZE 50 x 20 |
| 1 | MAJOR S/L PANEL BASE (130 X 610) |
| | QTY |



SCHEMATIC DIAGRAM

WIRING
1069378
1069380

BLACK 2.5mm Cu DOUBLE INSULATED WHITE SHEATH WITH BLACK INNER INSULATION (NEUTRAL)
RED 2.5mm Cu DOUBLE INSULATED BLACK SHEATH WITH RED INNER INSULATION



COMPLETE ASSEMBLY

| Item | Description | Quantity |
|------|--|----------|
| 1 | Panel Base, Insulation, natural paper laminate 3.2mm | 1 |
| 2 | Insulated connector block | 1 |
| 3 | MCB 10A 1 Phase | 1 |
| 4 | 2.5mm ² SDI Cable (Red Core) | 0.2m |
| 5 | Din Rail to suit | |
| 6 | Insulator Connector Block (Red) | 1 |

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES

ACT GOVERNMENT



DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorised Signature

Drawn NC * Date

Project Engineer WC * Date

LINK PANEL FOR
INTEGRAL LUMINAIRES
ON 4.1m POST TOP COLUMNS
(SUITABLE FOR BEGA LIGHTS
AND KIM ARCHE LUMINAIRES)

Scale NOT TO SCALE Date 14/09/06

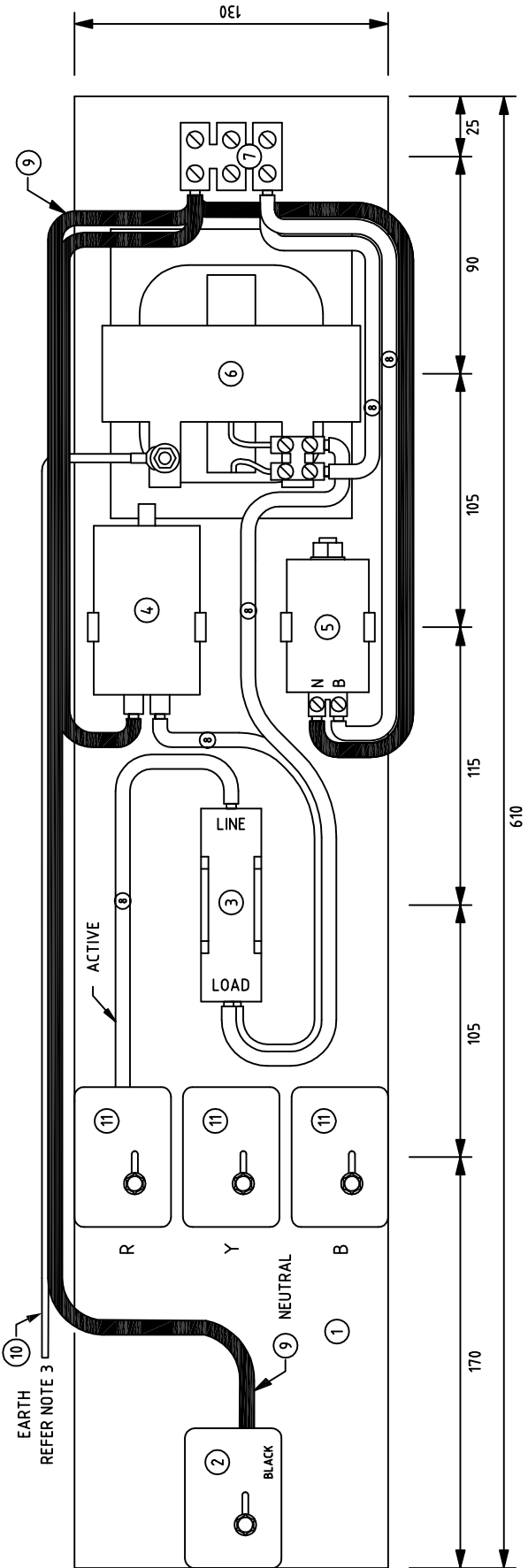
AutoCAD File

Drawing No.

DS12-01-09

Revision No.

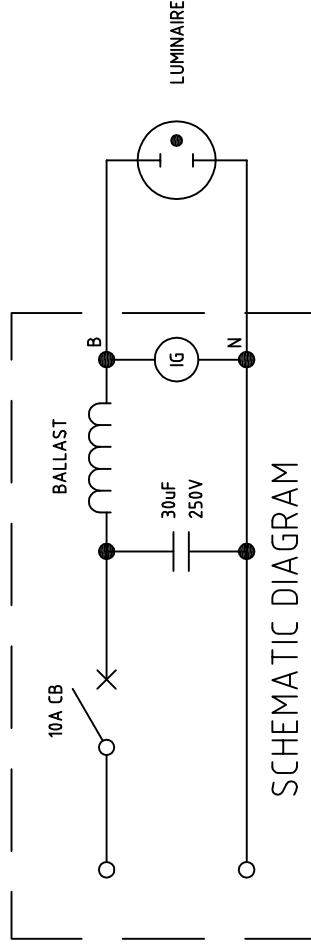
0



PLAN

| COMPLETE ASSEMBLY | | QTY |
|-------------------|--|------|
| 8 | SCREW 4x0.5" PAN PHILLIPS | 8 |
| 2 | RAIL TERMINAL MOUNTING KLIPPON TYPE TSK35 | 2 |
| 6 | CABLE TIE 142x3.2mm BLACK | 6 |
| 4 | LINK 500V 80A 4 HOLE ACTIVE/NEUTRAL | 4 |
| 1 | CRIMP LUG 2.5mm x M5 COPPER | 1 |
| 1 | SCREW CHEESE 3/16" | 1 |
| 2 | NUT 3/16" | 2 |
| 1 | WASHER 3/16" | 1 |
| 11 | INSULATED CONNECTOR LINK (RED) | 3 |
| 10 | 2.5mm ² 1C EARTH CABLE (Green/Yellow) | 0.8m |
| 9 | 2.5mm ² 1C DOUBLE INSULATED CABLE (BLACK CORE) | - |
| 8 | 2.5mm ² 1C DOUBLE INSULATED CABLE (RED CORE) | - |
| 7 | CONNECTOR STRIP | 3 |
| 6 | BALLAST 250V 400W MBF ATCO CATALOGUE 06B400-09 OR EQUIVALENT | 1 |
| 5 | IGNITOR ECA501 VOSSLÖH SCHWABE OR EQUIVALENT | 1 |
| 4 | CAPACITOR 30uF 250V 50HZ | 1 |
| 3 | MINIATURE CIRCUIT BREAKER 10A SINGLE POLE | 1 |
| 2 | INSULATED CONNECTOR LINKS BLACK | 4 |
| 1 | S/L PANEL BASE (130x610) | 1 |
| ITEM | DESCRIPTION | QTY |

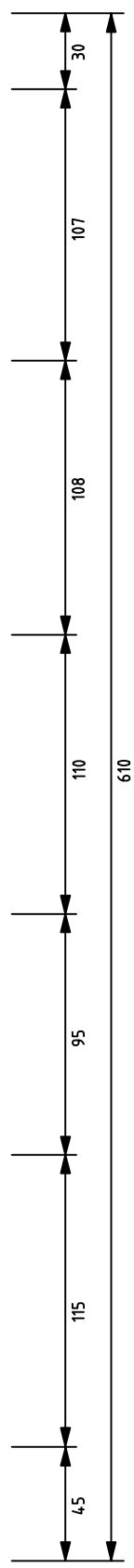
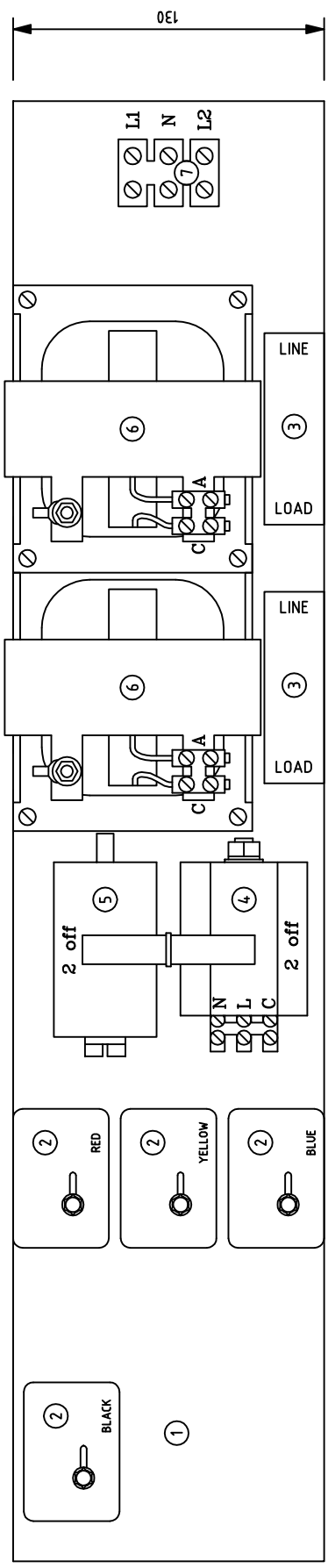
PANEL



SCHEMATIC DIAGRAM

NOTES

1. TERMINALS FOR CAPACITOR & IGNITOR SHOULD POINT DOWNWARD
2. LINE SIDE OF THE MINIATURE CIRCUIT BREAKER SHOULD POINT UP
3. EARTH CABLE (ITEM 10) SHOULD NOT BE CONNECTED TO INSULATOR LINK. LEAVE CABLE COILED AND CLIPPED TO PANEL - LENGTH TO BE 800mm

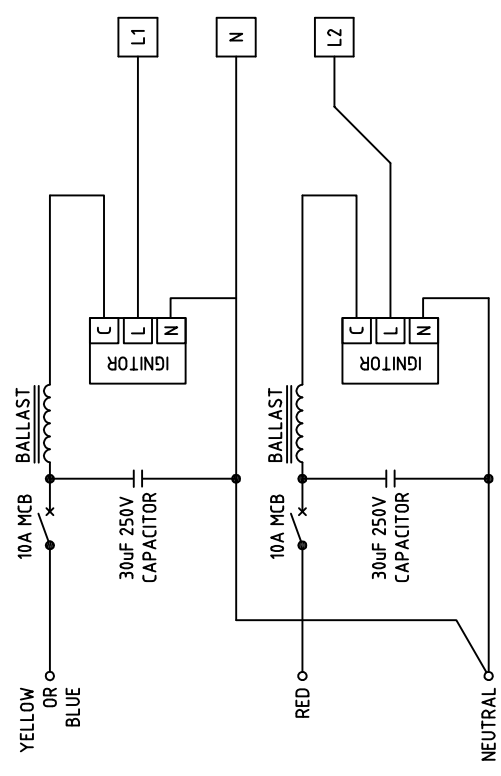


150W HPS

| No | DESCRIPTION | 0.8m |
|----|---|------|
| 8 | EARTH CABLE SDI 2.5mm ² | 3 |
| 7 | PLASTIC TERMINAL STRIP (BP 535) | 2 |
| 6 | 150W H.P.S. NON ENCAPSULATED BALLAST - ATCO OGS150-03 | 2 |
| 5 | 30µF 250V CAPACITOR | 2 |
| 4 | IGNITOR ATCO AMZN400 | 2 |
| 3 | 1 PHASE 10A MCB | 4 |
| 2 | INSULATED CONNECTOR LINK (BLACK) | 1 |
| 1 | MAJOR STREETLIGHT PANEL BASE | |

250W HPS

| No | DESCRIPTION | 0.8m |
|----|--|------|
| 8 | EARTH CABLE SDI 2.5mm ² | 3 |
| 7 | PLASTIC TERMINAL STRIP (BP 535) | 2 |
| 6 | 250W H.P.S. NON ENCAPSULATED BALLAST - ATCO OGS250-100 | 2 |
| 5 | 30µF 250V CAPACITOR | 2 |
| 4 | IGNITOR ATCO AMZN400 | 2 |
| 3 | 1 PHASE 10A MCB | 2 |
| 2 | INSULATED CONNECTOR LINK (BLACK) | 1 |
| 1 | MAJOR STREETLIGHT PANEL BASE | 1 |



SCHEMATIC DIAGRAM

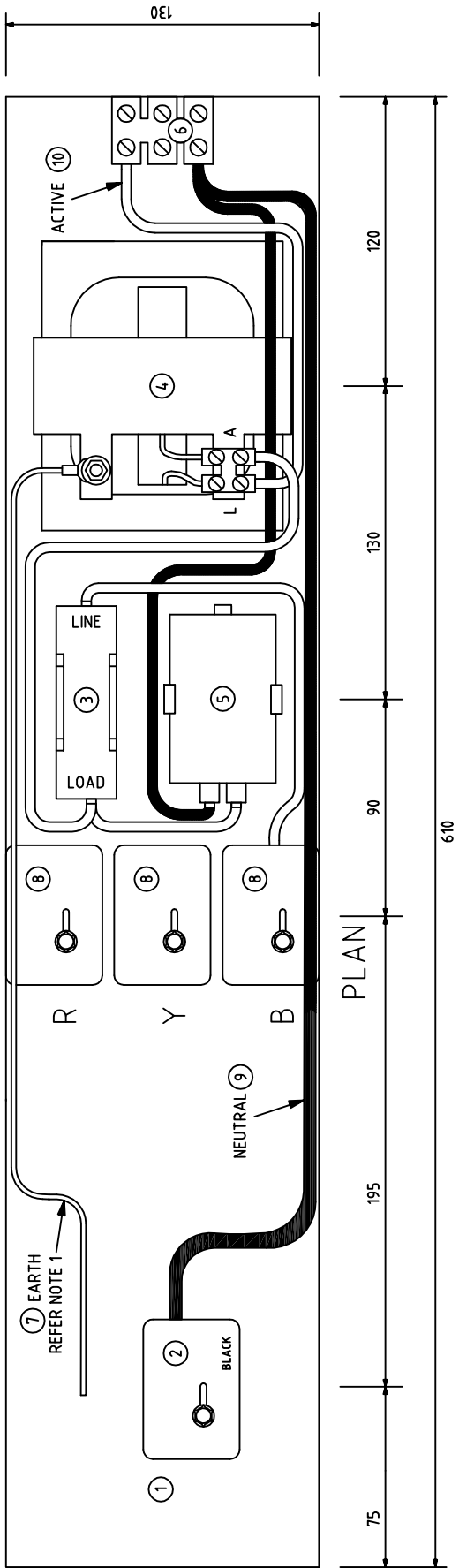
NOTES

1. EARTH CABLE (ITEM 8) SHOULD NOT BE CONNECTED TO INSULATOR LINK. LEAVE CABLE COILED AND CLIPPED TO PANEL - LENGTH TO BE 800mm

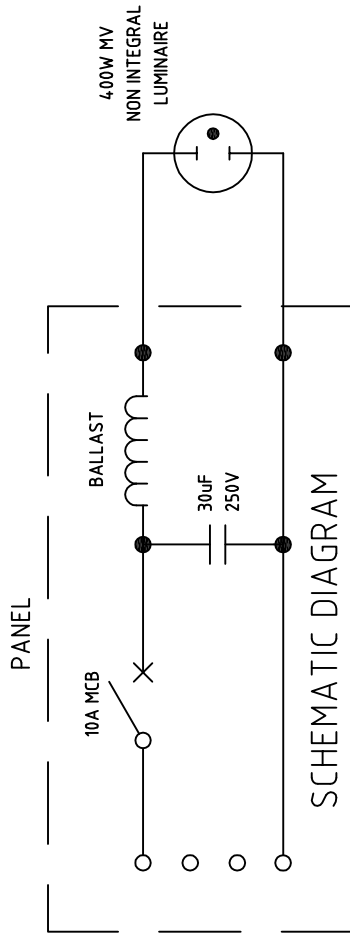


**DESIGN STANDARD
URBAN INFRASTRUCTURE**

| | |
|--|--------------------------|
| Authorized Signature | Date |
| Drawn NC | Date |
| Project Engineer WC | Date |
| STREETLIGHT CONTROL PANEL FOR TWIN/TRAFFIC 150W/250W HPS NON INTEGRAL LUMINAIRES LAYOUT AND SCHEMATIC | |
| Scale NOT TO SCALE | Date 14/09/06 |
| Approved File | Revision No. 0 |



| COMPLETE ASSEMBLY | | QTY |
|-------------------|---|------|
| 1 | WASHER 3/16" BRASS | 2 |
| 2 | SELF TAP SCREW, 4x.5", PHILLIPS HEAD | 8 |
| 3 | SCREW 3/16" BRASS | 1 |
| 4 | NUT 3/16" | 1 |
| 5 | RAIL TERMINAL MOUNTING, KLIPPON TYPE TSK 35 | 2 |
| 6 | QUICKLUG 2.5mm ² x M5.1 BOLT HOLE COPPER | 1 |
| 7 | CABLE TIE 14x2x3.2mm BLACK NYLON | 1 |
| 8 | CABLE SDI 2.5mm ² INSULATED BLACK | 0.6m |
| 9 | CABLE SDI 2.5mm ² INSULATED RED | 1.1m |
| 10 | INSULATED CONNECTOR LINKS (RED) | 3 |
| 11 | EARTH CABLE SDI 2.5mm ² (GREEN/YELLOW) | 0.8m |
| 12 | PLASTIC TERMINAL STRIP (30A) | 3 |
| 13 | CAPACITOR 30uF, 250V | 1 |
| 14 | BALLAST ENCAPSULATED 250V 400W MBF - ATCO No.0GB4,00-09 | 1 |
| 15 | MINIATURE CIRCUIT BREAKER 10A SINGLE POLE | 1 |
| 16 | INSULATED CONNECTOR LINKS (BLACK) | 1 |
| 17 | S/L PANEL BASE (130x610) | 1 |
| ITEM | DESCRIPTION | QTY |



NOTES

- EARTH CABLE (ITEM 7) SHOULD NOT BE CONNECTED TO INSULATOR LINK. LEAVE CABLE COILED & CLIPPED TO PANEL - LENGTH TO BE 800mm.

ACT GOVERNMENT

DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorized Signature _____ Date _____

Drawn NC * Date _____

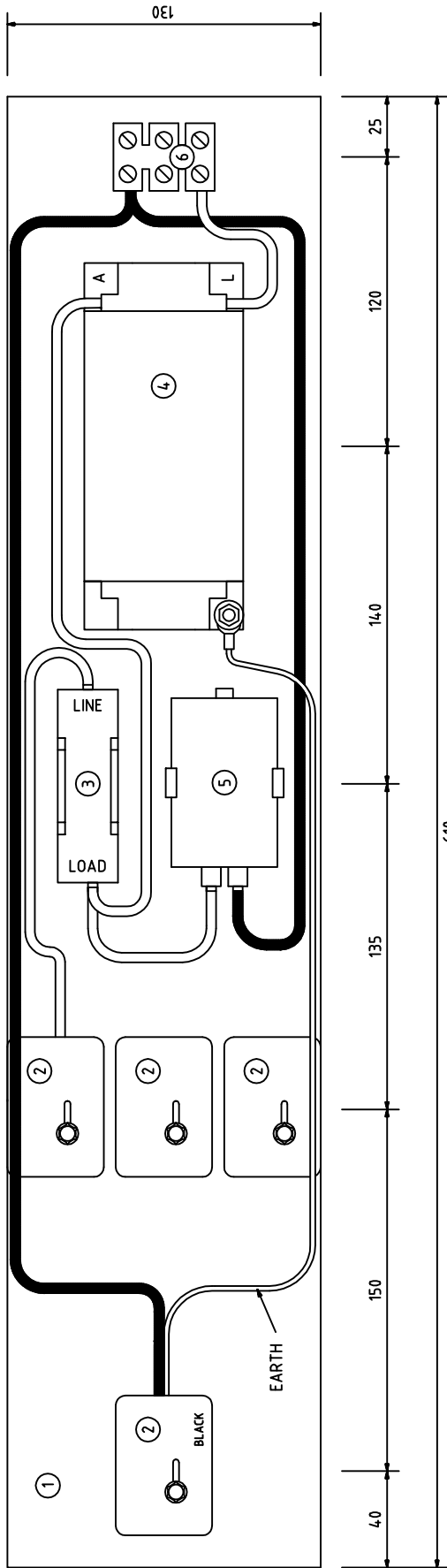
Project Engineer WC * Date _____

STREETLIGHT CONTROL PANEL
FOR 400W MV SINGLE
NON INTEGRAL LUMINAIRE

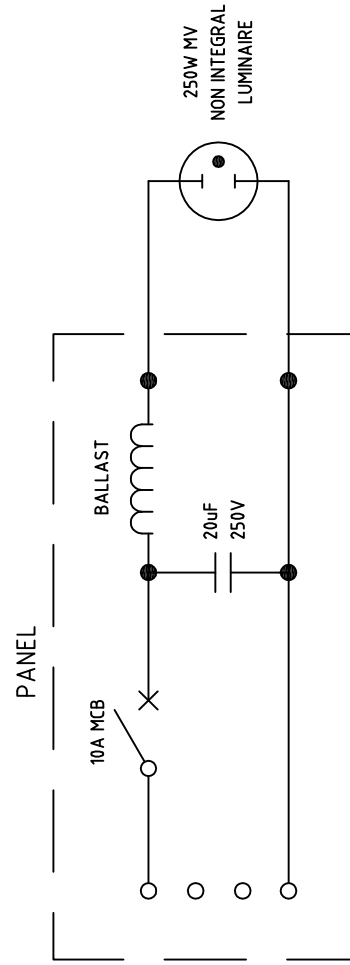
Scale NOT TO SCALE Date 14/09/06

AutoCAD File

Drawing No. **DS12-01-12** Revision No. **0**



PLAN



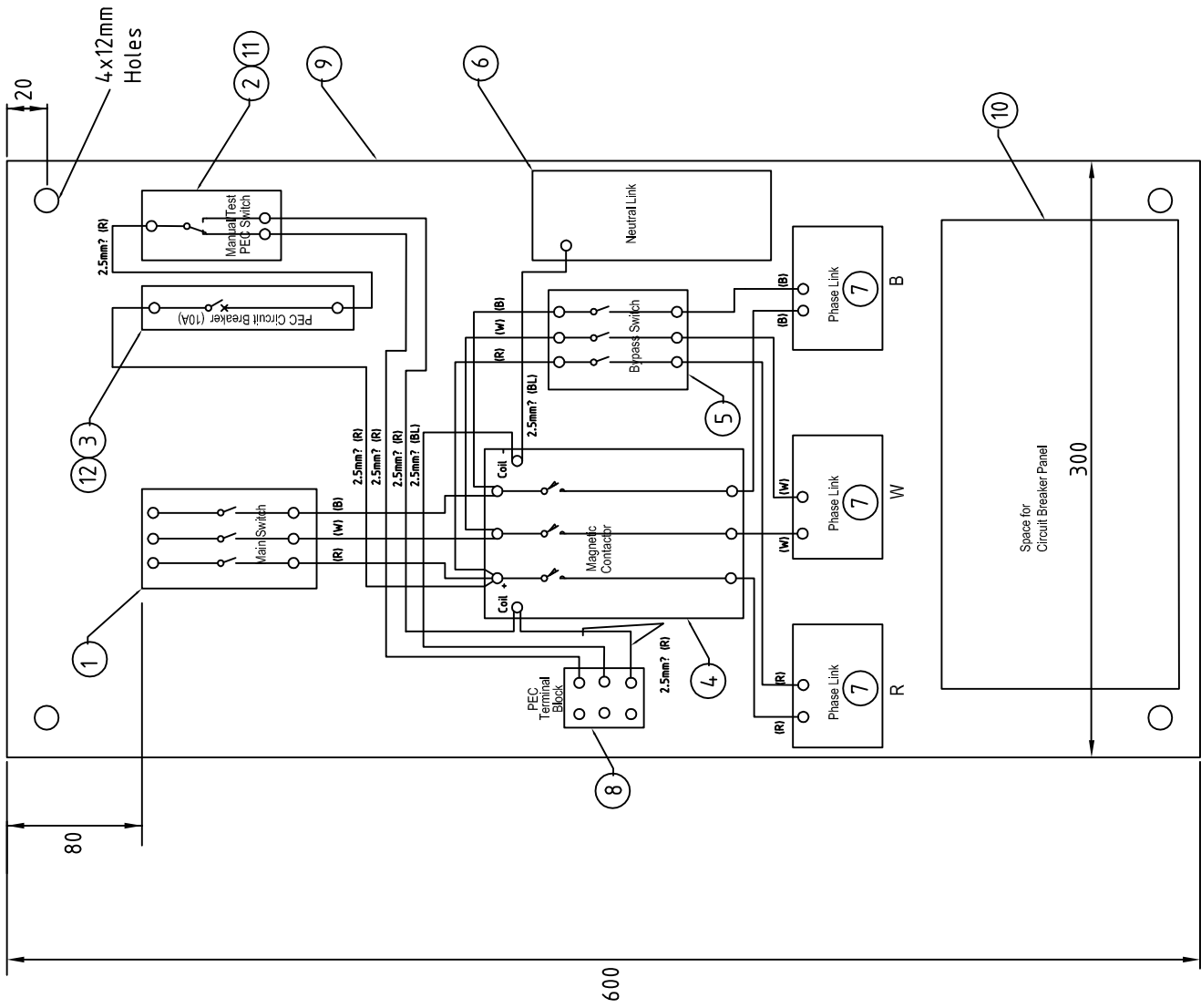
SCHEMATIC DIAGRAM

| COMPLETE ASSEMBLY | | |
|-------------------|--|-----|
| ITEM | DESCRIPTION | QTY |
| 6 | PLASTIC TERMINAL STRIP (30A) | 3 |
| 5 | CAPACITOR 20µF, 250V | 1 |
| 4 | BALLAST ENCAPSULATED 250V 250W MBF - ATCO No.OMB250-02 | 1 |
| 3 | MINIATURE CIRCUIT BREAKER 10A SINGLE POLE | 1 |
| 2 | INSULATED CONNECTOR LINKS (500V, 80A, 4 HOLE) | 4 |
| 1 | S/L PANEL BASE (130x610) | 1 |

ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

| | |
|--|--------------------------|
| Authorized Signature | Date |
| Drawn NC | Date |
| Project Engineer WC | Date |
| STREETLIGHT CONTROL PANEL FOR 250W MV SINGLE NON INTEGRAL LUMINAIRE | |
| Scale NOT TO SCALE | Date 14/09/06 |
| AutocAD File | |
| Drawing No. DS12-01-13 | Revision No. 0 |

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| Item No | Description | Qty |
|---------|--|-----|
| 12 | CABLE 2.5mm ² SINGLE CORE - RED | 2m |
| | CABLE 2.5mm ² SINGLE CORE - BLACK | 1m |
| | CABLE 16mm ² SINGLE CORE - BLUE | 1m |
| | CABLE 16mm ² SINGLE CORE - WHITE | 1m |
| | CABLE 16mm ² SINGLE CORE - RED | 1m |
| | DIN RAIL CLIPPON TYPE - TSK35 | 1 |
| 11 | ARCHITRAVE MOUNTING BLOCK (HPM1413-09) | 1 |
| 10 | CB 1 MODULE ENCLOSURE (HAGVM01C) | 1 |
| 9 | BLACK BAKERLITE PANEL (600x300) | 1 |
| 8 | PEC TERMINAL BLOCK (30A) | 1 |
| 7 | PHASE LINKS (RED) | 3 |
| 6 | NEUTRAL LINK 500v 300A 10 HOLE | 1 |
| 5 | BYPASS SWITCH | 1 |
| 4 | MAGNETIC CONTACTOR | 1 |
| 3 | 10 AMP CIRCUIT BREAKER | 1 |
| 2 | 10A Single Gang Switch | 1 |
| 1 | MAIN SWITCH 3PH - 440v 80A | 1 |
| | PANEL COMPLETE | - |

NOTES

- ALL WIRING TO BE 16mm² PVC SINGLE CORE CONDUCTOR UNLESS SHOWN OTHERWISE.
- NUMBER OF CIRCUIT BREAKERS RATING AND TYPE (I.E. 3φ OR 1φ) TO BE DETERMINED BY THE PROJECT MANAGER TO SUIT INDIVIDUAL PROJECT REQUIREMENTS.
- CABLE COLOUR CODES ARE AS FOLLOWS:
 R - RED
 W - WHITE
 B - BLUE
 BL - BLACK

ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

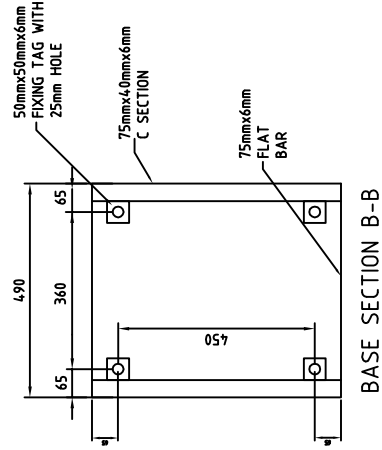
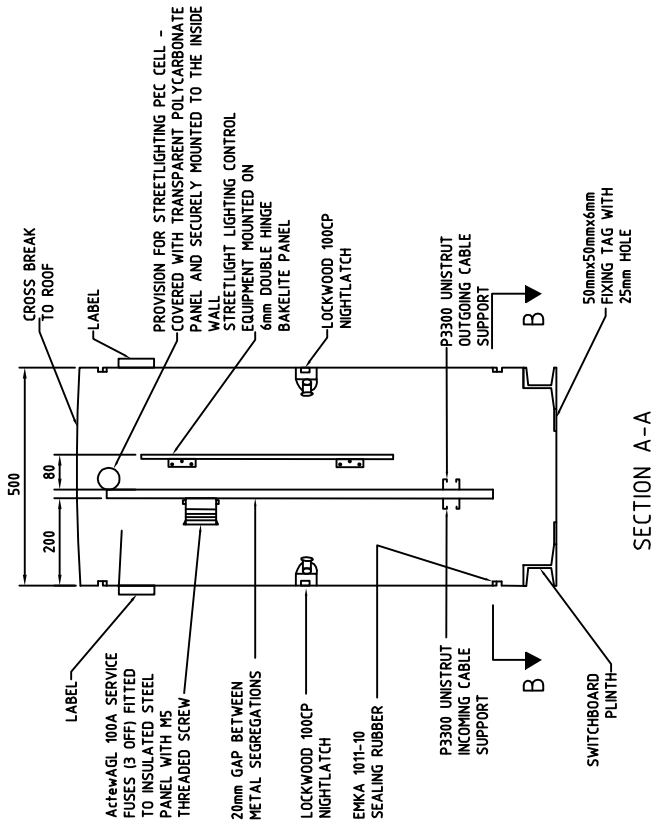
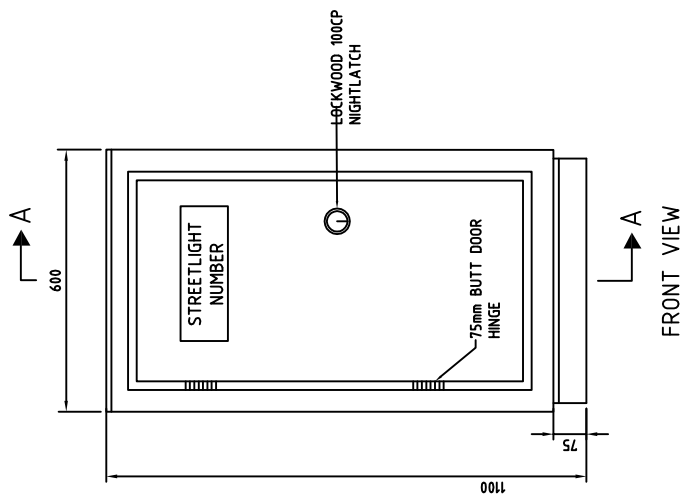
Drawn: NC * Date: *
 Project Engineer: WC * Date: *

STREETLIGHT CONTROL PANEL
SINGLE LINE DIAGRAM


Scale: NOT TO SCALE Date: 14/09/06
 AutoCAD File:

Drawing No. **DS12-01-15** Revision No. **0**

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- Notes:**
1. SWITCHBOARD CONSTRUCTION MUST COMPLY WITH ENCLOSURE RATING IP54 RATING
 2. REFER TO DS12-02-02 FOR CONCRETE FOOTING DETAILS
 3. SWITCHBOARD CUBICLE 1.5mm ZINCSEAL
 4. SWITCHBOARD DOORS 2.0mm ZINCSEAL
 5. Actewagl TO INSTALL NECESSARY LABELS PRIOR TO ENERGISATION
 6. DOOR LOCKS WILL BE REPLACED WITH Actewagl MASTERLOCK PRIOR TO ENERGISATION
 7. STREETLIGHT CUBICLE COLOUR IS TO BE ANOTEC GREY DULUX 512272
 8. REFER TO DS12-01-13 FOR ACTEWAGL CONNECTION ARRANGEMENT

| | |
|---|-----------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | Date |
| Drawn NC | Date |
| Project Engineer WC | Date |
| STREETLIGHT CONTROL CUBICLE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | Revision No. |
| DS12-01-16 | 0 |

USE FOR ACTEWAGL DISTRIBUTION

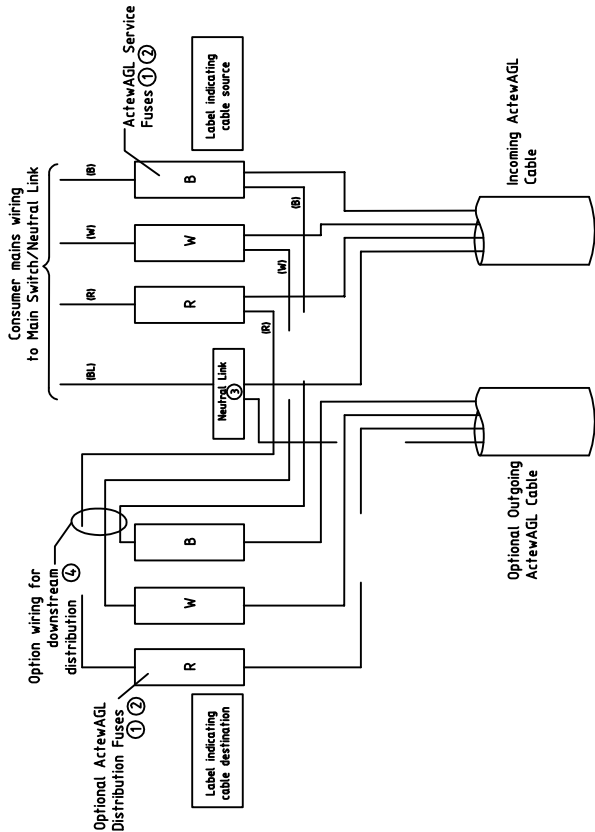
1. ActewAGL may choose to utilise the streetlight control cubicle as a distribution cubicle for similar type loads within the immediate vicinity.
2. When using the cubicle to service other loads the following shall apply:
 - a) ActewAGL shall supply and install the optional fuses and associated wiring as required
 - b) The number of downstream circuits shall be limited to either 1x3 phase or 3x1 phase
 - c) The maximum demand of the streetlighting installation AND all downstream loads shall not exceed 100A per phase
 - d) The maximum outgoing ActewAGL cable size shall be 35mm²
 - e) The types of loads able to be serviced from the ActewAGL distribution panel shall be limited to ACT Government, Territory Municipal Services assets such as Traffic Light Controllers, Irrigation Controllers and BBQ's etc.

Network Boundaries

1. The network boundary between the ActewAGL electricity network and the streetlight installation shall be the ActewAGL service fuses installed on the ActewAGL distribution panel.
2. When being used for distribution the outgoing cables from ActewAGL's distribution panel from part of the electricity network and the network boundary for downstream loads shall be the cable terminals or the ActewAGL service fuse (if installed) at each downstream load.

Notes

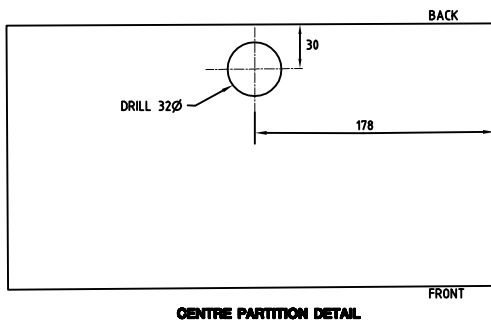
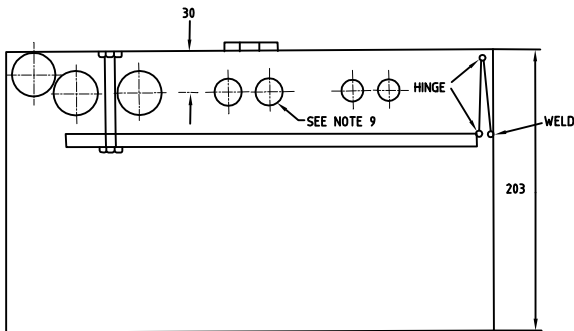
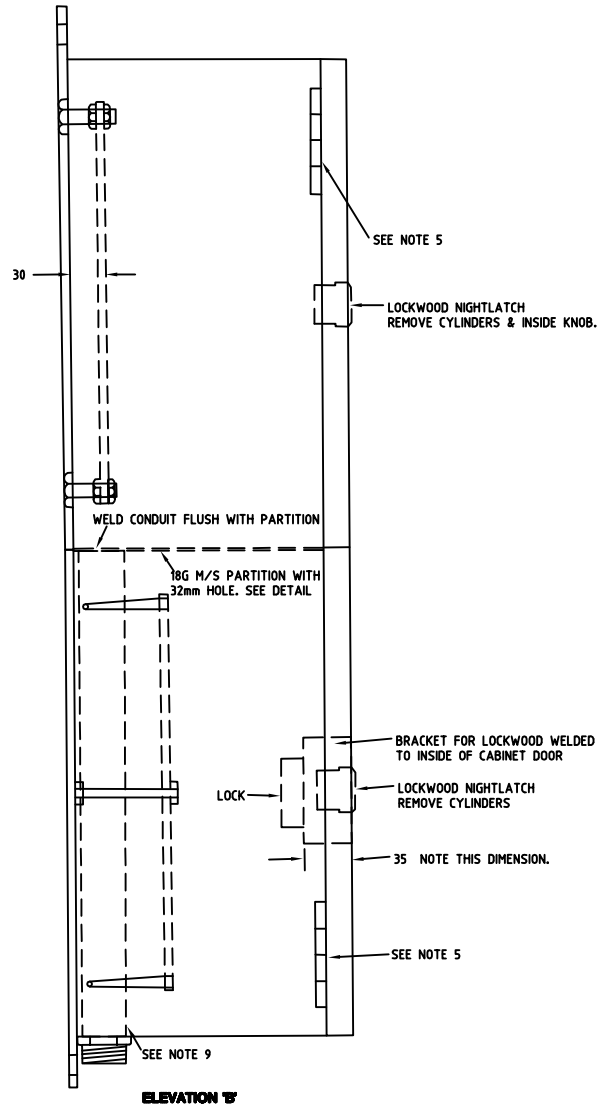
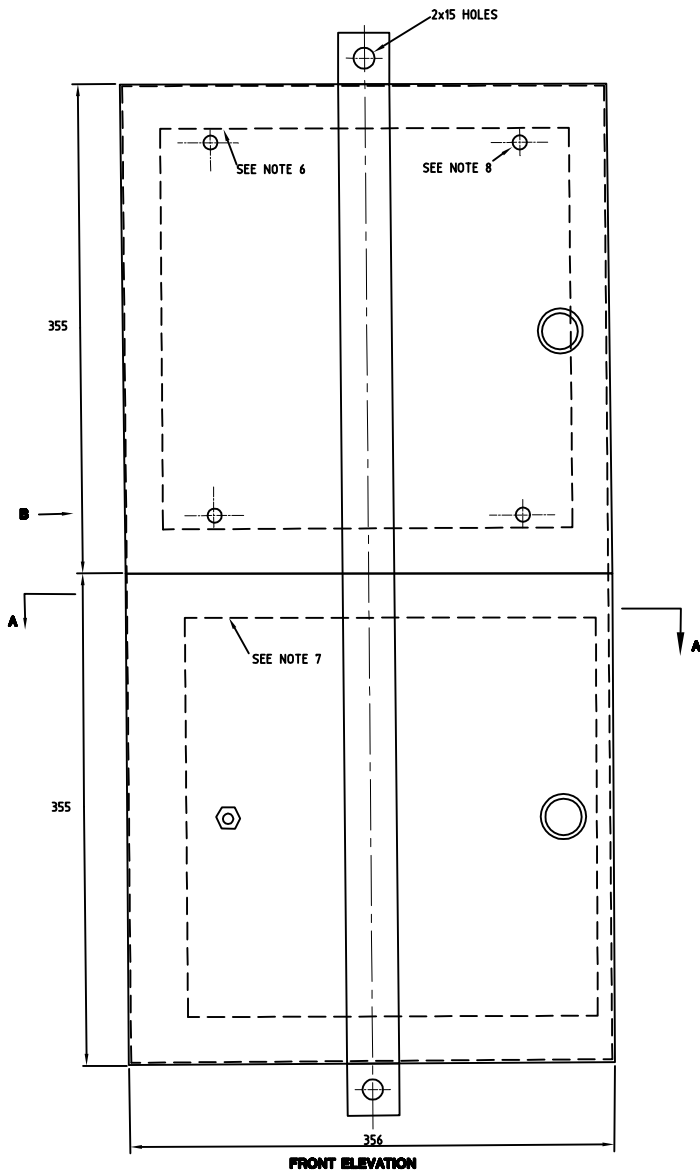
1. The ActewAGL service fuses for the streetlight installation shall be supplied by ActewAGL and installed by the cubicle manufacturer.
2. The ActewAGL neutral link and consumer mains wiring between the ActewAGL distribution panel and the streetlight control panel shall be supplied and installed by the cubicle manufacturer.
3. The consumer mains wiring shall be 16mm² Cu PVC single core cable.
4. The cubicle MEN shall be provided on the streetlight control panel side. Verification of the earthing/MEN connection is required by ActewAGL prior to energisation.
5. The maximum incoming ActewAGL cable size shall be 35mm²
6. All labels shall be laminated traffolyte with black lettering on a white background and shall be in accordance with ActewAGL Drg 091-005 "Labeling Standard-Distribution Plant"
7. Related/reference drawings:
 - a) DS12-02-02 Concrete Footing for Streetlight Control Cubicle
 - b) DS12-01-13 Single line Diagram - Streetlight Control Panel
 - c) DS12-01-15 Streetlight Control Cubicle



| Item | Description | Quantity | Arrangement |
|------|--|---------------|---------------|
| 4 | Cable 16mm ² Cu Single Core - Red | 1m | |
| | Cable 16mm ² Cu Single Core - White | 1m | |
| | Cable 16mm ² Cu Single Core - Blue | 1m | |
| | Cable 16mm ² Cu Single Core - Black | 1m | |
| 3 | Neutral link 500v 300A 10 hole | 1 | |
| 2 | HRC fuse cartridge - 100 Amp | 3 | |
| 1 | Fuse Holder | 3 | |
| | | Quantity | Arrangement |
| | | Arrangement 1 | Arrangement 2 |


Arrangement 1 - Streetlight control cubicle only
 Arrangement 2 - Streetlight control cubicle also being used for distribution. Quantities are additional items only above that of Arrangement 1 not total quantities

| | |
|--|-------------------|
| | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorized Signature | |
| Drawn | NC |
| Date | * |
| Project Engineer | WC |
| Date | * |
| STREETLIGHT CONTROL CUBICLE ACTEWAGL SERVICE CONNECTION ARRANGEMENT | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |
| Drawing No. | DS12-01-17 |
| Revision No. | 0 |

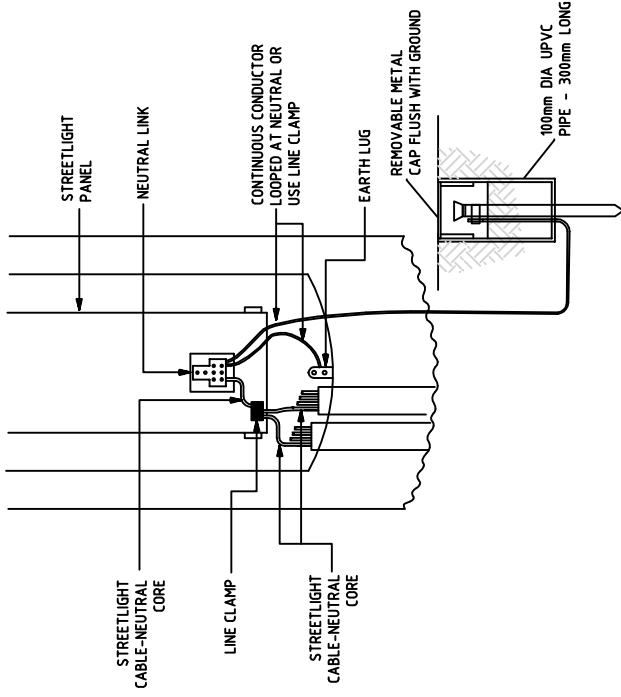


NOTES

1. BOX TO BE CONSTRUCTED FROM 18G MS SHEET.
2. ALL JOINTS TO BE OVERLAPPED & SPOT WELDED TO MAINTAIN WEATHERPROOF CONSTRUCTION.
3. BOX TO BE HOT DIPPED GALVANISED TO ASK53.
4. 76mm STANDARD BUTT TYPE HINGES.
5. 290 x 300 x 6 'PAXOLIN' PANEL.
6. 290 x 300 x 6 'PAXOLIN' PANEL HINGED, 60 SPACE BEHIND.
7. 4 x 10 WHIT BOLTS 32 LONG, WELDED TO BACK OF BOX.
8. 32mm STEEL CONDUIT.
9. "KNOCK OUTS" - 2 x 32, 2 x 20, 2 x 16. IN BOTTOM BOX

| | |
|---|--------------------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature _____ Drawn NC * Date _____ Project Engineer WC * Date _____ | |
| SPORTS OVAL LIGHTING CONTROL BOX POLE MOUNTED | |
| Scale NOT TO SCALE | Date 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-01-19 | Revision No. 0 |

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 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING Comlap Concrete Lightpole.pwd - DATED 11/05/05
 Page 12- 25



STEEL COLUMN MOUNTED ON RAGBOLT ASSEMBLY

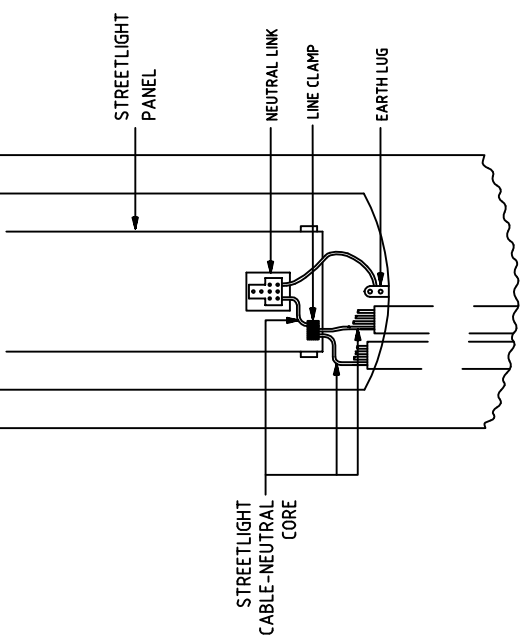
- NOTES:
1. WHERE 3 x 3 PHASE STREETLIGHT CABLES ARE TERMINATED, A 5 WAY NEUTRAL LINK MAY BE REQUIRED.
 2. EARTH CABLE 6mm² GREEN/YELLOW INSULATED EARTH CABLE.
 3. EARTH ELECTRODE IS A COPPER CLAD STEEL ROD 12.5mm IN DIAMETER AND 14.40mm LONG

ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

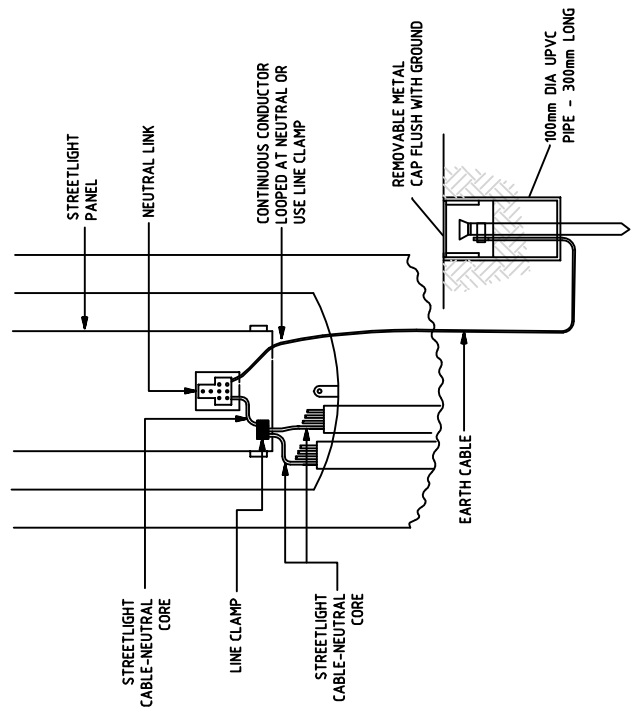
Authorized Signature: _____ Date: _____
 Drawn: NC * Date: _____
 Project Engineer: WC * Date: _____

M.E.N. EARTHING
OF STREETLIGHT COLUMNS

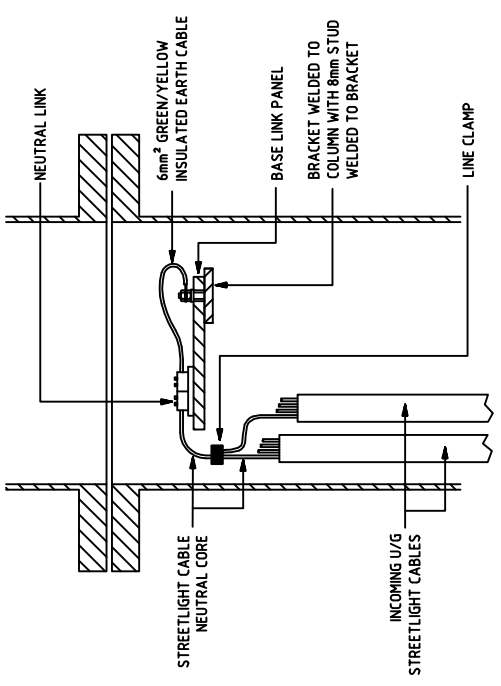
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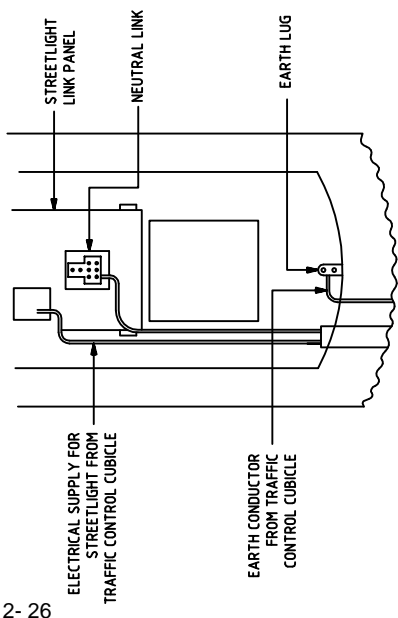
DIRECT BURIED COLUMN



CONCRETE COLUMN



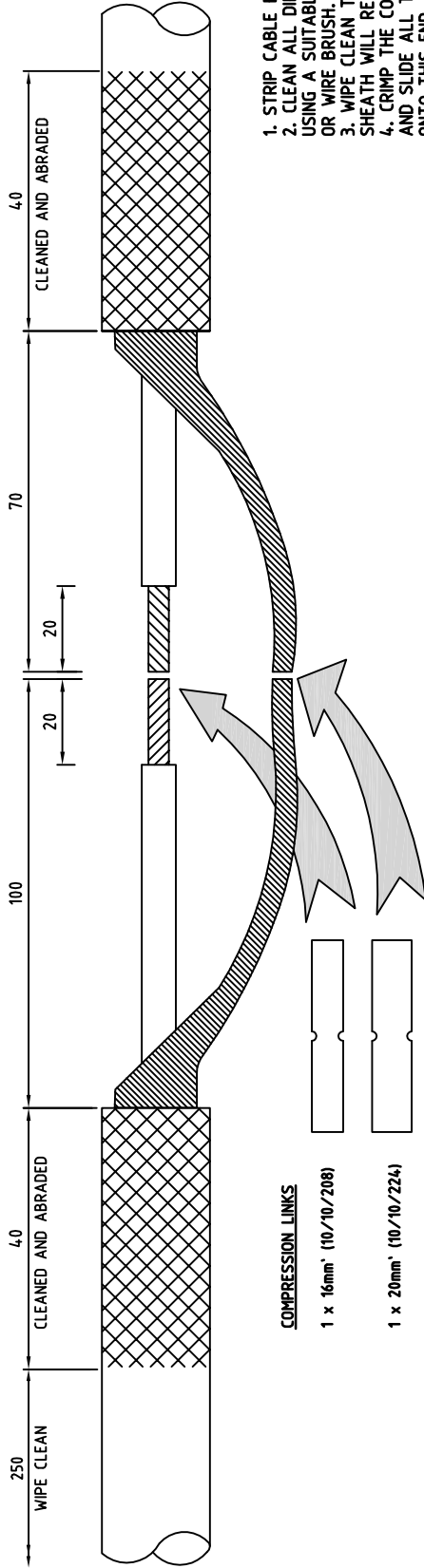
1SECTION THROUGH SLIP BASE COLUMN



- NOTE:
1. THIS COLUMN WILL NOT BE ON OUR STREETLIGHT CIRCUIT.
 2. SUPPLY TO STREETLIGHT COLUMN TO BE TAKEN FROM TRAFFIC LIGHT CONTROL BOX.
 3. THE LUMINAIRE TO HAVE OWN SPECIAL PE CELL BASE (NEMA OR D2 TYPE).

COMBINED TRAFFIC LIGHT & STREETLIGHT COLUMN

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAAGL. THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAAGL DRAWING NO. 799-0011 REVISION B - DATED 4/10/05



1. STRIP CABLE ENDS AS SHOWN ON DRAWING.
2. CLEAN ALL DIRT FROM THE CABLE SHEATH ENDS USING A SUITABLE SOLVENT AND ABRASE WITH THE RASP OR WIRE BRUSH.
3. WIPE CLEAN THE CABLE SHEATH WHERE THE OUTER SHEATH WILL REST.
4. CRIMP THE COMPRESSION LINKS ONTO THE LONGER TAILS AND SLIDE ALL THE OUTER AND INNER HEAT SHRINK SLEEVES ONTO THIS END.
5. CRIMP THE COMPRESSION LINKS ONTO THE OTHER TAILS

6. PLACE THE INNER SLEEVES CENTRALLY OVER THE LINKS AND HEAT GENTLY FROM THE MIDDLE OUTWARDS UNTIL MASTIC SQUEEZES OUT OF THE ENDS.
7. SHRINK ON OUTER SLEEVE AS FOR STEP 6.
8. ALLOW TO COOL 15 MINUTES BEFORE BACKFILLING TRENCH.

ACT GOVERNMENT

DESIGN STANDARD
URBAN INFRASTRUCTURE

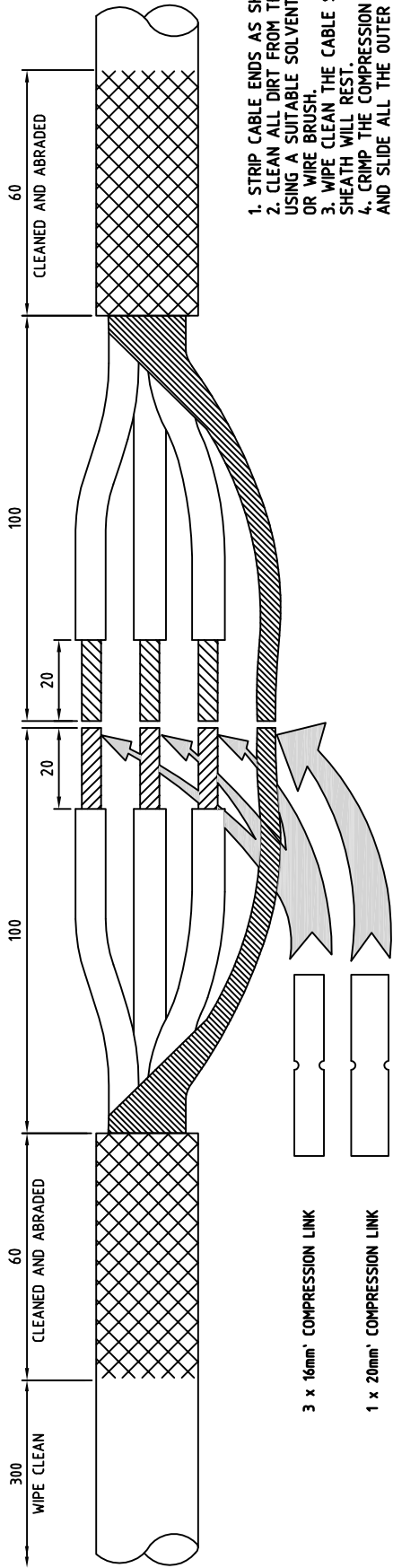
Authorized Signature: _____ Date: _____
 Drawn: NC * Date: _____
 Project Engineer: WC * Date: _____

STREET LIGHTING
10 NEUTRAL SCREEN
STRAIGHT THROUGH JOINT

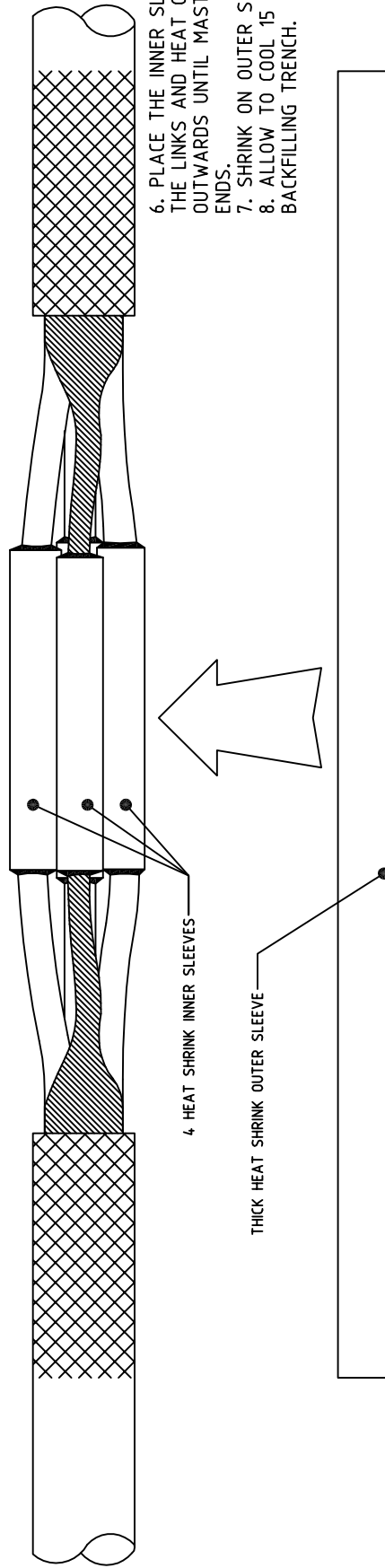
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 AutoCAD File: _____

Drawing No. **DS12-01-21** Revision No. **0**

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING 797-2-002 REVISION B - DATED 19/04/03



1. STRIP CABLE ENDS AS SHOWN ON DRAWING.
2. CLEAN ALL DIRT FROM THE CABLE SHEATH ENDS USING A SUITABLE SOLVENT AND ABRASE WITH THE RASP OR WIRE BRUSH.
3. WIPE CLEAN THE CABLE SHEATH WHERE THE OUTER SHEATH WILL REST.
4. CRIMP THE COMPRESSION LINKS ONTO THE LONGER TAILS AND SLIDE ALL THE OUTER AND INNER HEAT SHRINK SLEEVES ONTO THIS END.
5. CRIMP THE COMPRESSION LINKS ONTO THE OTHER TAILS



6. PLACE THE INNER SLEEVES CENTRALLY OVER THE LINKS AND HEAT GENTLY FROM THE MIDDLE OUTWARDS UNTIL MASTIC SQUEEZES OUT OF THE ENDS.
7. SHRINK ON OUTER SLEEVE AS FOR STEP 6.
8. ALLOW TO COOL 15 MINUTES BEFORE BACKFILLING TRENCH.

ACT GOVERNMENT

DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorized Signature: _____ Date: _____
 Drawn: NC * Date: _____
 Project Engineer: WC * Date: _____

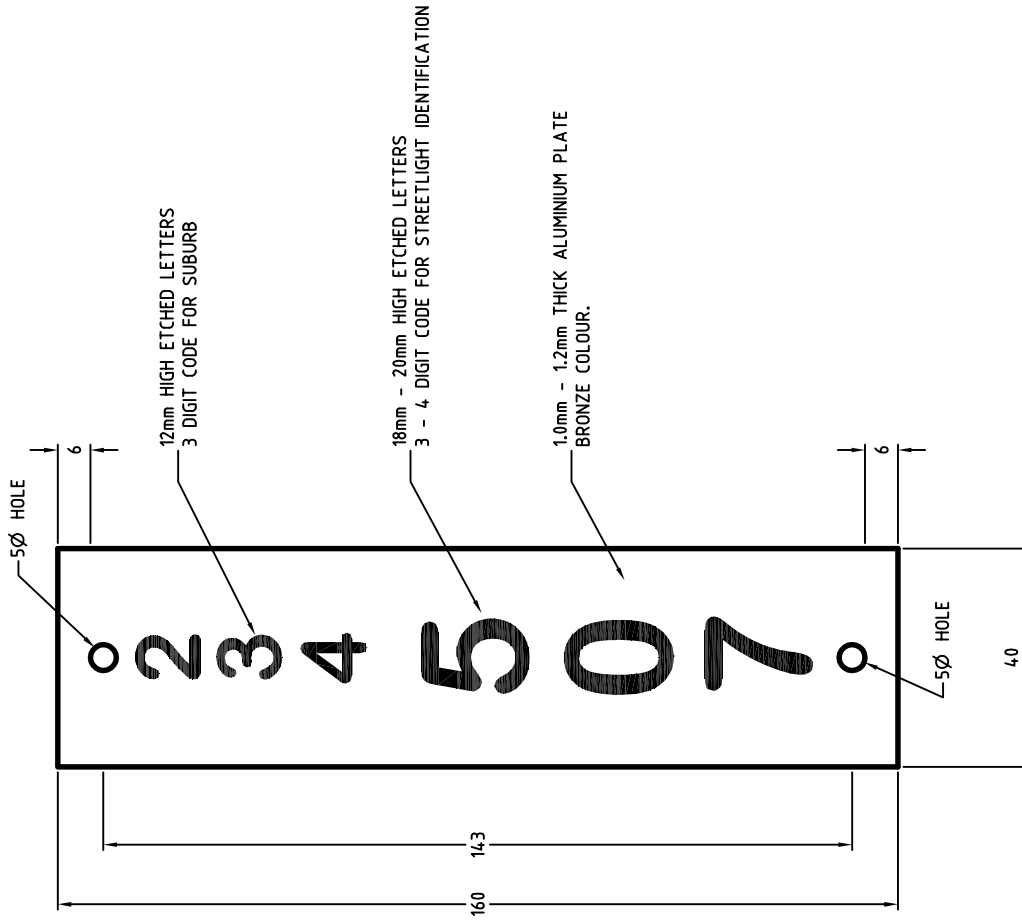
STREET LIGHTING
3Ø NEUTRAL SCREEN
STRAIGHT THROUGH JOINT

Scale: NOT TO SCALE Date: 14/09/06
 AutoCAD File: _____

Drawing No. **DS12-01-22** Revision No. **0**

IDENTIFICATION PLATES MANUFACTURED BY
 D.I. ELECTRICS PTY. LTD.
 IDENTIFICATION PLATES SUPPLIED TO
 ACTEWAGL FOR DISTRIBUTION.

MOUNTING HEIGHT 2.4m ABOVE G/C
 MOUNT ON ROAD OR PATHWAY SIDE OF COLUMN



ACT GOVERNMENT



DESIGN STANDARD
 URBAN INFRASTRUCTURE

Authorised Signature

Drawn NC * Date

Project Engineer WC * Date

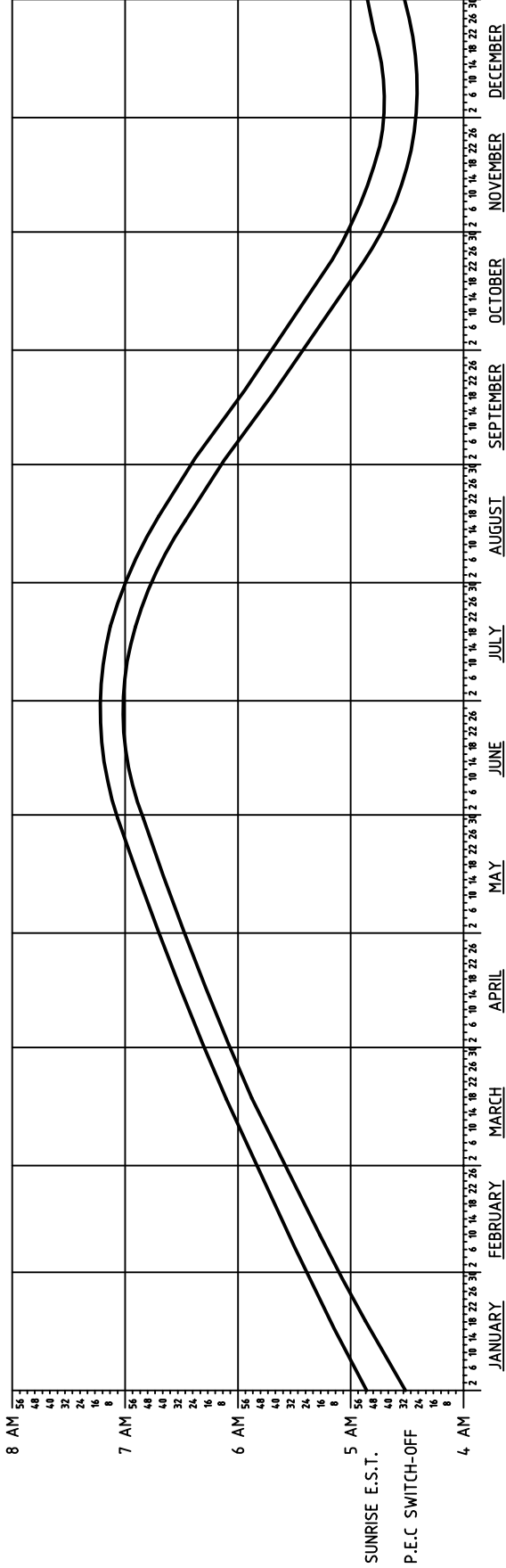
STREETLIGHT COLUMN
 IDENTIFICATION PLATE

Scale NOT TO SCALE Date 14/09/06

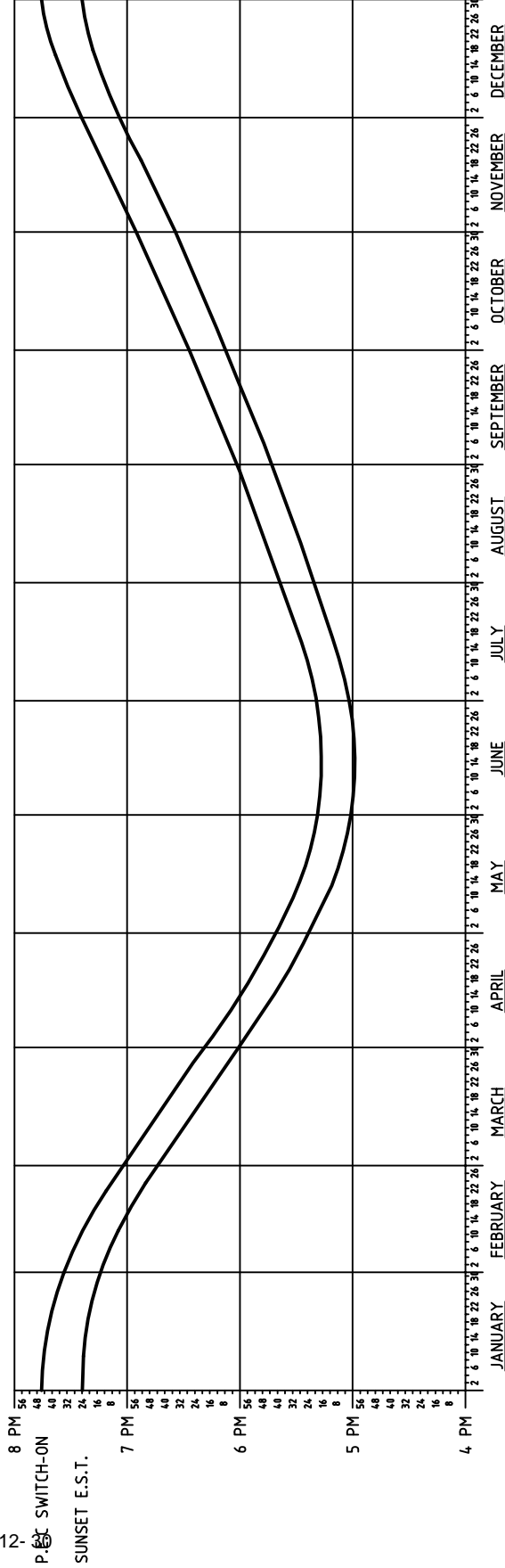
AutoCAD File

Drawing No. DS12-01-23 Revision No. 0


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 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACT ELECTRICITY AUTHORITY DRAWING 799-0001 DATED 06/07/70



SUNRISE E.S.T.
P.E.C SWITCH-OFF



P.E.C SWITCH-ON
SUNSET E.S.T.



ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

| | | | |
|------------------|----|------|--|
| Drawn | NC | Date | |
| Project Engineer | WC | Date | |

**PEC ACTIVATION
TIME GRAPH**

| | | | |
|--------|--------------|------|----------|
| Scale | NOT TO SCALE | Date | 14/09/06 |
| Author | WC | Date | |

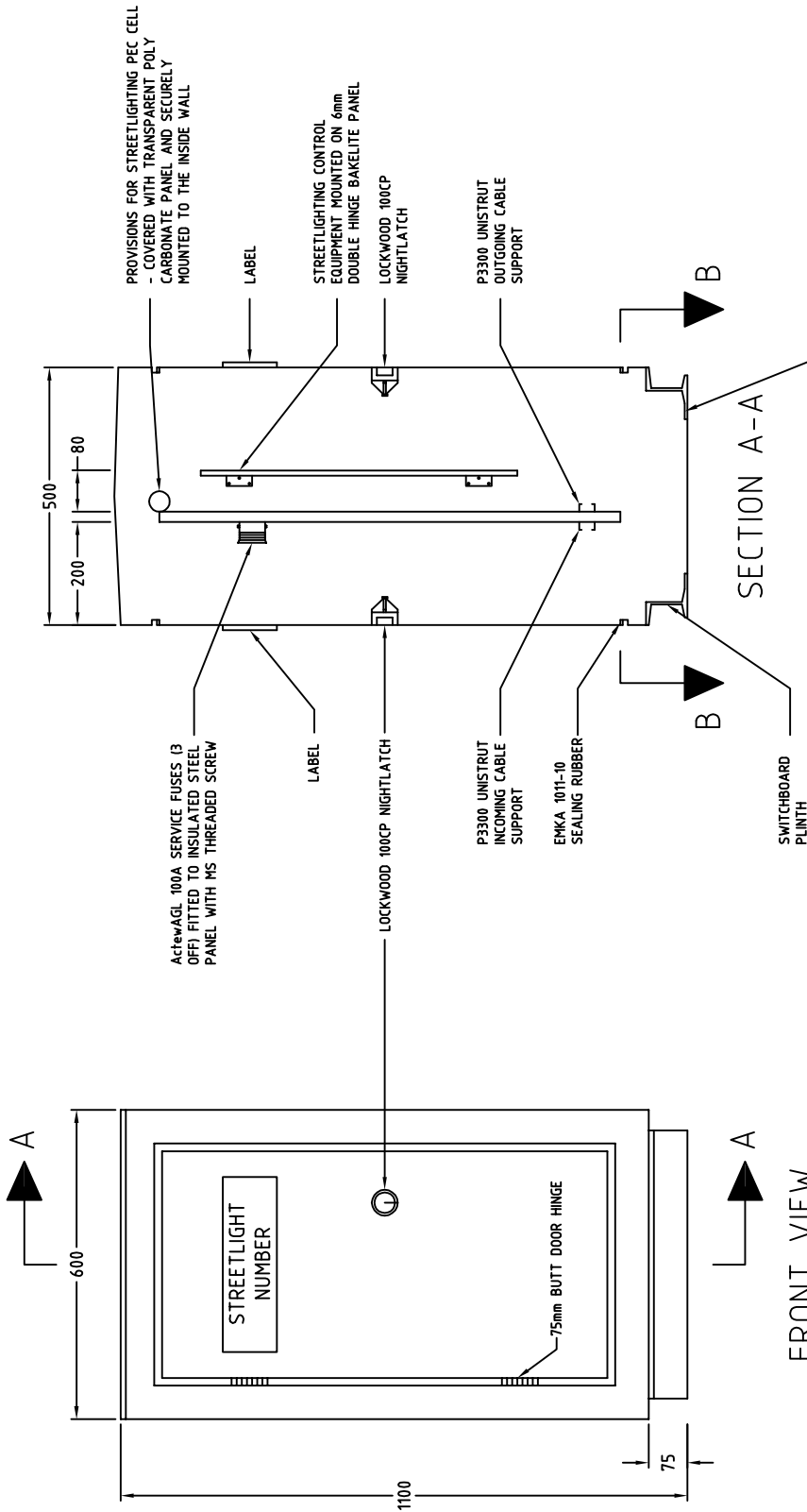
Drawing No.

DS12-01-24

Revision No.

0

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACT ELECTRICITY AUTHORITY DRAWING 796-7-001 DATED 10/08/79



FRONT VIEW

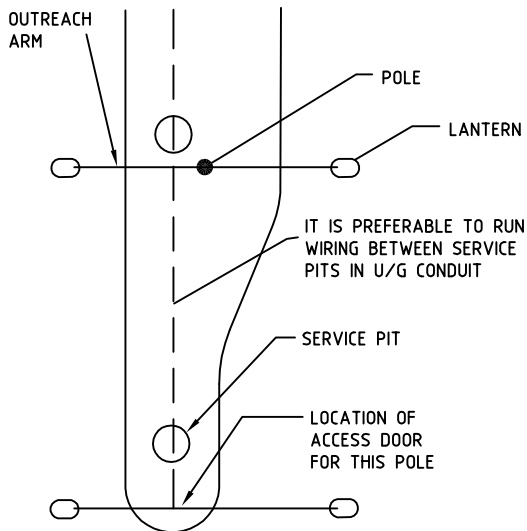
SECTION A-A

BASE SECTION B-B

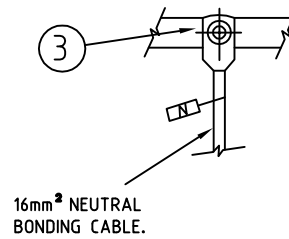
NOTES:

1. SWITCHBOARD CONSTRUCTION MUST COMPLY WITH ENCLOSURE RATING IP54 RATING
2. REFER TAMS DWG DS12-02-02 FOR CONCRETETEEFOOTING DETAILS
3. SWITCHBOARD CUBICLE 1.5mm ZINCSEAL
4. SWITCHBOARD DOORS 2.0mm ZINCSEAL
5. ActewAGL TO INSTALL NECESSARY LABELS PRIOR TO ENERGISATION
6. DOOR LOCKS WILL BE REPLACED BY ActewAGL MASTERLOCK PRIOR TO ENERGISATION
7. STREETLIGHT CUBICLE COLOUR IS TO BE BATTLESHIP GREY
8. REFER TO TAMS DWG DS12-01-17 FOR ActewAGL CONNECTION ARRANGEMENT

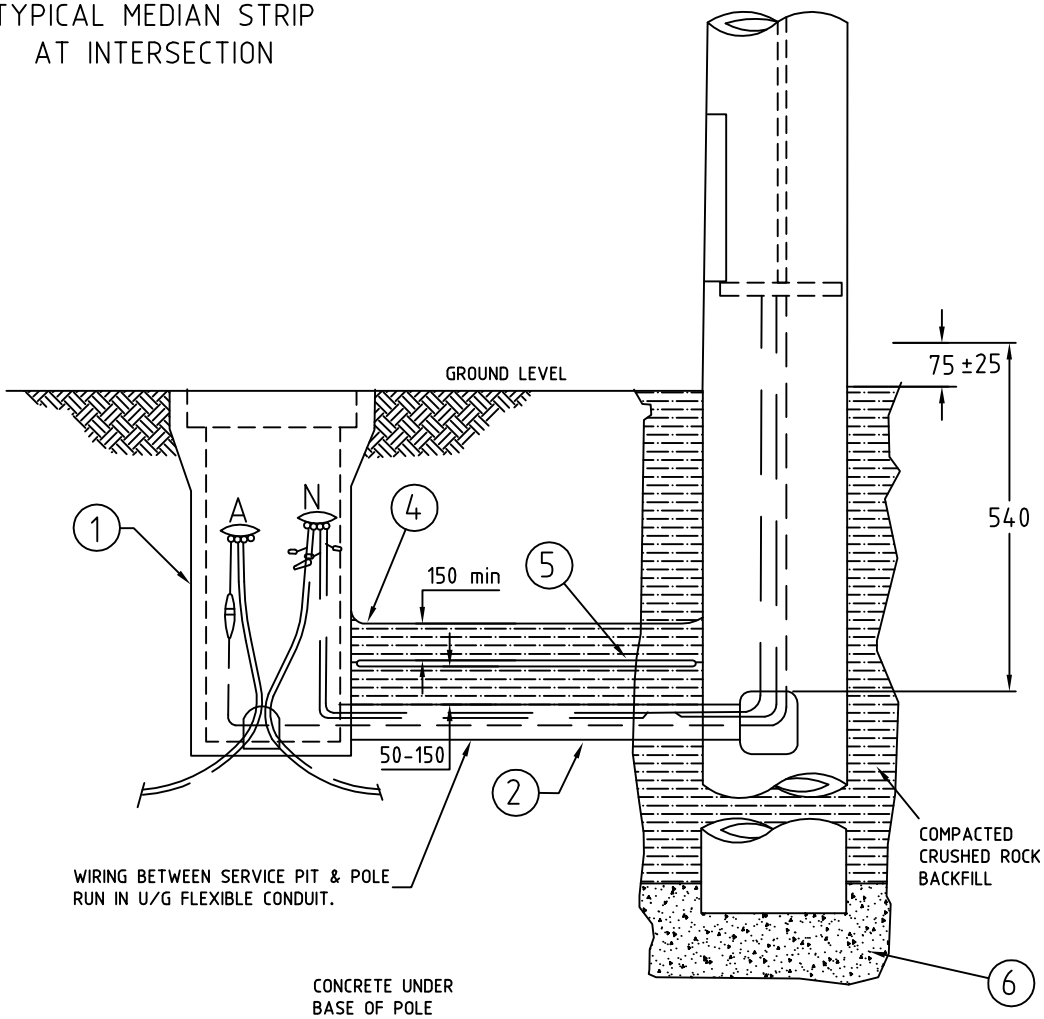
| | |
|------------------------------------|--------------|
| Authorised Signature | |
| Drawn | NC |
| Project Engineer | WC |
| Date | |
| Date | |
| STREETLIGHT CONTROL CUBICLE | |
| Scale | NOT TO SCALE |
| Drawn/CAD File | 08/11/06 |
| Revision No. | 0 |



TYPICAL MEDIAN STRIP AT INTERSECTION




NEUTRAL BOND STUD DETAILS



| | | |
|------|---|------|
| 6 | CONCRETE PREMIX DRY DENSE AGG. | 3 |
| 5 | COVER. U/G CABLE 1200x200, STRAIGHT POLY. | AR |
| 4 | TAPE, CAUTION. ELEC CABLE. BELOW. 150 WIDE | ROLL |
| 3 | LUG. CABLE CRIMP 16mm ² . M6 SCREW | 1 |
| 2 | CONDUIT. FLEXIBLE. PVC GREY Ø 25 (LARGER SIZE ACCEPTABLE) | AR |
| 1 | SERVICE PIT COMPONENTS. | 1 |
| | BODY | 1 |
| | LID | 1 |
| ITEM | DESCRIPTION | QTY |

ACT GOVERNMENT



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

| | |
|---|---------------------------|
| Authorised Signature | |
| Drawn NC * | Date |
| Project Engineer WC * | Date |
| HIGH SPEED IMPACT ABSORBING POLE ELECTRICAL INSTALLATION DETAILS | |
| Scale NOT TO SCALE | Date 29-01-2007 |
| AutoCAD File | |
| Drawing No. DS12-01-26 | Revision No. 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ActewAGL
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ActewAGL DRAWING SP15/214/90 - DATED 19-09-2002
Page 12- 32

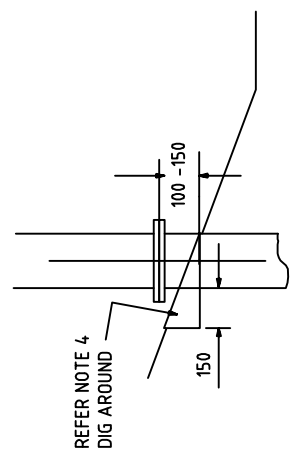
12.2 DS12-02 Footings

DRAFT

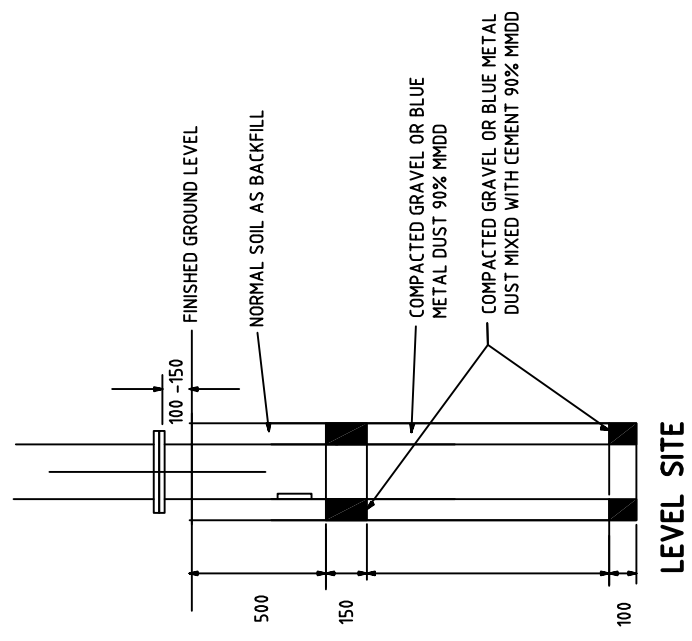
DRAFT

NOTES

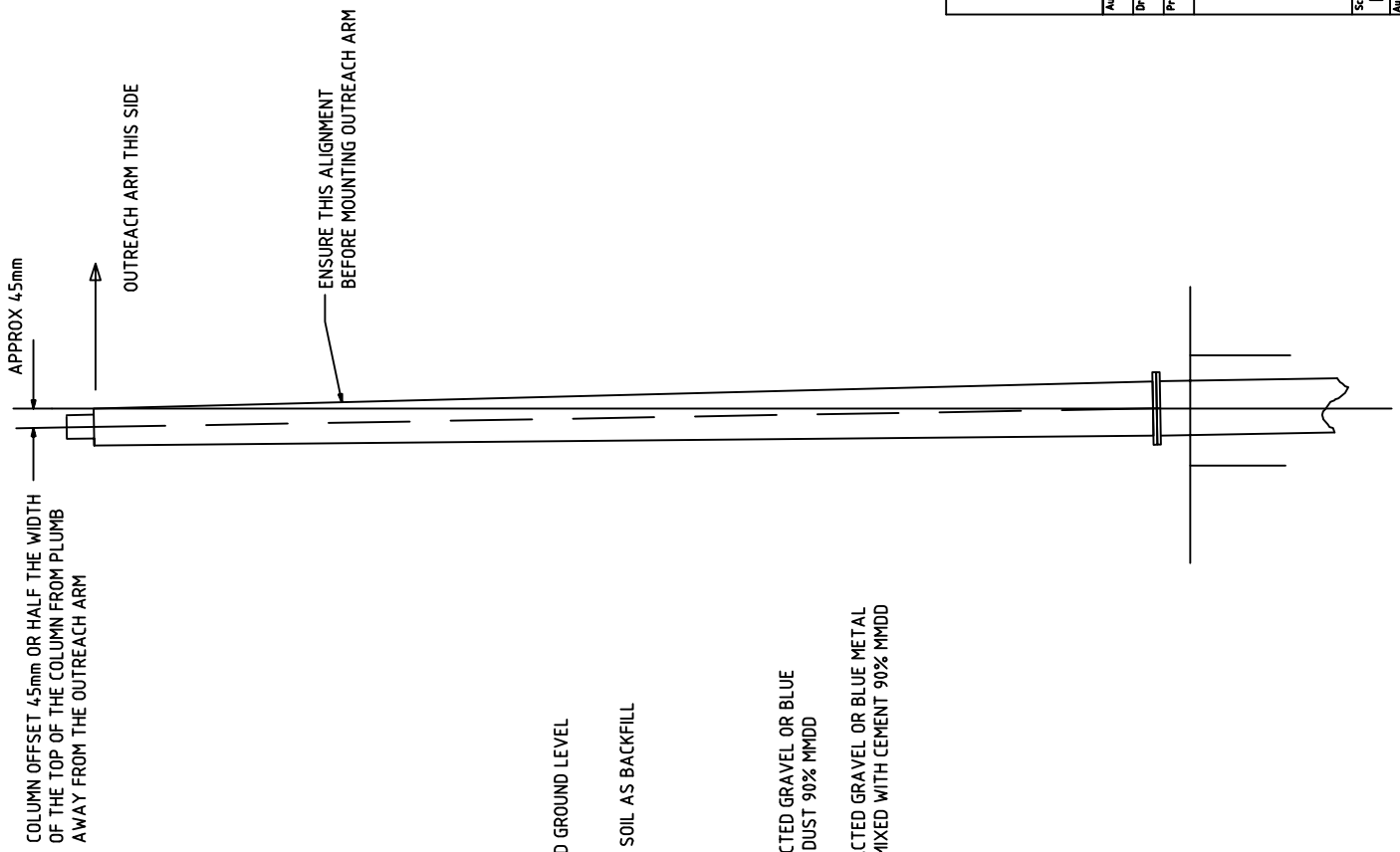
1. THIS METHOD OF INSTALLATION SHOULD ALSO BE FOLLOWED FOR ENERGY ABSORBING COLUMNS
2. FOR COLUMNS 6.5m OR LOWER USE NORMAL SOIL BACKFILL COMPACTED TO 90% MMD
3. USE TORQUE WRENCH TO TIGHTEN NUTS ON SLIPBASE NOMINAL TENSION 90Nm
4. DIG AROUND COLUMN AS SHOWN TO ALLOW WATER TO RUN PAST THE COLUMN WITHOUT ENTERING THE SLIP BASE ASSEMBLY
5. AVOID INSTALLING SLIP BASE COLUMNS WHERE FLOODING IS LIKELY USE IMPACT ABSORBING COLUMNS INSTEAD.
6. FOR CORRECT OPERATION OF SLIP BASE COLUMN MAXIMUM & MINIMUM HEIGHTS FROM G/C SHALL NOT BE EXCEEDED.



SLOPING VERGE



LEVEL SITE



| | |
|---|-------------------|
| | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Date | |
| Project Engineer | WC |
| Date | |
| STREETLIGHTING COLUMN INSTALLATION | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |
| Drawing No. | DS12-02-01 |
| Revision No. | 0 |

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWA/GL. THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWA/GL DRAWING NO. 794-99-04 DATED 17/09/96

PLUMB COLUMN AWAY FROM OUTREACH ARM

Site Earthworks

The excavation for the new footings to be taken down to the depths shown on the drawing. Prior to pouring concrete the excavation is to be cleaned of all loose material and compacted to 90% maximum dry density.

Excavation is to be dry prior to pouring concrete.

ActewAGL Project Manager to determine the direction of conduits and footing alignment prior to the commencement of site excavations.

Concrete and Reinforcement

Concrete strength shall be 25 MPa
Maximum aggregate size shall be 20mm

Concrete shall be well compacted

Materials and workmanship shall be in accordance with AS 3600 Concrete Structures

Reinforcement shall be in accordance with AS 1302 and AS 1304.
Reinforcement size and positioning shall be as shown on the drawings.

Minimum laps shall be in accordance with the requirements of AS 3600, Section 13.

Minimum cover to reinforcement 75mm unless otherwise shown.

Reinforcement shall be supported in its correct position so as not to be displaced during concreting.

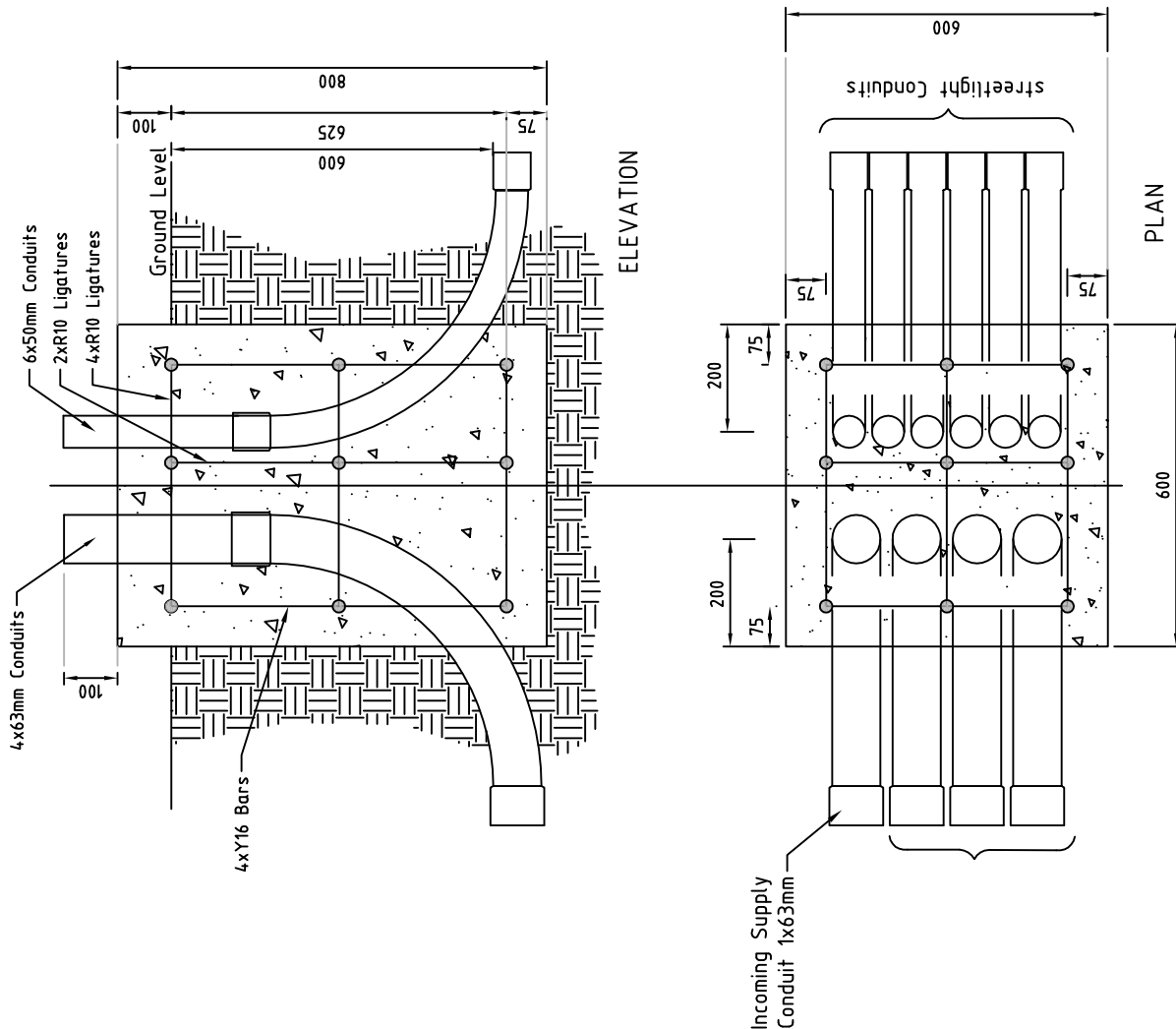
Provide bar chairs as necessary.

Control cubicle to be secured to base with dynabolts or similar.
Concrete base shall be allowed to cure a minimum of seven days before fixing cubicle.

All conduits to have large radius bends.
Elbow bends are not acceptable.

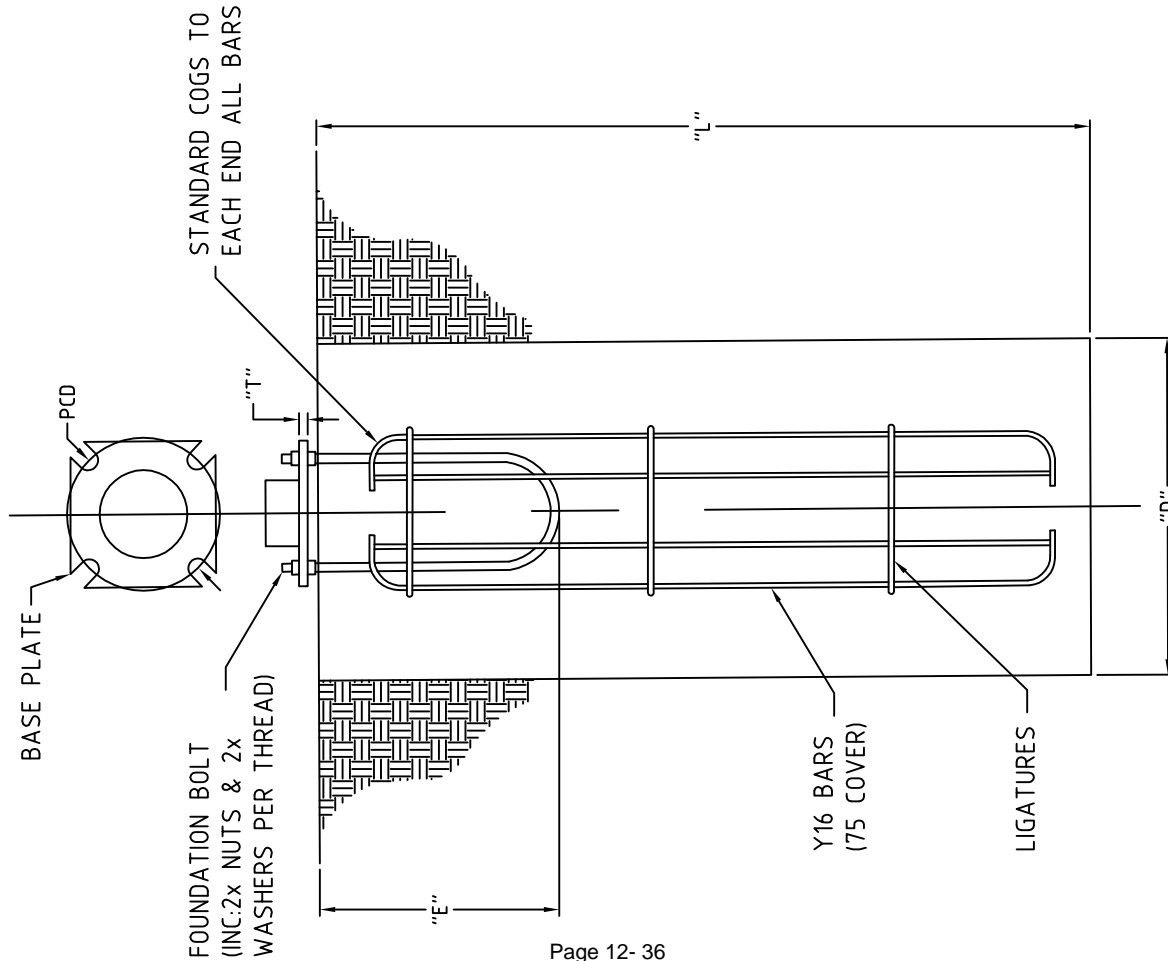
NOTES

1. All dimensions are in millimetres
2. Refer to DS12-29 for Streetlight Control Cubicle details



| | |
|---|-------------------|
| | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorized Signature | |
| Drawn | NC |
| Project Engineer | WC |
| Date | |
| Date | |
| CONCRETE FOOTING DETAILS STREETLIGHT CONTROL CUBICLE | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |
| Drawing No. | DS12-02-02 |
| Revision No. | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 794-99-07 REVISION B - DATED 27/08/05



| POLE HEIGHT | FOUNDATION BOLT (mm) | "T" (mm) | "D" (mm) | "L" (mm) | "E" (mm) | BARS | LIGATURES |
|-------------|----------------------|----------|----------|----------|----------|------|-------------|
| 3 METRE | 16x550x350 PCD | 16 | 610 | 1470 | MIN 400 | Y16 | R6 500 C/C |
| 4 METRE | 16x550x350 PCD | 16 | 610 | 1660 | MIN 400 | Y16 | R6 500 C/C |
| 5 METRE | 20x550x350 PCD | 20 | 762 | 1660 | MIN 400 | Y16 | R6 500 C/C |
| 6 METRE | 20x550x350 PCD | 20 | 762 | 1670 | MIN 400 | Y16 | R6 500 C/C |
| 8 METRE | 20x550x350 PCD | 20 | 762 | 1800 | MIN 400 | Y16 | R6 500 C/C |
| 9 METRE | 24x550x350 PCD | 25 | 762 | 1970 | MIN 400 | Y16 | R6 500 C/C |
| 10 METRE | 24x550x350 PCD | 25 | 762 | 1970 | MIN 400 | Y16 | R8 500 C/C |
| 12 METRE | 24x550x350 PCD | 25 | 762 | 2250 | MIN 400 | Y16 | R8 500 C/C |
| 15 METRE | 30x850x466 PCD | 30 | 762 | 2750 | MIN 700 | Y16 | R8 500 C/C |
| 18 METRE | 30x900x500 PCD | 30 | 762 | 2750 | MIN 750 | Y16 | R10 500 C/C |
| 20 METRE | 30x900x500 PCD | 30 | 1028 | 2400 | MIN 750 | Y24 | R10 500 C/C |

IMPORTANT NOTE

NEITHER VICOLE OR ROADS ACT ACCEPT RESPONSIBILITY FOR THE FOOTING DETAILS GIVEN. ALL FOOTING DETAILS ARE INDICATIVE ONLY. FOOTING SIZES WILL VARY ACCORDING TO A NUMBER OF FACTORS INCLUDING SOIL CONDITION, WIND LOADING AND TERRAIN CATEGORIES. IN ALL INSTANCES IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ENGINEERS COMPUTATIONS AND SPECIFIC COLUMN MANUFACTURERS INFORMATION TO DETERMINE THE FOOTING DETAIL REQUIRED FOR EACH SITE. NOTE THE ABOVE FOOTING DETAILS ARE BASED ON TERRAIN CAT 2, CONCRETE STRENGTH OF 32MPa AND AN ALLOWABLE LATERAL SOIL BEARING OF 50KPa PER METRE DEPTH.

Authorized Signature

Drawn NC

Date

Project Engineer WC

Date

INDICATIVE FOOTING DETAILS FOR OCTAGONAL COLUMNS

Scale NOT TO SCALE

Date 14/09/06

AutoCAD File

Drawing No.

DS12-02-03

Revision No.

0

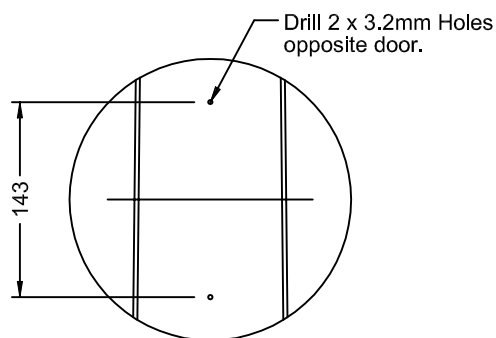
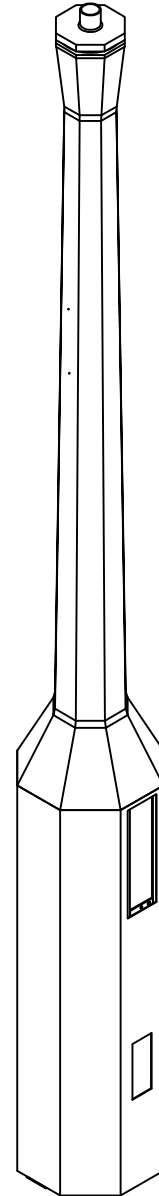
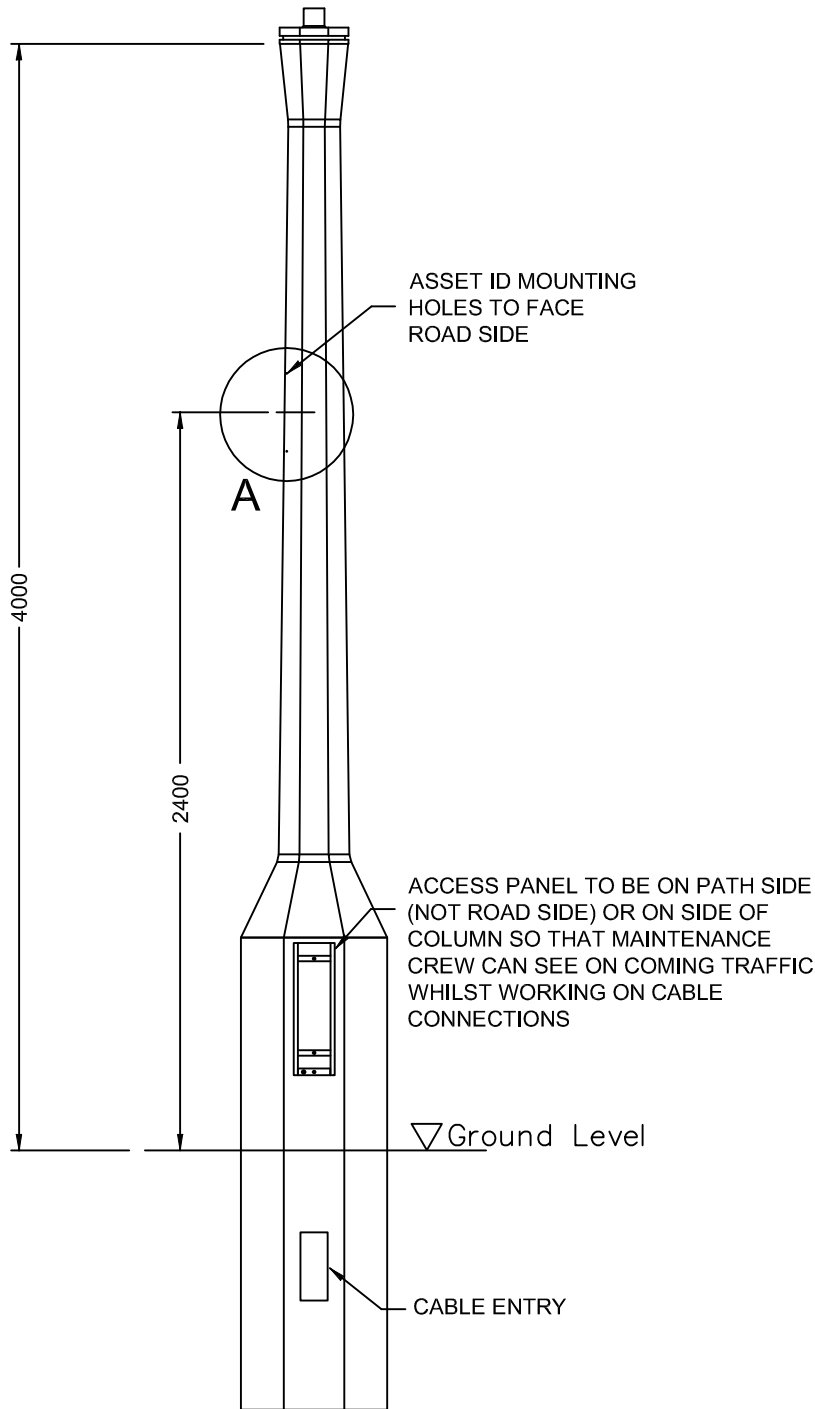
12.3 DS12-03 Columns

DRAFT


DRAFT

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



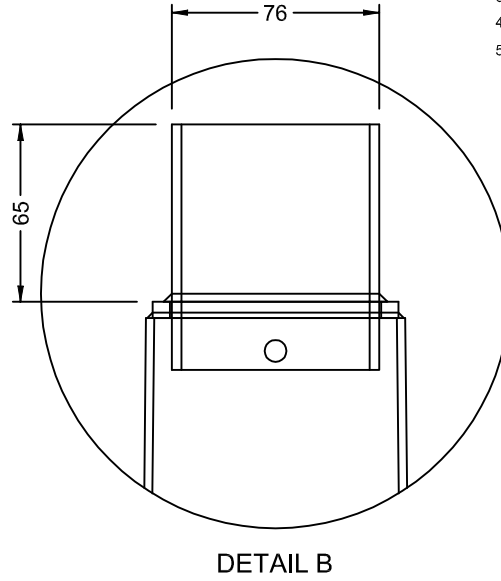
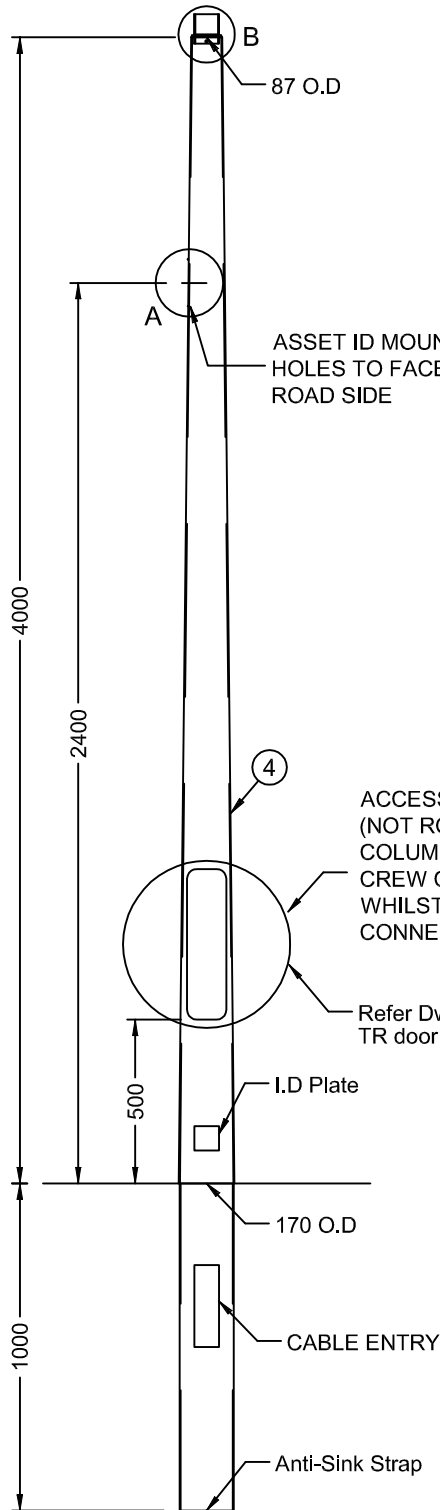
SIDE ELEVATION A

| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| COMPLAP CONCRETE STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-01 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING Complap Concrete Lightpole.pwd - DATED 11/05/05

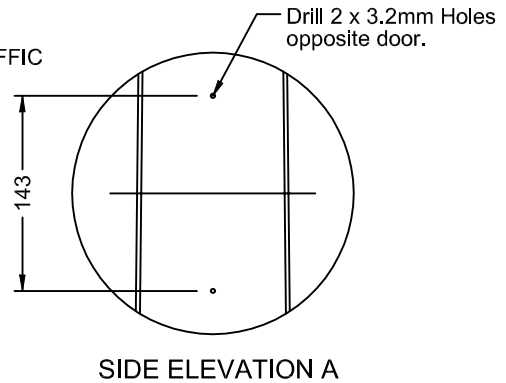
Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.




ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Refer Dwg: "ACTEW 3.5m TR door detail"

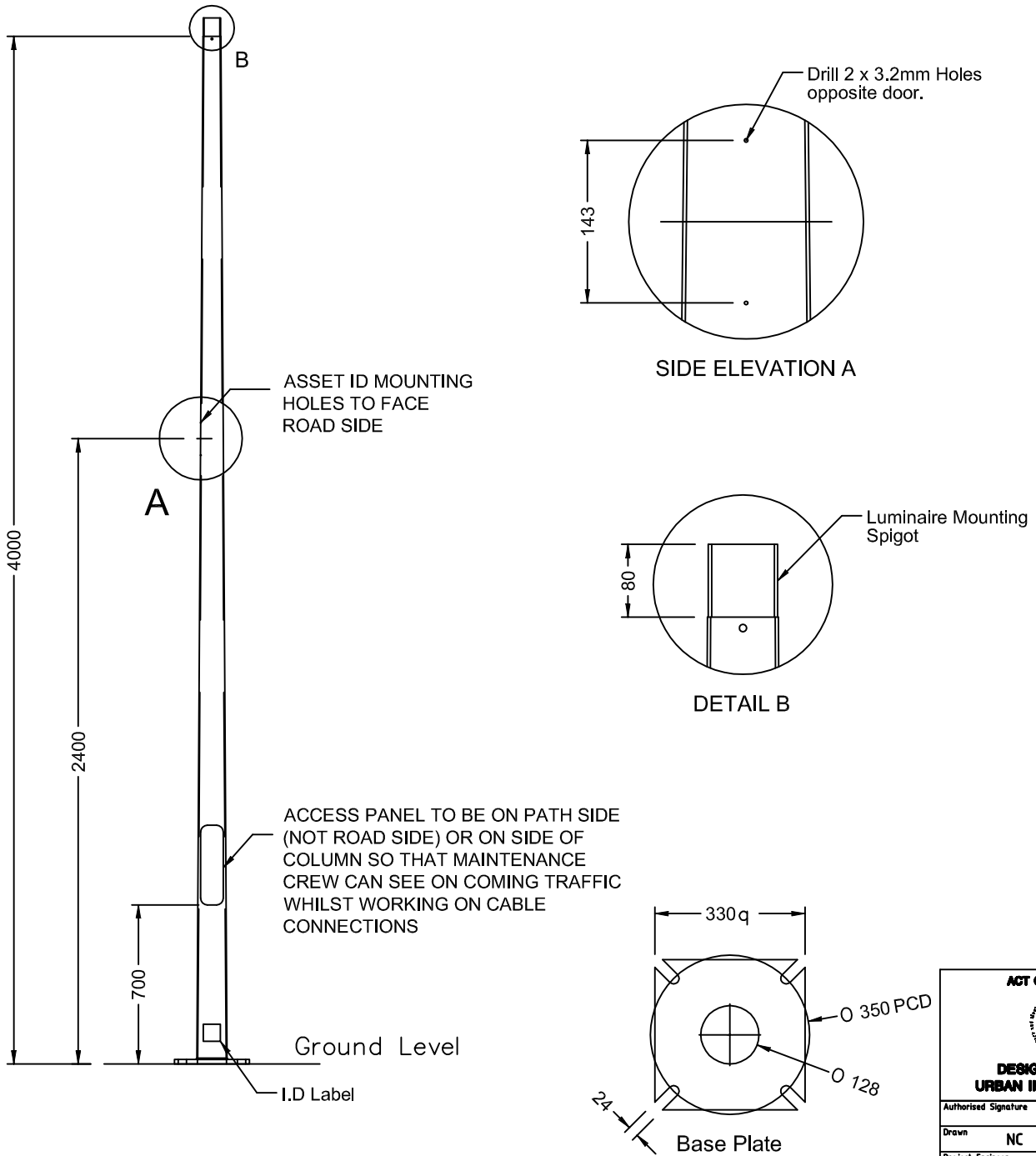



* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 3.5m Tapered Column.pwd - DATED 18/01/06

| | |
|---|--------------|
|  DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 4m TAPERED STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-02 | 0 |

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

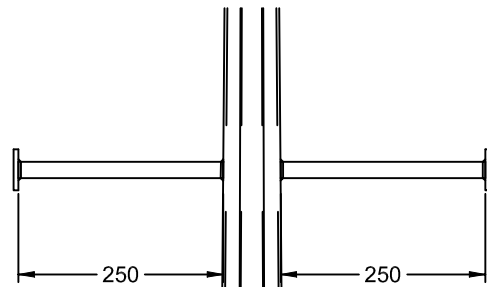
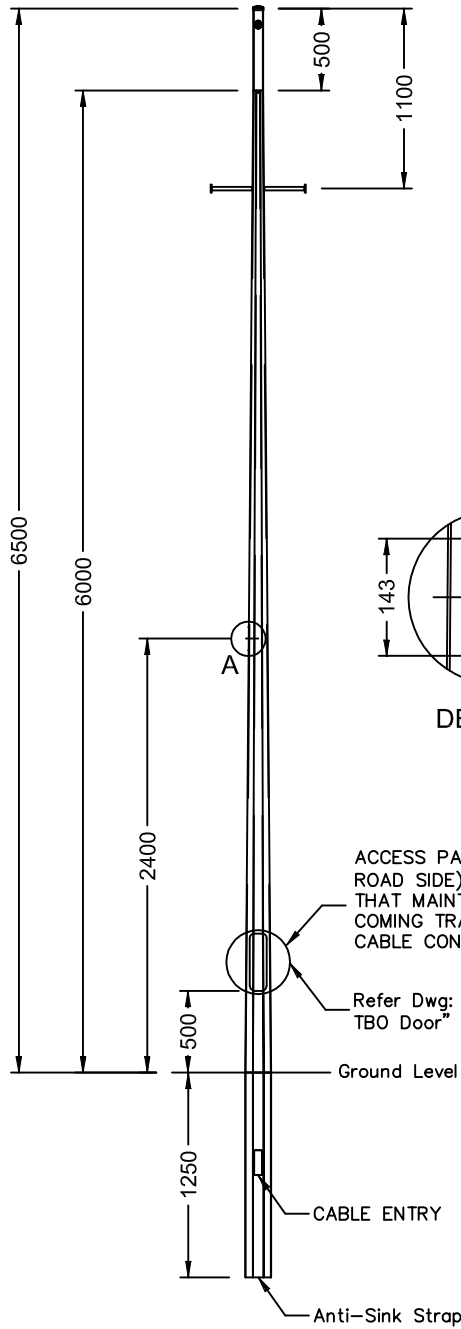


| | |
|---|-----------------------|
| ACT GOVERNMENT  DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn NC * | Date |
| Project Engineer WC * | Date |
| 4.5m TAPERED STREETLIGHT COLUMN | |
| Scale NOT TO SCALE | Date 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-03-03 | Revision No. 0 |

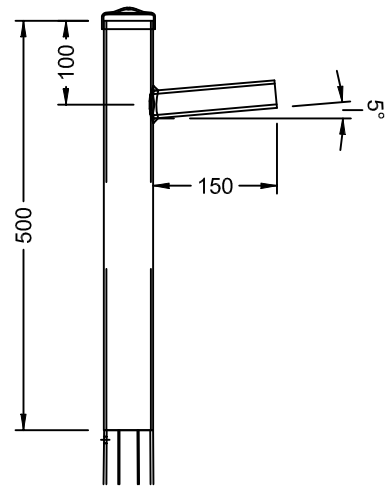
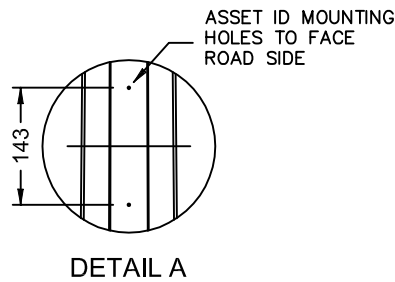
* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 4.5m Tapered Column.pwd - DATED 18/01/06

Notes


1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



Ladder Rests

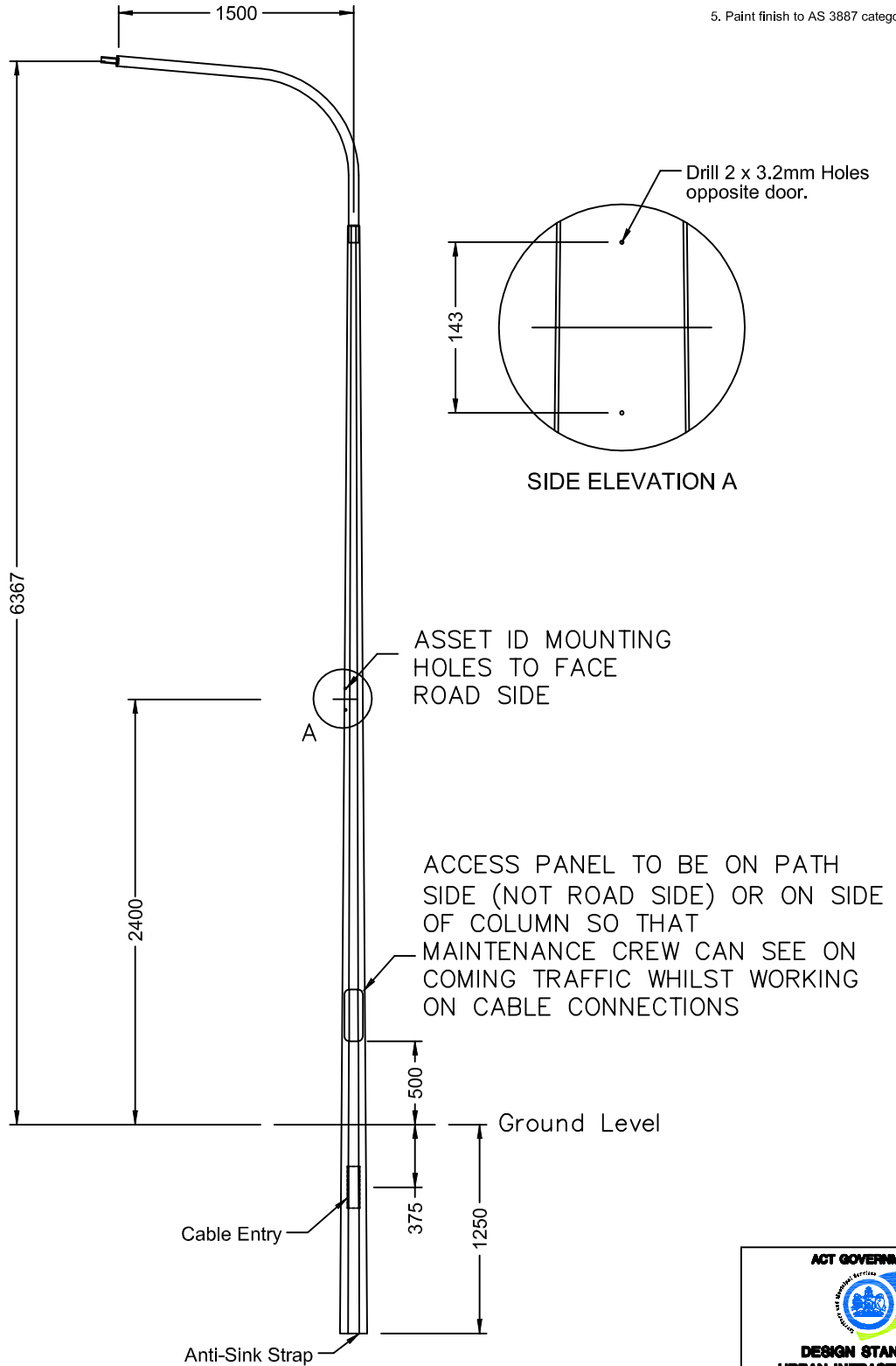



* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Taper cw Ladder Rest.pwd - DATED 18/01/06

| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m TAPERED STREETLIGHT COLUMN WITH LADDER REST | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-04 | 0 |

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

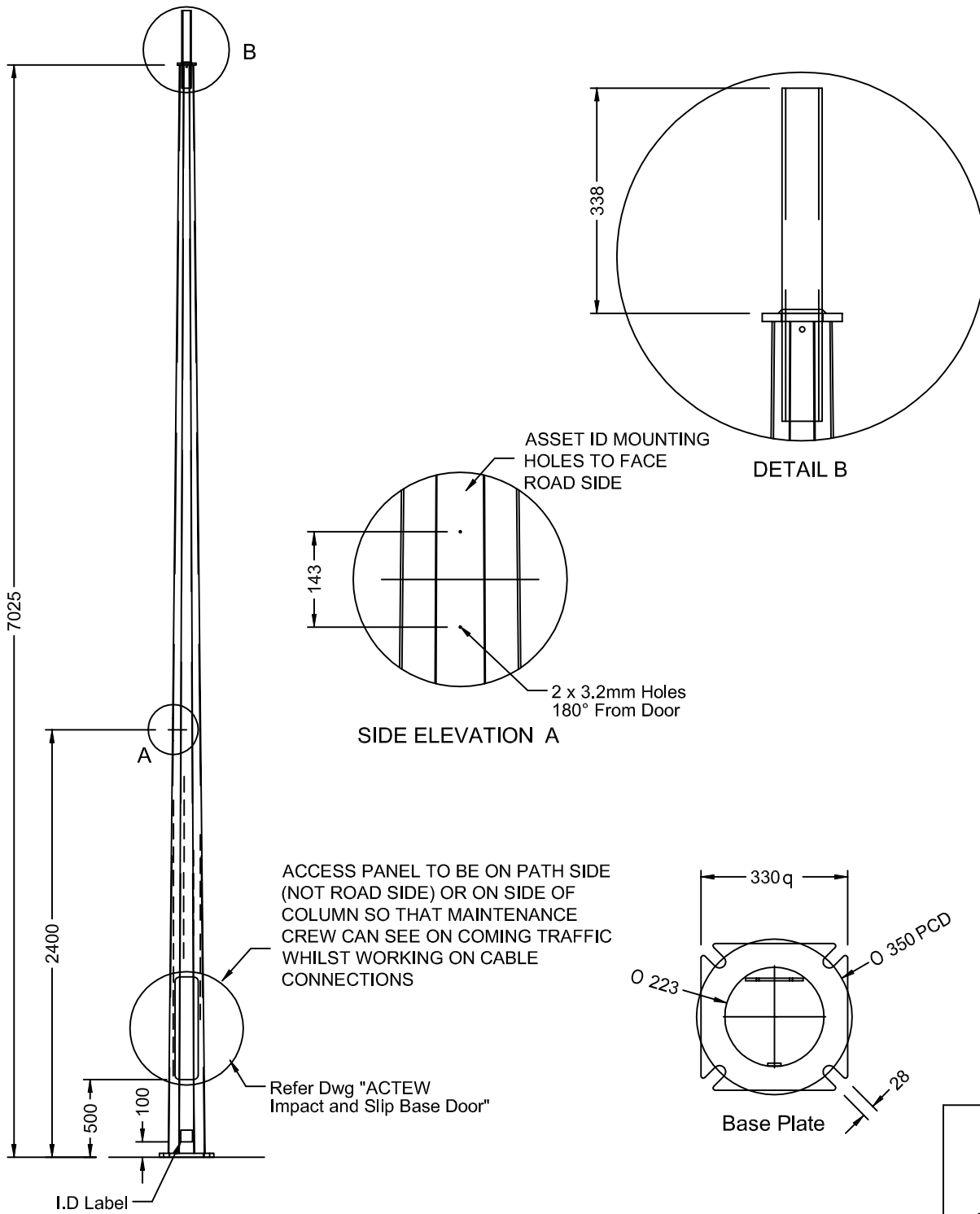


| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m TAPERED OCTAGONAL SINGLE STREETLIGHT | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-05 | 0 |


* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPCW0255ACT - 2.pwd - DATED 05/07/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

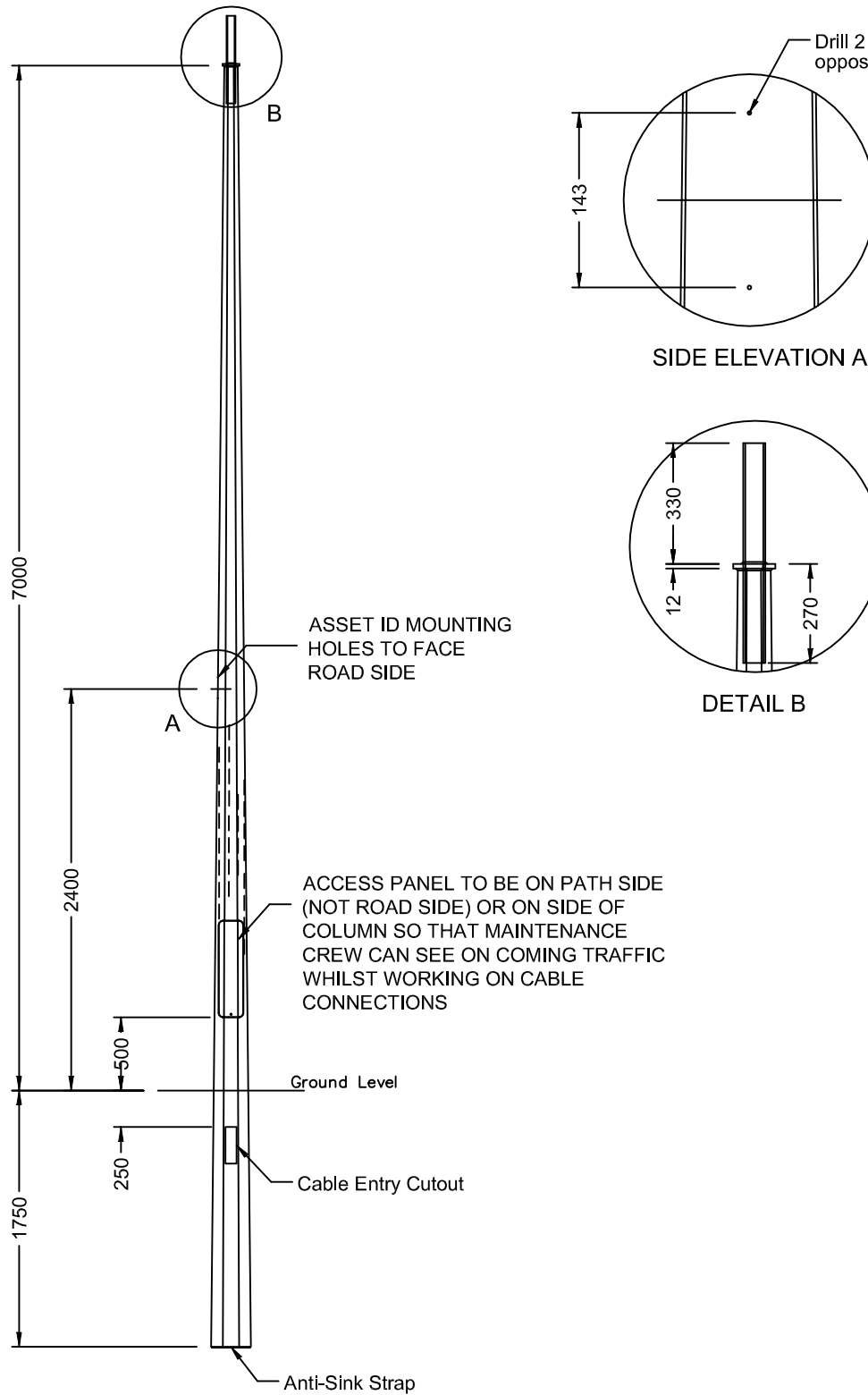



* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM INGAL.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 9.0m IAC BPM.pwd - DATED 18/01/06

| | |
|---|-----------------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn NC * | Date |
| Project Engineer WC * | Date |
| 9.0m IMPACT ABSORBING COLUMN BASE PLATE MOUNTED | |
| Scale NOT TO SCALE | Date 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-03-06 | Revision No. 0 |

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

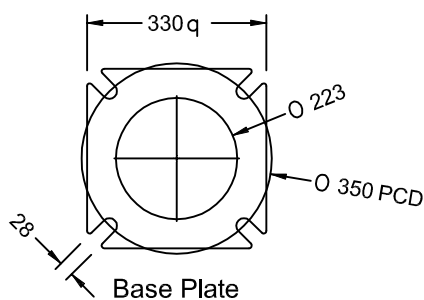
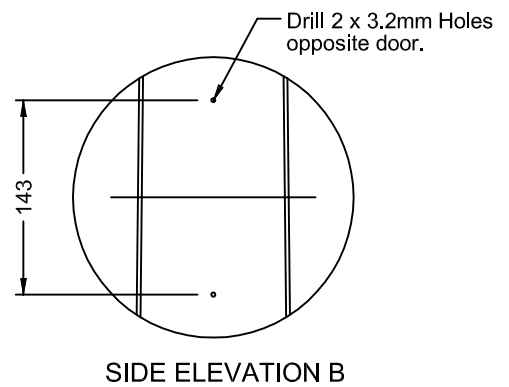
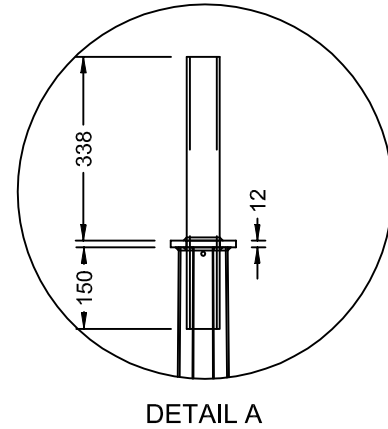
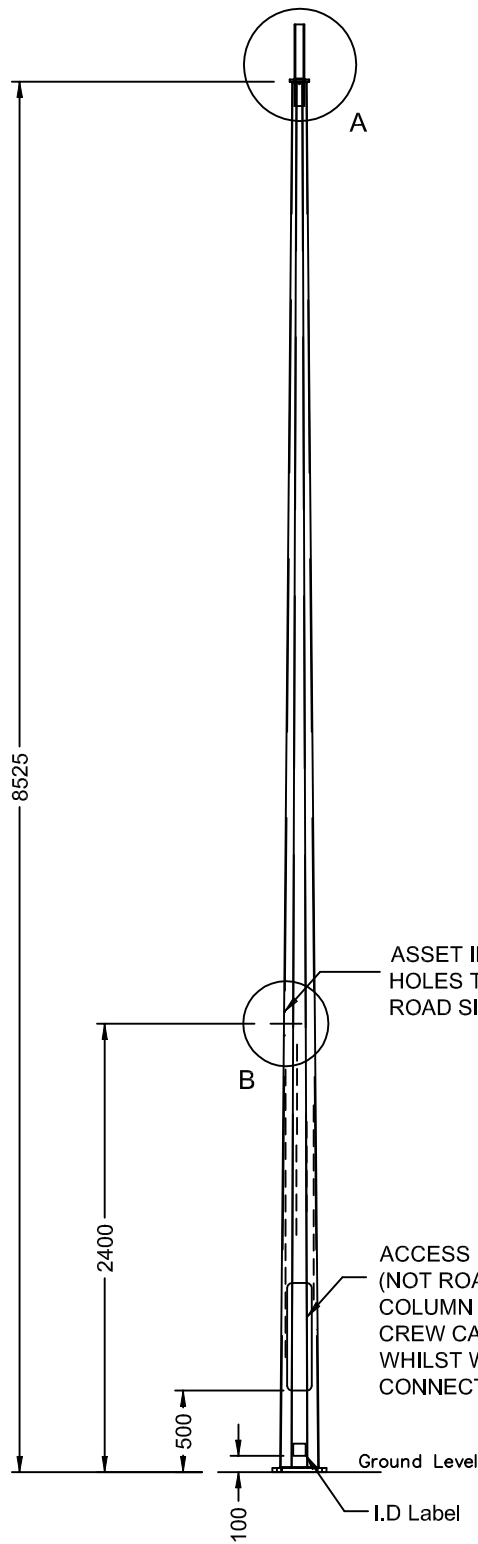



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|---|-----------------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn NC * | Date |
| Project Engineer WC * | Date |
| 9.0m IMPACT ABSORBING COLUMN IN GROUND MOUNTED | |
| Scale NOT TO SCALE | Date 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-03-07 | Revision No. 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM INGAL.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 9.0m IAC IGM.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

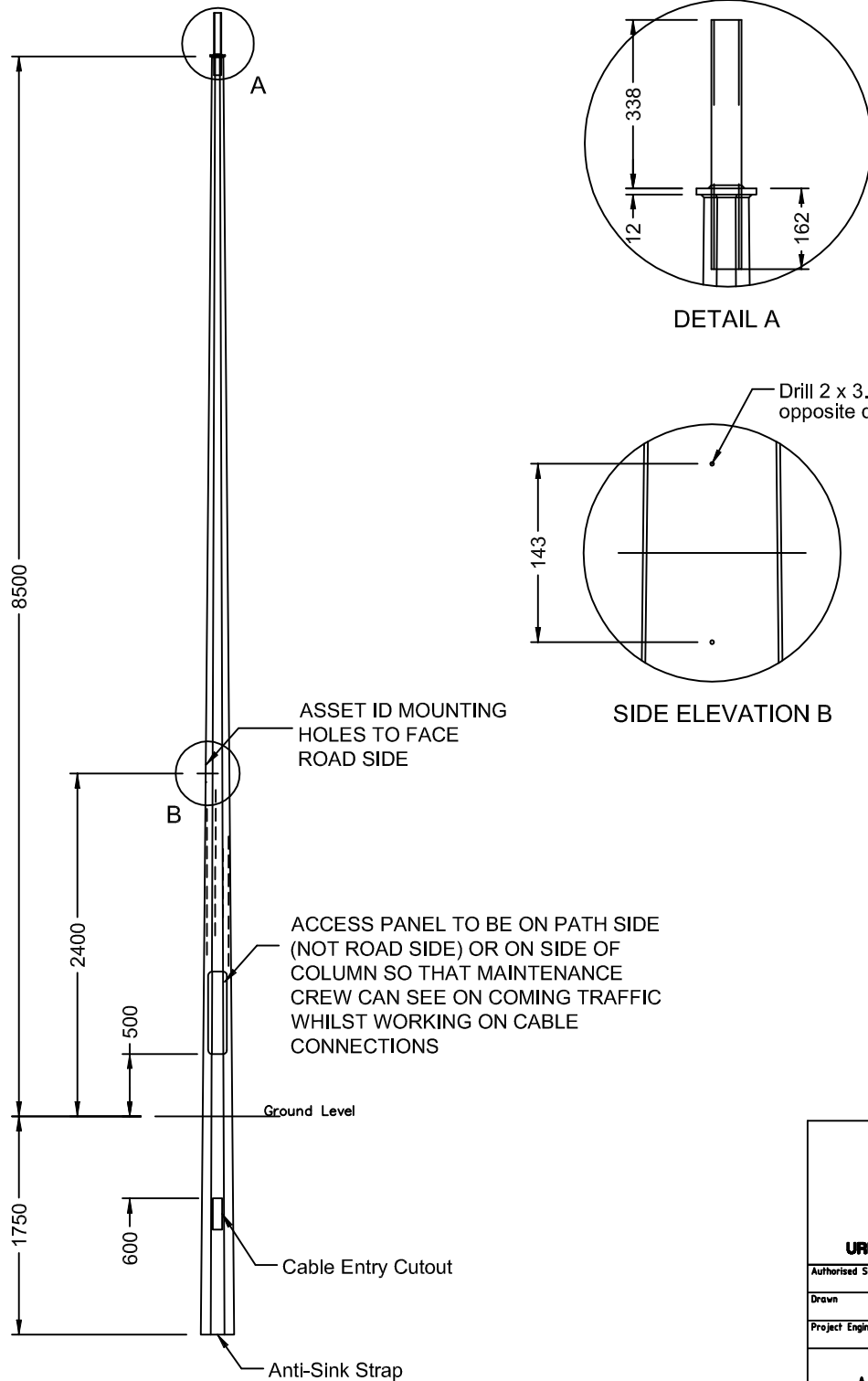



| | |
|--|--------------|
|  DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 10.5m IMPACT ABSORBING COLUMN BASE PLATE MOUNTED | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-08 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM INGAL.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEAWGL DRAWING 10.5m IAC BPM - DATED 18/01/06

Notes

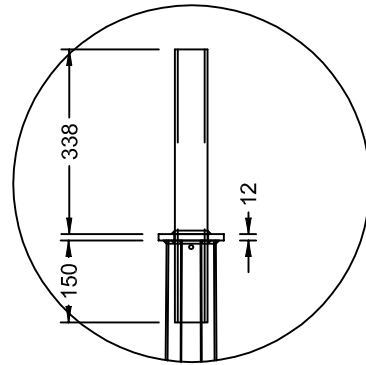
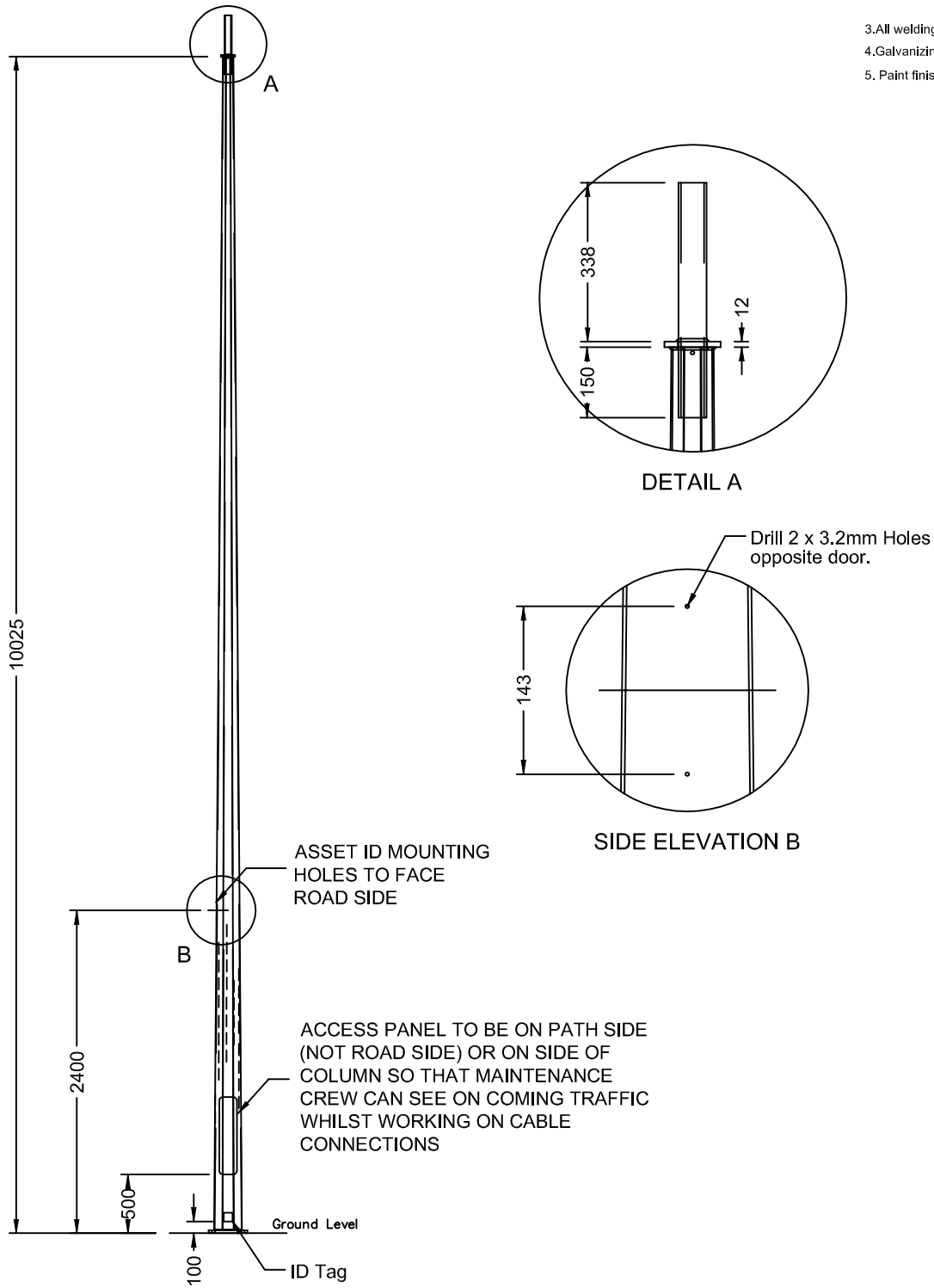
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



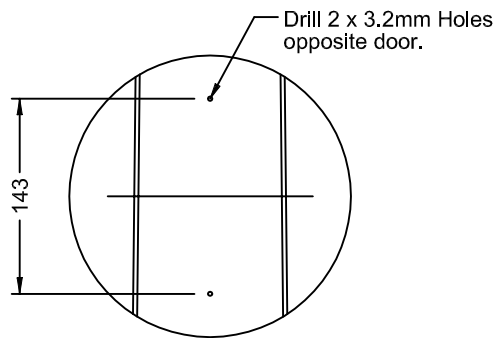
| | |
|---|-----------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 10.5m IMPACT ABSORBING COLUMN IN GROUND MOUNTED | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-09 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM INGAL.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING 10.5m IAC IGM.pwd - DATED 18/01/06

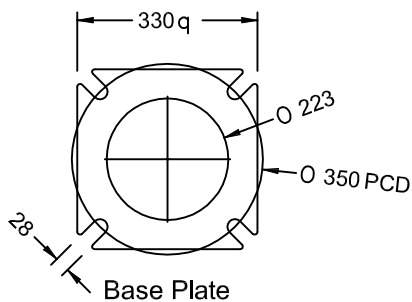
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 &
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.




DETAIL A



SIDE ELEVATION B

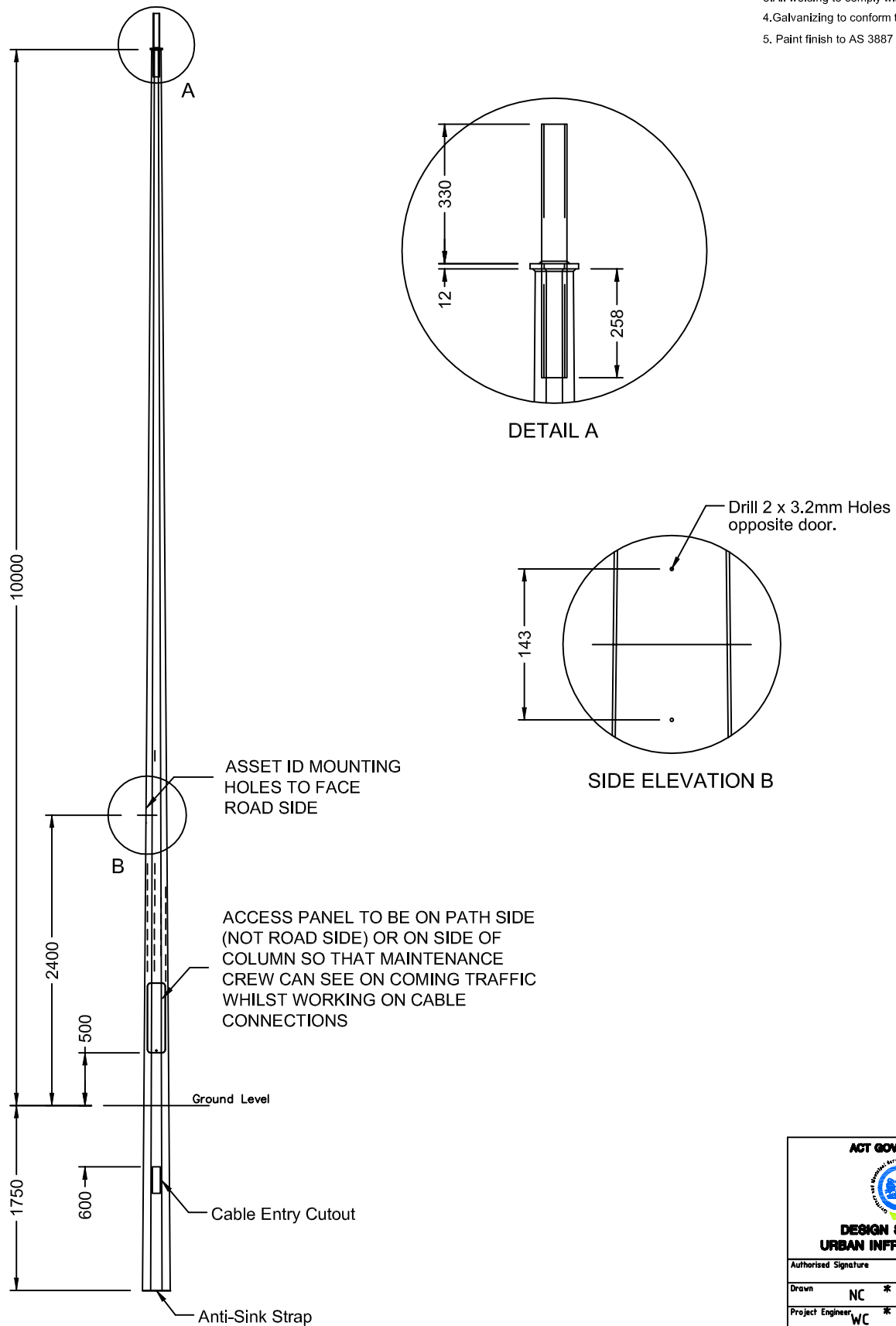



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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 12.0m IMPACT ABSORBING COLUMN BASE PLATE MOUNTED | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-10 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING 12.0m IAC BPM.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

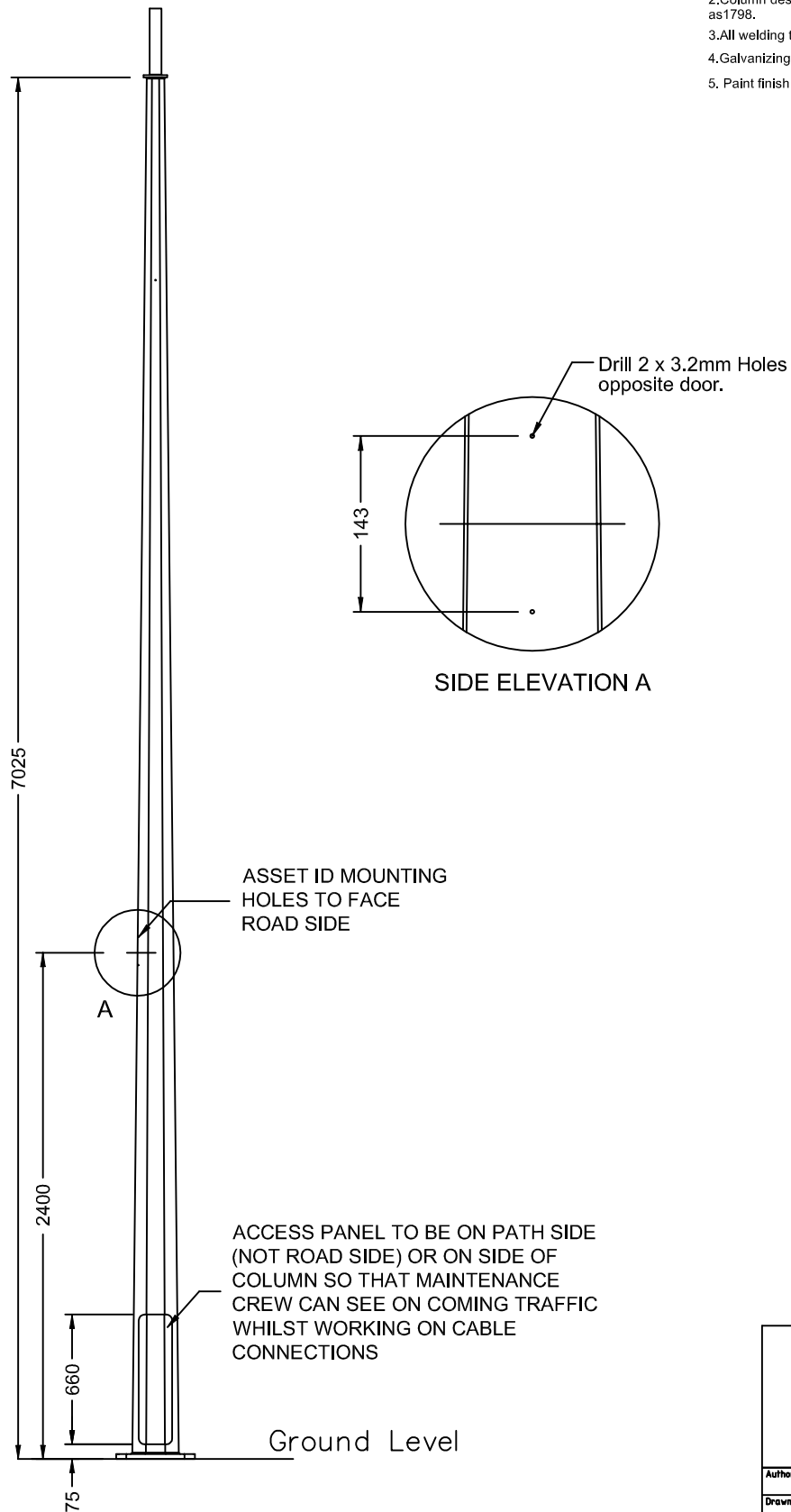



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|--|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 12.0m IMPACT ABSORBING COLUMN IN GROUND MOUNTED | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-11 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM INGAL.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING 12.0m IAC IGM.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

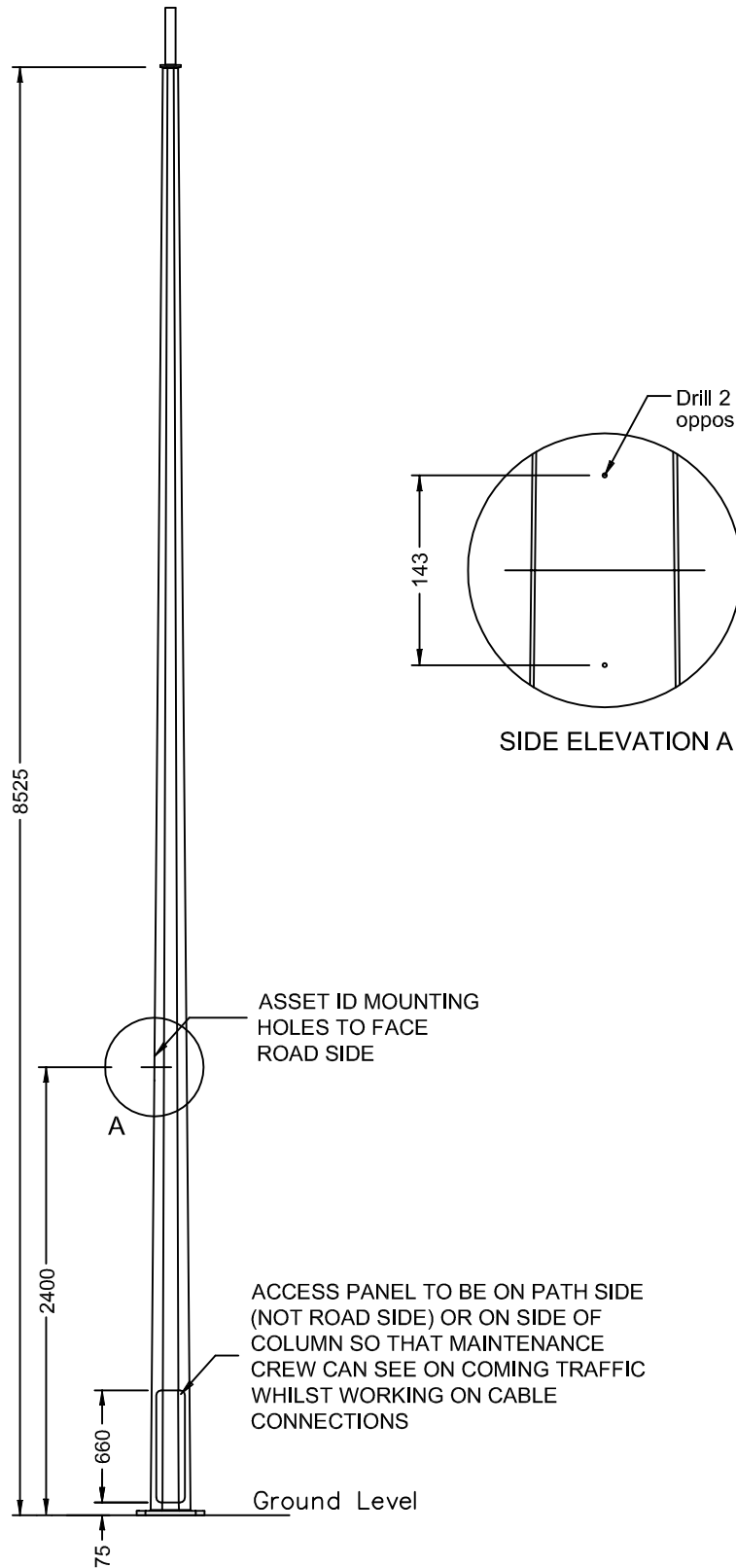



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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 9.0m SLIP BASE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-12 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACT090SB.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

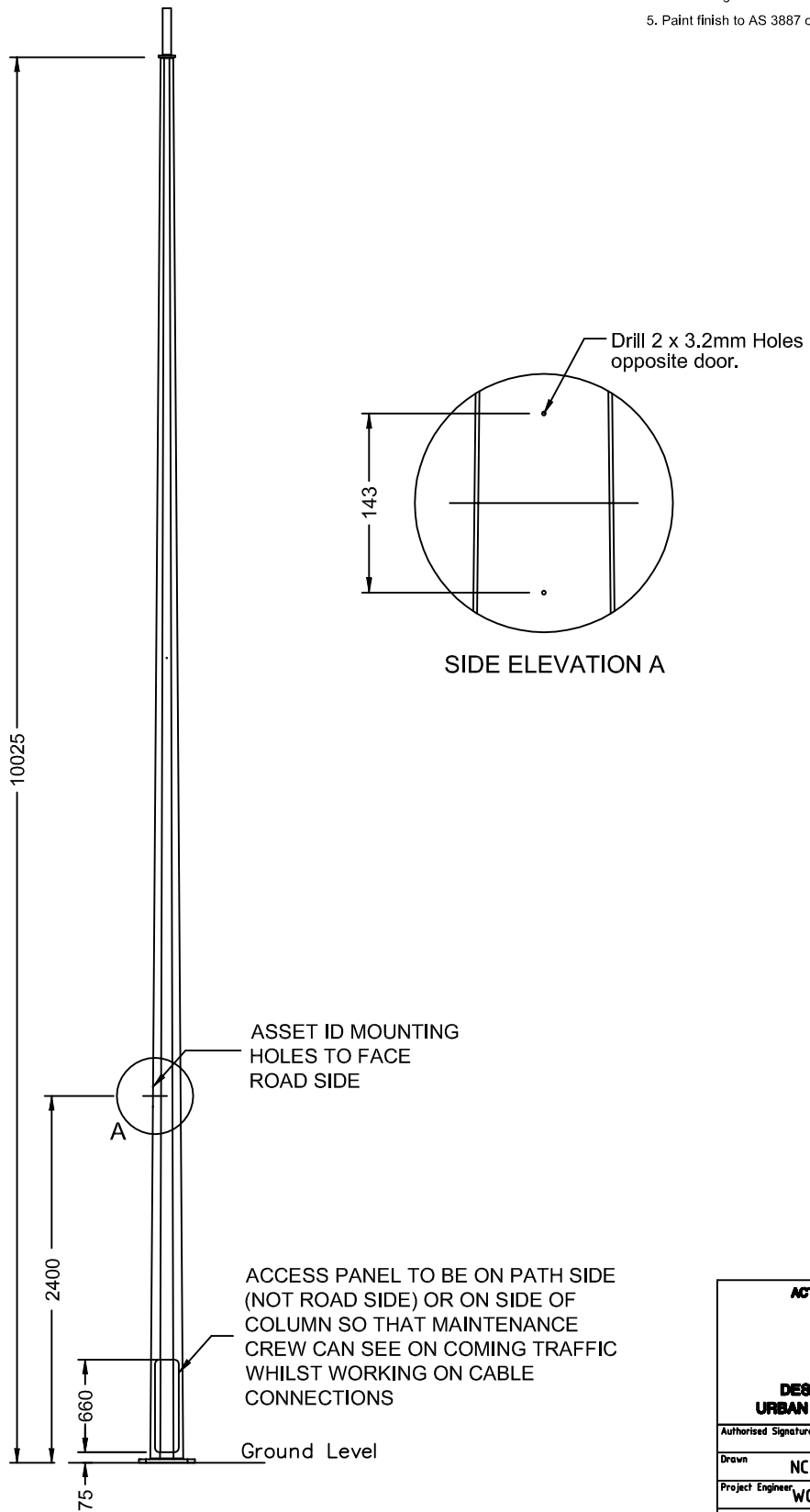



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|---|-----------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 10.5m SLIP BASE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-13 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACT105SB.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

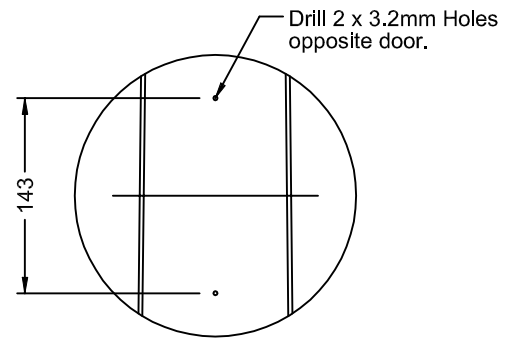
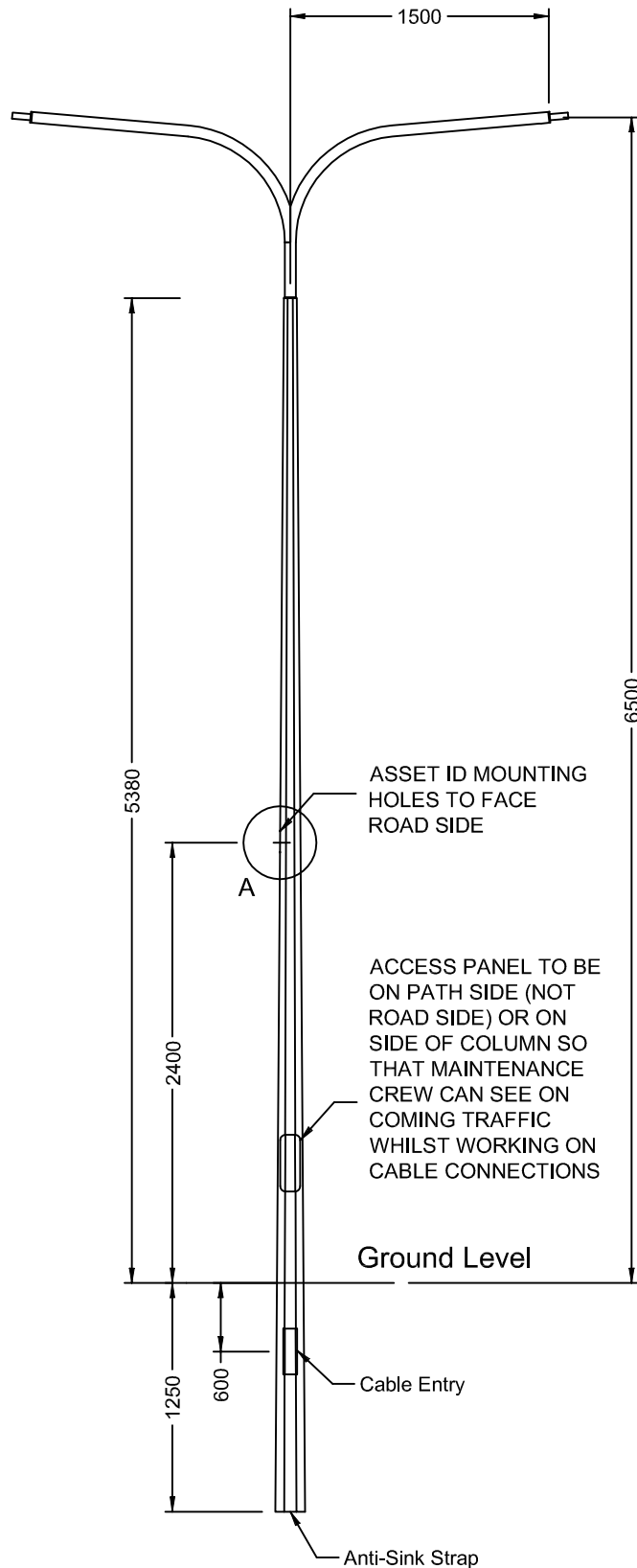


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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 12m SLIP BASE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-14 | 0 |


* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACT120SB.pwd - DATED 18/01/06

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



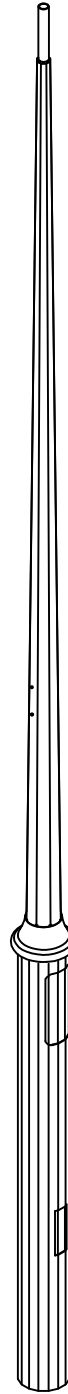
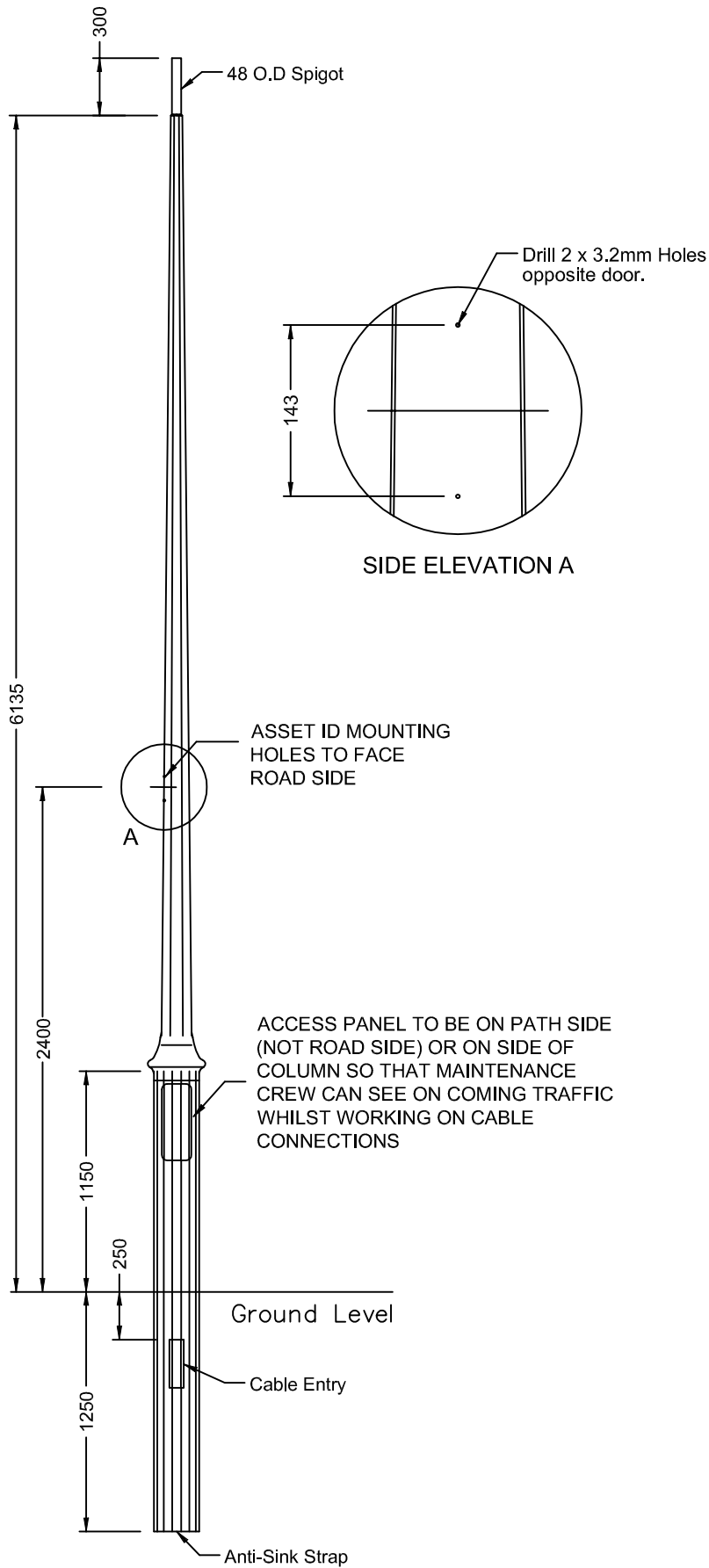
SIDE ELEVATION A


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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m DUAL STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-15 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPCW0255ACT DBL.pwd - DATED 15/09/05

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



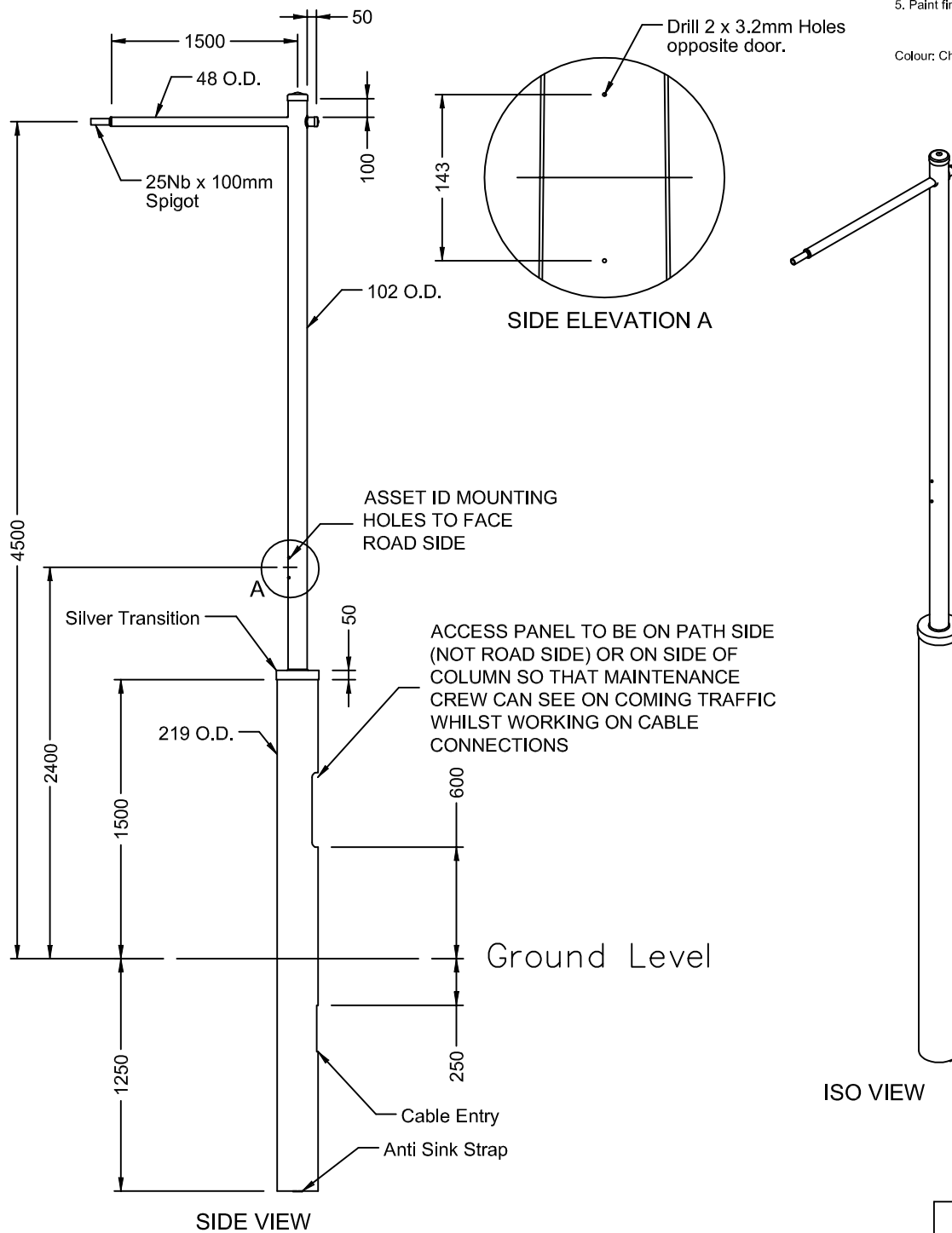
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|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m DECORATIVE STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-16 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACT6.5-PTG.pwd - DATED 18/01/06


Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 32999 c/w Silver Trans



ISO VIEW

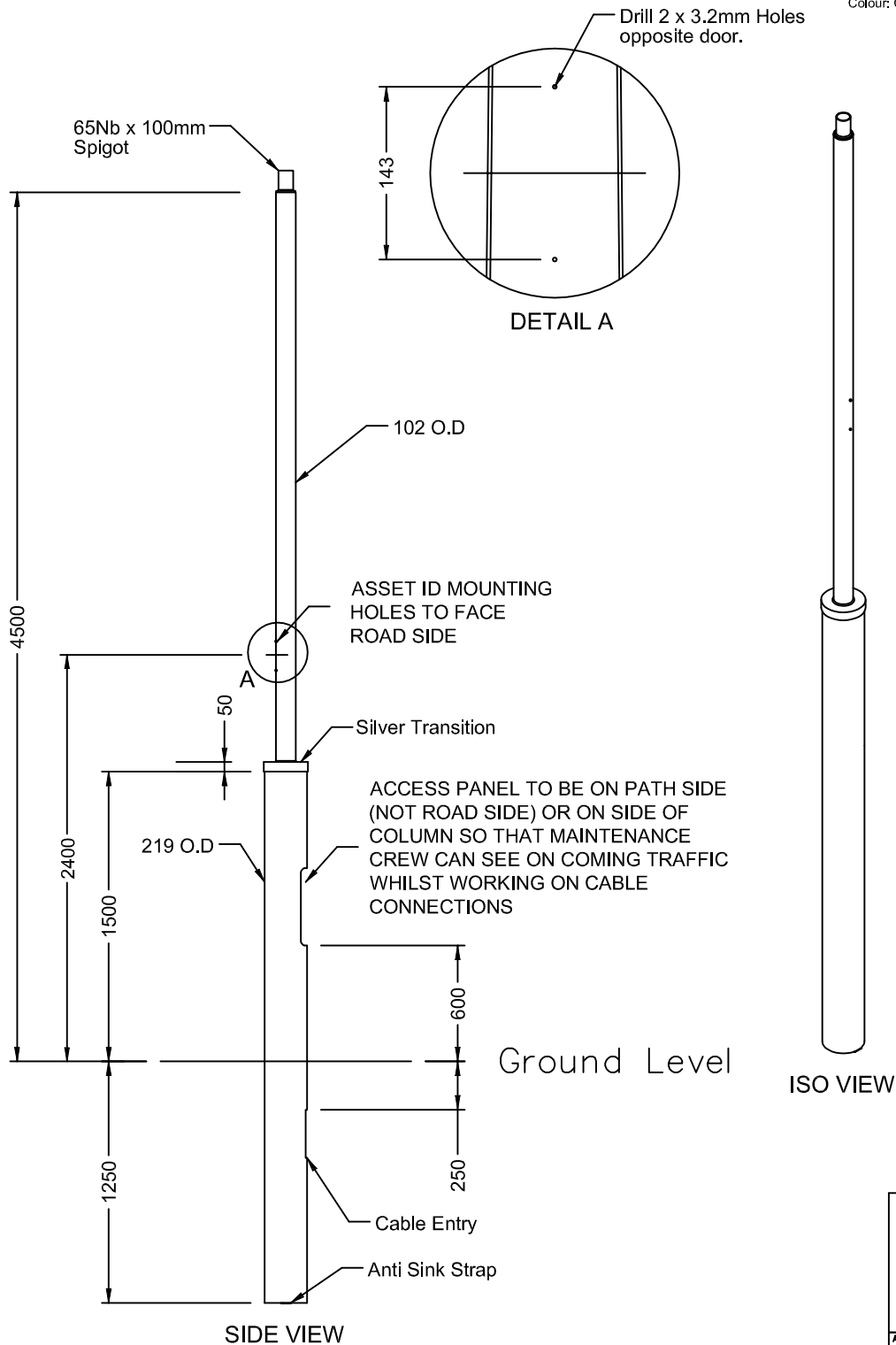
| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 4.5m FORDE TYPE 1 IN GROUND MOUNTED DECORATIVE STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-17 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 4.5m Forde Type 1 IGM - DATED 20/07/06


Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 32999 c/w Silver Trans



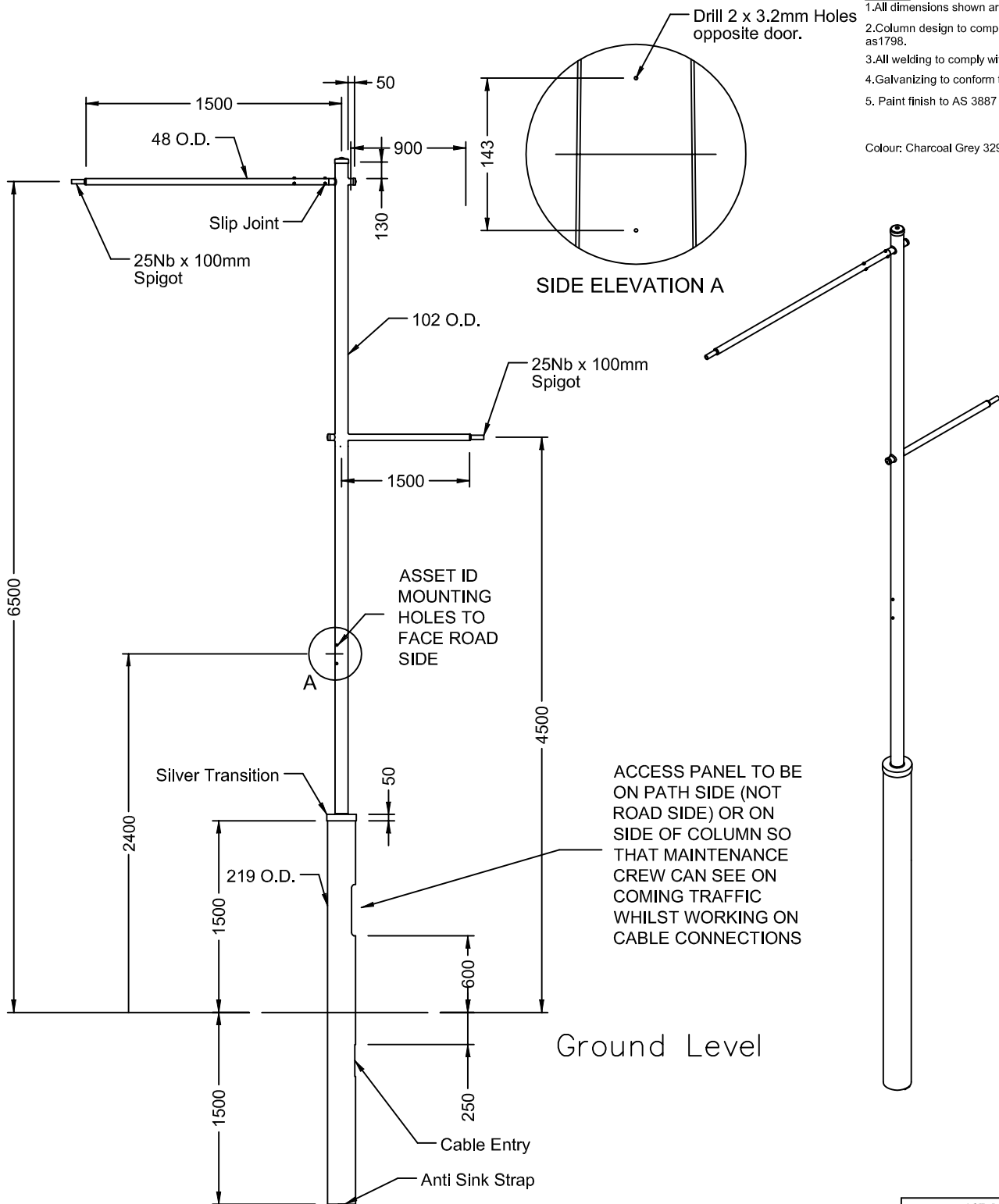
* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 4.5m Forde Type 2 IGM.asm - DATED 20/07/06

| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 4.5m FORDE TYPE 2 IN GROUND MOUNTED DECORATIVE STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-18 | 0 |

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.


Colour: Charcoal Grey 32999 c/w Silver Trans



SIDE VIEW

SIDE ELEVATION A

Ground Level

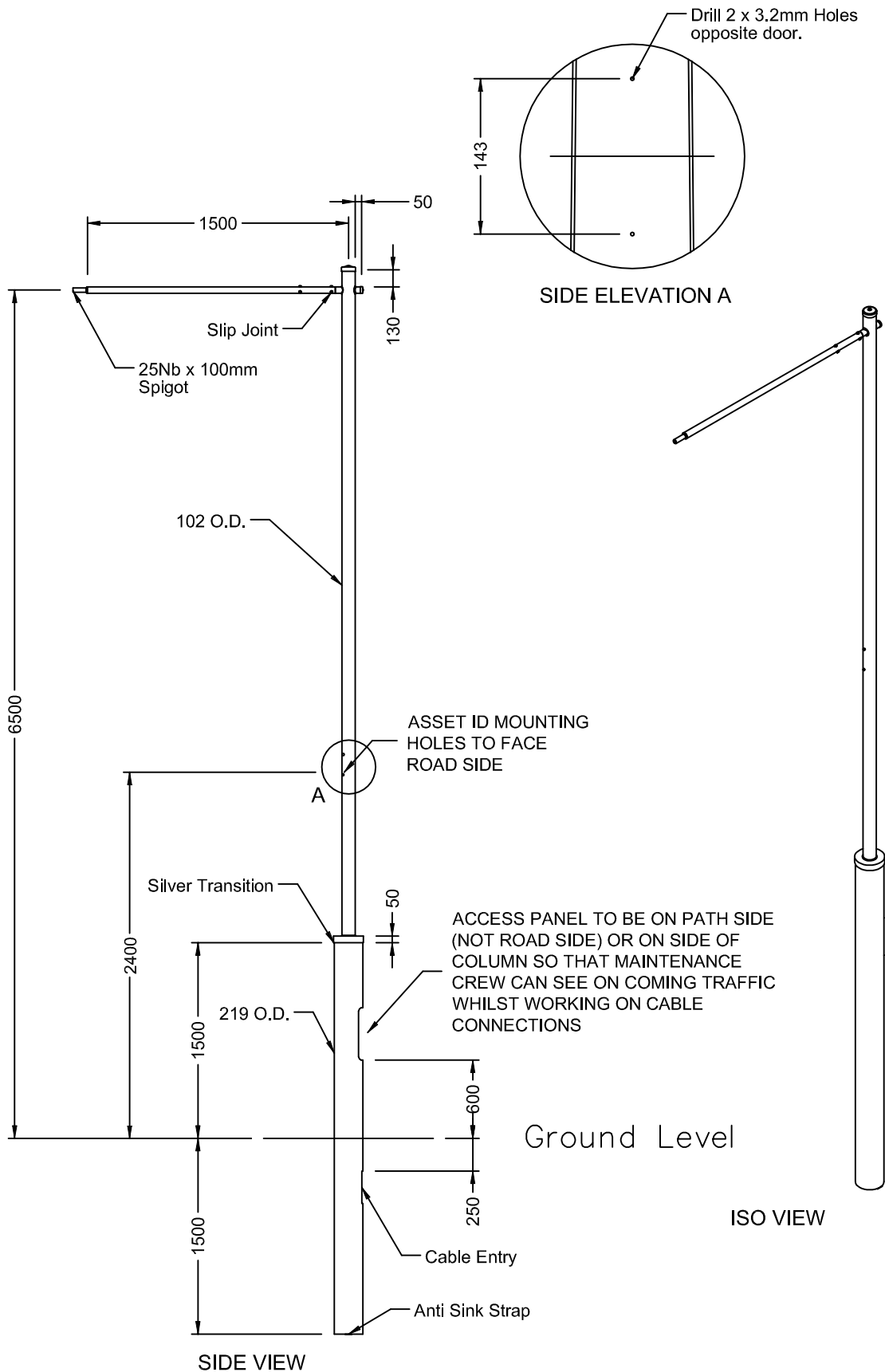
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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m FORDE TYPE 3 IN GROUND MOUNTED DECORATIVE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-19 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 1 IGM.asm - DATED 20/07/06


Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 32999 c/w Silver Trans



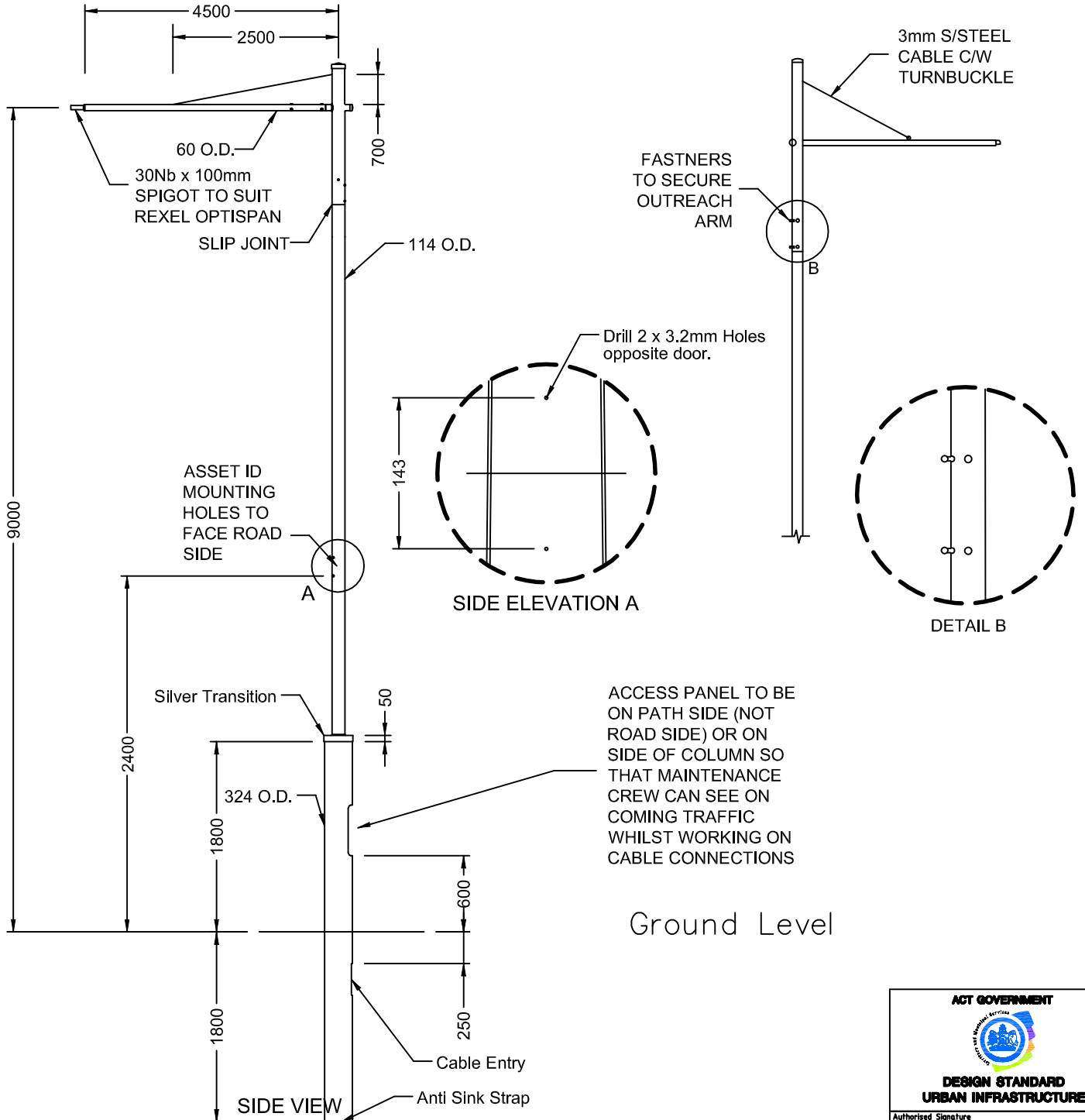
* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 2 IGM.asm - DATED 20/07/06

| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 6.5m FORDE TYPE 2 IN GROUND MOUNTED DECORATIVE STREETLIGHT COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-20 | 0 |

Notes


1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

Colour: Charcoal Grey 32999 c/w Silver Trans



ACCESS PANEL TO BE ON PATH SIDE (NOT ROAD SIDE) OR ON SIDE OF COLUMN SO THAT MAINTENANCE CREW CAN SEE ON COMING TRAFFIC WHILST WORKING ON CABLE CONNECTIONS

Ground Level

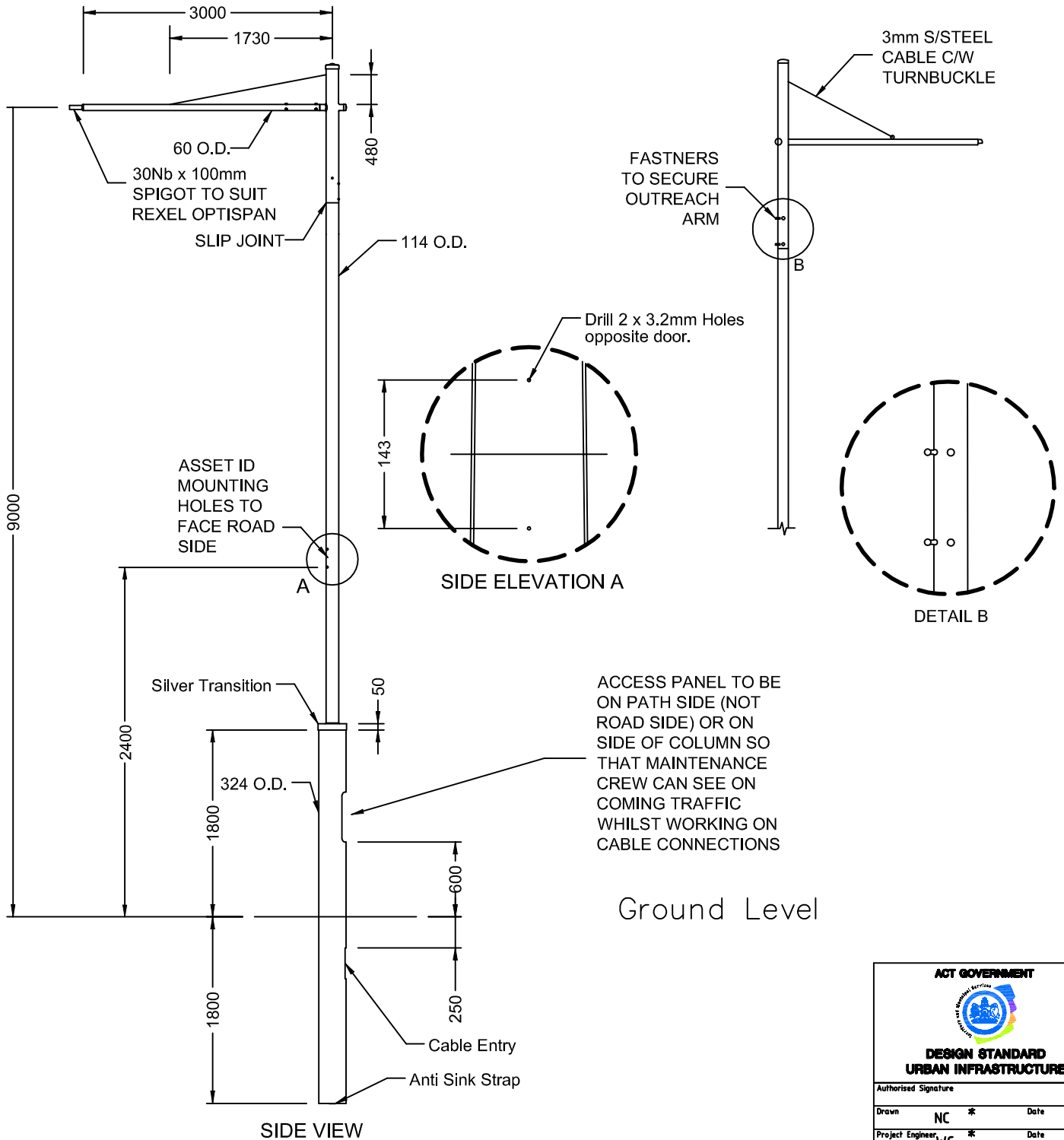
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|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 9.0m FORDE TYPE 3 IN GROUND MOUNTED DECORATIVE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-21 | 0 |


* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 1 IGM.asm - DATED 20/07/06

Notes

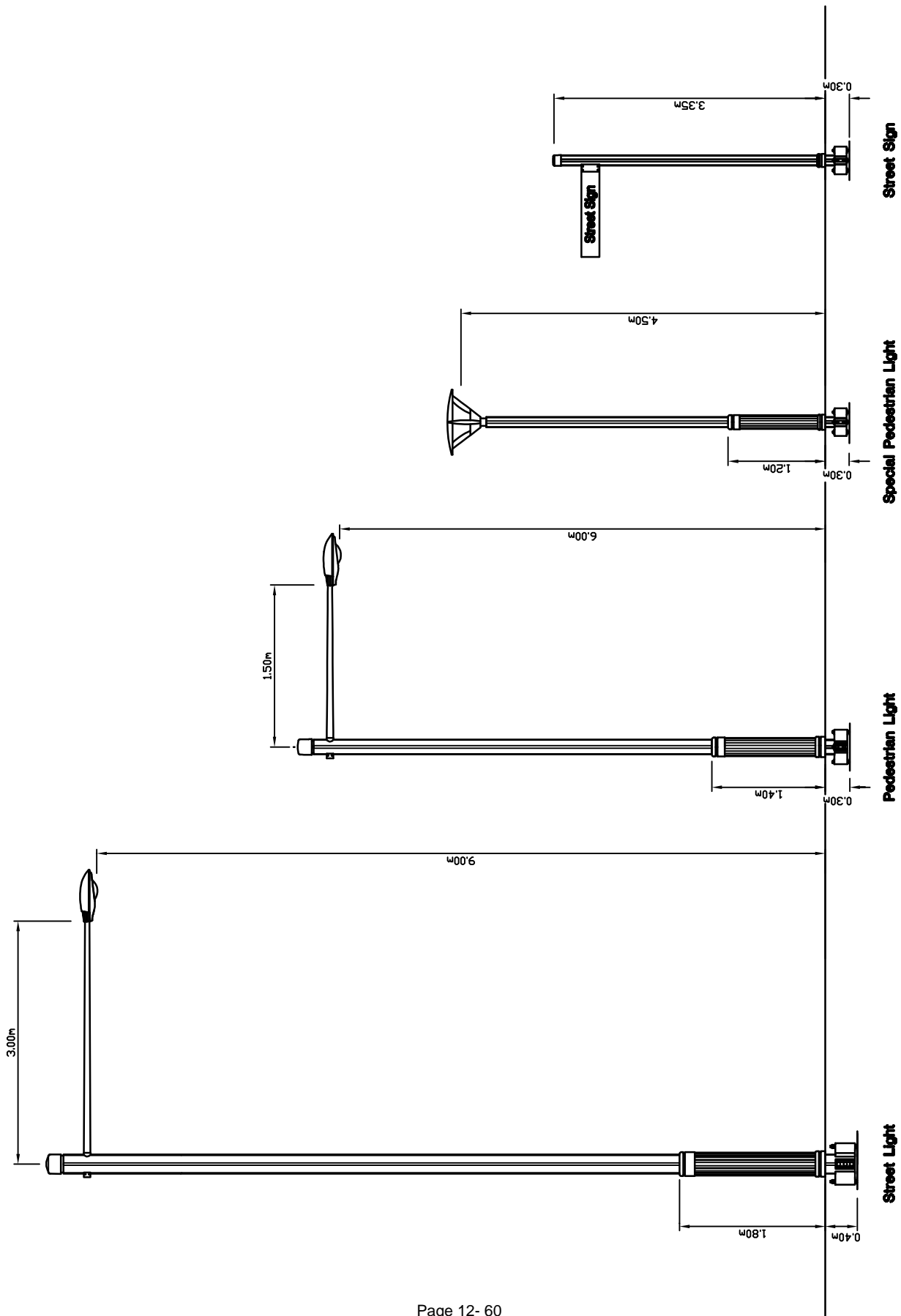
1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.


Colour: Charcoal Grey 32999 c/w Silver Trans



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|---|--------------|
| ACT GOVERNMENT  DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 9.0m FORDE TYPE 4 IN GROUND MOUNTED DECORATIVE | |
| Scale | Date |
| NOT TO SCALE | 14/09/06 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-22 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 1 IGM.asm - DATED 20/07/06

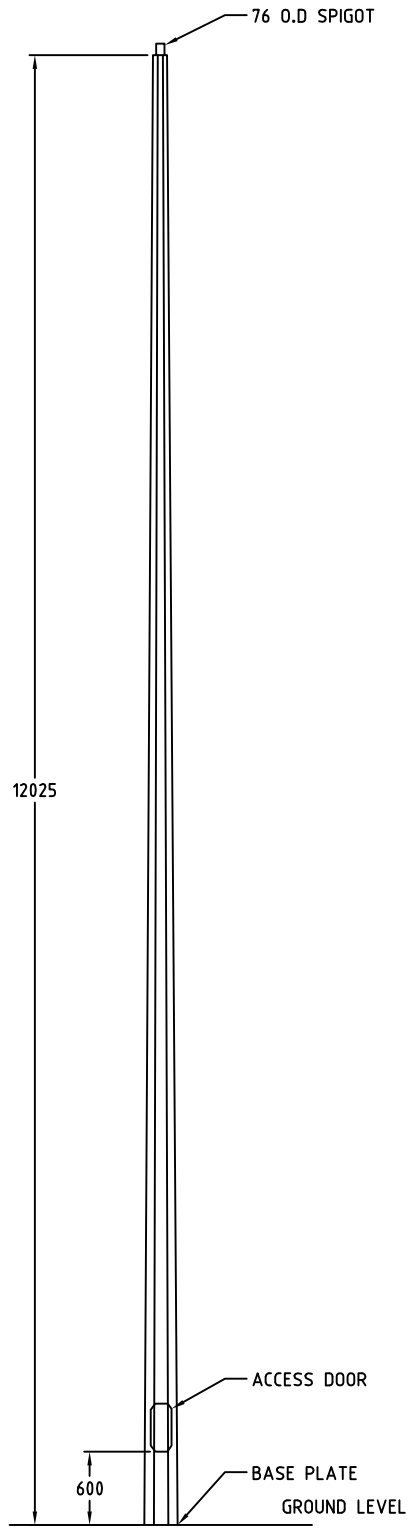



ACT GOVERNMENT

DESIGN STANDARD
URBAN INFRASTRUCTURE
 Authorized Signature _____ Date _____
 Drawn NC * Date _____
 Project Engineer WC * Date _____
CANBERRA MULTIPOLE
STREETLIGHT

Scale NOT TO SCALE Date 14/09/06
 AutoCAD File

Drawing No. **DS12-03-23** Sheet No. **0**

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM FYNTRIM PTY LTD
 THIS DRAWING HAS BEEN REPRODUCED USING DATA PROVIDED BY FYNTRIM PTY LTD



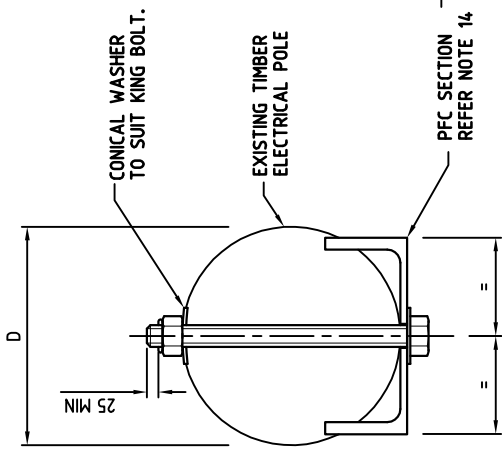
| | |
|---|--------------|
|  ACT GOVERNMENT DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC * Date |
| Project Engineer | WC * Date |
| 12.0m TAPERED OCTAGONAL COLUMN | |
| Scale | Date |
| NOT TO SCALE | 14-02-07 |
| AutoCAD File | |
| Drawing No. | Revision No. |
| DS12-03-24 | 0 |

* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING 6.5m Forde Type 1 IGM.asm - DATED 20/07/06

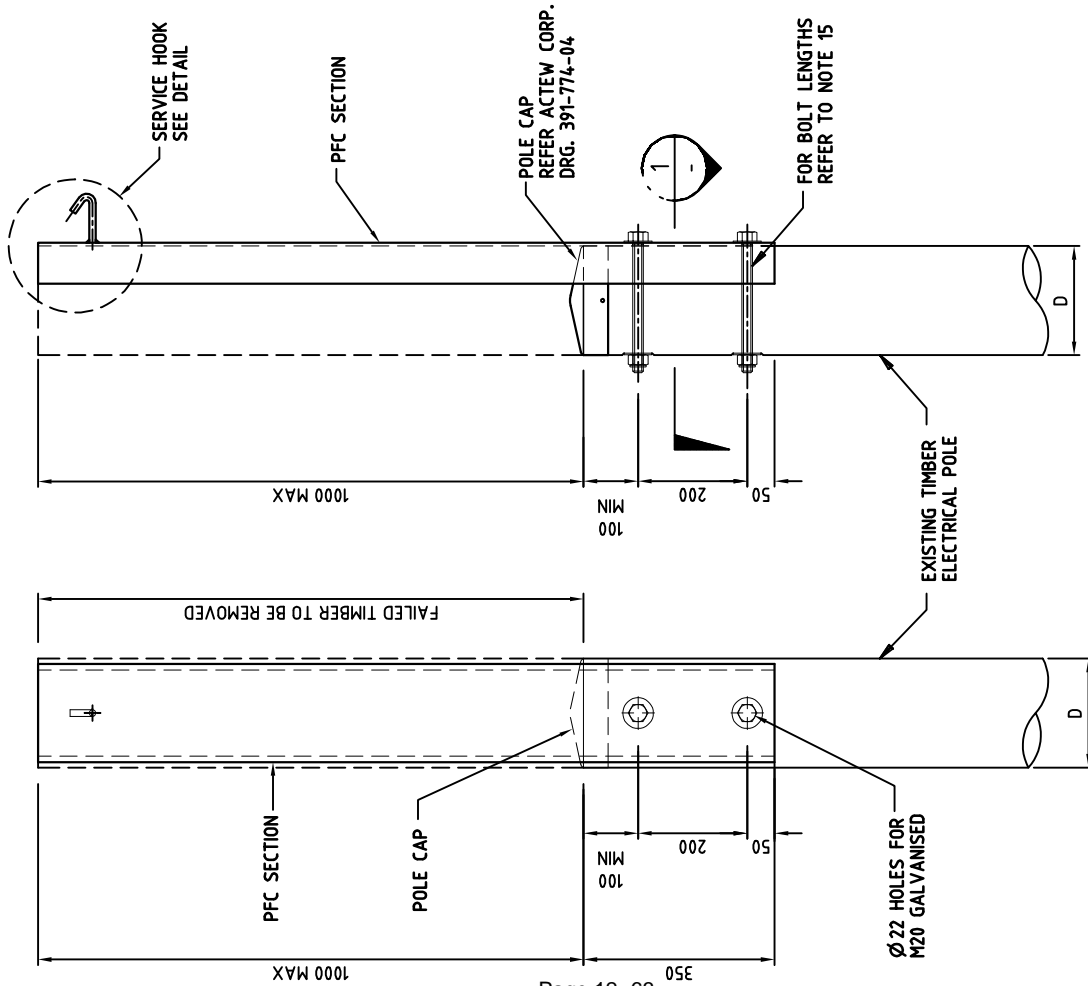
12.4 DS12-04 Outreach Arms & Brackets

DRAFT

DRAFT



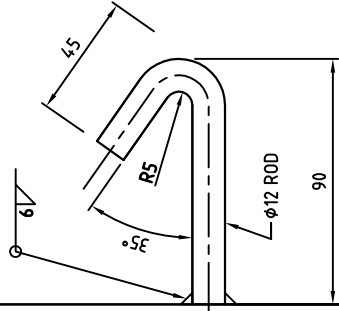
SECTION 1
SCALE 1:5



FRONT ELEVATION
SCALE 1:10

SIDE ELEVATION
SCALE 1:10

SERVICE HOOK DETAIL
SCALE 1:2



NOTES

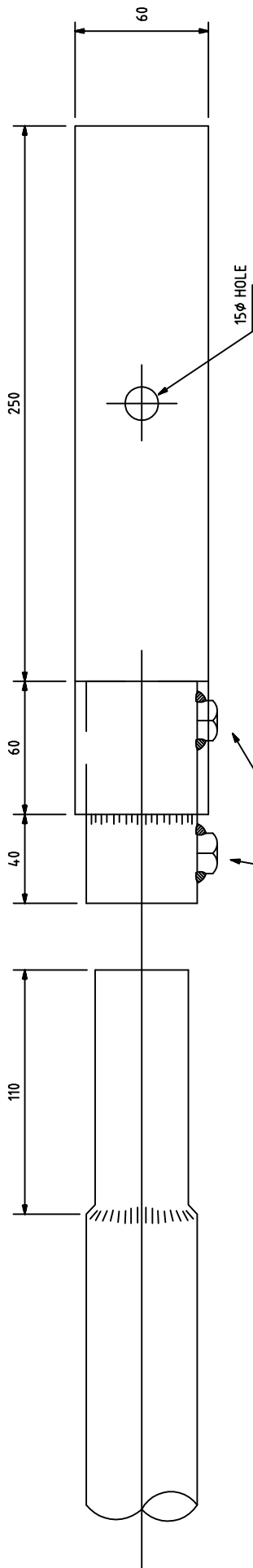
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SERVICE HOOK SHALL BE HOT ROLLED CARBON STEEL TO AS 1442 / CS 1030.
3. STEEL SECTION SHALL BE GRADE 300 TO AS 3679.
4. HIGH STRENGTH STEEL BOLTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252.
5. HIGH STRENGTH STEEL NUTS SHALL BE PROPERTY CLASS 10S TO AS/NZS 1252.
6. HIGH STRENGTH STEEL WASHERS SHALL CONFORM TO AS/NZS 1252.
7. THE WELD CATEGORY SHALL BE SP WITH E48XX ELECTRODES IN ACCORDANCE WITH AS 1554 PART 1 U.N.O.
8. WELDING SYMBOLS COMPLY WITH AS 1101 PART 3.
9. EDGES TO BE PROTECTIVE TREATED AND SHALL BE ROUNDED TO A RADIUS OF 1.5mm U.N.O.
10. ALL COMPONENTS SHALL BE HOT DIPPED GALVANISED AFTER FABRICATION IN ACCORDANCE WITH AS 4680.
11. DAMAGED GALVANISED SURFACES SHALL BE RENOVATED WITH A SUITABLE TWO PACK ORGANIC ZINC RICH PRIMER.
12. BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS 1214.
13. NOMINAL RATING FOR SERVICE HOOKS IS 4KN IN ACCORDANCE WITH AS 3766-1990.
14. THE PFC SECTION FOR THE BRACKET SHALL BE 150 PFC IF D<170mm AND 180 PFC IF 170mm ≤ D < 210mm.
15. LENGTH OF THE M20 GALVANIZED KING BOLTS SHALL BE SUCH THAT THE REQUIREMENT OF SECTION 1 OF THIS DRAWING IS ACHIEVED.
16. POLE BRACKET SHALL NOT BE MOUNTED ABOVE THE EXISTING POLE HEIGHT.



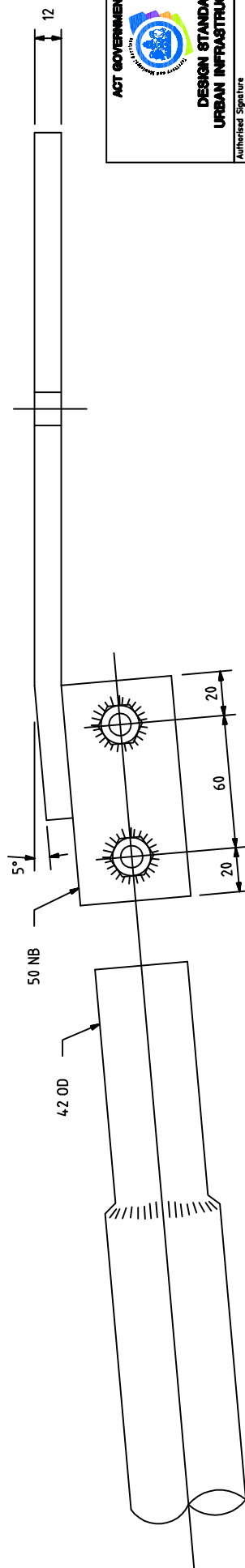
DESIGN STANDARD
URBAN INFRASTRUCTURE

| | | | |
|--------------------------------|--------------|------|----------|
| Authorized Signature | | Date | |
| Drawn | NC | Date | |
| Project Engineer | WC | Date | |
| ELECTRICAL POLE BRACKET | | | |
| Scale | NOT TO SCALE | Date | 14/09/06 |
| AutoCAD File | | | |

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAGL DRAWING NO. 794-61-03 REVISION B DATED 25/09/02



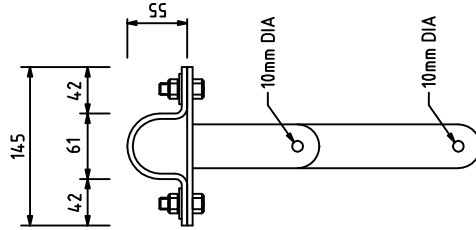
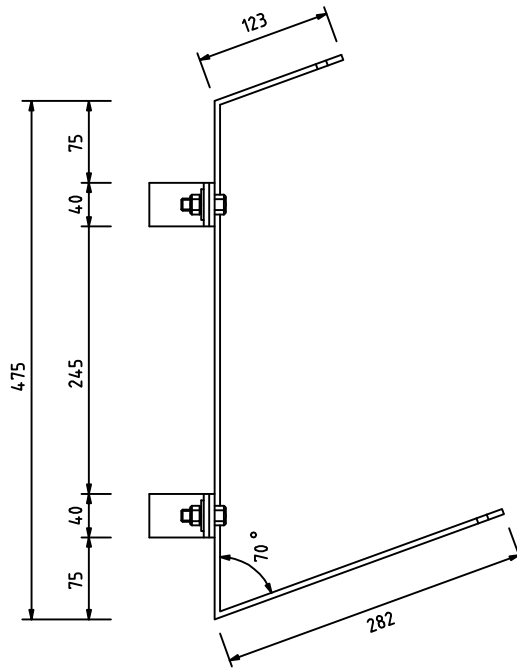
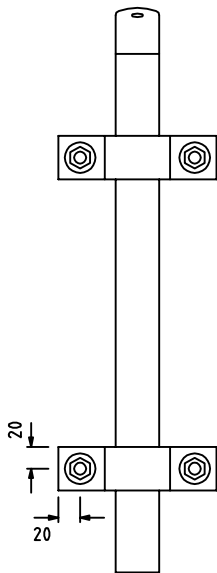
2xM10 LOCKNUTS
C/W M10 S/S GRUB SCREWS



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

| | |
|--|-----------------------|
| Authorized Signature | |
| Drawn: NC | Date: |
| Project Engineer: WC | Date: |
| PEDESTRIAN LIGHTING BRACKET | |
| Scale: NOT TO SCALE | Date: 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-04-03 | Revision No. 0 |

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM ACTEWAAGL.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM ACTEWAAGL DRAWING NO. 794-99-05 DATED 15/09/99



DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorised Signature

Drawn: NC * Date

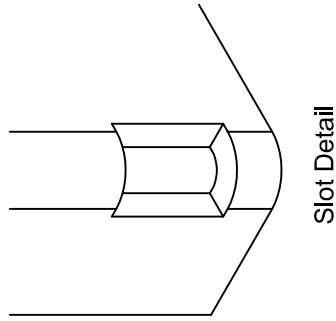
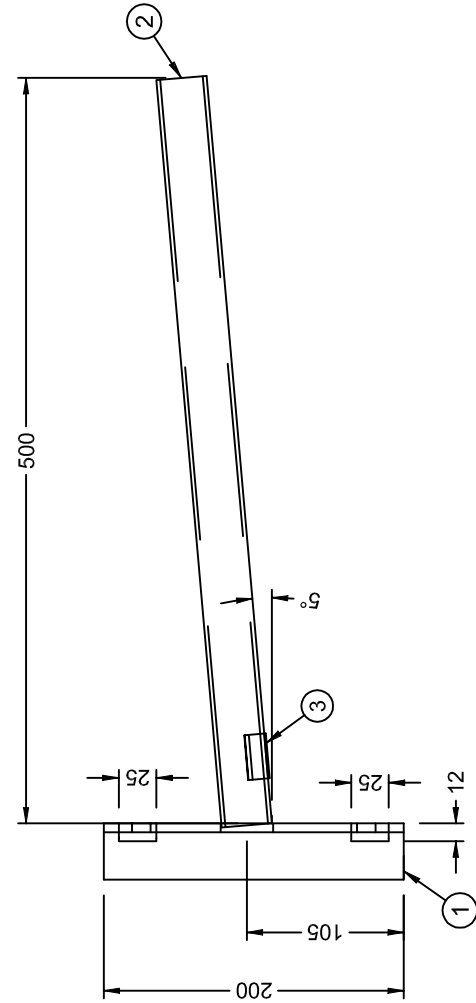
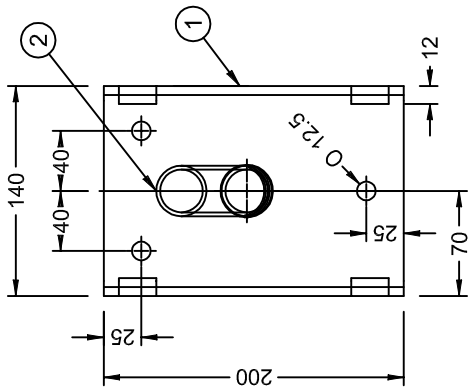
Project Engineer: WC * Date

MID ARM
MOUNTING BRACKET FOR
PEDESTRIAN FLOOD LIGHTS

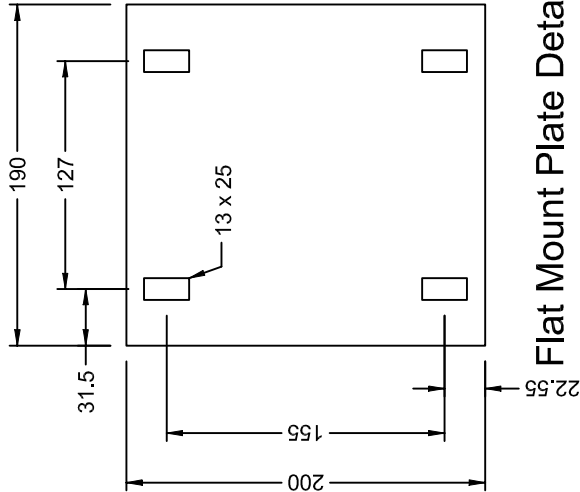
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AutoCAD File

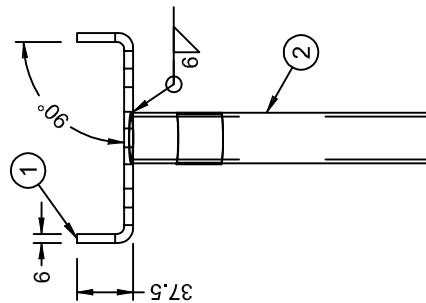
Drawing No. DS12-04-04 Revision No. 0



Slot Detail




Flat Mount Plate Detail



| Item No. | Qty. | Material | Description |
|----------|------|------------------------|----------------|
| 1 | 1 | | |
| 2 | 1 | 25 NB Lt Pipe x 500 lg | Outreach |
| 3 | 1 | | Insulated Bush |

- Notes**
- All dimensions shown are in mm.
 - Column design to comply with AS 1170 & as 1798.
 - All welding to comply with AS 1554.
 - Galvanizing to conform to AS/NZS 4680.
 - Paint finish to AS 3887 category long term.



ACT GOVERNMENT
DESIGN STANDARD
URBAN INFRASTRUCTURE

Drawn: NC Date: * *
Project Engineer: WC Date: * *

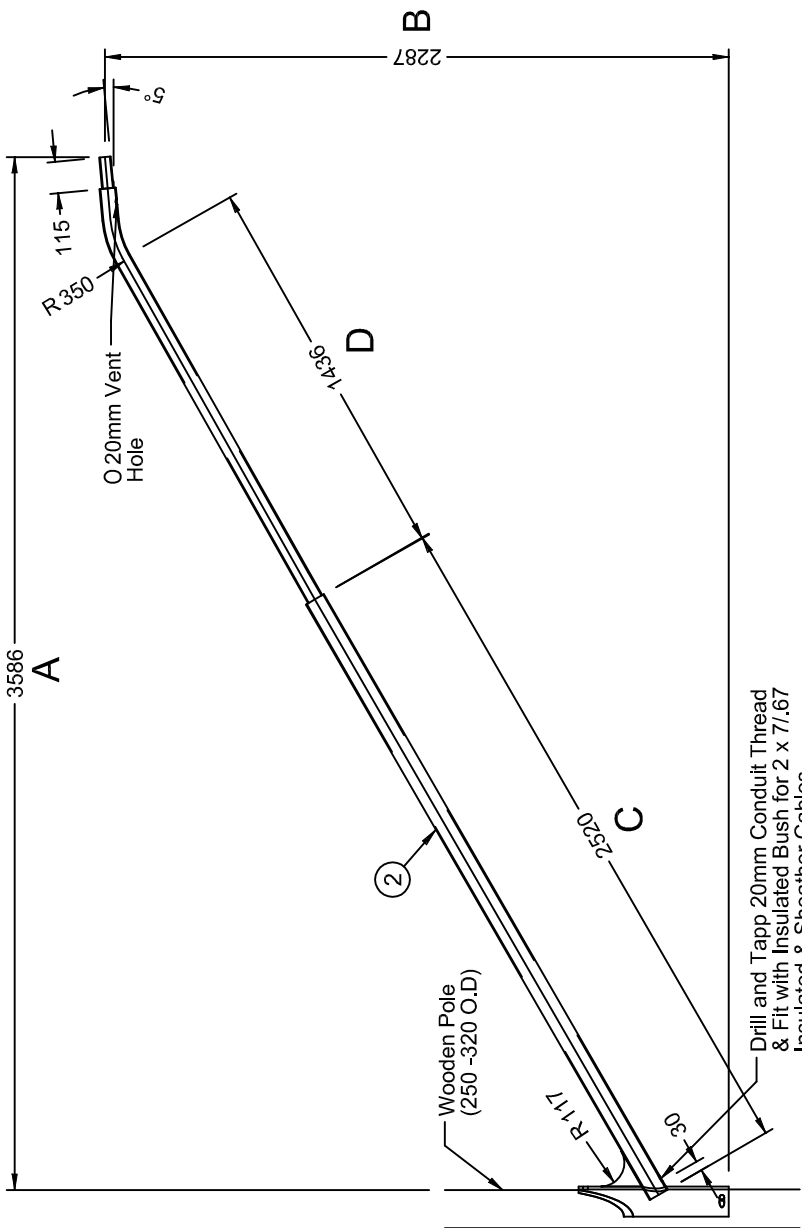
0.5 OUTREACH POLE MOUNTED BRACKET

Scale: **NOT TO SCALE**

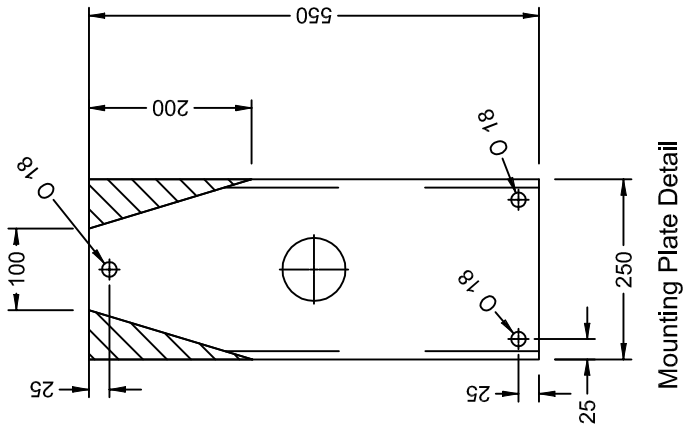
Date: **14/09/06**

AutocAD File

Drawing No. **DS12-04-05** Revision No. **0**



ACTEW Stock Code:
 3.0m - 1087990
 3.7m - 1161192
 4.5m - 1107976



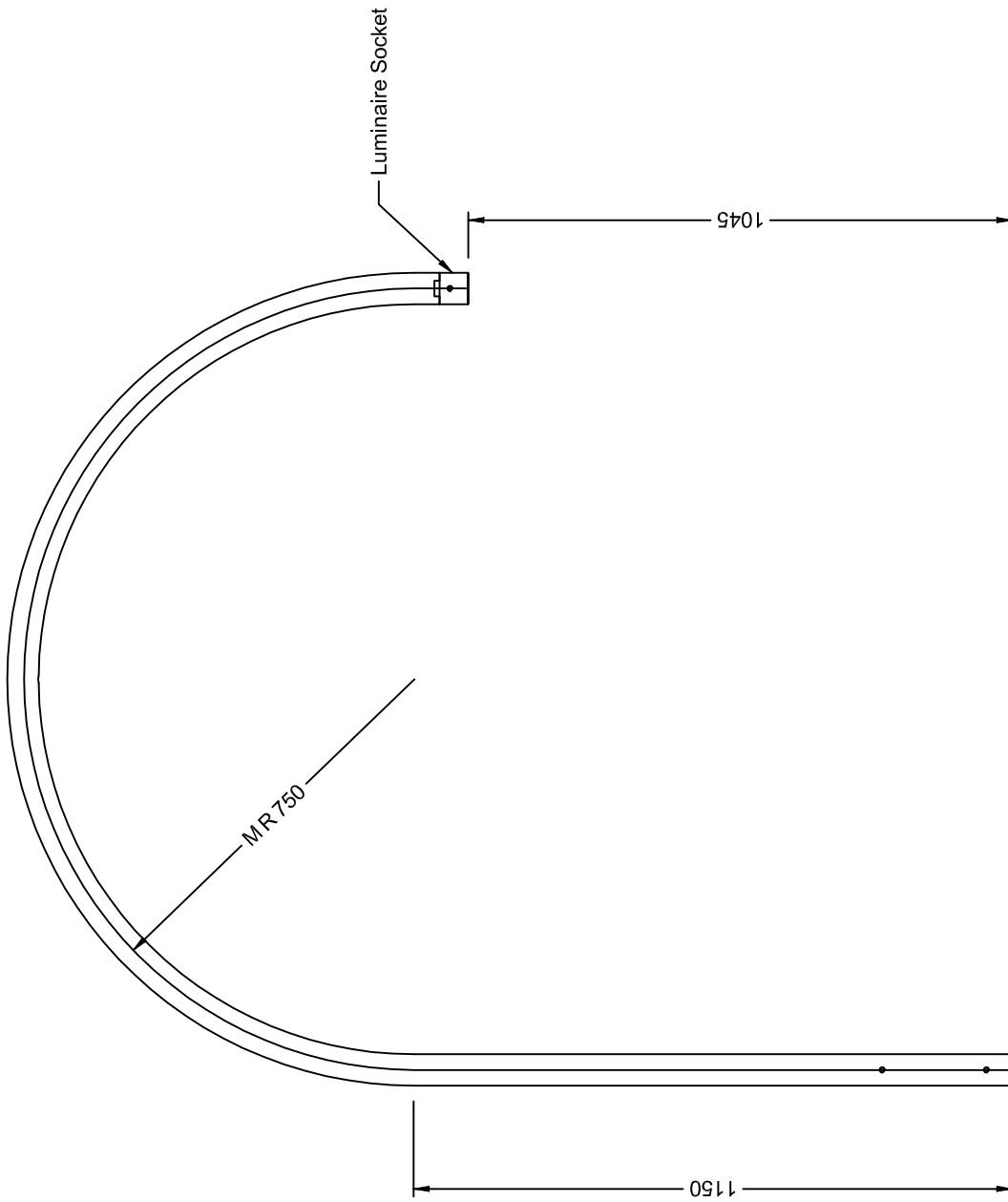
Mounting Plate Detail


| | |
|---|-------------------|
| | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Date | |
| Project Engineer | WC |
| Date | |
| 3.5m TIMBER POLE BRACKET ARM | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |
| Drawing No. | DS12-04-06 |
| Revision No. | 0 |

*THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
 THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING Timber Bracket Arm.dft - DATED 08/11/04

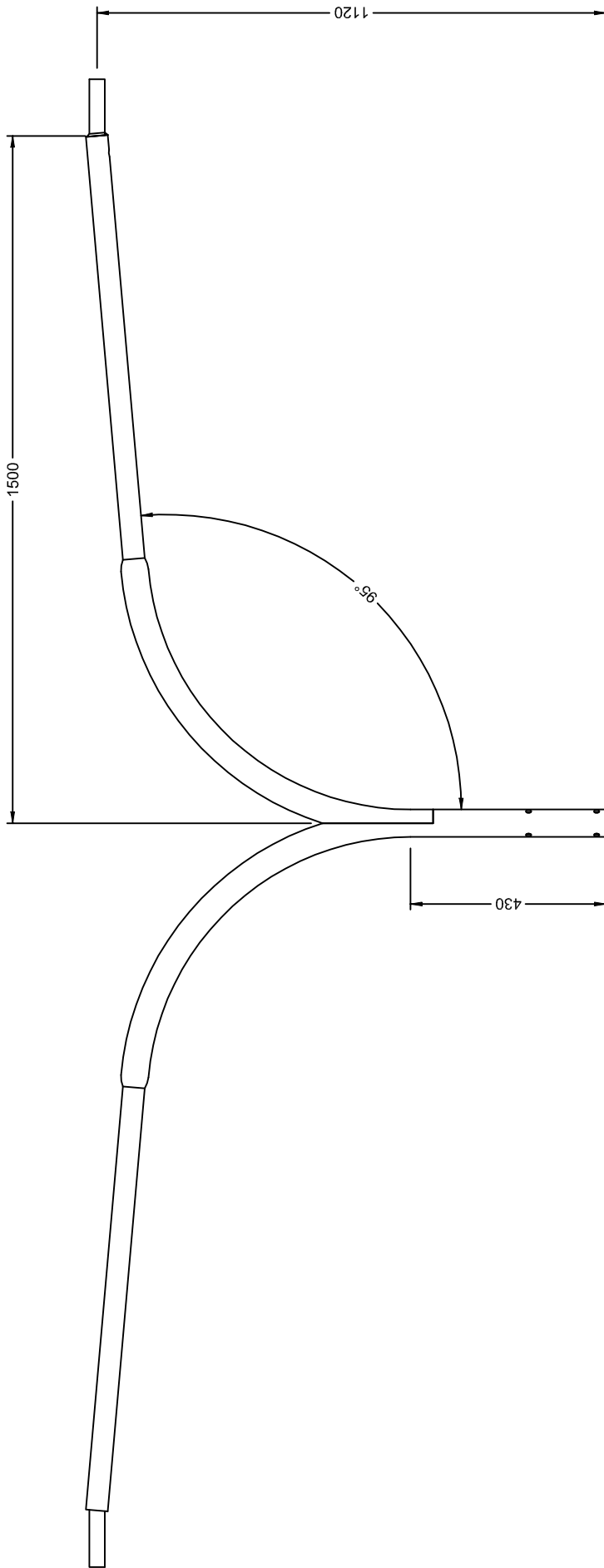
Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



| | |
|---|-----------------------|
|  | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn: NC | Date: |
| Project Engineer: WC | Date: |
| VPACT-OR750 R-2 STREETLIGHT OUTREACH | |
| Scale: NOT TO SCALE | Date: 14/09/06 |
| AutoCAD File | |
| Drawing No. DS12-04-07 | Revision No. 0 |

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Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

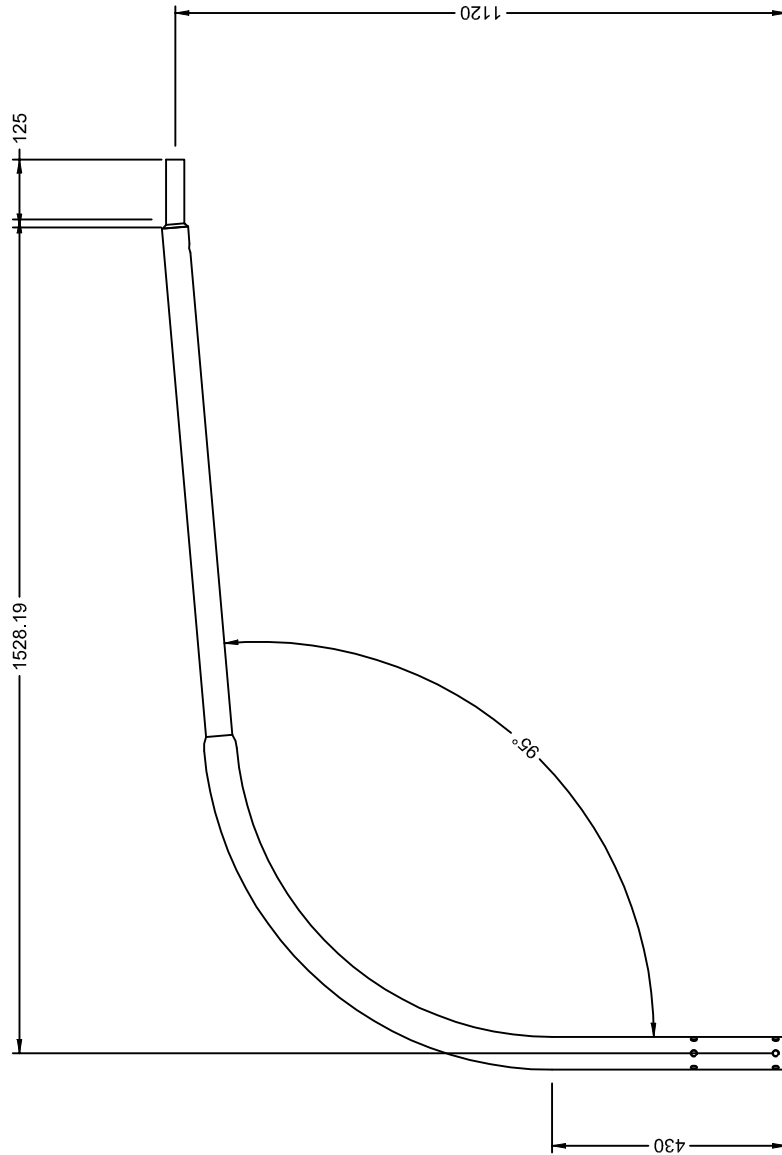
| | |
|---------------------------|---------------|
| Authorized Signature | |
| Drawn | NC |
| Project Engineer | WC |
| Date | Date |
| DUAL 1.5m OUTREACH | |
| Scale | NOT TO SCALE |
| AutoCAD File | Date 14/09/06 |

| | |
|--------------|-------------------|
| Drawing No. | DS12-04-08 |
| Revision No. | 0 |

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THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW1.5D.dft - DATED 14/10/04

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

Authorised Signature

Drawn: NC * Date

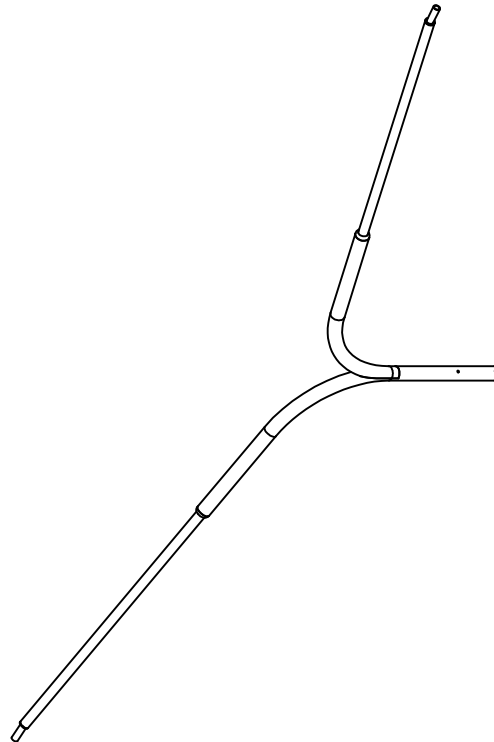
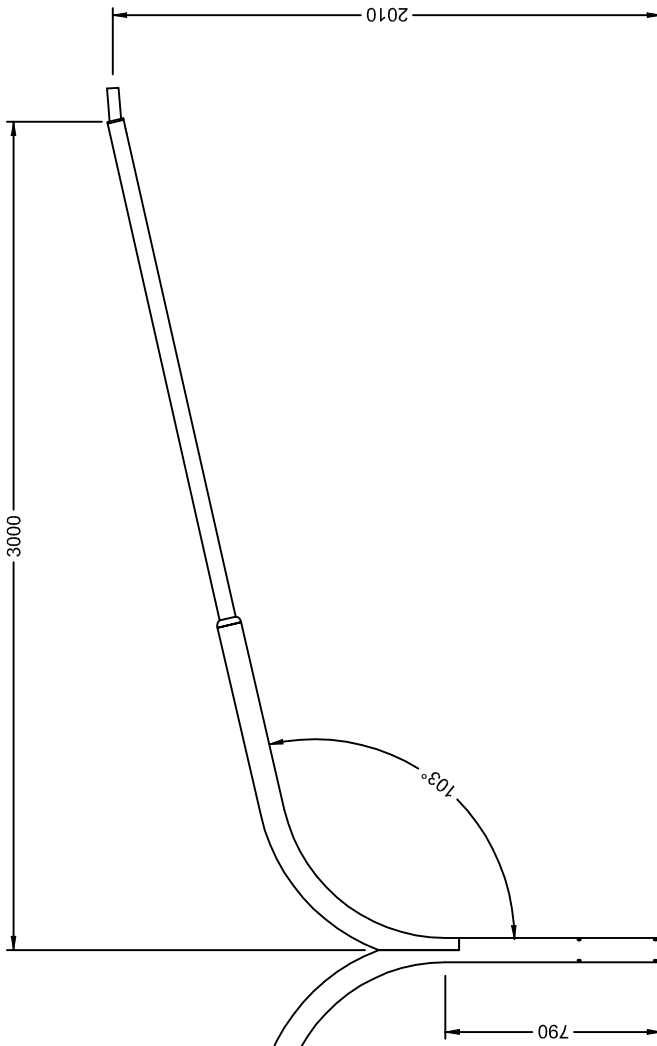
Project Engineer: WC * Date

**VPACTORW1.5S
1.5m SINGLE OUTREACH**

Scale: NOT TO SCALE Date: 14/09/06

AutoCAD File

Drawing No. **DS12-04-09** Revision No. **0**



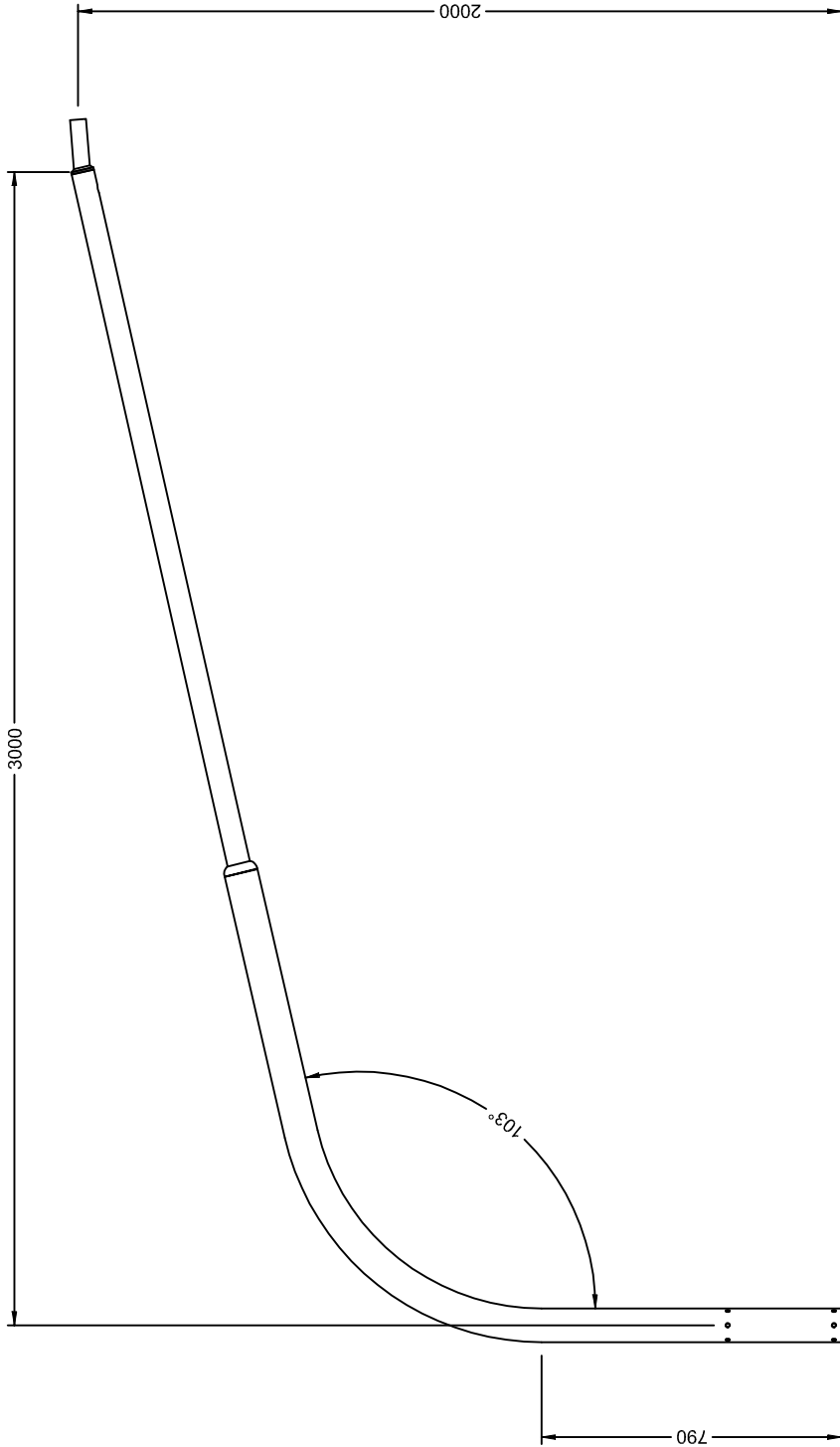
Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



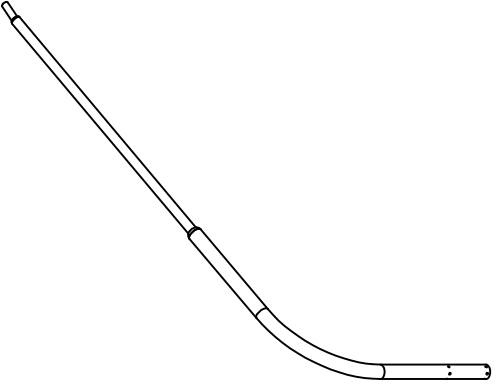
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|----------------------|--------------|------|----------|
| Authorized Signature | | Date | |
| Drawn | NC | * | * |
| Project Engineer | | WC | * |
| VPACTORW3.0D | | Date | |
| DUAL 3m OUTREACH | | Date | |
| Scale | NOT TO SCALE | Date | 14/09/06 |
| AutoCAD File | | | |
| Drawing No. | Revision No. | | 0 |
| DS12-04-10 | | | 0 |


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Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

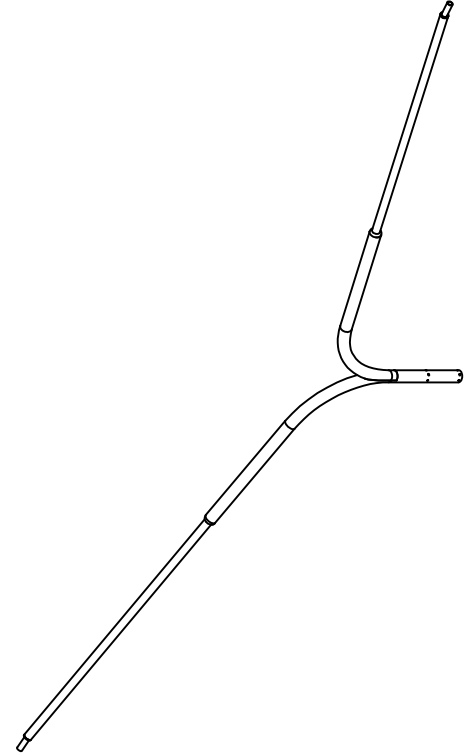
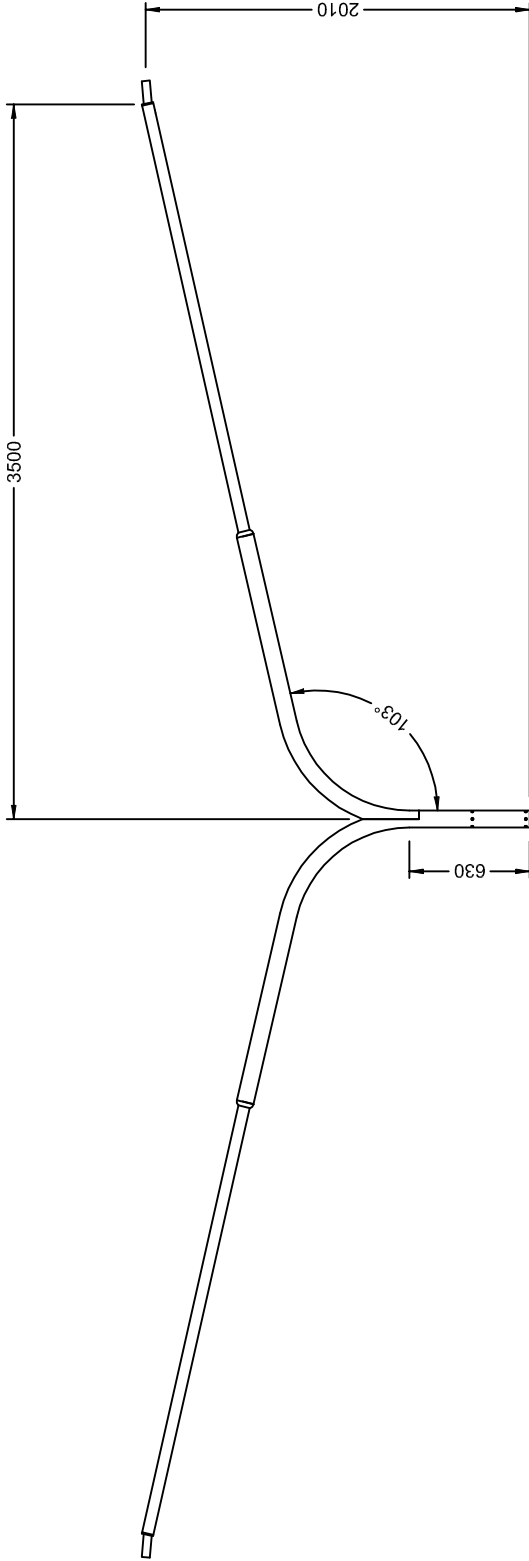


| | |
|---|-------------------|
|  | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Project Engineer | WC |
| VPACTORW3.0S | |
| 3m SINGLE OUTREACH | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutocAD File | |
| Drawing No. | DS12-04-11 |
| Revision No. | 0 |

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THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW3.0S.dft - DATED 02/02/05

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

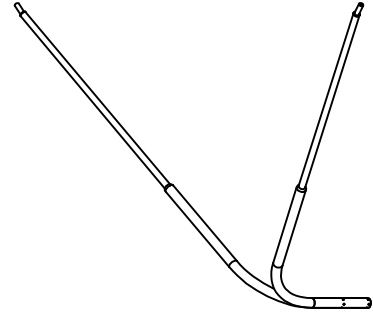
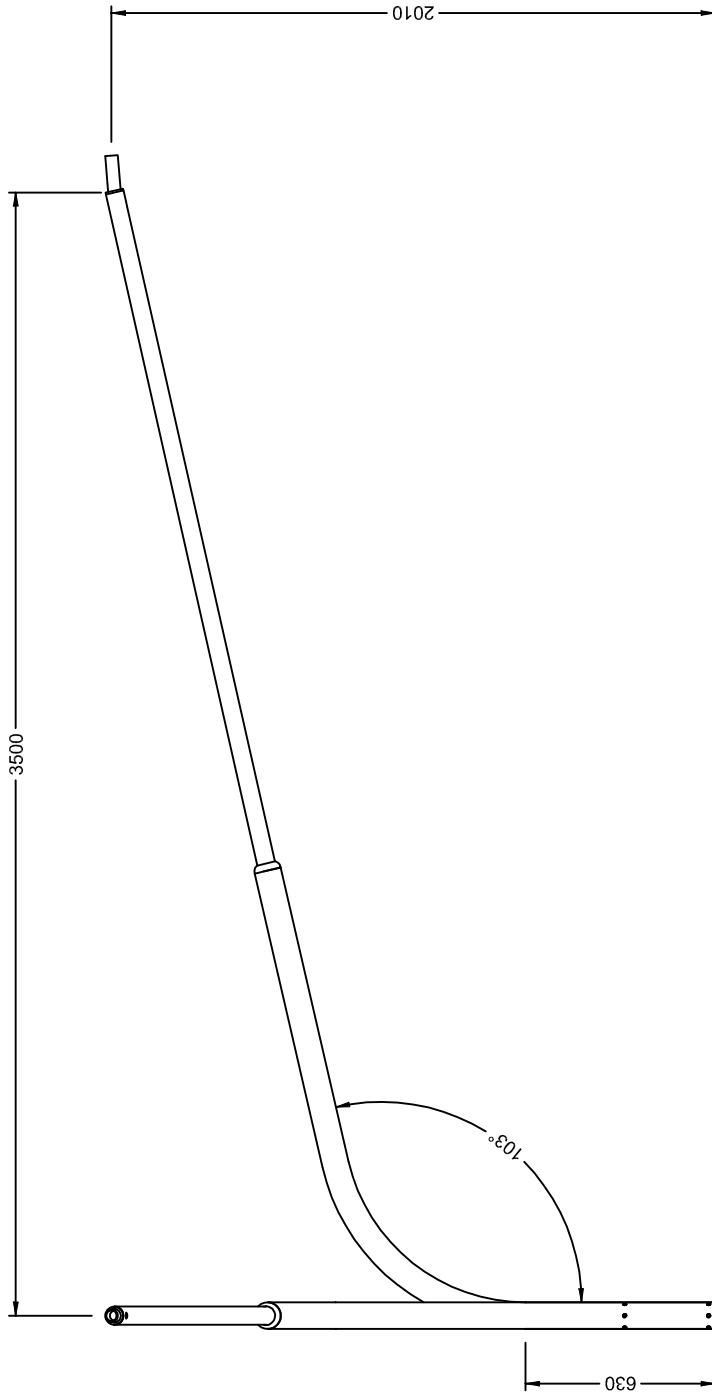
| | |
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| Authorised Signature | |
| Drawn | NC |
| Date | * |
| Project Engineer | WC |
| Date | * |
| VPACTORW3.7D DUAL 3.5m OUTREACH | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |

| | |
|--------------|-------------------|
| Drawing No. | DS12-04-12 |
| Revision No. | 0 |

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THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW3.7D.dft -- DATED 14/10/04

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



ACT GOVERNMENT



DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorised Signature

Drawn NC * Date

Project Engineer WC * Date

VFACTORW3.7D-90
DUAL 3.5m OUTREACH
90 DEGREE

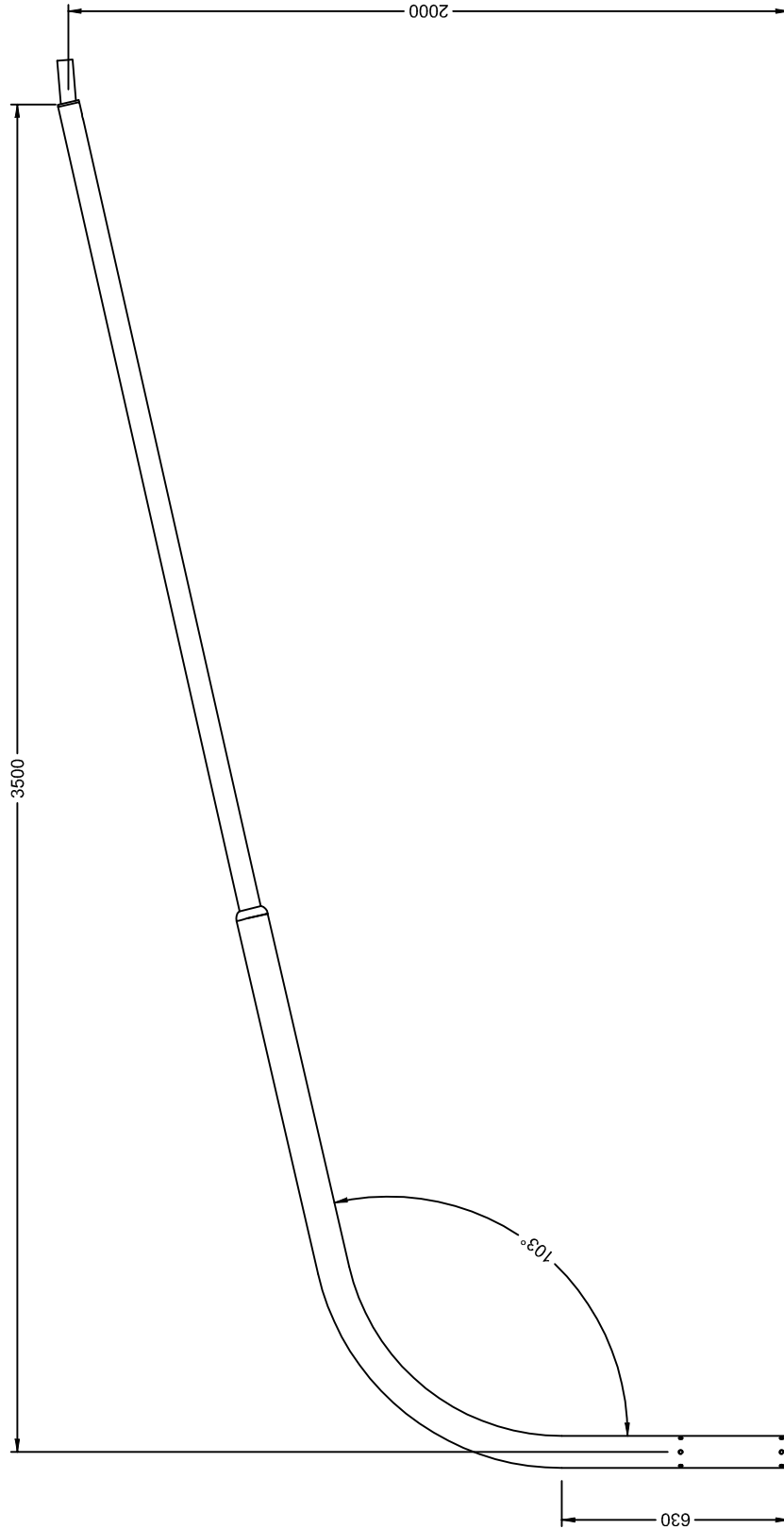
Scale NOT TO SCALE Date 14/09/06


AutoCAD File

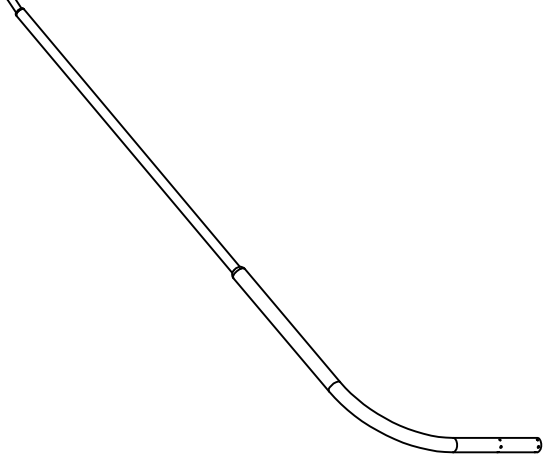
Drawing No. DS12-04-13 Revision No. 0

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



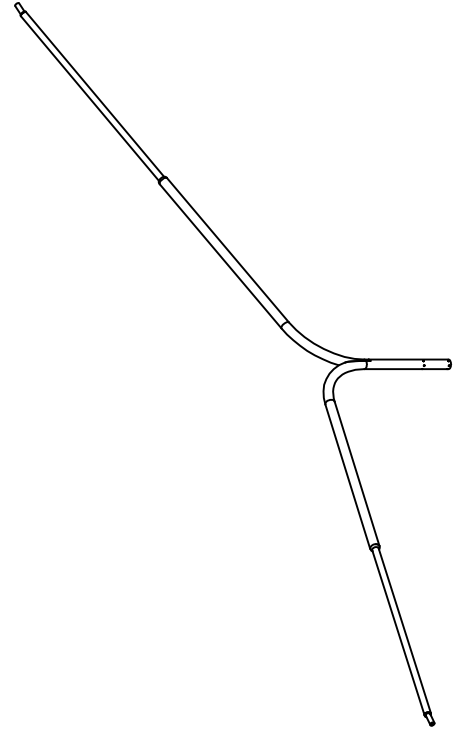
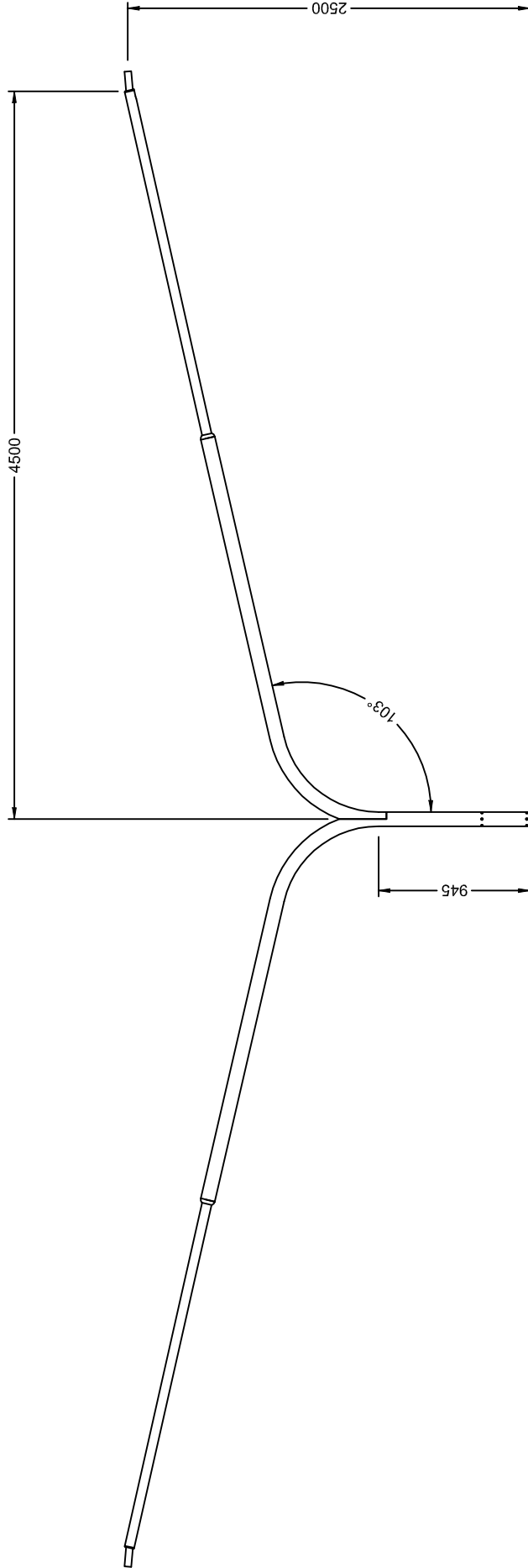
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|---|-------------------|
|  | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Project Engineer | WC |
| VPACTORW3.7S 3.5m SINGLE OUTREACH | |
| Scale | NOT TO SCALE |
| AutocAD File | 14/09/06 |
| Drawing No. | DS12-04-14 |
| Revision No. | 0 |



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Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.



**DESIGN STANDARD
URBAN INFRASTRUCTURE**

Authorised Signature

Drawn NC

Date

Project Engineer WC

Date

VPACTORW4.5D
DUAL 4.5m OUTREACH

Scale

Date

NOT TO SCALE 14/09/06

AutoCAD File

Drawing No.

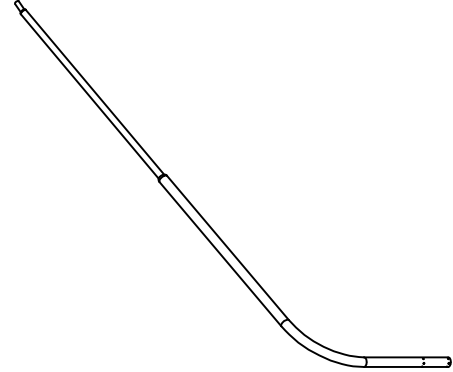
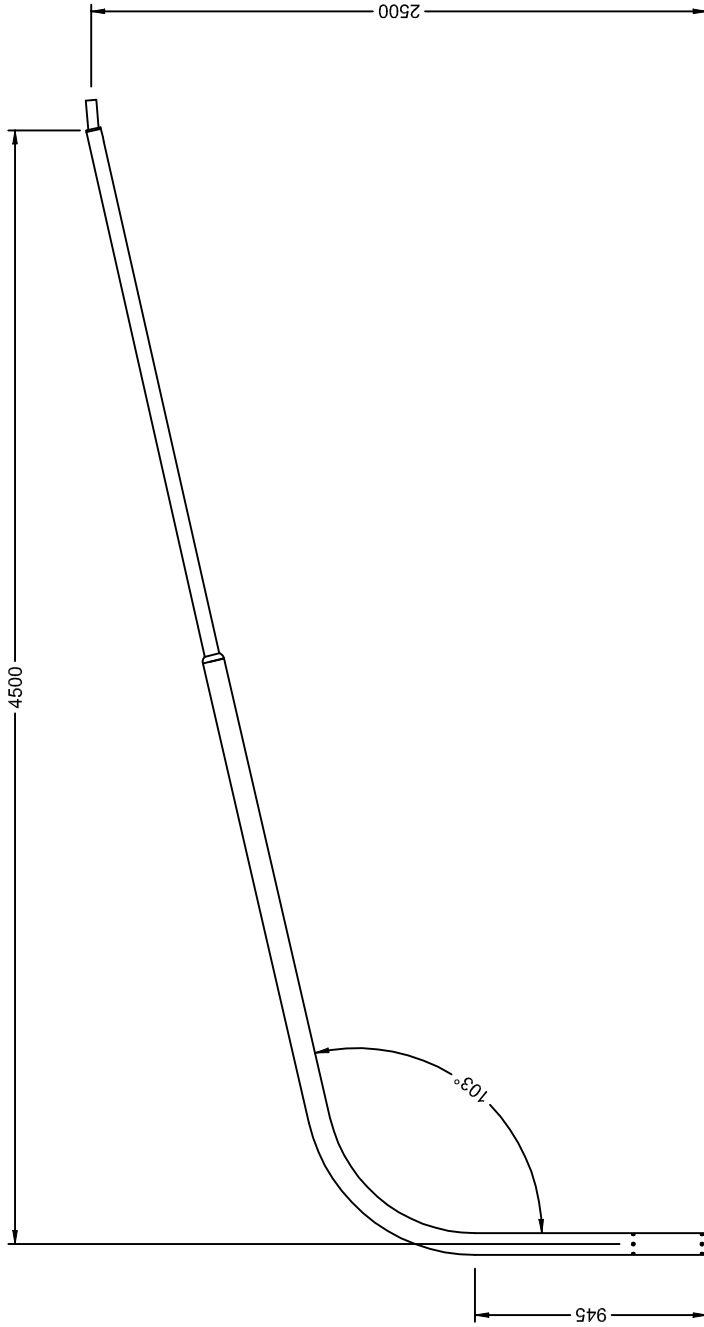
Revision No.


DS12-04-15

0

Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & as 1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

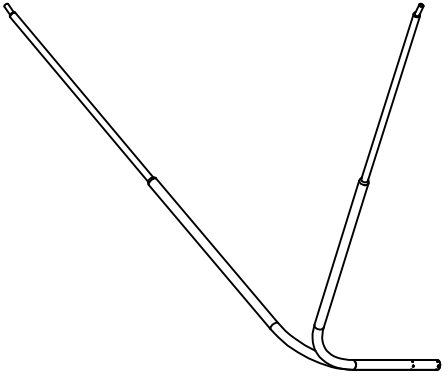
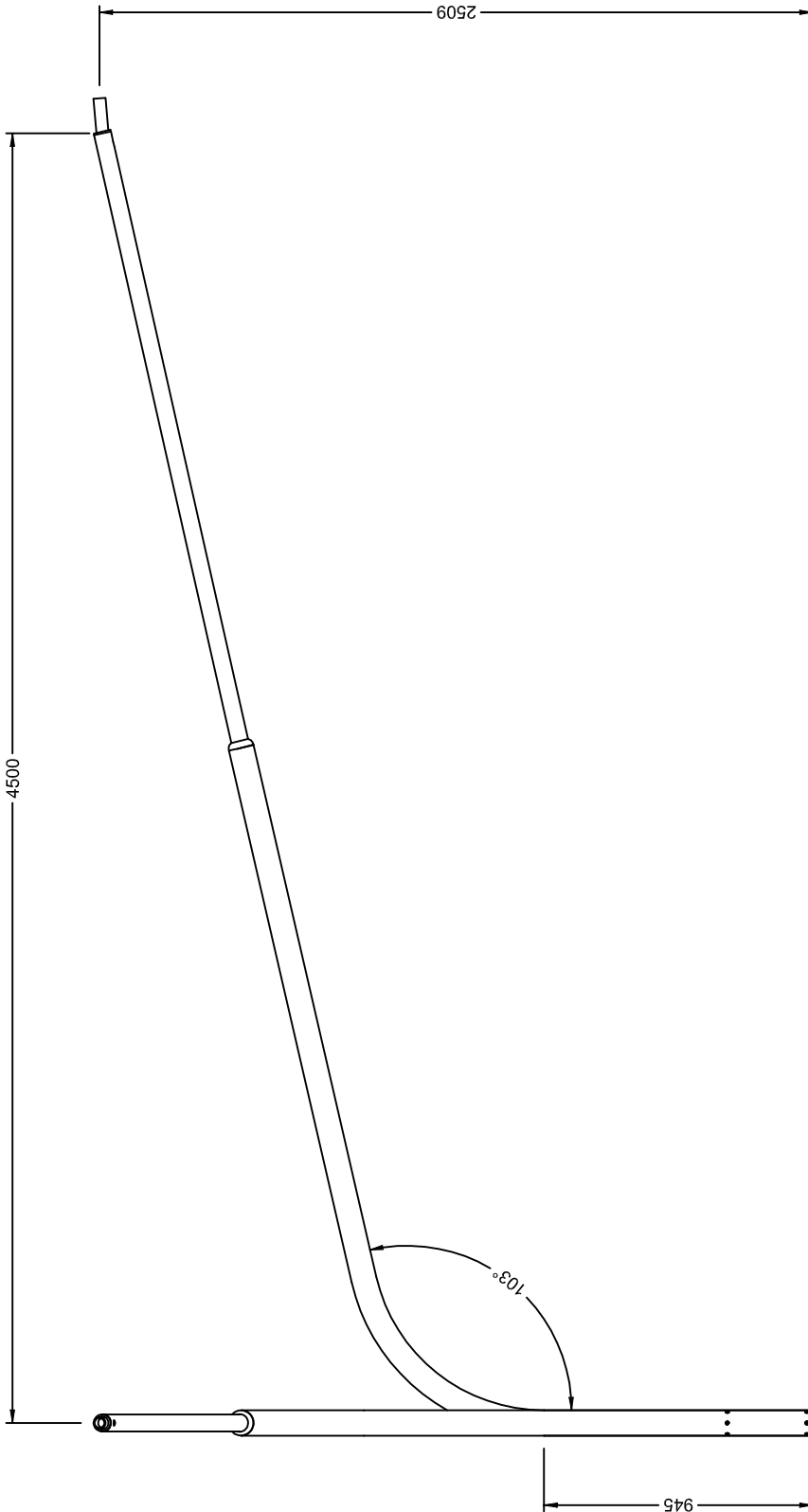



| | |
|---|-------------------|
|  | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Project Engineer | WC |
| VPACTORW4.5S SINGLE 4.5m OUTREACH | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutocAD File | |
| Drawing No. | DS12-04-16 |
| Revision No. | 0 |

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THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW4.5S.dft - DATED 02/02/05

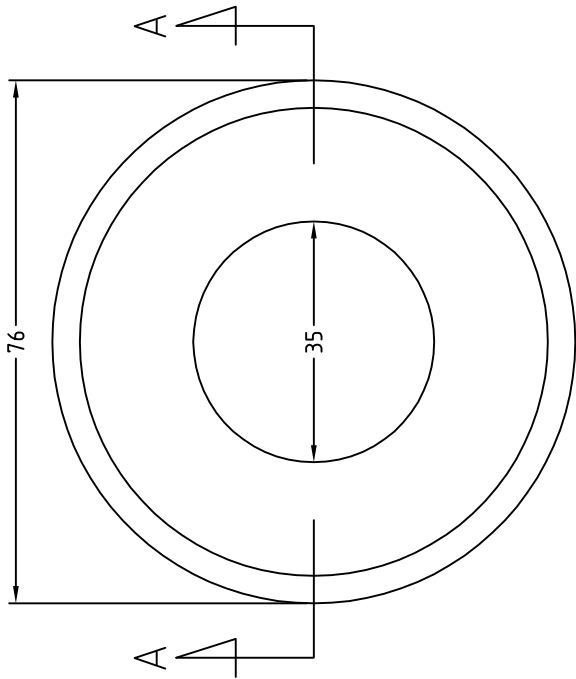
Notes

1. All dimensions shown are in mm.
2. Column design to comply with AS 1170 & AS1798.
3. All welding to comply with AS 1554.
4. Galvanizing to conform to AS/NZS 4680.
5. Paint finish to AS 3887 category long term.

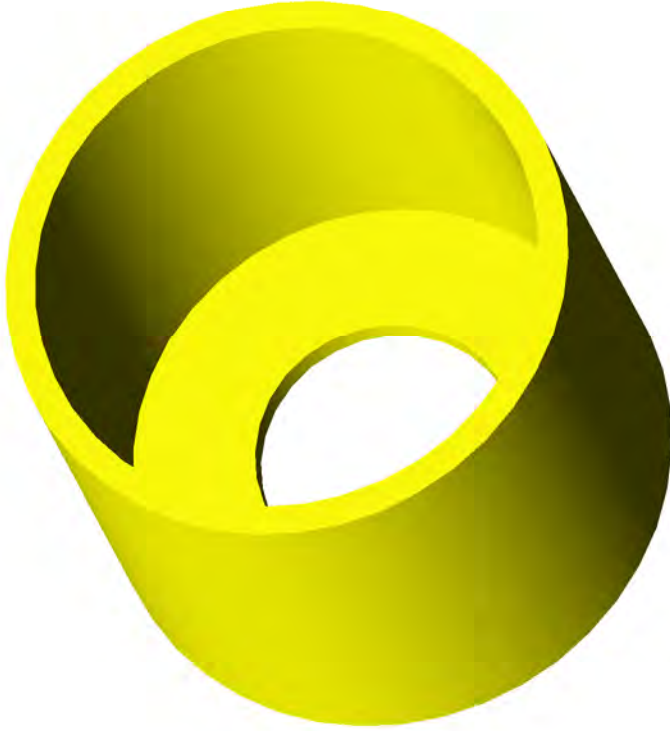


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|---|-------------------|
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| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Date | * |
| Project Engineer | WC |
| Date | * |
| VPACTORW4.5D-90 DUAL 4.5m OUTREACH 90 DEGREES | |
| Scale | NOT TO SCALE |
| Date | 14/09/06 |
| AutoCAD File | |
| Drawing No. | DS12-04-17 |
| Revision No. | 0 |

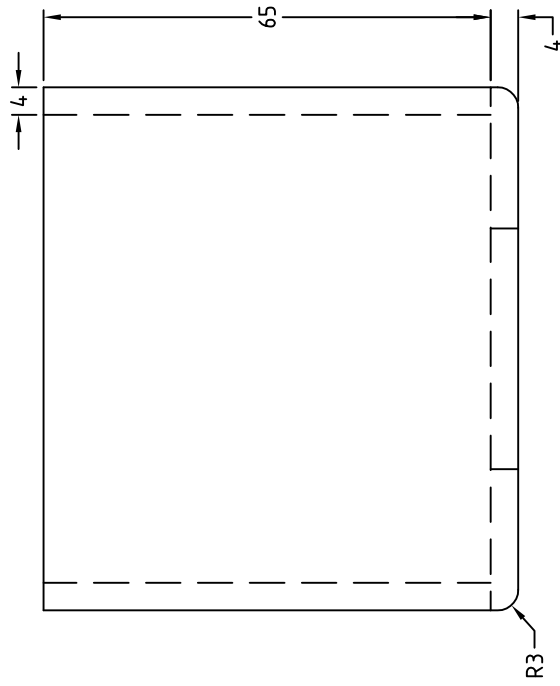
* THIS DRAWING HAS BEEN REPRODUCED BY THE ACT GOVERNMENT WITH PERMISSION FROM VICPOLE.
THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW4.5D-90.dft - DATED 14/10/04



PLAN VIEW



ISOMETRIC VIEW

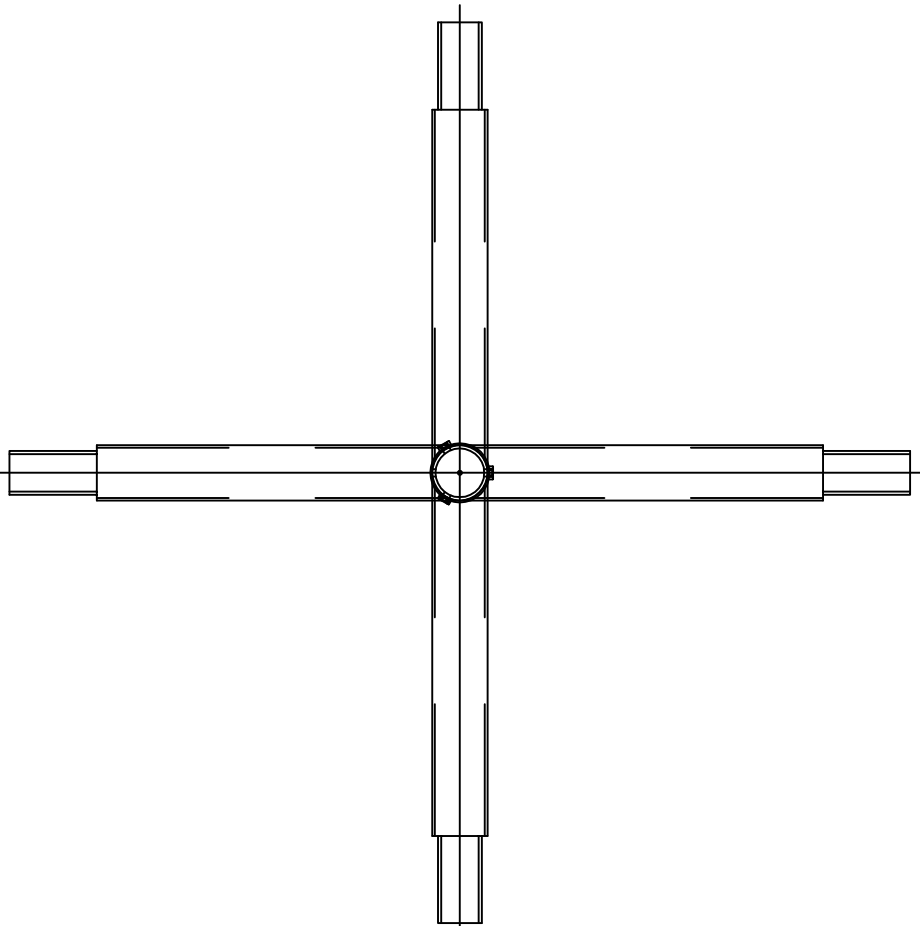


SECTION A-A

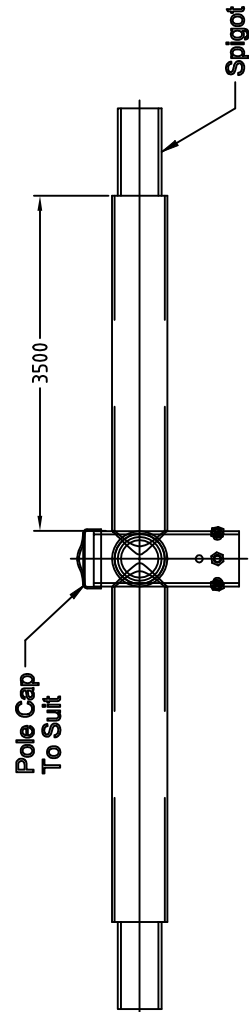
NOTES:

1. ALL DIMENSIONS INDICATED ARE IN MILLIMETRES
2. ALL WELDING TO COMPLY WITH AS1554
3. ALL GALVANISING TO COMPLY WITH AS/NZS4680 (600mg/sqm)
4. AcfewAGL STOCK CODE NUMBER 1088026

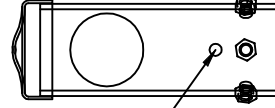
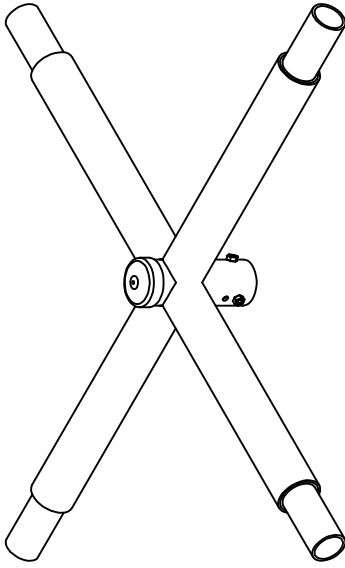
| | |
|---|-------------------|
| | |
| DESIGN STANDARD URBAN INFRASTRUCTURE | |
| Authorised Signature | |
| Drawn | NC |
| Date | |
| Project Engineer | WC |
| Date | |
| GALVANISED STEEL SPIGOT ADAPTOR TO SUIT 3.5m POST TOP COLUMN | |
| Scale | NOT TO SCALE |
| Date | 29-01-2007 |
| AutoCAD File | |
| Drawing No. | DS12-04-18 |
| Revision No. | 0 |



TOP VIEW



SIDE VIEW



10.5ø THROUGH HOLE
TO SUIT M10 THROUGH
BOLT

ACT GOVERNMENT



DESIGN STANDARD
URBAN INFRASTRUCTURE

Authorised Signature

Drawn NC * Date

Project Engineer WC * Date

4-WAY STRAIGHT
PIPE OUTREACH

Scale NOT TO SCALE Date 14-02-2007

AutoCAD File

Drawing No. DS12-04-19 Revision No. 0

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THIS DRAWING HAS BEEN REPRODUCED USING INFORMATION FROM VICPOLE DRAWING VPACTORW4.5D-90.dft - DATED 14/10/04